

TRAFFIC ENGINEERING REPORT

Main Street
Cherokee County, Georgia

Keck & Wood Project No.
240236.00

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Prepared by:



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1. INTRODUCTION

A traffic engineering study was requested by Cherokee County for Main Street between E Cherokee Drive and Ridgewalk Parkway in order to identify locations with operational and/or safety concerns. Utilizing existing traffic count data and recent crash history, the corridor was analyzed and solutions were developed to mitigate operational and/or safety deficiencies at the intersections that were identified as being in the top ten for worst operations and/or worst crash history.

1.1. STUDY AREA

The study area consists of the 1.4-mile segment along Main Street in Cherokee County commencing at E Cherokee Drive and terminating to the south at Ridgewalk Parkway. This study portion of Main Street is located near the southern portion of Cherokee County. The following study intersections are included in the study area:

1. Main Street at E Cherokee Drive (signalized)
2. Main Street at the South Cherokee Recreational Department Entrance (side street stop)
3. Main Street at Bell Parkway (side street stop)
4. Main Street at Brooke Boulevard (side street stop)
5. Main Street at Johnston Farm Lane (side street stop)
6. Main Street at Ridgewalk Parkway (signalized)

An aerial view of the study area is presented in Figure 1.

1.2. PLANNED TRANSPORTATION IMPROVEMENTS

A search for planned Georgia Department of Transportation (GDOT) projects revealed no planned transportation improvement projects in or near the study area. The search was performed using the GDOT GeoPI web application (<https://www.dot.ga.gov/applications/geopi/Pages/Search.aspx>).

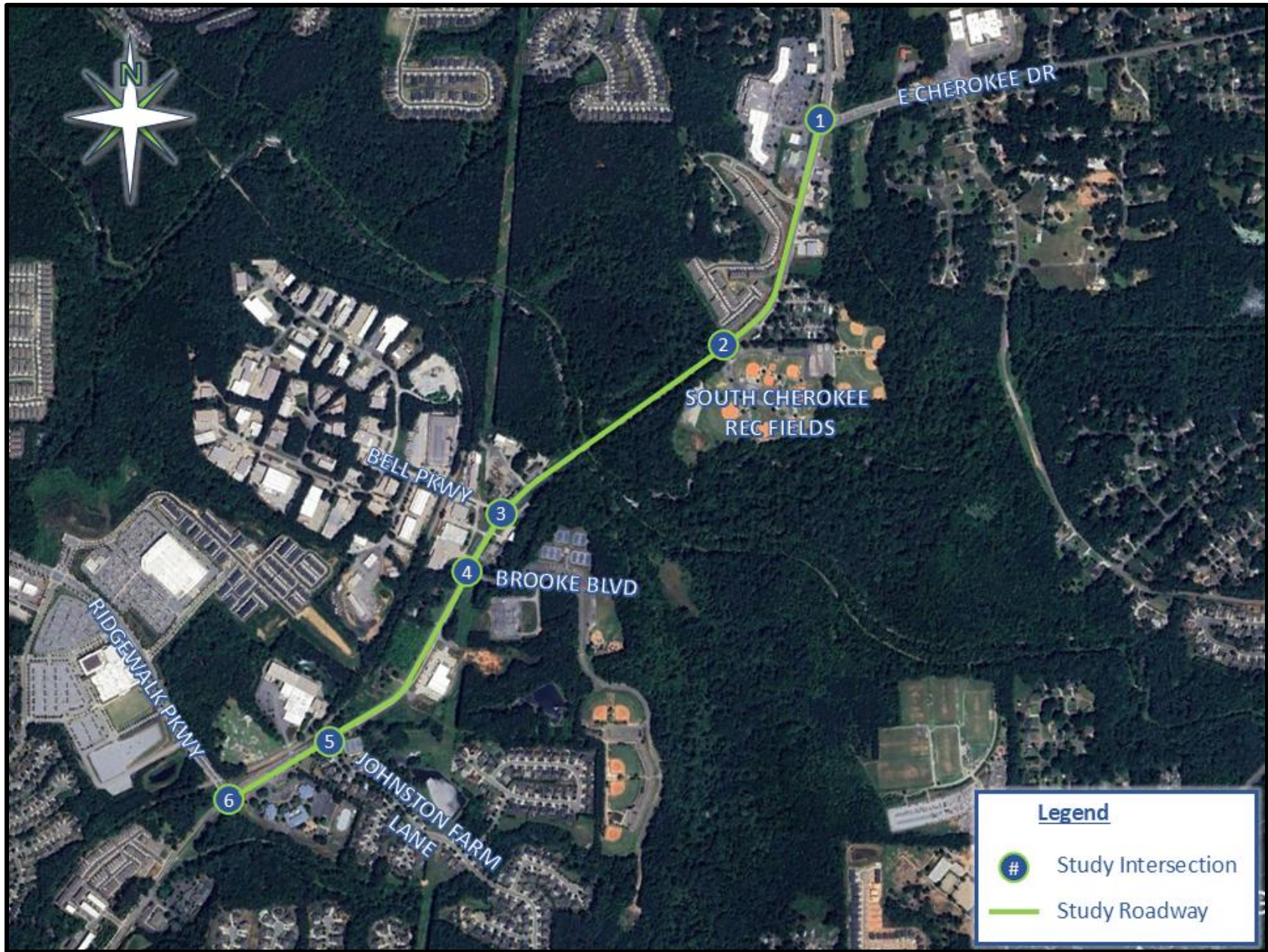


Figure 1 – Aerial View of Study Area

2. EXISTING CONDITIONS

2.1. ROADWAYS

Main Street is a minor arterial which traverses primarily north to south, commencing at the intersection with E Cherokee Drive and terminating approximately 1.4 miles to the south at Ridgewalk Parkway. The posted speed limit for the majority of the roadway is 45 mph; it transitions from 35 mph to 45 mph at its intersection with Ridgewalk Parkway. Main Street consists primarily of two travel lanes with dedicated turn lanes at key intersections. The land adjacent to the roadway contains a mixture of residential and commercial properties, as well as a few recreational facilities. Sidewalks are provided along Main Street with the exception of the segment between Brooke Boulevard and the Recreation Fields.

Table 1 – Study Area Roadway Characteristics

Roadway	Functional Classification	Lane Geometry	Adjacent Land Use	Posted Speed Limit (mph)
Main Street	Minor Arterial	2 lanes	Residential, Commercial	45
E Cherokee Drive	Minor Arterial	2 lanes w/ turn lanes	Residential, Institutional	45
South Cherokee Recreation Department Driveway	Local Road	2 lanes	Recreational	25
Bell Parkway	Local Road	2 lanes	Commercial	25
Brooke Boulevard	Local Road	2 lanes	Recreational	15
Johnston Farm Lane	Local Road	2 lanes	Residential	25
Ridgewalk Parkway	Local Road	2 lanes w/ turn lanes	Commercial	35

2.2. INTERSECTIONS

A total of six intersections were identified to be studied along Main Street. Of the intersections, two are signalized; the remaining four intersections are side street stop-controlled.

2.3. US ARMY CORPS OF ENGINEERS (USACE) PROPERTY CONCERNS

Based on research of the property owners within the study area, several parcels were discovered to be owned/controlled by USACE. USACE controlled property consists of most of the undeveloped parcels along Main Street between Brooke Boulevard and Edmondson Lane, including both sets of recreation fields east of Main Street. Property with USACE overlap appears to follow both the Little River and Rubes Creek beyond the limits of this study. USACE property exists on both sides of the study corridor, and coordination with USACE will likely be needed if improvements are explored at the following intersections or roadway segments:

- Main Street and South Cherokee Recreation Department Driveway
- Main Street and Brook Boulevard
- Main Street between South Cherokee Recreation Department Driveway and Waste Management Driveway

See below for an image pulled from the USACE website showing approximate parcel ownership. Figure 2 reveals the parcels owned/controlled by USCAE with the semi-transparent overlay.

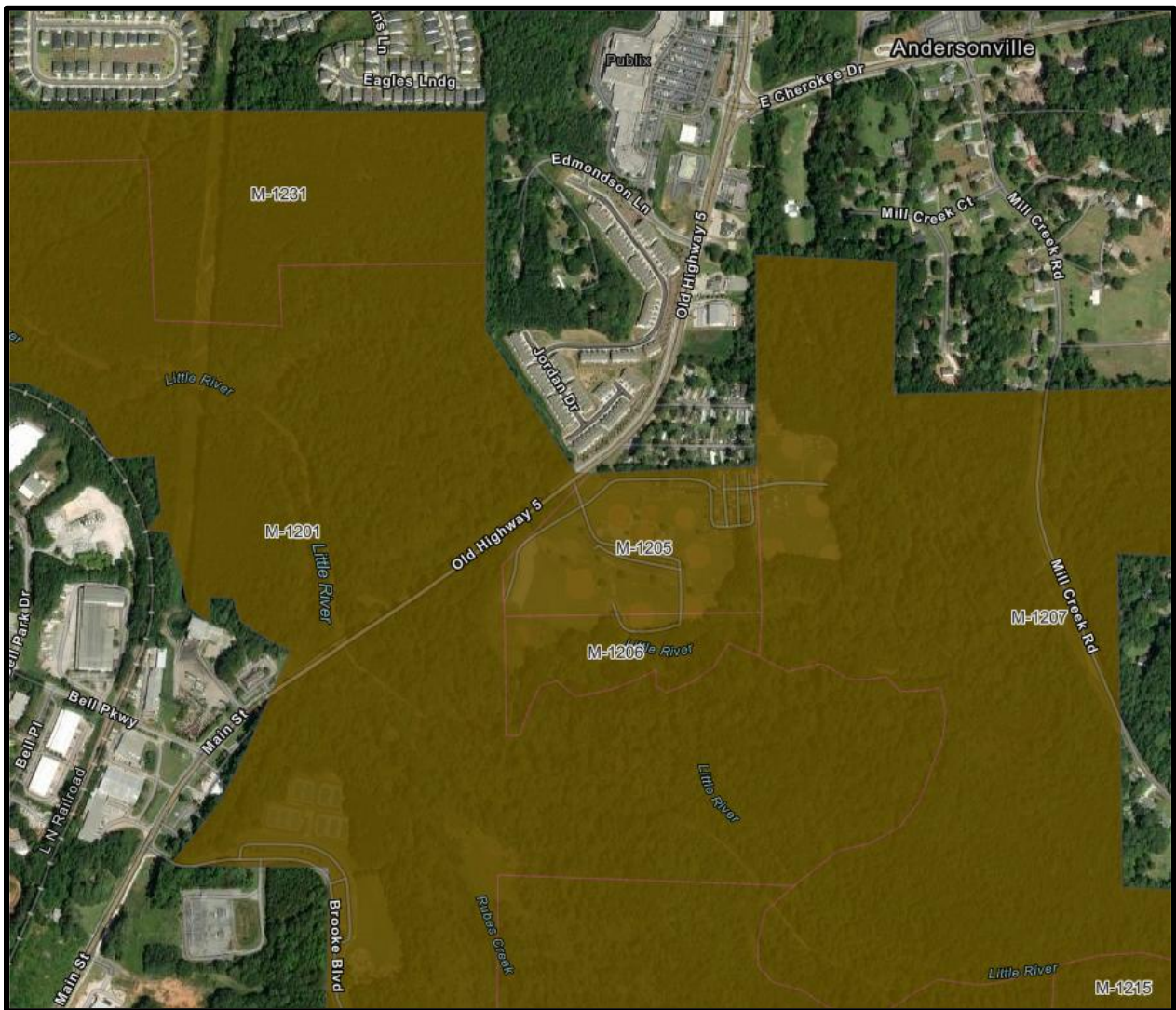


Figure 2 – Capture from USACE Civil Works Map

2.4. EXISTING TRAFFIC VOLUMES

Traffic counts for the study area were collected on Wednesday, May 8th, 2024, while school was in session and Saturday, May 4th, 2024. Counts were collected for the weekend to analyze the effects of the South Cherokee Recreational Fields due to the anticipated heavy traffic volumes that will accumulate from this development. The counts included 16-hour turning movement counts (TMCs) at four (4) of the five (5) of the study intersections and a 48-hour bi-directional speed and classification count at one location along Main Street. In addition to the new count data, counts for the signalized intersections at E Cherokee Drive and Ridgewalk Parkway were obtained from a previous study. These counts were collected in November 2021. To align with current count data, growth rates will be applied to grow volumes from 2021 to 2024. Further discussion on traffic forecasting will be included in Section 3. The traffic count data is included in **Appendix A**.

2.5. EXISTING YEAR CAPACITY ANALYSIS

A capacity analysis was performed for each of the study intersections based on the methodology outlined in the *Highway Capacity Manual (HCM)*. Various computer programs are available which implement the *HCM* methodology. For this project, Synchro 11 was used to analyze each of the study intersections.

The *HCM* defines level of service (LOS) in terms of the amount of control delay, including initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The LOS categories range from A to F, with different thresholds specified according to the type of stop control at the intersection. The LOS criteria for signalized and unsignalized intersections are listed in Table 2.

Table 2 – Level of Service Criteria

Level of Service (LOS)	Unsignalized Control Delay per Vehicle (sec)	Signalized Control Delay per Vehicle (sec)
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

Rural, sparsely developed areas have a minimum LOS requirement of C based on rural residents' expectation for relatively uncongested conditions in combination with design flexibility associated with lower right of way costs. The minimum LOS for urban areas is D, reflecting the greater acceptance of delay and congestion by urban residents. Additionally, the increased density of developments makes right of way costs much higher in urban areas. The study area is located within an urban area; therefore, a minimum LOS D is assumed for the study intersections.

A capacity analysis was performed for the Existing 2024 conditions using the current geometries at each of the six study intersections. The results of the analysis are listed in Tables 3 and 4, and the complete Synchro reports are included in **Appendix B**. It should be noted that the control delay for unsignalized intersections is reported based on the approach with the highest delay time rather than reporting an average delay for the overall intersection as with signalized intersections.

Table 3 – Existing Year 2024 Capacity Analysis Results

No.	Intersection	Intersection Control	Approach	Existing Year 2024							
				Weekday				Weekend			
				AM Peak		PM Peak		MD Peak		PM Peak	
				LOS	sec/veh	LOS	sec/veh	LOS	sec/veh	LOS	sec/veh
1	Main Street at E Cherokee Drive/Publix Entrance	Signalized	Overall	D	42.4	E	55.8	C	32.7	D	53.8
			NB	C	32.0	D	45.6	C	27.5	D	43.3
			SB	D	38.7	E	59.0	C	24.1	E	56.5
			EB	E	61.6	E	76.4	D	46.3	E	71.3
			WB	D	51.1	E	58.0	D	47.4	E	55.9
2	Main Street at South Cherokee Recreation Fields	Side Street Stop	WB	B	11.0	F	52.4	E	45.7	F	199.3
3	Main Street at Bell Parkway	Side Street Stop	EB	C	22.9	F	543.1	E	36.3	C	21.2
4	Main Street at Brooke Boulevard	Side Street Stop	WB	B	12.5	E	48.9	C	23.6	E	40.2
5	Main Street at Johnston Farm Lane	Side Street Stop	WB	E	38.1	F	72.7	E	39.0	D	32.6
6	Main Street at Ridgewalk Parkway	Signalized	Overall	C	23.3	C	31.7	C	26.1	B	19.4
			NB	B	17.1	D	37.5	B	17.6	B	17.5
			SB	B	15.6	C	22.4	B	19.2	B	18.4
			EB	D	35.3	D	37.9	D	35.4	C	21.5

The following inadequate operations were observed for the Existing Year 2024 conditions:

- Main Street at E Cherokee Drive/Publix Entrance (signalized)
 - The intersection is currently operating at LOS E during the weekday PM peak period.
- Main Street at South Cherokee Recreation Fields (unsignalized)
 - The westbound approach currently exhibits LOS F during both the weekday and weekend PM peak hours and LOS E in the weekend MD peak hour.
- Main Street at Bell Parkway (unsignalized)
 - The eastbound approach is operating at LOS F during the weekday PM peak hour and LOS E during the weekend MD peak period.
- Main Street at Brooke Boulevard (unsignalized)
 - The westbound approach currently experiences LOS E during the PM peak period for both the weekday and weekend.
- Main Street at Johnston Farm Lane (unsignalized)
 - The northbound approach is currently operating at LOS F during the weekday PM peak hour and LOS E for both the weekday AM peak period and the weekend MD peak period.
- Main Street at Ridgewalk Parkway (signalized)
 - The intersection is currently operating with adequate LOS for all approaches during all peak periods.

2.6. EXISTING YEAR BACK OF QUEUE ANALYSIS

A Back of Queue (BOQ) analysis was used to determine if any existing queues exceeded the available storage space at any of the study intersections. The 95th percentile queue is the maximum distance to the back of the queue that would be expected 95 percent of the time. Table 4 lists the BOQ lengths for each peak hour in the Existing Year conditions.

Table 4 – Existing Year 2024 Back of Queue Analysis Results

No.	Intersection	Intersection Control	Movement	Existing Storage (ft)	95th Percentile Back of Queue (ft)			
					Existing 2024			
					Weekday		Weekend	
					AM Peak	PM Peak	MD Peak	PM Peak
1	Main Street at E Cherokee Drive/ Publix Entrance	Signalized	EBL	25	26	153	25	153
			EBT+R	n/a	53	307	43	300
			WBL	575	356	412	303	340
			WBT	n/a	354	412	307	344
			WBR	265	83	295	86	190
			NBL	230	27	143	25	118
			NBT	n/a	193	366	149	318
			NBR	305	80	154	25	92
			SBL	375	337	328	272	328
			SBT+R	n/a	428	274	273	267
2	Main Street at South Cherokee Recreation Fields	Side Street Stop	NB	n/a	0	0	0	0
			SBL	n/a	0	0	25	25
			SBT	n/a	0	0	0	0
			WB	n/a	0	0	25	350
3	Main Street at Bell Parkway	Side Street Stop	NBL	155	25	25	25	0
			NBT	n/a	0	0	0	0
			SB	n/a	0	0	0	0
			EB	n/a	25	575	50	25
4	Main Street at Brooke Boulevard	Side Street Stop	NB	n/a	0	0	0	0
			SBL	n/a	0	25	0	0
			SBT	n/a	0	0	0	0
			WB	n/a	0	25	25	25
5	Main Street at Johnston Farm Lane	Side Street Stop	NB	n/a	0	0	0	0
			SBL	90	0	25	25	25
			SBT	n/a	0	0	0	0
			WBL	n/a	50	50	50	25
			WBR	130	25	25	25	25
6	Main Street at Ridgewalk Parkway	Signalized	EBL	n/a	175	312	268	186
			EBR	n/a	40	51	40	52
			NBL	200	42	160	42	95
			NBT	n/a	97	224	144	97
			SBT	n/a	326	269	201	166
			SBR	505	30	81	44	64

The following inadequacies were observed in the Existing Year BOQ analysis results:

- Main Street at E Cherokee Drive/Publix Entrance
 - For the PM peak period in both the weekday and weekend scenarios, the existing queue on the eastbound left-turn movement extends beyond the left-turn storage bay at the Publix Entrance.
 - During the weekday PM peak period scenario, the queue on the westbound right-turn lane movement extends past the existing storage bay along E Cherokee Drive.
- Main Street at South Cherokee Recreation Fields
 - For the weekend PM peak period, the westbound approach currently experiences queues that stretch back approximately 350 feet.
- Main Street at Bell Parkway
 - For the weekday PM peak period, the eastbound approach currently experiences queues that extend back to nearly 600 feet.

2.7. CRASH ANALYSIS

Crash data for the study area was obtained from Numetric for the five-year period between 2019 and 2023. A total of 341 crashes were reported along the corridor segment, including 7 serious injury crashes, 11 minor injury crashes, 50 possible injury crashes, and 271 property damage only crashes. 1 fatality crash was reported due to a head on collision that occurred overnight, north of the South Cherokee Recreation Fields in 2019. Based on the crash narrative, a southbound vehicle, assumed to be travelling above the speed limit, lost control in a curve and entered the opposing travel lanes where the collision occurred. Table 5 provides a summary of the crashes by manner of collision and Table 6 summarizes the corridor crashes by severity.

Table 5 – Summary of Corridor Crashes by Manner of Collision

Manner of Collision	Year					Total	
	2019	2020	2021	2022	2023	#	%
Angle	9	15	5	10	5	44	13%
Head On	4	1	1	2	0	8	2%
Not a Collision with Motor Vehicle	6	4	5	3	3	21	6%
Rear End	46	32	47	43	52	220	65%
Sideswipe - Opposite Direction	1	0	2	3	1	7	2%
Sideswipe - Same Direction	5	4	9	7	16	41	12%
Total	71	56	69	68	77	341	100%

Table 6 – Summary of Corridor Crashes by Severity

Collision Severity	Year					Total
	2019	2020	2021	2022	2023	
Fatal Injury Crash (K)	1	0	0	0	0	1
Serious Injury Crash (A)	3	2	1	1	0	7
Minor Injury Crash (B)	5	1	3	2	0	11
Possible Injury Crash (C)	5	13	8	13	11	50
Property Damage Only Crash (O)	57	40	57	52	66	272
Total Crashes	71	56	69	68	77	341
Total Non-Fatal Injuries	23	24	16	21	13	97
Total Fatalities	1	0	0	0	0	1
Average Crashes (per year)						68.2

The total potential benefit is a weighted value dependent upon the number of crashes within each severity level. Table 7 provides a summary of the crashes by manner of collision at the study intersections and Table 8 lists the crashes by severity. The sections that follow provide more detailed information pertaining to the intersections identified as the top ten crash locations. Crash diagrams for each location are provided in **Appendix C**.

Table 7 – Intersection Crashes by Manner of Collision

Int. No.	Intersection	Crashes by Manner of Collision						Total
		Angle	Head On	Not a Collision with Motor Vehicle	Rear End	Sideswipe-Opposite Direction	Sideswipe-Same Direction	
1	Main Street at E Cherokee Drive/Publix Entrance	10	3	3	120	2	16	154
2	Main Street at South Cherokee Recreation Fields	1	0	1	11	0	0	13
3	Main Street at Bell Parkway	2	2	2	12	0	1	19
4	Main Street at Brooke Boulevard	1	0	0	6	0	0	7
5	Main Street at Johnston Farm Lane	4	0	2	2	0	1	9
6	Main Street at Ridgewalk Parkway	17	1	5	29	0	14	66

Table 8 – Intersection Crashes by Severity

Int. No.	Intersection	Crashes by Severity					Total	Total Potential Benefit
		Fatal Injury (K)	Serious Injury (A)	Minor Injury (B)	Possible Injury (C)	Property Damage Only (O)		
1	Main Street at E Cherokee Drive/Publix Entrance	0	0	1	21	132	154	\$1,401,000.00
2	Main Street at South Cherokee Recreation Fields	0	0	0	5	8	13	\$173,800.00
3	Main Street at Bell Parkway	0	3	2	2	12	19	\$2,002,800.00
4	Main Street at Brooke Boulevard	0	0	1	1	5	7	\$173,800.00
5	Main Street at Johnston Farm Lane	0	0	0	2	7	9	\$90,800.00
6	Main Street at Ridgewalk Parkway	0	2	3	4	57	66	\$1,878,400.00

Intersection #1: Main Street at E Cherokee Drive/Publix Entrance

A total of 154 crashes were reported at the intersection of Main Street and E Cherokee Drive/Publix Entrance, including 1 minor injury crash, 21 possible injury crashes, and 132 property damage crashes. The majority of the reported crashes (75%) were rear end collisions. The next most common crash type was sideswipe-same direction collisions, accounting for 10% of the total crashes.

Intersection #2: Main Street at South Cherokee Recreation Fields

A total of 13 crashes were reported for the intersection of Main Street and South Cherokee Recreation Fields, including 5 possible injury crashes and 8 property damage crashes. The majority (85%, 11 total) of the reported crashes were rear end collisions; 9 occurred on the southbound approach while the other 2 occurred on the northbound approach.

Intersection #3: Main Street at Bell Parkway

A total of 19 crashes were reported for the intersection of Main Street and Bell Parkway. The crashes reported at this intersection included 3 serious injury crashes, 2 minor injury crashes, 2 possible injury crashes and 12 property damage crashes. Over half of the of the reported crashes (63%) were categorized as rear end crashes.

Intersection #4: Main Street at Brooke Boulevard

A total of 7 crashes were reported for the intersection of Main Street and Brooke Boulevard, including 1 minor injury crash, 1 possible injury crash, and 5 property damage crashes. The majority (86%, 6 total) of the reported crashes were rear end collisions; 4 occurred on the northbound approach while the other 2 occurred on the southbound approach. The remaining crash reported at this location was an angle crash involving a driver turning right out of an adjacent driveway very close to this intersection.

Intersection #5: Main Street at Johnston Farm Lane

A total of 9 crashes were reported for the intersection of Main Street and Johnston Farm Lane, including 4 angle crashes, 2 Not a Collision with a Motor Vehicle (NCWMV) crashes, 2 rear end crashes, and 1 sideswipe-same direction crash. The crashes reported at this intersection included 2 possible injury crashes and 7 property damage crashes.

Intersection #6: Main Street at Ridgewalk Parkway

A total of 66 crashes were reported for the intersection of Main Street and Ridgewalk Parkway, including 2 serious injury crashes, 3 minor injury crashes, 4 possible injury crashes, and 57 property damage crashes reported. The most common crash type reported was rear end crashes, accounting for nearly half (44%) of the total crashes. The next most common crash types were angle (26%) and sideswipe-same direction (21%) crashes.

3. FUTURE CONDITIONS

An analysis was completed to evaluate the operations of the corridor in future years in order to determine the need for any roadway and/or operational improvements. Opening and design years were established for the study area and an average annual growth rate applied to estimate the future traffic volumes.

3.1. PROJECTED TRAFFIC VOLUMES

An Opening Year of 2029 and a Design Year of 2049 were established for the study area, and an average annual growth rate was established based on a previous study conducted along Main Street. The growth rates established in the previous study were calculated by averaging the growth rates from the GDOT (Traffic Analysis and Data Application) TADA counts and county population data. Based on that data, a 1.5% growth rate was applied to the Existing Year 2024 peak hour traffic for 5 years to establish the Opening Year 2029 peak hour volumes. To establish the Design Year 2049 peak hour volumes, a 1.0% growth rate was applied to the Opening Year 2029 peak hour volumes for a period of 20 years.

3.2. OPERATIONAL ANALYSIS (NO-BUILD CONDITION)

Intersection capacity analysis was performed for the morning and evening peak hours of the Opening Year 2029 and Design Year 2049 No-Build condition. The No-Build analysis scenario utilized the same geometry and lane assignments as in the Existing Year scenario. The results are presented in Tables 9, 10, and 11, and the Synchro reports are included in **Appendix D**.

Table 9 – No-Build Capacity Analysis Results (2029)

No.	Intersection	Intersection Control	Approach	Opening Year 2029							
				Weekday				Weekend			
				AM Peak		PM Peak		AM Peak		PM Peak	
				LOS	sec/veh	LOS	sec/veh	LOS	sec/veh	LOS	sec/veh
1	Main Street at E Cherokee Drive/ Publix Entrance	Signalized	Overall	D	43.5	E	62.5	D	35.6	E	57.2
			NB	D	35.6	D	52.6	C	34.7	D	48.2
			SB	D	40.5	E	68.5	C	24.1	E	61.1
			EB	E	59.8	F	88.8	D	46.3	E	72.2
			WB	D	50.2	E	61.7	D	49.8	E	57.8
2	Main Street at South Cherokee Recreation Fields	Side Street Stop	WB	B	11.3	F	69.3	F	58.0	F	317.4
3	Main Street at Bell Parkway	Side Street Stop	EB	D	25.7	F	849.4	E	44.3	D	25.0
4	Main Street at Brooke Boulevard	Side Street Stop	WB	B	13.0	F	80.4	D	26.2	F	56.0
5	Main Street at Johnston Farm Lane	Side Street Stop	WB	E	47.3	F	113.8	E	48.9	E	42.5
6	Main Street at Ridgewalk Parkway	Signalized	Overall	C	24.0	C	34.0	C	27.2	C	20.8
			NB	B	17.5	D	46.2	B	18.2	B	18.8
			SB	B	17.0	C	25.4	C	20.6	B	19.4
			EB	D	35.0	D	35.8	D	36.4	C	23.7

Table 10 – No-Build Capacity Analysis Results (2049)

No.	Intersection	Intersection Control	Approach	Design Year 2049							
				Weekday				Weekend			
				AM Peak		PM Peak		MD Peak		PM Peak	
				LOS	sec/veh	LOS	sec/veh	LOS	sec/veh	LOS	sec/veh
1	Main Street at E Cherokee Drive/ Publix Entrance	Signalized	Overall	D	47.4	F	128.9	D	48.6	F	94.7
			NB	D	43.3	E	58.3	D	48.5	D	54.1
			SB	D	43.9	F	109.8	C	29.2	F	114.9
			EB	E	59.8	F	188.1	D	46.4	F	179.3
			WB	D	52.9	F	189.4	E	72.1	F	92.6
2	Main Street at South Cherokee Recreation Fields	Side Street Stop	WB	B	12.2	F	129.2	F	168.1	F	736.8
3	Main Street at Bell Parkway	Side Street Stop	EB	E	40.2	F	2004.0	F	100.2	E	39.7
4	Main Street at Brooke Boulevard	Side Street Stop	WB	B	14.8	F	323.3	E	43.8	F	153.0
5	Main Street at Johnston Farm Lane	Side Street Stop	WB	F	104.4	F	361.0	F	108.9	F	90.0
6	Main Street at Ridgewalk Parkway	Signalized	Overall	C	27.2	D	42.2	D	35.2	C	24.7
			NB	B	18.8	E	74.8	B	19.8	C	22.0
			SB	C	22.5	C	33.3	C	23.7	C	22.3
			EB	D	36.3	C	32.4	D	51.1	C	28.9

Based on the results of the No-Build Analysis, each of the intersections is expected to experience inadequate operations in at least one scenario.

For the intersection at Main Street and E Cherokee Drive, each of the PM peak period scenarios are expected to experience the most delay. Continued growth in commuter traffic, nearby schools, and traffic generated by the commercial development to the west are expected to continue impacting this intersection.

For the intersection at Main Street and South Cherokee Recreation Department, delays and queuing are expected to originate when practices and games take place. Based on the results, this is expected to occur mostly on the weekends. As shown in the tables above, side street delay is expected to exceed 100 seconds during the weekend scenarios, and queues are expected to extend back 600 feet in the Design Year weekend scenarios.

For the intersection at Main Street and Bell Parkway, eastbound delays on Bell Parkway are expected to 800 seconds for the weekday PM peak period scenarios. This movement is expected to be utilized by commuters leaving the industrial area west of Main Street. Minimal gaps on the mainline approaches of Main Street are expected to create long delays for motorists trying to make eastbound left-turn movements. With only a single lane eastbound, queues are expected to extend back 800 feet in the Design Year weekday PM peak scenario.

For the intersection at Main Street and Brooke Boulevard, each of the PM peak scenarios (weekday and weekend) are expected to be inadequate. Added delays from motorists trying to make left-turns from Brooke Boulevard are expected to impact overall operations. It should be noted that queues are minimal on the side street approach at Brooke Boulevard.

For the intersection at Main Street and Johnston Farm Lane, each of the scenarios studied are expected to experience inadequate operations on the westbound approach. While dedicated left and right turns are provided, minimal gaps along Main Street are expected to contribute to delays for motorists making left-turn movements. It should be noted that queues are minimal on the side street approach at Johnston Farm Lane.

For the intersection at Main Street and Ridgewalk Parkway, overall intersection operations are expected to be adequate; however, northbound delays are expected to experience LOS E during the Design Year weekday PM peak period scenario. As a primary connection to and from I-575, turning movements on and off of Ridgewalk Parkway are expected to continue to grow.

Table 11 below lists the BOQ lengths for each peak hour in both the Opening and Design Year scenarios.

Table 11 – Opening and Design Year (No-Build) Back of Queue Analysis Results

No.	Intersection	Intersection Control	Movement	Existing Storage (ft)	95th Percentile Back of Queue (ft)		95th Percentile Back of Queue (ft)		95th Percentile Back of Queue (ft)		95th Percentile Back of Queue (ft)	
					Opening Year 2029				Design Year 2049			
					Weekday		Weekend		Weekday		Weekend	
					AM Peak	PM Peak	MD Peak	PM Peak	AM Peak	PM Peak	MD Peak	PM Peak
1	Main Street at E Cherokee Drive/ Publix Entrance	Signalized	EBL	25	27	175	25	175	31	230	25	230
			EBT+R	n/a	56	348	45	339	64	445	51	432
			WBL	575	400	571	336	397	557	738	437	653
			WBT	n/a	393	577	341	401	553	748	438	657
			WBR	265	89	554	89	376	99	976	102	880
			NBL	230	30	155	25	128	33	199	25	152
			NBT	n/a	206	384	160	339	249	486	190	377
			NBR	305	83	247	25	92	92	556	27	250
2	Main Street at South Cherokee Recreation Fields	Side Street Stop	SBL	n/a	0	0	25	25	0	0	25	25
			SBT	n/a	0	0	0	0	0	0	0	0
			WB	n/a	0	25	50	425	0	25	75	575
			NBL	155	25	50	25	0	50	25	25	25
3	Main Street at Bell Parkway	Side Street Stop	NBT	n/a	0	0	0	0	0	0	0	0
			SB	n/a	0	0	0	0	0	0	0	0
			EB	n/a	25	650	50	25	50	800	75	50
			NB	n/a	0	0	0	0	0	0	0	0
4	Main Street at Brooke Boulevard	Side Street Stop	SBL	n/a	0	25	25	0	0	25	25	0
			SBT	n/a	0	0	0	0	0	0	0	0
			WB	n/a	0	50	25	50	0	100	25	100
			NBL	n/a	50	75	50	50	75	100	75	75
5	Main Street at Johnston Farm Lane	Side Street Stop	NBR	130	25	25	25	25	25	25	25	25
			EB	n/a	0	0	0	0	0	0	0	0
			WBL	90	0	25	25	25	0	25	25	25
			WBT	n/a	0	0	0	0	0	0	0	0
6	Main Street at Ridgewalk Parkway	Signalized	EBL	n/a	189	337	293	227	236	401	419	310
			EBR	n/a	45	50	40	58	135	50	113	63
			NBL	200	45	186	45	111	52	240	52	135
			NBT	n/a	103	268	156	106	126	376	196	131
			SBT	n/a	360	318	214	186	483	431	279	231
			SBR	505	30	97	43	65	28	180	25	112

4. PROPOSED IMPROVEMENTS

4.1. OPERATIONAL IMPROVEMENTS

Potential alternatives for mitigation were explored for each of the study intersections, and a capacity analysis was performed at each location for the Opening Year 2029 and Design Year 2049 Build conditions.

The criteria for determining the LOS at an intersection were provided in an earlier section of this report; however, the criteria listed were only for signalized and unsignalized intersections. Since at least one of the potential improvements involves converting an intersection to a roundabout, the method for determining the LOS of a roundabout should be noted. Based on guidance in the HCM, the same criteria for unsignalized intersections are applicable to roundabouts.

Table 12 – Level of Service Criteria

Level of Service (LOS)	Unsignalized & Roundabouts Control Delay per Vehicle (sec)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

The results of the Build condition capacity analysis for the Opening Year 2029 and Design Year 2049 are provided in Tables 13 and 14 along with a comparison to the No-Build results. The full capacity analysis reports are provided in **Appendix E**. The sections following the table provide details pertaining to the analysis results and to each proposed improvement.

Table 13 – Build Capacity Analysis Results (2029)

No.	Intersection	Analysis Scenario	Opening Year 2029							
			Weekday				Weekend			
			AM Peak		PM Peak		MD Peak		PM Peak	
			LOS	sec/veh	LOS	sec/veh	LOS	sec/veh	LOS	sec/veh
1	Main Street at E Cherokee Drive/Publix Entrance	No Build	D	43.5	E	62.5	D	35.6	E	57.2
		Build: Dual Right Turn Lanes on NB and WB Approaches	C	34.9	D	48.3	C	33.6	D	39.7
		% Improvement	20%		23%		6%		31%	
		Build: Reconfigure to T-intersection								
		% Improvement								
2	Main Street at South Cherokee Recreation Fields	No Build	B	11.3	F	69.3	F	58.0	F	317.4
		Build: Convert to High-T; Add SBL and WBR Turn Lanes	B	11.3	C	22.5	C	20.4	C	24.9
		% Improvement	0%		68%		65%		92%	
		Build: Add SBL Turn Lane	B	11.3	F	68.2	E	48.1	F	291.6
		% Improvement	0%		2%		17%		8%	
		Build: Add SBL and WBR Turn Lanes	B	11.3	F	68.2	E	43.2	F	90.2
		% Improvement	0%		2%		26%		72%	
		Build: Add WBR Turn Lane	B	11.3	F	69.3	F	51.2	F	107.2
		% Improvement	0%		0%		12%		66%	
		Build: Convert to Single Lane Roundabout; Add NBR and WBR Bypass Lanes	A	3.7	A	8.1	A	6.6	A	7.6
% Improvement	67%		88%		89%		98%			
3	Main Street at Bell Parkway	No Build	D	25.7	F	849.4	E	44.3	D	25.0
		Build: Convert to Single Lane Roundabout; Add SBR and EBR Bypass Lanes	A	9.9	A	9.5	A	5.9	A	5.0
		% Improvement	61%		99%		87%		80%	
		Build: Convert to RCUT	C	24.3	F	65.6	E	36.1	D	28.6
		% Improvement	5%		92%		19%		-14%	
		Build: Add Side Street Turn Lanes	C	23.7	F	220.6	F	57.1	D	27.1
		% Improvement	8%		74%		-29%		-8%	
Build: Install Traffic Signal	D	42.5	C	33.4	C	24.7	C	25.6		
% Improvement	-65%		96%		44%		-2%			
4	Main Street at Brooke Boulevard	No Build	B	13.0	F	80.4	D	26.2	F	56.0
		Build: Add Side Street Turn Lanes	B	13.0	F	66.8	D	27.3	E	47.7
		% Improvement	0%		17%		-4%		15%	
		Build: Connected Access with Ace Hardware								
		% Improvement								
5	Main Street at Johnston Farm Lane	No Build	E	47.3	F	113.8	E	48.9	E	42.5
		Build: Convert to High-T	B	14.2	D	25.9	C	20.9	C	17.4
		% Improvement	70%		77%		57%		59%	
		Build: Convert to RCUT	C	22.8	D	32.9	D	29.0	C	24.1
		% Improvement	52%		71%		41%		43%	
6	Main Street at Ridgewalk Parkway	No Build	C	24.0	C	34.0	C	27.2	C	20.8
		Build: Convert to Multi-Lane Roundabout	A	5.9	A	7.9	A	6.7	A	6.0
		% Improvement	75%		77%		75%		71%	
		Build: Add an additional SBR Turn Lane	C	20.6	C	26.9	C	23.8	C	28.8
		% Improvement	14%		21%		13%		-38%	

Table 14 – Build Capacity Analysis Results (2049)

No.	Intersection	Analysis Scenario	Design Year 2049							
			Weekday				Weekend			
			AM Peak		PM Peak		MD Peak		PM Peak	
			LOS	sec/veh	LOS	sec/veh	LOS	sec/veh	LOS	sec/veh
1	Main Street at E Cherokee Drive/Publix Entrance	No Build	D	47.4	F	128.9	D	48.6	F	94.7
		Build: Dual Right Turn Lanes on NB and WB Approaches	D	37.8	F	80.3	D	38.9	D	47.8
		% Improvement	20%		38%		20%		50%	
		Build: Reconfigure to T-intersection								
		% Improvement								
2	Main Street at South Cherokee Recreation Fields	No Build	B	12.2	F	129.2	F	168.1	F	736.8
		Build: Convert to High-T; Add SBL and WBR Turn Lanes	B	12.2	D	30.2	D	26.0	E	35.6
		% Improvement	0%		77%		85%		95%	
		Build: Add SBL Turn Lane	B	12.2	F	129.2	F	96.6	F	637.0
		% Improvement	0%		0%		43%		14%	
		Build: Add SBL and WBR Turn Lanes	B	12.2	F	129.2	F	79.3	F	214.1
		% Improvement	0%		0%		53%		71%	
		Build: Add WBR Turn Lane	B	12.2	F	129.2	F	128.7	F	276.4
		% Improvement	0%		0%		23%		62%	
		Build: Convert to Single Lane Roundabout; Add NBR and WBR Bypass Lanes	A	3.8	C	16.2	A	8.6	A	9.3
% Improvement	69%		87%		95%		99%			
3	Main Street at Bell Parkway	No Build	E	40.2	F	2004.0	F	100.2	E	39.7
		Build: Convert to Single Lane Roundabout; Add SBR and EBR Bypass Lanes	C	18.8	B	13.2	A	7.6	A	5.7
		% Improvement	53%		99%		92%		86%	
		Build: Convert to RCUT	D	31.1	F	138.1	E	40.6	D	32.0
		% Improvement	23%		93%		59%		19%	
		Build: Add Side Street Turn Lanes	D	34.4	F	554.2	F	143.1	E	45.5
		% Improvement	14%		72%		-43%		-15%	
		Build: Install Traffic Signal	D	42.5	D	37.6	D	41.2	C	32.0
% Improvement	-6%		98%		59%		19%			
4	Main Street at Brooke Boulevard	No Build	B	14.8	F	323.3	E	43.8	F	153.0
		Build: Add Side Street Turn Lanes	B	14.8	F	198.8	E	46.0	F	115.0
		% Improvement	0%		39%		-5%		25%	
		Build: Connected Access with Ace Hardware								
		% Improvement								
5	Main Street at Johnston Farm Lane	No Build	F	104.4	F	361.0	F	108.9	F	90.0
		Build: Convert to High-T	C	16.5	E	37.5	D	28.1	C	21.5
		% Improvement	84%		90%		74%		76%	
		Build: Convert to RCUT	D	25.3	E	46.9	E	38.0	D	28.8
		% Improvement	76%		87%		65%		68%	
6	Main Street at Ridgeway Parkway	No Build	C	27.2	D	42.2	D	35.2	C	24.7
		Build: Convert to Multi-Lane Roundabout	A	6.6	B	10.4	A	7.8	A	6.8
		% Improvement	76%		75%		78%		72%	
		Build: Add an additional SBR Turn Lane	C	23.6	C	34.0	C	25.3	D	35.4
		% Improvement	13%		19%		28%		-43%	

Main Street at E Cherokee Drive/Publix Entrance (Intersection #1)

Main Street at East Cherokee Drive is a four-legged, signalized intersection. The northbound approach on Main Street contains a single through lane, a left turn lane, a right turn lane, and two receiving lanes. The southbound approach consists of dual left turn lanes, a shared through-right turn lane, and a single departure lane. The westbound approach on East Cherokee Drive contains a left turn lane, a shared through-left turn lane, a right turn lane, and two departure lanes. The eastbound approach is the driveway to the Village Shoppes of East Cherokee shopping center that consist of a left turn lane and a shared through-right turn lane. The intersection experiences high volumes on the northbound and westbound right turn movements as well as the southbound and westbound left turn movements during both peak hours. In the PM peak period of both the Opening and Design Year No-Build conditions, the intersection is expected to exhibit inadequate operations. For the Opening Year, it is expected to operate at LOS E, and the Design Year is expected to operate at LOS F. Potential solutions for mitigation considered for this location include installing dual right turn lanes on the northbound and westbound approaches and reconfiguring the intersection to a T-intersection.

The first improvement option for this location involves **providing dual right turn lanes on the northbound and westbound approaches**. The existing right turn lanes to the Woodstock KinderCare driveways on Main Street would be extended to create a second northbound receiving lane beyond the intersection. The new lane would then become a drop lane at the northernmost driveway to the KinderCare facility. The estimated cost of providing northbound and westbound dual right turn lanes is \$700,000. The analysis results indicate that this improvement would be expected to reduce delay for all scenarios.

The second improvement option identified was to **convert the current four-legged intersection to a T-intersection by removing/relocating the eastbound approach for the development**. This alternative proposes to direct development traffic to the north and/or south and look at possible signalization for at least one of those locations. Improved frontage roads would be needed to efficiently move vehicles to new full access locations. It should be noted that operational analyses were not conducted for this alternative.

Main Street at South Cherokee Recreation Fields (Intersection #2)

Main Street at Cherokee Recreation Fields is an unsignalized T-intersection with single lane approaches on both Main Street and the Recreation Fields Driveway. The intersection is expected to operate at LOS B in the weekday, AM peak period scenarios for both the Opening and Design Years under the No-Build scenario. All other scenarios are expected to operate at LOS F with weekend peak periods revealing the highest delays. Potential solutions for mitigation considered for this location are located below.

The first proposed improvement involves **converting the intersection to an Unsignalized, High-T intersection**. A southbound left-turn lane along Main Street is proposed in conjunction with this alternative, as well as an additional receiving lane southbound for the High-T configuration to work. Additional improvement will also be made on the westbound approach of the Recreation Fields Driveway to construct dedicated left and right turn lanes to more efficiently serve vehicles upon egress. The estimated cost of this improvement is \$1,000,000. The analysis results indicate that this improvement would be expected to reduce delay for all scenarios with the exception of the weekday AM peak period where operations are expected to remain the same (minimal side street traffic during this time).

The next improvement alternative(s) included three scenarios for turn lane installation. The first option was to **install an exclusive southbound left turn lane**; the second option was to **install dedicated southbound left turn and westbound right turn lanes**; the final option was to only **install a dedicated westbound right turn lane**. Similar to the previous alternative, the analysis results indicate that this improvement would be expected to reduce delay for all scenarios with the exception of the weekday AM peak period where operations are expected to remain the same (minimal side street traffic during this time). The estimated cost for these improvements range from \$300,000 to \$700,000.

The single lane roundabout was the final alternative analyzed. It was modeled as an elongated roundabout with an inscribed diameter of 140 feet (N-S) and 80 feet (E-W); however, this could change once in the design phase. Bypass lanes are proposed on both the northbound and westbound approaches of the proposed roundabout. The estimated cost of this improvement is \$2,000,000. The analysis results indicate that this improvement would be expected to reduce delay for all scenarios. While the table only shows LOS and delay for the westbound approach, the overall intersection performance with a roundabout is expected to be acceptable in all scenarios. LOS A is expected for each of the weekday scenarios and LOS B is expected for each of the weekend scenarios when looking at the overall intersection.

Main Street at Bell Parkway (Intersection #3)

Main Street at Bell Parkway is an unsignalized, four-legged intersection. Main Street consists of a dedicated left turn lane and shared through+right turn lane on the northbound approach. The southbound approach consists of a through lane and a dedicated right turn lane. The eastbound approach on Bell Parkway is a single lane approach, and the westbound approach consists of commercial driveway that is currently exit only. For the weekday analysis, the intersection is expected to operate at LOS D in the AM peak period of the Opening Year scenario with all other scenarios operating inadequately under the No-Build scenario. For the weekend analysis, the intersection is expected to operate at LOS D in the PM peak period of the Opening Year scenario with all other scenarios operating inadequately under the No-Build scenario. Potential solutions for mitigation considered for this location are located below.

A hybrid roundabout was analyzed with an inscribed diameter of 100 feet; however, this could change once in the design phase. The roundabout is proposed to have two approach lanes northbound, one of which will be used as a left turn lane. The roundabout will also include bypass lanes on the southbound and eastbound approaches. The estimated cost of this improvement is \$2,150,000. While the table only shows LOS and delay for the eastbound approach, the overall intersection performance with a roundabout is not expected to be acceptable for all scenarios. LOS F is expected for at least one mainline approach in the weekday PM peak period for the Opening Year 2029 scenario. Additionally, the intersection is expected to operate with LOS F in the weekday PM peak period for the Design Year 2049 scenario.

The next improvement involves **converting the intersection to an Unsignalized, Restricted Crossing U-Turn (RCUT) intersection**. The existing geometry along Main Street will be retained, and each of the side street approaches will be limited to right-turns only. Those currently turning left from the eastbound approach on Bell Parkway can reach the same destination by utilizing the signal to the south at the Ace Hardware for U-turns. The estimated cost of this improvement is \$175,000. The analysis results indicate that this improvement would be expected to reduce delay for all scenarios with the exception of the Opening Year 2029 weekend PM peak period where operations are expected to remain similar to the No-Build conditions (minimal side street traffic during this time).

An exclusive eastbound right turn lane on Bell Parkway was another alternative identified for this intersection. For this improvement, the current lane would serve as a shared left+through lane and a right turn lane would be constructed. The estimated cost of this improvement is \$300,000. The analysis results indicate that this improvement would be expected to reduce delay for all weekday scenarios; however, there are weekend peak period scenarios that remain similar to the No-Build conditions (minimal side street traffic during this time).

A traffic signal was the last alternative analyzed for the Bell Parkway intersection. This alternative would include the exclusive right turn lane improvements noted above, along with creating a dedicated southbound left turn lane from the existing pavement, and finally improving the commercial driveway where the signal will be installed. The estimated cost of this improvement is \$600,000. While the table only shows LOS and delay for the eastbound approach, the overall intersection performance with a traffic signal is expected to operate better than what is currently reflected. Each of the scenarios is expected to

provide an overall LOS A with the exception of the weekday PM peak periods. For the weekday PM peak period scenarios, the Opening Year is expected to operate with LOS B, and the Design Year 2049 scenario is expected to operate with LOS C.

It should be noted that only a preliminary signal warrant analysis was completed. Only Warrant 2 – Four Hour Volumes is expected to be met based on the analysis. Using both the Existing Year 2024 and Opening Year 2029 volumes with reduced minor street right turns (Pagones Theorem), the warrant was met. This warrant is not expected to be met by removing all right-turn movements from the side street.

Main Street at Brooke Boulevard (Intersection #4)

Main Street at Brooke Boulevard is an unsignalized T-intersection with a single lane approach northbound on Main Street and a dedicated left turn lane and through lane southbound. The Brooke Boulevard approach is a single lane in and out. The intersection is expected to operate with adequate LOS for each of the weekday AM and weekend MD peak periods with the exception of the Design Year, weekend MD peak period. All other scenarios are expected to operate at LOS F. Potential solutions for mitigation considered for this location are located below.

An exclusive westbound right turn lane on Brooke Boulevard was the primary alternative identified for this intersection. For this improvement, the current lane would serve as a dedicated left turn lane and a right turn lane would be constructed. The estimated cost of this improvement is \$300,000. The analysis results indicate that this improvement would be expected to maintain or reduce delay for all weekday scenarios; however, there are weekend peak period scenarios that remain similar to the No-Build conditions (minimal side street traffic during this time).

The second improvement option identified was to realign the primary access for Brooke Boulevard to the Ace Hardware signal. Based on the lane configuration at the existing signal, and the current traffic along Brooke Boulevard, no additional improvements are expected to be needed at the signalized intersection. However, it should be noted that operational analyses were not conducted for this alternative due to not having traffic counts for the intersection.

Main Street at Johnston Farm Lane (Intersection #5)

Main Street at Johnston Farm Lane is an unsignalized T-intersection with a dedicated left turn lane on the southbound approach, a dedicated right turn on the northbound approach, and two lanes on the westbound approach. The intersection is expected to operate acceptably at LOS D in the morning peak hour of the Opening Year, but unacceptably in all other No-Build scenarios.

The first proposed improvement involves **converting the intersection to an Unsignalized, High-T intersection**. An additional receiving lane southbound will be needed for the High-T configuration to work; however, there may be sufficient pavement along Main Street with the striped median. The estimated cost of this improvement is \$300,000. The analysis results indicate that this improvement would be expected to reduce delay for all scenarios.

The second proposed improvement involves **converting the intersection to a Restricted Crossing U-Turn (RCUT) intersection**. Left turns from Johnston Farm Lane would no longer be permitted at the intersection. Those currently turning left from Johnston Farm Lane can reach the same destination by utilizing the signal to the south at the Ace Hardware for U-turns. The estimated cost of this improvement is \$325,000. The analysis results indicate that this improvement would be expected to reduce delay for all scenarios.

Main Street at Ridgewalk Parkway (Intersection #6)

The intersection of Main Street and Ridgewalk Parkway is signalized with three approaches. The northbound approach along Main Street contains dual left turn lanes and a single through lane. The southbound approach has a through lane and a right turn lane. The eastbound approach on Ridgewalk Parkway consists of dual left turn lanes and a single right turn lane. It should be noted that this intersection is expected to operate acceptably through all scenarios in the No-Build condition.

The multilane roundabout would consist of two entry lanes and two departure lanes on each approach. The southbound and eastbound approaches would each have a right turn bypass lane. The estimated cost of the multilane roundabout is \$2,750,000. The analysis results indicate that this improvement would be expected to reduce delay for all scenarios.

In order to **provide dual southbound right turn lanes**, the southbound approach along Main Street would need to be widened. Due to the proximity of the train tracks running along the west side of Main Street, the length of the new lane would be restricted to a maximum of approximately 200 feet in order to avoid impacts to the rail bed. The traffic signal phasing would be converted to allow the southbound right turn to operate during an overlap phase to increase the number of vehicles allowed for that movement per cycle. The estimated cost of providing dual southbound right turns is \$400,000. The analysis results indicate that this improvement would be expected to reduce delay for all scenarios.

4.2. SAFETY IMPROVEMENTS

The crash data at each study intersection was evaluated to identify crash trends and patterns in order to determine what type of improvement would be best-suited for each location. Some of the potential mitigations are intended to be implemented together in order to produce a more effective, overall improvement than if each were implemented individually. The potential safety improvements for each intersection are listed in Table 15 along with the number of crashes reported at the location. Details on the improvements at each location are provided in the sections that follow.

Table 15 – Proposed Improvements to Mitigate Safety Improvements

No.	Intersection	Crashes from 2019 - 2023						Improvement
		K	A	B	C	O	Total	
1	Main Street at E Cherokee Drive/ Publix Entrance	0	0	1	21	132	154	Minor Safety Improvements: Dynamic Warning Flashers, Resurface Pavement, Signal Timing Adjustments, Supplemental Signal Heads, Elongated Right Turn
2	Main Street at South Cherokee Recreation Fields	0	0	0	5	8	13	Convert to High T
								Add SB Left Turn Lanes
								Add SB Left and WB Right Turn Lanes
								Add WB Right Turn Lane
								Convert to Single Lane Roundabout
3	Main Street at Bell Parkway	0	3	2	2	12	19	Convert to Single Lane Roundabout
								Convert to RCUT
								Add EB Right Turn Lane
								Install Traffic Signal
4	Main Street at Brooke Boulevard	0	0	1	1	5	7	Add WB Right Turn Lane
5	Main Street at Johnston Farm Lane	0	0	0	2	7	9	Convert to High T
								Convert to RCUT
6	Main Street at Ridgewalk Parkway	0	2	3	4	57	66	Convert to Multilane Roundabout

Main Street at E Cherokee Drive/Publix Entrance (Intersection #1)

A total of 154 crashes were reported at the intersection of Main Street and E Cherokee Drive/Publix Entrance. The crashes included 120 rear end collisions, 16 sideswipe-same direction crashes, 10 angle collisions, 3 head on collisions, 2 single vehicle crashes, and 2 sideswipe-opposite direction crashes. More than half of the rear end crashes (55 percent, 66 total) occurred on the westbound approach, 23% (28 total) occurred on the southbound approach, and 18% (22 total) occurred on the northbound approach. The remaining rear end crashes at the intersection occurred in areas (or movements) departing the intersection.

A combination of safety improvements is recommended for this intersection. Pavement resurfacing and advance warning signs to alert drivers of the lane configuration ahead are recommended for the southbound approach on Main Street. Installing an elongated right turn is recommended to improve the visibility angle for the channelized right turns on the westbound and northbound approaches. The FHWA crash modification factors suggest that implementing an elongated right turn would result in a 44 percent reduction in all crash types. In addition to the right turn modification, signal timing adjustments are recommended for the northbound approach on Holly Springs Parkway, which include verifying appropriate clearances are used as well as potentially increasing vehicle extension time. Finally, a supplemental signal head is recommended for the eastbound approach to address the sight distance concern presented when exiting the Publix driveway due to the downgrade. The estimated cost associated with these improvements is \$400,000.

Main Street at South Cherokee Recreation Fields (Intersection #2)

A total of 13 crashes were reported at the intersection of Main Street and South Cherokee Recreation Fields. The majority (85%, 11 total) of the reported crashes were rear end collisions; 9 occurred on the southbound approach while the other 2 occurred on the northbound approach. There was also 1 angle crash and 1 single vehicle crash reported at the intersection.

Converting the intersection to an Unsignalized, High-T Intersection was one alternative identified for this location. The FHWA crash modification factors suggest that converting to a High-T and providing dedicated turn lanes would result in a 67 percent reduction in fatal and injury crashes and a 56 percent reduction in property damage crashes. The estimated cost of these improvements is \$1,000,000.

The benefit of **adding both mainline and side street turn lanes** were evaluated for this intersection. The installation of a left turn lane on the mainline would be expected to result in a reduction of 27 percent for fatal and injury crashes and 31 percent for property damage crashes. For a right turn lane on the side street approach, a reduction of 17 percent for fatal and injury crashes and 17 percent for property damage crashes would be expected. The combination of these two alternatives is expected to provide a reduction of 39 percent for fatal and injury crashes and 43 percent for property damage crashes. The estimated cost for these improvements range from \$300,000 to \$700,000.

The final option evaluated was to **convert the intersection into a single lane roundabout**. Converting the unsignalized intersection to a roundabout would result in a 71 percent reduction in fatal and injury crashes and a 62 percent reduction in property damage crashes. The estimated cost of the roundabout is \$2,000,000.

Main Street at Bell Parkway (Intersection #3)

A total of 19 crashes were reported at the intersection of Main Street and Bell Parkway. Over half of the of the reported crashes (63%, 12 total) were categorized as rear end crashes; 7 occurred on the northbound approach, 4 occurred on the eastbound approach, and 1 occurred on the southbound approach. There were also 2 angle crashes, 2 head on crashes, 2 single vehicle crashes, and 1 sideswipe-same direction crashes reported at the intersection.

The benefit of **converting the intersection into a single lane roundabout** with bypass lanes on both the eastbound and southbound approaches was evaluated. This improvement would result in a 71 percent reduction in fatal and injury crashes and a 62 percent reduction in property damage crashes. The estimated cost of the roundabout is \$2,150,000.

Converting the intersection to a Restricted Crossing U-Turn (RCUT) Intersection is another option that was evaluated. The FHWA crash modification factors suggest that converting to an RCUT would result in a 73 percent reduction in fatal and injury crashes and a 65 percent reduction in property damage crashes. The estimated cost of these improvements is \$175,000.

The benefit of **adding an eastbound right turn lane** was also evaluated for this intersection. The installation of a right turn lane on the side street would be expected to result in a reduction of 17 percent for fatal and injury crashes and 17 percent for property damage crashes. The estimated cost of this improvement is \$300,000.

Installing a traffic signal was the last improvement evaluated. The FHWA crash modification factors suggest that installing a traffic signal with a dedicated turn lanes would be expected to result in a 64 percent reduction in fatal and injury crashes and a 65 percent reduction in property damage crashes. The estimated cost of this improvement is \$600,000.

Main Street at Brooke Boulevard (Intersection #4)

A total of 7 crashes were reported at the intersection of Main Street and Brooke Boulevard including 6 rear end collisions and 1 angle crash. Of the rear end crashes, 4 occurred on the northbound approach and 2 occurred on the southbound approach.

The benefit of **adding a westbound right turn lane** was evaluated for this intersection. The installation of a right turn lane on the side street would be expected to result in a reduction of 17 percent for fatal and injury crashes and 17 percent for property damage crashes. The estimated cost of this improvement is \$300,000.

Main Street at Johnston Farm Lane (Intersection #5)

A total of 9 crashes were reported at the intersection of Main Street and Johnston Farm Lane. The total crashes included 4 angle crashes, 2 single vehicle collisions, 2 rear end crashes, and 1 sideswipe-same direction collision. 3 of the 4 angle crashes involved vehicles turning left from the westbound approach and being struck by a northbound vehicle.

Converting the intersection to an Unsignalized, High-T Intersection was one alternative identified for this location. The FHWA crash modification factors suggest that converting to a High-T intersection would result in a 67 percent reduction in fatal and injury crashes and a 56 percent reduction in property damage crashes. The estimated cost of these improvements is \$300,000.

Converting the intersection to a Restricted Crossing U-Turn (RCUT) Intersection is another option that was evaluated. The FHWA crash modification factors suggest that converting to an RCUT would result in a 73 percent reduction in fatal and injury crashes and a 65 percent reduction in property damage crashes. The estimated cost of these improvements is \$325,000.

Main Street at Ridgewalk Parkway (Intersection #6)

A total of 66 crashes were reported at the intersection of Main Street and Ridgewalk Parkway, including 29 rear end crashes, 17 angle crashes, 14 sideswipe-same direction crashes, 5 single vehicle collisions, and 1 head on collision. Of the rear end crashes, 15 occurred on the eastbound approach, 9 occurred on the southbound approach, and 5 occurred on the northbound approach.

A potential solution to improve safety at the intersection includes **converting the intersection to a multilane roundabout**. Converting the signalized intersection to a multilane roundabout would result in a 71 percent reduction in fatal and injury crashes and a 19 percent reduction in property damage crashes. The estimated cost of the roundabout is \$2,750,000.

5. PLANNING-LEVEL SEGMENT ANALYSIS

A planning-level roadway segment analysis was performed along the study corridor on Main Street, between Ridgewalk Parkway and E Cherokee Drive, to evaluate the current operation of the defined roadway segments and identify the potential need for widening to provide additional capacity in the future. It should be noted that this analysis did not include the evaluate of individual intersection operations. Furthermore, the intersection improvements discussed in the previous section were not taken into consideration as part of the segment analysis.

5.1. METHODOLOGY

The planning-level segment analysis was conducted using the Generalized Service Volume Tables (GSVTs) developed by the Florida Department of Transportation (FDOT) based on information from the *Highway Capacity Manual (HCM)*. The Georgia Regional Transportation Authority (GRTA) currently uses these tables to assist in defining study areas as part of the Development of Regional Impact (DRI) process. The tables provide values that represent the maximum service volumes for a given LOS based on the average daily traffic (ADT), number of lanes, the presence of a median, whether or not left turn lanes are provided, and the presence and frequency of signalized intersections along the segment. The tables are included in **Appendix F**.

The study corridor on Main Street, between Ridgewalk Parkway and E Cherokee Drive, was analyzed as a single segment based on the 48-hour bi-directional counts collected along the roadway.

5.2. EXISTING YEAR SEGMENT ANALYSIS

The defined segment was analyzed using the Existing Year 2024 volumes in order to determine the existing LOS. The minimum acceptable LOS was assumed to be D for the study area. The results of the Existing Year segment analysis for weekday and weekend are presented in Table 16.

Table 16 – Existing Year 2024 Roadway Segment LOS

Day of the Week	Signals per Mile	Facility Type	Maximum Facility Service Volume at Standard LOS D			Existing Year 2024			
			Base	Adjustment Factor	Adj	ADT	Facility LOS	Max. Service Volume at Existing LOS	
Weekday	1.45	2LU-1	16,600	N/A	N/A	16,600	23,492	F	> 16,600
Weekend							18,993	F	

The segment analysis results indicate that the study segment of Main Street is currently operating at failing LOS F for both the weekday and weekend scenarios, with the existing ADT exceeding the maximum service volume by 42% on weekday and 14% on weekend, respectively.

5.3. FUTURE YEAR SEGMENT ANALYSIS

The planning-level segment analysis was completed for the Opening Year 2029 and the Design Year 2049 using the same roadway configuration as the Existing Year 2024. The future year volumes were calculated by applying the growth rates discussed in Section 3.1 of the report. The segment LOS results for the Opening and Design Year for both the weekday and weekend scenarios are provided in Table 17.

Table 17 – Future Year Roadway Segment LOS

Day of the Week	Max. Facility Service Volume on Standard LOS	Opening Year 2029			Design Year 2049		
		ADT	Facility LOS	Max. Service Volume at 2029 LOS	ADT	Facility LOS	Max. Service Volume at 2029 LOS
Weekday	16,600	25,308	F	> 16,600	30,881	F	> 16,600
Weekend		20,461	F		24,966	F	

For each of the Opening and Design Year scenarios, the study segment of Main Street is expected to operate at LOS F during both the weekday and weekend periods, which is expected as the corridor is already failing in the existing conditions. By the Design Year 2049, the expected ADT will exceed the maximum service volume by 86% for a typical weekday and 50% for a typical weekend, respectively.

5.4. RECOMMENDATIONS

The planning-level segment analysis results indicate that capacity improvements will be needed along the corridor from Ridgewalk Parkway to E Cherokee Drive. An additional segment analysis was performed for the Opening Year 2029 and Design Year 2049 scenarios to determine potential corridor-wide improvements. The analysis scenarios are listed below:

- Widen to provide a two-way left turn lane (TWLTL)
- Widen to provide undivided 4-lane road with left turn bays
- Widen to provide divided 4-lane road with a two-way left turn lane (TWLTL)

The results for the mitigated segment LOS analysis are presented in Table 18.

Table 18 – Future Year Mitigated Roadway Segment LOS

Day of the Week	Facility Type	Max. Facility Service Volume on Standard LOS			Opening Year 2029		Design Year 2049		
		Base	Adjustment Factor	Adj	ADT	Facility LOS	ADT	Facility LOS	
Widen to provide a TWLTL with left turn bays at major intersections									
Weekday	2LD-1	16,600	Median (TWLTL)	1.05	17,430	25,308	F	30,881	F
Weekend					17,430	20,461	F	24,966	F
Widen to provide undivided 4-lane road with left turn bays at major intersections									
Weekday	4LU-1	35,000	Undivided w/ LT Bays	0.75	33,250	25,308	C	30,881	C
Weekend					33,250	20,461	B	24,966	C
Widen to provide divided 4-lane road with a TWLTL and left turn bays at major intersections									
Weekday	4LD-1	35,000	N/A	N/A	35,000	25,308	C	30,881	C
Weekend					35,000	20,461	B	24,966	C

The results indicate that adding a TWLTL along the existing 2-lane corridor has minimal operational improvement on Main Street in each of the future year scenarios. However, widening to a 4-lane roadway, with or without a TWLTL, will significantly improve the segment LOS to C or better for each of the future year scenarios.

6. CONCLUSION

6.1. INTERSECTION RECOMMENDATIONS

A list of all operational and safety improvements with their estimated construction costs is provided in Table 19. The B/C ratio calculations for the potential operational and safety improvements at each location are provided in **Appendix G**.

Table 19 – Proposed Operational and Safety Improvements with B/C Ratios

No.	Intersection	Improvement	Estimated Cost	B/C Ratio		
				Operational Weekday	Operational Weekend	Safety
1	Main Street at E Cherokee Drive/ Publix Entrance	Dual Right Turn Lanes (NB/WB)	\$700,000	9.36	--	--
		Minor Safety Improvements	\$400,000	--	--	9.79
2	Main Street at South Cherokee Recreation Fields	Convert to High T	\$1,000,000	7.03	49.00	0.82
		Add SB Left Turn Lanes	\$400,000	0.12	22.47	0.90
		Add SB Left and WB Right Turn Lanes	\$700,000	0.07	50.73	0.74
		Add WB Right Turn Lane	\$300,000	0.00	98.57	0.73
		Convert to Single Lane Roundabout	\$2,000,000	4.46	26.05	0.69
3	Main Street at Bell Parkway	Convert to Single Lane Roundabout	\$2,150,000	69.12	3.60	7.57
		Convert to RCUT	\$175,000	789.68	18.55	61.66
		Add EB Right Turn Lane	\$300,000	360.88	-9.21	8.40
		Install Traffic Signal	\$600,000	240.05	6.25	15.75
4	Main Street at Brooke Boulevard	Add WB Right Turn Lane	\$300,000	25.71	5.66	0.73
5	Main Street at Johnston Farm Lane	Convert to High T	\$300,000	91.46	29.05	1.24
		Convert to RCUT	\$325,000	79.74	22.72	1.44
6	Main Street at Ridgewalk Parkway	Convert to Multilane Roundabout	\$2,750,000	1.98	--	4.88
		Dual Right Turn Lanes (SB)	\$400,000	3.22	--	--

Based on the table above, there are several viable options to improve both safety and operations within the study area. For each of the unsignalized intersections, B/C ratios were established based on the worst approach. This should be taken into consideration when looking at alternatives such as a traffic signal or roundabout to ensure that overall operations mirror the benefit on the worst approach.

For the Main Street and South Cherokee Recreation Fields Driveway, it is expected that weekend B/C ratios will be the driving factor when determining potential improvements. For all other intersections, weekday operations appear to be the best determination for need at each location.

While several alternatives provide relatively high B/C ratios, there are others that are not expected to provide the same level of benefit. Based on the analysis, improvements at Ridgewalk Parkway are not expected to return high B/C ratios when compared to the other intersections analyzed. The Ridgewalk Parkway intersection is expected to operate adequately, overall, for each of the scenarios analyzed. It is expected that improvements for this intersection will have less priority when determining need along the study area.

6.2. CORRIDOR RECOMMENDATIONS

The results of the planning-level segment analysis indicate that capacity improvements are currently needed, and will continue to be needed in each of the future year scenarios, for the study segment of Main Street between Ridgewalk Parkway and E Cherokee Drive. Among the alternatives analyzed, widening to provide an undivided 4-lane roadway with left turn bays at each of the major intersections is the most cost-effective alternative providing significant operational improvements. Based on the analysis, this alternative is expected to provide LOS C or better in each of the future year scenarios. It should be noted that if any widening improvements are pursued, the individual intersection improvements will need to be reconsidered based on the lane configurations associated with the new roadway footprint.

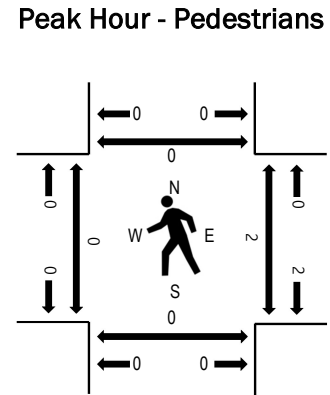
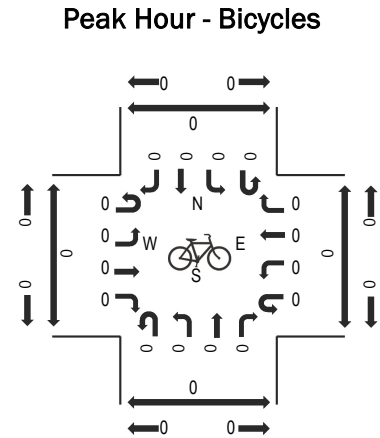
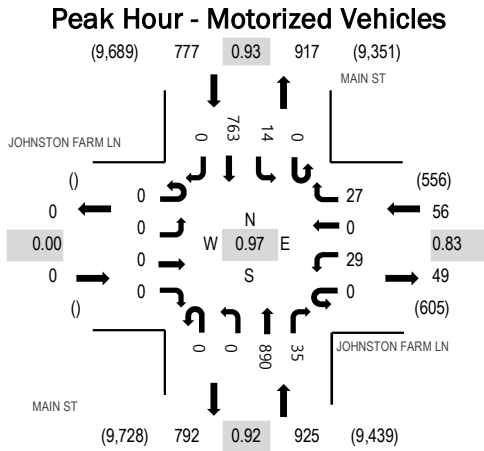
APPENDIX A – TRAFFIC COUNT DATA

Location: 1 MAIN ST & JOHNSTON FARM LN AM

Date: Saturday, May 4, 2024

Peak Hour: 12:00 PM - 01:00 PM

Peak 15-Minutes: 12:00 PM - 12:15 PM



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	JOHNSTON FARM LN Eastbound				JOHNSTON FARM LN Westbound				MAIN ST Northbound				MAIN ST 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
6:00 AM	0	0	0	0	0	0	0	0	0	0	17	0	0	0	19	0	36	256	0	1	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	22	0	0	0	36	0	58	354	0	0	0	0
6:30 AM	0	0	0	0	0	1	0	0	0	0	37	0	0	0	28	0	66	424	0	1	0	0
6:45 AM	0	0	0	0	0	2	0	1	0	0	57	0	0	0	36	0	96	535	0	0	0	0
7:00 AM	0	0	0	0	0	5	0	1	0	0	60	0	0	0	68	0	134	595	0	0	0	0
7:15 AM	0	0	0	0	0	2	0	1	0	0	60	0	0	1	64	0	128	656	0	0	0	0
7:30 AM	0	0	0	0	0	2	0	1	0	0	99	1	0	0	74	0	177	744	0	0	0	0
7:45 AM	0	0	0	0	0	3	0	3	0	0	79	2	0	0	69	0	156	765	0	0	0	0
8:00 AM	0	0	0	0	0	3	0	4	0	0	81	1	0	1	105	0	195	844	0	0	0	0
8:15 AM	0	0	0	0	0	3	0	2	0	0	99	1	0	3	108	0	216	878	0	0	0	0
8:30 AM	0	0	0	0	0	2	0	4	0	0	88	1	0	0	103	0	198	946	0	0	0	0
8:45 AM	0	0	0	0	0	1	0	2	0	0	103	4	0	3	122	0	235	1,059	0	0	0	0
9:00 AM	0	0	0	0	0	4	0	3	0	0	81	4	0	2	135	0	229	1,162	0	0	0	0
9:15 AM	0	0	0	0	0	6	0	5	0	0	113	2	0	1	157	0	284	1,293	0	0	0	0
9:30 AM	0	0	0	0	0	6	0	3	0	0	136	3	0	4	159	0	311	1,377	0	0	0	0
9:45 AM	0	0	0	0	0	4	0	3	0	0	122	1	0	0	208	0	338	1,458	0	0	0	0
10:00 AM	0	0	0	0	0	6	0	7	0	0	143	1	0	3	200	0	360	1,510	0	0	0	0
10:15 AM	0	0	0	0	0	5	0	3	0	0	158	1	0	7	194	0	368	1,540	0	0	0	0
10:30 AM	0	0	0	0	0	6	0	4	0	0	160	4	0	6	212	0	392	1,545	0	0	0	0
10:45 AM	0	0	0	0	0	5	0	7	0	0	169	7	0	4	198	0	390	1,566	0	1	0	0
11:00 AM	0	0	0	0	0	8	0	6	0	0	143	12	0	5	216	0	390	1,591	0	3	0	0
11:15 AM	0	0	0	0	0	6	0	7	0	0	167	7	0	3	183	0	373	1,655	0	0	0	0
11:30 AM	0	0	0	0	0	5	0	3	0	0	185	7	0	4	209	0	413	1,715	0	0	0	0
11:45 AM	0	0	0	0	0	2	0	4	0	0	168	4	0	7	230	0	415	1,736	0	2	0	0
12:00 PM	0	0	0	0	0	5	0	8	0	0	211	9	0	4	217	0	454	1,758	0	1	0	0
12:15 PM	0	0	0	0	0	7	0	6	0	0	219	12	0	4	185	0	433	1,710	0	1	0	0
12:30 PM	0	0	0	0	0	10	0	6	0	0	246	6	0	1	165	0	434	1,665	0	0	0	0
12:45 PM	0	0	0	0	0	7	0	7	0	0	214	8	0	5	196	0	437	1,646	0	0	0	0
1:00 PM	0	0	0	0	0	11	0	4	0	0	214	7	0	6	164	0	406	1,588	0	0	0	0
1:15 PM	0	0	0	0	0	6	0	5	0	0	183	3	0	8	183	0	388	1,622	0	0	0	0
1:30 PM	0	0	0	0	0	6	0	8	0	0	194	6	0	2	199	0	415	1,688	0	0	0	0
1:45 PM	0	0	0	0	0	5	0	6	0	0	175	7	0	8	178	0	379	1,673	0	0	0	0
2:00 PM	0	0	0	0	0	4	0	4	0	0	208	8	0	5	211	0	440	1,725	0	0	0	0
2:15 PM	0	0	0	0	0	5	0	4	0	0	200	11	0	10	224	0	454	1,708	0	0	0	0

2:30 PM	0	0	0	0	1	5	0	4	0	0	181	12	0	3	194	0	400	1,628	0	1	0	0
2:45 PM	0	0	0	0	0	3	0	2	0	0	212	7	0	7	200	0	431	1,677	0	1	0	0
3:00 PM	0	0	0	0	0	1	0	3	0	0	185	3	0	6	225	0	423	1,653	0	0	0	0
3:15 PM	0	0	0	0	0	6	0	3	0	0	188	7	0	3	167	0	374	1,619	0	0	0	0
3:30 PM	0	0	0	0	0	5	0	8	0	0	241	6	0	7	182	0	449	1,586	0	0	0	0
3:45 PM	0	0	0	0	0	8	0	9	0	0	184	9	0	4	193	0	407	1,542	0	0	0	0
4:00 PM	0	0	0	0	0	8	0	6	0	0	172	8	0	6	189	0	389	1,514	0	0	0	0
4:15 PM	0	0	0	0	0	7	0	5	0	0	153	11	0	8	157	0	341	1,527	0	0	0	0
4:30 PM	0	0	0	0	0	9	0	7	0	0	179	9	0	2	199	0	405	1,544	0	0	0	0
4:45 PM	0	0	0	0	0	8	0	10	0	0	185	6	0	6	164	0	379	1,498	0	0	0	0
5:00 PM	0	0	0	0	0	6	0	4	0	0	182	10	0	10	190	0	402	1,462	0	0	0	0
5:15 PM	0	0	0	0	0	4	0	4	0	0	164	3	0	8	175	0	358	1,416	0	0	0	0
5:30 PM	0	0	0	0	0	6	0	3	0	0	163	12	0	12	163	0	359	1,392	0	0	0	0
5:45 PM	0	0	0	0	0	1	0	10	0	0	164	5	0	8	155	0	343	1,364	0	0	0	0
6:00 PM	0	0	0	0	0	8	0	5	0	0	180	7	0	4	152	0	356	1,343	0	0	0	0
6:15 PM	0	0	0	0	0	5	0	4	0	0	171	9	0	4	141	0	334	1,276	0	0	0	0
6:30 PM	0	0	0	0	0	1	0	1	0	0	174	7	0	5	143	0	331	1,199	0	0	0	0
6:45 PM	0	0	0	0	0	7	0	2	0	0	145	4	0	6	158	0	322	1,106	0	0	0	0
7:00 PM	0	0	0	0	0	3	0	4	0	0	149	9	0	7	117	0	289	1,024	0	0	0	0
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8:30 PM	0	0	0	0	0	5	0	1	0	0	111	5	0	5	103	0	230	854	0	0	0	0
8:45 PM	0	0	0	0	0	6	0	1	0	0	97	5	0	3	107	0	219	796	0	0	0	0
9:00 PM	0	0	0	0	0	2	0	0	0	0	87	3	0	3	113	0	208	717	0	0	0	0
9:15 PM	0	0	0	0	0	2	0	2	0	0	92	5	0	2	94	0	197		0	0	0	0
9:30 PM	0	0	0	0	0	8	0	3	0	0	82	4	0	2	73	0	172		0	0	0	0
9:45 PM	0	0	0	0	0	8	0	1	0	0	70	4	0	2	55	0	140		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	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	28	0	27	0	0	882	35	0	14	759	0	1,745
Mediums	0	0	0	0	0	1	0	0	0	0	8	0	0	0	4	0	13
Total	0	0	0	0	0	29	0	27	0	0	890	35	0	14	763	0	1,758

Heavy Vehicle Percentage and Peak Hour Factor

	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	
Heavy Vehicle %	0.0%				1.8%				0.9%				0.5%				0.7%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	3.4%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.5%	0.0%	0.7%
Peak Hour Factor	0.00				0.83				0.92				0.93				0.97
Peak Hour Factor	0.00	0.00	0.00	0.00	0.25	0.80	0.00	0.70	0.00	0.00	0.91	0.79	0.00	0.79	0.94	0.00	0.97



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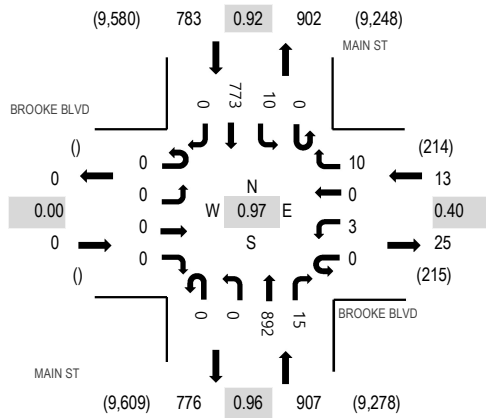
Location: 2 MAIN ST & BROOKE BLVD AM

Date: Saturday, May 4, 2024

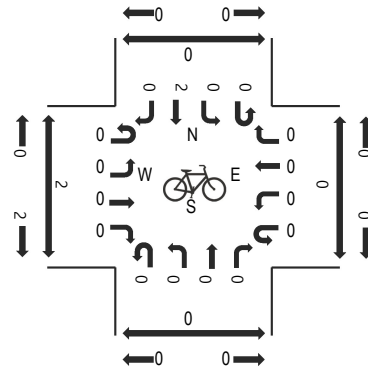
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Peak 15-Minutes: 12:00 PM - 12:15 PM

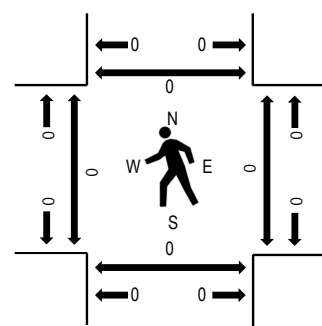
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	BROOKE BLVD Eastbound				BROOKE BLVD Westbound				MAIN ST Northbound				MAIN ST 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
6:00 AM	0	0	0	0	0	1	0	0	0	0	18	0	0	2	18	0	39	250	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	19	1	0	0	36	0	56	337	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	35	0	0	0	22	0	57	412	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	56	0	0	0	42	0	98	530	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	2	0	0	60	0	0	1	63	0	126	595	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	63	0	0	0	67	0	131	679	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	93	2	0	1	78	0	175	765	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	69	14	0	9	70	0	163	787	0	0	0	0
8:00 AM	0	0	0	0	0	13	0	15	0	0	72	12	0	4	94	0	210	855	0	0	0	0
8:15 AM	0	0	0	0	0	6	0	1	0	0	99	3	0	2	106	0	217	870	0	0	0	0
8:30 AM	0	0	0	0	0	2	0	2	0	0	94	0	0	0	99	0	197	925	0	0	0	0
8:45 AM	0	0	0	0	0	3	0	3	0	0	97	0	0	1	127	0	231	1,025	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	87	0	0	1	137	0	225	1,132	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	112	0	0	0	160	0	272	1,260	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	137	0	0	1	159	0	297	1,343	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	125	0	0	1	212	0	338	1,443	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	1	0	0	152	3	0	1	196	0	353	1,468	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	2	0	0	146	1	0	3	203	0	355	1,494	0	0	0	0
10:30 AM	0	0	0	0	0	3	0	3	0	0	169	3	0	1	218	0	397	1,512	0	0	0	0
10:45 AM	0	0	0	0	0	3	0	1	0	0	165	3	0	1	190	0	363	1,520	0	0	0	0
11:00 AM	0	0	0	0	0	3	0	2	0	0	145	1	0	3	225	0	379	1,562	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	3	0	0	172	1	0	1	196	0	373	1,621	0	0	0	0
11:30 AM	0	0	0	0	0	2	0	2	0	0	195	0	0	0	206	0	405	1,671	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	0	0	0	170	1	0	0	234	0	405	1,683	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	210	2	0	5	221	0	438	1,703	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	3	0	0	228	2	0	2	188	0	423	1,661	0	0	0	0
12:30 PM	0	0	0	0	0	1	0	2	0	0	234	5	0	2	173	0	417	1,615	0	0	0	0
12:45 PM	0	0	0	0	0	2	0	5	0	0	220	6	0	1	191	0	425	1,593	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	2	0	0	215	6	0	5	168	0	396	1,536	0	0	0	0
1:15 PM	0	0	0	0	0	1	0	0	0	0	184	3	0	3	186	0	377	1,559	0	0	0	0
1:30 PM	0	0	0	0	0	1	0	0	0	0	196	2	0	1	195	0	395	1,586	0	0	0	0
1:45 PM	0	0	0	0	0	2	0	2	0	0	170	5	0	1	188	0	368	1,584	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	2	0	0	211	2	0	2	202	0	419	1,616	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	0	0	0	177	3	0	0	224	0	404	1,649	0	0	0	0

2:30 PM	0	0	0	0	0	0	0	3	0	0	190	1	0	1	198	0	393	1,609	0	0	0	0
2:45 PM	0	0	0	0	0	2	0	4	0	0	185	5	0	3	201	0	400	1,639	0	0	0	0
3:00 PM	0	0	0	0	0	5	0	7	0	0	195	14	0	6	225	0	452	1,604	0	0	0	0
3:15 PM	0	0	0	0	0	5	0	5	0	0	187	2	0	2	163	0	364	1,543	0	0	0	0
3:30 PM	0	0	0	0	0	3	0	0	0	0	232	6	1	3	178	0	423	1,509	0	0	0	0
3:45 PM	0	0	0	0	0	7	0	5	0	0	165	2	0	0	186	0	365	1,458	0	0	0	0
4:00 PM	0	0	0	0	0	2	0	0	0	0	193	0	0	1	195	0	391	1,433	0	0	0	0
4:15 PM	0	0	0	0	0	2	0	4	0	0	165	1	0	0	158	0	330	1,442	0	0	0	0
4:30 PM	0	0	0	0	0	7	0	2	0	0	173	0	0	1	189	0	372	1,464	0	0	0	0
4:45 PM	0	0	0	0	0	8	0	1	0	0	175	3	0	1	152	0	340	1,433	0	0	0	0
5:00 PM	0	0	0	0	0	8	0	2	0	0	200	2	0	0	188	0	400	1,426	0	0	0	0
5:15 PM	0	0	0	0	0	2	0	1	0	0	173	1	0	0	175	0	352	1,373	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	162	3	0	0	176	0	341	1,330	0	0	0	0
5:45 PM	0	0	0	0	0	3	0	0	0	0	175	0	0	0	155	0	333	1,314	0	0	0	0
6:00 PM	0	0	0	0	0	3	0	1	0	0	188	0	0	1	154	0	347	1,291	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	2	0	0	170	3	0	1	133	0	309	1,229	0	0	0	0
6:30 PM	0	0	0	0	0	1	0	0	0	0	169	1	0	0	154	0	325	1,174	0	0	0	0
6:45 PM	0	0	0	0	0	1	0	0	0	0	149	2	0	1	157	0	310	1,075	0	0	0	0
7:00 PM	0	0	0	0	0	3	0	2	0	0	149	2	0	1	128	0	285	994	0	0	0	0
7:15 PM	0	0	0	0	0	1	0	1	0	0	128	1	0	2	121	0	254	967	0	0	0	0
7:30 PM	0	0	0	0	0	4	0	0	0	0	109	1	0	0	112	0	226	941	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	1	0	0	135	0	0	0	93	0	229	929	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	127	1	0	0	130	0	258	921	0	0	0	0
8:15 PM	0	0	0	0	0	1	0	2	0	0	103	1	0	0	121	0	228	863	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	2	0	0	103	0	0	1	108	0	214	822	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	1	0	0	106	1	0	0	113	0	221	772	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	1	0	0	84	0	1	0	114	0	200	686	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	91	0	0	0	96	0	187		0	0	0	0
9:30 PM	0	0	0	0	0	0	0	0	0	0	91	0	0	0	73	0	164		0	0	0	0
9:45 PM	0	0	0	0	0	0	0	0	0	0	76	1	0	0	58	0	135		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	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	3	0	10	0	0	883	15	0	10	769	0	1,690
Mediums	0	0	0	0	0	0	0	0	0	0	9	0	0	0	4	0	13
Total	0	0	0	0	0	3	0	10	0	0	892	15	0	10	773	0	1,703

Heavy Vehicle Percentage and Peak Hour Factor

	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	
Heavy Vehicle %	0.0%				0.0%				1.0%				0.5%				0.8%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.8%
Peak Hour Factor	0.00				0.40				0.96				0.92				0.97
Peak Hour Factor	0.00	0.00	0.00	0.00	0.00	0.78	0.00	0.35	0.00	0.00	0.96	0.55	0.25	0.44	0.92	0.00	0.97



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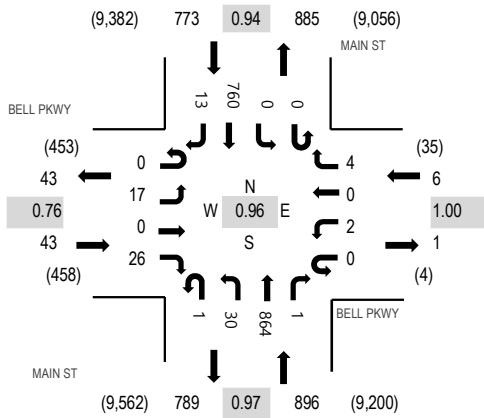
Location: 3 MAIN ST & BELL PKWY AM

Date: Saturday, May 4, 2024

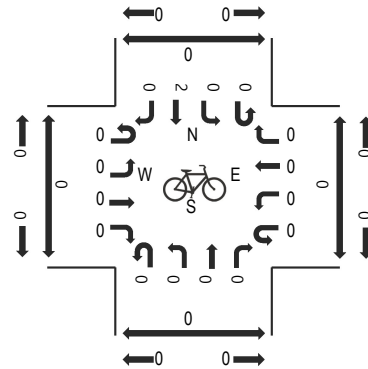
Peak Hour: 12:00 PM - 01:00 PM

Peak 15-Minutes: 12:00 PM - 12:15 PM

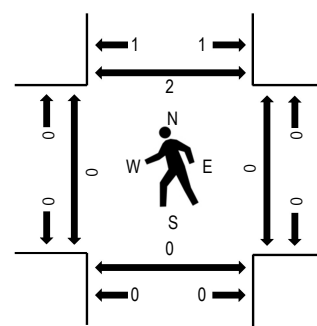
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	BELL PKWY Eastbound				BELL PKWY Westbound				MAIN ST Northbound			MAIN ST 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
6:00 AM	0	1	0	1	0	0	0	0	0	2	14	0	0	0	21	1	40	273	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	5	13	0	0	0	34	2	54	369	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	6	30	0	0	0	29	2	67	450	0	0	0	0
6:45 AM	0	2	0	3	0	0	0	0	0	19	35	0	0	0	38	15	112	559	0	0	0	0
7:00 AM	0	2	0	2	0	0	0	0	0	9	53	0	0	0	62	8	136	594	0	0	0	0
7:15 AM	0	1	0	3	0	0	0	0	0	3	60	0	0	0	65	3	135	643	0	0	0	0
7:30 AM	0	0	0	2	0	0	0	0	0	7	87	0	0	0	78	2	176	717	0	0	0	0
7:45 AM	0	0	0	1	0	0	0	0	0	6	65	0	0	0	74	1	147	744	0	0	0	0
8:00 AM	0	0	0	4	0	0	0	0	0	1	87	0	0	0	91	2	185	829	0	0	0	0
8:15 AM	0	0	0	2	0	0	0	0	0	6	86	0	0	0	111	4	209	882	0	0	0	0
8:30 AM	0	0	0	2	0	0	0	0	0	2	94	0	0	0	103	2	203	947	0	0	0	0
8:45 AM	0	0	0	4	0	0	0	1	0	4	103	0	0	0	119	1	232	1,058	0	0	0	0
9:00 AM	0	0	0	4	0	0	0	0	0	6	78	0	0	0	143	7	238	1,162	0	0	0	0
9:15 AM	0	0	0	5	0	0	0	0	0	5	110	0	0	0	149	5	274	1,275	0	0	0	0
9:30 AM	0	2	0	6	0	0	0	0	0	8	131	0	0	0	163	4	314	1,373	0	0	0	0
9:45 AM	0	4	0	5	0	1	0	1	0	3	114	0	0	0	207	1	336	1,445	0	0	0	0
10:00 AM	0	1	0	8	0	1	0	0	0	6	141	0	0	0	190	4	351	1,474	0	0	0	0
10:15 AM	0	1	0	6	0	0	0	0	0	4	159	0	0	0	200	2	372	1,501	0	0	0	0
10:30 AM	0	1	0	5	0	1	0	0	0	5	154	0	0	0	215	5	386	1,496	0	0	0	0
10:45 AM	0	1	0	2	0	1	0	3	0	5	160	0	0	0	192	1	365	1,524	0	0	0	0
11:00 AM	0	1	0	8	0	0	0	0	1	6	146	0	0	0	211	5	378	1,577	0	0	0	0
11:15 AM	0	2	0	9	0	0	0	0	0	4	163	0	0	0	186	3	367	1,647	0	0	0	0
11:30 AM	0	4	0	9	0	3	0	0	0	5	187	1	0	0	200	5	414	1,713	0	0	0	0
11:45 AM	0	6	0	7	0	1	0	0	0	11	168	0	0	0	219	6	418	1,708	0	0	0	0
12:00 PM	0	10	0	9	0	0	0	1	1	8	196	0	0	0	219	4	448	1,718	0	0	0	0
12:15 PM	0	3	0	3	0	0	0	1	0	9	225	0	0	0	190	2	433	1,673	0	0	0	0
12:30 PM	0	2	0	6	0	1	0	1	0	7	223	1	0	0	166	2	409	1,626	0	0	0	2
12:45 PM	0	2	0	8	0	1	0	1	0	6	220	0	0	0	185	5	428	1,612	0	0	0	0
1:00 PM	0	5	0	8	0	1	0	1	0	4	211	0	0	0	164	9	403	1,558	0	0	0	0
1:15 PM	0	3	0	11	0	1	0	1	0	6	178	0	0	0	176	10	386	1,582	0	0	0	0
1:30 PM	0	2	0	7	0	0	0	1	0	6	187	0	0	0	185	7	395	1,620	0	0	0	0
1:45 PM	0	1	0	10	0	0	0	0	0	6	169	0	1	0	177	10	374	1,598	0	0	0	0
2:00 PM	0	8	0	8	0	0	0	0	0	8	197	0	0	0	200	6	427	1,628	0	0	0	0
2:15 PM	0	1	0	6	0	1	0	0	2	4	182	0	0	0	223	5	424	1,638	0	0	0	0

2:30 PM	0	3	0	16	0	1	0	1	0	6	166	0	0	0	173	7	373	1,582	0	0	0	0
2:45 PM	0	0	0	16	0	1	0	0	0	12	186	0	0	0	185	4	404	1,640	0	0	0	0
3:00 PM	0	6	0	22	0	2	0	1	0	7	193	0	0	0	202	4	437	1,569	0	0	0	0
3:15 PM	0	7	0	15	0	0	0	0	1	5	191	0	0	0	146	3	368	1,525	0	0	0	0
3:30 PM	0	5	0	6	0	0	0	1	0	4	232	0	0	0	181	2	431	1,486	0	0	0	0
3:45 PM	0	2	0	9	0	0	0	0	0	3	150	0	0	0	169	0	333	1,432	0	0	0	0
4:00 PM	0	0	0	12	0	1	0	1	0	2	201	0	0	0	175	1	393	1,404	0	0	0	0
4:15 PM	0	2	0	8	0	0	0	0	1	1	160	0	0	0	156	1	329	1,418	0	0	0	0
4:30 PM	0	5	0	23	0	0	0	0	0	3	177	0	0	0	168	1	377	1,436	0	0	0	0
4:45 PM	0	1	0	6	0	0	0	0	1	3	150	0	0	0	143	1	305	1,399	0	0	0	0
5:00 PM	0	2	0	2	0	0	0	0	1	2	222	0	0	0	178	0	407	1,430	0	0	0	0
5:15 PM	0	4	0	4	0	0	0	0	0	1	164	0	0	0	174	0	347	1,364	0	0	0	0
5:30 PM	0	1	0	1	0	0	0	0	0	0	166	0	0	0	172	0	340	1,329	0	0	0	0
5:45 PM	0	3	0	3	0	0	0	0	0	3	176	0	0	0	150	1	336	1,314	0	0	0	0
6:00 PM	0	1	0	3	0	0	0	0	0	2	185	0	0	1	148	1	341	1,292	0	0	0	0
6:15 PM	0	0	0	1	0	0	0	0	0	0	171	0	0	0	140	0	312	1,223	0	0	0	0
6:30 PM	0	0	0	4	0	0	0	0	0	1	175	0	0	0	145	0	325	1,159	0	0	0	0
6:45 PM	0	0	0	1	0	0	0	0	0	0	149	0	0	0	162	2	314	1,048	0	0	0	0
7:00 PM	0	2	0	1	0	0	0	0	0	1	144	0	0	0	124	0	272	977	0	0	0	0
7:15 PM	0	1	0	3	0	0	0	0	0	2	125	0	0	0	116	1	248	961	0	0	0	0
7:30 PM	0	0	0	2	0	0	0	0	0	2	105	0	0	0	105	0	214	935	0	0	0	0
7:45 PM	0	0	0	1	0	0	0	0	0	0	141	0	0	0	101	0	243	936	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	0	0	0	130	0	0	0	126	0	256	910	0	0	0	0
8:15 PM	0	2	0	0	0	0	0	0	0	0	95	0	0	0	124	1	222	853	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	1	110	0	0	0	104	0	215	827	0	0	0	0
8:45 PM	0	0	0	1	0	0	0	0	0	1	98	0	0	0	117	0	217	774	0	0	0	0
9:00 PM	0	2	0	3	0	0	0	0	0	2	86	0	0	0	105	1	199	680	0	0	0	0
9:15 PM	0	1	0	1	0	0	0	1	0	0	92	1	0	0	98	2	196		0	0	0	0
9:30 PM	0	1	0	2	0	0	0	0	0	2	85	0	0	0	72	0	162		0	0	0	0
9:45 PM	0	0	0	1	0	0	0	0	0	0	70	0	0	0	51	1	123		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	0	0	0	0	0	0	0	0	0	0
Lights	0	16	0	25	0	2	0	4	1	29	856	1	0	0	757	13	1,704
Mediums	0	1	0	1	0	0	0	0	0	1	8	0	0	0	3	0	14
Total	0	17	0	26	0	2	0	4	1	30	864	1	0	0	760	13	1,718

