LAFAYETTE BOULEVARD IMPROVEMENTS

August 2025

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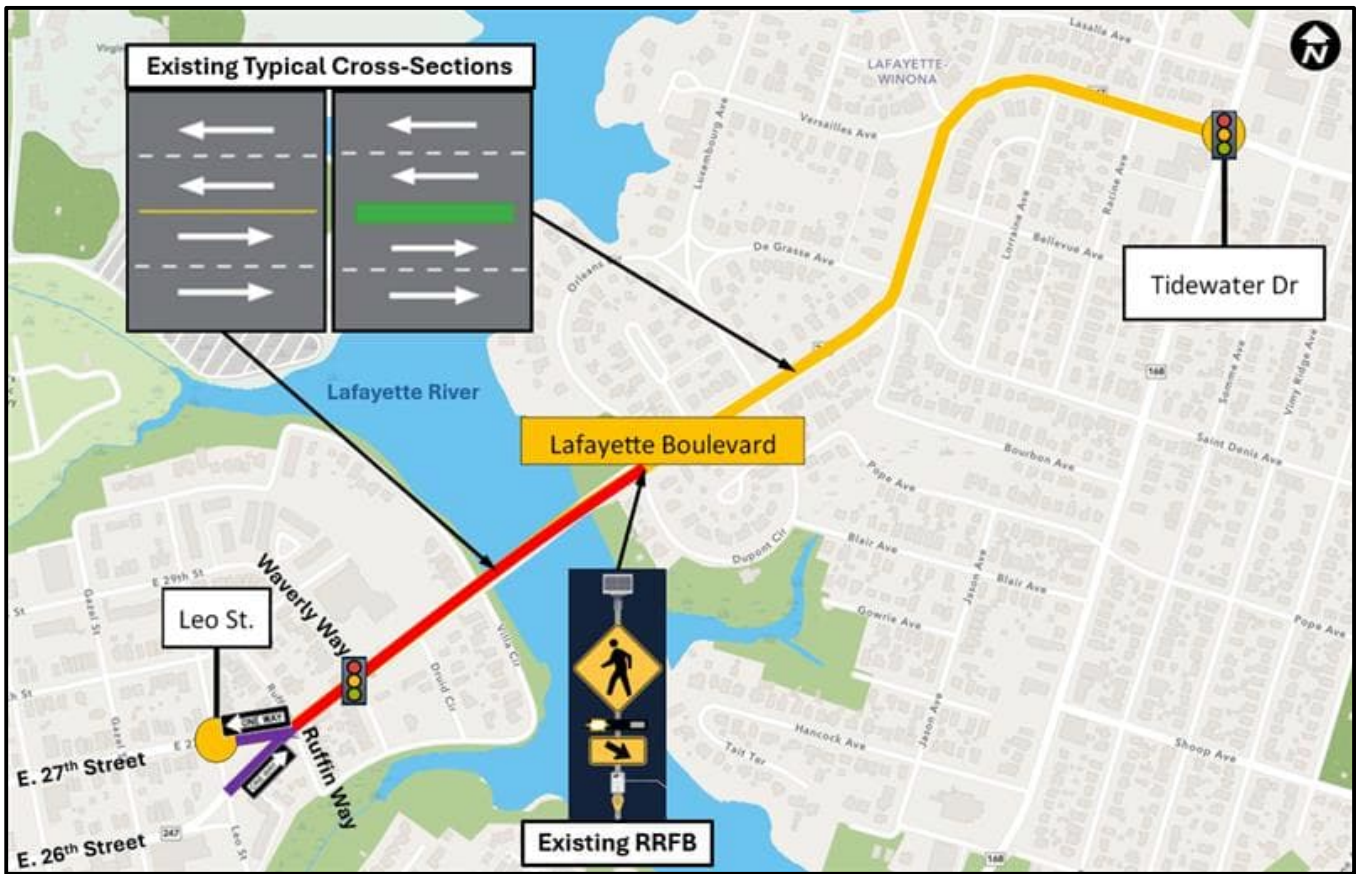
0 INTRODUCTION

0.1 BACKGROUND

In response to requests from the residents of Lafayette/Winona, the City of Norfolk retained WSP to perform a comprehensive transportation study of the VA-247 (Lafayette Boulevard) corridor from E. 26th /27th Street and Leo Street to VA-168 (Tidewater Drive). The focus of this study is to evaluate existing transportation operations and safety along the Lafayette Boulevard corridor, identifying opportunities for potential improvements, including speed limit reduction, lane repurposing to accommodate bicycle facilities, pedestrian improvements, closing median openings, and adding turn lanes. This project also stems from recommendations coming out of the City of Norfolk *Multimodal Transportation Master Plan* and supports Norfolk's Vision Zero policy. The project study area is shown in **Figure 1**.

Figure 1: Lafayette Boulevard Study Corridor



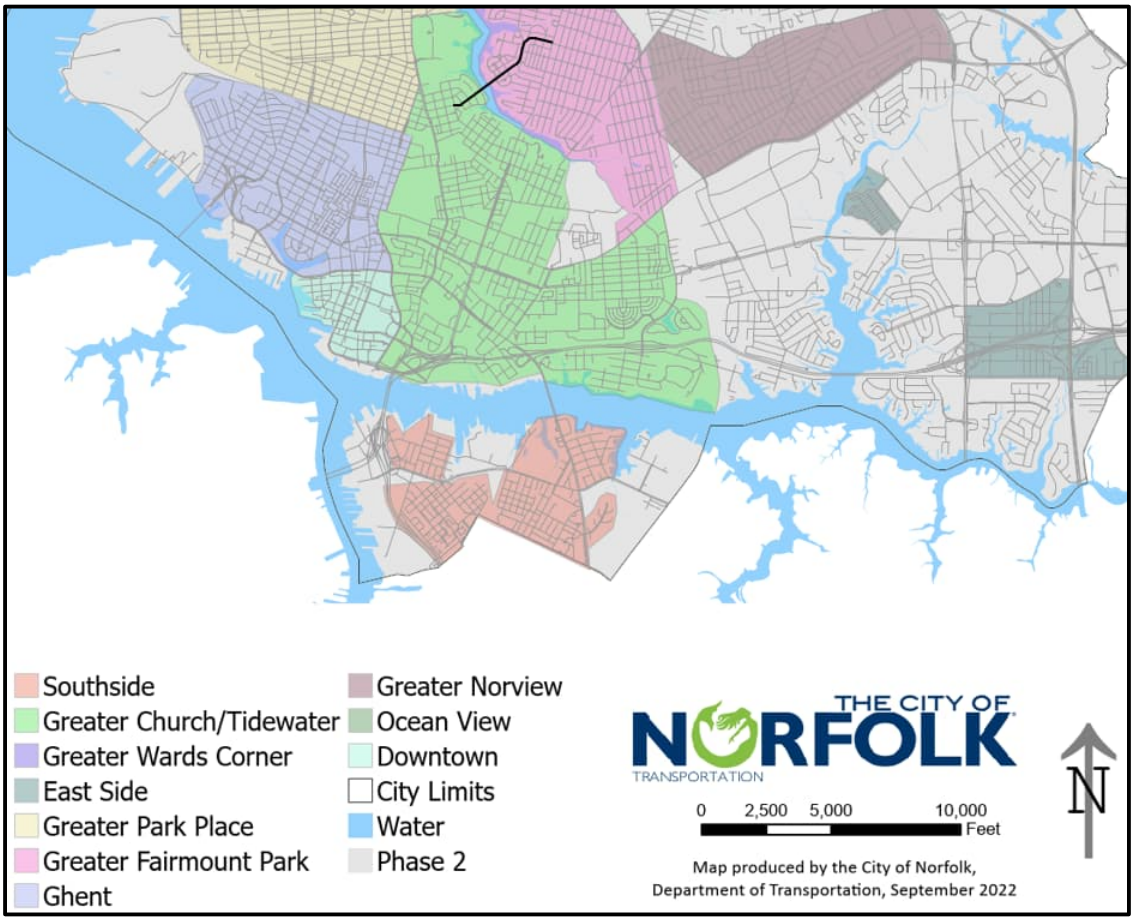
0.1.1 Supporting Vision Zero

Vision Zero is a strategy to eliminate all traffic fatalities and severe injuries, while increasing safety, mobility, and equity for all road users. In November 2019, Norfolk City Council adopted a Vision Zero policy establishing a goal of zero traffic-related fatalities and serious injuries while making the City's streets safer for all, especially for the most vulnerable users.

Bicyclists and pedestrians are the most vulnerable users on the road, and transportation networks that prioritize vehicle speed and capacity over safe and convenient travel for users outside of cars can have dangerous and life-threatening consequences. By better balancing the needs of all road users, the City of Norfolk can advance the Vision Zero goal of reducing traffic fatalities and severe injuries to zero.

To support Vision Zero, the City introduced a Neighborhood Speed Reduction Program to lower the speed limit on neighborhood "local" streets to 20 MPH without requiring an engineering study. At lower speeds, Drivers have a wider field of view and are more likely to notice other road users, including pedestrians and bicyclists. This is especially important in neighborhoods where more people are walking, biking, scootering, or playing. A community task force identified the neighborhoods in the Lafayette Boulevard Corridor (Greater Fairmount Park and Greater Church/Tidewater) as two of the Priority Areas for implementation of this program as shown in **Figure 2**.

Figure 2: Vision Zero Neighborhood Speed Reduction Program Priority Areas



The Virginia Department of Transportation (VDOT) assigns a functional classification – a type of street hierarchy describing its purpose – to the roadway network. Since VDOT classifies Lafayette Boulevard as a "minor arterial", an engineering study must be conducted to evaluate the potential for a reduced speed limit.

