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Staunton Augusta Waynesboro MPO (SAWMPO) Potential for Safety Improvement Study

August 2023



Prepared By:



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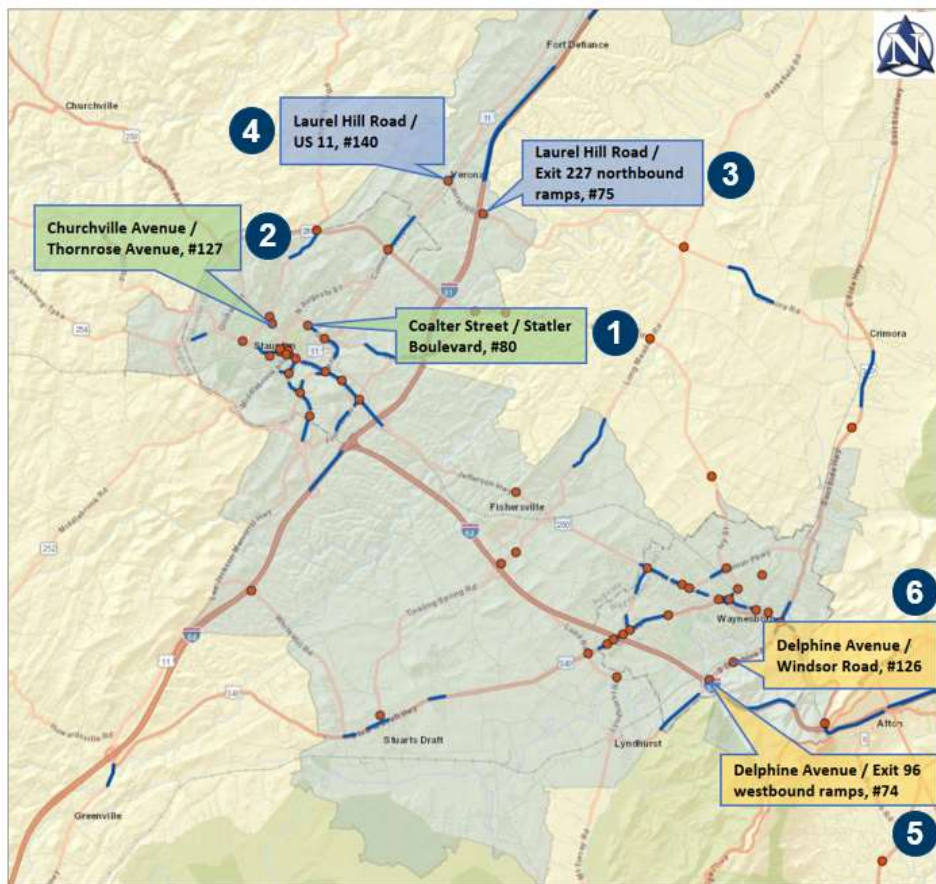
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1. INTRODUCTION

The Staunton Augusta Waynesboro Metropolitan Planning Organization (SAWMPO) has initiated a Potential for Safety Improvement (PSI) Study for six intersections that have been identified as PSI locations. Two intersections are included in each of the localities within the SAWMPO including Augusta County, the City of Staunton, and the City of Waynesboro (see **Figure 1-1**). The purpose of this study is to identify and evaluate safety improvements for implementation as part of future project(s) through SMART SCALE or other funding sources. The following is summary of the study locations and their corresponding PSI ranking:

- City of Staunton
 - N. Coalter Street at Statler Boulevard/Edgewood Road (#80)
 - Churchville Avenue at Thornrose Avenue (#127)
- Augusta County
 - Laurel Hill Road at I-81 Exit 227 Northbound Ramps (#75)
 - US 11 at Laurel Hill Road/Quick’s Mill Road (#140)
- City of Waynesboro
 - S. Delphine Ave at I-64 Exit 96 Westbound Ramps (#74)
 - S. Delphine Avenue at Windsor Road/Mountain Road (#126)

Figure 1-1: Study Intersections



2. METHODOLOGY

2.1 SITE IDENTIFICATION

PSI is a safety evaluation tool that compares the number of crashes at an intersection over a five-year period to the expected number of crashes based on intersection characteristics (traffic volumes, roadway geometry, and roadway classification). The higher the discrepancy between the expected and actual crashes, the higher the PSI ranking.

In 2022, SAWMPO selected the intersections to be included in this PSI study. This process began with a review of the VDOT 2020 PSI intersections within Augusta County, the City of Staunton, and the City of Waynesboro based on crash data between 2016 and 2020. From this list, a short-list of candidate locations was identified in each locality based on the likelihood that practical safety improvements could be identified and funded as part of SMART SCALE or other funding programs. SAWMPO then screened the short-list of candidate locations with VDOT and the localities. The list was further refined to identify two intersections per locality for study.

2.2 DATA COLLECTION

Classified 12-hour turning movement counts were collected by Peggy Malone & Associates (PMA) on Tuesday, November 15, 2022. Data was collected when local schools were in session and pedestrians, bicycles, and heavy vehicles were counted separately at the following intersections:

- N. Colter Street at Statler Boulevard/Edgewood Road
- Churchville Avenue at Thornrose Avenue/Constitution Drive
- Laurel Hill Road at I-81 Exit 227 Northbound Ramps
- US 11 at Laurel Hill Road/Quick's Mill Road
- US 11 at Dunsmore Road
- Laurel Hill Road at Dunsmore Road
- S. Delphine Avenue at I-64 Exit 96 Westbound Ramps
- S. Delphine Avenue at Windsor Road/Mountain Road
- S. Delphine Avenue at Western Road
- S. Delphine Avenue at 19th Street

The collected traffic data was reviewed to determine the peak hours for each of the study intersections. Raw traffic count data is included in **Appendix A**. Peak hour queuing, lane utilization, and general traffic operations were observed in the spring of 2023 during typical weekday AM and PM peak hours.

2.3 CRASH DATA REVIEW

Crash data within the study area was reviewed for a 7.67-year period between January 1, 2015 and August 31, 2022. Crash data was obtained from VDOT's Power BI Crash Analysis Tool. The crash data was reviewed by crash year, location, weather conditions, time of day, type and severity, causes, or other relevant information to identify crash patterns and trends. FR-300 reports were reviewed for spot locations to further investigate crash trends.

2.4 TRAFFIC FORECASTING

VDOT Staunton District Planning prepared growth rates for the six study intersections based on a review of existing traffic volumes, historical growth trends, and future forecasts associated with the MPO Travel Demand Model. **Table 2-1** summarizes annualized historic growth rate trends to the annual growth rates from the TDM that were determined by comparing the 2018 and 2045 volumes for the study intersection approaches. The variations between the historical growth rates and the forecasted TDM growth rates can be attributed to the future population and employment assumptions in the TDM. Specific variations to note include limited to no growth in the TDM at the two City of Staunton intersections due to population and employment assignments around the periphery of the City (Staunton Crossing) and higher TDM growth rates along US 11 north of Verona due to the model considering US 11 as a more attractive route than I-81 for traffic to and from the Harrisonburg region. The TDM growth rates along Delphine Avenue in the City of Waynesboro are higher and more consistent with the historical trends due to the future growth associated with the Nature's Crossing development to the south of I-64 at Exit 96. The Traffic Growth and Forecast memo prepared by VDOT is included in **Appendix B** and provides a more detailed summary of the development of the growth rates. The growth rates were applied to the AM and PM peak hour traffic volumes to establish the 2045 design year traffic volumes.

Table 2-1: Recommended Growth Rate Summary

Study Intersection by Approach	2019 VDOT Count Data	VDOT Historical Growth Rate	2018 TDM Forecast	2045 TDM Forecast	TDM Annualized Growth Rate	Recommended Study Growth Rate
US 11/Route 612 (Laurel Hill Road):						
US 11 northern leg	7,800	1.0%	12,946	18,729	1.7%	1.0%
US 11 southern leg	13,380	1.0%	13,371	17,822	1.2%	1.0%
Route 612 eastern leg	11,600	1.0%	10,543	10,999	0.2%	1.0%
Route 612 western leg	4,900	0.0%	5,994	7,534	1.0%	1.0%
Route 612 (Laurel Hill Road)/I-81, Exit 247 NB off-ramp:						
I-81 ramp northern leg	1,900	Insufficient data	2,022	1,618	-0.7%	1.0%
I-81 ramp southern leg	3,300	Insufficient data	4,915	4,793	-0.1%	1.0%
Route 612 eastern leg	6,500	0.0%	6,867	6,899	0.0%	1.0%
Route 612 western leg	14,450	1.0%	9,495	9,673	0.1%	1.0%
Churchville Avenue/Thornrose Avenue:						
Churchville Ave northern leg	8,300	1.0%	13,098	13,196	0.0%	1.0%
Thornrose Ave southern leg	5,200	2.5%	2,853	2,814	-0.1%	1.0%
Churchville Ave eastern leg	10,900	2.5%	10,931	10,993	0.0%	1.0%
Statler Blvd/Coalter Street/Edgewood Road:						
Coalter St northern leg	3,400	1.0%	8,900	9,584	0.3%	1.0%
Coalter St southern leg	3,400	0.0%	9,274	9,859	0.2%	1.0%
Statler Blvd eastern leg	10,000	1.0%	5,269	5,798	0.4%	1.0%
Edgewood Rd western leg	No data	Insufficient data	5,335	5,561	0.2%	1.0%
Delphine Avenue/Windsor Road:						
Delphine Ave northern leg	8,350	1.5%	7,013	9,807	1.5%	1.5%
Delphine Ave southern leg	10,200	2.5%	9,671	12,979	1.3%	1.5%
Windsor Rd western leg	4,150	2.0%	4,389	4,955	0.5%	1.0%
Delphine Avenue/I-64, Exit 96 WB off-ramp:						
Delphine Ave northern leg	10,200	2.5%	9,671	12,979	1.3%	1.5%
Delphine Ave southern leg	4,900	1.5%	6,902	9,492	1.4%	1.5%
I-64 ramp eastern leg	1,600	Insufficient data	1,118	2,011	3.0%	2.0%
I-64 ramp western leg	4,200	Insufficient data	4,114	4,703	0.5%	1.0%

2.5 TRAFFIC OPERATIONS EVALUATION

Traffic operations within the study area were evaluated for the AM and PM peak hours under existing (2022), 2045 No Build, and 2045 Build conditions. Synchro (version 11) and SIDRA software (version 9.1) were used as screening tools to evaluate the alternatives under consideration. SIDRA was used to evaluate the roundabout alternatives using output delays (sec/veh) and 95th percentile queue lengths (feet) for each roundabout movement. Synchro was used to evaluate the unsignalized and signalized intersection alternatives using output delays (sec/veh) and levels of service by overall intersection and critical movement. Results of the

SimTraffic microsimulation were used to document for maximum queue lengths (in feet) in accordance with VDOT’s Traffic Operations and Safety Analysis Manual – Version 2.0 (TOSAM).

Synchro models were developed in accordance with VDOT’s TOSAM. Existing traffic signal timings were provided by the City of Staunton and VDOT and utilized in the development of the Synchro models. Signal timings are included in **Appendix C**. Lane geometry, lane use, speed limits, traffic control, traffic volumes, peak hour factors, truck percentages, and pedestrians were also programmed into the Synchro models.

Detailed Synchro analysis and SimTraffic microsimulation outputs as well as SIDRA outputs are included in **Appendix D**.

2.6 MEASURES OF EFFECTIVENESS CRITERIA

Peak hour level of service (LOS), defined by the Highway Capacity Manual (HCM) is a measure of the quality of traffic, with LOS A reflecting the best conditions and LOS F reflecting a breakdown in traffic flow and traffic demand exceeding capacity. Capacity analyses were performed for AM and PM peak hour conditions to establish LOS in accordance with VDOT’s TOSAM. **Table 2-2** summarizes the LOS thresholds for signalized intersections and unsignalized intersections.

Table 2-2: Intersection Measures of Effectiveness

Level of Service	Intersection Control	
	Signalized	Unsignalized
	Average Delay (sec/veh)	Average Delay (sec/veh)
LOS A	≤ 10	≤ 10
LOS B	> 10 – 20	> 10 – 15
LOS C	> 20 – 35	> 15 – 25
LOS D	> 35 – 55	> 25 – 35
LOS E	> 55 – 80	> 35 – 50
LOS F	> 80	> 50

2.7 COST ESTIMATES

The planning level conceptual cost estimates developed for the projects were derived using a few different approaches. Most of the primary items were generally defined with the quantities calculated based on the Concept plans prepared for each site. The Lump Sum items were assigned estimated unit prices based on the proposed improvements and results from past bids on other similar projects. The costs associated with Right of Way Acquisition and Utility Relocations were established using VDOT’s PCES tool by approximating the potential impacts of the project. The percentages utilized for the Preliminary Engineering Fee and Contingency line items were generally based on VDOT’s guidance on contingencies appropriate to the current development level of the projects.

2.8 STUDY WORK GROUP

A Study Work Group was formed to provide input into the development of safety improvement alternatives and selection of preferred alternatives. The Study Work Group consisted of representatives from the following groups:

- City of Staunton
- Augusta County
- City of Waynesboro
- VDOT Staunton District
- Central Shenandoah Planning District Commission (CSPDC)
- Shenandoah Valley Bicycle Coalition
- BRITE Transit
- Local law enforcement
- Study Team – WRA & MT

Three meetings were held with the SWG as follows:

- **Existing Conditions Review (12/14/2022):** The SWG met to discuss existing conditions safety and traffic data and begin the development of alternatives to be considered.
- **Concept Development (3/8/2023):** The SWG met to discuss the alternatives under consideration and select one to two alternatives per intersection to be refined and evaluated in more detail.
- **Selection of Preferred Alternative/Wrap Up (5/17/2023):** The study team met to review the findings from analysis of the alternatives and refined concept drawings and select a preferred alternative for each intersection.

In addition, the findings of the PSI study were presented by the study team at the SAWMPO Policy Board meeting on June 7, 2023.

Public outreach was not conducted as part of this study; however, if funding is pursued for the recommended improvements, public outreach should be performed especially for those locations where impacts to access and/or traffic patterns are under consideration.

3. N. COALTER STREET AT STATLER BOULEVARD/EDGEWOOD ROAD – CITY OF STAUNTON

3.1 EXISTING ROADWAY CONDITIONS AND GEOMETRY

N. Coalter Street at Statler Boulevard/Edgewood Road is a signalized four-legged intersection located in the City of Staunton. The northbound and southbound N. Coalter Street approaches include a left-turn lane and a shared through/right-turn lane. The westbound Statler Boulevard approach includes a left-turn lane, a through lane, and a right-turn lane. The eastbound Edgewood Road approach includes a left-turn lane, a through lane, and a short, channelized right-turn lane. Left turns along N. Coalter Street operate with protected-only phasing, while the left turns from Statler Boulevard and Edgewood Road operate with protected-permissive phasing. Marked, unsignalized pedestrian crosswalks are present across the south and west legs of the intersection.

The posted speed limit along both N. Colter Street and Statler Boulevard is 35 mph and the posted speed limit along Edgewood Road is 25 mph. At the intersection, Walgreens is located in the northeast quadrant and 7-11 is located in the southeast quadrant. Both businesses have two entrances located within 200 feet of the intersection.

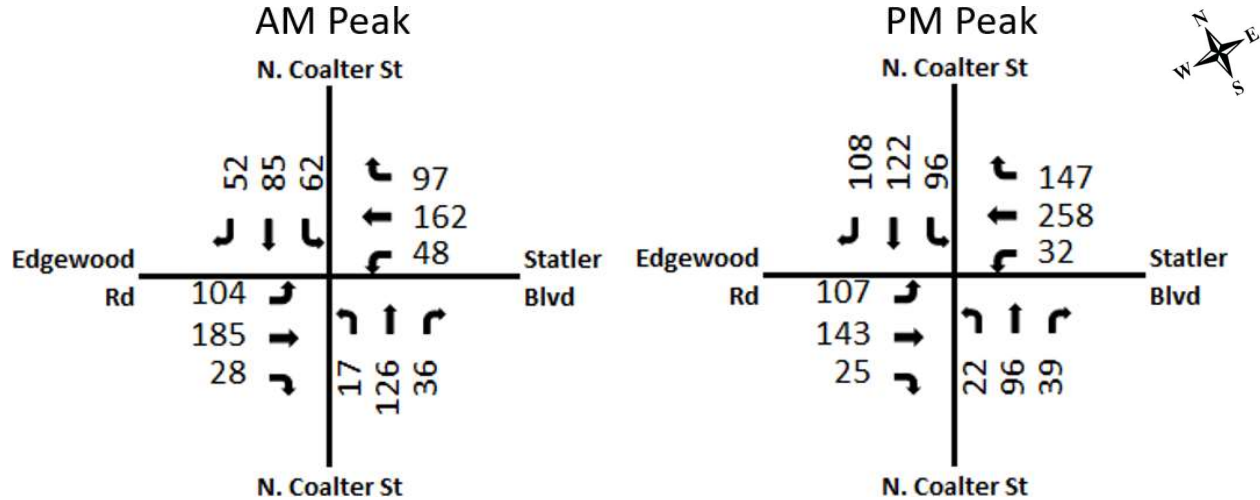
3.2 EXISTING PEAK HOUR OBSERVATIONS

Field visits to the intersection were conducted during the AM and PM peak hours under typical traffic conditions to review existing traffic operations, note maximum queue lengths, and make general observations related to the site. It was noted that queues were moderate during both peak periods, with some operational difficulties related to the entrances to 7-11 and Walgreens that are close to the intersection. Additionally, numerous drivers made late lane changes along westbound Statler Boulevard, which does not have any advance signage or pavement markings for a lane drop at N. Coalter Street.

3.3 PEAK HOUR TRAFFIC VOLUMES

Peak hour traffic volumes are depicted in **Figure 3-1**. Based on a review of the count data, the peak hours were identified as 7:45 AM to 8:45 AM and 4:30 PM to 5:30 PM. As shown, the predominant movements are eastbound on Edgewood Road and westbound on Statler Boulevard during both the AM and PM peak hours.

Figure 3-1: Existing (2022) Peak Hour Volumes



3.4 CRASH HISTORY

A total of 32 crashes were reported at the intersection between January 1, 2015 and August 31, 2022. No pedestrian or bicycle crashes were reported. **Figure 3-2** summarizes crashes by severity, type, pavement condition, and time of day. As shown, no fatal crashes were reported, and 19 crashes (59 percent) resulted in injuries. Of the 19 injury crashes, 17 (89 percent) were listed as “non-visible” injury crashes. Rear end crashes were the most common collision type accounting for 17 crashes (53 percent). Angle crashes were the next most common crash type with 13 crashes (41 percent). Six (46 percent) of the 13 angle crashes occurred at private/commercial driveways and 3 (23 percent) involved westbound left turns and eastbound through vehicles. Dry pavement crashes were the most common pavement condition accounting for 22 crashes (69 percent). Nine crashes (28 percent) occurred on wet pavement. The afternoon experienced the highest number of crashes with 18 (56 percent) crashes occurring between 12 PM and 6 PM including 5 crashes occurring between 1 PM and 2 PM.

The following is a summary of the crashes by type:

- 17 (53%) rear end crashes
 - 5 NB; 4 WB; 4 SB; 4 EB
- 13 (41%) angle crashes
 - 6 occurred at commercial driveways
 - 3 EB through/WB left crashes
 - 1 WB through/SB through crash
 - 1 NB through/WB through crash
 - 1 WB through/EB left crash
 - 1 SB through/private driveway crash
- 1 (3%) fixed object crash
- 1 (3%) other crash

Figure 3-2: Crashes by Type, Severity, Surface Condition, and Time of Day

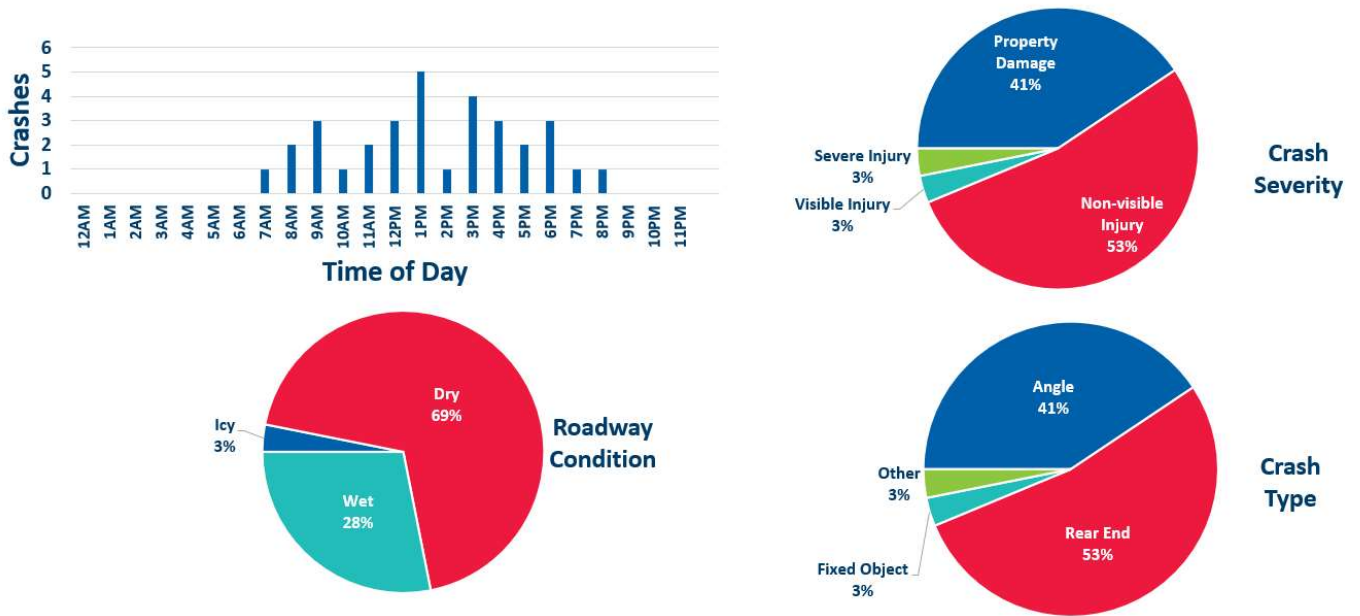


Figure 3-3 depicts the crash locations by type and severity within the study area.

Figure 3-3: Crashes by Type and Severity



3.5 EXISTING OPERATIONS

Table 3-1 summarizes levels of service and delays for intersection lane groups and overall intersection operations for the intersection of N. Coalter Street at Statler Boulevard under existing conditions. As shown, during the AM and PM peak hours, all intersection lane groups operate at LOS C or better, with delays of 30 seconds or less. Higher delays are experienced for the protected-only left turn lanes along N. Coalter Street.

Table 3-1: Existing Conditions Intersection Operations Summary

Peak Hour	Existing LOS Delay (seconds)										
	INT	NB N. Coalter		SB N. Coalter		EB Edgewood			WB Statler		
		L	T-R	L	T-R	L	T	R	L	T	R
AM	C 20	C 29	C 23	C 25	B 18	B 15	B 20	A 0	B 16	C 22	C 20
PM	C 22	C 30	C 26	C 27	C 24	B 15	B 16	A 0	B 15	C 22	B 20

3.6 OTHER RELEVANT PROJECTS

A SMART SCALE application was funded for pedestrian improvements including pedestrian upgrades at the N. Coalter Street at Statler Boulevard intersection. The design of the improvements will begin in 2023 and includes signalized pedestrian crossings on the west and south legs of the intersection (see **Figure 3-4**).

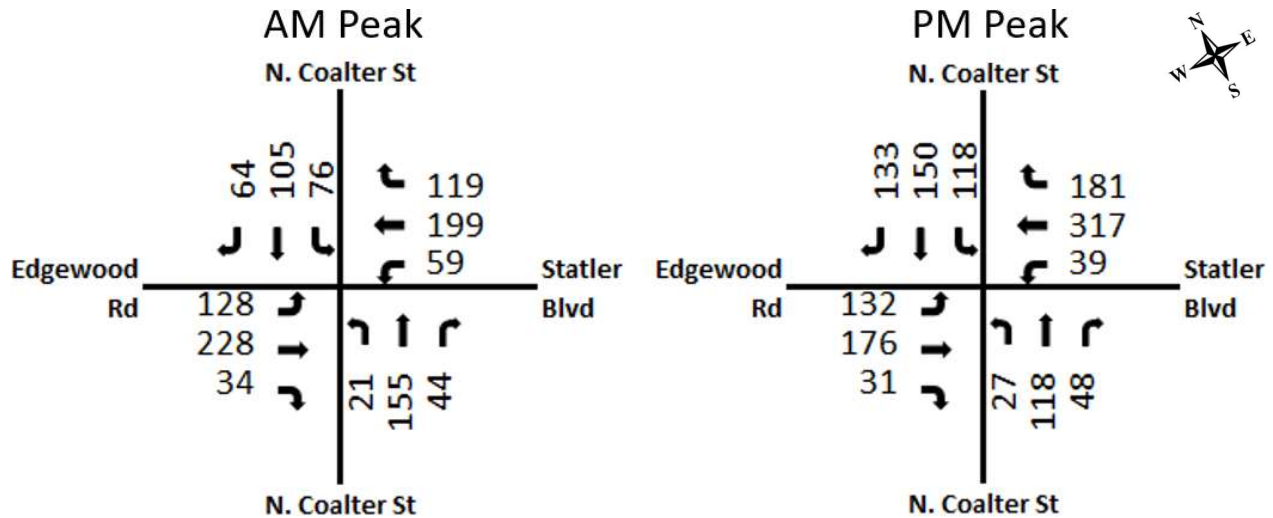
Figure 3-4: Funded SMART SCALE Pedestrian Improvements



3.7 FUTURE TRAFFIC VOLUMES

Future traffic volumes for the 2045 design year for the AM and PM peak hour are depicted in Figure 3-5.

Figure 3-5: 2045 Peak Hour Traffic Volumes



3.8 PROPOSED IMPROVEMENTS

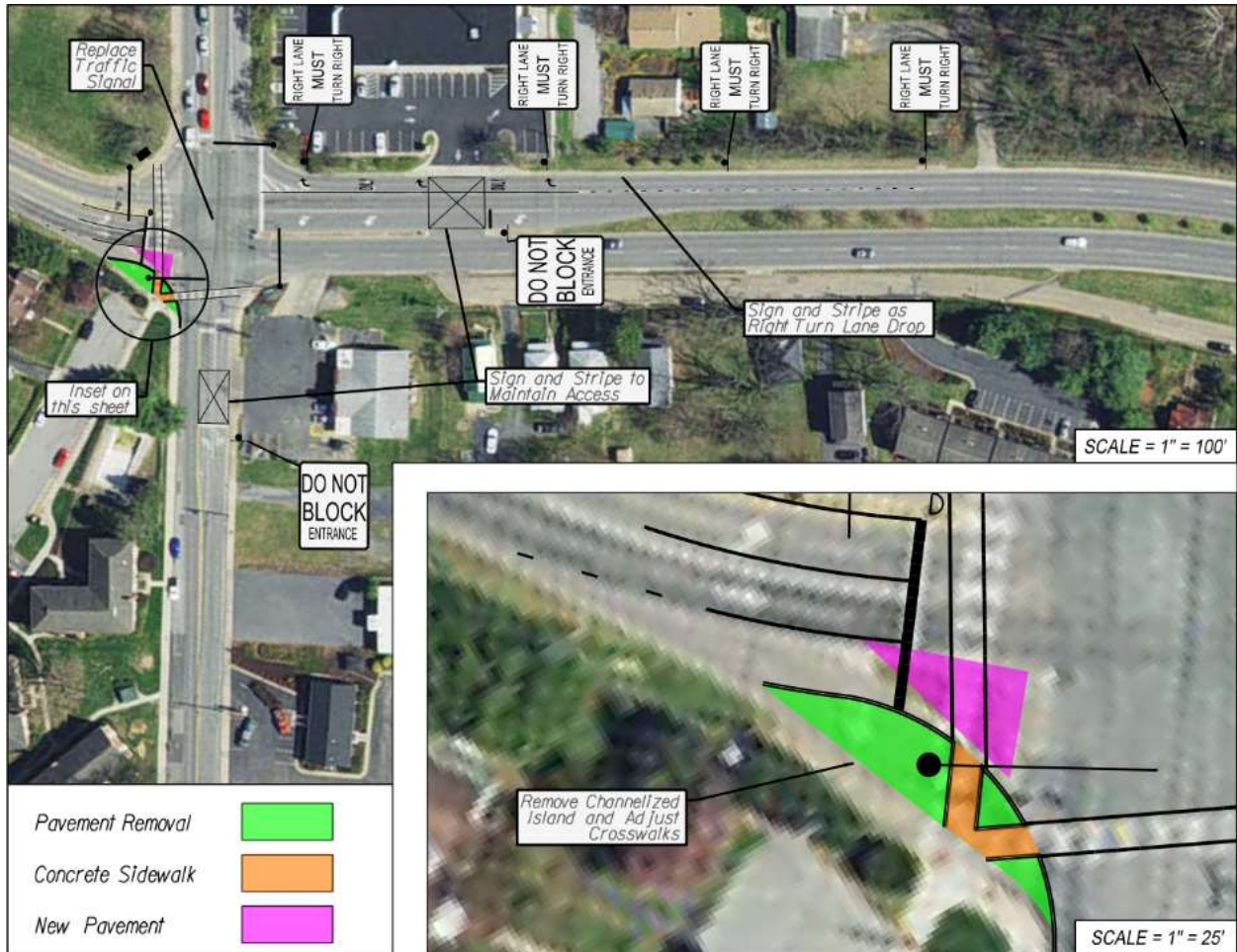
The following is a summary of the recommended improvements at the N. Coalter Street at Statler Boulevard intersection (see Figure 3-6) to address identified safety issues:

- Remove channelization for eastbound Edgewood Road right turn:** The existing channelizing island requires pedestrian to cross the free-flow right turn from eastbound Edgewood Road to southbound N. Coalter Street and increases the pedestrian crossing distance. The channelized right turn also increases the potential for rear end crashes involving right turns. Therefore, removal of the channelizing island is recommended in conjunction with the crosswalk and pedestrian signal improvements proposed on the west and south legs of the intersection.
- Convert eastbound and westbound protected-permissive left-turn phasing to flashing yellow arrow (FYA):** Installation of FYA for the eastbound and westbound left-turn phases has proven safety benefits in terms of reducing left-turn crashes and reducing congestion by allowing drivers to have the opportunity to turn as soon as the way is clear rather than having to wait for the next time the green arrow is displayed.
- Convert northbound and southbound protected-only left-turn phasing to flashing yellow arrow (FYA):** Installation of FYA for the northbound and southbound left-turn phases will reduce congestion by increasing the time period when left turns can turn.
- Overlap Phase on the eastbound Edgewood Road and westbound Statler Boulevard Approaches:** Installation of an overlap phase for the eastbound and westbound

approaches will allow the right turns to operate with the mainline left-turn phases resulting in a more efficient operation especially for the heavy westbound right-turn volume.

- **Install high visibility signal backplates (HVSB):** HVSB are recommended on all four approaches as a low-cost and proactive safety treatment to improve the visibility of traffic signal indications
- **Increase yellow and red clearance times in accordance with best practices:** Yellow change and red clearance calculations in accordance with VDOT TE 306.1 – Yellow Change Intervals and Red Clearance Intervals are included in **Appendix E**. Modifying the yellow change and red clearance intervals will reduce the potential for rear end and angle crashes at the intersection.
- **Install “DO NOT BLOCK” signing:** Based on field observations, queues on the northbound and westbound approaches to the intersection extend through the driveways serving the 7-11 on the southeast corner and the Walgreens on the northeast corner. Installation of DO NOT BLOCK ENTRANCE signing is proposed to reduce the potential for crashes at these entrances.
- **Lane Drop Striping on the Westbound Statler Boulevard Approach:** The westbound Statler Boulevard approach includes a right-turn lane drop onto to northbound N. Coalter Street; however, signing and pavement markings on the approach do not adequately warn motorists of this condition. Additional signing and striping is proposed to provide motorists with advance notice of the lane drop condition and decrease the potential for last minute lane changes that can contribute to crashes.
- **Full traffic signal replacement:** In conjunction with the proposed signal-related improvements including the signal phasing changes and HVSB, a full signal replacement is proposed to replace the existing span wire traffic signal.

Figure 3-6: N. Coalter Street at Statler Boulevard Recommended Improvements



3.9 2045 NO BUILD AND BUILD CONDITIONS ANALYSIS

Table 3-2 summarizes levels of service and delays for intersection approaches and overall intersection operations for the intersection of N. Coalter Street at Statler Boulevard under 2045 No Build and 2045 Build conditions. No changes to geometry or traffic operations were assumed for the 2045 No Build scenario. Recommended improvements summarized in Section 3.8 were incorporated into the 2045 Build scenario. As shown, during the AM and PM peak hours, all intersection approaches are projected to operate at LOS C or better with delays of 30 seconds or less for both 2045 No Build and 2045 Build conditions. Delays are projected to increase by up to 4 seconds per vehicle under Build conditions compared to No Build conditions, primarily due to proposed changes to the yellow change and red clearance intervals.

Table 3-2: 2045 No Build and Build Conditions Intersection Operations Summary

Option	LOS Delay (seconds)									
	INT		NB N. Coalter		SB N. Coalter		EB Edgewood		WB Statler	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
2045 No Build	C 22	C 24	C 25	C 28	C 22	C 29	B 20	B 18	C 22	C 23
2045 Build	C 25	C 26	C 29	C 30	C 22	C 29	C 24	C 22	C 25	C 26

3.10 COST ESTIMATE

Table 3-3 summarizes the total project costs for the recommended improvements.

Table 3-3: Cost Estimate

Phase	Improvements
Construction	\$563,695
Preliminary Engineering	\$169,109
R/W	\$0
Utility Relocations	\$6,600
Contingency	\$258,791
Total	\$998,000

4. CHURCHVILLE AVENUE AT THORNROSE AVENUE – CITY OF STAUNTON

4.1 EXISTING ROADWAY CONDITIONS AND GEOMETRY

Churchville Avenue at Thornrose Avenue is an unsignalized three-legged intersection located in the City of Staunton. The northbound Churchville Avenue approach operates under free-flowing conditions and includes a left-turn lane and a through lane. The southbound Churchville Avenue approach operates under free-flowing conditions and includes a through lane and a channelized right-turn lane. The eastbound Thornrose Avenue approach operates under stop control and includes a left turn lane and a channelized right-turn lane. Marked pedestrian crosswalks are present across the west leg of the intersection.

Churchville Avenue at Constitution Drive is an unsignalized three-legged intersection located immediately north of the Thornrose Avenue intersection which serves as an entrance to Gypsy Hill Park. The northbound Churchville Avenue approach operates under free-flowing conditions and includes a left-turn lane and a through lane. The southbound Churchville Avenue approach operates under free-flowing conditions and includes a single share through/right-turn lane. The eastbound Constitution Drive approach operates under stop control and includes a single shared lane for both left and right turns. There are no pedestrian accommodations at this intersection.

The posted speed limit along both Churchville Avenue and Thornrose Avenue is 25 mph, and the posted speed limit along Constitution Drive is 15 mph. At the intersection, the Stonewall Brigade Band Bandroom is located along the west side of Churchville Avenue between Thornrose Avenue and Constitution Drive with head-in parking spaces located adjacent to the channelized southbound right-turn lane. Additionally the intersection is located in a horizontal curve along Churchville Avenue.

For the purposes of this study, Churchville Avenue is assumed to run in a north-south direction and Thornrose Avenue and Constitution Drive are assumed to run in an east-west direction.

4.2 EXISTING PEAK HOUR OBSERVATIONS

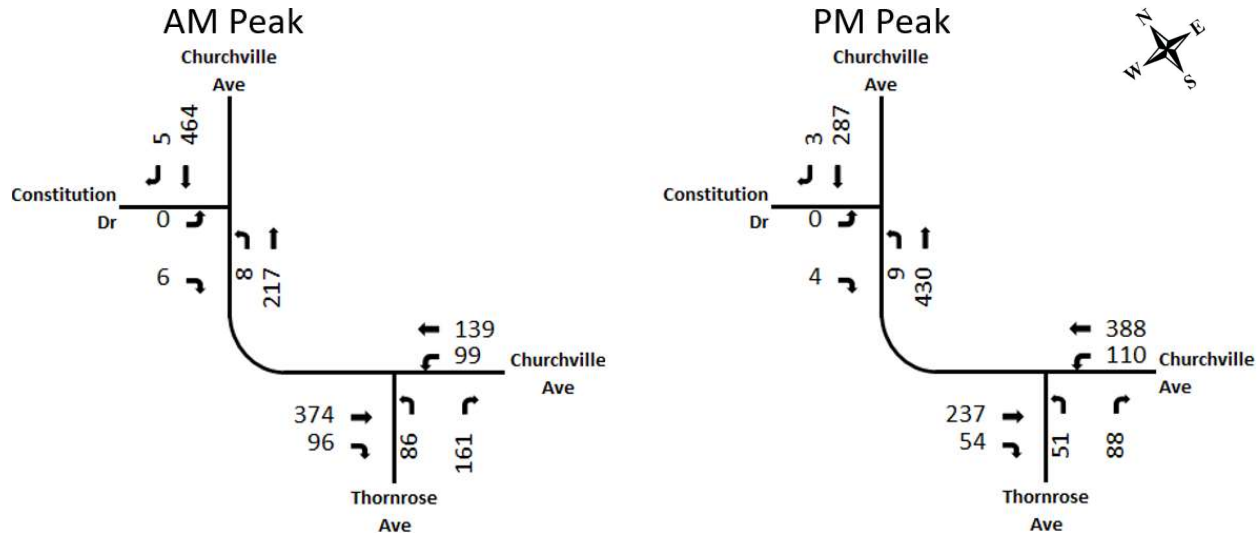
Field visits to the intersection were conducted during the AM and PM peak hours under typical traffic conditions to review existing traffic operations, note maximum queue lengths, and make general observations related to the site. It was noted that queues along Thornrose Avenue and Constitution Drive were generally short during both peak periods. Drivers travelling from southbound Churchville Avenue to westbound Thornrose Avenue traverse the channelized right turn at full speed, including the pedestrian crosswalk at the intersection. Additionally, motorists on Thornrose Avenue often have difficulty determining whether vehicles traveling south of Constitution Drive are going to travel through the intersection or turn right on Thornrose Avenue.

4.3 PEAK HOUR TRAFFIC VOLUMES

Peak hour traffic volumes are depicted in **Figure 4-1**. Based on a review of the count data, the peak hours were identified as 7:30 AM to 8:30 AM and 4:15 PM to 5:15 PM. As shown, the

predominant movements are southbound on Churchville Avenue in the AM peak hour and northbound on Churchville Avenue during the PM peak hour.

Figure 4-1: Existing (2022) Peak Hour Volumes



4.4 CRASH HISTORY

A total of 20 crashes were reported at the intersection between January 1, 2015 and August 31, 2022. No fatal crashes were reported, and 14 crashes (70 percent) resulted in injuries. Angle crashes were the most common collision type accounting for 8 crashes (40 percent). Rear end crashes and fixed object crashes each accounted for 25 percent of crashes with 5 crashes each. The PM peak period experienced the highest number of crashes between 2 PM and 7 PM with 11 crashes (55 percent) of crashes occurring during this five-hour period. **Figure 4-2** summarizes the study area crashes by collision type, severity and time of day while **Figure 4-3** depicts the crash locations by type and severity within the study area. No pedestrian or bicycle crashes were reported. The following is a summary of the crashes by type:

- 8 (40%) angle crashes
 - 3 EB Thornrose Ave left/NB Churchville Ave left crashes
 - 2 SB Churchville Ave through/EB Thornrose Ave left crashes
 - 1 SB Churchville Ave through/EB Thornrose Ave right crash
 - 1 SB Churchville Ave through/NB Churchville Ave left crash
- 5 (25%) rear end crashes
- 5 (25%) fixed object crashes
 - 4 SB Churchville Ave struck utility pole
- 2 (10%) sideswipe crashes

Figure 4-2: Crashes by Time of Day, Collision Type, and Severity

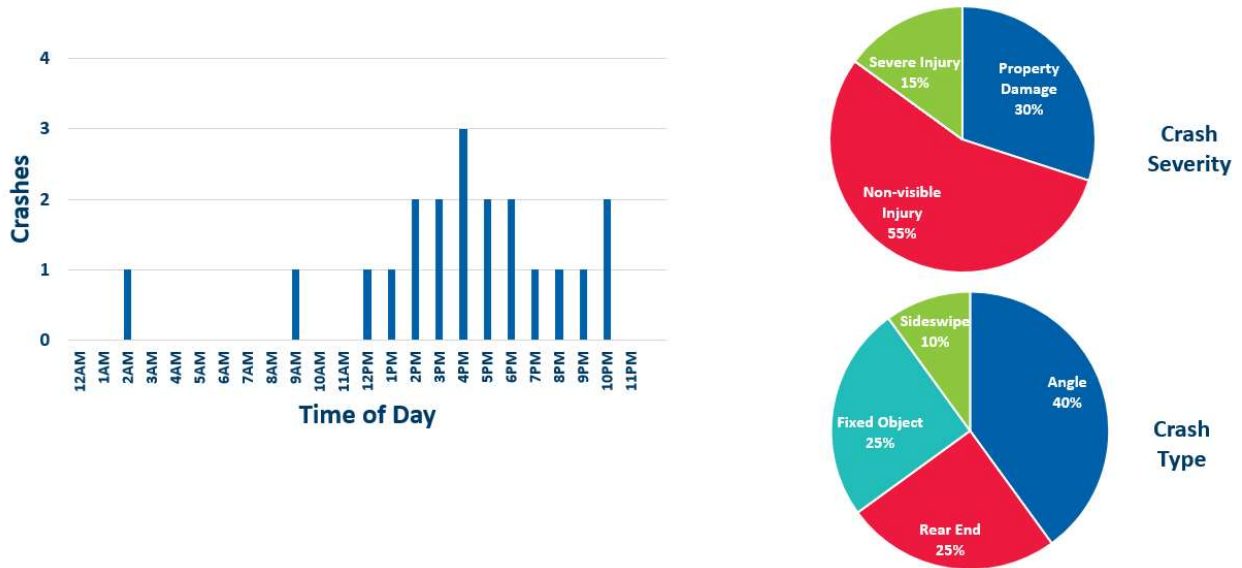
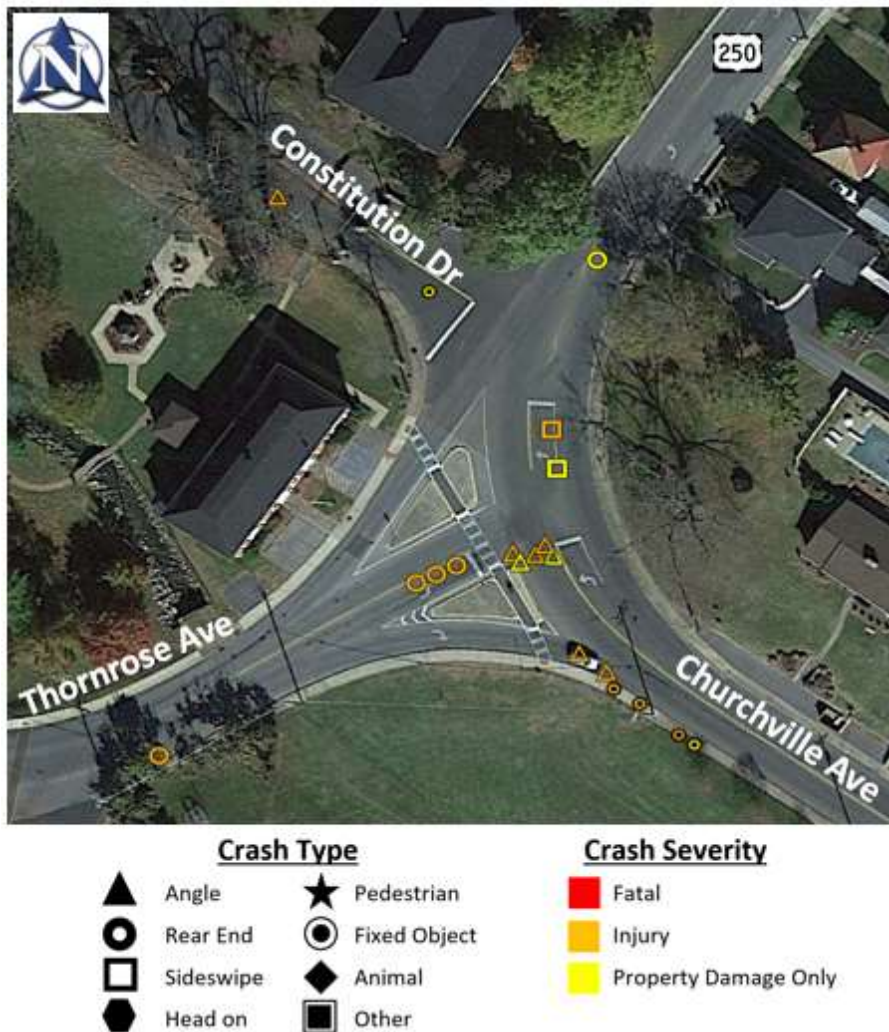


Figure 4-3: Crashes by Type and Severity



4.5 EXISTING OPERATIONS

Table 4-1 summarizes levels of service and delays for intersection lane groups and overall intersection operations for the intersections of Churchville Avenue at both Thornrose Avenue and Constitution Drive under existing conditions. As shown, during the AM and PM peak hours all intersection lane groups operate at LOS C or better, with delays of less than 25 seconds.

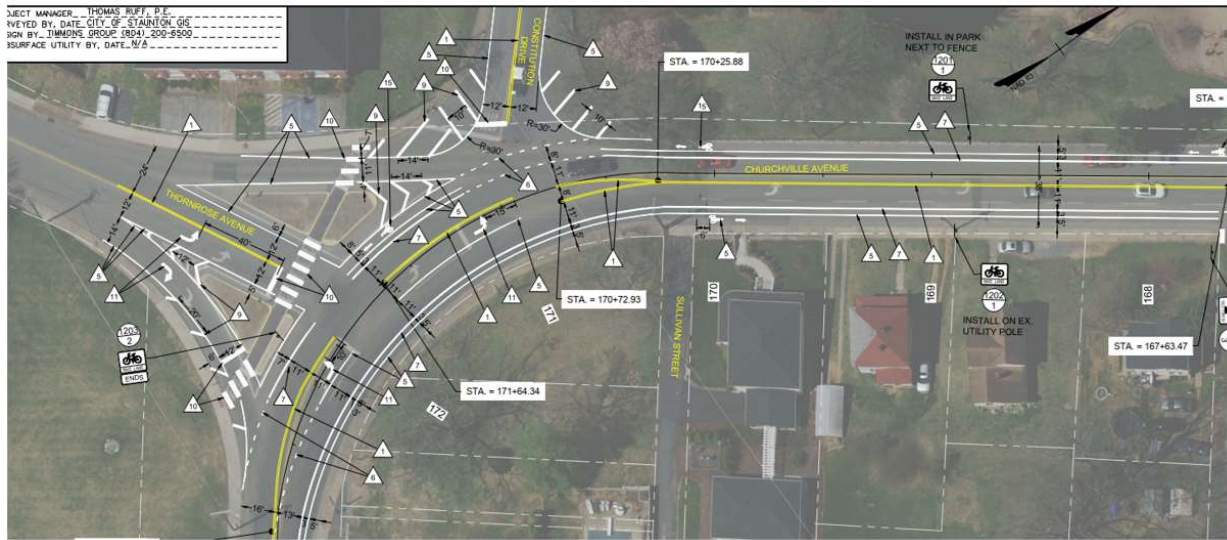
Table 4-1: Existing Conditions Intersection Operations Summary

Peak Hour	LOS Delay (seconds)						
	Constitution Dr			Thornrose Ave			
	NB Churchville		EB Constitution	NB Churchville		EB Thornrose	
	L	T	LTR	L	T	L	R
AM	A 8	- -	B 11	A 9	- -	C 22	B 14
PM	A 8	- -	A 10	A 8	- -	C 21	B 10

4.6 OTHER RELEVANT PROJECTS

The Churchville Avenue Bike Plan proposes the restriping of Churchville Avenue in the vicinity of the Thornrose Avenue intersection to accommodate bike lanes along Churchville Avenue (see **Figure 4-4**). The proposed improvements under consideration as part of this study are intended to be compatible with the proposed bike lanes along Churchville Avenue.

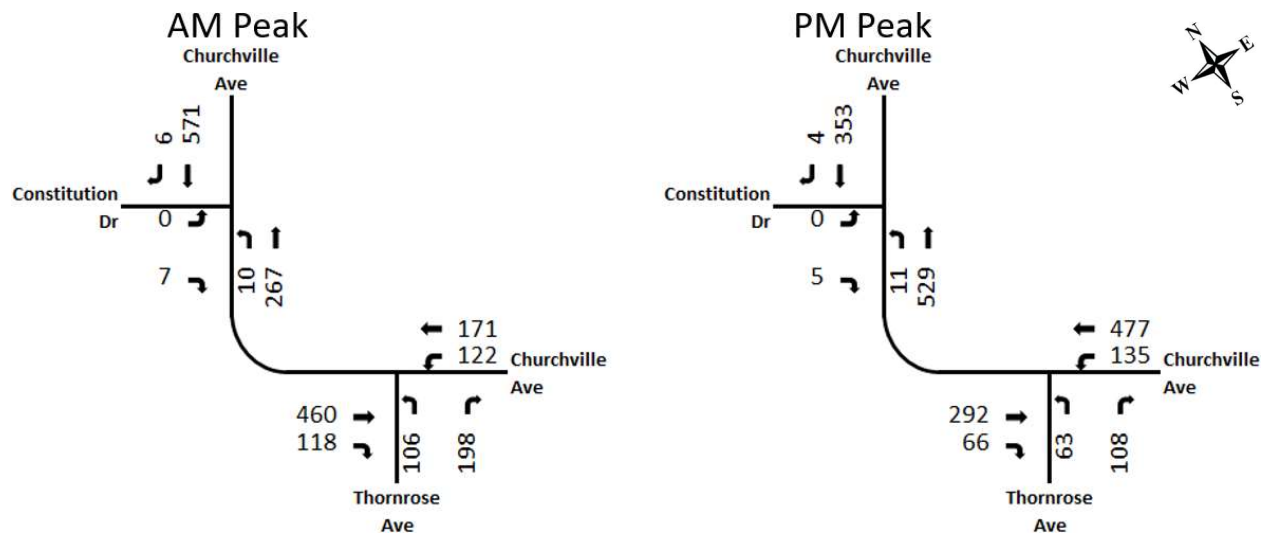
Figure 4-4: Churchville Avenue Bike Plan Improvements at Thornrose Avenue



4.7 FUTURE TRAFFIC VOLUMES

Future traffic volumes for the 2045 design year for the AM and PM peak hour are depicted in Figure 4-5.

Figure 4-5: 2045 Peak Hour Traffic Volumes



4.8 IMPROVEMENT ALTERNATIVES

Both short-term and long-term improvement alternatives were considered for the Churchville Avenue at Thornrose Avenue intersection.

Remove right-turn channelization to/from Thornrose Avenue (Short-Term Improvement):

As shown in **Figure 4-6**, this improvement alternative would remove the channelizing free-flow right-turn movements that encourage higher speed right-turn movements and also create confusion for motorists on Thornrose Avenue attempting to turn onto Churchville Avenue. This improvement will also reduce the pedestrian crossing distances and reduce conflict points for both vehicles and pedestrians. Impacts to the Stonewall Brigade Bandroom parking would need to be considered as part of more detailed studies.

Roundabout Option 1 (Long-Term Improvement): As shown in **Figure 4-7**, this improvement alternative would provide a roundabout at the intersection thereby minimizing conflict points for both vehicles and pedestrians and reduce speeds at the intersection. Constitution Drive would become a right-in/right-out intersection due to the intersection's proximity to the roundabout; however, access to Constitution Drive and Gypsy Park is also provided via Thornrose Avenue. Additionally, motorists exiting Constitution Drive wanting to make a left turn may use the roundabout to head northbound on Churchville Drive. Similar to the short-term improvements, impacts to the Stonewall Brigade Bandroom parking would need to be considered as part of more detailed studies given the parking lot entrance location with the proposed roundabout. With the exception of widening in the ShenanArts property on the southwest corner of the intersection, the roundabout footprint generally can be accommodated within the existing roadway footprint. AutoTurn runs depicting the turning paths for a WB-67 are depicted in **Figure 4-8**.

Roundabout Option 2 (Long-Term Improvement): As shown in **Figure 4-9**, this improvement alternative would provide an oblong roundabout at the intersection and incorporate the Constitution Drive approach in the roundabout. However, based on AutoTurn runs, this alternative does not accommodate large truck movements without significant overtracking over the truck apron (see **Figure 4-10**) and was therefore not considered further.

Figure 4-6: Churchville Avenue at Thornrose Avenue Short-Term Improvements



Figure 4-7: Churchville Avenue at Thornrose Avenue Roundabout Option 1 (Long-Term)



Figure 4-8: Churchville Avenue at Thornrose Avenue Roundabout Option 1 (Turning Paths)



Figure 4-9: Churchville Avenue at Thornrose Avenue Roundabout Option 2 (Long-Term)



Figure 4-10: Churchville Avenue at Thornrose Avenue Roundabout Option 2 (Turning Paths)



4.9 2045 NO BUILD AND BUILD CONDITIONS ANALYSIS

Table 4-2 summarizes levels of service and delays for intersection lane groups and overall intersection operations for the intersections of Churchville Avenue at both Thornrose Avenue and Constitution Drive under 2045 No Build and 2045 Build conditions. No changes to geometry or traffic operations were assumed for the 2045 No Build scenario. Recommended improvements detailed in Section 4.8 were incorporated for the 2045 Build scenarios for the short-term and long-term (Roundabout Option 1) improvements. As shown, during the AM and PM peak hours under 2045 No Build conditions, all intersection approaches are projected to operate at LOS B or better, with delays of less than 15 seconds, except for the eastbound Thornrose Avenue approach which is projected to degrade to LOS E in the AM peak hour and LOS D in the PM peak hour.

The short-term improvements are projected to operate similarly to the current intersection under No Build conditions. The long-term (Roundabout Option 1) improvements are projected to improve intersection operations under 2045 Build conditions, with all approaches projected to operate at LOS B or better with less than 15 seconds of delay.

Table 4-2: 2045 No Build and Build Conditions Intersection Operations Summary

Option	LOS Delay (seconds)									
	INT		NB Churchville		SB Churchville		EB Constitution		EB Thornrose	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
2045 No Build	-	-	A*	A*	-	-	B	B	E***	D***
	-	-	9	8	-	-	13	10	36	31
2045 Short Term	-	-	A*	A*	-	-	B	B	E***	D***
	-	-	9	8	-	-	13	10	36	31
2045 Long Term (Roundabout)	A	A	A	A	A	A	B**	B**	A	A
	7	6	5	7	7	5	13	10	7	5

*LOS and Delay results for NB left-turn movement only

**Constitution Dr operates as a stop-controlled right-in, right-out intersection

*** LOS and Delay results for EB left-turn movement only

4.10 COST ESTIMATE

Table 4-3 summarizes the total project costs for the recommended short-term improvements and recommended long-term improvements, respectively.

Table 4-3: Cost Estimate

Phase	Short-Term	Long-Term (Roundabout Option 1)
Construction	\$91,583	\$1,875,500
Preliminary Engineering	\$27,475	\$562,650
R/W	\$0	\$20,000
Utility Relocations	\$0	\$33,638
Contingency	\$50,004	\$1,121,305
Total	\$169,000	\$3,613,000

5. LAUREL HILL ROAD AT I-81 EXIT 227 NORTHBOUND RAMPS – AUGUSTA COUNTY

5.1 EXISTING ROADWAY CONDITIONS AND GEOMETRY

Laurel Hill Road at the I-81 Exit 227 northbound ramps is an unsignalized four-legged intersection in Augusta County. The eastbound Laurel Hill Road approach operates under free-flowing conditions and includes a left-turn lane and two through lanes. The westbound Laurel Hill Road approach operates under free-flowing conditions and includes two through lanes and a channelized right-turn lane. The northbound I-81 Exit 227 Off-Ramp approach operates under stop control and includes a shared left-turn/through lane and a channelized right-turn lane which operates under yield control and with an acceleration lane. The north leg of the intersection is the on-ramp to I-81 northbound. There are no pedestrian accommodations at the intersection.

The posted speed limit along Laurel Hill Road is 45 mph. The I-81 Exit 227 northbound off ramp has a posted advisory speed of 40 mph.