Heavy Vehicle Percentage and Peak Hour Factor

	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	
Heavy Vehicle %	4.7%				0.0%				1.0%				0.4%				0.8%
Heavy Vehicle %	0.0%	5.9%	0.0%	3.8%	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	0.9%	0.0%	0.0%	0.0%	0.4%	0.0%	0.8%
Peak Hour Factor	0.76				1.00				0.97				0.94				0.96
Peak Hour Factor	0.00	0.58	0.00	0.78	0.00	0.63	0.00	1.00	0.75	0.51	0.98	0.25	0.25	0.25	0.95	0.90	0.96



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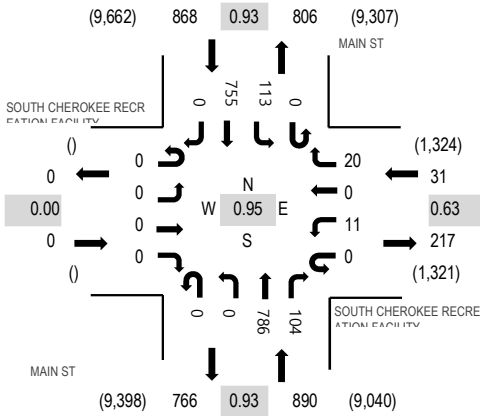
Location: 4 MAIN ST & SOUTH CHEROKEE RECREATION FACILITY AM

Date: Saturday, May 4, 2024

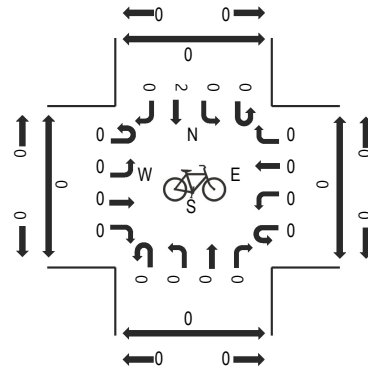
Peak Hour: 12:00 PM - 01:00 PM

Peak 15-Minutes: 12:00 PM - 12:15 PM

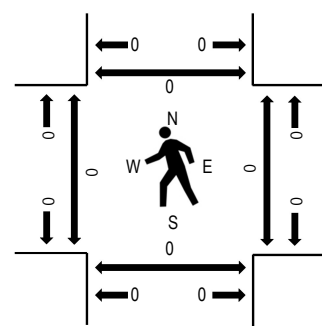
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SOUTH CHEROKEE RECREATION FACILITY Eastbound				SOUTH CHEROKEE RECREATION FACILITY Westbound				MAIN ST Northbound				MAIN ST 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
6:00 AM	0	0	0	0	0	0	0	0	0	0	14	0	0	0	23	0	37	247	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	16	0	0	0	33	0	49	336	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	27	0	0	0	39	0	66	416	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	39	0	0	1	55	0	95	527	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	55	1	0	0	70	0	126	579	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	65	1	0	0	63	0	129	631	0	0	0	0
7:30 AM	0	0	0	0	0	1	0	0	0	0	87	0	0	0	89	0	177	697	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	2	0	0	61	3	0	0	81	0	147	722	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	83	1	0	0	94	0	178	810	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	86	2	0	3	104	0	195	856	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	93	2	0	1	106	0	202	949	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	102	1	0	2	130	0	235	1,057	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	79	1	0	1	143	0	224	1,157	0	0	0	0
9:15 AM	0	0	0	0	0	4	0	3	0	0	114	1	0	2	164	0	288	1,275	0	0	0	0
9:30 AM	0	0	0	0	0	3	0	5	0	0	131	1	0	2	168	0	310	1,346	0	0	0	0
9:45 AM	0	0	0	0	0	1	0	2	0	0	115	6	0	4	207	0	335	1,427	0	0	0	0
10:00 AM	0	0	0	0	0	2	0	1	0	0	137	2	0	3	197	0	342	1,462	0	0	0	0
10:15 AM	0	0	0	0	0	4	0	2	0	0	156	2	0	5	190	0	359	1,490	0	0	0	0
10:30 AM	0	0	0	0	0	3	0	5	0	0	157	0	0	2	224	0	391	1,498	0	0	0	0
10:45 AM	0	0	0	0	0	2	0	5	0	0	164	1	0	5	193	0	370	1,510	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	147	1	0	3	219	0	370	1,563	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	1	0	0	175	0	0	0	191	0	367	1,666	0	0	0	0
11:30 AM	0	0	0	0	0	1	0	2	0	0	173	7	0	6	214	0	403	1,740	0	0	0	0
11:45 AM	0	0	0	0	0	1	0	5	0	0	164	12	1	23	217	0	423	1,785	0	0	0	0
12:00 PM	0	0	0	0	0	5	0	6	0	0	184	28	0	39	211	0	473	1,789	0	0	0	0
12:15 PM	0	0	0	0	0	1	0	0	0	0	195	26	0	24	195	0	441	1,729	0	0	0	0
12:30 PM	0	0	0	0	0	3	0	6	0	0	212	28	0	28	171	0	448	1,661	0	0	0	0
12:45 PM	0	0	0	0	0	2	0	8	0	0	195	22	0	22	178	0	427	1,629	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	2	0	0	194	16	0	14	187	0	413	1,603	0	0	0	0
1:15 PM	0	0	0	0	0	1	0	3	0	0	169	11	0	15	174	0	373	1,618	0	0	0	0
1:30 PM	0	0	0	0	0	5	0	3	0	0	178	13	0	18	199	0	416	1,721	0	0	0	0
1:45 PM	0	0	0	0	0	5	0	8	0	0	153	23	0	37	175	0	401	1,710	0	0	0	0
2:00 PM	0	0	0	0	0	35	0	39	0	0	142	12	0	25	175	0	428	1,749	0	0	0	0
2:15 PM	0	0	0	0	0	16	0	25	0	0	184	27	0	22	202	0	476	1,773	0	0	0	0

2:30 PM	0	0	0	0	0	25	0	57	0	0	127	14	0	21	161	0	405	1,678	0	0	0	0
2:45 PM	0	0	0	0	0	15	0	20	0	0	186	13	0	30	176	0	440	1,701	0	0	0	0
3:00 PM	0	0	0	0	0	3	0	4	0	0	203	27	0	25	190	0	452	1,658	0	0	0	0
3:15 PM	0	0	0	0	0	6	0	2	0	0	182	15	0	28	148	0	381	1,633	0	0	0	0
3:30 PM	0	0	0	0	0	23	0	23	0	0	189	17	0	17	159	0	428	1,603	0	0	0	0
3:45 PM	0	0	0	0	0	29	0	50	0	0	133	17	0	30	138	0	397	1,545	0	0	0	0
4:00 PM	0	0	0	0	0	10	0	13	0	0	204	25	0	21	154	0	427	1,497	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	5	0	0	154	10	0	11	170	0	351	1,584	0	0	0	0
4:30 PM	0	0	0	0	0	13	0	16	0	0	149	15	0	28	149	0	370	1,633	0	0	0	0
4:45 PM	0	0	0	0	0	45	0	53	0	0	123	9	0	24	95	0	349	1,611	0	0	0	0
5:00 PM	0	0	0	0	0	22	0	48	0	0	215	22	0	32	175	0	514	1,628	0	0	0	0
5:15 PM	0	0	0	0	0	16	0	32	0	0	175	11	0	18	148	0	400	1,467	0	0	0	0
5:30 PM	0	0	0	0	0	7	0	5	0	0	153	9	0	19	155	0	348	1,412	0	0	0	0
5:45 PM	0	0	0	0	0	2	0	6	0	0	148	28	0	35	147	0	366	1,462	0	0	0	0
6:00 PM	0	0	0	0	0	2	0	6	0	0	171	13	0	18	143	0	353	1,477	0	0	0	0
6:15 PM	0	0	0	0	0	10	0	2	0	0	152	18	0	21	142	0	345	1,443	0	0	0	0
6:30 PM	0	0	0	0	0	25	0	50	0	0	157	21	0	28	117	0	398	1,335	0	0	0	0
6:45 PM	0	0	0	0	0	28	0	58	0	0	126	14	0	20	135	0	381	1,178	0	0	0	0
7:00 PM	0	0	0	0	0	14	0	26	0	0	145	11	0	7	116	0	319	1,042	0	0	0	0
7:15 PM	0	0	0	0	0	1	0	4	0	0	118	2	0	4	108	0	237	1,027	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	11	0	0	119	0	0	7	104	0	241	1,054	0	0	0	0
7:45 PM	0	0	0	0	0	2	0	3	0	0	134	0	0	0	106	0	245	1,060	0	0	0	0
8:00 PM	0	0	0	0	0	15	0	53	0	0	122	1	0	2	111	0	304	1,054	0	0	0	0
8:15 PM	0	0	0	0	0	34	0	40	0	0	97	0	0	2	91	0	264	964	0	0	0	0
8:30 PM	0	0	0	0	0	9	0	32	0	0	114	0	0	0	92	0	247	917	0	0	0	0
8:45 PM	0	0	0	0	0	14	0	25	0	0	95	0	0	1	104	0	239	821	0	0	0	0
9:00 PM	0	0	0	0	0	9	0	22	0	0	86	2	0	0	95	0	214	711	0	0	0	0
9:15 PM	0	0	0	0	0	15	0	25	0	0	98	0	0	0	79	0	217		0	0	0	0
9:30 PM	0	0	0	0	0	3	0	1	0	0	84	0	0	0	63	0	151		0	0	0	0
9:45 PM	0	0	0	0	0	0	0	6	0	0	70	0	0	0	53	0	129		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	0	0	0	0	0	0	0	0	0	0
Lights	0	0	0	0	0	11	0	20	0	0	778	104	0	113	752	0	1,778
Mediums	0	0	0	0	0	0	0	0	0	0	8	0	0	0	3	0	11
Total	0	0	0	0	0	11	0	20	0	0	786	104	0	113	755	0	1,789

Heavy Vehicle Percentage and Peak Hour Factor

	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	
Heavy Vehicle %	0.0%				0.0%				0.9%				0.3%				0.6%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.6%
Peak Hour Factor	0.00				0.63				0.93				0.93				0.95
Peak Hour Factor	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.71	0.00	0.00	0.94	0.93	0.25	0.73	0.96	0.00	0.95



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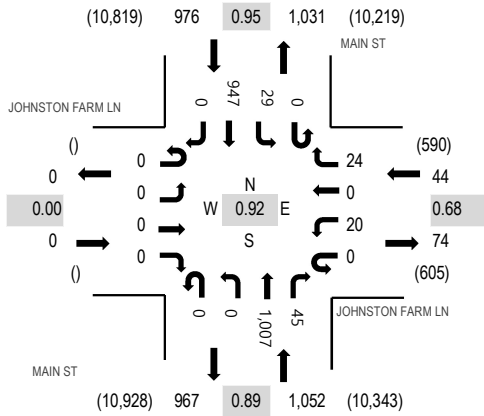
Location: 1 MAIN ST & JOHNSTON FARM LN AM

Date: Wednesday, May 8, 2024

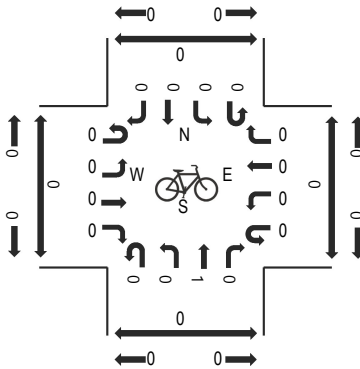
Peak Hour: 04:30 PM - 05:30 PM

Peak 15-Minutes: 04:30 PM - 04:45 PM

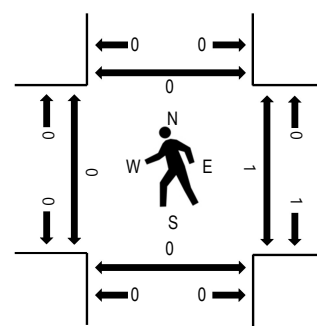
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	JOHNSTON FARM LN Eastbound				JOHNSTON FARM LN Westbound				MAIN ST Northbound				MAIN ST 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
6:00 AM	0	0	0	0	0	2	0	2	0	0	57	0	0	1	82	0	144	846	0	1	0	0
6:15 AM	0	0	0	0	0	4	0	0	0	0	57	0	0	0	95	0	156	1,071	0	0	0	0
6:30 AM	0	0	0	0	0	6	0	0	0	0	105	0	0	0	126	0	237	1,306	0	1	0	0
6:45 AM	0	0	0	0	0	6	0	4	0	0	116	1	0	0	182	0	309	1,448	0	0	0	0
7:00 AM	0	0	0	0	0	10	0	4	0	0	130	5	0	0	220	0	369	1,559	0	0	0	0
7:15 AM	0	0	0	0	0	12	0	2	0	0	137	3	0	1	236	0	391	1,524	0	0	0	0
7:30 AM	0	0	0	0	0	7	0	3	0	0	155	8	0	0	206	0	379	1,501	0	0	0	0
7:45 AM	0	0	0	0	0	6	0	5	0	0	153	5	0	2	249	0	420	1,421	0	0	0	0
8:00 AM	0	0	0	0	0	6	0	4	0	0	126	2	0	4	192	0	334	1,365	0	0	0	0
8:15 AM	0	0	0	0	0	8	0	4	0	0	129	5	0	2	220	0	368	1,344	0	0	0	0
8:30 AM	0	0	0	0	0	7	0	2	0	0	126	2	0	2	160	0	299	1,287	0	0	0	0
8:45 AM	0	0	0	0	0	7	0	4	0	0	149	5	0	3	196	0	364	1,275	0	0	0	0
9:00 AM	0	0	0	0	0	6	0	7	0	0	128	6	0	5	161	0	313	1,211	0	1	0	0
9:15 AM	0	0	0	0	0	4	0	4	0	0	116	10	0	2	175	0	311	1,200	0	0	0	0
9:30 AM	0	0	0	0	0	3	0	4	0	0	110	6	0	0	164	0	287	1,189	0	0	0	0
9:45 AM	0	0	0	0	0	5	0	3	0	0	132	4	0	1	155	0	300	1,234	0	0	0	0
10:00 AM	0	0	0	0	0	8	0	5	0	0	119	2	0	0	168	0	302	1,240	0	0	0	0
10:15 AM	0	0	0	0	0	3	0	1	0	0	140	1	0	3	152	0	300	1,259	0	0	0	0
10:30 AM	0	0	0	0	0	1	0	6	0	0	139	4	0	3	179	0	332	1,246	0	0	0	0
10:45 AM	0	0	0	0	0	7	0	2	0	0	155	8	0	5	129	0	306	1,208	0	0	0	0
11:00 AM	0	0	0	0	0	4	0	4	0	0	152	6	0	3	152	0	321	1,213	0	0	0	0
11:15 AM	0	0	0	0	0	1	0	1	0	0	124	5	0	1	155	0	287	1,210	0	0	0	0
11:30 AM	0	0	0	0	0	6	0	0	0	0	136	4	0	4	144	0	294	1,235	0	0	0	0
11:45 AM	0	0	0	0	0	8	0	5	0	0	131	2	0	0	165	0	311	1,283	0	0	0	0
12:00 PM	0	0	0	0	0	5	0	6	0	0	127	9	0	3	168	0	318	1,335	0	0	0	0
12:15 PM	0	0	0	0	0	7	0	6	0	0	136	6	0	3	154	0	312	1,365	0	0	0	0
12:30 PM	0	0	0	0	0	11	0	7	0	0	150	2	0	6	166	0	342	1,423	1	0	0	1
12:45 PM	0	0	0	0	0	6	0	4	0	0	166	6	0	4	177	0	363	1,457	0	1	0	0
1:00 PM	0	0	0	0	0	3	0	4	0	0	158	10	0	7	166	0	348	1,464	0	0	0	0
1:15 PM	0	0	0	0	0	5	0	4	0	0	181	7	0	1	172	0	370	1,511	0	0	0	0
1:30 PM	0	0	0	0	0	2	0	5	0	0	174	5	0	4	186	0	376	1,514	0	1	0	0
1:45 PM	0	0	0	0	0	3	0	4	0	0	193	2	0	7	161	0	370	1,522	0	1	0	0
2:00 PM	0	0	0	0	0	6	0	6	0	0	179	6	0	9	189	0	395	1,555	0	0	0	0
2:15 PM	0	0	0	0	0	4	0	4	0	0	185	5	0	7	168	0	373	1,552	0	0	0	0

2:30 PM	0	0	0	0	0	7	0	2	0	0	190	5	0	2	178	0	384	1,620	0	0	0	0
2:45 PM	0	0	0	0	0	3	0	5	0	0	203	10	0	4	178	0	403	1,683	0	0	0	0
3:00 PM	0	0	0	0	0	6	0	3	0	0	200	7	0	1	175	0	392	1,717	0	2	0	0
3:15 PM	0	0	0	0	0	6	0	4	0	0	221	10	0	7	193	0	441	1,784	0	0	0	0
3:30 PM	0	0	0	0	0	7	0	4	0	0	212	7	0	3	214	0	447	1,784	0	0	0	0
3:45 PM	0	0	0	0	0	9	0	5	0	0	199	5	0	6	213	0	437	1,901	0	1	0	0
4:00 PM	0	0	0	0	0	5	0	4	0	0	207	8	0	2	233	0	459	1,938	0	1	0	0
4:15 PM	0	0	0	0	0	6	0	2	0	0	249	3	0	0	181	0	441	2,024	0	3	0	0
4:30 PM	0	0	0	0	0	4	0	5	0	0	290	9	0	6	250	0	564	2,072	0	1	0	0
4:45 PM	0	0	0	0	0	2	0	5	0	0	231	9	0	8	219	0	474	1,987	0	0	0	0
5:00 PM	0	0	0	0	0	9	0	10	0	0	257	15	0	7	247	0	545	2,004	0	0	0	0
5:15 PM	0	0	0	0	0	5	0	4	0	0	229	12	0	8	231	0	489	1,901	0	0	0	0
5:30 PM	0	0	0	0	0	5	0	7	0	0	229	22	0	12	204	0	479	1,840	0	1	0	0
5:45 PM	0	0	0	0	0	11	0	12	0	0	251	10	0	6	201	0	491	1,752	0	0	0	0
6:00 PM	0	0	0	0	0	6	0	7	0	0	194	7	0	10	218	0	442	1,626	0	0	0	0
6:15 PM	0	0	0	0	0	8	0	2	0	0	196	13	0	3	206	0	428	1,519	0	2	0	0
6:30 PM	0	0	0	0	0	9	0	3	0	0	169	8	0	0	202	0	391	1,418	0	1	0	0
6:45 PM	0	0	0	0	0	9	0	7	0	0	179	8	0	5	157	0	365	1,284	0	0	0	0
7:00 PM	0	0	0	0	0	4	0	6	0	0	133	2	0	7	183	0	335	1,185	0	1	0	0
7:15 PM	0	0	0	0	0	7	0	6	0	0	169	6	0	5	134	0	327	1,075	0	0	0	0
7:30 PM	0	0	0	0	0	1	0	5	0	0	120	5	0	4	122	0	257	992	0	0	0	0
7:45 PM	0	0	0	0	0	2	0	3	0	0	153	7	0	3	98	0	266	960	0	2	0	0
8:00 PM	0	0	0	0	0	4	0	3	0	0	115	6	0	3	94	0	225	895	0	1	0	0
8:15 PM	0	0	0	0	0	0	0	2	0	0	125	7	0	10	100	0	244	848	0	0	0	0
8:30 PM	0	0	0	0	0	5	0	6	0	0	131	6	0	4	73	0	225	755	0	0	0	0
8:45 PM	0	0	0	0	0	2	0	1	0	0	114	2	0	3	79	0	201	667	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	1	0	0	91	2	0	3	81	0	178	599	0	0	0	0
9:15 PM	0	0	0	0	0	2	0	2	0	0	99	9	0	1	38	0	151		0	0	0	0
9:30 PM	0	0	0	0	0	3	0	0	0	0	75	4	0	2	53	0	137		0	0	0	0
9:45 PM	0	0	0	0	0	2	0	0	0	0	65	0	0	1	65	0	133		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	2	0	1	0	0	2	1	0	2	1	0	9
Lights	0	0	0	0	0	18	0	23	0	0	997	43	0	27	935	0	2,043
Mediums	0	0	0	0	0	0	0	0	0	0	8	1	0	0	11	0	20
Total	0	0	0	0	0	20	0	24	0	0	1,007	45	0	29	947	0	2,072

Heavy Vehicle Percentage and Peak Hour Factor

	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	
Heavy Vehicle %	0.0%				6.8%				1.1%				1.4%				1.4%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%	0.0%	4.2%	0.0%	0.0%	1.0%	4.4%	0.0%	6.9%	1.3%	0.0%	1.4%
Peak Hour Factor	0.00				0.68				0.89				0.95				0.92
Peak Hour Factor	0.00	0.00	0.00	0.00	0.00	0.73	0.00	0.69	0.00	0.00	0.89	0.67	0.00	0.75	0.95	0.00	0.92



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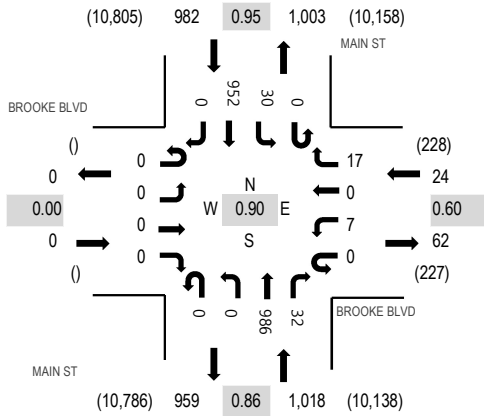
Location: 2 MAIN ST & BROOKE BLVD AM

Date: Wednesday, May 8, 2024

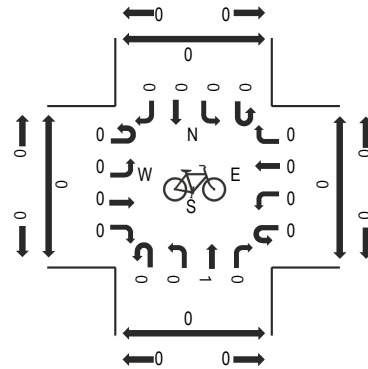
Peak Hour: 04:30 PM - 05:30 PM

Peak 15-Minutes: 04:30 PM - 04:45 PM

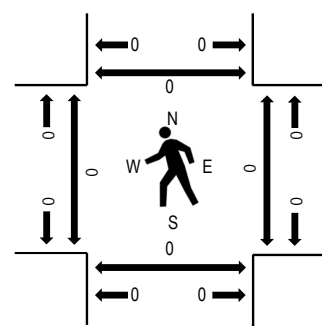
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	BROOKE BLVD Eastbound				BROOKE BLVD Westbound				MAIN ST Northbound				MAIN ST 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
6:00 AM	0	0	0	0	0	0	0	0	0	0	57	1	0	0	87	0	145	833	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	60	1	0	0	96	0	157	1,044	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	102	0	0	1	124	0	227	1,271	0	0	0	0
6:45 AM	0	0	0	0	0	1	0	0	0	0	119	0	0	0	184	0	304	1,415	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	134	0	0	0	222	0	356	1,520	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	2	0	0	138	0	0	1	243	0	384	1,483	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	156	0	0	0	215	0	371	1,451	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	154	0	0	1	253	0	409	1,378	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	131	1	0	0	187	0	319	1,303	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	130	1	0	0	221	0	352	1,299	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	129	0	0	0	169	0	298	1,227	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	149	0	0	0	185	0	334	1,207	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	1	0	0	139	0	0	0	175	0	315	1,153	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	0	0	0	111	0	0	0	169	0	280	1,134	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	1	0	0	113	0	0	2	162	0	278	1,156	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	132	0	0	1	147	0	280	1,194	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	1	0	0	121	0	0	2	172	0	296	1,204	0	0	0	0
10:15 AM	0	0	0	0	0	1	0	1	0	0	141	2	0	0	157	0	302	1,209	0	0	0	0
10:30 AM	0	0	0	0	0	2	0	2	0	0	139	0	0	2	171	0	316	1,200	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	155	0	0	0	135	0	290	1,162	0	0	0	0
11:00 AM	0	0	0	0	0	0	0	0	0	0	152	0	0	1	148	0	301	1,171	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	3	0	0	125	0	0	1	164	0	293	1,188	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	1	0	0	135	1	0	0	141	0	278	1,193	0	0	0	0
11:45 AM	0	0	0	0	0	1	0	0	0	0	135	1	0	0	162	0	299	1,239	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	138	0	0	2	178	0	318	1,282	0	0	0	0
12:15 PM	0	0	0	0	0	1	0	1	0	0	136	2	0	1	157	0	298	1,291	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	2	0	0	152	0	0	0	170	0	324	1,372	0	0	0	0
12:45 PM	0	0	0	0	0	1	0	3	0	0	164	0	0	2	172	0	342	1,402	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	1	0	0	156	0	0	0	170	0	327	1,426	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	0	0	0	191	1	0	3	184	0	379	1,478	0	1	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	172	0	0	0	182	0	354	1,464	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	0	0	0	194	1	0	0	171	0	366	1,495	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	1	0	0	185	0	1	0	192	0	379	1,525	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	3	0	0	184	0	0	0	178	0	365	1,531	0	0	0	0

2:30 PM	0	0	0	0	0	1	0	2	0	0	188	1	0	1	192	0	385	1,596	0	0	0	0
2:45 PM	0	0	0	0	0	1	0	1	0	0	205	2	0	2	185	0	396	1,634	0	0	0	0
3:00 PM	0	0	0	0	0	1	0	1	0	0	207	0	0	1	175	0	385	1,661	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	217	2	0	1	210	0	430	1,722	0	0	0	0
3:30 PM	0	0	0	0	0	1	0	1	0	0	209	3	0	4	205	0	423	1,731	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	1	0	0	199	1	0	4	218	0	423	1,873	0	0	0	0
4:00 PM	0	0	0	0	0	1	0	0	0	0	212	7	0	3	223	0	446	1,929	0	0	0	0
4:15 PM	0	0	0	0	0	2	0	0	0	0	229	13	0	8	187	0	439	2,003	0	0	0	0
4:30 PM	0	0	0	0	0	1	0	6	0	0	287	13	0	5	253	0	565	2,024	0	0	0	0
4:45 PM	0	0	0	0	0	3	0	5	0	0	221	10	0	14	226	0	479	1,938	0	0	0	0
5:00 PM	0	0	0	0	0	2	0	5	0	0	257	5	0	6	245	0	520	1,916	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	1	0	0	221	4	0	5	228	0	460	1,838	0	0	0	0
5:30 PM	0	0	0	0	0	6	0	4	0	0	249	1	0	3	216	0	479	1,793	0	0	0	0
5:45 PM	0	0	0	0	0	3	0	2	0	0	249	2	0	5	196	0	457	1,695	0	0	0	0
6:00 PM	0	0	0	0	0	7	0	4	0	0	199	4	0	3	225	0	442	1,612	0	0	0	0
6:15 PM	0	0	0	0	0	3	0	6	0	0	189	5	0	2	210	0	415	1,517	0	0	0	0
6:30 PM	0	0	0	0	0	14	0	12	0	0	162	10	0	4	179	0	381	1,407	0	0	0	0
6:45 PM	0	0	0	0	0	2	0	6	0	0	176	11	0	14	165	0	374	1,292	0	0	0	0
7:00 PM	0	0	0	0	0	11	0	20	0	0	133	4	0	3	176	0	347	1,162	0	0	0	0
7:15 PM	0	0	0	0	0	3	0	0	0	0	179	1	0	1	121	0	305	1,042	0	0	0	0
7:30 PM	0	0	0	0	0	2	0	2	0	0	128	0	0	0	134	0	266	970	0	0	0	0
7:45 PM	0	0	0	0	0	1	0	1	0	0	149	1	0	1	91	0	244	924	0	0	0	0
8:00 PM	0	0	0	0	0	2	0	2	0	0	123	0	0	1	99	0	227	896	0	0	0	0
8:15 PM	0	0	0	0	0	2	0	2	0	0	124	1	0	0	104	0	233	848	0	0	0	0
8:30 PM	0	0	0	0	0	10	0	8	0	0	138	0	0	1	63	0	220	750	0	0	0	0
8:45 PM	0	0	0	0	0	6	0	12	0	0	114	0	0	0	84	0	216	663	0	0	0	0
9:00 PM	0	0	0	0	0	2	0	3	0	0	92	1	0	0	81	0	179	578	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	1	0	0	98	0	0	1	35	0	135		0	0	0	0
9:30 PM	0	0	0	0	0	0	0	1	0	0	79	0	0	0	53	0	133		0	0	0	0
9:45 PM	0	0	0	0	0	0	0	0	0	0	62	0	0	0	69	0	131		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	0	0	0	3	0	0	0	3	0	6
Lights	0	0	0	0	0	7	0	17	0	0	975	32	0	30	938	0	1,999
Mediums	0	0	0	0	0	0	0	0	0	0	8	0	0	0	11	0	19
Total	0	0	0	0	0	7	0	17	0	0	986	32	0	30	952	0	2,024

Heavy Vehicle Percentage and Peak Hour Factor

	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	
Heavy Vehicle %	0.0%				0.0%				1.1%				1.4%				1.2%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	1.5%	0.0%	1.2%
Peak Hour Factor	0.00				0.60				0.86				0.95				0.90
Peak Hour Factor	0.00	0.00	0.00	0.00	0.00	0.54	0.00	0.55	0.00	0.00	0.87	0.83	0.25	0.59	0.94	0.00	0.90



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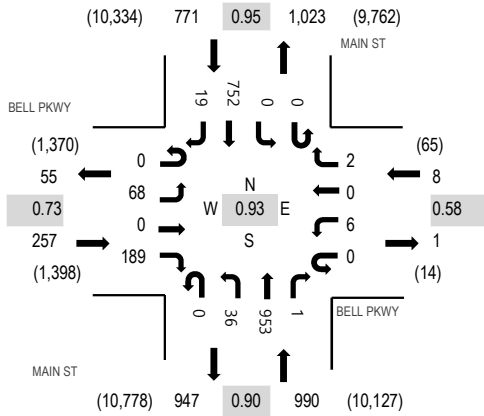
Location: 3 MAIN ST & BELL PKWY AM

Date: Wednesday, May 8, 2024

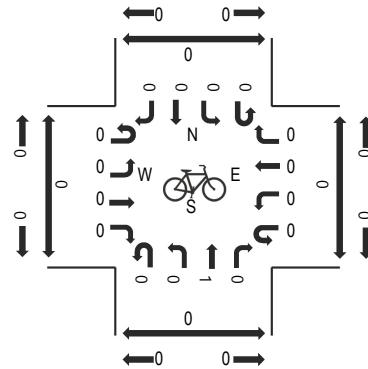
Peak Hour: 04:30 PM - 05:30 PM

Peak 15-Minutes: 04:30 PM - 04:45 PM

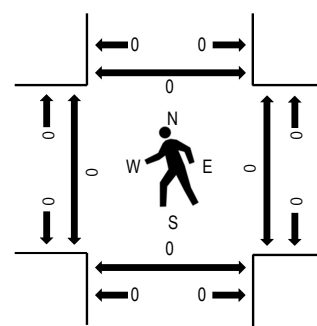
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	BELL PKWY Eastbound				BELL PKWY Westbound				MAIN ST Northbound			MAIN ST 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
6:00 AM	0	3	0	9	0	0	0	0	0	18	35	0	0	0	79	8	152	896	0	0	0	0
6:15 AM	0	6	0	4	0	0	0	0	0	16	42	0	0	0	91	10	169	1,131	0	0	0	0
6:30 AM	0	7	0	4	0	0	0	0	0	27	69	0	0	0	121	17	245	1,369	0	0	0	0
6:45 AM	0	5	0	13	0	0	0	0	0	57	60	0	0	0	166	29	330	1,506	0	0	0	0
7:00 AM	0	0	0	11	0	0	0	0	0	43	89	0	0	0	211	33	387	1,605	0	0	0	0
7:15 AM	0	2	0	7	0	0	0	0	0	31	110	0	0	0	232	25	407	1,556	0	0	0	0
7:30 AM	0	0	0	8	0	0	0	0	0	19	135	0	0	0	201	19	382	1,528	0	0	0	0
7:45 AM	0	1	0	15	0	0	0	0	0	36	121	0	0	0	239	17	429	1,477	0	0	0	0
8:00 AM	0	1	0	4	0	0	0	0	0	28	101	0	0	0	191	13	338	1,422	0	0	0	0
8:15 AM	0	6	0	6	0	0	0	0	0	23	107	0	0	0	216	21	379	1,400	0	0	0	0
8:30 AM	0	10	0	8	0	0	0	0	0	17	118	0	0	1	151	26	331	1,339	0	0	0	0
8:45 AM	0	8	0	19	0	0	0	0	0	26	120	0	0	0	184	17	374	1,303	0	0	0	0
9:00 AM	0	2	0	13	0	0	0	0	0	21	116	0	0	0	149	15	316	1,215	0	0	0	0
9:15 AM	0	4	0	12	0	0	0	0	0	18	106	0	0	2	164	12	318	1,215	0	0	0	0
9:30 AM	0	2	0	14	0	1	0	0	0	10	96	2	0	0	161	9	295	1,200	0	0	0	0
9:45 AM	0	4	0	8	0	0	1	0	0	15	105	0	0	0	150	3	286	1,237	0	0	0	0
10:00 AM	0	6	0	10	0	0	0	0	0	15	117	0	0	0	159	9	316	1,257	0	0	0	0
10:15 AM	0	7	0	12	0	1	0	0	0	16	123	0	0	0	139	5	303	1,252	0	0	0	0
10:30 AM	0	4	0	21	0	1	0	0	0	18	119	0	0	0	160	9	332	1,248	0	0	0	0
10:45 AM	0	2	1	14	0	0	0	0	0	15	144	0	0	1	119	10	306	1,218	0	0	0	0
11:00 AM	0	3	0	13	0	0	0	0	0	13	132	0	0	0	143	7	311	1,222	0	0	0	0
11:15 AM	0	4	0	13	0	2	1	0	0	12	118	0	0	0	144	5	299	1,257	0	0	0	0
11:30 AM	0	14	0	7	0	2	0	0	0	14	121	0	0	0	137	7	302	1,276	0	0	0	0
11:45 AM	0	11	0	28	0	1	1	1	0	13	114	1	0	1	136	3	310	1,332	0	0	0	0
12:00 PM	0	18	0	36	0	0	0	0	0	17	125	0	0	0	140	10	346	1,400	0	0	0	0
12:15 PM	0	14	0	22	0	4	0	2	0	11	115	0	0	0	134	16	318	1,411	0	0	0	0
12:30 PM	0	12	0	13	0	1	0	1	0	21	139	0	0	0	158	13	358	1,484	0	0	0	0
12:45 PM	0	13	0	12	0	1	0	3	0	26	146	1	0	0	161	15	378	1,497	0	0	0	0
1:00 PM	0	11	0	28	0	0	0	2	0	16	140	0	0	0	152	8	357	1,515	0	0	0	0
1:15 PM	0	7	0	21	0	0	0	1	0	19	174	1	0	0	154	14	391	1,566	0	1	0	1
1:30 PM	0	10	0	11	0	1	0	1	0	8	151	0	0	0	180	9	371	1,564	0	0	0	0
1:45 PM	0	14	0	14	0	2	0	1	1	11	183	0	0	0	157	13	396	1,584	0	0	0	0
2:00 PM	0	11	0	19	0	1	0	1	0	18	167	1	0	0	177	13	408	1,589	0	0	0	0
2:15 PM	0	9	0	9	0	0	0	1	0	17	170	0	0	0	168	15	389	1,575	0	0	0	0

2:30 PM	0	12	0	25	0	0	0	0	0	11	185	0	0	0	154	4	391	1,616	0	0	0	0
2:45 PM	0	9	0	17	0	2	0	2	0	14	182	0	0	0	165	10	401	1,672	0	0	0	0
3:00 PM	0	11	0	15	0	0	0	0	0	10	192	0	0	0	157	9	394	1,711	0	0	0	0
3:15 PM	0	10	0	21	0	0	0	1	0	12	204	0	0	0	174	8	430	1,761	0	0	0	0
3:30 PM	0	10	0	30	0	1	0	1	0	8	202	0	0	0	190	5	447	1,786	0	0	0	0
3:45 PM	0	9	0	31	0	2	0	0	0	10	195	0	0	0	189	4	440	1,881	0	0	0	0
4:00 PM	0	18	0	40	0	1	0	1	0	8	192	0	0	0	181	3	444	1,906	0	0	0	0
4:15 PM	0	9	0	16	0	1	0	1	0	9	239	0	0	1	175	4	455	2,001	0	0	0	0
4:30 PM	0	19	0	59	0	1	0	1	0	14	266	0	0	0	176	6	542	2,026	0	0	0	0
4:45 PM	0	16	0	39	0	0	0	1	0	14	200	1	0	0	187	7	465	1,963	0	0	0	0
5:00 PM	0	24	0	64	0	2	0	0	0	6	260	0	0	0	179	4	539	1,956	0	0	0	0
5:15 PM	0	9	0	27	0	3	0	0	0	2	227	0	0	0	210	2	480	1,850	0	0	0	0
5:30 PM	0	6	0	31	0	1	0	2	0	2	254	0	0	0	181	2	479	1,783	0	0	0	0
5:45 PM	0	8	0	14	0	1	0	2	0	3	232	0	0	0	196	2	458	1,682	0	0	0	0
6:00 PM	0	8	0	22	0	0	0	3	0	4	200	0	0	0	194	2	433	1,590	0	0	0	0
6:15 PM	0	9	0	11	0	0	0	0	0	1	196	0	0	0	196	0	413	1,503	0	0	0	0
6:30 PM	0	0	0	7	0	0	0	0	0	1	187	0	0	0	183	0	378	1,394	0	0	0	0
6:45 PM	0	2	0	0	0	0	0	0	0	1	183	0	1	0	176	3	366	1,285	0	0	0	0
7:00 PM	0	4	0	9	0	0	0	0	0	2	160	0	0	0	170	1	346	1,175	0	0	0	0
7:15 PM	0	2	0	7	0	0	0	0	0	2	163	0	0	0	127	3	304	1,052	0	0	0	0
7:30 PM	0	3	0	0	0	0	0	0	0	2	138	0	0	0	126	0	269	973	0	0	0	0
7:45 PM	0	3	0	0	0	0	0	0	0	2	152	0	0	0	98	1	256	917	0	0	0	0
8:00 PM	0	1	0	5	0	0	0	0	0	1	123	0	0	0	92	1	223	875	0	0	0	0
8:15 PM	0	0	0	1	0	0	0	0	0	0	119	0	0	0	105	0	225	834	0	0	0	0
8:30 PM	0	0	0	1	0	0	0	0	0	0	143	0	0	0	67	2	213	753	0	0	0	0
8:45 PM	0	1	0	4	0	0	0	0	0	1	132	0	0	0	75	1	214	672	0	0	0	0
9:00 PM	0	3	0	0	0	0	0	0	0	1	96	0	0	0	82	0	182	590	0	0	0	0
9:15 PM	0	2	0	0	0	0	0	0	0	0	102	0	0	0	40	0	144		0	0	0	0
9:30 PM	0	0	0	0	0	0	0	0	0	0	77	0	0	0	55	0	132		0	0	0	0
9:45 PM	0	0	0	4	0	0	0	0	0	0	64	0	0	0	62	2	132		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	2	0	0	0	0	0	0	3	0	0	0	1	0	6
Lights	0	65	0	186	0	6	0	2	0	34	943	1	0	0	743	16	1,996
Mediums	0	3	0	1	0	0	0	0	0	2	7	0	0	0	8	3	24
Total	0	68	0	189	0	6	0	2	0	36	953	1	0	0	752	19	2,026

Heavy Vehicle Percentage and Peak Hour Factor

	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	
Heavy Vehicle %	2.3%				0.0%				1.2%				1.6%				1.5%
Heavy Vehicle %	0.0%	4.4%	0.0%	1.6%	0.0%	0.0%	0.0%	0.0%	0.0%	5.6%	1.0%	0.0%	0.0%	0.0%	1.2%	15.8%	1.5%
Peak Hour Factor	0.73				0.58				0.90				0.95				0.93
Peak Hour Factor	0.00	0.71	0.25	0.74	0.00	0.44	0.50	0.67	0.25	0.69	0.94	0.25	0.25	0.38	0.92	0.80	0.93



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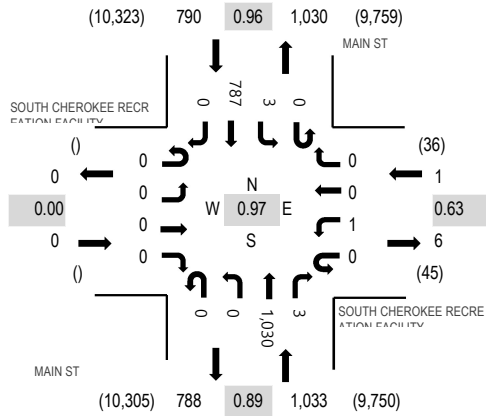
Location: 4 MAIN ST & SOUTH CHEROKEE RECREATION FACILITY AM

Date: Wednesday, May 8, 2024

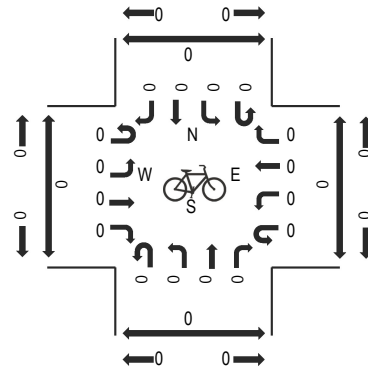
Peak Hour: 04:45 PM - 05:45 PM

Peak 15-Minutes: 05:00 PM - 05:15 PM

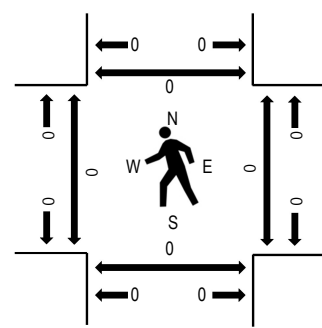
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SOUTH CHEROKEE RECREATION FACILITY Eastbound				SOUTH CHEROKEE RECREATION FACILITY Westbound				MAIN ST Northbound				MAIN ST 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
6:00 AM	0	0	0	0	0	0	0	0	0	0	40	0	0	0	84	0	124	727	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	43	0	0	0	103	0	146	940	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	73	0	0	0	130	0	203	1,165	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	64	0	0	1	189	0	254	1,312	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	86	0	0	0	251	0	337	1,431	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	114	0	0	1	256	0	371	1,404	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	123	1	0	0	225	0	350	1,381	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	118	0	0	1	254	0	373	1,334	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	103	0	0	0	207	0	310	1,287	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	111	0	0	2	235	0	348	1,265	0	0	0	0
8:30 AM	0	0	0	0	0	1	0	0	0	0	126	0	0	0	176	0	303	1,202	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	126	0	0	0	199	0	326	1,160	0	0	0	0
9:00 AM	0	0	0	0	0	0	0	0	0	0	124	0	0	0	164	0	288	1,103	0	0	0	0
9:15 AM	0	0	0	0	0	0	0	1	0	0	103	1	0	0	180	0	285	1,094	0	0	0	0
9:30 AM	0	0	0	0	0	0	0	0	0	0	95	0	0	0	166	0	261	1,089	0	0	0	0
9:45 AM	0	0	0	0	0	0	0	0	0	0	114	1	0	0	154	0	269	1,120	0	0	0	0
10:00 AM	0	0	0	0	0	0	0	0	0	0	115	0	0	0	164	0	279	1,127	0	0	0	0
10:15 AM	0	0	0	0	0	0	0	2	0	0	132	1	0	0	145	0	280	1,130	0	0	0	0
10:30 AM	0	0	0	0	0	0	0	0	0	0	126	1	0	0	165	0	292	1,120	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	1	0	0	143	0	0	1	131	0	276	1,114	0	0	0	0
11:00 AM	0	0	0	0	0	1	0	0	0	0	132	1	0	0	148	0	282	1,099	0	0	0	0
11:15 AM	0	0	0	0	0	0	0	0	0	0	120	0	0	0	150	0	270	1,104	0	0	0	0
11:30 AM	0	0	0	0	0	0	0	0	0	0	141	0	0	0	145	0	286	1,114	0	0	0	0
11:45 AM	0	0	0	0	0	0	0	1	0	0	124	0	0	0	136	0	261	1,163	0	0	0	0
12:00 PM	0	0	0	0	0	0	0	0	0	0	138	0	0	0	149	0	287	1,225	0	0	0	0
12:15 PM	0	0	0	0	0	0	0	0	0	0	127	0	0	0	153	0	280	1,253	0	0	0	0
12:30 PM	0	0	0	0	0	0	0	0	0	0	164	2	0	0	169	0	335	1,325	0	0	0	0
12:45 PM	0	0	0	0	0	0	0	0	0	0	151	1	0	0	171	0	323	1,338	0	0	0	0
1:00 PM	0	0	0	0	0	0	0	0	0	0	157	0	0	0	158	0	315	1,378	0	0	0	0
1:15 PM	0	0	0	0	0	0	0	2	0	0	180	0	0	0	170	0	352	1,440	0	0	0	0
1:30 PM	0	0	0	0	0	0	0	0	0	0	161	0	0	1	186	0	348	1,444	0	0	0	0
1:45 PM	0	0	0	0	0	0	0	1	0	0	196	0	0	0	166	0	363	1,446	0	0	0	0
2:00 PM	0	0	0	0	0	0	0	0	0	0	190	0	0	0	187	0	377	1,459	0	0	0	0
2:15 PM	0	0	0	0	0	0	0	1	0	0	174	0	0	0	181	0	356	1,446	0	0	0	0

2:30 PM	0	0	0	0	0	0	0	0	0	0	189	0	0	0	161	0	350	1,492	0	0	0	0
2:45 PM	0	0	0	0	0	0	0	0	0	0	196	1	0	2	177	0	376	1,545	0	0	0	0
3:00 PM	0	0	0	0	0	1	0	0	0	0	199	0	0	0	164	0	364	1,566	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	3	0	0	219	0	0	1	179	0	402	1,598	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	211	0	0	1	191	0	403	1,614	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	2	0	0	201	0	0	2	192	0	397	1,657	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	210	0	0	0	186	0	396	1,716	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	238	0	0	0	180	0	418	1,792	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	264	1	0	0	180	0	446	1,821	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	245	0	0	0	211	0	456	1,824	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	289	1	0	1	181	0	472	1,808	0	0	0	0
5:15 PM	0	0	0	0	0	1	0	0	0	0	236	0	0	1	209	0	447	1,743	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	260	2	0	1	186	0	449	1,705	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	1	0	0	248	1	0	1	189	0	440	1,636	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	202	1	0	3	201	0	407	1,557	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	1	0	0	210	2	0	2	194	0	409	1,495	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	201	0	0	0	179	0	380	1,377	0	0	0	0
6:45 PM	0	0	0	0	0	1	0	3	0	0	180	1	0	1	175	0	361	1,273	0	0	0	0
7:00 PM	0	0	0	0	0	1	0	3	0	0	169	0	0	0	172	0	345	1,160	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	159	0	0	0	132	0	291	1,033	0	0	0	0
7:30 PM	0	0	0	0	0	1	0	1	0	0	149	0	0	0	125	0	276	974	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	150	1	0	1	96	0	248	910	0	0	0	0
8:00 PM	0	0	0	0	0	0	0	1	0	0	122	0	0	0	95	0	218	878	0	0	0	0
8:15 PM	0	0	0	0	0	0	0	0	0	0	129	0	0	0	103	0	232	847	0	0	0	0
8:30 PM	0	0	0	0	0	0	0	0	0	0	140	0	0	0	72	0	212	759	0	0	0	0
8:45 PM	0	0	0	0	0	0	0	2	0	0	134	0	0	1	79	0	216	677	0	0	0	0
9:00 PM	0	0	0	0	0	0	0	0	0	0	104	0	0	0	83	0	187	588	0	0	0	0
9:15 PM	0	0	0	0	0	0	0	0	0	0	102	0	0	0	42	0	144		0	0	0	0
9:30 PM	0	0	0	0	0	0	0	0	0	0	78	0	0	0	52	0	130		0	0	0	0
9:45 PM	0	0	0	0	0	0	0	0	0	0	62	0	0	0	65	0	127		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	0	0	0	3	0	0	0	0	0	3
Lights	0	0	0	0	0	1	0	0	0	0	1,018	3	0	3	779	0	1,804
Mediums	0	0	0	0	0	0	0	0	0	0	9	0	0	0	8	0	17
Total	0	0	0	0	0	1	0	0	0	0	1,030	3	0	3	787	0	1,824

Heavy Vehicle Percentage and Peak Hour Factor

	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	
Heavy Vehicle %	0.0%				0.0%				1.2%				1.0%				1.1%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	1.0%	0.0%	1.1%
Peak Hour Factor	0.00				0.63				0.89				0.96				0.97
Peak Hour Factor	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.58	0.00	0.00	0.90	0.75	0.00	0.58	0.96	0.00	0.97



All Traffic Data Services

1 - MAIN ST NORTH OF JOHNSTON FARM LN

NB	Time	Lights	Mediums	Trucks	Total
	5/7/2024	9	0	0	9
	5/7/2024 12:15:00 AM	8	0	0	8
	5/7/2024 12:30:00 AM	10	0	1	11
	5/7/2024 12:45:00 AM	10	0	0	10
	Hour	37	0	1	38
	5/7/2024 1:00:00 AM	12	0	1	13
	5/7/2024 1:15:00 AM	5	0	0	5
	5/7/2024 1:30:00 AM	7	0	0	7
	5/7/2024 1:45:00 AM	9	0	0	9
	Hour	33	0	1	34
	5/7/2024 2:00:00 AM	4	0	0	4
	5/7/2024 2:15:00 AM	3	0	0	3
	5/7/2024 2:30:00 AM	3	0	0	3
	5/7/2024 2:45:00 AM	2	0	0	2
	Hour	12	0	0	12
	5/7/2024 3:00:00 AM	2	0	0	2
	5/7/2024 3:15:00 AM	5	1	0	6
	5/7/2024 3:30:00 AM	0	0	0	0
	5/7/2024 3:45:00 AM	3	1	0	4
	Hour	10	2	0	12
	5/7/2024 4:00:00 AM	4	0	0	4
	5/7/2024 4:15:00 AM	5	1	1	7
	5/7/2024 4:30:00 AM	9	0	0	9
	5/7/2024 4:45:00 AM	12	2	0	14
	Hour	30	3	1	34
	5/7/2024 5:00:00 AM	14	3	0	17
	5/7/2024 5:15:00 AM	18	0	0	18
	5/7/2024 5:30:00 AM	18	1	0	19
	5/7/2024 5:45:00 AM	53	1	0	54
	Hour	103	5	0	108
	5/7/2024 6:00:00 AM	57	1	1	59
	5/7/2024 6:15:00 AM	83	4	1	88
	5/7/2024 6:30:00 AM	97	9	1	107
	5/7/2024 6:45:00 AM	115	3	0	118
	Hour	352	17	3	372
	5/7/2024 7:00:00 AM	109	5	0	114
	5/7/2024 7:15:00 AM	137	7	1	145
	5/7/2024 7:30:00 AM	156	10	0	166
	5/7/2024 7:45:00 AM	158	6	0	164
	Hour	560	28	1	589
	5/7/2024 8:00:00 AM	138	4	1	143
	5/7/2024 8:15:00 AM	125	7	0	132
	5/7/2024 8:30:00 AM	154	8	0	162
	5/7/2024 8:45:00 AM	146	9	2	157
	Hour	563	28	3	594
	5/7/2024 9:00:00 AM	165	5	0	170
	5/7/2024 9:15:00 AM	143	2	0	145
	5/7/2024 9:30:00 AM	150	3	1	154
	5/7/2024 9:45:00 AM	126	13	0	139
	Hour	584	23	1	608
	5/7/2024 10:00:00 AM	137	11	1	149
	5/7/2024 10:15:00 AM	151	11	3	165
	5/7/2024 10:30:00 AM	153	5	2	160
	5/7/2024 10:45:00 AM	213	4	4	221
	Hour	654	31	10	695
	5/7/2024 11:00:00 AM	187	8	1	196
	5/7/2024 11:15:00 AM	183	12	5	200
	5/7/2024 11:30:00 AM	172	9	1	182
	5/7/2024 11:45:00 AM	177	7	2	186
	Hour	719	36	9	764
	Total	3,657	173	30	3,860
	Percentage	94.7%	4.5%	0.8%	



All Traffic Data Services

1 - MAIN ST NORTH OF JOHNSTON FARM LN

NB	Time	Lights	Mediums	Trucks	Total
	5/7/2024 12:00:00 PM	222	8	0	230
	5/7/2024 12:15:00 PM	194	6	1	201
	5/7/2024 12:30:00 PM	204	5	0	209
	5/7/2024 12:45:00 PM	193	8	1	202
	Hour	813	27	2	842
	5/7/2024 1:00:00 PM	167	7	2	176
	5/7/2024 1:15:00 PM	188	5	0	193
	5/7/2024 1:30:00 PM	187	2	0	189
	5/7/2024 1:45:00 PM	195	9	1	205
	Hour	737	23	3	763
	5/7/2024 2:00:00 PM	154	9	0	163
	5/7/2024 2:15:00 PM	176	7	1	184
	5/7/2024 2:30:00 PM	215	3	1	219
	5/7/2024 2:45:00 PM	183	6	1	190
	Hour	728	25	3	756
	5/7/2024 3:00:00 PM	203	8	0	211
	5/7/2024 3:15:00 PM	216	3	1	220
	5/7/2024 3:30:00 PM	225	8	1	234
	5/7/2024 3:45:00 PM	226	8	3	237
	Hour	870	27	5	902
	5/7/2024 4:00:00 PM	215	2	2	219
	5/7/2024 4:15:00 PM	263	0	0	263
	5/7/2024 4:30:00 PM	273	5	0	278
	5/7/2024 4:45:00 PM	268	2	1	271
	Hour	1019	9	3	1031
	5/7/2024 5:00:00 PM	287	4	0	291
	5/7/2024 5:15:00 PM	279	2	0	281
	5/7/2024 5:30:00 PM	292	1	0	293
	5/7/2024 5:45:00 PM	302	3	1	306
	Hour	1160	10	1	1171
	5/7/2024 6:00:00 PM	254	3	0	257
	5/7/2024 6:15:00 PM	236	4	2	242
	5/7/2024 6:30:00 PM	217	0	0	217
	5/7/2024 6:45:00 PM	183	0	0	183
	Hour	890	7	2	899
	5/7/2024 7:00:00 PM	207	1	0	208
	5/7/2024 7:15:00 PM	184	3	0	187
	5/7/2024 7:30:00 PM	170	2	0	172
	5/7/2024 7:45:00 PM	137	2	0	139
	Hour	698	8	0	706
	5/7/2024 8:00:00 PM	148	3	0	151
	5/7/2024 8:15:00 PM	138	1	0	139
	5/7/2024 8:30:00 PM	111	2	0	113
	5/7/2024 8:45:00 PM	120	1	1	122
	Hour	517	7	1	525
	5/7/2024 9:00:00 PM	110	0	0	110
	5/7/2024 9:15:00 PM	114	0	0	114
	5/7/2024 9:30:00 PM	93	0	0	93
	5/7/2024 9:45:00 PM	61	0	0	61
	Hour	378	0	0	378
	5/7/2024 10:00:00 PM	70	0	0	70
	5/7/2024 10:15:00 PM	61	1	1	63
	5/7/2024 10:30:00 PM	52	1	1	54
	5/7/2024 10:45:00 PM	47	0	0	47
	Hour	230	2	2	234
	5/7/2024 11:00:00 PM	33	0	0	33
	5/7/2024 11:15:00 PM	22	0	0	22
	5/7/2024 11:30:00 PM	27	1	0	28
	5/7/2024 11:45:00 PM	21	0	0	21
	Hour	103	1	0	104
	Total	8,143	146	22	8,311
	Percentage	98.0%	1.8%	0.3%	



All Traffic Data Services

1 - MAIN ST NORTH OF JOHNSTON FARM LN

NB	Time	Lights	Mediums	Trucks	Total
	5/8/2024	10	0	0	10
	5/8/2024 12:15:00 AM	3	0	0	3
	5/8/2024 12:30:00 AM	11	0	0	11
	5/8/2024 12:45:00 AM	10	0	0	10
	Hour	34	0	0	34
	5/8/2024 1:00:00 AM	7	0	0	7
	5/8/2024 1:15:00 AM	4	1	0	5
	5/8/2024 1:30:00 AM	1	0	0	1
	5/8/2024 1:45:00 AM	1	0	0	1
	Hour	13	1	0	14
	5/8/2024 2:00:00 AM	1	0	0	1
	5/8/2024 2:15:00 AM	2	0	0	2
	5/8/2024 2:30:00 AM	7	0	0	7
	5/8/2024 2:45:00 AM	2	0	0	2
	Hour	12	0	0	12
	5/8/2024 3:00:00 AM	5	0	0	5
	5/8/2024 3:15:00 AM	3	1	0	4
	5/8/2024 3:30:00 AM	3	0	0	3
	5/8/2024 3:45:00 AM	7	0	0	7
	Hour	18	1	0	19
	5/8/2024 4:00:00 AM	3	1	0	4
	5/8/2024 4:15:00 AM	3	1	0	4
	5/8/2024 4:30:00 AM	5	3	1	9
	5/8/2024 4:45:00 AM	12	0	0	12
	Hour	23	5	1	29
	5/8/2024 5:00:00 AM	12	0	0	12
	5/8/2024 5:15:00 AM	16	0	1	17
	5/8/2024 5:30:00 AM	30	4	1	35
	5/8/2024 5:45:00 AM	46	2	0	48
	Hour	104	6	2	112
	5/8/2024 6:00:00 AM	54	5	0	59
	5/8/2024 6:15:00 AM	53	3	1	57
	5/8/2024 6:30:00 AM	96	8	1	105
	5/8/2024 6:45:00 AM	114	6	0	120
	Hour	317	22	2	341
	5/8/2024 7:00:00 AM	127	5	2	134
	5/8/2024 7:15:00 AM	132	6	1	139
	5/8/2024 7:30:00 AM	148	9	1	158
	5/8/2024 7:45:00 AM	148	10	0	158
	Hour	555	30	4	589
	5/8/2024 8:00:00 AM	125	5	0	130
	5/8/2024 8:15:00 AM	126	7	0	133
	5/8/2024 8:30:00 AM	117	11	0	128
	5/8/2024 8:45:00 AM	144	7	2	153
	Hour	512	30	2	544
	5/8/2024 9:00:00 AM	130	5	0	135
	5/8/2024 9:15:00 AM	115	5	0	120
	5/8/2024 9:30:00 AM	105	7	2	114
	5/8/2024 9:45:00 AM	129	6	0	135
	Hour	479	23	2	504
	5/8/2024 10:00:00 AM	110	11	3	124
	5/8/2024 10:15:00 AM	133	6	2	141
	5/8/2024 10:30:00 AM	136	7	2	145
	5/8/2024 10:45:00 AM	149	6	2	157
	Hour	528	30	9	567
	5/8/2024 11:00:00 AM	150	6	0	156
	5/8/2024 11:15:00 AM	119	5	1	125
	5/8/2024 11:30:00 AM	128	6	2	136
	5/8/2024 11:45:00 AM	128	7	1	136
	Hour	525	24	4	553
	Total	3,120	172	26	3,318
	Percentage	94.0%	5.2%	0.8%	



All Traffic Data Services

1 - MAIN ST NORTH OF JOHNSTON FARM LN

NB	Time	Lights	Mediums	Trucks	Total
	5/8/2024 12:00:00 PM	126	6	1	133
	5/8/2024 12:15:00 PM	131	8	3	142
	5/8/2024 12:30:00 PM	148	7	2	157
	5/8/2024 12:45:00 PM	164	4	2	170
	Hour	569	25	8	602
	5/8/2024 1:00:00 PM	156	6	0	162
	5/8/2024 1:15:00 PM	178	5	2	185
	5/8/2024 1:30:00 PM	171	8	0	179
	5/8/2024 1:45:00 PM	187	9	1	197
	Hour	692	28	3	723
	5/8/2024 2:00:00 PM	176	8	1	185
	5/8/2024 2:15:00 PM	180	8	1	189
	5/8/2024 2:30:00 PM	191	0	1	192
	5/8/2024 2:45:00 PM	200	6	2	208
	Hour	747	22	5	774
	5/8/2024 3:00:00 PM	198	5	0	203
	5/8/2024 3:15:00 PM	222	3	0	225
	5/8/2024 3:30:00 PM	211	3	2	216
	5/8/2024 3:45:00 PM	198	5	1	204
	Hour	829	16	3	848
	5/8/2024 4:00:00 PM	208	1	2	211
	5/8/2024 4:15:00 PM	245	5	1	251
	5/8/2024 4:30:00 PM	293	1	1	295
	5/8/2024 4:45:00 PM	233	2	1	236
	Hour	979	9	5	993
	5/8/2024 5:00:00 PM	263	3	1	267
	5/8/2024 5:15:00 PM	231	2	0	233
	5/8/2024 5:30:00 PM	236	0	0	236
	5/8/2024 5:45:00 PM	262	0	1	263
	Hour	992	5	2	999
	5/8/2024 6:00:00 PM	200	1	0	201
	5/8/2024 6:15:00 PM	196	1	1	198
	5/8/2024 6:30:00 PM	172	0	0	172
	5/8/2024 6:45:00 PM	184	2	0	186
	Hour	752	4	1	757
	5/8/2024 7:00:00 PM	138	1	0	139
	5/8/2024 7:15:00 PM	175	0	0	175
	5/8/2024 7:30:00 PM	123	2	0	125
	5/8/2024 7:45:00 PM	153	3	0	156
	Hour	589	6	0	595
	5/8/2024 8:00:00 PM	118	0	0	118
	5/8/2024 8:15:00 PM	127	0	0	127
	5/8/2024 8:30:00 PM	137	0	0	137
	5/8/2024 8:45:00 PM	115	0	0	115
	Hour	497	0	0	497
	5/8/2024 9:00:00 PM	92	0	0	92
	5/8/2024 9:15:00 PM	101	0	0	101
	5/8/2024 9:30:00 PM	75	0	0	75
	5/8/2024 9:45:00 PM	65	0	0	65
	Hour	333	0	0	333
	5/8/2024 10:00:00 PM	55	0	0	55
	5/8/2024 10:15:00 PM	49	1	0	50
	5/8/2024 10:30:00 PM	46	0	1	47
	5/8/2024 10:45:00 PM	42	1	1	44
	Hour	192	2	2	196
	5/8/2024 11:00:00 PM	42	0	1	43
	5/8/2024 11:15:00 PM	34	0	0	34
	5/8/2024 11:30:00 PM	23	0	0	23
	5/8/2024 11:45:00 PM	22	0	0	22
	Hour	121	0	1	122
	Total	7,292	117	30	7,439
	Percentage	98.0%	1.6%	0.4%	
	Grand Total	22,212	608	108	22,928
	Percentage	96.9%	2.7%	0.5%	



All Traffic Data Services

1 - MAIN ST NORTH OF JOHNSTON FARM LN

SB	Time	Lights	Mediums	Trucks	Total
	5/7/2024	10	0	0	10
	5/7/2024 12:15:00 AM	7	0	0	7
	5/7/2024 12:30:00 AM	7	0	0	7
	5/7/2024 12:45:00 AM	3	0	0	3
	Hour	27	0	0	27
	5/7/2024 1:00:00 AM	5	0	0	5
	5/7/2024 1:15:00 AM	3	1	0	4
	5/7/2024 1:30:00 AM	4	0	0	4
	5/7/2024 1:45:00 AM	2	0	0	2
	Hour	14	1	0	15
	5/7/2024 2:00:00 AM	2	0	0	2
	5/7/2024 2:15:00 AM	2	0	0	2
	5/7/2024 2:30:00 AM	1	0	0	1
	5/7/2024 2:45:00 AM	8	2	0	10
	Hour	13	2	0	15
	5/7/2024 3:00:00 AM	3	0	0	3
	5/7/2024 3:15:00 AM	8	0	0	8
	5/7/2024 3:30:00 AM	30	0	0	30
	5/7/2024 3:45:00 AM	6	0	0	6
	Hour	47	0	0	47
	5/7/2024 4:00:00 AM	7	1	0	8
	5/7/2024 4:15:00 AM	18	0	0	18
	5/7/2024 4:30:00 AM	9	1	1	11
	5/7/2024 4:45:00 AM	21	1	1	23
	Hour	55	3	2	60
	5/7/2024 5:00:00 AM	24	0	0	24
	5/7/2024 5:15:00 AM	33	1	0	34
	5/7/2024 5:30:00 AM	44	1	1	46
	5/7/2024 5:45:00 AM	52	2	0	54
	Hour	153	4	1	158
	5/7/2024 6:00:00 AM	71	7	0	78
	5/7/2024 6:15:00 AM	101	3	0	104
	5/7/2024 6:30:00 AM	123	12	1	136
	5/7/2024 6:45:00 AM	165	11	0	176
	Hour	460	33	1	494
	5/7/2024 7:00:00 AM	214	11	0	225
	5/7/2024 7:15:00 AM	202	3	0	205
	5/7/2024 7:30:00 AM	217	9	0	226
	5/7/2024 7:45:00 AM	206	13	1	220
	Hour	839	36	1	876
	5/7/2024 8:00:00 AM	163	4	0	167
	5/7/2024 8:15:00 AM	167	5	2	174
	5/7/2024 8:30:00 AM	198	10	1	209
	5/7/2024 8:45:00 AM	165	5	0	170
	Hour	693	24	3	720
	5/7/2024 9:00:00 AM	172	9	1	182
	5/7/2024 9:15:00 AM	205	4	0	209
	5/7/2024 9:30:00 AM	195	9	0	204
	5/7/2024 9:45:00 AM	196	4	2	202
	Hour	768	26	3	797
	5/7/2024 10:00:00 AM	186	8	0	194
	5/7/2024 10:15:00 AM	193	6	1	200
	5/7/2024 10:30:00 AM	196	11	0	207
	5/7/2024 10:45:00 AM	181	8	2	191
	Hour	756	33	3	792
	5/7/2024 11:00:00 AM	214	8	0	222
	5/7/2024 11:15:00 AM	167	6	2	175
	5/7/2024 11:30:00 AM	230	9	6	245
	5/7/2024 11:45:00 AM	229	10	1	240
	Hour	840	33	9	882
	Total	4,665	195	23	4,883
	Percentage	95.5%	4.0%	0.5%	



All Traffic Data Services

1 - MAIN ST NORTH OF JOHNSTON FARM LN

SB	Time	Lights	Mediums	Trucks	Total
	5/7/2024 12:00:00 PM	209	9	3	221
	5/7/2024 12:15:00 PM	207	7	2	216
	5/7/2024 12:30:00 PM	220	8	0	228
	5/7/2024 12:45:00 PM	212	5	2	219
	Hour	848	29	7	884
	5/7/2024 1:00:00 PM	216	8	0	224
	5/7/2024 1:15:00 PM	186	7	0	193
	5/7/2024 1:30:00 PM	185	6	1	192
	5/7/2024 1:45:00 PM	194	4	1	199
	Hour	781	25	2	808
	5/7/2024 2:00:00 PM	160	9	3	172
	5/7/2024 2:15:00 PM	164	4	3	171
	5/7/2024 2:30:00 PM	215	12	2	229
	5/7/2024 2:45:00 PM	204	7	3	214
	Hour	743	32	11	786
	5/7/2024 3:00:00 PM	168	6	1	175
	5/7/2024 3:15:00 PM	191	4	1	196
	5/7/2024 3:30:00 PM	240	6	2	248
	5/7/2024 3:45:00 PM	201	2	0	203
	Hour	800	18	4	822
	5/7/2024 4:00:00 PM	218	8	1	227
	5/7/2024 4:15:00 PM	229	6	2	237
	5/7/2024 4:30:00 PM	281	5	0	286
	5/7/2024 4:45:00 PM	234	5	0	239
	Hour	962	24	3	989
	5/7/2024 5:00:00 PM	281	4	2	287
	5/7/2024 5:15:00 PM	267	4	1	272
	5/7/2024 5:30:00 PM	243	6	0	249
	5/7/2024 5:45:00 PM	227	1	0	228
	Hour	1018	15	3	1036
	5/7/2024 6:00:00 PM	226	3	2	231
	5/7/2024 6:15:00 PM	194	0	0	194
	5/7/2024 6:30:00 PM	208	1	0	209
	5/7/2024 6:45:00 PM	181	1	0	182
	Hour	809	5	2	816
	5/7/2024 7:00:00 PM	203	0	1	204
	5/7/2024 7:15:00 PM	198	3	0	201
	5/7/2024 7:30:00 PM	188	0	0	188
	5/7/2024 7:45:00 PM	182	2	0	184
	Hour	771	5	1	777
	5/7/2024 8:00:00 PM	119	0	0	119
	5/7/2024 8:15:00 PM	98	1	0	99
	5/7/2024 8:30:00 PM	118	0	0	118
	5/7/2024 8:45:00 PM	102	3	1	106
	Hour	437	4	1	442
	5/7/2024 9:00:00 PM	129	2	0	131
	5/7/2024 9:15:00 PM	73	0	0	73
	5/7/2024 9:30:00 PM	65	0	0	65
	5/7/2024 9:45:00 PM	52	0	0	52
	Hour	319	2	0	321
	5/7/2024 10:00:00 PM	44	1	0	45
	5/7/2024 10:15:00 PM	28	0	0	28
	5/7/2024 10:30:00 PM	21	0	0	21
	5/7/2024 10:45:00 PM	14	0	0	14
	Hour	107	1	0	108
	5/7/2024 11:00:00 PM	22	1	0	23
	5/7/2024 11:15:00 PM	18	0	0	18
	5/7/2024 11:30:00 PM	12	0	0	12
	5/7/2024 11:45:00 PM	10	0	0	10
	Hour	62	1	0	63
	Total	7,657	161	34	7,852
	Percentage	97.5%	2.1%	0.4%	



All Traffic Data Services

1 - MAIN ST NORTH OF JOHNSTON FARM LN

SB	Time	Lights	Mediums	Trucks	Total
	5/8/2024	10	0	0	10
	5/8/2024 12:15:00 AM	7	0	0	7
	5/8/2024 12:30:00 AM	4	0	1	5
	5/8/2024 12:45:00 AM	5	0	0	5
	Hour	26	0	1	27
	5/8/2024 1:00:00 AM	2	0	0	2
	5/8/2024 1:15:00 AM	5	0	1	6
	5/8/2024 1:30:00 AM	1	1	0	2
	5/8/2024 1:45:00 AM	2	0	0	2
	Hour	10	1	1	12
	5/8/2024 2:00:00 AM	1	0	0	1
	5/8/2024 2:15:00 AM	4	0	0	4
	5/8/2024 2:30:00 AM	2	0	0	2
	5/8/2024 2:45:00 AM	6	0	1	7
	Hour	13	0	1	14
	5/8/2024 3:00:00 AM	3	0	0	3
	5/8/2024 3:15:00 AM	5	3	0	8
	5/8/2024 3:30:00 AM	33	0	0	33
	5/8/2024 3:45:00 AM	8	1	0	9
	Hour	49	4	0	53
	5/8/2024 4:00:00 AM	12	0	0	12
	5/8/2024 4:15:00 AM	12	0	0	12
	5/8/2024 4:30:00 AM	17	3	0	20
	5/8/2024 4:45:00 AM	23	1	0	24
	Hour	64	4	0	68
	5/8/2024 5:00:00 AM	22	2	0	24
	5/8/2024 5:15:00 AM	19	2	2	23
	5/8/2024 5:30:00 AM	40	0	0	40
	5/8/2024 5:45:00 AM	51	1	1	53
	Hour	132	5	3	140
	5/8/2024 6:00:00 AM	80	3	0	83
	5/8/2024 6:15:00 AM	90	4	1	95
	5/8/2024 6:30:00 AM	115	10	1	126
	5/8/2024 6:45:00 AM	176	6	0	182
	Hour	461	23	2	486
	5/8/2024 7:00:00 AM	213	7	0	220
	5/8/2024 7:15:00 AM	233	3	1	237
	5/8/2024 7:30:00 AM	198	7	1	206
	5/8/2024 7:45:00 AM	244	6	1	251
	Hour	888	23	3	914
	5/8/2024 8:00:00 AM	183	13	0	196
	5/8/2024 8:15:00 AM	210	8	4	222
	5/8/2024 8:30:00 AM	152	8	2	162
	5/8/2024 8:45:00 AM	193	6	0	199
	Hour	738	35	6	779
	5/8/2024 9:00:00 AM	156	8	2	166
	5/8/2024 9:15:00 AM	165	9	3	177
	5/8/2024 9:30:00 AM	158	6	0	164
	5/8/2024 9:45:00 AM	148	6	2	156
	Hour	627	29	7	663
	5/8/2024 10:00:00 AM	161	6	1	168
	5/8/2024 10:15:00 AM	152	2	1	155
	5/8/2024 10:30:00 AM	175	7	0	182
	5/8/2024 10:45:00 AM	128	4	2	134
	Hour	616	19	4	639
	5/8/2024 11:00:00 AM	147	7	1	155
	5/8/2024 11:15:00 AM	148	5	3	156
	5/8/2024 11:30:00 AM	145	3	0	148
	5/8/2024 11:45:00 AM	157	8	0	165
	Hour	597	23	4	624
	Total	4,221	166	32	4,419
	Percentage	95.5%	3.8%	0.7%	



All Traffic Data Services

1 - MAIN ST NORTH OF JOHNSTON FARM LN

SB	Time	Lights	Mediums	Trucks	Total
	5/8/2024 12:00:00 PM	165	4	2	171
	5/8/2024 12:15:00 PM	152	4	1	157
	5/8/2024 12:30:00 PM	168	4	0	172
	5/8/2024 12:45:00 PM	174	3	4	181
	Hour	659	15	7	681
	5/8/2024 1:00:00 PM	167	4	2	173
	5/8/2024 1:15:00 PM	165	7	1	173
	5/8/2024 1:30:00 PM	186	4	0	190
	5/8/2024 1:45:00 PM	162	5	1	168
	Hour	680	20	4	704
	5/8/2024 2:00:00 PM	193	5	0	198
	5/8/2024 2:15:00 PM	166	9	0	175
	5/8/2024 2:30:00 PM	167	12	1	180
	5/8/2024 2:45:00 PM	176	4	2	182
	Hour	702	30	3	735
	5/8/2024 3:00:00 PM	169	4	3	176
	5/8/2024 3:15:00 PM	196	2	2	200
	5/8/2024 3:30:00 PM	212	3	2	217
	5/8/2024 3:45:00 PM	213	6	0	219
	Hour	790	15	7	812
	5/8/2024 4:00:00 PM	227	6	2	235
	5/8/2024 4:15:00 PM	174	4	3	181
	5/8/2024 4:30:00 PM	250	6	0	256
	5/8/2024 4:45:00 PM	223	2	2	227
	Hour	874	18	7	899
	5/8/2024 5:00:00 PM	252	1	1	254
	5/8/2024 5:15:00 PM	237	2	0	239
	5/8/2024 5:30:00 PM	213	3	0	216
	5/8/2024 5:45:00 PM	205	2	0	207
	Hour	907	8	1	916
	5/8/2024 6:00:00 PM	225	1	2	228
	5/8/2024 6:15:00 PM	207	1	1	209
	5/8/2024 6:30:00 PM	201	0	1	202
	5/8/2024 6:45:00 PM	161	1	0	162
	Hour	794	3	4	801
	5/8/2024 7:00:00 PM	190	0	0	190
	5/8/2024 7:15:00 PM	138	1	0	139
	5/8/2024 7:30:00 PM	125	1	0	126
	5/8/2024 7:45:00 PM	100	1	0	101
	Hour	553	3	0	556
	5/8/2024 8:00:00 PM	97	0	0	97
	5/8/2024 8:15:00 PM	109	1	0	110
	5/8/2024 8:30:00 PM	76	1	0	77
	5/8/2024 8:45:00 PM	82	0	0	82
	Hour	364	2	0	366
	5/8/2024 9:00:00 PM	83	1	0	84
	5/8/2024 9:15:00 PM	39	0	0	39
	5/8/2024 9:30:00 PM	55	0	0	55
	5/8/2024 9:45:00 PM	66	0	0	66
	Hour	243	1	0	244
	5/8/2024 10:00:00 PM	54	0	0	54
	5/8/2024 10:15:00 PM	29	0	0	29
	5/8/2024 10:30:00 PM	24	0	0	24
	5/8/2024 10:45:00 PM	17	0	0	17
	Hour	124	0	0	124
	5/8/2024 11:00:00 PM	16	0	0	16
	5/8/2024 11:15:00 PM	28	0	0	28
	5/8/2024 11:30:00 PM	8	0	0	8
	5/8/2024 11:45:00 PM	11	0	0	11
	Hour	63	0	0	63
	Total	6,753	115	33	6,901
	Percentage	97.9%	1.7%	0.5%	
	Grand Total	23,296	637	122	24,055
	Percentage	96.8%	2.6%	0.5%	



All Traffic Data Services

1 - MAIN ST NORTH OF JOHNSTON FARM LN

NB	Time	Lights	Mediums	Trucks	Total
	5/4/2024	26	0	0	26
	5/4/2024 12:15:00 AM	24	0	0	24
	5/4/2024 12:30:00 AM	14	0	0	14
	5/4/2024 12:45:00 AM	18	0	0	18
	Hour	82	0	0	82
	5/4/2024 1:00:00 AM	11	0	0	11
	5/4/2024 1:15:00 AM	13	0	0	13
	5/4/2024 1:30:00 AM	14	0	1	15
	5/4/2024 1:45:00 AM	10	0	0	10
	Hour	48	0	1	49
	5/4/2024 2:00:00 AM	5	0	0	5
	5/4/2024 2:15:00 AM	8	0	0	8
	5/4/2024 2:30:00 AM	5	0	0	5
	5/4/2024 2:45:00 AM	4	0	0	4
	Hour	22	0	0	22
	5/4/2024 3:00:00 AM	4	0	0	4
	5/4/2024 3:15:00 AM	0	0	0	0
	5/4/2024 3:30:00 AM	4	0	0	4
	5/4/2024 3:45:00 AM	2	0	0	2
	Hour	10	0	0	10
	5/4/2024 4:00:00 AM	4	1	0	5
	5/4/2024 4:15:00 AM	6	0	0	6
	5/4/2024 4:30:00 AM	4	0	0	4
	5/4/2024 4:45:00 AM	0	0	0	0
	Hour	14	1	0	15
	5/4/2024 5:00:00 AM	1	0	0	1
	5/4/2024 5:15:00 AM	5	0	0	5
	5/4/2024 5:30:00 AM	11	0	0	11
	5/4/2024 5:45:00 AM	13	0	0	13
	Hour	30	0	0	30
	5/4/2024 6:00:00 AM	16	1	0	17
	5/4/2024 6:15:00 AM	22	0	0	22
	5/4/2024 6:30:00 AM	37	0	0	37
	5/4/2024 6:45:00 AM	57	1	0	58
	Hour	132	2	0	134
	5/4/2024 7:00:00 AM	59	2	0	61
	5/4/2024 7:15:00 AM	59	2	0	61
	5/4/2024 7:30:00 AM	95	5	0	100
	5/4/2024 7:45:00 AM	76	4	2	82
	Hour	289	13	2	304
	5/4/2024 8:00:00 AM	84	1	0	85
	5/4/2024 8:15:00 AM	99	2	0	101
	5/4/2024 8:30:00 AM	92	0	0	92
	5/4/2024 8:45:00 AM	105	0	0	105
	Hour	380	3	0	383
	5/4/2024 9:00:00 AM	83	1	0	84
	5/4/2024 9:15:00 AM	117	1	0	118
	5/4/2024 9:30:00 AM	136	3	0	139
	5/4/2024 9:45:00 AM	121	4	0	125
	Hour	457	9	0	466
	5/4/2024 10:00:00 AM	146	4	0	150
	5/4/2024 10:15:00 AM	159	2	0	161
	5/4/2024 10:30:00 AM	162	2	0	164
	5/4/2024 10:45:00 AM	174	2	0	176
	Hour	641	10	0	651
	5/4/2024 11:00:00 AM	147	1	1	149
	5/4/2024 11:15:00 AM	172	2	0	174
	5/4/2024 11:30:00 AM	187	1	0	188
	5/4/2024 11:45:00 AM	171	1	0	172
	Hour	677	5	1	683
	Total	2,782	43	4	2,829
	Percentage	98.3%	1.5%	0.1%	



All Traffic Data Services

1 - MAIN ST NORTH OF JOHNSTON FARM LN

NB	Time	Lights	Mediums	Trucks	Total
	5/4/2024 12:00:00 PM	216	3	0	219
	5/4/2024 12:15:00 PM	225	0	0	225
	5/4/2024 12:30:00 PM	250	2	0	252
	5/4/2024 12:45:00 PM	218	3	0	221
	Hour	909	8	0	917
	5/4/2024 1:00:00 PM	217	1	0	218
	5/4/2024 1:15:00 PM	187	1	0	188
	5/4/2024 1:30:00 PM	201	1	0	202
	5/4/2024 1:45:00 PM	180	0	1	181
	Hour	785	3	1	789
	5/4/2024 2:00:00 PM	212	0	0	212
	5/4/2024 2:15:00 PM	204	0	0	204
	5/4/2024 2:30:00 PM	185	0	0	185
	5/4/2024 2:45:00 PM	213	1	0	214
	Hour	814	1	0	815
	5/4/2024 3:00:00 PM	188	0	0	188
	5/4/2024 3:15:00 PM	190	1	0	191
	5/4/2024 3:30:00 PM	246	3	0	249
	5/4/2024 3:45:00 PM	193	0	0	193
	Hour	817	4	0	821
	5/4/2024 4:00:00 PM	176	2	0	178
	5/4/2024 4:15:00 PM	157	1	0	158
	5/4/2024 4:30:00 PM	185	1	0	186
	5/4/2024 4:45:00 PM	195	0	0	195
	Hour	713	4	0	717
	5/4/2024 5:00:00 PM	185	1	0	186
	5/4/2024 5:15:00 PM	168	0	0	168
	5/4/2024 5:30:00 PM	166	0	0	166
	5/4/2024 5:45:00 PM	174	0	0	174
	Hour	693	1	0	694
	5/4/2024 6:00:00 PM	184	1	0	185
	5/4/2024 6:15:00 PM	173	2	0	175
	5/4/2024 6:30:00 PM	174	1	0	175
	5/4/2024 6:45:00 PM	146	1	0	147
	Hour	677	5	0	682
	5/4/2024 7:00:00 PM	153	0	0	153
	5/4/2024 7:15:00 PM	125	1	0	126
	5/4/2024 7:30:00 PM	113	0	0	113
	5/4/2024 7:45:00 PM	134	0	0	134
	Hour	525	1	0	526
	5/4/2024 8:00:00 PM	127	0	0	127
	5/4/2024 8:15:00 PM	93	2	0	95
	5/4/2024 8:30:00 PM	112	0	0	112
	5/4/2024 8:45:00 PM	96	2	0	98
	Hour	428	4	0	432
	5/4/2024 9:00:00 PM	87	0	0	87
	5/4/2024 9:15:00 PM	94	0	0	94
	5/4/2024 9:30:00 PM	85	0	0	85
	5/4/2024 9:45:00 PM	71	0	0	71
	Hour	337	0	0	337
	5/4/2024 10:00:00 PM	71	0	0	71
	5/4/2024 10:15:00 PM	71	0	0	71
	5/4/2024 10:30:00 PM	58	0	0	58
	5/4/2024 10:45:00 PM	56	0	0	56
	Hour	256	0	0	256
	5/4/2024 11:00:00 PM	61	0	0	61
	5/4/2024 11:15:00 PM	39	0	0	39
	5/4/2024 11:30:00 PM	32	0	0	32
	5/4/2024 11:45:00 PM	47	0	0	47
	Hour	179	0	0	179
	Total	7,133	31	1	7,165
	Percentage	99.6%	0.4%	0.0%	



All Traffic Data Services

1 - MAIN ST NORTH OF JOHNSTON FARM LN

NB	Time	Lights	Mediums	Trucks	Total
	5/5/2024	17	0	0	17
	5/5/2024 12:15:00 AM	20	0	0	20
	5/5/2024 12:30:00 AM	22	0	0	22
	5/5/2024 12:45:00 AM	22	0	0	22
	Hour	81	0	0	81
	5/5/2024 1:00:00 AM	19	0	0	19
	5/5/2024 1:15:00 AM	12	0	0	12
	5/5/2024 1:30:00 AM	7	0	0	7
	5/5/2024 1:45:00 AM	6	0	0	6
	Hour	44	0	0	44
	5/5/2024 2:00:00 AM	7	0	0	7
	5/5/2024 2:15:00 AM	9	0	0	9
	5/5/2024 2:30:00 AM	7	0	0	7
	5/5/2024 2:45:00 AM	11	0	0	11
	Hour	34	0	0	34
	5/5/2024 3:00:00 AM	7	0	0	7
	5/5/2024 3:15:00 AM	2	0	1	3
	5/5/2024 3:30:00 AM	3	0	0	3
	5/5/2024 3:45:00 AM	1	0	0	1
	Hour	13	0	1	14
	5/5/2024 4:00:00 AM	4	0	0	4
	5/5/2024 4:15:00 AM	5	0	0	5
	5/5/2024 4:30:00 AM	2	0	0	2
	5/5/2024 4:45:00 AM	1	0	0	1
	Hour	12	0	0	12
	5/5/2024 5:00:00 AM	3	0	0	3
	5/5/2024 5:15:00 AM	2	0	0	2
	5/5/2024 5:30:00 AM	4	0	0	4
	5/5/2024 5:45:00 AM	6	0	0	6
	Hour	15	0	0	15
	5/5/2024 6:00:00 AM	6	0	0	6
	5/5/2024 6:15:00 AM	25	0	0	25
	5/5/2024 6:30:00 AM	26	0	0	26
	5/5/2024 6:45:00 AM	24	0	0	24
	Hour	81	0	0	81
	5/5/2024 7:00:00 AM	20	1	0	21
	5/5/2024 7:15:00 AM	31	0	0	31
	5/5/2024 7:30:00 AM	43	0	0	43
	5/5/2024 7:45:00 AM	32	0	0	32
	Hour	126	1	0	127
	5/5/2024 8:00:00 AM	37	0	0	37
	5/5/2024 8:15:00 AM	50	1	0	51
	5/5/2024 8:30:00 AM	65	1	0	66
	5/5/2024 8:45:00 AM	76	3	0	79
	Hour	228	5	0	233
	5/5/2024 9:00:00 AM	73	0	2	75
	5/5/2024 9:15:00 AM	73	2	0	75
	5/5/2024 9:30:00 AM	99	3	0	102
	5/5/2024 9:45:00 AM	89	0	0	89
	Hour	334	5	2	341
	5/5/2024 10:00:00 AM	103	0	0	103
	5/5/2024 10:15:00 AM	224	0	0	224
	5/5/2024 10:30:00 AM	144	1	0	145
	5/5/2024 10:45:00 AM	124	0	0	124
	Hour	595	1	0	596
	5/5/2024 11:00:00 AM	132	0	0	132
	5/5/2024 11:15:00 AM	148	1	0	149
	5/5/2024 11:30:00 AM	147	0	0	147
	5/5/2024 11:45:00 AM	150	0	0	150
	Hour	577	1	0	578
	Total	2,140	13	3	2,156
	Percentage	99.3%	0.6%	0.1%	



All Traffic Data Services

1 - MAIN ST NORTH OF JOHNSTON FARM LN

NB	Time	Lights	Mediums	Trucks	Total
	5/5/2024 12:00:00 PM	184	0	0	184
	5/5/2024 12:15:00 PM	302	0	0	302
	5/5/2024 12:30:00 PM	277	0	0	277
	5/5/2024 12:45:00 PM	232	2	0	234
	Hour	995	2	0	997
	5/5/2024 1:00:00 PM	200	3	0	203
	5/5/2024 1:15:00 PM	198	3	0	201
	5/5/2024 1:30:00 PM	189	0	0	189
	5/5/2024 1:45:00 PM	209	1	0	210
	Hour	796	7	0	803
	5/5/2024 2:00:00 PM	213	1	0	214
	5/5/2024 2:15:00 PM	176	0	1	177
	5/5/2024 2:30:00 PM	221	0	0	221
	5/5/2024 2:45:00 PM	190	0	0	190
	Hour	800	1	1	802
	5/5/2024 3:00:00 PM	199	1	0	200
	5/5/2024 3:15:00 PM	198	0	0	198
	5/5/2024 3:30:00 PM	208	1	0	209
	5/5/2024 3:45:00 PM	212	1	0	213
	Hour	817	3	0	820
	5/5/2024 4:00:00 PM	200	0	0	200
	5/5/2024 4:15:00 PM	187	0	0	187
	5/5/2024 4:30:00 PM	211	0	0	211
	5/5/2024 4:45:00 PM	178	0	0	178
	Hour	776	0	0	776
	5/5/2024 5:00:00 PM	189	0	0	189
	5/5/2024 5:15:00 PM	187	0	0	187
	5/5/2024 5:30:00 PM	189	0	0	189
	5/5/2024 5:45:00 PM	168	1	0	169
	Hour	733	1	0	734
	5/5/2024 6:00:00 PM	167	0	0	167
	5/5/2024 6:15:00 PM	160	0	0	160
	5/5/2024 6:30:00 PM	165	0	1	166
	5/5/2024 6:45:00 PM	141	0	0	141
	Hour	633	0	1	634
	5/5/2024 7:00:00 PM	121	0	0	121
	5/5/2024 7:15:00 PM	118	0	0	118
	5/5/2024 7:30:00 PM	113	0	0	113
	5/5/2024 7:45:00 PM	105	0	0	105
	Hour	457	0	0	457
	5/5/2024 8:00:00 PM	82	0	0	82
	5/5/2024 8:15:00 PM	91	0	0	91
	5/5/2024 8:30:00 PM	91	0	0	91
	5/5/2024 8:45:00 PM	68	0	0	68
	Hour	332	0	0	332
	5/5/2024 9:00:00 PM	51	0	0	51
	5/5/2024 9:15:00 PM	60	1	0	61
	5/5/2024 9:30:00 PM	59	0	0	59
	5/5/2024 9:45:00 PM	54	0	0	54
	Hour	224	1	0	225
	5/5/2024 10:00:00 PM	42	0	0	42
	5/5/2024 10:15:00 PM	34	0	0	34
	5/5/2024 10:30:00 PM	28	0	0	28
	5/5/2024 10:45:00 PM	28	0	1	29
	Hour	132	0	1	133
	5/5/2024 11:00:00 PM	23	0	0	23
	5/5/2024 11:15:00 PM	15	0	0	15
	5/5/2024 11:30:00 PM	20	0	0	20
	5/5/2024 11:45:00 PM	15	0	0	15
	Hour	73	0	0	73
	Total	6,768	15	3	6,786
	Percentage	99.7%	0.2%	0.0%	
	Grand Total	18,823	102	11	18,936
	Percentage	99.4%	0.5%	0.1%	



All Traffic Data Services

1 - MAIN ST NORTH OF JOHNSTON FARM LN

SB	Time	Lights	Mediums	Trucks	Total
	5/4/2024	17	0	0	17
	5/4/2024 12:15:00 AM	13	0	0	13
	5/4/2024 12:30:00 AM	7	0	0	7
	5/4/2024 12:45:00 AM	5	0	0	5
	Hour	42	0	0	42
	5/4/2024 1:00:00 AM	3	0	0	3
	5/4/2024 1:15:00 AM	12	0	0	12
	5/4/2024 1:30:00 AM	6	0	0	6
	5/4/2024 1:45:00 AM	11	0	1	12
	Hour	32	0	1	33
	5/4/2024 2:00:00 AM	2	0	0	2
	5/4/2024 2:15:00 AM	6	0	0	6
	5/4/2024 2:30:00 AM	5	0	1	6
	5/4/2024 2:45:00 AM	4	0	0	4
	Hour	17	0	1	18
	5/4/2024 3:00:00 AM	1	0	0	1
	5/4/2024 3:15:00 AM	3	1	0	4
	5/4/2024 3:30:00 AM	6	0	0	6
	5/4/2024 3:45:00 AM	10	0	0	10
	Hour	20	1	0	21
	5/4/2024 4:00:00 AM	5	0	0	5
	5/4/2024 4:15:00 AM	10	0	0	10
	5/4/2024 4:30:00 AM	6	1	0	7
	5/4/2024 4:45:00 AM	9	1	0	10
	Hour	30	2	0	32
	5/4/2024 5:00:00 AM	10	0	0	10
	5/4/2024 5:15:00 AM	12	0	0	12
	5/4/2024 5:30:00 AM	16	0	0	16
	5/4/2024 5:45:00 AM	15	0	2	17
	Hour	53	0	2	55
	5/4/2024 6:00:00 AM	19	0	0	19
	5/4/2024 6:15:00 AM	36	0	0	36
	5/4/2024 6:30:00 AM	26	2	0	28
	5/4/2024 6:45:00 AM	34	2	0	36
	Hour	115	4	0	119
	5/4/2024 7:00:00 AM	67	1	0	68
	5/4/2024 7:15:00 AM	65	0	0	65
	5/4/2024 7:30:00 AM	71	3	0	74
	5/4/2024 7:45:00 AM	67	2	0	69
	Hour	270	6	0	276
	5/4/2024 8:00:00 AM	105	1	0	106
	5/4/2024 8:15:00 AM	110	1	0	111
	5/4/2024 8:30:00 AM	102	1	0	103
	5/4/2024 8:45:00 AM	123	2	0	125
	Hour	440	5	0	445
	5/4/2024 9:00:00 AM	134	3	0	137
	5/4/2024 9:15:00 AM	157	1	0	158
	5/4/2024 9:30:00 AM	161	2	0	163
	5/4/2024 9:45:00 AM	208	0	0	208
	Hour	660	6	0	666
	5/4/2024 10:00:00 AM	200	3	0	203
	5/4/2024 10:15:00 AM	199	2	0	201
	5/4/2024 10:30:00 AM	218	0	0	218
	5/4/2024 10:45:00 AM	200	2	0	202
	Hour	817	7	0	824
	5/4/2024 11:00:00 AM	219	2	0	221
	5/4/2024 11:15:00 AM	185	1	0	186
	5/4/2024 11:30:00 AM	210	3	0	213
	5/4/2024 11:45:00 AM	236	1	0	237
	Hour	850	7	0	857
	Total	3,346	38	4	3,388
	Percentage	98.8%	1.1%	0.1%	