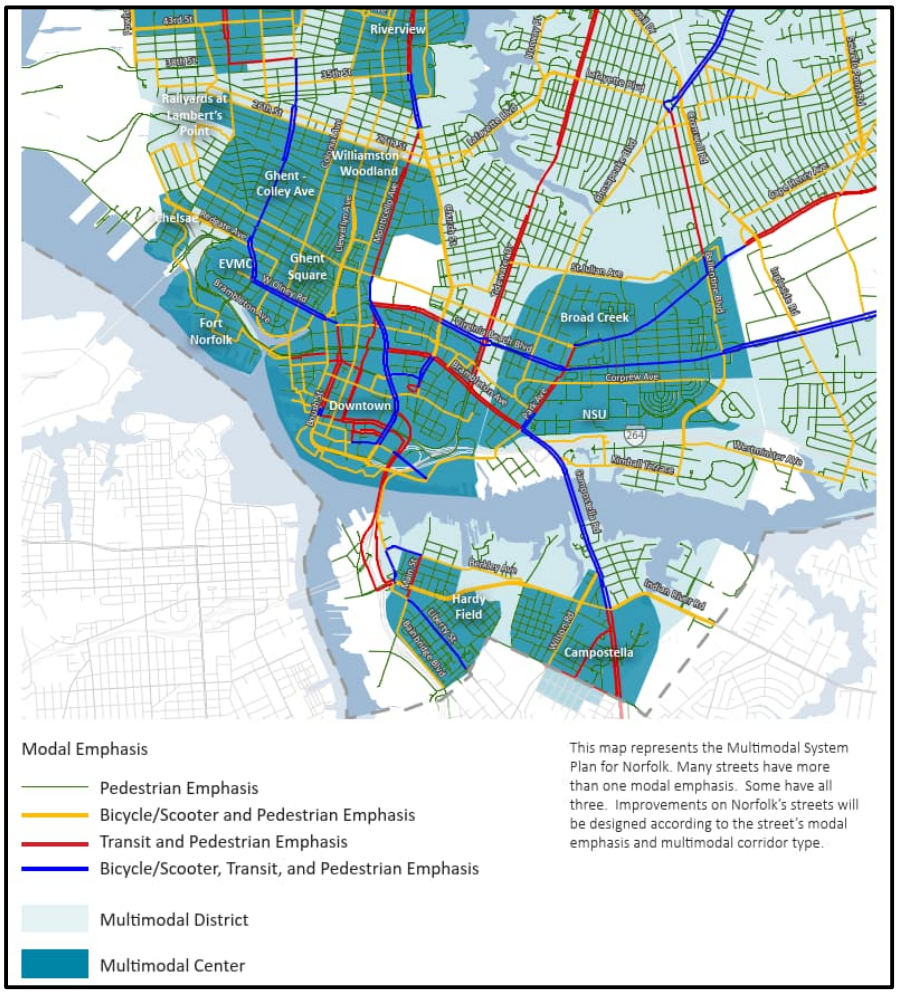
In addition to speed limit reduction, the average daily traffic (ADT) volumes along Lafayette Boulevard make it a potential candidate for "lane repurposing" or a "road diet", which means reducing the number of vehicle lanes to make space for other road users. Lane repurposing is a proven safety countermeasure that has been shown to improve safety by reducing the severity and frequency of crashes and reducing the potential for speeding. According to VDOT's "2022 Bidirectional Traffic

Volume Map", the ADT along the Lafayette Boulevard study corridor is 17,000 vehicles per day (vpd). FHWA advises that roadways with ADT of 20,000 vpd or less may be good candidates for a road diet and should be evaluated for feasibility.

0.1.2 Multimodal Transportation Master Plan (MMTMP)

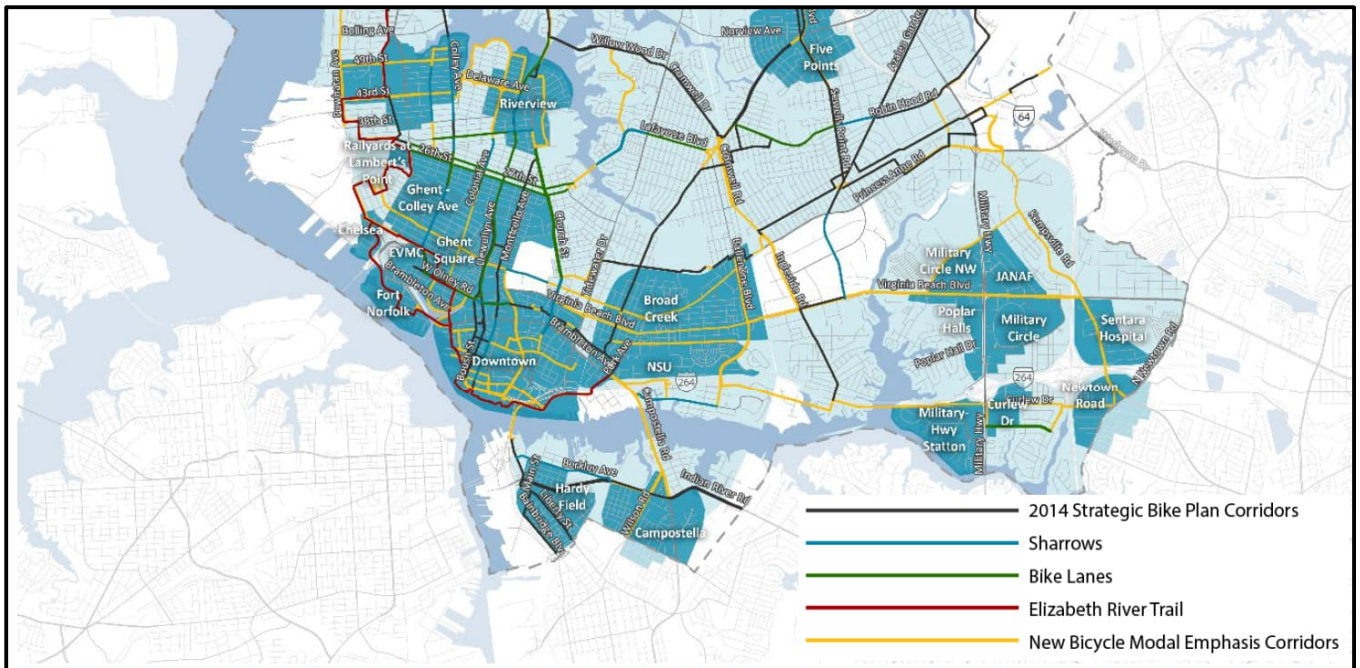
The City of Norfolk's *Multimodal Transportation Master Plan* (MMTMP), completed in May of 2022, identifies Lafayette Boulevard as a multimodal corridor with a long-term vision for an emphasis on bicycles/scooters, and pedestrians as shown in **Figure 3**. The *MMTMP* designates Lafayette Boulevard as a "Major Avenue" corridor type, which means it contains the highest density of destinations, intensity of activity, and mix of travel modes. Major Avenues typically have four or fewer lanes for motor vehicle travel while providing adequate facilities for bicycles, pedestrians, and roadway space dedicated to on-street parking. Design speeds for Major Avenues typically range from 25 to 35 mph.

Figure 3: Lafayette Boulevard Modal Emphasis from MMTMP



The *MMTMP* also identifies Lafayette Boulevard as a part of Norfolk's New Bicycle Modal Emphasis Corridors. The long-term network envisioned in the Bicycle and Pedestrian Master Plan for Lafayette Boulevard includes shared-lane markings (sharrows) for the majority of the study corridor as shown in **Figure 4**, which already exist north of the Lafayette River. In addition, installing bike lanes and other traffic calming treatments on Lafayette Boulevard from E. 26th Street to Tidewater Drive is listed as a high priority level in the City of Norfolk's Multimodal Program of Projects as shown in **Figure 5**.

Figure 4: Existing and Planned Bicycle Network



The Bicycle/Scooter Modal Emphasis network is a future vision of a fully connected network of streets and paths that bicyclists and scooter riders can use to travel safely and comfortably across the entire city. The map above shows the existing and planned bicycle facilities along with the corridors that have bicycle/scooter modal emphasis.

Figure 5: Multimodal Norfolk Program of Projects

ID	Project Name	Project Type	Project Source	Funding	Need Level
123	Construct sidewalk on Thole St from the railroad tracks east of Virginia Dr to Tidewater Dr	Sidewalk projects	Candidate projects from 2021 needs assessment	Unfunded	Medium
124	Install bike lanes on Thole St from Granby St to Tidewater Dr	Bike/scooter facility projects	Candidate projects from 2021 needs assessment	Unfunded	Medium
125	Complete missing sidewalk on Norview Ave from Sedgefield Dr to Tidewater Dr and improve railroad crossing	Sidewalk projects	Candidate projects from 2021 needs assessment	Unfunded	Medium
126	Construct a bike and pedestrian bridge alongside Willow Wood Dr bridge	Bike/scooter facility projects	Candidate projects from 2021 needs assessment	Unfunded	Low
127	Enhance the Elizabeth River Trail from the existing segment at W 25th St to the existing segment at Jeff Robertson Park	Bike/scooter facility projects	Candidate projects from 2021 needs assessment	Unfunded	Moderate
129	Install bike lanes and other traffic calming treatments on Lafayette Blvd from E 26th St across the bridge to Tidewater Dr	Bike/scooter facility projects	Candidate projects from 2021 needs assessment	Unfunded	High

0.2 Purpose of Study

The purpose of this study is to take a comprehensive look at the Lafayette Boulevard corridor with a particular focus on:

- Existing traffic operations including speed,
- Existing traffic safety,
- Completing gaps in the bicycle network based on recommendations from the City of Norfolk's *Bicycle and Pedestrian Master Plan*,

- Improving pedestrian crossings, and
- Evaluating the feasibility of lane repurposing.