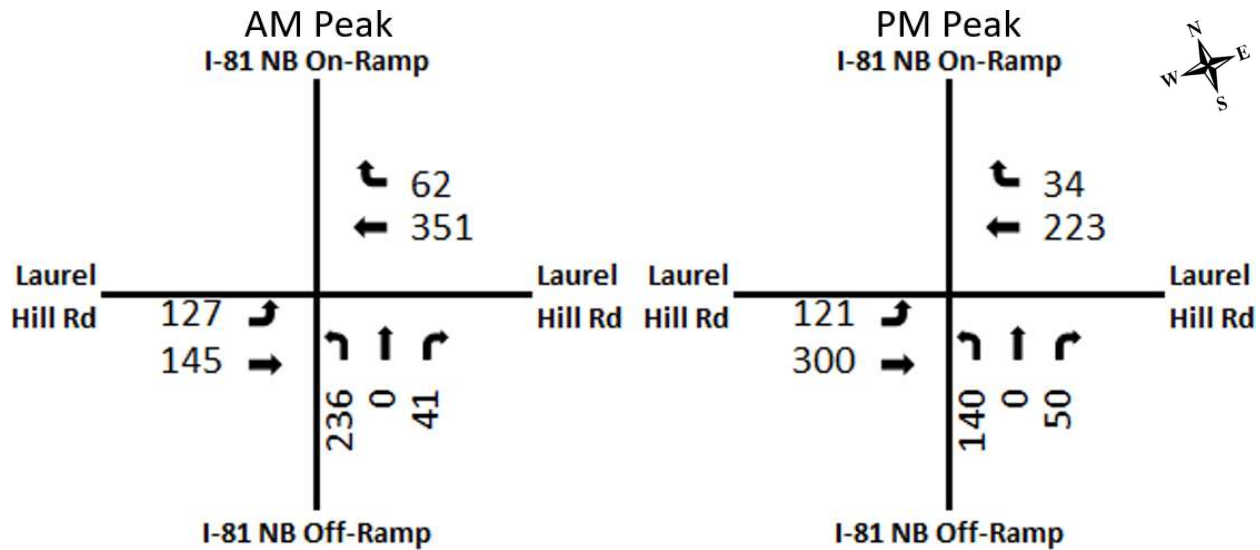
5.2 EXISTING PEAK HOUR OBSERVATIONS

Field visits to the intersection were conducted during the AM and PM peak hours under typical traffic conditions to review existing traffic operations, note maximum queue lengths, and make general observations related to the site. It was noted that queues along the Exit 227 northbound off-ramp periodically extended to approximately 200 feet. Several times, multiple vehicles were located in the crossover along Laurel Hill Road executing left turns from both eastbound Laurel Hill Road and the I-81 Exit 227 northbound off-ramp, with visibility becoming limited when larger vehicles were present.

5.3 PEAK HOUR TRAFFIC VOLUMES

Peak hour traffic volumes are depicted in **Figure 5-1**. Based on a review of the count data, the peak hours were identified as 7:00 AM to 8:00 AM and 4:00 PM to 5:00 PM. As shown, the predominant movements are westbound on Laurel Hill Road and northbound along the I-81 Exit 227 off-ramp in the AM peak hour and eastbound on Laurel Hill Road during the PM peak hour.

Figure 5-1: Existing (2022) Peak Hour Volumes



5.4 CRASH HISTORY

A total of 24 crashes were reported at the intersection between January 1, 2015 and August 31, 2022. No fatal crashes were reported, and 9 crashes (38 percent) resulted in injuries. Angle crashes were the most common collision type accounting for 22 crashes (92 percent). Of the 22 angle crashes, 14 (64 percent) involved eastbound through and northbound left-turning vehicles. Eight (33 percent) crashes occurred during darkness. Fourteen (58 percent) crashes occurred during the PM peak period between 3 PM and 8 PM. **Figure 5-2** summarizes the study area crashes by collision type, severity, light condition, and time of day while **Figure 5-3** depicts the crash locations by type and severity within the study area. No pedestrian or bicycle crashes were reported. The following is a summary of the crashes by type:

- 22 (92%) angle crashes
 - 14 EB through/NB left crashes
 - 4 WB through/NB left crashes
 - 2 EB left/WB through crashes
 - 1 WB U-turn/EB through crash
 - 1 WB left/WB through crash
- 2 (8%) rear end crashes

Figure 5-2: Crashes by Time of Day, Lighting Condition, Collision Type and Severity

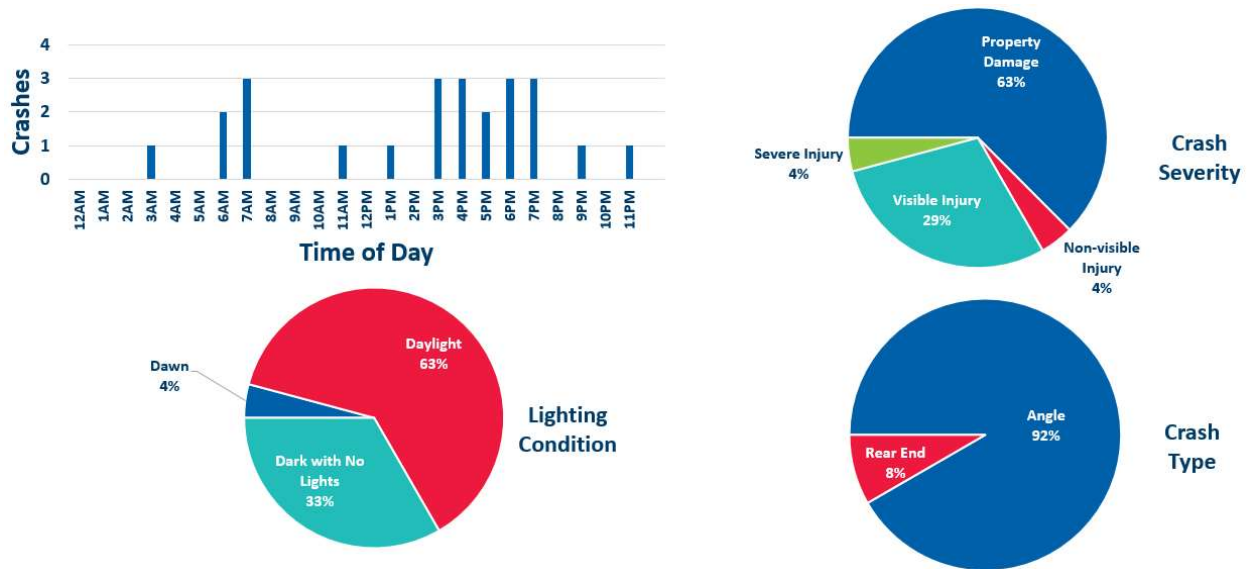
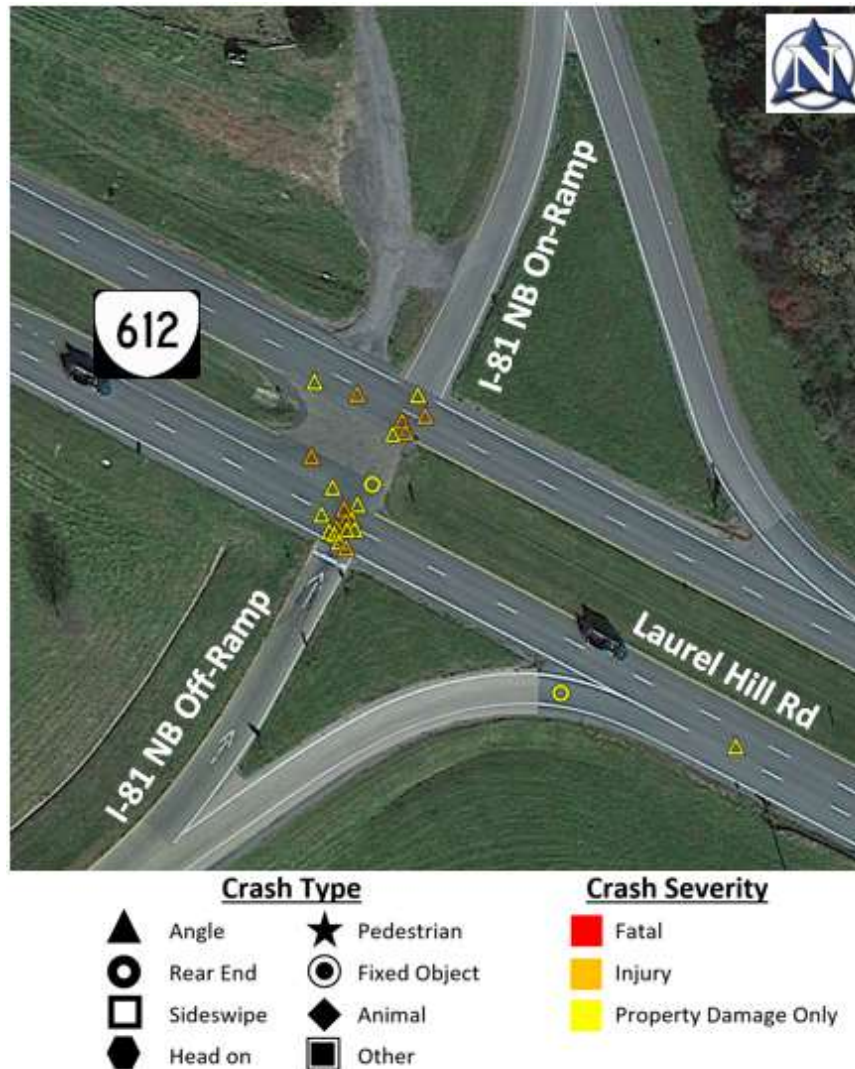


Figure 5-3: Crashes by Type and Severity



5.5 EXISTING OPERATIONS

Table 5-1 summarizes levels of service and delays for intersection lane groups and overall intersection operations for the intersection of Laurel Hill Road at the I-81 Exit 227 northbound off-ramp under existing conditions. As shown, during the AM peak hour the I-81 Exit 227 northbound off-ramp operates at LOS D, although delays are less than 30 seconds. The off-ramp operates at LOS C in the PM peak hour. All other movements at the intersection operate at LOS A under existing conditions.

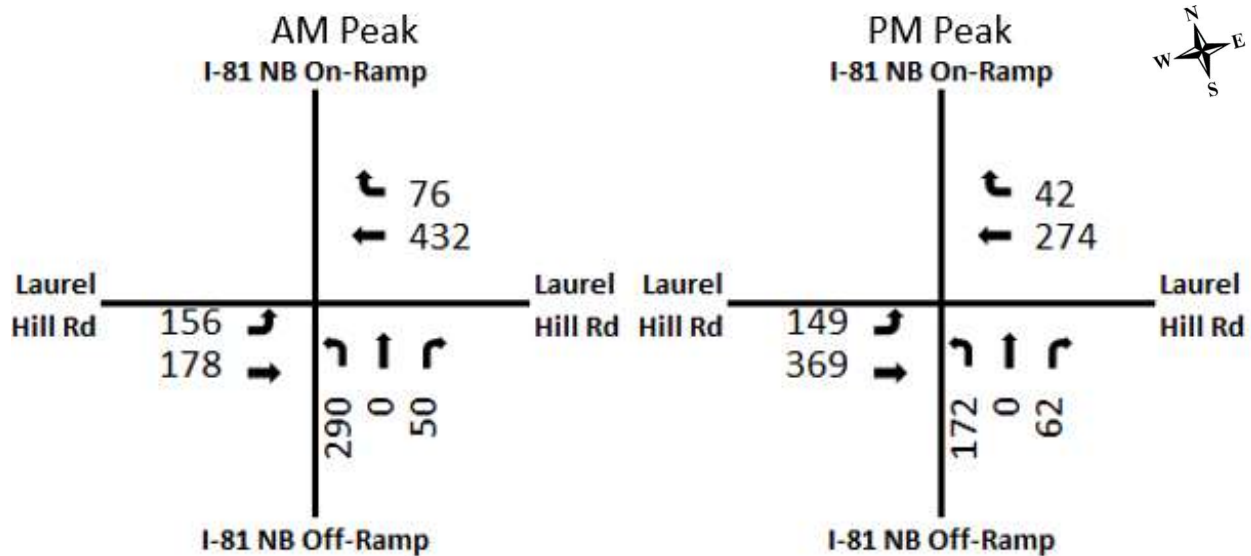
Table 5-1: Existing Conditions Intersection Operations Summary

Peak Hour	LOS Delay (seconds)					
	EB Laurel Hill		WB Laurel Hill		NB I-81 Off-Ramp	
	L	T	T	R	L	R
AM	A 9	-	-	-	D 27	A 0
PM	A 8	-	-	-	C 22	A 0

5.6 FUTURE TRAFFIC VOLUMES

Future traffic volumes for the 2045 design year for the AM and PM peak hour are depicted in Figure 5-4.

Figure 5-4: 2045 Peak Hour Traffic Volumes



5.7 PROPOSED IMPROVEMENTS

Various intersection improvement alternatives were considered that retained the existing stop-controlled intersection along Laurel Hill Road at the I-81 Exit 227 Northbound Ramps; however,

none would meaningfully reduce the potential for the severe angle crash pattern involving eastbound Laurel Hill Road through vehicles and left turns from the I-81 northbound off-ramp. A roundabout was considered that would significantly reduce the potential for crashes at the intersection. As shown in **Figure 5-5**, a roundabout would include dedicated lanes on the eastbound Laurel Hill Road approach for through traffic on eastbound Laurel Hill Road and for left-turn traffic to northbound I-81. All other approaches to the roundabout would have single lanes. The following is a summary of the advantages of the roundabout concept:

- Reduces conflict points from nine (9) to four (4) conflict points (56 percent reduction)
- Eliminates all crossing conflict points which result in the most severe crash types
- Reduces travel speeds thereby reducing crash severity
- Roundabout can be accommodated within the existing right of way
- Eliminates the merge along eastbound Laurel Hill Road with the northbound right turn from the I-81 northbound off ramp

In conjunction with the proposed roundabout, lighting is recommended at the roundabout due to the high percentage (33 percent) of crashes occurring during darkness.

Figure 5-5: Laurel Hill Road and I-81 Exit 227 Northbound Ramps Proposed Roundabout



5.8 2045 NO BUILD AND BUILD CONDITIONS ANALYSIS

Table 5-2 summarizes levels of service and delays for intersection lane groups and overall intersection operations for the intersection of Laurel Hill Road at the I-81 Exit 227 northbound off-ramp under 2045 No Build and 2045 Build conditions. No changes to geometry or traffic operations were assumed for the 2045 No Build scenario. The proposed roundabout improvements detailed in Section 5.7 were incorporated for the 2045 Build scenario.

As shown under 2045 No Build conditions, the I-81 Exit 227 northbound off-ramp is projected to operate at LOS F in the AM peak hour and at LOS E in the PM peak hour, more than doubling the delays in the AM peak hour compared to existing conditions. Under 2045 Build conditions, all intersection movements are projected to operate at LOS B or better, with delays of less than 15 seconds. Specifically, the proposed improvements are projected to decrease delays for the I-81 Exit 227 northbound off-ramp by more than 60 seconds in the AM peak hour and by approximately 30 seconds in the PM peak hour.

Table 5-2: 2045 No Build and Build Conditions Intersection Operations Summary

Option	LOS Delay (seconds)							
	INT		EB Laurel Hill		WB Laurel Hill		NB I-81 Off-Ramp	
	AM	PM	AM	PM	AM	PM	AM	PM
2045 No Build	-	-	A*	A*	-	-	F**	E**
	-	-	10	9	-	-	71	36
2045 Long-Term Option Roundabout	A	A	A	A	B	A	A	A
	8	5	4	4	12	7	7	7

*LOS and Delay results for EB left-turn movement only

**LOS and Delay results for NB left-turn movement only

5.9 COST ESTIMATE

Table 5-3 summarizes the total project costs for the recommended improvements.

Table 5-3: Cost Estimate

Phase	Improvements
Construction	\$2,471,000
Preliminary Engineering	\$741,300
R/W	\$0
Utility Relocations	\$0
Contingency	\$1,284,920
Total	\$4,497,000

6. US 11 AT LAUREL HILL ROAD/QUICK'S MILL ROAD – AUGUSTA COUNTY

6.1 EXISTING ROADWAY CONDITIONS AND GEOMETRY

US 11 at Laurel Hill Road/Quick's Mill Road is a signalized four-legged intersection in Augusta County. The northbound US 11 approach includes a left-turn lane, two through lanes, and a right-turn lane. The southbound US 11 approach includes a left-turn lane, a through lane, and a shared through/right-turn lane. The westbound Laurel Hill Road approach and the eastbound Quick's Mill Road approach both include a left-turn lane, a through lane, and a right-turn lane. Left turns along all four intersection approaches operate with flashing yellow arrow protected-permissive phasing. Marked, signalized pedestrian-actuated crosswalks are present across all four legs of the intersection.

The posted speed limit along both US 11 and Laurel Hill Road is 40 mph. The posted speed limit along Quick's Mill Road is 25 mph. At the intersection, Walgreens is located in the northeast quadrant, The Wave Car Wash is located in the southeast quadrant, and Burger King is located in the southwest quadrant. Both Walgreens and The Wave Car Wash have two entrances within 300 feet of the intersection along Laurel Hill Road. Additionally, the shopping center in the northeast quadrant of the intersection has three entrances along US 11 between Laurel Hill Road and Dunsmore Road, and one entrance along Dunsmore Road near the Post Office.

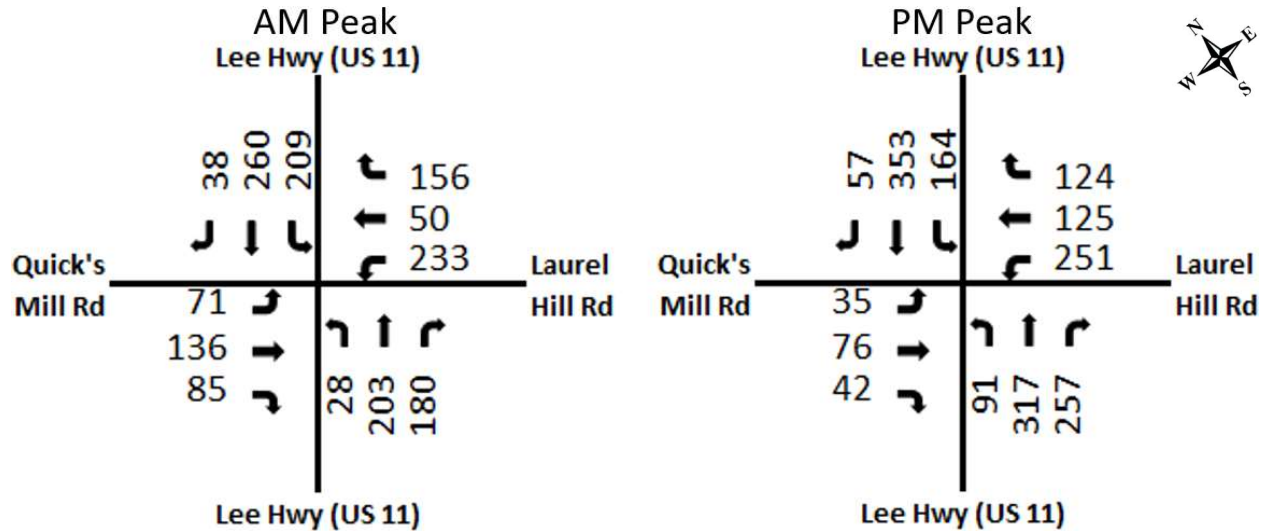
6.2 EXISTING PEAK HOUR OBSERVATIONS

Field visits to the intersection were conducted during the AM and PM peak hours under typical traffic conditions to review existing traffic operations, note maximum queue lengths, and make general observations related to the site. It was noted that queues were moderate during the AM peak hour and longer during the PM peak hour. It was also noted that along northbound US 11, the majority of drivers utilize the inside through lane at the signalized intersection with Laurel Hill Road to avoid right-turning vehicles entering the shopping center and to be positioned for the downstream lane drop located approximately 1650 feet north of Laurel Hill Road. Additionally, numerous drivers made late lane changes along westbound Laurel Hill Road, which does not have any advance signage or pavement markings for a lane drop at US 11.

6.3 PEAK HOUR TRAFFIC VOLUMES

Peak hour traffic volumes are depicted in **Figure 6-1**. Based on a review of the count data, the peak hours were identified as 7:15 AM to 8:15 AM and 4:30 PM to 5:30 PM. As shown, the predominant movements are southbound on US 11 and westbound on Laurel Hill Road the AM peak hour and both northbound and southbound US 11 along with westbound Laurel Hill Road in the PM peak hour.

Figure 6-1: Existing (2022) Peak Hour Volumes



6.4 CRASH HISTORY

A total of 67 crashes were reported in the study area between January 1, 2015 and August 31, 2022. The crash study area comprises the three intersections of US 11 at Laurel Hill Road/Quick's Mill Road (21 crashes), Laurel Hill Road at Dunsmore Road (6 crashes), and US 11 at Dunsmore Road (5 crashes). A total of 4 pedestrian crashes occurred within the study area with three resulting in injuries and one resulting in a fatality. The one fatal crash was reported involving an intoxicated pedestrian being struck by an intoxicated driver while trying to cross Laurel Hill Road at night. Twenty-four crashes (36 percent) resulted in non-fatal injuries. At the intersection of US 11 and Laurel Hill Road the most common crash type was angle crashes with 16 crashes (76 percent) including 4 crashes involving westbound through vehicles and eastbound left-turning vehicles. Of the other angle crashes, 3 involved northbound right-turning vehicles and southbound left-turning vehicles, and 3 angle crashes involved northbound left-turning vehicles and southbound through vehicles. A pedestrian crash occurred at the intersection of US 11 and Laurel Hill Road/Quick's Mill Road resulting in visible injuries. **Figure 6-2** summarizes the study area crashes by time of day, collision type, and severity while **Figure 6-3** depicts the crash locations by type and severity within the study area. The following is a summary of the crashes by type:

- US 11 at Laurel Hill Rd – 21 crashes
 - 16 (76%) angle crashes
 - 4 WB through/EB left crashes
 - 3 NB right/SB left crashes
 - 3 NB left/SB through crashes
 - 1 SB through/EB through crash
 - 1 NB through/SB left crash
 - 1 WB through/SB right crash
 - 1 SB left/NB left crash

- 1 WB right/SB through crash
 - 1 NB through/WB through crash
 - 1 (5%) pedestrian crash
 - Pedestrian struck while crossing west leg with signal (not at crosswalk)
- US 11 at Dunsmore Rd – 5 crashes
 - 4 (80%) angle crashes
 - 3 SB left/NB through crashes
 - 1 NB right/WB left crash
- Dunsmore Rd at Laurel Hill Rd – 6 crashes
 - 3 (50%) angle crashes
 - 2 WB through/SB left crashes
 - 1 WB through/SB right crash
 - 1 (17%) pedestrian fatal crash
 - Impaired driver struck impaired ped crossing roadway
 - 2 (3%) pedestrian crashes not at intersections
 - Vehicle made left from Dollar General onto US 11 and struck ped crossing with no crosswalk
 - Pedestrian was running to a dog on Quick’s Mill Rd

Figure 6-2: Crashes by Time of Day, Collision Type and Severity

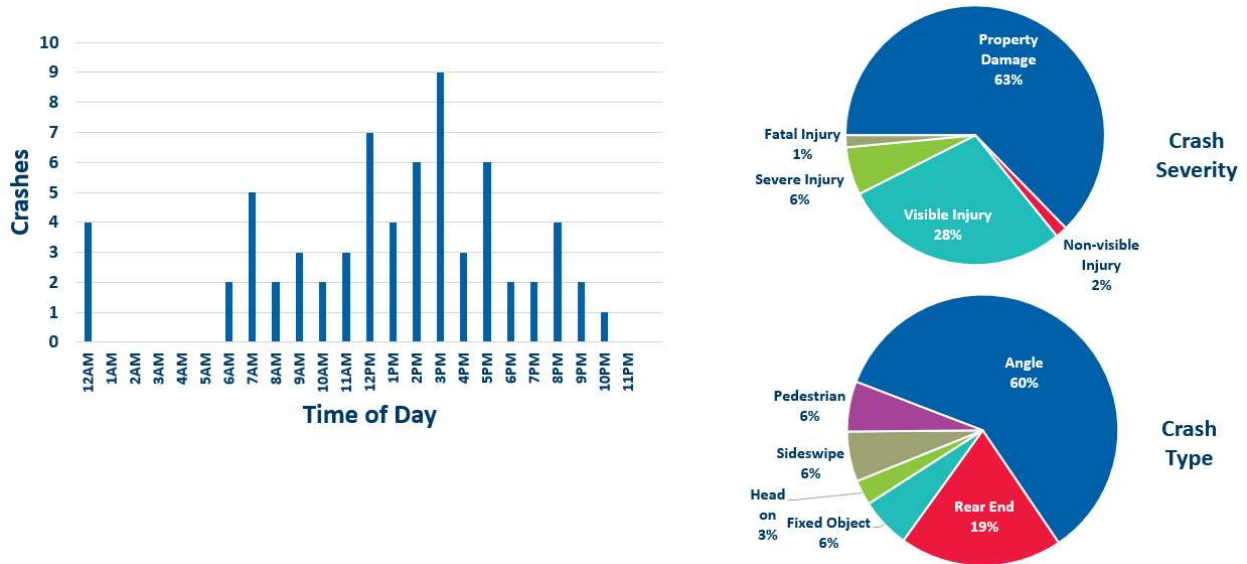
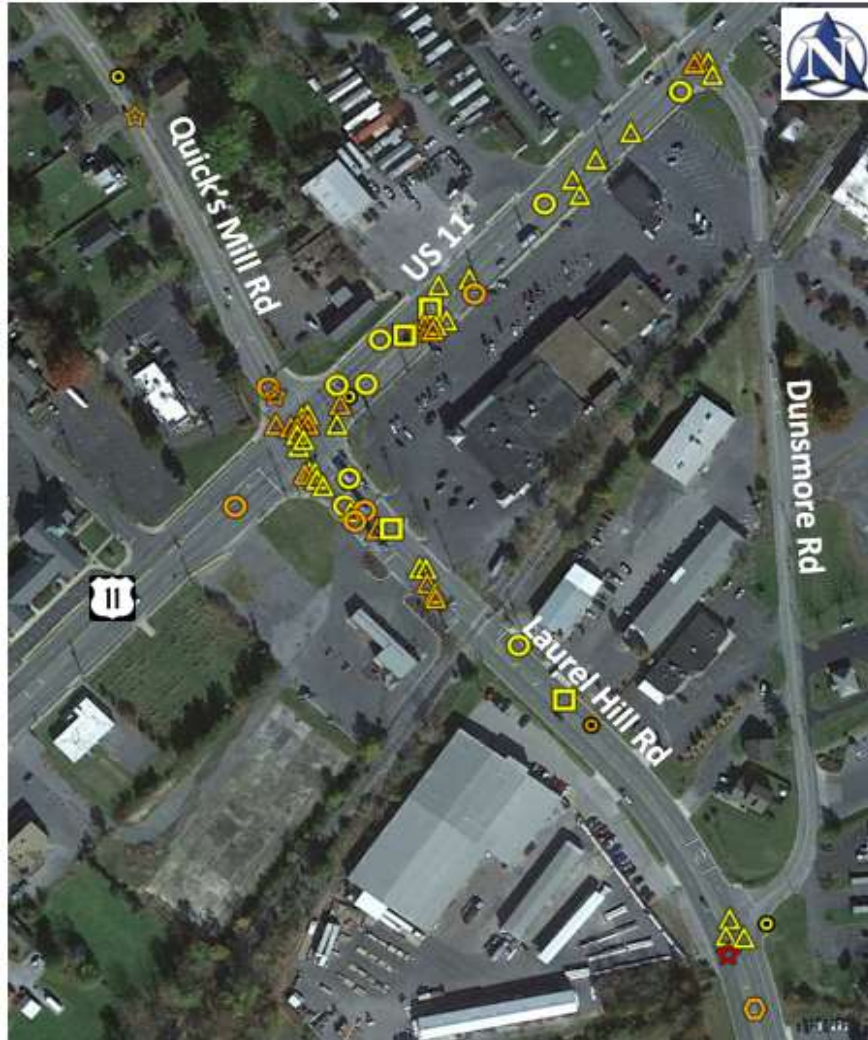


Figure 6-3: Crashes by Type and Severity



Additionally, crashes located in the vicinity of business entrances along both US 11 and Laurel Hill Road were reviewed to determine crash patterns and frequencies associated with each of the five entrances along both roads in consideration of potential access management strategies. The entrance along US 11 closest to the signalized intersection at Laurel Hill Road experienced the most crashes with 11, including 5 angle crashes, 5 rear end crashes, and one pedestrian crash. The two entrances along Laurel Hill Road experienced 8 total crashes with 5 angle crashes as the entrance farther away from the signalized intersection at US 11. At the entrance along Laurel Hill Road closer to the signalized intersection, there were two angle crashes and one rear end crash. At the two entrances adjacent to the Post Office, the southern entrance along US 11 experienced 3 angle crashes, while the northern entrance along US 11 experienced one angle crash.

Figure 6-4: Crashes at Business Entrances

- 1 ■ 1 NB/WB angle
- 3 ■ 3 angles: 1 NB/WBL, 1 SB/WBL, 1 NB/EBL
- 11 ■ 5 angles: 2NB/WBL, 2 NB/SBL, 1 SB/WBL
 ■ 5 rear-end: 4 SB/SB, 1 NB/NB
 ■ 1 ped/WBL
- 3 ■ 2 angles: 1 EB/SBL, 1 WB/SBL
 ■ 1 EB/EB rear-end
- 5 ■ 5 angles: 2 EB/SBL, 2 EB/NBL, 1 WB/SBL



Number of crashes at entrance location

6.5 EXISTING OPERATIONS

Table 6-1 summarizes levels of service and delays for intersection lane groups and overall intersection operations for the intersection of US 11 at Laurel Hill Road/Quick’s Mill Road under existing conditions. As shown, during the AM and PM peak hours, all intersection lane groups operate at LOS D or better with delays of less than 40 seconds.

Table 6-1: Existing Conditions Intersection Operations Summary

Peak Hour	Existing LOS Delay (seconds)												
	INT	NB US 11			SB US 11			EB Quick’s Mill			WB Laurel Hill		
		L	T	R	L	T	R	L	T	R	L	T	R
AM	C 29	C 21	C 32	D 37	C 24	C 26	C 26	C 22	D 35	C 34	C 26	C 27	C 30
PM	C 29	C 22	C 31	C 35	C 24	C 30	C 30	C 22	C 34	C 34	C 27	C 27	C 28

6.6 OTHER RELEVANT PROJECTS

Near the intersection of US 11 at Laurel Hill Road/Quick’s Mill Road, there are two VDOT projects to construct pedestrian improvements along both US 11 south of Laurel Hill Road and along Laurel Hill Road east of US 11. UPC 113687 and UPC 121209 will construct pedestrian improvements from Green Hills Drive to Dick Huff Lane along US 11 and from just east of US 11 to Mill Place Parkway/Lodge Lane along Laurel Hill Road. **Figure 6-5** depicts the limits of these proposed improvements in relation to the study intersection.

6.8 IMPROVEMENT ALTERNATIVES

Two options were considered to address access management concerns along US 11 north of Laurel Hill Road as discussed below. Both alternatives also include the following three components:

- **Lane drop signing on westbound Laurel Hill Road approach:** The westbound Laurel Hill Road approach includes a right-turn lane drop onto to northbound US 11; however, signing and pavement markings on the approach do not adequately warn motorists of this condition. Additional signing and striping is proposed to provide motorists advance notice of the lane drop condition and decrease the potential for last minute lane changes that can contribute to crashes.
- **Realign crosswalks, replace curb ramps, and replace pedestrian signals:** This improvement will upgrade the existing non-compliant curb ramps with ADA-compliant ramps and realign the crosswalks to provide shorter crossing distances in conjunction with the replacement of pedestrian signals on all four legs of the intersection.
- **Close Walgreens driveway along Laurel Hill Road located approximately 100 feet east of US 11:** Westbound Laurel Hill Road queues regularly extend beyond this driveway due to the close proximity to the US 11 intersection and a second driveway serving the Walgreens and shopping center is located farther from the intersection that provides additional access. Additionally, three crashes were reported at this driveway during the study period. Therefore, closure of this driveway is recommended.

The following is a summary of the two access management alternatives under consideration. Additional coordination and outreach to the businesses served by the driveways that are proposed to be closed or modified is needed to further evaluate internal circulation within the parking lot and select and refine a preferred access management strategy.

- **Option 1 - Convert the entrance along US 11 approximately 200 feet north of Laurel Hill Road to right-in only (see Figure 6-7):** Southbound US 11 queues regularly extend beyond this driveway due to the close proximity to the Laurel Hill Road intersection (200 feet). Eleven crashes were reported at this driveway which was the highest number of crashes of the driveways in close proximity to the US 11 and Laurel Hill Road intersection. Therefore, reducing conflict points at this driveway by converting it to right-in only is under consideration.
- **Option 2 - Close the entrance along US 11 approximately 200 feet north of Laurel Hill Road and shift the existing entrance located south of the Post Office to the south (see Figure 6-8):** As noted above, eleven crashes were reported at the southernmost entrance along US 11 north of Laurel Hill Road. Closure of this access is under consideration in conjunction with realigning the access point south of the Post Office to align it with the driveway serving Meade Park Circle on the west side of US 11. Realignment of this driveway will improve circulation within the shopping center parking lot by moving it farther away from the Post Office building.

Figure 6-7: Option 1 – US 11 at Laurel Hill Road Access Management

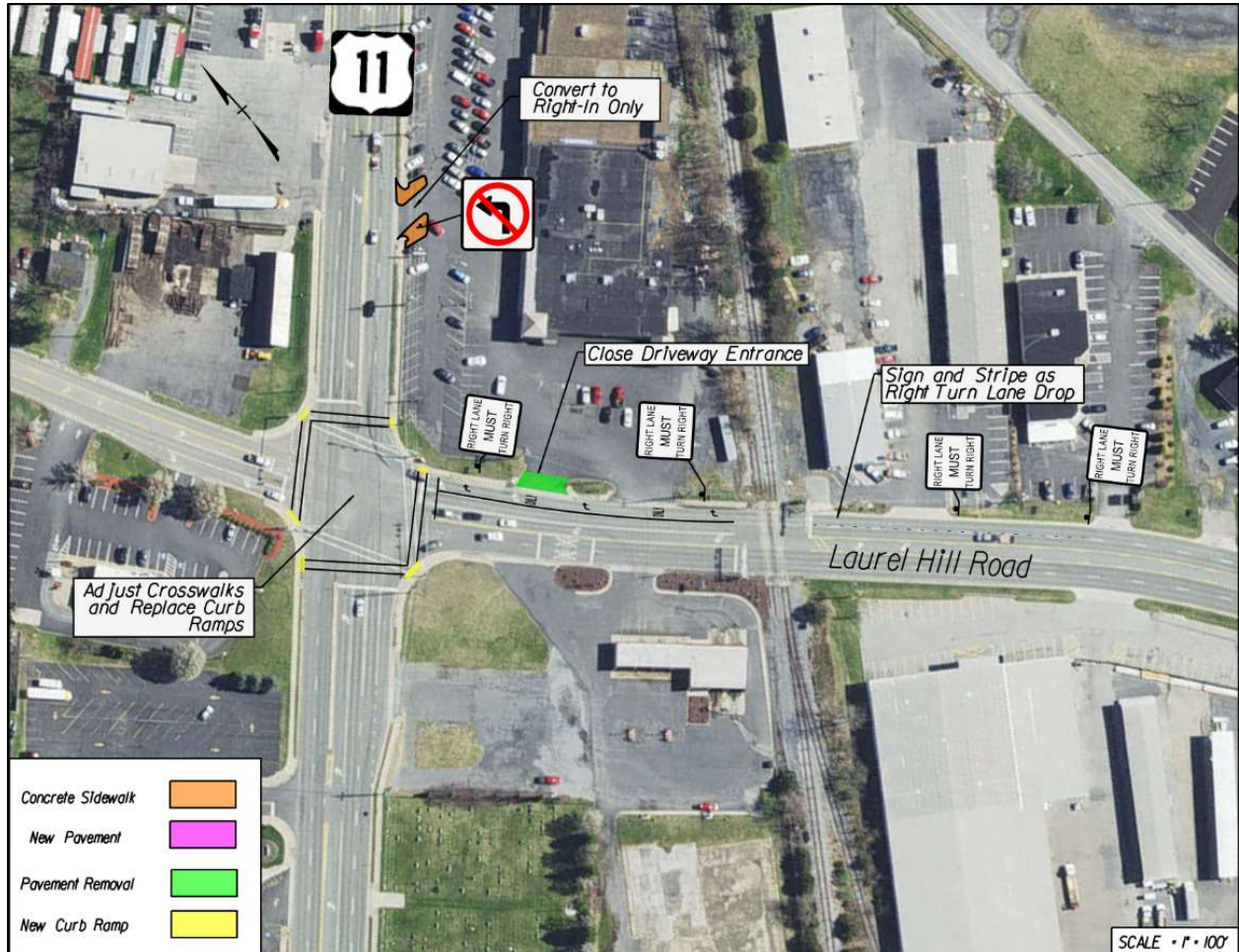
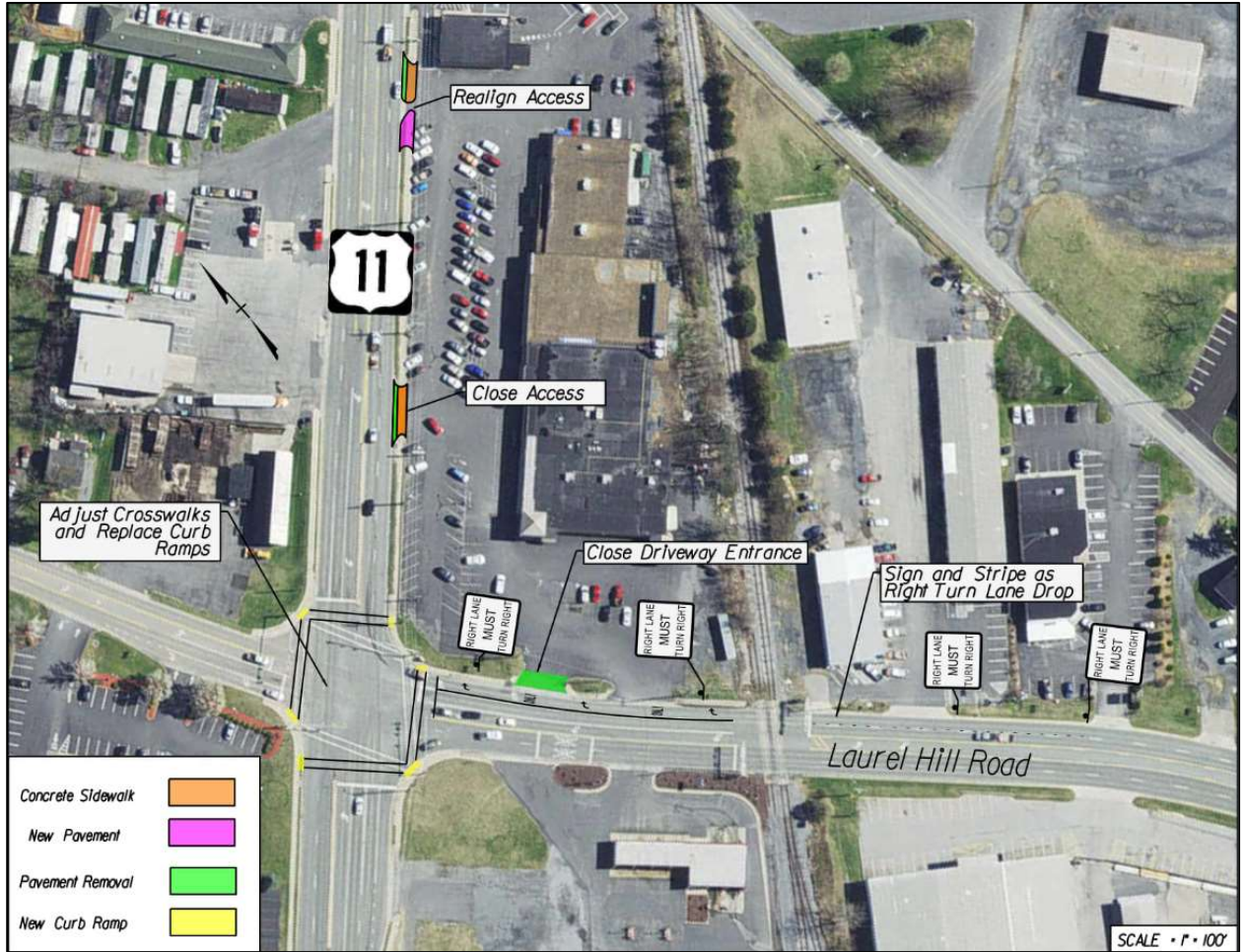


Figure 6-8: Option 2 – US 11 at Laurel Hill Road Access Management



6.9 2045 NO BUILD AND BUILD CONDITIONS ANALYSIS

Table 6-2 summarizes levels of service and delays for intersection approaches and overall intersection operations for the intersection of US 11 at Laurel Hill Road/Quick’s Mill Road under 2045 No Build and 2045 Build conditions. No changes to geometry or traffic operations were assumed for the 2045 No Build scenario. Recommended improvements detailed in Section 6.8 were incorporated for the 2045 Build scenarios. As shown, during the AM and PM peak hours, all intersection approaches are projected to continue operating at LOS D.

Table 6-2: 2045 No Build and Build Conditions Intersection Operations Summary

Option	LOS Delay (seconds)									
	INT		NB US 11		SB US 11		EB Quick’s Mill		WB Laurel Hill	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
2045 No Build	C 33	C 33	D 37	C 35	C 27	C 29	D 40	D 39	C 33	C 32
2045 Options 1 & 2	C 34	C 33	D 40	D 37	C 27	C 30	D 38	D 37	C 32	C 31

6.10 COST ESTIMATE

Table 6-3 summarizes the total project costs for Options 1 and 2 respectively.

Table 6-3: Cost Estimate

Phase	Option 1	Option 2
Construction	\$181,983	\$191,230
Preliminary Engineering	\$54,595	\$57,369
R/W	\$15,000	\$20,000
Utility Relocations	\$0	\$0
Contingency	\$105,663	\$112,812
Total	\$357,000	\$381,000

*Estimates do not account for potential loss of business damages related to commercial entrance adjustments

7. S. DELPHINE AVENUE AT I-64 EXIT 96 WESTBOUND RAMPS – CITY OF WAYNESBORO

7.1 EXISTING ROADWAY CONDITIONS AND GEOMETRY

S. Delphine Avenue at the I-64 Exit 96 westbound ramps is an unsignalized four-legged intersection in the City of Waynesboro. The northbound S. Delphine Avenue approach operates under free-flowing conditions and includes a left-turn lane and two through lanes. The southbound S. Delphine Avenue approach operates under free-flowing conditions and includes a through lane and a shared through/right-turn lane. The westbound I-64 Exit 96 Off-Ramp approach operates under stop control and includes a single shared lane for all movements. The west leg of the intersection is the on-ramp to I-64 westbound. There are no pedestrian accommodations at the intersection.

The posted speed limit along S. Delphine Avenue is 45 mph. The I-64 Exit 96 westbound off-ramp has a posted advisory speed of 30 mph. TForce Freight has a facility located in the northeast quadrant of the intersection with an entrance located along S. Delphine Avenue approximately 400 feet north of the I-64 Exit 96 westbound ramps.

For the purposes of this site, S. Delphine Avenue is assumed to run in a north-south direction.

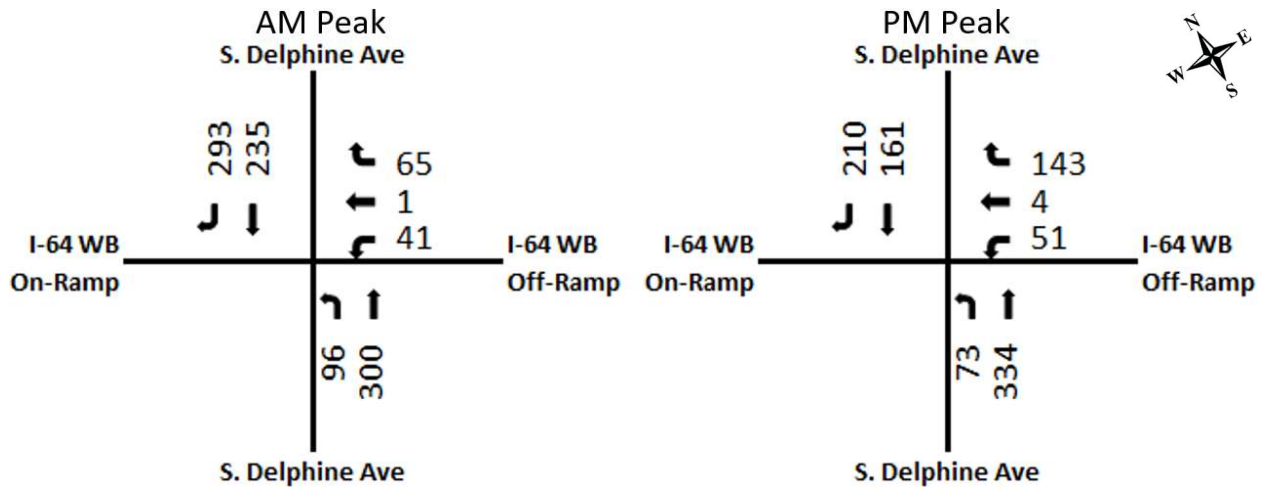
7.2 EXISTING PEAK HOUR OBSERVATIONS

Field visits to the intersection were conducted during the AM and PM peak hours under typical traffic conditions to review existing traffic operations, note maximum queue lengths, and make general observations related to the site. It was noted that queues along the Exit 96 westbound off-ramp were generally short, unless a tractor-trailer was waiting to turn left onto southbound S. Delphine Avenue. It was also observed that when a vehicle was waiting to make this left-turn movement from the off ramp that some drivers would pass stopped vehicles on the right shoulder of the off ramp, eventually turning right to northbound S. Delphine Avenue.

7.3 PEAK HOUR TRAFFIC VOLUMES

Peak hour traffic volumes are depicted in **Figure 7-1**. Based on a review of the count data, the peak hours were identified as 7:15 AM to 8:15 AM and 4:30 PM to 5:30 PM. As shown, the predominant movements are southbound on S. Delphine Avenue in the AM peak hour and northbound on S. Delphine Avenue in the PM peak hour.

Figure 7-1: Existing (2022) Peak Hour Volumes



7.4 CRASH HISTORY

A total of 24 crashes were reported at the intersection between January 1, 2015 and August 31, 2022. No fatal crashes were reported, and 9 crashes (38 percent) resulted in injuries. Fixed object crashes were the most common collision type accounting for 12 crashes (50 percent) including 10 (83 percent) occurring while vehicles attempted southbound right turns. Of the remaining 12 crashes, 5 were angle crashes, 3 were rear end crashes, 3 were sideswipes, and 1 was animal related. While crashes occurred throughout the day the highest spikes in crashes occurred at 2 PM and 7 PM with 3 crashes occurring during both one-hour periods. **Figure 7-2** summarizes the study area crashes by time of day, light condition, surface condition, collision type and severity while **Figure 7-3** depicts the crash locations by type and severity within the study area. As shown, 46 percent of crashes occurred on wet or snowy pavement conditions and 38 percent of crashes occurred during darkness. No pedestrian or bicycle crashes were reported. The following is a summary of the crashes by type:

- 12 (50%) fixed object/other crashes
 - 10 SB right crashes (40% on wet pavement, 50% occurred during darkness)
- 5 (20%) angle crashes
 - 2 WB left/NB through crashes (1 involving a truck)
 - 1 WB left/SB through crash
 - 1 WB right/NB through crash
- 3 (13%) rear end crashes (1 involved a truck)
- 3 (13%) sideswipe crashes attributed to two vehicles turning right from ramp simultaneously (all involved trucks)
- 1 (4%) animal-related crash

Figure 7-2: Crashes by Time of Day, Roadway Condition, Light Condition, Collision Type and Severity

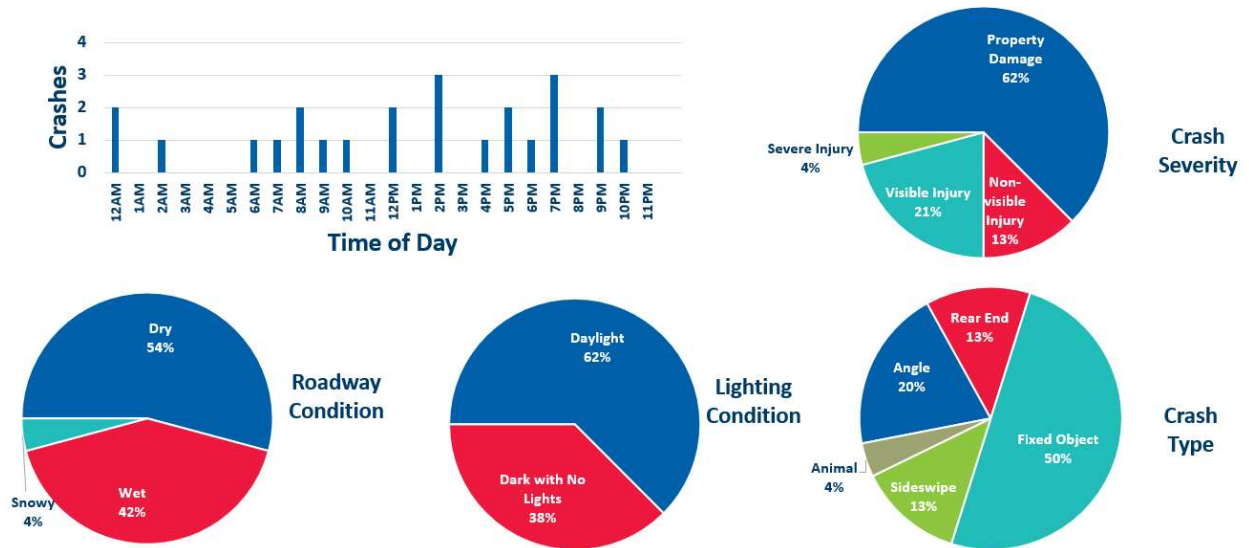
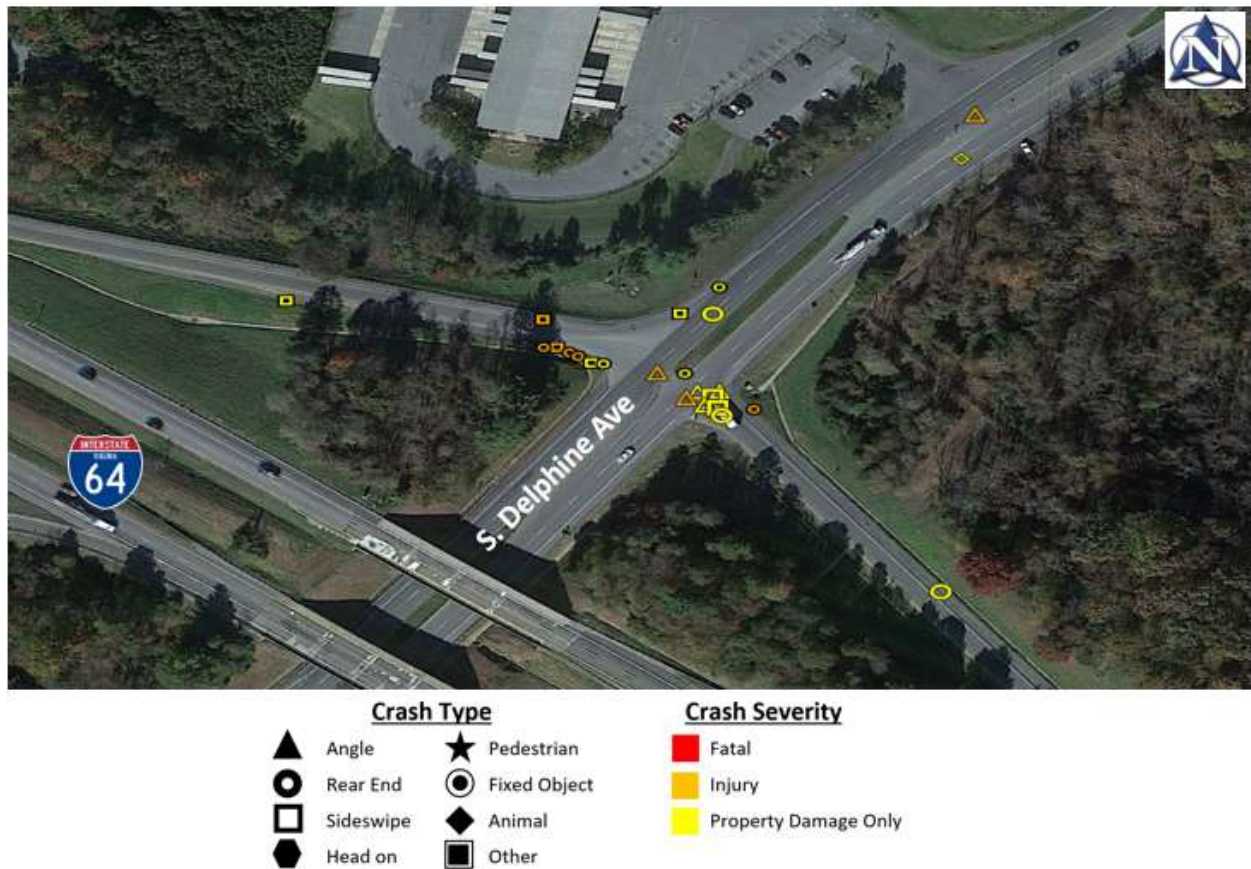


Figure 7-3: Crashes by Type and Severity



7.5 EXISTING OPERATIONS

Table 7-1 summarizes levels of service and delays for intersection lane groups and overall intersection operations for the intersection of S. Delphine Avenue at the I-64 Exit 96 westbound off-ramp under existing conditions. As shown, the I-64 westbound off-ramp operates at LOS C or better with delays of 15 seconds or less. All other movements at the intersection operate at LOS A under existing conditions.

Table 7-1: Existing Conditions Intersection Operations Summary

Peak Hour	LOS Delay (seconds)				
	NB S. Delphine		SB S. Delphine		WB I-64 Off-Ramp
	L	T	T	R	L-R
AM	A 10	-	-	-	C 15
PM	A 9	-	-	-	B 14

7.6 OTHER RELEVANT PROJECTS

The Nature’s Crossing Technology Center (NCTC) is a planned industrial park located in the southwest quadrant of the I-64 Exit 96 interchange, with a planned access to the site from S. Delphine Avenue approximately 0.65 miles south of I-64. There is the potential for up to 1.2 million square feet of industrial space to be developed within the NCTC, which would increase traffic at the interchange including an increase in heavy truck traffic.

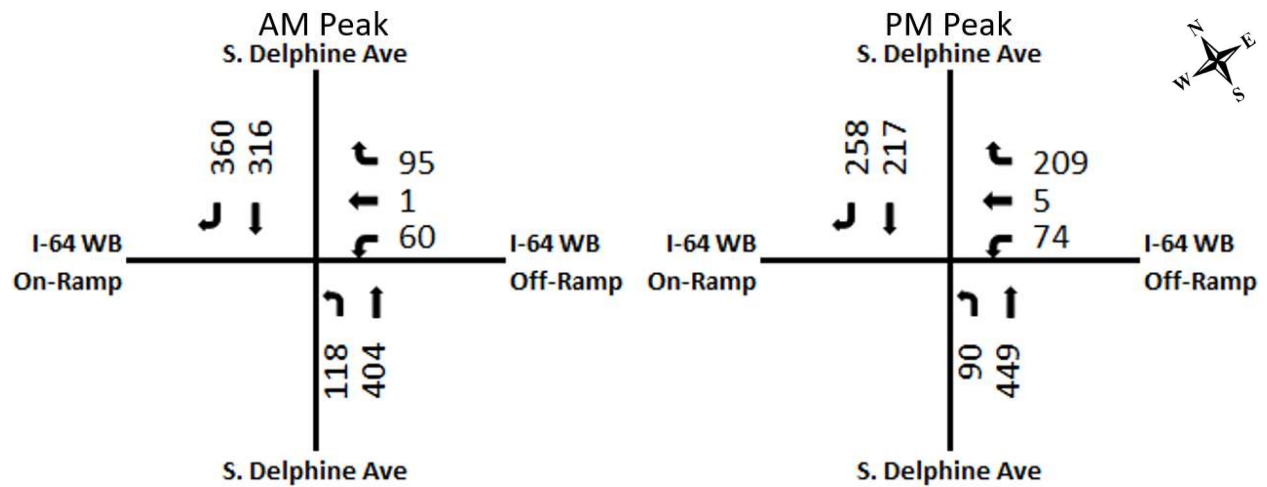
Figure 7-4: Nature’s Crossing Technology Center Site Layout



7.7 FUTURE TRAFFIC VOLUMES

Future traffic volumes for the 2045 design year for the AM and PM peak hour are depicted in Figure 7-5.