All Traffic Data Services

1 - MAIN ST NORTH OF JOHNSTON FARM LN

SB	Time	Lights	Mediums	Trucks	Total
	5/4/2024 12:00:00 PM	219	2	0	221
	5/4/2024 12:15:00 PM	189	0	0	189
	5/4/2024 12:30:00 PM	164	2	0	166
	5/4/2024 12:45:00 PM	201	0	0	201
	Hour	773	4	0	777
	5/4/2024 1:00:00 PM	169	1	0	170
	5/4/2024 1:15:00 PM	190	1	0	191
	5/4/2024 1:30:00 PM	199	2	0	201
	5/4/2024 1:45:00 PM	184	2	0	186
	Hour	742	6	0	748
	5/4/2024 2:00:00 PM	215	1	0	216
	5/4/2024 2:15:00 PM	233	1	0	234
	5/4/2024 2:30:00 PM	195	1	1	197
	5/4/2024 2:45:00 PM	206	1	0	207
	Hour	849	4	1	854
	5/4/2024 3:00:00 PM	229	2	0	231
	5/4/2024 3:15:00 PM	168	2	0	170
	5/4/2024 3:30:00 PM	186	3	0	189
	5/4/2024 3:45:00 PM	196	1	0	197
	Hour	779	8	0	787
	5/4/2024 4:00:00 PM	194	1	0	195
	5/4/2024 4:15:00 PM	163	2	0	165
	5/4/2024 4:30:00 PM	201	0	0	201
	5/4/2024 4:45:00 PM	170	0	0	170
	Hour	728	3	0	731
	5/4/2024 5:00:00 PM	199	1	0	200
	5/4/2024 5:15:00 PM	182	1	0	183
	5/4/2024 5:30:00 PM	172	3	0	175
	5/4/2024 5:45:00 PM	163	0	0	163
	Hour	716	5	0	721
	5/4/2024 6:00:00 PM	155	1	0	156
	5/4/2024 6:15:00 PM	145	0	0	145
	5/4/2024 6:30:00 PM	148	0	0	148
	5/4/2024 6:45:00 PM	162	2	0	164
	Hour	610	3	0	613
	5/4/2024 7:00:00 PM	123	1	0	124
	5/4/2024 7:15:00 PM	120	0	0	120
	5/4/2024 7:30:00 PM	115	0	0	115
	5/4/2024 7:45:00 PM	97	0	0	97
	Hour	455	1	0	456
	5/4/2024 8:00:00 PM	126	0	0	126
	5/4/2024 8:15:00 PM	126	1	0	127
	5/4/2024 8:30:00 PM	108	0	0	108
	5/4/2024 8:45:00 PM	110	0	0	110
	Hour	470	1	0	471
	5/4/2024 9:00:00 PM	115	1	0	116
	5/4/2024 9:15:00 PM	95	1	0	96
	5/4/2024 9:30:00 PM	75	0	0	75
	5/4/2024 9:45:00 PM	57	0	0	57
	Hour	342	2	0	344
	5/4/2024 10:00:00 PM	48	0	0	48
	5/4/2024 10:15:00 PM	56	0	0	56
	5/4/2024 10:30:00 PM	47	0	0	47
	5/4/2024 10:45:00 PM	42	0	0	42
	Hour	193	0	0	193
	5/4/2024 11:00:00 PM	32	1	0	33
	5/4/2024 11:15:00 PM	36	1	0	37
	5/4/2024 11:30:00 PM	28	0	0	28
	5/4/2024 11:45:00 PM	19	0	0	19
	Hour	115	2	0	117
	Total	6,772	39	1	6,812
	Percentage	99.4%	0.6%	0.0%	



All Traffic Data Services

1 - MAIN ST NORTH OF JOHNSTON FARM LN

SB	Time	Lights	Mediums	Trucks	Total
	5/5/2024	17	0	0	17
	5/5/2024 12:15:00 AM	17	0	0	17
	5/5/2024 12:30:00 AM	9	0	0	9
	5/5/2024 12:45:00 AM	7	0	0	7
	Hour	50	0	0	50
	5/5/2024 1:00:00 AM	13	0	0	13
	5/5/2024 1:15:00 AM	14	0	0	14
	5/5/2024 1:30:00 AM	3	0	0	3
	5/5/2024 1:45:00 AM	6	0	0	6
	Hour	36	0	0	36
	5/5/2024 2:00:00 AM	2	0	0	2
	5/5/2024 2:15:00 AM	6	0	0	6
	5/5/2024 2:30:00 AM	1	0	0	1
	5/5/2024 2:45:00 AM	7	0	0	7
	Hour	16	0	0	16
	5/5/2024 3:00:00 AM	6	0	0	6
	5/5/2024 3:15:00 AM	4	1	0	5
	5/5/2024 3:30:00 AM	4	0	0	4
	5/5/2024 3:45:00 AM	2	0	0	2
	Hour	16	1	0	17
	5/5/2024 4:00:00 AM	4	0	0	4
	5/5/2024 4:15:00 AM	8	0	0	8
	5/5/2024 4:30:00 AM	5	0	0	5
	5/5/2024 4:45:00 AM	3	0	0	3
	Hour	20	0	0	20
	5/5/2024 5:00:00 AM	6	0	0	6
	5/5/2024 5:15:00 AM	9	0	0	9
	5/5/2024 5:30:00 AM	8	0	0	8
	5/5/2024 5:45:00 AM	10	0	0	10
	Hour	33	0	0	33
	5/5/2024 6:00:00 AM	18	0	0	18
	5/5/2024 6:15:00 AM	15	0	0	15
	5/5/2024 6:30:00 AM	17	0	0	17
	5/5/2024 6:45:00 AM	30	0	0	30
	Hour	80	0	0	80
	5/5/2024 7:00:00 AM	25	0	0	25
	5/5/2024 7:15:00 AM	25	0	0	25
	5/5/2024 7:30:00 AM	50	0	0	50
	5/5/2024 7:45:00 AM	79	1	0	80
	Hour	179	1	0	180
	5/5/2024 8:00:00 AM	58	0	0	58
	5/5/2024 8:15:00 AM	102	0	0	102
	5/5/2024 8:30:00 AM	160	1	0	161
	5/5/2024 8:45:00 AM	172	0	0	172
	Hour	492	1	0	493
	5/5/2024 9:00:00 AM	102	2	0	104
	5/5/2024 9:15:00 AM	88	0	1	89
	5/5/2024 9:30:00 AM	113	0	1	114
	5/5/2024 9:45:00 AM	145	0	0	145
	Hour	448	2	2	452
	5/5/2024 10:00:00 AM	133	1	0	134
	5/5/2024 10:15:00 AM	177	0	0	177
	5/5/2024 10:30:00 AM	251	0	0	251
	5/5/2024 10:45:00 AM	230	0	0	230
	Hour	791	1	0	792
	5/5/2024 11:00:00 AM	220	2	0	222
	5/5/2024 11:15:00 AM	208	0	0	208
	5/5/2024 11:30:00 AM	186	1	0	187
	5/5/2024 11:45:00 AM	180	1	0	181
	Hour	794	4	0	798
	Total	2,955	10	2	2,967
	Percentage	99.6%	0.3%	0.1%	



All Traffic Data Services

1 - MAIN ST NORTH OF JOHNSTON FARM LN

SB	Time	Lights	Mediums	Trucks	Total
	5/5/2024 12:00:00 PM	163	0	1	164
	5/5/2024 12:15:00 PM	141	0	0	141
	5/5/2024 12:30:00 PM	172	2	0	174
	5/5/2024 12:45:00 PM	182	1	0	183
	Hour	658	3	1	662
	5/5/2024 1:00:00 PM	188	0	0	188
	5/5/2024 1:15:00 PM	194	1	0	195
	5/5/2024 1:30:00 PM	198	0	0	198
	5/5/2024 1:45:00 PM	202	2	0	204
	Hour	782	3	0	785
	5/5/2024 2:00:00 PM	207	1	0	208
	5/5/2024 2:15:00 PM	191	0	0	191
	5/5/2024 2:30:00 PM	186	0	0	186
	5/5/2024 2:45:00 PM	215	1	1	217
	Hour	799	2	1	802
	5/5/2024 3:00:00 PM	180	0	0	180
	5/5/2024 3:15:00 PM	177	1	0	178
	5/5/2024 3:30:00 PM	178	0	0	178
	5/5/2024 3:45:00 PM	199	0	0	199
	Hour	734	1	0	735
	5/5/2024 4:00:00 PM	208	0	0	208
	5/5/2024 4:15:00 PM	234	0	0	234
	5/5/2024 4:30:00 PM	141	1	0	142
	5/5/2024 4:45:00 PM	152	0	0	152
	Hour	735	1	0	736
	5/5/2024 5:00:00 PM	179	0	0	179
	5/5/2024 5:15:00 PM	148	0	0	148
	5/5/2024 5:30:00 PM	124	0	0	124
	5/5/2024 5:45:00 PM	169	1	0	170
	Hour	620	1	0	621
	5/5/2024 6:00:00 PM	119	0	0	119
	5/5/2024 6:15:00 PM	96	1	0	97
	5/5/2024 6:30:00 PM	119	0	2	121
	5/5/2024 6:45:00 PM	124	0	0	124
	Hour	458	1	2	461
	5/5/2024 7:00:00 PM	109	0	0	109
	5/5/2024 7:15:00 PM	92	0	0	92
	5/5/2024 7:30:00 PM	88	2	0	90
	5/5/2024 7:45:00 PM	93	0	0	93
	Hour	382	2	0	384
	5/5/2024 8:00:00 PM	99	0	0	99
	5/5/2024 8:15:00 PM	82	0	1	83
	5/5/2024 8:30:00 PM	65	0	0	65
	5/5/2024 8:45:00 PM	75	0	0	75
	Hour	321	0	1	322
	5/5/2024 9:00:00 PM	68	1	0	69
	5/5/2024 9:15:00 PM	52	1	0	53
	5/5/2024 9:30:00 PM	47	0	0	47
	5/5/2024 9:45:00 PM	41	1	0	42
	Hour	208	3	0	211
	5/5/2024 10:00:00 PM	32	0	0	32
	5/5/2024 10:15:00 PM	40	0	0	40
	5/5/2024 10:30:00 PM	22	0	0	22
	5/5/2024 10:45:00 PM	19	0	0	19
	Hour	113	0	0	113
	5/5/2024 11:00:00 PM	22	0	0	22
	5/5/2024 11:15:00 PM	10	0	0	10
	5/5/2024 11:30:00 PM	8	0	0	8
	5/5/2024 11:45:00 PM	10	0	0	10
	Hour	50	0	0	50
	Total	5,860	17	5	5,882
	Percentage	99.6%	0.3%	0.1%	
	Grand Total	18,933	104	12	19,049
	Percentage	99.4%	0.5%	0.1%	



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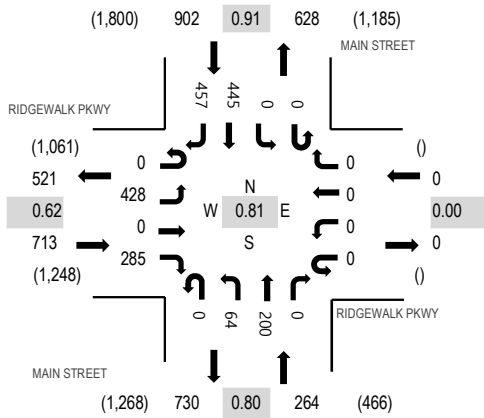
Location: #8 MAIN STREET & RIDGEWALK PKWY AM

Date: Tuesday, November 16, 2021

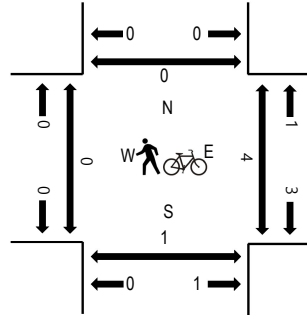
Peak Hour: 08:00 AM - 09:00 AM

Peak 15-Minutes: 08:30 AM - 08:45 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	RIDGEWALK PKWY Eastbound				RIDGEWALK PKWY Westbound				MAIN STREET Northbound				MAIN STREET 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
7:00 AM	0	94	0	32	0	0	0	0	0	10	28	0	0	0	74	96	334	1,635	0	0	0	0
7:15 AM	0	95	0	31	0	0	0	0	0	16	34	0	0	0	113	131	420	1,733	0	2	0	0
7:30 AM	0	105	0	37	0	0	0	0	0	14	43	0	0	0	124	142	465	1,745	0	2	0	0
7:45 AM	0	114	0	27	0	0	0	0	0	13	44	0	0	0	100	118	416	1,857	0	0	1	0
8:00 AM	0	108	0	25	0	0	0	0	0	13	45	0	0	0	113	128	432	1,879	0	0	1	0
8:15 AM	0	103	0	42	0	0	0	0	0	14	38	0	0	0	129	106	432		0	1	0	0
8:30 AM	0	103	0	183	0	0	0	0	0	18	54	0	0	0	112	107	577		0	1	0	0
8:45 AM	0	114	0	35	0	0	0	0	0	19	63	0	0	0	91	116	438		0	2	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	0	0	0	0	0	0	0	0	5	14
Lights	0	398	0	280	0	0	0	0	0	60	192	0	0	0	439	436	1,805
Mediums	0	23	0	3	0	0	0	0	0	4	8	0	0	0	6	16	60
Total	0	428	0	285	0	0	0	0	0	64	200	0	0	0	445	457	1,879



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Location: #8 MAIN STREET & RIDGEWALK PKWY PM

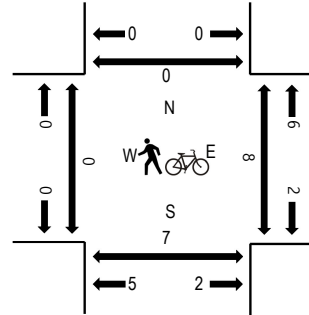
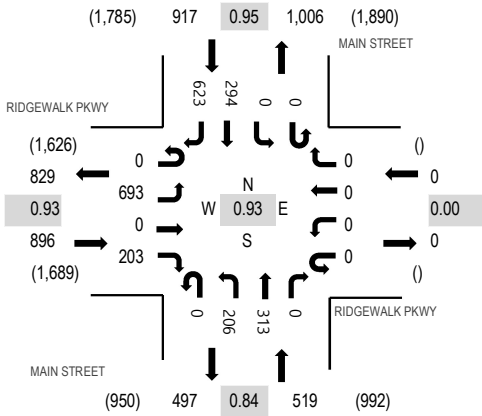
Date: Tuesday, November 16, 2021

Peak Hour: 04:45 PM - 05:45 PM

Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - Motorized Vehicles

Peak Hour - Pedestrians/Bicycles in Crosswalk



Note: Total study counts contained in parentheses.

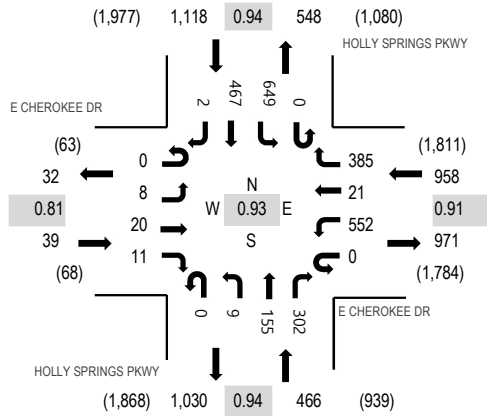
Traffic Counts - Motorized Vehicles

Interval Start Time	RIDGEWALK PKWY Eastbound				RIDGEWALK PKWY Westbound				MAIN STREET Northbound			MAIN STREET 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
4:00 PM	0	159	0	43	0	0	0	0	0	41	70	0	0	0	55	156	524	2,182	0	1	0	0
4:15 PM	0	160	0	49	0	0	0	0	0	58	76	0	0	0	70	160	573	2,251	0	1	0	0
4:30 PM	0	150	0	46	0	0	0	0	0	54	71	0	0	0	62	163	546	2,303	0	0	0	0
4:45 PM	0	156	0	53	0	0	0	0	0	32	80	0	0	0	68	150	539	2,332	0	4	2	0
5:00 PM	0	167	0	51	0	0	0	0	0	48	81	0	0	0	80	166	593	2,284	0	0	3	0
5:15 PM	0	179	0	49	0	0	0	0	0	69	86	0	0	0	76	166	625		0	2	0	0
5:30 PM	0	191	0	50	0	0	0	0	0	57	66	0	0	0	70	141	575		0	1	1	0
5:45 PM	0	134	0	52	0	0	0	0	0	39	64	0	0	0	76	126	491		0	4	3	0

Peak Rolling Hour Flow Rates

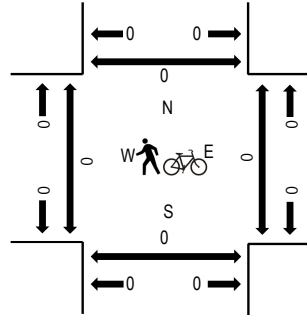
Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	2	0	1	0	0	0	0	0	0	0	0	0	0	1	4	8
Lights	0	690	0	201	0	0	0	0	0	205	308	0	0	0	291	606	2,301
Mediums	0	1	0	1	0	0	0	0	0	1	5	0	0	0	2	13	23
Total	0	693	0	203	0	0	0	0	0	206	313	0	0	0	294	623	2,332

Peak Hour - Motorized Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	E CHEROKEE DR Eastbound				E CHEROKEE DR Westbound				HOLLY SPRINGS PKWY Northbound				HOLLY SPRINGS PKWY 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
7:00 AM	0	1	1	2	0	99	2	108	0	1	27	59	0	121	96	4	521	2,474	0	0	0	0
7:15 AM	0	1	5	2	0	157	3	104	0	1	30	68	0	147	118	0	636	2,581	0	0	0	0
7:30 AM	0	3	2	4	0	137	7	113	0	4	52	73	0	162	135	0	692	2,525	0	0	0	0
7:45 AM	0	1	8	3	0	113	5	78	0	2	41	79	0	188	105	2	625	2,395	0	0	0	0
8:00 AM	0	3	5	2	0	145	6	90	0	2	32	82	0	152	109	0	628	2,321	0	0	0	0
8:15 AM	0	1	3	3	0	123	8	92	0	3	44	74	0	119	109	1	580		0	0	0	0
8:30 AM	0	2	4	2	0	107	5	87	0	3	36	93	0	134	89	0	562		0	1	0	0
8:45 AM	0	2	5	3	0	135	1	86	0	1	46	86	0	114	70	2	551		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	5	2	0	1	4	0	13
Lights	0	8	19	11	0	544	21	373	0	9	148	293	0	629	451	2	2,508
Mediums	0	0	1	0	0	8	0	11	0	0	2	7	0	19	12	0	60
Total	0	8	20	11	0	552	21	385	0	9	155	302	0	649	467	2	2,581

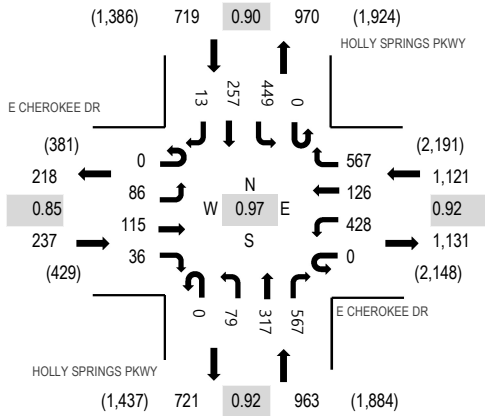
Location: #9 HOLLY SPRINGS PKWY & E CHEROKEE DR PM

Date: Tuesday, November 16, 2021

Peak Hour: 05:00 PM - 06:00 PM

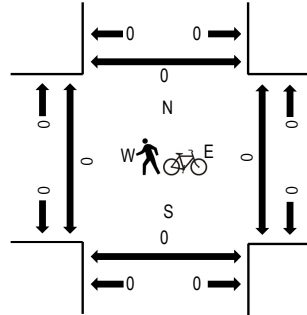
Peak 15-Minutes: 05:45 PM - 06:00 PM

Peak Hour - Motorized Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles in Crosswalk



Traffic Counts - Motorized Vehicles

Interval Start Time	E CHEROKEE DR Eastbound				E CHEROKEE DR Westbound				HOLLY SPRINGS PKWY Northbound				HOLLY SPRINGS PKWY 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
4:00 PM	0	16	21	10	0	93	25	131	0	15	77	140	0	72	64	2	666	2,850	0	0	0	0
4:15 PM	0	25	19	9	0	128	26	133	0	13	66	137	0	89	88	2	735	2,944	0	0	0	0
4:30 PM	0	18	24	5	0	89	18	154	0	15	84	138	0	96	64	4	709	2,957	0	0	0	0
4:45 PM	0	14	24	7	0	99	27	147	0	14	89	133	0	124	60	2	740	3,000	0	0	0	0
5:00 PM	0	21	31	10	0	107	28	132	0	18	73	135	0	123	79	3	760	3,040	0	0	0	0
5:15 PM	0	18	23	10	0	107	29	149	0	24	84	132	0	101	67	4	748		0	0	0	0
5:30 PM	0	19	32	3	0	97	30	139	0	17	78	167	0	111	56	3	752		0	0	0	0
5:45 PM	0	28	29	13	0	117	39	147	0	20	82	133	0	114	55	3	780		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	2	0	1	0	0	0	1	0	0	0	0	4
Lights	0	86	114	36	0	418	126	562	0	79	314	559	0	444	251	13	3,002
Mediums	0	0	1	0	0	8	0	4	0	0	3	7	0	5	6	0	34
Total	0	86	115	36	0	428	126	567	0	79	317	567	0	449	257	13	3,040

APPENDIX B – EXISTING CAPACITY ANALYSIS REPORTS
























1: Main St & Publix Dwy/E Cherokee Dr
Queues

2024 Existing AM Peak - Weekday

										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	9	34	309	308	414	10	167	325	698	504
v/c Ratio	0.08	0.28	0.79	0.79	0.61	0.12	0.26	0.42	0.83	0.45
Control Delay	58.9	47.8	62.0	61.2	7.6	62.3	36.4	6.1	55.4	17.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.9	47.8	62.0	61.2	7.6	62.3	36.4	6.1	55.4	17.8
Queue Length 50th (ft)	7	18	256	254	0	8	107	0	289	226
Queue Length 95th (ft)	26	53	356	354	83	27	193	80	337	428
Internal Link Dist (ft)		642		1304			1959			2488
Turn Bay Length (ft)	25		575		265	230		305	375	
Base Capacity (vph)	155	165	446	449	722	191	640	769	1001	1131
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	0.21	0.69	0.69	0.57	0.05	0.26	0.42	0.70	0.45
Intersection Summary										

1: Main St & Publix Dwy/E Cherokee Dr
 HCM Signalized Intersection Capacity Analysis

2024 Existing AM Peak - Weekday

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	20	11	552	21	385	9	155	302	649	467	2
Future Volume (vph)	8	20	11	552	21	385	9	155	302	649	467	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.8	3.8		3.8	3.8	3.8	6.2	6.2	6.2	5.6	6.2	
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00	1.00	1.00	1.00	0.97	1.00	
Frt	1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1799		1715	1725	1599	1805	1810	1583	3467	1826	
Flt Permitted	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1799		1715	1725	1599	1805	1810	1583	3467	1826	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	9	22	12	594	23	414	10	167	325	698	502	2
RTOR Reduction (vph)	0	12	0	0	0	320	0	0	214	0	0	0
Lane Group Flow (vph)	9	22	0	309	308	94	10	167	111	698	504	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	5%	2%	1%	4%	0%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases						7			6			
Actuated Green, G (s)	5.0	5.0		29.6	29.6	29.6	1.3	44.4	44.4	31.6	74.1	
Effective Green, g (s)	5.0	5.0		29.6	29.6	29.6	1.3	44.4	44.4	31.6	74.1	
Actuated g/C Ratio	0.04	0.04		0.23	0.23	0.23	0.01	0.34	0.34	0.24	0.57	
Clearance Time (s)	3.8	3.8		3.8	3.8	3.8	6.2	6.2	6.2	5.6	6.2	
Vehicle Extension (s)	2.0	2.0		3.0	3.0	3.0	2.0	5.0	5.0	3.0	5.0	
Lane Grp Cap (vph)	69	69		390	392	364	18	618	540	842	1040	
v/s Ratio Prot	0.00	c0.01		c0.18	0.18		0.01	0.09		c0.20	c0.28	
v/s Ratio Perm						0.06			0.07			
v/c Ratio	0.13	0.33		0.79	0.79	0.26	0.56	0.27	0.21	0.83	0.48	
Uniform Delay, d1	60.4	60.9		47.3	47.2	41.2	64.1	31.0	30.3	46.6	16.6	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.3	1.0		10.5	10.0	0.4	19.4	0.5	0.4	6.8	1.6	
Delay (s)	60.7	61.9		57.8	57.2	41.6	83.4	31.5	30.7	53.4	18.2	
Level of Service	E	E		E	E	D	F	C	C	D	B	
Approach Delay (s)		61.6			51.1			32.0			38.7	
Approach LOS		E			D			C			D	
Intersection Summary												
HCM 2000 Control Delay			42.4				HCM 2000 Level of Service				D	
HCM 2000 Volume to Capacity ratio			0.67									
Actuated Cycle Length (s)			130.0			Sum of lost time (s)				20.0		
Intersection Capacity Utilization			66.7%			ICU Level of Service				C		
Analysis Period (min)			15									
c	Critical Lane Group											

2: Main St & South Cherokee Dwy
 HCM 6th TWSC

2024 Existing AM Peak - Weekday

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	1	441	1	2	986
Future Vol, veh/h	0	1	441	1	2	986
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	459	1	2	1027

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1491	460	0	0	460	0
Stage 1	460	-	-	-	-	-
Stage 2	1031	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	136	601	-	-	1101	-
Stage 1	636	-	-	-	-	-
Stage 2	344	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	135	601	-	-	1101	-
Mov Cap-2 Maneuver	135	-	-	-	-	-
Stage 1	636	-	-	-	-	-
Stage 2	343	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	601	1101
HCM Lane V/C Ratio	-	-	0.002	0.002
HCM Control Delay (s)	-	-	11	8.3
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

3: Main St & Bell Pkwy/Exit Only Dwy
 HCM 6th TWSC

2024 Existing AM Peak - Weekday

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕		↕	↑			↑	↕
Traffic Vol, veh/h	3	0	41	0	0	0	129	455	0	0	883	94
Future Vol, veh/h	3	0	41	0	0	0	129	455	0	0	883	94
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	92	94	92	92	92	94	94	92	92	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	0	44	0	0	0	137	484	0	0	939	100

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1697	1697	939	1769	1797	484	1039	0	-	-	-	0
Stage 1	939	939	-	758	758	-	-	-	-	-	-	-
Stage 2	758	758	-	1011	1039	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	73	92	320	65	80	583	669	-	0	0	-	-
Stage 1	317	343	-	399	415	-	-	-	0	0	-	-
Stage 2	399	415	-	289	308	-	-	-	0	0	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	61	73	320	47	64	583	669	-	-	-	-	-
Mov Cap-2 Maneuver	61	73	-	47	64	-	-	-	-	-	-	-
Stage 1	252	343	-	317	330	-	-	-	-	-	-	-
Stage 2	317	330	-	250	308	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	22.9		0		2.6		0	
HCM LOS	C		A					

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	669	-	248	-	-	-
HCM Lane V/C Ratio	0.205	-	0.189	-	-	-
HCM Control Delay (s)	11.8	-	22.9	0	-	-
HCM Lane LOS	B	-	C	A	-	-
HCM 95th %tile Q(veh)	0.8	-	0.7	-	-	-

4: Main St & Brooke Blvd
 HCM 6th TWSC

2024 Existing AM Peak - Weekday

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↔		↔	↔
Traffic Vol, veh/h	0	3	582	0	2	933
Future Vol, veh/h	0	3	582	0	2	933
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	3	626	0	2	1003

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1633	626	0	0	626	0
Stage 1	626	-	-	-	-	-
Stage 2	1007	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	111	484	-	-	956	-
Stage 1	533	-	-	-	-	-
Stage 2	353	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	111	484	-	-	956	-
Mov Cap-2 Maneuver	111	-	-	-	-	-
Stage 1	533	-	-	-	-	-
Stage 2	352	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	484	956
HCM Lane V/C Ratio	-	-	0.007	0.002
HCM Control Delay (s)	-	-	12.5	8.8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

5: Main St & Johnston Farm
 HCM 6th TWSC

2024 Existing AM Peak - Weekday

Intersection						
Int Delay, s/veh	1.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↗	↑	↗	↙	↑
Traffic Vol, veh/h	31	14	571	18	7	883
Future Vol, veh/h	31	14	571	18	7	883
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	130	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	15	627	20	8	970







Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1613	627	0	0	647	0
Stage 1	627	-	-	-	-	-
Stage 2	986	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	115	484	-	-	939	-
Stage 1	532	-	-	-	-	-
Stage 2	361	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	114	484	-	-	939	-
Mov Cap-2 Maneuver	114	-	-	-	-	-
Stage 1	532	-	-	-	-	-
Stage 2	358	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	38.1	0	0.1
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	114	484	939
HCM Lane V/C Ratio	-	-	0.299	0.032	0.008
HCM Control Delay (s)	-	-	49.5	12.7	8.9
HCM Lane LOS	-	-	E	B	A
HCM 95th %tile Q(veh)	-	-	1.1	0.1	0

6: Main St & Ridgewalk Pkwy
Queues

2024 Existing AM Peak - Weekday

						
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	528	352	79	247	549	564
v/c Ratio	0.68	0.55	0.33	0.20	0.54	0.52
Control Delay	39.1	6.6	47.8	8.6	19.5	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.1	6.6	47.8	8.6	19.5	3.4
Queue Length 50th (ft)	158	0	25	60	228	0
Queue Length 95th (ft)	175	40	42	97	326	30
Internal Link Dist (ft)	1438			698	828	
Turn Bay Length (ft)			200			505
Base Capacity (vph)	949	708	402	1216	1022	1087
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	0.50	0.20	0.20	0.54	0.52
Intersection Summary						

6: Main St & Ridgewalk Pkwy
 HCM Signalized Intersection Capacity Analysis

2024 Existing AM Peak - Weekday



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	428	285	64	200	445	457
Future Volume (vph)	428	285	64	200	445	457
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3273	1583	3502	1900	1900	1538
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3273	1583	3502	1900	1900	1538
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	528	352	79	247	549	564
RTOR Reduction (vph)	0	269	0	0	0	267
Lane Group Flow (vph)	528	83	79	247	549	297
Heavy Vehicles (%)	7%	2%	0%	0%	0%	5%
Turn Type	Prot	Prot	Prot	NA	NA	Prot
Protected Phases	7	4	1	6	2	2
Permitted Phases						
Actuated Green, G (s)	23.7	23.7	5.8	64.0	52.7	52.7
Effective Green, g (s)	23.7	23.7	5.8	64.0	52.7	52.7
Actuated g/C Ratio	0.24	0.24	0.06	0.64	0.53	0.53
Clearance Time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Vehicle Extension (s)	5.1	5.1	2.1	5.1	5.1	5.1
Lane Grp Cap (vph)	775	375	203	1216	1001	810
v/s Ratio Prot	c0.16	0.05	c0.02	0.13	c0.29	0.19
v/s Ratio Perm						
v/c Ratio	0.68	0.22	0.39	0.20	0.55	0.37
Uniform Delay, d1	34.7	30.7	45.4	7.4	15.7	13.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.2	0.7	0.5	0.4	1.1	0.6
Delay (s)	38.0	31.4	45.9	7.8	16.9	14.5
Level of Service	D	C	D	A	B	B
Approach Delay (s)	35.3			17.1	15.6	
Approach LOS	D			B	B	

Intersection Summary			
HCM 2000 Control Delay	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

1: Main St & Publix Dwy/E Cherokee Dr
Queues

2024 Existing PM Peak - Weekday


























Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	93	163	296	302	611	86	341	611	485	291
v/c Ratio	0.48	0.80	0.76	0.75	0.82	0.65	0.55	0.68	0.87	0.38
Control Delay	72.4	88.9	66.1	65.2	20.3	89.5	45.8	8.9	78.1	33.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.4	88.9	66.1	65.2	20.3	89.5	45.8	8.9	78.1	33.1
Queue Length 50th (ft)	85	146	277	283	110	83	300	37	237	212
Queue Length 95th (ft)	153	#307	#412	412	295	143	366	154	#328	274
Internal Link Dist (ft)		642		1304			1959			2488
Turn Bay Length (ft)	25		575		265	230		305	375	
Base Capacity (vph)	194	203	394	407	750	166	743	971	573	865
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	0.48	0.80	0.75	0.74	0.81	0.52	0.46	0.63	0.85	0.34

Intersection Summary

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

1: Main St & Publix Dwy/E Cherokee Dr
 HCM Signalized Intersection Capacity Analysis

2024 Existing PM Peak - Weekday

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	120	38	448	132	593	83	331	593	470	269	14
Future Volume (vph)	90	120	38	448	132	593	83	331	593	470	269	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.6	6.6		6.6	6.6	6.6	6.2	6.2	6.2	5.6	6.2	
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00	1.00	1.00	1.00	0.97	1.00	
Frt	1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1818		1681	1738	1599	1805	1881	1599	3467	1851	
Flt Permitted	0.95	1.00		0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1818		1681	1738	1599	1805	1881	1599	3467	1851	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	93	124	39	462	136	611	86	341	611	485	277	14
RTOR Reduction (vph)	0	7	0	0	0	376	0	0	375	0	1	0
Lane Group Flow (vph)	93	156	0	296	302	235	86	341	236	485	290	0
Heavy Vehicles (%)	0%	1%	0%	2%	0%	1%	0%	1%	1%	1%	2%	0%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases						7			6			
Actuated Green, G (s)	16.2	16.2		35.0	35.0	35.0	11.0	49.7	49.7	24.1	62.2	
Effective Green, g (s)	16.2	16.2		35.0	35.0	35.0	11.0	49.7	49.7	24.1	62.2	
Actuated g/C Ratio	0.11	0.11		0.23	0.23	0.23	0.07	0.33	0.33	0.16	0.41	
Clearance Time (s)	6.6	6.6		6.6	6.6	6.6	6.2	6.2	6.2	5.6	6.2	
Vehicle Extension (s)	2.0	2.0		3.0	3.0	3.0	2.0	5.0	5.0	3.0	5.0	
Lane Grp Cap (vph)	194	196		392	405	373	132	623	529	557	767	
v/s Ratio Prot	0.05	c0.09		c0.18	0.17		0.05	c0.18		c0.14	0.16	
v/s Ratio Perm						0.15			0.15			
v/c Ratio	0.48	0.80		0.76	0.75	0.63	0.65	0.55	0.45	0.87	0.38	
Uniform Delay, d1	62.9	65.3		53.5	53.4	51.7	67.6	41.0	39.3	61.4	30.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.7	18.4		8.0	7.3	3.3	8.5	3.4	2.7	13.9	1.4	
Delay (s)	63.6	83.7		61.6	60.7	55.0	76.1	44.4	42.1	75.3	31.9	
Level of Service	E	F		E	E	D	E	D	D	E	C	
Approach Delay (s)		76.4			58.0			45.6			59.0	
Approach LOS		E			E			D			E	
Intersection Summary												
HCM 2000 Control Delay			55.8				HCM 2000 Level of Service			E		
HCM 2000 Volume to Capacity ratio			0.70									
Actuated Cycle Length (s)			150.0				Sum of lost time (s)			25.6		
Intersection Capacity Utilization			78.9%				ICU Level of Service			D		
Analysis Period (min)			15									
c Critical Lane Group												

2: Main St & South Cherokee Dwy
 HCM 6th TWSC

2024 Existing PM Peak - Weekday

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	0	1030	3	3	787
Future Vol, veh/h	1	0	1030	3	3	787
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	0	1062	3	3	811

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1881	1064	0	0	1065	0
Stage 1	1064	-	-	-	-	-
Stage 2	817	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	78	271	-	-	654	-
Stage 1	332	-	-	-	-	-
Stage 2	434	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	77	271	-	-	654	-
Mov Cap-2 Maneuver	77	-	-	-	-	-
Stage 1	332	-	-	-	-	-
Stage 2	431	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	52.4	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	77	654
HCM Lane V/C Ratio	-	-	0.013	0.005
HCM Control Delay (s)	-	-	52.4	10.5
HCM Lane LOS	-	-	F	B
HCM 95th %tile Q(veh)	-	-	0	0

3: Main St & Bell Pkwy/Exit Only Dwy
 HCM 6th TWSC

2024 Existing PM Peak - Weekday

Intersection												
Int Delay, s/veh	70											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↑			↑	↗
Traffic Vol, veh/h	68	0	189	6	0	2	36	953	0	0	752	19
Future Vol, veh/h	68	0	189	6	0	2	36	953	0	0	752	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	92	93	92	92	92	93	93	92	92	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	73	0	203	7	0	2	39	1025	0	0	809	20

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1913	1912	809	2024	1932	1025	829	0	-	-	-	0
Stage 1	809	809	-	1103	1103	-	-	-	-	-	-	-
Stage 2	1104	1103	-	921	829	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	~ 51	68	380	43	66	285	803	-	0	0	-	-
Stage 1	374	394	-	256	287	-	-	-	0	0	-	-
Stage 2	256	287	-	324	385	-	-	-	0	0	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 49	65	380	19	63	285	803	-	-	-	-	-
Mov Cap-2 Maneuver	~ 49	65	-	19	63	-	-	-	-	-	-	-
Stage 1	356	394	-	243	273	-	-	-	-	-	-	-
Stage 2	242	273	-	151	385	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	543.1		212.2		0.4		0	
HCM LOS	F		F					

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	803	-	136	25	-	-
HCM Lane V/C Ratio	0.048	-	2.032	0.348	-	-
HCM Control Delay (s)	9.7	-	543.1	212.2	-	-
HCM Lane LOS	A	-	F	F	-	-
HCM 95th %tile Q(veh)	0.2	-	22.2	1.1	-	-

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

4: Main St & Brooke Blvd
 HCM 6th TWSC

2024 Existing PM Peak - Weekday

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	17	986	32	30	952
Future Vol, veh/h	7	17	986	32	30	952
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	19	1096	36	33	1058

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2238	1114	0	0	1132
Stage 1	1114	-	-	-	-
Stage 2	1124	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	47	253	-	-	617
Stage 1	314	-	-	-	-
Stage 2	310	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	45	253	-	-	617
Mov Cap-2 Maneuver	45	-	-	-	-
Stage 1	314	-	-	-	-
Stage 2	294	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	48.9	0	0.3
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	108	617
HCM Lane V/C Ratio	-	-	0.247	0.054
HCM Control Delay (s)	-	-	48.9	11.2
HCM Lane LOS	-	-	E	B
HCM 95th %tile Q(veh)	-	-	0.9	0.2

5: Main St & Johnston Farm
 HCM 6th TWSC

2024 Existing PM Peak - Weekday

Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	20	24	1007	45	29	947
Future Vol, veh/h	20	24	1007	45	29	947
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	130	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	26	1095	49	32	1029
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2188	1095	0	0	1144	0
Stage 1	1095	-	-	-	-	-
Stage 2	1093	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	50	260	-	-	611	-
Stage 1	321	-	-	-	-	-
Stage 2	321	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	47	260	-	-	611	-
Mov Cap-2 Maneuver	47	-	-	-	-	-
Stage 1	321	-	-	-	-	-
Stage 2	304	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	72.7	0	0.3			
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT	
Capacity (veh/h)	-	-	47	260	611	-
HCM Lane V/C Ratio	-	-	0.463	0.1	0.052	-
HCM Control Delay (s)	-	-	135.5	20.4	11.2	-
HCM Lane LOS	-	-	F	C	B	-
HCM 95th %tile Q(veh)	-	-	1.7	0.3	0.2	-

6: Main St & Ridgewalk Pkwy
Queues

2024 Existing PM Peak - Weekday



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	780	228	231	352	330	700
v/c Ratio	0.73	0.35	0.84	0.32	0.38	0.64
Control Delay	40.7	4.8	80.7	14.6	23.9	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.7	4.8	80.7	14.6	23.9	4.7
Queue Length 50th (ft)	276	0	92	131	163	0
Queue Length 95th (ft)	312	51	#160	224	269	81
Internal Link Dist (ft)	1438			698	828	
Turn Bay Length (ft)			200			505
Base Capacity (vph)	1560	844	274	1095	871	1102
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	0.50	0.27	0.84	0.32	0.38	0.64

Intersection Summary

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

6: Main St & Ridgewalk Pkwy
 HCM Signalized Intersection Capacity Analysis

2024 Existing PM Peak - Weekday



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	725	212	215	327	307	651
Future Volume (vph)	725	212	215	327	307	651
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3467	1599	3467	1863	1881	1568
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3467	1599	3467	1863	1881	1568
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	780	228	231	352	330	700
RTOR Reduction (vph)	0	158	0	0	0	376
Lane Group Flow (vph)	780	70	231	352	330	324
Heavy Vehicles (%)	1%	1%	1%	2%	1%	3%
Turn Type	Prot	Prot	Prot	NA	NA	Prot
Protected Phases	7	4	1	6	2	2
Permitted Phases						
Actuated Green, G (s)	37.1	37.1	9.5	70.6	55.6	55.6
Effective Green, g (s)	37.1	37.1	9.5	70.6	55.6	55.6
Actuated g/C Ratio	0.31	0.31	0.08	0.59	0.46	0.46
Clearance Time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Vehicle Extension (s)	5.1	5.1	2.1	5.1	5.1	5.1
Lane Grp Cap (vph)	1071	494	274	1096	871	726
v/s Ratio Prot	c0.22	0.04	c0.07	0.19	0.18	c0.21
v/s Ratio Perm						
v/c Ratio	0.73	0.14	0.84	0.32	0.38	0.45
Uniform Delay, d1	37.0	30.0	54.5	12.5	21.0	21.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.1	0.3	19.7	0.8	0.6	0.9
Delay (s)	40.1	30.2	74.3	13.3	21.6	22.7
Level of Service	D	C	E	B	C	C
Approach Delay (s)	37.9			37.5	22.4	
Approach LOS	D			D	C	

Intersection Summary			
HCM 2000 Control Delay	31.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	57.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

1: Main St & Publix Dwy/E Cherokee Dr
Queues

2024 Existing MD Peak - Weekend



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	9	32	260	263	414	17	288	561	698	426
v/c Ratio	0.06	0.21	0.84	0.84	0.66	0.15	0.60	0.67	0.62	0.39
Control Delay	43.8	36.4	62.9	63.4	9.3	52.3	25.6	6.2	33.0	14.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.8	36.4	62.9	63.4	9.3	52.3	25.6	6.2	33.0	14.9
Queue Length 50th (ft)	5	13	168	170	0	11	143	31	207	134
Queue Length 95th (ft)	21	43	#303	#307	86	m22	m149	m20	272	273
Internal Link Dist (ft)		642		1304			1959			2488
Turn Bay Length (ft)	25		575		265	230		305	375	
Base Capacity (vph)	375	384	326	328	639	112	487	836	1121	1088
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	0.02	0.08	0.80	0.80	0.65	0.15	0.59	0.67	0.62	0.39

Intersection Summary
























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.

1: Main St & Publix Dwy/E Cherokee Dr
 HCM Signalized Intersection Capacity Analysis

2024 Existing MD Peak - Weekend

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	20	9	465	21	385	16	268	522	649	394	2
Future Volume (vph)	8	20	9	465	21	385	16	268	522	649	394	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.8	3.8		3.8	3.8	3.8	6.2	6.2	6.2	5.6	6.2	
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00	1.00	1.00	1.00	0.97	1.00	
Frt	1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1811		1715	1726	1599	1805	1810	1583	3467	1826	
Flt Permitted	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1811		1715	1726	1599	1805	1810	1583	3467	1826	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	9	22	10	500	23	414	17	288	561	698	424	2
RTOR Reduction (vph)	0	10	0	0	0	339	0	0	420	0	0	0
Lane Group Flow (vph)	9	22	0	260	263	75	17	288	141	698	426	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	5%	2%	1%	4%	0%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases						7			6			
Actuated Green, G (s)	4.8	4.8		18.2	18.2	18.2	2.6	25.2	25.2	32.4	54.4	
Effective Green, g (s)	4.8	4.8		18.2	18.2	18.2	2.6	25.2	25.2	32.4	54.4	
Actuated g/C Ratio	0.05	0.05		0.18	0.18	0.18	0.03	0.25	0.25	0.32	0.54	
Clearance Time (s)	3.8	3.8		3.8	3.8	3.8	6.2	6.2	6.2	5.6	6.2	
Vehicle Extension (s)	2.0	2.0		3.0	3.0	3.0	2.0	5.0	5.0	3.0	5.0	
Lane Grp Cap (vph)	86	86		312	314	291	46	456	398	1123	993	
v/s Ratio Prot	0.00	c0.01		0.15	c0.15		0.01	c0.16		c0.20	0.23	
v/s Ratio Perm						0.05			0.09			
v/c Ratio	0.10	0.26		0.83	0.84	0.26	0.37	0.63	0.36	0.62	0.43	
Uniform Delay, d1	45.5	45.9		39.4	39.5	35.1	47.9	33.3	30.7	28.6	13.6	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.12	0.65	0.88	1.00	1.00	
Incremental Delay, d2	0.2	0.6		17.1	17.4	0.5	1.5	3.3	1.0	1.1	1.4	
Delay (s)	45.7	46.5		56.5	56.9	35.6	55.3	24.9	27.9	29.7	14.9	
Level of Service	D	D		E	E	D	E	C	C	C	B	
Approach Delay (s)		46.3			47.4			27.5			24.1	
Approach LOS		D			D			C			C	
Intersection Summary												
HCM 2000 Control Delay			32.7				HCM 2000 Level of Service				C	
HCM 2000 Volume to Capacity ratio			0.66									
Actuated Cycle Length (s)			100.0				Sum of lost time (s)				20.0	
Intersection Capacity Utilization			70.7%				ICU Level of Service				C	
Analysis Period (min)			15									
c	Critical Lane Group											

Intersection						
Int Delay, s/veh	1.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	20	786	104	113	755
Future Vol, veh/h	11	20	786	104	113	755
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	21	819	108	118	786

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1895	873	0	0	927
Stage 1	873	-	-	-	-
Stage 2	1022	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	77	349	-	-	737
Stage 1	409	-	-	-	-
Stage 2	347	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	55	349	-	-	737
Mov Cap-2 Maneuver	55	-	-	-	-
Stage 1	409	-	-	-	-
Stage 2	248	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	45.7	0	1.4
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	120	737
HCM Lane V/C Ratio	-	-	0.269	0.16
HCM Control Delay (s)	-	-	45.7	10.8
HCM Lane LOS	-	-	E	B
HCM 95th %tile Q(veh)	-	-	1	0.6

3: Main St & Bell Pkwy
HCM 6th TWSC

2024 Existing MD Peak - Weekend

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↘↗		↘	↑	↑	↘
Traffic Vol, veh/h	17	26	31	864	760	13
Future Vol, veh/h	17	26	31	864	760	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	155	-	-	235
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	28	33	919	809	14

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1794	809	823	0	-	0
Stage 1	809	-	-	-	-	-
Stage 2	985	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	89	380	807	-	-	-
Stage 1	438	-	-	-	-	-
Stage 2	362	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	85	380	807	-	-	-
Mov Cap-2 Maneuver	85	-	-	-	-	-
Stage 1	420	-	-	-	-	-
Stage 2	362	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	36.3	0.3	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	807	-	160	-	-
HCM Lane V/C Ratio	0.041	-	0.286	-	-
HCM Control Delay (s)	9.7	-	36.3	-	-
HCM Lane LOS	A	-	E	-	-
HCM 95th %tile Q(veh)	0.1	-	1.1	-	-

4: Main St & Brooke Blvd
HCM 6th TWSC

2024 Existing MD Peak - Weekend

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	10	892	15	10	773
Future Vol, veh/h	3	10	892	15	10	773
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	10	920	15	10	797

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1745	928	0	0	935
Stage 1	928	-	-	-	-
Stage 2	817	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	95	325	-	-	732
Stage 1	385	-	-	-	-
Stage 2	434	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	94	325	-	-	732
Mov Cap-2 Maneuver	94	-	-	-	-
Stage 1	385	-	-	-	-
Stage 2	428	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.6	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	207	732
HCM Lane V/C Ratio	-	-	0.065	0.014
HCM Control Delay (s)	-	-	23.6	10
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.2	0

5: Main St & Johnston Farm
 HCM 6th TWSC

2024 Existing MD Peak - Weekend

Intersection						
Int Delay, s/veh	1.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	29	27	890	35	14	763
Future Vol, veh/h	29	27	890	35	14	763
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	130	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	28	918	36	14	787

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1733	918	0	0	954
Stage 1	918	-	-	-	-
Stage 2	815	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	97	329	-	-	720
Stage 1	389	-	-	-	-
Stage 2	435	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	95	329	-	-	720
Mov Cap-2 Maneuver	95	-	-	-	-
Stage 1	389	-	-	-	-
Stage 2	427	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	39	0	0.2
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	95	329	720
HCM Lane V/C Ratio	-	-	0.315	0.085	0.02
HCM Control Delay (s)	-	-	59.4	17	10.1
HCM Lane LOS	-	-	F	C	B
HCM 95th %tile Q(veh)	-	-	1.2	0.3	0.1

6: Main St & Ridgewalk Pkwy
Queues

2024 Existing MD Peak - Weekend



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	778	352	79	364	483	495
v/c Ratio	0.81	0.50	0.33	0.33	0.53	0.50
Control Delay	40.9	5.7	47.8	11.9	17.2	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.9	5.7	47.8	11.9	17.2	4.0
Queue Length 50th (ft)	225	0	25	121	164	20
Queue Length 95th (ft)	268	40	42	144	201	44
Internal Link Dist (ft)	1438			698	828	
Turn Bay Length (ft)			200			505
Base Capacity (vph)	980	720	402	1129	918	999
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	0.79	0.49	0.20	0.32	0.53	0.50
Intersection Summary						

6: Main St & Ridgewalk Pkwy
 HCM Signalized Intersection Capacity Analysis

2024 Existing MD Peak - Weekend



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	630	285	64	295	391	401
Future Volume (vph)	630	285	64	295	391	401
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3273	1583	3502	1900	1900	1538
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3273	1583	3502	1900	1900	1538
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	778	352	79	364	483	495
RTOR Reduction (vph)	0	249	0	0	0	261
Lane Group Flow (vph)	778	103	79	364	483	234
Heavy Vehicles (%)	7%	2%	0%	0%	0%	5%
Turn Type	Prot	Prot	Prot	NA	NA	Prot
Protected Phases	7	4	1	6	2	2
Permitted Phases						
Actuated Green, G (s)	29.2	29.2	5.8	58.5	47.2	47.2
Effective Green, g (s)	29.2	29.2	5.8	58.5	47.2	47.2
Actuated g/C Ratio	0.29	0.29	0.06	0.58	0.47	0.47
Clearance Time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Vehicle Extension (s)	5.1	5.1	2.1	5.1	5.1	5.1
Lane Grp Cap (vph)	955	462	203	1111	896	725
v/s Ratio Prot	c0.24	0.06	0.02	c0.19	c0.25	0.15
v/s Ratio Perm						
v/c Ratio	0.81	0.22	0.39	0.33	0.54	0.32
Uniform Delay, d1	32.9	26.8	45.4	10.7	18.7	16.4
Progression Factor	1.00	1.00	1.00	1.00	0.77	1.36
Incremental Delay, d2	6.1	0.5	0.5	0.8	1.1	0.5
Delay (s)	39.0	27.3	45.9	11.4	15.4	22.9
Level of Service	D	C	D	B	B	C
Approach Delay (s)	35.4			17.6	19.2	
Approach LOS	D			B	B	

Intersection Summary			
HCM 2000 Control Delay	26.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	55.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

1: Main St & Publix Dwy/E Cherokee Dr
Queues

2024 Existing PM Peak - Weekend

























Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	93	159	270	275	611	69	275	493	485	259
v/c Ratio	0.46	0.75	0.72	0.71	0.78	0.57	0.44	0.58	0.84	0.32
Control Delay	70.0	82.2	64.1	63.0	13.9	85.7	44.7	6.3	73.9	31.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.0	82.2	64.1	63.0	13.9	85.7	44.7	6.3	73.9	31.5
Queue Length 50th (ft)	85	144	258	263	49	67	221	0	237	171
Queue Length 95th (ft)	153	#300	340	344	190	118	318	92	#328	267
Internal Link Dist (ft)		642		1304			1959			2488
Turn Bay Length (ft)	25		575		265	230		305	375	
Base Capacity (vph)	204	212	387	401	790	166	758	938	594	911
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	0.46	0.75	0.70	0.69	0.77	0.42	0.36	0.53	0.82	0.28

Intersection Summary

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

1: Main St & Publix Dwy/E Cherokee Dr
 HCM Signalized Intersection Capacity Analysis

2024 Existing PM Peak - Weekend

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	120	34	397	132	593	67	267	478	470	238	14
Future Volume (vph)	90	120	34	397	132	593	67	267	478	470	238	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.6	6.6		6.6	6.6	6.6	6.2	6.2	6.2	5.6	6.2	
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00	1.00	1.00	1.00	0.97	1.00	
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1823		1681	1743	1599	1805	1881	1599	3467	1850	
Flt Permitted	0.95	1.00		0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1823		1681	1743	1599	1805	1881	1599	3467	1850	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	93	124	35	409	136	611	69	275	493	485	245	14
RTOR Reduction (vph)	0	6	0	0	0	426	0	0	331	0	2	0
Lane Group Flow (vph)	93	153	0	270	275	185	69	275	162	485	257	0
Heavy Vehicles (%)	0%	1%	0%	2%	0%	1%	0%	1%	1%	1%	2%	0%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases						7			6			
Actuated Green, G (s)	17.0	17.0		33.6	33.6	33.6	8.8	49.4	49.4	25.0	65.0	
Effective Green, g (s)	17.0	17.0		33.6	33.6	33.6	8.8	49.4	49.4	25.0	65.0	
Actuated g/C Ratio	0.11	0.11		0.22	0.22	0.22	0.06	0.33	0.33	0.17	0.43	
Clearance Time (s)	6.6	6.6		6.6	6.6	6.6	6.2	6.2	6.2	5.6	6.2	
Vehicle Extension (s)	2.0	2.0		3.0	3.0	3.0	2.0	5.0	5.0	3.0	5.0	
Lane Grp Cap (vph)	204	206		376	390	358	105	619	526	577	801	
v/s Ratio Prot	0.05	c0.08		c0.16	0.16		0.04	c0.15		c0.14	0.14	
v/s Ratio Perm						0.12			0.10			
v/c Ratio	0.46	0.74		0.72	0.71	0.52	0.66	0.44	0.31	0.84	0.32	
Uniform Delay, d1	62.2	64.4		53.8	53.6	51.1	69.1	39.5	37.6	60.6	28.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.6	11.8		6.4	5.7	1.3	10.8	2.3	1.5	10.7	1.1	
Delay (s)	62.8	76.2		60.2	59.3	52.3	79.9	41.8	39.1	71.2	29.0	
Level of Service	E	E		E	E	D	E	D	D	E	C	
Approach Delay (s)		71.3			55.9			43.3			56.5	
Approach LOS		E			E			D			E	
Intersection Summary												
HCM 2000 Control Delay			53.8		HCM 2000 Level of Service					D		
HCM 2000 Volume to Capacity ratio			0.64									
Actuated Cycle Length (s)			150.0		Sum of lost time (s)					25.6		
Intersection Capacity Utilization			75.3%		ICU Level of Service					D		
Analysis Period (min)			15									
c Critical Lane Group												

Intersection						
Int Delay, s/veh	30.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	96	149	662	57	102	567
Future Vol, veh/h	96	149	662	57	102	567
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	99	154	682	59	105	585

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1507	712	0	0	741	0
Stage 1	712	-	-	-	-	-
Stage 2	795	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	133	432	-	-	866	-
Stage 1	486	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	109	432	-	-	866	-
Mov Cap-2 Maneuver	109	-	-	-	-	-
Stage 1	486	-	-	-	-	-
Stage 2	365	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	199.3	0	1.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	200	866
HCM Lane V/C Ratio	-	-	1.263	0.121
HCM Control Delay (s)	-	-	199.3	9.7
HCM Lane LOS	-	-	F	A
HCM 95th %tile Q(veh)	-	-	13.6	0.4

3: Main St & Bell Pkwy
 HCM 6th TWSC

2024 Existing PM Peak - Weekend

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	12	35	11	713	663	2
Future Vol, veh/h	12	35	11	713	663	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	155	-	-	235
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	38	12	767	713	2

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1504	713	715	0	-	0
Stage 1	713	-	-	-	-	-
Stage 2	791	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	134	432	885	-	-	-
Stage 1	486	-	-	-	-	-
Stage 2	447	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	132	432	885	-	-	-
Mov Cap-2 Maneuver	132	-	-	-	-	-
Stage 1	479	-	-	-	-	-
Stage 2	447	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.2	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	885	-	273	-	-
HCM Lane V/C Ratio	0.013	-	0.185	-	-
HCM Control Delay (s)	9.1	-	21.2	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.7	-	-

4: Main St & Brooke Blvd
 HCM 6th TWSC

2024 Existing PM Peak - Weekend

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	6	721	6	2	704
Future Vol, veh/h	25	6	721	6	2	704
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	7	801	7	2	782

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1591	805	0	0	808
Stage 1	805	-	-	-	-
Stage 2	786	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	118	382	-	-	817
Stage 1	440	-	-	-	-
Stage 2	449	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	118	382	-	-	817
Mov Cap-2 Maneuver	118	-	-	-	-
Stage 1	440	-	-	-	-
Stage 2	448	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	40.2	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	136	817
HCM Lane V/C Ratio	-	-	0.253	0.003
HCM Control Delay (s)	-	-	40.2	9.4
HCM Lane LOS	-	-	E	A
HCM 95th %tile Q(veh)	-	-	0.9	0

Intersection						
Int Delay, s/veh	1.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	27	25	710	28	26	728
Future Vol, veh/h	27	25	710	28	26	728
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	130	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	27	772	30	28	791

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1619	772	0	0	802	0
Stage 1	772	-	-	-	-	-
Stage 2	847	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	114	400	-	-	822	-
Stage 1	456	-	-	-	-	-
Stage 2	420	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	110	400	-	-	822	-
Mov Cap-2 Maneuver	110	-	-	-	-	-
Stage 1	456	-	-	-	-	-
Stage 2	406	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	32.6	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	110	400	822
HCM Lane V/C Ratio	-	-	0.267	0.068	0.034
HCM Control Delay (s)	-	-	49.2	14.7	9.5
HCM Lane LOS	-	-	E	B	A
HCM 95th %tile Q(veh)	-	-	1	0.2	0.1

6: Main St & Ridgewalk Pkwy
Queues

2024 Existing PM Peak - Weekend



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	547	228	231	246	260	552
v/c Ratio	0.58	0.38	0.49	0.24	0.43	0.63
Control Delay	25.3	5.7	33.0	9.2	21.5	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.3	5.7	33.0	9.2	21.5	5.5
Queue Length 50th (ft)	97	0	45	49	83	0
Queue Length 95th (ft)	186	52	95	97	166	64
Internal Link Dist (ft)	1438			698	828	
Turn Bay Length (ft)			200			505
Base Capacity (vph)	1265	728	764	1609	1107	1150
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	0.43	0.31	0.30	0.15	0.23	0.48
Intersection Summary						

6: Main St & Ridgewalk Pkwy
 HCM Signalized Intersection Capacity Analysis

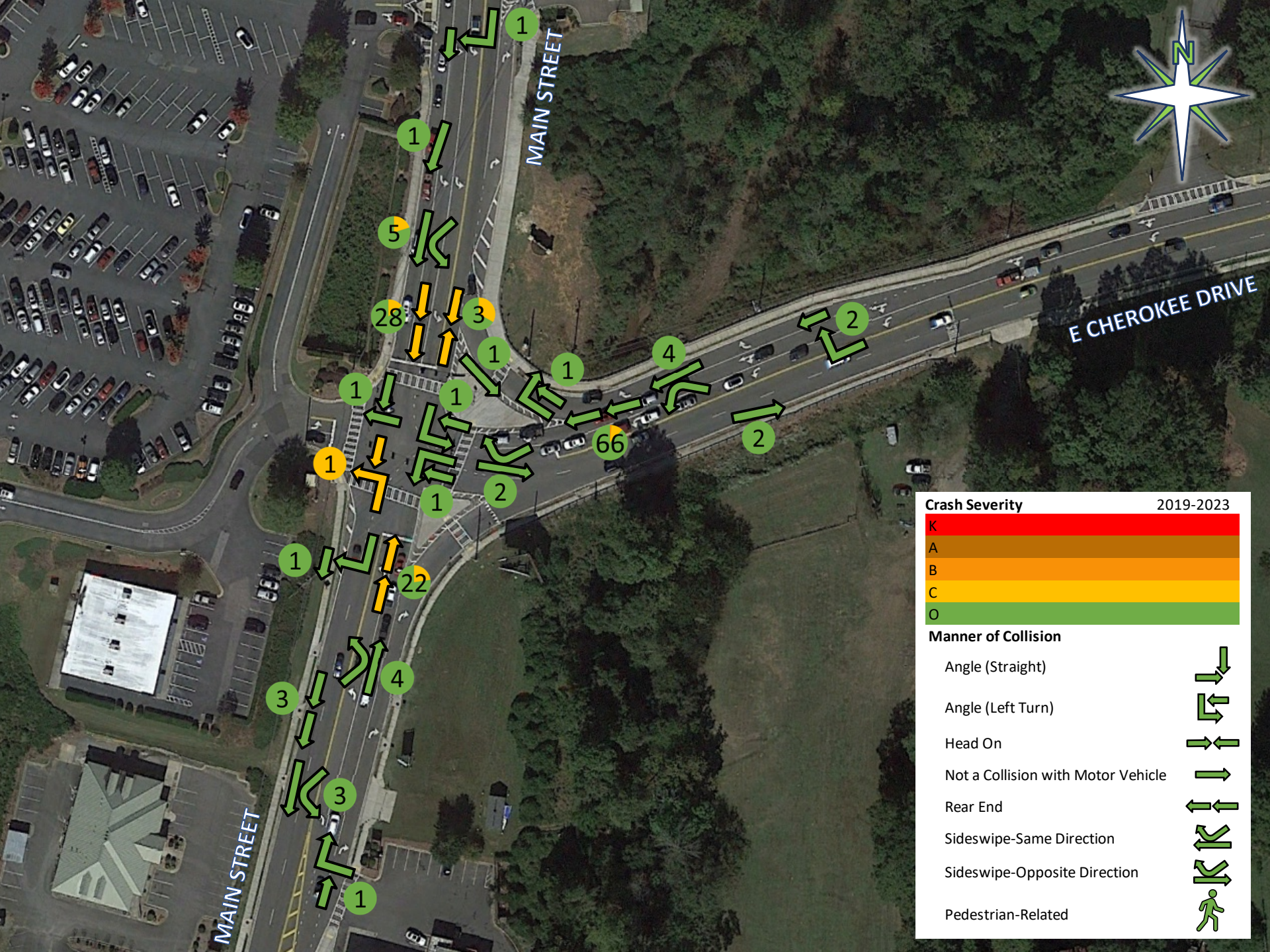
2024 Existing PM Peak - Weekend



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	509	212	215	229	242	513
Future Volume (vph)	509	212	215	229	242	513
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3467	1599	3467	1863	1881	1568
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3467	1599	3467	1863	1881	1568
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	547	228	231	246	260	552
RTOR Reduction (vph)	0	166	0	0	0	372
Lane Group Flow (vph)	547	62	231	246	260	180
Heavy Vehicles (%)	1%	1%	1%	2%	1%	3%
Turn Type	Prot	Prot	Prot	NA	NA	Prot
Protected Phases	7	4	1	6	2	2
Permitted Phases						
Actuated Green, G (s)	18.5	18.5	9.3	36.9	22.1	22.1
Effective Green, g (s)	18.5	18.5	9.3	36.9	22.1	22.1
Actuated g/C Ratio	0.27	0.27	0.14	0.55	0.33	0.33
Clearance Time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Vehicle Extension (s)	5.1	5.1	2.1	5.1	5.1	5.1
Lane Grp Cap (vph)	947	436	476	1015	614	511
v/s Ratio Prot	c0.16	0.04	c0.07	0.13	c0.14	0.11
v/s Ratio Perm						
v/c Ratio	0.58	0.14	0.49	0.24	0.42	0.35
Uniform Delay, d1	21.2	18.6	27.0	8.1	17.8	17.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.4	0.3	0.3	0.3	1.0	0.9
Delay (s)	22.6	18.9	27.3	8.3	18.8	18.3
Level of Service	C	B	C	A	B	B
Approach Delay (s)	21.5			17.5	18.4	
Approach LOS	C			B	B	

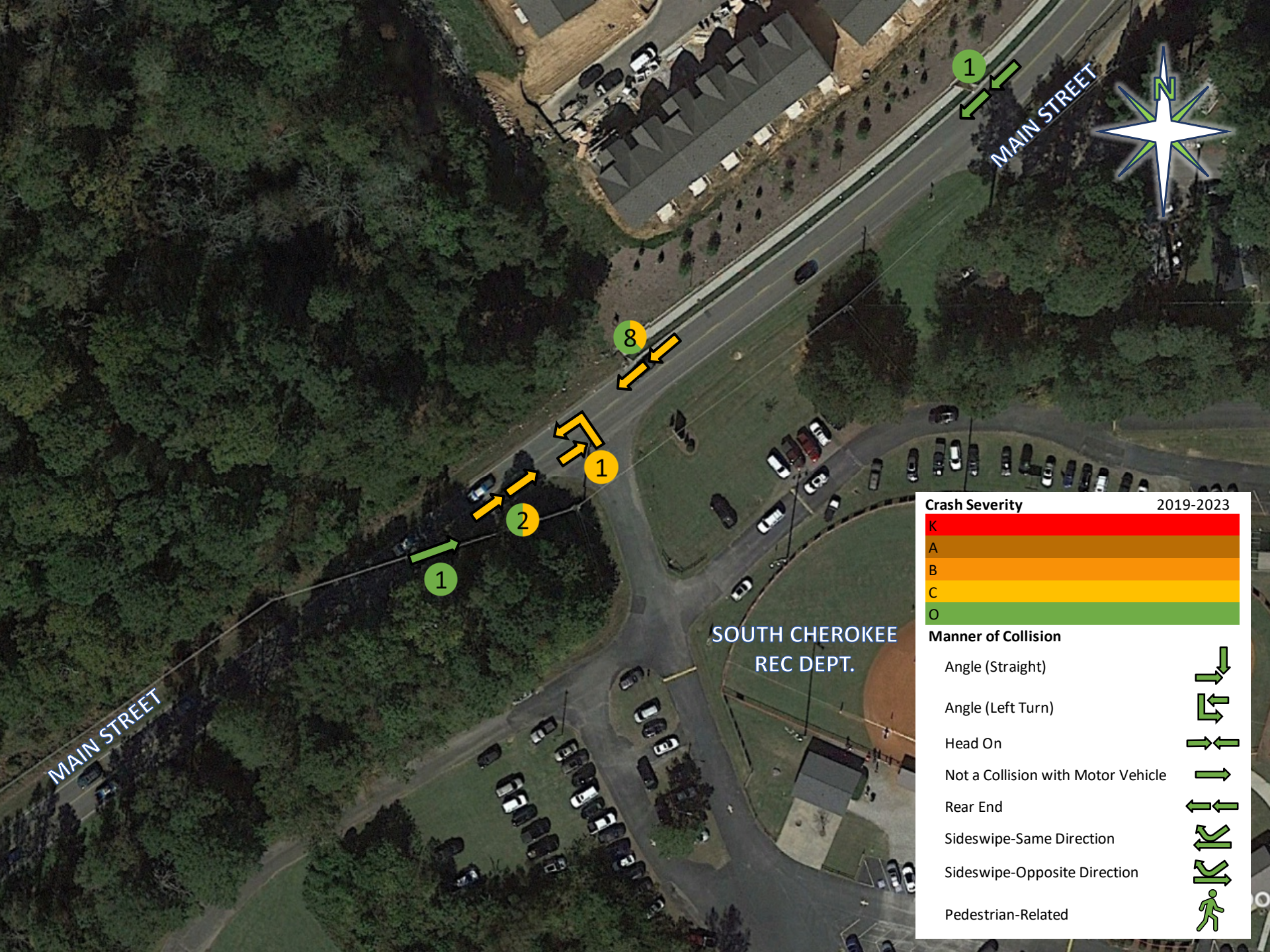
Intersection Summary			
HCM 2000 Control Delay	19.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	67.7	Sum of lost time (s)	17.8
Intersection Capacity Utilization	48.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

APPENDIX C – CRASH DIAGRAMS



Crash Severity	2019-2023
K	Red
A	Orange
B	Yellow
C	Light Yellow
O	Green

Manner of Collision	Symbol
Angle (Straight)	Two arrows pointing towards each other at an angle.
Angle (Left Turn)	Two arrows, one pointing straight and one pointing left across the path of the straight arrow.
Head On	Two arrows pointing directly towards each other.
Not a Collision with Motor Vehicle	A single arrow pointing in a direction.
Rear End	Two arrows pointing in the same direction, with the front arrow slightly behind the rear arrow.
Sideswipe-Same Direction	Two arrows pointing in the same direction, side-by-side.
Sideswipe-Opposite Direction	Two arrows pointing in opposite directions, side-by-side.
Pedestrian-Related	A stick figure icon.



Crash Severity	2019-2023
K	
A	
B	
C	
O	

Manner of Collision	
Angle (Straight)	
Angle (Left Turn)	
Head On	
Not a Collision with Motor Vehicle	
Rear End	
Sideswipe-Same Direction	
Sideswipe-Opposite Direction	
Pedestrian-Related	

MAIN STREET

MAIN STREET

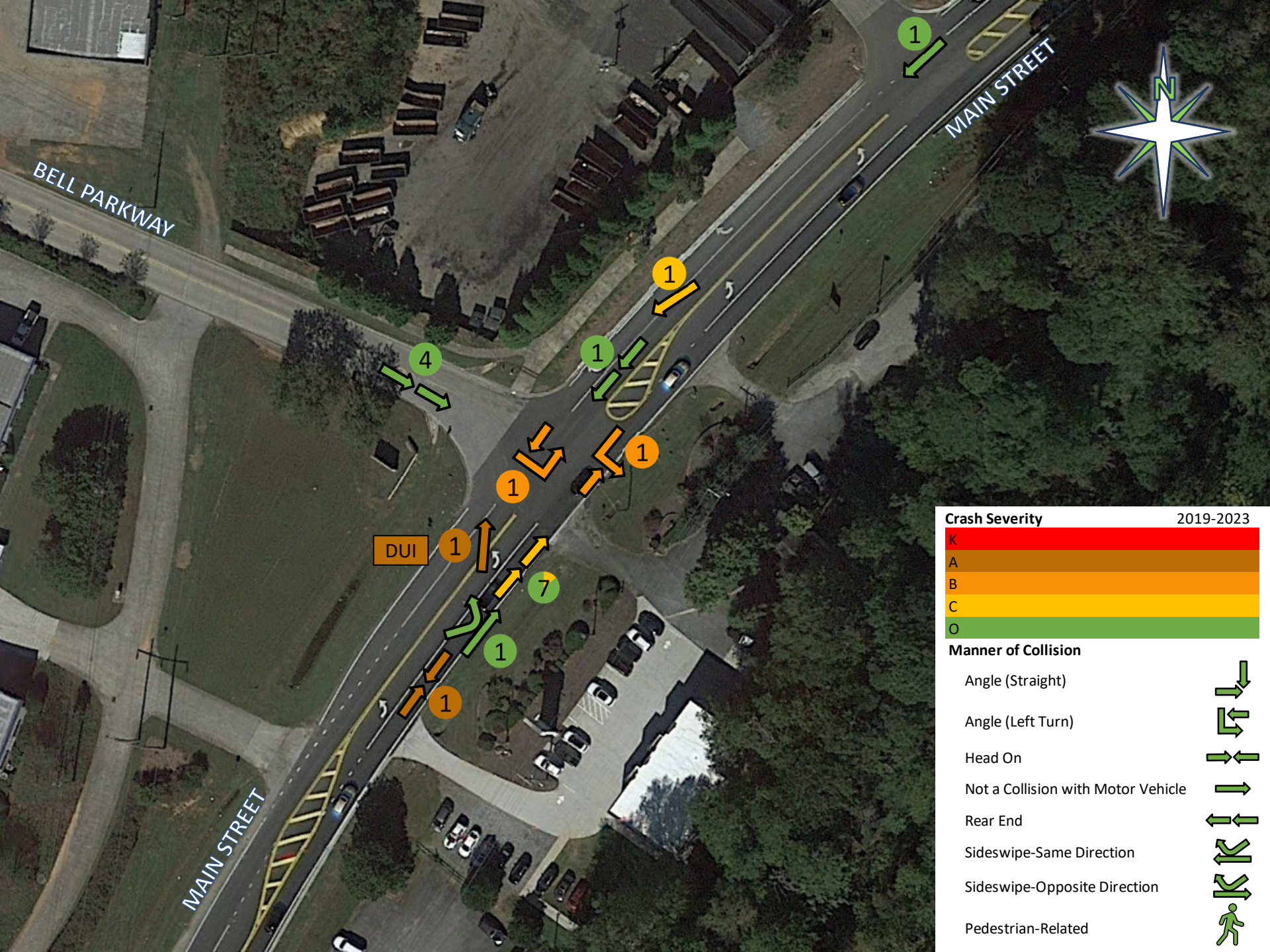
SOUTH CHEROKEE
REC DEPT.

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Crash Severity		2019-2023
K	[Red]	
A	[Orange]	
B	[Yellow]	
C	[Light Yellow]	
O	[Green]	

Manner of Collision	
Angle (Straight)	[Green arrow pointing down]
Angle (Left Turn)	[Green arrow pointing down and left]
Head On	[Green arrows pointing towards each other]
Not a Collision with Motor Vehicle	[Green arrow pointing right]
Rear End	[Green arrows pointing away from each other]
Sideswipe-Same Direction	[Green arrows pointing right, one above the other]
Sideswipe-Opposite Direction	[Green arrows pointing left and right]
Pedestrian-Related	[Green pedestrian icon]

BELL PARKWAY

MAIN STREET

MAIN STREET

DUI

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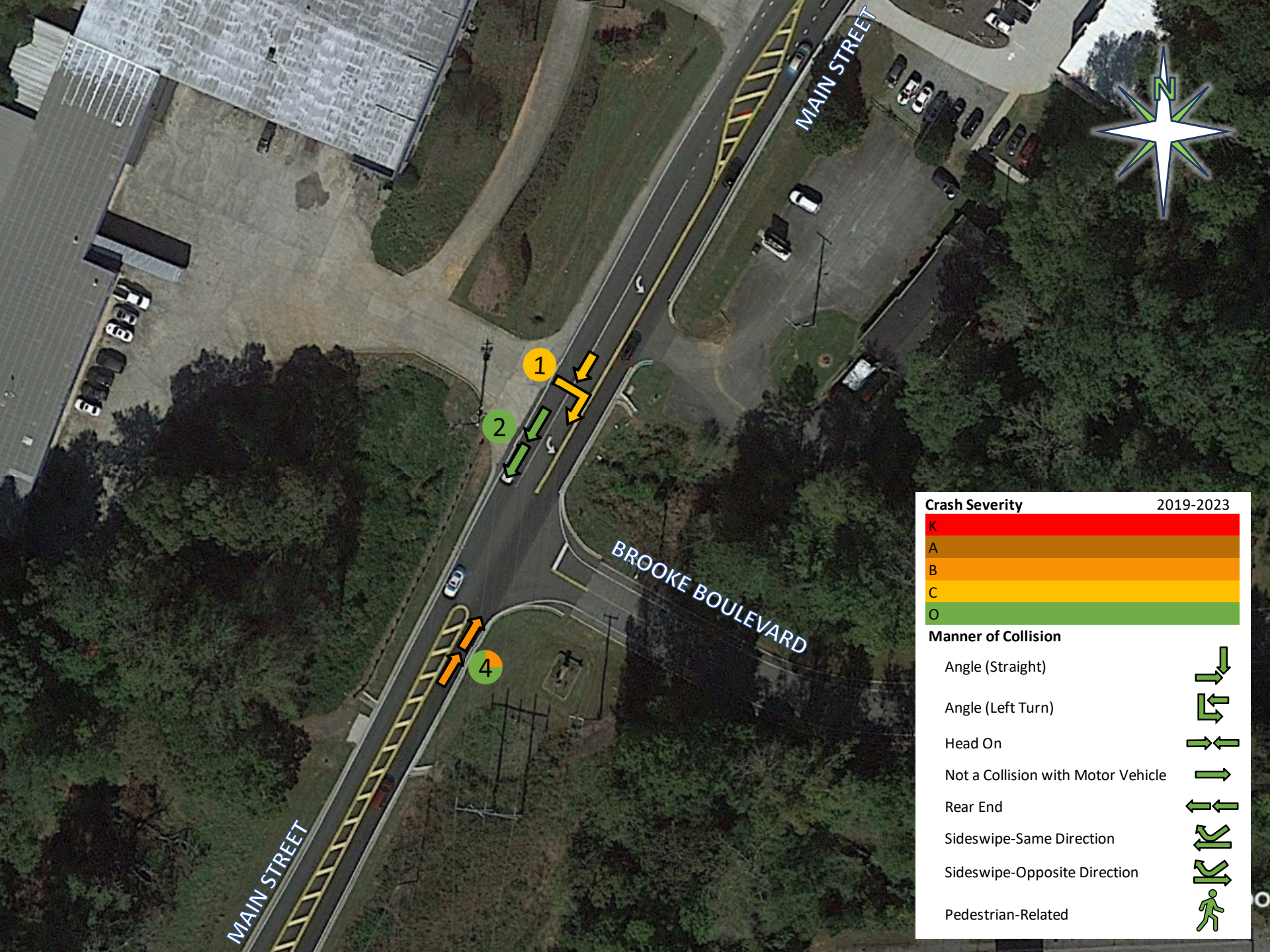
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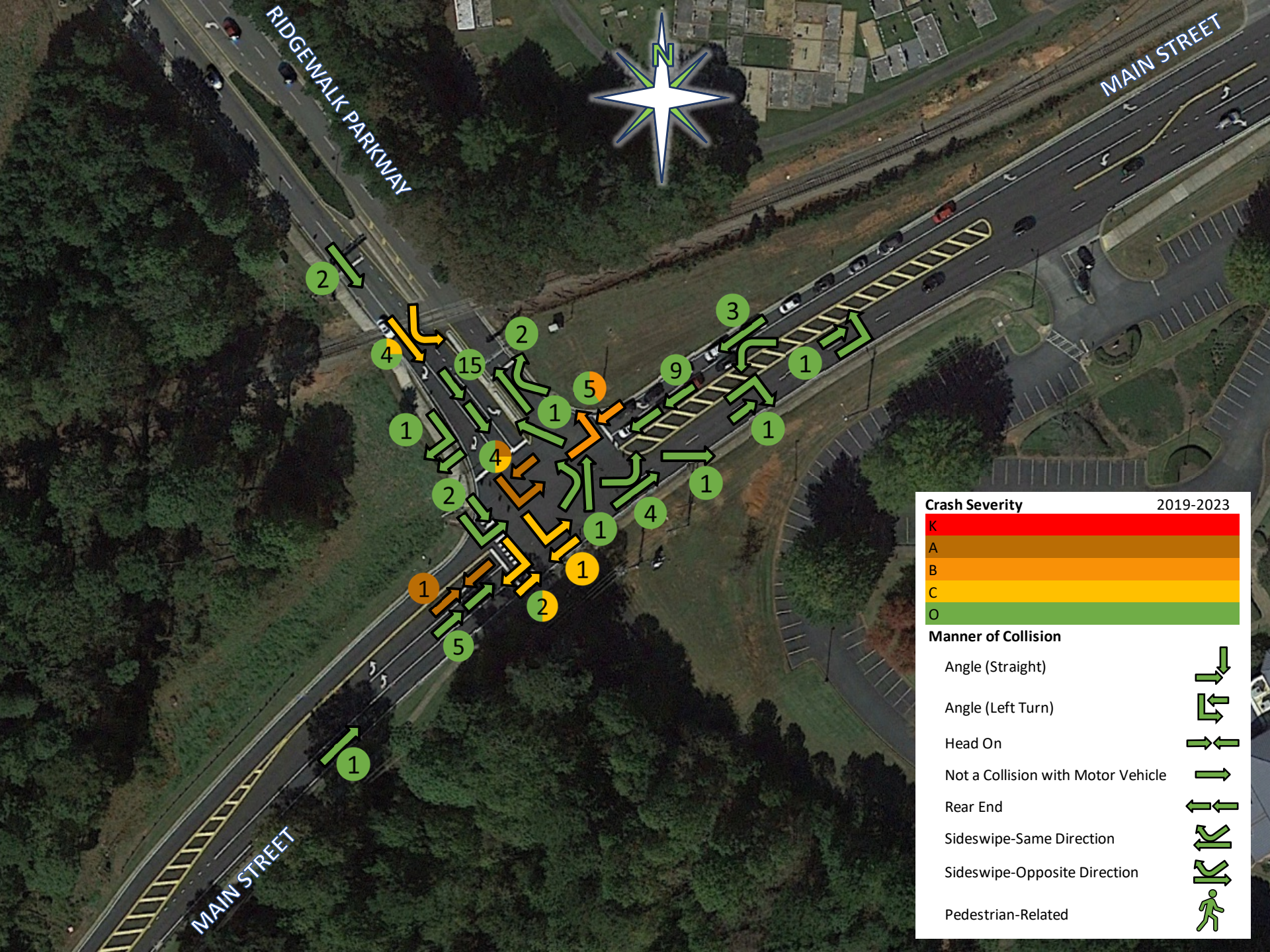
Crash Severity	2019-2023
K	
A	
B	
C	
O	

Manner of Collision	
Angle (Straight)	
Angle (Left Turn)	
Head On	
Not a Collision with Motor Vehicle	
Rear End	
Sideswipe-Same Direction	
Sideswipe-Opposite Direction	
Pedestrian-Related	



Crash Severity	2019-2023
K	Red
A	Orange
B	Yellow-Orange
C	Yellow
O	Green

Manner of Collision	Symbol
Angle (Straight)	Green arrow pointing down, with a smaller green arrow pointing left from its base.
Angle (Left Turn)	Green arrow pointing down, with a smaller green arrow pointing left from its base.
Head On	Two green arrows pointing towards each other.
Not a Collision with Motor Vehicle	A single green arrow pointing right.
Rear End	Two green arrows pointing in the same direction, with the front one slightly behind the other.
Sideswipe-Same Direction	Two green arrows pointing in the same direction, side-by-side.
Sideswipe-Opposite Direction	Two green arrows pointing in opposite directions, side-by-side.
Pedestrian-Related	A green silhouette of a person walking.



Crash Severity	2019-2023
K	[Red bar]
A	[Orange bar]
B	[Light Orange bar]
C	[Yellow bar]
O	[Green bar]

Manner of Collision	[Icon]
Angle (Straight)	[Green arrow pointing down]
Angle (Left Turn)	[Green arrow pointing right, with a smaller green arrow pointing down from above]
Head On	[Two green arrows pointing towards each other]
Not a Collision with Motor Vehicle	[Green arrow pointing right]
Rear End	[Two green arrows pointing in the same direction, one behind the other]
Sideswipe-Same Direction	[Two green arrows pointing in the same direction, side-by-side]
Sideswipe-Opposite Direction	[Two green arrows pointing in opposite directions, side-by-side]
Pedestrian-Related	[Green pedestrian icon]

APPENDIX D – NO-BUILD CAPACITY ANALYSIS REPORTS

1: Main St & Publix Dwy/E Cherokee Dr
Queues

2029 Opening Year AM Peak - Weekday


























Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	10	37	333	332	446	11	180	349	752	543
v/c Ratio	0.09	0.30	0.80	0.79	0.62	0.13	0.32	0.48	0.85	0.52
Control Delay	58.9	48.2	61.1	60.4	7.4	62.6	41.0	6.7	55.3	22.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.9	48.2	61.1	60.4	7.4	62.6	41.0	6.7	55.3	22.9
Queue Length 50th (ft)	8	20	272	271	0	9	123	0	311	266
Queue Length 95th (ft)	27	56	#400	#393	89	30	206	83	362	465
Internal Link Dist (ft)		642		1304			1959			2488
Turn Bay Length (ft)	25		575		265	230		305	375	
Base Capacity (vph)	155	166	453	456	751	191	559	730	1008	1035
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	0.22	0.74	0.73	0.59	0.06	0.32	0.48	0.75	0.52

Intersection Summary

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

1: Main St & Publix Dwy/E Cherokee Dr
 HCM Signalized Intersection Capacity Analysis

2029 Opening Year AM Peak - Weekday

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	22	12	595	23	415	10	167	325	699	503	2
Future Volume (vph)	9	22	12	595	23	415	10	167	325	699	503	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.8	3.8		3.8	3.8	3.8	6.2	6.2	6.2	5.6	6.2	
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00	1.00	1.00	1.00	0.97	1.00	
Frt	1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1800		1715	1725	1599	1805	1810	1583	3467	1826	
Flt Permitted	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1800		1715	1725	1599	1805	1810	1583	3467	1826	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	10	24	13	640	25	446	11	180	349	752	541	2
RTOR Reduction (vph)	0	12	0	0	0	338	0	0	244	0	0	0
Lane Group Flow (vph)	10	25	0	333	332	108	11	180	105	752	543	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	5%	2%	1%	4%	0%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases						7			6			
Actuated Green, G (s)	6.6	6.6		31.5	31.5	31.5	2.6	39.2	39.2	33.3	69.3	
Effective Green, g (s)	6.6	6.6		31.5	31.5	31.5	2.6	39.2	39.2	33.3	69.3	
Actuated g/C Ratio	0.05	0.05		0.24	0.24	0.24	0.02	0.30	0.30	0.26	0.53	
Clearance Time (s)	3.8	3.8		3.8	3.8	3.8	6.2	6.2	6.2	5.6	6.2	
Vehicle Extension (s)	2.0	2.0		3.0	3.0	3.0	2.0	5.0	5.0	3.0	5.0	
Lane Grp Cap (vph)	91	91		415	417	387	36	545	477	888	973	
v/s Ratio Prot	0.01	c0.01		c0.19	0.19		0.01	0.10		c0.22	c0.30	
v/s Ratio Perm						0.07			0.07			
v/c Ratio	0.11	0.27		0.80	0.80	0.28	0.31	0.33	0.22	0.85	0.56	
Uniform Delay, d1	58.9	59.4		46.3	46.2	40.0	62.8	35.2	34.0	45.9	20.2	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.2	0.6		10.7	10.1	0.4	1.8	0.7	0.5	7.5	2.3	
Delay (s)	59.1	60.0		57.0	56.3	40.4	64.6	36.0	34.5	53.4	22.5	
Level of Service	E	E		E	E	D	E	D	C	D	C	
Approach Delay (s)		59.8			50.2			35.6			40.5	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay	43.5			HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio	0.71											
Actuated Cycle Length (s)	130.0			Sum of lost time (s)				20.0				
Intersection Capacity Utilization	69.4%			ICU Level of Service				C				
Analysis Period (min)	15											
c Critical Lane Group												

2: Main St & South Cherokee Dwy
 HCM 6th TWSC

2029 Opening Year AM Peak - Weekday

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	1	475	1	2	1062
Future Vol, veh/h	0	1	475	1	2	1062
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	495	1	2	1106

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1606	496	0	0	496	0
Stage 1	496	-	-	-	-	-
Stage 2	1110	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	116	574	-	-	1068	-
Stage 1	612	-	-	-	-	-
Stage 2	315	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	115	574	-	-	1068	-
Mov Cap-2 Maneuver	115	-	-	-	-	-
Stage 1	612	-	-	-	-	-
Stage 2	313	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	574	1068
HCM Lane V/C Ratio	-	-	0.002	0.002
HCM Control Delay (s)	-	-	11.3	8.4
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

3: Main St & Bell Pkwy/Exit Only Dwy
 HCM 6th TWSC

2029 Opening Year AM Peak - Weekday

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘				↕		↘	↑			↑	↗
Traffic Vol, veh/h	3	0	41	0	0	0	129	490	0	0	951	94
Future Vol, veh/h	3	0	41	0	0	0	129	490	0	0	951	94
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	92	94	92	92	92	94	94	92	92	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	0	44	0	0	0	137	521	0	0	1012	100

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1807	-	1012	1879	1907	521	1112	0	-	-	-	0
Stage 1	1012	-	-	795	795	-	-	-	-	-	-	-
Stage 2	795	-	-	1084	1112	-	-	-	-	-	-	-
Critical Hdwy	7.12	-	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	61	0	290	54	68	555	628	-	0	0	-	-
Stage 1	288	0	-	381	399	-	-	-	0	0	-	-
Stage 2	381	0	-	263	284	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	51	-	290	38	53	555	628	-	-	-	-	-
Mov Cap-2 Maneuver	51	-	-	38	53	-	-	-	-	-	-	-
Stage 1	225	-	-	298	312	-	-	-	-	-	-	-
Stage 2	298	-	-	223	284	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	25.7		0		2.6		0	
HCM LOS	D		A					

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	628	-	220	-	-	-
HCM Lane V/C Ratio	0.219	-	0.213	-	-	-
HCM Control Delay (s)	12.3	-	25.7	0	-	-
HCM Lane LOS	B	-	D	A	-	-
HCM 95th %tile Q(veh)	0.8	-	0.8	-	-	-

4: Main St & Brooke Blvd
HCM 6th TWSC

2029 Opening Year AM Peak - Weekday

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	3	627	0	2	1005
Future Vol, veh/h	0	3	627	0	2	1005
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	3	674	0	2	1081

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1759	674	0	0	674	0
Stage 1	674	-	-	-	-	-
Stage 2	1085	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	93	455	-	-	917	-
Stage 1	506	-	-	-	-	-
Stage 2	324	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	93	455	-	-	917	-
Mov Cap-2 Maneuver	93	-	-	-	-	-
Stage 1	506	-	-	-	-	-
Stage 2	323	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	455	917
HCM Lane V/C Ratio	-	-	0.007	0.002
HCM Control Delay (s)	-	-	13	8.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

5: Main St & Johnston Farm
 HCM 6th TWSC

2029 Opening Year AM Peak - Weekday

Intersection						
Int Delay, s/veh	1.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	31	14	615	18	7	951
Future Vol, veh/h	31	14	615	18	7	951
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	130	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	15	676	20	8	1045

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1737	676	0	0	696	0
Stage 1	676	-	-	-	-	-
Stage 2	1061	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	96	453	-	-	900	-
Stage 1	505	-	-	-	-	-
Stage 2	333	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	95	453	-	-	900	-
Mov Cap-2 Maneuver	95	-	-	-	-	-
Stage 1	505	-	-	-	-	-
Stage 2	330	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	47.3	0	0.1
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT	
Capacity (veh/h)	-	-	95	453	900	-
HCM Lane V/C Ratio	-	-	0.359	0.034	0.009	-
HCM Control Delay (s)	-	-	62.7	13.2	9	-
HCM Lane LOS	-	-	F	B	A	-
HCM 95th %tile Q(veh)	-	-	1.4	0.1	0	-

6: Main St & Ridgewalk Pkwy
Queues

2029 Opening Year AM Peak - Weekday



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	569	379	85	265	591	607
v/c Ratio	0.70	0.57	0.35	0.22	0.59	0.55
Control Delay	38.9	7.1	48.0	9.2	21.5	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.9	7.1	48.0	9.2	21.5	3.6
Queue Length 50th (ft)	170	5	27	67	261	0
Queue Length 95th (ft)	189	45	45	103	360	30
Internal Link Dist (ft)	1438			698	828	
Turn Bay Length (ft)			200			505
Base Capacity (vph)	949	721	402	1196	999	1096
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	0.60	0.53	0.21	0.22	0.59	0.55
Intersection Summary						

6: Main St & Ridgewalk Pkwy
 HCM Signalized Intersection Capacity Analysis

2029 Opening Year AM Peak - Weekday



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↖↗	↖	↖↗	↑	↓	↘
Traffic Volume (vph)	461	307	69	215	479	492
Future Volume (vph)	461	307	69	215	479	492
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3273	1583	3502	1900	1900	1538
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3273	1583	3502	1900	1900	1538
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	569	379	85	265	591	607
RTOR Reduction (vph)	0	277	0	0	0	294
Lane Group Flow (vph)	569	102	85	265	591	313
Heavy Vehicles (%)	7%	2%	0%	0%	0%	5%
Turn Type	Prot	Prot	Prot	NA	NA	Prot
Protected Phases	7	4	1	6	2	2
Permitted Phases						
Actuated Green, G (s)	24.8	24.8	5.9	62.9	51.5	51.5
Effective Green, g (s)	24.8	24.8	5.9	62.9	51.5	51.5
Actuated g/C Ratio	0.25	0.25	0.06	0.63	0.52	0.52
Clearance Time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Vehicle Extension (s)	5.1	5.1	2.1	5.1	5.1	5.1
Lane Grp Cap (vph)	811	392	206	1195	978	792
v/s Ratio Prot	c0.17	0.06	c0.02	0.14	c0.31	0.20
v/s Ratio Perm						
v/c Ratio	0.70	0.26	0.41	0.22	0.60	0.39
Uniform Delay, d1	34.2	30.2	45.4	8.0	17.1	14.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.5	0.8	0.6	0.4	1.6	0.7
Delay (s)	37.8	31.0	46.0	8.4	18.7	15.5
Level of Service	D	C	D	A	B	B
Approach Delay (s)	35.0			17.5	17.0	
Approach LOS	D			B	B	

Intersection Summary			
HCM 2000 Control Delay	24.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

1: Main St & Publix Dwy/E Cherokee Dr
Queues

2029 Opening Year PM Peak - Weekday



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	103	180	328	335	678	95	378	678	538	324
v/c Ratio	0.53	0.90	0.76	0.75	0.90	0.69	0.66	0.78	0.95	0.45
Control Delay	75.5	103.1	63.9	63.0	33.6	92.2	50.1	14.7	89.2	35.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.5	103.1	63.9	63.0	33.6	92.2	50.1	14.7	89.2	35.2
Queue Length 50th (ft)	99	~186	302	308	236	92	326	111	272	238
Queue Length 95th (ft)	#175	#348	#571	#577	#554	155	384	247	#388	284
Internal Link Dist (ft)		642		1304			1959			2488
Turn Bay Length (ft)	25		575		265	230		305	375	
Base Capacity (vph)	193	201	432	446	751	166	737	962	565	850
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	0.53	0.90	0.76	0.75	0.90	0.57	0.51	0.70	0.95	0.38

Intersection Summary

~ 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.