0.3 Study Area

The study area for the comprehensive transportation study is shown in **Figure 1**. The study area consists of Lafayette Boulevard (VA-247) extending for approximately 0.94 miles from E. 26th/27th Street and Leo Street to the intersection of Tidewater Drive (VA-168). The corridor changes street name designations from E. 26th Street to Lafayette Boulevard at the Lafayette River Bridge. There are fifteen study area intersections shown in **Table 1** – two signalized and thirteen unsignalized – included in the detailed traffic operations analysis.

Table 1: Study Area Intersections

INTERSECTION		TRAFFIC CONTROL
1	E. 27th Street & Leo Street	Unsignalized
2	E. 26th Street & Leo Street	Unsignalized
3	E. 26th Street & Ruffin Way	Unsignalized
4	E. 26th Street & Waverly Way	Signal
5	E. 26th Street & Villa Circle	Unsignalized
6	Lafayette Boulevard & Orleans Circle/Dupont Circle West	Unsignalized (RRFB)
7	Lafayette Boulevard & Orleans Circle/Dupont Circle East	Unsignalized
8	Lafayette Boulevard & St Denis Avenue	Unsignalized
9	Lafayette Boulevard & Degrasse Avenue	Unsignalized
10	Lafayette Boulevard & Bellevue Avenue	Unsignalized
11	Lafayette Boulevard & Versailles Avenue/Norway Place	Unsignalized
12	Lafayette Boulevard & Fontainebleau Crescent	Unsignalized
13	Lafayette Boulevard & Lorraine Avenue	Unsignalized
14	Lafayette Boulevard & Racine Avenue	Unsignalized
15	Lafayette Boulevard & Tidewater Drive	Signal

The Lafayette Boulevard study corridor primarily consists of two typical cross-sections. From Ruffin Way to the west intersection of Orleans Circle/Dupont Circle, the corridor is four-lane undivided with two lanes in each direction, sidewalk on both sides, and a 25-mph posted speed limit. From the west intersection of Orleans Circle/Dupont Circle to Tidewater Drive, the cross-section is four-lane divided with an approximate eleven-feet wide median and sidewalks along both sides. There are two travel lanes in each direction with the outside lanes including sharrows or shared-lane markings for both bicycles and cars. Both directions also have approximately seven-feet designated for on-street parallel parking. The speed limit is posted at 30-mph along this portion of the study corridor. On the far west end of the study area, E. 26th Street and E. 27th Street split into one-way pairs at Ruffin Way and in road bike lanes are in place along both E. 26th Street and E. 27th Street to the west of Leo Street.

1 Existing Conditions Traffic Analysis

1.1 Data Collection

1.1.1 Traffic Counts

Turning movement counts (TMCs) were collected by WSP's subconsultant, Peggy Malone & Associates (PMA), on Thursday September 19, 2024 at the following fourteen study intersections:

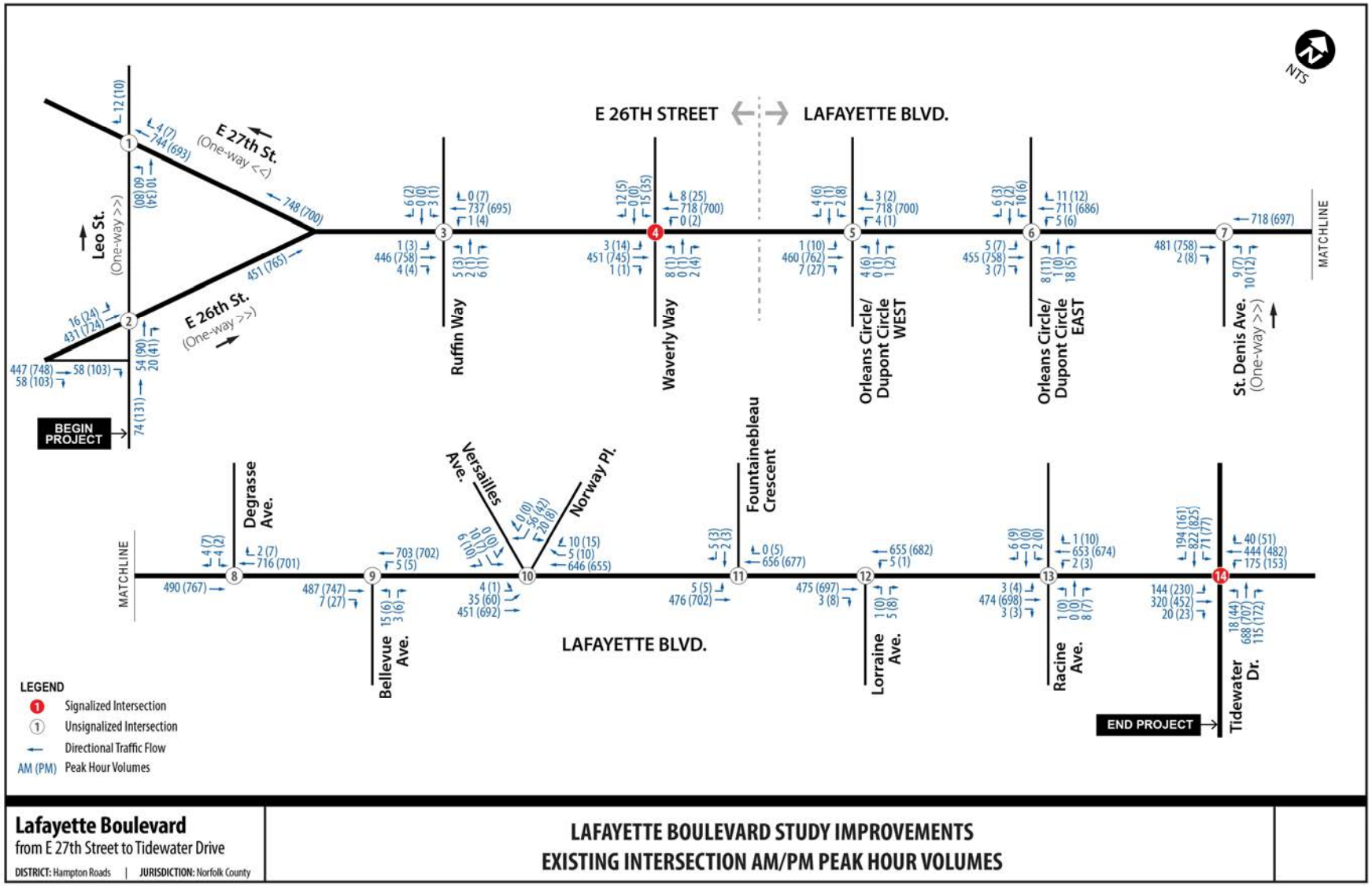
- E. 27th Street & Leo Street
- E. 26th Street & Leo Street
- E. 26th Street & Ruffin Way
- E. 26th Street & Waverly Way
- Lafayette Boulevard & Dupont Circle/Orleans Circle West
- Lafayette Boulevard & Dupont Circle/Orleans Circle East
- Lafayette Boulevard & St Denis Avenue
- Lafayette Boulevard & Degrasse Avenue
- Lafayette Boulevard & Bellevue Avenue
- Lafayette Boulevard & Versailles Avenue/Norway Place
- Lafayette Boulevard & Fontainebleau Crescent
- Lafayette Boulevard & Lorraine Avenue
- Lafayette Boulevard & Racine Avenue
- Lafayette Boulevard & Tidewater Drive

The TMCs were collected from 7 AM to 9 AM and 3:30 PM to 5:30 PM. Based on the TMC data, the AM peak hour generally occurs from 7:30 AM to 8:30 AM except for the Lafayette Boulevard at Tidewater Drive intersection which peaks from 7:15 AM to 8:15 AM. In the PM, the peak hour was more varied, but generally occurs from 4:15 PM to 5:15 PM. Three intersections peaked from 4:30 PM to 5:30 PM and two intersections peaked from 4:00 PM to 5:00 PM. The raw traffic volume data between study area intersections was not balanced. Any imbalances were manually adjusted. The adjusted AM and PM peak hour traffic volumes and ADT volumes are illustrated in **Figure 6**. Raw turning movement count and vehicle classification data are provided in **Appendix C**.

Average daily traffic (ADT) volume counts were collected by PMA for use in traffic operations analysis. Bi-directional traffic volume and classification counts as well as speeds were collected for a total of two days from Wednesday October 9, 2024 to Thursday October 10, 2024 at the following locations:

- E. 26th Street and E. 27th Street between Leo Street and Ruffin Way
- Lafayette Boulevard between Orleans Circle/Dupont Circle East and St. Denis Avenue

Figure 6: 2024 Existing Peak Hour Traffic Volumes



1.1.2 Speed Analysis

A speed analysis was conducted using the speed data collected by PMA on October 9 and 10, 2024 at the locations used to collect traffic volume and classification counts. These locations are shown in **Figure 7**. This data was used to determine average, median, 85th percentile, and 15th percentile speeds at each location. This data is shown in **Table 2**.

Table 2: Lafayette Boulevard Speed Analysis Results

Location	#1 E. 26th Street	#2 E. 27th Street	#3 Lafayette Boulevard	
Direction	EB	WB	EB	WB
ADT (vpd)	8,663	10,388	10,114	8,799
Posted Speed Limit (mph)	25	25	30	30
85th Percentile Speed (mph)	36.35	35.88	38.25	38.23
Average Speed (mph)	28.25	32.25	33.93	33.58
Median Speed (mph)	31.73	28.40	33.23	33.15
Pace Speed (mph)	30 – 40	25 – 35	30 – 40	30 – 40
15th Percentile Speed (mph)	14.10	15.83	29.00	28.83

The 85th percentile speed is defined as the speed at which 85-percent of Drivers will travel at or below under free-flowing conditions. The 85th percentile speed is typically used as a major consideration in determining a street's posted speed limit. Along Lafayette Boulevard, the 85th percentile speeds were all above the posted speed limit. At locations #1 and #2, the posted speed limit is 25 mph, while the 85th percentile speed is much higher at 36 mph. Similarly, at location #3, the posted speed limit is 30 mph, while the 85th percentile speed is much higher at 38 mph in both directions.