Figure 7-5: 2045 Peak Hour Traffic Volumes



7.8 PROPOSED IMPROVEMENTS

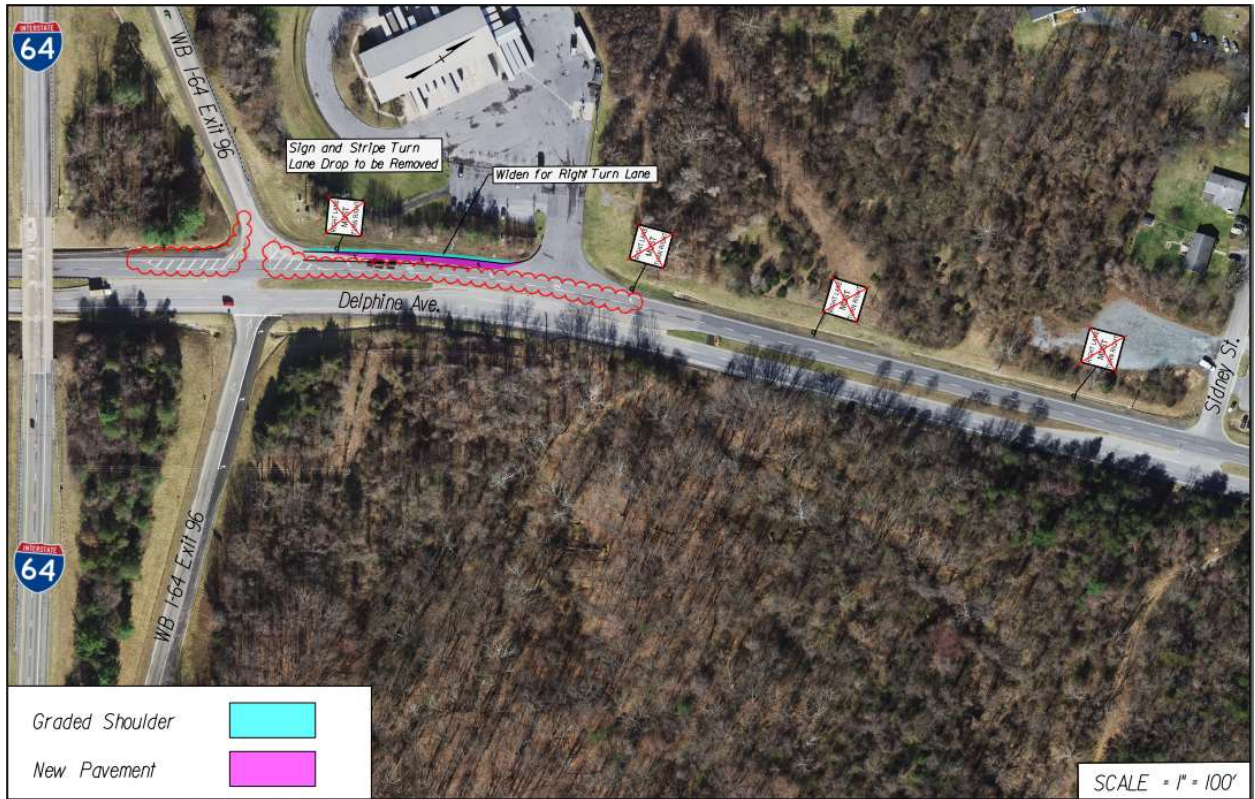
Both short/mid-term and long-term improvement alternatives were considered for the S. Delphine Avenue at I-64 Exit 96 Westbound Ramps intersection.

- **Restripe southbound S. Delphine Avenue to provide a right-turn lane and construct a right-turn lane on the westbound I-64 off-ramp to Delphine Avenue; install intersection lighting (Short/Mid-Term Improvement):** As shown in **Figure 7-6**, this improvement alternative would include restriping the southbound through lane approaching the westbound I-64 ramp to provide a right-turn lane thereby reducing the potential for run-off-road crashes involving right turns to the westbound I-64 ramp. In addition, widening to provide a right-turn lane from the westbound I-64 off-ramp to S. Delphine Avenue is proposed since based on field observations, vehicles were observed stacking in two lanes. This will reduce the potential for crashes involving right-turning vehicles turning concurrently and reduce delays for right-turn vehicles who will no longer have to wait for left-turning vehicles to clear the intersection. In addition, intersection lighting is recommended since 38% of the crashes occurred during darkness and 50% of the crashes involving southbound right turns also occurred during darkness.
- **Widen southbound S. Delphine Avenue to provide a separate right-turn lane (Long-Term Improvement):** As shown in **Figure 7-7**, this improvement would include the construction of a dedicated southbound S. Delphine Road right-turn lane in addition to the two through lanes. Based on a review of the capacity analysis (see Section 7.9), the removal of one of the through lanes as part of the short/mid-term improvements provides acceptable traffic operations and LOS in the short-term; however, in the 2045 design year, two through lanes are required on S. Delphine Avenue in order to maintain acceptable LOS for the left turn from the I-64 westbound off-ramp. The addition of the right-turn lane on southbound S. Delphine Avenue will improve safety for right turns to westbound I-64.

Figure 7-6: Delphine Avenue and I-64 Exit 96 WB Off-Ramp – Short/Mid-Term



Figure 7-7: Delphine Avenue and I-64 Exit 96 WB Off-Ramp – Long Term



7.9 2045 NO BUILD AND BUILD CONDITIONS ANALYSIS

Table 7-2 summarizes levels of service and delays for intersection lane groups and overall intersection operations for the intersection of S. Delphine Avenue at the I-64 Exit 96 westbound off-ramp under 2045 No Build and 2045 Build conditions. No changes to geometry or traffic operations were assumed for the 2045 No Build scenario. Recommended improvements detailed in Section 7.8 were incorporated for the 2045 Build scenario.

As shown under 2045 No Build conditions, the I-64 Exit 96 westbound off-ramp is projected to operate at LOS C in both the AM and PM peak hours. Under 2045 Build conditions for the Short-Term Improvements, the left-turn movement from the off ramp to southbound S. Delphine Avenue is projected to operate at LOS F in the AM peak hour and at LOS E in the PM peak hour, due to having only one receiving lane along southbound S. Delphine Avenue, which reduces available gaps and increases delays. However, the Short/Mid-Term Improvements would operate at LOS C or better with 2022 volumes. Under 2045 Build conditions for the Long-Term Improvements, the left-turn movement from the off ramp to southbound S. Delphine Avenue is projected to operate at LOS D in both the AM and PM peak hours, with delays of 30 seconds or less.

Table 7-2: 2045 No Build and Build Conditions Intersection Operations Summary

Option	LOS Delay (seconds)							
	NB S. Delphine*		SB S. Delphine		WB I-64 Off-Ramp			
	AM	PM	AM	PM	AM		PM	
					L	R	L	R
2045 No Build	B 11	A 9	- -	- -	C 23		C 23	
2045 Short-Term Improvements	B 11	A 9	- -	- -	F 62	B 11	E 38	B 12
2022 Short-Term Improvements	B 10	A 9	- -	- -	C 19	B 10	C 17	B 10
2045 Long-Term Improvements	B 11	A 9	- -	- -	D 30	B 11	D 25	B 12

*LOS and Delay results for NB left-turn movement only

7.10 COST ESTIMATE

Table 7-3 summarizes the total project costs for the recommended short/mid-term improvements and recommended long-term improvements, respectively.

Table 7-3: Cost Estimate

Phase	Short/Mid-Term	Long-Term
Construction	\$191,415	\$95,360
Preliminary Engineering	\$57,425	\$28,608
R/W	\$0	\$0
Utility Relocations	\$0	\$0
Contingency	\$104,513	\$52,067
Total	\$353,000	\$176,000

*Long-term improvements do not include costs for short/mid-term improvements

8. S. DELPHINE AVENUE AT WINDSOR ROAD – CITY OF WAYNESBORO

8.1 EXISTING ROADWAY CONDITIONS AND GEOMETRY

S. Delphine Avenue at Windsor Road/Mountain Road is an unsignalized four-legged intersection located in the City of Waynesboro. The eastbound and westbound S. Delphine Avenue approaches operate under free-flowing conditions and include a left-turn lane, a through lane, and a shared through/right-turn lane. The southbound Windsor Road and northbound Mountain Road approaches operate with stop control and include a single shared lane for all movements. There are no existing pedestrian accommodations at the intersection. Adjacent intersections along S. Delphine Avenue to the west at Western Road and to the east at 19th Street were also evaluated within the study area due to the interconnectivity of the residential community on the south side of S. Delphine Avenue.

S. Delphine Avenue at Western Road is an unsignalized three-legged intersection. The eastbound S. Delphine Avenue approach operates under free-flowing conditions and includes a through lane and a shared through/right-turn lane. The westbound S. Delphine Avenue approach operates under free-flowing conditions and includes a left-turn lane, a through lane, and a shared through/right-turn lane. The northbound Western Road approach operates with stop control has a single shared lane for left and right turns. There are no existing pedestrian accommodations at the intersection.

S. Delphine Avenue at 19th Street is an unsignalized three-legged intersection. The eastbound S. Delphine Avenue approach operates under free-flowing conditions and includes a through lane and a shared through/right-turn lane. The westbound S. Delphine Avenue approach operates under free-flowing conditions and includes a left-turn lane, a through lane, and a shared through/right-turn lane. The northbound 19th Street approach operates with stop control has a single shared lane for left and right turns. There are no existing pedestrian accommodations at the intersection.

The posted speed limit along S. Delphine Avenue is 45 mph. The posted speed limit along Windsor Road, Mountain Road, Western Road, and 19th Street is 25 mph. Numerous industrial businesses are located along the north side of S. Delphine Avenue east of Windsor Road. Single-family and multi-family residential development is located along the south side of S. Delphine Avenue. Additionally, Berkeley Glenn School is located at the intersection of Windsor Road at Jefferson Avenue, approximately 1200 feet north of S. Delphine Avenue.

For the purposes of this site, S. Delphine Avenue is assumed to run in an east-west direction.

8.2 EXISTING PEAK HOUR OBSERVATIONS

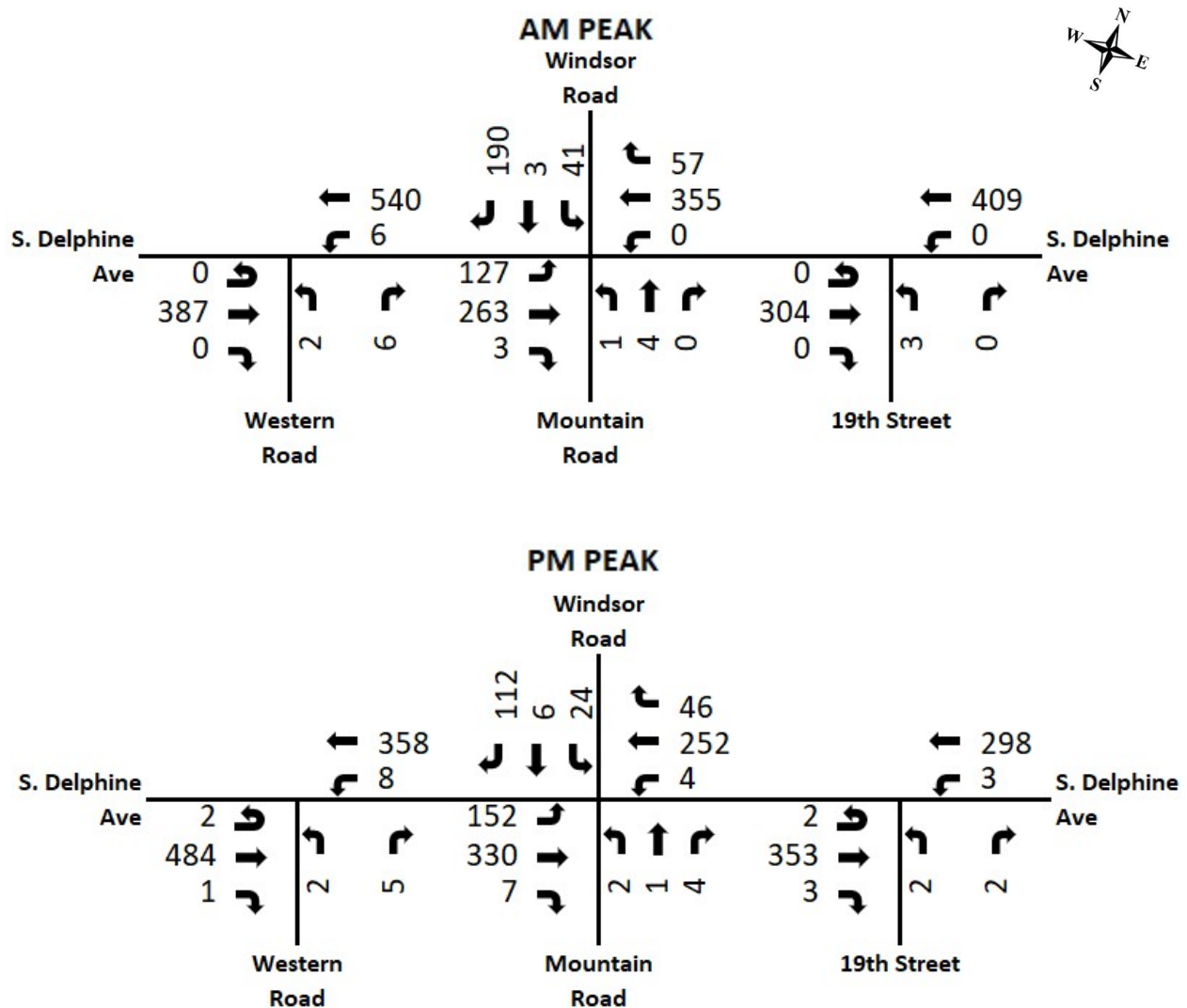
Field visits to the intersections along S. Delphine Avenue were conducted during the AM and PM peak hours under typical traffic conditions to review existing traffic operations, note maximum queue lengths, and make general observations related to the site. It was noted that queues along southbound Windsor Road were periodically moderate, primarily when traffic queued behind a

vehicle waiting to turn left onto eastbound S. Delphine Avenue. Queues were minimal for Mountain Road, Western Road, and 19th Street due to the low traffic volumes.

8.3 PEAK HOUR TRAFFIC VOLUMES

Peak hour traffic volumes are depicted in **Figure 8-1**. Based on a review of the count data, the peak hours were identified as 7:15 AM to 8:15 AM and 4:15 PM to 5:15 PM. As shown, the predominant movements are westbound on S. Delphine Avenue and in the AM peak hour and eastbound on S. Delphine Avenue in the PM peak hour. Turning movements to and from Windsor Road are significantly higher than turning movements to and from Mountain Road, Western Road, and 19th Street.

Figure 8-1: Existing (2022) Peak Hour Volumes



8.4 CRASH HISTORY

A total of 18 crashes were reported in the study area between January 1, 2015 and August 31, 2022. One fatal crash occurred resulting from an angle crash involving a southbound through vehicle from Windsor Road and a westbound through vehicle from S. Delphine Avenue. Six crashes (33 percent) resulted in non-fatal injuries. Angle crashes were the most common collision type accounting for 11 crashes (61 percent). Of the 11 angle crashes, 6 (55 percent) involved southbound vehicles from Windsor Road and westbound through vehicles on S. Delphine Avenue. While crashes occurred throughout the day, the AM peak period between 6 AM and 9 AM experienced the highest number of crashes with 8 (44 percent) crashes during the three-hour period which corresponds to the period with the highest traffic volumes on the Windsor Road approach. **Figure 8-2** summarizes the study area crashes by collision type, severity, and time of day. **Figure 8-3** depicts the crash locations by type and severity within the study area. No pedestrian or bicycle crashes were reported. The following is a summary of the crashes by type:

- 11 (61%) angle crashes
 - 6 SB through or left/WB through crashes
 - 2 SB through or left/EB through crashes
 - 1 SB right/WB through crash
 - 1 SB left/NB through crash
- 2 (11%) sideswipe crashes
- 2 (11%) animal crashes
- 1 (6%) fixed object crash
- 1 (6%) head on crash
- 1 (6%) rear end crash

- 1 Fatal crash
 - Angle crash involving SB vehicle that was struck by a WB vehicle
 - Clear and dry conditions in 2017

Figure 8-2: Crashes by Time of Day, Collision Type, and Severity

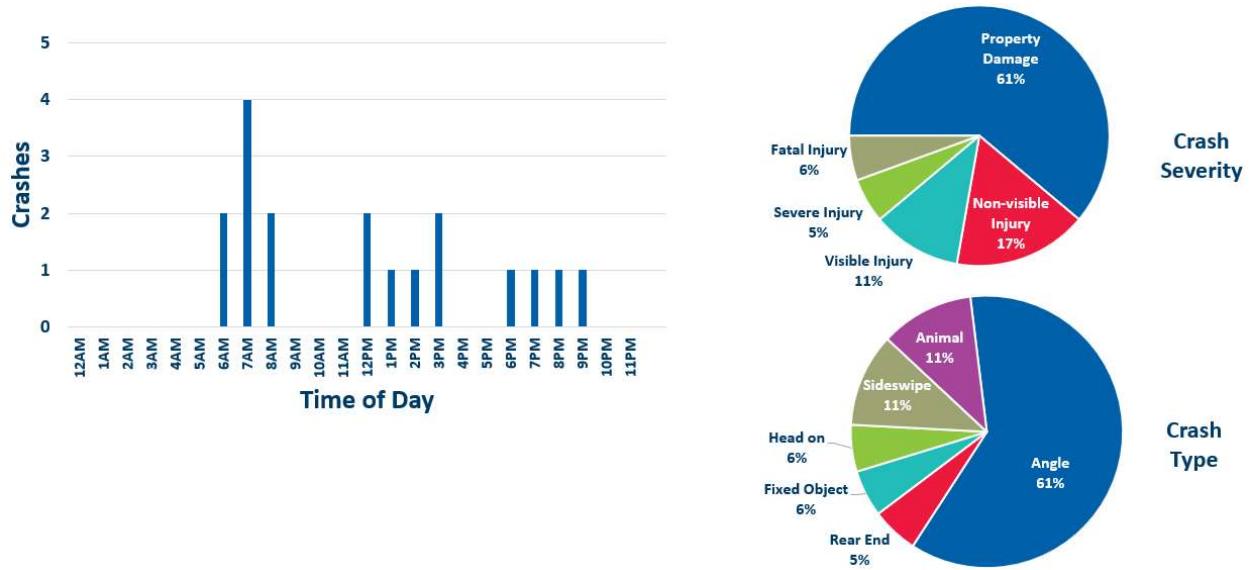


Figure 8-3: Crashes by Type and Severity



8.5 EXISTING OPERATIONS

Table 8-1 summarizes levels of service and delays for intersection lane groups and overall intersection operations for the intersections of S. Delphine Avenue at Windsor Road/Mountain Road, at Western Road, and at 19th Street under existing conditions. As shown, during the AM peak hour the northbound Mountain Road approach operates at LOS D, although delays are less than 30 seconds, and the traffic volumes are minor. Otherwise, all other movements at the intersections operate at LOS C or better under existing conditions with delays of approximately 20 seconds or less.

Table 8-1: Existing Conditions Intersection Operations Summary

Peak Hour	LOS Delay (seconds)					
	EB Delphine		WB Delphine		NB Mountain	SB Windsor
	L	T-R	L	T-R	L-T-R	L-T-R
AM	A 9	-	A 0	-	D 26	C 21
PM	A 8	-	A 8	-	C 16	B 14

8.6 OTHER RELEVANT PROJECTS

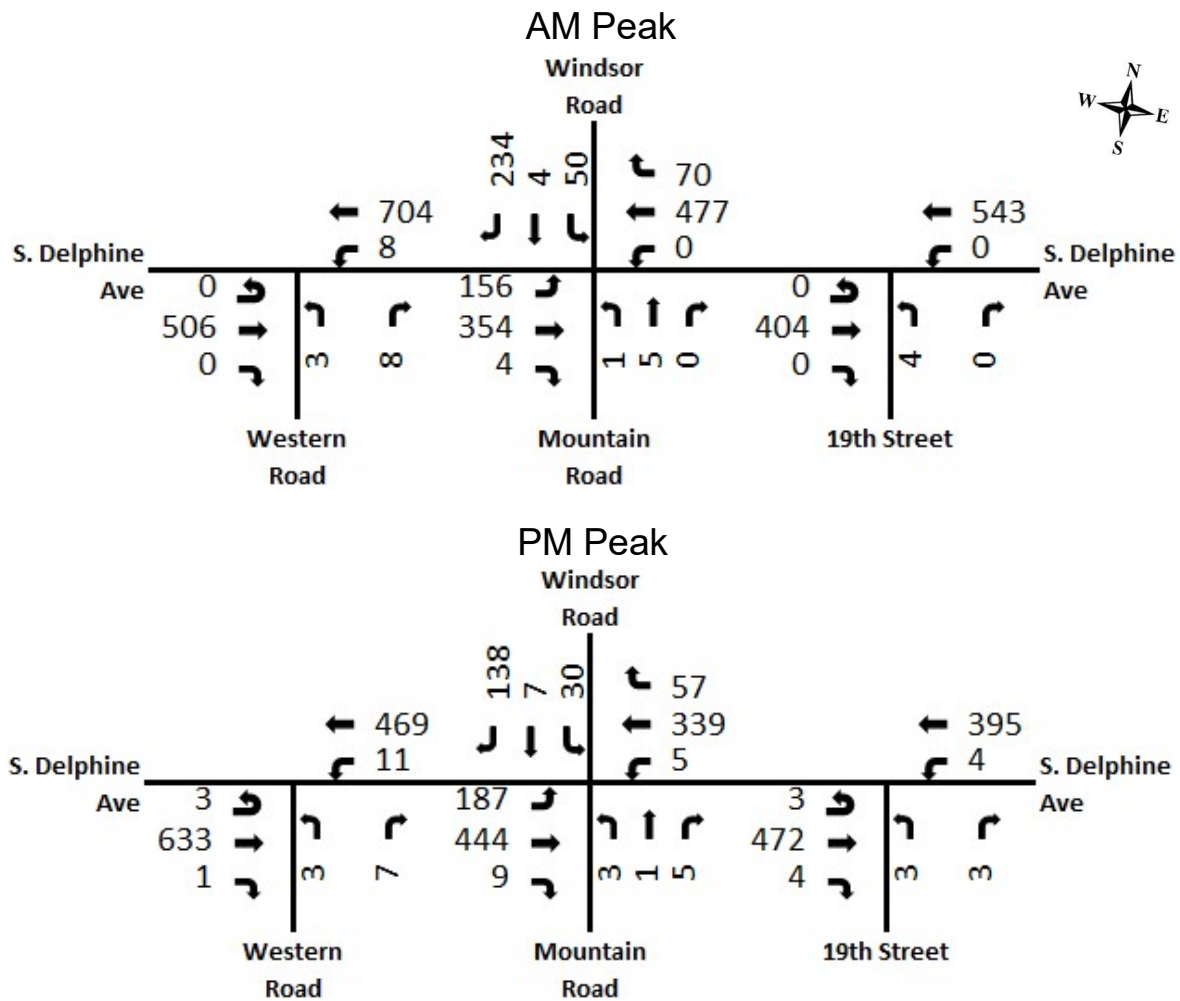
Pedestrian improvements are proposed at the S. Delphine Avenue at Windsor Road intersection as part of an HSIP project that will include the installation of high visibility crosswalks, advance warning signs, curb ramp upgrades and rectangular rapid flashing beacons (RRFB). The proposed improvements under consideration as part of this study are intended to be compatible with the proposed HSIP project.

Additionally, Delphine Enterprise Rail is considering reestablishing the rail spur east of Windsor Road that could have the potential to increase traffic volumes within the study area.

8.7 FUTURE TRAFFIC VOLUMES

Future traffic volumes for the 2045 design year for the AM and PM peak hours are depicted in **Figure 8-4**.

Figure 8-4: 2045 Peak Hour Traffic Volumes



8.8 IMPROVEMENT ALTERNATIVES

Various alternatives were considered for the S. Delphine Avenue at Windsor Road/Mountain Road intersection to reduce the potential for angle crashes. All of the options include restriping on the southbound Windsor Road approach to S. Delphine Avenue to provide separate left-turn and right-turn lanes within the existing pavement without any additional widening required. The following is a summary of the alternatives considered:

- Option 1A – Right-in/right on the Mountain Road approach to S. Delphin Avenue:**
 This alternative would restrict left turn and through movements to and from Mountain Road on the south leg of the intersection and remove the westbound S. Delphine Avenue left-turn lane onto Mountain Road. This alternative would significantly reduce conflict points at the intersection from 32 to 11 (66 percent reduction). The left turn and through movements using Mountain Road are each less than 10 vehicles per hour resulting in minimal diversion to alternate routes. Additionally, motorists currently using Mountain Road may

use Western Road, 19th Street, or 18th Street to enter and exit Mountain Road from S. Delphine Avenue. Due to the minimal traffic impacts associated with diverting the left turn and through movements to and from Mountain Road to alternate routes and the substantial reduction in conflict points at the intersection, Option 1A is the recommended alternative.

- **Option 1B – Cul-de-sac on the Mountain Road approach to S. Delphine Avenue:** This alternative would restrict all turning movements to and from Mountain Road on the south leg of the intersection and remove the westbound S. Delphine Avenue left-turn lane onto Mountain Road. This alternative would significantly reduce conflict points at the intersection from 32 to 9 (72 percent reduction). The movements using Mountain Road are each less than 10 vehicles per hour resulting in minimal diversion to alternate routes. Additionally, motorists currently using Mountain Road may use Western Road, 19th Street, or 18th Street to enter and exit Mountain Road from S. Delphine Avenue. Option 1B was not recommended over Option 1A (right-in/right-out) due to property impacts associated with the construction of a cul-de-sac as well as concerns regarding emergency access along Mountain Road.
- **Option 2 – S. Delphine Avenue at Windsor Road Modified-T Intersection:** This alternative includes constructing a raised median along eastbound S. Delphine Avenue that would accommodate the eastbound left turn to northbound Windsor Road and the southbound Windsor Road left turn to eastbound S. Delphine Avenue. An acceleration lane would be provided in the median for left turns from Windsor Road to merge with eastbound S. Delphine Avenue traffic. To accommodate the acceleration lane from Windsor Road, the median at 19th Street would be closed. Additionally, the median opening at the S. Delphine Avenue at Western Road intersection would be channelized to accommodate westbound left turns only and prohibit northbound left turns from due to sight distance restriction looking to the west on S. Delphine Avenue. Left turns to and from Mountain Road and 19th Street would be diverted to the 18th Street intersection to exit onto Delphine Avenue and left turns to Mountain Road and 19th Street would be diverted to either 18th Street or Western Road to access the neighborhood. This alternative would separate the left turns to and from Windsor Road and minimize conflict points at the intersection; however, it would result in substantial access changes to the community on the south side of S. Delphine Avenue and was therefore not recommended for further consideration.

Figure 8-5: Option 1A - Mountain Road Right-In/Right-Out

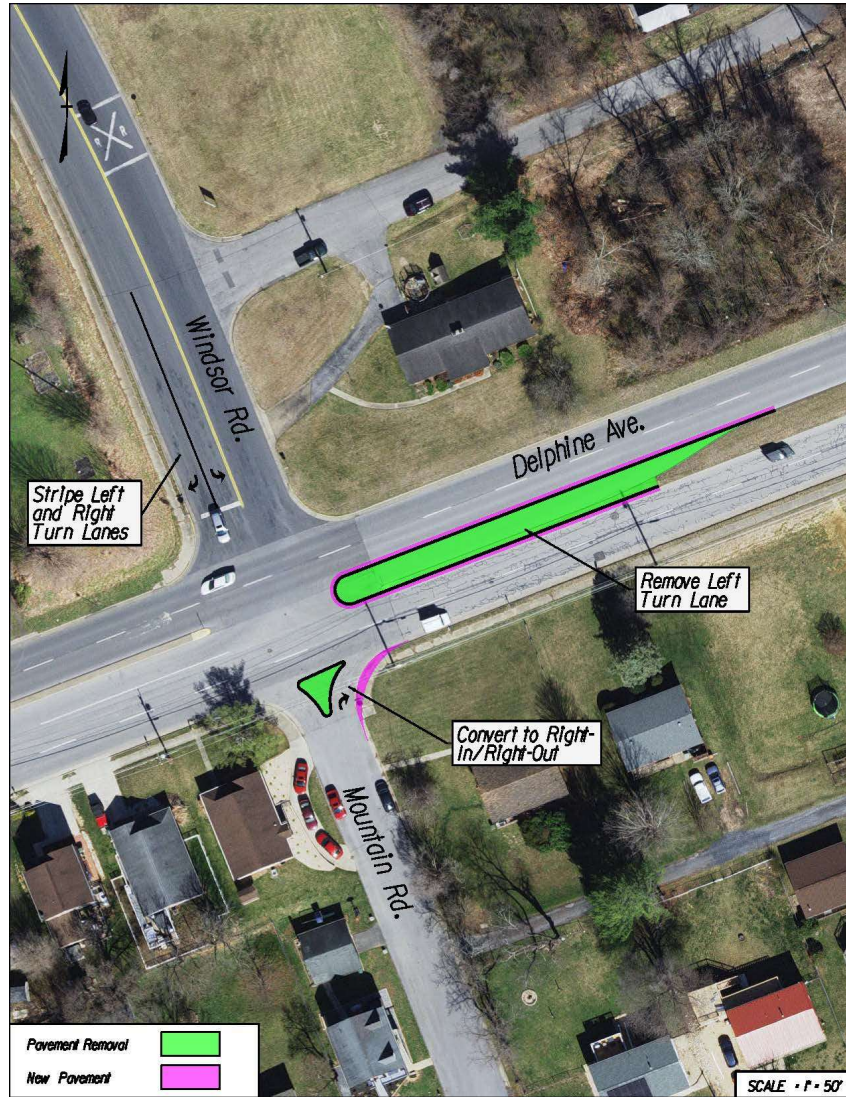


Figure 8-6: Option 1B – Mountain Road Cul-de-sac

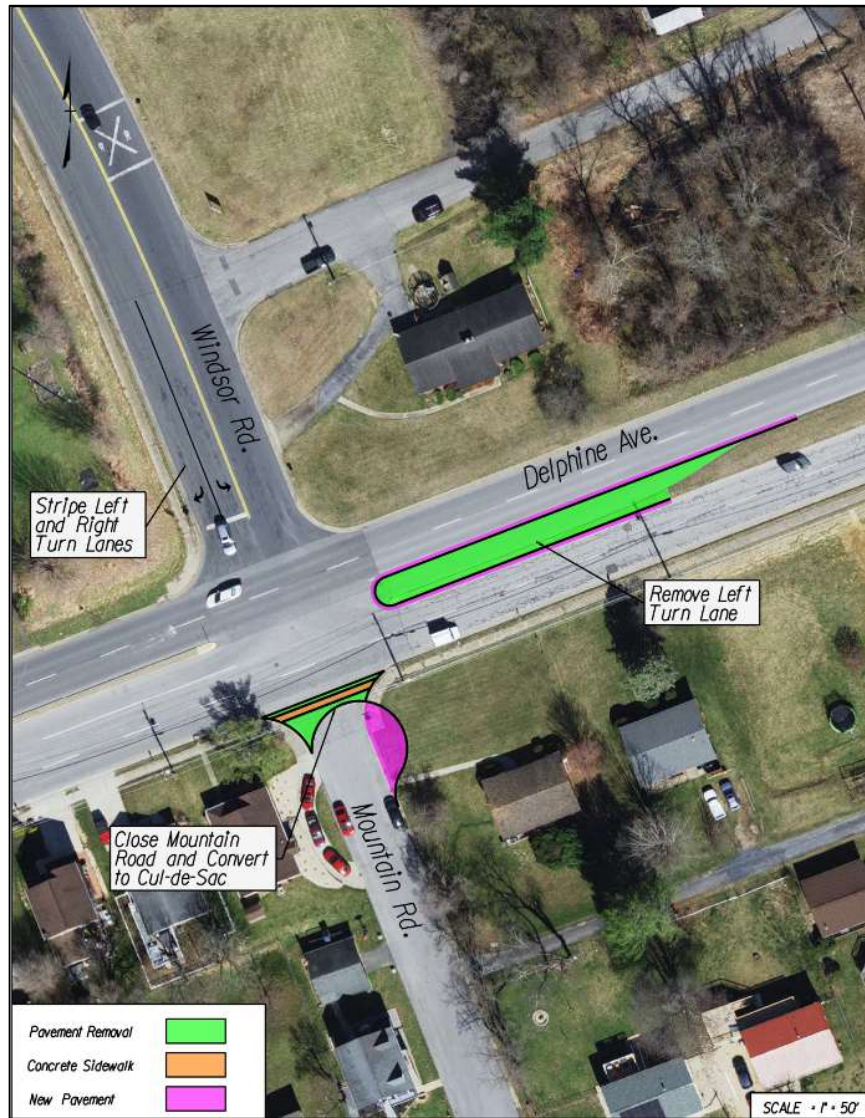


Figure 8-7: Option 2 – S. Delphine Avenue at Windsor Road Modified-T Intersection



8.9 2045 NO BUILD AND BUILD CONDITIONS ANALYSIS

Table 8-2 summarizes levels of service and delays for intersection lane groups and overall intersection operations for the intersections of S. Delphine Avenue at Windsor Road/Mountain Road, at Western Road, and at 19th Street under 2045 No Build and 2045 Build conditions. No changes to geometry or traffic operations were assumed for the 2045 No Build scenario. Recommended improvements detailed in Section 8.8 were incorporated for the 2045 Build scenario.

As shown under 2045 No Build conditions, during the AM peak hour the southbound Windsor Road approach is projected to degrade to LOS F and the northbound Mountain Road approach is projected to degrade to LOS E, although the traffic volumes along Mountain Road are projected to remain minor. Both approaches are projected to operate at LOS C during the PM peak hour. Otherwise, all other movements at the intersections are projected to operate at LOS B or better with delays of approximately 10 seconds or less.

Under 2045 Build conditions, Options 1A, 1B, and 2 each result in operational improvements at the S. Delphine Avenue at Windsor Road/Mountain Road intersection due to a combination of adding a right-turn lane along southbound Windsor Road and restricting turning movements to and from Mountain Road. Delays for left-turning vehicles from Windsor Road to eastbound S. Delphine Avenue are unchanged for Option 1A compared to No Build conditions, although right-turning vehicles from Windsor Road to westbound S. Delphine Avenue will experience significantly shorter delays than under No Build conditions. In Option 1B, Mountain Road is closed and converted to a cul-de-sac, which results in delay reductions for the southbound left-turn from Windsor Road of approximately 12 seconds in the AM peak hour and approximately 5 seconds in the PM peak hour, compared to Option 1A. Option 2 results in the best vehicular operations for the southbound left-turn from Windsor Road, with projected delay reductions of approximately 26 seconds in the AM peak hour and approximately 12 seconds in the PM peak hour, compared to Option 1A. The left-turn from eastbound S. Delphine Avenue to Windsor Road is projected to operate similarly under both No Build conditions and all Build condition options.

Table 8-2: 2045 No Build and Build Conditions Operations Summary

Option	LOS Delay (seconds)									
	EB S. Delphine*		WB S. Delphine*		NB Mountain		SB Windsor			
	AM	PM	AM	PM	AM	PM	AM		PM	
							L	R	L	R
2045 No Build	A 10	A 9	A 0	A 8	E 39	C 22	F 53		C 21	
2045 Option 1A	A 10	A 9	- -	- -	A 0	A 10	F 53	B 14	D 34	B 11
2045 Option 1B	A 10	A 9	- -	- -	- -	- -	E 41	B 14	D 29	B 11
2045 Option 2	B 10	A 9	- -	- -	A 0	A 10	D 27	B 14	C 22	B 11

*LOS and Delay results for left-turn movement only

8.10 COST ESTIMATE

Table 8-3 summarizes the total project costs for Options 1A, 1B, and 2.

Table 8-3: Cost Estimate

Phase	Option 1A (Preferred Alternative)	Option 1B	Option 2
Construction	\$114,563	\$121,454	\$200,920
Preliminary Engineering	\$34,369	\$36,436	\$60,276
R/W	\$0	\$3,000	\$0
Utility Relocations	\$0	\$0	\$0
Contingency	\$62,551	\$67,574	\$104,478
Total	\$211,000	\$228,000	\$366,000

9. SUMMARY OF FINDINGS / NEXT STEPS

The Staunton Augusta Waynesboro Metropolitan Planning Organization (SAWMPO) has initiated a Potential for Safety Improvement (PSI) Study for six intersections that have been identified as PSI locations to identify and evaluate safety improvements for implementation as part of future project(s) through SMART SCALE or other funding sources. Improvement recommendations for each of the six study intersections are depicted in Sections 3 through 8 of this report to address identified safety deficiencies.

If the recommendations from this study are prioritized by the localities of Augusta County, the City of Staunton, and the City of Waynesboro, funding can be pursued for implementation of the improvements. If funding is obtained through SMART SCALE or other funding sources, the project(s) will then enter the project development process.

As noted, public outreach was not conducted as part of this study; however, if funding is pursued for the recommended improvements, public outreach should be performed especially for those locations where impacts to access and/or traffic patterns are under consideration.

Appendix A:
Turning Movement Counts

Peggy Malone and Associates

904-992-8072

File Name : 1-Dunsmore Rd & US 11 AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Cars

Start Time	Business Driveway Eastbound					Dunsmore Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	1	0	15	0	16	0	64	0	0	64	6	92	0	0	98	178
07:15 AM	0	0	0	0	0	3	0	15	0	18	0	115	1	0	116	9	91	0	0	100	234
07:30 AM	0	0	0	0	0	1	0	13	0	14	0	128	1	0	129	9	122	0	0	131	274
07:45 AM	0	0	0	0	0	1	0	20	0	21	0	99	1	0	100	8	140	0	0	148	269
Total	0	0	0	0	0	6	0	63	0	69	0	406	3	0	409	32	445	0	0	477	955
08:00 AM	0	0	0	0	0	0	0	12	0	12	0	76	1	0	77	9	133	0	0	142	231
08:15 AM	0	0	0	0	0	1	0	9	0	10	0	64	0	0	64	6	87	0	0	93	167
08:30 AM	0	0	0	0	0	2	0	5	0	7	0	59	2	0	61	3	75	0	0	78	146
08:45 AM	0	0	0	0	0	0	0	15	0	15	0	42	1	0	43	5	79	0	0	84	142
Total	0	0	0	0	0	3	0	41	0	44	0	241	4	0	245	23	374	0	0	397	686
Grand Total	0	0	0	0	0	9	0	104	0	113	0	647	7	0	654	55	819	0	0	874	1641
Apprch %	0	0	0	0	0	8	0	92	0	100	0	98.9	1.1	0	100	6.3	93.7	0	0	100	
Total %	0	0	0	0	0	0.5	0	6.3	0	6.9	0	39.4	0.4	0	39.9	3.4	49.9	0	0	53.3	

Start Time	Business Driveway Eastbound					Dunsmore Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	3	0	15	0	18	0	115	1	0	116	9	91	0	0	100	234
07:30 AM	0	0	0	0	0	1	0	13	0	14	0	128	1	0	129	9	122	0	0	131	274
07:45 AM	0	0	0	0	0	1	0	20	0	21	0	99	1	0	100	8	140	0	0	148	269
08:00 AM	0	0	0	0	0	0	0	12	0	12	0	76	1	0	77	9	133	0	0	142	231
Total Volume	0	0	0	0	0	5	0	60	0	65	0	418	4	0	422	35	486	0	0	521	1008
% App. Total	0	0	0	0	0	7.7	0	92.3	0	100	0	99.1	0.9	0	100	6.7	93.3	0	0	100	
PHF	.000	.000	.000	.000	.000	.417	.000	.750	.000	.774	.000	.816	1.00	.000	.818	.972	.868	.000	.000	.880	.920

Peggy Malone and Associates

904-992-8072

File Name : 1-Dunsmore Rd & US 11 AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Trucks

Start Time	Business Driveway Eastbound					Dunsmore Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	1	0	0	0	1	0	2	0	0	2	0	8	0	0	8	11
07:15 AM	0	0	0	0	0	0	0	1	0	1	0	3	0	0	3	0	6	0	0	6	10
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	3	0	0	3	8
07:45 AM	0	0	0	0	0	1	0	1	0	2	0	5	0	0	5	0	11	0	0	11	18
Total	0	0	0	0	0	2	0	2	0	4	0	15	0	0	15	0	28	0	0	28	47
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	8
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	4	1	0	5	0	2	0	0	2	7
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	1	0	0	1	5
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	0	3	0	0	3	6
Total	0	0	0	0	0	0	0	0	0	0	0	10	2	0	12	0	14	0	0	14	26
Grand Total	0	0	0	0	0	2	0	2	0	4	0	25	2	0	27	0	42	0	0	42	73
Apprch %	0	0	0	0	0	50	0	50	0	0	0	92.6	7.4	0	0	0	100	0	0	0	
Total %	0	0	0	0	0	2.7	0	2.7	0	5.5	0	34.2	2.7	0	37	0	57.5	0	0	57.5	

Start Time	Business Driveway Eastbound					Dunsmore Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	1	0	0	0	1	0	2	0	0	2	0	8	0	0	8	11
07:15 AM	0	0	0	0	0	0	0	1	0	1	0	3	0	0	3	0	6	0	0	6	10
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	3	0	0	3	8
07:45 AM	0	0	0	0	0	1	0	1	0	2	0	5	0	0	5	0	11	0	0	11	18
Total Volume	0	0	0	0	0	2	0	2	0	4	0	15	0	0	15	0	28	0	0	28	47
% App. Total	0	0	0	0	0	50	0	50	0	0	0	100	0	0	0	0	100	0	0	0	
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.500	.000	.750	.000	.000	.750	.000	.636	.000	.000	.636	.653

Peggy Malone and Associates

904-992-8072

File Name : 1-Dunsmore Rd & US 11 AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Bicycles on Crosswalk

Start Time	Business Driveway Eastbound					Dunsmore Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	Business Driveway Eastbound					Dunsmore Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

904-992-8072

File Name : 1-Dunsmore Rd & US 11 AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Pedestrians

Start Time	Business Driveway Eastbound					Dunsmore Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	Business Driveway Eastbound					Dunsmore Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

904-992-8072

File Name : 1-Dunsmore Rd & US 11 AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Combined

Start Time	Business Driveway Eastbound					Dunsmore Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	2	0	15	0	17	0	66	0	0	66	6	100	0	0	106	189
07:15 AM	0	0	0	0	0	3	0	16	0	19	0	118	1	0	119	9	97	0	0	106	244
07:30 AM	0	0	0	0	0	1	0	13	0	14	0	133	1	0	134	9	125	0	0	134	282
07:45 AM	0	0	0	0	0	2	0	21	0	23	0	104	1	0	105	8	151	0	0	159	287
Total	0	0	0	0	0	8	0	65	0	73	0	421	3	0	424	32	473	0	0	505	1002
08:00 AM	0	0	0	0	0	0	0	12	0	12	0	76	1	0	77	9	141	0	0	150	239
08:15 AM	0	0	0	0	0	1	0	9	0	10	0	68	1	0	69	6	89	0	0	95	174
08:30 AM	0	0	0	0	0	2	0	5	0	7	0	63	2	0	65	3	76	0	0	79	151
08:45 AM	0	0	0	0	0	0	0	15	0	15	0	44	2	0	46	5	82	0	0	87	148
Total	0	0	0	0	0	3	0	41	0	44	0	251	6	0	257	23	388	0	0	411	712
Grand Total	0	0	0	0	0	11	0	106	0	117	0	672	9	0	681	55	861	0	0	916	1714
Apprch %	0	0	0	0	0	9.4	0	90.6	0	0	0	98.7	1.3	0	0	6	94	0	0	0	
Total %	0	0	0	0	0	0.6	0	6.2	0	6.8	0	39.2	0.5	0	39.7	3.2	50.2	0	0	53.4	

Start Time	Business Driveway Eastbound					Dunsmore Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	3	0	16	0	19	0	118	1	0	119	9	97	0	0	106	244
07:30 AM	0	0	0	0	0	1	0	13	0	14	0	133	1	0	134	9	125	0	0	134	282
07:45 AM	0	0	0	0	0	2	0	21	0	23	0	104	1	0	105	8	151	0	0	159	287
08:00 AM	0	0	0	0	0	0	0	12	0	12	0	76	1	0	77	9	141	0	0	150	239
Total Volume	0	0	0	0	0	6	0	62	0	68	0	431	4	0	435	35	514	0	0	549	1052
% App. Total	0	0	0	0	0	8.8	0	91.2	0	0	0	99.1	0.9	0	0	6.4	93.6	0	0	0	
PHF	.000	.000	.000	.000	.000	.500	.000	.738	.000	.739	.000	.810	1.00	.000	.812	.972	.851	.000	.000	.863	.916

Peggy Malone and Associates

904-992-8072

File Name : 1-Dunsmore Rd & US 11 PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Cars

Start Time	Business Driveway Eastbound					Dunsmore Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	2	0	19	0	21	1	106	1	0	108	3	111	0	0	114	243
04:15 PM	0	0	0	0	0	1	0	16	0	17	0	114	1	0	115	5	117	0	0	122	254
04:30 PM	0	0	0	0	0	1	0	17	0	18	0	111	2	0	113	3	142	0	0	145	276
04:45 PM	0	0	0	0	0	2	0	16	0	18	0	117	1	0	118	5	136	0	0	141	277
Total	0	0	0	0	0	6	0	68	0	74	1	448	5	0	454	16	506	0	0	522	1050
05:00 PM	0	0	0	0	0	2	0	17	0	19	0	123	1	0	124	6	130	0	0	136	279
05:15 PM	0	0	0	0	0	1	0	14	0	15	0	118	0	0	118	6	150	0	0	156	289
05:30 PM	0	0	0	0	0	1	0	19	0	20	0	86	1	0	87	9	109	0	0	118	225
05:45 PM	0	0	0	0	0	0	0	7	0	7	0	78	0	0	78	1	100	0	0	101	186
Total	0	0	0	0	0	4	0	57	0	61	0	405	2	0	407	22	489	0	0	511	979
Grand Total	0	0	0	0	0	10	0	125	0	135	1	853	7	0	861	38	995	0	0	1033	2029
Apprch %	0	0	0	0	0	7.4	0	92.6	0	135	0.1	99.1	0.8	0	861	3.7	96.3	0	0	1033	2029
Total %	0	0	0	0	0	0.5	0	6.2	0	6.7	0	42	0.3	0	42.4	1.9	49	0	0	50.9	2029

Start Time	Business Driveway Eastbound					Dunsmore Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	1	0	17	0	18	0	111	2	0	113	3	142	0	0	145	276
04:45 PM	0	0	0	0	0	2	0	16	0	18	0	117	1	0	118	5	136	0	0	141	277
05:00 PM	0	0	0	0	0	2	0	17	0	19	0	123	1	0	124	6	130	0	0	136	279
05:15 PM	0	0	0	0	0	1	0	14	0	15	0	118	0	0	118	6	150	0	0	156	289
Total Volume	0	0	0	0	0	6	0	64	0	70	0	469	4	0	473	20	558	0	0	578	1121
% App. Total	0	0	0	0	0	8.6	0	91.4	0	70	0	99.2	0.8	0	473	3.5	96.5	0	0	578	1121
PHF	.000	.000	.000	.000	.000	.750	.000	.941	.000	.921	.000	.953	.500	.000	.954	.833	.930	.000	.000	.926	.970

Peggy Malone and Associates
904-992-8072

File Name : 1-Dunsmore Rd & US 11 PM
Site Code :
Start Date : 11/15/2022
Page No : 1

Groups Printed- Trucks

Start Time	Business Driveway Eastbound					Dunsmore Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	5	0	0	5	10
04:15 PM	0	0	0	0	0	1	0	0	0	1	0	3	0	0	3	0	2	0	0	2	6
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	3	1	0	4	1	3	0	0	4	8
04:45 PM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	1	0	0	1	3
Total	0	0	0	0	0	2	0	0	0	2	0	12	1	0	13	1	11	0	0	12	27
05:00 PM	0	0	0	0	0	0	0	1	0	1	0	4	0	0	4	0	3	0	0	3	8
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	4
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
05:45 PM	0	0	0	0	0	1	0	0	0	1	0	3	0	0	3	0	2	0	0	2	6
Total	0	0	0	0	0	1	0	1	0	2	0	9	0	0	9	0	8	0	0	8	19
Grand Total	0	0	0	0	0	3	0	1	0	4	0	21	1	0	22	1	19	0	0	20	46
Apprch %	0	0	0	0	0	75	0	25	0	0	0	95.5	4.5	0	0	5	95	0	0	0	0
Total %	0	0	0	0	0	6.5	0	2.2	0	8.7	0	45.7	2.2	0	47.8	2.2	41.3	0	0	43.5	0

Start Time	Business Driveway Eastbound					Dunsmore Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	5	0	0	5	10
04:15 PM	0	0	0	0	0	1	0	0	0	1	0	3	0	0	3	0	2	0	0	2	6
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	3	1	0	4	1	3	0	0	4	8
04:45 PM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	1	0	0	1	3
Total Volume	0	0	0	0	0	2	0	0	0	2	0	12	1	0	13	1	11	0	0	12	27
% App. Total	0	0	0	0	0	100	0	0	0	0	0	92.3	7.7	0	0	8.3	91.7	0	0	0	0
PHF	.000	.000	.000	.000	.000	.500	.000	.000	.000	.500	.000	.600	.250	.000	.650	.250	.550	.000	.000	.600	.675

Peggy Malone and Associates

904-992-8072

File Name : 1-Dunsmore Rd & US 11 PM
 Site Code :
 Start Date : 11/15/2022
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Groups Printed- Bicycles on Crosswalk

Start Time	Business Driveway Eastbound					Dunsmore Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	Business Driveway Eastbound					Dunsmore Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates
904-992-8072

File Name : 1-Dunsmore Rd & US 11 PM
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Groups Printed- Pedestrians

Start Time	Business Driveway Eastbound					Dunsmore Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Apprch %	0	0	0	100		0	0	0	0		0	0	0	100		0	0	0	0		
Total %	0	0	0	50	50	0	0	0	0	0	0	0	0	50	50	0	0	0	0	0	

Start Time	Business Driveway Eastbound					Dunsmore Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
% App. Total	0	0	0	100		0	0	0	0		0	0	0	100		0	0	0	0		
PHF	.000	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000	.000	.250

Peggy Malone and Associates

904-992-8072

File Name : 1-Dunsmore Rd & US 11 PM
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Groups Printed- Combined

Start Time	Business Driveway Eastbound					Dunsmore Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	1	1	2	0	19	0	21	1	111	1	1	114	3	116	0	0	119	255
04:15 PM	0	0	0	0	0	2	0	16	0	18	0	117	1	0	118	5	119	0	0	124	260
04:30 PM	0	0	0	0	0	1	0	17	0	18	0	114	3	0	117	4	145	0	0	149	284
04:45 PM	0	0	0	0	0	3	0	16	0	19	0	118	1	0	119	5	137	0	0	142	280
Total	0	0	0	1	1	8	0	68	0	76	1	460	6	1	468	17	517	0	0	534	1079
05:00 PM	0	0	0	0	0	2	0	18	0	20	0	127	1	0	128	6	133	0	0	139	287
05:15 PM	0	0	0	0	0	1	0	14	0	15	0	120	0	0	120	6	152	0	0	158	293
05:30 PM	0	0	0	0	0	1	0	19	0	20	0	86	1	0	87	9	110	0	0	119	226
05:45 PM	0	0	0	0	0	1	0	7	0	8	0	81	0	0	81	1	102	0	0	103	192
Total	0	0	0	0	0	5	0	58	0	63	0	414	2	0	416	22	497	0	0	519	998
Grand Total	0	0	0	1	1	13	0	126	0	139	1	874	8	1	884	39	1014	0	0	1053	2077
Apprch %	0	0	0	100		9.4	0	90.6	0		0.1	98.9	0.9	0.1		3.7	96.3	0	0		
Total %	0	0	0	0	0	0.6	0	6.1	0	6.7	0	42.1	0.4	0	42.6	1.9	48.8	0	0	50.7	

Start Time	Business Driveway Eastbound					Dunsmore Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	1	0	17	0	18	0	114	3	0	117	4	145	0	0	149	284
04:45 PM	0	0	0	0	0	3	0	16	0	19	0	118	1	0	119	5	137	0	0	142	280
05:00 PM	0	0	0	0	0	2	0	18	0	20	0	127	1	0	128	6	133	0	0	139	287
05:15 PM	0	0	0	0	0	1	0	14	0	15	0	120	0	0	120	6	152	0	0	158	293
Total Volume	0	0	0	0	0	7	0	65	0	72	0	479	5	0	484	21	567	0	0	588	1144
% App. Total	0	0	0	0	0	9.7	0	90.3	0	9.0	0	99	1	0	99.9	3.6	96.4	0	0	99.9	
PHF	.000	.000	.000	.000	.000	.583	.000	.903	.000	.900	.000	.943	.417	.000	.945	.875	.933	.000	.000	.930	.976

Peggy Malone and Associates

904-992-8072

File Name : 2-Laurel Hill Rd_Quick's Mill Rd & US 11 AM
 Site Code :
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Groups Printed- Cars

Start Time	Quick's Mill Rd Eastbound					Laurel Hill Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	11	38	16	0	65	42	13	18	0	73	2	34	40	0	76	36	39	6	0	81	295
07:15 AM	19	42	23	0	84	52	18	39	0	109	5	52	34	0	91	38	56	6	0	100	384
07:30 AM	23	42	17	0	82	62	12	48	0	122	6	58	45	0	109	41	60	9	0	110	423
07:45 AM	12	22	29	0	63	74	6	37	0	117	5	51	42	0	98	70	59	14	0	143	421
Total	65	144	85	0	294	230	49	142	0	421	18	195	161	0	374	185	214	35	0	434	1523
08:00 AM	14	30	16	0	60	38	13	28	0	79	11	37	46	0	94	49	72	8	0	129	362
08:15 AM	10	26	15	0	51	43	8	13	0	64	11	51	27	0	89	27	56	5	0	88	292
08:30 AM	9	17	12	0	38	41	16	12	0	69	3	34	47	0	84	26	51	3	0	80	271
08:45 AM	9	24	16	0	49	35	10	11	0	56	5	32	35	0	72	23	48	10	0	81	258
Total	42	97	59	0	198	157	47	64	0	268	30	154	155	0	339	125	227	26	0	378	1183
Grand Total	107	241	144	0	492	387	96	206	0	689	48	349	316	0	713	310	441	61	0	812	2706
Apprch %	21.7	49	29.3	0		56.2	13.9	29.9	0		6.7	48.9	44.3	0		38.2	54.3	7.5	0		
Total %	4	8.9	5.3	0	18.2	14.3	3.5	7.6	0	25.5	1.8	12.9	11.7	0	26.3	11.5	16.3	2.3	0	30	

Start Time	Quick's Mill Rd Eastbound					Laurel Hill Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	19	42	23	0	84	52	18	39	0	109	5	52	34	0	91	38	56	6	0	100	384
07:30 AM	23	42	17	0	82	62	12	48	0	122	6	58	45	0	109	41	60	9	0	110	423
07:45 AM	12	22	29	0	63	74	6	37	0	117	5	51	42	0	98	70	59	14	0	143	421
08:00 AM	14	30	16	0	60	38	13	28	0	79	11	37	46	0	94	49	72	8	0	129	362
Total Volume	68	136	85	0	289	226	49	152	0	427	27	198	167	0	392	198	247	37	0	482	1590
% App. Total	23.5	47.1	29.4	0		52.9	11.5	35.6	0		6.9	50.5	42.6	0		41.1	51.2	7.7	0		
PHF	.739	.810	.733	.000	.860	.764	.681	.792	.000	.875	.614	.853	.908	.000	.899	.707	.858	.661	.000	.843	.940