1: Main St & Publix Dwy/E Cherokee Dr
 HCM Signalized Intersection Capacity Analysis

2029 Opening Year PM Peak - Weekday

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	133	42	497	146	658	92	367	658	522	299	16
Future Volume (vph)	100	133	42	497	146	658	92	367	658	522	299	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.6	6.6		6.6	6.6	6.6	6.2	6.2	6.2	5.6	6.2	
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00	1.00	1.00	1.00	0.97	1.00	
Frt	1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1818		1681	1738	1599	1805	1881	1599	3467	1851	
Flt Permitted	0.95	1.00		0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1818		1681	1738	1599	1805	1881	1599	3467	1851	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	103	137	43	512	151	678	95	378	678	538	308	16
RTOR Reduction (vph)	0	7	0	0	0	340	0	0	383	0	1	0
Lane Group Flow (vph)	103	173	0	328	335	338	95	378	295	538	323	0
Heavy Vehicles (%)	0%	1%	0%	2%	0%	1%	0%	1%	1%	1%	2%	0%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases						7			6			
Actuated Green, G (s)	16.0	16.0		38.6	38.6	38.6	11.4	45.9	45.9	24.5	58.4	
Effective Green, g (s)	16.0	16.0		38.6	38.6	38.6	11.4	45.9	45.9	24.5	58.4	
Actuated g/C Ratio	0.11	0.11		0.26	0.26	0.26	0.08	0.31	0.31	0.16	0.39	
Clearance Time (s)	6.6	6.6		6.6	6.6	6.6	6.2	6.2	6.2	5.6	6.2	
Vehicle Extension (s)	2.0	2.0		3.0	3.0	3.0	2.0	5.0	5.0	3.0	5.0	
Lane Grp Cap (vph)	192	193		432	447	411	137	575	489	566	720	
v/s Ratio Prot	0.06	c0.10		0.20	0.19		0.05	c0.20		c0.16	0.17	
v/s Ratio Perm						c0.21			0.18			
v/c Ratio	0.54	0.90		0.76	0.75	0.82	0.69	0.66	0.60	0.95	0.45	
Uniform Delay, d1	63.5	66.2		51.4	51.3	52.5	67.6	45.2	44.3	62.1	33.9	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.4	36.2		7.5	6.8	12.5	11.6	5.8	5.4	26.0	2.0	
Delay (s)	64.9	102.4		58.9	58.0	64.9	79.2	51.0	49.7	88.1	35.9	
Level of Service	E	F		E	E	E	E	D	D	F	D	
Approach Delay (s)		88.8			61.7			52.6			68.5	
Approach LOS		F			E			D			E	
Intersection Summary												
HCM 2000 Control Delay			62.5				HCM 2000 Level of Service			E		
HCM 2000 Volume to Capacity ratio			0.80									
Actuated Cycle Length (s)			150.0				Sum of lost time (s)			25.6		
Intersection Capacity Utilization			85.8%				ICU Level of Service			E		
Analysis Period (min)			15									
c	Critical Lane Group											

2: Main St & South Cherokee Dwy
 HCM 6th TWSC

2029 Opening Year PM Peak - Weekday

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	1	0	1143	3	3	873
Future Vol, veh/h	1	0	1143	3	3	873
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	0	1178	3	3	900

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2086	1180	0	0	1181	0
Stage 1	1180	-	-	-	-	-
Stage 2	906	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	58	232	-	-	591	-
Stage 1	292	-	-	-	-	-
Stage 2	394	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	57	232	-	-	591	-
Mov Cap-2 Maneuver	57	-	-	-	-	-
Stage 1	292	-	-	-	-	-
Stage 2	390	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	69.3	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	57	591
HCM Lane V/C Ratio	-	-	0.018	0.005
HCM Control Delay (s)	-	-	69.3	11.1
HCM Lane LOS	-	-	F	B
HCM 95th %tile Q(veh)	-	-	0.1	0

3: Main St & Bell Pkwy/Exit Only Dwy
 HCM 6th TWSC

2029 Opening Year PM Peak - Weekday

Intersection												
Int Delay, s/veh	100.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖				↕		↖	↗			↗	↖
Traffic Vol, veh/h	68	0	189	6	0	2	36	1058	1	0	835	19
Future Vol, veh/h	68	0	189	6	0	2	36	1058	1	0	835	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	92	93	92	92	92	93	93	92	92	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	73	0	203	7	0	2	39	1138	1	0	898	20

Major/Minor	Minor2	Minor1		Major1			Major2					
Conflicting Flow All	2116	-	898	2227	2135	1139	918	0	0	-	-	0
Stage 1	898	-	-	1217	1217	-	-	-	-	-	-	-
Stage 2	1218	-	-	1010	918	-	-	-	-	-	-	-
Critical Hdwy	7.12	-	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	~ 37	0	338	31	49	245	743	-	-	0	-	-
Stage 1	334	0	-	221	253	-	-	-	-	0	-	-
Stage 2	221	0	-	289	350	-	-	-	-	0	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 35	-	338	12	46	245	743	-	-	-	-	-
Mov Cap-2 Maneuver	~ 35	-	-	12	46	-	-	-	-	-	-	-
Stage 1	317	-	-	210	240	-	-	-	-	-	-	-
Stage 2	208	-	-	115	350	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	\$ 849.4	\$ 383.4	0.3	0
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	743	-	-	103	16	-	-
HCM Lane V/C Ratio	0.052	-	-	2.683	0.543	-	-
HCM Control Delay (s)	10.1	-	-	\$ 849.4	\$ 383.4	-	-
HCM Lane LOS	B	-	-	F	F	-	-
HCM 95th %tile Q(veh)	0.2	-	-	25.7	1.4	-	-

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

4: Main St & Brooke Blvd
HCM 6th TWSC

2029 Opening Year PM Peak - Weekday

Intersection						
Int Delay, s/veh	1.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	19	1094	36	33	1057
Future Vol, veh/h	8	19	1094	36	33	1057
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	21	1216	40	37	1174
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2484	1236	0	0	1256	0
Stage 1	1236	-	-	-	-	-
Stage 2	1248	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	32	215	-	-	554	-
Stage 1	274	-	-	-	-	-
Stage 2	271	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	30	215	-	-	554	-
Mov Cap-2 Maneuver	30	-	-	-	-	-
Stage 1	274	-	-	-	-	-
Stage 2	253	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	80.4	0	0.4			
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	76	554	-	
HCM Lane V/C Ratio	-	-	0.395	0.066	-	
HCM Control Delay (s)	-	-	80.4	12	-	
HCM Lane LOS	-	-	F	B	-	
HCM 95th %tile Q(veh)	-	-	1.5	0.2	-	

5: Main St & Johnston Farm
 HCM 6th TWSC

2029 Opening Year PM Peak - Weekday

Intersection						
Int Delay, s/veh	2.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	20	24	1118	45	29	1051
Future Vol, veh/h	20	24	1118	45	29	1051
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	130	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	26	1215	49	32	1142
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2421	1215	0	0	1264	0
Stage 1	1215	-	-	-	-	-
Stage 2	1206	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	36	221	-	-	550	-
Stage 1	281	-	-	-	-	-
Stage 2	283	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	34	221	-	-	550	-
Mov Cap-2 Maneuver	34	-	-	-	-	-
Stage 1	281	-	-	-	-	-
Stage 2	267	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	113.8	0	0.3			
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT	
Capacity (veh/h)	-	-	34	221	550	-
HCM Lane V/C Ratio	-	-	0.639	0.118	0.057	-
HCM Control Delay (s)	-	-	222.2	23.5	11.9	-
HCM Lane LOS	-	-	F	C	B	-
HCM 95th %tile Q(veh)	-	-	2.2	0.4	0.2	-

6: Main St & Ridgewalk Pkwy
Queues

2029 Opening Year PM Peak - Weekday



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	866	253	257	390	367	777
v/c Ratio	0.74	0.36	0.94	0.37	0.45	0.69
Control Delay	38.8	4.4	95.7	17.2	27.5	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.8	4.4	95.7	17.2	27.5	5.6
Queue Length 50th (ft)	302	0	103	162	197	0
Queue Length 95th (ft)	337	50	#186	268	318	97
Internal Link Dist (ft)	1438			698	828	
Turn Bay Length (ft)			200			505
Base Capacity (vph)	1560	858	274	1042	817	1120
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	0.29	0.94	0.37	0.45	0.69

Intersection Summary

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

6: Main St & Ridgewalk Pkwy
 HCM Signalized Intersection Capacity Analysis

2029 Opening Year PM Peak - Weekday



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	805	235	239	363	341	723
Future Volume (vph)	805	235	239	363	341	723
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3467	1599	3467	1863	1881	1568
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3467	1599	3467	1863	1881	1568
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	866	253	257	390	367	777
RTOR Reduction (vph)	0	167	0	0	0	440
Lane Group Flow (vph)	866	86	257	390	367	337
Heavy Vehicles (%)	1%	1%	1%	2%	1%	3%
Turn Type	Prot	Prot	Prot	NA	NA	Prot
Protected Phases	7	4	1	6	2	2
Permitted Phases						
Actuated Green, G (s)	40.6	40.6	9.5	67.1	52.1	52.1
Effective Green, g (s)	40.6	40.6	9.5	67.1	52.1	52.1
Actuated g/C Ratio	0.34	0.34	0.08	0.56	0.43	0.43
Clearance Time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Vehicle Extension (s)	5.1	5.1	2.1	5.1	5.1	5.1
Lane Grp Cap (vph)	1173	540	274	1041	816	680
v/s Ratio Prot	c0.25	0.05	c0.07	0.21	0.20	c0.22
v/s Ratio Perm						
v/c Ratio	0.74	0.16	0.94	0.37	0.45	0.50
Uniform Delay, d1	35.0	27.8	55.0	14.7	23.9	24.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.3	37.3	1.0	0.9	1.2
Delay (s)	38.1	28.1	92.2	15.8	24.7	25.7
Level of Service	D	C	F	B	C	C
Approach Delay (s)	35.8			46.2	25.4	
Approach LOS	D			D	C	

Intersection Summary			
HCM 2000 Control Delay	34.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

1: Main St & Publix Dwy/E Cherokee Dr
Queues

2029 Opening Year MD Peak - Weekend



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	10	35	280	284	446	18	311	604	752	458
v/c Ratio	0.07	0.22	0.87	0.88	0.67	0.16	0.70	0.72	0.64	0.43
Control Delay	43.7	36.5	66.7	67.6	9.3	51.1	30.0	7.3	32.7	15.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.7	36.5	66.7	67.6	9.3	51.1	30.0	7.3	32.7	15.6
Queue Length 50th (ft)	6	15	184	186	0	12	129	14	227	147
Queue Length 95th (ft)	23	45	#336	#341	89	m22	m160	m20	298	302
Internal Link Dist (ft)		642		1304			1959			2488
Turn Bay Length (ft)	25		575		265	230		305	375	
Base Capacity (vph)	375	385	328	330	666	113	470	858	1179	1075
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	0.09	0.85	0.86	0.67	0.16	0.66	0.70	0.64	0.43

Intersection Summary

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.

1: Main St & Publix Dwy/E Cherokee Dr
 HCM Signalized Intersection Capacity Analysis

2029 Opening Year MD Peak - Weekend

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	22	10	501	23	415	17	289	562	699	424	2
Future Volume (vph)	9	22	10	501	23	415	17	289	562	699	424	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.8	3.8		3.8	3.8	3.8	6.2	6.2	6.2	5.6	6.2	
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00	1.00	1.00	1.00	0.97	1.00	
Frt	1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1810		1715	1726	1599	1805	1810	1583	3467	1826	
Flt Permitted	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1810		1715	1726	1599	1805	1810	1583	3467	1826	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	10	24	11	539	25	446	18	311	604	752	456	2
RTOR Reduction (vph)	0	10	0	0	0	362	0	0	466	0	0	0
Lane Group Flow (vph)	10	25	0	280	284	84	18	311	138	752	458	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	5%	2%	1%	4%	0%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases						7			6			
Actuated Green, G (s)	4.9	4.9		18.8	18.8	18.8	2.7	22.9	22.9	34.0	53.6	
Effective Green, g (s)	4.9	4.9		18.8	18.8	18.8	2.7	22.9	22.9	34.0	53.6	
Actuated g/C Ratio	0.05	0.05		0.19	0.19	0.19	0.03	0.23	0.23	0.34	0.54	
Clearance Time (s)	3.8	3.8		3.8	3.8	3.8	6.2	6.2	6.2	5.6	6.2	
Vehicle Extension (s)	2.0	2.0		3.0	3.0	3.0	2.0	5.0	5.0	3.0	5.0	
Lane Grp Cap (vph)	88	88		322	324	300	48	414	362	1178	978	
v/s Ratio Prot	0.01	c0.01		0.16	c0.16		0.01	c0.17		c0.22	0.25	
v/s Ratio Perm						0.05			0.09			
v/c Ratio	0.11	0.28		0.87	0.88	0.28	0.38	0.75	0.38	0.64	0.47	
Uniform Delay, d1	45.5	45.8		39.4	39.5	34.8	47.8	35.9	32.6	27.8	14.4	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.09	0.65	1.08	1.00	1.00	
Incremental Delay, d2	0.2	0.6		21.2	22.3	0.5	1.4	7.2	1.1	1.1	1.6	
Delay (s)	45.7	46.5		60.6	61.8	35.3	53.8	30.7	36.2	29.0	16.0	
Level of Service	D	D		E	E	D	D	C	D	C	B	
Approach Delay (s)		46.3			49.8			34.7			24.1	
Approach LOS		D			D			C			C	
Intersection Summary												
HCM 2000 Control Delay			35.6				HCM 2000 Level of Service				D	
HCM 2000 Volume to Capacity ratio			0.71									
Actuated Cycle Length (s)			100.0				Sum of lost time (s)				20.0	
Intersection Capacity Utilization			74.6%				ICU Level of Service				D	
Analysis Period (min)			15									
c Critical Lane Group												

2: Main St & South Cherokee Dwy
 HCM 6th TWSC

2029 Opening Year MD Peak - Weekend

Intersection						
Int Delay, s/veh	1.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	W	T	T	T	T
Traffic Vol, veh/h	11	20	847	104	113	813
Future Vol, veh/h	11	20	847	104	113	813
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	21	882	108	118	847
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2019	936	0	0	990	0
Stage 1	936	-	-	-	-	-
Stage 2	1083	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	64	321	-	-	698	-
Stage 1	382	-	-	-	-	-
Stage 2	325	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	44	321	-	-	698	-
Mov Cap-2 Maneuver	44	-	-	-	-	-
Stage 1	382	-	-	-	-	-
Stage 2	221	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	58	0	1.4			
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	99	698		
HCM Lane V/C Ratio	-	-	0.326	0.169		
HCM Control Delay (s)	-	-	58	11.2		
HCM Lane LOS	-	-	F	B		
HCM 95th %tile Q(veh)	-	-	1.3	0.6		

3: Main St & Bell Pkwy
HCM 6th TWSC

2029 Opening Year MD Peak - Weekend

Intersection						
Int Delay, s/veh	1.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	17	26	31	931	819	13
Future Vol, veh/h	17	26	31	931	819	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	155	-	-	235
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	28	33	990	871	14
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1927	871	885	0	-	0
Stage 1	871	-	-	-	-	-
Stage 2	1056	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	73	350	765	-	-	-
Stage 1	410	-	-	-	-	-
Stage 2	335	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	70	350	765	-	-	-
Mov Cap-2 Maneuver	70	-	-	-	-	-
Stage 1	392	-	-	-	-	-
Stage 2	335	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	44.3	0.3		0		
HCM LOS	E					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	765	-	136	-	-	
HCM Lane V/C Ratio	0.043	-	0.336	-	-	
HCM Control Delay (s)	9.9	-	44.3	-	-	
HCM Lane LOS	A	-	E	-	-	
HCM 95th %tile Q(veh)	0.1	-	1.4	-	-	

4: Main St & Brooke Blvd
HCM 6th TWSC

2029 Opening Year MD Peak - Weekend

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	11	961	16	11	833
Future Vol, veh/h	3	11	961	16	11	833
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	11	991	16	11	859

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1880	999	0	0	1007
Stage 1	999	-	-	-	-
Stage 2	881	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	78	295	-	-	688
Stage 1	356	-	-	-	-
Stage 2	405	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	77	295	-	-	688
Mov Cap-2 Maneuver	77	-	-	-	-
Stage 1	356	-	-	-	-
Stage 2	399	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26.2	0	0.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	184	688
HCM Lane V/C Ratio	-	-	0.078	0.016
HCM Control Delay (s)	-	-	26.2	10.3
HCM Lane LOS	-	-	D	B
HCM 95th %tile Q(veh)	-	-	0.3	0.1

5: Main St & Johnston Farm
 HCM 6th TWSC

2029 Opening Year MD Peak - Weekend

Intersection						
Int Delay, s/veh	1.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	29	27	959	35	14	822
Future Vol, veh/h	29	27	959	35	14	822
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	130	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	28	989	36	14	847
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1864	989	0	0	1025	0
Stage 1	989	-	-	-	-	-
Stage 2	875	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	80	299	-	-	677	-
Stage 1	360	-	-	-	-	-
Stage 2	408	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	78	299	-	-	677	-
Mov Cap-2 Maneuver	78	-	-	-	-	-
Stage 1	360	-	-	-	-	-
Stage 2	399	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	48.9	0	0.2			
HCM LOS	E					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT	
Capacity (veh/h)	-	-	78	299	677	-
HCM Lane V/C Ratio	-	-	0.383	0.093	0.021	-
HCM Control Delay (s)	-	-	77.4	18.3	10.4	-
HCM Lane LOS	-	-	F	C	B	-
HCM 95th %tile Q(veh)	-	-	1.5	0.3	0.1	-

6: Main St & Ridgewalk Pkwy
Queues

2029 Opening Year MD Peak - Weekend



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	838	379	85	393	520	533
v/c Ratio	0.85	0.51	0.35	0.36	0.58	0.53
Control Delay	42.8	5.6	48.0	12.5	18.7	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	42.8	5.6	48.0	12.5	18.7	4.1
Queue Length 50th (ft)	249	0	27	133	184	22
Queue Length 95th (ft)	293	40	45	156	214	43
Internal Link Dist (ft)	1438			698	828	
Turn Bay Length (ft)			200			505
Base Capacity (vph)	991	743	402	1119	898	1008
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	0.85	0.51	0.21	0.35	0.58	0.53
Intersection Summary						

6: Main St & Ridgewalk Pkwy
 HCM Signalized Intersection Capacity Analysis

2029 Opening Year MD Peak - Weekend



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	679	307	69	318	421	432
Future Volume (vph)	679	307	69	318	421	432
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3273	1583	3502	1900	1900	1538
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3273	1583	3502	1900	1900	1538
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	838	379	85	393	520	533
RTOR Reduction (vph)	0	265	0	0	0	287
Lane Group Flow (vph)	838	114	85	393	520	246
Heavy Vehicles (%)	7%	2%	0%	0%	0%	5%
Turn Type	Prot	Prot	Prot	NA	NA	Prot
Protected Phases	7	4	1	6	2	2
Permitted Phases						
Actuated Green, G (s)	30.1	30.1	5.9	57.6	46.2	46.2
Effective Green, g (s)	30.1	30.1	5.9	57.6	46.2	46.2
Actuated g/C Ratio	0.30	0.30	0.06	0.58	0.46	0.46
Clearance Time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Vehicle Extension (s)	5.1	5.1	2.1	5.1	5.1	5.1
Lane Grp Cap (vph)	985	476	206	1094	877	710
v/s Ratio Prot	c0.26	0.07	0.02	c0.21	c0.27	0.16
v/s Ratio Perm						
v/c Ratio	0.85	0.24	0.41	0.36	0.59	0.35
Uniform Delay, d1	32.8	26.3	45.4	11.3	19.9	17.2
Progression Factor	1.00	1.00	1.00	1.00	0.78	1.36
Incremental Delay, d2	7.9	0.6	0.6	0.9	1.5	0.6
Delay (s)	40.7	26.9	46.0	12.3	17.1	24.1
Level of Service	D	C	D	B	B	C
Approach Delay (s)	36.4			18.2	20.6	
Approach LOS	D			B	C	

Intersection Summary			
HCM 2000 Control Delay	27.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	59.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

1: Main St & Publix Dwy/E Cherokee Dr
Queues

2029 Opening Year PM Peak - Weekend


























Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	103	176	300	306	678	76	305	547	538	288
v/c Ratio	0.47	0.78	0.72	0.71	0.86	0.61	0.56	0.64	0.89	0.40
Control Delay	70.5	82.9	61.4	60.4	24.5	87.3	50.2	6.8	77.9	35.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.5	82.9	61.4	60.4	24.5	87.3	50.2	6.8	77.9	35.7
Queue Length 50th (ft)	93	158	281	285	169	73	273	0	262	212
Queue Length 95th (ft)	#175	#339	397	401	#376	128	339	92	#388	285
Internal Link Dist (ft)		642		1304			1959			2488
Turn Bay Length (ft)	25		575		265	230		305	375	
Base Capacity (vph)	217	227	418	433	784	166	737	959	604	852
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	0.47	0.78	0.72	0.71	0.86	0.46	0.41	0.57	0.89	0.34

Intersection Summary

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

1: Main St & Publix Dwy/E Cherokee Dr
 HCM Signalized Intersection Capacity Analysis

2029 Opening Year PM Peak - Weekend

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	100	133	38	441	146	658	74	296	531	522	264	16	
Future Volume (vph)	100	133	38	441	146	658	74	296	531	522	264	16	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	6.6	6.6		6.6	6.6	6.6	6.2	6.2	6.2	5.6	6.2		
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00	1.00	1.00	1.00	0.97	1.00		
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		
Flt Protected	0.95	1.00		0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00		
Satd. Flow (prot)	1805	1823		1681	1743	1599	1805	1881	1599	3467	1849		
Flt Permitted	0.95	1.00		0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00		
Satd. Flow (perm)	1805	1823		1681	1743	1599	1805	1881	1599	3467	1849		
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	
Adj. Flow (vph)	103	137	39	455	151	678	76	305	547	538	272	16	
RTOR Reduction (vph)	0	7	0	0	0	387	0	0	389	0	2	0	
Lane Group Flow (vph)	103	169	0	300	306	291	76	305	158	538	286	0	
Heavy Vehicles (%)	0%	1%	0%	2%	0%	1%	0%	1%	1%	1%	2%	0%	
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA		
Protected Phases	8	8		7	7		1	6		5	2		
Permitted Phases						7			6				
Actuated Green, G (s)	18.1	18.1		37.3	37.3	37.3	10.4	43.4	43.4	26.2	58.6		
Effective Green, g (s)	18.1	18.1		37.3	37.3	37.3	10.4	43.4	43.4	26.2	58.6		
Actuated g/C Ratio	0.12	0.12		0.25	0.25	0.25	0.07	0.29	0.29	0.17	0.39		
Clearance Time (s)	6.6	6.6		6.6	6.6	6.6	6.2	6.2	6.2	5.6	6.2		
Vehicle Extension (s)	2.0	2.0		3.0	3.0	3.0	2.0	5.0	5.0	3.0	5.0		
Lane Grp Cap (vph)	217	219		418	433	397	125	544	462	605	722		
v/s Ratio Prot	0.06	c0.09		0.18	0.18		0.04	c0.16		c0.16	0.15		
v/s Ratio Perm						c0.18			0.10				
v/c Ratio	0.47	0.77		0.72	0.71	0.73	0.61	0.56	0.34	0.89	0.40		
Uniform Delay, d1	61.5	63.9		51.5	51.4	51.8	67.8	45.2	42.0	60.5	32.9		
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Incremental Delay, d2	0.6	14.2		5.8	5.2	6.9	5.6	4.1	2.0	14.9	1.6		
Delay (s)	62.1	78.1		57.3	56.6	58.6	73.4	49.3	44.1	75.4	34.6		
Level of Service	E	E		E	E	E	E	D	D	E	C		
Approach Delay (s)		72.2			57.8			48.2			61.1		
Approach LOS		E			E			D			E		
Intersection Summary													
HCM 2000 Control Delay			57.2									HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio			0.71										
Actuated Cycle Length (s)			150.0									Sum of lost time (s)	25.6
Intersection Capacity Utilization			81.8%									ICU Level of Service	D
Analysis Period (min)			15										
c Critical Lane Group													

Intersection						
Int Delay, s/veh	44.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	96	149	735	57	102	629
Future Vol, veh/h	96	149	735	57	102	629
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	99	154	758	59	105	648

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1646	788	0	0	817
Stage 1	788	-	-	-	-
Stage 2	858	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	109	391	-	-	811
Stage 1	448	-	-	-	-
Stage 2	415	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 87	391	-	-	811
Mov Cap-2 Maneuver	~ 87	-	-	-	-
Stage 1	448	-	-	-	-
Stage 2	331	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	317.4	0	1.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	165	811
HCM Lane V/C Ratio	-	-	1.531	0.13
HCM Control Delay (s)	-	-	317.4	10.1
HCM Lane LOS	-	-	F	B
HCM 95th %tile Q(veh)	-	-	16.6	0.4

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

3: Main St & Bell Pkwy
HCM 6th TWSC

2029 Opening Year PM Peak - Weekend

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	35	11	791	736	2
Future Vol, veh/h	12	35	11	791	736	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	155	-	-	235
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	38	12	851	791	2

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1666	791	793	0	-	0
Stage 1	791	-	-	-	-	-
Stage 2	875	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	106	390	828	-	-	-
Stage 1	447	-	-	-	-	-
Stage 2	408	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	105	390	828	-	-	-
Mov Cap-2 Maneuver	105	-	-	-	-	-
Stage 1	441	-	-	-	-	-
Stage 2	408	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	25	0.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	828	-	230	-	-
HCM Lane V/C Ratio	0.014	-	0.22	-	-
HCM Control Delay (s)	9.4	-	25	-	-
HCM Lane LOS	A	-	D	-	-
HCM 95th %tile Q(veh)	0	-	0.8	-	-

4: Main St & Brooke Blvd
HCM 6th TWSC

2029 Opening Year PM Peak - Weekend

Intersection						
Int Delay, s/veh	1.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		T		T	T
Traffic Vol, veh/h	28	7	800	7	2	781
Future Vol, veh/h	28	7	800	7	2	781
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	8	889	8	2	868
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1765	893	0	0	897	0
Stage 1	893	-	-	-	-	-
Stage 2	872	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	92	340	-	-	757	-
Stage 1	400	-	-	-	-	-
Stage 2	409	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	92	340	-	-	757	-
Mov Cap-2 Maneuver	92	-	-	-	-	-
Stage 1	400	-	-	-	-	-
Stage 2	408	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	56	0	0			
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	108	757	-	
HCM Lane V/C Ratio	-	-	0.36	0.003	-	
HCM Control Delay (s)	-	-	56	9.8	-	
HCM Lane LOS	-	-	F	A	-	
HCM 95th %tile Q(veh)	-	-	1.4	0	-	

Intersection						
Int Delay, s/veh	1.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	27	25	788	28	26	808
Future Vol, veh/h	27	25	788	28	26	808
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	130	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	27	857	30	28	878

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1791	857	0	0	887	0
Stage 1	857	-	-	-	-	-
Stage 2	934	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	89	357	-	-	763	-
Stage 1	416	-	-	-	-	-
Stage 2	382	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	86	357	-	-	763	-
Mov Cap-2 Maneuver	86	-	-	-	-	-
Stage 1	416	-	-	-	-	-
Stage 2	368	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	42.5	0	0.3
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	86	357	763
HCM Lane V/C Ratio	-	-	0.341	0.076	0.037
HCM Control Delay (s)	-	-	67.2	15.9	9.9
HCM Lane LOS	-	-	F	C	A
HCM 95th %tile Q(veh)	-	-	1.3	0.2	0.1

6: Main St & Ridgewalk Pkwy
Queues

2029 Opening Year PM Peak - Weekend



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	608	253	257	273	289	612
v/c Ratio	0.64	0.41	0.53	0.27	0.46	0.66
Control Delay	28.4	6.0	35.7	9.4	22.2	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.4	6.0	35.7	9.4	22.2	5.6
Queue Length 50th (ft)	119	0	55	59	100	0
Queue Length 95th (ft)	227	58	111	106	186	65
Internal Link Dist (ft)	1438			698	828	
Turn Bay Length (ft)			200			505
Base Capacity (vph)	1190	715	719	1523	1041	1141
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	0.51	0.35	0.36	0.18	0.28	0.54
Intersection Summary						

6: Main St & Ridgewalk Pkwy
 HCM Signalized Intersection Capacity Analysis

2029 Opening Year PM Peak - Weekend



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	565	235	239	254	269	569
Future Volume (vph)	565	235	239	254	269	569
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3467	1599	3467	1863	1881	1568
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3467	1599	3467	1863	1881	1568
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	608	253	257	273	289	612
RTOR Reduction (vph)	0	184	0	0	0	404
Lane Group Flow (vph)	608	69	257	273	289	208
Heavy Vehicles (%)	1%	1%	1%	2%	1%	3%
Turn Type	Prot	Prot	Prot	NA	NA	Prot
Protected Phases	7	4	1	6	2	2
Permitted Phases						
Actuated Green, G (s)	19.8	19.8	10.1	40.1	24.5	24.5
Effective Green, g (s)	19.8	19.8	10.1	40.1	24.5	24.5
Actuated g/C Ratio	0.27	0.27	0.14	0.56	0.34	0.34
Clearance Time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Vehicle Extension (s)	5.1	5.1	2.1	5.1	5.1	5.1
Lane Grp Cap (vph)	950	438	484	1034	638	532
v/s Ratio Prot	c0.18	0.04	c0.07	0.15	c0.15	0.13
v/s Ratio Perm						
v/c Ratio	0.64	0.16	0.53	0.26	0.45	0.39
Uniform Delay, d1	23.1	19.9	28.8	8.4	18.6	18.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.1	0.4	0.6	0.3	1.1	1.0
Delay (s)	25.1	20.2	29.5	8.7	19.7	19.2
Level of Service	C	C	C	A	B	B
Approach Delay (s)	23.7			18.8	19.4	
Approach LOS	C			B	B	

Intersection Summary			
HCM 2000 Control Delay	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	72.2	Sum of lost time (s)	17.8
Intersection Capacity Utilization	51.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

1: Main St & Publix Dwy/E Cherokee Dr
Queues

2049 Horizon Year AM Peak - Weekday


























Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	12	45	406	405	544	13	219	427	917	662
v/c Ratio	0.10	0.35	0.88	0.87	0.66	0.15	0.50	0.61	0.90	0.67
Control Delay	59.0	48.8	66.6	65.6	7.4	63.2	49.3	7.9	56.1	28.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.0	48.8	66.6	65.6	7.4	63.2	49.3	7.9	56.1	28.3
Queue Length 50th (ft)	10	24	336	335	0	11	172	0	372	383
Queue Length 95th (ft)	31	64	#557	#553	99	33	249	92	#490	630
Internal Link Dist (ft)		642		1304			1959			2488
Turn Bay Length (ft)	25		575		265	230		305	375	
Base Capacity (vph)	155	169	465	468	830	191	457	719	1043	984
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	0.08	0.27	0.87	0.87	0.66	0.07	0.48	0.59	0.88	0.67

Intersection Summary

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

1: Main St & Publix Dwy/E Cherokee Dr
 HCM Signalized Intersection Capacity Analysis

2049 Horizon Year AM Peak - Weekday

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	27	15	726	28	506	12	204	397	853	614	2
Future Volume (vph)	11	27	15	726	28	506	12	204	397	853	614	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.8	3.8		3.8	3.8	3.8	6.2	6.2	6.2	5.6	6.2	
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00	1.00	1.00	1.00	0.97	1.00	
Frt	1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1799		1715	1725	1599	1805	1810	1583	3467	1826	
Flt Permitted	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1799		1715	1725	1599	1805	1810	1583	3467	1826	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	12	29	16	781	30	544	13	219	427	917	660	2
RTOR Reduction (vph)	0	15	0	0	0	398	0	0	327	0	0	0
Lane Group Flow (vph)	12	30	0	406	405	146	13	219	100	917	662	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	5%	2%	1%	4%	0%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases						7			6			
Actuated Green, G (s)	6.8	6.8		35.0	35.0	35.0	2.6	30.4	30.4	38.4	65.6	
Effective Green, g (s)	6.8	6.8		35.0	35.0	35.0	2.6	30.4	30.4	38.4	65.6	
Actuated g/C Ratio	0.05	0.05		0.27	0.27	0.27	0.02	0.23	0.23	0.30	0.50	
Clearance Time (s)	3.8	3.8		3.8	3.8	3.8	6.2	6.2	6.2	5.6	6.2	
Vehicle Extension (s)	2.0	2.0		3.0	3.0	3.0	2.0	5.0	5.0	3.0	5.0	
Lane Grp Cap (vph)	94	94		461	464	430	36	423	370	1024	921	
v/s Ratio Prot	0.01	c0.02		c0.24	0.23		0.01	0.12		c0.26	c0.36	
v/s Ratio Perm						0.09			0.06			
v/c Ratio	0.13	0.32		0.88	0.87	0.34	0.36	0.52	0.27	0.90	0.72	
Uniform Delay, d1	58.8	59.4		45.5	45.4	38.2	62.9	43.4	40.7	43.9	25.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.2	0.7		17.6	16.4	0.5	2.2	2.1	0.8	10.2	4.8	
Delay (s)	59.0	60.1		63.1	61.8	38.7	65.1	45.5	41.5	54.1	29.8	
Level of Service	E	E		E	E	D	E	D	D	D	C	
Approach Delay (s)		59.8			52.9			43.3			43.9	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay				47.4	HCM 2000 Level of Service				D			
HCM 2000 Volume to Capacity ratio				0.83								
Actuated Cycle Length (s)				130.0	Sum of lost time (s)				20.0			
Intersection Capacity Utilization				78.6%	ICU Level of Service				D			
Analysis Period (min)				15								
c Critical Lane Group												

2: Main St & South Cherokee Dwy
 HCM 6th TWSC

2049 Horizon Year AM Peak - Weekday

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	580	1	2	1296
Future Vol, veh/h	0	1	580	1	2	1296
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	604	1	2	1350

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1959	605	0	0	605	0
Stage 1	605	-	-	-	-	-
Stage 2	1354	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	70	498	-	-	973	-
Stage 1	545	-	-	-	-	-
Stage 2	240	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	69	498	-	-	973	-
Mov Cap-2 Maneuver	69	-	-	-	-	-
Stage 1	545	-	-	-	-	-
Stage 2	238	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	498	973
HCM Lane V/C Ratio	-	-	0.002	0.002
HCM Control Delay (s)	-	-	12.2	8.7
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

3: Main St & Bell Pkwy/Exit Only Dwy
 HCM 6th TWSC

2049 Horizon Year AM Peak - Weekday

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘				↕		↘	↑			↑	↗
Traffic Vol, veh/h	3	0	41	0	0	0	129	598	0	0	1160	94
Future Vol, veh/h	3	0	41	0	0	0	129	598	0	0	1160	94
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	92	94	92	92	92	94	94	92	92	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	0	44	0	0	0	137	636	0	0	1234	100

Major/Minor	Minor2	Minor1		Major1			Major2					
Conflicting Flow All	2144	-	1234	2216	2244	636	1334	0	-	-	-	0
Stage 1	1234	-	-	910	910	-	-	-	-	-	-	-
Stage 2	910	-	-	1306	1334	-	-	-	-	-	-	-
Critical Hdwy	7.12	-	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	35	0	215	31	42	478	517	-	0	0	-	-
Stage 1	216	0	-	329	353	-	-	-	0	0	-	-
Stage 2	329	0	-	197	223	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	28	-	215	20	31	478	517	-	-	-	-	-
Mov Cap-2 Maneuver	28	-	-	20	31	-	-	-	-	-	-	-
Stage 1	159	-	-	242	259	-	-	-	-	-	-	-
Stage 2	242	-	-	157	223	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	40.2	0	2.6	0
HCM LOS	E	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1WBLn1	SBT	SBR
Capacity (veh/h)	517	-	148	-	-
HCM Lane V/C Ratio	0.265	-	0.316	-	-
HCM Control Delay (s)	14.5	-	40.2	0	-
HCM Lane LOS	B	-	E	A	-
HCM 95th %tile Q(veh)	1.1	-	1.3	-	-

4: Main St & Brooke Blvd
 HCM 6th TWSC

2049 Horizon Year AM Peak - Weekday

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↔		↔	↔
Traffic Vol, veh/h	0	4	765	0	2	1226
Future Vol, veh/h	0	4	765	0	2	1226
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	823	0	2	1318

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2145	823	0	0	823	0
Stage 1	823	-	-	-	-	-
Stage 2	1322	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	53	373	-	-	807	-
Stage 1	431	-	-	-	-	-
Stage 2	249	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	53	373	-	-	807	-
Mov Cap-2 Maneuver	53	-	-	-	-	-
Stage 1	431	-	-	-	-	-
Stage 2	249	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	373	807
HCM Lane V/C Ratio	-	-	0.012	0.003
HCM Control Delay (s)	-	-	14.8	9.5
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Intersection						
Int Delay, s/veh	2.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	14	750	18	7	1160
Future Vol, veh/h	31	14	750	18	7	1160
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	130	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	15	824	20	8	1275

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2115	824	0	0	844	0
Stage 1	824	-	-	-	-	-
Stage 2	1291	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	56	373	-	-	792	-
Stage 1	431	-	-	-	-	-
Stage 2	258	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	55	373	-	-	792	-
Mov Cap-2 Maneuver	55	-	-	-	-	-
Stage 1	431	-	-	-	-	-
Stage 2	255	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	104.4	0	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	55	373	792
HCM Lane V/C Ratio	-	-	0.619	0.041	0.01
HCM Control Delay (s)	-	-	144.7	15.1	9.6
HCM Lane LOS	-	-	F	C	A
HCM 95th %tile Q(veh)	-	-	2.5	0.1	0

6: Main St & Ridgewalk Pkwy
Queues

2049 Horizon Year AM Peak - Weekday



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	695	463	104	323	721	741
v/c Ratio	0.78	0.69	0.40	0.28	0.77	0.65
Control Delay	40.0	15.7	48.2	10.6	29.5	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.0	15.7	48.2	10.6	29.5	4.5
Queue Length 50th (ft)	205	71	32	96	390	0
Queue Length 95th (ft)	236	135	52	126	483	28
Internal Link Dist (ft)	1438			698	828	
Turn Bay Length (ft)			200			505
Base Capacity (vph)	949	687	402	1146	940	1135
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	0.73	0.67	0.26	0.28	0.77	0.65
Intersection Summary						

6: Main St & Ridgewalk Pkwy
 HCM Signalized Intersection Capacity Analysis

2049 Horizon Year AM Peak - Weekday



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	563	375	84	262	584	600
Future Volume (vph)	563	375	84	262	584	600
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3273	1583	3502	1900	1900	1538
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3273	1583	3502	1900	1900	1538
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	695	463	104	323	721	741
RTOR Reduction (vph)	0	234	0	0	0	382
Lane Group Flow (vph)	695	229	104	323	721	359
Heavy Vehicles (%)	7%	2%	0%	0%	0%	5%
Turn Type	Prot	Prot	Prot	NA	NA	Prot
Protected Phases	7	4	1	6	2	2
Permitted Phases						
Actuated Green, G (s)	27.4	27.4	6.4	60.3	48.4	48.4
Effective Green, g (s)	27.4	27.4	6.4	60.3	48.4	48.4
Actuated g/C Ratio	0.27	0.27	0.06	0.60	0.48	0.48
Clearance Time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Vehicle Extension (s)	5.1	5.1	2.1	5.1	5.1	5.1
Lane Grp Cap (vph)	896	433	224	1145	919	744
v/s Ratio Prot	c0.21	0.14	c0.03	0.17	c0.38	0.23
v/s Ratio Perm						
v/c Ratio	0.78	0.53	0.46	0.28	0.78	0.48
Uniform Delay, d1	33.5	30.8	45.1	9.5	21.5	17.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.0	2.3	0.7	0.6	5.2	1.1
Delay (s)	38.5	33.1	45.8	10.1	26.6	18.4
Level of Service	D	C	D	B	C	B
Approach Delay (s)	36.3			18.8	22.5	
Approach LOS	D			B	C	

Intersection Summary			
HCM 2000 Control Delay	27.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	64.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

1: Main St & Publix Dwy/E Cherokee Dr
Queues

2049 Horizon Year PM Peak - Weekday



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	126	220	400	409	828	115	462	828	657	397
v/c Ratio	0.78	1.30	1.04	1.03	1.23	0.77	0.70	0.91	1.17	0.50
Control Delay	97.3	220.7	110.8	107.6	141.7	98.3	47.1	29.8	146.4	32.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	97.3	220.7	110.8	107.6	141.7	98.3	47.1	29.8	146.4	32.9
Queue Length 50th (ft)	123	~268	~514	~522	~716	111	362	310	~392	263
Queue Length 95th (ft)	#230	#445	#738	#748	#976	#199	486	#556	#518	358
Internal Link Dist (ft)		642		1304			1959			2488
Turn Bay Length (ft)	25		575		265	230		305	375	
Base Capacity (vph)	161	169	385	397	672	166	737	953	563	849
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	0.78	1.30	1.04	1.03	1.23	0.69	0.63	0.87	1.17	0.47

Intersection Summary

~ 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.

1: Main St & Publix Dwy/E Cherokee Dr
 HCM Signalized Intersection Capacity Analysis

2049 Horizon Year PM Peak - Weekday

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	122	162	51	606	178	803	112	448	803	637	365	20
Future Volume (vph)	122	162	51	606	178	803	112	448	803	637	365	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.6	6.6		6.6	6.6	6.6	6.2	6.2	6.2	5.6	6.2	
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00	1.00	1.00	1.00	0.97	1.00	
Frt	1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1818		1681	1738	1599	1805	1881	1599	3467	1850	
Flt Permitted	0.95	1.00		0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1818		1681	1738	1599	1805	1881	1599	3467	1850	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	126	167	53	625	184	828	115	462	828	657	376	21
RTOR Reduction (vph)	0	7	0	0	0	306	0	0	349	0	1	0
Lane Group Flow (vph)	126	213	0	400	409	522	115	462	479	657	396	0
Heavy Vehicles (%)	0%	1%	0%	2%	0%	1%	0%	1%	1%	1%	2%	0%
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	8	8		7	7		1	6		5	2	
Permitted Phases						7			6			
Actuated Green, G (s)	13.4	13.4		34.4	34.4	34.4	12.4	52.8	52.8	24.4	64.2	
Effective Green, g (s)	13.4	13.4		34.4	34.4	34.4	12.4	52.8	52.8	24.4	64.2	
Actuated g/C Ratio	0.09	0.09		0.23	0.23	0.23	0.08	0.35	0.35	0.16	0.43	
Clearance Time (s)	6.6	6.6		6.6	6.6	6.6	6.2	6.2	6.2	5.6	6.2	
Vehicle Extension (s)	2.0	2.0		3.0	3.0	3.0	2.0	5.0	5.0	3.0	5.0	
Lane Grp Cap (vph)	161	162		385	398	366	149	662	562	563	791	
v/s Ratio Prot	0.07	c0.12		0.24	0.24		0.06	0.25		c0.19	0.21	
v/s Ratio Perm						c0.33			c0.30			
v/c Ratio	0.78	1.31		1.04	1.03	1.43	0.77	0.70	0.85	1.17	0.50	
Uniform Delay, d1	66.9	68.3		57.8	57.8	57.8	67.4	41.7	45.0	62.8	31.2	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	20.0	177.8		56.3	52.4	207.1	19.9	6.0	15.1	93.2	2.3	
Delay (s)	86.9	246.1		114.1	110.2	264.9	87.3	47.8	60.1	156.0	33.5	
Level of Service	F	F		F	F	F	F	D	E	F	C	
Approach Delay (s)		188.1			189.4			58.3			109.8	
Approach LOS		F			F			E			F	
Intersection Summary												
HCM 2000 Control Delay	128.9			HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio	1.12											
Actuated Cycle Length (s)	150.0			Sum of lost time (s)				25.6				
Intersection Capacity Utilization	101.1%			ICU Level of Service				G				
Analysis Period (min)	15											
c Critical Lane Group												

2: Main St & South Cherokee Dwy
 HCM 6th TWSC

2049 Horizon Year PM Peak - Weekday

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	1	0	1395	3	3	1065
Future Vol, veh/h	1	0	1395	3	3	1065
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	0	1438	3	3	1098
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2544	1440	0	0	1441	0
Stage 1	1440	-	-	-	-	-
Stage 2	1104	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	30	163	-	-	471	-
Stage 1	218	-	-	-	-	-
Stage 2	317	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	30	163	-	-	471	-
Mov Cap-2 Maneuver	30	-	-	-	-	-
Stage 1	218	-	-	-	-	-
Stage 2	312	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	129.2	0	0			
HCM LOS	F					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	30	471		
HCM Lane V/C Ratio	-	-	0.034	0.007		
HCM Control Delay (s)	-	-	129.2	12.7		
HCM Lane LOS	-	-	F	B		
HCM 95th %tile Q(veh)	-	-	0.1	0		

3: Main St & Bell Pkwy/Exit Only Dwy
 HCM 6th TWSC

2049 Horizon Year PM Peak - Weekday

Intersection												
Int Delay, s/veh	202.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖				↕		↖	↗			↗	↖
Traffic Vol, veh/h	68	0	189	6	0	2	36	1291	1	0	1019	19
Future Vol, veh/h	68	0	189	6	0	2	36	1291	1	0	1019	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	92	93	92	92	92	93	93	92	92	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	73	0	203	7	0	2	39	1388	1	0	1096	20

Major/Minor	Minor2	Minor1		Major1			Major2					
Conflicting Flow All	2564	-	1096	2675	2583	1389	1116	0	0	-	-	0
Stage 1	1096	-	-	1467	1467	-	-	-	-	-	-	-
Stage 2	1468	-	-	1208	1116	-	-	-	-	-	-	-
Critical Hdwy	7.12	-	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	~ 18	0	259	15	25	175	626	-	-	0	-	-
Stage 1	259	0	-	159	192	-	-	-	-	0	-	-
Stage 2	159	0	-	224	283	-	-	-	-	0	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 17	-	259	~ 3	23	175	626	-	-	-	-	-
Mov Cap-2 Maneuver	~ 17	-	-	~ 3	23	-	-	-	-	-	-	-
Stage 1	243	-	-	149	180	-	-	-	-	-	-	-
Stage 2	147	-	-	48	283	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s \$ 2004		\$ 2143.9	0.3	0
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBT	SBR
Capacity (veh/h)	626	-	-	54	4	-
HCM Lane V/C Ratio	0.062	-	-	5.117	2.174	-
HCM Control Delay (s)	11.1	-	-	\$ 2004 2143.9	-	-
HCM Lane LOS	B	-	-	F	F	-
HCM 95th %tile Q(veh)	0.2	-	-	31.1	2.1	-

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

4: Main St & Brooke Blvd
HCM 6th TWSC

2049 Horizon Year PM Peak - Weekday

Intersection						
Int Delay, s/veh	4.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↔		↔	↔
Traffic Vol, veh/h	10	23	1335	44	40	1290
Future Vol, veh/h	10	23	1335	44	40	1290
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	26	1483	49	44	1433

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	3029	1508	0	0	1532	0
Stage 1	1508	-	-	-	-	-
Stage 2	1521	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	14	148	-	-	434	-
Stage 1	202	-	-	-	-	-
Stage 2	199	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	13	148	-	-	434	-
Mov Cap-2 Maneuver	13	-	-	-	-	-
Stage 1	202	-	-	-	-	-
Stage 2	179	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	323.3	0	0.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	36	434
HCM Lane V/C Ratio	-	-	1.019	0.102
HCM Control Delay (s)	-	-	323.3	14.2
HCM Lane LOS	-	-	F	B
HCM 95th %tile Q(veh)	-	-	3.8	0.3

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

5: Main St & Johnston Farm
 HCM 6th TWSC

2049 Horizon Year PM Peak - Weekday

Intersection						
Int Delay, s/veh	5.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	20	24	1364	45	29	1282
Future Vol, veh/h	20	24	1364	45	29	1282
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	130	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	26	1483	49	32	1393

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2940	1483	0	0	1532	0
Stage 1	1483	-	-	-	-	-
Stage 2	1457	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 16	154	-	-	434	-
Stage 1	208	-	-	-	-	-
Stage 2	214	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	~ 15	154	-	-	434	-
Mov Cap-2 Maneuver	~ 15	-	-	-	-	-
Stage 1	208	-	-	-	-	-
Stage 2	198	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	\$ 361	0	0.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	15	154	434
HCM Lane V/C Ratio	-	-	1.449	0.169	0.073
HCM Control Delay (s)	-	-	\$ 754.4	33.1	13.9
HCM Lane LOS	-	-	F	D	B
HCM 95th %tile Q(veh)	-	-	3.3	0.6	0.2

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

6: Main St & Ridgewalk Pkwy
Queues

2049 Horizon Year PM Peak - Weekday



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	1056	309	314	476	447	948
v/c Ratio	0.77	0.38	1.15	0.51	0.63	0.81
Control Delay	35.5	3.6	148.5	23.5	36.7	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.5	3.6	148.5	23.5	36.7	9.1
Queue Length 50th (ft)	358	0	~146	242	283	10
Queue Length 95th (ft)	401	50	#240	376	431	180
Internal Link Dist (ft)	1438			698	828	
Turn Bay Length (ft)			200			505
Base Capacity (vph)	1560	889	274	936	710	1169
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	0.68	0.35	1.15	0.51	0.63	0.81

Intersection Summary

~ 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.

6: Main St & Ridgewalk Pkwy
 HCM Signalized Intersection Capacity Analysis

2049 Horizon Year PM Peak - Weekday



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	982	287	292	443	416	882
Future Volume (vph)	982	287	292	443	416	882
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3467	1599	3467	1863	1881	1568
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3467	1599	3467	1863	1881	1568
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1056	309	314	476	447	948
RTOR Reduction (vph)	0	187	0	0	0	578
Lane Group Flow (vph)	1056	122	314	476	447	370
Heavy Vehicles (%)	1%	1%	1%	2%	1%	3%
Turn Type	Prot	Prot	Prot	NA	NA	Prot
Protected Phases	7	4	1	6	2	2
Permitted Phases						
Actuated Green, G (s)	47.4	47.4	9.5	60.3	45.3	45.3
Effective Green, g (s)	47.4	47.4	9.5	60.3	45.3	45.3
Actuated g/C Ratio	0.39	0.39	0.08	0.50	0.38	0.38
Clearance Time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Vehicle Extension (s)	5.1	5.1	2.1	5.1	5.1	5.1
Lane Grp Cap (vph)	1369	631	274	936	710	591
v/s Ratio Prot	c0.30	0.08	c0.09	0.26	c0.24	0.24
v/s Ratio Perm						
v/c Ratio	0.77	0.19	1.15	0.51	0.63	0.63
Uniform Delay, d1	31.6	23.8	55.2	19.9	30.5	30.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.3	0.3	99.7	2.0	2.5	3.0
Delay (s)	34.8	24.1	154.9	21.9	33.0	33.4
Level of Service	C	C	F	C	C	C
Approach Delay (s)	32.4			74.8	33.3	
Approach LOS	C			E	C	

Intersection Summary			
HCM 2000 Control Delay	42.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

1: Main St & Publix Dwy/E Cherokee Dr
Queues

2049 Horizon Year MD Peak - Weekend


























Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	12	42	342	345	544	23	380	738	917	558
v/c Ratio	0.08	0.26	1.04	1.04	0.73	0.20	0.82	0.77	0.82	0.53
Control Delay	43.7	37.0	101.2	101.8	9.7	50.5	34.7	8.7	39.9	17.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.7	37.0	101.2	101.8	9.7	50.5	34.7	8.7	39.9	17.8
Queue Length 50th (ft)	7	18	~253	~256	0	16	146	11	295	193
Queue Length 95th (ft)	25	51	#437	#438	102	m24	m190	m27	#430	400
Internal Link Dist (ft)		642		1304			1959			2488
Turn Bay Length (ft)	25		575		265	230		305	375	
Base Capacity (vph)	375	387	329	331	746	116	470	957	1121	1062
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	0.11	1.04	1.04	0.73	0.20	0.81	0.77	0.82	0.53

Intersection Summary

- ~ 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.

1: Main St & Publix Dwy/E Cherokee Dr
 HCM Signalized Intersection Capacity Analysis

2049 Horizon Year MD Peak - Weekend

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	11	27	12	611	28	506	21	353	686	853	517	2	
Future Volume (vph)	11	27	12	611	28	506	21	353	686	853	517	2	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	3.8	3.8		3.8	3.8	3.8	6.2	6.2	6.2	5.6	6.2		
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00	1.00	1.00	1.00	0.97	1.00		
Frt	1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00		
Flt Protected	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00		
Satd. Flow (prot)	1805	1812		1715	1726	1599	1805	1810	1583	3467	1826		
Flt Permitted	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00		
Satd. Flow (perm)	1805	1812		1715	1726	1599	1805	1810	1583	3467	1826		
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	
Adj. Flow (vph)	12	29	13	657	30	544	23	380	738	917	556	2	
RTOR Reduction (vph)	0	12	0	0	0	440	0	0	561	0	0	0	
Lane Group Flow (vph)	12	30	0	342	345	104	23	380	177	917	558	0	
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	5%	2%	1%	4%	0%	
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA		
Protected Phases	8	8		7	7		1	6		5	2		
Permitted Phases						7			6				
Actuated Green, G (s)	5.0	5.0		19.2	19.2	19.2	2.9	24.0	24.0	32.4	52.9		
Effective Green, g (s)	5.0	5.0		19.2	19.2	19.2	2.9	24.0	24.0	32.4	52.9		
Actuated g/C Ratio	0.05	0.05		0.19	0.19	0.19	0.03	0.24	0.24	0.32	0.53		
Clearance Time (s)	3.8	3.8		3.8	3.8	3.8	6.2	6.2	6.2	5.6	6.2		
Vehicle Extension (s)	2.0	2.0		3.0	3.0	3.0	2.0	5.0	5.0	3.0	5.0		
Lane Grp Cap (vph)	90	90		329	331	307	52	434	379	1123	965		
v/s Ratio Prot	0.01	c0.02		0.20	c0.20		0.01	c0.21		c0.26	0.31		
v/s Ratio Perm						0.07			0.11				
v/c Ratio	0.13	0.33		1.04	1.04	0.34	0.44	0.88	0.47	0.82	0.58		
Uniform Delay, d1	45.4	45.9		40.4	40.4	34.9	47.8	36.6	32.5	31.1	16.0		
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.08	0.65	1.62	1.00	1.00		
Incremental Delay, d2	0.2	0.8		60.3	60.9	0.7	1.5	13.7	1.3	4.7	2.5		
Delay (s)	45.7	46.7		100.7	101.3	35.6	53.1	37.4	54.0	35.8	18.5		
Level of Service	D	D		F	F	D	D	D	D	D	B		
Approach Delay (s)		46.4			72.1			48.5			29.2		
Approach LOS		D			E			D			C		
Intersection Summary													
HCM 2000 Control Delay			48.6									HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			0.86										
Actuated Cycle Length (s)			100.0									Sum of lost time (s)	20.0
Intersection Capacity Utilization			86.6%									ICU Level of Service	E
Analysis Period (min)			15										
c Critical Lane Group													

2: Main St & South Cherokee Dwy
 HCM 6th TWSC

2049 Horizon Year MD Peak - Weekend

Intersection						
Int Delay, s/veh	2.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	20	1034	104	113	992
Future Vol, veh/h	11	20	1034	104	113	992
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	21	1077	108	118	1033

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2400	1131	0	0	1185
Stage 1	1131	-	-	-	-
Stage 2	1269	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	37	248	-	-	589
Stage 1	308	-	-	-	-
Stage 2	264	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	20	248	-	-	589
Mov Cap-2 Maneuver	20	-	-	-	-
Stage 1	308	-	-	-	-
Stage 2	140	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	168.1	0	1.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	49	589
HCM Lane V/C Ratio	-	-	0.659	0.2
HCM Control Delay (s)	-	-	168.1	12.6
HCM Lane LOS	-	-	F	B
HCM 95th %tile Q(veh)	-	-	2.6	0.7

3: Main St & Bell Pkwy
HCM 6th TWSC

2049 Horizon Year MD Peak - Weekend

Intersection						
Int Delay, s/veh	2.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	↔
Traffic Vol, veh/h	17	26	31	1136	999	13
Future Vol, veh/h	17	26	31	1136	999	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	155	-	-	235
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	28	33	1209	1063	14

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	2338	1063	1077	0	-	0
Stage 1	1063	-	-	-	-	-
Stage 2	1275	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	40	271	647	-	-	-
Stage 1	332	-	-	-	-	-
Stage 2	263	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	38	271	647	-	-	-
Mov Cap-2 Maneuver	38	-	-	-	-	-
Stage 1	315	-	-	-	-	-
Stage 2	263	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	100.2	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	647	-	79	-	-
HCM Lane V/C Ratio	0.051	-	0.579	-	-
HCM Control Delay (s)	10.9	-	100.2	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.2	-	2.6	-	-

4: Main St & Brooke Blvd
HCM 6th TWSC

2049 Horizon Year MD Peak - Weekend

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	13	1173	20	13	1016
Future Vol, veh/h	4	13	1173	20	13	1016
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	13	1209	21	13	1047

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2293	1220	0	0	1230
Stage 1	1220	-	-	-	-
Stage 2	1073	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	43	220	-	-	567
Stage 1	279	-	-	-	-
Stage 2	328	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	42	220	-	-	567
Mov Cap-2 Maneuver	42	-	-	-	-
Stage 1	279	-	-	-	-
Stage 2	320	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	43.8	0	0.1
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	110	567
HCM Lane V/C Ratio	-	-	0.159	0.024
HCM Control Delay (s)	-	-	43.8	11.5
HCM Lane LOS	-	-	E	B
HCM 95th %tile Q(veh)	-	-	0.5	0.1

Intersection						
Int Delay, s/veh	2.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	29	27	1170	35	14	1003
Future Vol, veh/h	29	27	1170	35	14	1003
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	130	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	28	1206	36	14	1034

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2268	1206	0	0	1242
Stage 1	1206	-	-	-	-
Stage 2	1062	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	45	224	-	-	561
Stage 1	283	-	-	-	-
Stage 2	332	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	44	224	-	-	561
Mov Cap-2 Maneuver	44	-	-	-	-
Stage 1	283	-	-	-	-
Stage 2	324	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	108.9	0	0.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	44	224	561
HCM Lane V/C Ratio	-	-	0.679	0.124	0.026
HCM Control Delay (s)	-	-	188.5	23.3	11.6
HCM Lane LOS	-	-	F	C	B
HCM 95th %tile Q(veh)	-	-	2.6	0.4	0.1

6: Main St & Ridgewalk Pkwy
Queues

2049 Horizon Year MD Peak - Weekend



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	1023	463	104	479	635	651
v/c Ratio	1.00	0.63	0.40	0.45	0.73	0.62
Control Delay	63.4	12.1	48.2	13.9	22.1	4.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	63.4	12.1	48.2	13.9	22.1	4.4
Queue Length 50th (ft)	~377	55	32	157	225	24
Queue Length 95th (ft)	#419	113	52	196	m279	m25
Internal Link Dist (ft)	1438			698	828	
Turn Bay Length (ft)			200			505
Base Capacity (vph)	1027	737	402	1115	864	1054
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.00	0.63	0.26	0.43	0.73	0.62

Intersection Summary

~ 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.

6: Main St & Ridgewalk Pkwy
 HCM Signalized Intersection Capacity Analysis

2049 Horizon Year MD Peak - Weekend



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	829	375	84	388	514	527
Future Volume (vph)	829	375	84	388	514	527
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3273	1583	3502	1900	1900	1538
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3273	1583	3502	1900	1900	1538
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	1023	463	104	479	635	651
RTOR Reduction (vph)	0	241	0	0	0	362
Lane Group Flow (vph)	1023	222	104	479	635	289
Heavy Vehicles (%)	7%	2%	0%	0%	0%	5%
Turn Type	Prot	Prot	Prot	NA	NA	Prot
Protected Phases	7	4	1	6	2	2
Permitted Phases						
Actuated Green, G (s)	31.4	31.4	6.4	56.3	44.4	44.4
Effective Green, g (s)	31.4	31.4	6.4	56.3	44.4	44.4
Actuated g/C Ratio	0.31	0.31	0.06	0.56	0.44	0.44
Clearance Time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Vehicle Extension (s)	5.1	5.1	2.1	5.1	5.1	5.1
Lane Grp Cap (vph)	1027	497	224	1069	843	682
v/s Ratio Prot	c0.31	0.14	0.03	c0.25	c0.33	0.19
v/s Ratio Perm						
v/c Ratio	1.00	0.45	0.46	0.45	0.75	0.42
Uniform Delay, d1	34.2	27.4	45.1	12.8	23.2	19.0
Progression Factor	1.00	1.00	1.00	1.00	0.75	1.33
Incremental Delay, d2	27.0	1.4	0.7	1.4	3.8	0.7
Delay (s)	61.3	28.8	45.8	14.1	21.3	26.0
Level of Service	E	C	D	B	C	C
Approach Delay (s)	51.1			19.8	23.7	
Approach LOS	D			B	C	

Intersection Summary			
HCM 2000 Control Delay	35.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	126	214	366	373	828	93	372	668	657	353
v/c Ratio	0.78	1.27	0.76	0.75	1.06	0.68	0.67	0.79	1.17	0.51
Control Delay	97.3	208.5	60.8	59.7	72.2	91.4	51.8	15.6	146.4	37.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	97.3	208.5	60.8	59.7	72.2	91.4	51.8	15.6	146.4	37.5
Queue Length 50th (ft)	123	~257	343	348	~550	90	323	118	~392	266
Queue Length 95th (ft)	#230	#432	#653	#657	#880	152	377	250	#518	314
Internal Link Dist (ft)		642		1304			1959			2488
Turn Bay Length (ft)	25		575		265	230		305	375	
Base Capacity (vph)	161	169	483	500	781	166	737	953	563	849
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	0.78	1.27	0.76	0.75	1.06	0.56	0.50	0.70	1.17	0.42

Intersection Summary

~ 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.

1: Main St & Publix Dwy/E Cherokee Dr
 HCM Signalized Intersection Capacity Analysis

2049 Horizon Year PM Peak - Weekend

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	122	162	46	538	178	803	90	361	648	637	322	20	
Future Volume (vph)	122	162	46	538	178	803	90	361	648	637	322	20	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	6.6	6.6		6.6	6.6	6.6	6.2	6.2	6.2	5.6	6.2		
Lane Util. Factor	1.00	1.00		0.95	0.95	1.00	1.00	1.00	1.00	0.97	1.00		
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		
Flt Protected	0.95	1.00		0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00		
Satd. Flow (prot)	1805	1823		1681	1743	1599	1805	1881	1599	3467	1848		
Flt Permitted	0.95	1.00		0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00		
Satd. Flow (perm)	1805	1823		1681	1743	1599	1805	1881	1599	3467	1848		
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	
Adj. Flow (vph)	126	167	47	555	184	828	93	372	668	657	332	21	
RTOR Reduction (vph)	0	6	0	0	0	322	0	0	380	0	2	0	
Lane Group Flow (vph)	126	208	0	366	373	506	93	372	288	657	351	0	
Heavy Vehicles (%)	0%	1%	0%	2%	0%	1%	0%	1%	1%	1%	2%	0%	
Turn Type	Split	NA		Split	NA	Perm	Prot	NA	Perm	Prot	NA		
Protected Phases	8	8		7	7		1	6		5	2		
Permitted Phases						7			6				
Actuated Green, G (s)	13.4	13.4		43.1	43.1	43.1	11.4	44.1	44.1	24.4	56.5		
Effective Green, g (s)	13.4	13.4		43.1	43.1	43.1	11.4	44.1	44.1	24.4	56.5		
Actuated g/C Ratio	0.09	0.09		0.29	0.29	0.29	0.08	0.29	0.29	0.16	0.38		
Clearance Time (s)	6.6	6.6		6.6	6.6	6.6	6.2	6.2	6.2	5.6	6.2		
Vehicle Extension (s)	2.0	2.0		3.0	3.0	3.0	2.0	5.0	5.0	3.0	5.0		
Lane Grp Cap (vph)	161	162		483	500	459	137	553	470	563	696		
v/s Ratio Prot	0.07	c0.11		0.22	0.21		0.05	c0.20		c0.19	0.19		
v/s Ratio Perm						c0.32			0.18				
v/c Ratio	0.78	1.28		0.76	0.75	1.10	0.68	0.67	0.61	1.17	0.50		
Uniform Delay, d1	66.9	68.3		48.7	48.5	53.4	67.5	46.6	45.6	62.8	36.0		
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Incremental Delay, d2	20.0	165.5		6.7	6.0	72.7	10.0	6.4	5.9	93.2	2.6		
Delay (s)	86.9	233.8		55.4	54.5	126.2	77.5	53.0	51.5	156.0	38.6		
Level of Service	F	F		E	D	F	E	D	D	F	D		
Approach Delay (s)		179.3			92.6			54.1			114.9		
Approach LOS		F			F			D			F		
Intersection Summary													
HCM 2000 Control Delay			94.7									HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio			0.99										
Actuated Cycle Length (s)			150.0									Sum of lost time (s)	25.6
Intersection Capacity Utilization			96.2%									ICU Level of Service	F
Analysis Period (min)			15										
c	Critical Lane Group												

2: Main St & South Cherokee Dwy
 HCM 6th TWSC

2049 Horizon Year PM Peak - Weekend

Intersection						
Int Delay, s/veh	87.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	96	149	897	57	102	767
Future Vol, veh/h	96	149	897	57	102	767
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	99	154	925	59	105	791

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1956	955	0	0	984
Stage 1	955	-	-	-	-
Stage 2	1001	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	~ 70	313	-	-	702
Stage 1	374	-	-	-	-
Stage 2	355	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 51	313	-	-	702
Mov Cap-2 Maneuver	~ 51	-	-	-	-
Stage 1	374	-	-	-	-
Stage 2	260	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s\$	736.8	0	1.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	104	702
HCM Lane V/C Ratio	-	-	2.429	0.15
HCM Control Delay (s)	-	-	\$ 736.8	11
HCM Lane LOS	-	-	F	B
HCM 95th %tile Q(veh)	-	-	22.7	0.5

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

3: Main St & Bell Pkwy
HCM 6th TWSC

2049 Horizon Year PM Peak - Weekend

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	35	11	965	898	2
Future Vol, veh/h	12	35	11	965	898	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	155	-	-	235
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	38	12	1038	966	2

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	2028	966	968	0	-	0
Stage 1	966	-	-	-	-	-
Stage 2	1062	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	63	309	712	-	-	-
Stage 1	369	-	-	-	-	-
Stage 2	332	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	62	309	712	-	-	-
Mov Cap-2 Maneuver	62	-	-	-	-	-
Stage 1	363	-	-	-	-	-
Stage 2	332	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	39.7	0.1	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	712	-	153	-	-
HCM Lane V/C Ratio	0.017	-	0.33	-	-
HCM Control Delay (s)	10.1	-	39.7	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0.1	-	1.3	-	-

4: Main St & Brooke Blvd
HCM 6th TWSC

2049 Horizon Year PM Peak - Weekend

Intersection						
Int Delay, s/veh	3.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		T		T	T
Traffic Vol, veh/h	34	9	976	9	2	953
Future Vol, veh/h	34	9	976	9	2	953
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	10	1084	10	2	1059

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2152	1089	0	0	1094
Stage 1	1089	-	-	-	-
Stage 2	1063	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	53	262	-	-	638
Stage 1	323	-	-	-	-
Stage 2	332	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	53	262	-	-	638
Mov Cap-2 Maneuver	53	-	-	-	-
Stage 1	323	-	-	-	-
Stage 2	331	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	153	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	64	638
HCM Lane V/C Ratio	-	-	0.747	0.003
HCM Control Delay (s)	-	-	153	10.7
HCM Lane LOS	-	-	F	B
HCM 95th %tile Q(veh)	-	-	3.3	0

5: Main St & Johnston Farm
 HCM 6th TWSC

2049 Horizon Year PM Peak - Weekend

Intersection						
Int Delay, s/veh	2.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	27	25	962	28	26	986
Future Vol, veh/h	27	25	962	28	26	986
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	130	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	27	1046	30	28	1072

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2174	1046	0	0	1076	0
Stage 1	1046	-	-	-	-	-
Stage 2	1128	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	51	277	-	-	648	-
Stage 1	338	-	-	-	-	-
Stage 2	309	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	49	277	-	-	648	-
Mov Cap-2 Maneuver	49	-	-	-	-	-
Stage 1	338	-	-	-	-	-
Stage 2	296	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	90	0	0.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT	
Capacity (veh/h)	-	-	49	277	648	-
HCM Lane V/C Ratio	-	-	0.599	0.098	0.044	-
HCM Control Delay (s)	-	-	155.4	19.4	10.8	-
HCM Lane LOS	-	-	F	C	B	-
HCM 95th %tile Q(veh)	-	-	2.3	0.3	0.1	-

6: Main St & Ridgewalk Pkwy
Queues

2049 Horizon Year PM Peak - Weekend



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	741	309	314	333	353	746
v/c Ratio	0.77	0.46	0.64	0.31	0.52	0.74
Control Delay	35.5	6.1	41.4	10.0	24.0	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.5	6.1	41.4	10.0	24.0	7.3
Queue Length 50th (ft)	184	0	82	85	145	14
Queue Length 95th (ft)	#310	63	135	131	231	112
Internal Link Dist (ft)	1438			698	828	
Turn Bay Length (ft)			200			505
Base Capacity (vph)	1039	695	628	1365	909	1122
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	0.71	0.44	0.50	0.24	0.39	0.66

Intersection Summary

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

6: Main St & Ridgewalk Pkwy
 HCM Signalized Intersection Capacity Analysis

2049 Horizon Year PM Peak - Weekend



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	689	287	292	310	328	694
Future Volume (vph)	689	287	292	310	328	694
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3467	1599	3467	1863	1881	1568
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3467	1599	3467	1863	1881	1568
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	741	309	314	333	353	746
RTOR Reduction (vph)	0	223	0	0	0	452
Lane Group Flow (vph)	741	86	314	333	353	294
Heavy Vehicles (%)	1%	1%	1%	2%	1%	3%
Turn Type	Prot	Prot	Prot	NA	NA	Prot
Protected Phases	7	4	1	6	2	2
Permitted Phases						
Actuated Green, G (s)	22.9	22.9	11.7	46.7	29.5	29.5
Effective Green, g (s)	22.9	22.9	11.7	46.7	29.5	29.5
Actuated g/C Ratio	0.28	0.28	0.14	0.57	0.36	0.36
Clearance Time (s)	6.0	6.0	5.5	6.3	6.3	6.3
Vehicle Extension (s)	5.1	5.1	2.1	5.1	5.1	5.1
Lane Grp Cap (vph)	969	447	495	1062	677	564
v/s Ratio Prot	c0.21	0.05	c0.09	0.18	0.19	c0.19
v/s Ratio Perm						
v/c Ratio	0.76	0.19	0.63	0.31	0.52	0.52
Uniform Delay, d1	27.0	22.5	33.1	9.2	20.6	20.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.3	0.5	2.0	0.4	1.4	1.7
Delay (s)	31.4	22.9	35.1	9.6	22.1	22.4
Level of Service	C	C	D	A	C	C
Approach Delay (s)	28.9			22.0	22.3	
Approach LOS	C			C	C	

Intersection Summary			
HCM 2000 Control Delay	24.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	81.9	Sum of lost time (s)	17.8
Intersection Capacity Utilization	61.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

APPENDIX E – BUILD CAPACITY ANALYSIS REPORTS

1: Main St & Publix Dwy/E Cherokee Dr
Queues

2029 Opening Year AM Peak - Weekday
OY 2029 Int 1 - Overlap DBRT.syn

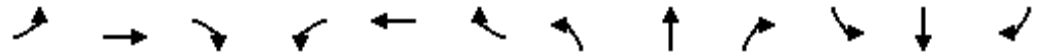


Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	10	37	333	332	446	11	180	349	752	543
v/c Ratio	0.09	0.30	0.75	0.74	0.26	0.13	0.35	0.19	0.84	0.54
Control Delay	58.9	48.2	54.6	54.1	0.9	62.6	43.6	1.8	54.8	24.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.9	48.2	54.6	54.1	0.9	62.6	43.6	1.8	54.8	24.9
Queue Length 50th (ft)	8	20	266	264	0	9	126	0	311	278
Queue Length 95th (ft)	27	56	386	384	14	30	212	25	360	481
Internal Link Dist (ft)		642		1304			1959			2488
Turn Bay Length (ft)	25		575		265	230		305	375	
Base Capacity (vph)	155	166	476	479	1801	191	543	1795	1010	1002
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	0.22	0.70	0.69	0.25	0.06	0.33	0.19	0.74	0.54

Intersection Summary

1: Main St & Publix Dwy/E Cherokee Dr
 HCM Signalized Intersection Capacity Analysis

2029 Opening Year AM Peak - Weekday
 OY 2029 Int 1 - Overlap DBRT.syn



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖↗	↖	↑	↖↗	↖↗	↗	↖
Traffic Volume (vph)	9	22	12	595	23	415	10	167	325	699	503	2
Future Volume (vph)	9	22	12	595	23	415	10	167	325	699	503	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.8	3.8		3.8	3.8	3.8	6.2	6.2	3.8	5.6	6.2	
Lane Util. Factor	1.00	1.00		0.95	0.95	0.88	1.00	1.00	0.88	0.97	1.00	
Frt	1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1800		1715	1725	2814	1805	1810	2787	3467	1826	
Flt Permitted	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1800		1715	1725	2814	1805	1810	2787	3467	1826	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	10	24	13	640	25	446	11	180	349	752	541	2
RTOR Reduction (vph)	0	12	0	0	0	202	0	0	170	0	0	0
Lane Group Flow (vph)	10	25	0	333	332	244	11	180	179	752	543	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	5%	2%	1%	4%	0%
Turn Type	Split	NA		Split	NA	pt+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	8	8		7	7	7.5	1	6	7	5	2	
Permitted Phases									6			
Actuated Green, G (s)	6.6	6.6		33.9	33.9	71.1	2.6	32.9	66.8	37.2	66.9	
Effective Green, g (s)	6.6	6.6		33.9	33.9	71.1	2.6	32.9	66.8	37.2	66.9	
Actuated g/C Ratio	0.05	0.05		0.26	0.26	0.55	0.02	0.25	0.51	0.29	0.51	
Clearance Time (s)	3.8	3.8		3.8	3.8		6.2	6.2	3.8	5.6	6.2	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	5.0	3.0	3.0	5.0	
Lane Grp Cap (vph)	91	91		447	449	1539	36	458	1513	992	939	
v/s Ratio Prot	0.01	c0.01		c0.19	0.19	0.09	0.01	c0.10	0.03	c0.22	c0.30	
v/s Ratio Perm									0.03			
v/c Ratio	0.11	0.27		0.74	0.74	0.16	0.31	0.39	0.12	0.76	0.58	
Uniform Delay, d1	58.9	59.4		44.1	44.0	14.6	62.8	40.3	16.4	42.3	21.8	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.2	0.6		6.6	6.3	0.0	1.8	1.2	0.0	3.4	2.6	
Delay (s)	59.1	60.0		50.7	50.3	14.7	64.6	41.4	16.4	45.7	24.4	
Level of Service	E	E		D	D	B	E	D	B	D	C	
Approach Delay (s)		59.8			36.1			25.7			36.7	
Approach LOS		E			D			C			D	
Intersection Summary												
HCM 2000 Control Delay			34.9		HCM 2000 Level of Service				C			
HCM 2000 Volume to Capacity ratio			0.67									
Actuated Cycle Length (s)			130.0		Sum of lost time (s)				20.0			
Intersection Capacity Utilization			69.4%		ICU Level of Service				C			
Analysis Period (min)			15									
c Critical Lane Group												

1: Main St & Publix Dwy/E Cherokee Dr
Queues

2029 Opening Year PM Peak - Weekday
OY 2029 Int 1 - Overlap DBRT.syn



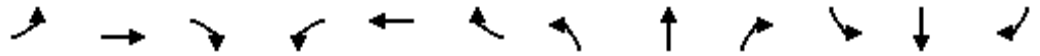
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	103	180	328	335	678	95	378	678	538	324
v/c Ratio	0.43	0.73	0.85	0.84	0.45	0.69	0.77	0.44	0.74	0.45
Control Delay	67.2	76.3	76.0	74.5	4.5	92.2	61.7	18.8	62.0	34.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.2	76.3	76.0	74.5	4.5	92.2	61.7	18.8	62.0	34.8
Queue Length 50th (ft)	92	161	331	337	28	92	348	197	255	235
Queue Length 95th (ft)	#175	#348	#571	#577	66	155	431	230	314	284
Internal Link Dist (ft)		642		1304			1959			2488
Turn Bay Length (ft)	25		575		265	230		305	375	
Base Capacity (vph)	239	248	386	398	1514	166	737	1547	725	850
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	0.43	0.73	0.85	0.84	0.45	0.57	0.51	0.44	0.74	0.38

Intersection Summary

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

1: Main St & Publix Dwy/E Cherokee Dr
 HCM Signalized Intersection Capacity Analysis

2029 Opening Year PM Peak - Weekday
 OY 2029 Int 1 - Overlap DBRT.syn



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖↗	↖	↑	↖↗	↖↗	↗	↖
Traffic Volume (vph)	100	133	42	497	146	658	92	367	658	522	299	16
Future Volume (vph)	100	133	42	497	146	658	92	367	658	522	299	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.6	6.6		6.6	6.6	6.6	6.2	6.2	6.6	5.6	6.2	
Lane Util. Factor	1.00	1.00		0.95	0.95	0.88	1.00	1.00	0.88	0.97	1.00	
Frt	1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1818		1681	1738	2814	1805	1881	2814	3467	1851	
Flt Permitted	0.95	1.00		0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1818		1681	1738	2814	1805	1881	2814	3467	1851	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	103	137	43	512	151	678	95	378	678	538	308	16
RTOR Reduction (vph)	0	7	0	0	0	294	0	0	53	0	1	0
Lane Group Flow (vph)	103	173	0	328	335	384	95	378	625	538	323	0
Heavy Vehicles (%)	0%	1%	0%	2%	0%	1%	0%	1%	1%	1%	2%	0%
Turn Type	Split	NA		Split	NA	pt+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	8	8		7	7	7.5	1	6	7	5	2	
Permitted Phases									6			
Actuated Green, G (s)	19.9	19.9		34.5	34.5	65.9	11.4	39.2	73.7	31.4	58.6	
Effective Green, g (s)	19.9	19.9		34.5	34.5	65.9	11.4	39.2	73.7	31.4	58.6	
Actuated g/C Ratio	0.13	0.13		0.23	0.23	0.44	0.08	0.26	0.49	0.21	0.39	
Clearance Time (s)	6.6	6.6		6.6	6.6		6.2	6.2	6.6	5.6	6.2	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	5.0	3.0	3.0	5.0	
Lane Grp Cap (vph)	239	241		386	399	1236	137	491	1506	725	723	
v/s Ratio Prot	0.06	c0.10		c0.20	0.19	0.14	0.05	c0.20	0.10	c0.16	0.17	
v/s Ratio Perm									0.13			
v/c Ratio	0.43	0.72		0.85	0.84	0.31	0.69	0.77	0.42	0.74	0.45	
Uniform Delay, d1	59.8	62.4		55.3	55.1	27.3	67.6	51.2	24.4	55.5	33.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	8.2		15.9	14.3	0.1	11.6	11.1	0.2	4.1	2.0	
Delay (s)	60.3	70.6		71.2	69.5	27.4	79.2	62.3	24.6	59.6	35.7	
Level of Service	E	E		E	E	C	E	E	C	E	D	
Approach Delay (s)		66.8			48.6			41.5			50.6	
Approach LOS		E			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			48.3		HCM 2000 Level of Service					D		
HCM 2000 Volume to Capacity ratio			0.78									
Actuated Cycle Length (s)			150.0		Sum of lost time (s)					25.6		
Intersection Capacity Utilization			82.2%		ICU Level of Service					E		
Analysis Period (min)			15									
c Critical Lane Group												



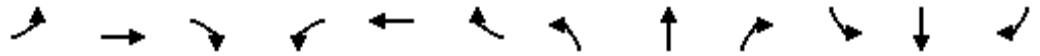
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	10	35	280	284	446	18	311	604	752	458
v/c Ratio	0.09	0.28	0.68	0.69	0.27	0.20	0.56	0.34	0.83	0.44
Control Delay	59.0	49.7	53.3	53.5	1.0	64.2	46.3	6.3	54.1	21.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.0	49.7	53.3	53.5	1.0	64.2	46.3	6.3	54.1	21.3
Queue Length 50th (ft)	8	20	221	224	0	15	235	53	306	211
Queue Length 95th (ft)	27	55	320	323	16	42	#381	97	371	390
Internal Link Dist (ft)		642		1304			1959			2488
Turn Bay Length (ft)	25		575		265	230		305	375	
Base Capacity (vph)	155	166	453	456	1764	191	553	1798	997	1037
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	0.21	0.62	0.62	0.25	0.09	0.56	0.34	0.75	0.44

Intersection Summary

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

1: Main St & Publix Dwy/E Cherokee Dr
 HCM Signalized Intersection Capacity Analysis

2029 Opening Year MD Peak - Weekend
 OY 2029 Int 1 - Overlap DBRT.syn



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↖	↗		↖	↗	↖↗	↖	↗	↖↗	↖↗	↗	↖	
Traffic Volume (vph)	9	22	10	501	23	415	17	289	562	699	424	2	
Future Volume (vph)	9	22	10	501	23	415	17	289	562	699	424	2	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	3.8	3.8		3.8	3.8	3.8	6.2	6.2	3.8	5.6	6.2		
Lane Util. Factor	1.00	1.00		0.95	0.95	0.88	1.00	1.00	0.88	0.97	1.00		
Frt	1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00		
Flt Protected	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00		
Satd. Flow (prot)	1805	1810		1715	1726	2814	1805	1810	2787	3467	1826		
Flt Permitted	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00		
Satd. Flow (perm)	1805	1810		1715	1726	2814	1805	1810	2787	3467	1826		
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	
Adj. Flow (vph)	10	24	11	539	25	446	18	311	604	752	456	2	
RTOR Reduction (vph)	0	10	0	0	0	210	0	0	175	0	0	0	
Lane Group Flow (vph)	10	25	0	280	284	236	18	311	429	752	458	0	
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	5%	2%	1%	4%	0%	
Turn Type	Split	NA		Split	NA	pt+ov	Prot	NA	pm+ov	Prot	NA		
Protected Phases	8	8		7	7	7.5	1	6	7	5	2		
Permitted Phases									6				
Actuated Green, G (s)	6.6	6.6		31.1	31.1	68.7	2.9	35.3	66.4	37.6	69.4		
Effective Green, g (s)	6.6	6.6		31.1	31.1	68.7	2.9	35.3	66.4	37.6	69.4		
Actuated g/C Ratio	0.05	0.05		0.24	0.24	0.53	0.02	0.27	0.51	0.29	0.53		
Clearance Time (s)	3.8	3.8		3.8	3.8		6.2	6.2	3.8	5.6	6.2		
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	5.0	3.0	3.0	5.0		
Lane Grp Cap (vph)	91	91		410	412	1487	40	491	1504	1002	974		
v/s Ratio Prot	0.01	c0.01		0.16	c0.16	0.08	0.01	c0.17	0.07	c0.22	0.25		
v/s Ratio Perm									0.09				
v/c Ratio	0.11	0.27		0.68	0.69	0.16	0.45	0.63	0.29	0.75	0.47		
Uniform Delay, d1	58.9	59.4		45.0	45.0	15.8	62.8	41.7	18.2	41.9	18.9		
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Incremental Delay, d2	0.2	0.6		4.7	4.8	0.1	2.9	3.7	0.1	3.2	1.6		
Delay (s)	59.1	60.0		49.6	49.8	15.8	65.7	45.3	18.3	45.1	20.5		
Level of Service	E	E		D	D	B	E	D	B	D	C		
Approach Delay (s)		59.8			34.7			28.2			35.8		
Approach LOS		E			C			C			D		
Intersection Summary													
HCM 2000 Control Delay			33.6		HCM 2000 Level of Service					C			
HCM 2000 Volume to Capacity ratio			0.67										
Actuated Cycle Length (s)			130.0		Sum of lost time (s)					20.0			
Intersection Capacity Utilization			69.5%		ICU Level of Service					C			
Analysis Period (min)			15										
c Critical Lane Group													



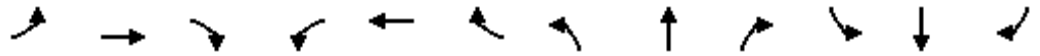
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	108	184	313	318	708	80	318	571	561	301
v/c Ratio	0.42	0.68	0.75	0.74	0.47	0.58	0.72	0.36	0.74	0.43
Control Delay	57.4	63.9	57.4	56.6	7.0	73.4	56.4	13.0	53.5	32.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.4	63.9	57.4	56.6	7.0	73.4	56.4	13.0	53.5	32.5
Queue Length 50th (ft)	83	139	253	257	59	66	255	109	229	193
Queue Length 95th (ft)	152	#296	368	371	86	117	#393	153	273	268
Internal Link Dist (ft)		642		1304			1959			2488
Turn Bay Length (ft)	25		575		265	230		305	375	
Base Capacity (vph)	260	272	438	450	1709	191	443	1569	997	739
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	0.42	0.68	0.71	0.71	0.41	0.42	0.72	0.36	0.56	0.41

Intersection Summary

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

1: Main St & Publix Dwy/E Cherokee Dr
 HCM Signalized Intersection Capacity Analysis

2029 Opening Year PM Peak - Weekend
 OY 2029 Int 1 - Overlap DBRT.syn



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖↗	↖	↑	↖↗	↖↗	↗	↖
Traffic Volume (vph)	100	133	38	441	146	658	74	296	531	522	264	16
Future Volume (vph)	100	133	38	441	146	658	74	296	531	522	264	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.8	3.8		3.8	3.8	3.8	6.2	6.2	3.8	5.6	6.2	
Lane Util. Factor	1.00	1.00		0.95	0.95	0.88	1.00	1.00	0.88	0.97	1.00	
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1836		1715	1760	2814	1805	1810	2787	3467	1815	
Flt Permitted	0.95	1.00		0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1836		1715	1760	2814	1805	1810	2787	3467	1815	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	108	143	41	474	157	708	80	318	571	561	284	17
RTOR Reduction (vph)	0	8	0	0	0	171	0	0	82	0	2	0
Lane Group Flow (vph)	108	176	0	313	318	537	80	318	489	561	299	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	5%	2%	1%	4%	0%
Turn Type	Split	NA		Split	NA	pt+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	8	8		7	7	7.5	1	6	7	5	2	
Permitted Phases									6			
Actuated Green, G (s)	18.8	18.8		31.7	31.7	60.0	10.0	31.8	63.5	28.3	49.5	
Effective Green, g (s)	18.8	18.8		31.7	31.7	60.0	10.0	31.8	63.5	28.3	49.5	
Actuated g/C Ratio	0.14	0.14		0.24	0.24	0.46	0.08	0.24	0.49	0.22	0.38	
Clearance Time (s)	3.8	3.8		3.8	3.8		6.2	6.2	3.8	5.6	6.2	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	5.0	3.0	3.0	5.0	
Lane Grp Cap (vph)	261	265		418	429	1298	138	442	1442	754	691	
v/s Ratio Prot	0.06	c0.10		c0.18	0.18	0.19	0.04	c0.18	0.08	c0.16	0.16	
v/s Ratio Perm									0.09			
v/c Ratio	0.41	0.67		0.75	0.74	0.41	0.58	0.72	0.34	0.74	0.43	
Uniform Delay, d1	50.6	52.6		45.5	45.4	23.3	58.0	45.0	20.4	47.5	29.8	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.4	4.8		7.2	6.8	0.2	3.6	6.8	0.1	4.0	2.0	
Delay (s)	51.0	57.4		52.7	52.1	23.5	61.6	51.8	20.5	51.5	31.8	
Level of Service	D	E		D	D	C	E	D	C	D	C	
Approach Delay (s)		55.0			37.1			34.2			44.6	
Approach LOS		E			D			C			D	
Intersection Summary												
HCM 2000 Control Delay			39.7	HCM 2000 Level of Service				D				
HCM 2000 Volume to Capacity ratio			0.73									
Actuated Cycle Length (s)			130.0	Sum of lost time (s)				20.0				
Intersection Capacity Utilization			72.3%	ICU Level of Service				C				
Analysis Period (min)			15									
c Critical Lane Group												

Intersection

Int Delay, s/veh 2859.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	595	415	167	325	699	503
Future Vol, veh/h	595	415	167	325	699	503
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	Yield	-	None
Storage Length	575	-	-	305	375	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	1	5	2	1	4
Mvmt Flow	640	446	180	349	752	541

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	2225	180	0
Stage 1	180	-	-
Stage 2	2045	-	-
Critical Hdwy	6.4	6.21	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.309	-
Pot Cap-1 Maneuver	~ 48	865	-
Stage 1	856	-	-
Stage 2	~ 110	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	~ 22	865	-
Mov Cap-2 Maneuver	~ 22	-	-
Stage 1	856	-	-
Stage 2	~ 51	-	-

Approach	WB	NB	SB
HCM Control Delay, \$	7647.7	0	6.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	22	865	1402
HCM Lane V/C Ratio	-	-29.081	0.516	0.536	-
HCM Control Delay (s)	-	\$ 12972.4	13.5	10.5	-
HCM Lane LOS	-	-	F	B	B
HCM 95th %tile Q(veh)	-	-	80.2	3	3.3

Notes

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

Intersection						
Int Delay, s/veh	714.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	497	658	367	658	522	299
Future Vol, veh/h	497	658	367	658	522	299
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	Yield	-	None
Storage Length	575	-	-	305	375	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	1	1	1	1	2
Mvmt Flow	512	678	378	678	538	308

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1762	378	0	0	378	0
Stage 1	378	-	-	-	-	-
Stage 2	1384	-	-	-	-	-
Critical Hdwy	6.42	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	~ 93	~ 671	-	-	1186	-
Stage 1	693	-	-	-	-	-
Stage 2	~ 232	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	~ 51	~ 671	-	-	1186	-
Mov Cap-2 Maneuver	~ 51	-	-	-	-	-
Stage 1	693	-	-	-	-	-
Stage 2	~ 127	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, \$	1852.8	0	6.7
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	51	671	1186
HCM Lane V/C Ratio	-	-	10.046	1.011	0.454
HCM Control Delay (s)	-	\$	4223.4	62.3	10.5
HCM Lane LOS	-	-	F	F	B
HCM 95th %tile Q(veh)	-	-	60.8	16.4	2.4

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

Intersection						
Int Delay, s/veh	2333					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	501	415	289	562	699	424
Future Vol, veh/h	501	415	289	562	699	424
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	Yield	-	None
Storage Length	575	-	-	305	375	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	1	5	2	1	4
Mvmt Flow	539	446	311	604	752	456

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2271	311	0	0	311	0
Stage 1	311	-	-	-	-	-
Stage 2	1960	-	-	-	-	-
Critical Hdwy	6.4	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	~ 45	731	-	-	1255	-
Stage 1	748	-	-	-	-	-
Stage 2	~ 122	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	~ 18	731	-	-	1255	-
Mov Cap-2 Maneuver	~ 18	-	-	-	-	-
Stage 1	748	-	-	-	-	-
Stage 2	~ 49	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, \$	7351.4	0	7.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	18	731	1255
HCM Lane V/C Ratio	-	-29.928	0.61	0.599	-
HCM Control Delay (s)	-	\$ 13426.5	17.3	12.1	-
HCM Lane LOS	-	-	F	C	B
HCM 95th %tile Q(veh)	-	-	68.1	4.2	4.2

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

Intersection						
Int Delay, s/veh	607.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	441	658	296	531	522	264
Future Vol, veh/h	441	658	296	531	522	264
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	Yield	-	None
Storage Length	575	-	-	305	375	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	1	5	2	1	4
Mvmt Flow	474	708	318	571	561	284

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1724	318	0	0	318	0
Stage 1	318	-	-	-	-	-
Stage 2	1406	-	-	-	-	-
Critical Hdwy	6.4	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	~ 99	725	-	-	1248	-
Stage 1	742	-	-	-	-	-
Stage 2	~ 229	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	~ 54	725	-	-	1248	-
Mov Cap-2 Maneuver	~ 54	-	-	-	-	-
Stage 1	742	-	-	-	-	-
Stage 2	~ 126	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, \$	1494.3	0	6.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	54	725	1248
HCM Lane V/C Ratio	-	-	8.781	0.976	0.45
HCM Control Delay (s)	-	-	\$ 3647	51.6	10.2
HCM Lane LOS	-	-	F	F	B
HCM 95th %tile Q(veh)	-	-	55.7	15.2	2.4

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

1: Main St & Publix Dwy/E Cherokee Dr
Queues

2049 Opening Year AM Peak - Weekday
DY 2049 Int 1 - Overlap DBRT.syn



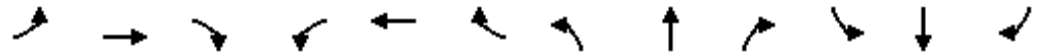
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	12	45	406	405	544	13	219	427	917	662
v/c Ratio	0.10	0.35	0.83	0.83	0.29	0.15	0.54	0.25	0.90	0.69
Control Delay	59.0	48.8	59.7	58.9	0.9	63.2	51.6	4.8	56.5	30.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.0	48.8	59.7	58.9	0.9	63.2	51.6	4.8	56.5	30.2
Queue Length 50th (ft)	10	24	335	334	0	11	175	27	364	385
Queue Length 95th (ft)	31	64	#541	#536	17	33	249	55	#507	643
Internal Link Dist (ft)		642		1304			1959			2488
Turn Bay Length (ft)	25		575		265	230		305	375	
Base Capacity (vph)	155	169	487	490	1901	191	453	1692	1041	957
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	0.08	0.27	0.83	0.83	0.29	0.07	0.48	0.25	0.88	0.69

Intersection Summary

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

1: Main St & Publix Dwy/E Cherokee Dr
 HCM Signalized Intersection Capacity Analysis

2049 Opening Year AM Peak - Weekday
 DY 2049 Int 1 - Overlap DBRT.syn



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖↗	↖	↑	↖↗	↖↗	↗	↖
Traffic Volume (vph)	11	27	15	726	28	506	12	204	397	853	614	2
Future Volume (vph)	11	27	15	726	28	506	12	204	397	853	614	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.8	3.8		3.8	3.8	3.8	6.2	6.2	3.8	5.6	6.2	
Lane Util. Factor	1.00	1.00		0.95	0.95	0.88	1.00	1.00	0.88	0.97	1.00	
Frt	1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1799		1715	1725	2814	1805	1810	2787	3467	1826	
Flt Permitted	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1799		1715	1725	2814	1805	1810	2787	3467	1826	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	12	29	16	781	30	544	13	219	427	917	660	2
RTOR Reduction (vph)	0	15	0	0	0	214	0	0	162	0	0	0
Lane Group Flow (vph)	12	30	0	406	405	330	13	219	265	917	662	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	5%	2%	1%	4%	0%
Turn Type	Split	NA		Split	NA	pt+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	8	8		7	7	7.5	1	6	7	5	2	
Permitted Phases									6			
Actuated Green, G (s)	6.8	6.8		37.0	37.0	78.9	2.6	24.9	61.9	41.9	63.6	
Effective Green, g (s)	6.8	6.8		37.0	37.0	78.9	2.6	24.9	61.9	41.9	63.6	
Actuated g/C Ratio	0.05	0.05		0.28	0.28	0.61	0.02	0.19	0.48	0.32	0.49	
Clearance Time (s)	3.8	3.8		3.8	3.8		6.2	6.2	3.8	5.6	6.2	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	5.0	3.0	3.0	5.0	
Lane Grp Cap (vph)	94	94		488	490	1707	36	346	1408	1117	893	
v/s Ratio Prot	0.01	c0.02		c0.24	0.23	0.12	0.01	c0.12	0.05	c0.26	c0.36	
v/s Ratio Perm									0.04			
v/c Ratio	0.13	0.32		0.83	0.83	0.19	0.36	0.63	0.19	0.82	0.74	
Uniform Delay, d1	58.8	59.4		43.6	43.5	11.4	62.9	48.3	19.6	40.6	26.6	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.2	0.7		11.5	10.9	0.1	2.2	5.2	0.1	5.0	5.5	
Delay (s)	59.0	60.1		55.1	54.4	11.4	65.1	53.5	19.7	45.5	32.1	
Level of Service	E	E		E	D	B	E	D	B	D	C	
Approach Delay (s)		59.8			37.4			31.8			39.9	
Approach LOS		E			D			C			D	
Intersection Summary												
HCM 2000 Control Delay			37.8		HCM 2000 Level of Service					D		
HCM 2000 Volume to Capacity ratio			0.78									
Actuated Cycle Length (s)			130.0		Sum of lost time (s)					20.0		
Intersection Capacity Utilization			78.6%		ICU Level of Service					D		
Analysis Period (min)			15									
c Critical Lane Group												



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	126	220	400	409	828	115	462	828	657	397
v/c Ratio	0.78	1.30	1.26	1.25	0.57	0.77	0.81	0.54	0.75	0.46
Control Delay	97.3	220.7	187.0	182.5	11.4	98.3	59.9	21.6	58.4	29.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	97.3	220.7	187.0	182.5	11.4	98.3	59.9	21.6	58.4	29.4
Queue Length 50th (ft)	123	~268	~514	~522	114	111	420	268	308	263
Queue Length 95th (ft)	#230	#445	#738	#748	196	#199	504	280	#481	358
Internal Link Dist (ft)		642		1304			1959			2488
Turn Bay Length (ft)	25		575		265	230		305	375	
Base Capacity (vph)	161	169	318	328	1446	166	737	1530	877	866
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	0.78	1.30	1.26	1.25	0.57	0.69	0.63	0.54	0.75	0.46

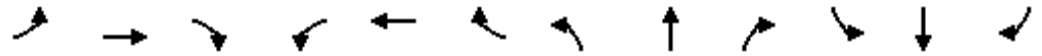
Intersection Summary

~ 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.