Figure 7: Speed Data Collection Locations

1.2 Traffic Safety Analysis

A detailed crash analysis was performed for this study to evaluate the existing conditions. The most recent available five years of crash data was obtained from VDOT's Crash Map (https://vdot.maps.arcgis.com/apps/webappviewer/index.html?id=ef9957cd10964a7286d2f9df5b85e833). This crash analysis used crash data from January 1, 2019 to December 31, 2023 and did not include evaluations of individual crash reports. The crash analysis evaluated the following crash characteristics over the entire study corridor:

- Crash Year
- Crash Severity
- Crash Type
- Crash Time of Day
- Crash Roadway Surface
- Crash Weather Condition
- Crash Light Condition
- Crash Truck Involvement

In addition to the overall corridor, three hot-spot intersections were identified for further evaluation based on the frequency of crashes:

- Lafayette Boulevard at Tidewater Drive
- Lafayette Boulevard at Degrasse Avenue/St Denis Avenue
- E. 26th Street at Leo Street

The following sections detail the corridor and hot-spot crash evaluations.

1.2.1 Corridor Safety Analysis

A total of 167 crashes occurred within the study area from January 1, 2019 through December 31, 2023. This is an average of approximately 33 crashes per year; however, the crash frequency varied widely from 22 crashes per year in 2022 to 44 crashes per year in 2021 as shown in **Figure 8.**

Figure 8: Study Area Annual Crash Distribution

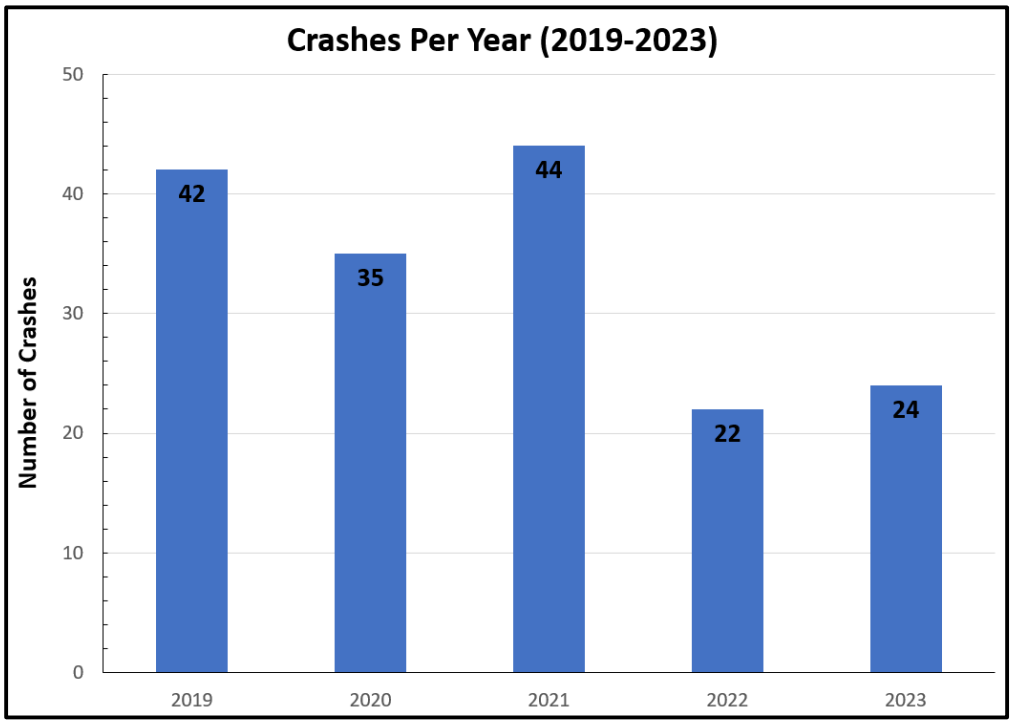


Figure 9 shows that there were 3 fatal crashes (1.80%), 4 ambulatory injury crashes (2.40%), 47 visible injury crashes (28.14%), 6 non-visible injury crashes (3.59%), and 107 property-damage only crashes (64.07%) which occurred in the study area within the five-year analysis period. All three fatal crashes occurred at the intersection of Lafayette Boulevard and Tidewater Drive at night. Two of the fatal crashes were angle crashes (one involving a motorcycle) and the other fatal crash involved a pedestrian. Two of the fatal collisions involved alcohol with no adverse weather conditions and the other fatal crash occurred during rain/wet roadway conditions.

Figure 9: Study Area Crash Severity

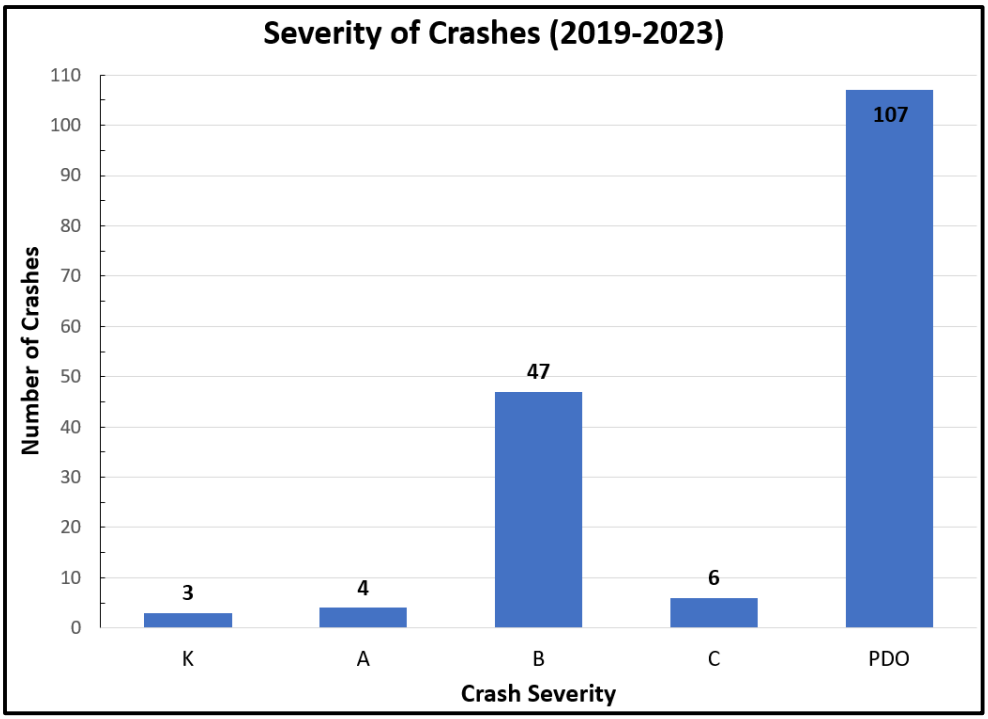


Figure 10 displays the number of crashes that occurred in the study area by time of day, presented in 3-hour increments. The highest frequency of crashes occurred from 3:00 PM-6:00 PM (25%), from 6:00 PM-9:00 PM (21%), and from 9:00 AM–Noon (11%). Nearly half of the crashes along the corridor occurred in the 3 PM to 9 PM window.

Figure 11 summarizes crashes along the corridor by type. Most crashes that occurred were angle crashes (38%), rear-end crashes (34%), and fixed object – off road crashes (14%). There were a total of 3 pedestrian and 2 bicycle related crashes (3% combined) along the study corridor.