Peggy Malone and Associates

904-992-8072

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Groups Printed- Trucks

Start Time	Quick's Mill Rd Eastbound					Laurel Hill Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	1	0	0	0	1	0	1	1	0	2	0	1	5	0	6	7	1	0	0	8	17
07:15 AM	0	0	0	0	0	1	0	1	0	2	0	1	6	0	7	1	2	1	0	4	13
07:30 AM	2	0	0	0	2	4	1	1	0	6	0	2	3	0	5	1	2	0	0	3	16
07:45 AM	1	0	0	0	1	2	0	2	0	4	0	2	3	0	5	7	4	0	0	11	21
Total	4	0	0	0	4	7	2	5	0	14	0	6	17	0	23	16	9	1	0	26	67
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	2	5	0	0	7	9
08:15 AM	0	0	0	0	0	0	0	2	0	2	0	4	1	0	5	2	4	0	0	6	13
08:30 AM	0	0	0	0	0	3	0	4	0	7	0	0	7	0	7	0	1	0	0	1	15
08:45 AM	0	0	1	0	1	1	1	0	0	2	0	3	1	0	4	2	4	1	0	7	14
Total	0	0	1	0	1	4	1	6	0	11	1	7	10	0	18	6	14	1	0	21	51
Grand Total	4	0	1	0	5	11	3	11	0	25	1	13	27	0	41	22	23	2	0	47	118
Apprch %	80	0	20	0		44	12	44	0		2.4	31.7	65.9	0		46.8	48.9	4.3	0		
Total %	3.4	0	0.8	0	4.2	9.3	2.5	9.3	0	21.2	0.8	11	22.9	0	34.7	18.6	19.5	1.7	0	39.8	

Start Time	Quick's Mill Rd Eastbound					Laurel Hill Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	1	0	0	0	1	0	1	1	0	2	0	1	5	0	6	7	1	0	0	8	17
07:15 AM	0	0	0	0	0	1	0	1	0	2	0	1	6	0	7	1	2	1	0	4	13
07:30 AM	2	0	0	0	2	4	1	1	0	6	0	2	3	0	5	1	2	0	0	3	16
07:45 AM	1	0	0	0	1	2	0	2	0	4	0	2	3	0	5	7	4	0	0	11	21
Total Volume	4	0	0	0	4	7	2	5	0	14	0	6	17	0	23	16	9	1	0	26	67
% App. Total	100	0	0	0		50	14.3	35.7	0		0	26.1	73.9	0		61.5	34.6	3.8	0		
PHF	.500	.000	.000	.000	.500	.438	.500	.625	.000	.583	.000	.750	.708	.000	.821	.571	.563	.250	.000	.591	.798

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904-992-8072

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Groups Printed- Bicycles on Crosswalk

Start Time	Quick's Mill Rd Eastbound					Laurel Hill Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	Quick's Mill Rd Eastbound					Laurel Hill Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

904-992-8072

File Name : 2-Laurel Hill Rd_Quick's Mill Rd & US 11 AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Pedestrians

Start Time	Quick's Mill Rd Eastbound					Laurel Hill Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	Quick's Mill Rd Eastbound					Laurel Hill Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

904-992-8072

File Name : 2-Laurel Hill Rd_Quick's Mill Rd & US 11 AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Combined

Start Time	Quick's Mill Rd Eastbound					Laurel Hill Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	12	38	16	0	66	42	14	19	0	75	2	35	45	0	82	43	40	6	0	89	312
07:15 AM	19	42	23	0	84	53	18	40	0	111	5	53	40	0	98	39	58	7	0	104	397
07:30 AM	25	42	17	0	84	66	13	49	0	128	6	60	48	0	114	42	62	9	0	113	439
07:45 AM	13	22	29	0	64	76	6	39	0	121	5	53	45	0	103	77	63	14	0	154	442
Total	69	144	85	0	298	237	51	147	0	435	18	201	178	0	397	201	223	36	0	460	1590
08:00 AM	14	30	16	0	60	38	13	28	0	79	12	37	47	0	96	51	77	8	0	136	371
08:15 AM	10	26	15	0	51	43	8	15	0	66	11	55	28	0	94	29	60	5	0	94	305
08:30 AM	9	17	12	0	38	44	16	16	0	76	3	34	54	0	91	26	52	3	0	81	286
08:45 AM	9	24	17	0	50	36	11	11	0	58	5	35	36	0	76	25	52	11	0	88	272
Total	42	97	60	0	199	161	48	70	0	279	31	161	165	0	357	131	241	27	0	399	1234
Grand Total	111	241	145	0	497	398	99	217	0	714	49	362	343	0	754	332	464	63	0	859	2824
Apprch %	22.3	48.5	29.2	0		55.7	13.9	30.4	0		6.5	48	45.5	0		38.6	54	7.3	0		
Total %	3.9	8.5	5.1	0	17.6	14.1	3.5	7.7	0	25.3	1.7	12.8	12.1	0	26.7	11.8	16.4	2.2	0	30.4	

Start Time	Quick's Mill Rd Eastbound					Laurel Hill Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	19	42	23	0	84	53	18	40	0	111	5	53	40	0	98	39	58	7	0	104	397
07:30 AM	25	42	17	0	84	66	13	49	0	128	6	60	48	0	114	42	62	9	0	113	439
07:45 AM	13	22	29	0	64	76	6	39	0	121	5	53	45	0	103	77	63	14	0	154	442
08:00 AM	14	30	16	0	60	38	13	28	0	79	12	37	47	0	96	51	77	8	0	136	371
Total Volume	71	136	85	0	292	233	50	156	0	439	28	203	180	0	411	209	260	38	0	507	1649
% App. Total	24.3	46.6	29.1	0		53.1	11.4	35.5	0		6.8	49.4	43.8	0		41.2	51.3	7.5	0		
PHF	.710	.810	.733	.000	.869	.766	.694	.796	.000	.857	.583	.846	.938	.000	.901	.679	.844	.679	.000	.823	.933

Peggy Malone and Associates

904-992-8072

File Name : 2-Laurel Hill Rd_Quick's Mill Rd & US 11 PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Cars

Start Time	Quick's Mill Rd Eastbound					Laurel Hill Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	14	13	11	0	38	59	39	23	0	121	18	74	60	0	152	23	77	10	0	110	421
04:15 PM	4	14	14	0	32	48	22	29	0	99	15	80	53	0	148	34	71	12	0	117	396
04:30 PM	9	19	10	0	38	75	31	24	0	130	18	84	66	0	168	39	94	13	0	146	482
04:45 PM	7	17	10	0	34	51	26	36	0	113	25	71	44	0	140	39	90	13	0	142	429
Total	34	63	45	0	142	233	118	112	0	463	76	309	223	0	608	135	332	48	0	515	1728
05:00 PM	14	19	8	0	41	41	41	20	0	102	20	85	79	0	184	42	80	14	0	136	463
05:15 PM	5	19	14	0	38	72	27	39	0	138	28	73	65	0	166	41	83	17	0	141	483
05:30 PM	7	34	9	0	50	36	22	28	0	86	16	55	49	0	120	32	57	20	0	109	365
05:45 PM	4	18	4	0	26	39	30	33	0	102	19	46	33	0	98	35	64	11	0	110	336
Total	30	90	35	0	155	188	120	120	0	428	83	259	226	0	568	150	284	62	0	496	1647
Grand Total	64	153	80	0	297	421	238	232	0	891	159	568	449	0	1176	285	616	110	0	1011	3375
Apprch %	21.5	51.5	26.9	0		47.3	26.7	26	0		13.5	48.3	38.2	0		28.2	60.9	10.9	0		
Total %	1.9	4.5	2.4	0	8.8	12.5	7.1	6.9	0	26.4	4.7	16.8	13.3	0	34.8	8.4	18.3	3.3	0	30	

Start Time	Quick's Mill Rd Eastbound					Laurel Hill Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	9	19	10	0	38	75	31	24	0	130	18	84	66	0	168	39	94	13	0	146	482
04:45 PM	7	17	10	0	34	51	26	36	0	113	25	71	44	0	140	39	90	13	0	142	429
05:00 PM	14	19	8	0	41	41	41	20	0	102	20	85	79	0	184	42	80	14	0	136	463
05:15 PM	5	19	14	0	38	72	27	39	0	138	28	73	65	0	166	41	83	17	0	141	483
Total Volume	35	74	42	0	151	239	125	119	0	483	91	313	254	0	658	161	347	57	0	565	1857
% App. Total	23.2	49	27.8	0		49.5	25.9	24.6	0		13.8	47.6	38.6	0		28.5	61.4	10.1	0		
PHF	.625	.974	.750	.000	.921	.797	.762	.763	.000	.875	.813	.921	.804	.000	.894	.958	.923	.838	.000	.967	.961

Peggy Malone and Associates

904-992-8072

File Name : 2-Laurel Hill Rd_Quick's Mill Rd & US 11 PM
 Site Code :
 Start Date : 11/15/2022
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Groups Printed- Trucks

Start Time	Quick's Mill Rd Eastbound					Laurel Hill Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	1	0	0	1	3	0	0	0	3	0	4	4	0	8	2	4	0	0	6	18
04:15 PM	0	0	0	0	0	0	1	1	0	2	0	1	1	0	2	0	2	0	0	2	6
04:30 PM	0	2	0	0	2	4	0	1	0	5	0	0	1	0	1	0	2	0	0	2	10
04:45 PM	0	0	0	0	0	4	0	0	0	4	0	1	0	0	1	1	1	0	0	2	7
Total	0	3	0	0	3	11	1	2	0	14	0	6	6	0	12	3	9	0	0	12	41
05:00 PM	0	0	0	0	0	3	0	3	0	6	0	3	0	0	3	1	2	0	0	3	12
05:15 PM	0	0	0	0	0	1	0	1	0	2	0	0	2	0	2	1	1	0	0	2	6
05:30 PM	0	0	0	0	0	2	1	0	0	3	0	0	1	0	1	1	1	0	0	2	6
05:45 PM	0	0	0	0	0	1	1	1	0	3	0	1	1	0	2	0	2	0	0	2	7
Total	0	0	0	0	0	7	2	5	0	14	0	4	4	0	8	3	6	0	0	9	31
Grand Total	0	3	0	0	3	18	3	7	0	28	0	10	10	0	20	6	15	0	0	21	72
Apprch %	0	100	0	0		64.3	10.7	25	0		0	50	50	0		28.6	71.4	0	0		
Total %	0	4.2	0	0	4.2	25	4.2	9.7	0	38.9	0	13.9	13.9	0	27.8	8.3	20.8	0	0	29.2	

Start Time	Quick's Mill Rd Eastbound					Laurel Hill Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	1	0	0	1	3	0	0	0	3	0	4	4	0	8	2	4	0	0	6	18
04:15 PM	0	0	0	0	0	0	1	1	0	2	0	1	1	0	2	0	2	0	0	2	6
04:30 PM	0	2	0	0	2	4	0	1	0	5	0	0	1	0	1	0	2	0	0	2	10
04:45 PM	0	0	0	0	0	4	0	0	0	4	0	1	0	0	1	1	1	0	0	2	7
Total Volume	0	3	0	0	3	11	1	2	0	14	0	6	6	0	12	3	9	0	0	12	41
% App. Total	0	100	0	0		78.6	7.1	14.3	0		0	50	50	0		25	75	0	0		
PHF	.000	.375	.000	.000	.375	.688	.250	.500	.000	.700	.000	.375	.375	.000	.375	.375	.563	.000	.000	.500	.569

Peggy Malone and Associates

904-992-8072

File Name : 2-Laurel Hill Rd_Quick's Mill Rd & US 11 PM
 Site Code :
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 Page No : 1

Groups Printed- Bicycles on Crosswalk

Start Time	Quick's Mill Rd Eastbound					Laurel Hill Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	Quick's Mill Rd Eastbound					Laurel Hill Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

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File Name : 2-Laurel Hill Rd_Quick's Mill Rd & US 11 PM
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Groups Printed- Pedestrians

Start Time	Quick's Mill Rd Eastbound					Laurel Hill Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	Quick's Mill Rd Eastbound					Laurel Hill Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

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File Name : 2-Laurel Hill Rd_Quick's Mill Rd & US 11 PM
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Groups Printed- Combined

Start Time	Quick's Mill Rd Eastbound					Laurel Hill Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	14	14	11	0	39	62	39	23	0	124	18	78	64	0	160	25	81	10	0	116	439
04:15 PM	4	14	14	0	32	48	23	30	0	101	15	81	54	0	150	34	73	12	0	119	402
04:30 PM	9	21	10	0	40	79	31	25	0	135	18	84	67	0	169	39	96	13	0	148	492
04:45 PM	7	17	10	0	34	55	26	36	0	117	25	72	44	0	141	40	91	13	0	144	436
Total	34	66	45	0	145	244	119	114	0	477	76	315	229	0	620	138	341	48	0	527	1769
05:00 PM	14	19	8	0	41	44	41	23	0	108	20	88	79	0	187	43	82	14	0	139	475
05:15 PM	5	19	14	0	38	73	27	40	0	140	28	73	67	0	168	42	84	17	0	143	489
05:30 PM	7	34	9	0	50	38	23	28	0	89	16	55	50	0	121	33	58	20	0	111	371
05:45 PM	4	18	4	0	26	40	31	34	0	105	19	47	34	0	100	35	66	11	0	112	343
Total	30	90	35	0	155	195	122	125	0	442	83	263	230	0	576	153	290	62	0	505	1678
Grand Total	64	156	80	0	300	439	241	239	0	919	159	578	459	0	1196	291	631	110	0	1032	3447
Apprch %	21.3	52	26.7	0		47.8	26.2	26	0		13.3	48.3	38.4	0		28.2	61.1	10.7	0		
Total %	1.9	4.5	2.3	0	8.7	12.7	7	6.9	0	26.7	4.6	16.8	13.3	0	34.7	8.4	18.3	3.2	0	29.9	

Start Time	Quick's Mill Rd Eastbound					Laurel Hill Rd Westbound					US 11 Northbound					US 11 Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	9	21	10	0	40	79	31	25	0	135	18	84	67	0	169	39	96	13	0	148	492
04:45 PM	7	17	10	0	34	55	26	36	0	117	25	72	44	0	141	40	91	13	0	144	436
05:00 PM	14	19	8	0	41	44	41	23	0	108	20	88	79	0	187	43	82	14	0	139	475
05:15 PM	5	19	14	0	38	73	27	40	0	140	28	73	67	0	168	42	84	17	0	143	489
Total Volume	35	76	42	0	153	251	125	124	0	500	91	317	257	0	665	164	353	57	0	574	1892
% App. Total	22.9	49.7	27.5	0		50.2	25	24.8	0		13.7	47.7	38.6	0		28.6	61.5	9.9	0		
PHF	.625	.905	.750	.000	.933	.794	.762	.775	.000	.893	.813	.901	.813	.000	.889	.953	.919	.838	.000	.970	.961

Peggy Malone and Associates
904-992-8072

File Name : 3-Laurel Hill Rd & Dunsmore Rd AM
Site Code :
Start Date : 11/15/2022
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Groups Printed- Cars

Start Time	Laurel Hill Rd Eastbound				Laurel Hill Rd Westbound				Dunsmore Rd Southbound				Int. Total
	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Right	Peds	App. Total	
07:00 AM	0	109	0	109	73	17	0	90	8	0	0	8	207
07:15 AM	0	108	0	108	118	14	0	132	12	0	0	12	252
07:30 AM	1	120	0	121	111	15	0	126	12	0	0	12	259
07:45 AM	0	124	0	124	123	23	0	146	6	1	0	7	277
Total	1	461	0	462	425	69	0	494	38	1	0	39	995
08:00 AM	0	125	0	125	78	11	0	89	15	0	0	15	229
08:15 AM	0	83	0	83	66	14	0	80	8	1	0	9	172
08:30 AM	1	84	0	85	64	8	0	72	8	0	0	8	165
08:45 AM	1	76	0	77	55	15	0	70	6	1	0	7	154
Total	2	368	0	370	263	48	0	311	37	2	0	39	720
Grand Total	3	829	0	832	688	117	0	805	75	3	0	78	1715
Apprch %	0.4	99.6	0		85.5	14.5	0		96.2	3.8	0		
Total %	0.2	48.3	0	48.5	40.1	6.8	0	46.9	4.4	0.2	0	4.5	

Start Time	Laurel Hill Rd Eastbound				Laurel Hill Rd Westbound				Dunsmore Rd Southbound				Int. Total
	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:15 AM													
07:15 AM	0	108	0	108	118	14	0	132	12	0	0	12	252
07:30 AM	1	120	0	121	111	15	0	126	12	0	0	12	259
07:45 AM	0	124	0	124	123	23	0	146	6	1	0	7	277
08:00 AM	0	125	0	125	78	11	0	89	15	0	0	15	229
Total Volume	1	477	0	478	430	63	0	493	45	1	0	46	1017
% App. Total	0.2	99.8	0		87.2	12.8	0		97.8	2.2	0		
PHF	.250	.954	.000	.956	.874	.685	.000	.844	.750	.250	.000	.767	.918

Peggy Malone and Associates
904-992-8072

File Name : 3-Laurel Hill Rd & Dunsmore Rd AM
Site Code :
Start Date : 11/15/2022
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Groups Printed- Trucks

Start Time	Laurel Hill Rd Eastbound				Laurel Hill Rd Westbound				Dunsmore Rd Southbound				Int. Total
	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Right	Peds	App. Total	
07:00 AM	0	13	0	13	3	0	0	3	0	0	0	0	16
07:15 AM	0	7	0	7	5	3	0	8	1	0	0	1	16
07:30 AM	0	7	0	7	5	1	0	6	0	0	0	0	13
07:45 AM	0	10	0	10	4	2	0	6	0	0	0	0	16
Total	0	37	0	37	17	6	0	23	1	0	0	1	61
08:00 AM	0	3	0	3	1	0	0	1	1	0	0	1	5
08:15 AM	0	2	0	2	4	1	0	5	2	1	0	3	10
08:30 AM	0	6	0	6	7	1	0	8	0	0	0	0	14
08:45 AM	0	5	0	5	6	0	0	6	0	0	0	0	11
Total	0	16	0	16	18	2	0	20	3	1	0	4	40
Grand Total	0	53	0	53	35	8	0	43	4	1	0	5	101
Apprch %	0	100	0		81.4	18.6	0		80	20	0		
Total %	0	52.5	0	52.5	34.7	7.9	0	42.6	4	1	0	5	

Start Time	Laurel Hill Rd Eastbound				Laurel Hill Rd Westbound				Dunsmore Rd Southbound				Int. Total
	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:00 AM													
07:00 AM	0	13	0	13	3	0	0	3	0	0	0	0	16
07:15 AM	0	7	0	7	5	3	0	8	1	0	0	1	16
07:30 AM	0	7	0	7	5	1	0	6	0	0	0	0	13
07:45 AM	0	10	0	10	4	2	0	6	0	0	0	0	16
Total Volume	0	37	0	37	17	6	0	23	1	0	0	1	61
% App. Total	0	100	0		73.9	26.1	0		100	0	0		
PHF	.000	.712	.000	.712	.850	.500	.000	.719	.250	.000	.000	.250	.953

Peggy Malone and Associates
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File Name : 3-Laurel Hill Rd & Dunsmore Rd AM
Site Code :
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Groups Printed- Combined

Start Time	Laurel Hill Rd Eastbound				Laurel Hill Rd Westbound				Dunsmore Rd Southbound				Int. Total
	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Right	Peds	App. Total	
07:00 AM	0	109	0	109	73	17	0	90	8	0	0	8	207
07:15 AM	0	108	0	108	118	14	0	132	12	0	0	12	252
07:30 AM	1	120	0	121	111	15	0	126	12	0	0	12	259
07:45 AM	0	124	0	124	123	23	0	146	6	1	0	7	277
Total	1	461	0	462	425	69	0	494	38	1	0	39	995
08:00 AM	0	125	0	125	78	11	0	89	15	0	0	15	229
08:15 AM	0	83	0	83	66	14	0	80	8	1	0	9	172
08:30 AM	1	84	0	85	64	8	0	72	8	0	0	8	165
08:45 AM	1	76	0	77	55	15	0	70	6	1	0	7	154
Total	2	368	0	370	263	48	0	311	37	2	0	39	720
Grand Total	3	829	0	832	688	117	0	805	75	3	0	78	1715
Apprch %	0.4	99.6	0		85.5	14.5	0		96.2	3.8	0		
Total %	0.2	48.3	0	48.5	40.1	6.8	0	46.9	4.4	0.2	0	4.5	

Start Time	Laurel Hill Rd Eastbound				Laurel Hill Rd Westbound				Dunsmore Rd Southbound				Int. Total
	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 07:15 AM													
07:15 AM	0	108	0	108	118	14	0	132	12	0	0	12	252
07:30 AM	1	120	0	121	111	15	0	126	12	0	0	12	259
07:45 AM	0	124	0	124	123	23	0	146	6	1	0	7	277
08:00 AM	0	125	0	125	78	11	0	89	15	0	0	15	229
Total Volume	1	477	0	478	430	63	0	493	45	1	0	46	1017
% App. Total	0.2	99.8	0		87.2	12.8	0		97.8	2.2	0		
PHF	.250	.954	.000	.956	.874	.685	.000	.844	.750	.250	.000	.767	.918

Peggy Malone and Associates
904-992-8072

File Name : 3-Laurel Hill Rd & Dunsmore Rd PM
Site Code :
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Groups Printed- Cars

Start Time	Laurel Hill Rd Eastbound				Laurel Hill Rd Westbound				Dunsmore Rd Southbound				Int. Total
	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Right	Peds	App. Total	
04:00 PM	1	93	0	94	109	18	0	127	8	0	0	8	229
04:15 PM	0	111	0	111	91	17	0	108	4	2	0	6	225
04:30 PM	0	112	0	112	137	19	0	156	11	0	0	11	279
04:45 PM	1	94	0	95	113	14	0	127	8	1	0	9	231
Total	2	410	0	412	450	68	0	518	31	3	0	34	964
05:00 PM	0	138	0	138	117	15	0	132	7	0	0	7	277
05:15 PM	2	127	0	129	120	17	0	137	9	2	0	11	277
05:30 PM	1	116	0	117	88	20	0	108	10	1	0	11	236
05:45 PM	0	95	0	95	110	9	0	119	6	0	0	6	220
Total	3	476	0	479	435	61	0	496	32	3	0	35	1010
Grand Total	5	886	0	891	885	129	0	1014	63	6	0	69	1974
Apprch %	0.6	99.4	0		87.3	12.7	0		91.3	8.7	0		
Total %	0.3	44.9	0	45.1	44.8	6.5	0	51.4	3.2	0.3	0	3.5	

Start Time	Laurel Hill Rd Eastbound				Laurel Hill Rd Westbound				Dunsmore Rd Southbound				Int. Total
	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:30 PM													
04:30 PM	0	112	0	112	137	19	0	156	11	0	0	11	279
04:45 PM	1	94	0	95	113	14	0	127	8	1	0	9	231
05:00 PM	0	138	0	138	117	15	0	132	7	0	0	7	277
05:15 PM	2	127	0	129	120	17	0	137	9	2	0	11	277
Total Volume	3	471	0	474	487	65	0	552	35	3	0	38	1064
% App. Total	0.6	99.4	0		88.2	11.8	0		92.1	7.9	0		
PHF	.375	.853	.000	.859	.889	.855	.000	.885	.795	.375	.000	.864	.953

Peggy Malone and Associates
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File Name : 3-Laurel Hill Rd & Dunsmore Rd PM
Site Code :
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Groups Printed- Trucks

Start Time	Laurel Hill Rd Eastbound				Laurel Hill Rd Westbound				Dunsmore Rd Southbound				Int. Total
	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Right	Peds	App. Total	
04:00 PM	0	8	0	8	4	0	0	4	1	0	0	1	13
04:15 PM	0	1	0	1	3	1	0	4	0	0	0	0	5
04:30 PM	0	3	0	3	6	0	0	6	1	0	0	1	10
04:45 PM	0	2	0	2	4	0	0	4	0	0	0	0	6
Total	0	14	0	14	17	1	0	18	2	0	0	2	34
05:00 PM	0	1	0	1	7	1	0	8	1	0	0	1	10
05:15 PM	0	2	0	2	2	0	0	2	1	0	0	1	5
05:30 PM	1	1	0	2	2	0	0	2	0	0	0	0	4
05:45 PM	0	1	0	1	2	0	0	2	0	0	0	0	3
Total	1	5	0	6	13	1	0	14	2	0	0	2	22
Grand Total	1	19	0	20	30	2	0	32	4	0	0	4	56
Apprch %	5	95	0		93.8	6.2	0		100	0	0		
Total %	1.8	33.9	0	35.7	53.6	3.6	0	57.1	7.1	0	0	7.1	

Start Time	Laurel Hill Rd Eastbound				Laurel Hill Rd Westbound				Dunsmore Rd Southbound				Int. Total
	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:00 PM													
04:00 PM	0	8	0	8	4	0	0	4	1	0	0	1	13
04:15 PM	0	1	0	1	3	1	0	4	0	0	0	0	5
04:30 PM	0	3	0	3	6	0	0	6	1	0	0	1	10
04:45 PM	0	2	0	2	4	0	0	4	0	0	0	0	6
Total Volume	0	14	0	14	17	1	0	18	2	0	0	2	34
% App. Total	0	100	0		94.4	5.6	0		100	0	0		
PHF	.000	.438	.000	.438	.708	.250	.000	.750	.500	.000	.000	.500	.654

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File Name : 3-Laurel Hill Rd & Dunsmore Rd PM
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Groups Printed- Combined

Start Time	Laurel Hill Rd Eastbound				Laurel Hill Rd Westbound				Dunsmore Rd Southbound				Int. Total
	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Right	Peds	App. Total	
04:00 PM	1	101	0	102	113	18	0	131	9	0	0	9	242
04:15 PM	0	112	0	112	94	18	0	112	4	2	0	6	230
04:30 PM	0	115	0	115	143	19	0	162	12	0	0	12	289
04:45 PM	1	96	0	97	117	14	0	131	8	1	0	9	237
Total	2	424	0	426	467	69	0	536	33	3	0	36	998
05:00 PM	0	139	0	139	124	16	0	140	8	0	0	8	287
05:15 PM	2	129	0	131	122	17	0	139	10	2	0	12	282
05:30 PM	2	117	0	119	90	20	0	110	10	1	0	11	240
05:45 PM	0	96	0	96	112	9	0	121	6	0	0	6	223
Total	4	481	0	485	448	62	0	510	34	3	0	37	1032
Grand Total	6	905	0	911	915	131	0	1046	67	6	0	73	2030
Apprch %	0.7	99.3	0		87.5	12.5	0		91.8	8.2	0		
Total %	0.3	44.6	0	44.9	45.1	6.5	0	51.5	3.3	0.3	0	3.6	

Start Time	Laurel Hill Rd Eastbound				Laurel Hill Rd Westbound				Dunsmore Rd Southbound				Int. Total
	Left	Thru	Peds	App. Total	Thru	Right	Peds	App. Total	Left	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:30 PM													
04:30 PM	0	115	0	115	143	19	0	162	12	0	0	12	289
04:45 PM	1	96	0	97	117	14	0	131	8	1	0	9	237
05:00 PM	0	139	0	139	124	16	0	140	8	0	0	8	287
05:15 PM	2	129	0	131	122	17	0	139	10	2	0	12	282
Total Volume	3	479	0	482	506	66	0	572	38	3	0	41	1095
% App. Total	0.6	99.4	0		88.5	11.5	0		92.7	7.3	0		
PHF	.375	.862	.000	.867	.885	.868	.000	.883	.792	.375	.000	.854	.947

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File Name : 4-Laurel Hill Rd & I-81 NB Ramps AM
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Groups Printed- Bicycles on Crosswalk

Start Time	Laurel Hill Rd Eastbound					Laurel Hill Rd Westbound					I-81 NB Off Ramp Northbound					I-81 NB On Ramp Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	Laurel Hill Rd Eastbound					Laurel Hill Rd Westbound					I-81 NB Off Ramp Northbound					I-81 NB On Ramp Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates
904-992-8072

File Name : 4-Laurel Hill Rd & I-81 NB Ramps AM
Site Code :
Start Date : 11/15/2022
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Groups Printed- Pedestrians

Start Time	Laurel Hill Rd Eastbound					Laurel Hill Rd Westbound					I-81 NB Off Ramp Northbound					I-81 NB On Ramp Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	100		
Total %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	100	100	

Start Time	Laurel Hill Rd Eastbound					Laurel Hill Rd Westbound					I-81 NB Off Ramp Northbound					I-81 NB On Ramp Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.250

Peggy Malone and Associates
904-992-8072

File Name : 4-Laurel Hill Rd & I-81 NB Ramps PM
Site Code :
Start Date : 11/15/2022
Page No : 1

Groups Printed- Bicycles on Crosswalk

Start Time	Laurel Hill Rd Eastbound					Laurel Hill Rd Westbound					I-81 NB Off Ramp Northbound					I-81 NB On Ramp Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	Laurel Hill Rd Eastbound					Laurel Hill Rd Westbound					I-81 NB Off Ramp Northbound					I-81 NB On Ramp Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates
904-992-8072

File Name : 4-Laurel Hill Rd & I-81 NB Ramps PM
Site Code :
Start Date : 11/15/2022
Page No : 1

Groups Printed- Pedestrians

Start Time	Laurel Hill Rd Eastbound					Laurel Hill Rd Westbound					I-81 NB Off Ramp Northbound					I-81 NB On Ramp Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	Laurel Hill Rd Eastbound					Laurel Hill Rd Westbound					I-81 NB Off Ramp Northbound					I-81 NB On Ramp Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

904-992-8072

File Name : 4-Laurel Hill Rd & I-81 NB Ramps PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Combined

Start Time	Laurel Hill Rd Eastbound					Laurel Hill Rd Westbound					I-81 NB Off Ramp Northbound					I-81 NB On Ramp Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	28	78	0	0	106	0	52	9	0	61	29	0	14	0	43	1	0	0	0	1	211
04:15 PM	31	72	0	0	103	0	56	10	0	66	30	0	14	0	44	0	0	0	0	0	213
04:30 PM	33	77	0	0	110	0	69	12	0	81	41	0	14	0	55	0	0	0	0	0	246
04:45 PM	29	73	0	0	102	0	46	3	0	49	40	0	8	0	48	0	0	0	0	0	199
Total	121	300	0	0	421	0	223	34	0	257	140	0	50	0	190	1	0	0	0	1	869
05:00 PM	20	78	0	0	98	0	55	5	0	60	41	0	11	0	52	0	0	0	0	0	210
05:15 PM	25	80	0	0	105	0	44	7	0	51	43	0	10	0	53	0	0	0	0	0	209
05:30 PM	19	68	0	0	87	0	41	4	0	45	31	0	11	0	42	0	0	0	0	0	174
05:45 PM	14	62	0	0	76	0	47	3	0	50	47	0	10	0	57	0	0	0	0	0	183
Total	78	288	0	0	366	0	187	19	0	206	162	0	42	0	204	0	0	0	0	0	776
Grand Total	199	588	0	0	787	0	410	53	0	463	302	0	92	0	394	1	0	0	0	1	1645
Apprch %	25.3	74.7	0	0		0	88.6	11.4	0		76.6	0	23.4	0		100	0	0	0		
Total %	12.1	35.7	0	0	47.8	0	24.9	3.2	0	28.1	18.4	0	5.6	0	24	0.1	0	0	0	0.1	

Start Time	Laurel Hill Rd Eastbound					Laurel Hill Rd Westbound					I-81 NB Off Ramp Northbound					I-81 NB On Ramp Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	28	78	0	0	106	0	52	9	0	61	29	0	14	0	43	1	0	0	0	1	211
04:15 PM	31	72	0	0	103	0	56	10	0	66	30	0	14	0	44	0	0	0	0	0	213
04:30 PM	33	77	0	0	110	0	69	12	0	81	41	0	14	0	55	0	0	0	0	0	246
04:45 PM	29	73	0	0	102	0	46	3	0	49	40	0	8	0	48	0	0	0	0	0	199
Total Volume	121	300	0	0	421	0	223	34	0	257	140	0	50	0	190	1	0	0	0	1	869
% App. Total	28.7	71.3	0	0		0	86.8	13.2	0		73.7	0	26.3	0		100	0	0	0		
PHF	.917	.962	.000	.000	.957	.000	.808	.708	.000	.793	.854	.000	.893	.000	.864	.250	.000	.000	.000	.250	.883

Peggy Malone and Associates

904-992-8072

File Name : 5-N Coalter St & Statler Blvd Edgewood Rd AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Cars

Start Time	Edgewood Rd Eastbound					Statler Blvd Westbound					N Coalter St Northbound					N Coalter St Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	9	61	6	0	76	6	20	14	0	40	0	6	5	0	11	11	7	7	0	25	152
07:15 AM	15	56	10	0	81	7	16	11	0	34	3	10	11	0	24	5	6	7	0	18	157
07:30 AM	28	53	8	0	89	4	27	25	0	56	0	18	7	0	25	15	17	7	0	39	209
07:45 AM	29	47	11	0	87	10	43	19	0	72	4	27	9	0	40	13	22	7	0	42	241
Total	81	217	35	0	333	27	106	69	0	202	7	61	32	0	100	44	52	28	0	124	759
08:00 AM	33	46	6	0	85	10	38	20	0	68	4	34	12	0	50	9	13	10	0	32	235
08:15 AM	22	39	3	0	64	10	43	39	0	92	1	33	6	0	40	18	23	21	0	62	258
08:30 AM	18	49	6	0	73	16	34	19	0	69	8	27	7	0	42	19	25	13	0	57	241
08:45 AM	19	54	6	0	79	8	38	25	0	71	7	21	11	0	39	19	25	6	0	50	239
Total	92	188	21	0	301	44	153	103	0	300	20	115	36	0	171	65	86	50	0	201	973
Grand Total	173	405	56	0	634	71	259	172	0	502	27	176	68	0	271	109	138	78	0	325	1732
Apprch %	27.3	63.9	8.8	0		14.1	51.6	34.3	0		10	64.9	25.1	0		33.5	42.5	24	0		
Total %	10	23.4	3.2	0	36.6	4.1	15	9.9	0	29	1.6	10.2	3.9	0	15.6	6.3	8	4.5	0	18.8	

Start Time	Edgewood Rd Eastbound					Statler Blvd Westbound					N Coalter St Northbound					N Coalter St Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	29	47	11	0	87	10	43	19	0	72	4	27	9	0	40	13	22	7	0	42	241
08:00 AM	33	46	6	0	85	10	38	20	0	68	4	34	12	0	50	9	13	10	0	32	235
08:15 AM	22	39	3	0	64	10	43	39	0	92	1	33	6	0	40	18	23	21	0	62	258
08:30 AM	18	49	6	0	73	16	34	19	0	69	8	27	7	0	42	19	25	13	0	57	241
Total Volume	102	181	26	0	309	46	158	97	0	301	17	121	34	0	172	59	83	51	0	193	975
% App. Total	33	58.6	8.4	0		15.3	52.5	32.2	0		9.9	70.3	19.8	0		30.6	43	26.4	0		
PHF	.773	.923	.591	.000	.888	.719	.919	.622	.000	.818	.531	.890	.708	.000	.860	.776	.830	.607	.000	.778	.945

Peggy Malone and Associates

904-992-8072

File Name : 5-N Coalter St & Statler Blvd Edgewood Rd AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Trucks

Start Time	Edgewood Rd Eastbound					Statler Blvd Westbound					N Coalter St Northbound					N Coalter St Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	1	1	1	0	3	6
07:15 AM	1	1	0	0	2	0	0	2	0	2	0	2	0	0	2	1	0	0	0	1	7
07:30 AM	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	2	0	2	5
07:45 AM	0	2	0	0	2	2	2	0	0	4	0	2	1	0	3	0	2	0	0	2	11
Total	2	4	0	0	6	2	5	2	0	9	0	4	2	0	6	2	3	3	0	8	29
08:00 AM	2	1	0	0	3	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	6
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1	0	2	3
08:30 AM	0	1	2	0	3	0	2	0	0	2	0	1	0	0	1	1	0	0	0	1	7
08:45 AM	1	1	0	0	2	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	4
Total	3	3	2	0	8	1	2	1	0	4	0	3	1	0	4	3	0	1	0	4	20
Grand Total	5	7	2	0	14	3	7	3	0	13	0	7	3	0	10	5	3	4	0	12	49
Apprch %	35.7	50	14.3	0		23.1	53.8	23.1	0		0	70	30	0		41.7	25	33.3	0		
Total %	10.2	14.3	4.1	0	28.6	6.1	14.3	6.1	0	26.5	0	14.3	6.1	0	20.4	10.2	6.1	8.2	0	24.5	

Start Time	Edgewood Rd Eastbound					Statler Blvd Westbound					N Coalter St Northbound					N Coalter St Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	1	0	1	1	1	1	0	3	6
07:15 AM	1	1	0	0	2	0	0	2	0	2	0	2	0	0	2	1	0	0	0	1	7
07:30 AM	1	1	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	2	0	2	5
07:45 AM	0	2	0	0	2	2	2	0	0	4	0	2	1	0	3	0	2	0	0	2	11
Total Volume	2	4	0	0	6	2	5	2	0	9	0	4	2	0	6	2	3	3	0	8	29
% App. Total	33.3	66.7	0	0		22.2	55.6	22.2	0		0	66.7	33.3	0		25	37.5	37.5	0		
PHF	.500	.500	.000	.000	.750	.250	.625	.250	.000	.563	.000	.500	.500	.000	.500	.500	.375	.375	.000	.667	.659

Peggy Malone and Associates

904-992-8072

File Name : 5-N Coalter St & Statler Blvd Edgewood Rd AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Bicycles on Crosswalk

Start Time	Edgewood Rd Eastbound					Statler Blvd Westbound					N Coalter St Northbound					N Coalter St Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	Edgewood Rd Eastbound					Statler Blvd Westbound					N Coalter St Northbound					N Coalter St Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

904-992-8072

File Name : 5-N Coalter St & Statler Blvd Edgewood Rd AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Pedestrians

Start Time	Edgewood Rd Eastbound					Statler Blvd Westbound					N Coalter St Northbound					N Coalter St Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	2	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	2	2	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4
Grand Total	0	0	0	7	7	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	9
Apprch %	0	0	0	100		0	0	0	0		0	0	0	100		0	0	0	0		
Total %	0	0	0	77.8	77.8	0	0	0	0	0	0	0	0	22.2	22.2	0	0	0	0	0	

Start Time	Edgewood Rd Eastbound					Statler Blvd Westbound					N Coalter St Northbound					N Coalter St Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:30 AM	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:45 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
% App. Total	0	0	0	100		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.625	.625	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.625

Peggy Malone and Associates

904-992-8072

File Name : 5-N Coalter St & Statler Blvd Edgewood Rd AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Combined

Start Time	Edgewood Rd Eastbound					Statler Blvd Westbound					N Coalter St Northbound					N Coalter St Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	9	61	6	0	76	6	22	14	0	42	0	6	6	0	12	12	8	8	0	28	158
07:15 AM	16	57	10	2	85	7	16	13	0	36	3	12	11	0	26	6	6	7	0	19	166
07:30 AM	29	54	8	2	93	4	28	25	0	57	0	18	7	0	25	15	17	9	0	41	216
07:45 AM	29	49	11	1	90	12	45	19	0	76	4	29	10	0	43	13	24	7	0	44	253
Total	83	221	35	5	344	29	111	71	0	211	7	65	34	0	106	46	55	31	0	132	793
08:00 AM	35	47	6	0	88	10	38	20	0	68	4	36	12	0	52	10	13	10	0	33	241
08:15 AM	22	39	3	0	64	10	43	39	0	92	1	33	7	0	41	19	23	22	0	64	261
08:30 AM	18	50	8	2	78	16	36	19	0	71	8	28	7	2	45	20	25	13	0	58	252
08:45 AM	20	55	6	0	81	9	38	26	0	73	7	21	11	0	39	19	25	6	0	50	243
Total	95	191	23	2	311	45	155	104	0	304	20	118	37	2	177	68	86	51	0	205	997
Grand Total	178	412	58	7	655	74	266	175	0	515	27	183	71	2	283	114	141	82	0	337	1790
Apprch %	27.2	62.9	8.9	1.1		14.4	51.7	34	0		9.5	64.7	25.1	0.7		33.8	41.8	24.3	0		
Total %	9.9	23	3.2	0.4	36.6	4.1	14.9	9.8	0	28.8	1.5	10.2	4	0.1	15.8	6.4	7.9	4.6	0	18.8	

Start Time	Edgewood Rd Eastbound					Statler Blvd Westbound					N Coalter St Northbound					N Coalter St Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	29	49	11	1	90	12	45	19	0	76	4	29	10	0	43	13	24	7	0	44	253
08:00 AM	35	47	6	0	88	10	38	20	0	68	4	36	12	0	52	10	13	10	0	33	241
08:15 AM	22	39	3	0	64	10	43	39	0	92	1	33	7	0	41	19	23	22	0	64	261
08:30 AM	18	50	8	2	78	16	36	19	0	71	8	28	7	2	45	20	25	13	0	58	252
Total Volume	104	185	28	3	320	48	162	97	0	307	17	126	36	2	181	62	85	52	0	199	1007
% App. Total	32.5	57.8	8.8	0.9		15.6	52.8	31.6	0		9.4	69.6	19.9	1.1		31.2	42.7	26.1	0		
PHF	.743	.925	.636	.375	.889	.750	.900	.622	.000	.834	.531	.875	.750	.250	.870	.775	.850	.591	.000	.777	.965

Peggy Malone and Associates

904-992-8072

File Name : 5-N Coalter St & Statler Blvd Edgewood Rd PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Cars

Start Time	Edgewood Rd Eastbound					Statler Blvd Westbound					N Coalter St Northbound					N Coalter St Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	20	44	6	0	70	13	48	37	0	98	7	27	9	0	43	18	43	30	0	91	302
04:15 PM	20	35	7	0	62	12	57	27	0	96	13	29	13	0	55	22	28	24	0	74	287
04:30 PM	25	40	8	0	73	6	60	33	0	99	7	20	9	0	36	30	28	24	0	82	290
04:45 PM	22	30	5	0	57	10	62	35	0	107	4	29	11	0	44	17	31	32	0	80	288
Total	87	149	26	0	262	41	227	132	0	400	31	105	42	0	178	87	130	110	0	327	1167
05:00 PM	28	43	2	0	73	8	60	44	0	112	8	26	10	0	44	23	33	23	0	79	308
05:15 PM	32	28	10	0	70	8	76	34	0	118	3	19	9	0	31	26	29	28	0	83	302
05:30 PM	20	22	5	0	47	8	41	23	0	72	7	24	12	0	43	15	35	25	0	75	237
05:45 PM	22	22	1	0	45	11	37	18	0	66	2	16	6	0	24	13	25	30	0	68	203
Total	102	115	18	0	235	35	214	119	0	368	20	85	37	0	142	77	122	106	0	305	1050
Grand Total	189	264	44	0	497	76	441	251	0	768	51	190	79	0	320	164	252	216	0	632	2217
Apprch %	38	53.1	8.9	0		9.9	57.4	32.7	0		15.9	59.4	24.7	0		25.9	39.9	34.2	0		
Total %	8.5	11.9	2	0	22.4	3.4	19.9	11.3	0	34.6	2.3	8.6	3.6	0	14.4	7.4	11.4	9.7	0	28.5	

Start Time	Edgewood Rd Eastbound					Statler Blvd Westbound					N Coalter St Northbound					N Coalter St Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	25	40	8	0	73	6	60	33	0	99	7	20	9	0	36	30	28	24	0	82	290
04:45 PM	22	30	5	0	57	10	62	35	0	107	4	29	11	0	44	17	31	32	0	80	288
05:00 PM	28	43	2	0	73	8	60	44	0	112	8	26	10	0	44	23	33	23	0	79	308
05:15 PM	32	28	10	0	70	8	76	34	0	118	3	19	9	0	31	26	29	28	0	83	302
Total Volume	107	141	25	0	273	32	258	146	0	436	22	94	39	0	155	96	121	107	0	324	1188
% App. Total	39.2	51.6	9.2	0		7.3	59.2	33.5	0		14.2	60.6	25.2	0		29.6	37.3	33	0		
PHF	.836	.820	.625	.000	.935	.800	.849	.830	.000	.924	.688	.810	.886	.000	.881	.800	.917	.836	.000	.976	.964

Peggy Malone and Associates

904-992-8072

File Name : 5-N Coalter St & Statler Blvd Edgewood Rd PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Trucks

Start Time	Edgewood Rd Eastbound					Statler Blvd Westbound					N Coalter St Northbound					N Coalter St Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
04:15 PM	1	0	0	0	1	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	3
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
04:45 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3
Total	1	2	0	0	3	1	0	0	0	1	1	1	1	0	3	0	1	0	0	1	8
05:00 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	1	1	0	2	0	1	1	0	2	0	0	1	0	1	5
Grand Total	1	2	0	0	3	1	1	1	0	3	1	2	2	0	5	0	1	1	0	2	13
Apprch %	33.3	66.7	0	0		33.3	33.3	33.3	0		20	40	40	0		0	50	50	0		
Total %	7.7	15.4	0	0	23.1	7.7	7.7	7.7	0	23.1	7.7	15.4	15.4	0	38.5	0	7.7	7.7	0	15.4	

Start Time	Edgewood Rd Eastbound					Statler Blvd Westbound					N Coalter St Northbound					N Coalter St Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0
04:15 PM	1	0	0	0	1	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	3
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
04:45 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3
Total Volume	1	2	0	0	3	1	0	0	0	1	1	1	1	0	3	0	1	0	0	1	8
% App. Total	33.3	66.7	0	0		100	0	0	0		33.3	33.3	33.3	0		0	100	0	0		
PHF	.250	.250	.000	.000	.375	.250	.000	.000	.000	.250	.250	.250	.250	.000	.750	.000	.250	.000	.000	.250	.667

Peggy Malone and Associates
904-992-8072

File Name : 5-N Coalter St & Statler Blvd Edgewood Rd PM
Site Code :
Start Date : 11/15/2022
Page No : 1

Groups Printed- Bicycles on Crosswalk

Start Time	Edgewood Rd Eastbound					Statler Blvd Westbound					N Coalter St Northbound					N Coalter St Southbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0			
Total %																						

Start Time	Edgewood Rd Eastbound					Statler Blvd Westbound					N Coalter St Northbound					N Coalter St Southbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 04:00 PM																						
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0			
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

904-992-8072

File Name : 5-N Coalter St & Statler Blvd Edgewood Rd PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Pedestrians

Start Time	Edgewood Rd Eastbound					Statler Blvd Westbound					N Coalter St Northbound					N Coalter St Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	5
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	1	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	5
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	1	1	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	5
Apprch %	0	0	0	100		0	0	0	0		0	0	0	100		0	0	0	0		
Total %	0	0	0	20	20	0	0	0	0	0	0	0	0	80	80	0	0	0	0	0	

Start Time	Edgewood Rd Eastbound					Statler Blvd Westbound					N Coalter St Northbound					N Coalter St Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	5
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	1	1	0	0	0	0	0	0	0	0	4	4	0	0	0	0	0	5
% App. Total	0	0	0	100		0	0	0	0		0	0	0	100		0	0	0	0		
PHF	.000	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000	.000	.250

Peggy Malone and Associates

904-992-8072

File Name : 5-N Coalter St & Statler Blvd Edgewood Rd PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Combined

Start Time	Edgewood Rd Eastbound					Statler Blvd Westbound					N Coalter St Northbound					N Coalter St Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	20	44	6	0	70	13	48	37	0	98	7	27	10	0	44	18	43	30	0	91	303
04:15 PM	21	35	7	0	63	13	57	27	0	97	14	29	13	0	56	22	28	24	0	74	290
04:30 PM	25	40	8	1	74	6	60	33	0	99	7	21	9	4	41	30	28	24	0	82	296
04:45 PM	22	32	5	0	59	10	62	35	0	107	4	29	11	0	44	17	32	32	0	81	291
Total	88	151	26	1	266	42	227	132	0	401	32	106	43	4	185	87	131	110	0	328	1180
05:00 PM	28	43	2	0	73	8	60	45	0	113	8	26	10	0	44	23	33	23	0	79	309
05:15 PM	32	28	10	0	70	8	76	34	0	118	3	20	9	0	32	26	29	29	0	84	304
05:30 PM	20	22	5	0	47	8	41	23	0	72	7	24	13	0	44	15	35	25	0	75	238
05:45 PM	22	22	1	0	45	11	38	18	0	67	2	16	6	0	24	13	25	30	0	68	204
Total	102	115	18	0	235	35	215	120	0	370	20	86	38	0	144	77	122	107	0	306	1055
Grand Total	190	266	44	1	501	77	442	252	0	771	52	192	81	4	329	164	253	217	0	634	2235
Apprch %	37.9	53.1	8.8	0.2		10	57.3	32.7	0		15.8	58.4	24.6	1.2		25.9	39.9	34.2	0		
Total %	8.5	11.9	2	0	22.4	3.4	19.8	11.3	0	34.5	2.3	8.6	3.6	0.2	14.7	7.3	11.3	9.7	0	28.4	

Start Time	Edgewood Rd Eastbound					Statler Blvd Westbound					N Coalter St Northbound					N Coalter St Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	25	40	8	1	74	6	60	33	0	99	7	21	9	4	41	30	28	24	0	82	296
04:45 PM	22	32	5	0	59	10	62	35	0	107	4	29	11	0	44	17	32	32	0	81	291
05:00 PM	28	43	2	0	73	8	60	45	0	113	8	26	10	0	44	23	33	23	0	79	309
05:15 PM	32	28	10	0	70	8	76	34	0	118	3	20	9	0	32	26	29	29	0	84	304
Total Volume	107	143	25	1	276	32	258	147	0	437	22	96	39	4	161	96	122	108	0	326	1200
% App. Total	38.8	51.8	9.1	0.4		7.3	59	33.6	0		13.7	59.6	24.2	2.5		29.4	37.4	33.1	0		
PHF	.836	.831	.625	.250	.932	.800	.849	.817	.000	.926	.688	.828	.886	.250	.915	.800	.924	.844	.000	.970	.971

Peggy Malone and Associates

904-992-8072

File Name : 6-Churchville Ave & Thornrose Ave_Constitution Dr AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Cars

Start Time	Constitution Dr Eastbound					Churchville Ave Westbound					Thornrose Ave Northbound					Churchville Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	13	1	17	0	31	0	3	21	0	24	51	9	0	0	60	115
07:15 AM	0	1	0	0	1	8	0	14	0	22	0	11	29	0	40	65	12	1	0	78	141
07:30 AM	0	1	0	0	1	22	1	27	0	50	1	18	24	0	43	100	19	2	0	121	215
07:45 AM	0	0	0	0	0	38	2	29	0	69	1	28	49	0	78	84	24	0	0	108	255
Total	0	2	0	0	2	81	4	87	0	172	2	60	123	0	185	300	64	3	0	367	726
08:00 AM	0	0	0	0	0	20	1	26	0	47	0	22	53	0	75	77	34	0	0	111	233
08:15 AM	0	5	0	0	5	15	2	47	0	64	0	15	31	0	46	104	19	3	0	126	241
08:30 AM	0	1	0	0	1	12	2	33	0	47	0	9	23	0	32	98	15	0	0	113	193
08:45 AM	0	2	0	0	2	18	4	37	0	59	1	14	20	0	35	82	15	2	0	99	195
Total	0	8	0	0	8	65	9	143	0	217	1	60	127	0	188	361	83	5	0	449	862
Grand Total	0	10	0	0	10	146	13	230	0	389	3	120	250	0	373	661	147	8	0	816	1588
Apprch %	0	100	0	0		37.5	3.3	59.1	0		0.8	32.2	67	0		81	18	1	0		
Total %	0	0.6	0	0	0.6	9.2	0.8	14.5	0	24.5	0.2	7.6	15.7	0	23.5	41.6	9.3	0.5	0	51.4	

Start Time	Constitution Dr Eastbound					Churchville Ave Westbound					Thornrose Ave Northbound					Churchville Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	1	0	0	1	22	1	27	0	50	1	18	24	0	43	100	19	2	0	121	215
07:45 AM	0	0	0	0	0	38	2	29	0	69	1	28	49	0	78	84	24	0	0	108	255
08:00 AM	0	0	0	0	0	20	1	26	0	47	0	22	53	0	75	77	34	0	0	111	233
08:15 AM	0	5	0	0	5	15	2	47	0	64	0	15	31	0	46	104	19	3	0	126	241
Total Volume	0	6	0	0	6	95	6	129	0	230	2	83	157	0	242	365	96	5	0	466	944
% App. Total	0	100	0	0		41.3	2.6	56.1	0		0.8	34.3	64.9	0		78.3	20.6	1.1	0		
PHF	.000	.300	.000	.000	.300	.625	.750	.686	.000	.833	.500	.741	.741	.000	.776	.877	.706	.417	.000	.925	.925

Peggy Malone and Associates

904-992-8072

File Name : 6-Churchville Ave & Thornrose Ave_Constitution Dr AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Trucks

Start Time	Constitution Dr Eastbound					Churchville Ave Westbound					Thornrose Ave Northbound					Churchville Ave Southbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
07:00 AM	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	0	0	0	1	3
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4	0	0	0	0	4	5
07:30 AM	0	0	0	0	0	3	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	4
07:45 AM	0	0	0	0	0	1	0	2	0	3	0	0	1	0	1	1	0	0	0	0	1	5
Total	0	0	0	0	0	4	0	5	0	9	0	0	2	0	2	6	0	0	0	0	6	17
08:00 AM	0	0	0	0	0	0	0	1	0	1	0	1	1	0	2	2	0	0	0	0	2	5
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2
08:30 AM	0	0	0	0	0	0	0	2	0	2	0	1	2	0	3	0	0	0	0	0	0	5
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	1	2
Total	0	0	0	0	0	0	0	3	0	3	0	2	6	0	8	3	0	0	0	0	3	14
Grand Total	0	0	0	0	0	4	0	8	0	12	0	2	8	0	10	9	0	0	0	0	9	31
Apprch %	0	0	0	0	0	33.3	0	66.7	0		0	20	80	0		100	0	0	0	0		
Total %	0	0	0	0	0	12.9	0	25.8	0	38.7	0	6.5	25.8	0	32.3	29	0	0	0	0	29	

Start Time	Constitution Dr Eastbound					Churchville Ave Westbound					Thornrose Ave Northbound					Churchville Ave Southbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 07:15 AM																						
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4	0	0	0	0	4	5
07:30 AM	0	0	0	0	0	3	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	4
07:45 AM	0	0	0	0	0	1	0	2	0	3	0	0	1	0	1	1	0	0	0	0	1	5
08:00 AM	0	0	0	0	0	0	0	1	0	1	0	1	1	0	2	2	0	0	0	0	2	5
Total Volume	0	0	0	0	0	4	0	4	0	8	0	1	3	0	4	7	0	0	0	0	7	19
% App. Total	0	0	0	0	0	50	0	50	0	50	0	25	75	0	50	100	0	0	0	0	50	
PHF	.000	.000	.000	.000	.000	.333	.000	.500	.000	.500	.000	.250	.750	.000	.500	.438	.000	.000	.000	.000	.438	.950

Peggy Malone and Associates

904-992-8072

File Name : 6-Churchville Ave & Thornrose Ave_Constitution Dr AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Bicycles on Crosswalk

Start Time	Constitution Dr Eastbound					Churchville Ave Westbound					Thornrose Ave Northbound					Churchville Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	Constitution Dr Eastbound					Churchville Ave Westbound					Thornrose Ave Northbound					Churchville Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

904-992-8072

File Name : 6-Churchville Ave & Thornrose Ave_Constitution Dr AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Pedestrians

Start Time	Constitution Dr Eastbound					Churchville Ave Westbound					Thornrose Ave Northbound					Churchville Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	2
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	3
08:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	3
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	1	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	4
Grand Total	0	0	0	1	1	0	0	0	0	0	0	0	0	6	6	0	0	0	0	0	7
Apprch %	0	0	0	100		0	0	0	0		0	0	0	100		0	0	0	0		
Total %	0	0	0	14.3	14.3	0	0	0	0	0	0	0	0	85.7	85.7	0	0	0	0	0	

Start Time	Constitution Dr Eastbound					Churchville Ave Westbound					Thornrose Ave Northbound					Churchville Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	2
08:00 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	3
Total Volume	0	0	0	1	1	0	0	0	0	0	0	0	0	5	5	0	0	0	0	0	6
% App. Total	0	0	0	100		0	0	0	0		0	0	0	100		0	0	0	0		
PHF	.000	.000	.000	.250	.250	.000	.000	.000	.000	.000	.000	.000	.000	.625	.625	.000	.000	.000	.000	.000	.500

Peggy Malone and Associates

904-992-8072

File Name : 6-Churchville Ave & Thornrose Ave_Constitution Dr AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Combined