1: Main St & Publix Dwy/E Cherokee Dr
 HCM Signalized Intersection Capacity Analysis

2049 Opening Year PM Peak - Weekday
 DY 2049 Int 1 - Overlap DBRT.syn



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖↗	↖	↑	↖↗	↖↗	↗	↖
Traffic Volume (vph)	122	162	51	606	178	803	112	448	803	637	365	20
Future Volume (vph)	122	162	51	606	178	803	112	448	803	637	365	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.6	6.6		6.6	6.6	6.6	6.2	6.2	6.6	5.6	6.2	
Lane Util. Factor	1.00	1.00		0.95	0.95	0.88	1.00	1.00	0.88	0.97	1.00	
Frt	1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1818		1681	1738	2814	1805	1881	2814	3467	1850	
Flt Permitted	0.95	1.00		0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1818		1681	1738	2814	1805	1881	2814	3467	1850	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	126	167	53	625	184	828	115	462	828	657	376	21
RTOR Reduction (vph)	0	7	0	0	0	217	0	0	36	0	1	0
Lane Group Flow (vph)	126	213	0	400	409	611	115	462	792	657	396	0
Heavy Vehicles (%)	0%	1%	0%	2%	0%	1%	0%	1%	1%	1%	2%	0%
Turn Type	Split	NA		Split	NA	pt+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	8	8		7	7	7 5	1	6	7	5	2	
Permitted Phases									6			
Actuated Green, G (s)	13.4	13.4		28.4	28.4	66.4	12.4	45.2	73.6	38.0	70.2	
Effective Green, g (s)	13.4	13.4		28.4	28.4	66.4	12.4	45.2	73.6	38.0	70.2	
Actuated g/C Ratio	0.09	0.09		0.19	0.19	0.44	0.08	0.30	0.49	0.25	0.47	
Clearance Time (s)	6.6	6.6		6.6	6.6		6.2	6.2	6.6	5.6	6.2	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	5.0	3.0	3.0	5.0	
Lane Grp Cap (vph)	161	162		318	329	1245	149	566	1504	878	865	
v/s Ratio Prot	0.07	c0.12		c0.24	0.24	0.22	0.06	c0.25	0.10	c0.19	0.21	
v/s Ratio Perm									0.18			
v/c Ratio	0.78	1.31		1.26	1.24	0.49	0.77	0.82	0.53	0.75	0.46	
Uniform Delay, d1	66.9	68.3		60.8	60.8	29.8	67.4	48.6	26.2	51.6	27.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	20.0	177.8		139.1	132.5	0.3	19.9	12.3	0.3	3.5	1.7	
Delay (s)	86.9	246.1		199.9	193.3	30.1	87.3	60.9	26.6	55.1	28.8	
Level of Service	F	F		F	F	C	F	E	C	E	C	
Approach Delay (s)		188.1			112.3			42.8			45.2	
Approach LOS		F			F			D			D	
Intersection Summary												
HCM 2000 Control Delay			80.3	HCM 2000 Level of Service				F				
HCM 2000 Volume to Capacity ratio			0.95									
Actuated Cycle Length (s)			150.0	Sum of lost time (s)				25.6				
Intersection Capacity Utilization			95.7%	ICU Level of Service				F				
Analysis Period (min)			15									
c Critical Lane Group												

1: Main St & Publix Dwy/E Cherokee Dr
Queues

2049 Opening Year MD Peak - Weekend
DY 2049 Int 1 - Overlap DBRT.syn



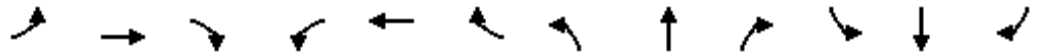
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	12	42	342	345	544	23	380	738	917	558
v/c Ratio	0.10	0.33	0.75	0.76	0.30	0.25	0.82	0.43	0.93	0.59
Control Delay	59.1	50.7	55.4	55.5	1.0	65.4	62.4	10.0	61.8	27.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.1	50.7	55.4	55.5	1.0	65.4	62.4	10.0	61.8	27.6
Queue Length 50th (ft)	10	24	273	275	0	19	318	110	386	360
Queue Length 95th (ft)	31	62	400	403	17	49	#514	165	#507	510
Internal Link Dist (ft)		642		1304			1959			2488
Turn Bay Length (ft)	25		575		265	230		305	375	
Base Capacity (vph)	155	168	467	470	1847	191	464	1718	997	953
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	0.08	0.25	0.73	0.73	0.29	0.12	0.82	0.43	0.92	0.59

Intersection Summary

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

1: Main St & Publix Dwy/E Cherokee Dr
 HCM Signalized Intersection Capacity Analysis

2049 Opening Year MD Peak - Weekend
 DY 2049 Int 1 - Overlap DBRT.syn



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations	↖	↗		↖	↗	↖↗	↖	↑	↖↗	↖↗	↗	↖	
Traffic Volume (vph)	11	27	12	611	28	506	21	353	686	853	517	2	
Future Volume (vph)	11	27	12	611	28	506	21	353	686	853	517	2	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	3.8	3.8		3.8	3.8	3.8	6.2	6.2	3.8	5.6	6.2		
Lane Util. Factor	1.00	1.00		0.95	0.95	0.88	1.00	1.00	0.88	0.97	1.00		
Frt	1.00	0.95		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00		
Flt Protected	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00		
Satd. Flow (prot)	1805	1812		1715	1726	2814	1805	1810	2787	3467	1826		
Flt Permitted	0.95	1.00		0.95	0.96	1.00	0.95	1.00	1.00	0.95	1.00		
Satd. Flow (perm)	1805	1812		1715	1726	2814	1805	1810	2787	3467	1826		
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	
Adj. Flow (vph)	12	29	13	657	30	544	23	380	738	917	556	2	
RTOR Reduction (vph)	0	12	0	0	0	236	0	0	156	0	0	0	
Lane Group Flow (vph)	12	30	0	342	345	308	23	380	582	917	558	0	
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	5%	2%	1%	4%	0%	
Turn Type	Split	NA		Split	NA	pt+ov	Prot	NA	pm+ov	Prot	NA		
Protected Phases	8	8		7	7	7 5	1	6	7	5	2		
Permitted Phases									6				
Actuated Green, G (s)	6.7	6.7		34.3	34.3	73.7	4.3	30.2	64.5	39.4	64.7		
Effective Green, g (s)	6.7	6.7		34.3	34.3	73.7	4.3	30.2	64.5	39.4	64.7		
Actuated g/C Ratio	0.05	0.05		0.26	0.26	0.57	0.03	0.23	0.50	0.30	0.50		
Clearance Time (s)	3.8	3.8		3.8	3.8		6.2	6.2	3.8	5.6	6.2		
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	5.0	3.0	3.0	5.0		
Lane Grp Cap (vph)	93	93		452	455	1595	59	420	1464	1050	908		
v/s Ratio Prot	0.01	c0.02		0.20	c0.20	0.11	0.01	c0.21	0.10	c0.26	0.31		
v/s Ratio Perm									0.10				
v/c Ratio	0.13	0.32		0.76	0.76	0.19	0.39	0.90	0.40	0.87	0.61		
Uniform Delay, d1	58.9	59.5		44.0	44.0	13.7	61.6	48.5	20.6	42.9	23.6		
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Incremental Delay, d2	0.2	0.7		7.1	7.1	0.1	1.6	23.6	0.2	8.2	3.1		
Delay (s)	59.1	60.2		51.1	51.1	13.8	63.1	72.1	20.7	51.1	26.7		
Level of Service	E	E		D	D	B	E	E	C	D	C		
Approach Delay (s)		59.9			34.6			38.7			41.9		
Approach LOS		E			C			D			D		
Intersection Summary													
HCM 2000 Control Delay			38.9	HCM 2000 Level of Service						D			
HCM 2000 Volume to Capacity ratio			0.82										
Actuated Cycle Length (s)			130.0	Sum of lost time (s)						20.0			
Intersection Capacity Utilization			80.4%	ICU Level of Service						D			
Analysis Period (min)			15										
c Critical Lane Group													



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	131	223	381	388	863	97	388	697	685	368
v/c Ratio	0.61	0.98	0.87	0.86	0.55	0.64	0.97	0.46	0.78	0.52
Control Delay	68.4	110.0	67.6	66.2	9.3	76.4	88.3	17.8	51.4	33.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	68.4	110.0	67.6	66.2	9.3	76.4	88.3	17.8	51.4	33.3
Queue Length 50th (ft)	107	~196	325	330	114	80	327	175	275	232
Queue Length 95th (ft)	#226	#406	#508	#512	152	138	#530	230	333	326
Internal Link Dist (ft)		642		1304			1959			2488
Turn Bay Length (ft)	25		575		265	230		305	375	
Base Capacity (vph)	215	227	437	449	1660	191	400	1504	997	725
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.98	0.87	0.86	0.52	0.51	0.97	0.46	0.69	0.51

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

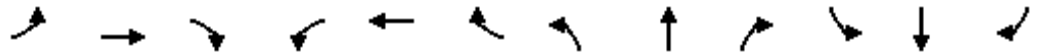
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

1: Main St & Publix Dwy/E Cherokee Dr
 HCM Signalized Intersection Capacity Analysis

2049 Opening Year PM Peak - Weekend
 DY 2049 Int 1 - Overlap DBRT.syn



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗	↖↗	↖	↗	↖↗	↖↗	↗	↖
Traffic Volume (vph)	122	162	46	538	178	803	90	361	648	637	322	20
Future Volume (vph)	122	162	46	538	178	803	90	361	648	637	322	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.8	3.8		3.8	3.8	3.8	6.2	6.2	3.8	5.6	6.2	
Lane Util. Factor	1.00	1.00		0.95	0.95	0.88	1.00	1.00	0.88	0.97	1.00	
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1837		1715	1760	2814	1805	1810	2787	3467	1815	
Flt Permitted	0.95	1.00		0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1837		1715	1760	2814	1805	1810	2787	3467	1815	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	131	174	49	578	191	863	97	388	697	685	346	22
RTOR Reduction (vph)	0	8	0	0	0	103	0	0	47	0	2	0
Lane Group Flow (vph)	131	215	0	381	388	760	97	388	650	685	366	0
Heavy Vehicles (%)	0%	0%	0%	0%	0%	1%	0%	5%	2%	1%	4%	0%
Turn Type	Split	NA		Split	NA	pt+ov	Prot	NA	pm+ov	Prot	NA	
Protected Phases	8	8		7	7	7.5	1	6	7	5	2	
Permitted Phases									6			
Actuated Green, G (s)	15.5	15.5		33.2	33.2	66.3	10.9	28.8	62.0	33.1	50.4	
Effective Green, g (s)	15.5	15.5		33.2	33.2	66.3	10.9	28.8	62.0	33.1	50.4	
Actuated g/C Ratio	0.12	0.12		0.26	0.26	0.51	0.08	0.22	0.48	0.25	0.39	
Clearance Time (s)	3.8	3.8		3.8	3.8		6.2	6.2	3.8	5.6	6.2	
Vehicle Extension (s)	2.0	2.0		3.0	3.0		2.0	5.0	3.0	3.0	5.0	
Lane Grp Cap (vph)	215	219		437	449	1435	151	400	1410	882	703	
v/s Ratio Prot	0.07	c0.12		c0.22	0.22	0.27	0.05	c0.21	0.12	c0.20	0.20	
v/s Ratio Perm									0.12			
v/c Ratio	0.61	0.98		0.87	0.86	0.53	0.64	0.97	0.46	0.78	0.52	
Uniform Delay, d1	54.4	57.1		46.4	46.2	21.4	57.7	50.2	22.8	45.0	30.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.3	55.3		17.1	15.7	0.4	6.8	37.2	0.2	4.3	2.7	
Delay (s)	57.7	112.4		63.5	62.0	21.7	64.5	87.4	23.0	49.4	33.3	
Level of Service	E	F		E	E	C	E	F	C	D	C	
Approach Delay (s)		92.2			41.0			47.6			43.7	
Approach LOS		F			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			47.8			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.89									
Actuated Cycle Length (s)			130.0			Sum of lost time (s)				20.0		
Intersection Capacity Utilization			84.6%			ICU Level of Service				E		
Analysis Period (min)			15									
c Critical Lane Group												

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↖		↘	↗
Traffic Vol, veh/h	0	1	475	1	2	0
Future Vol, veh/h	0	1	475	1	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	495	1	2	0

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	500	496	0	0	496	0
Stage 1	496	-	-	-	-	-
Stage 2	4	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	530	574	-	-	1068	-
Stage 1	612	-	-	-	-	-
Stage 2	1019	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	529	574	-	-	1068	-
Mov Cap-2 Maneuver	529	-	-	-	-	-
Stage 1	612	-	-	-	-	-
Stage 2	1017	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	8.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	-	574	1068
HCM Lane V/C Ratio	-	-	0.002	0.002
HCM Control Delay (s)	-	-	0	11.3
HCM Lane LOS	-	-	A	B
HCM 95th %tile Q(veh)	-	-	0	0

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↖		↘	↗
Traffic Vol, veh/h	1	0	1143	3	3	0
Future Vol, veh/h	1	0	1143	3	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	0	1178	3	3	0

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1186	1180	0	0	1181	0
Stage 1	1180	-	-	-	-	-
Stage 2	6	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	208	232	-	-	591	-
Stage 1	292	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	207	232	-	-	591	-
Mov Cap-2 Maneuver	207	-	-	-	-	-
Stage 1	292	-	-	-	-	-
Stage 2	1012	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.5	0	11.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	207	-	591
HCM Lane V/C Ratio	-	-	0.005	-	0.005
HCM Control Delay (s)	-	-	22.5	0	11.1
HCM Lane LOS	-	-	C	A	B
HCM 95th %tile Q(veh)	-	-	0	-	0

Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↖		↘	↗
Traffic Vol, veh/h	11	20	847	104	113	0
Future Vol, veh/h	11	20	847	104	113	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	21	882	108	118	0
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1172	936	0	0	990	0
Stage 1	936	-	-	-	-	-
Stage 2	236	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	213	321	-	-	698	-
Stage 1	382	-	-	-	-	-
Stage 2	803	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	177	321	-	-	698	-
Mov Cap-2 Maneuver	177	-	-	-	-	-
Stage 1	382	-	-	-	-	-
Stage 2	667	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	20.4	0	11.2			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT	
Capacity (veh/h)	-	-	177	321	698	-
HCM Lane V/C Ratio	-	-	0.065	0.065	0.169	-
HCM Control Delay (s)	-	-	26.7	17	11.2	-
HCM Lane LOS	-	-	D	C	B	-
HCM 95th %tile Q(veh)	-	-	0.2	0.2	0.6	-

Intersection						
Int Delay, s/veh	6.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↗	↖		↙	↗
Traffic Vol, veh/h	96	149	735	57	102	0
Future Vol, veh/h	96	149	735	57	102	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	100	155	766	59	106	0

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1008	796	0	0	825
Stage 1	796	-	-	-	-
Stage 2	212	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	267	387	-	-	805
Stage 1	444	-	-	-	-
Stage 2	823	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	232	387	-	-	805
Mov Cap-2 Maneuver	232	-	-	-	-
Stage 1	444	-	-	-	-
Stage 2	714	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.9	0	10.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	232	387	805
HCM Lane V/C Ratio	-	-	0.431	0.401	0.132
HCM Control Delay (s)	-	-	31.8	20.4	10.2
HCM Lane LOS	-	-	D	C	B
HCM 95th %tile Q(veh)	-	-	2	1.9	0.5

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↔		↔	↔
Traffic Vol, veh/h	0	1	475	1	2	1062
Future Vol, veh/h	0	1	475	1	2	1062
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	495	1	2	1106

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1606	496	0	0	496
Stage 1	496	-	-	-	-
Stage 2	1110	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	116	574	-	-	1068
Stage 1	612	-	-	-	-
Stage 2	315	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	116	574	-	-	1068
Mov Cap-2 Maneuver	116	-	-	-	-
Stage 1	612	-	-	-	-
Stage 2	314	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	574	1068
HCM Lane V/C Ratio	-	-	0.002	0.002
HCM Control Delay (s)	-	-	11.3	8.4
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↔		↔	↔
Traffic Vol, veh/h	1	0	1143	3	3	873
Future Vol, veh/h	1	0	1143	3	3	873
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	0	1178	3	3	900

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2086	1180	0	0	1181
Stage 1	1180	-	-	-	-
Stage 2	906	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	58	232	-	-	591
Stage 1	292	-	-	-	-
Stage 2	394	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	58	232	-	-	591
Mov Cap-2 Maneuver	58	-	-	-	-
Stage 1	292	-	-	-	-
Stage 2	392	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	68.2	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	58	591
HCM Lane V/C Ratio	-	-	0.018	0.005
HCM Control Delay (s)	-	-	68.2	11.1
HCM Lane LOS	-	-	F	B
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection						
Int Delay, s/veh	1.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↔		↔	↔
Traffic Vol, veh/h	11	20	847	104	113	813
Future Vol, veh/h	11	20	847	104	113	813
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	21	882	108	118	847

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2019	936	0	0	990
Stage 1	936	-	-	-	-
Stage 2	1083	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	64	321	-	-	698
Stage 1	382	-	-	-	-
Stage 2	325	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	53	321	-	-	698
Mov Cap-2 Maneuver	53	-	-	-	-
Stage 1	382	-	-	-	-
Stage 2	270	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	48.1	0	1.4
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	115	698
HCM Lane V/C Ratio	-	-	0.281	0.169
HCM Control Delay (s)	-	-	48.1	11.2
HCM Lane LOS	-	-	E	B
HCM 95th %tile Q(veh)	-	-	1.1	0.6

Intersection						
Int Delay, s/veh	41					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		T		T	T
Traffic Vol, veh/h	96	149	735	57	102	629
Future Vol, veh/h	96	149	735	57	102	629
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	100	155	766	59	106	655

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1663	796	0	0	825
Stage 1	796	-	-	-	-
Stage 2	867	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	107	387	-	-	805
Stage 1	444	-	-	-	-
Stage 2	411	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 93	387	-	-	805
Mov Cap-2 Maneuver	~ 93	-	-	-	-
Stage 1	444	-	-	-	-
Stage 2	357	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	291.6	0	1.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	173	805
HCM Lane V/C Ratio	-	-	1.475	0.132
HCM Control Delay (s)	-	-	291.6	10.2
HCM Lane LOS	-	-	F	B
HCM 95th %tile Q(veh)	-	-	16.2	0.5

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

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↗	↖		↙	↗
Traffic Vol, veh/h	0	1	475	1	2	1062
Future Vol, veh/h	0	1	475	1	2	1062
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	495	1	2	1106

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1606	496	0	0	496	0
Stage 1	496	-	-	-	-	-
Stage 2	1110	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	116	574	-	-	1068	-
Stage 1	612	-	-	-	-	-
Stage 2	315	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	116	574	-	-	1068	-
Mov Cap-2 Maneuver	116	-	-	-	-	-
Stage 1	612	-	-	-	-	-
Stage 2	314	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	574	1068
HCM Lane V/C Ratio	-	-	-	0.002	0.002
HCM Control Delay (s)	-	-	0	11.3	8.4
HCM Lane LOS	-	-	A	B	A
HCM 95th %tile Q(veh)	-	-	-	0	0

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↗	↖		↙	↗
Traffic Vol, veh/h	1	0	1143	3	3	873
Future Vol, veh/h	1	0	1143	3	3	873
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	0	1178	3	3	900

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2086	1180	0	0	1181
Stage 1	1180	-	-	-	-
Stage 2	906	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	58	232	-	-	591
Stage 1	292	-	-	-	-
Stage 2	394	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	58	232	-	-	591
Mov Cap-2 Maneuver	58	-	-	-	-
Stage 1	292	-	-	-	-
Stage 2	392	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	68.2	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	-	58	591
HCM Lane V/C Ratio	-	-	0.018	0.005
HCM Control Delay (s)	-	-	68.2	0
HCM Lane LOS	-	-	F	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection						
Int Delay, s/veh	1.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖		↖	↗
Traffic Vol, veh/h	11	20	847	104	113	813
Future Vol, veh/h	11	20	847	104	113	813
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	21	882	108	118	847

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2019	936	0	0	990
Stage 1	936	-	-	-	-
Stage 2	1083	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	64	321	-	-	698
Stage 1	382	-	-	-	-
Stage 2	325	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	53	321	-	-	698
Mov Cap-2 Maneuver	53	-	-	-	-
Stage 1	382	-	-	-	-
Stage 2	270	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	43.2	0	1.4
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	53	321	698
HCM Lane V/C Ratio	-	-	0.216	0.065	0.169
HCM Control Delay (s)	-	-	90.8	17	11.2
HCM Lane LOS	-	-	F	C	B
HCM 95th %tile Q(veh)	-	-	0.7	0.2	0.6

Intersection						
Int Delay, s/veh	13.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↗	↖		↙	↗
Traffic Vol, veh/h	96	149	735	57	102	629
Future Vol, veh/h	96	149	735	57	102	629
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	100	155	766	59	106	655

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1663	796	0	0	825
Stage 1	796	-	-	-	-
Stage 2	867	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	107	387	-	-	805
Stage 1	444	-	-	-	-
Stage 2	411	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 93	387	-	-	805
Mov Cap-2 Maneuver	~ 93	-	-	-	-
Stage 1	444	-	-	-	-
Stage 2	357	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	90.2	0	1.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	93	387	805
HCM Lane V/C Ratio	-	-	1.075	0.401	0.132
HCM Control Delay (s)	-	-	198.5	20.4	10.2
HCM Lane LOS	-	-	F	C	B
HCM 95th %tile Q(veh)	-	-	6.6	1.9	0.5

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

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	475	1	2	1062
Future Vol, veh/h	0	1	475	1	2	1062
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	495	1	2	1106

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1606	496	0	0	496
Stage 1	496	-	-	-	-
Stage 2	1110	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	116	574	-	-	1068
Stage 1	612	-	-	-	-
Stage 2	315	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	115	574	-	-	1068
Mov Cap-2 Maneuver	115	-	-	-	-
Stage 1	612	-	-	-	-
Stage 2	313	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	574	1068
HCM Lane V/C Ratio	-	-	-	0.002	0.002
HCM Control Delay (s)	-	-	0	11.3	8.4
HCM Lane LOS	-	-	A	B	A
HCM 95th %tile Q(veh)	-	-	-	0	0

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	0	1143	3	3	873
Future Vol, veh/h	1	0	1143	3	3	873
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	0	1178	3	3	900

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2086	1180	0	0	1181	0
Stage 1	1180	-	-	-	-	-
Stage 2	906	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	58	232	-	-	591	-
Stage 1	292	-	-	-	-	-
Stage 2	394	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	57	232	-	-	591	-
Mov Cap-2 Maneuver	57	-	-	-	-	-
Stage 1	292	-	-	-	-	-
Stage 2	390	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	69.3	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	-	57	591
HCM Lane V/C Ratio	-	-	0.018	0.005
HCM Control Delay (s)	-	-	69.3	11.1
HCM Lane LOS	-	-	F	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection						
Int Delay, s/veh	1.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	20	847	104	113	813
Future Vol, veh/h	11	20	847	104	113	813
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	21	882	108	118	847

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2019	936	0	0	990
Stage 1	936	-	-	-	-
Stage 2	1083	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	64	321	-	-	698
Stage 1	382	-	-	-	-
Stage 2	325	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	44	321	-	-	698
Mov Cap-2 Maneuver	44	-	-	-	-
Stage 1	382	-	-	-	-
Stage 2	221	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	51.2	0	1.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	44	321	698
HCM Lane V/C Ratio	-	-	0.26	0.065	0.169
HCM Control Delay (s)	-	-	113.5	17	11.2
HCM Lane LOS	-	-	F	C	B
HCM 95th %tile Q(veh)	-	-	0.9	0.2	0.6

Intersection						
Int Delay, s/veh	15.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	96	149	735	57	102	629
Future Vol, veh/h	96	149	735	57	102	629
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	100	155	766	59	106	655

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1663	796	0	0	825
Stage 1	796	-	-	-	-
Stage 2	867	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	107	387	-	-	805
Stage 1	444	-	-	-	-
Stage 2	411	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 85	387	-	-	805
Mov Cap-2 Maneuver	~ 85	-	-	-	-
Stage 1	444	-	-	-	-
Stage 2	326	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	107.2	0	1.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	85	387	805
HCM Lane V/C Ratio	-	-	1.176	0.401	0.132
HCM Control Delay (s)	-	-	242	20.4	10.2
HCM Lane LOS	-	-	F	C	B
HCM 95th %tile Q(veh)	-	-	7.1	1.9	0.5

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

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↗	↖		↙	↗
Traffic Vol, veh/h	0	1	580	1	2	0
Future Vol, veh/h	0	1	580	1	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	604	1	2	0

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	609	605	0	0	605
Stage 1	605	-	-	-	-
Stage 2	4	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	458	498	-	-	973
Stage 1	545	-	-	-	-
Stage 2	1019	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	457	498	-	-	973
Mov Cap-2 Maneuver	457	-	-	-	-
Stage 1	545	-	-	-	-
Stage 2	1017	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.2	0	8.7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	498	973
HCM Lane V/C Ratio	-	-	-	0.002	0.002
HCM Control Delay (s)	-	-	0	12.2	8.7
HCM Lane LOS	-	-	A	B	A
HCM 95th %tile Q(veh)	-	-	-	0	0

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖		↖	↗
Traffic Vol, veh/h	1	0	1395	3	3	0
Future Vol, veh/h	1	0	1395	3	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	0	1438	3	3	0

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1446	1440	0	0	1441
Stage 1	1440	-	-	-	-
Stage 2	6	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	145	163	-	-	471
Stage 1	218	-	-	-	-
Stage 2	1017	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	144	163	-	-	471
Mov Cap-2 Maneuver	144	-	-	-	-
Stage 1	218	-	-	-	-
Stage 2	1011	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	30.2	0	12.7
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	144	-	471
HCM Lane V/C Ratio	-	-	0.007	-	0.007
HCM Control Delay (s)	-	-	30.2	0	12.7
HCM Lane LOS	-	-	D	A	B
HCM 95th %tile Q(veh)	-	-	0	-	0

Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖		↖	↗
Traffic Vol, veh/h	11	20	1034	104	113	0
Future Vol, veh/h	11	20	1034	104	113	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	21	1077	108	118	0

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1367	1131	0	0	1185
Stage 1	1131	-	-	-	-
Stage 2	236	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	162	248	-	-	589
Stage 1	308	-	-	-	-
Stage 2	803	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	130	248	-	-	589
Mov Cap-2 Maneuver	130	-	-	-	-
Stage 1	308	-	-	-	-
Stage 2	642	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26	0	12.6
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	130	248	589
HCM Lane V/C Ratio	-	-	0.088	0.084	0.2
HCM Control Delay (s)	-	-	35.4	20.8	12.6
HCM Lane LOS	-	-	E	C	B
HCM 95th %tile Q(veh)	-	-	0.3	0.3	0.7

Intersection						
Int Delay, s/veh	7.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↗	↖		↙	↗
Traffic Vol, veh/h	96	149	897	57	102	0
Future Vol, veh/h	96	149	897	57	102	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	100	155	934	59	106	0

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1176	964	0	0	993	0
Stage 1	964	-	-	-	-	-
Stage 2	212	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	211	310	-	-	696	-
Stage 1	370	-	-	-	-	-
Stage 2	823	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	179	310	-	-	696	-
Mov Cap-2 Maneuver	179	-	-	-	-	-
Stage 1	370	-	-	-	-	-
Stage 2	698	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	35.6	0	11.1
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	179	310	696
HCM Lane V/C Ratio	-	-	0.559	0.501	0.153
HCM Control Delay (s)	-	-	47.9	27.7	11.1
HCM Lane LOS	-	-	E	D	B
HCM 95th %tile Q(veh)	-	-	2.9	2.6	0.5

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↔		↔	↔
Traffic Vol, veh/h	0	1	580	1	2	1296
Future Vol, veh/h	0	1	580	1	2	1296
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	604	1	2	1350

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1959	605	0	0	605
Stage 1	605	-	-	-	-
Stage 2	1354	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	70	498	-	-	973
Stage 1	545	-	-	-	-
Stage 2	240	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	70	498	-	-	973
Mov Cap-2 Maneuver	70	-	-	-	-
Stage 1	545	-	-	-	-
Stage 2	240	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	498	973
HCM Lane V/C Ratio	-	-	0.002	0.002
HCM Control Delay (s)	-	-	12.2	8.7
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	0	1395	3	3	1065
Future Vol, veh/h	1	0	1395	3	3	1065
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	0	1438	3	3	1098

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2544	1440	0	0	1441
Stage 1	1440	-	-	-	-
Stage 2	1104	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	30	163	-	-	471
Stage 1	218	-	-	-	-
Stage 2	317	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	30	163	-	-	471
Mov Cap-2 Maneuver	30	-	-	-	-
Stage 1	218	-	-	-	-
Stage 2	315	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	129.2	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	30	471
HCM Lane V/C Ratio	-	-	0.034	0.007
HCM Control Delay (s)	-	-	129.2	12.7
HCM Lane LOS	-	-	F	B
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection						
Int Delay, s/veh	1.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	20	1034	104	113	992
Future Vol, veh/h	11	20	1034	104	113	992
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	21	1077	108	118	1033

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2400	1131	0	0	1185
Stage 1	1131	-	-	-	-
Stage 2	1269	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	37	248	-	-	589
Stage 1	308	-	-	-	-
Stage 2	264	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	30	248	-	-	589
Mov Cap-2 Maneuver	30	-	-	-	-
Stage 1	308	-	-	-	-
Stage 2	211	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	96.6	0	1.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	69	589
HCM Lane V/C Ratio	-	-	0.468	0.2
HCM Control Delay (s)	-	-	96.6	12.6
HCM Lane LOS	-	-	F	B
HCM 95th %tile Q(veh)	-	-	1.9	0.7

Intersection						
Int Delay, s/veh	76					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	96	149	897	57	102	767
Future Vol, veh/h	96	149	897	57	102	767
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	100	155	934	59	106	799

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1975	964	0	0	993
Stage 1	964	-	-	-	-
Stage 2	1011	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	~ 68	310	-	-	696
Stage 1	370	-	-	-	-
Stage 2	352	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 58	310	-	-	696
Mov Cap-2 Maneuver	~ 58	-	-	-	-
Stage 1	370	-	-	-	-
Stage 2	298	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	\$ 637	0	1.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	115	696
HCM Lane V/C Ratio	-	-	2.219	0.153
HCM Control Delay (s)	-	-	\$ 637	11.1
HCM Lane LOS	-	-	F	B
HCM 95th %tile Q(veh)	-	-	21.9	0.5

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

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↗	↖		↙	↗
Traffic Vol, veh/h	0	1	580	1	2	1296
Future Vol, veh/h	0	1	580	1	2	1296
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	604	1	2	1350

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1959	605	0	0	605
Stage 1	605	-	-	-	-
Stage 2	1354	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	70	498	-	-	973
Stage 1	545	-	-	-	-
Stage 2	240	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	70	498	-	-	973
Mov Cap-2 Maneuver	70	-	-	-	-
Stage 1	545	-	-	-	-
Stage 2	240	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	498	973
HCM Lane V/C Ratio	-	-	-	0.002	0.002
HCM Control Delay (s)	-	-	0	12.2	8.7
HCM Lane LOS	-	-	A	B	A
HCM 95th %tile Q(veh)	-	-	-	0	0

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖		↖	↗
Traffic Vol, veh/h	1	0	1395	3	3	1065
Future Vol, veh/h	1	0	1395	3	3	1065
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	0	1438	3	3	1098

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2544	1440	0	0	1441
Stage 1	1440	-	-	-	-
Stage 2	1104	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	30	163	-	-	471
Stage 1	218	-	-	-	-
Stage 2	317	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	30	163	-	-	471
Mov Cap-2 Maneuver	30	-	-	-	-
Stage 1	218	-	-	-	-
Stage 2	315	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	129.2	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	-	30	471
HCM Lane V/C Ratio	-	-	0.034	0.007
HCM Control Delay (s)	-	-	129.2	0
HCM Lane LOS	-	-	F	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↗	↖		↙	↗
Traffic Vol, veh/h	11	20	1034	104	113	992
Future Vol, veh/h	11	20	1034	104	113	992
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	21	1077	108	118	1033

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2400	1131	0	0	1185
Stage 1	1131	-	-	-	-
Stage 2	1269	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	37	248	-	-	589
Stage 1	308	-	-	-	-
Stage 2	264	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	30	248	-	-	589
Mov Cap-2 Maneuver	30	-	-	-	-
Stage 1	308	-	-	-	-
Stage 2	211	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	79.3	0	1.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	30	248	589
HCM Lane V/C Ratio	-	-	0.382	0.084	0.2
HCM Control Delay (s)	-	-	185.8	20.8	12.6
HCM Lane LOS	-	-	F	C	B
HCM 95th %tile Q(veh)	-	-	1.2	0.3	0.7

Intersection						
Int Delay, s/veh	25.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↖	↗	↖		↖	↗
Traffic Vol, veh/h	96	149	897	57	102	767
Future Vol, veh/h	96	149	897	57	102	767
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	100	155	934	59	106	799

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1975	964	0	0	993
Stage 1	964	-	-	-	-
Stage 2	1011	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	~ 68	310	-	-	696
Stage 1	370	-	-	-	-
Stage 2	352	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 58	310	-	-	696
Mov Cap-2 Maneuver	~ 58	-	-	-	-
Stage 1	370	-	-	-	-
Stage 2	298	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	214.1	0	1.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	58	310	696
HCM Lane V/C Ratio	-	-	1.724	0.501	0.153
HCM Control Delay (s)	-	-	\$ 503.3	27.7	11.1
HCM Lane LOS	-	-	F	D	B
HCM 95th %tile Q(veh)	-	-	9.3	2.6	0.5

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

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	580	1	2	1296
Future Vol, veh/h	0	1	580	1	2	1296
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1	604	1	2	1350

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1959	605	0	0	605	0
Stage 1	605	-	-	-	-	-
Stage 2	1354	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	70	498	-	-	973	-
Stage 1	545	-	-	-	-	-
Stage 2	240	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	69	498	-	-	973	-
Mov Cap-2 Maneuver	69	-	-	-	-	-
Stage 1	545	-	-	-	-	-
Stage 2	238	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	498	973
HCM Lane V/C Ratio	-	-	-	0.002	0.002
HCM Control Delay (s)	-	-	0	12.2	8.7
HCM Lane LOS	-	-	A	B	A
HCM 95th %tile Q(veh)	-	-	-	0	0

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	0	1395	3	3	1065
Future Vol, veh/h	1	0	1395	3	3	1065
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	0	1438	3	3	1098

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2544	1440	0	0	1441
Stage 1	1440	-	-	-	-
Stage 2	1104	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	30	163	-	-	471
Stage 1	218	-	-	-	-
Stage 2	317	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	30	163	-	-	471
Mov Cap-2 Maneuver	30	-	-	-	-
Stage 1	218	-	-	-	-
Stage 2	312	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	129.2	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	30	-	471
HCM Lane V/C Ratio	-	-	0.034	-	0.007
HCM Control Delay (s)	-	-	129.2	0	12.7
HCM Lane LOS	-	-	F	A	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0

Intersection						
Int Delay, s/veh	2.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	20	1034	104	113	992
Future Vol, veh/h	11	20	1034	104	113	992
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	21	1077	108	118	1033

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2400	1131	0	0	1185
Stage 1	1131	-	-	-	-
Stage 2	1269	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	37	248	-	-	589
Stage 1	308	-	-	-	-
Stage 2	264	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	20	248	-	-	589
Mov Cap-2 Maneuver	20	-	-	-	-
Stage 1	308	-	-	-	-
Stage 2	140	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	128.7	0	1.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	20	248	589
HCM Lane V/C Ratio	-	-	0.573	0.084	0.2
HCM Control Delay (s)	-	-	324.8	20.8	12.6
HCM Lane LOS	-	-	F	C	B
HCM 95th %tile Q(veh)	-	-	1.6	0.3	0.7

Intersection						
Int Delay, s/veh	33.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	96	149	897	57	102	767
Future Vol, veh/h	96	149	897	57	102	767
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	100	155	934	59	106	799

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1975	964	0	0	993
Stage 1	964	-	-	-	-
Stage 2	1011	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	~ 68	310	-	-	696
Stage 1	370	-	-	-	-
Stage 2	352	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 49	310	-	-	696
Mov Cap-2 Maneuver	~ 49	-	-	-	-
Stage 1	370	-	-	-	-
Stage 2	256	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	276.4	0	1.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	49	310	696
HCM Lane V/C Ratio	-	-	2.041	0.501	0.153
HCM Control Delay (s)	-	-	\$ 662.4	27.7	11.1
HCM Lane LOS	-	-	F	D	B
HCM 95th %tile Q(veh)	-	-	10.1	2.6	0.5

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

LANE LEVEL OF SERVICE

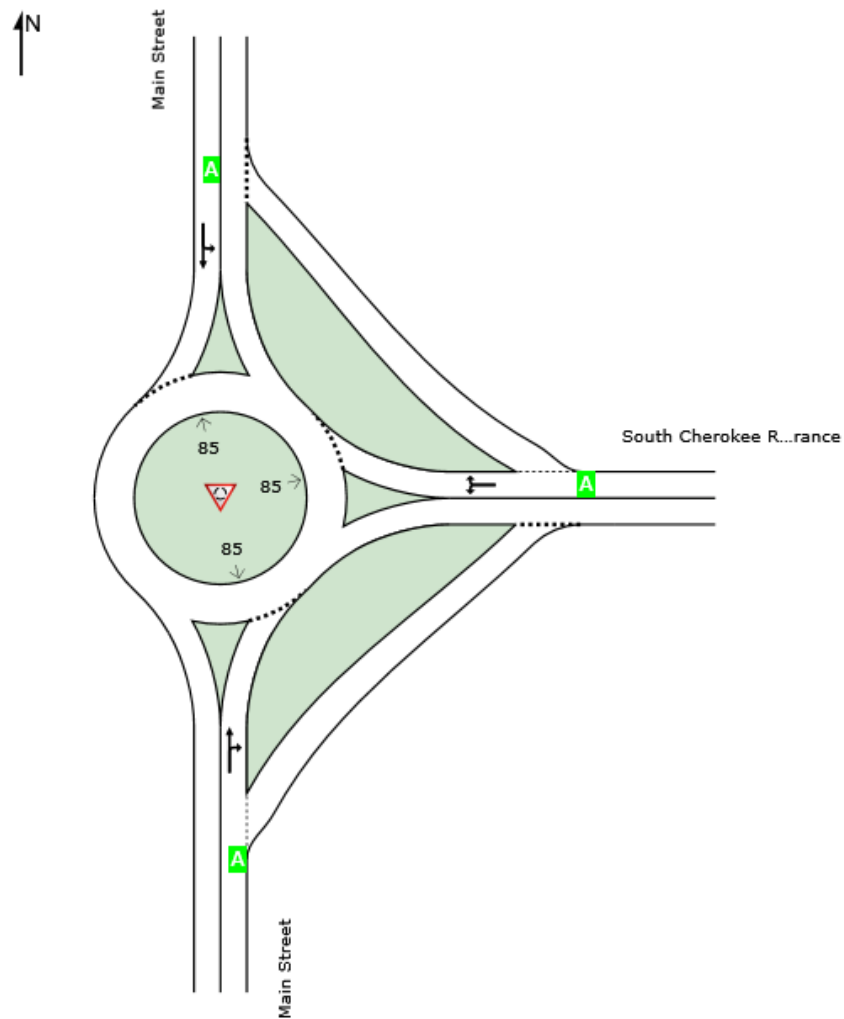
Lane Level of Service

 Site: 1 [Main Street at South Cherokee Rec Entrance 2029 AM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 MD Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	East	North	
LOS	A	A	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

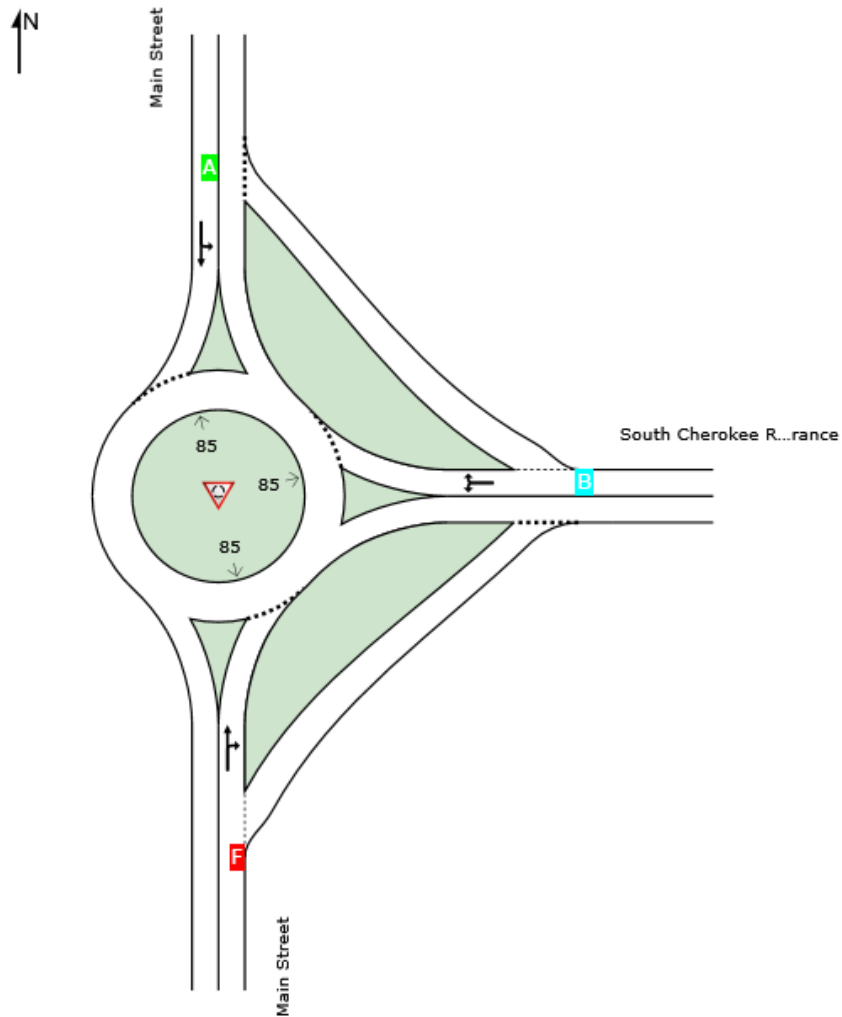
Lane Level of Service

 **Site: 1 [Main Street at South Cherokee Rec Entrance 2029 PM - Weekday (Site Folder: General)]**

Output produced by **SIDRA INTERSECTION Version: 9.1.6.228**

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	East	North	
LOS	A	B	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

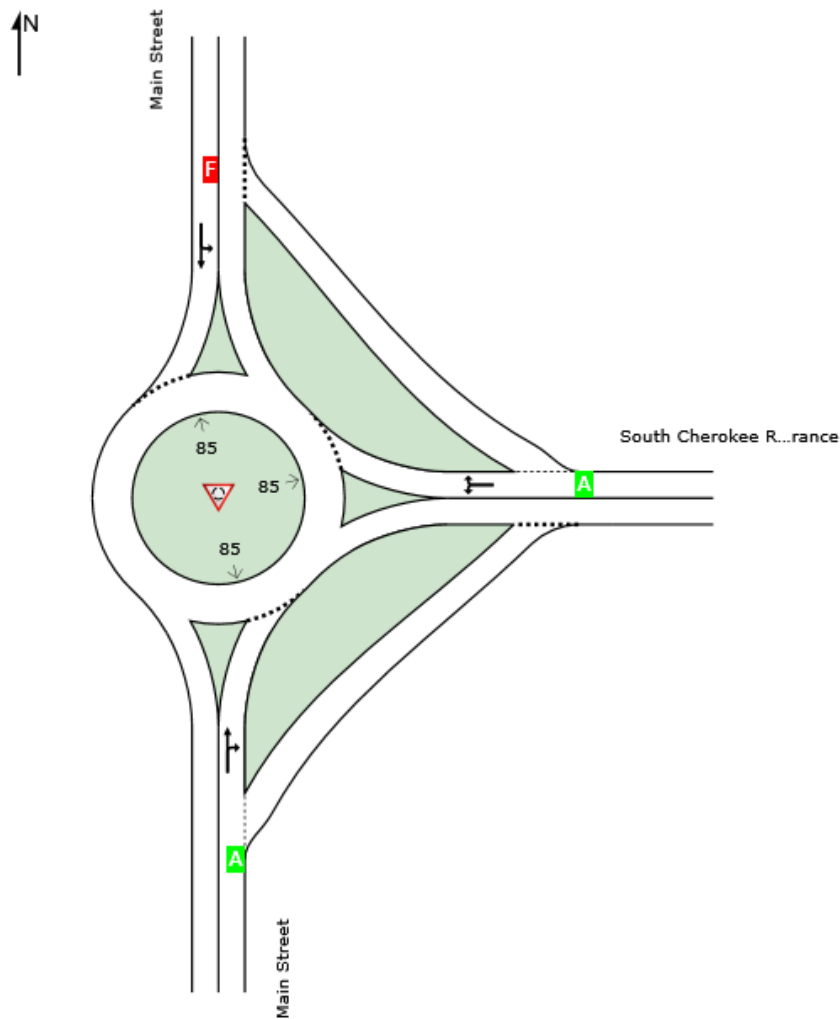
Lane Level of Service

 Site: 1 [Main Street at South Cherokee Rec Entrance 2049 AM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	East	North	
LOS	A	A	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

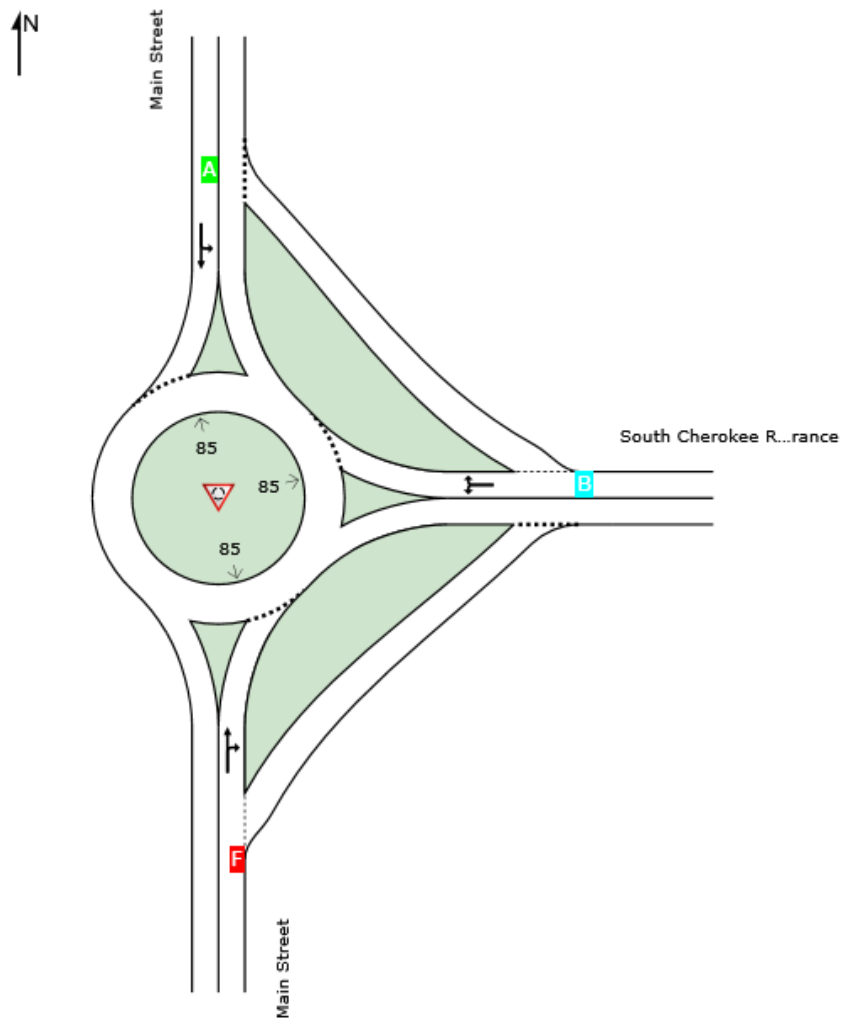
Lane Level of Service

 **Site: 1 [Main Street at South Cherokee Rec Entrance 2049 PM - Weekday (Site Folder: General)]**

Output produced by **SIDRA INTERSECTION Version: 9.1.6.228**

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	East	North	
LOS	A	B	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

LANE SUMMARY

Site: 1 [Main Street at South Cherokee Rec Entrance 2029 AM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 MD Peak - Weekend
 Site Category: (None)
 Roundabout

Lane Use and Performance																
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.	
	[Total veh/h]	HV %	[Total veh/h]	HV %						[Veh]	Dist] ft					
South: Main Street																
Lane 1 ^d	517	3.0	517	3.0	1224	0.423	100	5.2	LOS A	3.0	76.8	Full	2200	0.0	0.0	
Approach	517	3.0	517	3.0		0.423		5.2	LOS A	3.0	76.8					
East: South Cherokee Rec Entrance																
Lane 1 ^d	2	3.0	2	3.0	668	0.003	100	5.4	LOS A	0.0	0.3	Full	800	0.0	0.0	
Approach	2	3.0	2	3.0		0.003		5.4	LOS A	0.0	0.3					
North: Main Street																
Lane 1 ^d	1157	3.0	1157	3.0	1226	0.944	100	7.9	LOS A	67.3	1722.5	Full	2100	0.0	0.0	
Approach	1157	3.0	1157	3.0		0.944		7.9	LOS A	67.3	1722.5					
All Vehicles	1676	3.0	1676	3.0		0.944		7.1	LOS A	67.3	1722.5					

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From S To Exit:	N	E			Cap. veh/h	v/c	%	%		
Lane 1	516	1	517	3.0	1224	0.423	100	NA	NA	
Approach	516	1	517	3.0		0.423				
East: South Cherokee Rec Entrance										
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From E To Exit:	S	N			Cap. veh/h	v/c	%	%		
Lane 1	1	1	2	3.0	668	0.003	100	NA	NA	

Approach	1	1	2	3.0	0.003				
North: Main Street									
Mov.	L2	T1	Total	%HV		Deg.	Lane	Prob.	Ov.
From N To Exit:	E	S			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.
Lane 1	2	1154	1157	3.0	1226	0.944	100	NA	NA
Approach	2	1154	1157	3.0	0.944				
Total %HV Deg.Satn (v/c)									
All Vehicles	1676	3.0	0.944						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec	
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
East: South Cherokee Rec Entrance				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0

LANE SUMMARY

Site: 1 [Main Street at South Cherokee Rec Entrance 2029 PM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

Lane Use and Performance															
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	HV %	[Total veh/h]	HV %						[Veh]	Dist] ft				
South: Main Street															
Lane 1 ^d	1246	3.0	1246	3.0	1223	1.019	100	9.0	LOS F	227.9	5834.5	Full	2200	0.0	59.2
Approach	1246	3.0	1246	3.0		1.019		9.0	LOS A	227.9	5834.5				
East: South Cherokee Rec Entrance															
Lane 1 ^d	2	3.0	2	3.0	290	0.007	100	12.5	LOS B	0.0	0.6	Full	800	0.0	0.0
Approach	2	3.0	2	3.0		0.007		12.5	LOS B	0.0	0.6				
North: Main Street															
Lane 1 ^d	952	3.0	952	3.0	1226	0.777	100	7.0	LOS A	14.2	364.4	Full	2100	0.0	0.0
Approach	952	3.0	952	3.0		0.777		7.0	LOS A	14.2	364.4				
All Vehicles	2200	3.0	2200	3.0		1.019		8.1	LOS A	227.9	5834.5				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From S To Exit:	N	E			Cap. veh/h	v/c	%	%		
Lane 1	1242	3	1246	3.0	1223	1.019	100	NA	NA	
Approach	1242	3	1246	3.0		1.019				
East: South Cherokee Rec Entrance										
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From E To Exit:	S	N			Cap. veh/h	v/c	%	%		
Lane 1	1	1	2	3.0	290	0.007	100	NA	NA	

Approach	1	1	2	3.0	0.007				
North: Main Street									
Mov.	L2	T1	Total	%HV		Deg.	Lane	Prob.	Ov.
From N To Exit:	E	S			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.
Lane 1	3	949	952	3.0	1226	0.777	100	NA	NA
Approach	3	949	952	3.0	0.777				
Total %HV Deg.Satn (v/c)									
All Vehicles	2200	3.0	1.019						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec	
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	5.8	17.0	NA
East: South Cherokee Rec Entrance				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0

LANE SUMMARY

Site: 1 [Main Street at South Cherokee Rec Entrance 2049 AM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

Lane Use and Performance																
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.	
	[Total veh/h]	HV %	[Total veh/h]	HV %						[Veh]	Dist] ft					
South: Main Street																
Lane 1 ^d	632	3.0	632	3.0	1280	0.494	100	5.5	LOS A	4.0	101.9	Full	2200	0.0	0.0	
Approach	632	3.0	632	3.0		0.494		5.5	LOS A	4.0	101.9					
East: South Cherokee Rec Entrance																
Lane 1 ^d	2	3.0	2	3.0	628	0.003	100	5.8	LOS A	0.0	0.3	Full	800	0.0	0.0	
Approach	2	3.0	2	3.0		0.003		5.8	LOS A	0.0	0.3					
North: Main Street																
Lane 1 ^d	1411	3.0	1411	3.0	1281	1.101	100	8.1	LOS F	261.1	6684.4	Full	2100	0.0	100.0	
Approach	1411	3.0	1411	3.0		1.101		8.1	LOS A	261.1	6684.4					
All Vehicles	2045	3.0	2045	3.0		1.101		7.3	LOS A	261.1	6684.4					

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From S To Exit:	N	E			Cap. veh/h	v/c	%	%		
Lane 1	630	1	632	3.0	1280	0.494	100	NA	NA	
Approach	630	1	632	3.0		0.494				
East: South Cherokee Rec Entrance										
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From E To Exit:	S	N			Cap. veh/h	v/c	%	%		
Lane 1	1	1	2	3.0	628	0.003	100	NA	NA	

Approach	1	1	2	3.0	0.003				
North: Main Street									
Mov.	L2	T1	Total	%HV	Deg.	Lane	Prob.	Ov.	
From N To Exit:	E	S			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.
Lane 1	2	1409	1411	3.0	1281	1.101	100	NA	NA
Approach	2	1409	1411	3.0	1.101				
Total %HV Deg.Satn (v/c)									
All Vehicles	2045	3.0	1.101						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
East: South Cherokee Rec Entrance				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	32.5	91.3	NA

LANE SUMMARY

Site: 1 [Main Street at South Cherokee Rec Entrance 2049 PM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

Lane Use and Performance															
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	HV %	[Total veh/h]	HV %						[Veh]	[Dist]				
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			ft		ft	%	%
South: Main Street															
Lane 1 ^d	1520	3.0	1520	3.0	1278	1.189	100	9.2	LOS F	295.9	7574.2	Full	2200	0.0	100.0
Approach	1520	3.0	1520	3.0		1.189		9.2	LOS A	295.9	7574.2				
East: South Cherokee Rec Entrance															
Lane 1 ^d	2	3.0	2	3.0	301	0.007	100	12.1	LOS B	0.0	0.6	Full	800	0.0	0.0
Approach	2	3.0	2	3.0		0.007		12.1	LOS B	0.0	0.6				
North: Main Street															
Lane 1 ^d	1161	3.0	1161	3.0	1281	0.906	100	7.5	LOS A	39.1	1002.0	Full	2100	0.0	0.0
Approach	1161	3.0	1161	3.0		0.906		7.5	LOS A	39.1	1002.0				
All Vehicles	2683	3.0	2683	3.0		1.189		8.5	LOS A	295.9	7574.2				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From S To Exit:	N	E			Cap. veh/h	v/c	%	%		
Lane 1	1516	3	1520	3.0	1278	1.189	100	NA	NA	
Approach	1516	3	1520	3.0		1.189				
East: South Cherokee Rec Entrance										
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From E To Exit:	S	N			Cap. veh/h	v/c	%	%		
Lane 1	1	1	2	3.0	301	0.007	100	NA	NA	

Approach	1	1	2	3.0	0.007				
North: Main Street									
Mov.	L2	T1	Total	%HV	Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From N To Exit:	E	S			veh/h	v/c	%	%	
Lane 1	3	1158	1161	3.0	1281	0.906	100	NA	NA
Approach	3	1158	1161	3.0	0.906				
Total %HV Deg.Satn (v/c)									
All Vehicles	2683	3.0	1.189						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	60.4	170.3	NA
East: South Cherokee Rec Entrance				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0

LANE SUMMARY

Site: 1 [Main Street at South Cherokee Rec Entrance 2029 AM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 MD Peak - Weekend
 Site Category: (None)
 Roundabout

Lane Use and Performance																
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.	
	[Total veh/h]	HV %	[Total veh/h]	HV %						[Veh]	[Dist]					
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			ft		ft	%	%	
South: Main Street																
Lane 1 ^d	517	3.0	517	3.0	1224	0.423	100	5.2	LOS A	3.0	76.8	Full	2200	0.0	0.0	
Approach	517	3.0	517	3.0		0.423		5.2	LOS A	3.0	76.8					
East: South Cherokee Rec Entrance																
Lane 1 ^d	2	3.0	2	3.0	668	0.003	100	5.4	LOS A	0.0	0.3	Full	800	0.0	0.0	
Approach	2	3.0	2	3.0		0.003		5.4	LOS A	0.0	0.3					
North: Main Street																
Lane 1 ^d	1157	3.0	1157	3.0	1226	0.944	100	7.9	LOS A	67.3	1722.5	Full	2100	0.0	0.0	
Approach	1157	3.0	1157	3.0		0.944		7.9	LOS A	67.3	1722.5					
All Vehicles	1676	3.0	1676	3.0		0.944		7.1	LOS A	67.3	1722.5					

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	T1	R2	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From S To Exit:	N	E			veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	516	1	517	3.0	1224	0.423	100	NA	NA	
Approach	516	1	517	3.0		0.423				
East: South Cherokee Rec Entrance										
Mov.	L2	R2	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From E To Exit:	S	N			veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	1	1	2	3.0	668	0.003	100	NA	NA	

Approach	1	1	2	3.0	0.003				
North: Main Street									
Mov.	L2	T1	Total	%HV		Deg.	Lane	Prob.	Ov.
From N To Exit:	E	S			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.
Lane 1	2	1154	1157	3.0	1226	0.944	100	NA	NA
Approach	2	1154	1157	3.0	0.944				
Total %HV Deg.Satn (v/c)									
All Vehicles	1676	3.0	0.944						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
East: South Cherokee Rec Entrance				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0

LANE SUMMARY

Site: 1 [Main Street at South Cherokee Rec Entrance 2029 PM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

Lane Use and Performance															
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	HV %	[Total veh/h]	HV %						[Veh]	Dist] ft				
South: Main Street															
Lane 1 ^d	1246	3.0	1246	3.0	1223	1.019	100	9.0	LOS F	227.9	5834.5	Full	2200	0.0	59.2
Approach	1246	3.0	1246	3.0		1.019		9.0	LOS A	227.9	5834.5				
East: South Cherokee Rec Entrance															
Lane 1 ^d	2	3.0	2	3.0	290	0.007	100	12.5	LOS B	0.0	0.6	Full	800	0.0	0.0
Approach	2	3.0	2	3.0		0.007		12.5	LOS B	0.0	0.6				
North: Main Street															
Lane 1 ^d	952	3.0	952	3.0	1226	0.777	100	7.0	LOS A	14.2	364.4	Full	2100	0.0	0.0
Approach	952	3.0	952	3.0		0.777		7.0	LOS A	14.2	364.4				
All Vehicles	2200	3.0	2200	3.0		1.019		8.1	LOS A	227.9	5834.5				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From S To Exit:	N	E			Cap. veh/h	v/c	%	%		
Lane 1	1242	3	1246	3.0	1223	1.019	100	NA	NA	
Approach	1242	3	1246	3.0		1.019				
East: South Cherokee Rec Entrance										
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From E To Exit:	S	N			Cap. veh/h	v/c	%	%		
Lane 1	1	1	2	3.0	290	0.007	100	NA	NA	

Approach	1	1	2	3.0	0.007				
North: Main Street									
Mov.	L2	T1	Total	%HV		Deg.	Lane	Prob.	Ov.
From N To Exit:	E	S			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.
Lane 1	3	949	952	3.0	1226	0.777	100	NA	NA
Approach	3	949	952	3.0	0.777				
Total %HV Deg.Satn (v/c)									
All Vehicles	2200	3.0	1.019						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	5.8	17.0	NA
East: South Cherokee Rec Entrance				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0

LANE SUMMARY

Site: 1 [Main Street at South Cherokee Rec Entrance 2049 AM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

Lane Use and Performance																
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.	
	[Total veh/h]	HV %	[Total veh/h]	HV %						[Veh]	Dist] ft					
South: Main Street																
Lane 1 ^d	632	3.0	632	3.0	1280	0.494	100	5.5	LOS A	4.0	101.9	Full	2200	0.0	0.0	
Approach	632	3.0	632	3.0		0.494		5.5	LOS A	4.0	101.9					
East: South Cherokee Rec Entrance																
Lane 1 ^d	2	3.0	2	3.0	628	0.003	100	5.8	LOS A	0.0	0.3	Full	800	0.0	0.0	
Approach	2	3.0	2	3.0		0.003		5.8	LOS A	0.0	0.3					
North: Main Street																
Lane 1 ^d	1411	3.0	1411	3.0	1281	1.101	100	8.1	LOS F	261.1	6684.4	Full	2100	0.0	100.0	
Approach	1411	3.0	1411	3.0		1.101		8.1	LOS A	261.1	6684.4					
All Vehicles	2045	3.0	2045	3.0		1.101		7.3	LOS A	261.1	6684.4					

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL	Ov. Lane	
From S To Exit:	N	E			Cap. veh/h	v/c	%	%	No.	
Lane 1	630	1	632	3.0	1280	0.494	100	NA	NA	
Approach	630	1	632	3.0		0.494				
East: South Cherokee Rec Entrance										
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL	Ov. Lane	
From E To Exit:	S	N			Cap. veh/h	v/c	%	%	No.	
Lane 1	1	1	2	3.0	628	0.003	100	NA	NA	

Approach	1	1	2	3.0	0.003				
North: Main Street									
Mov.	L2	T1	Total	%HV		Deg.	Lane	Prob.	Ov.
From N To Exit:	E	S			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.
Lane 1	2	1409	1411	3.0	1281	1.101	100	NA	NA
Approach	2	1409	1411	3.0	1.101				
Total %HV Deg.Satn (v/c)									
All Vehicles	2045	3.0	1.101						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
East: South Cherokee Rec Entrance				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	32.5	91.3	NA

LANE SUMMARY

Site: 1 [Main Street at South Cherokee Rec Entrance 2049 PM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

Lane Use and Performance															
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	HV %	[Total veh/h]	HV %						[Veh]	Dist] ft				
South: Main Street															
Lane 1 ^d	1520	3.0	1520	3.0	1278	1.189	100	9.2	LOS F	295.9	7574.2	Full	2200	0.0	100.0
Approach	1520	3.0	1520	3.0		1.189		9.2	LOS A	295.9	7574.2				
East: South Cherokee Rec Entrance															
Lane 1 ^d	2	3.0	2	3.0	301	0.007	100	12.1	LOS B	0.0	0.6	Full	800	0.0	0.0
Approach	2	3.0	2	3.0		0.007		12.1	LOS B	0.0	0.6				
North: Main Street															
Lane 1 ^d	1161	3.0	1161	3.0	1281	0.906	100	7.5	LOS A	39.1	1002.0	Full	2100	0.0	0.0
Approach	1161	3.0	1161	3.0		0.906		7.5	LOS A	39.1	1002.0				
All Vehicles	2683	3.0	2683	3.0		1.189		8.5	LOS A	295.9	7574.2				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From S To Exit:	N	E			Cap. veh/h	v/c	%	%		
Lane 1	1516	3	1520	3.0	1278	1.189	100	NA	NA	
Approach	1516	3	1520	3.0		1.189				
East: South Cherokee Rec Entrance										
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From E To Exit:	S	N			Cap. veh/h	v/c	%	%		
Lane 1	1	1	2	3.0	301	0.007	100	NA	NA	

Approach	1	1	2	3.0	0.007				
North: Main Street									
Mov. From N To Exit:	L2	T1	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
	E	S							
Lane 1	3	1158	1161	3.0	1281	0.906	100	NA	NA
Approach	3	1158	1161	3.0	0.906				
Total %HV Deg.Satn (v/c)									
All Vehicles	2683	3.0	1.189						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	60.4	170.3	NA
East: South Cherokee Rec Entrance				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0

LANE LEVEL OF SERVICE

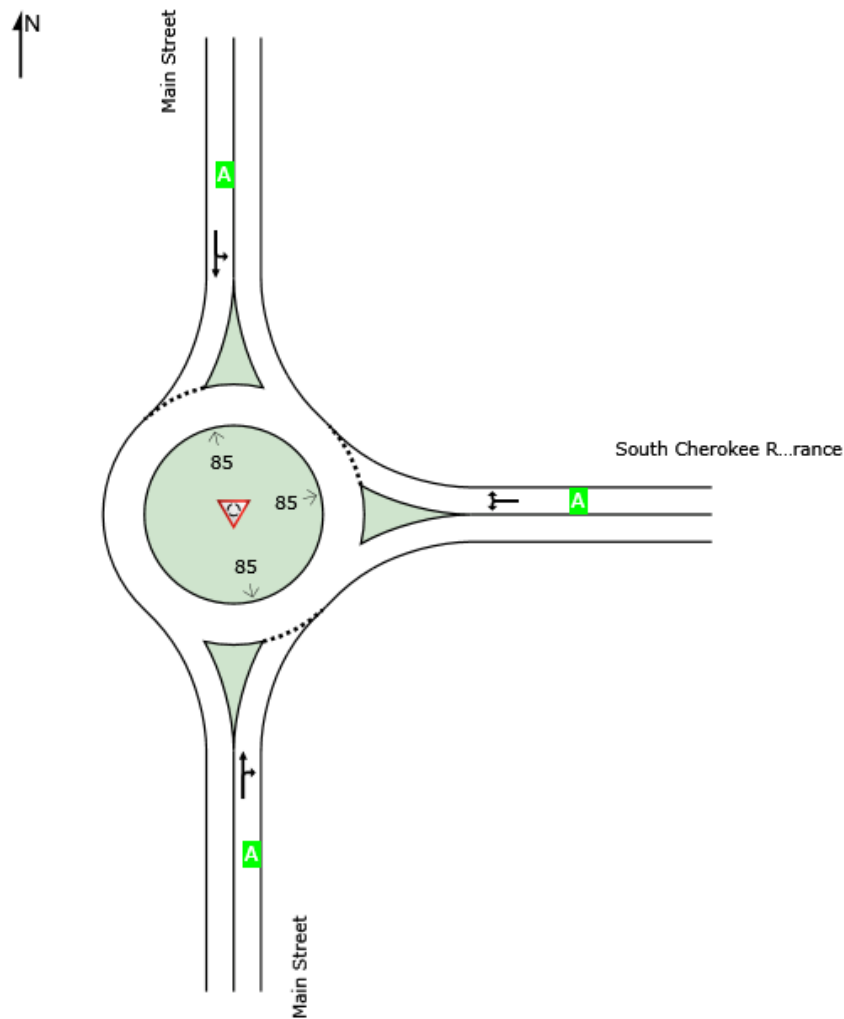
Lane Level of Service

 Site: 1 [Main Street at South Cherokee Rec Entrance 2029 AM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 MD Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	East	North	
LOS	A	A	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

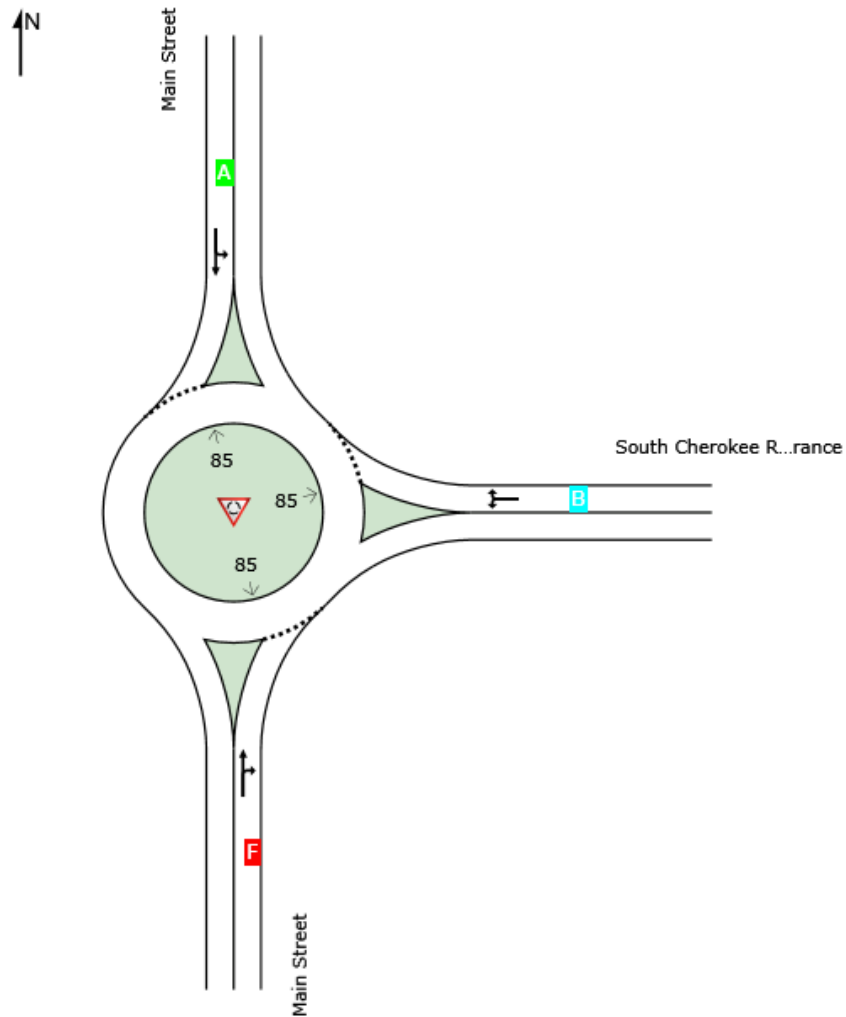
Lane Level of Service

 **Site: 1 [Main Street at South Cherokee Rec Entrance 2029 PM - Weekday (Site Folder: General)]**

Output produced by **SIDRA INTERSECTION Version: 9.1.6.228**

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	East	North	
LOS	A	B	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

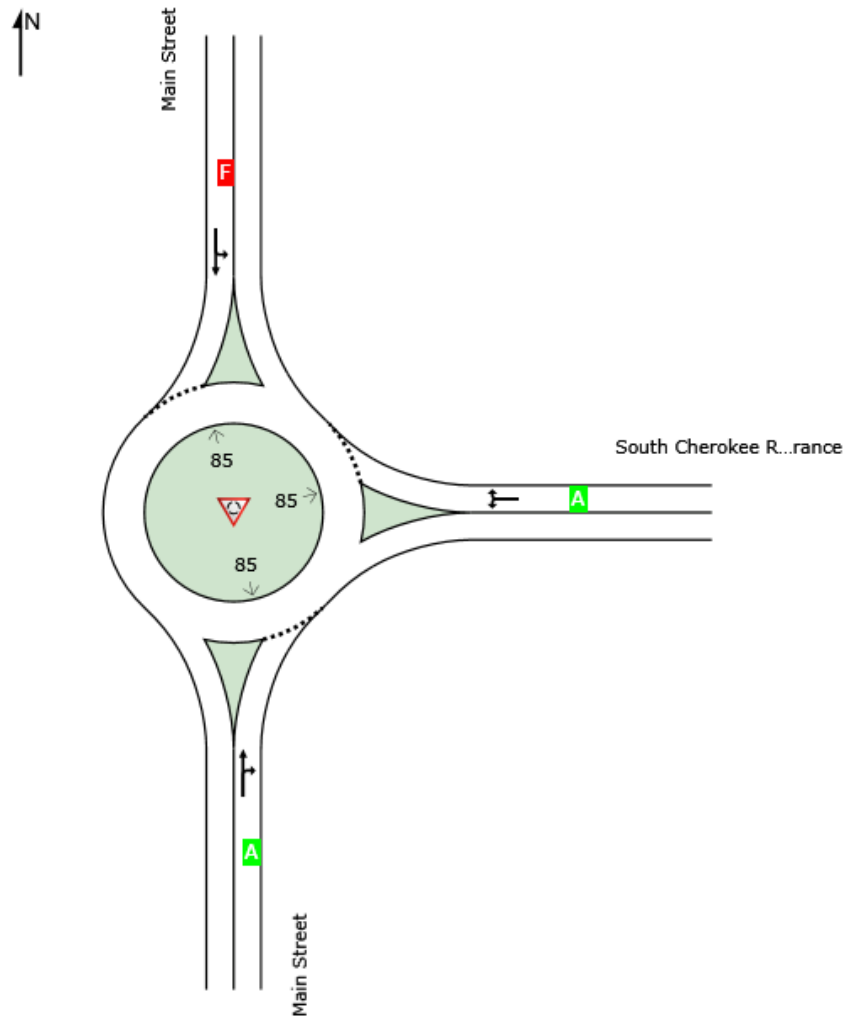
Lane Level of Service

 Site: 1 [Main Street at South Cherokee Rec Entrance 2049 AM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	East	North	
LOS	A	A	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptime Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

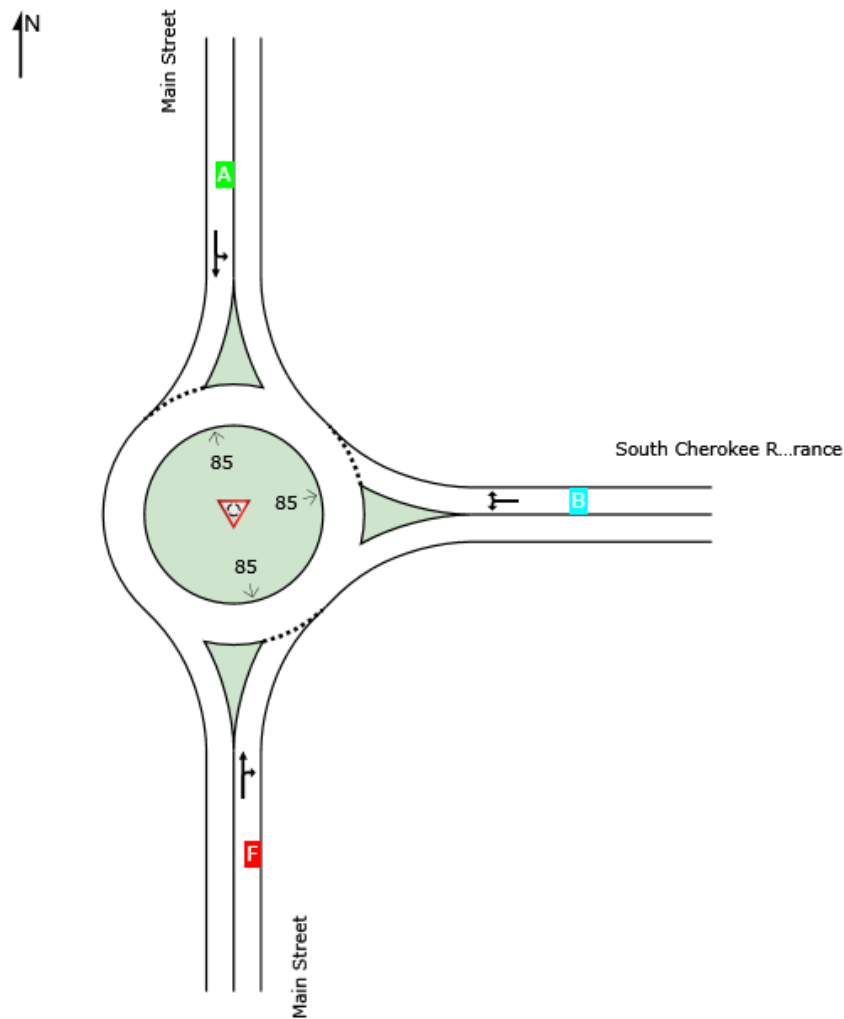
Lane Level of Service

 **Site: 1 [Main Street at South Cherokee Rec Entrance 2049 PM - Weekday (Site Folder: General)]**

Output produced by **SIDRA INTERSECTION** Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	East	North	
LOS	A	B	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

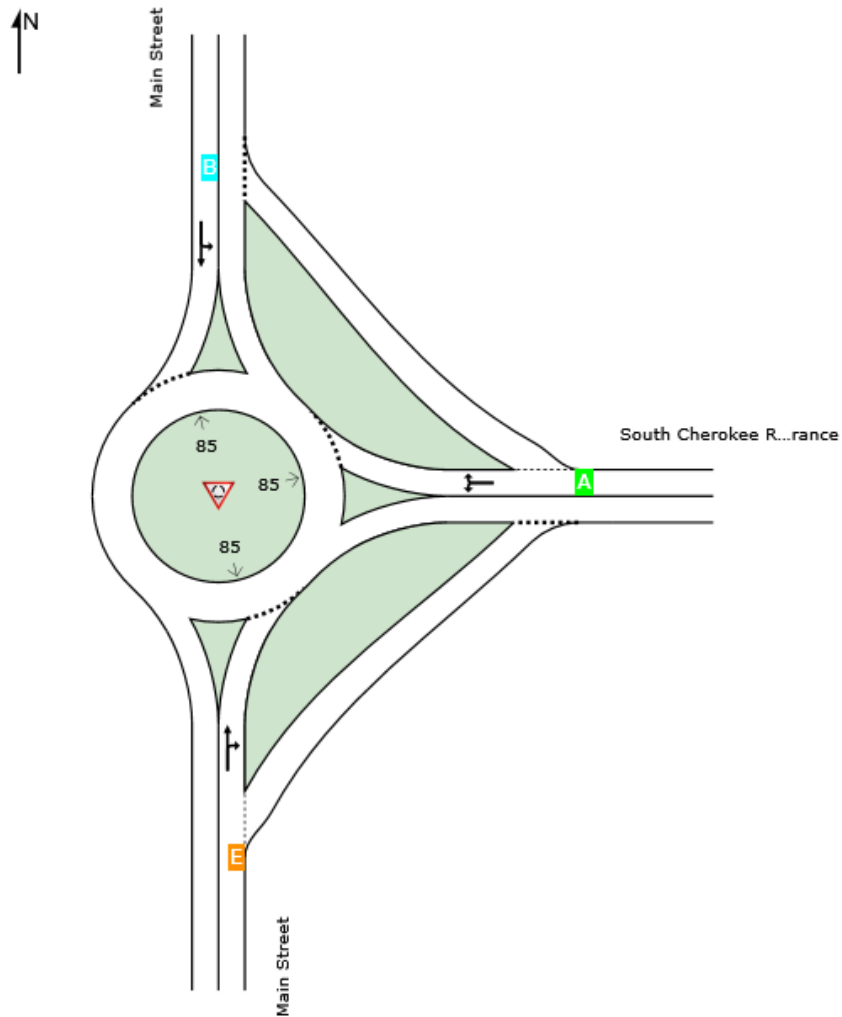
Lane Level of Service

 Site: 1 [Main Street at South Cherokee Rec Entrance 2029 MD - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 MD Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	East	North	
LOS	E	A	B	C



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptime Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

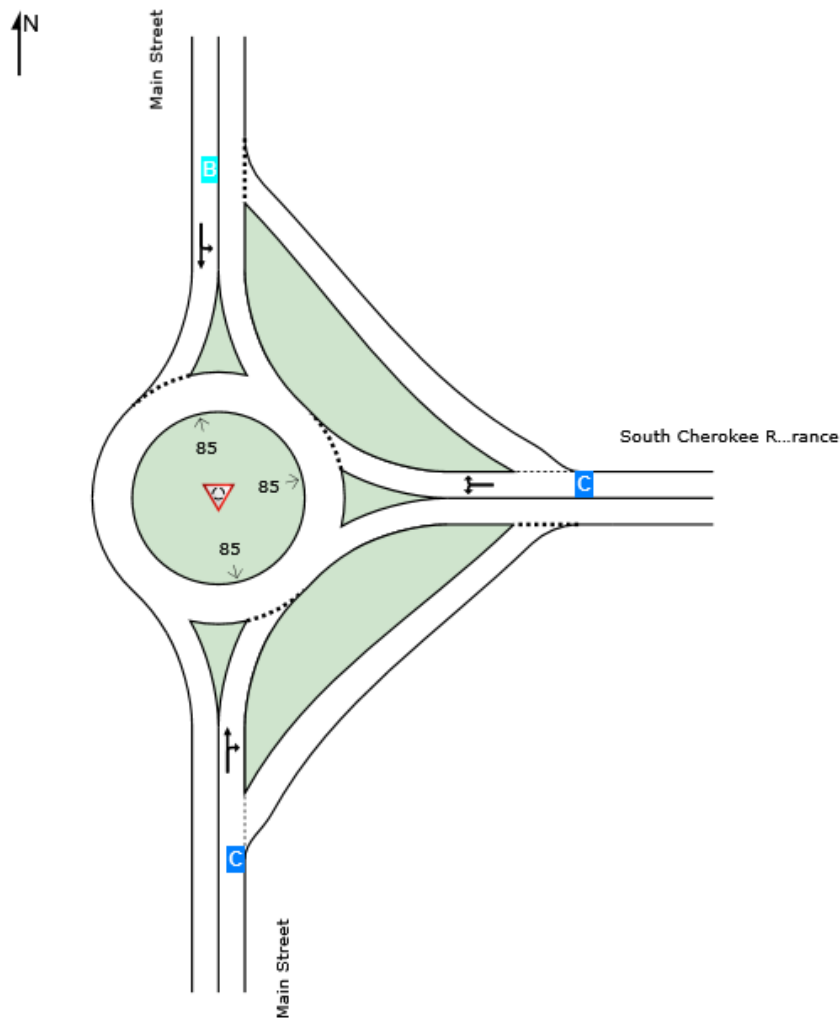
Lane Level of Service

 **Site: 1 [Main Street at South Cherokee Rec Entrance 2029 PM - Weekend (Site Folder: General)]**

Output produced by **SIDRA INTERSECTION Version: 9.1.6.228**

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	East	North	
LOS	C	C	B	C



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

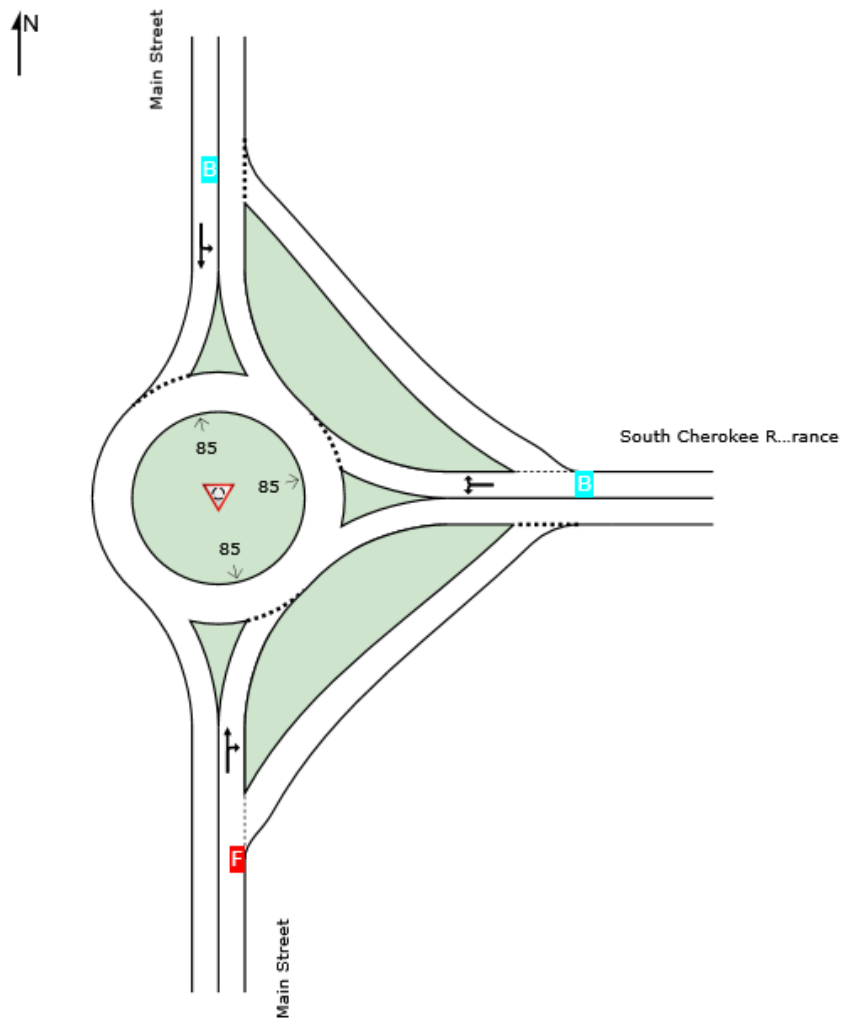
Lane Level of Service

 Site: 1 [Main Street at South Cherokee Rec Entrance 2049 MD - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	East	North	
LOS	F	B	B	F



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

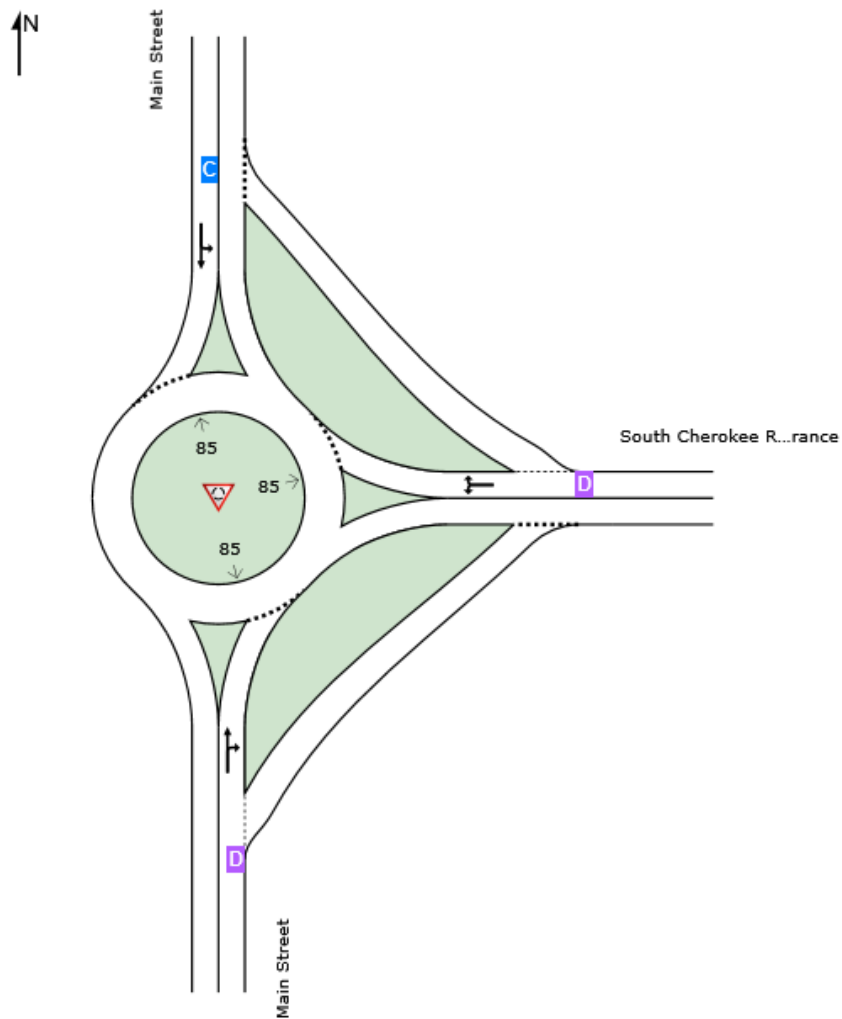
Lane Level of Service

 Site: 1 [Main Street at South Cherokee Rec Entrance 2049 PM - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	East	North	
LOS	D	D	C	D



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

LANE SUMMARY

Site: 1 [Main Street at South Cherokee Rec Entrance 2029 MD - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 MD Peak - Weekend
 Site Category: (None)
 Roundabout

Lane Use and Performance															
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	HV %	[Total veh/h]	HV %						[Veh]	Dist] ft				
South: Main Street															
Lane 1 ^d	1034	3.0	1034	3.0	1062	0.973	100	35.7	LOS E	55.9	1430.6	Full	2200	0.0	0.0
Approach	1034	3.0	1034	3.0		0.973		35.7	LOS E	55.9	1430.6				
East: South Cherokee Rec Entrance															
Lane 1 ^d	34	3.0	34	3.0	414	0.081	100	9.9	LOS A	0.3	7.3	Full	800	0.0	0.0
Approach	34	3.0	34	3.0		0.081		9.9	LOS A	0.3	7.3				
North: Main Street															
Lane 1 ^d	1007	3.0	1007	3.0	1210	0.832	100	10.5	LOS B	19.0	485.7	Full	2100	0.0	0.0
Approach	1007	3.0	1007	3.0		0.832		10.5	LOS B	19.0	485.7				
All Vehicles	2074	3.0	2074	3.0		0.973		23.0	LOS C	55.9	1430.6				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From S To Exit:	N	E			Cap. veh/h	v/c	%	%		
Lane 1	921	113	1034	3.0	1062	0.973	100	NA	NA	
Approach	921	113	1034	3.0		0.973				
East: South Cherokee Rec Entrance										
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From E To Exit:	S	N			Cap. veh/h	v/c	%	%		
Lane 1	12	22	34	3.0	414	0.081	100	NA	NA	

Approach	12	22	34	3.0	0.081				
North: Main Street									
Mov.	L2	T1	Total	%HV	Deg.	Lane	Prob.	Ov.	
From N To Exit:	E	S			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.
Lane 1	123	884	1007	3.0	1210	0.832	100	NA	NA
Approach	123	884	1007	3.0	0.832				
Total %HV Deg.Satn (v/c)									
All Vehicles	2074	3.0	0.973						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
East: South Cherokee Rec Entrance				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0

LANE SUMMARY

Site: 1 [Main Street at South Cherokee Rec Entrance 2029 PM - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

Lane Use and Performance															
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	HV %	[Total veh/h]	HV %						[Veh]	Dist] ft				
South: Main Street															
Lane 1 ^d	861	3.0	861	3.0	1077	0.799	100	17.5	LOS C	13.6	348.9	Full	2200	0.0	0.0
Approach	861	3.0	861	3.0		0.799		17.5	LOS C	13.6	348.9				
East: South Cherokee Rec Entrance															
Lane 1 ^d	266	3.0	266	3.0	478	0.557	100	19.2	LOS C	3.2	80.9	Full	800	0.0	0.0
Approach	266	3.0	266	3.0		0.557		19.2	LOS C	3.2	80.9				
North: Main Street															
Lane 1 ^d	795	3.0	795	3.0	1085	0.732	100	14.4	LOS B	8.4	214.9	Full	2100	0.0	0.0
Approach	795	3.0	795	3.0		0.732		14.4	LOS B	8.4	214.9				
All Vehicles	1922	3.0	1922	3.0		0.799		16.5	LOS C	13.6	348.9				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From S To Exit:	N	E			Cap. veh/h	v/c	%	%		
Lane 1	799	62	861	3.0	1077	0.799	100	NA	NA	
Approach	799	62	861	3.0		0.799				
East: South Cherokee Rec Entrance										
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From E To Exit:	S	N			Cap. veh/h	v/c	%	%		
Lane 1	104	162	266	3.0	478	0.557	100	NA	NA	

Approach	104	162	266	3.0	0.557				
North: Main Street									
Mov. From N To Exit:	L2 E	T1 S	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	111	684	795	3.0	1085	0.732	100	NA	NA
Approach	111	684	795	3.0	0.732				
Total %HV Deg.Satn (v/c)									
All Vehicles	1922	3.0	0.799						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
East: South Cherokee Rec Entrance				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0

LANE SUMMARY

Site: 1 [Main Street at South Cherokee Rec Entrance 2049 MD - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

Lane Use and Performance															
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	HV %	[Total veh/h]	HV %						[Veh]	Dist] ft				
South: Main Street															
Lane 1 ^d	1237	3.0	1237	3.0	1062	1.165	100	90.8	LOS F	106.9	2737.3	Full	2200	0.0	11.9
Approach	1237	3.0	1237	3.0		1.165		90.8	LOS F	106.9	2737.3				
East: South Cherokee Rec Entrance															
Lane 1 ^d	34	3.0	34	3.0	392	0.086	100	10.4	LOS B	0.3	7.6	Full	800	0.0	0.0
Approach	34	3.0	34	3.0		0.086		10.4	LOS B	0.3	7.6				
North: Main Street															
Lane 1 ^d	1201	3.0	1201	3.0	1210	0.993	100	13.3	LOS B	208.9	5346.9	Full	2100	0.0	53.0
Approach	1201	3.0	1201	3.0		0.993		13.3	LOS B	208.9	5346.9				
All Vehicles	2472	3.0	2472	3.0		1.165		52.1	LOS F	208.9	5346.9				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL	Ov. Lane	
From S To Exit:	N	E			Cap. veh/h	v/c	%	%	No.	
Lane 1	1124	113	1237	3.0	1062	1.165	100	NA	NA	
Approach	1124	113	1237	3.0		1.165				
East: South Cherokee Rec Entrance										
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL	Ov. Lane	
From E To Exit:	S	N			Cap. veh/h	v/c	%	%	No.	
Lane 1	12	22	34	3.0	392	0.086	100	NA	NA	

Approach	12	22	34	3.0	0.086				
North: Main Street									
Mov.	L2	T1	Total	%HV	Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From N To Exit:	E	S			veh/h	v/c	%	%	
Lane 1	123	1078	1201	3.0	1210	0.993	100	NA	NA
Approach	123	1078	1201	3.0	0.993				
Total %HV Deg.Satn (v/c)									
All Vehicles	2472	3.0	1.165						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	43.8	148.3	NA
East: South Cherokee Rec Entrance				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0

LANE SUMMARY

Site: 1 [Main Street at South Cherokee Rec Entrance 2049 PM - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

Lane Use and Performance															
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	HV %	[Total veh/h]	HV %						[Veh]	Dist] ft				
South: Main Street															
Lane 1 ^d	1037	3.0	1037	3.0	1077	0.963	100	33.2	LOS D	51.8	1325.7	Full	2200	0.0	0.0
Approach	1037	3.0	1037	3.0		0.963		33.2	LOS D	51.8	1325.7				
East: South Cherokee Rec Entrance															
Lane 1 ^d	266	3.0	266	3.0	388	0.687	100	30.4	LOS D	3.9	99.9	Full	800	0.0	0.0
Approach	266	3.0	266	3.0		0.687		30.4	LOS D	3.9	99.9				
North: Main Street															
Lane 1 ^d	945	3.0	945	3.0	1085	0.870	100	22.0	LOS C	24.2	618.6	Full	2100	0.0	0.0
Approach	945	3.0	945	3.0		0.870		22.0	LOS C	24.2	618.6				
All Vehicles	2248	3.0	2248	3.0		0.963		28.2	LOS D	51.8	1325.7				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From S To Exit:	N	E			Cap. veh/h	v/c	%	%		
Lane 1	975	62	1037	3.0	1077	0.963	100	NA	NA	
Approach	975	62	1037	3.0		0.963				
East: South Cherokee Rec Entrance										
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From E To Exit:	S	N			Cap. veh/h	v/c	%	%		
Lane 1	104	162	266	3.0	388	0.687	100	NA	NA	