Figure 10: Study Area Crashes by Time of Day

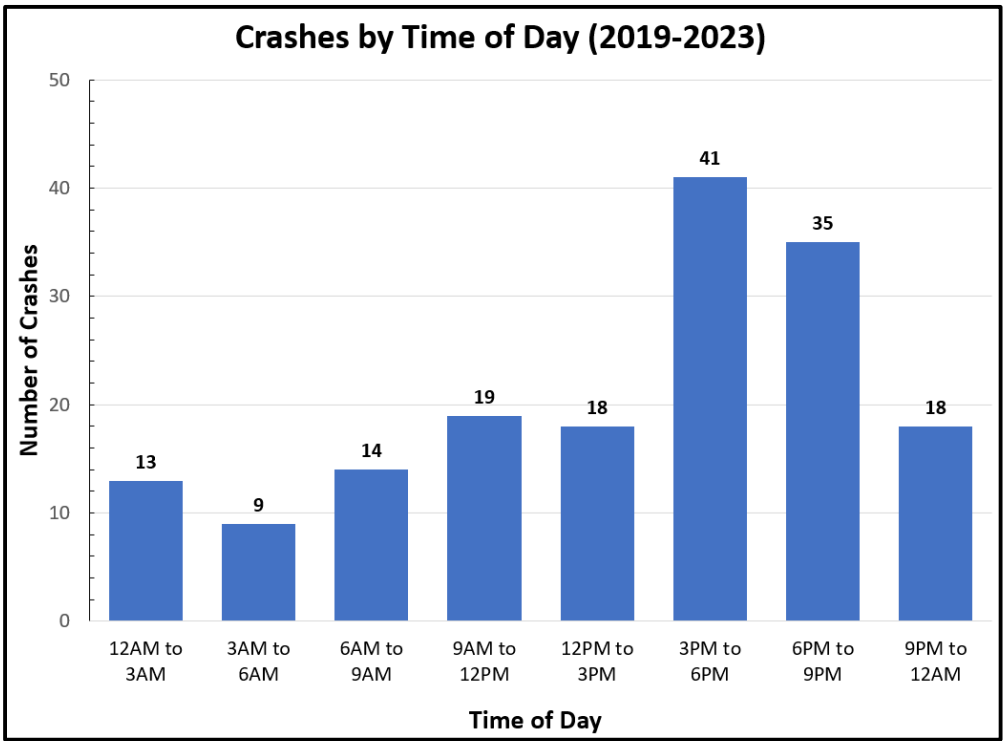


Figure 11: Study Area Crash Types

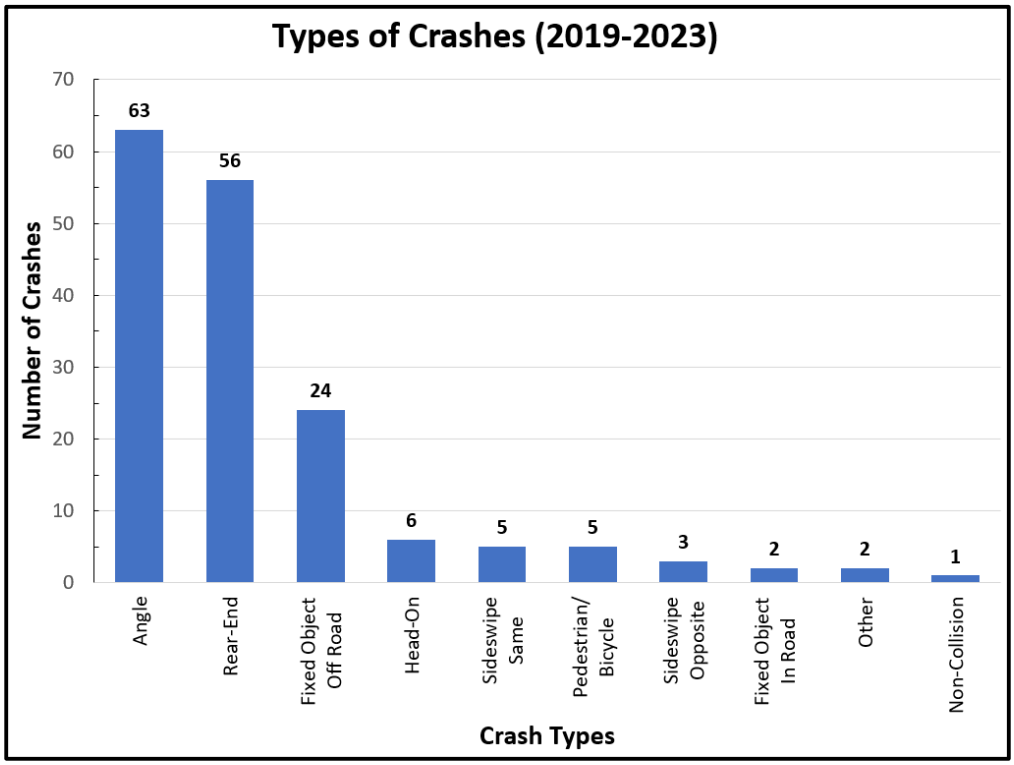


Figure 12 indicates the number of crashes by roadway surface condition within the study area during the five-year study period, 2019-2023. The majority (78%) of crashes occurred during dry roadway conditions while wet roadway surface conditions accounted for 22% of crashes. Similarly, **Figure 13** shows that most collisions in the study area occurred under clear/cloudy (no adverse) weather conditions (78%), with the remainder occurring in rain/misty weather conditions (22%).

Figure 12: Study Area Crashes by Roadway Surface

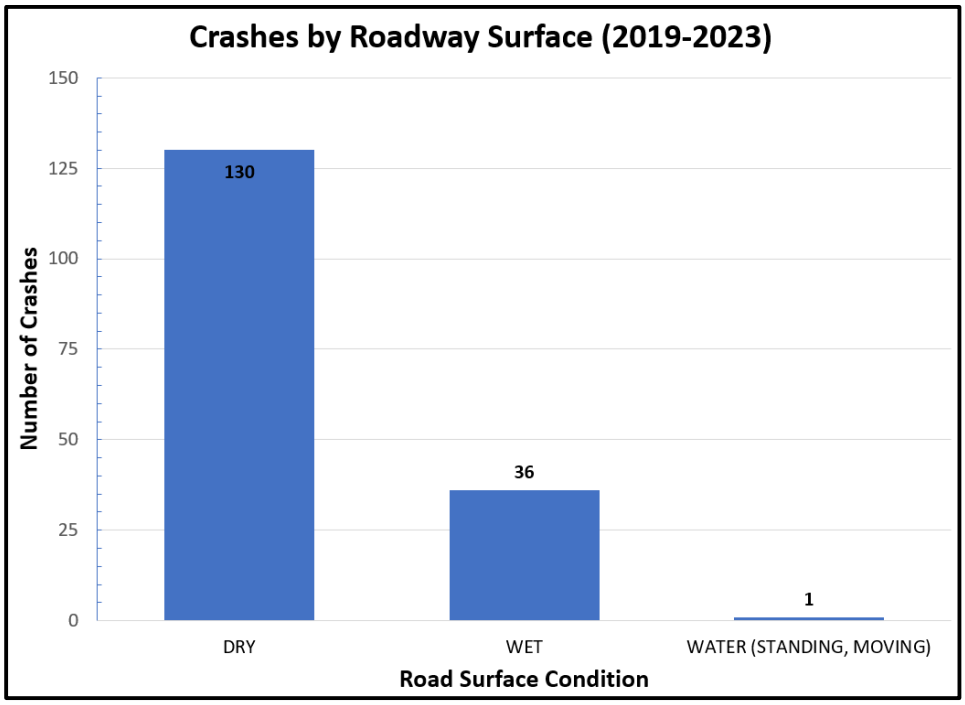


Figure 13: Study Area Crashes by Weather Condition

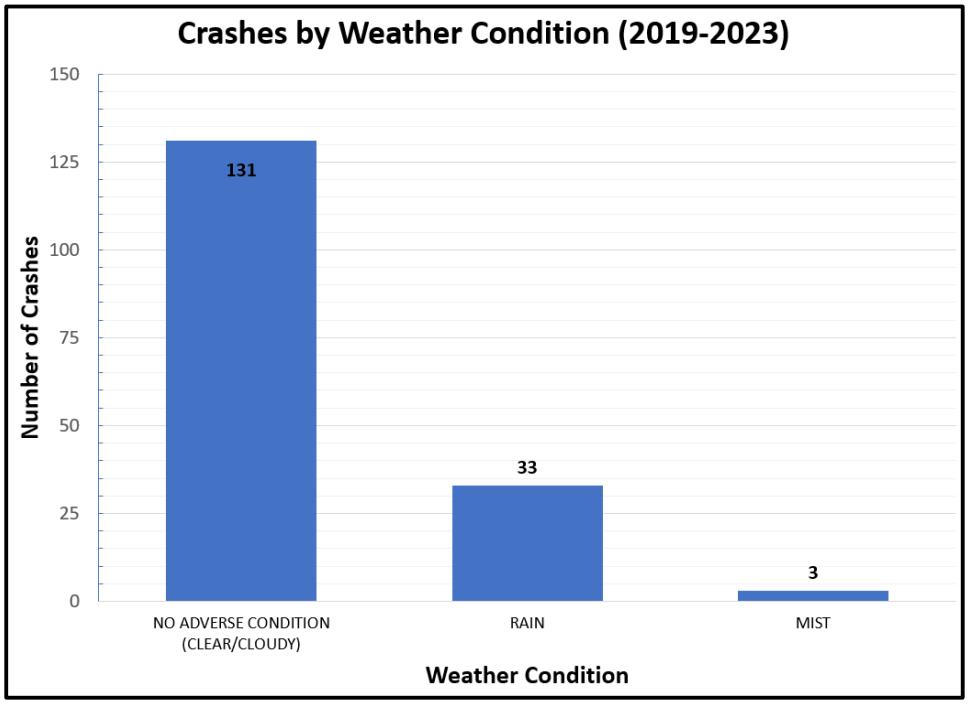
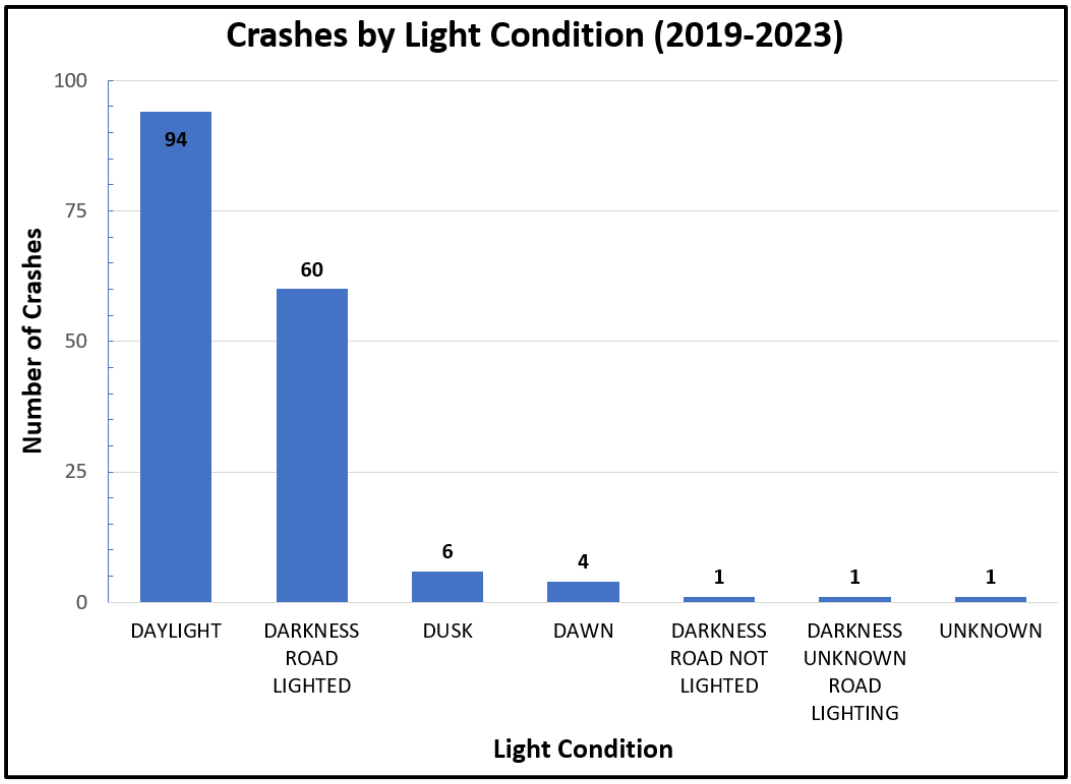


Figure 14 indicates the number of crashes in the study area by light condition. The majority (56%) of crashes occurred during daylight conditions, followed by darkness – road lighted accounting for 36% of crashes.