Start Time	Constitution Dr Eastbound					Churchville Ave Westbound					Thornrose Ave Northbound					Churchville Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	13	1	19	0	33	0	3	21	0	24	52	9	0	0	61	118
07:15 AM	0	1	0	0	1	8	0	14	0	22	0	11	30	1	42	69	12	1	0	82	147
07:30 AM	0	1	0	0	1	25	1	28	0	54	1	18	24	0	43	100	19	2	0	121	219
07:45 AM	0	0	0	0	0	39	2	31	0	72	1	28	50	2	81	85	24	0	0	109	262
Total	0	2	0	0	2	85	4	92	0	181	2	60	125	3	190	306	64	3	0	373	746
08:00 AM	0	0	0	1	1	20	1	27	0	48	0	23	54	2	79	79	34	0	0	113	241
08:15 AM	0	5	0	0	5	15	2	47	0	64	0	15	33	0	48	104	19	3	0	126	243
08:30 AM	0	1	0	0	1	12	2	35	0	49	0	10	25	1	36	98	15	0	0	113	199
08:45 AM	0	2	0	0	2	18	4	37	0	59	1	14	21	0	36	83	15	2	0	100	197
Total	0	8	0	1	9	65	9	146	0	220	1	62	133	3	199	364	83	5	0	452	880
Grand Total	0	10	0	1	11	150	13	238	0	401	3	122	258	6	389	670	147	8	0	825	1626
Apprch %	0	90.9	0	9.1		37.4	3.2	59.4	0		0.8	31.4	66.3	1.5		81.2	17.8	1	0		
Total %	0	0.6	0	0.1	0.7	9.2	0.8	14.6	0	24.7	0.2	7.5	15.9	0.4	23.9	41.2	9	0.5	0	50.7	

Start Time	Constitution Dr Eastbound					Churchville Ave Westbound					Thornrose Ave Northbound					Churchville Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	0	1	0	0	1	25	1	28	0	54	1	18	24	0	43	100	19	2	0	121	219
07:45 AM	0	0	0	0	0	39	2	31	0	72	1	28	50	2	81	85	24	0	0	109	262
08:00 AM	0	0	0	1	1	20	1	27	0	48	0	23	54	2	79	79	34	0	0	113	241
08:15 AM	0	5	0	0	5	15	2	47	0	64	0	15	33	0	48	104	19	3	0	126	243
Total Volume	0	6	0	1	7	99	6	133	0	238	2	84	161	4	251	368	96	5	0	469	965
% App. Total	0	85.7	0	14.3		41.6	2.5	55.9	0		0.8	33.5	64.1	1.6		78.5	20.5	1.1	0		
PHF	.000	.300	.000	.250	.350	.635	.750	.707	.000	.826	.500	.750	.745	.500	.775	.885	.706	.417	.000	.931	.921

Peggy Malone and Associates

904-992-8072

File Name : 6-Churchville Ave & Thornrose Ave_Constitution Dr PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Cars

Start Time	Constitution Dr Eastbound					Churchville Ave Westbound					Thornrose Ave Northbound					Churchville Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	1	0	0	0	1	18	1	97	0	116	1	15	23	0	39	56	21	0	0	77	233
04:15 PM	0	1	0	0	1	25	1	88	0	114	0	14	23	0	37	62	12	0	0	74	226
04:30 PM	0	2	0	0	2	26	3	94	0	123	0	10	17	0	27	52	13	2	0	67	219
04:45 PM	0	0	0	0	0	28	1	93	0	122	0	12	20	0	32	58	15	0	0	73	227
Total	1	3	0	0	4	97	6	372	0	475	1	51	83	0	135	228	61	2	0	291	905
05:00 PM	0	1	0	0	1	29	4	96	0	129	0	15	26	0	41	57	13	1	0	71	242
05:15 PM	0	2	0	0	2	30	1	72	0	103	0	13	17	0	30	43	21	0	0	64	199
05:30 PM	1	0	0	0	1	28	0	83	0	111	0	8	19	0	27	36	12	2	0	50	189
05:45 PM	0	1	1	0	2	18	1	68	0	87	0	10	18	0	28	48	14	0	0	62	179
Total	1	4	1	0	6	105	6	319	0	430	0	46	80	0	126	184	60	3	0	247	809
Grand Total	2	7	1	0	10	202	12	691	0	905	1	97	163	0	261	412	121	5	0	538	1714
Apprch %	20	70	10	0		22.3	1.3	76.4	0		0.4	37.2	62.5	0		76.6	22.5	0.9	0		
Total %	0.1	0.4	0.1	0	0.6	11.8	0.7	40.3	0	52.8	0.1	5.7	9.5	0	15.2	24	7.1	0.3	0	31.4	

Start Time	Constitution Dr Eastbound					Churchville Ave Westbound					Thornrose Ave Northbound					Churchville Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	1	0	0	1	25	1	88	0	114	0	14	23	0	37	62	12	0	0	74	226
04:30 PM	0	2	0	0	2	26	3	94	0	123	0	10	17	0	27	52	13	2	0	67	219
04:45 PM	0	0	0	0	0	28	1	93	0	122	0	12	20	0	32	58	15	0	0	73	227
05:00 PM	0	1	0	0	1	29	4	96	0	129	0	15	26	0	41	57	13	1	0	71	242
Total Volume	0	4	0	0	4	108	9	371	0	488	0	51	86	0	137	229	53	3	0	285	914
% App. Total	0	100	0	0		22.1	1.8	76	0		0	37.2	62.8	0		80.4	18.6	1.1	0		
PHF	.000	.500	.000	.000	.500	.931	.563	.966	.000	.946	.000	.850	.827	.000	.835	.923	.883	.375	.000	.963	.944

Peggy Malone and Associates

904-992-8072

File Name : 6-Churchville Ave & Thornrose Ave_Constitution Dr PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Trucks

Start Time	Constitution Dr Eastbound					Churchville Ave Westbound					Thornrose Ave Northbound					Churchville Ave Southbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
04:00 PM	0	0	0	0	0	1	0	3	0	4	0	1	0	0	1	1	0	0	0	0	1	6
04:15 PM	0	0	0	0	0	0	0	4	0	4	0	0	1	0	1	0	0	0	0	0	0	5
04:30 PM	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	2	0	2	0	0	1	0	1	4	1	0	0	0	5	8
Total	0	0	0	0	0	2	0	10	0	12	0	1	2	0	3	5	1	0	0	0	6	21
05:00 PM	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	2
05:30 PM	0	0	0	0	0	1	0	2	0	3	0	0	0	0	0	1	0	0	0	0	1	4
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
Total	0	0	0	0	0	2	0	5	0	7	0	0	1	0	1	1	0	0	0	0	1	9
Grand Total	0	0	0	0	0	4	0	15	0	19	0	1	3	0	4	6	1	0	0	0	7	30
Apprch %	0	0	0	0	0	21.1	0	78.9	0		0	25	75	0		85.7	14.3	0	0			
Total %	0	0	0	0	0	13.3	0	50	0	63.3	0	3.3	10	0	13.3	20	3.3	0	0	23.3		

Start Time	Constitution Dr Eastbound					Churchville Ave Westbound					Thornrose Ave Northbound					Churchville Ave Southbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																						
Peak Hour for Entire Intersection Begins at 04:00 PM																						
04:00 PM	0	0	0	0	0	1	0	3	0	4	0	1	0	0	1	1	0	0	0	0	1	6
04:15 PM	0	0	0	0	0	0	0	4	0	4	0	0	1	0	1	0	0	0	0	0	0	5
04:30 PM	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:45 PM	0	0	0	0	0	0	0	2	0	2	0	0	1	0	1	4	1	0	0	0	5	8
Total Volume	0	0	0	0	0	2	0	10	0	12	0	1	2	0	3	5	1	0	0	0	6	21
% App. Total	0	0	0	0	0	16.7	0	83.3	0		0	33.3	66.7	0		83.3	16.7	0	0			
PHF	.000	.000	.000	.000	.000	.500	.000	.625	.000	.750	.000	.250	.500	.000	.750	.313	.250	.000	.000	.300	.656	

Peggy Malone and Associates

904-992-8072

File Name : 6-Churchville Ave & Thornrose Ave_Constitution Dr PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Bicycles on Crosswalk

Start Time	Constitution Dr Eastbound					Churchville Ave Westbound					Thornrose Ave Northbound					Churchville Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	Constitution Dr Eastbound					Churchville Ave Westbound					Thornrose Ave Northbound					Churchville Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

904-992-8072

File Name : 6-Churchville Ave & Thornrose Ave_Constitution Dr PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Pedestrians

Start Time	Constitution Dr Eastbound					Churchville Ave Westbound					Thornrose Ave Northbound					Churchville Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	Constitution Dr Eastbound					Churchville Ave Westbound					Thornrose Ave Northbound					Churchville Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

904-992-8072

File Name : 6-Churchville Ave & Thornrose Ave_Constitution Dr PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Combined

Start Time	Constitution Dr Eastbound					Churchville Ave Westbound					Thornrose Ave Northbound					Churchville Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	1	0	0	0	1	19	1	100	0	120	1	16	23	0	40	57	21	0	0	78	239
04:15 PM	0	1	0	0	1	25	1	92	0	118	0	14	24	0	38	62	12	0	0	74	231
04:30 PM	0	2	0	0	2	27	3	95	0	125	0	10	17	0	27	52	13	2	0	67	221
04:45 PM	0	0	0	0	0	28	1	95	0	124	0	12	21	0	33	62	16	0	0	78	235
Total	1	3	0	0	4	99	6	382	0	487	1	52	85	0	138	233	62	2	0	297	926
05:00 PM	0	1	0	0	1	30	4	97	0	131	0	15	26	0	41	57	13	1	0	71	244
05:15 PM	0	2	0	0	2	30	1	74	0	105	0	13	17	0	30	43	21	0	0	64	201
05:30 PM	1	0	0	0	1	29	0	85	0	114	0	8	19	0	27	37	12	2	0	51	193
05:45 PM	0	1	1	0	2	18	1	68	0	87	0	10	19	0	29	48	14	0	0	62	180
Total	1	4	1	0	6	107	6	324	0	437	0	46	81	0	127	185	60	3	0	248	818
Grand Total	2	7	1	0	10	206	12	706	0	924	1	98	166	0	265	418	122	5	0	545	1744
Apprch %	20	70	10	0		22.3	1.3	76.4	0		0.4	37	62.6	0		76.7	22.4	0.9	0		
Total %	0.1	0.4	0.1	0	0.6	11.8	0.7	40.5	0	53	0.1	5.6	9.5	0	15.2	24	7	0.3	0	31.2	

Start Time	Constitution Dr Eastbound					Churchville Ave Westbound					Thornrose Ave Northbound					Churchville Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	1	0	0	1	25	1	92	0	118	0	14	24	0	38	62	12	0	0	74	231
04:30 PM	0	2	0	0	2	27	3	95	0	125	0	10	17	0	27	52	13	2	0	67	221
04:45 PM	0	0	0	0	0	28	1	95	0	124	0	12	21	0	33	62	16	0	0	78	235
05:00 PM	0	1	0	0	1	30	4	97	0	131	0	15	26	0	41	57	13	1	0	71	244
Total Volume	0	4	0	0	4	110	9	379	0	498	0	51	88	0	139	233	54	3	0	290	931
% App. Total	0	100	0	0		22.1	1.8	76.1	0		0	36.7	63.3	0		80.3	18.6	1	0		
PHF	.000	.500	.000	.000	.500	.917	.563	.977	.000	.950	.000	.850	.846	.000	.848	.940	.844	.375	.000	.929	.954

Peggy Malone and Associates

904-992-8072

File Name : 7-S Delphine Ave & I-64 WB Ramps AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Cars

Start Time	I-64 WB On Ramp Eastbound					I-64 WB Off Ramp Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	4	1	11	0	16	25	48	0	0	73	0	41	59	0	100	189
07:15 AM	0	0	0	0	0	5	0	10	0	15	23	77	0	0	100	0	50	65	0	115	230
07:30 AM	0	0	0	0	0	7	0	13	0	20	27	62	0	0	89	0	68	81	0	149	258
07:45 AM	0	0	0	0	0	14	0	15	0	29	21	92	0	0	113	0	70	69	0	139	281
Total	0	0	0	0	0	30	1	49	0	80	96	279	0	0	375	0	229	274	0	503	958
08:00 AM	0	0	0	0	0	9	0	15	0	24	14	51	0	0	65	0	41	57	0	98	187
08:15 AM	0	0	0	0	0	4	0	11	0	15	13	55	0	0	68	0	47	48	0	95	178
08:30 AM	0	0	0	0	0	3	1	12	0	16	13	45	0	0	58	0	36	51	0	87	161
08:45 AM	0	0	0	0	0	1	0	14	0	15	14	43	0	0	57	0	26	48	0	74	146
Total	0	0	0	0	0	17	1	52	0	70	54	194	0	0	248	0	150	204	0	354	672
Grand Total	0	0	0	0	0	47	2	101	0	150	150	473	0	0	623	0	379	478	0	857	1630
Apprch %	0	0	0	0	0	31.3	1.3	67.3	0		24.1	75.9	0	0		0	44.2	55.8	0		
Total %	0	0	0	0	0	2.9	0.1	6.2	0	9.2	9.2	29	0	0	38.2	0	23.3	29.3	0	52.6	

Start Time	I-64 WB On Ramp Eastbound					I-64 WB Off Ramp Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	4	1	11	0	16	25	48	0	0	73	0	41	59	0	100	189
07:15 AM	0	0	0	0	0	5	0	10	0	15	23	77	0	0	100	0	50	65	0	115	230
07:30 AM	0	0	0	0	0	7	0	13	0	20	27	62	0	0	89	0	68	81	0	149	258
07:45 AM	0	0	0	0	0	14	0	15	0	29	21	92	0	0	113	0	70	69	0	139	281
Total Volume	0	0	0	0	0	30	1	49	0	80	96	279	0	0	375	0	229	274	0	503	958
% App. Total	0	0	0	0	0	37.5	1.2	61.2	0		25.6	74.4	0	0		0	45.5	54.5	0		
PHF	.000	.000	.000	.000	.000	.536	.250	.817	.000	.690	.889	.758	.000	.000	.830	.000	.818	.846	.000	.844	.852

Peggy Malone and Associates

904-992-8072

File Name : 7-S Delphine Ave & I-64 WB Ramps AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Trucks

Start Time	I-64 WB On Ramp Eastbound					I-64 WB Off Ramp Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	0	1	0	1	3	8	0	0	11	0	0	5	0	5	17
07:15 AM	0	0	0	0	0	0	1	4	0	5	1	5	0	0	6	0	2	2	0	4	15
07:30 AM	0	0	0	0	0	2	0	4	0	6	4	3	0	0	7	0	1	5	0	6	19
07:45 AM	0	0	0	0	0	1	0	1	0	2	2	6	0	0	8	0	1	7	0	8	18
Total	0	0	0	0	0	3	1	10	0	14	10	22	0	0	32	0	4	19	0	23	69
08:00 AM	0	0	0	0	0	3	0	3	0	6	4	4	0	0	8	0	2	7	0	9	23
08:15 AM	0	0	0	0	0	1	0	5	0	6	4	6	0	0	10	0	2	6	0	8	24
08:30 AM	0	0	0	0	0	0	0	1	0	1	1	4	0	0	5	0	4	3	0	7	13
08:45 AM	0	0	0	0	0	2	0	3	0	5	5	10	0	0	15	0	4	4	0	8	28
Total	0	0	0	0	0	6	0	12	0	18	14	24	0	0	38	0	12	20	0	32	88
Grand Total	0	0	0	0	0	9	1	22	0	32	24	46	0	0	70	0	16	39	0	55	157
Apprch %	0	0	0	0	0	28.1	3.1	68.8	0		34.3	65.7	0	0		0	29.1	70.9	0		
Total %	0	0	0	0	0	5.7	0.6	14	0	20.4	15.3	29.3	0	0	44.6	0	10.2	24.8	0	35	

Start Time	I-64 WB On Ramp Eastbound					I-64 WB Off Ramp Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	0	0	0	0	0	3	0	3	0	6	4	4	0	0	8	0	2	7	0	9	23
08:15 AM	0	0	0	0	0	1	0	5	0	6	4	6	0	0	10	0	2	6	0	8	24
08:30 AM	0	0	0	0	0	0	0	1	0	1	1	4	0	0	5	0	4	3	0	7	13
08:45 AM	0	0	0	0	0	2	0	3	0	5	5	10	0	0	15	0	4	4	0	8	28
Total Volume	0	0	0	0	0	6	0	12	0	18	14	24	0	0	38	0	12	20	0	32	88
% App. Total	0	0	0	0	0	33.3	0	66.7	0		36.8	63.2	0	0		0	37.5	62.5	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.600	.000	.750	.700	.600	.000	.000	.633	.000	.750	.714	.000	.889	.786

Peggy Malone and Associates

904-992-8072

File Name : 7-S Delphine Ave & I-64 WB Ramps AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Bicycles on Crosswalk

Start Time	I-64 WB On Ramp Eastbound					I-64 WB Off Ramp Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	I-64 WB On Ramp Eastbound					I-64 WB Off Ramp Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

904-992-8072

File Name : 7-S Delphine Ave & I-64 WB Ramps AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Pedestrians

Start Time	I-64 WB On Ramp Eastbound					I-64 WB Off Ramp Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	I-64 WB On Ramp Eastbound					I-64 WB Off Ramp Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

904-992-8072

File Name : 7-S Delphine Ave & I-64 WB Ramps AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Combined

Start Time	I-64 WB On Ramp Eastbound					I-64 WB Off Ramp Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	4	0	12	0	16	28	56	0	0	84	0	41	64	0	105	205
07:15 AM	0	0	0	0	0	5	0	14	0	19	24	82	0	0	106	0	52	67	0	119	244
07:30 AM	0	0	0	0	0	9	0	17	0	26	31	65	0	0	96	0	69	86	0	155	277
07:45 AM	0	0	0	0	0	15	0	16	0	31	23	98	0	0	121	0	71	76	0	147	299
Total	0	0	0	0	0	33	0	59	0	92	106	301	0	0	407	0	233	293	0	526	1025
08:00 AM	0	0	0	0	0	12	0	18	0	30	18	55	0	0	73	0	43	64	0	107	210
08:15 AM	0	0	0	0	0	5	0	16	0	21	17	61	0	0	78	0	49	54	0	103	202
08:30 AM	0	0	0	0	0	3	0	13	0	16	14	49	0	0	63	0	40	54	0	94	173
08:45 AM	0	0	0	0	0	3	0	17	0	20	19	53	0	0	72	0	30	52	0	82	174
Total	0	0	0	0	0	23	0	64	0	87	68	218	0	0	286	0	162	224	0	386	759
Grand Total	0	0	0	0	0	56	0	123	0	179	174	519	0	0	693	0	395	517	0	912	1784
Apprch %	0	0	0	0	0	31.3	0	68.7	0	179	25.1	74.9	0	0	693	0	43.3	56.7	0	912	1784
Total %	0	0	0	0	0	3.1	0	6.9	0	10	9.8	29.1	0	0	38.8	0	22.1	29	0	51.1	1784

Start Time	I-64 WB On Ramp Eastbound					I-64 WB Off Ramp Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	0	0	0	0	5	0	14	0	19	24	82	0	0	106	0	52	67	0	119	244
07:30 AM	0	0	0	0	0	9	0	17	0	26	31	65	0	0	96	0	69	86	0	155	277
07:45 AM	0	0	0	0	0	15	0	16	0	31	23	98	0	0	121	0	71	76	0	147	299
08:00 AM	0	0	0	0	0	12	0	18	0	30	18	55	0	0	73	0	43	64	0	107	210
Total Volume	0	0	0	0	0	41	0	65	0	106	96	300	0	0	396	0	235	293	0	528	1030
% App. Total	0	0	0	0	0	38.7	0	61.3	0	106	24.2	75.8	0	0	396	0	44.5	55.5	0	528	1030
PHF	.000	.000	.000	.000	.000	.683	.000	.903	.000	.855	.774	.765	.000	.000	.818	.000	.827	.852	.000	.852	.861

Peggy Malone and Associates

904-992-8072

File Name : 7-S Delphine Ave & I-64 WB Ramps PM
 Site Code :
 Start Date : 11/15/2022
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Groups Printed- Cars

Start Time	I-64 WB On Ramp Eastbound					I-64 WB Off Ramp Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	12	4	19	0	35	12	86	0	0	98	0	35	41	0	76	209
04:15 PM	0	0	0	0	0	9	1	34	0	44	10	102	0	0	112	0	35	53	0	88	244
04:30 PM	0	0	0	0	0	9	0	31	0	40	11	84	0	0	95	0	39	39	0	78	213
04:45 PM	0	0	0	0	0	11	2	33	0	46	11	64	0	0	75	0	33	49	0	82	203
Total	0	0	0	0	0	41	7	117	0	165	44	336	0	0	380	0	142	182	0	324	869
05:00 PM	0	0	0	0	0	14	0	37	0	51	32	71	0	0	103	0	46	49	0	95	249
05:15 PM	0	0	0	0	0	15	0	38	0	53	25	88	0	0	113	0	31	45	0	76	242
05:30 PM	0	0	0	0	0	12	0	37	0	49	17	60	0	0	77	0	32	42	0	74	200
05:45 PM	0	0	0	0	0	6	0	27	0	33	13	44	0	0	57	0	15	38	0	53	143
Total	0	0	0	0	0	47	0	139	0	186	87	263	0	0	350	0	124	174	0	298	834
Grand Total	0	0	0	0	0	88	7	256	0	351	131	599	0	0	730	0	266	356	0	622	1703
Apprch %	0	0	0	0	0	25.1	2	72.9	0		17.9	82.1	0	0		0	42.8	57.2	0		
Total %	0	0	0	0	0	5.2	0.4	15	0	20.6	7.7	35.2	0	0	42.9	0	15.6	20.9	0	36.5	

Start Time	I-64 WB On Ramp Eastbound					I-64 WB Off Ramp Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	0	0	0	0	9	1	34	0	44	10	102	0	0	112	0	35	53	0	88	244
04:30 PM	0	0	0	0	0	9	0	31	0	40	11	84	0	0	95	0	39	39	0	78	213
04:45 PM	0	0	0	0	0	11	2	33	0	46	11	64	0	0	75	0	33	49	0	82	203
05:00 PM	0	0	0	0	0	14	0	37	0	51	32	71	0	0	103	0	46	49	0	95	249
Total Volume	0	0	0	0	0	43	3	135	0	181	64	321	0	0	385	0	153	190	0	343	909
% App. Total	0	0	0	0	0	23.8	1.7	74.6	0		16.6	83.4	0	0		0	44.6	55.4	0		
PHF	.000	.000	.000	.000	.000	.768	.375	.912	.000	.887	.500	.787	.000	.000	.859	.000	.832	.896	.000	.903	.913

Peggy Malone and Associates

904-992-8072

File Name : 7-S Delphine Ave & I-64 WB Ramps PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Trucks

Start Time	I-64 WB On Ramp Eastbound					I-64 WB Off Ramp Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	0	2	0	2	2	3	0	0	5	0	3	5	0	8	15
04:15 PM	0	0	0	0	0	2	0	3	0	5	3	5	0	0	8	0	4	4	0	8	21
04:30 PM	0	0	0	0	0	2	0	2	0	4	1	3	0	0	4	0	2	2	0	4	12
04:45 PM	0	0	0	0	0	3	1	0	0	4	4	4	0	0	8	0	1	7	0	8	20
Total	0	0	0	0	0	7	1	7	0	15	10	15	0	0	25	0	10	18	0	28	68
05:00 PM	0	0	0	0	0	1	0	3	0	4	1	1	0	0	2	0	1	7	0	8	14
05:15 PM	0	0	0	0	0	4	0	3	0	7	0	1	0	0	1	0	1	2	0	3	11
05:30 PM	0	0	0	0	0	1	0	1	0	2	3	2	0	0	5	0	4	2	0	6	13
05:45 PM	0	0	0	0	0	1	0	1	0	2	0	1	0	0	1	0	0	1	0	1	4
Total	0	0	0	0	0	7	0	8	0	15	4	5	0	0	9	0	6	12	0	18	42
Grand Total	0	0	0	0	0	14	1	15	0	30	14	20	0	0	34	0	16	30	0	46	110
Apprch %	0	0	0	0	0	46.7	3.3	50	0		41.2	58.8	0	0		0	34.8	65.2	0		
Total %	0	0	0	0	0	12.7	0.9	13.6	0	27.3	12.7	18.2	0	0	30.9	0	14.5	27.3	0	41.8	

Start Time	I-64 WB On Ramp Eastbound					I-64 WB Off Ramp Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	0	0	0	0	2	0	2	2	3	0	0	5	0	3	5	0	8	15
04:15 PM	0	0	0	0	0	2	0	3	0	5	3	5	0	0	8	0	4	4	0	8	21
04:30 PM	0	0	0	0	0	2	0	2	0	4	1	3	0	0	4	0	2	2	0	4	12
04:45 PM	0	0	0	0	0	3	1	0	0	4	4	4	0	0	8	0	1	7	0	8	20
Total Volume	0	0	0	0	0	7	1	7	0	15	10	15	0	0	25	0	10	18	0	28	68
% App. Total	0	0	0	0	0	46.7	6.7	46.7	0		40	60	0	0		0	35.7	64.3	0		
PHF	.000	.000	.000	.000	.000	.583	.250	.583	.000	.750	.625	.750	.000	.000	.781	.000	.625	.643	.000	.875	.810

Peggy Malone and Associates

904-992-8072

File Name : 7-S Delphine Ave & I-64 WB Ramps PM
 Site Code :
 Start Date : 11/15/2022
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Groups Printed- Bicycles on Crosswalk

Start Time	I-64 WB On Ramp Eastbound					I-64 WB Off Ramp Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	I-64 WB On Ramp Eastbound					I-64 WB Off Ramp Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

904-992-8072

File Name : 7-S Delphine Ave & I-64 WB Ramps PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Pedestrians

Start Time	I-64 WB On Ramp Eastbound					I-64 WB Off Ramp Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	I-64 WB On Ramp Eastbound					I-64 WB Off Ramp Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

904-992-8072

File Name : 7-S Delphine Ave & I-64 WB Ramps PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Combined

Start Time	I-64 WB On Ramp Eastbound					I-64 WB Off Ramp Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
04:00 PM	0	0	0	0	0	12	4	21	0	37	14	89	0	0	103	0	38	46	0	84	224
04:15 PM	0	0	0	0	0	11	1	37	0	49	13	107	0	0	120	0	39	57	0	96	265
04:30 PM	0	0	0	0	0	11	0	33	0	44	12	87	0	0	99	0	41	41	0	82	225
04:45 PM	0	0	0	0	0	14	3	33	0	50	15	68	0	0	83	0	34	56	0	90	223
Total	0	0	0	0	0	48	8	124	0	180	54	351	0	0	405	0	152	200	0	352	937
05:00 PM	0	0	0	0	0	15	0	40	0	55	33	72	0	0	105	0	47	56	0	103	263
05:15 PM	0	0	0	0	0	19	0	41	0	60	25	89	0	0	114	0	32	47	0	79	253
05:30 PM	0	0	0	0	0	13	0	38	0	51	20	62	0	0	82	0	36	44	0	80	213
05:45 PM	0	0	0	0	0	7	0	28	0	35	13	45	0	0	58	0	15	39	0	54	147
Total	0	0	0	0	0	54	0	147	0	201	91	268	0	0	359	0	130	186	0	316	876
Grand Total	0	0	0	0	0	102	8	271	0	381	145	619	0	0	764	0	282	386	0	668	1813
Apprch %	0	0	0	0	0	26.8	2.1	71.1	0		19	81	0	0		0	42.2	57.8	0		
Total %	0	0	0	0	0	5.6	0.4	14.9	0	21	8	34.1	0	0	42.1	0	15.6	21.3	0	36.8	

Start Time	I-64 WB On Ramp Eastbound					I-64 WB Off Ramp Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	0	0	0	0	11	1	37	0	49	13	107	0	0	120	0	39	57	0	96	265
04:30 PM	0	0	0	0	0	11	0	33	0	44	12	87	0	0	99	0	41	41	0	82	225
04:45 PM	0	0	0	0	0	14	3	33	0	50	15	68	0	0	83	0	34	56	0	90	223
05:00 PM	0	0	0	0	0	15	0	40	0	55	33	72	0	0	105	0	47	56	0	103	263
Total Volume	0	0	0	0	0	51	4	143	0	198	73	334	0	0	407	0	161	210	0	371	976
% App. Total	0	0	0	0	0	25.8	2	72.2	0		17.9	82.1	0	0		0	43.4	56.6	0		
PHF	.000	.000	.000	.000	.000	.850	.333	.894	.000	.900	.553	.780	.000	.000	.848	.000	.856	.921	.000	.900	.921

Peggy Malone and Associates
904-992-8072

File Name : 8-S Delphine Ave & Western Rd AM
Site Code :
Start Date : 11/15/2022
Page No : 1

Groups Printed- Cars

Start Time	Western Rd Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
07:00 AM	1	0	0	1	0	54	1	0	55	0	92	0	92	148
07:15 AM	0	1	0	1	0	85	0	0	85	0	114	0	114	200
07:30 AM	2	0	0	2	0	71	0	0	71	2	145	0	147	220
07:45 AM	0	4	0	4	0	102	0	0	102	1	135	0	136	242
Total	3	5	0	8	0	312	1	0	313	3	486	0	489	810
08:00 AM	0	0	0	0	0	66	0	0	66	3	93	0	96	162
08:15 AM	0	0	0	0	0	67	0	0	67	0	93	0	93	160
08:30 AM	1	0	0	1	0	56	0	0	56	0	90	0	90	147
08:45 AM	1	1	0	2	0	54	0	0	54	0	64	0	64	120
Total	2	1	0	3	0	243	0	0	243	3	340	0	343	589
Grand Total	5	6	0	11	0	555	1	0	556	6	826	0	832	1399
Apprch %	45.5	54.5	0		0	99.8	0.2	0		0.7	99.3	0		
Total %	0.4	0.4	0	0.8	0	39.7	0.1	0	39.7	0.4	59	0	59.5	

Start Time	Western Rd Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 07:15 AM														
07:15 AM	0	1	0	1	0	85	0	0	85	0	114	0	114	200
07:30 AM	2	0	0	2	0	71	0	0	71	2	145	0	147	220
07:45 AM	0	4	0	4	0	102	0	0	102	1	135	0	136	242
08:00 AM	0	0	0	0	0	66	0	0	66	3	93	0	96	162
Total Volume	2	5	0	7	0	324	0	0	324	6	487	0	493	824
% App. Total	28.6	71.4	0		0	100	0	0		1.2	98.8	0		
PHF	.250	.313	.000	.438	.000	.794	.000	.000	.794	.500	.840	.000	.838	.851

Peggy Malone and Associates
904-992-8072

File Name : 8-S Delphine Ave & Western Rd AM
Site Code :
Start Date : 11/15/2022
Page No : 1

Groups Printed- Trucks

Start Time	Western Rd Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
07:00 AM	0	0	0	0	0	10	0	0	10	0	5	0	5	15
07:15 AM	0	0	0	0	0	4	0	0	4	0	5	0	5	9
07:30 AM	0	0	0	0	0	12	0	0	12	0	4	0	4	16
07:45 AM	0	0	0	0	0	8	0	0	8	0	8	0	8	16
Total	0	0	0	0	0	34	0	0	34	0	22	0	22	56
08:00 AM	0	0	0	0	0	6	0	0	6	0	11	0	11	17
08:15 AM	1	0	0	1	0	9	0	0	9	0	6	0	6	16
08:30 AM	0	0	0	0	0	7	0	0	7	0	6	0	6	13
08:45 AM	0	0	0	0	0	11	0	0	11	0	9	0	9	20
Total	1	0	0	1	0	33	0	0	33	0	32	0	32	66
Grand Total	1	0	0	1	0	67	0	0	67	0	54	0	54	122
Apprch %	100	0	0		0	100	0	0		0	100	0		
Total %	0.8	0	0	0.8	0	54.9	0	0	54.9	0	44.3	0	44.3	

Start Time	Western Rd Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 08:00 AM														
08:00 AM	0	0	0	0	0	6	0	0	6	0	11	0	11	17
08:15 AM	1	0	0	1	0	9	0	0	9	0	6	0	6	16
08:30 AM	0	0	0	0	0	7	0	0	7	0	6	0	6	13
08:45 AM	0	0	0	0	0	11	0	0	11	0	9	0	9	20
Total Volume	1	0	0	1	0	33	0	0	33	0	32	0	32	66
% App. Total	100	0	0		0	100	0	0		0	100	0		
PHF	.250	.000	.000	.250	.000	.750	.000	.000	.750	.000	.727	.000	.727	.825

Peggy Malone and Associates
904-992-8072

File Name : 8-S Delphine Ave & Western Rd AM
Site Code :
Start Date : 11/15/2022
Page No : 1

Groups Printed- Combined

Start Time	Western Rd Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
07:00 AM	1	0	0	1	0	64	1	0	65	0	97	0	97	163
07:15 AM	0	1	0	1	0	89	0	0	89	0	119	0	119	209
07:30 AM	2	0	0	2	0	83	0	0	83	2	149	0	151	236
07:45 AM	0	4	0	4	0	110	0	0	110	1	143	0	144	258
Total	3	5	0	8	0	346	1	0	347	3	508	0	511	866
08:00 AM	0	0	0	0	0	72	0	0	72	3	104	0	107	179
08:15 AM	1	0	0	1	0	76	0	0	76	0	99	0	99	176
08:30 AM	1	0	0	1	0	63	0	0	63	0	96	0	96	160
08:45 AM	1	1	0	2	0	65	0	0	65	0	73	0	73	140
Total	3	1	0	4	0	276	0	0	276	3	372	0	375	655
Grand Total	6	6	0	12	0	622	1	0	623	6	880	0	886	1521
Apprch %	50	50	0		0	99.8	0.2	0		0.7	99.3	0		
Total %	0.4	0.4	0	0.8	0	40.9	0.1	0	41	0.4	57.9	0	58.3	

Start Time	Western Rd Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 07:15 AM														
07:15 AM	0	1	0	1	0	89	0	0	89	0	119	0	119	209
07:30 AM	2	0	0	2	0	83	0	0	83	2	149	0	151	236
07:45 AM	0	4	0	4	0	110	0	0	110	1	143	0	144	258
08:00 AM	0	0	0	0	0	72	0	0	72	3	104	0	107	179
Total Volume	2	5	0	7	0	354	0	0	354	6	515	0	521	882
% App. Total	28.6	71.4	0		0	100	0	0		1.2	98.8	0		
PHF	.250	.313	.000	.438	.000	.805	.000	.000	.805	.500	.864	.000	.863	.855

Peggy Malone and Associates

904-992-8072

File Name : 8-S Delphine Ave & Western Rd PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Cars

Start Time	Western Rd Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
02:00 PM	1	0	0	1	0	57	0	0	57	1	57	0	58	116
02:15 PM	0	2	0	2	0	62	2	0	64	0	50	0	50	116
02:30 PM	0	1	0	1	0	73	0	0	73	0	74	0	74	148
02:45 PM	2	1	0	3	0	61	0	0	61	0	64	0	64	128
Total	3	4	0	7	0	253	2	0	255	1	245	0	246	508
03:00 PM	0	0	0	0	0	73	0	0	73	0	77	0	77	150
03:15 PM	1	2	0	3	1	70	1	0	72	0	79	0	79	154
03:30 PM	0	0	0	0	0	107	2	0	109	0	84	0	84	193
03:45 PM	0	1	0	1	0	96	0	0	96	0	77	0	77	174
Total	1	3	0	4	1	346	3	0	350	0	317	0	317	671
04:00 PM	0	1	0	1	0	112	0	0	112	0	80	0	80	193
04:15 PM	0	3	0	3	0	129	0	0	129	1	81	0	82	214
04:30 PM	0	2	0	2	1	121	0	0	122	1	83	0	84	208
04:45 PM	1	0	0	1	1	101	0	0	102	2	80	0	82	185
Total	1	6	0	7	2	463	0	0	465	4	324	0	328	800
05:00 PM	1	0	0	1	0	111	1	0	112	4	86	0	90	203
05:15 PM	1	0	0	1	0	125	1	0	126	1	72	0	73	200
05:30 PM	1	1	0	2	0	94	0	0	94	0	72	0	72	168
05:45 PM	0	1	0	1	0	74	0	0	74	1	51	0	52	127
Total	3	2	0	5	0	404	2	0	406	6	281	0	287	698
Grand Total	8	15	0	23	3	1466	7	0	1476	11	1167	0	1178	2677
Apprch %	34.8	65.2	0		0.2	99.3	0.5	0		0.9	99.1	0		
Total %	0.3	0.6	0	0.9	0.1	54.8	0.3	0	55.1	0.4	43.6	0	44	

Start Time	Western Rd Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 03:00 PM														
03:00 PM	0	0	0	0	0	73	0	0	73	0	77	0	77	150
03:15 PM	1	2	0	3	1	70	1	0	72	0	79	0	79	154
03:30 PM	0	0	0	0	0	107	2	0	109	0	84	0	84	193
03:45 PM	0	1	0	1	0	96	0	0	96	0	77	0	77	174
Total Volume	1	3	0	4	1	346	3	0	350	0	317	0	317	671
% App. Total	25	75	0		0.3	98.9	0.9	0		0	100	0		
PHF	.250	.375	.000	.333	.250	.808	.375	.000	.803	.000	.943	.000	.943	.869

Peggy Malone and Associates

904-992-8072

File Name : 8-S Delphine Ave & Western Rd PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Trucks

Start Time	Western Rd Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
02:00 PM	0	0	0	0	0	5	0	0	5	0	6	0	6	11
02:15 PM	0	1	0	1	0	4	0	0	4	0	4	0	4	9
02:30 PM	0	0	0	0	0	8	0	0	8	0	6	0	6	14
02:45 PM	0	0	0	0	0	12	0	0	12	0	5	0	5	17
Total	0	1	0	1	0	29	0	0	29	0	21	0	21	51
03:00 PM	0	0	0	0	0	6	0	0	6	0	5	0	5	11
03:15 PM	0	0	0	0	1	8	0	0	9	0	5	0	5	14
03:30 PM	0	0	0	0	0	4	0	0	4	0	6	0	6	10
03:45 PM	0	0	0	0	0	7	0	0	7	0	3	0	3	10
Total	0	0	0	0	1	25	0	0	26	0	19	0	19	45
04:00 PM	0	0	0	0	0	5	0	0	5	0	7	0	7	12
04:15 PM	0	0	0	0	0	11	0	0	11	0	8	0	8	19
04:30 PM	0	0	0	0	0	5	0	0	5	0	6	0	6	11
04:45 PM	0	0	0	0	0	4	0	0	4	0	6	0	6	10
Total	0	0	0	0	0	25	0	0	25	0	27	0	27	52
05:00 PM	0	0	0	0	0	3	0	0	3	0	9	0	9	12
05:15 PM	0	0	0	0	0	4	0	0	4	0	5	0	5	9
05:30 PM	0	0	0	0	0	4	0	0	4	0	6	0	6	10
05:45 PM	0	0	0	0	0	1	0	0	1	0	2	0	2	3
Total	0	0	0	0	0	12	0	0	12	0	22	0	22	34
Grand Total	0	1	0	1	1	91	0	0	92	0	89	0	89	182
Apprch %	0	100	0		1.1	98.9	0	0		0	100	0		
Total %	0	0.5	0	0.5	0.5	50	0	0	50.5	0	48.9	0	48.9	

Start Time	Western Rd Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 02:30 PM														
02:30 PM	0	0	0	0	0	8	0	0	8	0	6	0	6	14
02:45 PM	0	0	0	0	0	12	0	0	12	0	5	0	5	17
03:00 PM	0	0	0	0	0	6	0	0	6	0	5	0	5	11
03:15 PM	0	0	0	0	1	8	0	0	9	0	5	0	5	14
Total Volume	0	0	0	0	1	34	0	0	35	0	21	0	21	56
% App. Total	0	0	0	0	2.9	97.1	0	0	97.1	0	100	0	100	97.1
PHF	.000	.000	.000	.000	.250	.708	.000	.000	.729	.000	.875	.000	.875	.824

Peggy Malone and Associates

904-992-8072

File Name : 8-S Delphine Ave & Western Rd PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Combined

Start Time	Western Rd Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
02:00 PM	1	0	0	1	0	62	0	0	62	1	63	0	64	127
02:15 PM	0	3	0	3	0	66	2	0	68	0	54	0	54	125
02:30 PM	0	1	0	1	0	81	0	0	81	0	80	0	80	162
02:45 PM	2	1	0	3	0	73	0	0	73	0	69	0	69	145
Total	3	5	0	8	0	282	2	0	284	1	266	0	267	559
03:00 PM	0	0	0	0	0	79	0	0	79	0	82	0	82	161
03:15 PM	1	2	0	3	2	78	1	0	81	0	84	0	84	168
03:30 PM	0	0	0	0	0	111	2	0	113	0	90	0	90	203
03:45 PM	0	1	0	1	0	103	0	0	103	0	80	0	80	184
Total	1	3	0	4	2	371	3	0	376	0	336	0	336	716
04:00 PM	0	1	0	1	0	117	0	0	117	0	87	0	87	205
04:15 PM	0	3	0	3	0	140	0	0	140	1	89	0	90	233
04:30 PM	0	2	0	2	1	126	0	0	127	1	89	0	90	219
04:45 PM	1	0	0	1	1	105	0	0	106	2	86	0	88	195
Total	1	6	0	7	2	488	0	0	490	4	351	0	355	852
05:00 PM	1	0	0	1	0	114	1	0	115	4	95	0	99	215
05:15 PM	1	0	0	1	0	129	1	0	130	1	77	0	78	209
05:30 PM	1	1	0	2	0	98	0	0	98	0	78	0	78	178
05:45 PM	0	1	0	1	0	75	0	0	75	1	53	0	54	130
Total	3	2	0	5	0	416	2	0	418	6	303	0	309	732
Grand Total	8	16	0	24	4	1557	7	0	1568	11	1256	0	1267	2859
Apprch %	33.3	66.7	0		0.3	99.3	0.4	0		0.9	99.1	0		
Total %	0.3	0.6	0	0.8	0.1	54.5	0.2	0	54.8	0.4	43.9	0	44.3	

Start Time	Western Rd Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 03:00 PM														
03:00 PM	0	0	0	0	0	79	0	0	79	0	82	0	82	161
03:15 PM	1	2	0	3	2	78	1	0	81	0	84	0	84	168
03:30 PM	0	0	0	0	0	111	2	0	113	0	90	0	90	203
03:45 PM	0	1	0	1	0	103	0	0	103	0	80	0	80	184
Total Volume	1	3	0	4	2	371	3	0	376	0	336	0	336	716
% App. Total	25	75	0		0.5	98.7	0.8	0		0	100	0		
PHF	.250	.375	.000	.333	.250	.836	.375	.000	.832	.000	.933	.000	.933	.882

Peggy Malone and Associates

904-992-8072

File Name : 9-S Delphine Ave & Windsor Rd_Mountain Rd AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Cars

Start Time	Windsor Rd Eastbound					Mountain Rd Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	11	0	41	0	52	0	1	1	0	2	12	51	1	0	64	0	59	8	0	67	185
07:15 AM	10	1	43	0	54	1	0	0	0	1	29	64	0	0	93	0	74	8	0	82	230
07:30 AM	10	1	54	0	65	0	1	0	0	1	23	59	1	0	83	0	96	17	0	113	262
07:45 AM	14	1	48	0	63	0	1	0	0	1	40	74	1	0	115	0	93	19	0	112	291
Total	45	3	186	0	234	1	3	1	0	5	104	248	3	0	355	0	322	52	0	374	968
08:00 AM	6	0	39	0	45	0	2	0	0	2	29	43	0	0	72	0	68	11	0	79	198
08:15 AM	2	1	44	0	47	1	0	1	0	2	29	47	1	0	77	1	54	3	0	58	184
08:30 AM	7	0	39	0	46	0	0	0	0	0	26	37	0	0	63	1	57	5	0	63	172
08:45 AM	7	0	20	0	27	0	1	0	0	1	23	41	2	0	66	0	52	3	0	55	149
Total	22	1	142	0	165	1	3	1	0	5	107	168	3	0	278	2	231	22	0	255	703
Grand Total	67	4	328	0	399	2	6	2	0	10	211	416	6	0	633	2	553	74	0	629	1671
Apprch %	16.8	1	82.2	0		20	60	20	0		33.3	65.7	0.9	0		0.3	87.9	11.8	0		
Total %	4	0.2	19.6	0	23.9	0.1	0.4	0.1	0	0.6	12.6	24.9	0.4	0	37.9	0.1	33.1	4.4	0	37.6	

Start Time	Windsor Rd Eastbound					Mountain Rd Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	10	1	43	0	54	1	0	0	0	1	29	64	0	0	93	0	74	8	0	82	230
07:30 AM	10	1	54	0	65	0	1	0	0	1	23	59	1	0	83	0	96	17	0	113	262
07:45 AM	14	1	48	0	63	0	1	0	0	1	40	74	1	0	115	0	93	19	0	112	291
08:00 AM	6	0	39	0	45	0	2	0	0	2	29	43	0	0	72	0	68	11	0	79	198
Total Volume	40	3	184	0	227	1	4	0	0	5	121	240	2	0	363	0	331	55	0	386	981
% App. Total	17.6	1.3	81.1	0		20	80	0	0		33.3	66.1	0.6	0		0	85.8	14.2	0		
PHF	.714	.750	.852	.000	.873	.250	.500	.000	.000	.625	.756	.811	.500	.000	.789	.000	.862	.724	.000	.854	.843

Peggy Malone and Associates

904-992-8072

File Name : 9-S Delphine Ave & Windsor Rd_Mountain Rd AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Trucks

Start Time	Windsor Rd Eastbound					Mountain Rd Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	1	0	2	0	3	0	0	0	0	0	2	7	1	0	10	0	3	1	0	4	4
07:15 AM	0	0	0	0	0	0	0	0	0	0	1	3	0	0	4	0	5	1	0	6	10
07:30 AM	0	0	0	0	0	0	0	0	0	0	2	9	1	0	12	0	4	0	0	4	16
07:45 AM	0	0	2	0	2	0	0	0	0	0	3	5	0	0	8	0	6	0	0	6	16
Total	1	0	4	0	5	0	0	0	0	0	8	24	2	0	34	0	18	2	0	20	59
08:00 AM	1	0	4	0	5	0	0	0	0	0	0	6	0	0	6	0	9	1	0	10	21
08:15 AM	0	0	2	0	2	0	0	1	0	1	0	10	0	0	10	0	5	0	0	5	18
08:30 AM	0	0	1	0	1	0	0	0	0	0	2	5	0	0	7	0	5	0	0	5	13
08:45 AM	0	0	3	0	3	0	0	0	0	0	0	11	0	0	11	0	6	0	0	6	20
Total	1	0	10	0	11	0	0	1	0	1	2	32	0	0	34	0	25	1	0	26	72
Grand Total	2	0	14	0	16	0	0	1	0	1	10	56	2	0	68	0	43	3	0	46	131
Apprch %	12.5	0	87.5	0		0	0	100	0		14.7	82.4	2.9	0		0	93.5	6.5	0		
Total %	1.5	0	10.7	0	12.2	0	0	0.8	0	0.8	7.6	42.7	1.5	0	51.9	0	32.8	2.3	0	35.1	

Start Time	Windsor Rd Eastbound					Mountain Rd Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	1	0	4	0	5	0	0	0	0	0	0	6	0	0	6	0	9	1	0	10	21
08:15 AM	0	0	2	0	2	0	0	1	0	1	0	10	0	0	10	0	5	0	0	5	18
08:30 AM	0	0	1	0	1	0	0	0	0	0	2	5	0	0	7	0	5	0	0	5	13
08:45 AM	0	0	3	0	3	0	0	0	0	0	0	11	0	0	11	0	6	0	0	6	20
Total Volume	1	0	10	0	11	0	0	1	0	1	2	32	0	0	34	0	25	1	0	26	72
% App. Total	9.1	0	90.9	0		0	0	100	0		5.9	94.1	0	0		0	96.2	3.8	0		
PHF	.250	.000	.625	.000	.550	.000	.000	.250	.000	.250	.250	.727	.000	.000	.773	.000	.694	.250	.000	.650	.857

Peggy Malone and Associates

904-992-8072

File Name : 9-S Delphine Ave & Windsor Rd_Mountain Rd AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Bicycles on Crosswalk

Start Time	Windsor Rd Eastbound					Mountain Rd Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	Windsor Rd Eastbound					Mountain Rd Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

904-992-8072

File Name : 9-S Delphine Ave & Windsor Rd_Mountain Rd AM

Site Code :

Start Date : 11/15/2022

Page No : 1

Groups Printed- Pedestrians

Start Time	Windsor Rd Eastbound					Mountain Rd Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	Windsor Rd Eastbound					Mountain Rd Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

904-992-8072

File Name : 9-S Delphine Ave & Windsor Rd_Mountain Rd AM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Combined

Start Time	Windsor Rd Eastbound					Mountain Rd Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	Windsor Rd Eastbound					Mountain Rd Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

904-992-8072

File Name : 9-S Delphine Ave & Windsor Rd_Mountain Rd PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Cars

Start Time	Windsor Rd Eastbound					Mountain Rd Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
02:00 PM	3	1	19	0	23	0	0	1	0	1	19	37	1	0	57	1	38	11	0	50	131
02:15 PM	5	1	14	0	20	0	0	0	0	0	21	45	0	0	66	1	35	3	0	39	125
02:30 PM	2	1	20	0	23	1	2	1	0	4	20	49	2	0	71	1	54	10	0	65	163
02:45 PM	7	1	21	0	29	0	1	1	0	2	21	43	0	0	64	2	41	4	0	47	142
Total	17	4	74	0	95	1	3	3	0	7	81	174	3	0	258	5	168	28	0	201	561
03:00 PM	8	2	24	0	34	1	0	0	0	1	22	50	0	0	72	2	52	9	0	63	170
03:15 PM	4	1	27	0	32	0	2	1	0	3	19	52	0	0	71	2	50	10	0	62	168
03:30 PM	11	3	22	0	36	0	0	1	0	1	21	87	0	0	108	1	62	8	0	71	216
03:45 PM	8	3	28	0	39	0	0	1	0	1	27	70	2	0	99	2	50	12	0	64	203
Total	31	9	101	0	141	1	2	3	0	6	89	259	2	0	350	7	214	39	0	260	757
04:00 PM	5	0	25	0	30	0	0	0	0	0	32	79	0	0	111	2	54	8	0	64	205
04:15 PM	8	2	30	0	40	0	0	1	0	1	46	87	1	0	134	2	50	9	0	61	236
04:30 PM	4	0	24	0	28	0	0	2	0	2	35	87	2	0	124	1	61	13	0	75	229
04:45 PM	3	1	21	0	25	0	1	1	0	2	36	63	1	0	100	0	60	14	0	74	201
Total	20	3	100	0	123	0	1	4	0	5	149	316	4	0	469	5	225	44	0	274	871
05:00 PM	9	3	34	0	46	2	0	0	0	2	33	72	3	0	108	1	54	9	0	64	220
05:15 PM	10	0	24	0	34	0	0	1	0	1	39	81	1	0	121	1	51	14	0	66	222
05:30 PM	5	0	17	0	22	1	0	0	0	1	34	59	1	0	94	4	58	21	0	83	200
05:45 PM	5	0	21	0	26	1	1	0	0	2	34	42	0	0	76	0	31	12	0	43	147
Total	29	3	96	0	128	4	1	1	0	6	140	254	5	0	399	6	194	56	0	256	789
Grand Total	97	19	371	0	487	6	7	11	0	24	459	1003	14	0	1476	23	801	167	0	991	2978
Apprch %	19.9	3.9	76.2	0		25	29.2	45.8	0		31.1	68	0.9	0		2.3	80.8	16.9	0		
Total %	3.3	0.6	12.5	0	16.4	0.2	0.2	0.4	0	0.8	15.4	33.7	0.5	0	49.6	0.8	26.9	5.6	0	33.3	

Start Time	Windsor Rd Eastbound					Mountain Rd Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:00 PM																					
03:00 PM	8	2	24	0	34	1	0	0	0	1	22	50	0	0	72	2	52	9	0	63	170
03:15 PM	4	1	27	0	32	0	2	1	0	3	19	52	0	0	71	2	50	10	0	62	168
03:30 PM	11	3	22	0	36	0	0	1	0	1	21	87	0	0	108	1	62	8	0	71	216
03:45 PM	8	3	28	0	39	0	0	1	0	1	27	70	2	0	99	2	50	12	0	64	203
Total Volume	31	9	101	0	141	1	2	3	0	6	89	259	2	0	350	7	214	39	0	260	757
% App. Total	22	6.4	71.6	0		16.7	33.3	50	0		25.4	74	0.6	0		2.7	82.3	15	0		
PHF	.705	.750	.902	.000	.904	.250	.250	.750	.000	.500	.824	.744	.250	.000	.810	.875	.863	.813	.000	.915	.876

Peggy Malone and Associates

904-992-8072

File Name : 9-S Delphine Ave & Windsor Rd_Mountain Rd PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Trucks

Start Time	Windsor Rd Eastbound					Mountain Rd Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
02:00 PM	0	0	3	0	3	0	0	0	0	0	0	5	0	0	5	0	4	1	0	5	13
02:15 PM	1	0	0	0	1	0	0	0	0	0	1	4	0	0	5	0	4	0	0	4	10
02:30 PM	1	0	0	0	1	0	0	0	0	0	1	8	0	0	9	0	6	1	0	7	17
02:45 PM	1	0	2	0	3	0	0	0	0	0	0	11	1	0	12	0	3	0	0	3	18
Total	3	0	5	0	8	0	0	0	0	0	2	28	1	0	31	0	17	2	0	19	58
03:00 PM	0	0	1	0	1	0	0	0	0	0	0	6	0	0	6	0	4	1	0	5	12
03:15 PM	0	1	3	0	4	0	0	0	0	0	1	7	0	0	8	0	2	1	0	3	15
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	3	1	0	4	0	6	2	0	8	12
03:45 PM	0	0	1	0	1	0	0	0	0	0	0	6	0	0	6	0	2	1	0	3	10
Total	0	1	5	0	6	0	0	0	0	0	1	22	1	0	24	0	14	5	0	19	49
04:00 PM	0	0	3	0	3	0	0	0	0	0	0	5	0	0	5	0	5	0	0	5	13
04:15 PM	0	0	1	0	1	0	0	0	0	0	0	11	0	0	11	0	7	1	0	8	20
04:30 PM	0	0	0	0	0	0	0	0	0	0	1	4	0	0	5	0	6	0	0	6	11
04:45 PM	0	0	1	0	1	0	0	0	0	0	0	4	0	0	4	0	6	0	0	6	11
Total	0	0	5	0	5	0	0	0	0	0	1	24	0	0	25	0	24	1	0	25	55
05:00 PM	0	0	1	0	1	0	0	0	0	0	1	2	0	0	3	0	8	0	0	8	12
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	3	1	0	4	8
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	1	6	0	0	7	11
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	0	0	2	3
Total	0	0	1	0	1	0	0	0	0	0	1	11	0	0	12	1	19	1	0	21	34
Grand Total	3	1	16	0	20	0	0	0	0	0	5	85	2	0	92	1	74	9	0	84	196
Apprch %	15	5	80	0		0	0	0	0		5.4	92.4	2.2	0		1.2	88.1	10.7	0		
Total %	1.5	0.5	8.2	0	10.2	0	0	0	0	0	2.6	43.4	1	0	46.9	0.5	37.8	4.6	0	42.9	

Start Time	Windsor Rd Eastbound					Mountain Rd Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 02:30 PM																					
02:30 PM	1	0	0	0	1	0	0	0	0	0	1	8	0	0	9	0	6	1	0	7	17
02:45 PM	1	0	2	0	3	0	0	0	0	0	0	11	1	0	12	0	3	0	0	3	18
03:00 PM	0	0	1	0	1	0	0	0	0	0	0	6	0	0	6	0	4	1	0	5	12
03:15 PM	0	1	3	0	4	0	0	0	0	0	1	7	0	0	8	0	2	1	0	3	15
Total Volume	2	1	6	0	9	0	0	0	0	0	2	32	1	0	35	0	15	3	0	18	62
% App. Total	22.2	11.1	66.7	0		0	0	0	0		5.7	91.4	2.9	0		0	83.3	16.7	0		
PHF	.500	.250	.500	.000	.563	.000	.000	.000	.000	.000	.500	.727	.250	.000	.729	.000	.625	.750	.000	.643	.861

Peggy Malone and Associates

904-992-8072

File Name : 9-S Delphine Ave & Windsor Rd_Mountain Rd PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Bicycles on Crosswalk