Approach	104	162	266	3.0	0.687				
North: Main Street									
Mov. From N To Exit:	L2 E	T1 S	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	111	834	945	3.0	1085	0.870	100	NA	NA
Approach	111	834	945	3.0	0.870				
Total %HV Deg.Satn (v/c)									
All Vehicles	2248	3.0	0.963						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
East: South Cherokee Rec Entrance				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0

LANE SUMMARY

Site: 1 [Main Street at South Cherokee Rec Entrance 2029 MD - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 MD Peak - Weekend
 Site Category: (None)
 Roundabout

Lane Use and Performance															
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	HV %	[Total veh/h]	HV %						[Veh]	Dist] ft				
South: Main Street															
Lane 1 ^d	1034	3.0	1034	3.0	1062	0.973	100	35.7	LOS E	55.9	1430.6	Full	2200	0.0	0.0
Approach	1034	3.0	1034	3.0		0.973		35.7	LOS E	55.9	1430.6				
East: South Cherokee Rec Entrance															
Lane 1 ^d	34	3.0	34	3.0	414	0.081	100	9.9	LOS A	0.3	7.3	Full	800	0.0	0.0
Approach	34	3.0	34	3.0		0.081		9.9	LOS A	0.3	7.3				
North: Main Street															
Lane 1 ^d	1007	3.0	1007	3.0	1210	0.832	100	10.5	LOS B	19.0	485.7	Full	2100	0.0	0.0
Approach	1007	3.0	1007	3.0		0.832		10.5	LOS B	19.0	485.7				
All Vehicles	2074	3.0	2074	3.0		0.973		23.0	LOS C	55.9	1430.6				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From S To Exit:	N	E			Cap. veh/h	v/c	%	%		
Lane 1	921	113	1034	3.0	1062	0.973	100	NA	NA	
Approach	921	113	1034	3.0		0.973				
East: South Cherokee Rec Entrance										
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From E To Exit:	S	N			Cap. veh/h	v/c	%	%		
Lane 1	12	22	34	3.0	414	0.081	100	NA	NA	

Approach	12	22	34	3.0	0.081				
North: Main Street									
Mov. From N To Exit:	L2	T1	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
	E	S							
Lane 1	123	884	1007	3.0	1210	0.832	100	NA	NA
Approach	123	884	1007	3.0	0.832				
Total %HV Deg.Satn (v/c)									
All Vehicles	2074	3.0	0.973						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
East: South Cherokee Rec Entrance				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0

LANE SUMMARY

Site: 1 [Main Street at South Cherokee Rec Entrance 2029 PM - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

Lane Use and Performance															
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h	HV %	[Total veh/h	HV %						[Veh	Dist] ft				
South: Main Street															
Lane 1 ^d	861	3.0	861	3.0	1077	0.799	100	17.5	LOS C	13.6	348.9	Full	2200	0.0	0.0
Approach	861	3.0	861	3.0		0.799		17.5	LOS C	13.6	348.9				
East: South Cherokee Rec Entrance															
Lane 1 ^d	266	3.0	266	3.0	478	0.557	100	19.2	LOS C	3.2	80.9	Full	800	0.0	0.0
Approach	266	3.0	266	3.0		0.557		19.2	LOS C	3.2	80.9				
North: Main Street															
Lane 1 ^d	795	3.0	795	3.0	1085	0.732	100	14.4	LOS B	8.4	214.9	Full	2100	0.0	0.0
Approach	795	3.0	795	3.0		0.732		14.4	LOS B	8.4	214.9				
All Vehicles	1922	3.0	1922	3.0		0.799		16.5	LOS C	13.6	348.9				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From S To Exit:	N	E			Cap. veh/h	v/c	%	%		
Lane 1	799	62	861	3.0	1077	0.799	100	NA	NA	
Approach	799	62	861	3.0		0.799				
East: South Cherokee Rec Entrance										
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From E To Exit:	S	N			Cap. veh/h	v/c	%	%		
Lane 1	104	162	266	3.0	478	0.557	100	NA	NA	

Approach	104	162	266	3.0	0.557				
North: Main Street									
Mov. From N To Exit:	L2 E	T1 S	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	111	684	795	3.0	1085	0.732	100	NA	NA
Approach	111	684	795	3.0	0.732				
Total %HV Deg.Satn (v/c)									
All Vehicles	1922	3.0	0.799						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
East: South Cherokee Rec Entrance				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0

LANE SUMMARY

Site: 1 [Main Street at South Cherokee Rec Entrance 2049 MD - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

Lane Use and Performance															
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	HV %	[Total veh/h]	HV %						[Veh]	Dist] ft				
South: Main Street															
Lane 1 ^d	1237	3.0	1237	3.0	1062	1.165	100	90.8	LOS F	106.9	2737.3	Full	2200	0.0	11.9
Approach	1237	3.0	1237	3.0		1.165		90.8	LOS F	106.9	2737.3				
East: South Cherokee Rec Entrance															
Lane 1 ^d	34	3.0	34	3.0	392	0.086	100	10.4	LOS B	0.3	7.6	Full	800	0.0	0.0
Approach	34	3.0	34	3.0		0.086		10.4	LOS B	0.3	7.6				
North: Main Street															
Lane 1 ^d	1201	3.0	1201	3.0	1210	0.993	100	13.3	LOS B	208.9	5346.9	Full	2100	0.0	53.0
Approach	1201	3.0	1201	3.0		0.993		13.3	LOS B	208.9	5346.9				
All Vehicles	2472	3.0	2472	3.0		1.165		52.1	LOS F	208.9	5346.9				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Roundabout Capacity Model: US HCM 6.
 Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
 Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
 Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
 Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	T1	R2	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From S To Exit:	N	E			veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	1124	113	1237	3.0	1062	1.165	100	NA	NA	
Approach	1124	113	1237	3.0		1.165				
East: South Cherokee Rec Entrance										
Mov.	L2	R2	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From E To Exit:	S	N			veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	12	22	34	3.0	392	0.086	100	NA	NA	

Approach	12	22	34	3.0	0.086				
North: Main Street									
Mov.	L2	T1	Total	%HV		Deg.	Lane	Prob.	Ov.
From N To Exit:	E	S			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.
Lane 1	123	1078	1201	3.0	1210	0.993	100	NA	NA
Approach	123	1078	1201	3.0	0.993				
Total %HV Deg.Satn (v/c)									
All Vehicles	2472	3.0	1.165						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	43.8	148.3	NA
East: South Cherokee Rec Entrance				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0

LANE SUMMARY

Site: 1 [Main Street at South Cherokee Rec Entrance 2049 PM - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

Lane Use and Performance															
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	HV %	[Total veh/h]	HV %						[Veh]	Dist] ft				
South: Main Street															
Lane 1 ^d	1037	3.0	1037	3.0	1077	0.963	100	33.2	LOS D	51.8	1325.7	Full	2200	0.0	0.0
Approach	1037	3.0	1037	3.0		0.963		33.2	LOS D	51.8	1325.7				
East: South Cherokee Rec Entrance															
Lane 1 ^d	266	3.0	266	3.0	388	0.687	100	30.4	LOS D	3.9	99.9	Full	800	0.0	0.0
Approach	266	3.0	266	3.0		0.687		30.4	LOS D	3.9	99.9				
North: Main Street															
Lane 1 ^d	945	3.0	945	3.0	1085	0.870	100	22.0	LOS C	24.2	618.6	Full	2100	0.0	0.0
Approach	945	3.0	945	3.0		0.870		22.0	LOS C	24.2	618.6				
All Vehicles	2248	3.0	2248	3.0		0.963		28.2	LOS D	51.8	1325.7				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From S To Exit:	N	E			Cap. veh/h	v/c	%	%		
Lane 1	975	62	1037	3.0	1077	0.963	100	NA	NA	
Approach	975	62	1037	3.0		0.963				
East: South Cherokee Rec Entrance										
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From E To Exit:	S	N			Cap. veh/h	v/c	%	%		
Lane 1	104	162	266	3.0	388	0.687	100	NA	NA	

Approach	104	162	266	3.0	0.687				
North: Main Street									
Mov. From N To Exit:	L2 E	T1 S	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	111	834	945	3.0	1085	0.870	100	NA	NA
Approach	111	834	945	3.0	0.870				
Total %HV Deg.Satn (v/c)									
All Vehicles	2248	3.0	0.963						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
East: South Cherokee Rec Entrance				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0

LANE LEVEL OF SERVICE

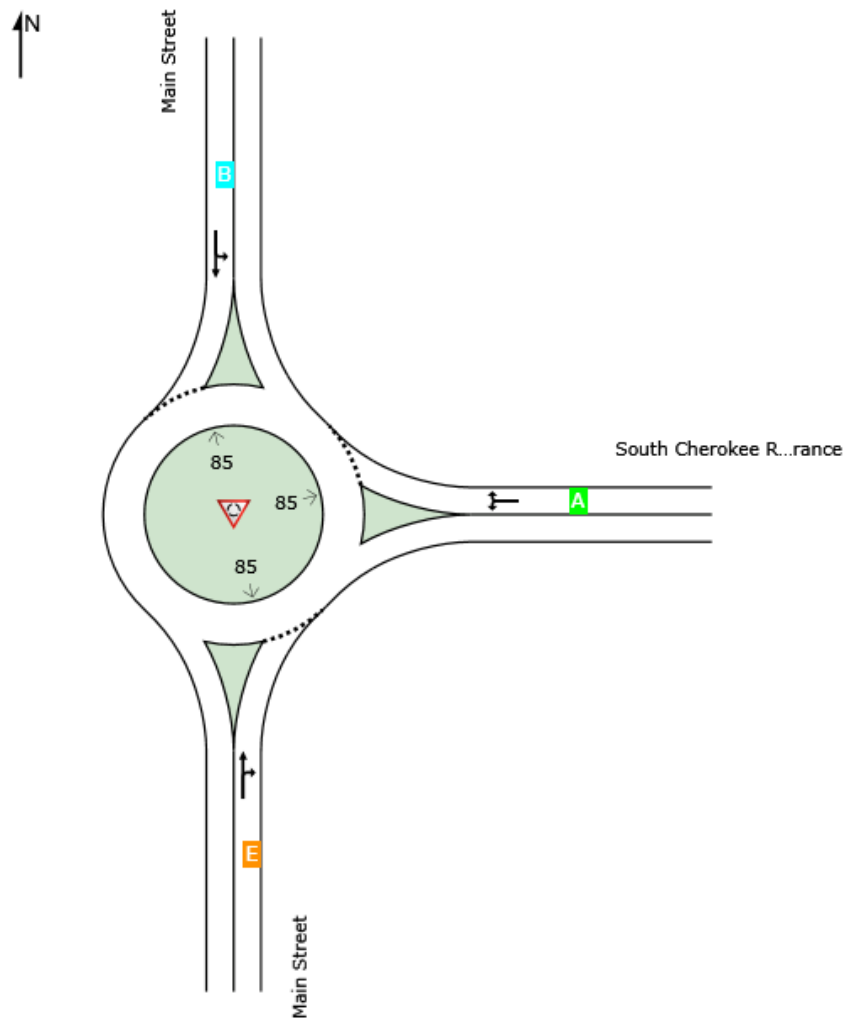
Lane Level of Service

 **Site: 1 [Main Street at South Cherokee Rec Entrance 2029 MD - Weekend (Site Folder: General)]**

Output produced by **SIDRA INTERSECTION Version: 9.1.6.228**

Main Street at South Cherokee Rec Entrance
 2029 MD Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	East	North	
LOS	E	A	B	C



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

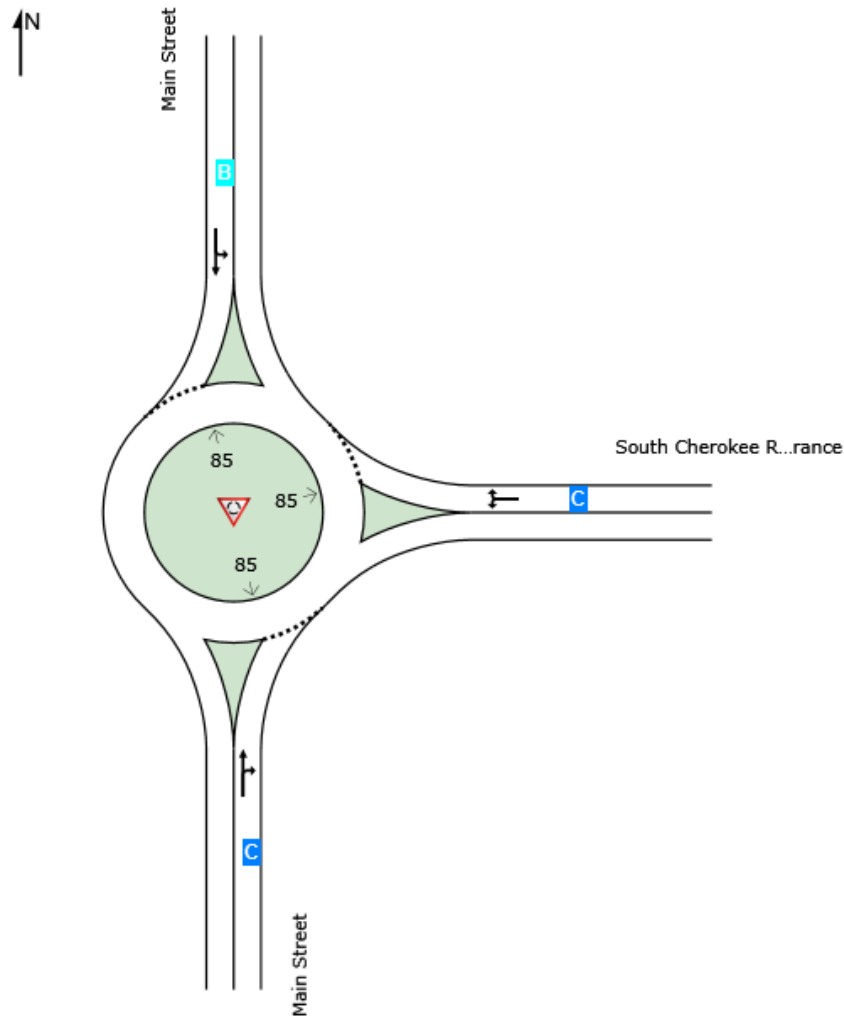
Lane Level of Service

 **Site: 1 [Main Street at South Cherokee Rec Entrance 2029 PM - Weekend (Site Folder: General)]**

Output produced by **SIDRA INTERSECTION Version: 9.1.6.228**

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	East	North	
LOS	C	C	B	C



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

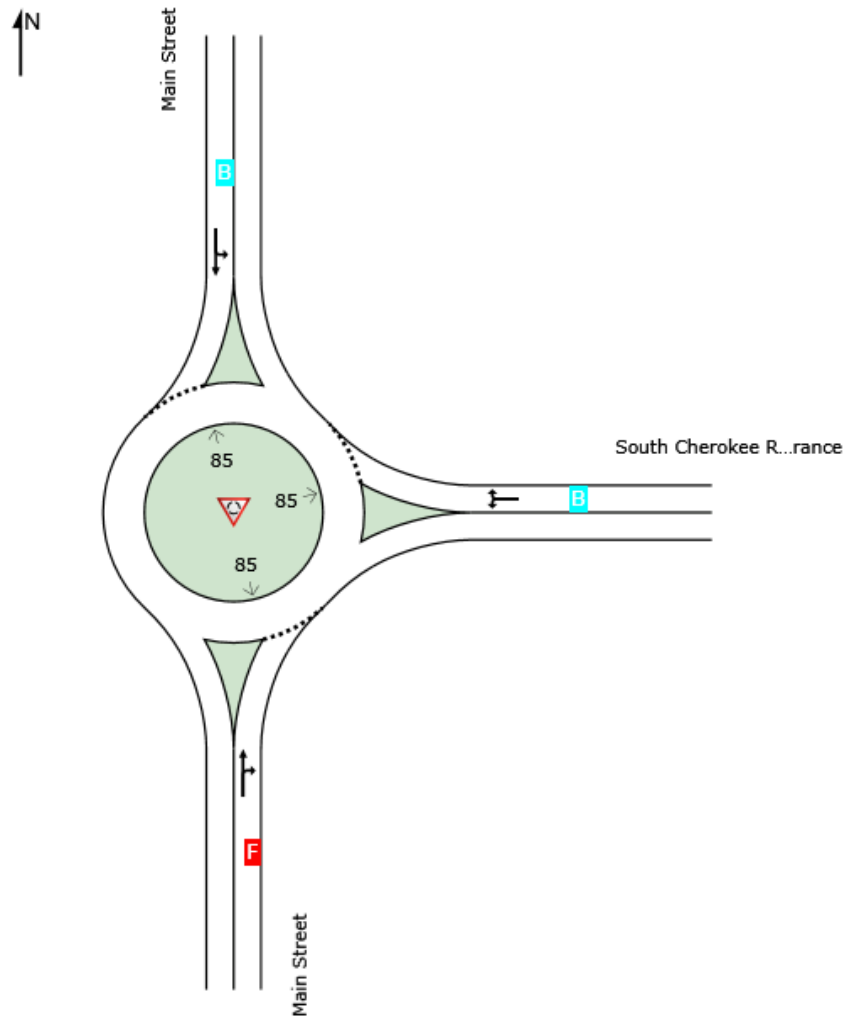
Lane Level of Service

 Site: 1 [Main Street at South Cherokee Rec Entrance 2049 MD - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	East	North	
LOS	F	B	B	F



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

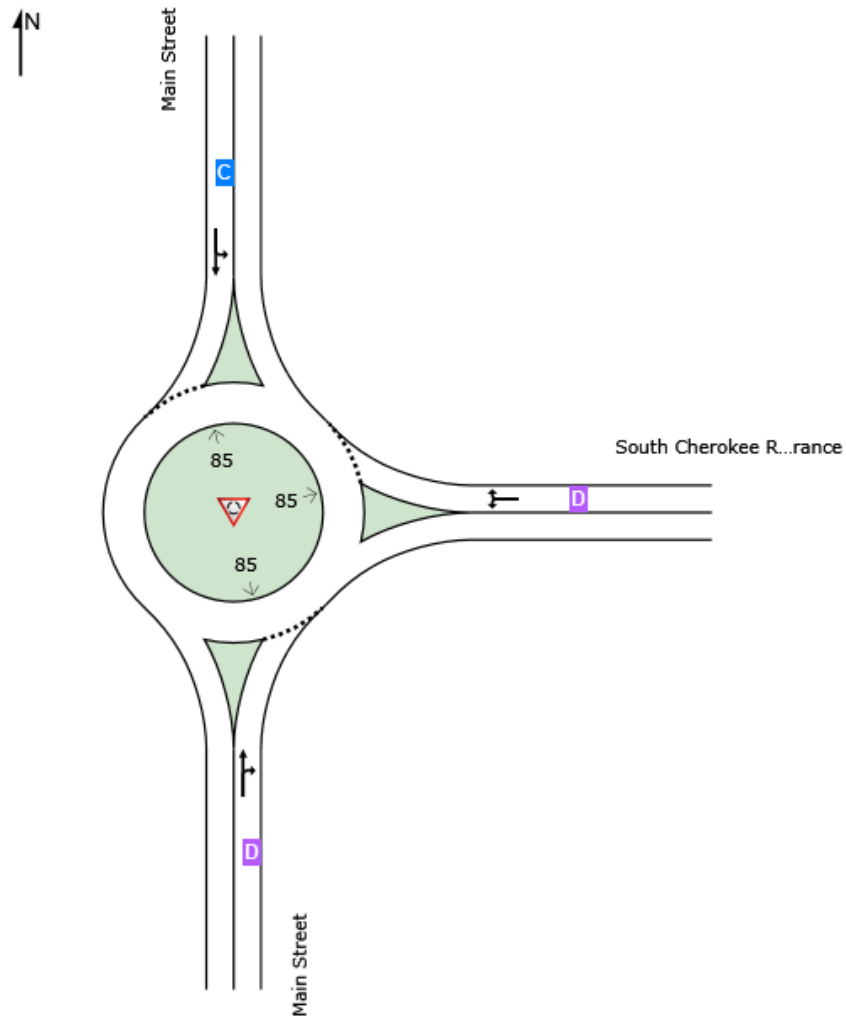
Lane Level of Service

 Site: 1 [Main Street at South Cherokee Rec Entrance 2049 PM - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at South Cherokee Rec Entrance
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	East	North	
LOS	D	D	C	D



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

HCM 6th TWSC
3: Main St & Bell Pkwy/Exit Only Dwy

2029 Opening Year AM Peak - Weekday
OY 2029 Int 3 - RCUT.syn

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↘	↖			↖	↗
Traffic Vol, veh/h	0	0	44	0	0	0	129	493	0	0	951	94
Future Vol, veh/h	0	0	44	0	0	0	129	493	0	0	951	94
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	92	94	92	92	92	94	94	92	92	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	47	0	0	0	137	524	0	0	1012	100

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	1012	-	-	524	1112	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	290	0	0	553	628	-	0	0	-	-
Stage 1	0	0	-	0	0	-	-	-	0	0	-	-
Stage 2	0	0	-	0	0	-	-	-	0	0	-	-
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	-	-	290	-	-	553	628	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	19.8		0		2.6		0	
HCM LOS	C		A					

Minor Lane/Major Mvmt	NBL	NBT	EBLn1WBLn1	SBT	SBR
Capacity (veh/h)	628	-	290	-	-
HCM Lane V/C Ratio	0.219	-	0.161	-	-
HCM Control Delay (s)	12.3	-	19.8	0	-
HCM Lane LOS	B	-	C	A	-
HCM 95th %tile Q(veh)	0.8	-	0.6	-	-

HCM 6th TWSC
3: Main St & Bell Pkwy/Exit Only Dwy

2029 Opening Year PM Peak - Weekday
OY 2029 Int 3 - RCUT.syn

Intersection												
Int Delay, s/veh	5.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↗	↖			↖	↗
Traffic Vol, veh/h	0	0	257	0	0	8	36	1126	0	0	835	19
Future Vol, veh/h	0	0	257	0	0	8	36	1126	0	0	835	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	92	93	92	92	92	93	93	92	92	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	276	0	0	9	39	1211	0	0	898	20

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	898	-	-	1211	918	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	338	0	0	222	743	-	0	0	-	-
Stage 1	0	0	-	0	0	-	-	-	0	0	-	-
Stage 2	0	0	-	0	0	-	-	-	0	0	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	338	-	-	222	743	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB				
HCM Control Delay, s	49.5		21.9		0.3		0				
HCM LOS	E		C								

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	WBLn1	SBT	SBR
Capacity (veh/h)	743	-	338	222	-	-
HCM Lane V/C Ratio	0.052	-	0.818	0.039	-	-
HCM Control Delay (s)	10.1	-	49.5	21.9	-	-
HCM Lane LOS	B	-	E	C	-	-
HCM 95th %tile Q(veh)	0.2	-	7	0.1	-	-

HCM 6th TWSC
3: Main St & Bell Pkwy/Exit Only Dwy

2029 Opening Year MD Peak - Weekend
OY 2029 Int 3 - RCUT.syn

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↗	↖			↖	↗
Traffic Vol, veh/h	0	0	43	0	0	0	31	948	0	0	819	13
Future Vol, veh/h	0	0	43	0	0	0	31	948	0	0	819	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	92	94	92	92	92	94	94	92	92	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	46	0	0	0	33	1009	0	0	871	14

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	871	-	-	1009	885	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	350	0	0	292	765	-	0	0	-	-
Stage 1	0	0	-	0	0	-	-	-	0	0	-	-
Stage 2	0	0	-	0	0	-	-	-	0	0	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	350	-	-	292	765	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	16.8		0		0.3		0	
HCM LOS	C		A					

Minor Lane/Major Mvmt	NBL	NBT	EBLn1WBLn1	SBT	SBR
Capacity (veh/h)	765	-	350	-	-
HCM Lane V/C Ratio	0.043	-	0.131	-	-
HCM Control Delay (s)	9.9	-	16.8	0	-
HCM Lane LOS	A	-	C	A	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

HCM 6th TWSC
3: Main St & Bell Pkwy/Exit Only Dwy

2029 Opening Year PM Peak - Weekend
OY 2029 Int 3 - RCUT.syn

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↗	↖			↖	↗
Traffic Vol, veh/h	0	0	47	0	0	0	11	803	0	0	736	2
Future Vol, veh/h	0	0	47	0	0	0	11	803	0	0	736	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	92	94	92	92	92	94	94	92	92	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	50	0	0	0	12	854	0	0	783	2

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	783	-	-	854	785	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	394	0	0	358	834	-	0	0	-	-
Stage 1	0	0	-	0	0	-	-	-	0	0	-	-
Stage 2	0	0	-	0	0	-	-	-	0	0	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	394	-	-	358	834	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	15.5		0		0.1		0	
HCM LOS	C		A					

Minor Lane/Major Mvmt	NBL	NBT	EBLn1WBLn1	SBT	SBR
Capacity (veh/h)	834	-	394	-	-
HCM Lane V/C Ratio	0.014	-	0.127	-	-
HCM Control Delay (s)	9.4	-	15.5	0	-
HCM Lane LOS	A	-	C	A	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Queues
3: Main St & Bell Pkwy/Exit Only Dwy

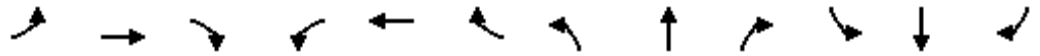
2029 Opening Year AM Peak - Weekday
OY 2029 Wkdy - Signal.syn



Lane Group	EBT	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	3	44	137	521	1012	100
v/c Ratio	0.02	0.24	0.35	0.32	0.62	0.07
Control Delay	39.0	15.9	5.7	2.8	5.7	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.0	15.9	5.7	2.8	5.7	0.6
Queue Length 50th (ft)	2	0	19	70	215	0
Queue Length 95th (ft)	10	31	49	108	346	9
Internal Link Dist (ft)	537			454	2139	
Turn Bay Length (ft)		105	155			235
Base Capacity (vph)	419	451	386	1626	1626	1394
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	0.01	0.10	0.35	0.32	0.62	0.07
Intersection Summary						

HCM Signalized Intersection Capacity Analysis
 3: Main St & Bell Pkwy/Exit Only Dwy

2029 Opening Year AM Peak - Weekday
 OY 2029 Wkdy - Signal.syn



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↔		↖	↑		↘	↕	↗
Traffic Volume (vph)	3	0	41	0	0	0	129	490	0	0	951	94
Future Volume (vph)	3	0	41	0	0	0	129	490	0	0	951	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0				6.0	6.0			6.0	6.0
Lane Util. Factor		1.00	1.00				1.00	1.00			1.00	1.00
Fr _t		1.00	0.85				1.00	1.00			1.00	0.85
Fl _t Protected		0.95	1.00				0.95	1.00			1.00	1.00
Satd. Flow (prot)		1770	1583				1770	1863			1863	1583
Fl _t Permitted		0.85	1.00				0.24	1.00			1.00	1.00
Satd. Flow (perm)		1585	1583				443	1863			1863	1583
Peak-hour factor, PHF	0.94	0.92	0.94	0.92	0.92	0.92	0.94	0.94	0.92	0.92	0.94	0.94
Adj. Flow (vph)	3	0	44	0	0	0	137	521	0	0	1012	100
RTOR Reduction (vph)	0	0	42	0	0	0	0	0	0	0	0	18
Lane Group Flow (vph)	0	3	2	0	0	0	137	521	0	0	1012	82
Turn Type	Perm	NA	Perm				Perm	NA		Perm	NA	Perm
Protected Phases		8			4			6			2	
Permitted Phases	8		8	4			6		2			2
Actuated Green, G (s)		4.7	4.7				77.0	77.0			77.0	77.0
Effective Green, g (s)		4.7	4.7				77.0	77.0			77.0	77.0
Actuated g/C Ratio		0.05	0.05				0.82	0.82			0.82	0.82
Clearance Time (s)		6.0	6.0				6.0	6.0			6.0	6.0
Vehicle Extension (s)		3.0	3.0				5.0	5.0			5.0	5.0
Lane Grp Cap (vph)		79	79				364	1530			1530	1300
v/s Ratio Prot								0.28			c0.54	
v/s Ratio Perm		c0.00	0.00				0.31					0.05
v/c Ratio		0.04	0.03				0.38	0.34			0.66	0.06
Uniform Delay, d1		42.3	42.3				2.2	2.1			3.3	1.6
Progression Factor		1.00	1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2		0.2	0.1				1.4	0.3			1.4	0.0
Delay (s)		42.5	42.5				3.5	2.3			4.7	1.6
Level of Service		D	D				A	A			A	A
Approach Delay (s)		42.5			0.0			2.6			4.4	
Approach LOS		D			A			A			A	

Intersection Summary		
HCM 2000 Control Delay	4.7	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.63	A
Actuated Cycle Length (s)	93.7	Sum of lost time (s)
Intersection Capacity Utilization	81.7%	12.0
Analysis Period (min)	15	ICU Level of Service
		D

c Critical Lane Group

Queues
3: Main St & Bell Pkwy/Exit Only Dwy

2029 Opening Year PM Peak - Weekday
OY 2029 Wkdy - Signal.syn



Lane Group	EBT	EBR	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	73	203	9	39	1139	898	20
v/c Ratio	0.41	0.58	0.04	0.12	0.84	0.66	0.02
Control Delay	41.9	15.7	0.4	4.8	16.1	9.3	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.9	15.7	0.4	4.8	16.1	9.3	0.9
Queue Length 50th (ft)	37	15	0	5	322	191	0
Queue Length 95th (ft)	79	77	1	17	#759	383	4
Internal Link Dist (ft)	537		143		454	2139	
Turn Bay Length (ft)		105		155			235
Base Capacity (vph)	413	588	436	353	1465	1465	1252
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	0.18	0.35	0.02	0.11	0.78	0.61	0.02

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
3: Main St & Bell Pkwy/Exit Only Dwy

2029 Opening Year PM Peak - Weekday
OY 2029 Wkdy - Signal.syn



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↕		↗	↕		↗	↕	↗
Traffic Volume (vph)	68	0	189	6	0	2	36	1058	1	0	835	19
Future Volume (vph)	68	0	189	6	0	2	36	1058	1	0	835	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0		6.0		6.0	6.0			6.0	6.0
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Frt		1.00	0.85		0.97		1.00	1.00			1.00	0.85
Flt Protected		0.95	1.00		0.96		0.95	1.00			1.00	1.00
Satd. Flow (prot)		1770	1583		1739		1770	1862			1863	1583
Flt Permitted		0.75	1.00		0.78		0.24	1.00			1.00	1.00
Satd. Flow (perm)		1400	1583		1403		449	1862			1863	1583
Peak-hour factor, PHF	0.93	0.92	0.93	0.92	0.92	0.92	0.93	0.93	0.92	0.92	0.93	0.93
Adj. Flow (vph)	73	0	203	7	0	2	39	1138	1	0	898	20
RTOR Reduction (vph)	0	0	151	0	8	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	73	52	0	1	0	39	1139	0	0	898	15
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		6
Actuated Green, G (s)		10.4	10.4		10.4		59.6	59.6			59.6	59.6
Effective Green, g (s)		10.4	10.4		10.4		59.6	59.6			59.6	59.6
Actuated g/C Ratio		0.13	0.13		0.13		0.73	0.73			0.73	0.73
Clearance Time (s)		6.0	6.0		6.0		6.0	6.0			6.0	6.0
Vehicle Extension (s)		3.0	3.0		3.0		5.0	5.0			5.0	5.0
Lane Grp Cap (vph)		177	200		177		326	1353			1354	1150
v/s Ratio Prot								c0.61			0.48	
v/s Ratio Perm		c0.05	0.03		0.00		0.09					0.01
v/c Ratio		0.41	0.26		0.01		0.12	0.84			0.66	0.01
Uniform Delay, d1		33.0	32.3		31.3		3.4	7.9			5.9	3.1
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		1.6	0.7		0.0		0.3	5.4			1.6	0.0
Delay (s)		34.5	33.0		31.3		3.7	13.3			7.5	3.1
Level of Service		C	C		C		A	B			A	A
Approach Delay (s)		33.4			31.3			13.0			7.4	
Approach LOS		C			C			B			A	

Intersection Summary		
HCM 2000 Control Delay	13.3	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.78	B
Actuated Cycle Length (s)	82.0	Sum of lost time (s)
Intersection Capacity Utilization	77.3%	12.0
Analysis Period (min)	15	ICU Level of Service
		D

c Critical Lane Group

Queues
3: Main St & Bell Pkwy

2029 Opening Year MD Peak - Weekend
OY 2029 Wknd - Signal.syn

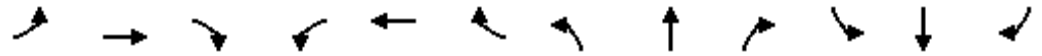


Lane Group	EBT	EBR	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	18	28	6	33	990	871	14
v/c Ratio	0.05	0.09	0.02	0.08	0.64	0.56	0.01
Control Delay	31.3	12.4	0.2	3.4	7.0	5.8	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.3	12.4	0.2	3.4	7.0	5.8	0.4
Queue Length 50th (ft)	6	0	0	4	205	159	0
Queue Length 95th (ft)	29	22	0	10	334	251	2
Internal Link Dist (ft)	537		148		454	2139	
Turn Bay Length (ft)		105		155			235
Base Capacity (vph)	1045	902	853	462	1739	1739	1480
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	0.02	0.03	0.01	0.07	0.57	0.50	0.01
Intersection Summary							

HCM Signalized Intersection Capacity Analysis
3: Main St & Bell Pkwy

2029 Opening Year MD Peak - Weekend

OY 2029 Wknd - Signal.syn



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↔		↖	↗		↖	↗	↖
Traffic Volume (vph)	17	0	26	2	0	4	31	931	0	0	819	13
Future Volume (vph)	17	0	26	2	0	4	31	931	0	0	819	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0		6.0		6.0	6.0			6.0	6.0
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Frt		1.00	0.85		0.91		1.00	1.00			1.00	0.85
Flt Protected		0.95	1.00		0.98		0.95	1.00			1.00	1.00
Satd. Flow (prot)		1770	1583		1667		1770	1863			1863	1583
Flt Permitted		1.00	1.00		0.88		0.27	1.00			1.00	1.00
Satd. Flow (perm)		1863	1583		1495		496	1863			1863	1583
Peak-hour factor, PHF	0.94	0.92	0.94	0.92	0.92	0.92	0.94	0.94	0.92	0.92	0.94	0.94
Adj. Flow (vph)	18	0	28	2	0	4	33	990	0	0	871	14
RTOR Reduction (vph)	0	0	26	0	6	0	0	0	0	0	0	4
Lane Group Flow (vph)	0	18	2	0	0	0	33	990	0	0	871	10
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		8			4			6			2	
Permitted Phases	8		8	4			6			2		2
Actuated Green, G (s)		3.7	3.7		3.7		40.1	40.1			40.1	40.1
Effective Green, g (s)		3.7	3.7		3.7		40.1	40.1			40.1	40.1
Actuated g/C Ratio		0.07	0.07		0.07		0.72	0.72			0.72	0.72
Clearance Time (s)		6.0	6.0		6.0		6.0	6.0			6.0	6.0
Vehicle Extension (s)		3.0	3.0		3.0		5.0	5.0			5.0	5.0
Lane Grp Cap (vph)		123	104		99		356	1338			1338	1137
v/s Ratio Prot								c0.53			0.47	
v/s Ratio Perm		c0.01	0.00		0.00		0.07					0.01
v/c Ratio		0.15	0.02		0.00		0.09	0.74			0.65	0.01
Uniform Delay, d1		24.6	24.4		24.3		2.4	4.7			4.2	2.2
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		0.6	0.1		0.0		0.2	2.7			1.5	0.0
Delay (s)		25.1	24.4		24.3		2.6	7.4			5.7	2.2
Level of Service		C	C		C		A	A			A	A
Approach Delay (s)		24.7			24.3			7.2			5.6	
Approach LOS		C			C			A			A	

Intersection Summary		
HCM 2000 Control Delay	7.0	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.69	A
Actuated Cycle Length (s)	55.8	Sum of lost time (s)
Intersection Capacity Utilization	71.4%	12.0
Analysis Period (min)	15	ICU Level of Service
		C

c Critical Lane Group

Queues
3: Main St & Bell Pkwy

2029 Opening Year PM Peak - Weekend
OY 2029 Wknd - Signal.syn



Lane Group	EBT	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	13	38	12	851	791	2
v/c Ratio	0.04	0.14	0.03	0.55	0.52	0.00
Control Delay	27.4	12.0	3.2	6.0	5.5	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.4	12.0	3.2	6.0	5.5	0.0
Queue Length 50th (ft)	5	0	1	153	134	0
Queue Length 95th (ft)	19	25	5	250	216	0
Internal Link Dist (ft)	537			454	2139	
Turn Bay Length (ft)	105		155		235	
Base Capacity (vph)	870	759	559	1798	1798	1529
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	0.01	0.05	0.02	0.47	0.44	0.00

Intersection Summary

HCM Signalized Intersection Capacity Analysis
3: Main St & Bell Pkwy

2029 Opening Year PM Peak - Weekend
OY 2029 Wknd - Signal.syn



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↔		↖	↗		↖	↗	↖
Traffic Volume (vph)	12	0	35	0	0	0	11	791	0	0	736	2
Future Volume (vph)	12	0	35	0	0	0	11	791	0	0	736	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0				6.0	6.0			6.0	6.0
Lane Util. Factor		1.00	1.00				1.00	1.00			1.00	1.00
Frt		1.00	0.85				1.00	1.00			1.00	0.85
Flt Protected		0.95	1.00				0.95	1.00			1.00	1.00
Satd. Flow (prot)		1770	1583				1770	1863			1863	1583
Flt Permitted		1.00	1.00				0.31	1.00			1.00	1.00
Satd. Flow (perm)		1863	1583				579	1863			1863	1583
Peak-hour factor, PHF	0.93	0.92	0.93	0.92	0.92	0.92	0.93	0.93	0.92	0.92	0.93	0.93
Adj. Flow (vph)	13	0	38	0	0	0	12	851	0	0	791	2
RTOR Reduction (vph)	0	0	35	0	0	0	0	0	0	0	0	1
Lane Group Flow (vph)	0	13	3	0	0	0	12	851	0	0	791	1
Turn Type	Perm	NA	Perm				Perm	NA		Perm	NA	Perm
Protected Phases		8			4			6			2	
Permitted Phases	8		8	4			6		2			2
Actuated Green, G (s)		3.9	3.9				42.4	42.4			42.4	42.4
Effective Green, g (s)		3.9	3.9				42.4	42.4			42.4	42.4
Actuated g/C Ratio		0.07	0.07				0.73	0.73			0.73	0.73
Clearance Time (s)		6.0	6.0				6.0	6.0			6.0	6.0
Vehicle Extension (s)		3.0	3.0				5.0	5.0			5.0	5.0
Lane Grp Cap (vph)		124	105				421	1354			1354	1151
v/s Ratio Prot								c0.46			0.42	
v/s Ratio Perm		c0.01	0.00				0.02					0.00
v/c Ratio		0.10	0.02				0.03	0.63			0.58	0.00
Uniform Delay, d1		25.6	25.4				2.2	4.0			3.8	2.2
Progression Factor		1.00	1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2		0.4	0.1				0.1	1.3			1.0	0.0
Delay (s)		25.9	25.5				2.3	5.3			4.8	2.2
Level of Service		C	C				A	A			A	A
Approach Delay (s)		25.6			0.0			5.3			4.8	
Approach LOS		C			A			A			A	

Intersection Summary

HCM 2000 Control Delay	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	58.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th TWSC
3: Main St & Bell Pkwy/Exit Only Dwy

2029 Opening Year AM Peak - Weekday
OY 2029 Int 3 - SSSL.syn

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙		↗		↕		↙	↑			↑	↗
Traffic Vol, veh/h	3	0	41	0	0	0	129	490	0	0	951	94
Future Vol, veh/h	3	0	41	0	0	0	129	490	0	0	951	94
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	92	94	92	92	92	94	94	92	92	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	0	44	0	0	0	137	521	0	0	1012	100

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1807	-	1012	1879	1907	521	1112	0	-	-	-	0
Stage 1	1012	-	-	795	795	-	-	-	-	-	-	-
Stage 2	795	-	-	1084	1112	-	-	-	-	-	-	-
Critical Hdwy	7.12	-	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	61	0	290	54	68	555	628	-	0	0	-	-
Stage 1	288	0	-	381	399	-	-	-	0	0	-	-
Stage 2	381	0	-	263	284	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	51	-	290	38	53	555	628	-	-	-	-	-
Mov Cap-2 Maneuver	51	-	-	38	53	-	-	-	-	-	-	-
Stage 1	225	-	-	298	312	-	-	-	-	-	-	-
Stage 2	298	-	-	223	284	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	23.7	0	2.6	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	WBLn1	SBT	SBR
Capacity (veh/h)	628	-	51	290	-	-	-
HCM Lane V/C Ratio	0.219	-	0.063	0.15	-	-	-
HCM Control Delay (s)	12.3	-	80.2	19.6	0	-	-
HCM Lane LOS	B	-	F	C	A	-	-
HCM 95th %tile Q(veh)	0.8	-	0.2	0.5	-	-	-

HCM 6th TWSC
3: Main St & Bell Pkwy/Exit Only Dwy

2029 Opening Year PM Peak - Weekday
OY 2029 Int 3 - SSSL.syn

Intersection												
Int Delay, s/veh	27.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖		↗		↕		↖	↗			↗	↖
Traffic Vol, veh/h	68	0	189	6	0	2	36	1058	0	0	835	19
Future Vol, veh/h	68	0	189	6	0	2	36	1058	0	0	835	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	92	93	92	92	92	93	93	92	92	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	73	0	203	7	0	2	39	1138	0	0	898	20

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2115	-	898	2226	2134	1138	918	0	-	-	-	0
Stage 1	898	-	-	1216	1216	-	-	-	-	-	-	-
Stage 2	1217	-	-	1010	918	-	-	-	-	-	-	-
Critical Hdwy	7.12	-	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	~ 37	0	338	31	49	245	743	-	0	0	-	-
Stage 1	334	0	-	221	254	-	-	-	0	0	-	-
Stage 2	221	0	-	289	350	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	~ 35	-	338	12	46	245	743	-	-	-	-	-
Mov Cap-2 Maneuver	~ 35	-	-	12	46	-	-	-	-	-	-	-
Stage 1	317	-	-	210	241	-	-	-	-	-	-	-
Stage 2	208	-	-	115	350	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	220.6		\$ 383.4		0.3		0	
HCM LOS	F		F					

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	WBLn1	SBT	SBR
Capacity (veh/h)	743	-	35	338	16	-	-
HCM Lane V/C Ratio	0.052	-	2.089	0.601	0.543	-	-
HCM Control Delay (s)	10.1	-	\$ 748.8	30.5	\$ 383.4	-	-
HCM Lane LOS	B	-	F	D	F	-	-
HCM 95th %tile Q(veh)	0.2	-	8.1	3.7	1.4	-	-

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

HCM 6th TWSC
3: Main St & Bell Pkwy/Exit Only Dwy

2029 Opening Year MD Peak - Weekend
OY 2029 Int 3 - SSSL.syn

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘		↗		↕		↘	↗			↗	↘
Traffic Vol, veh/h	17	0	26	2	0	4	31	931	0	0	819	13
Future Vol, veh/h	17	0	26	2	0	4	31	931	0	0	819	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	92	94	92	92	92	94	94	92	92	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	0	28	2	0	4	33	990	0	0	871	14

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1929	-	871	1948	1941	990	885	0	-	-	-	0
Stage 1	871	-	-	1056	1056	-	-	-	-	-	-	-
Stage 2	1058	-	-	892	885	-	-	-	-	-	-	-
Critical Hdwy	7.12	-	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	50	0	350	49	65	299	765	-	0	0	-	-
Stage 1	346	0	-	272	302	-	-	-	0	0	-	-
Stage 2	272	0	-	337	363	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	48	-	350	44	62	299	765	-	-	-	-	-
Mov Cap-2 Maneuver	48	-	-	44	62	-	-	-	-	-	-	-
Stage 1	331	-	-	260	289	-	-	-	-	-	-	-
Stage 2	256	-	-	310	363	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	57.1		42.7		0.3		0	
HCM LOS	F		E					

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	WBLn1	SBT	SBR
Capacity (veh/h)	765	-	48	350	102	-	-
HCM Lane V/C Ratio	0.043	-	0.377	0.079	0.064	-	-
HCM Control Delay (s)	9.9	-	119.7	16.2	42.7	-	-
HCM Lane LOS	A	-	F	C	E	-	-
HCM 95th %tile Q(veh)	0.1	-	1.3	0.3	0.2	-	-

HCM 6th TWSC
3: Main St & Bell Pkwy/Exit Only Dwy

2029 Opening Year PM Peak - Weekend
OY 2029 Int 3 - SSSL.syn

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙		↗		↕		↙	↑			↑	↗
Traffic Vol, veh/h	12	0	35	0	0	0	11	791	0	0	736	2
Future Vol, veh/h	12	0	35	0	0	0	11	791	0	0	736	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	92	93	92	92	92	93	93	92	92	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	0	38	0	0	0	12	851	0	0	791	2

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1666	-	791	1686	1668	851	793	0	-	-	-	0
Stage 1	791	-	-	875	875	-	-	-	-	-	-	-
Stage 2	875	-	-	811	793	-	-	-	-	-	-	-
Critical Hdwy	7.12	-	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	77	0	390	74	96	360	828	-	0	0	-	-
Stage 1	383	0	-	344	367	-	-	-	0	0	-	-
Stage 2	344	0	-	373	400	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	76	-	390	66	95	360	828	-	-	-	-	-
Mov Cap-2 Maneuver	76	-	-	66	95	-	-	-	-	-	-	-
Stage 1	378	-	-	339	362	-	-	-	-	-	-	-
Stage 2	339	-	-	337	400	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	27.1		0		0.1		0	
HCM LOS	D		A					

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	WBLn1	SBT	SBR
Capacity (veh/h)	828	-	76	390	-	-	-
HCM Lane V/C Ratio	0.014	-	0.17	0.096	-	-	-
HCM Control Delay (s)	9.4	-	61.8	15.2	0	-	-
HCM Lane LOS	A	-	F	C	A	-	-
HCM 95th %tile Q(veh)	0	-	0.6	0.3	-	-	-

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↗	↖			↖	↗
Traffic Vol, veh/h	0	0	44	0	0	0	129	601	0	0	1160	94
Future Vol, veh/h	0	0	44	0	0	0	129	601	0	0	1160	94
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	92	94	92	92	92	94	94	92	92	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	47	0	0	0	137	639	0	0	1234	100

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	1234	-	-	639	1334	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	215	0	0	476	517	-	0	0	-	-
Stage 1	0	0	-	0	0	-	-	-	0	0	-	-
Stage 2	0	0	-	0	0	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	-	-	215	-	-	476	517	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	26.3		0		2.6		0	
HCM LOS	D		A					

Minor Lane/Major Mvmt	NBL	NBT	EBLn1WBLn1	SBT	SBR
Capacity (veh/h)	517	-	215	-	-
HCM Lane V/C Ratio	0.265	-	0.218	-	-
HCM Control Delay (s)	14.5	-	26.3	0	-
HCM Lane LOS	B	-	D	A	-
HCM 95th %tile Q(veh)	1.1	-	0.8	-	-

Intersection												
Int Delay, s/veh	11.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↗	↖			↖	↖
Traffic Vol, veh/h	0	0	257	0	0	8	36	1359	0	0	1019	19
Future Vol, veh/h	0	0	257	0	0	8	36	1359	0	0	1019	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	92	93	92	92	92	93	93	92	92	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	276	0	0	9	39	1461	0	0	1096	20

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	1096	-	-	1461	1116	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	~ 259	0	0	158	626	-	0	0	-	-
Stage 1	0	0	-	0	0	-	-	-	0	0	-	-
Stage 2	0	0	-	0	0	-	-	-	0	0	-	-
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	-	-	~ 259	-	-	158	626	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	117		29.1		0.3		0	
HCM LOS	F		D					

Minor Lane/Major Mvmt	NBL	NBT	EBLn1WBLn1	SBT	SBR
Capacity (veh/h)	626	-	259	158	-
HCM Lane V/C Ratio	0.062	-	1.067	0.055	-
HCM Control Delay (s)	11.1	-	117	29.1	-
HCM Lane LOS	B	-	F	D	-
HCM 95th %tile Q(veh)	0.2	-	11.3	0.2	-

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

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↗	↖			↖	↗
Traffic Vol, veh/h	0	0	43	0	0	0	31	1153	0	0	999	13
Future Vol, veh/h	0	0	43	0	0	0	31	1153	0	0	999	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	92	94	92	92	92	94	94	92	92	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	46	0	0	0	33	1227	0	0	1063	14

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	1063	-	-	1227	1077	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	271	0	0	217	647	-	0	0	-	-
Stage 1	0	0	-	0	0	-	-	-	0	0	-	-
Stage 2	0	0	-	0	0	-	-	-	0	0	-	-
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	-	-	271	-	-	217	647	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	21	0	0.3	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1WBLn1	SBT	SBR
Capacity (veh/h)	647	-	271	-	-
HCM Lane V/C Ratio	0.051	-	0.169	-	-
HCM Control Delay (s)	10.9	-	21	0	-
HCM Lane LOS	B	-	C	A	-
HCM 95th %tile Q(veh)	0.2	-	0.6	-	-

HCM 6th TWSC
3: Main St & Bell Pkwy/Exit Only Dwy

2049 Design Year PM Peak - Weekend
DY 2049 Int 3 - RCUT.syn

Intersection												
Int Delay, s/veh	0.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			↗			↗	↗	↖			↖	↗
Traffic Vol, veh/h	0	0	47	0	0	0	11	977	0	0	898	2
Future Vol, veh/h	0	0	47	0	0	0	11	977	0	0	898	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	0	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	92	94	92	92	92	94	94	92	92	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	50	0	0	0	12	1039	0	0	955	2

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	-	955	-	-	1039	957	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	313	0	0	280	719	-	0	0	-	-
Stage 1	0	0	-	0	0	-	-	-	0	0	-	-
Stage 2	0	0	-	0	0	-	-	-	0	0	-	-
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	-	-	313	-	-	280	719	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	18.7		0		0.1		0	
HCM LOS	C		A					

Minor Lane/Major Mvmt	NBL	NBT	EBLn1WBLn1	SBT	SBR
Capacity (veh/h)	719	-	313	-	-
HCM Lane V/C Ratio	0.016	-	0.16	-	-
HCM Control Delay (s)	10.1	-	18.7	0	-
HCM Lane LOS	B	-	C	A	-
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-

Queues
3: Main St & Bell Pkwy/Exit Only Dwy

2049 Horizon Year AM Peak - Weekday
DY 2049 - Wkdy - Signal.syn



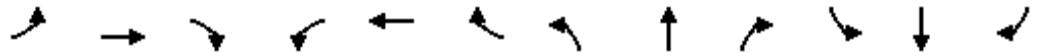
Lane Group	EBT	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	3	44	137	636	1234	100
v/c Ratio	0.02	0.24	0.58	0.39	0.76	0.07
Control Delay	39.0	15.9	17.3	3.2	9.4	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.0	15.9	17.3	3.2	9.4	0.9
Queue Length 50th (ft)	2	0	27	94	357	2
Queue Length 95th (ft)	10	31	#151	144	#664	11
Internal Link Dist (ft)	537			454	2139	
Turn Bay Length (ft)		105	155			235
Base Capacity (vph)	419	451	237	1626	1626	1392
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	0.01	0.10	0.58	0.39	0.76	0.07

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
 3: Main St & Bell Pkwy/Exit Only Dwy

2049 Horizon Year AM Peak - Weekday
 DY 2049 - Wkdy - Signal.syn



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↔		↖	↗		↖	↗	↗
Traffic Volume (vph)	3	0	41	0	0	0	129	598	0	0	1160	94
Future Volume (vph)	3	0	41	0	0	0	129	598	0	0	1160	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0				6.0	6.0			6.0	6.0
Lane Util. Factor		1.00	1.00				1.00	1.00			1.00	1.00
Frt		1.00	0.85				1.00	1.00			1.00	0.85
Flt Protected		0.95	1.00				0.95	1.00			1.00	1.00
Satd. Flow (prot)		1770	1583				1770	1863			1863	1583
Flt Permitted		0.85	1.00				0.15	1.00			1.00	1.00
Satd. Flow (perm)		1585	1583				272	1863			1863	1583
Peak-hour factor, PHF	0.94	0.92	0.94	0.92	0.92	0.92	0.94	0.94	0.92	0.92	0.94	0.94
Adj. Flow (vph)	3	0	44	0	0	0	137	636	0	0	1234	100
RTOR Reduction (vph)	0	0	42	0	0	0	0	0	0	0	0	15
Lane Group Flow (vph)	0	3	2	0	0	0	137	636	0	0	1234	85
Turn Type	Perm	NA	Perm				Perm	NA		Perm	NA	Perm
Protected Phases		8			4			6			2	
Permitted Phases	8		8	4			6		2			2
Actuated Green, G (s)		4.7	4.7				77.0	77.0			77.0	77.0
Effective Green, g (s)		4.7	4.7				77.0	77.0			77.0	77.0
Actuated g/C Ratio		0.05	0.05				0.82	0.82			0.82	0.82
Clearance Time (s)		6.0	6.0				6.0	6.0			6.0	6.0
Vehicle Extension (s)		3.0	3.0				5.0	5.0			5.0	5.0
Lane Grp Cap (vph)		79	79				223	1530			1530	1300
v/s Ratio Prot								0.34			c0.66	
v/s Ratio Perm		c0.00	0.00				0.50					0.05
v/c Ratio		0.04	0.03				0.61	0.42			0.81	0.07
Uniform Delay, d1		42.3	42.3				3.0	2.3			4.4	1.6
Progression Factor		1.00	1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2		0.2	0.1				7.1	0.4			3.7	0.0
Delay (s)		42.5	42.5				10.1	2.6			8.1	1.6
Level of Service		D	D				B	A			A	A
Approach Delay (s)		42.5			0.0			4.0			7.6	
Approach LOS		D			A			A			A	

Intersection Summary		
HCM 2000 Control Delay	7.1	HCM 2000 Level of Service
HCM 2000 Volume to Capacity ratio	0.76	A
Actuated Cycle Length (s)	93.7	Sum of lost time (s)
Intersection Capacity Utilization	92.7%	12.0
Analysis Period (min)	15	ICU Level of Service
		F

c Critical Lane Group

Queues
3: Main St & Bell Pkwy/Exit Only Dwy

2049 Horizon Year PM Peak - Weekday
DY 2049 - Wkdy - Signal.syn



Lane Group	EBT	EBR	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	73	203	9	39	1389	1096	20
v/c Ratio	0.40	0.67	0.04	0.20	1.02	0.80	0.02
Control Delay	41.0	27.4	0.4	7.6	43.3	14.9	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.0	27.4	0.4	7.6	43.3	14.9	1.1
Queue Length 50th (ft)	37	46	0	5	~653	307	0
Queue Length 95th (ft)	78	115	1	24	#1213	#833	5
Internal Link Dist (ft)	537		143		454	2139	
Turn Bay Length (ft)		105		155			235
Base Capacity (vph)	378	510	409	198	1366	1366	1170
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	0.19	0.40	0.02	0.20	1.02	0.80	0.02

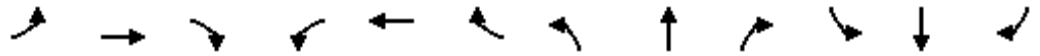
Intersection Summary

~ 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.

HCM Signalized Intersection Capacity Analysis
 3: Main St & Bell Pkwy/Exit Only Dwy

2049 Horizon Year PM Peak - Weekday
 DY 2049 - Wkdy - Signal.syn



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↔		↖	↗		↖	↗	↗
Traffic Volume (vph)	68	0	189	6	0	2	36	1291	1	0	1019	19
Future Volume (vph)	68	0	189	6	0	2	36	1291	1	0	1019	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0		6.0		6.0	6.0			6.0	6.0
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Frt		1.00	0.85		0.97		1.00	1.00			1.00	0.85
Flt Protected		0.95	1.00		0.96		0.95	1.00			1.00	1.00
Satd. Flow (prot)		1770	1583		1739		1770	1863			1863	1583
Flt Permitted		0.75	1.00		0.79		0.14	1.00			1.00	1.00
Satd. Flow (perm)		1400	1583		1429		270	1863			1863	1583
Peak-hour factor, PHF	0.93	0.92	0.93	0.92	0.92	0.92	0.93	0.93	0.92	0.92	0.93	0.93
Adj. Flow (vph)	73	0	203	7	0	2	39	1388	1	0	1096	20
RTOR Reduction (vph)	0	0	98	0	8	0	0	0	0	0	0	5
Lane Group Flow (vph)	0	73	105	0	1	0	39	1389	0	0	1096	15
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		8			4			6			2	
Permitted Phases	8		8	4			6			2		2
Actuated Green, G (s)		11.7	11.7		11.7		65.3	65.3			65.3	65.3
Effective Green, g (s)		11.7	11.7		11.7		65.3	65.3			65.3	65.3
Actuated g/C Ratio		0.13	0.13		0.13		0.73	0.73			0.73	0.73
Clearance Time (s)		6.0	6.0		6.0		6.0	6.0			6.0	6.0
Vehicle Extension (s)		3.0	3.0		3.0		5.0	5.0			5.0	5.0
Lane Grp Cap (vph)		184	208		187		198	1366			1366	1161
v/s Ratio Prot								c0.75			0.59	
v/s Ratio Perm		0.05	c0.07		0.00		0.14					0.01
v/c Ratio		0.40	0.50		0.01		0.20	1.02			0.80	0.01
Uniform Delay, d1		35.4	36.0		33.6		3.7	11.9			7.7	3.2
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		1.4	1.9		0.0		1.0	28.6			4.0	0.0
Delay (s)		36.8	37.9		33.6		4.7	40.5			11.7	3.2
Level of Service		D	D		C		A	D			B	A
Approach Delay (s)		37.6			33.6			39.5			11.5	
Approach LOS		D			C			D			B	

Intersection Summary		
HCM 2000 Control Delay	28.3	HCM 2000 Level of Service C
HCM 2000 Volume to Capacity ratio	0.94	
Actuated Cycle Length (s)	89.0	Sum of lost time (s) 12.0
Intersection Capacity Utilization	87.0%	ICU Level of Service E
Analysis Period (min)	15	

c Critical Lane Group

Queues
3: Main St & Bell Pkwy

2049 Horizon Year MD Peak - Weekend
DY 2049 - Wknd - Signal.syn



Lane Group	EBT	EBR	WBT	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	18	28	6	33	1209	1063	14
v/c Ratio	0.12	0.16	0.04	0.10	0.75	0.66	0.01
Control Delay	39.3	13.8	0.3	3.1	9.3	6.5	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.3	13.8	0.3	3.1	9.3	6.5	0.4
Queue Length 50th (ft)	11	0	0	4	336	241	0
Queue Length 95th (ft)	29	22	0	11	#632	402	2
Internal Link Dist (ft)	537		130		454	2139	
Turn Bay Length (ft)		105		155			235
Base Capacity (vph)	437	461	437	346	1616	1616	1378
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	0.04	0.06	0.01	0.10	0.75	0.66	0.01

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis
3: Main St & Bell Pkwy

2049 Horizon Year MD Peak - Weekend
DY 2049 - Wknd - Signal.syn



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↔		↖	↗		↖	↗	↗
Traffic Volume (vph)	17	0	26	2	0	4	31	1136	0	0	999	13
Future Volume (vph)	17	0	26	2	0	4	31	1136	0	0	999	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0		6.0		6.0	6.0			6.0	6.0
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Frt		1.00	0.85		0.91		1.00	1.00			1.00	0.85
Flt Protected		0.95	1.00		0.98		0.95	1.00			1.00	1.00
Satd. Flow (prot)		1770	1583		1667		1770	1863			1863	1583
Flt Permitted		0.85	1.00		0.88		0.21	1.00			1.00	1.00
Satd. Flow (perm)		1585	1583		1495		398	1863			1863	1583
Peak-hour factor, PHF	0.94	0.92	0.94	0.92	0.92	0.92	0.94	0.94	0.92	0.92	0.94	0.94
Adj. Flow (vph)	18	0	28	2	0	4	33	1209	0	0	1063	14
RTOR Reduction (vph)	0	0	27	0	6	0	0	0	0	0	0	3
Lane Group Flow (vph)	0	18	1	0	0	0	33	1209	0	0	1063	11
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	Perm
Protected Phases		8			4			6			2	
Permitted Phases	8		8	4			6			2		2
Actuated Green, G (s)		4.7	4.7		4.7		73.2	73.2			73.2	73.2
Effective Green, g (s)		4.7	4.7		4.7		73.2	73.2			73.2	73.2
Actuated g/C Ratio		0.05	0.05		0.05		0.81	0.81			0.81	0.81
Clearance Time (s)		6.0	6.0		6.0		6.0	6.0			6.0	6.0
Vehicle Extension (s)		3.0	3.0		3.0		5.0	5.0			5.0	5.0
Lane Grp Cap (vph)		82	82		78		324	1516			1516	1288
v/s Ratio Prot								c0.65			0.57	
v/s Ratio Perm		c0.01	0.00		0.00		0.08					0.01
v/c Ratio		0.22	0.02		0.00		0.10	0.80			0.70	0.01
Uniform Delay, d1		40.8	40.4		40.4		1.7	4.4			3.6	1.6
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.00	1.00
Incremental Delay, d2		1.4	0.1		0.0		0.3	3.5			1.9	0.0
Delay (s)		42.2	40.5		40.4		2.0	7.9			5.5	1.6
Level of Service		D	D		D		A	A			A	A
Approach Delay (s)		41.2			40.4			7.7			5.4	
Approach LOS		D			D			A			A	

Intersection Summary

HCM 2000 Control Delay	7.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	89.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Queues
3: Main St & Bell Pkwy

2049 Horizon Year PM Peak - Weekend
DY 2049 - Wknd - Signal.syn



Lane Group	EBT	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	13	38	12	1038	966	2
v/c Ratio	0.05	0.16	0.03	0.65	0.60	0.00
Control Delay	36.0	14.8	2.6	6.6	5.8	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.0	14.8	2.6	6.6	5.8	0.0
Queue Length 50th (ft)	6	0	1	228	196	0
Queue Length 95th (ft)	24	28	5	367	307	0
Internal Link Dist (ft)	537			454	2139	
Turn Bay Length (ft)		105	155			235
Base Capacity (vph)	723	637	388	1610	1610	1372
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	0.02	0.06	0.03	0.64	0.60	0.00

Intersection Summary

HCM Signalized Intersection Capacity Analysis
3: Main St & Bell Pkwy

2049 Horizon Year PM Peak - Weekend
DY 2049 - Wknd - Signal.syn



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗		↔		↖	↗		↖	↗	↖
Traffic Volume (vph)	12	0	35	0	0	0	11	965	0	0	898	2
Future Volume (vph)	12	0	35	0	0	0	11	965	0	0	898	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.0	6.0				6.0	6.0			6.0	6.0
Lane Util. Factor		1.00	1.00				1.00	1.00			1.00	1.00
Frt		1.00	0.85				1.00	1.00			1.00	0.85
Flt Protected		0.95	1.00				0.95	1.00			1.00	1.00
Satd. Flow (prot)		1770	1583				1770	1863			1863	1583
Flt Permitted		1.00	1.00				0.24	1.00			1.00	1.00
Satd. Flow (perm)		1863	1583				449	1863			1863	1583
Peak-hour factor, PHF	0.93	0.92	0.93	0.92	0.92	0.92	0.93	0.93	0.92	0.92	0.93	0.93
Adj. Flow (vph)	13	0	38	0	0	0	12	1038	0	0	966	2
RTOR Reduction (vph)	0	0	36	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	13	2	0	0	0	12	1038	0	0	966	2
Turn Type	Perm	NA	Perm				Perm	NA		Perm	NA	Perm
Protected Phases		8			4			6			2	
Permitted Phases	8		8	4			6		2			2
Actuated Green, G (s)		3.9	3.9				55.1	55.1			55.1	55.1
Effective Green, g (s)		3.9	3.9				55.1	55.1			55.1	55.1
Actuated g/C Ratio		0.05	0.05				0.78	0.78			0.78	0.78
Clearance Time (s)		6.0	6.0				6.0	6.0			6.0	6.0
Vehicle Extension (s)		3.0	3.0				5.0	5.0			5.0	5.0
Lane Grp Cap (vph)		102	86				348	1445			1445	1228
v/s Ratio Prot								c0.56			0.52	
v/s Ratio Perm		c0.01	0.00				0.03					0.00
v/c Ratio		0.13	0.02				0.03	0.72			0.67	0.00
Uniform Delay, d1		31.9	31.7				1.8	4.0			3.7	1.8
Progression Factor		1.00	1.00				1.00	1.00			1.00	1.00
Incremental Delay, d2		0.6	0.1				0.1	2.2			1.6	0.0
Delay (s)		32.5	31.9				1.9	6.2			5.3	1.8
Level of Service		C	C				A	A			A	A
Approach Delay (s)		32.0			0.0			6.1			5.3	
Approach LOS		C			A			A			A	

Intersection Summary

HCM 2000 Control Delay	6.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	71.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	67.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th TWSC
3: Main St & Bell Pkwy/Exit Only Dwy

2049 Design Year AM Peak - Weekday
DY 2049 Int 3 - SSSL.syn

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘		↗		↕		↘	↗			↗	↘
Traffic Vol, veh/h	3	0	41	0	0	0	129	598	0	0	1160	94
Future Vol, veh/h	3	0	41	0	0	0	129	598	0	0	1160	94
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	92	94	92	92	92	94	94	92	92	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	0	44	0	0	0	137	636	0	0	1234	100

Major/Minor	Minor2	Minor1		Major1			Major2					
Conflicting Flow All	2144	-	1234	2216	2244	636	1334	0	-	-	-	0
Stage 1	1234	-	-	910	910	-	-	-	-	-	-	-
Stage 2	910	-	-	1306	1334	-	-	-	-	-	-	-
Critical Hdwy	7.12	-	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	35	0	215	31	42	478	517	-	0	0	-	-
Stage 1	216	0	-	329	353	-	-	-	0	0	-	-
Stage 2	329	0	-	197	223	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	28	-	215	20	31	478	517	-	-	-	-	-
Mov Cap-2 Maneuver	28	-	-	20	31	-	-	-	-	-	-	-
Stage 1	159	-	-	242	259	-	-	-	-	-	-	-
Stage 2	242	-	-	157	223	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	34.4	0	2.6	0
HCM LOS	D	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	WBLn1	SBT	SBR
Capacity (veh/h)	517	-	28	215	-	-	-
HCM Lane V/C Ratio	0.265	-	0.114	0.203	-	-	-
HCM Control Delay (s)	14.5	-	149.5	26	0	-	-
HCM Lane LOS	B	-	F	D	A	-	-
HCM 95th %tile Q(veh)	1.1	-	0.3	0.7	-	-	-

HCM 6th TWSC
3: Main St & Bell Pkwy/Exit Only Dwy

2049 Design Year PM Peak - Weekday
DY 2049 Int 3 - SSSL.syn

Intersection												
Int Delay, s/veh	60.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖		↗		↕		↖	↗			↗	↖
Traffic Vol, veh/h	68	0	189	6	0	2	36	1291	0	0	1019	19
Future Vol, veh/h	68	0	189	6	0	2	36	1291	0	0	1019	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	92	93	92	92	92	93	93	92	92	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	73	0	203	7	0	2	39	1388	0	0	1096	20

Major/Minor	Minor2	Minor1		Major1			Major2					
Conflicting Flow All	2563	-	1096	2674	2582	1388	1116	0	-	-	-	0
Stage 1	1096	-	-	1466	1466	-	-	-	-	-	-	-
Stage 2	1467	-	-	1208	1116	-	-	-	-	-	-	-
Critical Hdwy	7.12	-	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	~ 18	0	259	15	25	175	626	-	0	0	-	-
Stage 1	259	0	-	159	192	-	-	-	0	0	-	-
Stage 2	159	0	-	224	283	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	~ 17	-	259	~ 3	23	175	626	-	-	-	-	-
Mov Cap-2 Maneuver	~ 17	-	-	~ 3	23	-	-	-	-	-	-	-
Stage 1	243	-	-	149	180	-	-	-	-	-	-	-
Stage 2	147	-	-	48	283	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	\$ 554.2	\$ 2143.9	0.3	0
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	WBLn1	SBT	SBR
Capacity (veh/h)	626	-	17	259	4	-	-
HCM Lane V/C Ratio	0.062	-	4.301	0.785	2.174	-	-
HCM Control Delay (s)	11.1	\$	1940.1	55	\$ 2143.9	-	-
HCM Lane LOS	B	-	F	F	F	-	-
HCM 95th %tile Q(veh)	0.2	-	9.8	5.9	2.1	-	-

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

HCM 6th TWSC
3: Main St & Bell Pkwy/Exit Only Dwy

2049 Design Year MD Peak - Weekend
DY 2049 Int 3 - SSSL.syn

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘		↗		↕		↘	↑			↑	↗
Traffic Vol, veh/h	17	0	26	2	0	4	31	1136	0	0	999	13
Future Vol, veh/h	17	0	26	2	0	4	31	1136	0	0	999	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	92	94	92	92	92	94	94	92	92	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	0	28	2	0	4	33	1209	0	0	1063	14

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	2340	-	1063	2359	2352	1209	1077	0	-	-	-	0
Stage 1	1063	-	-	1275	1275	-	-	-	-	-	-	-
Stage 2	1277	-	-	1084	1077	-	-	-	-	-	-	-
Critical Hdwy	7.12	-	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	25	0	271	25	36	223	647	-	0	0	-	-
Stage 1	270	0	-	205	238	-	-	-	0	0	-	-
Stage 2	204	0	-	263	295	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	24	-	271	22	34	223	647	-	-	-	-	-
Mov Cap-2 Maneuver	24	-	-	22	34	-	-	-	-	-	-	-
Stage 1	256	-	-	195	226	-	-	-	-	-	-	-
Stage 2	190	-	-	236	295	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	143.1		79.1		0.3		0	
HCM LOS	F		F					

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	WBLn1	SBT	SBR
Capacity (veh/h)	647	-	24	271	55	-	-
HCM Lane V/C Ratio	0.051	-	0.754	0.102	0.119	-	-
HCM Control Delay (s)	10.9	-	\$ 331.8	19.8	79.1	-	-
HCM Lane LOS	B	-	F	C	F	-	-
HCM 95th %tile Q(veh)	0.2	-	2.3	0.3	0.4	-	-

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙		↗		↕		↙	↑			↑	↗
Traffic Vol, veh/h	12	0	35	0	0	0	11	965	0	0	898	2
Future Vol, veh/h	12	0	35	0	0	0	11	965	0	0	898	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	155	-	-	-	-	235
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	92	93	92	92	92	93	93	92	92	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	0	38	0	0	0	12	1038	0	0	966	2

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	2028	-	966	2048	2030	1038	968	0	-	-	-	0
Stage 1	966	-	-	1062	1062	-	-	-	-	-	-	-
Stage 2	1062	-	-	986	968	-	-	-	-	-	-	-
Critical Hdwy	7.12	-	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-
Pot Cap-1 Maneuver	43	0	309	41	57	280	712	-	0	0	-	-
Stage 1	306	0	-	270	300	-	-	-	0	0	-	-
Stage 2	270	0	-	298	332	-	-	-	0	0	-	-
Platoon blocked, %								-			-	-
Mov Cap-1 Maneuver	42	-	309	36	56	280	712	-	-	-	-	-
Mov Cap-2 Maneuver	42	-	-	36	56	-	-	-	-	-	-	-
Stage 1	301	-	-	265	295	-	-	-	-	-	-	-
Stage 2	265	-	-	262	332	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	45.5		0		0.1		0	
HCM LOS	E		A					

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	WBLn1	SBT	SBR
Capacity (veh/h)	712	-	42	309	-	-	-
HCM Lane V/C Ratio	0.017	-	0.307	0.122	-	-	-
HCM Control Delay (s)	10.1	-	125	18.3	0	-	-
HCM Lane LOS	B	-	F	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	1	0.4	-	-	-

LANE SUMMARY

Site: 3 [Main Street at Bell Pkwy 2049 PM - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Bell Pkwy
2049 PM Peak - Weekend
Site Category: (None)
Roundabout

Lane Use and Performance															
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	[HV %]	[Total veh/h]	[HV %]						[Veh]	[Dist]				
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			ft		ft	%	%
South: Main Street															
Lane 1 ^d	1109	3.0	1109	3.0	1263	0.878	100	11.4	LOS B	26.6	680.8	Full	500	0.0	15.0
Approach	1109	3.0	1109	3.0		0.878		11.4	LOS B	26.6	680.8				
North: Main Street															
Lane 1 ^d	1023	3.0	1023	3.0	1265	0.809	100	10.0	LOS A	16.3	418.3	Full	2200	0.0	0.0
Approach	1023	3.0	1023	3.0		0.809		10.0	LOS A	16.3	418.3				
West: Bell Pkwy															
Lane 1 ^d	53	3.0	53	3.0	403	0.133	100	10.9	LOS B	0.5	11.8	Full	770	0.0	0.0
Approach	53	3.0	53	3.0		0.133		10.9	LOS B	0.5	11.8				
All Vehicles	2185	3.0	2185	3.0		0.878		10.7	LOS B	26.6	680.8				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	L2	T1	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From S					veh/h	Satn	Util.	SL	Ov.	Lane
To Exit:	W	N				v/c	%	%	%	No.
Lane 1	13	1097	1109	3.0	1263	0.878	100	NA	NA	
Approach	13	1097	1109	3.0		0.878				
North: Main Street										
Mov.	T1	R2	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From N					veh/h	Satn	Util.	SL	Ov.	Lane
To Exit:	S	W				v/c	%	%	%	No.
Lane 1	1020	2	1023	3.0	1265	0.809	100	NA	NA	

Approach	1020	2	1023	3.0	0.809				
West: Bell Pkwy									
Mov.	L2	R2	Total	%HV		Deg.	Lane	Prob.	Ov.
From W To Exit:	N	S			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.
Lane 1	14	40	53	3.0	403	0.133	100	NA	NA
Approach	14	40	53	3.0	0.133				
Total %HV Deg.Satn (v/c)									
All Vehicles	2185	3.0	0.878						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0
West: Bell Pkwy				
Lane 1	0.0	0.0	0.0	0.0

LANE SUMMARY

Site: 3 [Main Street at Bell Pkwy 2029 MD - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Bell Pkwy
 2029 MD Peak - Weekend
 Site Category: (None)
 Roundabout

Lane Use and Performance															
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	[HV %]	[Total veh/h]	[HV %]						[Veh]	[Dist]				
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			ft		ft	%	%
South: Main Street															
Lane 1 ^d	1093	3.0	1093	3.0	1200	0.911	100	14.4	LOS B	34.3	876.9	Full	500	0.0	25.4
Approach	1093	3.0	1093	3.0		0.911		14.4	LOS B	34.3	876.9				
North: Main Street															
Lane 1 ^d	945	3.0	945	3.0	1177	0.803	100	13.9	LOS B	14.3	366.2	Full	2200	0.0	0.0
Approach	945	3.0	945	3.0		0.803		13.9	LOS B	14.3	366.2				
West: Bell Pkwy															
Lane 1 ^d	49	3.0	49	3.0	409	0.120	100	10.6	LOS B	0.4	10.8	Full	770	0.0	0.0
Approach	49	3.0	49	3.0		0.120		10.6	LOS B	0.4	10.8				
All Vehicles	2088	3.0	2088	3.0		0.911		14.1	LOS B	34.3	876.9				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab). Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	L2	T1	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From S To Exit:	W	N			veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	35	1058	1093	3.0	1200	0.911	100	NA	NA	
Approach	35	1058	1093	3.0		0.911				
North: Main Street										
Mov.	T1	R2	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From N To Exit:	S	W			veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	931	15	945	3.0	1177	0.803	100	NA	NA	

Approach	931	15	945	3.0	0.803				
West: Bell Pkwy									
Mov.	L2	R2	Total	%HV		Deg.	Lane	Prob.	Ov.
From W To Exit:	N	S			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.
Lane 1	19	30	49	3.0	409	0.120	100	NA	NA
Approach	19	30	49	3.0	0.120				
Total %HV Deg.Satn (v/c)									
All Vehicles	2088	3.0	0.911						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0
West: Bell Pkwy				
Lane 1	0.0	0.0	0.0	0.0

LANE SUMMARY

Site: 3 [Main Street at Bell Pkwy 2029 PM - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Bell Pkwy
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

Lane Use and Performance																
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.	
	[Total veh/h]	[HV %]	[Total veh/h]	[HV %]						[Veh]	[Dist]					
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			ft		ft	%	%	
South: Main Street																
Lane 1 ^d	911	3.0	911	3.0	1208	0.755	100	9.7	LOS A	12.0	307.7	Full	500	0.0	0.0	
Approach	911	3.0	911	3.0		0.755		9.7	LOS A	12.0	307.7					
North: Main Street																
Lane 1 ^d	839	3.0	839	3.0	1209	0.693	100	8.8	LOS A	9.0	229.8	Full	2200	0.0	0.0	
Approach	839	3.0	839	3.0		0.693		8.8	LOS A	9.0	229.8					
West: Bell Pkwy																
Lane 1 ^d	53	3.0	53	3.0	457	0.117	100	9.5	LOS A	0.4	10.8	Full	770	0.0	0.0	
Approach	53	3.0	53	3.0		0.117		9.5	LOS A	0.4	10.8					
All Vehicles	1803	3.0	1803	3.0		0.755		9.3	LOS A	12.0	307.7					

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	L2	T1	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From S					veh/h	Satn	Util.	SL	OV	Lane
To Exit:	W	N				v/c	%	%	%	No.
Lane 1	13	899	911	3.0	1208	0.755	100	NA	NA	
Approach	13	899	911	3.0		0.755				
North: Main Street										
Mov.	T1	R2	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From N					veh/h	Satn	Util.	SL	OV	Lane
To Exit:	S	W				v/c	%	%	%	No.
Lane 1	836	2	839	3.0	1209	0.693	100	NA	NA	

Approach	836	2	839	3.0	0.693				
West: Bell Pkwy									
Mov.	L2	R2	Total	%HV		Deg.	Lane	Prob.	Ov.
From W To Exit:	N	S			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.
Lane 1	14	40	53	3.0	457	0.117	100	NA	NA
Approach	14	40	53	3.0	0.117				
Total %HV Deg.Satn (v/c)									
All Vehicles	1803	3.0	0.755						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0
West: Bell Pkwy				
Lane 1	0.0	0.0	0.0	0.0

LANE SUMMARY

Site: 3 [Main Street at Bell Pkwy 2049 MD - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Bell Pkwy
2049 MD Peak - Weekend
Site Category: (None)
Roundabout

Lane Use and Performance															
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	HV %	[Total veh/h]	HV %						[Veh]	[Dist]				
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			ft		ft	%	%
South: Main Street															
Lane 1 ^d	1326	3.0	1326	3.0	1255	1.057	100	19.8	LOS F	233.2	5970.4	Full	500	0.0	100.0
Approach	1326	3.0	1326	3.0		1.057		19.8	LOS C	233.2	5970.4				
North: Main Street															
Lane 1 ^d	1150	3.0	1150	3.0	1235	0.931	100	18.7	LOS C	37.0	946.0	Full	2200	0.0	0.0
Approach	1150	3.0	1150	3.0		0.931		18.7	LOS C	37.0	946.0				
West: Bell Pkwy															
Lane 1 ^d	49	3.0	49	3.0	353	0.138	100	12.5	LOS B	0.5	12.0	Full	770	0.0	0.0
Approach	49	3.0	49	3.0		0.138		12.5	LOS B	0.5	12.0				
All Vehicles	2525	3.0	2525	3.0		1.057		19.2	LOS C	233.2	5970.4				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	L2	T1	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From S To Exit:	W	N			veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	35	1291	1326	3.0	1255	1.057	100	NA	NA	
Approach	35	1291	1326	3.0		1.057				
North: Main Street										
Mov.	T1	R2	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From N To Exit:	S	W			veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	1135	15	1150	3.0	1235	0.931	100	NA	NA	

Approach	1135	15	1150	3.0	0.931				
West: Bell Pkwy									
Mov.	L2	R2	Total	%HV		Deg.	Lane	Prob.	Ov.
From W To Exit:	N	S			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.
Lane 1	19	30	49	3.0	353	0.138	100	NA	NA
Approach	19	30	49	3.0	0.138				
Total %HV Deg.Satn (v/c)									
All Vehicles	2525	3.0	1.057						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	17.8	51.1	NA
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0
West: Bell Pkwy				
Lane 1	0.0	0.0	0.0	0.0

LANE LEVEL OF SERVICE

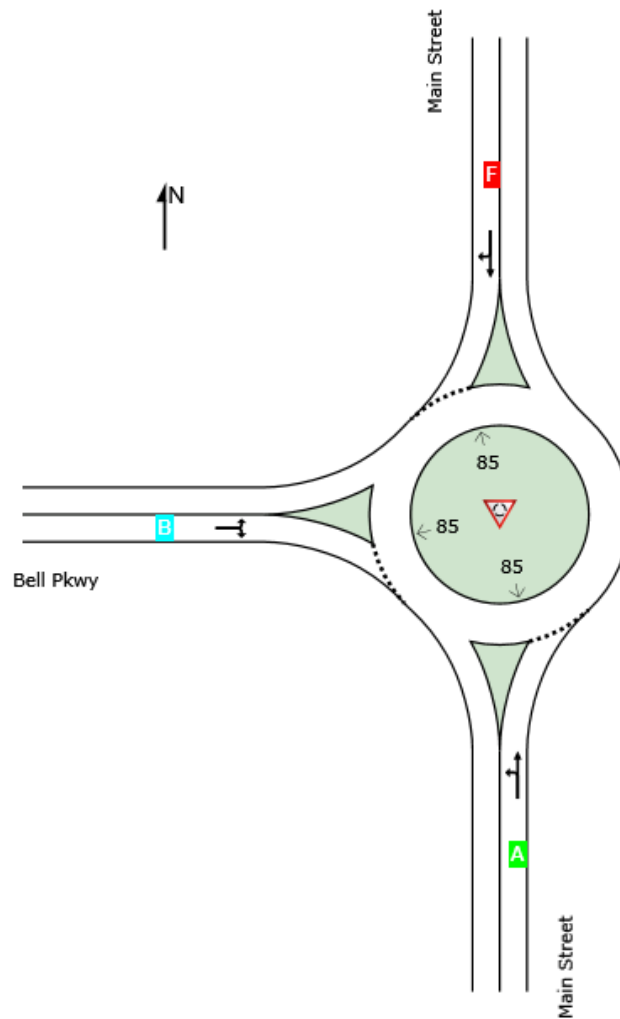
Lane Level of Service

 Site: 3 [Main Street at Bell Pkwy 2029 AM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Bell Pkwy
 2029 AM Peak - Weekday
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	North	West	
LOS	A	F	B	F



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptime Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

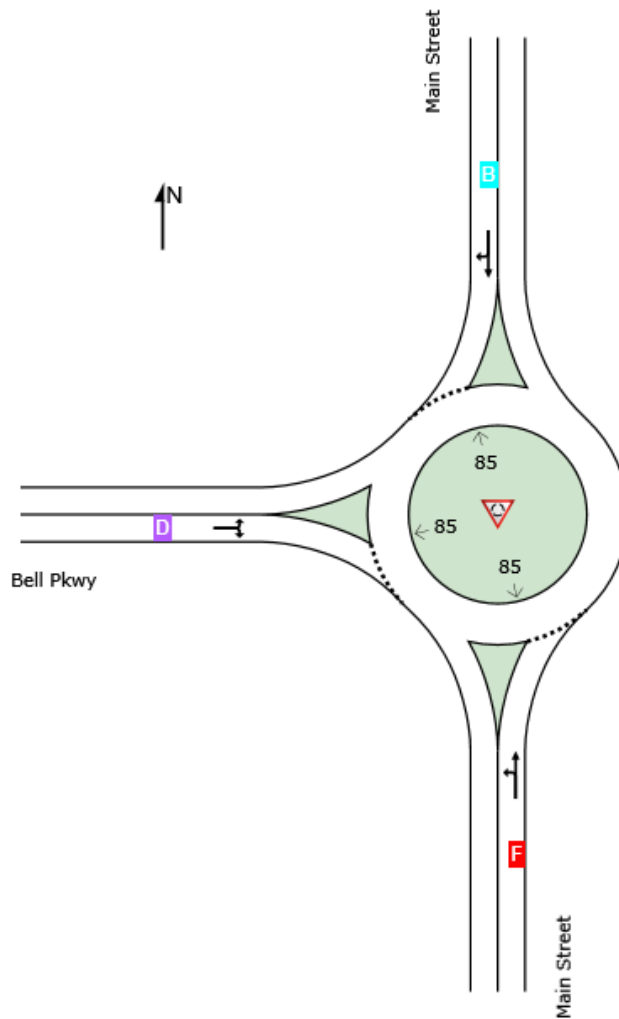
Lane Level of Service

 Site: 3 [Main Street at Bell Pkwy 2029 PM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Bell Pkwy
 2029 PM Peak - Weekday
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	North	West	
LOS	F	B	D	E



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

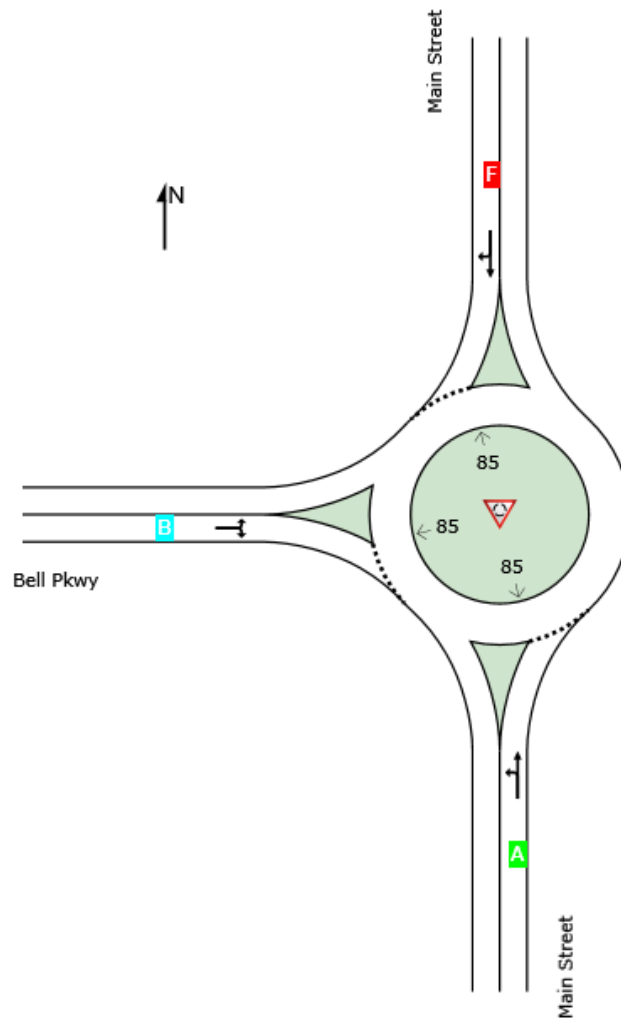
Lane Level of Service

 Site: 3 [Main Street at Bell Pkwy 2049 AM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Bell Pkwy
 2049 AM Peak - Weekday
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	North	West	
LOS	A	F	B	F



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptime Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

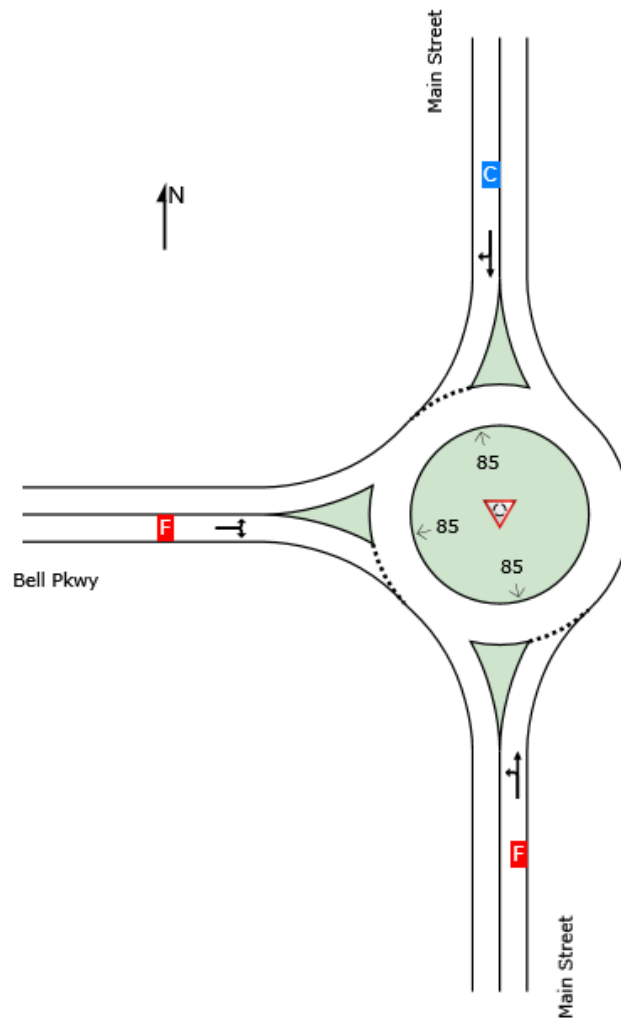
Lane Level of Service

 Site: 3 [Main Street at Bell Pkwy 2049 PM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Bell Pkwy
 2049 PM Peak - Weekday
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	North	West	
LOS	F	C	F	F



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

LANE SUMMARY

Site: 3 [Main Street at Bell Pkwy 2049 PM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Bell Pkwy
2049 PM Peak - Weekday
Site Category: (None)
Roundabout

Lane Use and Performance															
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	[HV %]	[Total veh/h]	[HV %]						[Veh]	[Dist]				
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			ft		ft	%	%
South: Main Street															
Lane 1 ^d	1508	3.0	1508	3.0	1175	1.283	100	128.5	LOS F	158.7	4062.1	Full	500	0.0	100.0
Approach	1508	3.0	1508	3.0		1.283		128.5	LOS F	158.7	4062.1				
North: Main Street															
Lane 1 ^d	1180	3.0	1180	3.0	1237	0.953	100	19.7	LOS C	50.0	1279.4	Full	2200	0.0	0.0
Approach	1180	3.0	1180	3.0		0.953		19.7	LOS C	50.0	1279.4				
West: Bell Pkwy															
Lane 1 ^d	292	3.0	292	3.0	344	0.848	100	51.5	LOS F	5.5	141.0	Full	770	0.0	0.0
Approach	292	3.0	292	3.0		0.848		51.5	LOS F	5.5	141.0				
All Vehicles	2980	3.0	2980	3.0		1.283		77.9	LOS F	158.7	4062.1				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	L2	T1	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From S To Exit:	W	N			veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	41	1467	1508	3.0	1175	1.283	100	NA	NA	
Approach	41	1467	1508	3.0		1.283				
North: Main Street										
Mov.	T1	R2	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From N To Exit:	S	W			veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	1158	22	1180	3.0	1237	0.953	100	NA	NA	

Approach	1158	22	1180	3.0	0.953				
West: Bell Pkwy									
Mov.	L2	R2	Total	%HV		Deg.	Lane	Prob.	Ov.
From W To Exit:	N	S			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.
Lane 1	77	215	292	3.0	344	0.848	100	NA	NA
Approach	77	215	292	3.0	0.848				
Total %HV Deg.Satn (v/c)									
All Vehicles	2980	3.0	1.283						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec	
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	83.1	254.6	NA
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0
West: Bell Pkwy				
Lane 1	0.0	0.0	0.0	0.0

LANE SUMMARY

Site: 3 [Main Street at Bell Pkwy 2029 AM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Bell Pkwy
 2029 AM Peak - Weekday
 Site Category: (None)
 Roundabout

Lane Use and Performance																
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.	
	[Total veh/h]	[HV %]	[Total veh/h]	[HV %]						[Veh]	[Dist]					
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			ft		ft	%	%	
South: Main Street																
Lane 1 ^d	703	3.0	703	3.0	1222	0.575	100	6.3	LOS A	5.5	141.7	Full	500	0.0	0.0	
Approach	703	3.0	703	3.0		0.575		6.3	LOS A	5.5	141.7					
North: Main Street																
Lane 1 ^d	1188	3.0	1188	3.0	1033	1.150	100	87.3	LOS F	97.7	2501.5	Full	2200	0.0	8.9	
Approach	1188	3.0	1188	3.0		1.150		87.3	LOS F	97.7	2501.5					
West: Bell Pkwy																
Lane 1 ^d	50	3.0	50	3.0	404	0.124	100	10.7	LOS B	0.4	11.2	Full	770	0.0	0.0	
Approach	50	3.0	50	3.0		0.124		10.7	LOS B	0.4	11.2					
All Vehicles	1941	3.0	1941	3.0		1.150		56.0	LOS F	97.7	2501.5					

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Roundabout Capacity Model: US HCM 6.
 Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
 Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
 Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.
 HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
 Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	L2	T1	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From S To Exit:	W	N			veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	147	557	703	3.0	1222	0.575	100	NA	NA	
Approach	147	557	703	3.0		0.575				
North: Main Street										
Mov.	T1	R2	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From N To Exit:	S	W			veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	1081	107	1188	3.0	1033	1.150	100	NA	NA	

Approach	1081	107	1188	3.0	1.150				
West: Bell Pkwy									
Mov.	L2	R2	Total	%HV					
From W To Exit:	N	S			Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	3	47	50	3.0	404	0.124	100	NA	NA
Approach	3	47	50	3.0	0.124				
Total %HV Deg.Satn (v/c)									
All Vehicles	1941	3.0	1.150						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	38.7	135.0	NA
West: Bell Pkwy				
Lane 1	0.0	0.0	0.0	0.0

LANE SUMMARY

Site: 3 [Main Street at Bell Pkwy 2029 PM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Bell Pkwy
 2029 PM Peak - Weekday
 Site Category: (None)
 Roundabout

Lane Use and Performance															
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	HV %	[Total veh/h]	HV %						[Veh]	Dist] ft				
South: Main Street															
Lane 1 ^d	1243	3.0	1243	3.0	1120	1.109	100	63.7	LOS F	94.9	2428.4	Full	500	0.0	100.0
Approach	1243	3.0	1243	3.0		1.109		63.7	LOS F	94.9	2428.4				
North: Main Street															
Lane 1 ^d	970	3.0	970	3.0	1175	0.826	100	14.9	LOS B	16.1	413.3	Full	2200	0.0	0.0
Approach	970	3.0	970	3.0		0.826		14.9	LOS B	16.1	413.3				
West: Bell Pkwy															
Lane 1 ^d	292	3.0	292	3.0	400	0.730	100	32.8	LOS D	4.8	122.5	Full	770	0.0	0.0
Approach	292	3.0	292	3.0		0.730		32.8	LOS D	4.8	122.5				
All Vehicles	2506	3.0	2506	3.0		1.109		41.2	LOS E	94.9	2428.4				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	L2	T1	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From S To Exit:	W	N			veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	41	1202	1243	3.0	1120	1.109	100	NA	NA	
Approach	41	1202	1243	3.0		1.109				
North: Main Street										
Mov.	T1	R2	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From N To Exit:	S	W			veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	949	22	970	3.0	1175	0.826	100	NA	NA	

Approach	949	22	970	3.0	0.826				
West: Bell Pkwy									
Mov.	L2	R2	Total	%HV		Deg.	Lane	Prob.	Ov.
From W To Exit:	N	S			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.
Lane 1	77	215	292	3.0	400	0.730	100	NA	NA
Approach	77	215	292	3.0	0.730				
Total %HV Deg.Satn (v/c)									
All Vehicles	2506	3.0	1.109						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec	
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	30.7	98.5	NA
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0
West: Bell Pkwy				
Lane 1	0.0	0.0	0.0	0.0

LANE SUMMARY

Site: 3 [Main Street at Bell Pkwy 2049 AM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Bell Pkwy
2049 AM Peak - Weekday
Site Category: (None)
Roundabout