Figure 14: Study Area Crashes by Light Condition



Within the study area, trucks were involved in 7% of total crashes as shown in **Table 3**, although trucks did not necessarily cause the crashes they were involved in. However, trucks only comprised approximately 2.5% of the total traffic along Lafayette Boulevard in the year 2021. Therefore, large trucks are overrepresented in collisions along the corridor.

Table 3: Study Area Crash Truck Involvement (2019-2023)

Corridor/Location	Truck Involved Crashes	Non-Truck Involved Crashes	Total Crashes	Percent Truck Involved Crashes
Lafayette Boulevard	11	156	167	6.59%

1.2.2 Crash Hot-Spot Evaluation

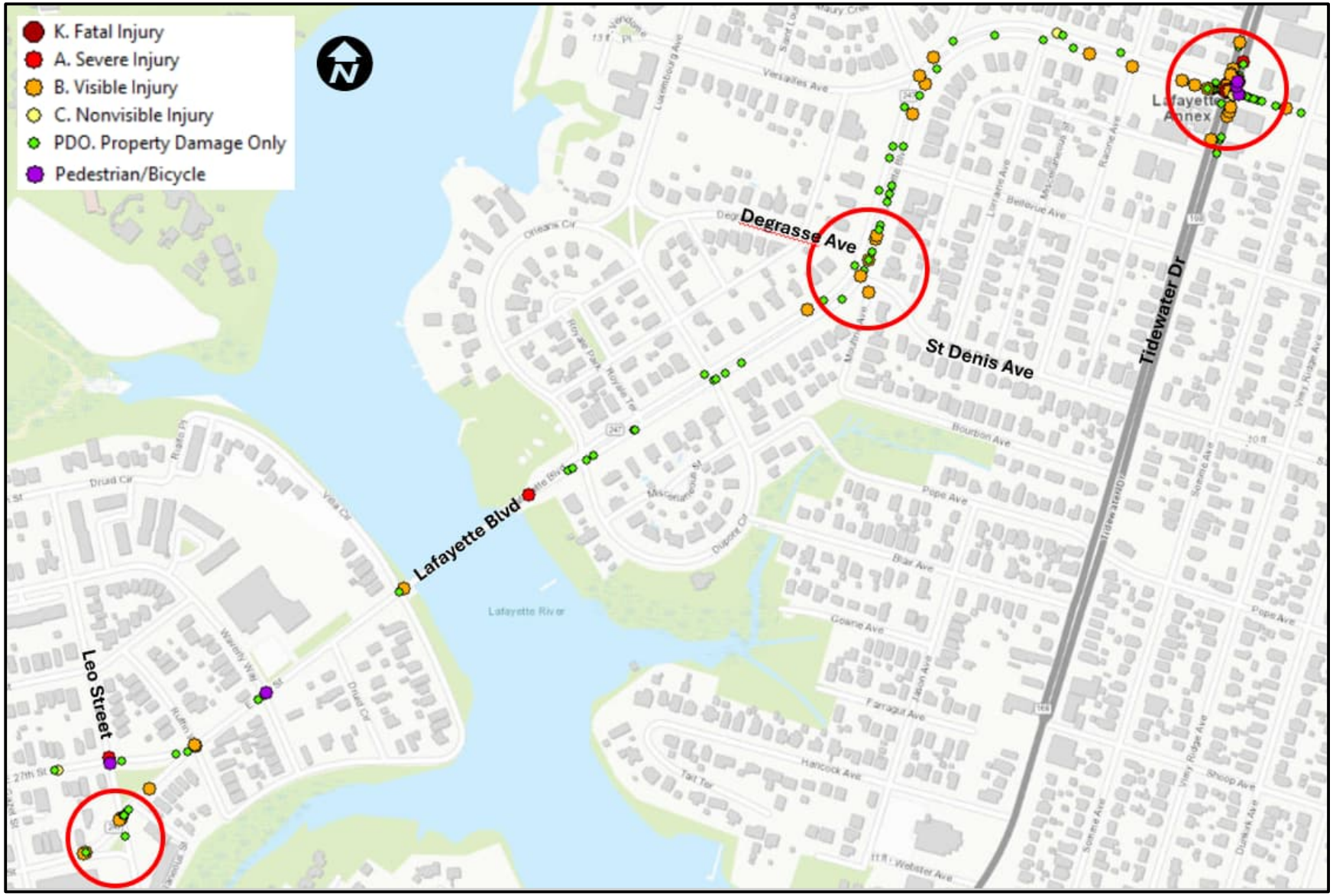
The Lafayette Boulevard study corridor was broken up into intersection influence areas and roadway segments to better identify high crash areas. 158 of the 167 crashes (95%) along the corridor were assigned to intersection influence areas. Intersection crashes by location are shown in **Table 4**.

As shown in **Table 4**, 84 of the 158 intersection crashes (53%) occurred at the intersection of Lafayette Boulevard and Tidewater Drive, including three fatal collisions. 13 (8%) occurred at the Degrasse Avenue/St Denis Avenue offset T-intersection, and 12 (8%) occurred at the intersection of E. 26th Street and Leo Street. Therefore, 109 of the 167 total crashes (65%) along the study corridor occurred at these three intersections. A crash location map for the entire study area is shown in **Figure 15** and illustrates the hot-spot locations as well as the locations of pedestrian and bicycle related collisions.

Table 4: Lafayette Boulevard Intersection Crashes (2019-2023)

Intersection	5-Year Crash Total	Crashes/ Year	Fatal Crashes	Injury Crashes	PDO Crashes	Angle Crashes	Rear-End Crashes	Fixed Object Off-Road Crashes	Bike/Ped Crashes
Tidewater Drive	84	16.8	3	29	52	37	30	5	3
Degrasse Ave/St Denis Ave	13	2.6	0	5	8	1	4	5	0
E. 26th Street & Leo Street	12	2.4	0	4	8	6	1	3	0
Versailles Ave/Norway Pl	7	1.4	0	4	3	3	0	2	0
Bellevue Avenue	7	1.4	0	0	7	0	4	3	0
Lorraine Avenue	6	1.2	0	1	5	0	6	0	0
Racine Avenue	4	0.8	0	3	1	2	1	1	0
E. 27th Street & Leo Street	4	0.8	0	2	2	2	1	0	1
E. 26th Street & Ruffin Way	4	0.8	0	2	2	3	0	1	0
E. 26th Street & Waverly Way	4	0.8	0	1	3	2	1	0	1
Dupont Circle/Orleans Circle West	4	0.8	0	0	4	2	2	0	0
Dupont Circle/Orleans Circle East	4	0.8	0	0	4	2	1	1	0
Villa Circle	2	0.4	0	1	1	1	1	0	0
Royale Terrace	2	0.4	0	0	2	0	2	0	0
Fontainebleau Crescent	1	0.2	0	0	1	1	0	0	0
TOTALS	158	31.6	3	52	103	62	54	21	5

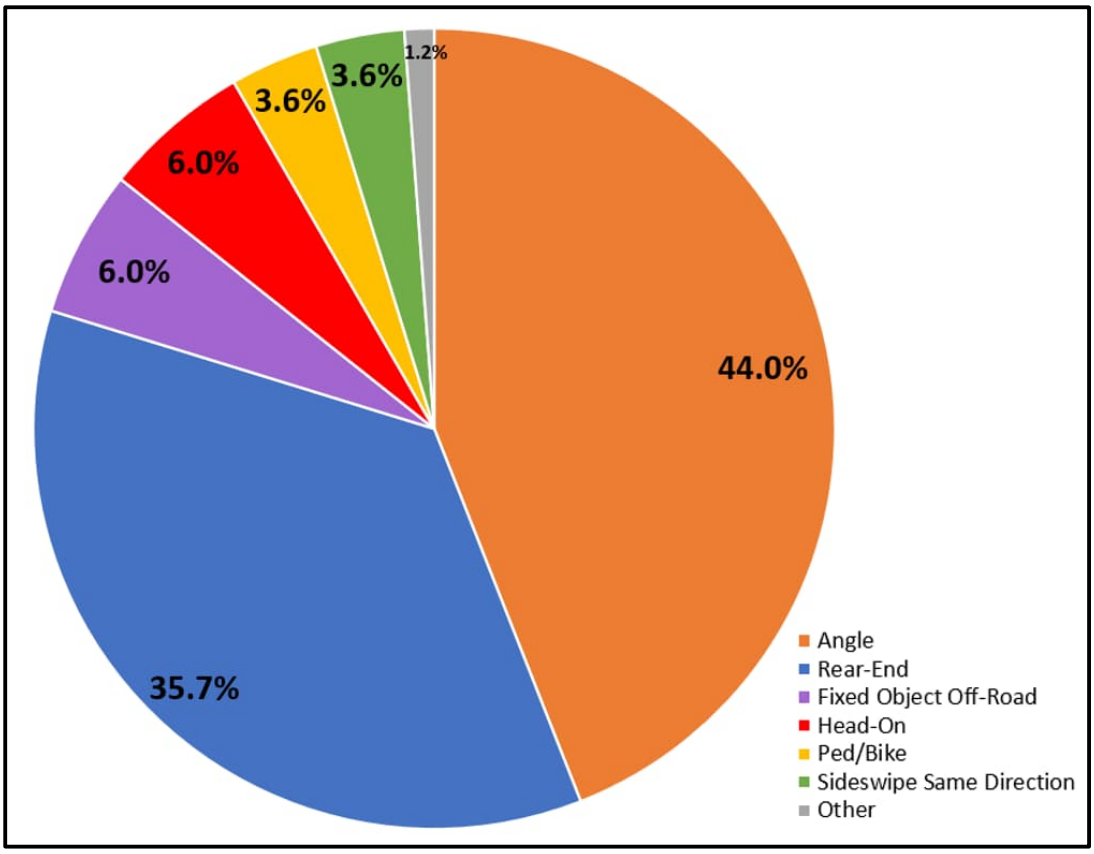
Figure 15: Corridor Crash Heat Map (2019-2023)