Start Time	Windsor Rd Eastbound					Mountain Rd Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	Windsor Rd Eastbound					Mountain Rd Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 02:00 PM																					
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

904-992-8072

File Name : 9-S Delphine Ave & Windsor Rd_Mountain Rd PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Pedestrians

Start Time	Windsor Rd Eastbound					Mountain Rd Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
Total %																					

Start Time	Windsor Rd Eastbound					Mountain Rd Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 02:00 PM																					
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peggy Malone and Associates

904-992-8072

File Name : 9-S Delphine Ave & Windsor Rd_Mountain Rd PM
 Site Code :
 Start Date : 11/15/2022
 Page No : 1

Groups Printed- Combined

Start Time	Windsor Rd Eastbound					Mountain Rd Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
02:00 PM	3	1	22	0	26	0	0	1	0	1	19	42	1	0	62	1	42	12	0	55	144
02:15 PM	6	1	14	0	21	0	0	0	0	0	22	49	0	0	71	1	39	3	0	43	135
02:30 PM	3	1	20	0	24	1	2	1	0	4	21	57	2	0	80	1	60	11	0	72	180
02:45 PM	8	1	23	0	32	0	1	1	0	2	21	54	1	0	76	2	44	4	0	50	160
Total	20	4	79	0	103	1	3	3	0	7	83	202	4	0	289	5	185	30	0	220	619
03:00 PM	8	2	25	0	35	1	0	0	0	1	22	56	0	0	78	2	56	10	0	68	182
03:15 PM	4	2	30	0	36	0	2	1	0	3	20	59	0	0	79	2	52	11	0	65	183
03:30 PM	11	3	22	0	36	0	0	1	0	1	21	90	1	0	112	1	68	10	0	79	228
03:45 PM	8	3	29	0	40	0	0	1	0	1	27	76	2	0	105	2	52	13	0	67	213
Total	31	10	106	0	147	1	2	3	0	6	90	281	3	0	374	7	228	44	0	279	806
04:00 PM	5	0	28	0	33	0	0	0	0	0	32	84	0	0	116	2	59	8	0	69	218
04:15 PM	8	2	31	0	41	0	0	1	0	1	46	98	1	0	145	2	57	10	0	69	256
04:30 PM	4	0	24	0	28	0	0	2	0	2	36	91	2	0	129	1	67	13	0	81	240
04:45 PM	3	1	22	0	26	0	1	1	0	2	36	67	1	0	104	0	66	14	0	80	212
Total	20	3	105	0	128	0	1	4	0	5	150	340	4	0	494	5	249	45	0	299	926
05:00 PM	9	3	35	0	47	2	0	0	0	2	34	74	3	0	111	1	62	9	0	72	232
05:15 PM	10	0	24	0	34	0	0	1	0	1	39	85	1	0	125	1	54	15	0	70	230
05:30 PM	5	0	17	0	22	1	0	0	0	1	34	63	1	0	98	5	64	21	0	90	211
05:45 PM	5	0	21	0	26	1	1	0	0	2	34	43	0	0	77	0	33	12	0	45	150
Total	29	3	97	0	129	4	1	1	0	6	141	265	5	0	411	7	213	57	0	277	823
Grand Total	100	20	387	0	507	6	7	11	0	24	464	1088	16	0	1568	24	875	176	0	1075	3174
Apprch %	19.7	3.9	76.3	0		25	29.2	45.8	0		29.6	69.4	1	0		2.2	81.4	16.4	0		
Total %	3.2	0.6	12.2	0	16	0.2	0.2	0.3	0	0.8	14.6	34.3	0.5	0	49.4	0.8	27.6	5.5	0	33.9	

Start Time	Windsor Rd Eastbound					Mountain Rd Westbound					S Delphine Ave Northbound					S Delphine Ave Southbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:00 PM																					
03:00 PM	8	2	25	0	35	1	0	0	0	1	22	56	0	0	78	2	56	10	0	68	182
03:15 PM	4	2	30	0	36	0	2	1	0	3	20	59	0	0	79	2	52	11	0	65	183
03:30 PM	11	3	22	0	36	0	0	1	0	1	21	90	1	0	112	1	68	10	0	79	228
03:45 PM	8	3	29	0	40	0	0	1	0	1	27	76	2	0	105	2	52	13	0	67	213
Total Volume	31	10	106	0	147	1	2	3	0	6	90	281	3	0	374	7	228	44	0	279	806
% App. Total	21.1	6.8	72.1	0		16.7	33.3	50	0		24.1	75.1	0.8	0		2.5	81.7	15.8	0		
PHF	.705	.833	.883	.000	.919	.250	.250	.750	.000	.500	.833	.781	.375	.000	.835	.875	.838	.846	.000	.883	.884

Peggy Malone and Associates
904-992-8072

File Name : 10-S Delphine Ave & 19th St AM
Site Code :
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Groups Printed- Cars

Start Time	19th St Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
07:00 AM	1	0	0	1	1	56	0	0	57	0	60	0	60	118
07:15 AM	1	0	0	1	0	71	0	0	71	0	78	0	78	150
07:30 AM	2	0	0	2	0	60	0	0	60	0	100	0	100	162
07:45 AM	0	0	0	0	0	83	0	0	83	0	108	0	108	191
Total	4	0	0	4	1	270	0	0	271	0	346	0	346	621
08:00 AM	0	0	0	0	0	43	0	0	43	0	69	0	69	112
08:15 AM	0	0	0	0	0	39	1	0	40	0	49	0	49	89
08:30 AM	0	0	0	0	0	39	0	0	39	0	57	0	57	96
08:45 AM	0	0	0	0	0	37	0	0	37	0	51	0	51	88
Total	0	0	0	0	0	158	1	0	159	0	226	0	226	385
Grand Total	4	0	0	4	1	428	1	0	430	0	572	0	572	1006
Apprch %	100	0	0		0.2	99.5	0.2	0		0	100	0		
Total %	0.4	0	0	0.4	0.1	42.5	0.1	0	42.7	0	56.9	0	56.9	

Start Time	19th St Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 07:00 AM														
07:00 AM	1	0	0	1	1	56	0	0	57	0	60	0	60	118
07:15 AM	1	0	0	1	0	71	0	0	71	0	78	0	78	150
07:30 AM	2	0	0	2	0	60	0	0	60	0	100	0	100	162
07:45 AM	0	0	0	0	0	83	0	0	83	0	108	0	108	191
Total Volume	4	0	0	4	1	270	0	0	271	0	346	0	346	621
% App. Total	100	0	0		0.4	99.6	0	0		0	100	0		
PHF	.500	.000	.000	.500	.250	.813	.000	.000	.816	.000	.801	.000	.801	.813

Peggy Malone and Associates
904-992-8072

File Name : 10-S Delphine Ave & 19th St AM
Site Code :
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Groups Printed- Trucks

Start Time	19th St Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
07:00 AM	0	1	0	1	0	8	0	0	8	0	3	0	3	12
07:15 AM	0	0	0	0	0	3	0	0	3	0	6	0	6	9
07:30 AM	0	0	0	0	0	9	0	0	9	0	4	0	4	13
07:45 AM	0	0	0	0	0	5	0	0	5	0	6	0	6	11
Total	0	1	0	1	0	25	0	0	25	0	19	0	19	45
08:00 AM	0	0	0	0	0	7	0	0	7	0	10	0	10	17
08:15 AM	0	0	0	0	0	11	0	0	11	0	6	0	6	17
08:30 AM	0	0	0	0	0	5	0	0	5	0	5	0	5	10
08:45 AM	0	0	0	0	0	11	0	0	11	0	6	0	6	17
Total	0	0	0	0	0	34	0	0	34	0	27	0	27	61
Grand Total	0	1	0	1	0	59	0	0	59	0	46	0	46	106
Apprch %	0	100	0		0	100	0	0		0	100	0		
Total %	0	0.9	0	0.9	0	55.7	0	0	55.7	0	43.4	0	43.4	

Start Time	19th St Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 08:00 AM														
08:00 AM	0	0	0	0	0	7	0	0	7	0	10	0	10	17
08:15 AM	0	0	0	0	0	11	0	0	11	0	6	0	6	17
08:30 AM	0	0	0	0	0	5	0	0	5	0	5	0	5	10
08:45 AM	0	0	0	0	0	11	0	0	11	0	6	0	6	17
Total Volume	0	0	0	0	0	34	0	0	34	0	27	0	27	61
% App. Total	0	0	0		0	100	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.773	.000	.000	.773	.000	.675	.000	.675	.897

Peggy Malone and Associates

904-992-8072

File Name : 10-S Delphine Ave & 19th St AM
 Site Code :
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Groups Printed- Combined

Start Time	19th St Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
07:00 AM	1	1	0	2	1	64	0	0	65	0	63	0	63	130
07:15 AM	1	0	0	1	0	74	0	0	74	0	84	0	84	159
07:30 AM	2	0	0	2	0	69	0	0	69	0	104	0	104	175
07:45 AM	0	0	0	0	0	88	0	0	88	0	114	0	114	202
Total	4	1	0	5	1	295	0	0	296	0	365	0	365	666
08:00 AM	0	0	0	0	0	50	0	0	50	0	79	0	79	129
08:15 AM	0	0	0	0	0	50	1	0	51	0	55	0	55	106
08:30 AM	0	0	0	0	0	44	0	0	44	0	62	0	62	106
08:45 AM	0	0	0	0	0	48	0	0	48	0	57	0	57	105
Total	0	0	0	0	0	192	1	0	193	0	253	0	253	446
Grand Total	4	1	0	5	1	487	1	0	489	0	618	0	618	1112
Apprch %	80	20	0		0.2	99.6	0.2	0		0	100	0		
Total %	0.4	0.1	0	0.4	0.1	43.8	0.1	0	44	0	55.6	0	55.6	

Start Time	19th St Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 07:00 AM														
07:00 AM	1	1	0	2	1	64	0	0	65	0	63	0	63	130
07:15 AM	1	0	0	1	0	74	0	0	74	0	84	0	84	159
07:30 AM	2	0	0	2	0	69	0	0	69	0	104	0	104	175
07:45 AM	0	0	0	0	0	88	0	0	88	0	114	0	114	202
Total Volume	4	1	0	5	1	295	0	0	296	0	365	0	365	666
% App. Total	80	20	0		0.3	99.7	0	0		0	100	0		
PHF	.500	.250	.000	.625	.250	.838	.000	.000	.841	.000	.800	.000	.800	.824

Peggy Malone and Associates

904-992-8072

File Name : 10-S Delphine Ave & 19th St PM
 Site Code :
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Groups Printed- Cars

Start Time	19th St Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
02:00 PM	1	0	0	1	0	40	0	0	40	1	47	0	48	89
02:15 PM	0	0	0	0	0	50	0	0	50	1	38	0	39	89
02:30 PM	0	0	0	0	0	50	1	0	51	1	68	0	69	120
02:45 PM	0	0	0	0	0	51	0	0	51	0	48	0	48	99
Total	1	0	0	1	0	191	1	0	192	3	201	0	204	397
03:00 PM	2	1	0	3	0	56	1	0	57	1	60	0	61	121
03:15 PM	1	0	0	1	0	57	0	0	57	0	60	0	60	118
03:30 PM	1	1	0	2	0	101	0	0	101	0	71	0	71	174
03:45 PM	0	1	0	1	0	77	0	0	77	0	63	0	63	141
Total	4	3	0	7	0	291	1	0	292	1	254	0	255	554
04:00 PM	0	0	0	0	0	86	0	0	86	0	65	0	65	151
04:15 PM	1	1	0	2	0	97	0	0	97	0	63	0	63	162
04:30 PM	0	1	0	1	1	94	1	0	96	2	70	0	72	169
04:45 PM	1	0	0	1	1	63	1	0	65	1	72	0	73	139
Total	2	2	0	4	2	340	2	0	344	3	270	0	273	621
05:00 PM	0	0	0	0	0	81	1	0	82	0	68	0	68	150
05:15 PM	1	1	0	2	0	91	0	0	91	0	62	0	62	155
05:30 PM	0	0	0	0	0	64	1	0	65	1	80	0	81	146
05:45 PM	0	1	0	1	0	46	0	0	46	0	42	0	42	89
Total	1	2	0	3	0	282	2	0	284	1	252	0	253	540
Grand Total	8	7	0	15	2	1104	6	0	1112	8	977	0	985	2112
Apprch %	53.3	46.7	0		0.2	99.3	0.5	0		0.8	99.2	0		
Total %	0.4	0.3	0	0.7	0.1	52.3	0.3	0	52.7	0.4	46.3	0	46.6	

Start Time	19th St Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 03:00 PM														
03:00 PM	2	1	0	3	0	56	1	0	57	1	60	0	61	121
03:15 PM	1	0	0	1	0	57	0	0	57	0	60	0	60	118
03:30 PM	1	1	0	2	0	101	0	0	101	0	71	0	71	174
03:45 PM	0	1	0	1	0	77	0	0	77	0	63	0	63	141
Total Volume	4	3	0	7	0	291	1	0	292	1	254	0	255	554
% App. Total	57.1	42.9	0		0	99.7	0.3	0		0.4	99.6	0		
PHF	.500	.750	.000	.583	.000	.720	.250	.000	.723	.250	.894	.000	.898	.796

Peggy Malone and Associates

904-992-8072

File Name : 10-S Delphine Ave & 19th St PM
 Site Code :
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Groups Printed- Trucks

Start Time	19th St Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
02:00 PM	0	0	0	0	0	5	0	0	5	0	5	0	5	10
02:15 PM	0	0	0	0	0	5	0	0	5	0	5	0	5	10
02:30 PM	0	0	0	0	0	8	0	0	8	0	7	0	7	15
02:45 PM	0	1	0	1	0	11	0	0	11	0	3	0	3	15
Total	0	1	0	1	0	29	0	0	29	0	20	0	20	50
03:00 PM	0	0	0	0	0	6	0	0	6	0	5	0	5	11
03:15 PM	1	0	0	1	0	8	0	0	8	0	2	0	2	11
03:30 PM	0	0	0	0	0	3	0	0	3	0	8	0	8	11
03:45 PM	0	0	0	0	0	7	0	0	7	0	3	0	3	10
Total	1	0	0	1	0	24	0	0	24	0	18	0	18	43
04:00 PM	0	0	0	0	0	5	0	0	5	0	5	0	5	10
04:15 PM	0	0	0	0	0	10	0	0	10	0	7	0	7	17
04:30 PM	0	0	0	0	0	4	0	0	4	0	6	0	6	10
04:45 PM	0	0	0	0	0	4	0	0	4	0	6	0	6	10
Total	0	0	0	0	0	23	0	0	23	0	24	0	24	47
05:00 PM	0	0	0	0	0	2	0	0	2	0	8	0	8	10
05:15 PM	0	0	0	0	0	4	0	0	4	0	6	0	6	10
05:30 PM	0	0	0	0	0	4	0	0	4	0	9	0	9	13
05:45 PM	0	0	0	0	0	1	0	0	1	0	1	0	1	2
Total	0	0	0	0	0	11	0	0	11	0	24	0	24	35
Grand Total	1	1	0	2	0	87	0	0	87	0	86	0	86	175
Apprch %	50	50	0		0	100	0	0		0	100	0		
Total %	0.6	0.6	0	1.1	0	49.7	0	0	49.7	0	49.1	0	49.1	

Start Time	19th St Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 02:30 PM														
02:30 PM	0	0	0	0	0	8	0	0	8	0	7	0	7	15
02:45 PM	0	1	0	1	0	11	0	0	11	0	3	0	3	15
03:00 PM	0	0	0	0	0	6	0	0	6	0	5	0	5	11
03:15 PM	1	0	0	1	0	8	0	0	8	0	2	0	2	11
Total Volume	1	1	0	2	0	33	0	0	33	0	17	0	17	52
% App. Total	50	50	0		0	100	0	0		0	100	0		
PHF	.250	.250	.000	.500	.000	.750	.000	.000	.750	.000	.607	.000	.607	.867

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Groups Printed- Bicycles on Crosswalk

Start Time	19th St Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Apprch %	0	0	0		0	0	0	0		0	0	0		
Total %														

Start Time	19th St Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 02:00 PM

Peggy Malone and Associates

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Groups Printed- Combined

Start Time	19th St Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
02:00 PM	1	0	0	1	0	45	0	0	45	1	52	0	53	99
02:15 PM	0	0	0	0	0	55	0	0	55	1	43	0	44	99
02:30 PM	0	0	0	0	0	58	1	0	59	1	75	0	76	135
02:45 PM	0	1	0	1	0	62	0	0	62	0	51	0	51	114
Total	1	1	0	2	0	220	1	0	221	3	221	0	224	447
03:00 PM	2	1	0	3	0	62	1	0	63	1	65	0	66	132
03:15 PM	2	0	0	2	0	65	0	0	65	0	62	0	62	129
03:30 PM	1	1	0	2	0	104	0	0	104	0	79	0	79	185
03:45 PM	0	1	0	1	0	84	0	0	84	0	66	0	66	151
Total	5	3	0	8	0	315	1	0	316	1	272	0	273	597
04:00 PM	0	0	0	0	0	91	0	0	91	0	70	0	70	161
04:15 PM	1	1	0	2	0	107	0	0	107	0	70	0	70	179
04:30 PM	0	1	0	1	1	98	1	0	100	2	76	0	78	179
04:45 PM	1	0	0	1	1	67	1	0	69	1	78	0	79	149
Total	2	2	0	4	2	363	2	0	367	3	294	0	297	668
05:00 PM	0	0	0	0	0	83	1	0	84	0	76	0	76	160
05:15 PM	1	1	0	2	0	95	0	0	95	0	68	0	68	165
05:30 PM	0	0	0	0	0	68	1	0	69	1	89	0	90	159
05:45 PM	0	1	0	1	0	47	0	0	47	0	43	0	43	91
Total	1	2	0	3	0	293	2	0	295	1	276	0	277	575
Grand Total	9	8	0	17	2	1191	6	0	1199	8	1063	0	1071	2287
Apprch %	52.9	47.1	0	0.7	0.2	99.3	0.5	0	52.4	0.7	99.3	0	46.8	
Total %	0.4	0.3	0	0.7	0.1	52.1	0.3	0	52.4	0.3	46.5	0	46.8	

Start Time	19th St Westbound				S Delphine Ave Northbound					S Delphine Ave Southbound				Int. Total
	Left	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	
Peak Hour Analysis From 02:00 PM to 03:45 PM - Peak 1 of 1														
Peak Hour for Entire Intersection Begins at 03:00 PM														
03:00 PM	2	1	0	3	0	62	1	0	63	1	65	0	66	132
03:15 PM	2	0	0	2	0	65	0	0	65	0	62	0	62	129
03:30 PM	1	1	0	2	0	104	0	0	104	0	79	0	79	185
03:45 PM	0	1	0	1	0	84	0	0	84	0	66	0	66	151
Total Volume	5	3	0	8	0	315	1	0	316	1	272	0	273	597
% App. Total	62.5	37.5	0	0.7	0	99.7	0.3	0	52.4	0.4	99.6	0	46.8	
PHF	.625	.750	.000	.667	.000	.757	.250	.000	.760	.250	.861	.000	.864	.807

Appendix B:
Traffic Growth and Forecast Memo

Overview

As part of their FY2023 work plan, the Staunton-Augusta-Waynesboro (SAW) MPO is conducting a safety and operations study at several intersections within the MPO region that are designated as Potential for Safety Improvement (PSI) locations. PSI ranking are a safety screening tool that compares the number of observed crashes over a 5-year period to the number of anticipated crashes based on roadway characteristics. The larger the difference of observed crashes over anticipated crashes, the higher the PSI intersection ranking. The current PSI rankings are based on crashes between 2016 and 2020. The purpose of this memo is to provide information to support the consideration of future traffic volume growth for the 2035 design year operational and safety analysis of the study. This memo provides a summary of existing traffic volumes, historical growth trends, and future forecasts associated with the MPO Travel Demand Model. This information is utilized in developing the recommended study growth rates. The recommended growth rates and supporting traffic data are presented in **Table 1**.

Existing Conditions

The study intersections consist of the following locations:

- US 11 and Route 612 – Augusta County – PSI #140
- I-81, Exit 227 Northbound Ramp and Route 612 – Augusta County – PSI #75
- Churchville Avenue and Thornrose Avenue – Staunton City – PSI #127
- Coalter Street and Statler Boulevard – Staunton City – PSI #80
- Delphine Avenue and Windsor Road – Waynesboro City – PSI #126
- I-64, Exit 96 Westbound Ramp and Delphine Avenue – Waynesboro City – PSI #74

The VDOT annual count program collects traffic data across the state, typically on a 3-year cycle. The last round of physical counts collected in the SAW MPO region as part of this program was in 2019, before the COVID-19 pandemic. To determine historic growth trends for each approach of the study intersections, physical counts for a minimum 10-year period were also reviewed. The 2019 volumes and historical growth trends are shown in **Table 1**.

Staunton – Augusta – Waynesboro MPO Travel Demand Model

The SAW MPO, in cooperation with VDOT and Cambridge Systematics, completed a Travel Demand Model (TDM) in 2018 to assist with the MPO Long Range Planning program. The model outputs include an Existing 2018 scenario and a 2045 scenario that considers the implementation of funded transportation projects within the MPO boundary, including the construction of the I-81 corridor improvements through Staunton. Annualized growth rates from the TDM were determined by comparing the 2045 to 2018 volumes for the study intersection approaches as shown in **Table 1**. The variations between the historical growth rates and the forecasted TDM growth rates can be attributed to the future population and employment assignments coded into the TDM by the MPO Long Range Transportation Plan study team during the 2020 update. Specific variations of note include limited to no growth in the TDM at the two Staunton intersection due to population and employment assignments around the periphery of the city (Staunton Crossing) and higher TDM growth rates along US 11 north of Verona due to the model considering US 11 as a more attractive route than I-81 for traffic to and from the Harrisonburg region. The TDM growth rates along Delphine Avenue in Waynesboro are higher and more consistent with the historical trends due to the future growth assigned to the Nature’s Crossing development to the south of I-64 at Exit 96.

Recommendation

Based on the review of the historical growth trends and TDM outputs, VDOT District Planning provides recommended growth rates for the SAW MPO PSI intersection study in the final column of **Table 1**. These growth rates can be utilized by the study consultant to grow intersection volumes for the 2035 design year no-build scenario and analysis of intersection improvement alternatives. If warranted based on the selected improvement alternatives, VDOT District Planning is available to perform sensitivity testing with high growth rates to ensure acceptable future operations.

Table 1 - Traffic Data with Recommended Growth Rates

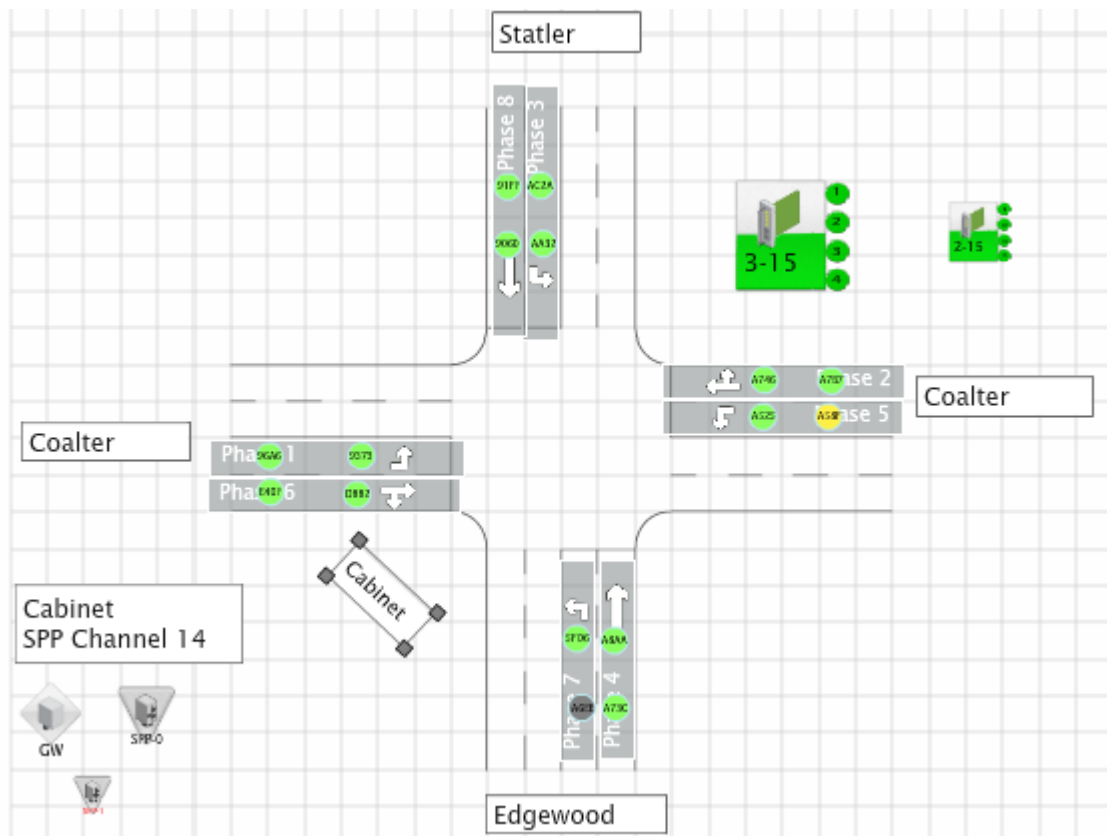
Study Intersection by Approach	2019 VDOT Count Data	VDOT Historical Growth Rate	2018 TDM Forecast	2045 TDM Forecast	TDM Annualized Growth Rate	Recommended Study Growth Rate
US 11/Route 612 (Laurel Hill Road):						
US 11 northern leg	7,800	1.0%	12,946	18,729	1.7%	1.0%
US 11 southern leg	13,380	1.0%	13,371	17,822	1.2%	1.0%
Route 612 eastern leg	11,600	1.0%	10,543	10,999	0.2%	1.0%
Route 612 western leg	4,900	0.0%	5,994	7,534	1.0%	1.0%
Route 612 (Laurel Hill Road)/I-81, Exit 247 NB off-ramp:						
I-81 ramp northern leg	1,900	Insufficient data	2,022	1,618	-0.7%	1.0%
I-81 ramp southern leg	3,300	Insufficient data	4,915	4,793	-0.1%	1.0%
Route 612 eastern leg	6,500	0.0%	6,867	6,899	0.0%	1.0%
Route 612 western leg	14,450	1.0%	9,495	9,673	0.1%	1.0%
Churchville Avenue/Thornrose Avenue:						
Churchville Ave northern leg	8,300	1.0%	13,098	13,196	0.0%	1.0%
Thornrose Ave southern leg	5,200	2.5%	2,853	2,814	-0.1%	1.0%
Churchville Ave eastern leg	10,900	2.5%	10,931	10,993	0.0%	1.0%
Statler Blvd/Coalter Street/Edgewood Road:						
Coalter St northern leg	3,400	1.0%	8,900	9,584	0.3%	1.0%
Coalter St southern leg	3,400	0.0%	9,274	9,859	0.2%	1.0%
Statler Blvd eastern leg	10,000	1.0%	5,269	5,798	0.4%	1.0%
Edgewood Rd western leg	No data	Insufficient data	5,335	5,561	0.2%	1.0%
Delphine Avenue/Windsor Road:						
Delphine Ave northern leg	8,350	1.5%	7,013	9,807	1.5%	1.5%
Delphine Ave southern leg	10,200	2.5%	9,671	12,979	1.3%	1.5%
Windsor Rd western leg	4,150	2.0%	4,389	4,955	0.5%	1.0%
Delphine Avenue/I-64, Exit 96 WB off-ramp:						
Delphine Ave northern leg	10,200	2.5%	9,671	12,979	1.3%	1.5%
Delphine Ave southern leg	4,900	1.5%	6,902	9,492	1.4%	1.5%
I-64 ramp eastern leg	1,600	Insufficient data	1,118	2,011	3.0%	2.0%
I-64 ramp western leg	4,200	Insufficient data	4,114	4,703	0.5%	1.0%

Appendix C:
Traffic Signal Timings

Coalter and Edgewood Timings

Phase	1	2	3	4	5	6	7	8
Min Green	8	7	7	7	8	7	7	7
Passage	5	4	4	4	5	4	4	4
Yellow	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All Red	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Max 1	25	35	20	30	20	35	35	30
Max 2	30	40	25	30	25	40	40	35

NOTE: Network Switch IP 10.29.5.252
 Controller IP 10.29.5.107
 Sensys IP 10.29.5.105
 Subnet IP 255.255.0.0
 Gateway IP 10.29.1.253



11/612, Verona

Phase Options

11/2/2022 10:23:13 AM

Phases	1-8								9-16								
Min Recalls	2				6												
Max Recalls																	
Ped Recalls																	
Soft Recall																	
Dual Entry																	
Red Rest																	
Walk Rest																	
Walk Expand																	
Ped Recycle																	
Sim Ped Term																	
PC Thru Clr																	
Guar Passage																	
No Simult Gap	1	3		5		7											
Yel Lock																	
Red Lock																	
PhaseNext Lock	1	2	3	4	5	6	7	8									
No Term Call	1	2	3	4	5	6	7	8									
Cond Serv																	
CS Enable																	
Cond Reserve																	
Reserve																	
Veh Omit																	
Ped Omit																	
Perm Phase																	
Protect Calls																	
Protect Calls 2																	
Flash Entry																	
Flash Exit																	
Flash Exit Yel																	
Flash Exit Red																	
Ped Scramble																	
No Min Yel																	
No Min Red Rev																	
Max Scramble Walk																	
Flash Yellow	2				6												
Flash FYA																	
CNA 1																	
CNA 2																	

11/612, Verona

Phase Startup Options

11/2/2022 10:23:13 AM

Startup Flash Mode
 Startup All Red Yellow

Phases	1-8								9-16							
Startup Phases	2					6										
Startup Yellow																
Startup Red																
Startup No Walk																
Startup Next																
Startup Yel Fls																
Startup FYA																
No Veh Call																
No Ped Call																

Phase Startup Timing

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Start Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Max Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Unit

Red Revert Ped Protect AdvFls in Flash

11/612, Verona

FYA/FRA

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FYA	1	2	3	4	5	6	7	8
Prot Phs	1	0	3	0	5	0	7	0
Opp Thru	2	0	4	0	6	0	8	0
Start Phs	0	0	0	0	0	0	0	0
Opp Ped	0	0	0	0	0	0	0	0
Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Min FYA	3.0	0.0	3.0	0.0	3.0	0.0	3.0	0.0
Skip Prot Red	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
Head Mode	FYA 1	FYA 1	FYA 1	FYA 1	FYA 1	FYA 1	FYA 1	FYA 1

Ped Hawk 1

Veh Phase

Ped Phase

Flash Yel Dark Signal

Flash Delay Flash Carryover

Green Mode

Ped Hawk 2

Veh Phase

Ped Phase

Flash Yel Dark Signal

Flash Delay Flash Carryover

Green Mode

Ped Hawk 3

Veh Phase

Ped Phase

Flash Yel Dark Signal

Flash Delay Flash Carryover

Green Mode

Ped Hawk 4

Veh Phase

Ped Phase

Flash Yel Dark Signal

Flash Delay Flash Carryover

Green Mode

11/612, Verona

Overlap Startup Options

11/2/2022 10:23:13 AM

Overlaps	1-8								9-16							
Startup Overlap Green																
Startup Overlap Yellow																

Overlap Startup Timing

Overlap	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Start Walk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Start Min Green	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Overlap Unit Options

Overlaps	1-8								9-16							
Overlap Ped Recalls																
MCE Olap Ped Protect																
MCE Olap Ped Calls																
MCE Olap Ped Expand																
No Min Yellow																
No Min Red Rev																
Flash Yellow																
No Conflict																
Pre Signal																
Perm Red																
Perm FYA																
Perm FRA																

11/612, Verona

Coordination Options

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Sync Time

RTC Set Time

Transition Mode

Ped Adjust

Trans Short %

Trans Long %

Offset Reference

Short Cycles

Dual Entry

Overlap F/O

Master Sync Mode

Master Sync Length

Adapt Thresh

Adapt Step

External Plan Max

Hardwire No Match

Hardwire Sync Fail

Override Omit/Recall

Phases 1-8

9-16

No Trans Recall

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--	--	--	--	--	--	--	--

Trans Ped Recall

--	--	--	--	--	--	--	--

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Trans Phases

--	--	--	--	--	--	--	--

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11/612, Verona

Hardwire Plans

11/2/2022 10:23:13 AM

Hardwire	Plan Select	Pattern	Offset	Mode
Plan 1		0	0	Hardwire
Plan 2		0	0	Hardwire
Plan 3		0	0	Hardwire
Plan 4		0	0	Hardwire
Plan 5		0	0	Hardwire
Plan 6		0	0	Hardwire
Plan 7		0	0	Hardwire
Plan 8		0	0	Hardwire
Plan 9		0	0	Hardwire
Plan 10		0	0	Hardwire
Plan 11		0	0	Hardwire
Plan 12		0	0	Hardwire
Plan 13		0	0	Hardwire
Plan 14		0	0	Hardwire
Plan 15		0	0	Hardwire
Plan 16		0	0	Hardwire
Plan 17		0	0	Hardwire
Plan 18		0	0	Hardwire
Plan 19		0	0	Hardwire
Plan 20		0	0	Hardwire
Plan 21		0	0	Hardwire
Plan 22		0	0	Hardwire
Plan 23		0	0	Hardwire
Plan 24		0	0	Hardwire
Plan 25		0	0	Hardwire
Plan 26		0	0	Hardwire
Plan 27		0	0	Hardwire
Plan 28		0	0	Hardwire
Plan 29		0	0	Hardwire
Plan 30		0	0	Hardwire
Plan 31		0	0	Hardwire
Plan 32		0	0	Hardwire

11/612, Verona

TOD Pattern Events

11/2/2022 10:23:13 AM

	Time	DOW	Holidays	Mode	Pattern	Offset
Event 1	00:00			Sched	0	0
Event 2	00:00			Sched	0	0
Event 3	00:00			Sched	0	0
Event 4	00:00			Sched	0	0
Event 5	00:00			Sched	0	0
Event 6	00:00			Sched	0	0
Event 7	00:00			Sched	0	0
Event 8	00:00			Sched	0	0
Event 9	00:00			Sched	0	0
Event 10	00:00			Sched	0	0
Event 11	00:00			Sched	0	0
Event 12	00:00			Sched	0	0
Event 13	00:00			Sched	0	0
Event 14	00:00			Sched	0	0
Event 15	00:00			Sched	0	0
Event 16	00:00			Sched	0	0
Event 17	00:00			Sched	0	0
Event 18	00:00			Sched	0	0
Event 19	00:00			Sched	0	0
Event 20	00:00			Sched	0	0
Event 21	00:00			Sched	0	0
Event 22	00:00			Sched	0	0
Event 23	00:00			Sched	0	0
Event 24	00:00			Sched	0	0
Event 25	00:00			Sched	0	0
Event 26	00:00			Sched	0	0
Event 27	00:00			Sched	0	0
Event 28	00:00			Sched	0	0
Event 29	00:00			Sched	0	0
Event 30	00:00			Sched	0	0
Event 31	00:00			Sched	0	0
Event 32	00:00			Sched	0	0

11/612, Verona

Holidays

11/2/2022 10:23:13 AM

	Active Holidays	Month	Day	DOW	WOM
Date 1		0	0		0
Date 2		0	0		0
Date 3		0	0		0
Date 4		0	0		0
Date 5		0	0		0
Date 6		0	0		0
Date 7		0	0		0
Date 8		0	0		0
Date 9		0	0		0
Date 10		0	0		0
Date 11		0	0		0
Date 12		0	0		0
Date 13		0	0		0
Date 14		0	0		0
Date 15		0	0		0
Date 16		0	0		0
Date 17		0	0		0
Date 18		0	0		0
Date 19		0	0		0
Date 20		0	0		0
Date 21		0	0		0
Date 22		0	0		0
Date 23		0	0		0
Date 24		0	0		0
Date 25		0	0		0
Date 26		0	0		0
Date 27		0	0		0
Date 28		0	0		0
Date 29		0	0		0
Date 30		0	0		0
Date 31		0	0		0
Date 32		0	0		0

Appendix D:
Synchro/SimTraffic and SIDRA Output Summaries

Existing Conditions

HCM 6th Signalized Intersection Summary

3: N Coalter St & Edgewood Rd/Statler Blvd

02/27/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	185	28	48	162	97	17	126	36	62	85	52
Future Volume (veh/h)	104	185	28	48	162	97	17	126	36	62	85	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1796	1841	1856	1900	1900	1841	1811	1826	1870	1870
Adj Flow Rate, veh/h	108	193	0	50	169	101	18	131	38	65	89	54
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	7	4	3	0	0	4	6	5	2	2
Cap, veh/h	422	374		392	300	258	64	215	62	165	235	143
Arrive On Green	0.11	0.20	0.00	0.07	0.16	0.16	0.04	0.16	0.16	0.09	0.22	0.22
Sat Flow, veh/h	1781	1870	1522	1753	1856	1600	1810	1371	398	1739	1087	659
Grp Volume(v), veh/h	108	193	0	50	169	101	18	0	169	65	0	143
Grp Sat Flow(s),veh/h/ln	1781	1870	1522	1753	1856	1600	1810	0	1769	1739	0	1746
Q Serve(g_s), s	2.4	4.6	0.0	1.1	4.2	2.8	0.5	0.0	4.5	1.8	0.0	3.5
Cycle Q Clear(g_c), s	2.4	4.6	0.0	1.1	4.2	2.8	0.5	0.0	4.5	1.8	0.0	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		0.38
Lane Grp Cap(c), veh/h	422	374		392	300	258	64	0	277	165	0	378
V/C Ratio(X)	0.26	0.52		0.13	0.56	0.39	0.28	0.00	0.61	0.39	0.00	0.38
Avail Cap(c_a), veh/h	1649	1118		1143	1294	1116	902	0	1410	1040	0	1392
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.4	17.9	0.0	15.3	19.4	18.8	23.6	0.0	19.7	21.3	0.0	16.8
Incr Delay (d2), s/veh	0.5	1.6	0.0	0.2	2.4	1.4	5.0	0.0	3.1	3.2	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.0	0.0	0.4	1.8	1.0	0.3	0.0	1.9	0.8	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.9	19.5	0.0	15.5	21.8	20.2	28.6	0.0	22.8	24.6	0.0	17.7
LnGrp LOS	B	B		B	C	C	C	A	C	C	A	B
Approach Vol, veh/h		301			320			187			208	
Approach Delay, s/veh		17.8			20.3			23.3			19.8	
Approach LOS		B			C			C			B	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	10.8	13.9	9.5	16.0	7.8	16.9	11.4	14.1				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	30.0	40.0	25.0	30.0	25.0	40.0	40.0	35.0				
Max Q Clear Time (g_c+I1), s	3.8	6.5	3.1	6.6	2.5	5.5	4.4	6.2				
Green Ext Time (p_c), s	0.3	1.4	0.1	1.5	0.0	1.2	0.5	1.9				

Intersection Summary

HCM 6th Ctrl Delay	20.0
HCM 6th LOS	C

Notes

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

Intersection: 3: N Coalter St & Edgewood Rd/Statler Blvd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	TR	L	TR
Maximum Queue (ft)	117	170	52	68	146	69	45	154	95	117
Average Queue (ft)	48	76	22	25	74	31	11	65	38	44
95th Queue (ft)	90	139	52	57	129	58	33	121	77	91
Link Distance (ft)		645			2350	2350		698		1277
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	250		50	250			110		350	
Storage Blk Time (%)		21	0					2		
Queuing Penalty (veh)		28	1					0		

Network Summary

Network wide Queuing Penalty: 29

HCM 6th Signalized Intersection Summary
 3: N Coalter St & Edgewood Rd/Statler Blvd

Timing Plan: PM
 05/12/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑	↗	↖	↗	↖	↗	↖	↗
Traffic Volume (veh/h)	107	143	25	32	258	147	22	96	39	96	122	108
Future Volume (veh/h)	107	143	25	32	258	147	22	96	39	96	122	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1900	1900	1885	1900	1870	1900	1900	1885	1885
Adj Flow Rate, veh/h	110	147	0	33	266	152	23	99	40	99	126	111
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	1	0	0	0	1	0	2	0	0	1	1
Cap, veh/h	407	512		484	415	346	78	165	67	205	185	163
Arrive On Green	0.10	0.27	0.00	0.05	0.22	0.22	0.04	0.13	0.13	0.11	0.20	0.20
Sat Flow, veh/h	1810	1885	1610	1810	1900	1583	1810	1267	512	1810	923	813
Grp Volume(v), veh/h	110	147	0	33	266	152	23	0	139	99	0	237
Grp Sat Flow(s),veh/h/ln	1810	1885	1610	1810	1900	1583	1810	0	1778	1810	0	1736
Q Serve(g_s), s	2.4	3.4	0.0	0.7	7.0	4.6	0.7	0.0	4.1	2.8	0.0	7.0
Cycle Q Clear(g_c), s	2.4	3.4	0.0	0.7	7.0	4.6	0.7	0.0	4.1	2.8	0.0	7.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.29	1.00		0.47
Lane Grp Cap(c), veh/h	407	512		484	415	346	78	0	232	205	0	348
V/C Ratio(X)	0.27	0.29		0.07	0.64	0.44	0.30	0.00	0.60	0.48	0.00	0.68
Avail Cap(c_a), veh/h	1531	1024		1212	1204	1003	819	0	1288	983	0	1258
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.0	15.9	0.0	15.0	19.6	18.6	25.6	0.0	22.7	23.0	0.0	20.4
Incr Delay (d2), s/veh	0.5	0.4	0.0	0.1	2.3	1.2	4.4	0.0	3.5	3.7	0.0	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.4	0.0	0.3	3.0	1.6	0.4	0.0	1.8	1.3	0.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.5	16.3	0.0	15.1	21.9	19.9	30.0	0.0	26.2	26.7	0.0	23.8
LnGrp LOS	B	B		B	C	B	C	A	C	C	A	C
Approach Vol, veh/h		257			451			162			336	
Approach Delay, s/veh		15.6			20.8			26.7			24.6	
Approach LOS		B			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.2	13.2	8.8	21.0	8.4	17.1	11.7	18.1				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	30.0	40.0	25.0	30.0	25.0	40.0	40.0	35.0				
Max Q Clear Time (g_c+I1), s	4.8	6.1	2.7	5.4	2.7	9.0	4.4	9.0				
Green Ext Time (p_c), s	0.6	1.1	0.1	1.1	0.1	2.1	0.5	3.0				

Intersection Summary

HCM 6th Ctrl Delay	21.5
HCM 6th LOS	C

Notes

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

Intersection: 3: N Coalter St & Edgewood Rd/Statler Blvd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	TR	L	TR
Maximum Queue (ft)	249	405	45	250	1898	1712	109	345	343	569
Average Queue (ft)	140	179	27	112	1282	730	51	176	182	295
95th Queue (ft)	238	312	52	284	2368	2139	114	295	335	517
Link Distance (ft)		645			2350	2350		698		1277
Upstream Blk Time (%)					5	1				
Queuing Penalty (veh)					0	0				
Storage Bay Dist (ft)	250		50	250			110		350	
Storage Blk Time (%)	0	44	1	0	68		1	27	0	7
Queuing Penalty (veh)	2	116	3	1	43		2	12	1	13

Network Summary

Network wide Queuing Penalty: 192

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	6	8	217	464	5
Future Vol, veh/h	0	6	8	217	464	5
Conflicting Peds, #/hr	0	0	0	0	0	1
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	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	2	1	0
Mvmt Flow	0	7	9	236	504	5

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	762	508	510	0	-	0
Stage 1	508	-	-	-	-	-
Stage 2	254	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	376	569	1065	-	-	-
Stage 1	608	-	-	-	-	-
Stage 2	793	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	372	568	1064	-	-	-
Mov Cap-2 Maneuver	372	-	-	-	-	-
Stage 1	603	-	-	-	-	-
Stage 2	792	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.4	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1064	-	568	-	-
HCM Lane V/C Ratio	0.008	-	0.011	-	-
HCM Control Delay (s)	8.4	-	11.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	5.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	86	161	99	139	374	96
Future Vol, veh/h	86	161	99	139	374	96
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	0	50	60	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	3	4	3	1	0
Mvmt Flow	93	175	108	151	407	104

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	830	463	411	0	-	0
Stage 1	463	-	-	-	-	-
Stage 2	367	-	-	-	-	-
Critical Hdwy	6.41	6.23	4.14	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.327	2.236	-	-	-
Pot Cap-1 Maneuver	341	597	1137	-	-	-
Stage 1	636	-	-	-	-	-
Stage 2	703	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	306	595	1133	-	-	-
Mov Cap-2 Maneuver	306	-	-	-	-	-
Stage 1	573	-	-	-	-	-
Stage 2	700	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.5	3.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1133	-	306	595	-	-
HCM Lane V/C Ratio	0.095	-	0.305	0.294	-	-
HCM Control Delay (s)	8.5	-	21.9	13.6	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.3	-	1.3	1.2	-	-

Intersection: 2: Churchville Ave & Constitution Dr

Movement	EB	NB	SB
Directions Served	LR	L	TR
Maximum Queue (ft)	30	31	16
Average Queue (ft)	6	3	1
95th Queue (ft)	25	17	12
Link Distance (ft)	258	57	276
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Churchville Ave & Thornrose Ave

Movement	EB	EB	NB	NB	SB
Directions Served	L	R	L	T	TR
Maximum Queue (ft)	84	45	49	25	5
Average Queue (ft)	22	8	17	1	0
95th Queue (ft)	56	34	40	12	3
Link Distance (ft)	297			387	57
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		50	60		
Storage Blk Time (%)	2	0	0	0	
Queuing Penalty (veh)	3	0	0	0	

Network Summary

Network wide Queuing Penalty: 3

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔		↔	↑	↑	
Traffic Vol, veh/h	0	4	9	430	287	5
Future Vol, veh/h	0	4	9	430	287	5
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	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	2	2	0
Mvmt Flow	0	4	9	453	302	5

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	776	305	307	0	-	0
Stage 1	305	-	-	-	-	-
Stage 2	471	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	369	740	1265	-	-	-
Stage 1	752	-	-	-	-	-
Stage 2	632	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	366	740	1265	-	-	-
Mov Cap-2 Maneuver	366	-	-	-	-	-
Stage 1	747	-	-	-	-	-
Stage 2	632	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.9	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1265	-	740	-	-
HCM Lane V/C Ratio	0.007	-	0.006	-	-
HCM Control Delay (s)	7.9	-	9.9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	3.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	51	88	110	388	237	54
Future Vol, veh/h	51	88	110	388	237	54
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	0	50	60	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	2	2	2	2	2
Mvmt Flow	54	93	116	408	249	57

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	918	278	249	0	0
Stage 1	278	-	-	-	-
Stage 2	640	-	-	-	-
Critical Hdwy	6.4	6.22	4.12	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.318	2.218	-	-
Pot Cap-1 Maneuver	304	761	1317	-	-
Stage 1	774	-	-	-	-
Stage 2	529	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	277	761	1317	-	-
Mov Cap-2 Maneuver	277	-	-	-	-
Stage 1	706	-	-	-	-
Stage 2	529	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.3	1.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1317	-	277	761	-	-
HCM Lane V/C Ratio	0.088	-	0.194	0.122	-	-
HCM Control Delay (s)	8	-	21.1	10.4	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.7	0.4	-	-

Intersection: 2: Churchville Ave & Constitution Dr

Movement	EB	NB	SB
Directions Served	LR	L	TR
Maximum Queue (ft)	30	33	10
Average Queue (ft)	5	3	0
95th Queue (ft)	23	17	8
Link Distance (ft)	258	57	276
Upstream Blk Time (%)		0	
Queuing Penalty (veh)		0	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Churchville Ave & Thornrose Ave

Movement	EB	EB	NB	NB	SB
Directions Served	L	R	L	T	TR
Maximum Queue (ft)	42	26	45	25	1
Average Queue (ft)	12	1	16	1	0
95th Queue (ft)	30	12	40	15	1
Link Distance (ft)	297			387	57
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		50	60		
Storage Blk Time (%)	0	0	0	0	
Queuing Penalty (veh)	0	0	0	0	

Network Summary

Network wide Queuing Penalty: 0

HCM 6th TWSC

3: I-81 Exit 227 NB Off-Ramp/I-81 Exit 227 NB On-Ramp & Laurel Hill Rd

02/27/2023

Intersection												
Int Delay, s/veh	8.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↗			↗			↘	↗			
Traffic Vol, veh/h	127	145	0	0	351	0	236	0	41	0	0	0
Future Vol, veh/h	127	145	0	0	351	0	236	0	41	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	165	-	-	-	-	-	-	-	200	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	17	6	0	0	3	0	5	0	2	0	0	0
Mvmt Flow	143	163	0	0	394	0	265	0	46	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	394	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.44	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.37	-	-
Pot Cap-1 Maneuver	1061	0	0
Stage 1	-	0	0
Stage 2	-	0	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1061	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	4.2	0	27.4
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT
Capacity (veh/h)	418	-	1061	-	-
HCM Lane V/C Ratio	0.634	-	0.134	-	-
HCM Control Delay (s)	27.4	0	8.9	-	-
HCM Lane LOS	D	A	A	-	-
HCM 95th %tile Q(veh)	4.3	-	0.5	-	-

Intersection: 3: I-81 Exit 227 NB Off-Ramp/I-81 Exit 227 NB On-Ramp & Laurel Hill Rd

Movement	EB	WB	WB	NB	NB
Directions Served	L	T	T	LT	R
Maximum Queue (ft)	98	9	7	433	180
Average Queue (ft)	35	0	0	168	29
95th Queue (ft)	76	6	3	417	146
Link Distance (ft)		191	191	838	
Upstream Blk Time (%)				0	
Queuing Penalty (veh)				0	
Storage Bay Dist (ft)	165				200
Storage Blk Time (%)	0			18	0
Queuing Penalty (veh)	0			8	1

Intersection: 5: I-81 Exit 227 NB On-Ramp

Movement	NW
Directions Served	R
Maximum Queue (ft)	36
Average Queue (ft)	5
95th Queue (ft)	24
Link Distance (ft)	330
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Laurel Hill Rd & I-81 Exit 227 NB On-Ramp

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 9

Intersection												
Int Delay, s/veh	5.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑			↑↑			↙	↗			
Traffic Vol, veh/h	121	300	0	0	223	0	140	0	50	0	0	0
Future Vol, veh/h	121	300	0	0	223	0	140	0	50	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	165	-	-	-	-	-	-	-	200	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	11	2	0	0	3	0	4	0	0	0	0	0
Mvmt Flow	138	341	0	0	253	0	159	0	57	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	253	0	- - - 0 744 870 -
Stage 1	-	-	- - - 617 617 -
Stage 2	-	-	- - - 127 253 -
Critical Hdwy	4.32	-	- - - 6.88 6.5 -
Critical Hdwy Stg 1	-	-	- - - 5.88 5.5 -
Critical Hdwy Stg 2	-	-	- - - 5.88 5.5 -
Follow-up Hdwy	2.31	-	- - - 3.54 4 -
Pot Cap-1 Maneuver	1246	- 0 0	- 0 346 292 0
Stage 1	-	- 0 0	- 0 495 484 0
Stage 2	-	- 0 0	- 0 879 701 0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1246	- - -	- 308 0 -
Mov Cap-2 Maneuver	-	- - -	- 373 0 -
Stage 1	-	- - -	- 440 0 -
Stage 2	-	- - -	- 879 0 -

Approach	EB	WB	NB
HCM Control Delay, s	2.4	0	21.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT
Capacity (veh/h)	373	-	1246	-	-
HCM Lane V/C Ratio	0.427	-	0.11	-	-
HCM Control Delay (s)	21.6	0	8.2	-	-
HCM Lane LOS	C	A	A	-	-
HCM 95th %tile Q(veh)	2.1	-	0.4	-	-

Intersection: 3: I-81 Exit 227 NB Off-Ramp/I-81 Exit 227 NB On-Ramp & Laurel Hill Rd

Movement	EB	WB	NB
Directions Served	L	T	LT
Maximum Queue (ft)	74	2	141
Average Queue (ft)	23	0	61
95th Queue (ft)	56	1	117
Link Distance (ft)		191	838
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	165		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: I-81 Exit 227 NB On-Ramp

Movement	NW
Directions Served	R
Maximum Queue (ft)	31
Average Queue (ft)	3
95th Queue (ft)	17
Link Distance (ft)	330
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Laurel Hill Rd & I-81 Exit 227 NB On-Ramp

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 0

HCM 6th Signalized Intersection Summary
 3: US 11 & Quick's Mill Rd/Laurel Hill Rd

Timing Plan: AM
 03/06/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	136	85	233	50	156	28	203	180	209	260	38
Future Volume (veh/h)	71	136	85	233	50	156	28	203	180	209	260	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1900	1900	1856	1870	1856	1841	1856	1796	1826	1826	1856
Adj Flow Rate, veh/h	76	146	91	251	54	168	30	218	194	225	280	41
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	0	0	3	2	3	4	3	7	5	5	3
Cap, veh/h	440	271	230	430	397	334	365	430	272	408	800	116
Arrive On Green	0.08	0.14	0.14	0.15	0.21	0.21	0.05	0.18	0.18	0.13	0.26	0.26
Sat Flow, veh/h	1753	1900	1610	1767	1870	1572	1753	2412	1522	1739	3041	440
Grp Volume(v), veh/h	76	146	91	251	54	168	30	218	194	225	158	163
Grp Sat Flow(s),veh/h/ln	1753	1900	1610	1767	1870	1572	1753	1206	1522	1739	1735	1747
Q Serve(g_s), s	2.7	6.0	4.3	9.9	2.0	7.9	1.0	6.9	10.1	8.6	6.2	6.4
Cycle Q Clear(g_c), s	2.7	6.0	4.3	9.9	2.0	7.9	1.0	6.9	10.1	8.6	6.2	6.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.25
Lane Grp Cap(c), veh/h	440	271	230	430	397	334	365	430	272	408	457	460
V/C Ratio(X)	0.17	0.54	0.40	0.58	0.14	0.50	0.08	0.51	0.71	0.55	0.35	0.35
Avail Cap(c_a), veh/h	614	791	670	902	779	655	1011	1435	905	902	1032	1039
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	33.5	32.7	24.9	26.8	29.2	20.5	31.2	32.5	23.3	25.1	25.2
Incr Delay (d2), s/veh	0.2	1.7	1.1	1.3	0.2	1.2	0.1	1.1	4.2	1.2	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	2.8	1.7	4.0	0.9	2.9	0.4	2.0	3.8	3.4	2.5	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.3	35.1	33.8	26.1	27.0	30.4	20.6	32.3	36.7	24.4	25.7	25.7
LnGrp LOS	C	D	C	C	C	C	C	C	D	C	C	C
Approach Vol, veh/h		313			473			442			546	
Approach Delay, s/veh		31.6			27.7			33.4			25.2	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	12.9	31.0	20.3	19.8	20.1	23.9	14.4	25.7				
Change Period (Y+Rc), s	8.9	8.9	* 7.8	* 7.8	8.9	8.9	* 7.8	* 7.8				
Max Green Setting (Gmax), s	35.0	50.0	* 35	* 35	35.0	50.0	* 15	* 35				
Max Q Clear Time (g_c+I1), s	3.0	8.4	11.9	8.0	10.6	12.1	4.7	9.9				
Green Ext Time (p_c), s	0.1	2.3	0.7	1.1	0.6	2.5	0.1	0.8				

Intersection Summary

HCM 6th Ctrl Delay	29.1
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection: 3: US 11 & Quick's Mill Rd/Laurel Hill Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	T	R	L	T
Maximum Queue (ft)	99	212	138	214	90	79	58	157	138	113	191	204
Average Queue (ft)	41	83	29	114	29	34	17	87	49	50	99	75
95th Queue (ft)	95	164	84	193	69	63	45	143	117	88	172	151
Link Distance (ft)		880			870	870	166	166	166			799
Upstream Blk Time (%)								0	0	0		
Queuing Penalty (veh)								0	0	0		
Storage Bay Dist (ft)	100		140	300						150	215	
Storage Blk Time (%)	0	6	0						0	0	0	0
Queuing Penalty (veh)	0	9	0						0	0	0	0

Intersection: 3: US 11 & Quick's Mill Rd/Laurel Hill Rd

Movement	SB
Directions Served	TR
Maximum Queue (ft)	138
Average Queue (ft)	56
95th Queue (ft)	115
Link Distance (ft)	799
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 10

HCM 6th Signalized Intersection Summary
 3: US 11 & Quick's Mill Rd/Laurel Hill Rd