Lane Use and Performance																
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.	
	[Total veh/h]	HV %	[Total veh/h]	HV %						[Veh]	[Dist]					
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			ft		ft	%	%	
South: Main Street																
Lane 1 ^d	826	3.0	826	3.0	1278	0.647	100	6.6	LOS A	7.4	190.5	Full	500	0.0	0.0	
Approach	826	3.0	826	3.0		0.647		6.6	LOS A	7.4	190.5					
North: Main Street																
Lane 1 ^d	1425	3.0	1425	3.0	1087	1.311	100	151.1	LOS F	148.9	3811.1	Full	2200	0.0	24.8	
Approach	1425	3.0	1425	3.0		1.311		151.1	LOS F	148.9	3811.1					
West: Bell Pkwy																
Lane 1 ^d	50	3.0	50	3.0	410	0.122	100	10.6	LOS B	0.4	10.9	Full	770	0.0	0.0	
Approach	50	3.0	50	3.0		0.122		10.6	LOS B	0.4	10.9					
All Vehicles	2301	3.0	2301	3.0		1.311		96.1	LOS F	148.9	3811.1					

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	L2	T1	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From S To Exit:	W	N			veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	147	680	826	3.0	1278	0.647	100	NA	NA	
Approach	147	680	826	3.0		0.647				
North: Main Street										
Mov.	T1	R2	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From N To Exit:	S	W			veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.	
Lane 1	1318	107	1425	3.0	1087	1.311	100	NA	NA	

Approach	1318	107	1425	3.0	1.311				
West: Bell Pkwy									
Mov.	L2	R2	Total	%HV		Deg.	Lane	Prob.	Ov.
From W To Exit:	N	S			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.
Lane 1	3	47	50	3.0	410	0.122	100	NA	NA
Approach	3	47	50	3.0	0.122				
Total %HV Deg.Satn (v/c)									
All Vehicles	2301	3.0	1.311						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane % veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec	
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	84.5	280.0	NA
West: Bell Pkwy				
Lane 1	0.0	0.0	0.0	0.0

LANE LEVEL OF SERVICE

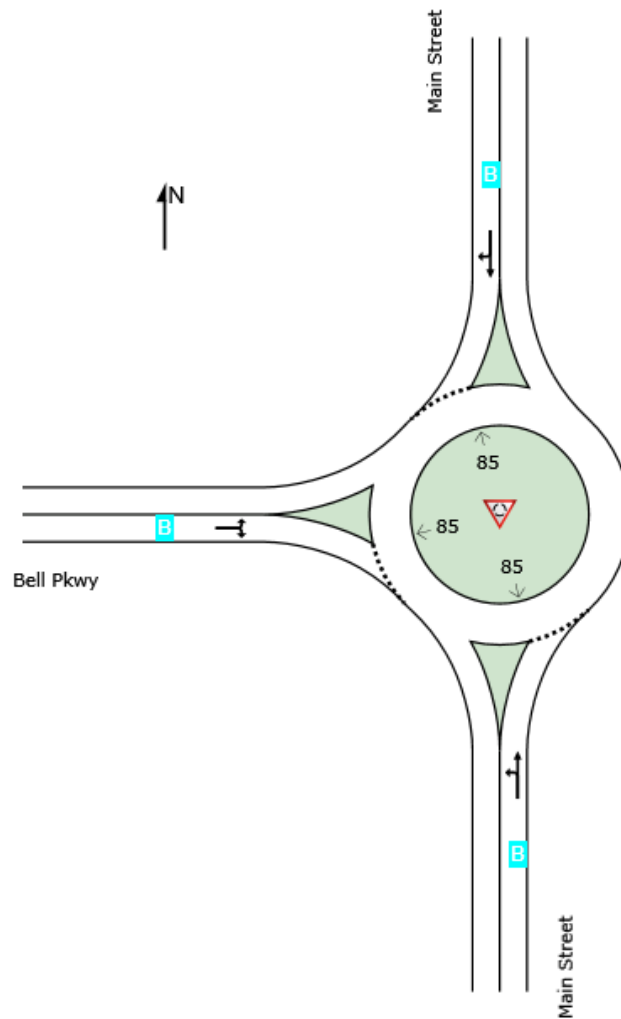
Lane Level of Service

 Site: 3 [Main Street at Bell Pkwy 2029 MD - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Bell Pkwy
 2029 MD Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	North	West	
LOS	B	B	B	B



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

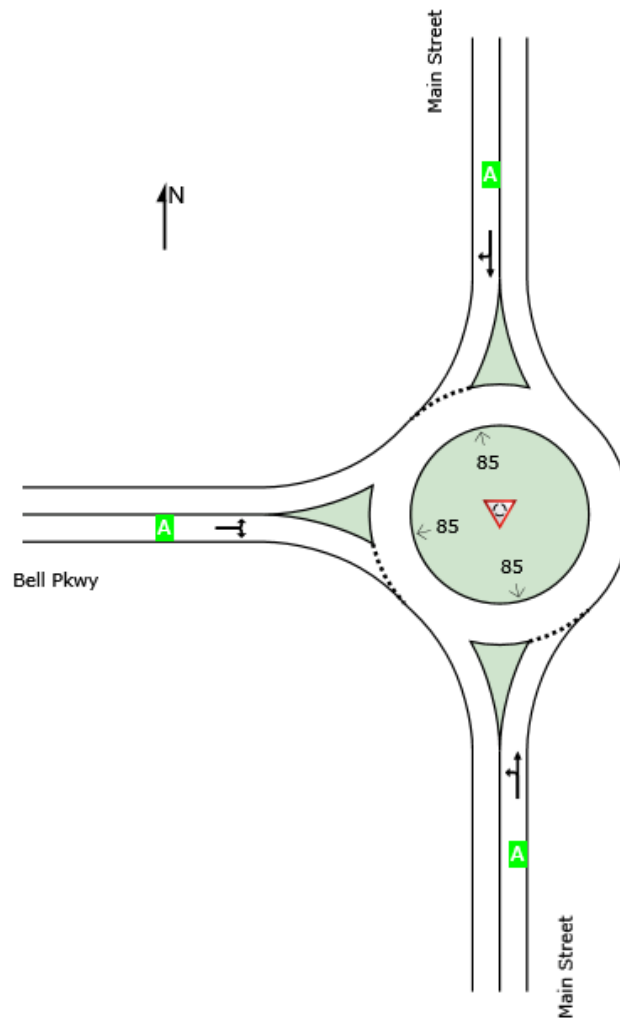
Lane Level of Service

 Site: 3 [Main Street at Bell Pkwy 2029 PM - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Bell Pkwy
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	North	West	
LOS	A	A	A	A



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptime Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

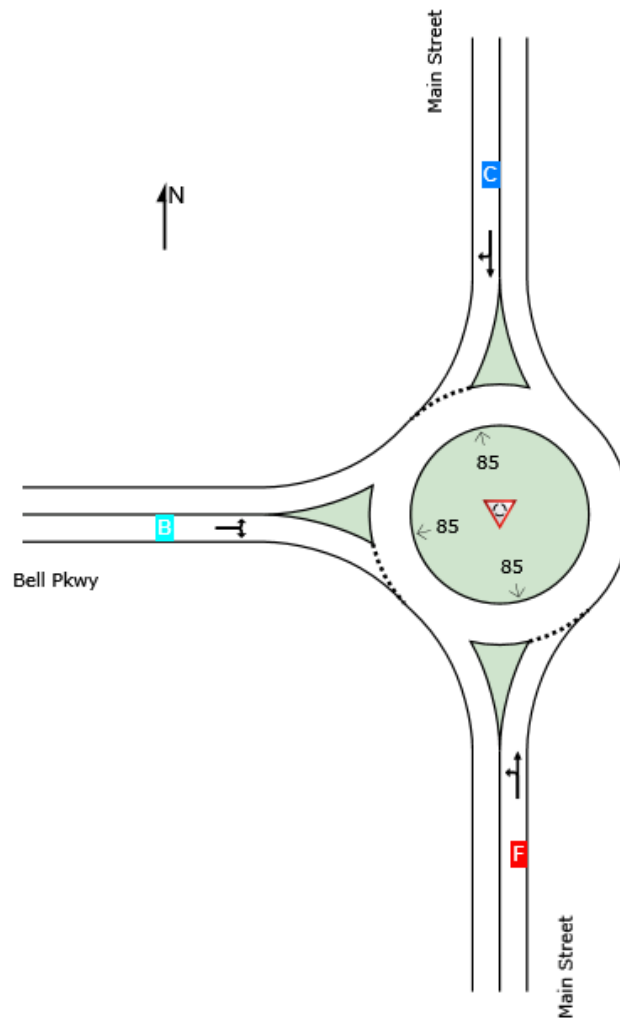
Lane Level of Service

 Site: 3 [Main Street at Bell Pkwy 2049 MD - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Bell Pkwy
 2049 MD Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	North	West	
LOS	C	C	B	C



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptime Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

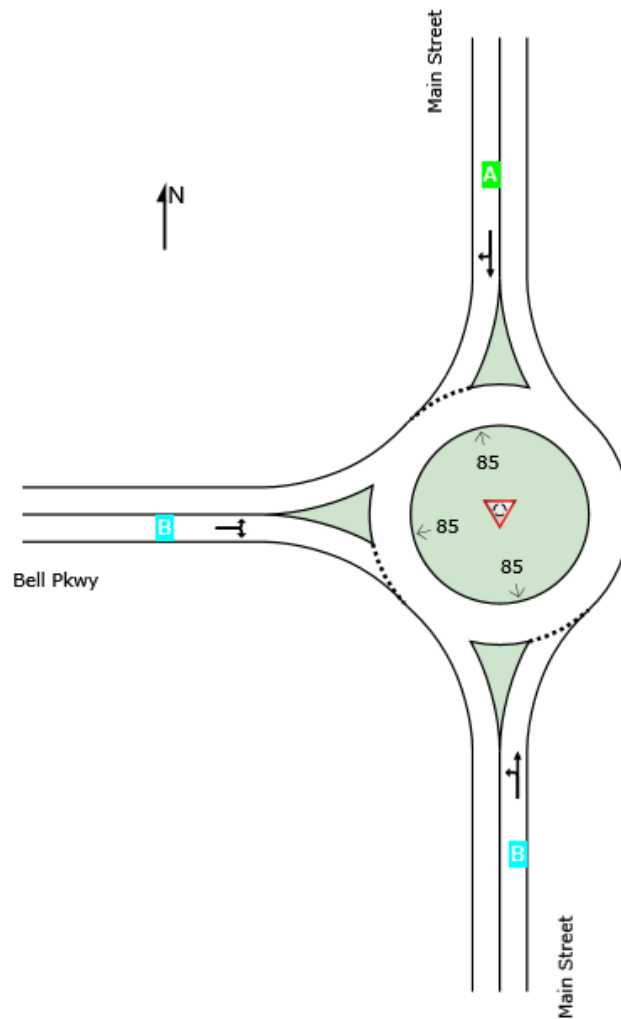
Lane Level of Service

 Site: 3 [Main Street at Bell Pkwy 2049 PM - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Bell Pkwy
 2049 PM Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	North	West	
LOS	B	A	B	B



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↖		↘	↗
Traffic Vol, veh/h	0	3	627	0	2	1005
Future Vol, veh/h	0	3	627	0	2	1005
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	3	674	0	2	1081

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1759	674	0	0	674	0
Stage 1	674	-	-	-	-	-
Stage 2	1085	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	93	455	-	-	917	-
Stage 1	506	-	-	-	-	-
Stage 2	324	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	93	455	-	-	917	-
Mov Cap-2 Maneuver	93	-	-	-	-	-
Stage 1	506	-	-	-	-	-
Stage 2	323	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	-	-	455	917
HCM Lane V/C Ratio	-	-	0.007	0.002
HCM Control Delay (s)	-	-	0	13
HCM Lane LOS	-	-	A	B
HCM 95th %tile Q(veh)	-	-	0	0

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔	↔	↔		↔	↔
Traffic Vol, veh/h	8	19	1094	36	33	1057
Future Vol, veh/h	8	19	1094	36	33	1057
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	9	21	1216	40	37	1174

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2484	1236	0	0	1256
Stage 1	1236	-	-	-	-
Stage 2	1248	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	32	215	-	-	554
Stage 1	274	-	-	-	-
Stage 2	271	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	30	215	-	-	554
Mov Cap-2 Maneuver	30	-	-	-	-
Stage 1	274	-	-	-	-
Stage 2	253	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	66.8	0	0.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	30	215	554
HCM Lane V/C Ratio	-	-	0.296	0.098	0.066
HCM Control Delay (s)	-	-	169.3	23.6	12
HCM Lane LOS	-	-	F	C	B
HCM 95th %tile Q(veh)	-	-	0.9	0.3	0.2

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	11	961	16	11	833
Future Vol, veh/h	3	11	961	16	11	833
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	12	1033	17	12	896

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1962	1042	0	0	1050
Stage 1	1042	-	-	-	-
Stage 2	920	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	70	279	-	-	663
Stage 1	340	-	-	-	-
Stage 2	388	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	69	279	-	-	663
Mov Cap-2 Maneuver	69	-	-	-	-
Stage 1	340	-	-	-	-
Stage 2	381	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.3	0	0.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	69	279	663
HCM Lane V/C Ratio	-	-	0.047	0.042	0.018
HCM Control Delay (s)	-	-	59.7	18.5	10.5
HCM Lane LOS	-	-	F	C	B
HCM 95th %tile Q(veh)	-	-	0.1	0.1	0.1

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↖		↘	↗
Traffic Vol, veh/h	28	7	800	7	2	781
Future Vol, veh/h	28	7	800	7	2	781
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	8	860	8	2	840

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1708	864	0	0	868	0
Stage 1	864	-	-	-	-	-
Stage 2	844	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	100	354	-	-	776	-
Stage 1	413	-	-	-	-	-
Stage 2	422	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	100	354	-	-	776	-
Mov Cap-2 Maneuver	100	-	-	-	-	-
Stage 1	413	-	-	-	-	-
Stage 2	421	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	47.7	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	100	354	776
HCM Lane V/C Ratio	-	-	0.301	0.021	0.003
HCM Control Delay (s)	-	-	55.8	15.4	9.7
HCM Lane LOS	-	-	F	C	A
HCM 95th %tile Q(veh)	-	-	1.1	0.1	0

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↖		↘	↗
Traffic Vol, veh/h	0	4	765	0	2	1226
Future Vol, veh/h	0	4	765	0	2	1226
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	823	0	2	1318

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2145	823	0	0	823	0
Stage 1	823	-	-	-	-	-
Stage 2	1322	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	53	373	-	-	807	-
Stage 1	431	-	-	-	-	-
Stage 2	249	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	53	373	-	-	807	-
Mov Cap-2 Maneuver	53	-	-	-	-	-
Stage 1	431	-	-	-	-	-
Stage 2	249	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	373	807
HCM Lane V/C Ratio	-	-	-	0.012	0.003
HCM Control Delay (s)	-	-	0	14.8	9.5
HCM Lane LOS	-	-	A	B	A
HCM 95th %tile Q(veh)	-	-	-	0	0

Intersection						
Int Delay, s/veh	2.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	23	1335	44	40	1290
Future Vol, veh/h	10	23	1335	44	40	1290
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	26	1483	49	44	1433

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	3029	1508	0	0	1532	0
Stage 1	1508	-	-	-	-	-
Stage 2	1521	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	14	148	-	-	434	-
Stage 1	202	-	-	-	-	-
Stage 2	199	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	13	148	-	-	434	-
Mov Cap-2 Maneuver	13	-	-	-	-	-
Stage 1	202	-	-	-	-	-
Stage 2	179	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	198.8	0	0.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	13 148	434	-
HCM Lane V/C Ratio	-	-	0.855 0.173	0.102	-
HCM Control Delay (s)	-	-	\$ 577.2 34.3	14.2	-
HCM Lane LOS	-	-	F D	B	-
HCM 95th %tile Q(veh)	-	-	1.9 0.6	0.3	-

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↖		↘	↗
Traffic Vol, veh/h	4	13	1173	20	13	1016
Future Vol, veh/h	4	13	1173	20	13	1016
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	14	1261	22	14	1092

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	2392	1272	0	0	1283
Stage 1	1272	-	-	-	-
Stage 2	1120	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	37	205	-	-	541
Stage 1	263	-	-	-	-
Stage 2	312	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	36	205	-	-	541
Mov Cap-2 Maneuver	36	-	-	-	-
Stage 1	263	-	-	-	-
Stage 2	304	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	46	0	0.1
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	36	205	541
HCM Lane V/C Ratio	-	-	0.119	0.068	0.026
HCM Control Delay (s)	-	-	118.1	23.8	11.8
HCM Lane LOS	-	-	F	C	B
HCM 95th %tile Q(veh)	-	-	0.4	0.2	0.1

Intersection						
Int Delay, s/veh	2.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	9	976	9	2	953
Future Vol, veh/h	34	9	976	9	2	953
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	10	1049	10	2	1025

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	2083	1054	0	0	1059	0
Stage 1	1054	-	-	-	-	-
Stage 2	1029	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	58	275	-	-	658	-
Stage 1	335	-	-	-	-	-
Stage 2	345	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	58	275	-	-	658	-
Mov Cap-2 Maneuver	58	-	-	-	-	-
Stage 1	335	-	-	-	-	-
Stage 2	344	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	115	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	58	275	658
HCM Lane V/C Ratio	-	-	0.63	0.035	0.003
HCM Control Delay (s)	-	-	140.5	18.6	10.5
HCM Lane LOS	-	-	F	C	B
HCM 95th %tile Q(veh)	-	-	2.6	0.1	0

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	31	14	615	18	7	0
Future Vol, veh/h	31	14	615	18	7	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	Yield	-	None
Storage Length	0	130	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	15	676	20	8	0

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	692	676	0	0	676	0
Stage 1	676	-	-	-	-	-
Stage 2	16	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	410	453	-	-	915	-
Stage 1	505	-	-	-	-	-
Stage 2	1007	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	406	453	-	-	915	-
Mov Cap-2 Maneuver	406	-	-	-	-	-
Stage 1	505	-	-	-	-	-
Stage 2	998	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.2	0	9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT	
Capacity (veh/h)	-	-	406	453	915	-
HCM Lane V/C Ratio	-	-	0.084	0.034	0.008	-
HCM Control Delay (s)	-	-	14.7	13.2	9	-
HCM Lane LOS	-	-	B	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.1	0	-

Intersection						
Int Delay, s/veh	1.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	20	24	1118	45	29	0
Future Vol, veh/h	20	24	1118	45	29	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	Yield	-	None
Storage Length	0	130	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	26	1215	49	32	0

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1279	1215	0	0	1215	0
Stage 1	1215	-	-	-	-	-
Stage 2	64	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	183	221	-	-	574	-
Stage 1	281	-	-	-	-	-
Stage 2	959	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	173	221	-	-	574	-
Mov Cap-2 Maneuver	173	-	-	-	-	-
Stage 1	281	-	-	-	-	-
Stage 2	905	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.9	0	11.6
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	173	221	574
HCM Lane V/C Ratio	-	-	0.126	0.118	0.055
HCM Control Delay (s)	-	-	28.8	23.5	11.6
HCM Lane LOS	-	-	D	C	B
HCM 95th %tile Q(veh)	-	-	0.4	0.4	0.2

Intersection						
Int Delay, s/veh	1.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	29	27	959	35	14	0
Future Vol, veh/h	29	27	959	35	14	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	Yield	-	None
Storage Length	0	130	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	29	1042	38	15	0

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1072	1042	0	0	1042	0
Stage 1	1042	-	-	-	-	-
Stage 2	30	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	244	279	-	-	667	-
Stage 1	340	-	-	-	-	-
Stage 2	993	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	239	279	-	-	667	-
Mov Cap-2 Maneuver	239	-	-	-	-	-
Stage 1	340	-	-	-	-	-
Stage 2	971	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.9	0	10.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	239	279	667
HCM Lane V/C Ratio	-	-	0.132	0.105	0.023
HCM Control Delay (s)	-	-	22.3	19.4	10.5
HCM Lane LOS	-	-	C	C	B
HCM 95th %tile Q(veh)	-	-	0.4	0.3	0.1

Intersection						
Int Delay, s/veh	1.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	27	25	788	28	26	0
Future Vol, veh/h	27	25	788	28	26	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	Yield	-	None
Storage Length	0	130	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	27	857	30	28	0

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	913	857	0	0	857	0
Stage 1	857	-	-	-	-	-
Stage 2	56	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	304	357	-	-	783	-
Stage 1	416	-	-	-	-	-
Stage 2	967	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	293	357	-	-	783	-
Mov Cap-2 Maneuver	293	-	-	-	-	-
Stage 1	416	-	-	-	-	-
Stage 2	932	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.4	0	9.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	293	357	783
HCM Lane V/C Ratio	-	-	0.1	0.076	0.036
HCM Control Delay (s)	-	-	18.7	15.9	9.8
HCM Lane LOS	-	-	C	C	A
HCM 95th %tile Q(veh)	-	-	0.3	0.2	0.1

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↗	↗	↗	↗
Traffic Vol, veh/h	0	45	615	18	7	982
Future Vol, veh/h	0	45	615	18	7	982
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	-	0	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	49	676	20	8	1079

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	676	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.22	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.318	-
Pot Cap-1 Maneuver	0	453	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	453	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.9	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	453	900
HCM Lane V/C Ratio	-	-	0.109	0.009
HCM Control Delay (s)	-	-	13.9	9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.4	0

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↗	↗	↗	↗
Traffic Vol, veh/h	0	44	1118	45	29	1071
Future Vol, veh/h	0	44	1118	45	29	1071
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	-	0	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	48	1215	49	32	1164

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	1215	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.22	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.318	-
Pot Cap-1 Maneuver	0	221	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	-	221	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.7	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	221	550
HCM Lane V/C Ratio	-	-	0.216	0.057
HCM Control Delay (s)	-	-	25.7	11.9
HCM Lane LOS	-	-	D	B
HCM 95th %tile Q(veh)	-	-	0.8	0.2

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↗	↗	↗	↗
Traffic Vol, veh/h	0	56	959	35	14	851
Future Vol, veh/h	0	56	959	35	14	851
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	-	0	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	61	1042	38	15	925

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	1042	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.22	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.318	-
Pot Cap-1 Maneuver	0	279	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	-	279	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.5	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	279	646
HCM Lane V/C Ratio	-	-	0.218	0.024
HCM Control Delay (s)	-	-	21.5	10.7
HCM Lane LOS	-	-	C	B
HCM 95th %tile Q(veh)	-	-	0.8	0.1

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↗	↗	↘	↗
Traffic Vol, veh/h	0	52	788	28	26	835
Future Vol, veh/h	0	52	788	28	26	835
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	-	0	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	57	857	30	28	908

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	857	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.22	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.318	-
Pot Cap-1 Maneuver	0	357	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	-	357	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	357	763
HCM Lane V/C Ratio	-	-	0.158	0.037
HCM Control Delay (s)	-	-	17	9.9
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.6	0.1

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	31	14	750	18	7	0
Future Vol, veh/h	31	14	750	18	7	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	Yield	-	None
Storage Length	0	130	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	15	824	20	8	0
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	840	824	0	0	824	0
Stage 1	824	-	-	-	-	-
Stage 2	16	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	335	373	-	-	806	-
Stage 1	431	-	-	-	-	-
Stage 2	1007	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	332	373	-	-	806	-
Mov Cap-2 Maneuver	332	-	-	-	-	-
Stage 1	431	-	-	-	-	-
Stage 2	997	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	16.5	0	9.5			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT	
Capacity (veh/h)	-	-	332	373	806	-
HCM Lane V/C Ratio	-	-	0.103	0.041	0.01	-
HCM Control Delay (s)	-	-	17.1	15.1	9.5	-
HCM Lane LOS	-	-	C	C	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.1	0	-

Intersection						
Int Delay, s/veh	1.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	20	24	1364	45	29	0
Future Vol, veh/h	20	24	1364	45	29	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	Yield	-	None
Storage Length	0	130	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	26	1483	49	32	0
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1547	1483	0	0	1483	0
Stage 1	1483	-	-	-	-	-
Stage 2	64	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	126	154	-	-	454	-
Stage 1	208	-	-	-	-	-
Stage 2	959	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	117	154	-	-	454	-
Mov Cap-2 Maneuver	117	-	-	-	-	-
Stage 1	208	-	-	-	-	-
Stage 2	892	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	37.5	0	13.5			
HCM LOS	E					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT	
Capacity (veh/h)	-	-	117	154	454	-
HCM Lane V/C Ratio	-	-	0.186	0.169	0.069	-
HCM Control Delay (s)	-	-	42.7	33.1	13.5	-
HCM Lane LOS	-	-	E	D	B	-
HCM 95th %tile Q(veh)	-	-	0.6	0.6	0.2	-

Intersection						
Int Delay, s/veh	1.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	29	27	1170	35	14	0
Future Vol, veh/h	29	27	1170	35	14	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	Yield	-	None
Storage Length	0	130	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	29	1272	38	15	0

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1302	1272	0	0	1272	0
Stage 1	1272	-	-	-	-	-
Stage 2	30	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	177	205	-	-	546	-
Stage 1	263	-	-	-	-	-
Stage 2	993	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	172	205	-	-	546	-
Mov Cap-2 Maneuver	172	-	-	-	-	-
Stage 1	263	-	-	-	-	-
Stage 2	966	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	28.1	0	11.8
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	172	205	546
HCM Lane V/C Ratio	-	-	0.183	0.143	0.028
HCM Control Delay (s)	-	-	30.6	25.5	11.8
HCM Lane LOS	-	-	D	D	B
HCM 95th %tile Q(veh)	-	-	0.6	0.5	0.1

Intersection						
Int Delay, s/veh	1.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	27	25	962	28	26	0
Future Vol, veh/h	27	25	962	28	26	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	Yield	-	None
Storage Length	0	130	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	27	1046	30	28	0

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1102	1046	0	0	1046	0
Stage 1	1046	-	-	-	-	-
Stage 2	56	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	234	277	-	-	665	-
Stage 1	338	-	-	-	-	-
Stage 2	967	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	224	277	-	-	665	-
Mov Cap-2 Maneuver	224	-	-	-	-	-
Stage 1	338	-	-	-	-	-
Stage 2	926	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.5	0	10.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT	
Capacity (veh/h)	-	-	224	277	665	-
HCM Lane V/C Ratio	-	-	0.131	0.098	0.042	-
HCM Control Delay (s)	-	-	23.5	19.4	10.7	-
HCM Lane LOS	-	-	C	C	B	-
HCM 95th %tile Q(veh)	-	-	0.4	0.3	0.1	-

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↗	↗	↗	↗
Traffic Vol, veh/h	0	45	750	18	7	1191
Future Vol, veh/h	0	45	750	18	7	1191
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	-	-	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	49	824	20	8	1309
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	824	0	0	844	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	4.12	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	0	373	-	-	792	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	373	-	-	792	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	16.1	0	0.1			
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	373	792	-	
HCM Lane V/C Ratio	-	-	0.133	0.01	-	
HCM Control Delay (s)	-	-	16.1	9.6	-	
HCM Lane LOS	-	-	C	A	-	
HCM 95th %tile Q(veh)	-	-	0.5	0	-	

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↑	↖	↘	↑
Traffic Vol, veh/h	0	44	1364	45	29	1302
Future Vol, veh/h	0	44	1364	45	29	1302
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	-	-	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	48	1483	49	32	1415

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	1483	0	0	1532
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	4.12
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	2.218
Pot Cap-1 Maneuver	0	154	-	-	434
Stage 1	0	-	-	-	-
Stage 2	0	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	-	154	-	-	434
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	38.6	0	0.3
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	154	434
HCM Lane V/C Ratio	-	-	0.311	0.073
HCM Control Delay (s)	-	-	38.6	13.9
HCM Lane LOS	-	-	E	B
HCM 95th %tile Q(veh)	-	-	1.2	0.2

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↗	↗	↗	↗
Traffic Vol, veh/h	0	56	1170	35	14	1032
Future Vol, veh/h	0	56	1170	35	14	1032
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	-	-	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	61	1272	38	15	1122

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	1272	0	0	1310
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	4.12
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	2.218
Pot Cap-1 Maneuver	0	205	-	-	528
Stage 1	0	-	-	-	-
Stage 2	0	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	-	205	-	-	528
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	29.8	0	0.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	205	528
HCM Lane V/C Ratio	-	-	0.297	0.029
HCM Control Delay (s)	-	-	29.8	12
HCM Lane LOS	-	-	D	B
HCM 95th %tile Q(veh)	-	-	1.2	0.1

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↗	↗	↗	↗
Traffic Vol, veh/h	0	52	962	28	26	1013
Future Vol, veh/h	0	52	962	28	26	1013
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	None
Storage Length	-	-	-	0	90	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	57	1046	30	28	1101

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	-	1046	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	6.22	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	3.318	-
Pot Cap-1 Maneuver	0	277	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	-	277	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.3	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	277	648
HCM Lane V/C Ratio	-	-	0.204	0.044
HCM Control Delay (s)	-	-	21.3	10.8
HCM Lane LOS	-	-	C	B
HCM 95th %tile Q(veh)	-	-	0.7	0.1

6: Main St & Ridgewalk Pkwy
Queues

2029 Opening Year AM Peak - Weekday
OY 2029 Int 6 - RT Lane SB.syn



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	569	379	85	265	591	607
v/c Ratio	0.64	0.54	0.35	0.23	0.62	0.25
Control Delay	35.5	6.6	48.0	10.1	23.5	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.5	6.6	48.0	10.1	23.5	0.4
Queue Length 50th (ft)	158	5	27	77	289	0
Queue Length 95th (ft)	189	45	45	103	360	4
Internal Link Dist (ft)	1438			698	828	
Turn Bay Length (ft)			200			505
Base Capacity (vph)	956	723	402	1154	954	2401
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	0.60	0.52	0.21	0.23	0.62	0.25
Intersection Summary						

6: Main St & Ridgewalk Pkwy
 HCM Signalized Intersection Capacity Analysis

2029 Opening Year AM Peak - Weekday
 OY 2029 Int 6 - RT Lane SB.syn



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	461	307	69	215	479	492
Future Volume (vph)	461	307	69	215	479	492
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.5	6.3	6.3	6.0
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3273	1583	3502	1900	1900	2707
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3273	1583	3502	1900	1900	2707
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	569	379	85	265	591	607
RTOR Reduction (vph)	0	269	0	0	0	144
Lane Group Flow (vph)	569	110	85	265	591	463
Heavy Vehicles (%)	7%	2%	0%	0%	0%	5%
Turn Type	Prot	Prot	Prot	NA	NA	pm+ov
Protected Phases	7	4	1	6	2	7
Permitted Phases						2
Actuated Green, G (s)	27.2	27.2	5.9	60.5	49.1	76.3
Effective Green, g (s)	27.2	27.2	5.9	60.5	49.1	76.3
Actuated g/C Ratio	0.27	0.27	0.06	0.60	0.49	0.76
Clearance Time (s)	6.0	6.0	5.5	6.3	6.3	6.0
Vehicle Extension (s)	5.1	5.1	2.1	5.1	5.1	5.1
Lane Grp Cap (vph)	890	430	206	1149	932	2065
v/s Ratio Prot	c0.17	0.07	c0.02	0.14	c0.31	0.06
v/s Ratio Perm						0.11
v/c Ratio	0.64	0.26	0.41	0.23	0.63	0.22
Uniform Delay, d1	32.1	28.5	45.4	9.1	18.8	3.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.2	0.7	0.6	0.5	2.0	0.1
Delay (s)	34.2	29.2	46.0	9.5	20.8	3.5
Level of Service	C	C	D	A	C	A
Approach Delay (s)	32.2			18.4	12.0	
Approach LOS	C			B	B	

Intersection Summary			
HCM 2000 Control Delay	20.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

6: Main St & Ridgewalk Pkwy
Queues

2029 Opening Year PM Peak - Weekday
OY 2029 Int 6 - RT Lane SB.syn



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	866	253	257	390	367	777
v/c Ratio	0.62	0.32	0.94	0.42	0.53	0.34
Control Delay	30.3	3.5	95.7	22.4	34.5	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.3	3.5	95.7	22.4	34.5	2.9
Queue Length 50th (ft)	265	0	103	191	225	61
Queue Length 95th (ft)	309	46	#186	295	343	79
Internal Link Dist (ft)	1438			698	828	
Turn Bay Length (ft)			200			505
Base Capacity (vph)	1569	861	274	930	704	2273
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	0.55	0.29	0.94	0.42	0.52	0.34

Intersection Summary

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

6: Main St & Ridgewalk Pkwy
 HCM Signalized Intersection Capacity Analysis

2029 Opening Year PM Peak - Weekday
 OY 2029 Int 6 - RT Lane SB.syn



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	805	235	239	363	341	723
Future Volume (vph)	805	235	239	363	341	723
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.5	6.3	6.3	6.0
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3467	1599	3467	1863	1881	2760
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3467	1599	3467	1863	1881	2760
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	866	253	257	390	367	777
RTOR Reduction (vph)	0	152	0	0	0	5
Lane Group Flow (vph)	866	101	257	390	367	772
Heavy Vehicles (%)	1%	1%	1%	2%	1%	3%
Turn Type	Prot	Prot	Prot	NA	NA	pm+ov
Protected Phases	7	4	1	6	2	7
Permitted Phases						2
Actuated Green, G (s)	48.1	48.1	9.5	59.6	44.6	92.7
Effective Green, g (s)	48.1	48.1	9.5	59.6	44.6	92.7
Actuated g/C Ratio	0.40	0.40	0.08	0.50	0.37	0.77
Clearance Time (s)	6.0	6.0	5.5	6.3	6.3	6.0
Vehicle Extension (s)	5.1	5.1	2.1	5.1	5.1	5.1
Lane Grp Cap (vph)	1389	640	274	925	699	2270
v/s Ratio Prot	c0.25	0.06	c0.07	0.21	c0.20	0.14
v/s Ratio Perm						0.14
v/c Ratio	0.62	0.16	0.94	0.42	0.53	0.34
Uniform Delay, d1	28.7	23.0	55.0	19.2	29.4	4.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.3	37.3	1.4	1.4	0.2
Delay (s)	30.0	23.3	92.2	20.6	30.8	4.4
Level of Service	C	C	F	C	C	A
Approach Delay (s)	28.5			49.1	12.9	
Approach LOS	C			D	B	

Intersection Summary			
HCM 2000 Control Delay	26.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

6: Main St & Ridgewalk Pkwy
Queues

2029 Opening Year MD Peak - Weekend
OY 2029 Int 6 - RT Lane SB.syn



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	730	330	74	342	453	465
v/c Ratio	0.65	0.44	0.36	0.32	0.50	0.19
Control Delay	36.7	4.5	58.9	15.9	26.3	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.7	4.5	58.9	15.9	26.3	0.3
Queue Length 50th (ft)	247	0	28	132	241	0
Queue Length 95th (ft)	272	56	53	234	409	7
Internal Link Dist (ft)	1438			698	828	
Turn Bay Length (ft)			200			505
Base Capacity (vph)	1560	901	274	1065	911	2463
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	0.37	0.27	0.32	0.50	0.19
Intersection Summary						

6: Main St & Ridgewalk Pkwy
 HCM Signalized Intersection Capacity Analysis

2029 Opening Year MD Peak - Weekend
 OY 2029 Int 6 - RT Lane SB.syn



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	679	307	69	318	421	432
Future Volume (vph)	679	307	69	318	421	432
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.5	6.3	6.3	6.0
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3467	1599	3467	1863	1881	2760
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3467	1599	3467	1863	1881	2760
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	730	330	74	342	453	465
RTOR Reduction (vph)	0	222	0	0	0	93
Lane Group Flow (vph)	730	108	74	342	453	372
Heavy Vehicles (%)	1%	1%	1%	2%	1%	3%
Turn Type	Prot	Prot	Prot	NA	NA	pm+ov
Protected Phases	7	4	1	6	2	7
Permitted Phases						2
Actuated Green, G (s)	39.1	39.1	6.1	68.6	57.0	96.1
Effective Green, g (s)	39.1	39.1	6.1	68.6	57.0	96.1
Actuated g/C Ratio	0.33	0.33	0.05	0.57	0.48	0.80
Clearance Time (s)	6.0	6.0	5.5	6.3	6.3	6.0
Vehicle Extension (s)	5.1	5.1	2.1	5.1	5.1	5.1
Lane Grp Cap (vph)	1129	521	176	1065	893	2348
v/s Ratio Prot	c0.21	0.07	c0.02	0.18	c0.24	0.05
v/s Ratio Perm						0.08
v/c Ratio	0.65	0.21	0.42	0.32	0.51	0.16
Uniform Delay, d1	34.5	29.2	55.2	13.5	21.8	2.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.8	0.4	0.7	0.8	1.0	0.1
Delay (s)	36.3	29.7	55.9	14.3	22.8	2.8
Level of Service	D	C	E	B	C	A
Approach Delay (s)	34.3			21.7	12.7	
Approach LOS	C			C	B	

Intersection Summary			
HCM 2000 Control Delay	23.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	59.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

6: Main St & Ridgewalk Pkwy
Queues

2029 Opening Year PM Peak - Weekend
OY 2029 Int 6 - RT Lane SB.syn



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	608	253	257	273	289	612
v/c Ratio	0.59	0.39	0.94	0.24	0.32	0.27
Control Delay	37.8	5.0	95.7	13.2	22.3	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.8	5.0	95.7	13.2	22.3	2.6
Queue Length 50th (ft)	207	0	103	92	134	44
Queue Length 95th (ft)	232	52	#186	173	235	59
Internal Link Dist (ft)	1438			698	828	
Turn Bay Length (ft)			200			505
Base Capacity (vph)	1560	858	274	1121	897	2280
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	0.29	0.94	0.24	0.32	0.27

Intersection Summary

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

6: Main St & Ridgewalk Pkwy
 HCM Signalized Intersection Capacity Analysis

2029 Opening Year PM Peak - Weekend
 OY 2029 Int 6 - RT Lane SB.syn



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	565	235	239	254	269	569
Future Volume (vph)	565	235	239	254	269	569
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.5	6.3	6.3	6.0
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3467	1599	3467	1863	1881	2760
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3467	1599	3467	1863	1881	2760
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	608	253	257	273	289	612
RTOR Reduction (vph)	0	178	0	0	0	5
Lane Group Flow (vph)	608	75	257	273	289	607
Heavy Vehicles (%)	1%	1%	1%	2%	1%	3%
Turn Type	Prot	Prot	Prot	NA	NA	pm+ov
Protected Phases	7	4	1	6	2	7
Permitted Phases						2
Actuated Green, G (s)	35.5	35.5	9.5	72.2	57.2	92.7
Effective Green, g (s)	35.5	35.5	9.5	72.2	57.2	92.7
Actuated g/C Ratio	0.30	0.30	0.08	0.60	0.48	0.77
Clearance Time (s)	6.0	6.0	5.5	6.3	6.3	6.0
Vehicle Extension (s)	5.1	5.1	2.1	5.1	5.1	5.1
Lane Grp Cap (vph)	1025	473	274	1120	896	2270
v/s Ratio Prot	c0.18	0.05	c0.07	0.15	c0.15	0.08
v/s Ratio Perm						0.14
v/c Ratio	0.59	0.16	0.94	0.24	0.32	0.27
Uniform Delay, d1	36.1	31.2	55.0	11.2	19.4	3.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.4	0.3	37.3	0.5	0.5	0.1
Delay (s)	37.5	31.6	92.2	11.7	19.9	4.1
Level of Service	D	C	F	B	B	A
Approach Delay (s)	35.8			50.7	9.1	
Approach LOS	D			D	A	

Intersection Summary			
HCM 2000 Control Delay	28.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	51.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

6: Main St & Ridgewalk Pkwy
Queues

2049 Opening Year AM Peak - Weekday
DY 2049 Int 6 - RT Lane SB.syn



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	695	463	104	323	721	741
v/c Ratio	0.75	0.68	0.40	0.29	0.78	0.31
Control Delay	38.2	15.2	48.2	11.0	30.7	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.2	15.2	48.2	11.0	30.7	0.8
Queue Length 50th (ft)	205	71	32	96	390	7
Queue Length 95th (ft)	236	135	52	126	483	14
Internal Link Dist (ft)	1438			698	828	
Turn Bay Length (ft)			200			505
Base Capacity (vph)	949	687	402	1126	920	2363
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	0.73	0.67	0.26	0.29	0.78	0.31
Intersection Summary						

6: Main St & Ridgewalk Pkwy
 HCM Signalized Intersection Capacity Analysis

2049 Opening Year AM Peak - Weekday
 DY 2049 Int 6 - RT Lane SB.syn



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	563	375	84	262	584	600
Future Volume (vph)	563	375	84	262	584	600
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.5	6.3	6.3	6.0
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3273	1583	3502	1900	1900	2707
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3273	1583	3502	1900	1900	2707
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	695	463	104	323	721	741
RTOR Reduction (vph)	0	231	0	0	0	144
Lane Group Flow (vph)	695	232	104	323	721	597
Heavy Vehicles (%)	7%	2%	0%	0%	0%	5%
Turn Type	Prot	Prot	Prot	NA	NA	pm+ov
Protected Phases	7	4	1	6	2	7
Permitted Phases						2
Actuated Green, G (s)	28.4	28.4	6.4	59.3	47.4	75.8
Effective Green, g (s)	28.4	28.4	6.4	59.3	47.4	75.8
Actuated g/C Ratio	0.28	0.28	0.06	0.59	0.47	0.76
Clearance Time (s)	6.0	6.0	5.5	6.3	6.3	6.0
Vehicle Extension (s)	5.1	5.1	2.1	5.1	5.1	5.1
Lane Grp Cap (vph)	929	449	224	1126	900	2051
v/s Ratio Prot	c0.21	0.15	c0.03	0.17	c0.38	0.08
v/s Ratio Perm						0.14
v/c Ratio	0.75	0.52	0.46	0.29	0.80	0.29
Uniform Delay, d1	32.5	30.1	45.1	10.0	22.3	3.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.0	2.1	0.7	0.6	5.9	0.2
Delay (s)	36.6	32.1	45.8	10.6	28.2	3.9
Level of Service	D	C	D	B	C	A
Approach Delay (s)	34.8			19.2	15.9	
Approach LOS	C			B	B	

Intersection Summary			
HCM 2000 Control Delay	23.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	64.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

6: Main St & Ridgewalk Pkwy
Queues

2049 Opening Year PM Peak - Weekday
DY 2049 Int 6 - RT Lane SB.syn



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	1056	309	314	476	447	948
v/c Ratio	0.68	0.35	1.15	0.57	0.73	0.42
Control Delay	29.0	3.3	148.5	28.0	44.4	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.0	3.3	148.5	28.0	44.4	3.4
Queue Length 50th (ft)	310	0	~146	280	318	84
Queue Length 95th (ft)	401	50	#240	376	431	107
Internal Link Dist (ft)	1438			698	828	
Turn Bay Length (ft)			200			505
Base Capacity (vph)	1587	899	274	854	627	2278
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	0.67	0.34	1.15	0.56	0.71	0.42

Intersection Summary

~ 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.

6: Main St & Ridgewalk Pkwy
 HCM Signalized Intersection Capacity Analysis

2049 Opening Year PM Peak - Weekday
 DY 2049 Int 6 - RT Lane SB.syn



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	982	287	292	443	416	882
Future Volume (vph)	982	287	292	443	416	882
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.5	6.3	6.3	6.0
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3467	1599	3467	1863	1881	2760
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3467	1599	3467	1863	1881	2760
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1056	309	314	476	447	948
RTOR Reduction (vph)	0	171	0	0	0	2
Lane Group Flow (vph)	1056	138	314	476	447	946
Heavy Vehicles (%)	1%	1%	1%	2%	1%	3%
Turn Type	Prot	Prot	Prot	NA	NA	pm+ov
Protected Phases	7	4	1	6	2	7
Permitted Phases						2
Actuated Green, G (s)	53.6	53.6	9.5	54.1	39.1	92.7
Effective Green, g (s)	53.6	53.6	9.5	54.1	39.1	92.7
Actuated g/C Ratio	0.45	0.45	0.08	0.45	0.33	0.77
Clearance Time (s)	6.0	6.0	5.5	6.3	6.3	6.0
Vehicle Extension (s)	5.1	5.1	2.1	5.1	5.1	5.1
Lane Grp Cap (vph)	1548	714	274	839	612	2270
v/s Ratio Prot	c0.30	0.09	c0.09	0.26	c0.24	0.19
v/s Ratio Perm						0.16
v/c Ratio	0.68	0.19	1.15	0.57	0.73	0.42
Uniform Delay, d1	26.4	20.1	55.2	24.3	35.8	4.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.6	0.3	99.7	2.8	5.5	0.3
Delay (s)	28.1	20.4	154.9	27.1	41.3	4.8
Level of Service	C	C	F	C	D	A
Approach Delay (s)	26.3			77.9	16.5	
Approach LOS	C			E	B	

Intersection Summary			
HCM 2000 Control Delay	34.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

6: Main St & Ridgewalk Pkwy
Queues

2049 Opening Year MD Peak - Weekend
DY 2049 Int 6 - RT Lane SB.syn



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	891	403	90	417	553	567
v/c Ratio	0.67	0.51	0.41	0.44	0.73	0.24
Control Delay	32.6	9.0	59.5	21.6	39.1	0.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.6	9.0	59.5	21.6	39.1	0.7
Queue Length 50th (ft)	287	56	35	199	361	7
Queue Length 95th (ft)	320	127	61	320	#622	17
Internal Link Dist (ft)	1438			698	828	
Turn Bay Length (ft)			200			505
Base Capacity (vph)	1560	880	274	954	759	2376
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	0.57	0.46	0.33	0.44	0.73	0.24

Intersection Summary

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

6: Main St & Ridgewalk Pkwy
 HCM Signalized Intersection Capacity Analysis

2049 Opening Year MD Peak - Weekend
 DY 2049 Int 6 - RT Lane SB.syn



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	829	375	84	388	514	527
Future Volume (vph)	829	375	84	388	514	527
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.5	6.3	6.3	6.0
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3467	1599	3467	1863	1881	2760
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3467	1599	3467	1863	1881	2760
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	891	403	90	417	553	567
RTOR Reduction (vph)	0	180	0	0	0	92
Lane Group Flow (vph)	891	223	90	417	553	475
Heavy Vehicles (%)	1%	1%	1%	2%	1%	3%
Turn Type	Prot	Prot	Prot	NA	NA	pm+ov
Protected Phases	7	4	1	6	2	7
Permitted Phases						2
Actuated Green, G (s)	46.2	46.2	7.6	61.5	48.4	94.6
Effective Green, g (s)	46.2	46.2	7.6	61.5	48.4	94.6
Actuated g/C Ratio	0.39	0.39	0.06	0.51	0.40	0.79
Clearance Time (s)	6.0	6.0	5.5	6.3	6.3	6.0
Vehicle Extension (s)	5.1	5.1	2.1	5.1	5.1	5.1
Lane Grp Cap (vph)	1334	615	219	954	758	2313
v/s Ratio Prot	c0.26	0.14	0.03	c0.22	c0.29	0.08
v/s Ratio Perm						0.09
v/c Ratio	0.67	0.36	0.41	0.44	0.73	0.21
Uniform Delay, d1	30.5	26.4	54.0	18.4	30.3	3.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.7	0.8	0.5	1.5	4.4	0.1
Delay (s)	32.3	27.2	54.6	19.8	34.7	3.3
Level of Service	C	C	D	B	C	A
Approach Delay (s)	30.7			26.0	18.8	
Approach LOS	C			C	B	

Intersection Summary			
HCM 2000 Control Delay	25.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

6: Main St & Ridgewalk Pkwy
Queues

2049 Opening Year PM Peak - Weekend
DY 2049 Int 6 - RT Lane SB.syn



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	741	309	314	333	353	746
v/c Ratio	0.59	0.40	1.15	0.33	0.46	0.33
Control Delay	32.5	3.8	148.5	18.6	30.1	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.5	3.8	148.5	18.6	30.1	2.9
Queue Length 50th (ft)	238	0	~146	139	195	59
Queue Length 95th (ft)	253	49	#240	249	331	77
Internal Link Dist (ft)	1438			698	828	
Turn Bay Length (ft)			200			505
Base Capacity (vph)	1564	891	274	1002	776	2277
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	0.35	1.15	0.33	0.45	0.33

Intersection Summary

~ 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.

6: Main St & Ridgewalk Pkwy
 HCM Signalized Intersection Capacity Analysis

2049 Opening Year PM Peak - Weekend
 DY 2049 Int 6 - RT Lane SB.syn



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	689	287	292	310	328	694
Future Volume (vph)	689	287	292	310	328	694
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	5.5	6.3	6.3	6.0
Lane Util. Factor	0.97	1.00	0.97	1.00	1.00	0.88
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	3467	1599	3467	1863	1881	2760
Flt Permitted	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (perm)	3467	1599	3467	1863	1881	2760
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	741	309	314	333	353	746
RTOR Reduction (vph)	0	198	0	0	0	2
Lane Group Flow (vph)	741	111	314	333	353	744
Heavy Vehicles (%)	1%	1%	1%	2%	1%	3%
Turn Type	Prot	Prot	Prot	NA	NA	pm+ov
Protected Phases	7	4	1	6	2	7
Permitted Phases						2
Actuated Green, G (s)	43.3	43.3	9.5	64.4	49.4	92.7
Effective Green, g (s)	43.3	43.3	9.5	64.4	49.4	92.7
Actuated g/C Ratio	0.36	0.36	0.08	0.54	0.41	0.77
Clearance Time (s)	6.0	6.0	5.5	6.3	6.3	6.0
Vehicle Extension (s)	5.1	5.1	2.1	5.1	5.1	5.1
Lane Grp Cap (vph)	1251	576	274	999	774	2270
v/s Ratio Prot	c0.21	0.07	c0.09	0.18	c0.19	0.12
v/s Ratio Perm						0.15
v/c Ratio	0.59	0.19	1.15	0.33	0.46	0.33
Uniform Delay, d1	31.2	26.4	55.2	15.7	25.6	4.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	0.4	99.7	0.9	0.9	0.2
Delay (s)	32.3	26.7	154.9	16.6	26.5	4.3
Level of Service	C	C	F	B	C	A
Approach Delay (s)	30.7			83.7	11.5	
Approach LOS	C			F	B	

Intersection Summary			
HCM 2000 Control Delay	35.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	17.8
Intersection Capacity Utilization	60.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

LANE LEVEL OF SERVICE

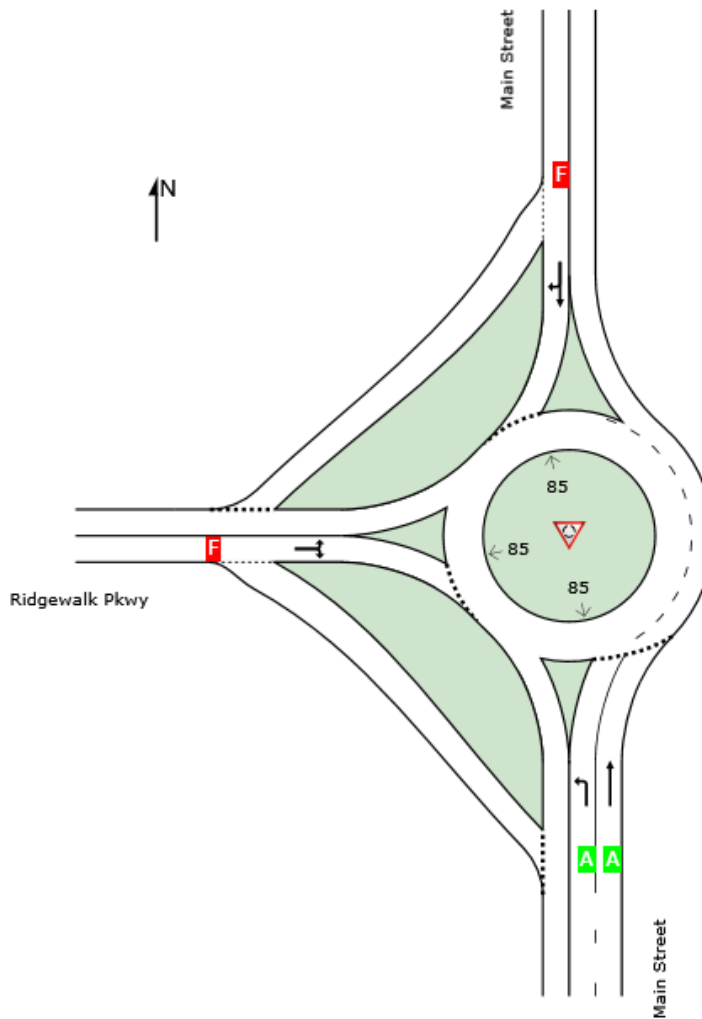
Lane Level of Service

 Site: 3 [Main Street at Ridgewalk Pkwy 2029 AM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Ridgewalk Pkwy
 2029 AM Peak - Weekday
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	North	West	
LOS	A	F	F	F



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

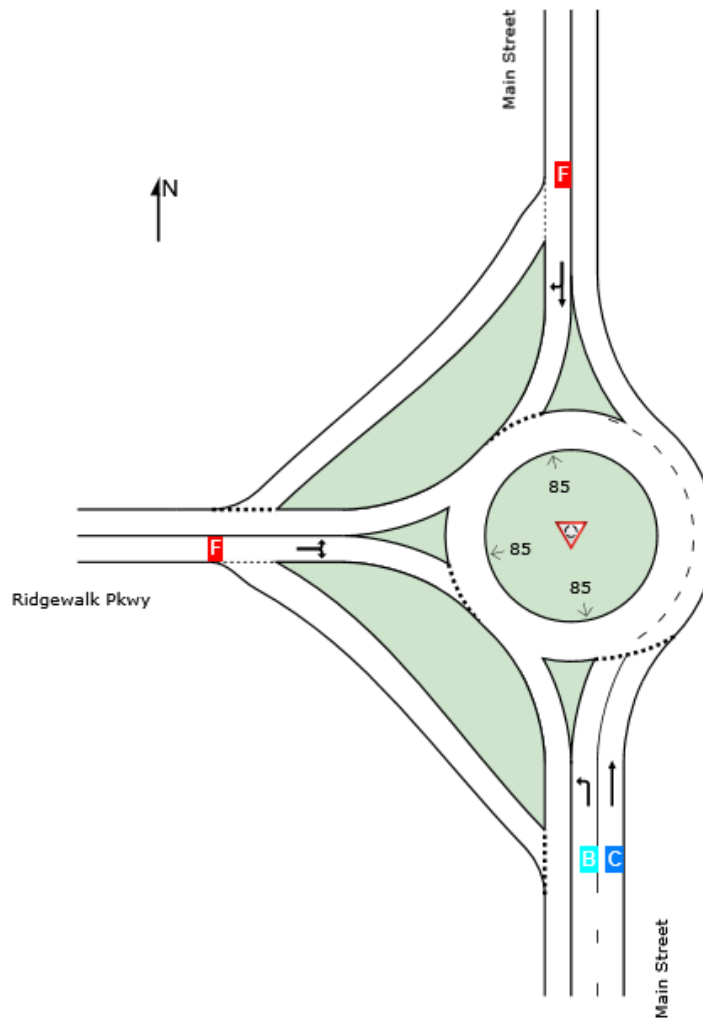
Lane Level of Service

 Site: 3 [Main Street at Ridgewalk Pkwy 2029 PM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Ridgewalk Pkwy
 2029 PM Peak - Weekday
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	North	West	
LOS	C	F	F	F



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
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 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptime Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

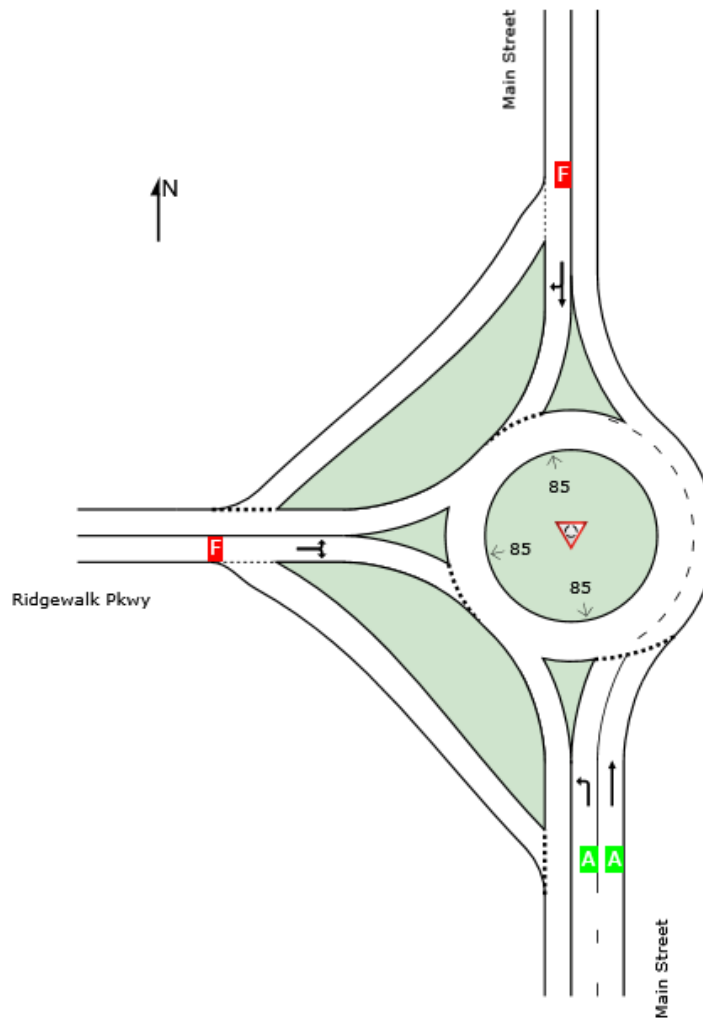
Lane Level of Service

 Site: 3 [Main Street at Ridgewalk Pkwy 2049 AM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Ridgewalk Pkwy
 2049 AM Peak - Weekday
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	North	West	
LOS	A	F	F	F



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptime Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

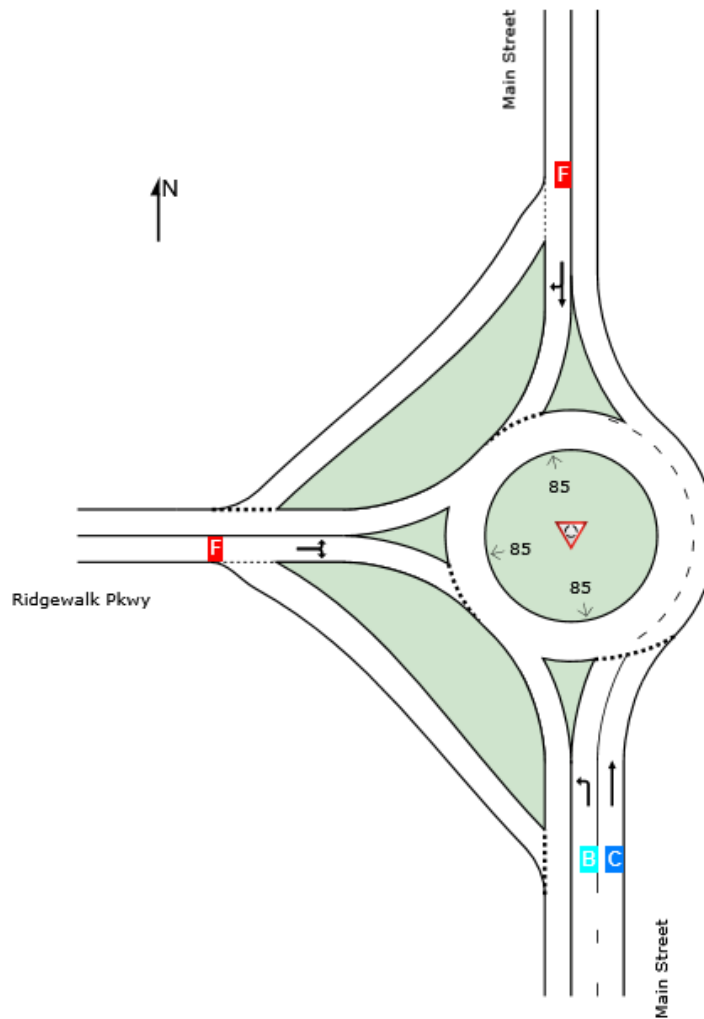
Lane Level of Service

 Site: 3 [Main Street at Ridgewalk Pkwy 2049 PM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Ridgewalk Pkwy
 2049 PM Peak - Weekday
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	North	West	
LOS	C	F	F	F



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
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 LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

LANE SUMMARY

Site: 3 [Main Street at Ridgewalk Pkwy 2029 AM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Ridgewalk Pkwy
 2029 AM Peak - Weekday
 Site Category: (None)
 Roundabout

Lane Use and Performance																
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.	
	[Total veh/h	HV %	[Total veh/h	HV %						[Veh	Dist] ft					
South: Main Street																
Lane 1	85	3.0	85	3.0	841	0.101	100	5.3	LOS A	0.4	9.9	Full	700	0.0	0.0	
Lane 2 ^d	265	3.0	265	3.0	841	0.316	100	7.8	LOS A	1.4	36.5	Full	500	0.0	0.0	
Approach	351	3.0	351	3.0		0.316		7.2	LOS A	1.4	36.5					
North: Main Street																
Lane 1 ^d	1199	3.0	1199	3.0	1110	1.080	100	56.2	LOS F	88.1	2255.4	Full	550	0.0	100.0	
Approach	1199	3.0	1199	3.0		1.080		56.2	LOS F	88.1	2255.4					
West: Ridgewalk Pkwy																
Lane 1 ^d	948	3.0	948	3.0	643	1.474	100	236.7	LOS F	106.5	2725.5	Full	700	0.0	100.0	
Approach	948	3.0	948	3.0		1.474		236.7	LOS F	106.5	2725.5					
All Vehicles	2498	3.0	2498	3.0		1.474		117.8	LOS F	106.5	2725.5					

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab). Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	L2	T1	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From S To Exit:	W	N			Cap. veh/h	v/c	%	%		
Lane 1	85	-	85	3.0	841	0.101	100	NA	NA	
Lane 2	-	265	265	3.0	841	0.316	100	NA	NA	
Approach	85	265	351	3.0		0.316				
North: Main Street										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From N To Exit:	S	W			Cap. veh/h	v/c	%	%		

Lane 1	591	607	1199	3.0	1110	1.080	100	NA	NA
Approach	591	607	1199	3.0		1.080			
West: Ridgewalk Pkwy									
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.
From W To Exit:	N	S			Cap. veh/h	v/c	%	%	
Lane 1	569	379	948	3.0	643	1.474	100	NA	NA
Approach	569	379	948	3.0		1.474			
Total %HV Deg.Satn (v/c)									
All Vehicles	2498	3.0		1.474					

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate % veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
Lane 2	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	22.2	71.9	NA
West: Ridgewalk Pkwy				
Lane 1	0.0	76.2	426.5	NA

LANE SUMMARY

Site: 3 [Main Street at Ridgewalk Pkwy 2029 PM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Ridgewalk Pkwy
 2029 PM Peak - Weekday
 Site Category: (None)
 Roundabout

Lane Use and Performance																
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.	
	[Total veh/h	HV %	[Total veh/h	HV %						[Veh	Dist] ft					
South: Main Street																
Lane 1	257	3.0	257	3.0	620	0.415	100	11.9	LOS B	2.0	52.2	Full	700	0.0	0.0	
Lane 2 ^d	390	3.0	390	3.0	620	0.630	100	18.2	LOS C	4.5	114.2	Full	500	0.0	0.0	
Approach	647	3.0	647	3.0		0.630		15.7	LOS C	4.5	114.2					
North: Main Street																
Lane 1 ^d	1144	3.0	1144	3.0	907	1.262	100	137.9	LOS F	102.7	2629.6	Full	550	0.0	100.0	
Approach	1144	3.0	1144	3.0		1.262		137.9	LOS F	102.7	2629.6					
West: Ridgewalk Pkwy																
Lane 1 ^d	1118	3.0	1118	3.0	871	1.283	100	148.1	LOS F	101.9	2608.7	Full	700	0.0	100.0	
Approach	1118	3.0	1118	3.0		1.283		148.1	LOS F	101.9	2608.7					
All Vehicles	2910	3.0	2910	3.0		1.283		114.6	LOS F	102.7	2629.6					

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	L2	T1	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From S To Exit:	W	N			Cap. veh/h	v/c	%	%		
Lane 1	257	-	257	3.0	620	0.415	100	NA	NA	
Lane 2	-	390	390	3.0	620	0.630	100	NA	NA	
Approach	257	390	647	3.0		0.630				
North: Main Street										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From N To Exit:	S	W			Cap. veh/h	v/c	%	%		

Lane 1	367	777	1144	3.0	907	1.262	100	NA	NA
Approach	367	777	1144	3.0	1.262				
West: Ridgewalk Pkwy									
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.
From W To Exit:	N	S			Cap. veh/h	v/c	%	%	
Lane 1	866	253	1118	3.0	871	1.283	100	NA	NA
Approach	866	253	1118	3.0	1.283				
Total %HV Deg.Satn (v/c)									
All Vehicles	2910	3.0	1.283						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
Lane 2	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	59.4	235.7	NA
West: Ridgewalk Pkwy				
Lane 1	0.0	61.7	255.0	NA

LANE SUMMARY

Site: 3 [Main Street at Ridgewalk Pkwy 2049 AM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Ridgewalk Pkwy
2049 AM Peak - Weekday
Site Category: (None)
Roundabout

Lane Use and Performance																
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.	
	[Total veh/h]	[HV %]	[Total veh/h]	[HV %]						[Veh]	[Dist]					
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			ft		ft	%	%	
South: Main Street																
Lane 1	104	3.0	104	3.0	877	0.118	100	5.3	LOS A	0.5	11.7	Full	700	0.0	0.0	
Lane 2 ^d	323	3.0	323	3.0	877	0.369	100	8.3	LOS A	1.7	44.5	Full	500	0.0	0.0	
Approach	427	3.0	427	3.0		0.369		7.6	LOS A	1.7	44.5					
North: Main Street																
Lane 1 ^d	1462	3.0	1462	3.0	1141	1.281	100	133.6	LOS F	152.0	3892.3	Full	550	0.0	100.0	
Approach	1462	3.0	1462	3.0		1.281		133.6	LOS F	152.0	3892.3					
West: Ridgewalk Pkwy																
Lane 1 ^d	1158	3.0	1158	3.0	678	1.707	100	337.6	LOS F	159.8	4091.1	Full	700	0.0	100.0	
Approach	1158	3.0	1158	3.0		1.707		337.6	LOS F	159.8	4091.1					
All Vehicles	3047	3.0	3047	3.0		1.707		193.5	LOS F	159.8	4091.1					

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	L2	T1	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From S					veh/h	Satn	Util.	SL Ov.	Lane	
To Exit:	W	N				v/c	%	%	No.	
Lane 1	104	-	104	3.0	877	0.118	100	NA	NA	
Lane 2	-	323	323	3.0	877	0.369	100	NA	NA	
Approach	104	323	427	3.0		0.369				
North: Main Street										
Mov.	T1	R2	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From N					veh/h	Satn	Util.	SL Ov.	Lane	
To Exit:	S	W				v/c	%	%	No.	

Lane 1	721	741	1462	3.0	1141	1.281	100	NA	NA
Approach	721	741	1462	3.0		1.281			
West: Ridgewalk Pkwy									
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.
From W To Exit:	N	S			Cap. veh/h	v/c	%	%	
Lane 1	695	463	1158	3.0	678	1.707	100	NA	NA
Approach	695	463	1158	3.0		1.707			
Total %HV Deg.Satn (v/c)									
All Vehicles	3047	3.0		1.707					

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate % veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
Lane 2	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	80.2	253.1	NA
West: Ridgewalk Pkwy				
Lane 1	0.0	119.9	636.2	NA

LANE SUMMARY

Site: 3 [Main Street at Ridgewalk Pkwy 2049 PM - Weekday (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Ridgewalk Pkwy
 2049 PM Peak - Weekday
 Site Category: (None)
 Roundabout

Lane Use and Performance																
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.	
	[Total veh/h]	[HV %]	[Total veh/h]	[HV %]						[Veh]	[Dist]					
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			ft		ft	%	%	
South: Main Street																
Lane 1	314	3.0	314	3.0	638	0.492	100	13.4	LOS B	2.7	69.1	Full	700	0.0	0.0	
Lane 2 ^d	476	3.0	476	3.0	638	0.747	100	23.8	LOS C	6.6	168.1	Full	500	0.0	0.0	
Approach	790	3.0	790	3.0		0.747		19.7	LOS C	6.6	168.1					
North: Main Street																
Lane 1 ^d	1396	3.0	1396	3.0	899	1.552	100	263.3	LOS F	174.5	4468.4	Full	550	0.0	100.0	
Approach	1396	3.0	1396	3.0		1.552		263.3	LOS F	174.5	4468.4					
West: Ridgewalk Pkwy																
Lane 1 ^d	1365	3.0	1365	3.0	926	1.474	100	228.4	LOS F	159.0	4070.8	Full	700	0.0	100.0	
Approach	1365	3.0	1365	3.0		1.474		228.4	LOS F	159.0	4070.8					
All Vehicles	3551	3.0	3551	3.0		1.552		195.7	LOS F	174.5	4468.4					

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	L2	T1	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From S					veh/h	Satn	Util.	SL	Ov.	Lane
To Exit:	W	N				v/c	%	%	%	No.
Lane 1	314	-	314	3.0	638	0.492	100	NA	NA	
Lane 2	-	476	476	3.0	638	0.747	100	NA	NA	
Approach	314	476	790	3.0		0.747				
North: Main Street										
Mov.	T1	R2	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From N					veh/h	Satn	Util.	SL	Ov.	Lane
To Exit:	S	W				v/c	%	%	%	No.

Lane 1	447	948	1396	3.0	899	1.552	100	NA	NA
Approach	447	948	1396	3.0	1.552				
West: Ridgewalk Pkwy									
Mov.	L2	R2	Total	%HV					
From W To Exit:	N	S			Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	1056	309	1365	3.0	926	1.474	100	NA	NA
Approach	1056	309	1365	3.0	1.474				
Total %HV Deg.Satn (v/c)									
All Vehicles	3551	3.0	1.552						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate % veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec	
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
Lane 2	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	124.1	496.6	NA
West: Ridgewalk Pkwy				
Lane 1	0.0	109.6	426.2	NA

LANE LEVEL OF SERVICE

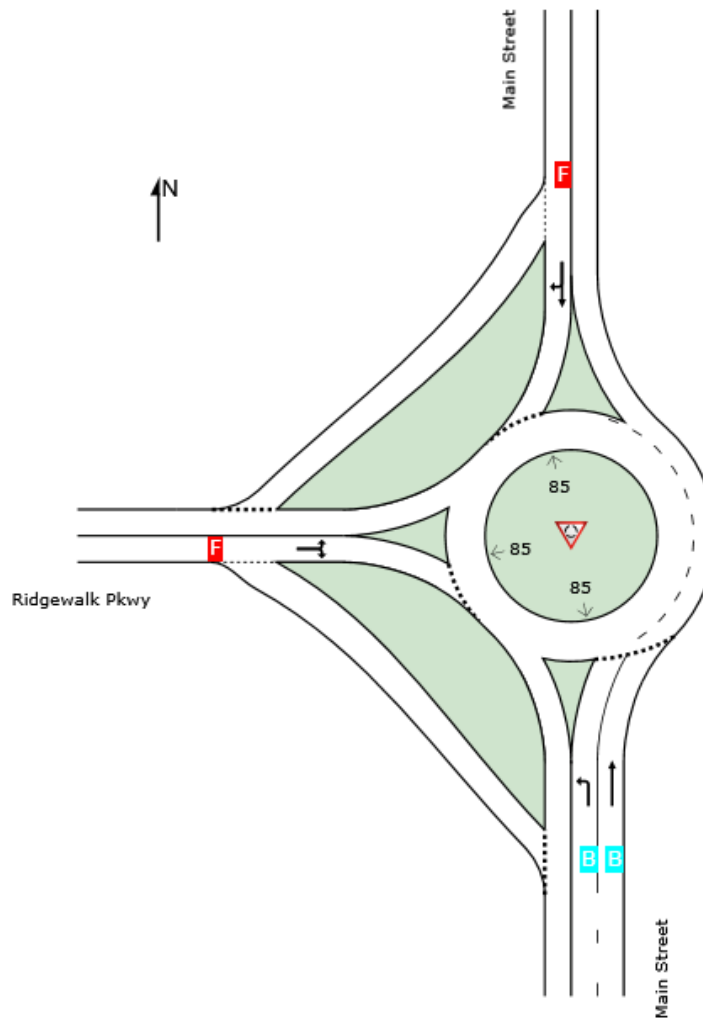
Lane Level of Service

Site: 3 [Main Street at Ridgewalk Pkwy 2049 PM - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Ridgewalk Pkwy
 2049 PM Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	North	West	
LOS	B	F	F	F



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptime Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

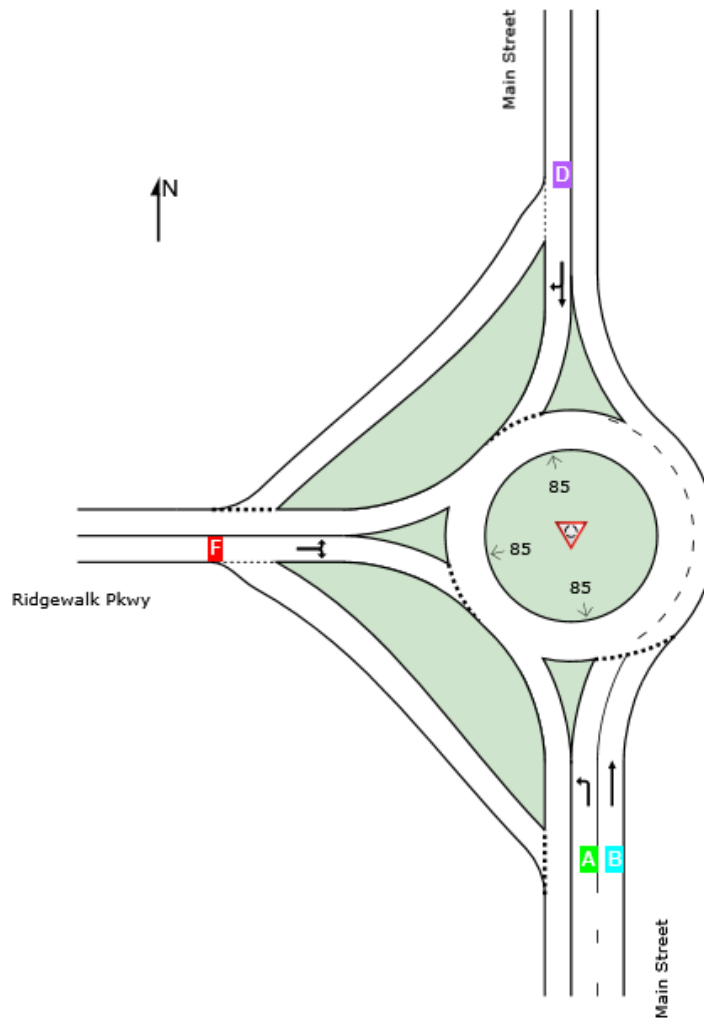
Lane Level of Service

 Site: 3 [Main Street at Ridgewalk Pkwy 2029 MD - Weekend
(Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Ridgewalk Pkwy
2029 MD Peak - Weekend
Site Category: (None)
Roundabout

	Approaches			Intersection
	South	North	West	
LOS	B	D	F	F



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

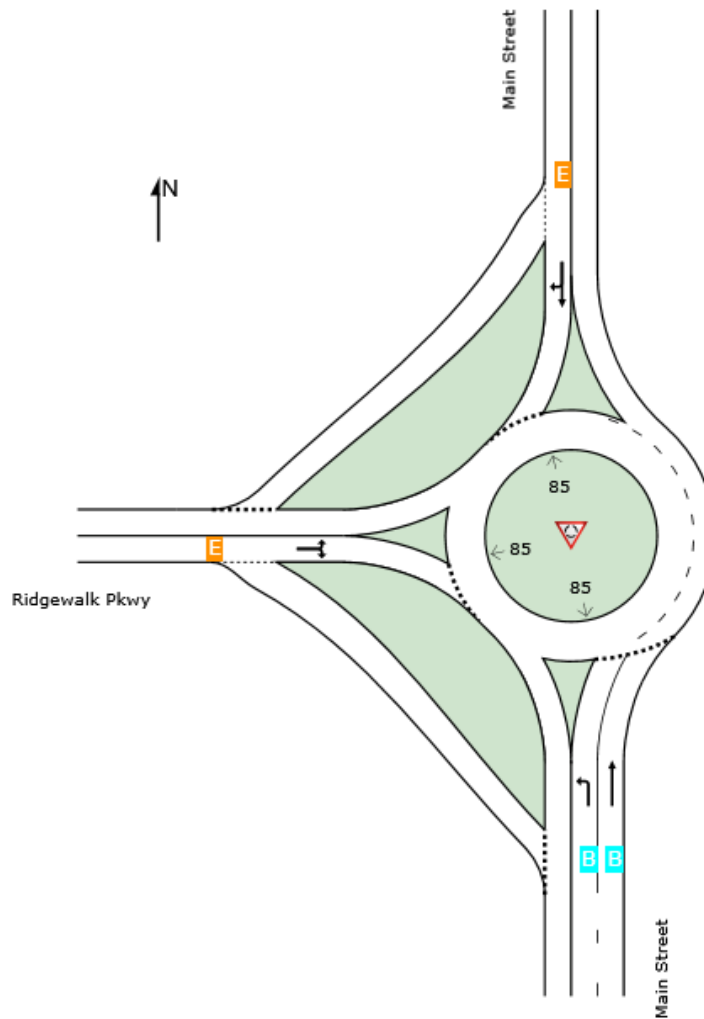
Lane Level of Service

 Site: 3 [Main Street at Ridgewalk Pkwy 2029 PM - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Ridgewalk Pkwy
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	North	West	
LOS	B	E	E	E



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

LANE LEVEL OF SERVICE

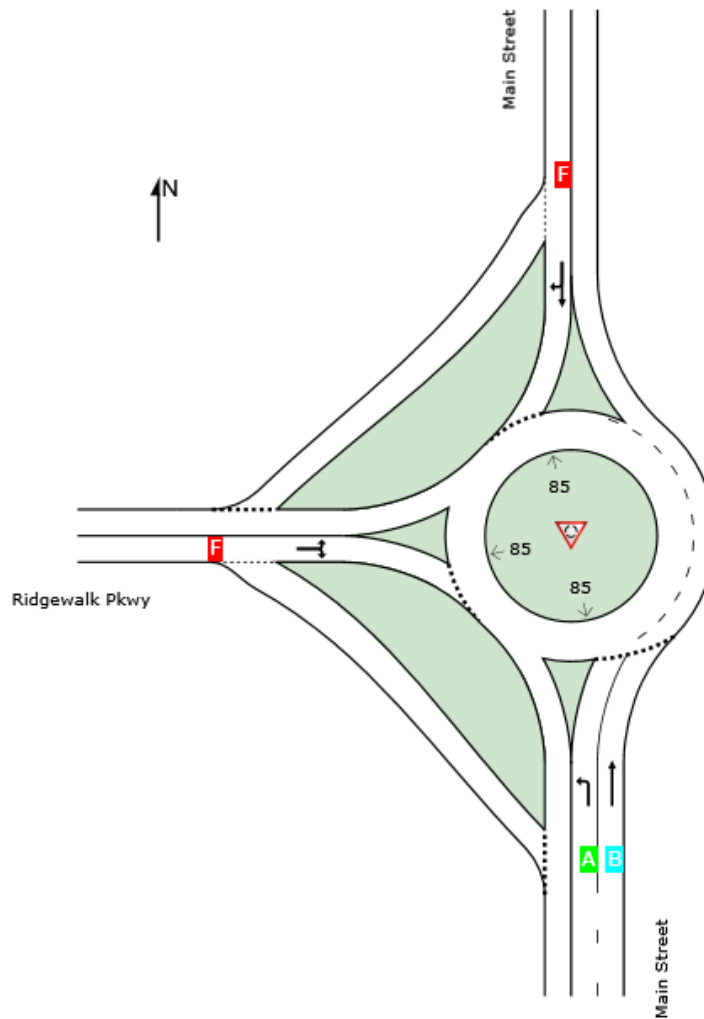
Lane Level of Service

Site: 3 [Main Street at Ridgewalk Pkwy 2049 MD - Weekend (Site Folder: General)]

Output produced by **SIDRA INTERSECTION Version: 9.1.6.228**

Main Street at Ridgewalk Pkwy
 2049 MD Peak - Weekend
 Site Category: (None)
 Roundabout

	Approaches			Intersection
	South	North	West	
LOS	B	F	F	F



Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.
 Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
 LOS F will result if $v/c > 1$ irrespective of lane delay value (does not apply for approaches and intersection).
 Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
 Delay Model: HCM Delay Formula (Stoptline Delay: Geometric Delay is not included).

Lane 1	520	533	1053	3.0	1110	0.949	100	NA	NA
Approach	520	533	1053	3.0		0.949			
West: Ridgewalk Pkwy									
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.
From W To Exit:	N	S			Cap. veh/h	v/c	%	%	
Lane 1	838	379	1217	3.0	665	1.831	100	NA	NA
Approach	838	379	1217	3.0		1.831			
Total %HV Deg.Satn (v/c)									
All Vehicles	2748	3.0		1.831					

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate % veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
Lane 2	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0
West: Ridgewalk Pkwy				
Lane 1	0.0	138.1	747.9	NA

LANE SUMMARY

Site: 3 [Main Street at Ridgewalk Pkwy 2029 PM - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Ridgewalk Pkwy
 2029 PM Peak - Weekend
 Site Category: (None)
 Roundabout

Lane Use and Performance															
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h	HV %	[Total veh/h	HV %						[Veh	Dist] ft				
South: Main Street															
Lane 1	257	3.0	257	3.0	660	0.389	100	10.8	LOS B	1.9	47.9	Full	700	0.0	0.0
Lane 2 ^d	273	3.0	273	3.0	660	0.414	100	11.2	LOS B	2.1	53.3	Full	500	0.0	0.0
Approach	530	3.0	530	3.0		0.414		11.0	LOS B	2.1	53.3				
North: Main Street															
Lane 1 ^d	901	3.0	901	3.0	907	0.994	100	46.4	LOS E	44.8	1146.5	Full	550	0.0	34.9
Approach	901	3.0	901	3.0		0.994		46.4	LOS E	44.8	1146.5				
West: Ridgewalk Pkwy															
Lane 1 ^d	860	3.0	860	3.0	873	0.986	100	45.9	LOS E	39.4	1009.4	Full	700	0.0	17.1
Approach	860	3.0	860	3.0		0.986		45.9	LOS E	39.4	1009.4				
All Vehicles	2291	3.0	2291	3.0		0.994		38.0	LOS E	44.8	1146.5				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab). Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	L2	T1	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From S To Exit:	W	N			Cap. veh/h	v/c	%	%		
Lane 1	257	-	257	3.0	660	0.389	100	NA	NA	
Lane 2	-	273	273	3.0	660	0.414	100	NA	NA	
Approach	257	273	530	3.0		0.414				
North: Main Street										
Mov.	T1	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.	
From N To Exit:	S	W			Cap. veh/h	v/c	%	%		

Lane 1	289	612	901	3.0	907	0.994	100	NA	NA
Approach	289	612	901	3.0		0.994			
West: Ridgewalk Pkwy									
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.
From W To Exit:	N	S			Cap. veh/h	v/c	%	%	
Lane 1	608	253	860	3.0	873	0.986	100	NA	NA
Approach	608	253	860	3.0		0.986			
Total %HV Deg.Satn (v/c)									
All Vehicles	2291	3.0		0.994					

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate % veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec		
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
Lane 2	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	0.0	0.0	0.0
West: Ridgewalk Pkwy				
Lane 1	0.0	0.0	0.0	0.0

LANE SUMMARY

Site: 3 [Main Street at Ridgewalk Pkwy 2049 MD - Weekend
(Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Ridgewalk Pkwy
2049 MD Peak - Weekend
Site Category: (None)
Roundabout

Lane Use and Performance															
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	[HV %]	[Total veh/h]	[HV %]						[Veh]	[Dist]				
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			ft		ft	%	%
South: Main Street															
Lane 1	104	3.0	104	3.0	826	0.126	100	5.6	LOS A	0.5	12.3	Full	700	0.0	0.0
Lane 2 ^d	479	3.0	479	3.0	826	0.580	100	13.0	LOS B	4.7	120.5	Full	500	0.0	0.0
Approach	583	3.0	583	3.0		0.580		11.7	LOS B	4.7	120.5				
North: Main Street															
Lane 1 ^d	1285	3.0	1285	3.0	1141	1.127	100	73.2	LOS F	103.7	2653.5	Full	550	0.0	100.0
Approach	1285	3.0	1285	3.0		1.127		73.2	LOS F	103.7	2653.5				
West: Ridgewalk Pkwy															
Lane 1 ^d	1486	3.0	1486	3.0	678	2.192	100	553.6	LOS F	261.0	6681.6	Full	700	0.0	100.0
Approach	1486	3.0	1486	3.0		2.192		553.6	LOS F	261.0	6681.6				
All Vehicles	3354	3.0	3354	3.0		2.192		275.4	LOS F	261.0	6681.6				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).

Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	L2	T1	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From S					veh/h	Satn	Util.	SL	Ov.	Lane
To Exit:	W	N				v/c	%	%	%	No.
Lane 1	104	-	104	3.0	826	0.126	100	NA	NA	
Lane 2	-	479	479	3.0	826	0.580	100	NA	NA	
Approach	104	479	583	3.0		0.580				
North: Main Street										
Mov.	T1	R2	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From N					veh/h	Satn	Util.	SL	Ov.	Lane
To Exit:	S	W				v/c	%	%	%	No.

Lane 1	635	651	1285	3.0	1141	1.127	100	NA	NA
Approach	635	651	1285	3.0		1.127			
West: Ridgewalk Pkwy									
Mov.	L2	R2	Total	%HV		Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane No.
From W To Exit:	N	S			Cap. veh/h	v/c	%	%	
Lane 1	1023	463	1486	3.0	678	2.192	100	NA	NA
Approach	1023	463	1486	3.0		2.192			
	Total	%HV	Deg. Satn	(v/c)					
All Vehicles	3354	3.0		2.192					

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
Exit Lane Number	Short Lane Length	Percent Opng in Lane	Opposing Flow Rate	Critical Gap	Follow-up Headway	Lane Flow Rate	Capacity	Deg. Satn	Min. Delay	Merge Delay		
	ft	%	veh/h	pcu/h	sec	sec	veh/h	veh/h	v/c	sec	sec	sec
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand	Residual Queued Demand	Time for Residual Demand to Clear	Duration of Oversatn
	veh	veh	sec	sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
Lane 2	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	36.1	113.9	NA
West: Ridgewalk Pkwy				
Lane 1	0.0	202.1	1073.2	NA

LANE SUMMARY

Site: 3 [Main Street at Ridgewalk Pkwy 2049 PM - Weekend (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street at Ridgewalk Pkwy
 2049 PM Peak - Weekend
 Site Category: (None)
 Roundabout

Lane Use and Performance															
	Demand Flows		Arrival Flows		Cap.	Deg. Satn	Lane Util.	Aver. Delay	Level of Service	95% Back Of Queue		Lane Config	Lane Length	Cap. Adj.	Prob. Block.
	[Total veh/h]	[HV %]	[Total veh/h]	[HV %]						[Veh]	[Dist]				
	veh/h	%	veh/h	%	veh/h	v/c	%	sec			ft		ft	%	%
South: Main Street															
Lane 1	314	3.0	314	3.0	679	0.462	100	12.0	LOS B	2.5	64.3	Full	700	0.0	0.0
Lane 2 ^d	333	3.0	333	3.0	679	0.491	100	12.7	LOS B	2.8	71.7	Full	500	0.0	0.0
Approach	647	3.0	647	3.0		0.491		12.4	LOS B	2.8	71.7				
North: Main Street															
Lane 1 ^d	1099	3.0	1099	3.0	899	1.222	100	122.7	LOS F	88.6	2268.0	Full	550	0.0	100.0
Approach	1099	3.0	1099	3.0		1.222		122.7	LOS F	88.6	2268.0				
West: Ridgewalk Pkwy															
Lane 1 ^d	1049	3.0	1049	3.0	926	1.134	100	88.2	LOS F	71.0	1817.6	Full	700	0.0	55.8
Approach	1049	3.0	1049	3.0		1.134		88.2	LOS F	71.0	1817.6				
All Vehicles	2796	3.0	2796	3.0		1.222		84.2	LOS F	88.6	2268.0				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
 Roundabout LOS Method: Same as Sign Control.

Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.

LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: Sieglösch M1 implied by US HCM 6 Roundabout Capacity Model.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

^d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)										
South: Main Street										
Mov.	L2	T1	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From S					veh/h	Satn	Util.	SL	Ov.	Lane
To Exit:	W	N				v/c	%	%	%	No.
Lane 1	314	-	314	3.0	679	0.462	100	NA	NA	
Lane 2	-	333	333	3.0	679	0.491	100	NA	NA	
Approach	314	333	647	3.0		0.491				
North: Main Street										
Mov.	T1	R2	Total	%HV	Cap.	Deg.	Lane	Prob.	Ov.	
From N					veh/h	Satn	Util.	SL	Ov.	Lane
To Exit:	S	W				v/c	%	%	%	No.