1.2.3 Crash Hot-Spot #1: Lafayette Boulevard at Tidewater Drive

The intersection of Lafayette Boulevard and Tidewater Drive and its influence area was selected for additional hot-spot crash analysis due to having the largest number of crashes along the corridor. This intersection experienced 84 crashes during the five-year period, or 17 crashes per year, and included all three of the fatal crashes along the corridor. Of the 84 crashes at this intersection, 37 (44%) were angle, 30 (36%) were rear-end, 5 (6%) were head-on, 5 (6%) were fixed object off-road, and 3 (4%) were bicycle/pedestrian-related. 28 of the 84 total crashes at this location or one-third of the crashes resulted in severe and visible injuries. **Figure 16** shows a breakdown of crashes at this intersection by collision type.

Figure 16: Lafayette Boulevard at Tidewater Drive – Crashes by Collision Type

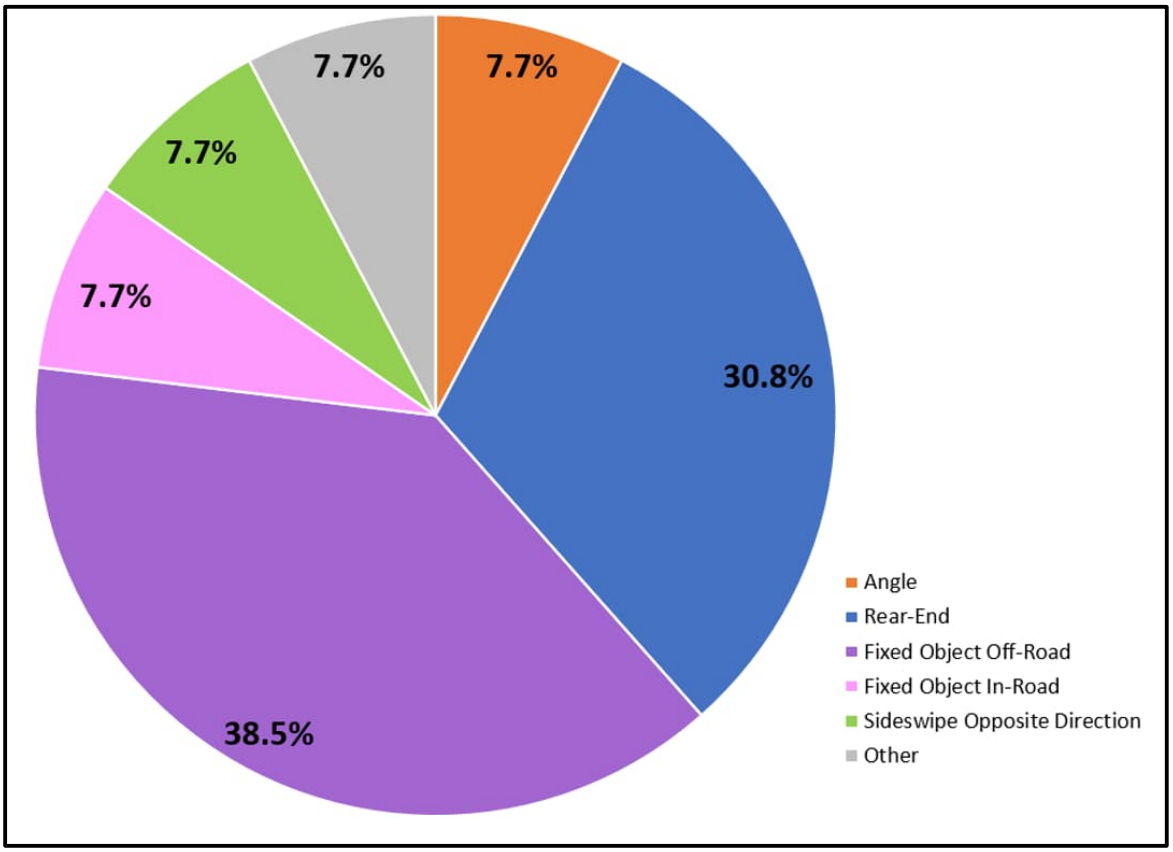


The three fatal crashes at the intersection of Lafayette Boulevard and Tidewater Drive all occurred in dark conditions with roadway lighting. One fatal, alcohol-related, angle crash occurred in 2020, shortly after 9 PM, with no adverse weather conditions and dry pavement. One fatal angle crash occurred in 2021, shortly after 6 PM, involving a motorcycle which occurred in the rain with wet pavement. The third fatal crash also occurred in 2021, shortly after 11 PM, was also alcohol-related and involved a pedestrian with no adverse weather conditions and dry pavement.

1.2.4 Crash Hot-Spot #2: Lafayette Boulevard at Degrasse Avenue/St. Denis Avenue

The intersection of Lafayette Boulevard at Degrasse Avenue and St. Denis Avenue form an offset T-intersection configuration, both three-legged intersections and separated by less than 100-feet. It was selected for additional hot-spot crash analysis due to having the second largest number of crashes along the corridor. This intersection experienced 13 crashes during the five-year period, or approximately 3 crashes per year. Of the 13 crashes at this intersection, 5 (38%) were fixed object off-road, 4 (31%) were rear-end, and 1 (8%) was an angle collision. 5 of the 13 total crashes (38%) at this location resulted in visible injuries. These intersections lie on a horizontal curve, so limited intersection sight distance and speed may explain the large percentage of fixed object off-road collisions at this location as the curve has an advisory speed of 25 mph. **Figure 17** shows a breakdown of crashes at this intersection by collision type.

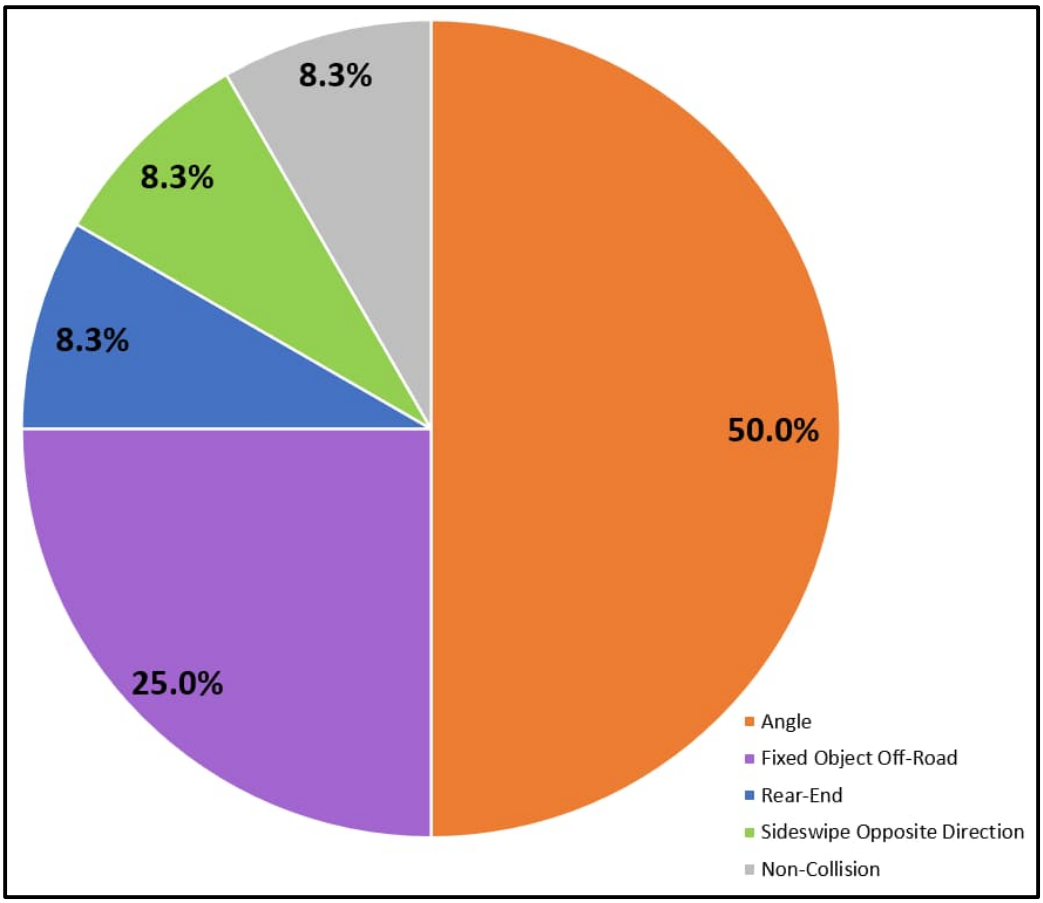
Figure 17: Lafayette Boulevard at Degrasse Ave/St. Denis Ave – Crashes by Collision Type



1.2.5 Crash Hot-Spot #3: E. 26th Street at Leo Street

The intersection of E. 26th Street at Leo Street and its influence area was selected for additional hot-spot crash analysis due to having the third largest number of crashes along the corridor. This intersection experienced 12 crashes during the five-year period, or approximately 2 crashes per year. Of the 12 crashes at this intersection, 6 (50%) were angle, 3 (25%) were fixed object off-road, and 1 (8%) was rear-end. 4 of the 12 total crashes (33%) at this location resulted in visible injuries. **Figure 18** shows a breakdown of crashes at this intersection by collision type.