Timing Plan: PM
 05/12/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Traffic Volume (veh/h)	35	76	42	251	125	124	91	317	257	164	353	57
Future Volume (veh/h)	35	76	42	251	125	124	91	317	257	164	353	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1856	1900	1826	1900	1841	1900	1885	1885	1870	1870	1900
Adj Flow Rate, veh/h	36	79	44	261	130	129	95	330	268	171	368	59
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	3	0	5	0	4	0	1	1	2	2	0
Cap, veh/h	389	256	222	477	456	375	364	591	358	351	736	117
Arrive On Green	0.05	0.14	0.14	0.16	0.24	0.24	0.08	0.22	0.22	0.10	0.24	0.24
Sat Flow, veh/h	1810	1856	1610	1739	1900	1560	1810	2639	1598	1781	3071	488
Grp Volume(v), veh/h	36	79	44	261	130	129	95	330	268	171	212	215
Grp Sat Flow(s),veh/h/ln	1810	1856	1610	1739	1900	1560	1810	1320	1598	1781	1777	1782
Q Serve(g_s), s	1.2	3.3	2.1	10.8	4.9	6.0	3.3	9.6	13.6	6.3	8.9	9.1
Cycle Q Clear(g_c), s	1.2	3.3	2.1	10.8	4.9	6.0	3.3	9.6	13.6	6.3	8.9	9.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	389	256	222	477	456	375	364	591	358	351	426	427
V/C Ratio(X)	0.09	0.31	0.20	0.55	0.28	0.34	0.26	0.56	0.75	0.49	0.50	0.50
Avail Cap(c_a), veh/h	605	747	648	906	765	628	943	1518	919	892	1022	1025
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.3	33.7	33.2	25.6	26.9	27.4	21.6	29.9	31.5	22.8	28.5	28.6
Incr Delay (d2), s/veh	0.1	0.7	0.4	1.0	0.3	0.5	0.4	1.0	3.8	1.0	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.5	0.8	4.3	2.1	2.2	1.3	3.0	5.3	2.6	3.7	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.4	34.4	33.6	26.6	27.3	27.9	22.0	30.9	35.3	23.8	29.6	29.7
LnGrp LOS	C	C	C	C	C	C	C	C	D	C	C	C
Approach Vol, veh/h		159			520			693			598	
Approach Delay, s/veh		31.5			27.1			31.4			28.0	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.1	29.7	21.3	19.8	17.5	28.4	12.4	28.7				
Change Period (Y+Rc), s	8.9	8.9	* 7.8	* 7.8	8.9	8.9	* 7.8	* 7.8				
Max Green Setting (Gmax), s	35.0	50.0	* 35	* 35	35.0	50.0	* 15	* 35				
Max Q Clear Time (g_c+I1), s	5.3	11.1	12.8	5.3	8.3	15.6	3.2	8.0				
Green Ext Time (p_c), s	0.2	3.1	0.7	0.5	0.4	3.9	0.0	1.1				

Intersection Summary

HCM 6th Ctrl Delay	29.2
HCM 6th LOS	C

Notes

- User approved pedestrian interval to be less than phase max green.
- * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection: 3: US 11 & Quick's Mill Rd/Laurel Hill Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	T	R	L	T
Maximum Queue (ft)	94	136	44	252	180	70	103	188	155	120	169	190
Average Queue (ft)	23	55	12	129	66	29	43	105	71	53	74	101
95th Queue (ft)	68	112	32	215	131	56	83	166	142	92	131	167
Link Distance (ft)		880			870	870	166	166	166			799
Upstream Blk Time (%)								1	0	0		
Queuing Penalty (veh)								0	0	0		
Storage Bay Dist (ft)	100		140	300						150	215	
Storage Blk Time (%)	0	2		0	0				0	0	0	0
Queuing Penalty (veh)	0	2		0	0				0	0	0	0

Intersection: 3: US 11 & Quick's Mill Rd/Laurel Hill Rd

Movement	SB
Directions Served	TR
Maximum Queue (ft)	162
Average Queue (ft)	82
95th Queue (ft)	148
Link Distance (ft)	799
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 2

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↕		↕	↕			↕	
Traffic Vol, veh/h	0	0	0	41	0	65	96	300	0	0	235	293
Future Vol, veh/h	0	0	0	41	0	65	96	300	0	0	235	293
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	-	-	-	-	-	-	160	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	15	0	19	12	6	0	0	3	7
Mvmt Flow	0	0	0	48	0	76	112	349	0	0	273	341

Major/Minor	Minor1		Major1		Major2		
Conflicting Flow All	710	1187	175	614	0	-	0
Stage 1	573	573	-	-	-	-	-
Stage 2	137	614	-	-	-	-	-
Critical Hdwy	7.1	6.5	7.28	4.34	-	-	-
Critical Hdwy Stg 1	6.1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	-	-	-	-
Follow-up Hdwy	3.65	4	3.49	2.32	-	-	-
Pot Cap-1 Maneuver	341	190	787	896	-	0	0
Stage 1	493	507	-	-	-	0	0
Stage 2	838	486	-	-	-	0	0
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	298	0	787	896	-	-	-
Mov Cap-2 Maneuver	298	0	-	-	-	-	-
Stage 1	431	0	-	-	-	-	-
Stage 2	838	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15	2.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBTWBLn1	SBT	SBR
Capacity (veh/h)	896	-	481	-
HCM Lane V/C Ratio	0.125	-	0.256	-
HCM Control Delay (s)	9.6	-	15	-
HCM Lane LOS	A	-	C	-
HCM 95th %tile Q(veh)	0.4	-	1	-

Intersection: 3: S Delphine Ave & I-64 Exit 96 WB On-Ramp/I-64 Exit 96 WB Off-Ramp

Movement	WB	NB	SB	SB
Directions Served	LTR	L	T	TR
Maximum Queue (ft)	139	91	3	34
Average Queue (ft)	50	32	0	4
95th Queue (ft)	98	69	3	20
Link Distance (ft)	1070		584	584
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		160		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 0

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↕		↕	↑↑			↑↑	
Traffic Vol, veh/h	0	0	0	51	4	143	73	334	0	0	161	210
Future Vol, veh/h	0	0	0	51	4	143	73	334	0	0	161	210
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	-	-	-	-	-	-	160	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	16	25	6	12	4	0	0	5	10
Mvmt Flow	0	0	0	55	4	155	79	363	0	0	175	228

Major/Minor	Minor1	Major1	Major2				
Conflicting Flow All	609	924	182	403	0	-	-
Stage 1	521	521	-	-	-	-	-
Stage 2	88	403	-	-	-	-	-
Critical Hdwy	7.12	7	7.02	4.34	-	-	-
Critical Hdwy Stg 1	6.12	6	-	-	-	-	-
Critical Hdwy Stg 2	6.12	6	-	-	-	-	-
Follow-up Hdwy	3.66	4.25	3.36	2.32	-	-	-
Pot Cap-1 Maneuver	396	231	817	1084	-	0	0
Stage 1	523	476	-	-	-	0	0
Stage 2	885	544	-	-	-	0	0
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	367	0	817	1084	-	-	-
Mov Cap-2 Maneuver	367	0	-	-	-	-	-
Stage 1	485	0	-	-	-	-	-
Stage 2	885	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.9	1.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBTWBLn1	SBT	SBR
Capacity (veh/h)	1084	-	618	-
HCM Lane V/C Ratio	0.073	-	0.348	-
HCM Control Delay (s)	8.6	-	13.9	-
HCM Lane LOS	A	-	B	-
HCM 95th %tile Q(veh)	0.2	-	1.6	-

Intersection: 3: S Delphine Ave & I-64 Exit 96 WB On-Ramp/I-64 Exit 96 WB Off-Ramp

Movement	WB	NB	SB
Directions Served	LTR	L	TR
Maximum Queue (ft)	141	65	27
Average Queue (ft)	59	21	2
95th Queue (ft)	105	51	13
Link Distance (ft)	1070		584
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		160	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

HCM 6th TWSC
 3: S Delphine Ave & Windsor Rd/Mountain Rd

02/27/2023

Intersection												
Int Delay, s/veh	5.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	41	3	190	1	4	0	127	263	3	0	355	57
Future Vol, veh/h	41	3	190	1	4	0	127	263	3	0	355	57
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	-	-	-	-	-	-	240	-	-	160	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	0	3	0	0	0	5	9	33	0	7	4
Mvmt Flow	48	4	224	1	5	0	149	309	4	0	418	67

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	907	1063	243	820	1094	157	485	0	0	313	0	0
Stage 1	452	452	-	609	609	-	-	-	-	-	-	-
Stage 2	455	611	-	211	485	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.5	6.96	7.5	6.5	6.9	4.2	-	-	4.1	-	-
Critical Hdwy Stg 1	6.54	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4	3.33	3.5	4	3.3	2.25	-	-	2.2	-	-
Pot Cap-1 Maneuver	231	225	755	270	216	867	1053	-	-	1259	-	-
Stage 1	557	574	-	454	488	-	-	-	-	-	-	-
Stage 2	554	487	-	777	555	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	202	193	755	167	185	867	1053	-	-	1259	-	-
Mov Cap-2 Maneuver	202	193	-	167	185	-	-	-	-	-	-	-
Stage 1	478	574	-	390	419	-	-	-	-	-	-	-
Stage 2	470	418	-	544	555	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	20.8		25.6		2.9		0	
HCM LOS	C		D					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1053	-	-	498	181	1259	-
HCM Lane V/C Ratio	0.142	-	-	0.553	0.032	-	-
HCM Control Delay (s)	9	-	-	20.8	25.6	0	-
HCM Lane LOS	A	-	-	C	D	A	-
HCM 95th %tile Q(veh)	0.5	-	-	3.3	0.1	0	-

HCM 6th TWSC
6: S Delphine Ave & Western Rd

02/27/2023

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	6	387	0	6	540
Future Vol, veh/h	2	6	387	0	6	540
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	9	0	0	5
Mvmt Flow	2	7	455	0	7	635

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	787	228	0
Stage 1	455	-	-
Stage 2	332	-	-
Critical Hdwy	6.8	6.9	-
Critical Hdwy Stg 1	5.8	-	-
Critical Hdwy Stg 2	5.8	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	333	781	-
Stage 1	611	-	-
Stage 2	705	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	331	781	-
Mov Cap-2 Maneuver	331	-	-
Stage 1	611	-	-
Stage 2	701	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	583	1116
HCM Lane V/C Ratio	-	-	0.016	0.006
HCM Control Delay (s)	-	-	11.3	8.2
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	3	0	304	0	0	409
Future Vol, veh/h	3	0	304	0	0	409
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	-	-	-	140	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	9	0	0	7
Mvmt Flow	4	0	371	0	0	499

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	621	186	0
Stage 1	371	-	-
Stage 2	250	-	-
Critical Hdwy	6.8	6.9	-
Critical Hdwy Stg 1	5.8	-	-
Critical Hdwy Stg 2	5.8	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	424	831	-
Stage 1	674	-	-
Stage 2	774	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	424	831	-
Mov Cap-2 Maneuver	424	-	-
Stage 1	674	-	-
Stage 2	774	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	424	1199
HCM Lane V/C Ratio	-	-	0.009	-
HCM Control Delay (s)	-	-	13.6	0
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Intersection: 3: S Delphine Ave & Windsor Rd/Mountain Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	TR
Maximum Queue (ft)	248	31	87	4
Average Queue (ft)	81	5	30	0
95th Queue (ft)	176	23	64	4
Link Distance (ft)	575	316		488
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			240	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: S Delphine Ave & Western Rd

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	33	30
Average Queue (ft)	7	2
95th Queue (ft)	29	15
Link Distance (ft)	248	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: S Delphine Ave & 19th St

Movement	WB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	3
95th Queue (ft)	19
Link Distance (ft)	311
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 0

Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	24	6	112	2	1	4	152	330	7	4	252	46
Future Vol, veh/h	24	6	112	2	1	4	152	330	7	4	252	46
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	-	-	-	-	-	-	240	-	-	160	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	3	0	0	0	1	6	0	0	11	2
Mvmt Flow	26	7	122	2	1	4	165	359	8	4	274	50

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	817	1004	162	842	1025	184	324	0	0	367	0	0
Stage 1	307	307	-	693	693	-	-	-	-	-	-	-
Stage 2	510	697	-	149	332	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.96	7.5	6.5	6.9	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.33	3.5	4	3.3	2.21	-	-	2.2	-	-
Pot Cap-1 Maneuver	272	244	851	261	237	833	1240	-	-	1203	-	-
Stage 1	683	665	-	405	448	-	-	-	-	-	-	-
Stage 2	519	446	-	844	648	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	242	211	851	196	205	833	1240	-	-	1203	-	-
Mov Cap-2 Maneuver	242	211	-	196	205	-	-	-	-	-	-	-
Stage 1	592	663	-	351	388	-	-	-	-	-	-	-
Stage 2	446	387	-	714	646	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	14.1		15.5		2.6		0.1	
HCM LOS	B		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1240	-	-	548	352	1203	-	-
HCM Lane V/C Ratio	0.133	-	-	0.282	0.022	0.004	-	-
HCM Control Delay (s)	8.3	-	-	14.1	15.5	8	-	-
HCM Lane LOS	A	-	-	B	C	A	-	-
HCM 95th %tile Q(veh)	0.5	-	-	1.1	0.1	0	-	-

Intersection							
Int Delay, s/veh	0.2						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	2	5	2	484	1	8	358
Future Vol, veh/h	2	5	2	484	1	8	358
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	-	-	100	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	5	0	0	8
Mvmt Flow	2	5	2	526	1	9	389

Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	744	264	389	0	0	527
Stage 1	531	-	-	-	-	-
Stage 2	213	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4	-	-	4.1
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.5	-	-	2.2
Pot Cap-1 Maneuver	354	741	823	-	-	1050
Stage 1	560	-	-	-	-	-
Stage 2	808	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	350	741	823	-	-	1050
Mov Cap-2 Maneuver	350	-	-	-	-	-
Stage 1	558	-	-	-	-	-
Stage 2	801	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.5	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	562	1050
HCM Lane V/C Ratio	-	-	0.014	0.008
HCM Control Delay (s)	0	-	11.5	8.5
HCM Lane LOS	A	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Intersection							
Int Delay, s/veh	0.2						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	2	2	2	353	3	3	298
Future Vol, veh/h	2	2	2	353	3	3	298
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	-	-	140	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	6	0	0	9
Mvmt Flow	2	2	2	380	3	3	320

Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	552	192	320	0	0	383
Stage 1	386	-	-	-	-	-
Stage 2	166	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4	-	-	4.1
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.5	-	-	2.2
Pot Cap-1 Maneuver	469	823	909	-	-	1187
Stage 1	662	-	-	-	-	-
Stage 2	852	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	466	823	909	-	-	1187
Mov Cap-2 Maneuver	466	-	-	-	-	-
Stage 1	660	-	-	-	-	-
Stage 2	849	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.1	0.1	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	595	1187
HCM Lane V/C Ratio	-	-	0.007	0.003
HCM Control Delay (s)	0	-	11.1	8
HCM Lane LOS	A	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Intersection: 3: S Delphine Ave & Windsor Rd/Mountain Rd

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	L	L	TR
Maximum Queue (ft)	108	33	73	16	9
Average Queue (ft)	48	6	27	1	0
95th Queue (ft)	88	26	57	7	5
Link Distance (ft)	575	316			488
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			240	160	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: S Delphine Ave & Western Rd

Movement	WB	NB	SB
Directions Served	LR	UT	L
Maximum Queue (ft)	31	12	29
Average Queue (ft)	7	1	3
95th Queue (ft)	27	8	17
Link Distance (ft)	248	507	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			100
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: S Delphine Ave & 19th St

Movement	WB	NB	SB
Directions Served	LR	UT	L
Maximum Queue (ft)	31	10	18
Average Queue (ft)	3	0	1
95th Queue (ft)	18	5	8
Link Distance (ft)	311	488	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			140
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

2047 No Build Conditions

HCM 6th Signalized Intersection Summary

3: N Coalter St & Edgewood Rd/Statler Blvd

05/16/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	228	34	59	199	119	21	155	44	76	105	64
Future Volume (veh/h)	128	228	34	59	199	119	21	155	44	76	105	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1796	1841	1856	1900	1900	1841	1811	1826	1870	1870
Adj Flow Rate, veh/h	133	238	0	61	207	124	22	161	46	79	109	67
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	7	4	3	0	0	4	6	5	2	2
Cap, veh/h	407	400		375	336	290	75	243	69	176	256	157
Arrive On Green	0.11	0.21	0.00	0.08	0.18	0.18	0.04	0.18	0.18	0.10	0.24	0.24
Sat Flow, veh/h	1781	1870	1522	1753	1856	1601	1810	1377	393	1739	1081	665
Grp Volume(v), veh/h	133	238	0	61	207	124	22	0	207	79	0	176
Grp Sat Flow(s),veh/h/ln	1781	1870	1522	1753	1856	1601	1810	0	1770	1739	0	1746
Q Serve(g_s), s	3.2	6.4	0.0	1.5	5.7	3.8	0.7	0.0	6.1	2.4	0.0	4.8
Cycle Q Clear(g_c), s	3.2	6.4	0.0	1.5	5.7	3.8	0.7	0.0	6.1	2.4	0.0	4.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		0.38
Lane Grp Cap(c), veh/h	407	400		375	336	290	75	0	312	176	0	413
V/C Ratio(X)	0.33	0.59		0.16	0.62	0.43	0.29	0.00	0.66	0.45	0.00	0.43
Avail Cap(c_a), veh/h	1492	1009		1029	1167	1007	813	0	1273	938	0	1255
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.5	19.7	0.0	16.1	21.0	20.2	25.9	0.0	21.4	23.5	0.0	18.0
Incr Delay (d2), s/veh	0.7	2.0	0.0	0.3	2.6	1.4	4.5	0.0	3.4	3.8	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.8	0.0	0.6	2.5	1.4	0.4	0.0	2.5	1.1	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.1	21.7	0.0	16.4	23.6	21.6	30.4	0.0	24.8	27.3	0.0	19.0
LnGrp LOS	B	C		B	C	C	C	A	C	C	A	B
Approach Vol, veh/h		371			392			229			255	
Approach Delay, s/veh		19.7			21.9			25.3			21.6	
Approach LOS		B			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.6	15.8	10.3	17.9	8.3	19.2	12.1	16.1				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	30.0	40.0	25.0	30.0	25.0	40.0	40.0	35.0				
Max Q Clear Time (g_c+I1), s	4.4	8.1	3.5	8.4	2.7	6.8	5.2	7.7				
Green Ext Time (p_c), s	0.4	1.7	0.2	1.9	0.1	1.5	0.6	2.4				

Intersection Summary

HCM 6th Ctrl Delay	21.8
HCM 6th LOS	C

Notes

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

Intersection: 3: N Coalter St & Edgewood Rd/Statler Blvd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	TR	L	TR
Maximum Queue (ft)	119	210	61	99	210	86	95	201	119	141
Average Queue (ft)	56	98	26	32	99	37	18	88	50	59
95th Queue (ft)	100	177	55	72	175	69	56	161	99	114
Link Distance (ft)		645			2350	2350		698		1277
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	250		50	250			110		350	
Storage Blk Time (%)		30	0		0		0	5		
Queuing Penalty (veh)		48	1		0		0	1		

Network Summary

Network wide Queuing Penalty: 51

HCM 6th Signalized Intersection Summary
 3: N Coalter St & Edgewood Rd/Statler Blvd

Timing Plan: PM
 05/16/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑	↗	↖	↗		↖	↗	
Traffic Volume (veh/h)	132	176	31	39	317	181	27	118	48	118	150	133
Future Volume (veh/h)	132	176	31	39	317	181	27	118	48	118	150	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	0.99		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1900	1900	1885	1900	1885	1900	1900	1885	1885
Adj Flow Rate, veh/h	136	181	0	40	327	187	28	122	49	122	155	137
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	1	0	0	0	1	0	1	0	0	1	1
Cap, veh/h	375	555		478	478	399	88	220	88	198	214	190
Arrive On Green	0.10	0.29	0.00	0.06	0.25	0.25	0.05	0.17	0.17	0.11	0.23	0.23
Sat Flow, veh/h	1810	1885	1610	1810	1900	1585	1810	1279	514	1810	922	815
Grp Volume(v), veh/h	136	181	0	40	327	187	28	0	171	122	0	292
Grp Sat Flow(s),veh/h/ln	1810	1885	1610	1810	1900	1585	1810	0	1793	1810	0	1736
Q Serve(g_s), s	3.4	4.9	0.0	1.0	10.1	6.5	1.0	0.0	5.7	4.2	0.0	10.1
Cycle Q Clear(g_c), s	3.4	4.9	0.0	1.0	10.1	6.5	1.0	0.0	5.7	4.2	0.0	10.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.29	1.00		0.47
Lane Grp Cap(c), veh/h	375	555		478	478	399	88	0	309	198	0	404
V/C Ratio(X)	0.36	0.33		0.08	0.68	0.47	0.32	0.00	0.55	0.62	0.00	0.72
Avail Cap(c_a), veh/h	836	2229		628	1838	1533	250	0	1129	806	0	1627
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.8	17.9	0.0	16.0	22.0	20.7	29.9	0.0	24.7	27.7	0.0	23.0
Incr Delay (d2), s/veh	0.8	0.5	0.0	0.1	2.5	1.2	4.3	0.0	2.2	6.5	0.0	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	2.1	0.0	0.4	4.5	2.3	0.5	0.0	2.4	2.1	0.0	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.6	18.4	0.0	16.1	24.5	21.9	34.2	0.0	26.9	34.2	0.0	26.5
LnGrp LOS	B	B		B	C	C	C	A	C	C	A	C
Approach Vol, veh/h		317			554			199			414	
Approach Delay, s/veh		17.6			23.0			27.9			28.8	
Approach LOS		B			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.1	17.2	9.6	25.2	9.2	21.1	12.4	22.4				
Change Period (Y+Rc), s	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0				
Max Green Setting (Gmax), s	29.0	41.0	9.0	77.0	9.0	61.0	23.0	63.0				
Max Q Clear Time (g_c+I1), s	6.2	7.7	3.0	6.9	3.0	12.1	5.4	12.1				
Green Ext Time (p_c), s	0.7	1.4	0.0	1.8	0.0	2.9	0.5	4.3				

Intersection Summary

HCM 6th Ctrl Delay	24.1
HCM 6th LOS	C

Notes

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

Intersection: 3: N Coalter St & Edgewood Rd/Statler Blvd

Movement	EB	EB	EB	WB	WB	WB	B4	B4	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	T	T	L	TR	L	TR
Maximum Queue (ft)	250	1242	46	250	1964	1756	59	31	109	659	350	2215
Average Queue (ft)	237	596	28	91	1492	808	4	2	71	450	312	1507
95th Queue (ft)	287	1159	52	246	2403	1886	45	38	131	744	426	2361
Link Distance (ft)		1778			2322	2322	2380	2380		698		3519
Upstream Blk Time (%)		1			3	0				10		
Queuing Penalty (veh)		0			0	0				0		
Storage Bay Dist (ft)	250		50	250					110		350	
Storage Blk Time (%)	29	38	1	0	63				17	58	10	51
Queuing Penalty (veh)	119	124	5	1	50				57	31	55	121

Network Summary

Network wide Queuing Penalty: 562

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	
Traffic Vol, veh/h	0	7	10	267	571	6
Future Vol, veh/h	0	7	10	267	571	6
Conflicting Peds, #/hr	0	0	0	0	0	1
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	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	2	1	0
Mvmt Flow	0	8	11	290	621	7

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	938	626	629	0	0
Stage 1	626	-	-	-	-
Stage 2	312	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	296	488	963	-	-
Stage 1	537	-	-	-	-
Stage 2	747	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	292	487	962	-	-
Mov Cap-2 Maneuver	292	-	-	-	-
Stage 1	531	-	-	-	-
Stage 2	746	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	962	-	487	-	-
HCM Lane V/C Ratio	0.011	-	0.016	-	-
HCM Control Delay (s)	8.8	-	12.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	106	198	122	171	460	118
Future Vol, veh/h	106	198	122	171	460	118
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	0	50	60	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	3	4	3	1	0
Mvmt Flow	115	215	133	186	500	128

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1020	568	504	0	-	0
Stage 1	568	-	-	-	-	-
Stage 2	452	-	-	-	-	-
Critical Hdwy	6.41	6.23	4.14	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.327	2.236	-	-	-
Pot Cap-1 Maneuver	263	520	1050	-	-	-
Stage 1	569	-	-	-	-	-
Stage 2	643	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	228	518	1046	-	-	-
Mov Cap-2 Maneuver	228	-	-	-	-	-
Stage 1	495	-	-	-	-	-
Stage 2	640	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.5	3.7	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1046	-	228	518	-	-
HCM Lane V/C Ratio	0.127	-	0.505	0.415	-	-
HCM Control Delay (s)	8.9	-	35.9	16.8	-	-
HCM Lane LOS	A	-	E	C	-	-
HCM 95th %tile Q(veh)	0.4	-	2.6	2	-	-

Intersection: 2: Churchville Ave & Constitution Dr

Movement	EB	NB	NB	SB
Directions Served	LR	L	T	TR
Maximum Queue (ft)	31	28	4	48
Average Queue (ft)	8	4	0	2
95th Queue (ft)	29	22	4	20
Link Distance (ft)	258	57	57	276
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Churchville Ave & Thornrose Ave

Movement	EB	EB	NB	NB	SB
Directions Served	L	R	L	T	TR
Maximum Queue (ft)	132	52	61	48	16
Average Queue (ft)	33	15	26	4	1
95th Queue (ft)	84	46	52	27	8
Link Distance (ft)	297			387	57
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		50	60		
Storage Blk Time (%)	5	1	1	0	
Queuing Penalty (veh)	10	1	1	0	

Network Summary

Network wide Queuing Penalty: 11

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	5	11	529	353	4
Future Vol, veh/h	0	5	11	529	353	4
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	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	2	2	0
Mvmt Flow	0	5	12	557	372	4

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	955	374	376	0	-	0
Stage 1	374	-	-	-	-	-
Stage 2	581	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	289	677	1194	-	-	-
Stage 1	700	-	-	-	-	-
Stage 2	563	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	286	677	1194	-	-	-
Mov Cap-2 Maneuver	286	-	-	-	-	-
Stage 1	693	-	-	-	-	-
Stage 2	563	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1194	-	677	-	-
HCM Lane V/C Ratio	0.01	-	0.008	-	-
HCM Control Delay (s)	8	-	10.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	3.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	63	108	135	477	292	66
Future Vol, veh/h	63	108	135	477	292	66
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Yield	-	None	-	Yield
Storage Length	0	50	60	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	2	2	2	2	2
Mvmt Flow	66	114	142	502	307	69

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1128	342	307	0	-	0
Stage 1	342	-	-	-	-	-
Stage 2	786	-	-	-	-	-
Critical Hdwy	6.4	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	228	701	1254	-	-	-
Stage 1	724	-	-	-	-	-
Stage 2	453	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	202	701	1254	-	-	-
Mov Cap-2 Maneuver	202	-	-	-	-	-
Stage 1	642	-	-	-	-	-
Stage 2	453	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.5	1.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1254	-	202	701	-	-
HCM Lane V/C Ratio	0.113	-	0.328	0.162	-	-
HCM Control Delay (s)	8.2	-	31.3	11.1	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.4	-	1.4	0.6	-	-

Intersection: 2: Churchville Ave & Constitution Dr

Movement	EB	NB	NB	SB
Directions Served	LR	L	T	TR
Maximum Queue (ft)	30	38	6	25
Average Queue (ft)	4	3	0	1
95th Queue (ft)	22	20	0	11
Link Distance (ft)	258	57	57	276
Upstream Blk Time (%)		0	0	
Queuing Penalty (veh)		0	0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Churchville Ave & Thornrose Ave

Movement	EB	EB	NB	NB	SB
Directions Served	L	R	L	T	TR
Maximum Queue (ft)	64	34	48	33	6
Average Queue (ft)	17	3	20	2	0
95th Queue (ft)	43	19	44	18	5
Link Distance (ft)	297			387	57
Upstream Blk Time (%)					0
Queuing Penalty (veh)					0
Storage Bay Dist (ft)		50	60		
Storage Blk Time (%)	1	0	0	0	
Queuing Penalty (veh)	1	0	0	0	

Network Summary

Network wide Queuing Penalty: 1

Intersection												
Int Delay, s/veh	21											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↗			↗			↘	↗			
Traffic Vol, veh/h	156	178	0	0	432	0	290	0	50	0	0	0
Future Vol, veh/h	156	178	0	0	432	0	290	0	50	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	165	-	-	-	-	-	-	-	200	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	17	6	0	0	3	0	5	0	2	0	0	0
Mvmt Flow	175	200	0	0	485	0	326	0	56	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	485	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.44	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.37	-	-
Pot Cap-1 Maneuver	976	0	0
Stage 1	-	0	0
Stage 2	-	0	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	976	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	4.4	0	71.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT
Capacity (veh/h)	344	-	976	-	-
HCM Lane V/C Ratio	0.947	-	0.18	-	-
HCM Control Delay (s)	71.4	0	9.5	-	-
HCM Lane LOS	F	A	A	-	-
HCM 95th %tile Q(veh)	10	-	0.7	-	-

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

Intersection: 3: I-81 Exit 227 NB Off-Ramp/I-81 Exit 227 NB On-Ramp & Laurel Hill Rd

Movement	EB	WB	WB	NB	NB	B4
Directions Served	L	T	T	LT	R	T
Maximum Queue (ft)	120	17	9	1353	200	635
Average Queue (ft)	46	1	1	1177	136	253
95th Queue (ft)	90	8	5	1566	289	869
Link Distance (ft)		191	191	1258		2017
Upstream Blk Time (%)				55		
Queuing Penalty (veh)				0		
Storage Bay Dist (ft)	165				200	
Storage Blk Time (%)	0			96	1	
Queuing Penalty (veh)	0			48	4	

Intersection: 5: I-81 Exit 227 NB On-Ramp

Movement	NW
Directions Served	R
Maximum Queue (ft)	38
Average Queue (ft)	7
95th Queue (ft)	29
Link Distance (ft)	330
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Laurel Hill Rd & I-81 Exit 227 NB On-Ramp

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 52

Intersection												
Int Delay, s/veh	7.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↗			↗			↘	↗			
Traffic Vol, veh/h	149	369	0	0	274	0	172	0	62	0	0	0
Future Vol, veh/h	149	369	0	0	274	0	172	0	62	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Free	-	-	None
Storage Length	165	-	-	-	-	-	-	-	200	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	11	2	0	0	3	0	4	0	0	0	0	0
Mvmt Flow	169	419	0	0	311	0	195	0	70	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	311	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.32	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.31	-	-
Pot Cap-1 Maneuver	1184	0	0
Stage 1	-	0	0
Stage 2	-	0	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1184	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	2.5	0	36.4
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	WBT
Capacity (veh/h)	302	-	1184	-	-
HCM Lane V/C Ratio	0.647	-	0.143	-	-
HCM Control Delay (s)	36.4	0	8.5	-	-
HCM Lane LOS	E	A	A	-	-
HCM 95th %tile Q(veh)	4.2	-	0.5	-	-

Intersection: 3: I-81 Exit 227 NB Off-Ramp/I-81 Exit 227 NB On-Ramp & Laurel Hill Rd

Movement	EB	WB	WB	NB	NB
Directions Served	L	T	T	LT	R
Maximum Queue (ft)	90	4	3	265	140
Average Queue (ft)	29	0	0	107	11
95th Queue (ft)	65	2	2	218	85
Link Distance (ft)		191	191	1258	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	165				200
Storage Blk Time (%)				4	0
Queuing Penalty (veh)				3	0

Intersection: 5: I-81 Exit 227 NB On-Ramp

Movement	NW
Directions Served	R
Maximum Queue (ft)	37
Average Queue (ft)	5
95th Queue (ft)	24
Link Distance (ft)	330
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Laurel Hill Rd & I-81 Exit 227 NB On-Ramp

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 3

HCM 6th Signalized Intersection Summary
 3: US 11 & Quick's Mill Rd/Laurel Hill Rd

Timing Plan: AM
 03/06/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑	↗	↖	↑↑	↗	↖	↑↔	
Traffic Volume (veh/h)	87	167	105	287	62	192	34	250	221	257	320	47
Future Volume (veh/h)	87	167	105	287	62	192	34	250	221	257	320	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1900	1900	1856	1870	1856	1841	1856	1796	1826	1826	1856
Adj Flow Rate, veh/h	94	180	113	309	67	206	37	269	238	276	344	51
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	0	0	3	2	3	4	3	7	5	5	3
Cap, veh/h	423	239	202	424	424	356	370	486	307	424	910	134
Arrive On Green	0.08	0.13	0.13	0.18	0.23	0.23	0.05	0.20	0.20	0.15	0.30	0.30
Sat Flow, veh/h	1753	1900	1610	1767	1870	1572	1753	2412	1522	1739	3034	446
Grp Volume(v), veh/h	94	180	113	309	67	206	37	269	238	276	195	200
Grp Sat Flow(s),veh/h/ln	1753	1900	1610	1767	1870	1572	1753	1206	1522	1739	1735	1746
Q Serve(g_s), s	3.8	8.9	6.4	14.3	2.8	11.3	1.4	9.7	14.3	11.8	8.6	8.7
Cycle Q Clear(g_c), s	3.8	8.9	6.4	14.3	2.8	11.3	1.4	9.7	14.3	11.8	8.6	8.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	423	239	202	424	424	356	370	486	307	424	520	524
V/C Ratio(X)	0.22	0.75	0.56	0.73	0.16	0.58	0.10	0.55	0.78	0.65	0.38	0.38
Avail Cap(c_a), veh/h	562	687	583	751	677	569	913	1247	787	792	897	902
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.9	40.8	39.8	29.1	30.0	33.3	21.2	34.7	36.6	24.9	26.7	26.8
Incr Delay (d2), s/veh	0.3	4.8	2.4	2.4	0.2	1.5	0.1	1.2	5.1	1.7	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	4.4	2.6	6.0	1.2	4.3	0.5	2.8	5.5	4.8	3.5	3.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.2	45.6	42.2	31.5	30.2	34.8	21.3	35.9	41.6	26.5	27.3	27.3
LnGrp LOS	C	D	D	C	C	C	C	D	D	C	C	C
Approach Vol, veh/h		387			582			544			671	
Approach Delay, s/veh		39.6			32.5			37.4			27.0	
Approach LOS		D			C			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.9	37.9	24.9	20.0	23.5	28.4	15.2	29.7				
Change Period (Y+Rc), s	8.9	8.9	* 7.8	* 7.8	8.9	8.9	* 7.8	* 7.8				
Max Green Setting (Gmax), s	35.0	50.0	* 35	* 35	35.0	50.0	* 15	* 35				
Max Q Clear Time (g_c+I1), s	3.4	10.7	16.3	10.9	13.8	16.3	5.8	13.3				
Green Ext Time (p_c), s	0.1	2.9	0.8	1.3	0.8	3.2	0.1	0.9				

Intersection Summary

HCM 6th Ctrl Delay	33.3
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection: 3: US 11 & Quick's Mill Rd/Laurel Hill Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	B2	SB
Directions Served	L	T	R	L	T	R	L	T	T	R	T	L
Maximum Queue (ft)	99	287	140	280	118	103	62	190	170	139	3	213
Average Queue (ft)	56	127	49	151	38	42	19	110	76	61	0	134
95th Queue (ft)	116	241	130	249	88	81	48	172	153	109	3	210
Link Distance (ft)		880			870	870	166	166	166		114	
Upstream Blk Time (%)								1	0	0		
Queuing Penalty (veh)								0	0	0		
Storage Bay Dist (ft)	100		140	300							150	215
Storage Blk Time (%)	1	15	0	0					0	0		1
Queuing Penalty (veh)	2	29	1	0					1	0		2

Intersection: 3: US 11 & Quick's Mill Rd/Laurel Hill Rd

Movement	SB	SB
Directions Served	T	TR
Maximum Queue (ft)	278	182
Average Queue (ft)	97	83
95th Queue (ft)	188	154
Link Distance (ft)	799	799
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)	0	
Queuing Penalty (veh)	0	

Network Summary

Network wide Queuing Penalty: 34

HCM 6th Signalized Intersection Summary
 3: US 11 & Quick's Mill Rd/Laurel Hill Rd

Timing Plan: PM
 05/12/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Traffic Volume (veh/h)	43	93	52	309	154	153	112	390	316	202	434	70
Future Volume (veh/h)	43	93	52	309	154	153	112	390	316	202	434	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1856	1900	1826	1900	1841	1900	1885	1885	1870	1870	1900
Adj Flow Rate, veh/h	45	97	54	322	160	159	117	406	329	210	452	73
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	3	0	5	0	4	0	1	1	2	2	0
Cap, veh/h	365	219	190	478	470	386	358	683	413	355	896	144
Arrive On Green	0.06	0.12	0.12	0.19	0.25	0.25	0.08	0.26	0.26	0.11	0.29	0.29
Sat Flow, veh/h	1810	1856	1610	1739	1900	1560	1810	2639	1598	1781	3066	492
Grp Volume(v), veh/h	45	97	54	322	160	159	117	406	329	210	261	264
Grp Sat Flow(s),veh/h/ln	1810	1856	1610	1739	1900	1560	1810	1320	1598	1781	1777	1782
Q Serve(g_s), s	1.8	5.0	3.1	16.1	7.0	8.7	4.4	13.7	19.6	8.6	12.4	12.5
Cycle Q Clear(g_c), s	1.8	5.0	3.1	16.1	7.0	8.7	4.4	13.7	19.6	8.6	12.4	12.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	365	219	190	478	470	386	358	683	413	355	519	521
V/C Ratio(X)	0.12	0.44	0.28	0.67	0.34	0.41	0.33	0.59	0.80	0.59	0.50	0.51
Avail Cap(c_a), veh/h	529	638	553	752	653	536	843	1296	784	772	872	875
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.6	41.8	41.0	30.4	31.5	32.1	22.6	33.1	35.2	24.4	29.9	29.9
Incr Delay (d2), s/veh	0.1	1.4	0.8	1.7	0.4	0.7	0.5	1.0	4.2	1.6	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	2.3	1.2	6.7	3.2	3.3	1.9	4.3	7.8	3.6	5.2	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.7	43.2	41.8	32.1	31.9	32.8	23.2	34.1	39.5	25.9	30.8	30.9
LnGrp LOS	C	D	D	C	C	C	C	C	D	C	C	C
Approach Vol, veh/h		196			641			852			735	
Approach Delay, s/veh		38.8			32.2			34.7			29.4	
Approach LOS		D			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.6	38.7	26.8	19.8	20.0	35.3	13.6	33.0				
Change Period (Y+Rc), s	8.9	8.9	* 7.8	* 7.8	8.9	8.9	* 7.8	* 7.8				
Max Green Setting (Gmax), s	35.0	50.0	* 35	* 35	35.0	50.0	* 15	* 35				
Max Q Clear Time (g_c+I1), s	6.4	14.5	18.1	7.0	10.6	21.6	3.8	10.7				
Green Ext Time (p_c), s	0.3	3.9	0.9	0.6	0.6	4.8	0.0	1.3				

Intersection Summary

HCM 6th Ctrl Delay	32.8
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection: 3: US 11 & Quick's Mill Rd/Laurel Hill Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	B2	B2
Directions Served	L	T	R	L	T	R	L	T	T	R	T	T
Maximum Queue (ft)	98	183	118	293	282	94	129	228	199	149	25	10
Average Queue (ft)	32	72	21	174	90	36	57	136	109	78	1	1
95th Queue (ft)	80	147	63	276	194	70	110	205	183	142	14	13
Link Distance (ft)		880			870	870	166	166	166		114	114
Upstream Blk Time (%)							0	3	1	0		
Queuing Penalty (veh)							0	0	0	0		
Storage Bay Dist (ft)	100		140	300							150	
Storage Blk Time (%)	0	6	0	1	0				1	0		
Queuing Penalty (veh)	0	5	0	1	0				4	0		

Intersection: 3: US 11 & Quick's Mill Rd/Laurel Hill Rd

Movement	SB	SB	SB
Directions Served	L	T	TR
Maximum Queue (ft)	210	258	228
Average Queue (ft)	100	138	121
95th Queue (ft)	180	228	210
Link Distance (ft)		799	799
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	215		
Storage Blk Time (%)	0	1	
Queuing Penalty (veh)	1	1	

Network Summary

Network wide Queuing Penalty: 14

Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↕		↕	↕			↕	↕
Traffic Vol, veh/h	0	0	0	60	0	95	118	404	0	0	316	360
Future Vol, veh/h	0	0	0	60	0	95	118	404	0	0	316	360
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	-	-	-	-	-	-	160	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	15	0	19	12	6	0	0	3	7
Mvmt Flow	0	0	0	68	0	108	134	459	0	0	359	409

Major/Minor	Minor1		Major1		Major2		
Conflicting Flow All	907	1495	230	768	0	-	0
Stage 1	727	727	-	-	-	-	-
Stage 2	180	768	-	-	-	-	-
Critical Hdwy	7.1	6.5	7.28	4.34	-	-	-
Critical Hdwy Stg 1	6.1	5.5	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	-	-	-	-
Follow-up Hdwy	3.65	4	3.49	2.32	-	-	-
Pot Cap-1 Maneuver	252	124	723	779	-	0	0
Stage 1	407	432	-	-	-	0	0
Stage 2	795	414	-	-	-	0	0
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	209	0	723	779	-	-	-
Mov Cap-2 Maneuver	209	0	-	-	-	-	-
Stage 1	337	0	-	-	-	-	-
Stage 2	795	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.3	2.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBTWBLn1	SBT	SBR
Capacity (veh/h)	779	-	370	-
HCM Lane V/C Ratio	0.172	-	0.476	-
HCM Control Delay (s)	10.6	-	23.3	-
HCM Lane LOS	B	-	C	-
HCM 95th %tile Q(veh)	0.6	-	2.5	-

Intersection: 3: S Delphine Ave & I-64 Exit 96 WB On-Ramp/I-64 Exit 96 WB Off-Ramp

Movement	WB	NB	NB	NB	SB	SB
Directions Served	LTR	L	T	T	T	TR
Maximum Queue (ft)	272	122	28	24	15	33
Average Queue (ft)	94	47	2	1	1	5
95th Queue (ft)	236	97	34	24	10	21
Link Distance (ft)	1070		537	537	584	584
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		160				
Storage Blk Time (%)		0				
Queuing Penalty (veh)		0				

Network Summary

Network wide Queuing Penalty: 0

Intersection												
Int Delay, s/veh	5.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↕		↕	↑↑			↑↑	
Traffic Vol, veh/h	0	0	0	74	5	209	90	449	0	0	217	258
Future Vol, veh/h	0	0	0	74	5	209	90	449	0	0	217	258
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	-	-	-	-	-	-	160	-	-	-	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	16	25	6	12	4	0	0	5	10
Mvmt Flow	0	0	0	80	5	227	98	488	0	0	236	280

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	802	1200	244
Stage 1	684	684	-
Stage 2	118	516	-
Critical Hdwy	7.12	7	7.02
Critical Hdwy Stg 1	6.12	6	-
Critical Hdwy Stg 2	6.12	6	-
Follow-up Hdwy	3.66	4.25	3.36
Pot Cap-1 Maneuver	294	154	744
Stage 1	427	395	-
Stage 2	854	479	-
Platoon blocked, %			
Mov Cap-1 Maneuver	265	0	744
Mov Cap-2 Maneuver	265	0	-
Stage 1	384	0	-
Stage 2	854	0	-

Approach	WB	NB	SB
HCM Control Delay, s	23.1	1.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBTWBLn1	SBT	SBR
Capacity (veh/h)	979	-	505	-
HCM Lane V/C Ratio	0.1	-	0.62	-
HCM Control Delay (s)	9.1	-	23.1	-
HCM Lane LOS	A	-	C	-
HCM 95th %tile Q(veh)	0.3	-	4.2	-

Intersection: 3: S Delphine Ave & I-64 Exit 96 WB On-Ramp/I-64 Exit 96 WB Off-Ramp

Movement	WB	NB	SB
Directions Served	LTR	L	TR
Maximum Queue (ft)	206	80	38
Average Queue (ft)	94	28	4
95th Queue (ft)	173	61	23
Link Distance (ft)	1070		584
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		160	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

HCM 6th TWSC
 3: S Delphine Ave & Windsor Rd/Mountain Rd

03/02/2023

Intersection												
Int Delay, s/veh	12.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	50	4	234	1	5	0	156	354	4	0	477	70
Future Vol, veh/h	50	4	234	1	5	0	156	354	4	0	477	70
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	-	-	-	-	-	-	240	-	-	160	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	0	3	0	0	0	5	9	33	0	7	4
Mvmt Flow	57	5	266	1	6	0	177	402	5	0	542	80

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1140	1343	311	1033	1381	204	622	0	0	407	0	0
Stage 1	582	582	-	759	759	-	-	-	-	-	-	-
Stage 2	558	761	-	274	622	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.5	6.96	7.5	6.5	6.9	4.2	-	-	4.1	-	-
Critical Hdwy Stg 1	6.54	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4	3.33	3.5	4	3.3	2.25	-	-	2.2	-	-
Pot Cap-1 Maneuver	156	153	682	189	145	809	935	-	-	1163	-	-
Stage 1	466	502	-	369	418	-	-	-	-	-	-	-
Stage 2	482	417	-	714	482	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	129	124	682	96	118	809	935	-	-	1163	-	-
Mov Cap-2 Maneuver	129	124	-	96	118	-	-	-	-	-	-	-
Stage 1	378	502	-	299	339	-	-	-	-	-	-	-
Stage 2	384	338	-	432	482	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	52.8		38.6		3		0	
HCM LOS	F		E					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	935	-	-	377	114	1163	-
HCM Lane V/C Ratio	0.19	-	-	0.868	0.06	-	-
HCM Control Delay (s)	9.7	-	-	52.8	38.6	0	-
HCM Lane LOS	A	-	-	F	E	A	-
HCM 95th %tile Q(veh)	0.7	-	-	8.4	0.2	0	-

HCM 6th TWSC
6: S Delphine Ave & Western Rd

03/02/2023

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	8	506	0	8	704
Future Vol, veh/h	3	8	506	0	8	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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	9	0	0	5
Mvmt Flow	3	9	575	0	9	800

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	993	288	0
Stage 1	575	-	-
Stage 2	418	-	-
Critical Hdwy	6.8	6.9	-
Critical Hdwy Stg 1	5.8	-	-
Critical Hdwy Stg 2	5.8	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	246	715	-
Stage 1	532	-	-
Stage 2	638	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	244	715	-
Mov Cap-2 Maneuver	244	-	-
Stage 1	532	-	-
Stage 2	632	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.9	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	468	1008
HCM Lane V/C Ratio	-	-	0.027	0.009
HCM Control Delay (s)	-	-	12.9	8.6
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	0	404	0	0	543
Future Vol, veh/h	4	0	404	0	0	543
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	-	-	-	140	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	9	0	0	7
Mvmt Flow	5	0	459	0	0	617

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	768	230	0
Stage 1	459	-	-
Stage 2	309	-	-
Critical Hdwy	6.8	6.9	-
Critical Hdwy Stg 1	5.8	-	-
Critical Hdwy Stg 2	5.8	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	342	779	-
Stage 1	609	-	-
Stage 2	724	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	342	779	-
Mov Cap-2 Maneuver	342	-	-
Stage 1	609	-	-
Stage 2	724	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	342	1113
HCM Lane V/C Ratio	-	-	0.013	-
HCM Control Delay (s)	-	-	15.7	0
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0	0

Intersection: 3: S Delphine Ave & Windsor Rd/Mountain Rd

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	L	T	TR
Maximum Queue (ft)	583	35	100	4	12
Average Queue (ft)	192	8	39	0	1
95th Queue (ft)	501	29	75	5	7
Link Distance (ft)	2240	316		488	488
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			240		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: S Delphine Ave & Western Rd

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	38	32
Average Queue (ft)	8	4
95th Queue (ft)	31	19
Link Distance (ft)	248	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: S Delphine Ave & 19th St

Movement	WB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	4
95th Queue (ft)	22
Link Distance (ft)	311
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 0

Intersection												
Int Delay, s/veh	4.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	30	7	138	3	1	5	187	444	9	5	339	57
Future Vol, veh/h	30	7	138	3	1	5	187	444	9	5	339	57
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	-	-	-	-	-	-	240	-	-	160	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	3	0	0	0	1	6	0	0	11	2
Mvmt Flow	33	8	150	3	1	5	203	483	10	5	368	62

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	1057	1308	215	1092	1334	247	430	0	0	493	0	0
Stage 1	409	409	-	894	894	-	-	-	-	-	-	-
Stage 2	648	899	-	198	440	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.96	7.5	6.5	6.9	4.12	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.33	3.5	4	3.3	2.21	-	-	2.2	-	-
Pot Cap-1 Maneuver	182	161	787	172	155	759	1133	-	-	1081	-	-
Stage 1	596	600	-	306	362	-	-	-	-	-	-	-
Stage 2	430	360	-	791	581	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	154	132	787	115	127	759	1133	-	-	1081	-	-
Mov Cap-2 Maneuver	154	132	-	115	127	-	-	-	-	-	-	-
Stage 1	489	597	-	251	297	-	-	-	-	-	-	-
Stage 2	349	296	-	629	578	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	20.9		22		2.6		0.1	
HCM LOS	C		C					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1133	-	-	414	222	1081	-	-
HCM Lane V/C Ratio	0.179	-	-	0.459	0.044	0.005	-	-
HCM Control Delay (s)	8.9	-	-	20.9	22	8.3	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0.7	-	-	2.4	0.1	0	-	-

Intersection							
Int Delay, s/veh	0.2						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	3	7	3	633	1	11	469
Future Vol, veh/h	3	7	3	633	1	11	469
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	-	-	100	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	5	0	0	8
Mvmt Flow	3	8	3	688	1	12	510

Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	974	345	510	0	0	689
Stage 1	695	-	-	-	-	-
Stage 2	279	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4	-	-	4.1
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.5	-	-	2.2
Pot Cap-1 Maneuver	253	657	691	-	-	915
Stage 1	462	-	-	-	-	-
Stage 2	749	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	248	657	691	-	-	915
Mov Cap-2 Maneuver	248	-	-	-	-	-
Stage 1	459	-	-	-	-	-
Stage 2	739	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.4	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	440	915
HCM Lane V/C Ratio	-	-	0.025	0.013
HCM Control Delay (s)	0	-	13.4	9
HCM Lane LOS	A	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection							
Int Delay, s/veh	0.2						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	3	3	3	472	4	4	395
Future Vol, veh/h	3	3	3	472	4	4	395
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	-	-	140	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	6	0	0	9
Mvmt Flow	3	3	3	508	4	4	425

Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	737	256	425	0	0	512
Stage 1	516	-	-	-	-	-
Stage 2	221	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4	-	-	4.1
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.5	-	-	2.2
Pot Cap-1 Maneuver	358	749	781	-	-	1064
Stage 1	570	-	-	-	-	-
Stage 2	801	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	355	749	781	-	-	1064
Mov Cap-2 Maneuver	355	-	-	-	-	-
Stage 1	567	-	-	-	-	-
Stage 2	798	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.6	0.1	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	482	1064
HCM Lane V/C Ratio	-	-	0.013	0.004
HCM Control Delay (s)	0	-	12.6	8.4
HCM Lane LOS	A	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Intersection: 3: S Delphine Ave & Windsor Rd/Mountain Rd

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	L	L	TR
Maximum Queue (ft)	186	38	80	24	9
Average Queue (ft)	72	8	34	2	0
95th Queue (ft)	142	31	61	12	6
Link Distance (ft)	2240	316			488
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			240	160	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 6: S Delphine Ave & Western Rd

Movement	WB	NB	SB
Directions Served	LR	UT	L
Maximum Queue (ft)	35	36	34
Average Queue (ft)	9	2	5
95th Queue (ft)	33	23	23
Link Distance (ft)	248	507	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			100
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: S Delphine Ave & 19th St

Movement	WB	NB	SB
Directions Served	LR	UT	L
Maximum Queue (ft)	31	43	24
Average Queue (ft)	5	2	2
95th Queue (ft)	24	17	13
Link Distance (ft)	311	488	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			140
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

2047 Build Conditions

HCM 6th Signalized Intersection Summary
 3: N Coalter St & Edgewood Rd/Statler Blvd

Timing Plan: AM
 04/21/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	128	228	34	59	199	119	21	155	44	76	105	64
Future Volume (veh/h)	128	228	34	59	199	119	21	155	44	76	105	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1796	1841	1856	1900	1900	1841	1811	1826	1870	1870
Adj Flow Rate, veh/h	133	238	35	61	207	124	22	161	46	79	109	67
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	7	4	3	0	0	4	6	5	2	2
Cap, veh/h	351	364	356	320	313	420	344	229	65	336	237	145
Arrive On Green	0.10	0.19	0.19	0.07	0.17	0.17	0.04	0.17	0.17	0.09	0.22	0.22
Sat Flow, veh/h	1781	1870	1514	1753	1856	1601	1810	1377	393	1739	1081	664
Grp Volume(v), veh/h	133	238	35	61	207	124	22	0	207	79	0	176
Grp Sat Flow(s),veh/h/ln	1781	1870	1514	1753	1856	1601	1810	0	1770	1739	0	1745
Q Serve(g_s), s	3.9	7.7	1.2	1.7	6.8	4.0	0.6	0.0	7.2	2.3	0.0	5.7
Cycle Q Clear(g_c), s	3.9	7.7	1.2	1.7	6.8	4.0	0.6	0.0	7.2	2.3	0.0	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		0.38
Lane Grp Cap(c), veh/h	351	364	356	320	313	420	344	0	294	336	0	382
V/C Ratio(X)	0.38	0.65	0.10	0.19	0.66	0.30	0.06	0.00	0.70	0.24	0.00	0.46
Avail Cap(c_a), veh/h	535	948	829	465	855	888	504	0	932	477	0	999
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.4	24.3	19.6	18.7	25.4	19.3	18.4	0.0	25.7	19.2	0.0	22.2
Incr Delay (d2), s/veh	1.0	2.8	0.2	0.4	3.4	0.6	0.2	0.0	4.4	0.8	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	3.5	0.4	0.7	3.1	1.4	0.2	0.0	3.2	0.9	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.4	27.1	19.8	19.1	28.8	19.8	18.6	0.0	30.1	20.0	0.0	23.4
LnGrp LOS	C	C	B	B	C	B	B	A	C	B	A	C
Approach Vol, veh/h		406			392			229			255	
Approach Delay, s/veh		24.3			24.5			29.0			22.3	
Approach LOS		C			C			C			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.7	19.4	11.6	19.6	11.2	22.9	13.3	17.9				
Change Period (Y+Rc), s	* 8.6	* 8.6	* 6.9	* 6.9	* 8.6	* 8.6	* 6.9	* 6.9				
Max Green Setting (Gmax), s	* 11	* 34	* 10	* 33	* 8.4	* 37	* 13	* 30				
Max Q Clear Time (g_c+I1), s	4.3	9.2	3.7	9.7	2.6	7.7	5.9	8.8				
Green Ext Time (p_c), s	0.2	1.6	0.1	2.2	0.0	1.4	0.3	2.2				

Intersection Summary

HCM 6th Ctrl Delay	24.8
HCM 6th LOS	C

Notes

- User approved pedestrian interval to be less than phase max green.
- * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection: 3: N Coalter St & Edgewood Rd/Statler Blvd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	TR	L	TR
Maximum Queue (ft)	131	236	60	82	204	76	82	213	112	152
Average Queue (ft)	60	110	24	32	108	35	17	95	41	58
95th Queue (ft)	109	195	60	66	183	63	56	168	81	116
Link Distance (ft)		645			2350	2350		701		1277
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	250		50	250			110		350	
Storage Blk Time (%)		33	1		0		0	6		
Queuing Penalty (veh)		53	2		0		0	1		

Network Summary

Network wide Queuing Penalty: 56

HCM 6th Signalized Intersection Summary
 3: N Coalter St & Edgewood Rd/Statler Blvd