Lane 1	353	746	1099	3.0	899	1.222	100	NA	NA
Approach	353	746	1099	3.0	1.222				
West: Ridgewalk Pkwy									
Mov.	L2	R2	Total	%HV		Deg.	Lane	Prob.	Ov.
From W To Exit:	N	S			Cap. veh/h	Satn v/c	Util. %	SL Ov. %	Lane No.
Lane 1	741	309	1049	3.0	926	1.134	100	NA	NA
Approach	741	309	1049	3.0	1.134				
Total %HV Deg.Satn (v/c)									
All Vehicles	2796	3.0	1.222						

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis												
	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate % veh/h	Critical Gap pcu/h	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec	
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis				
	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
South: Main Street				
Lane 1	0.0	0.0	0.0	0.0
Lane 2	0.0	0.0	0.0	0.0
North: Main Street				
Lane 1	0.0	49.9	199.6	NA
West: Ridgewalk Pkwy				
Lane 1	0.0	31.0	120.5	NA

APPENDIX F – GENERALIZED SERVICE VOLUME TABLES FOR
PLANNING LEVEL SEGMENT ANALYSIS

TABLE 2

Generalized Annual Average Daily Volumes for Use in GRTA's DRI Review												
State Two-Way Arterials						Freeways						
Unsignalized (Uninterrupted Flow)						Group I (w/in urban area 500,000+ w/in 5 miles of CBD)						
Lanes		Level of Service				Lanes		Level of Service				
/Divided		A	B	C	D	E	A	B	C	D	E	
2/undivided		8,900	13,900	18,900	24,800	33,100	4	21,200	34,300	51,500	66,200	81,700
4/divided		21,500	35,800	50,100	60,100	71,600	6	32,600	52,700	79,000	101,600	125,400
6/divided		32,200	53,700	75,200	90,200	107,400	8	44,500	71,800	107,800	138,600	171,100
							10	55,600	89,800	134,700	173,200	213,800
							12	65,200	105,400	158,100	203,200	250,900
Interrupted Flow						Group II (w/in urban area 500,000+ not included in Group I)						
Class I (> 2 signalized intersections per mile)						Level of Service						
Lanes		A**	B	C	D***	E***	Lanes		Level of Service			
/Divided							A	B	C	D	E	
2/undivided		N/A	10,800	15,600	16,600	16,600	4	20,900	32,800	49,200	62,600	74,500
4/divided		N/A	23,500	33,200	35,000	35,000	6	32,100	50,400	75,600	96,200	114,500
6/divided		N/A	35,800	49,900	52,500	52,500	8	43,800	68,800	103,200	131,300	156,300
8/divided		N/A	45,300	61,400	64,400	64,400	10	54,700	86,000	129,000	164,200	195,400
							12	64,100	100,800	151,200	192,400	229,100
Class II (2-4.5 signalized intersections per mile)						Non-State Roadways (Major City/County Roads)						
Lanes		Level of Service				Lanes		Level of Service				
/Divided		A**	B**	C	D	E	A**	B**	C	D	E	
2/undivided		N/A	N/A	9,900	14,900	16,200	2/undivided	N/A	N/A	8,600	14,600	16,000
4/divided		N/A	N/A	22,900	32,500	34,300	4/divided	N/A	N/A	19,800	31,700	33,900
6/divided		N/A	N/A	35,500	48,900	51,700	6/divided	N/A	N/A	30,800	47,800	51,000
8/divided		N/A	N/A	44,700	60,100	63,400						
Class III (> 4.5 signalized intersections per mile but not in CBD)						Other Signalized Roadways (Signalized Intersection Analysis)						
Lanes		Level of Service				Lanes		Level of Service				
/Divided		A**	B**	C	D	E	A**	B**	C	D	E	
2/undivided		N/A	N/A	3,300	12,100	15,800	2/undivided	N/A	N/A	4,800	10,900	11,900
4/divided		N/A	N/A	7,800	27,800	33,600	4/divided	N/A	N/A	11,600	23,800	25,400
6/divided		N/A	N/A	12,100	43,300	50,500						
8/divided		N/A	N/A	15,300	54,200	62,100						
Class IV (> 4.5 signalized intersections per mile within CBD)						Adjustments (Divided/Undivided)						
Lanes		Level of Service				(Alter corresponding two-way volumes by indicated percentage)						
/Divided		A**	B**	C	D	E	Left Turn		Adjustment			
2/undivided		N/A	N/A	3,700	13,800	15,300	Lanes	Median	Bays	Factor		
4/divided		N/A	N/A	8,900	29,900	32,600	2	divided	Yes	+5%		
6/divided		N/A	N/A	14,000	45,500	49,000	2	undivided	No	-20%		
8/divided		N/A	N/A	17,500	56,200	60,100	Multi	undivided	Yes	-5%		
							Multi	undivided	No	-25%		
						One-Way						
						(Alter corresponding two-way volumes by indicated percentage)						
One-Way		Equivalent		Adjustment		One-Way		Equivalent		Adjustment		
Lanes		2-Way Lanes		Factor	Lanes		2-Way Lanes		Factor			
2		4		-40%	2		4		-40%			
3		6		-40%	3		6		-40%			
4		8		-40%	4		8		-40%			
5		8		-25%	5		8		-25%			
<p>* This table is based on the 1997 Highway Capacity Manual and data generated by the Florida DOT. For the purposes of GRTA review this table can be used for Level of Service Analysis in Section 2.2.</p> <p>** Cannot be achieved.</p> <p>*** Volumes are comparable because intersection capacities have been reached.</p>												
<p>SOURCE: The Florida Department of Transportation, Systems Planning Office, 605 Suwannee Street - Mail Station # 19, Tallahassee, Florida, 32399-0450 September 1998 - www.dot.state.fl.us/planning <<<The assumptions made in the development of this table appear in the 1998 Level of Service Handbook published by Florida DOT.>>></p>												

APPENDIX G – BENEFIT-COST RATIO CALCULATIONS

- Operational Improvements
- Safety Improvements

B/C Ratios: Operational Improvements

GDOT Benefit-Cost Calculator

Project Information

ID
 Description 1. Main St at E Cherokee Dr
 Build - Alt 1: Dual Right Turn Lanes on NB and WB Approaches

Cost Estimate

Date of estimate	2/20/2025
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 700,000
Total	\$ 700,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	2,782	43.5	3,530	62.5	3,395	47.4	4,307	128.9
Vehicle Denied	0	0.0	0	0.0	0	0.0	0	0.0
Total Delay (hr)	33.6		61.3		44.7		154.2	

With project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	2,782	34.9	3,530	48.3	3,395	37.8	4,307	80.3
Vehicle Denied	0	0.0	0	0.0	0	0.0	0	0.0
Total Delay (hr)	27.0		47.4		35.6		96.1	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	====> Operational Design Life = 20 Years
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 700,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 639,392
Build	\$ 509,804
Auto delay savings	\$ 138,589
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 68,945
Build	\$ 54,001
Truck delay savings	\$ 14,944
Open Year (2029) Benefits	\$ 153,533
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 1,340,192
Build	\$ 887,447
Auto delay savings	\$ 452,745
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 144,512
Build	\$ 95,693
Truck delay savings	\$ 48,819
Design Year (2049) Benefits	\$ 501,565
Design Life Benefits	\$ 6,550,974
Design Life Benefit-Cost Ratio	9.36

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 700,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.0
Visible Injury	B	0.2
Complaint Injury	C	4.2
Property Damage Only	O	26.4

Weighted cost of fatal and injury collisions
 Q = \$ 132,273

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit		
Design Life Operational Benefit	\$6,550,974	Weight= 100%
Design Life Safety Benefit	\$0	Weight= 0%
Total Weighted Benefit	\$6,550,974	
Design Life Operational Cost	\$700,000	Weight= 100%
Design Life Safety Cost	\$0	Weight= 0%
Total Weighted Cost	\$700,000	
Project Benefit-Cost Ratio	9.36	

GDOT Benefit-Cost Calculator

Project Information

ID: [Redacted]
 Description: 1. Main St at E Cherokee Dr
 Build - Alt 1: Dual Right Turn Lanes on NB and WB Approaches

Cost Estimate

Date of estimate	2/20/2025
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 700,000
Total	\$ 700,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	2,973	35.6	3,219	57.2	3,627	48.6	3,927	94.7
Vehicle Denied	0	0.0	0	0.0	0	0.0	0	0.0
Total Delay (hr)	29.4		51.1		49.0		103.3	

With project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	2,973	33.6	3,219	39.7	3,627	38.9	3,927	47.8
Vehicle Denied	0	0.0	0	0.0	0	0.0	0	0.0
Total Delay (hr)	27.7		35.5		39.2		52.1	

- F: Annual number of collisions involving fatalities during study period
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- P: Average annual number of collisions involving only property damage for the period of the study
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- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	====> Operational Design Life = 20 Years
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 700,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 542,679
Build	\$ 426,123
Auto delay savings	\$ 116,556
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 58,517
Build	\$ 45,949
Truck delay savings	\$ 12,568
Open Year (2029) Benefits	\$ 129,124
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 1,025,895
Build	\$ 615,360
Auto delay savings	\$ 410,535
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 110,622
Build	\$ 66,354
Truck delay savings	\$ 44,268
Design Year (2049) Benefits	\$ 454,803
Design Life Benefits	\$ 5,839,268
Design Life Benefit-Cost Ratio	8.34

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 700,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.0
Visible Injury	B	0.2
Complaint Injury	C	4.2
Property Damage Only	O	26.4

Weighted cost of fatal and injury collisions
 Q = \$ 132,273

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$5,839,268	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$5,839,268		
Design Life Operational Cost	\$700,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$700,000		
Project Benefit-Cost Ratio	8.34		

GDOT Benefit-Cost Calculator

Project Information

ID:
 Description: 2. Main St @ South Cherokee Rec Fields
Build Analysis - Alt 1: Add WB Right Turn Lane on Rec Field Dwy

Cost Estimate

Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 300,000
Total	\$ 300,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,541	11.3	2,023	69.3	1,880	12.2	2,467	129.2
Vehicle Denied								
Total Delay (hr)	4.8		38.9		6.4		88.5	

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,541	11.3	2,023	69.3	1,880	12.2	2,467	129.2
Vehicle Denied								
Total Delay (hr)	4.8		38.9		6.4		88.5	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	====> Operational Design Life = 20 Years
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 300,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 294,966
Build	\$ 294,966
Auto delay savings	\$ -
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 31,806
Build	\$ 31,806
Truck delay savings	\$ -
Open Year (2029) Benefits	\$ -
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 639,449
Build	\$ 639,449
Auto delay savings	\$ -
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 68,951
Build	\$ 68,951
Truck delay savings	\$ -
Design Year (2049) Benefits	\$ -
Design Life Benefits	\$ -
Design Life Benefit-Cost Ratio	-

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 300,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.0
Visible Injury	B	0.0
Complaint Injury	C	1.0
Property Damage Only	O	1.6

Weighted cost of fatal and injury collisions
 Q = \$ 110,000

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$0	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$0		
Design Life Operational Cost	\$300,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$300,000		
Project Benefit-Cost Ratio	0.00		

GDOT Benefit-Cost Calculator

Project Information

ID
 Description 2. Main St @ South Cherokee Rec Fields
 Build Analysis - Alt 2: Add SB Left Turn Lane on Main St

Cost Estimate

Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 400,000
Total	\$ 400,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,541	11.3	2,023	69.3	1,880	12.2	2,467	129.2
Vehicle Denied								
Total Delay (hr)	4.8		38.9		6.4		88.5	

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,541	11.3	2,023	68.2	1,880	12.2	2,467	129.2
Vehicle Denied								
Total Delay (hr)	4.8		38.3		6.4		88.5	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used
Open year	2016	2029	2029
Design year	2036	2049	2049
Discount rate	7%		7.0%
AM peak period (hr)	2	2	2
PM peak period (hr)	3	2	2
Value of auto travel (\$/hr)	13.75		13.75
Value of truck travel (\$/hr)	72.65		72.65
Percent trucks	12%	2.0%	2.0%
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000
Operational Benefit Factor	100%		100%

====> Operational Design Life = 20 Years

====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 400,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 294,966
Build	\$ 290,802
Auto delay savings	\$ 4,165
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 31,806
Build	\$ 31,357
Truck delay savings	\$ 449
Open Year (2029) Benefits	\$ 4,614
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 639,449
Build	\$ 639,449
Auto delay savings	\$ -
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 68,951
Build	\$ 68,951
Truck delay savings	\$ -
Design Year (2049) Benefits	\$ -
Design Life Benefits	\$ 46,138
Design Life Benefit-Cost Ratio	0.12

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 400,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.0
Visible Injury	B	0.0
Complaint Injury	C	1.0
Property Damage Only	O	1.6

Weighted cost of fatal and injury collisions
 Q = \$ 110,000

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit		
Design Life Operational Benefit	\$46,138	Weight= 100%
Design Life Safety Benefit	\$0	Weight= 0%
Total Weighted Benefit	\$46,138	
Design Life Operational Cost	\$400,000	Weight= 100%
Design Life Safety Cost	\$0	Weight= 0%
Total Weighted Cost	\$400,000	
Project Benefit-Cost Ratio	0.12	

GDOT Benefit-Cost Calculator

Project Information

ID	
Description	2. Main St @ South Cherokee Rec Fields Build Analysis - Alt 3: Add SB Left Turn Lane on Main St and WB Right Turn Lane on Rec Field Dwy
Cost Estimate	
Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 700,000
Total	\$ 700,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,541	11.3	2,023	69.3	1,880	12.2	2,467	129.2
Vehicle Denied								
Total Delay (hr)	4.8		38.9		6.4		88.5	

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,541	11.3	2,023	68.2	1,880	12.2	2,467	129.2
Vehicle Denied								
Total Delay (hr)	4.8		38.3		6.4		88.5	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used
Open year	2016	2029	2029
Design year	2036	2049	2049
Discount rate	7%		7.0%
AM peak period (hr)	2	2	2
PM peak period (hr)	3	2	2
Value of auto travel (\$/hr)	13.75		13.75
Value of truck travel (\$/hr)	72.65		72.65
Percent trucks	12%	2.0%	2.0%
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000
Operational Benefit Factor	100%		100%

====> Operational Design Life = 20 Years

====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 700,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 294,966
Build	\$ 290,802
Auto delay savings	\$ 4,165
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 31,806
Build	\$ 31,357
Truck delay savings	\$ 449
Open Year (2029) Benefits	\$ 4,614
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 639,449
Build	\$ 639,449
Auto delay savings	\$ -
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 68,951
Build	\$ 68,951
Truck delay savings	\$ -
Design Year (2049) Benefits	\$ -
Design Life Benefits	\$ 46,138
Design Life Benefit-Cost Ratio	0.07

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 700,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.0
Visible Injury	B	0.0
Complaint Injury	C	1.0
Property Damage Only	O	1.6

Weighted cost of fatal and injury collisions
Q = \$ 110,000

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
B = \$ -

Design Life Cost
C = \$ -

Design Life Benefit/Cost Ratio
B/C = N/A

Total Project Benefit		
Design Life Operational Benefit	\$46,138	Weight= 100%
Design Life Safety Benefit	\$0	Weight= 0%
Total Weighted Benefit	\$46,138	
Design Life Operational Cost	\$700,000	Weight= 100%
Design Life Safety Cost	\$0	Weight= 0%
Total Weighted Cost	\$700,000	
Project Benefit-Cost Ratio	0.07	

GDOT Benefit-Cost Calculator

Project Information

ID	
Description	2. Main St @ South Cherokee Rec Fields Build Analysis - Alt 4: Convert to High T; Add SB Left Turn Lane on Main St and WB Right Turn Lane on Rec Field Dwy
Cost Estimate	
Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 1,000,000
Total	\$ 1,000,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,541	11.3	2,023	69.3	1,880	12.2	2,467	129.2
Vehicle Denied								
Total Delay (hr)	4.8		38.9		6.4		88.5	

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,541	11.3	2,023	22.5	1,880	12.2	2,467	30.2
Vehicle Denied								
Total Delay (hr)	4.8		12.6		6.4		20.7	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Operational Design Life = 20 Years
Safety Benefit Factor				====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 1,000,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 294,966
Build	\$ 117,777
Auto delay savings	\$ 177,190
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 31,806
Build	\$ 12,700
Truck delay savings	\$ 19,106
Open Year (2029) Benefits	\$ 196,296
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 639,449
Build	\$ 182,361
Auto delay savings	\$ 457,089
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 68,951
Build	\$ 19,664
Truck delay savings	\$ 49,288
Design Year (2049) Benefits	\$ 506,376
Design Life Benefits	\$ 7,026,722
Design Life Benefit-Cost Ratio	7.03

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 1,000,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.0
Visible Injury	B	0.0
Complaint Injury	C	1.0
Property Damage Only	O	1.6

Weighted cost of fatal and injury collisions
Q = \$ 110,000

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
B = \$ -

Design Life Cost
C = \$ -

Design Life Benefit/Cost Ratio
B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$7,026,722	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$7,026,722		
Design Life Operational Cost	\$1,000,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$1,000,000		
Project Benefit-Cost Ratio	7.03		

GDOT Benefit-Cost Calculator

Project Information

ID
 Description 2. Main St @ South Cherokee Rec Fields
 Build Analysis - Alt 5: Convert to Single Lane Roundabout

Cost Estimate

Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 2,000,000
Total	\$ 2,000,000

Source of traffic data

Peak Hour analysis using Synchro 11 and Sidra 9

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,541	11.3	2,023	69.3	1,880	12.2	2,467	129.2
Vehicle Denied								
Total Delay (hr)	4.8		38.9		6.4		88.5	

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,541	3.7	2,023	8.1	1,880	3.8	2,467	16.2
Vehicle Denied								
Total Delay (hr)	1.6		4.6		2.0		11.1	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	====> Operational Design Life = 20 Years
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 2,000,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 294,966
Build	\$ 41,338
Auto delay savings	\$ 253,628
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 31,806
Build	\$ 4,457
Truck delay savings	\$ 27,349
Open Year (2029) Benefits	\$ 280,976
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 639,449
Build	\$ 88,167
Auto delay savings	\$ 551,283
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 68,951
Build	\$ 9,507
Truck delay savings	\$ 59,444
Design Year (2049) Benefits	\$ 610,727
Design Life Benefits	\$ 8,917,038
Design Life Benefit-Cost Ratio	4.46

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 2,000,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.0
Visible Injury	B	0.0
Complaint Injury	C	1.0
Property Damage Only	O	1.6

Weighted cost of fatal and injury collisions
 Q = \$ 110,000

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$8,917,038	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$8,917,038		
Design Life Operational Cost	\$2,000,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$2,000,000		
Project Benefit-Cost Ratio	4.46		

GDOT Benefit-Cost Calculator

Project Information

ID:
 Description: 2. Main St @ South Cherokee Rec Fields
Build Analysis - Alt 1: Add WB Right Turn Lane on Rec Field Dwy

Cost Estimate

Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 300,000
Total	\$ 300,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,908	58.0	1,768	317.4	2,274	168.1	2,068	736.8
Vehicle Denied								
Total Delay (hr)	30.7		155.9		106.2		423.3	

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,908	51.2	1,768	107.2	2,274	128.7	2,068	276.4
Vehicle Denied								
Total Delay (hr)	27.1		52.6		81.3		158.8	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	====> Operational Design Life = 20 Years
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 300,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 1,257,343
Build	\$ 537,539
Auto delay savings	\$ 719,805
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 135,578
Build	\$ 57,962
Truck delay savings	\$ 77,616
Open Year (2029) Benefits	\$ 797,421
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 3,567,060
Build	\$ 1,617,485
Auto delay savings	\$ 1,949,576
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 384,634
Build	\$ 174,412
Truck delay savings	\$ 210,221
Design Year (2049) Benefits	\$ 2,159,797
Design Life Benefits	\$ 29,572,177
Design Life Benefit-Cost Ratio	98.57

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 300,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.0
Visible Injury	B	0.0
Complaint Injury	C	1.0
Property Damage Only	O	1.6

Weighted cost of fatal and injury collisions
 Q = \$ 110,000

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$29,572,177	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$29,572,177		
Design Life Operational Cost	\$300,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$300,000		
Project Benefit-Cost Ratio	98.57		

GDOT Benefit-Cost Calculator

Project Information

ID:
 Description: 2. Main St @ South Cherokee Rec Fields
Build Analysis - Alt 2: Add SB Left Turn Lane on Main St

Cost Estimate

Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 400,000
Total	\$ 400,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,908	58.0	1,768	317.4	2,274	168.1	2,068	736.8
Vehicle Denied								
Total Delay (hr)	30.7		155.9		106.2		423.3	

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,908	48.1	1,768	291.6	2,274	96.6	2,068	637.0
Vehicle Denied								
Total Delay (hr)	25.5		143.2		61.0		365.9	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used
Open year	2016	2029	2029
Design year	2036	2049	2049
Discount rate	7%		7.0%
AM peak period (hr)	2	2	2
PM peak period (hr)	3	2	2
Value of auto travel (\$/hr)	13.75		13.75
Value of truck travel (\$/hr)	72.65		72.65
Percent trucks	12%	2.0%	2.0%
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000
Operational Benefit Factor	100%		100%

====> Operational Design Life = 20 Years

====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 400,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 1,257,343
Build	\$ 1,136,623
Auto delay savings	\$ 120,720
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 135,578
Build	\$ 122,561
Truck delay savings	\$ 13,017
Open Year (2029) Benefits	\$ 133,737
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 3,567,060
Build	\$ 2,876,509
Auto delay savings	\$ 690,551
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 384,634
Build	\$ 310,172
Truck delay savings	\$ 74,462
Design Year (2049) Benefits	\$ 765,013
Design Life Benefits	\$ 8,987,506
Design Life Benefit-Cost Ratio	22.47

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 400,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.0
Visible Injury	B	0.0
Complaint Injury	C	1.0
Property Damage Only	O	1.6

Weighted cost of fatal and injury collisions
 Q = \$ 110,000

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$8,987,506	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$8,987,506		
Design Life Operational Cost	\$400,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$400,000		
Project Benefit-Cost Ratio	22.47		

GDOT Benefit-Cost Calculator

Project Information

ID: [Redacted]
 Description: 2. Main St @ South Cherokee Rec Fields
 Build Analysis - Alt 3: Add SB Left Turn Lane on Main St and WB Right Turn Lane on Rec Field Dwy

Cost Estimate

Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 700,000
Total	\$ 700,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,908	58.0	1,768	317.4	2,274	168.1	2,068	736.8
Vehicle Denied								
Total Delay (hr)	30.7		155.9		106.2		423.3	

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,908	43.2	1,768	90.2	2,274	79.3	2,068	214.1
Vehicle Denied								
Total Delay (hr)	22.9		44.3		50.1		123.0	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	====> Operational Design Life = 20 Years
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 700,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 1,257,343
Build	\$ 452,721
Auto delay savings	\$ 804,622
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 135,578
Build	\$ 48,817
Truck delay savings	\$ 86,762
Open Year (2029) Benefits	\$ 891,384
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 3,567,060
Build	\$ 1,166,125
Auto delay savings	\$ 2,400,936
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 384,634
Build	\$ 125,742
Truck delay savings	\$ 258,891
Design Year (2049) Benefits	\$ 2,659,827
Design Life Benefits	\$ 35,512,111
Design Life Benefit-Cost Ratio	50.73

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 700,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.0
Visible Injury	B	0.0
Complaint Injury	C	1.0
Property Damage Only	O	1.6

Weighted cost of fatal and injury collisions
 Q = \$ 110,000

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$35,512,111	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$35,512,111		
Design Life Operational Cost	\$700,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$700,000		
Project Benefit-Cost Ratio	50.73		

GDOT Benefit-Cost Calculator

Project Information

ID	
Description	2. Main St @ South Cherokee Rec Fields Build Analysis - Alt 4: Convert to High T; Add SB Left Turn Lane on Main St and WB Right Turn Lane on Rec Field Dwy
Cost Estimate	
Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 1,000,000
Total	\$ 1,000,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,908	58.0	1,768	317.4	2,274	168.1	2,068	736.8
Vehicle Denied								
Total Delay (hr)	30.7		155.9		106.2		423.3	

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,908	20.4	1,768	24.9	2,274	26.0	2,068	35.0
Vehicle Denied								
Total Delay (hr)	10.8		12.2		16.4		20.1	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Operational Design Life = 20 Years
Safety Benefit Factor				====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 1,000,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 1,257,343
Build	\$ 155,236
Auto delay savings	\$ 1,102,107
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 135,578
Build	\$ 16,739
Truck delay savings	\$ 118,839
Open Year (2029) Benefits	\$ 1,220,946
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 3,567,060
Build	\$ 246,113
Auto delay savings	\$ 3,320,947
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 384,634
Build	\$ 26,538
Truck delay savings	\$ 358,095
Design Year (2049) Benefits	\$ 3,679,043
Design Life Benefits	\$ 48,999,887
Design Life Benefit-Cost Ratio	49.00

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 1,000,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.0
Visible Injury	B	0.0
Complaint Injury	C	1.0
Property Damage Only	O	1.6

Weighted cost of fatal and injury collisions
 Q = \$ 110,000

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$48,999,887	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$48,999,887		
Design Life Operational Cost	\$1,000,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$1,000,000		
Project Benefit-Cost Ratio	49.00		

GDOT Benefit-Cost Calculator

Project Information

ID
 Description 2. Main St @ South Cherokee Rec Fields
 Build Analysis - Alt 5: Convert to Single Lane Roundabout

Cost Estimate

Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 2,000,000
Total	\$ 2,000,000

Source of traffic data

Peak Hour analysis using Synchro 11 and Sidra 9

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,908	58.0	1,768	317.4	2,274	168.1	2,068	736.8
Vehicle Denied								
Total Delay (hr)	30.7		155.9		106.2		423.3	

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,908	6.6	1,768	7.6	2,274	8.6	2,068	9.3
Vehicle Denied								
Total Delay (hr)	3.5		3.7		5.4		5.3	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	====> Operational Design Life = 20 Years
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 2,000,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 1,257,343
Build	\$ 48,715
Auto delay savings	\$ 1,208,628
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 135,578
Build	\$ 5,253
Truck delay savings	\$ 130,326
Open Year (2029) Benefits	\$ 1,338,954
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 3,567,060
Build	\$ 72,594
Auto delay savings	\$ 3,494,466
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 384,634
Build	\$ 7,828
Truck delay savings	\$ 376,806
Design Year (2049) Benefits	\$ 3,871,272
Design Life Benefits	\$ 52,102,257
Design Life Benefit-Cost Ratio	26.05

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 2,000,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.0
Visible Injury	B	0.0
Complaint Injury	C	1.0
Property Damage Only	O	1.6

Weighted cost of fatal and injury collisions
 Q = \$ 110,000

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$52,102,257	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$52,102,257		
Design Life Operational Cost	\$2,000,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$2,000,000		
Project Benefit-Cost Ratio	26.05		

GDOT Benefit-Cost Calculator

Project Information

ID	
Description	1. Main St @ Bell Pkwy Build Analysis - Alt 1: Convert to Single Lane Roundabout; Add SBR & EBR Bypass Lanes
Cost Estimate	
Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 2,150,000
Total	\$ 2,150,000

Source of traffic data

Peak Hour analysis using Synchro 11 and Sidra 9

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,708	25.7	2,214	849.4	2,025	40.2	2,631	2,004.0
Vehicle Denied								
Total Delay (hr)		12.2		522.4		22.6		1,464.6

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,708	9.9	2,214	9.5	2,025	18.8	2,631	13.2
Vehicle Denied								
Total Delay (hr)		4.7		5.8		10.6		9.6

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Operational Design Life = 20 Years
Safety Benefit Factor				====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 2,150,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 3,601,694
Build	\$ 71,010
Auto delay savings	\$ 3,530,684
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 388,368
Build	\$ 7,657
Truck delay savings	\$ 380,711
Open Year (2029) Benefits	\$ 3,911,395
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 10,020,027
Build	\$ 136,246
Auto delay savings	\$ 9,883,781
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 1,080,453
Build	\$ 14,691
Truck delay savings	\$ 1,065,761
Design Year (2049) Benefits	\$ 10,949,542
Design Life Benefits	\$ 148,609,376
Design Life Benefit-Cost Ratio	69.12

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 2,150,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.6
Visible Injury	B	0.4
Complaint Injury	C	0.4
Property Damage Only	O	2.4

Weighted cost of fatal and injury collisions
 Q = \$ 1,377,143

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$148,609,376	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$148,609,376		
Design Life Operational Cost	\$2,150,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$2,150,000		
Project Benefit-Cost Ratio	69.12		

GDOT Benefit-Cost Calculator

Project Information

ID	
Description	2. Main St @ Bell Pkwy Build Analysis - Alt 2: Convert intersection to RCUT

Cost Estimate

Date of estimate	2/20/25	Source of traffic data	
Preliminary Engineering	\$ -	Peak Hour analysis using Synchro 11	
Reimbursable Utility	\$ -		
Right-of-Way	\$ -		
Construction	\$ 175,000		
Total	\$ 175,000		

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,708	25.7	2,214	849.4	2,025	40.2	2,631	2,004.0
Vehicle Denied								
Total Delay (hr)		12.2		522.4		22.6		1,464.6

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,708	24.3	2,214	65.6	2,025	31.1	2,631	138.1
Vehicle Denied								
Total Delay (hr)		11.5		40.3		17.5		100.9

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	====> Operational Design Life = 20 Years
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 175,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 3,601,694
Build	\$ 349,494
Auto delay savings	\$ 3,252,199
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 388,368
Build	\$ 37,686
Truck delay savings	\$ 350,682
Open Year (2029) Benefits	\$ 3,602,882
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 10,020,027
Build	\$ 797,867
Auto delay savings	\$ 9,222,160
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 1,080,453
Build	\$ 86,033
Truck delay savings	\$ 994,419
Design Year (2049) Benefits	\$ 10,216,579
Design Life Benefits	\$ 138,194,608
Design Life Benefit-Cost Ratio	789.68

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 175,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.6
Visible Injury	B	0.4
Complaint Injury	C	0.4
Property Damage Only	O	2.4

Weighted cost of fatal and injury collisions
 Q = \$ 1,377,143

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$138,194,608	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$138,194,608		
Design Life Operational Cost	\$175,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$175,000		
Project Benefit-Cost Ratio	789.68		

GDOT Benefit-Cost Calculator

Project Information

ID	
Description	3. Main St @ Bell Pkwy Build Analysis - Alt 3: Add EB Right Turn Lane on Bell Pkwy
Cost Estimate	
Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 300,000
Total	\$ 300,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,708	25.7	2,214	849.4	2,025	40.2	2,631	2,004.0
Vehicle Denied								
Total Delay (hr)		12.2		522.4		22.6		1,464.6

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,708	23.7	2,214	220.6	2,025	34.4	2,631	554.2
Vehicle Denied								
Total Delay (hr)		11.2		135.7		19.4		405.0

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used
Open year	2016	2029	2029
Design year	2036	2049	2049
Discount rate	7%		7.0%
AM peak period (hr)	2	2	2
PM peak period (hr)	3	2	2
Value of auto travel (\$/hr)	13.75		13.75
Value of truck travel (\$/hr)	72.65		72.65
Percent trucks	12%	2.0%	2.0%
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000
Operational Benefit Factor	100%		100%

====> Operational Design Life = 20 Years

====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 300,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 3,601,694
Build	\$ 989,829
Auto delay savings	\$ 2,611,865
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 388,368
Build	\$ 106,733
Truck delay savings	\$ 281,636
Open Year (2029) Benefits	\$ 2,893,501
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 10,020,027
Build	\$ 2,859,246
Auto delay savings	\$ 7,160,781
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 1,080,453
Build	\$ 308,310
Truck delay savings	\$ 772,142
Design Year (2049) Benefits	\$ 7,932,923
Design Life Benefits	\$ 108,264,242
Design Life Benefit-Cost Ratio	360.88

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 300,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.6
Visible Injury	B	0.4
Complaint Injury	C	0.4
Property Damage Only	O	2.4

Weighted cost of fatal and injury collisions
 Q = \$ 1,377,143

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$108,264,242	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$108,264,242		
Design Life Operational Cost	\$300,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$300,000		
Project Benefit-Cost Ratio	360.88		

GDOT Benefit-Cost Calculator

Project Information

ID
 Description 4. Main St @ Bell Pkwy
 Build Analysis - Alt 4: Convert intersection to signalized

Cost Estimate

Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 600,000
Total	\$ 600,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,708	25.7	2,214	849.4	2,025	40.2	2,631	2,004.0
Vehicle Denied								
Total Delay (hr)		12.2		522.4		22.6		1,464.6

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,708	42.5	2,214	33.4	2,025	42.5	2,631	37.6
Vehicle Denied								
Total Delay (hr)		20.2		20.5		23.9		27.5

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	====> Operational Design Life = 20 Years
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 600,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 3,601,694
Build	\$ 274,249
Auto delay savings	\$ 3,327,445
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 388,368
Build	\$ 29,572
Truck delay savings	\$ 358,796
Open Year (2029) Benefits	\$ 3,686,241
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 10,020,027
Build	\$ 346,210
Auto delay savings	\$ 9,673,816
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 1,080,453
Build	\$ 37,332
Truck delay savings	\$ 1,043,121
Design Year (2049) Benefits	\$ 10,716,937
Design Life Benefits	\$ 144,031,782
Design Life Benefit-Cost Ratio	240.05

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 600,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.6
Visible Injury	B	0.4
Complaint Injury	C	0.4
Property Damage Only	O	2.4

Weighted cost of fatal and injury collisions
 Q = \$ 1,377,143

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$144,031,782	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$144,031,782		
Design Life Operational Cost	\$600,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$600,000		
Project Benefit-Cost Ratio	240.05		

GDOT Benefit-Cost Calculator

Project Information

ID	
Description	1. Main St @ Bell Pkwy Build Analysis - Alt 1: Convert to Single Lane Roundabout; Add SBR & EBR Bypass Lanes
Cost Estimate	
Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 2,150,000
Total	\$ 2,150,000

Source of traffic data

Peak Hour analysis using Synchro 11 and Sidra 9

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,837	44.3	1,587	25.0	2,222	100.2	1,923	39.7
Vehicle Denied								
Total Delay (hr)	22.6		11.0		61.8		21.2	

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,837	5.9	1,587	5.0	2,222	7.6	1,923	5.7
Vehicle Denied								
Total Delay (hr)	3.0		2.2		4.7		3.0	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Operational Design Life = 20 Years
Safety Benefit Factor				====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 2,150,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 226,556
Build	\$ 35,135
Auto delay savings	\$ 191,421
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 24,429
Build	\$ 3,789
Truck delay savings	\$ 20,641
Open Year (2029) Benefits	\$ 212,062
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 559,563
Build	\$ 52,119
Auto delay savings	\$ 507,445
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 60,337
Build	\$ 5,620
Truck delay savings	\$ 54,717
Design Year (2049) Benefits	\$ 562,162
Design Life Benefits	\$ 7,742,241
Design Life Benefit-Cost Ratio	3.60

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 2,150,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.6
Visible Injury	B	0.4
Complaint Injury	C	0.4
Property Damage Only	O	2.4

Weighted cost of fatal and injury collisions

Q = \$ 1,377,143

Annual Benefit: \$ -

Annual Cost: \$ -

Annual B/C Ratio: N/A

Design Life Benefit

B = \$ -

Design Life Cost

C = \$ -

Design Life Benefit/Cost Ratio

B/C = N/A

Total Project Benefit		
Design Life Operational Benefit	\$7,742,241	Weight= 100%
Design Life Safety Benefit	\$0	Weight= 0%
Total Weighted Benefit	\$7,742,241	
Design Life Operational Cost	\$2,150,000	Weight= 100%
Design Life Safety Cost	\$0	Weight= 0%
Total Weighted Cost	\$2,150,000	
Project Benefit-Cost Ratio	3.60	

GDOT Benefit-Cost Calculator

Project Information

ID
 Description 2. Main St @ Bell Pkwy
 Build Analysis - Alt 2: Convert intersection to RCUT

Cost Estimate

Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 175,000
Total	\$ 175,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,837	44.3	1,587	25.0	2,222	100.2	1,923	39.7
Vehicle Denied								
Total Delay (hr)	22.6		11.0		61.8		21.2	

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,837	36.1	1,587	28.6	2,222	40.6	1,923	32.0
Vehicle Denied								
Total Delay (hr)	18.4		12.6		25.1		17.1	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	====> Operational Design Life = 20 Years
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Safety Benefit Factor = 0%

Operational Benefits		
Costs	\$	175,000
Open Year (2029) Auto Delay Costs		
Nobuild	\$	226,556
Build	\$	209,057
Auto delay savings	\$	17,499
Open Year (2029) Truck Delay Costs		
Nobuild	\$	24,429
Build	\$	22,542
Truck delay savings	\$	1,887
Open Year (2029) Benefits	\$	19,386
Design Year (2049) Auto Delay Costs		
Nobuild	\$	559,563
Build	\$	284,003
Auto delay savings	\$	275,561
Design Year (2049) Truck Delay Costs		
Nobuild	\$	60,337
Build	\$	30,624
Truck delay savings	\$	29,714
Design Year (2049) Benefits	\$	305,274
Design Life Benefits	\$	3,246,602
Design Life Benefit-Cost Ratio		18.55

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 175,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.6
Visible Injury	B	0.4
Complaint Injury	C	0.4
Property Damage Only	O	2.4

Weighted cost of fatal and injury collisions
 Q = \$ 1,377,143

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$3,246,602	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$3,246,602		
Design Life Operational Cost	\$175,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$175,000		
Project Benefit-Cost Ratio	18.55		

GDOT Benefit-Cost Calculator

Project Information

ID
 Description 3. Main St @ Bell Pkwy
 Build Analysis - Alt 3: Add EB Right Turn Lane on Bell Pkwy

Cost Estimate

Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 300,000
Total	\$ 300,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,837	44.3	1,587	25.0	2,222	100.2	1,923	39.7
Vehicle Denied								
Total Delay (hr)	22.6		11.0		61.8		21.2	

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,837	57.1	1,587	27.1	2,222	143.1	1,923	45.5
Vehicle Denied								
Total Delay (hr)	29.1		11.9		88.3		24.3	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	====> Operational Design Life = 20 Years
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Safety Benefit Factor = 0%

Operational Benefits		
Costs	\$	300,000
Open Year (2029) Auto Delay Costs		
Nobuild	\$	226,556
Build	\$	276,800
Auto delay savings	\$	(50,244)
Open Year (2029) Truck Delay Costs		
Nobuild	\$	24,429
Build	\$	29,847
Truck delay savings	\$	(5,418)
Open Year (2029) Benefits	\$	(55,661)
Design Year (2049) Auto Delay Costs		
Nobuild	\$	559,563
Build	\$	758,838
Auto delay savings	\$	(199,275)
Design Year (2049) Truck Delay Costs		
Nobuild	\$	60,337
Build	\$	81,825
Truck delay savings	\$	(21,488)
Design Year (2049) Benefits	\$	(220,763)
Design Life Benefits	\$	(2,764,241)
Design Life Benefit-Cost Ratio		(9.21)

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 300,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.6
Visible Injury	B	0.4
Complaint Injury	C	0.4
Property Damage Only	O	2.4

Weighted cost of fatal and injury collisions
 Q = \$ 1,377,143

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit		
Design Life Operational Benefit	(\$2,764,241)	Weight= 100%
Design Life Safety Benefit	\$0	Weight= 0%
Total Weighted Benefit	(\$2,764,241)	
Design Life Operational Cost	\$300,000	Weight= 100%
Design Life Safety Cost	\$0	Weight= 0%
Total Weighted Cost	\$300,000	
Project Benefit-Cost Ratio	-9.21	

GDOT Benefit-Cost Calculator

Project Information

ID
 Description 4. Main St @ Bell Pkwy
 Build Analysis - Alt 4: Convert intersection to signalized

Cost Estimate

Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 600,000
Total	\$ 600,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,837	44.3	1,587	25.0	2,222	100.2	1,923	39.7
Vehicle Denied								
Total Delay (hr)	22.6		11.0		61.8		21.2	

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,837	24.7	1,587	25.6	2,222	41.2	1,923	32.0
Vehicle Denied								
Total Delay (hr)	12.6		11.3		25.4		17.1	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	====> Operational Design Life = 20 Years
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Safety Benefit Factor = 0%

Operational Benefits		
Costs	\$	600,000
Open Year (2029) Auto Delay Costs		
Nobuild	\$	226,556
Build	\$	160,953
Auto delay savings	\$	65,603
Open Year (2029) Truck Delay Costs		
Nobuild	\$	24,429
Build	\$	17,355
Truck delay savings	\$	7,074
Open Year (2029) Benefits	\$	72,677
Design Year (2049) Auto Delay Costs		
Nobuild	\$	559,563
Build	\$	286,498
Auto delay savings	\$	273,065
Design Year (2049) Truck Delay Costs		
Nobuild	\$	60,337
Build	\$	30,893
Truck delay savings	\$	29,444
Design Year (2049) Benefits	\$	302,510
Design Life Benefits	\$	3,751,865
Design Life Benefit-Cost Ratio		6.25

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 600,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.6
Visible Injury	B	0.4
Complaint Injury	C	0.4
Property Damage Only	O	2.4

Weighted cost of fatal and injury collisions
 Q = \$ 1,377,143

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$3,751,865	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$3,751,865		
Design Life Operational Cost	\$600,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$600,000		
Project Benefit-Cost Ratio	6.25		

GDOT Benefit-Cost Calculator

Project Information

ID
 Description 1. Main St @ Brooke Blvd
 Build Analysis - Alt 3: Add WB Right Turn Lane on Brooke Blvd

Cost Estimate

Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 300,000
Total	\$ 300,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,637	13.0	2,247	80.4	1,997	14.8	2,742	323.3
Vehicle Denied								
Total Delay (hr)	5.9		50.2		8.2		246.2	

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,637	13.0	2,247	66.8	1,997	14.8	2,742	198.8
Vehicle Denied								
Total Delay (hr)	5.9		41.7		8.2		151.4	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	====> Operational Design Life = 20 Years
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Safety Benefit Factor = 0%

Operational Benefits		
Costs	\$	300,000
Open Year (2029) Auto Delay Costs		
Nobuild	\$	377,936
Build	\$	320,744
Auto delay savings	\$	57,192
Open Year (2029) Truck Delay Costs		
Nobuild	\$	40,753
Build	\$	34,586
Truck delay savings	\$	6,167
Open Year (2029) Benefits	\$	63,359
Design Year (2049) Auto Delay Costs		
Nobuild	\$	1,714,402
Build	\$	1,075,502
Auto delay savings	\$	638,900
Design Year (2049) Truck Delay Costs		
Nobuild	\$	184,863
Build	\$	115,971
Truck delay savings	\$	68,892
Design Year (2049) Benefits	\$	707,792
Design Life Benefits	\$	7,711,519
Design Life Benefit-Cost Ratio		25.71

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 300,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.0
Visible Injury	B	0.2
Complaint Injury	C	0.2
Property Damage Only	O	1.0

Weighted cost of fatal and injury collisions
 Q = \$ 355,000

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$7,711,519	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$7,711,519		
Design Life Operational Cost	\$300,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$300,000		
Project Benefit-Cost Ratio	25.71		

GDOT Benefit-Cost Calculator

Project Information

ID
 Description 1. Main St @ Brooke Blvd
 Build Analysis - Alt 3: Add WB Right Turn Lane on Brooke Blvd

Cost Estimate

Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 300,000
Total	\$ 300,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,835	26.2	1,625	56.0	2,239	43.8	1,983	153.0
Vehicle Denied								
Total Delay (hr)	13.4		25.3		27.2		84.3	

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,835	27.3	1,625	47.7	2,239	46.0	1,983	115.0
Vehicle Denied								
Total Delay (hr)	13.9		21.5		28.6		63.3	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	====> Operational Design Life = 20 Years
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 300,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 260,286
Build	\$ 238,822
Auto delay savings	\$ 21,465
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 28,067
Build	\$ 25,752
Truck delay savings	\$ 2,315
Open Year (2029) Benefits	\$ 23,779
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 751,357
Build	\$ 619,549
Auto delay savings	\$ 131,808
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 81,018
Build	\$ 66,806
Truck delay savings	\$ 14,213
Design Year (2049) Benefits	\$ 146,021
Design Life Benefits	\$ 1,698,002
Design Life Benefit-Cost Ratio	5.66

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 300,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.0
Visible Injury	B	0.2
Complaint Injury	C	0.2
Property Damage Only	O	1.0

Weighted cost of fatal and injury collisions
 Q = \$ 355,000

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$1,698,002	Weight= 100%	
Design Life Safety Benefit	\$0	Weight= 0%	
Total Weighted Benefit	\$1,698,002		
Design Life Operational Cost	\$300,000	Weight= 100%	
Design Life Safety Cost	\$0	Weight= 0%	
Total Weighted Cost	\$300,000		
Project Benefit-Cost Ratio	5.66		

GDOT Benefit-Cost Calculator

Project Information

ID
 Description 5, Main St @ Johnston Farm Ln
 Build Analysis - Alt 1: Convert intersection to RCUT

Cost Estimate

Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 325,000
Total	\$ 325,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,636	47.3	2,287	113.8	1,980	104.4	2,764	361.0
Vehicle Denied								
Total Delay (hr)	21.5		72.3		57.4		277.2	

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,636	22.8	2,287	32.9	1,980	25.3	2,764	46.9
Vehicle Denied								
Total Delay (hr)	10.4		20.9		13.9		36.0	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	====> Operational Design Life = 20 Years
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Safety Benefit Factor = 0%

Operational Benefits		
Costs	\$	325,000
Open Year (2029) Auto Delay Costs		
Nobuild	\$	631,909
Build	\$	210,628
Auto delay savings	\$	421,281
Open Year (2029) Truck Delay Costs		
Nobuild	\$	68,138
Build	\$	22,712
Truck delay savings	\$	45,426
Open Year (2029) Benefits	\$	466,708
Design Year (2049) Auto Delay Costs		
Nobuild	\$	2,254,285
Build	\$	336,361
Auto delay savings	\$	1,917,924
Design Year (2049) Truck Delay Costs		
Nobuild	\$	243,078
Build	\$	36,270
Truck delay savings	\$	206,808
Design Year (2049) Benefits	\$	2,124,732
Design Life Benefits	\$	25,914,401
Design Life Benefit-Cost Ratio		79.74

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 325,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.0
Visible Injury	B	0.0
Complaint Injury	C	0.4
Property Damage Only	O	1.4

Weighted cost of fatal and injury collisions
 Q = \$ 110,000

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$25,914,401	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$25,914,401		
Design Life Operational Cost	\$325,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$325,000		
Project Benefit-Cost Ratio	79.74		

GDOT Benefit-Cost Calculator

Project Information

ID
 Description 5, Main St @ Johnston Farm Ln
 Build Analysis - Alt 2: Convert intersection to High T

Cost Estimate

Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 300,000
Total	\$ 300,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,636	47.3	2,287	113.8	1,980	104.4	2,764	361.0
Vehicle Denied								
Total Delay (hr)	21.5		72.3		57.4		277.2	

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,636	14.2	2,287	25.9	1,980	16.5	2,764	37.5
Vehicle Denied								
Total Delay (hr)	6.5		16.5		9.1		28.8	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	====> Operational Design Life = 20 Years
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Safety Benefit Factor = 0%

Operational Benefits		
Costs	\$	300,000
Open Year (2029) Auto Delay Costs		
Nobuild	\$	631,909
Build	\$	154,335
Auto delay savings	\$	477,574
Open Year (2029) Truck Delay Costs		
Nobuild	\$	68,138
Build	\$	16,642
Truck delay savings	\$	51,497
Open Year (2029) Benefits	\$	529,071
Design Year (2049) Auto Delay Costs		
Nobuild	\$	2,254,285
Build	\$	255,127
Auto delay savings	\$	1,999,158
Design Year (2049) Truck Delay Costs		
Nobuild	\$	243,078
Build	\$	27,510
Truck delay savings	\$	215,568
Design Year (2049) Benefits	\$	2,214,726
Design Life Benefits	\$	27,437,973
Design Life Benefit-Cost Ratio		91.46

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 300,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.0
Visible Injury	B	0.0
Complaint Injury	C	0.4
Property Damage Only	O	1.4

Weighted cost of fatal and injury collisions
 Q = \$ 110,000

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$27,437,973	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$27,437,973		
Design Life Operational Cost	\$300,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$300,000		
Project Benefit-Cost Ratio	91.46		

GDOT Benefit-Cost Calculator

Project Information

ID	
Description	5, Main St @ Johnston Farm Ln Build Analysis - Alt 1: Convert intersection to RCUT

Cost Estimate

Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 325,000
Total	\$ 325,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,886	48.9	1,702	42.5	2,278	108.9	2,054	90.0
Vehicle Denied								
Total Delay (hr)	25.6		20.1		68.9		51.4	

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,886	29.0	1,702	24.1	2,278	38.0	2,054	28.8
Vehicle Denied								
Total Delay (hr)	15.2		11.4		24.0		16.4	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Operational Design Life = 20 Years
Safety Benefit Factor				====> Safety Benefit Factor = 0%

Operational Benefits		
Costs	\$	325,000
Open Year (2029) Auto Delay Costs		
Nobuild	\$	307,979
Build	\$	179,128
Auto delay savings	\$	128,851
Open Year (2029) Truck Delay Costs		
Nobuild	\$	33,209
Build	\$	19,315
Truck delay savings	\$	13,894
Open Year (2029) Benefits	\$	142,745
Design Year (2049) Auto Delay Costs		
Nobuild	\$	810,248
Build	\$	272,718
Auto delay savings	\$	537,531
Design Year (2049) Truck Delay Costs		
Nobuild	\$	87,369
Build	\$	29,407
Truck delay savings	\$	57,962
Design Year (2049) Benefits	\$	595,492
Design Life Benefits	\$	7,382,377
Design Life Benefit-Cost Ratio		22.72

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 325,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.0
Visible Injury	B	0.0
Complaint Injury	C	0.4
Property Damage Only	O	1.4

Weighted cost of fatal and injury collisions
 Q = \$ 110,000

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$7,382,377	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$7,382,377		
Design Life Operational Cost	\$325,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$325,000		
Project Benefit-Cost Ratio	22.72		

GDOT Benefit-Cost Calculator

Project Information

ID:
 Description: 5, Main St @ Johnston Farm Ln
Build Analysis - Alt 2: Convert intersection to High T

Cost Estimate

Date of estimate	2/20/25
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 300,000
Total	\$ 300,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without Project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,886	48.9	1,702	42.5	2,278	108.9	2,054	90.0
Vehicle Denied								
Total Delay (hr)	25.6		20.1		68.9		51.4	

With Project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	1,886	20.9	1,702	17.4	2,278	28.1	2,054	21.5
Vehicle Denied								
Total Delay (hr)	10.9		8.2		17.8		12.3	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	====> Operational Design Life = 20 Years
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 300,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 307,979
Build	\$ 129,196
Auto delay savings	\$ 178,784
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 33,209
Build	\$ 13,931
Truck delay savings	\$ 19,278
Open Year (2029) Benefits	\$ 198,062
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 810,248
Build	\$ 202,448
Auto delay savings	\$ 607,800
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 87,369
Build	\$ 21,830
Truck delay savings	\$ 65,539
Design Year (2049) Benefits	\$ 673,339
Design Life Benefits	\$ 8,714,004
Design Life Benefit-Cost Ratio	29.05

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 300,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.0
Visible Injury	B	0.0
Complaint Injury	C	0.4
Property Damage Only	O	1.4

Weighted cost of fatal and injury collisions
 Q = \$ 110,000

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$8,714,004	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$8,714,004		
Design Life Operational Cost	\$300,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$300,000		
Project Benefit-Cost Ratio	29.05		

GDOT Benefit-Cost Calculator

Project Information

ID	
Description	6. Main St at Ridgewalk Pkwy Build - Alt 1: Multilane Roundabout
Cost Estimate	
Date of estimate	2/20/2025
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 2,750,000
Total	\$ 2,750,000

Source of traffic data

Peak Hour analysis using Synchro 11 and SIDRA 9

Without project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	2,023	24.0	2,706	34.0	2,468	27.2	3,302	42.2
Vehicle Denied	0	0.0	0	0.0	0	0.0	0	0.0
Total Delay (hr)	13.5		25.6		18.6		38.7	

With project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	2,023	5.9	2,706	7.9	2,468	6.6	3,302	10.4
Vehicle Denied	0	0.0	0	0.0	0	0.0	0	0.0
Total Delay (hr)	3.3		5.9		4.5		9.5	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used
Open year	2016	2029	2029
Design year	2036	2049	2049
Discount rate	7%		7.0%
AM peak period (hr)	2	2	2
PM peak period (hr)	3	2	2
Value of auto travel (\$/hr)	13.75		13.75
Value of truck travel (\$/hr)	72.65		72.65
Percent trucks	12%	2.0%	2.0%
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000
Operational Benefit Factor	100%		100%

====> Operational Design Life = 20 Years

====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 2,750,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 263,054
Build	\$ 62,346
Auto delay savings	\$ 200,708
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 28,365
Build	\$ 6,723
Truck delay savings	\$ 21,642
Open Year (2029) Benefits	\$ 222,350
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 386,422
Build	\$ 94,755
Auto delay savings	\$ 291,667
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 41,668
Build	\$ 10,217
Truck delay savings	\$ 31,450
Design Year (2049) Benefits	\$ 323,117
Design Life Benefits	\$ 5,454,677
Design Life Benefit-Cost Ratio	1.98

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 2,750,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.4
Visible Injury	B	0.6
Complaint Injury	C	0.8
Property Damage Only	O	11.4

Weighted cost of fatal and injury collisions
 Q = \$ 857,778

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit		
Design Life Operational Benefit	\$5,454,677	Weight= 100%
Design Life Safety Benefit	\$0	Weight= 0%
Total Weighted Benefit	\$5,454,677	
Design Life Operational Cost	\$2,750,000	Weight= 100%
Design Life Safety Cost	\$0	Weight= 0%
Total Weighted Cost	\$2,750,000	
Project Benefit-Cost Ratio	1.98	

GDOT Benefit-Cost Calculator

Project Information

ID
 Description 6. Main St at Ridgewalk Pkwy
 Build - Alt 2: Dual SB Right Turn Lanes

Cost Estimate

Date of estimate	2/20/2025
Preliminary Engineering	\$ -
Reimbursable Utility	\$ -
Right-of-Way	\$ -
Construction	\$ 400,000
Total	\$ 400,000

Source of traffic data

Peak Hour analysis using Synchro 11

Without project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	2,023	24.0	2,706	34.0	2,468	27.2	3,302	42.2
Vehicle Denied	0	0.0	0	0.0	0	0.0	0	0.0
Total Delay (hr)	13.5		25.6		18.6		38.7	

With project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	2,023	20.6	2,706	26.9	2,468	23.6	3,302	34.0
Vehicle Denied	0	0.0	0	0.0	0	0.0	0	0.0
Total Delay (hr)	11.6		20.2		16.2		31.2	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used
Open year	2016	2029	2029
Design year	2036	2049	2049
Discount rate	7%		7.0%
AM peak period (hr)	2	2	2
PM peak period (hr)	3	2	2
Value of auto travel (\$/hr)	13.75		13.75
Value of truck travel (\$/hr)	72.65		72.65
Percent trucks	12%	2.0%	2.0%
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000
Operational Benefit Factor	100%		100%

====> Operational Design Life = 20 Years

====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 400,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 263,054
Build	\$ 214,225
Auto delay savings	\$ 48,830
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 28,365
Build	\$ 23,100
Truck delay savings	\$ 5,265
Open Year (2029) Benefits	\$ 54,095
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 386,422
Build	\$ 319,119
Auto delay savings	\$ 67,302
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 41,668
Build	\$ 34,410
Truck delay savings	\$ 7,257
Design Year (2049) Benefits	\$ 74,560
Design Life Benefits	\$ 1,286,545
Design Life Benefit-Cost Ratio	3.22

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 400,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.4
Visible Injury	B	0.6
Complaint Injury	C	0.8
Property Damage Only	O	11.4

Weighted cost of fatal and injury collisions
 Q = \$ 857,778

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
 B = \$ -

Design Life Cost
 C = \$ -

Design Life Benefit/Cost Ratio
 B/C = N/A

Total Project Benefit			
Design Life Operational Benefit	\$1,286,545	Weight=	100%
Design Life Safety Benefit	\$0	Weight=	0%
Total Weighted Benefit	\$1,286,545		
Design Life Operational Cost	\$400,000	Weight=	100%
Design Life Safety Cost	\$0	Weight=	0%
Total Weighted Cost	\$400,000		
Project Benefit-Cost Ratio	3.22		

GDOT Benefit-Cost Calculator

Project Information

ID	
Description	6. Main St at Ridgewalk Pkwy Build - Alt 2: Dual SB Right Turn Lanes

Cost Estimate

Date of estimate	2/20/2025	Source of traffic data	
Preliminary Engineering	\$ -	Peak Hour analysis using Synchro 11	
Reimbursable Utility	\$ -		
Right-of-Way	\$ -		
Construction	\$ 400,000		
Total	\$ 400,000		

Without project (No-Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	2,226	27.2	2,131	20.8	2,717	35.2	2,600	24.7
Vehicle Denied	0	0.0	0	0.0	0	0.0	0	0.0
Total Delay (hr)	16.8		12.3		26.6		17.8	

With project (Build)	Open Year 2029				Design Year 2049			
	AM		PM		AM		PM	
	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)	Number of Vehicles	Delay per vehicle (s)
Vehicle Served	2,226	23.8	2,131	28.8	2,717	25.3	2,600	35.4
Vehicle Denied	0	0.0	0	0.0	0	0.0	0	0.0
Total Delay (hr)	14.7		17.0		19.1		25.6	

- F: Annual number of collisions involving fatalities during study period
- I: Average annual number of collisions involving injured people for the period of the study
- P: Average annual number of collisions involving only property damage for the period of the study
- R: Reduction of fatal and injury collisions by type (from Table A - Appendix E)
- r: Crash modification factor for fatal and injury collisions
- Rp: Reduction of property damage only collisions by type (from Table A - Appendix E)
- rp: Crash modification factor for property damage only collisions
- Pc: Average cost, in thousands of \$, per property damage only collision
- Q: Weighted cost, in thousands of \$, of fatal and injury collisions
- Ic: Average cost per injury in thousands of \$
- Fc: Average cost per fatality in thousands of \$
- Ek: Capital recovery factor based on countermeasure life (from Table B - Appendix E)
- Ci: Estimated initial cost of the countermeasure (cost of the improvement including r/w) in thousands of \$
- Cm: Estimated annual maintenance and operating cost of the countermeasure in thousands of \$

Parameters	Default	Override	Used	
Open year	2016	2029	2029	====> Operational Design Life = 20 Years
Design year	2036	2049	2049	
Discount rate	7%		7.0%	
AM peak period (hr)	2	2	2	
PM peak period (hr)	3	2	2	
Value of auto travel (\$/hr)	13.75		13.75	
Value of truck travel (\$/hr)	72.65		72.65	
Percent trucks	12%	2.0%	2.0%	
Fatality Cost (Kc)	\$9,100,000	\$ 12,450,000	\$12,450,000	
Serious Injury Cost (Ac)	\$ 2,740,000	\$ 2,740,000	\$2,740,000	
Visible Injury Cost (Bc)	\$ 600,000	\$ 600,000	\$600,000	
Complaint Injury Cost (Cc)	\$955,500	\$ 129,000	\$110,000	
Property Damage Only Cost (Oc)	\$27,300	\$ 28,000	\$28,000	
Annual Maintenance/Operating Cost (Cm)	\$20,000		\$20,000	
Operational Benefit Factor	100%		100%	====> Safety Benefit Factor = 0%

Operational Benefits	
Costs	\$ 400,000
Open Year (2029) Auto Delay Costs	
Nobuild	\$ 196,271
Build	\$ 214,012
Auto delay savings	\$ (17,741)
Open Year (2029) Truck Delay Costs	
Nobuild	\$ 21,164
Build	\$ 23,077
Truck delay savings	\$ (1,913)
Open Year (2029) Benefits	\$ (19,654)
Design Year (2049) Auto Delay Costs	
Nobuild	\$ 299,179
Build	\$ 300,904
Auto delay savings	\$ (1,725)
Design Year (2049) Truck Delay Costs	
Nobuild	\$ 32,260
Build	\$ 32,446
Truck delay savings	\$ (186)
Design Year (2049) Benefits	\$ (1,911)
Design Life Benefits	\$ (215,654)
Design Life Benefit-Cost Ratio	(0.54)

Safety Benefits						
Targeted Crash Types: All						
Recommendation	CRF IDs	Ek	R	r	Rp	rp
				1.00		1.00

Description	Symbol	Value
Reduction Factor (F, I)	R	0
Reduction Factor (PDO)	Rp	0
Capital Recovery Factor	Ek	0.000
Initial Improvement Cost	Ci	\$ 400,000

Accident Data	Symbol	Value
Fatality	K	0.0
Serious Injury	A	0.4
Visible Injury	B	0.6
Complaint Injury	C	0.8
Property Damage Only	O	11.4

Weighted cost of fatal and injury collisions
Q = \$ 857,778

Annual Benefit: \$ -
Annual Cost: \$ -
Annual B/C Ratio: N/A

Design Life Benefit
B = \$ -

Design Life Cost
C = \$ -

Design Life Benefit/Cost Ratio
B/C = N/A

Total Project Benefit		
Design Life Operational Benefit	(\$215,654)	Weight= 100%
Design Life Safety Benefit	\$0	Weight= 0%
Total Weighted Benefit	(\$215,654)	
Design Life Operational Cost	\$400,000	Weight= 100%
Design Life Safety Cost	\$0	Weight= 0%
Total Weighted Cost	\$400,000	
Project Benefit-Cost Ratio	-0.54	

B/C Ratios: Safety Improvements

BENEFIT COST ANALYSIS WORKSHEET

#1 - Main St at E Cherokee Dr
Cherokee County
Minor Safety Improvements

Years for Crash Data = 5

Crash Data for 5 Years (KABCO System)			
Severity Description	Severity Symbol	No. Crashes	Crash Rate (per year)
Fatal	K	0	0.00
Incapacitating injury	A	0	0.00
Non-incapacitating injury	B	1	0.20
Possible injury	C	21	4.20
Property Damage Only (PDO)	O	132	26.40
All	KABCO	154	30.80

Crash Costs		
Severity Description	Symbol	Value
Fatal	C_K	\$12,450,000
Incapacitating injury	C_A	\$2,740,000
Non-incapacitating injury	C_B	\$600,000
Possible injury	C_C	\$129,000
Property Damage Only	C_O	\$28,000
Maintenance	C_m	\$20,000

BC CALCULATION PARAMETERS AND VALUES		
Description	Symbol	Value
Reduction Factor (Fatal and Injury Crashes, KABC)	CRF_{KABC}	64%
Reduction Factor (PDO Crashes, O)	CRF_O	69%
Capital Recovery Factor	E_k	0.237
Initial Improvement Cost (Itemized Cost Estimate)	C_i	\$400,000
Maintenance / Operating Cost (per year)	C_m	\$0

$$Q = \text{Weighted Cost of Fatal and Injury Crashes} \Rightarrow \frac{(C_K \times K) + (C_A \times A) + (C_B \times B) + (C_C \times C)}{K + A + B + C} \quad \$150,409$$

$$B = \text{Benefit} \Rightarrow Q (K + A + B + C) (CRF_{KABC}) + C_O (O) (CRF_O) \quad \$928,454$$

$$C = \text{Cost} \Rightarrow C = E_k (C_i) + C_m \quad \$94,800$$

$$B/C = \text{Benefit/Cost Ratio} \Rightarrow \quad B/C \quad \quad \quad 9.7938$$

BENEFIT COST ANALYSIS FACTOR DEFINITIONS

K: Average annual number of collisions involving fatalities during study period

A: Average annual number of collisions involving incapacitating injuries for the period of the study

B: Average annual number of collisions involving non-incapacitating injuries for the period of the study

C: Average annual number of collisions involving possible (not visible) injuries for the period of the study

C: Average annual number of collisions involving only property damage for the period of the study

CRF_{KABC}: Percentage of reduction in fatal and injury crashes by type (correctable crashes)

CRF_O: Percentage of reduction in property damage only crashes by type (correctable crashes)

C_k: Average cost per fatal crash

C_A: Average cost per incapacitating injury crash

C_B: Average cost per non-incapacitating injury crash

C_C: Average cost per possible injury (not visible injury) crash

C_O: Average cost per property damage only crash

Q: Weighted cost of fatal and injury crashes

E_k: Capital recovery factor based on countermeasure (proposed alternative) life

C_i: Estimated initial cost of the countermeasure (cost of the improvement including Right of Way)

C_m: Estimated annual maintenance and operating cost of the countermeasure

BENEFIT COST ANALYSIS WORKSHEET

#2 - Main St @ S. Cherokee Rec Fields

Cherokee County

Convert intersection to Single Lane Roundabout

Years for Crash Data = 5

Crash Data for 5 Years (KABCO System)			
Severity Description	Severity Symbol	No. Crashes	Crash Rate (per year)
Fatal	K	0	0.00
Incapacitating injury	A	0	0.00
Non-incapacitating injury	B	0	0.00
Possible injury	C	5	1.00
Property Damage Only (PDO)	O	8	1.60
All	KABCO	13	2.60

Crash Costs		
Severity Description	Symbol	Value
Fatal	C _k	\$12,450,000
Incapacitating injury	C _A	\$2,740,000
Non-incapacitating injury	C _B	\$600,000
Possible injury	C _C	\$129,000
Property Damage Only	C _O	\$28,000
Maintenance	C _m	\$20,000

BC CALCULATION PARAMETERS AND VALUES		
Description	Symbol	Value
Reduction Factor (Fatal and Injury Crashes, KABCO)	CRF _{KABC}	71%
Reduction Factor (PDO Crashes, O)	CRF _O	62%
Capital Recovery Factor	E _k	0.087
Initial Improvement Cost (Itemized Cost Estimate)	C _i	\$2,000,000
Maintenance / Operating Cost (per year)	C _m	\$0

$$Q = \text{Weighted Cost of Fatal and Injury Crashes} \Rightarrow \frac{(C_k \times K) + (C_A \times A) + (C_B \times B) + (C_C \times C)}{K + A + B + C} = \$129,000$$

$$B = \text{Benefit} \Rightarrow Q (K + A + B + C) (CRF_{KABC}) + C_O (O) (CRF_O) = \$119,366$$

$$C = \text{Cost} \Rightarrow C = E_k (C_i) + C_m = \$174,000$$

$$\underline{\underline{B/C = \text{Benefit/Cost Ratio} \Rightarrow \quad \quad \quad B/C \quad \quad \quad 0.6860}}$$

BENEFIT COST ANALYSIS FACTOR DEFINITIONS

K: Average annual number of collisions involving fatalities during study period

A: Average annual number of collisions involving incapacitating injuries for the period of the study

B: Average annual number of collisions involving non-incapacitating injuries for the period of the study

C: Average annual number of collisions involving possible (not visible) injuries for the period of the study

C: Average annual number of collisions involving only property damage for the period of the study

CRF_{KABC}: Percentage of reduction in fatal and injury crashes by type (correctable crashes)

CRF_O: Percentage of reduction in property damage only crashes by type (correctable crashes)

C_k: Average cost per fatal crash

C_A: Average cost per incapacitating injury crash

C_B: Average cost per non-incapacitating injury crash

C_C: Average cost per possible injury (not visible injury) crash

C_O: Average cost per property damage only crash

Q: Weighted cost of fatal and injury crashes

E_k: Capital recovery factor based on countermeasure (proposed alternative) life

C_i: Estimated initial cost of the countermeasure (cost of the improvement including Right of Way)

C_m: Estimated annual maintenance and operating cost of the countermeasure

BENEFIT COST ANALYSIS WORKSHEET

#2 - Main St @ S. Cherokee Rec Fields
Cherokee County
Add SB Left Turn Lane

Years for Crash Data = 5

Crash Data for 5 Years (KABCO System)			
Severity Description	Severity Symbol	No. Crashes	Crash Rate (per year)
Fatal	K	0	0.00
Incapacitating injury	A	0	0.00
Non-incapacitating injury	B	0	0.00
Possible injury	C	5	1.00
Property Damage Only (PDO)	O	8	1.60
All	KABCO	13	2.60

Crash Costs		
Severity Description	Symbol	Value
Fatal	C _k	\$12,450,000
Incapacitating injury	C _A	\$2,740,000
Non-incapacitating injury	C _B	\$600,000
Possible injury	C _C	\$129,000
Property Damage Only	C _O	\$28,000
Maintenance	C _m	\$20,000

BC CALCULATION PARAMETERS AND VALUES		
Description	Symbol	Value
Reduction Factor (Fatal and Injury Crashes, KABCO)	CRF _{KABC}	27%
Reduction Factor (PDO Crashes, O)	CRF _O	31%
Capital Recovery Factor	E _k	0.135
Initial Improvement Cost (Itemized Cost Estimate)	C _i	\$400,000
Maintenance / Operating Cost (per year)	C _m	\$0

$$Q = \text{Weighted Cost of Fatal and Injury Crashes} \Rightarrow \frac{(C_k \times K) + (C_A \times A) + (C_B \times B) + (C_C \times C)}{K + A + B + C} = \$129,000$$

$$B = \text{Benefit} \Rightarrow Q (K + A + B + C) (CRF_{KABC}) + C_O (O) (CRF_O) = \$48,718$$

$$C = \text{Cost} \Rightarrow C = E_k (C_i) + C_m = \$54,000$$

$$B/C = \text{Benefit/Cost Ratio} \Rightarrow \frac{B}{C} = 0.9022$$

BENEFIT COST ANALYSIS FACTOR DEFINITIONS

K: Average annual number of collisions involving fatalities during study period

A: Average annual number of collisions involving incapacitating injuries for the period of the study

B: Average annual number of collisions involving non-incapacitating injuries for the period of the study

C: Average annual number of collisions involving possible (not visible) injuries for the period of the study

C: Average annual number of collisions involving only property damage for the period of the study

CRF_{KABC}: Percentage of reduction in fatal and injury crashes by type (correctable crashes)

CRF_O: Percentage of reduction in property damage only crashes by type (correctable crashes)

C_k: Average cost per fatal crash

C_A: Average cost per incapacitating injury crash

C_B: Average cost per non-incapacitating injury crash

C_C: Average cost per possible injury (not visible injury) crash

C_O: Average cost per property damage only crash

Q: Weighted cost of fatal and injury crashes

E_k: Capital recovery factor based on countermeasure (proposed alternative) life

C_i: Estimated initial cost of the countermeasure (cost of the improvement including Right of Way)

C_m: Estimated annual maintenance and operating cost of the countermeasure

BENEFIT COST ANALYSIS WORKSHEET

#2 - Main St @ S. Cherokee Rec Fields
Cherokee County
Add WB Right Turn Lane

Years for Crash Data = 5

Crash Data for 5 Years (KABCO System)			
Severity Description	Severity Symbol	No. Crashes	Crash Rate (per year)
Fatal	K	0	0.00
Incapacitating injury	A	0	0.00
Non-incapacitating injury	B	0	0.00
Possible injury	C	5	1.00
Property Damage Only (PDO)	O	8	1.60
All	KABCO	13	2.60

Crash Costs		
Severity Description	Symbol	Value
Fatal	C _k	\$12,450,000
Incapacitating injury	C _A	\$2,740,000
Non-incapacitating injury	C _B	\$600,000
Possible injury	C _C	\$129,000
Property Damage Only	C _O	\$28,000
Maintenance	C _m	\$20,000

BC CALCULATION PARAMETERS AND VALUES		
Description	Symbol	Value
Reduction Factor (Fatal and Injury Crashes, KABCO)	CRF _{KABC}	17%
Reduction Factor (PDO Crashes, O)	CRF _O	17%
Capital Recovery Factor	E _k	0.135
Initial Improvement Cost (Itemized Cost Estimate)	C _i	\$300,000
Maintenance / Operating Cost (per year)	C _m	\$0

$$Q = \text{Weighted Cost of Fatal and Injury Crashes} \Rightarrow \frac{(C_k \times K) + (C_A \times A) + (C_B \times B) + (C_C \times C)}{K + A + B + C} = \$129,000$$

$$B = \text{Benefit} \Rightarrow Q (K + A + B + C) (CRF_{KABC}) + C_O (O) (CRF_O) = \$29,546$$

$$C = \text{Cost} \Rightarrow C = E_k (C_i) + C_m = \$40,500$$

$$B/C = \text{Benefit/Cost Ratio} \Rightarrow \frac{B}{C} = 0.7295$$

BENEFIT COST ANALYSIS FACTOR DEFINITIONS

K: Average annual number of collisions involving fatalities during study period

A: Average annual number of collisions involving incapacitating injuries for the period of the study

B: Average annual number of collisions involving non-incapacitating injuries for the period of the study

C: Average annual number of collisions involving possible (not visible) injuries for the period of the study

C: Average annual number of collisions involving only property damage for the period of the study

CRF_{KABC}: Percentage of reduction in fatal and injury crashes by type (correctable crashes)

CRF_O: Percentage of reduction in property damage only crashes by type (correctable crashes)

C_k: Average cost per fatal crash

C_A: Average cost per incapacitating injury crash

C_B: Average cost per non-incapacitating injury crash

C_C: Average cost per possible injury (not visible injury) crash

C_O: Average cost per property damage only crash

Q: Weighted cost of fatal and injury crashes

E_k: Capital recovery factor based on countermeasure (proposed alternative) life

C_i: Estimated initial cost of the countermeasure (cost of the improvement including Right of Way)

C_m: Estimated annual maintenance and operating cost of the countermeasure

BENEFIT COST ANALYSIS WORKSHEET

#2 - Main St @ S. Cherokee Rec Fields

Cherokee County

Add WB Right Turn Lane & SB Left Turn Lane

Years for Crash Data = 5

Crash Data for 5 Years (KABCO System)			
Severity Description	Severity Symbol	No. Crashes	Crash Rate (per year)
Fatal	K	0	0.00
Incapacitating injury	A	0	0.00
Non-incapacitating injury	B	0	0.00
Possible injury	C	5	1.00
Property Damage Only (PDO)	O	8	1.60
All	KABCO	13	2.60

Crash Costs		
Severity Description	Symbol	Value
Fatal	C _k	\$12,450,000
Incapacitating injury	C _A	\$2,740,000
Non-incapacitating injury	C _B	\$600,000
Possible injury	C _C	\$129,000
Property Damage Only	C _O	\$28,000
Maintenance	C _m	\$20,000

BC CALCULATION PARAMETERS AND VALUES		
Description	Symbol	Value
Reduction Factor (Fatal and Injury Crashes, KABCO)	CRF _{KABC}	39%
Reduction Factor (PDO Crashes, O)	CRF _O	43%
Capital Recovery Factor	E _k	0.135
Initial Improvement Cost (Itemized Cost Estimate)	C _i	\$700,000
Maintenance / Operating Cost (per year)	C _m	\$0

$$Q = \text{Weighted Cost of Fatal and Injury Crashes} \Rightarrow \frac{(C_k \times K) + (C_A \times A) + (C_B \times B) + (C_C \times C)}{K + A + B + C} = \$129,000$$

$$B = \text{Benefit} \Rightarrow Q (K + A + B + C) (CRF_{KABC}) + C_O (O) (CRF_O) = \$69,982$$

$$C = \text{Cost} \Rightarrow C = E_k (C_i) + C_m = \$94,500$$

$$B/C = \text{Benefit/Cost Ratio} \Rightarrow \frac{B}{C} = 0.7405$$

BENEFIT COST ANALYSIS FACTOR DEFINITIONS

K: Average annual number of collisions involving fatalities during study period

A: Average annual number of collisions involving incapacitating injuries for the period of the study

B: Average annual number of collisions involving non-incapacitating injuries for the period of the study

C: Average annual number of collisions involving possible (not visible) injuries for the period of the study

C: Average annual number of collisions involving only property damage for the period of the study

CRF_{KABC}: Percentage of reduction in fatal and injury crashes by type (correctable crashes)

CRF_O: Percentage of reduction in property damage only crashes by type (correctable crashes)

C_k: Average cost per fatal crash

C_A: Average cost per incapacitating injury crash

C_B: Average cost per non-incapacitating injury crash

C_C: Average cost per possible injury (not visible injury) crash

C_O: Average cost per property damage only crash

Q: Weighted cost of fatal and injury crashes

E_k: Capital recovery factor based on countermeasure (proposed alternative) life

C_i: Estimated initial cost of the countermeasure (cost of the improvement including Right of Way)

C_m: Estimated annual maintenance and operating cost of the countermeasure

BENEFIT COST ANALYSIS WORKSHEET

#2 - Main St @ S. Cherokee Rec Fields
Cherokee County

Convert to an Unsignalized High-T Intersection; Add SB Left Turn & WBR Turn Lanes

Years for Crash Data = 5

Crash Data for 5 Years (KABCO System)			
Severity Description	Severity Symbol	No. Crashes	Crash Rate (per year)
Fatal	K	0	0.00
Incapacitating injury	A	0	0.00
Non-incapacitating injury	B	0	0.00
Possible injury	C	5	1.00
Property Damage Only (PDO)	O	8	1.60
All	KABCO	13	2.60

Crash Costs		
Severity Description	Symbol	Value
Fatal	C _k	\$12,450,000
Incapacitating injury	C _A	\$2,740,000
Non-incapacitating injury	C _B	\$600,000
Possible injury	C _C	\$129,000
Property Damage Only	C _O	\$28,000
Maintenance	C _m	\$20,000

BC CALCULATION PARAMETERS AND VALUES		
Description	Symbol	Value
Reduction Factor (Fatal and Injury Crashes, KABC)	CRF _{KABC}	67%
Reduction Factor (PDO Crashes, O)	CRF _O	56%
Capital Recovery Factor	E _k	0.135
Initial Improvement Cost (Itemized Cost Estimate)	C _i	\$1,000,000
Maintenance / Operating Cost (per year)	C _m	\$0

$$Q = \text{Weighted Cost of Fatal and Injury Crashes} \Rightarrow \frac{(C_k \times K) + (C_A \times A) + (C_B \times B) + (C_C \times C)}{K + A + B + C} = \$129,000$$

$$B = \text{Benefit} \Rightarrow Q (K + A + B + C) (CRF_{KABC}) + C_O (O) (CRF_O) = \$111,056$$

$$C = \text{Cost} \Rightarrow C = E_k (C_i) + C_m = \$135,000$$

$$B/C = \text{Benefit/Cost Ratio} \Rightarrow \frac{B}{C} = 0.8226$$

BENEFIT COST ANALYSIS FACTOR DEFINITIONS

K: Average annual number of collisions involving fatalities during study period

A: Average annual number of collisions involving incapacitating injuries for the period of the study

B: Average annual number of collisions involving non-incapacitating injuries for the period of the study

C: Average annual number of collisions involving possible (not visible) injuries for the period of the study

C: Average annual number of collisions involving only property damage for the period of the study

CRF_{KABC}: Percentage of reduction in fatal and injury crashes by type (correctable crashes)

CRF_O: Percentage of reduction in property damage only crashes by type (correctable crashes)

C_K: Average cost per fatal crash

C_A: Average cost per incapacitating injury crash

C_B: Average cost per non-incapacitating injury crash

C_C: Average cost per possible injury (not visible injury) crash

C_O: Average cost per property damage only crash

Q: Weighted cost of fatal and injury crashes

E_k: Capital recovery factor based on countermeasure (proposed alternative) life

C: Estimated initial cost of the countermeasure (cost of the improvement including Right of Way)

C_m: Estimated annual maintenance and operating cost of the countermeasure

BENEFIT COST ANALYSIS WORKSHEET

#3 - Main St @ Bell Pkwy
Cherokee County

Convert intersection to Single Lane Roundabout; Add SB & EB Right Turn Bypass Lanes

Years for Crash Data = 5

Crash Data for 5 Years (KABCO System)			
Severity Description	Severity Symbol	No. Crashes	Crash Rate (per year)
Fatal	K	0	0.00
Incapacitating injury	A	3	0.60
Non-incapacitating injury	B	2	0.40
Possible injury	C	2	0.40
Property Damage Only (PDO)	O	12	2.40
All	KABCO	19	3.80

Crash Costs		
Severity Description	Symbol	Value
Fatal	C _k	\$12,450,000
Incapacitating injury	C _A	\$2,740,000
Non-incapacitating injury	C _B	\$600,000
Possible injury	C _C	\$129,000
Property Damage Only	C _O	\$28,000
Maintenance	C _m	\$20,000

BC CALCULATION PARAMETERS AND VALUES		
Description	Symbol	Value
Reduction Factor (Fatal and Injury Crashes, KABCO)	CRF _{KABC}	71%
Reduction Factor (PDO Crashes, O)	CRF _O	62%
Capital Recovery Factor	E _k	0.087
Initial Improvement Cost (Itemized Cost Estimate)	C _i	\$2,150,000
Maintenance / Operating Cost (per year)	C _m	\$0

$$Q = \text{Weighted Cost of Fatal and Injury Crashes} \Rightarrow \frac{(C_k \times K) + (C_A \times A) + (C_B \times B) + (C_C \times C)}{K + A + B + C} = \$1,382,571$$

$$B = \text{Benefit} \Rightarrow Q (K + A + B + C) (CRF_{KABC}) + C_O (O) (CRF_O) = \$1,415,940$$

$$C = \text{Cost} \Rightarrow C = E_k (C_i) + C_m = \$187,050$$

$$B/C = \text{Benefit/Cost Ratio} \Rightarrow \frac{B}{C} = 7.5698$$

BENEFIT COST ANALYSIS FACTOR DEFINITIONS

K: Average annual number of collisions involving fatalities during study period

A: Average annual number of collisions involving incapacitating injuries for the period of the study

B: Average annual number of collisions involving non-incapacitating injuries for the period of the study

C: Average annual number of collisions involving possible (not visible) injuries for the period of the study

C: Average annual number of collisions involving only property damage for the period of the study

CRF_{KABC}: Percentage of reduction in fatal and injury crashes by type (correctable crashes)

CRF_O: Percentage of reduction in property damage only crashes by type (correctable crashes)

C_k: Average cost per fatal crash

C_A: Average cost per incapacitating injury crash

C_B: Average cost per non-incapacitating injury crash

C_C: Average cost per possible injury (not visible injury) crash

C_O: Average cost per property damage only crash

Q: Weighted cost of fatal and injury crashes

E_k: Capital recovery factor based on countermeasure (proposed alternative) life

C_i: Estimated initial cost of the countermeasure (cost of the improvement including Right of Way)

C_m: Estimated annual maintenance and operating cost of the countermeasure

BENEFIT COST ANALYSIS WORKSHEET

#3 - Main St @ Bell Pkwy
Cherokee County

Install Signal and Add SB Left Turn and EB Right Turn Lanes

Years for Crash Data = 5

Crash Data for 5 Years (KABCO System)			
Severity Description	Severity Symbol	No. Crashes	Crash Rate (per year)
Fatal	K	0	0.00
Incapacitating injury	A	3	0.60
Non-incapacitating injury	B	2	0.40
Possible injury	C	2	0.40
Property Damage Only (PDO)	O	12	2.40
All	KABCO	19	3.80

Crash Costs		
Severity Description	Symbol	Value
Fatal	C _k	\$12,450,000
Incapacitating injury	C _A	\$2,740,000
Non-incapacitating injury	C _B	\$600,000
Possible injury	C _C	\$129,000
Property Damage Only	C _O	\$28,000
Maintenance	C _m	\$20,000

BC CALCULATION PARAMETERS AND VALUES		
Description	Symbol	Value
Reduction Factor (Fatal and Injury Crashes, KABCO)	CRF _{KABC}	64%
Reduction Factor (PDO Crashes, O)	CRF _O	65%
Capital Recovery Factor	E _k	0.135
Initial Improvement Cost (Itemized Cost Estimate)	C _i	\$600,000
Maintenance / Operating Cost (per year)	C _m	\$0

$$Q = \text{Weighted Cost of Fatal and Injury Crashes} \Rightarrow \frac{(C_k \times K) + (C_A \times A) + (C_B \times B) + (C_C \times C)}{K + A + B + C} = \$1,382,571$$

$$B = \text{Benefit} \Rightarrow Q (K + A + B + C) (CRF_{KABC}) + C_O (O) (CRF_O) = \$1,275,656$$

$$C = \text{Cost} \Rightarrow C = E_k (C_i) + C_m = \$81,000$$

$$\underline{\underline{B/C = \text{Benefit/Cost Ratio} \Rightarrow \quad \quad \quad B/C \quad \quad \quad 15.7488}}}$$

BENEFIT COST ANALYSIS FACTOR DEFINITIONS

K: Average annual number of collisions involving fatalities during study period

A: Average annual number of collisions involving incapacitating injuries for the period of the study

B: Average annual number of collisions involving non-incapacitating injuries for the period of the study

C: Average annual number of collisions involving possible (not visible) injuries for the period of the study

C: Average annual number of collisions involving only property damage for the period of the study

CRF_{KABC}: Percentage of reduction in fatal and injury crashes by type (correctable crashes)

CRF_O: Percentage of reduction in property damage only crashes by type (correctable crashes)

C_k: Average cost per fatal crash

C_A: Average cost per incapacitating injury crash

C_B: Average cost per non-incapacitating injury crash

C_C: Average cost per possible injury (not visible injury) crash

C_O: Average cost per property damage only crash

Q: Weighted cost of fatal and injury crashes

E_k: Capital recovery factor based on countermeasure (proposed alternative) life

C_i: Estimated initial cost of the countermeasure (cost of the improvement including Right of Way)

C_m: Estimated annual maintenance and operating cost of the countermeasure

BENEFIT COST ANALYSIS WORKSHEET

#3 - Main St @ Bell Pkwy
Cherokee County
Add EB Right Turn Lane

Years for Crash Data = 5

Crash Data for 5 Years (KABCO System)			
Severity Description	Severity Symbol	No. Crashes	Crash Rate (per year)
Fatal	K	0	0.00
Incapacitating injury	A	3	0.60
Non-incapacitating injury	B	2	0.40
Possible injury	C	2	0.40
Property Damage Only (PDO)	O	12	2.40
All	KABCO	19	3.80

Crash Costs		
Severity Description	Symbol	Value
Fatal	C _k	\$12,450,000
Incapacitating injury	C _A	\$2,740,000
Non-incapacitating injury	C _B	\$600,000
Possible injury	C _C	\$129,000
Property Damage Only	C _O	\$28,000
Maintenance	C _m	\$20,000

BC CALCULATION PARAMETERS AND VALUES		
Description	Symbol	Value
Reduction Factor (Fatal and Injury Crashes, KABCO)	CRF _{KABC}	17%
Reduction Factor (PDO Crashes, O)	CRF _O	17%
Capital Recovery Factor	E _k	0.135
Initial Improvement Cost (Itemized Cost Estimate)	C _i	\$300,000
Maintenance / Operating Cost (per year)	C _m	\$0

$$Q = \text{Weighted Cost of Fatal and Injury Crashes} \Rightarrow \frac{(C_k \times K) + (C_A \times A) + (C_B \times B) + (C_C \times C)}{K + A + B + C} = \$1,382,571$$

$$B = \text{Benefit} \Rightarrow Q (K + A + B + C) (CRF_{KABC}) + C_O (O) (CRF_O) = \$340,476$$

$$C = \text{Cost} \Rightarrow C = E_k (C_i) + C_m = \$40,500$$

$$\underline{\underline{B/C = \text{Benefit/Cost Ratio} \Rightarrow \quad \quad \quad B/C \quad \quad \quad 8.4068}}}$$

BENEFIT COST ANALYSIS FACTOR DEFINITIONS

K: Average annual number of collisions involving fatalities during study period

A: Average annual number of collisions involving incapacitating injuries for the period of the study

B: Average annual number of collisions involving non-incapacitating injuries for the period of the study

C: Average annual number of collisions involving possible (not visible) injuries for the period of the study

C: Average annual number of collisions involving only property damage for the period of the study

CRF_{KABC}: Percentage of reduction in fatal and injury crashes by type (correctable crashes)

CRF_O: Percentage of reduction in property damage only crashes by type (correctable crashes)

C_k: Average cost per fatal crash

C_A: Average cost per incapacitating injury crash

C_B: Average cost per non-incapacitating injury crash

C_C: Average cost per possible injury (not visible injury) crash

C_O: Average cost per property damage only crash

Q: Weighted cost of fatal and injury crashes

E_k: Capital recovery factor based on countermeasure (proposed alternative) life

C_i: Estimated initial cost of the countermeasure (cost of the improvement including Right of Way)

C_m: Estimated annual maintenance and operating cost of the countermeasure

BENEFIT COST ANALYSIS WORKSHEET

#3 - Main St @ Bell Pkwy
Cherokee County

Convert to Restricted Crossing U-Turn (RCUT) Intersection

Years for Crash Data = 5

Crash Data for 5 Years (KABCO System)			
Severity Description	Severity Symbol	No. Crashes	Crash Rate (per year)
Fatal	K	0	0.00
Incapacitating injury	A	3	0.60
Non-incapacitating injury	B	2	0.40
Possible injury	C	2	0.40
Property Damage Only (PDO)	O	12	2.40
All	KABCO	19	3.80

Crash Costs		
Severity Description	Symbol	Value
Fatal	C _k	\$12,450,000
Incapacitating injury	C _A	\$2,740,000
Non-incapacitating injury	C _B	\$600,000
Possible injury	C _C	\$129,000
Property Damage Only	C _O	\$28,000
Maintenance	C _m	\$20,000

BC CALCULATION PARAMETERS AND VALUES		
Description	Symbol	Value
Reduction Factor (Fatal and Injury Crashes, KABCO)	CRF _{KABC}	73%
Reduction Factor (PDO Crashes, O)	CRF _O	65%
Capital Recovery Factor	E _k	0.135
Initial Improvement Cost (Itemized Cost Estimate)	C _i	\$175,000
Maintenance / Operating Cost (per year)	C _m	\$0

$$Q = \text{Weighted Cost of Fatal and Injury Crashes} \Rightarrow \frac{(C_k \times K) + (C_A \times A) + (C_B \times B) + (C_C \times C)}{K + A + B + C} = \$1,382,571$$

$$B = \text{Benefit} \Rightarrow Q (K + A + B + C) (CRF_{KABC}) + C_O (O) (CRF_O) = \$1,456,668$$

$$C = \text{Cost} \Rightarrow C = E_k (C_i) + C_m = \$23,625$$

$$\underline{\underline{B/C = \text{Benefit/Cost Ratio} \Rightarrow \quad \quad \quad B/C \quad \quad \quad 61.6579}}}$$

BENEFIT COST ANALYSIS FACTOR DEFINITIONS

K: Average annual number of collisions involving fatalities during study period

A: Average annual number of collisions involving incapacitating injuries for the period of the study

B: Average annual number of collisions involving non-incapacitating injuries for the period of the study

C: Average annual number of collisions involving possible (not visible) injuries for the period of the study

C: Average annual number of collisions involving only property damage for the period of the study

CRF_{KABC}: Percentage of reduction in fatal and injury crashes by type (correctable crashes)

CRF_O: Percentage of reduction in property damage only crashes by type (correctable crashes)

C_k: Average cost per fatal crash

C_A: Average cost per incapacitating injury crash

C_B: Average cost per non-incapacitating injury crash

C_C: Average cost per possible injury (not visible injury) crash

C_O: Average cost per property damage only crash

Q: Weighted cost of fatal and injury crashes

E_k: Capital recovery factor based on countermeasure (proposed alternative) life

C_i: Estimated initial cost of the countermeasure (cost of the improvement including Right of Way)

C_m: Estimated annual maintenance and operating cost of the countermeasure

BENEFIT COST ANALYSIS WORKSHEET

#4 - Main St @ Brooke Blvd
Cherokee County
Add WB Right Turn Lane

Years for Crash Data = 5

Crash Data for 5 Years (KABCO System)			
Severity Description	Severity Symbol	No. Crashes	Crash Rate (per year)
Fatal	K	0	0.00
Incapacitating injury	A	0	0.00
Non-incapacitating injury	B	1	0.20
Possible injury	C	1	0.20
Property Damage Only (PDO)	O	5	1.00
All	KABCO	7	1.40

Crash Costs		
Severity Description	Symbol	Value
Fatal	C_K	\$12,450,000
Incapacitating injury	C_A	\$2,740,000
Non-incapacitating injury	C_B	\$600,000
Possible injury	C_C	\$129,000
Property Damage Only	C_O	\$28,000
Maintenance	C_m	\$20,000

BC CALCULATION PARAMETERS AND VALUES		
Description	Symbol	Value
Reduction Factor (Fatal and Injury Crashes, KABCO)	CRF_{KABC}	17%
Reduction Factor (PDO Crashes, O)	CRF_O	17%
Capital Recovery Factor	E_k	0.135
Initial Improvement Cost (Itemized Cost Estimate)	C_i	\$300,000
Maintenance / Operating Cost (per year)	C_m	\$0

$$Q = \text{Weighted Cost of Fatal and Injury Crashes} \Rightarrow \frac{(C_K \times K) + (C_A \times A) + (C_B \times B) + (C_C \times C)}{K + A + B + C} = \$364,500$$

$$B = \text{Benefit} \Rightarrow Q (K + A + B + C) (CRF_{KABC}) + C_O (O) (CRF_O) = \$29,546$$

$$C = \text{Cost} \Rightarrow C = E_k (C_i) + C_m = \$40,500$$

$$B/C = \text{Benefit/Cost Ratio} \Rightarrow \frac{B}{C} = 0.7295$$

BENEFIT COST ANALYSIS FACTOR DEFINITIONS

K: Average annual number of collisions involving fatalities during study period

A: Average annual number of collisions involving incapacitating injuries for the period of the study

B: Average annual number of collisions involving non-incapacitating injuries for the period of the study

C: Average annual number of collisions involving possible (not visible) injuries for the period of the study

C: Average annual number of collisions involving only property damage for the period of the study

CRF_{KABC}: Percentage of reduction in fatal and injury crashes by type (correctable crashes)

CRF_O: Percentage of reduction in property damage only crashes by type (correctable crashes)

C_k: Average cost per fatal crash

C_A: Average cost per incapacitating injury crash

C_B: Average cost per non-incapacitating injury crash

C_C: Average cost per possible injury (not visible injury) crash

C_O: Average cost per property damage only crash

Q: Weighted cost of fatal and injury crashes

E_k: Capital recovery factor based on countermeasure (proposed alternative) life

C_i: Estimated initial cost of the countermeasure (cost of the improvement including Right of Way)

C_m: Estimated annual maintenance and operating cost of the countermeasure

BENEFIT COST ANALYSIS WORKSHEET

#5 - Main St @ Johnston Farm Ln
Cherokee County

Convert to an Unsignalized High-T Intersection

Years for Crash Data = 5

Crash Data for 5 Years (KABCO System)			
Severity Description	Severity Symbol	No. Crashes	Crash Rate (per year)
Fatal	K	0	0.00
Incapacitating injury	A	0	0.00
Non-incapacitating injury	B	0	0.00
Possible injury	C	2	0.40
Property Damage Only (PDO)	O	7	1.40
All	KABCO	9	1.80

Crash Costs		
Severity Description	Symbol	Value
Fatal	C _k	\$12,450,000
Incapacitating injury	C _A	\$2,740,000
Non-incapacitating injury	C _B	\$600,000
Possible injury	C _C	\$129,000
Property Damage Only	C _O	\$28,000
Maintenance	C _m	\$20,000

BC CALCULATION PARAMETERS AND VALUES		
Description	Symbol	Value
Reduction Factor (Fatal and Injury Crashes, KABC)	CRF _{KABC}	45%
Reduction Factor (PDO Crashes, O)	CRF _O	23%
Capital Recovery Factor	E _k	0.087
Initial Improvement Cost (Itemized Cost Estimate)	C _i	\$300,000
Maintenance / Operating Cost (per year)	C _m	\$0

$$Q = \text{Weighted Cost of Fatal and Injury Crashes} \Rightarrow \frac{(C_k \times K) + (C_A \times A) + (C_B \times B) + (C_C \times C)}{K + A + B + C} = \$129,000$$

$$B = \text{Benefit} \Rightarrow Q (K + A + B + C) (CRF_{KABC}) + C_O (O) (CRF_O) = \$32,236$$

$$C = \text{Cost} \Rightarrow C = E_k (C_i) + C_m = \$26,100$$

$$B/C = \text{Benefit/Cost Ratio} \Rightarrow \frac{B}{C} = 1.2351$$

BENEFIT COST ANALYSIS FACTOR DEFINITIONS

K: Average annual number of collisions involving fatalities during study period

A: Average annual number of collisions involving incapacitating injuries for the period of the study

B: Average annual number of collisions involving non-incapacitating injuries for the period of the study

C: Average annual number of collisions involving possible (not visible) injuries for the period of the study

C: Average annual number of collisions involving only property damage for the period of the study

CRF_{KABC}: Percentage of reduction in fatal and injury crashes by type (correctable crashes)

CRF_O: Percentage of reduction in property damage only crashes by type (correctable crashes)

C_K: Average cost per fatal crash

C_A: Average cost per incapacitating injury crash

C_B: Average cost per non-incapacitating injury crash

C_C: Average cost per possible injury (not visible injury) crash

C_O: Average cost per property damage only crash

Q: Weighted cost of fatal and injury crashes

E_k: Capital recovery factor based on countermeasure (proposed alternative) life

C: Estimated initial cost of the countermeasure (cost of the improvement including Right of Way)

C_m: Estimated annual maintenance and operating cost of the countermeasure

BENEFIT COST ANALYSIS WORKSHEET

#5 - Main St @ Johnston Farm Ln
Cherokee County

Convert to Restricted Crossing U-Turn (RCUT) Intersection

Years for Crash Data = 5

Crash Data for 5 Years (KABCO System)			
Severity Description	Severity Symbol	No. Crashes	Crash Rate (per year)
Fatal	K	0	0.00
Incapacitating injury	A	0	0.00
Non-incapacitating injury	B	0	0.00
Possible injury	C	2	0.40
Property Damage Only (PDO)	O	7	1.40
All	KABCO	9	1.80

Crash Costs		
Severity Description	Symbol	Value
Fatal	C _k	\$12,450,000
Incapacitating injury	C _A	\$2,740,000
Non-incapacitating injury	C _B	\$600,000
Possible injury	C _C	\$129,000
Property Damage Only	C _O	\$28,000
Maintenance	C _m	\$20,000

BC CALCULATION PARAMETERS AND VALUES		
Description	Symbol	Value
Reduction Factor (Fatal and Injury Crashes, KABCO)	CRF _{KABC}	73%
Reduction Factor (PDO Crashes, O)	CRF _O	65%
Capital Recovery Factor	E _k	0.135
Initial Improvement Cost (Itemized Cost Estimate)	C _i	\$325,000
Maintenance / Operating Cost (per year)	C _m	\$0

$$Q = \text{Weighted Cost of Fatal and Injury Crashes} \Rightarrow \frac{(C_k \times K) + (C_A \times A) + (C_B \times B) + (C_C \times C)}{K + A + B + C} = \$129,000$$

$$B = \text{Benefit} \Rightarrow Q (K + A + B + C) (CRF_{KABC}) + C_O (O) (CRF_O) = \$63,148$$

$$C = \text{Cost} \Rightarrow C = E_k (C_i) + C_m = \$43,875$$

$$\underline{\underline{B/C = \text{Benefit/Cost Ratio} \Rightarrow \quad \quad \quad B/C \quad \quad \quad 1.4393}}$$

BENEFIT COST ANALYSIS FACTOR DEFINITIONS

K: Average annual number of collisions involving fatalities during study period

A: Average annual number of collisions involving incapacitating injuries for the period of the study

B: Average annual number of collisions involving non-incapacitating injuries for the period of the study

C: Average annual number of collisions involving possible (not visible) injuries for the period of the study

C: Average annual number of collisions involving only property damage for the period of the study

CRF_{KABC}: Percentage of reduction in fatal and injury crashes by type (correctable crashes)

CRF_O: Percentage of reduction in property damage only crashes by type (correctable crashes)

C_k: Average cost per fatal crash

C_A: Average cost per incapacitating injury crash

C_B: Average cost per non-incapacitating injury crash

C_C: Average cost per possible injury (not visible injury) crash

C_O: Average cost per property damage only crash

Q: Weighted cost of fatal and injury crashes

E_k: Capital recovery factor based on countermeasure (proposed alternative) life

C_i: Estimated initial cost of the countermeasure (cost of the improvement including Right of Way)

C_m: Estimated annual maintenance and operating cost of the countermeasure

BENEFIT COST ANALYSIS WORKSHEET

#6 - Main St @ Ridgewalk Pkwy

Cherokee County

Convert intersection to a Multilane Roundabout

Years for Crash Data = 5

Crash Data for 5 Years (KABCO System)			
Severity Description	Severity Symbol	No. Crashes	Crash Rate (per year)
Fatal	K	0	0.00
Incapacitating injury	A	2	0.40
Non-incapacitating injury	B	3	0.60
Possible injury	C	4	0.80
Property Damage Only (PDO)	O	57	11.40
All	KABCO	66	13.20

Crash Costs		
Severity Description	Symbol	Value
Fatal	C_K	\$12,450,000
Incapacitating injury	C_A	\$2,740,000
Non-incapacitating injury	C_B	\$600,000
Possible injury	C_C	\$129,000
Property Damage Only	C_O	\$28,000
Maintenance	C_m	\$20,000

BC CALCULATION PARAMETERS AND VALUES		
Description	Symbol	Value
Reduction Factor (Fatal and Injury Crashes, KABCO)	CRF_{KABC}	71%
Reduction Factor (PDO Crashes, O)	CRF_O	19%
Capital Recovery Factor	E_k	0.087
Initial Improvement Cost (Itemized Cost Estimate)	C_i	\$2,750,000
Maintenance / Operating Cost (per year)	C_m	\$0

$$Q = \text{Weighted Cost of Fatal and Injury Crashes} \Rightarrow \frac{(C_K \times K) + (C_A \times A) + (C_B \times B) + (C_C \times C)}{K + A + B + C} = \$866,222$$

$$B = \text{Benefit} \Rightarrow Q (K + A + B + C) (CRF_{KABC}) + C_O (O) (CRF_O) = \$1,167,680$$

$$C = \text{Cost} \Rightarrow C = E_k (C_i) + C_m = \$239,250$$

$$B/C = \text{Benefit/Cost Ratio} \Rightarrow \frac{B}{C} = 4.8806$$

BENEFIT COST ANALYSIS FACTOR DEFINITIONS

K: Average annual number of collisions involving fatalities during study period

A: Average annual number of collisions involving incapacitating injuries for the period of the study

B: Average annual number of collisions involving non-incapacitating injuries for the period of the study

C: Average annual number of collisions involving possible (not visible) injuries for the period of the study

C: Average annual number of collisions involving only property damage for the period of the study

CRF_{KABC}: Percentage of reduction in fatal and injury crashes by type (correctable crashes)

CRF_O: Percentage of reduction in property damage only crashes by type (correctable crashes)

C_k: Average cost per fatal crash

C_A: Average cost per incapacitating injury crash

C_B: Average cost per non-incapacitating injury crash

C_C: Average cost per possible injury (not visible injury) crash

C_O: Average cost per property damage only crash

Q: Weighted cost of fatal and injury crashes

E_k: Capital recovery factor based on countermeasure (proposed alternative) life

C_i: Estimated initial cost of the countermeasure (cost of the improvement including Right of Way)

C_m: Estimated annual maintenance and operating cost of the countermeasure