Timing Plan: PM
 04/21/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	176	31	39	317	181	27	118	48	118	150	133
Future Volume (veh/h)	132	176	31	39	317	181	27	118	48	118	150	133
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1900	1900	1900	1885	1900	1885	1900	1900	1885	1885
Adj Flow Rate, veh/h	136	181	32	40	327	187	28	122	49	122	155	137
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	1	0	0	0	1	0	1	0	0	1	1
Cap, veh/h	319	501	501	414	438	523	250	215	86	374	202	179
Arrive On Green	0.09	0.27	0.27	0.05	0.23	0.23	0.05	0.17	0.17	0.10	0.22	0.22
Sat Flow, veh/h	1810	1885	1598	1810	1900	1584	1810	1279	514	1810	922	815
Grp Volume(v), veh/h	136	181	32	40	327	187	28	0	171	122	0	292
Grp Sat Flow(s),veh/h/ln	1810	1885	1598	1810	1900	1584	1810	0	1793	1810	0	1736
Q Serve(g_s), s	4.1	5.8	1.0	1.2	12.0	6.7	0.9	0.0	6.6	4.0	0.0	11.8
Cycle Q Clear(g_c), s	4.1	5.8	1.0	1.2	12.0	6.7	0.9	0.0	6.6	4.0	0.0	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.29	1.00		0.47
Lane Grp Cap(c), veh/h	319	501	501	414	438	523	250	0	302	374	0	381
V/C Ratio(X)	0.43	0.36	0.06	0.10	0.75	0.36	0.11	0.00	0.57	0.33	0.00	0.77
Avail Cap(c_a), veh/h	477	834	783	563	765	795	368	0	825	472	0	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.9	22.3	18.0	18.0	26.7	19.1	21.4	0.0	28.6	21.9	0.0	27.4
Incr Delay (d2), s/veh	1.3	0.6	0.1	0.1	3.6	0.6	0.4	0.0	2.4	1.1	0.0	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	2.6	0.4	0.5	5.5	2.4	0.4	0.0	2.9	1.7	0.0	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.2	22.9	18.1	18.1	30.3	19.7	21.8	0.0	31.0	22.9	0.0	31.9
LnGrp LOS	C	C	B	B	C	B	C	A	C	C	A	C
Approach Vol, veh/h		349			554			199				414
Approach Delay, s/veh		21.8			25.9			29.7				29.3
Approach LOS		C			C			C				C
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.0	21.2	10.9	26.8	12.1	25.0	13.5	24.1				
Change Period (Y+Rc), s	* 8.6	* 8.6	* 6.9	* 6.9	* 8.6	* 8.6	* 6.9	* 6.9				
Max Green Setting (Gmax), s	* 11	* 34	* 10	* 33	* 8.4	* 37	* 13	* 30				
Max Q Clear Time (g_c+I1), s	6.0	8.6	3.2	7.8	2.9	13.8	6.1	14.0				
Green Ext Time (p_c), s	0.3	1.3	0.0	1.7	0.0	2.5	0.3	3.3				

Intersection Summary

HCM 6th Ctrl Delay	26.4
HCM 6th LOS	C

Notes

- User approved pedestrian interval to be less than phase max green.
- * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection: 3: N Coalter St & Edgewood Rd/Statler Blvd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	R	L	T	R	L	TR	L	TR
Maximum Queue (ft)	137	192	50	82	289	96	93	194	124	236
Average Queue (ft)	65	91	21	24	157	45	20	81	53	106
95th Queue (ft)	116	165	55	67	253	78	61	156	98	198
Link Distance (ft)		645			2350	2350		701		1277
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	250		50	250			110		350	
Storage Blk Time (%)		28	0	0	1		0	4		
Queuing Penalty (veh)		46	1	0	0		0	1		

Network Summary

Network wide Queuing Penalty: 48

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	7	10	267	571	6
Future Vol, veh/h	0	7	10	267	571	6
Conflicting Peds, #/hr	0	0	0	0	0	1
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	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	2	1	0
Mvmt Flow	0	8	11	290	621	7

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	938	626	629	0	0
Stage 1	626	-	-	-	-
Stage 2	312	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	296	488	963	-	-
Stage 1	537	-	-	-	-
Stage 2	747	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	292	487	962	-	-
Mov Cap-2 Maneuver	292	-	-	-	-
Stage 1	531	-	-	-	-
Stage 2	746	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	962	-	487	-	-
HCM Lane V/C Ratio	0.011	-	0.016	-	-
HCM Control Delay (s)	8.8	-	12.5	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	7.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↙	↗	↙	↑	↗	
Traffic Vol, veh/h	106	198	122	171	460	118
Future Vol, veh/h	106	198	122	171	460	118
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	60	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	3	4	3	1	0
Mvmt Flow	115	215	133	186	500	128

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1020	568	632	0	-	0
Stage 1	568	-	-	-	-	-
Stage 2	452	-	-	-	-	-
Critical Hdwy	6.41	6.23	4.14	-	-	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.327	2.236	-	-	-
Pot Cap-1 Maneuver	263	520	941	-	-	-
Stage 1	569	-	-	-	-	-
Stage 2	643	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	224	518	937	-	-	-
Mov Cap-2 Maneuver	224	-	-	-	-	-
Stage 1	486	-	-	-	-	-
Stage 2	640	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.8	3.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	937	-	224	518	-	-
HCM Lane V/C Ratio	0.142	-	0.514	0.415	-	-
HCM Control Delay (s)	9.5	-	36.9	16.8	-	-
HCM Lane LOS	A	-	E	C	-	-
HCM 95th %tile Q(veh)	0.5	-	2.7	2	-	-

Intersection: 2: Churchville Ave & Constitution Dr

Movement	EB	NB	NB	SB
Directions Served	LR	L	T	TR
Maximum Queue (ft)	31	31	4	3
Average Queue (ft)	8	5	0	0
95th Queue (ft)	29	23	4	3
Link Distance (ft)	258	62	62	276
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 3: Churchville Ave & Thornrose Ave

Movement	EB	EB	NB	NB	SB
Directions Served	L	R	L	T	TR
Maximum Queue (ft)	215	100	60	91	23
Average Queue (ft)	57	47	28	8	1
95th Queue (ft)	143	96	55	55	12
Link Distance (ft)	301			371	62
Upstream Blk Time (%)	0				0
Queuing Penalty (veh)	0				0
Storage Bay Dist (ft)		100	60		
Storage Blk Time (%)	4	1	2	0	
Queuing Penalty (veh)	7	1	3	0	

Network Summary

Network wide Queuing Penalty: 12

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	5	11	529	353	4
Future Vol, veh/h	0	5	11	529	353	4
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	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	2	2	0
Mvmt Flow	0	5	12	557	372	4

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	955	374	376	0	0
Stage 1	374	-	-	-	-
Stage 2	581	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-
Pot Cap-1 Maneuver	289	677	1194	-	-
Stage 1	700	-	-	-	-
Stage 2	563	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	286	677	1194	-	-
Mov Cap-2 Maneuver	286	-	-	-	-
Stage 1	693	-	-	-	-
Stage 2	563	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1194	-	677	-	-
HCM Lane V/C Ratio	0.01	-	0.008	-	-
HCM Control Delay (s)	8	-	10.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	3.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	63	108	135	477	292	66
Future Vol, veh/h	63	108	135	477	292	66
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	100	60	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	2	2	2	2	2
Mvmt Flow	66	114	142	502	307	69

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1128	342	376	0	-	0
Stage 1	342	-	-	-	-	-
Stage 2	786	-	-	-	-	-
Critical Hdwy	6.4	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	228	701	1182	-	-	-
Stage 1	724	-	-	-	-	-
Stage 2	453	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	201	701	1182	-	-	-
Mov Cap-2 Maneuver	201	-	-	-	-	-
Stage 1	637	-	-	-	-	-
Stage 2	453	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.6	1.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1182	-	201	701	-	-
HCM Lane V/C Ratio	0.12	-	0.33	0.162	-	-
HCM Control Delay (s)	8.5	-	31.5	11.1	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.4	-	1.4	0.6	-	-

Intersection: 2: Churchville Ave & Constitution Dr

Movement	EB	NB	NB
Directions Served	LR	L	T
Maximum Queue (ft)	30	38	12
Average Queue (ft)	4	3	0
95th Queue (ft)	22	21	6
Link Distance (ft)	258	62	62
Upstream Blk Time (%)		0	0
Queuing Penalty (veh)		0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 3: Churchville Ave & Thornrose Ave

Movement	EB	EB	NB	NB	SB
Directions Served	L	R	L	T	TR
Maximum Queue (ft)	81	61	55	78	3
Average Queue (ft)	28	21	20	3	0
95th Queue (ft)	60	45	43	39	2
Link Distance (ft)	301			371	62
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		100	60		
Storage Blk Time (%)	0	0	0	0	
Queuing Penalty (veh)	0	0	2	0	

Network Summary

Network wide Queuing Penalty: 2

MOVEMENT SUMMARY

Site: 101 [AM Peak (Site Folder: Staunton #127 - 2045 Build Preferred Alternative (Long-Term))]

Output produced by SIDRA INTERSECTION Version: 9.1.1.200

New Site
 Site Category: (None)
 Roundabout

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV] veh/h	%	[Total HV] veh/h	%				[Veh. veh	Dist] ft				
South: Thornrose Ave															
8	T1	All MCs	91	1.2	91	1.2	0.301	7.2	LOS A	1.4	36.6	0.57	0.43	0.57	31.8
18	R2	All MCs	175	2.5	175	2.5	0.301	7.3	LOS A	1.4	36.6	0.57	0.43	0.57	31.5
Approach			266	2.1	266	2.1	0.301	7.3	LOS A	1.4	36.6	0.57	0.43	0.57	31.6
East: Churchville Ave															
1	L2	All MCs	114	3.8	114	3.8	0.213	4.8	LOS A	1.1	27.2	0.26	0.11	0.26	31.7
16	R2	All MCs	145	3.0	145	3.0	0.213	4.7	LOS A	1.1	27.2	0.26	0.11	0.26	31.9
Approach			259	3.4	259	3.4	0.213	4.8	LOS A	1.1	27.2	0.26	0.11	0.26	31.8
North: Churchville Ave															
7	L2	All MCs	407	0.8	407	0.8	0.420	7.0	LOS A	2.7	69.0	0.38	0.18	0.38	30.3
4	T1	All MCs	104	0.0	104	0.0	0.420	7.0	LOS A	2.7	69.0	0.38	0.18	0.38	30.8
Approach			511	0.6	511	0.6	0.420	7.0	LOS A	2.7	69.0	0.38	0.18	0.38	30.4
All Vehicles			1036	1.7	1036	1.7	0.420	6.5	LOS A	2.7	69.0	0.40	0.23	0.40	31.0

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.

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

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

Intersection and Approach LOS values are based on average delay for all movements (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.

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MOVEMENT SUMMARY

Site: 101 [PM Peak (Site Folder: Staunton #127 - 2045 Build Preferred Alternative (Long-Term))]

Output produced by SIDRA INTERSECTION Version: 9.1.1.200

New Site
 Site Category: (None)
 Roundabout

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV] veh/h	%	[Total HV] veh/h	%				[Veh. veh	Dist] ft				
South: Thornrose Ave															
8	T1	All MCs	54	0.0	54	0.0	0.140	4.5	LOS A	0.6	15.7	0.41	0.26	0.41	33.0
18	R2	All MCs	93	2.3	93	2.3	0.140	4.7	LOS A	0.6	15.7	0.41	0.26	0.41	32.7
Approach			146	1.5	146	1.5	0.140	4.7	LOS A	0.6	15.7	0.41	0.26	0.41	32.8
East: Churchville Ave															
1	L2	All MCs	125	1.7	125	1.7	0.409	6.4	LOS A	2.7	69.3	0.25	0.09	0.25	31.3
16	R2	All MCs	399	2.1	399	2.1	0.409	6.5	LOS A	2.7	69.3	0.25	0.09	0.25	31.5
Approach			524	2.0	524	2.0	0.409	6.5	LOS A	2.7	69.3	0.25	0.09	0.25	31.4
North: Churchville Ave															
7	L2	All MCs	249	1.7	249	1.7	0.257	5.3	LOS A	1.3	34.1	0.32	0.16	0.32	31.0
4	T1	All MCs	57	1.9	57	1.9	0.257	5.3	LOS A	1.3	34.1	0.32	0.16	0.32	31.4
Approach			306	1.7	306	1.7	0.257	5.3	LOS A	1.3	34.1	0.32	0.16	0.32	31.0
All Vehicles			977	1.8	977	1.8	0.409	5.8	LOS A	2.7	69.3	0.30	0.13	0.30	31.5

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.

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

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

Intersection and Approach LOS values are based on average delay for all movements (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.

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MOVEMENT SUMMARY

Site: 101 [AM Peak (Site Folder: Augusta #75 - 2045 Build Preferred Alternative)]

Output produced by SIDRA INTERSECTION Version: 9.1.1.200

New Site
 Site Category: (None)
 Roundabout

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV] veh/h	%	[Total HV] veh/h	%				[Veh. veh	Dist] ft				
South: I-81 NB Exit 227 Off-Ramp															
3	L2	All MCs	326	4.7	326	4.7	0.352	7.7	LOS A	1.5	39.1	0.53	0.40	0.53	30.1
18	R2	All MCs	56	2.4	56	2.4	0.063	4.6	LOS A	0.2	5.8	0.44	0.33	0.44	34.5
Approach			382	4.4	382	4.4	0.352	7.2	LOS A	1.5	39.1	0.52	0.39	0.52	30.6
East: Laurel Hill Rd															
6	T1	All MCs	485	2.8	485	2.8	0.589	13.2	LOS B	4.8	122.7	0.75	0.77	1.18	31.2
16	R2	All MCs	85	1.6	85	1.6	0.102	5.3	LOS A	0.4	9.7	0.51	0.42	0.51	34.3
Approach			571	2.6	571	2.6	0.589	12.0	LOS B	4.8	122.7	0.71	0.72	1.08	31.6
West: Laurel Hill Rd															
5	L2	All MCs	175	16.5	175	16.5	0.143	3.7	LOS A	0.0	0.0	0.00	0.00	0.00	32.9
2	T1	All MCs	200	6.2	200	6.2	0.149	3.4	LOS A	0.0	0.0	0.00	0.00	0.00	37.8
Approach			375	11.0	375	11.0	0.149	3.5	LOS A	0.0	0.0	0.00	0.00	0.00	35.3
All Vehicles			1328	5.5	1328	5.5	0.589	8.3	LOS A	4.8	122.7	0.46	0.42	0.61	32.2

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.

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

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

Intersection and Approach LOS values are based on average delay for all movements (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.

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MOVEMENT SUMMARY

Site: 101 [PM Peak (Site Folder: Augusta #75 - 2045 Build Preferred Alternative)]

Output produced by SIDRA INTERSECTION Version: 9.1.1.200

New Site
 Site Category: (None)
 Roundabout

Vehicle Movement Performance															
Mov ID	Turn	Mov Class	Demand Flows		Arrival Flows		Deg. Satn	Aver. Delay	Level of Service	95% Back Of Queue		Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed
			[Total HV] veh/h	%	[Total HV] veh/h	%				[Veh. veh	Dist] ft				
South: I-81 NB Exit 227 Off-Ramp															
3	L2	All MCs	195	4.3	195	4.3	0.252	7.4	LOS A	0.9	24.1	0.56	0.48	0.56	30.2
18	R2	All MCs	70	0.0	70	0.0	0.092	5.6	LOS A	0.3	8.4	0.53	0.46	0.53	34.0
Approach			266	3.2	266	3.2	0.252	6.9	LOS A	0.9	24.1	0.55	0.47	0.55	31.1
East: Laurel Hill Rd															
6	T1	All MCs	311	2.7	311	2.7	0.326	7.2	LOS A	1.5	38.2	0.53	0.39	0.53	33.9
16	R2	All MCs	48	2.9	48	2.9	0.050	4.2	LOS A	0.2	4.7	0.43	0.31	0.43	34.8
Approach			359	2.7	359	2.7	0.326	6.8	LOS A	1.5	38.2	0.52	0.38	0.52	34.0
West: Laurel Hill Rd															
5	L2	All MCs	169	10.7	169	10.7	0.132	3.5	LOS A	0.0	0.0	0.00	0.00	0.00	33.1
2	T1	All MCs	419	1.7	419	1.7	0.300	4.1	LOS A	0.0	0.0	0.00	0.00	0.00	37.8
Approach			589	4.3	589	4.3	0.300	3.9	LOS A	0.0	0.0	0.00	0.00	0.00	36.3
All Vehicles			1214	3.6	1214	3.6	0.326	5.4	LOS A	1.5	38.2	0.28	0.22	0.28	34.3

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.

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

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

Intersection and Approach LOS values are based on average delay for all movements (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.

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HCM 6th Signalized Intersection Summary
 3: US 11 & Quick's Mill Rd/Laurel Hill Rd

Timing Plan: AM
 04/21/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗	↘	↖	↗	↘	↖	↗	↘	↖	↗	↘
Traffic Volume (veh/h)	87	167	105	287	62	192	34	250	221	257	320	47
Future Volume (veh/h)	87	167	105	287	62	192	34	250	221	257	320	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1841	1900	1900	1856	1870	1856	1841	1856	1796	1826	1826	1856
Adj Flow Rate, veh/h	94	180	113	309	67	206	37	269	238	276	344	51
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	0	0	3	2	3	4	3	7	5	5	3
Cap, veh/h	426	243	206	425	420	353	361	460	290	416	876	129
Arrive On Green	0.08	0.13	0.13	0.17	0.22	0.22	0.05	0.19	0.19	0.15	0.29	0.29
Sat Flow, veh/h	1753	1900	1610	1767	1870	1572	1753	2412	1522	1739	3034	446
Grp Volume(v), veh/h	94	180	113	309	67	206	37	269	238	276	195	200
Grp Sat Flow(s),veh/h/ln	1753	1900	1610	1767	1870	1572	1753	1206	1522	1739	1735	1746
Q Serve(g_s), s	3.7	8.6	6.2	13.9	2.7	11.0	1.3	9.5	14.1	11.6	8.5	8.6
Cycle Q Clear(g_c), s	3.7	8.6	6.2	13.9	2.7	11.0	1.3	9.5	14.1	11.6	8.5	8.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	426	243	206	425	420	353	361	460	290	416	501	504
V/C Ratio(X)	0.22	0.74	0.55	0.73	0.16	0.58	0.10	0.58	0.82	0.66	0.39	0.40
Avail Cap(c_a), veh/h	443	389	330	535	662	557	420	620	391	546	686	691
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.1	39.4	38.3	28.2	29.2	32.4	21.2	34.5	36.4	24.9	26.7	26.8
Incr Delay (d2), s/veh	0.3	4.4	2.3	3.7	0.2	1.5	0.1	1.4	10.5	1.9	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	4.2	2.5	6.0	1.2	4.1	0.5	2.8	5.8	4.7	3.4	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.4	43.8	40.6	31.9	29.4	34.0	21.3	36.0	46.9	26.8	27.3	27.4
LnGrp LOS	C	D	D	C	C	C	C	D	D	C	C	C
Approach Vol, veh/h		387			582			544			671	
Approach Delay, s/veh		38.1			32.4			39.7			27.1	
Approach LOS		D			C			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	13.8	36.0	24.1	19.8	23.0	26.8	15.1	28.8				
Change Period (Y+Rc), s	8.9	8.9	* 7.8	* 7.8	8.9	8.9	* 7.8	* 7.8				
Max Green Setting (Gmax), s	8.1	37.1	* 22	* 19	21.1	24.1	* 8.2	* 33				
Max Q Clear Time (g_c+I1), s	3.3	10.6	15.9	10.6	13.6	16.1	5.7	13.0				
Green Ext Time (p_c), s	0.0	2.7	0.5	0.8	0.5	1.8	0.0	0.9				

Intersection Summary

HCM 6th Ctrl Delay	33.6
HCM 6th LOS	C

Notes

- User approved pedestrian interval to be less than phase max green.
- * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

HCM 6th Signalized Intersection Summary
 3: US 11 & Quick's Mill Rd/Laurel Hill Rd

Timing Plan: PM
 04/21/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑	↗	↖	↑	↗	↖	↑↑	↗	↖	↑↗	
Traffic Volume (veh/h)	43	93	52	309	154	153	112	390	316	202	434	70
Future Volume (veh/h)	43	93	52	309	154	153	112	390	316	202	434	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1856	1900	1826	1900	1841	1900	1885	1885	1870	1870	1900
Adj Flow Rate, veh/h	45	97	54	322	160	159	117	406	329	210	452	73
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	3	0	5	0	4	0	1	1	2	2	0
Cap, veh/h	370	226	196	482	472	388	349	652	395	346	853	137
Arrive On Green	0.06	0.12	0.12	0.18	0.25	0.25	0.08	0.25	0.25	0.11	0.28	0.28
Sat Flow, veh/h	1810	1856	1610	1739	1900	1560	1810	2639	1598	1781	3066	492
Grp Volume(v), veh/h	45	97	54	322	160	159	117	406	329	210	261	264
Grp Sat Flow(s),veh/h/ln	1810	1856	1610	1739	1900	1560	1810	1320	1598	1781	1777	1782
Q Serve(g_s), s	1.7	4.8	3.0	15.6	6.8	8.4	4.4	13.5	19.3	8.5	12.3	12.4
Cycle Q Clear(g_c), s	1.7	4.8	3.0	15.6	6.8	8.4	4.4	13.5	19.3	8.5	12.3	12.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	370	226	196	482	472	388	349	652	395	346	494	495
V/C Ratio(X)	0.12	0.43	0.28	0.67	0.34	0.41	0.33	0.62	0.83	0.61	0.53	0.53
Avail Cap(c_a), veh/h	416	248	215	623	600	493	357	831	503	443	704	706
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.6	40.2	39.4	29.3	30.4	31.0	22.8	33.1	35.2	24.5	30.2	30.2
Incr Delay (d2), s/veh	0.1	1.3	0.8	1.8	0.4	0.7	0.6	1.2	9.8	1.7	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.2	1.2	6.4	3.1	3.1	1.8	4.3	8.2	3.6	5.2	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.8	41.5	40.2	31.2	30.9	31.7	23.4	34.3	45.1	26.2	31.2	31.3
LnGrp LOS	C	D	D	C	C	C	C	C	D	C	C	C
Approach Vol, veh/h		196			641			852			735	
Approach Delay, s/veh		37.3			31.2			36.9			29.8	
Approach LOS		D			C			D			C	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.6	36.4	26.0	19.8	19.6	33.3	13.5	32.3				
Change Period (Y+Rc), s	8.9	8.9	* 7.8	* 7.8	8.9	8.9	* 7.8	* 7.8				
Max Green Setting (Gmax), s	8.1	39.1	* 26	* 13	16.1	31.1	* 8.2	* 31				
Max Q Clear Time (g_c+I1), s	6.4	14.4	17.6	6.8	10.5	21.3	3.7	10.4				
Green Ext Time (p_c), s	0.0	3.7	0.6	0.3	0.3	3.1	0.0	1.3				

Intersection Summary

HCM 6th Ctrl Delay	33.3
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.
 * HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection: 3: US 11 & Quick's Mill Rd/Laurel Hill Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	B2	SB
Directions Served	L	T	R	L	T	R	L	T	T	R	T	L
Maximum Queue (ft)	99	264	140	272	121	97	59	185	157	135	2	212
Average Queue (ft)	55	111	39	144	39	41	18	106	68	58	0	122
95th Queue (ft)	114	209	108	235	84	76	46	164	137	101	2	201
Link Distance (ft)		880			870	870	166	166	166		114	
Upstream Blk Time (%)								1	0	0		
Queuing Penalty (veh)								0	0	0		
Storage Bay Dist (ft)	100		140	300							150	215
Storage Blk Time (%)	1	11	0	0	0				0	0		1
Queuing Penalty (veh)	2	22	0	0	0				0	0		1

Intersection: 3: US 11 & Quick's Mill Rd/Laurel Hill Rd

Movement	SB	SB
Directions Served	T	TR
Maximum Queue (ft)	267	187
Average Queue (ft)	92	81
95th Queue (ft)	179	151
Link Distance (ft)	799	799
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)	0	
Queuing Penalty (veh)	0	

Network Summary

Network wide Queuing Penalty: 26

Intersection: 3: US 11 & Quick's Mill Rd/Laurel Hill Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	B2	SB
Directions Served	L	T	R	L	T	R	L	T	T	R	T	L
Maximum Queue (ft)	88	133	79	280	220	80	111	214	174	147	6	209
Average Queue (ft)	25	58	18	166	80	34	52	129	95	66	0	97
95th Queue (ft)	67	114	50	265	170	64	94	193	166	118	5	176
Link Distance (ft)		880			870	870	166	166	166		114	
Upstream Blk Time (%)								2	0	0		
Queuing Penalty (veh)								0	0	0		
Storage Bay Dist (ft)	100		140	300						150		215
Storage Blk Time (%)	0	3	0	0	0				0	0		0
Queuing Penalty (veh)	0	3	0	0	0				1	0		0

Intersection: 3: US 11 & Quick's Mill Rd/Laurel Hill Rd

Movement	SB	SB
Directions Served	T	TR
Maximum Queue (ft)	233	222
Average Queue (ft)	129	114
95th Queue (ft)	203	195
Link Distance (ft)	799	799
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)	0	
Queuing Penalty (veh)	1	

Network Summary

Network wide Queuing Penalty: 6

Intersection												
Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↔	↔	↔	↕			↕	↔
Traffic Vol, veh/h	0	0	0	60	0	95	118	404	0	0	316	360
Future Vol, veh/h	0	0	0	60	0	95	118	404	0	0	316	360
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	-	-	-	-	-	250	160	-	-	-	-	0
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	15	0	19	12	6	0	0	3	7
Mvmt Flow	0	0	0	68	0	108	134	459	0	0	359	409

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1291	1495	230
Stage 1	727	727	-
Stage 2	564	768	-
Critical Hdwy	6.825	6.5	7.185
Critical Hdwy Stg 1	6.025	5.5	-
Critical Hdwy Stg 2	5.625	5.5	-
Follow-up Hdwy	3.6425	4.34805	2.314
Pot Cap-1 Maneuver	153	124	729
Stage 1	413	432	-
Stage 2	537	414	-
Platoon blocked, %			
Mov Cap-1 Maneuver	127	0	729
Mov Cap-2 Maneuver	127	0	-
Stage 1	343	0	-
Stage 2	537	0	-

Approach	WB	NB	SB
HCM Control Delay, s	30.7	2.4	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBTWBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	791	-	127	729	-
HCM Lane V/C Ratio	0.17	-	0.537	0.148	-
HCM Control Delay (s)	10.5	-	62.2	10.8	-
HCM Lane LOS	B	-	F	B	-
HCM 95th %tile Q(veh)	0.6	-	2.6	0.5	-

Intersection: 3: S Delphine Ave & I-64 Exit 96 WB On-Ramp/I-64 Exit 96 WB Off-Ramp

Movement	WB	WB	NB	SB
Directions Served	LT	R	L	R
Maximum Queue (ft)	144	99	109	52
Average Queue (ft)	46	39	43	5
95th Queue (ft)	108	75	89	27
Link Distance (ft)	1070			583
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		250	160	
Storage Blk Time (%)	0	0		
Queuing Penalty (veh)	0	0		

Network Summary

Network wide Queuing Penalty: 0

Intersection												
Int Delay, s/veh	4.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations					↕	↕	↕	↕↕			↕	↕
Traffic Vol, veh/h	0	0	0	74	5	209	90	449	0	0	217	258
Future Vol, veh/h	0	0	0	74	5	209	90	449	0	0	217	258
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	-	-	-	-	-	250	160	-	-	-	-	0
Veh in Median Storage, #	-	1	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	16	25	6	12	4	0	0	5	10
Mvmt Flow	0	0	0	80	5	227	98	488	0	0	236	280

Major/Minor	Minor1		Major1		Major2		
Conflicting Flow All	1060	1200	244	516	0	-	0
Stage 1	684	684	-	-	-	-	-
Stage 2	376	516	-	-	-	-	-
Critical Hdwy	6.84	6.875	6.99	4.28	-	-	-
Critical Hdwy Stg 1	6.04	5.875	-	-	-	-	-
Critical Hdwy Stg 2	5.64	5.875	-	-	-	-	-
Follow-up Hdwy	3.652	4.2375	3.357	2.314	-	-	-
Pot Cap-1 Maneuver	215	160	747	990	-	0	0
Stage 1	434	405	-	-	-	0	0
Stage 2	658	488	-	-	-	0	0
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	194	0	747	990	-	-	-
Mov Cap-2 Maneuver	194	0	-	-	-	-	-
Stage 1	391	0	-	-	-	-	-
Stage 2	658	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.9	1.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBTWBLn1	WBLn2	SBT	SBR
Capacity (veh/h)	990	-	194 747	-	-
HCM Lane V/C Ratio	0.099	-	0.443 0.304	-	-
HCM Control Delay (s)	9	-	37.5 11.9	-	-
HCM Lane LOS	A	-	E B	-	-
HCM 95th %tile Q(veh)	0.3	-	2.1 1.3	-	-

Intersection: 3: S Delphine Ave & I-64 Exit 96 WB On-Ramp/I-64 Exit 96 WB Off-Ramp

Movement	WB	WB	NB	SB
Directions Served	LT	R	L	R
Maximum Queue (ft)	102	98	81	36
Average Queue (ft)	45	46	27	3
95th Queue (ft)	82	79	60	18
Link Distance (ft)	1070			583
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		250	160	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 0

Intersection												
Int Delay, s/veh	5.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔		↔			↔	↔	↕			↕	
Traffic Vol, veh/h	50	0	238	0	0	0	161	354	4	0	477	70
Future Vol, veh/h	50	0	238	0	0	0	161	354	4	0	477	70
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	-	120	-	-	0	240	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	0	3	0	0	0	5	9	33	0	7	4
Mvmt Flow	57	0	270	0	0	0	183	402	5	0	542	80

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1149	-	311	-	-	204	622	0	0	-	-	0
Stage 1	582	-	-	-	-	-	-	-	-	-	-	-
Stage 2	567	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.96	-	-	6.9	4.2	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.33	-	-	3.3	2.25	-	-	-	-	-
Pot Cap-1 Maneuver	153	0	682	0	0	809	935	-	-	0	-	-
Stage 1	466	0	-	0	0	-	-	-	-	0	-	-
Stage 2	476	0	-	0	0	-	-	-	-	0	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	130	-	682	-	-	809	935	-	-	-	-	-
Mov Cap-2 Maneuver	130	-	-	-	-	-	-	-	-	-	-	-
Stage 1	375	-	-	-	-	-	-	-	-	-	-	-
Stage 2	383	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.5	0	3	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBT	SBR
Capacity (veh/h)	935	-	-	130	682	-	-	-
HCM Lane V/C Ratio	0.196	-	-	0.437	0.397	-	-	-
HCM Control Delay (s)	9.8	-	-	52.6	13.7	0	-	-
HCM Lane LOS	A	-	-	F	B	A	-	-
HCM 95th %tile Q(veh)	0.7	-	-	1.9	1.9	-	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	13	506	0	12	703
Future Vol, veh/h	4	13	506	0	12	703
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	9	0	0	5
Mvmt Flow	5	15	575	0	14	799

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1003	288	0
Stage 1	575	-	-
Stage 2	428	-	-
Critical Hdwy	6.8	6.9	-
Critical Hdwy Stg 1	5.8	-	-
Critical Hdwy Stg 2	5.8	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	242	715	-
Stage 1	532	-	-
Stage 2	631	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	239	715	-
Mov Cap-2 Maneuver	239	-	-
Stage 1	532	-	-
Stage 2	622	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.7	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	487	1008
HCM Lane V/C Ratio	-	-	0.04	0.014
HCM Control Delay (s)	-	-	12.7	8.6
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	0	404	0	0	543
Future Vol, veh/h	4	0	404	0	0	543
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	-	-	-	140	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	9	0	0	7
Mvmt Flow	5	0	459	0	0	617

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	768	230	0
Stage 1	459	-	-
Stage 2	309	-	-
Critical Hdwy	6.8	6.9	-
Critical Hdwy Stg 1	5.8	-	-
Critical Hdwy Stg 2	5.8	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	342	779	-
Stage 1	609	-	-
Stage 2	724	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	342	779	-
Mov Cap-2 Maneuver	342	-	-
Stage 1	609	-	-
Stage 2	724	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	342	1113
HCM Lane V/C Ratio	-	-	0.013	-
HCM Control Delay (s)	-	-	15.7	0
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0	0

Intersection: 3: S Delphine Ave & Windsor Rd/Mountain Rd

Movement	EB	EB	NB	SB
Directions Served	L	R	L	TR
Maximum Queue (ft)	192	115	102	14
Average Queue (ft)	51	64	39	1
95th Queue (ft)	147	106	79	8
Link Distance (ft)	2240		483	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	120		240	
Storage Blk Time (%)	2	0		
Queuing Penalty (veh)	4	0		

Intersection: 6: S Delphine Ave & Western Rd

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	40	30
Average Queue (ft)	13	5
95th Queue (ft)	39	22
Link Distance (ft)	248	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	100	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: S Delphine Ave & 19th St

Movement	WB
Directions Served	LR
Maximum Queue (ft)	33
Average Queue (ft)	5
95th Queue (ft)	23
Link Distance (ft)	311
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 5

Intersection												
Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↵		↵			↵	↵	↕			↕	
Traffic Vol, veh/h	30	0	145	0	0	5	188	444	9	0	339	57
Future Vol, veh/h	30	0	145	0	0	5	188	444	9	0	339	57
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	-	120	-	-	0	240	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	3	0	0	0	1	6	0	0	11	2
Mvmt Flow	33	0	158	0	0	5	204	483	10	0	368	62

Major/Minor	Minor2	Minor1		Major1		Major2						
Conflicting Flow All	1049	-	215	-	-	247	430	0	0	-	-	0
Stage 1	399	-	-	-	-	-	-	-	-	-	-	-
Stage 2	650	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.5	-	6.96	-	-	6.9	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.5	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	-	3.33	-	-	3.3	2.21	-	-	-	-	-
Pot Cap-1 Maneuver	184	0	787	0	0	759	1133	-	-	0	-	-
Stage 1	604	0	-	0	0	-	-	-	-	0	-	-
Stage 2	429	0	-	0	0	-	-	-	-	0	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	157	-	787	-	-	759	1133	-	-	-	-	-
Mov Cap-2 Maneuver	157	-	-	-	-	-	-	-	-	-	-	-
Stage 1	495	-	-	-	-	-	-	-	-	-	-	-
Stage 2	349	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.7	9.8	2.6	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBT	SBR
Capacity (veh/h)	1133	-	-	157	787	759	-	-
HCM Lane V/C Ratio	0.18	-	-	0.208	0.2	0.007	-	-
HCM Control Delay (s)	8.9	-	-	33.8	10.7	9.8	-	-
HCM Lane LOS	A	-	-	D	B	A	-	-
HCM 95th %tile Q(veh)	0.7	-	-	0.8	0.7	0	-	-

Intersection							
Int Delay, s/veh	0.3						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	6	8	3	633	1	18	466
Future Vol, veh/h	6	8	3	633	1	18	466
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	-	-	100	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	5	0	0	8
Mvmt Flow	7	9	3	688	1	20	507

Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	989	345	507	0	0	689
Stage 1	695	-	-	-	-	-
Stage 2	294	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4	-	-	4.1
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.5	-	-	2.2
Pot Cap-1 Maneuver	247	657	694	-	-	915
Stage 1	462	-	-	-	-	-
Stage 2	736	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	240	657	694	-	-	915
Mov Cap-2 Maneuver	240	-	-	-	-	-
Stage 1	459	-	-	-	-	-
Stage 2	720	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	377	915
HCM Lane V/C Ratio	-	-	0.04	0.021
HCM Control Delay (s)	0	-	15	9
HCM Lane LOS	A	-	C	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1

Intersection							
Int Delay, s/veh	0.2						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	3	3	3	472	4	9	390
Future Vol, veh/h	3	3	3	472	4	9	390
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	-	-	140	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	6	0	0	9
Mvmt Flow	3	3	3	508	4	10	419

Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	746	256	419	0	0	512
Stage 1	516	-	-	-	-	-
Stage 2	230	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4	-	-	4.1
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.5	-	-	2.2
Pot Cap-1 Maneuver	353	749	788	-	-	1064
Stage 1	570	-	-	-	-	-
Stage 2	792	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	348	749	788	-	-	1064
Mov Cap-2 Maneuver	348	-	-	-	-	-
Stage 1	567	-	-	-	-	-
Stage 2	785	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.7	0.1	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	475	1064
HCM Lane V/C Ratio	-	-	0.014	0.009
HCM Control Delay (s)	0	-	12.7	8.4
HCM Lane LOS	A	-	B	A
HCM 95th %tile Q(veh)	-	-	0	0

Intersection: 3: S Delphine Ave & Windsor Rd/Mountain Rd

Movement	EB	EB	WB	NB	NB	SB
Directions Served	L	R	R	L	T	TR
Maximum Queue (ft)	66	99	31	84	5	9
Average Queue (ft)	24	45	5	33	0	0
95th Queue (ft)	55	75	23	61	5	4
Link Distance (ft)	2240		316		362	483
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		120		240		
Storage Blk Time (%)		0				
Queuing Penalty (veh)		0				

Intersection: 6: S Delphine Ave & Western Rd

Movement	WB	NB	SB
Directions Served	LR	UT	L
Maximum Queue (ft)	39	43	32
Average Queue (ft)	12	3	6
95th Queue (ft)	36	23	25
Link Distance (ft)	248	507	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			100
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: S Delphine Ave & 19th St

Movement	WB	NB	SB
Directions Served	LR	UT	L
Maximum Queue (ft)	31	36	27
Average Queue (ft)	4	2	2
95th Queue (ft)	22	17	15
Link Distance (ft)	311	483	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			140
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

Intersection						
Int Delay, s/veh	5.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	238	161	354	477	70
Future Vol, veh/h	50	238	161	354	477	70
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	120	240	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	3	5	9	7	4
Mvmt Flow	57	270	183	402	542	80

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1149	311	622	0	-	0
Stage 1	582	-	-	-	-	-
Stage 2	567	-	-	-	-	-
Critical Hdwy	6.84	6.96	4.2	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.33	2.25	-	-	-
Pot Cap-1 Maneuver	192	682	935	-	-	-
Stage 1	522	-	-	-	-	-
Stage 2	531	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	154	682	935	-	-	-
Mov Cap-2 Maneuver	154	-	-	-	-	-
Stage 1	420	-	-	-	-	-
Stage 2	531	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.5	3.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	935	-	154	682	-	-
HCM Lane V/C Ratio	0.196	-	0.369	0.397	-	-
HCM Control Delay (s)	9.8	-	41.4	13.7	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0.7	-	1.6	1.9	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	13	502	4	12	703
Future Vol, veh/h	4	13	502	4	12	703
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	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	9	33	0	5
Mvmt Flow	5	15	570	5	14	799

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1001	288	0
Stage 1	573	-	-
Stage 2	428	-	-
Critical Hdwy	6.8	6.9	-
Critical Hdwy Stg 1	5.8	-	-
Critical Hdwy Stg 2	5.8	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	243	715	-
Stage 1	533	-	-
Stage 2	631	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	240	715	-
Mov Cap-2 Maneuver	240	-	-
Stage 1	533	-	-
Stage 2	622	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.7	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	488	1008
HCM Lane V/C Ratio	-	-	0.04	0.014
HCM Control Delay (s)	-	-	12.7	8.6
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	0	404	0	0	543
Future Vol, veh/h	4	0	404	0	0	543
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	-	-	-	140	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	9	0	0	7
Mvmt Flow	5	0	459	0	0	617

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	768	230	0
Stage 1	459	-	-
Stage 2	309	-	-
Critical Hdwy	6.8	6.9	-
Critical Hdwy Stg 1	5.8	-	-
Critical Hdwy Stg 2	5.8	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	342	779	-
Stage 1	609	-	-
Stage 2	724	-	-
Platoon blocked, %			-
Mov Cap-1 Maneuver	342	779	-
Mov Cap-2 Maneuver	342	-	-
Stage 1	609	-	-
Stage 2	724	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	342	1113
HCM Lane V/C Ratio	-	-	0.013	-
HCM Control Delay (s)	-	-	15.7	0
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0	0

Intersection: 3: S Delphine Ave & Windsor Rd

Movement	EB	EB	NB	SB	SB
Directions Served	L	R	L	T	TR
Maximum Queue (ft)	259	119	109	2	16
Average Queue (ft)	57	65	44	0	1
95th Queue (ft)	179	110	84	2	10
Link Distance (ft)	2240		483		483
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	120		240		
Storage Blk Time (%)	3	1			
Queuing Penalty (veh)	8	0			

Intersection: 6: S Delphine Ave & Western Rd

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	38	30
Average Queue (ft)	14	5
95th Queue (ft)	39	22
Link Distance (ft)	248	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	100	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: S Delphine Ave & 19th St

Movement	WB
Directions Served	LR
Maximum Queue (ft)	33
Average Queue (ft)	5
95th Queue (ft)	24
Link Distance (ft)	311
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 9

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↙	↗	↙	↑↑	↑↑	
Traffic Vol, veh/h	30	145	188	444	339	57
Future Vol, veh/h	30	145	188	444	339	57
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	120	240	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	3	1	6	11	2
Mvmt Flow	33	158	204	483	368	62

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	1049	215	430	0	0
Stage 1	399	-	-	-	-
Stage 2	650	-	-	-	-
Critical Hdwy	6.8	6.96	4.12	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-
Follow-up Hdwy	3.5	3.33	2.21	-	-
Pot Cap-1 Maneuver	226	787	1133	-	-
Stage 1	652	-	-	-	-
Stage 2	487	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	185	787	1133	-	-
Mov Cap-2 Maneuver	185	-	-	-	-
Stage 1	535	-	-	-	-
Stage 2	487	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.8	2.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1133	-	185	787	-	-
HCM Lane V/C Ratio	0.18	-	0.176	0.2	-	-
HCM Control Delay (s)	8.9	-	28.6	10.7	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.7	-	0.6	0.7	-	-

Intersection							
Int Delay, s/veh	0.3						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	6	8	3	624	10	18	466
Future Vol, veh/h	6	8	3	624	10	18	466
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	-	-	100	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	5	0	0	8
Mvmt Flow	7	9	3	678	11	20	507

Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	984	345	507	0	0	689
Stage 1	690	-	-	-	-	-
Stage 2	294	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4	-	-	4.1
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.5	-	-	2.2
Pot Cap-1 Maneuver	249	657	694	-	-	915
Stage 1	465	-	-	-	-	-
Stage 2	736	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	242	657	694	-	-	915
Mov Cap-2 Maneuver	242	-	-	-	-	-
Stage 1	462	-	-	-	-	-
Stage 2	720	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.9	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	379	915
HCM Lane V/C Ratio	-	-	0.04	0.021
HCM Control Delay (s)	0	-	14.9	9
HCM Lane LOS	A	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1

Intersection							
Int Delay, s/veh	0.3						
Movement	WBL	WBR	NBU	NBT	NBR	SBL	SBT
Lane Configurations							
Traffic Vol, veh/h	3	8	3	467	4	9	390
Future Vol, veh/h	3	8	3	467	4	9	390
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	-	-	140	-
Veh in Median Storage, #	0	-	-	0	-	-	0
Grade, %	0	-	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	6	0	0	9
Mvmt Flow	3	9	3	502	4	10	419

Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	740	253	419	0	0	506
Stage 1	510	-	-	-	-	-
Stage 2	230	-	-	-	-	-
Critical Hdwy	6.8	6.9	6.4	-	-	4.1
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.5	-	-	2.2
Pot Cap-1 Maneuver	357	753	788	-	-	1069
Stage 1	574	-	-	-	-	-
Stage 2	792	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	352	753	788	-	-	1069
Mov Cap-2 Maneuver	352	-	-	-	-	-
Stage 1	571	-	-	-	-	-
Stage 2	785	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.4	0.1	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	575	1069
HCM Lane V/C Ratio	-	-	0.021	0.009
HCM Control Delay (s)	0	-	11.4	8.4
HCM Lane LOS	A	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection: 3: S Delphine Ave & Windsor Rd

Movement	EB	EB	NB	SB
Directions Served	L	R	L	TR
Maximum Queue (ft)	83	96	92	9
Average Queue (ft)	25	46	40	0
95th Queue (ft)	64	76	74	5
Link Distance (ft)	2240		483	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	120		240	
Storage Blk Time (%)	0	0		
Queuing Penalty (veh)	0	0		

Intersection: 6: S Delphine Ave & Western Rd

Movement	WB	NB	SB
Directions Served	LR	UT	L
Maximum Queue (ft)	41	35	35
Average Queue (ft)	12	2	8
95th Queue (ft)	38	20	30
Link Distance (ft)	248	507	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: S Delphine Ave & 19th St

Movement	WB	NB	SB
Directions Served	LR	UT	L
Maximum Queue (ft)	33	23	24
Average Queue (ft)	8	1	3
95th Queue (ft)	31	9	17
Link Distance (ft)	311	483	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	140		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

Intersection													
Int Delay, s/veh	4.7												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↙		↗			↗		↘	↕	↕		↕	↕
Traffic Vol, veh/h	50	0	238	0	0	0	8	161	354	4	0	473	70
Future Vol, veh/h	50	0	238	0	0	0	8	161	354	4	0	473	70
Conflicting Peds, #/hr	0	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	Free
RT Channelized	-	-	None	-	-	None	-	-	-	None	-	-	None
Storage Length	0	-	120	-	-	0	-	240	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	0	3	0	0	0	0	5	9	33	0	7	4
Mvmt Flow	57	0	270	0	0	0	9	183	402	5	0	538	80

Major/Minor	Minor2	Minor1		Major1			Major2						
Conflicting Flow All	1163	-	309	-	-	204	617	618	0	0	-	-	0
Stage 1	578	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	585	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.54	-	6.96	-	-	6.9	6.4	4.2	-	-	-	-	-
Critical Hdwy Stg 1	6.54	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	-	3.33	-	-	3.3	2.5	2.25	-	-	-	-	-
Pot Cap-1 Maneuver	150	0	684	0	0	809	591	938	-	-	0	-	-
Stage 1	468	0	-	0	0	-	-	-	-	-	0	-	-
Stage 2	464	0	-	0	0	-	-	-	-	-	0	-	-
Platoon blocked, %									-	-	-	-	-
Mov Cap-1 Maneuver	125	-	684	-	-	809	878	878	-	-	-	-	-
Mov Cap-2 Maneuver	223	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	366	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	363	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.9	0	3.3	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2WBLn1	SBT	SBR
Capacity (veh/h)	878	-	-	223	684	-	-
HCM Lane V/C Ratio	0.219	-	-	0.255	0.395	-	-
HCM Control Delay (s)	10.2	-	-	26.6	13.7	0	-
HCM Lane LOS	B	-	-	D	B	A	-
HCM 95th %tile Q(veh)	0.8	-	-	1	1.9	-	-

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕		↖	↕
Traffic Vol, veh/h	0	21	506	0	12	707
Future Vol, veh/h	0	21	506	0	12	707
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	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	9	0	0	5
Mvmt Flow	0	24	575	0	14	803

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	288	0	0	575
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	4.1
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	2.2
Pot Cap-1 Maneuver	0	715	-	-	1008
Stage 1	0	-	-	-	-
Stage 2	0	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	-	715	-	-	1008
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.2	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	715	1008
HCM Lane V/C Ratio	-	-	0.033	0.014
HCM Control Delay (s)	-	-	10.2	8.6
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑↑			↑↑
Traffic Vol, veh/h	0	0	404	0	0	543
Future Vol, veh/h	0	0	404	0	0	543
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	88	88	88	88	88	88
Heavy Vehicles, %	0	0	9	0	0	7
Mvmt Flow	0	0	459	0	0	617

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	230	0	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-
Pot Cap-1 Maneuver	0	663	-	-	0
Stage 1	0	-	-	-	0
Stage 2	0	-	-	-	0
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	-	663	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

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

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

Intersection: 3: S Delphine Ave & Windsor Rd/Mountain Rd

Movement	EB	EB	NB	NB	SB	SB
Directions Served	L	R	UL	T	T	TR
Maximum Queue (ft)	102	106	102	4	2	9
Average Queue (ft)	34	61	38	0	0	1
95th Queue (ft)	72	94	75	5	2	6
Link Distance (ft)	2240		357		489	489
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	120		240			
Storage Blk Time (%)	0	0				
Queuing Penalty (veh)	0	0				

Intersection: 6: S Delphine Ave & Western Rd

Movement	WB	SB
Directions Served	R	L
Maximum Queue (ft)	36	30
Average Queue (ft)	17	4
95th Queue (ft)	42	20
Link Distance (ft)	248	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	100	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: S Delphine Ave & 19th St

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 0

Intersection													
Int Delay, s/veh	3.3												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↶		↷			↶		↷	↶↷	↶↷		↶↷	
Traffic Vol, veh/h	30	0	145	0	0	5	12	188	444	9	0	345	57
Future Vol, veh/h	30	0	145	0	0	5	12	188	444	9	0	345	57
Conflicting Peds, #/hr	0	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	Free
RT Channelized	-	-	None	-	-	None	-	-	-	None	-	-	None
Storage Length	0	-	120	-	-	0	-	240	-	-	-	-	-
Veh in Median Storage, #	-	1	-	-	0	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	3	0	0	0	0	1	6	0	0	11	2
Mvmt Flow	33	0	158	0	0	5	13	204	483	10	0	375	62

Major/Minor	Minor2		Minor1		Major1			Major2					
Conflicting Flow All	1082	-	219	-	-	247	437	437	0	0	-	-	0
Stage 1	406	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	676	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	7.5	-	6.96	-	-	6.9	6.4	4.12	-	-	-	-	-
Critical Hdwy Stg 1	6.5	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	-	3.33	-	-	3.3	2.5	2.21	-	-	-	-	-
Pot Cap-1 Maneuver	175	0	782	0	0	759	768	1126	-	-	0	-	-
Stage 1	598	0	-	0	0	-	-	-	-	-	0	-	-
Stage 2	414	0	-	0	0	-	-	-	-	-	0	-	-
Platoon blocked, %									-	-	-	-	-
Mov Cap-1 Maneuver	147	-	782	-	-	759	1075	1075	-	-	-	-	-
Mov Cap-2 Maneuver	241	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	477	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	328	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	12.8		9.8		2.8		0	
HCM LOS	B		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2WBLn1	SBT	SBR
Capacity (veh/h)	1075	-	-	241	782	759	-
HCM Lane V/C Ratio	0.202	-	-	0.135	0.202	0.007	-
HCM Control Delay (s)	9.2	-	-	22.3	10.8	9.8	-
HCM Lane LOS	A	-	-	C	B	A	-
HCM 95th %tile Q(veh)	0.8	-	-	0.5	0.8	0	-

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↕		↖	↕
Traffic Vol, veh/h	0	17	636	1	27	475
Future Vol, veh/h	0	17	636	1	27	475
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	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	5	0	0	8
Mvmt Flow	0	18	691	1	29	516

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	-	346	0	0	692
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	4.1
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	2.2
Pot Cap-1 Maneuver	0	656	-	-	912
Stage 1	0	-	-	-	-
Stage 2	0	-	-	-	-
Platoon blocked, %					
Mov Cap-1 Maneuver	-	656	-	-	912
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	0.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	656	912
HCM Lane V/C Ratio	-	-	0.028	0.032
HCM Control Delay (s)	-	-	10.6	9.1
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0.1

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↑ ↑ ↑	↑ ↑ ↑			↑ ↑
Traffic Vol, veh/h	0	3	475	4	0	402
Future Vol, veh/h	0	3	475	4	0	402
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	6	0	0	9
Mvmt Flow	0	3	511	4	0	432

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	-	258	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	636	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	636	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBT
Capacity (veh/h)	-	-	636
HCM Lane V/C Ratio	-	-	0.005
HCM Control Delay (s)	-	-	10.7
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0

Intersection: 3: S Delphine Ave & Windsor Rd/Mountain Rd

Movement	EB	EB	WB	NB	SB
Directions Served	L	R	R	UL	TR
Maximum Queue (ft)	75	99	31	79	11
Average Queue (ft)	24	46	5	35	0
95th Queue (ft)	56	75	23	65	5
Link Distance (ft)	2240		316		489
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		120		240	
Storage Blk Time (%)	0	0			
Queuing Penalty (veh)	0	0			

Intersection: 6: S Delphine Ave & Western Rd

Movement	WB	SB
Directions Served	R	L
Maximum Queue (ft)	38	35
Average Queue (ft)	14	10
95th Queue (ft)	39	33
Link Distance (ft)	248	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: S Delphine Ave & 19th St

Movement	WB
Directions Served	R
Maximum Queue (ft)	30
Average Queue (ft)	3
95th Queue (ft)	18
Link Distance (ft)	298
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 0

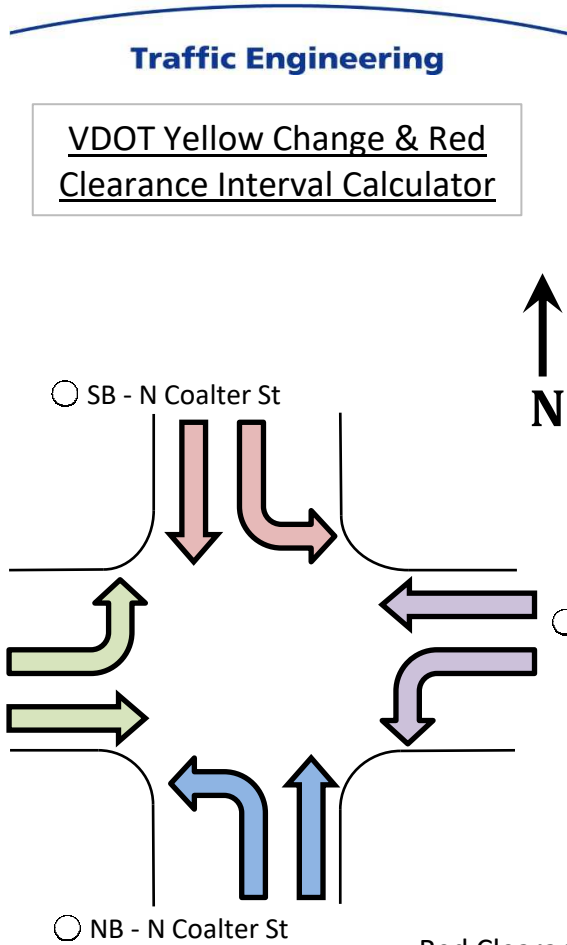
Appendix E:
Yellow Change and Red Clearance Calculations

Intersection Information:

Operations Region: Northwest
 Locality: Staunton (City)
 Intersection Node: N/A
 Reference #: N/A
 NB/SB Street: N Coalter St
 EB Street: Edgewood Rd
 WB Street: Statler Blvd

Additional Notes:

○ EB - Edgewood Rd



Name:
 Company: WRA
 Implementation Date:
 By:

Yellow Change Interval:

$$Y = t + \frac{1.47 * V}{2a + 64.4g}$$

$a = 10 \text{ ft/s}^2$
 $t = 1 \text{ s}$

Red Clearance Interval:

$$R = \frac{w + L}{1.47 * V} - 1$$

V_{LTS} is used in place of V for calculation of R_{lt}

Approach - Street - Movement	V (mph)*	V data	g	V_{LTS} (mph)*	L (ft)*	w (ft)*	Y (s)**	R (s)**
NB - N Coalter St - Through	42	SL + 7	-0.07		20	125	5.0	1.3
NB - N Coalter St - Left	30	SL - 5	-0.07	20	20	115	3.8	3.6
SB - N Coalter St - Through	42	SL + 7	-0.01		20	110	4.2	1.1
SB - N Coalter St - Left	30	SL - 5	-0.01	20	20	105	3.3	3.3
EB - Edgewood Rd - Through	32	SL + 7	-0.04		20	75	3.7	1.0
EB - Edgewood Rd - Left	20	SL - 5	-0.04	20	20	100	2.7 (3.0)	3.1
WB - Statler Blvd - Through	42	SL + 7	0.03		20	75	3.8	0.5 (1.0)
WB - Statler Blvd - Left	30	SL - 5	0.03	20	20	90	3.0	2.7

Engineering judgment applied for all numbers in red and italics. Provide supporting documentation.
**** Calculated intervals in blue indicate values below the minimum required time. ****

Phase Street - Movement	Right Turn Overlap	Left Turn Phase Type	Y Output Phase Adjusted	R Output Phase Adjusted	Controller Input Y	Controller Input R
1 SB - N Coalter St - Left	B - WBR	Protected/Permissive	5.0	3.6	5.0	3.6
2 NB - N Coalter St - Through			5.0	3.6	5.0	3.6
3 WB - Statler Blvd - Left		Protected/Permissive	3.8	3.1	3.8	3.1
4 EB - Edgewood Rd - Through			3.8	3.1	3.8	3.1
5 NB - N Coalter St - Left	A - EBR	Protected/Permissive	5.0	3.6	5.0	3.6
6 SB - N Coalter St - Through			5.0	3.6	5.0	3.6
7 EB - Edgewood Rd - Left		Protected/Permissive	3.8	3.1	3.8	3.1
8 WB - Statler Blvd - Through			3.8	3.1	3.8	3.1