Figure 18: E. 26th Street at Leo Street – Crashes by Collision Type



1.2.6 Potential Mitigation Strategies and Crash Modification Factors

After discussions with the City, it was determined that a road diet would be implemented as a mitigation strategy on this roadway. The SMART SCALE Round 6 CMF list, VA State preferred CMF list, *Crash Modification Factor Clearinghouse*[1] and *FHWA Desktop Reference for Crash Reduction Factors*[2] were utilized to identify the Crash Modification Factors (CMFs) associated with this preferred improvement along Lafayette Boulevard.

The CMFs were selected based on the improvements designated for the *2030* conditions and VDOT's order of preference for use of CMF lists: 1) SMART SCALE Planning Level CMFs – Round 6, 2) Virginia State Preferred CMF List, 3) *CMF Clearinghouse*[1], and 4) *FHWA Desktop Reference for CRFs*[2]. The CMFs selected and utilized for the road diet along Lafayette Boulevard are shown in **Table 5.** It is important to note that a CMF is a multiplicative factor that indicates the proportion of crashes that would be expected after implementing a countermeasure. CMFs with a value less than 1.0 indicate an expected decrease in crashes. CMFs greater than 1.0 indicate an expected increase in crashes. The estimate is based on research studies which may only be based on the crash experience at a limited number of study sites. In addition, crashes are random in nature; therefore, the actual change in crashes and benefits may vary.

Table 5: Crash Modification Factors for Lafayette Boulevard Improvements

Countermeasure	CRASH MODIFICATION FACTOR (CMF)	APPLICABILITY
Add median (along roadway segment)	0.74	All Types/ All Severities
Convert a 4-lane road to a 2-lane road	0.53	All Types/ All Severities
Add 1 left-turn lane (none present on approach)	0.73	All Types/ All Severities
Add 2 left-turn lanes (none present on approach)	0.53	All Types/ All Severities
Add bicycle lane on roadway (not separated)	0.42	Bicycle

[1] Federal Highway Administration. (2017). Crash Modification Factors Clearinghouse. Washington, DC. Retrieved from http://www.cmfclearinghouse.org/.
[2] Federal Highway Administration. (2014). *Desktop Reference for Crash Reduction Factors*. Washington, DC. Retrieved from https://safety.fhwa.dot.gov/tools/crf/resources/fhwasa08011/.

1.3 Traffic Operations Analysis

1.3.1 Analysis Tools and Assumptions

Traffic operational analyses were conducted using *Synchro 11* traffic analysis software, which utilizes methodologies that are consistent with the *Highway Capacity Manual* (HCM) published by the Transportation Research Board of the National Academies. In addition, the analysis methodology and assumptions are consistent with the standards in VDOT's *Traffic Operations and Safety Analysis Manual* (TOSAM) Version 2.0.

The City of Norfolk provided their *Synchro* network with existing signal timings and phasing for the signalized intersections in the study area including cycle lengths, splits, and offsets, which was used to complete this analysis.

1.3.2 Measures of Effectiveness (MOEs)

For the intersection capacity analysis, two measures-of-effectiveness were evaluated: level of service (LOS) and vehicle delay. For the purposes of this report, simplified definitions of these terms are provided in this section.

LOS describes the amount of traffic congestion at an intersection or on a roadway and ranges from A to F (A indicating a condition of little to no congestion and F indicating severe congestion, unstable traffic flow, and stop-and-go conditions). LOS is based on the average delay experienced by all traffic using the intersection during the busiest (peak) 15-minute period. Generally, LOS A through LOS D are considered acceptable for overall intersection LOS in urban environments as a standard industry practice. However, it is not atypical for individual intersection approaches and movements to operate at LOS E or LOS F in more developed urban and suburban areas.

Delay and associated LOS for signalized and unsignalized intersections are reported from the *Synchro* analysis. A graphical depiction of overall intersection LOS is shown in **Figure 19**. **Table 6** shows the corresponding thresholds in delay for both signalized and unsignalized intersections.

Figure 19: Overall Intersection LOS Depiction

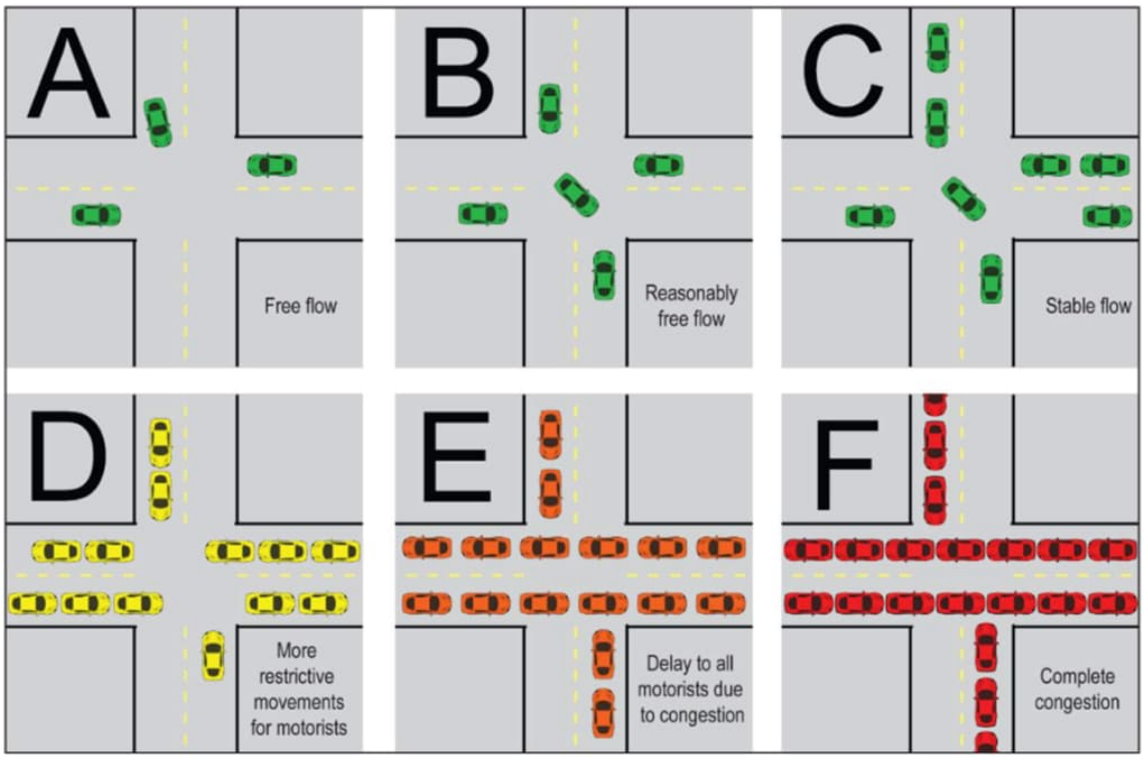


Table 6: LOS Control Delay Thresholds

LOS	Signalized Intersection Control Delay (seconds/vehicle)	Unsignalized Intersection Control Delay (seconds/vehicle)	Description
A	≤ 10	≤ 10	Free-flow traffic operations at average travel speeds. Vehicles completely unimpeded in ability to maneuver.
B	10 – 20	10 – 15	Reasonably unimpeded traffic operations at average travel speeds. Vehicle maneuverability slightly restricted.
C	20 – 35	15 – 25	Stable traffic operations. Lane changes becoming more restricted. Travel speeds reduced to half of average free flow speeds.
D	35 – 55	25 – 35	Small increases in traffic flow can cause increased delays.
E	55 – 80	35 – 50	Significant delays. Travel speeds reduced to one third of average free flow travel speed.
F	> 80	> 50	Extremely low speeds. Intersection congestion and extensive queues at intersections.

1.3.3 Existing Conditions Traffic Operation Analysis Results

A detailed traffic operations analysis was performed for this study to evaluate the existing conditions. This analysis examined traffic operations during the AM and PM peak hours under the existing roadway geometry with the existing (2024) traffic volumes provided in **Figure 6**.

Traffic operations analysis for the existing 2024 conditions were conducted with Synchro 11 traffic analysis software to evaluate the overall performance of the study intersections within the Lafayette Boulevard corridor. Delay in seconds per vehicle were reported from Synchro for all the signalized and unsignalized intersections. **Figure 20** presents the overall intersection AM and PM peak hour LOS graphically with color coding. **Table 7** summarizes the AM and PM peak hour delay for each movement for the study intersections along the corridor. Synchro output sheets are provided in the **Appendix**.

The results indicate that all intersections along the corridor operate at LOS A, with the exception of the intersection at Tidewater Drive which operates at LOS D in both the AM and PM peak hour with overall delay values that exceed 35 seconds per vehicle. All eastbound and westbound movements along Lafayette Boulevard at Tidewater Drive operate with greater than 35 seconds per vehicle in both the AM and PM peak hour. In addition, both Waverly Way approaches at E. 26th Street operate at LOS D with greater than 35 seconds per vehicle of delay during both the AM and PM peak hour.

Figure 20: Existing AM/PM Level of Service

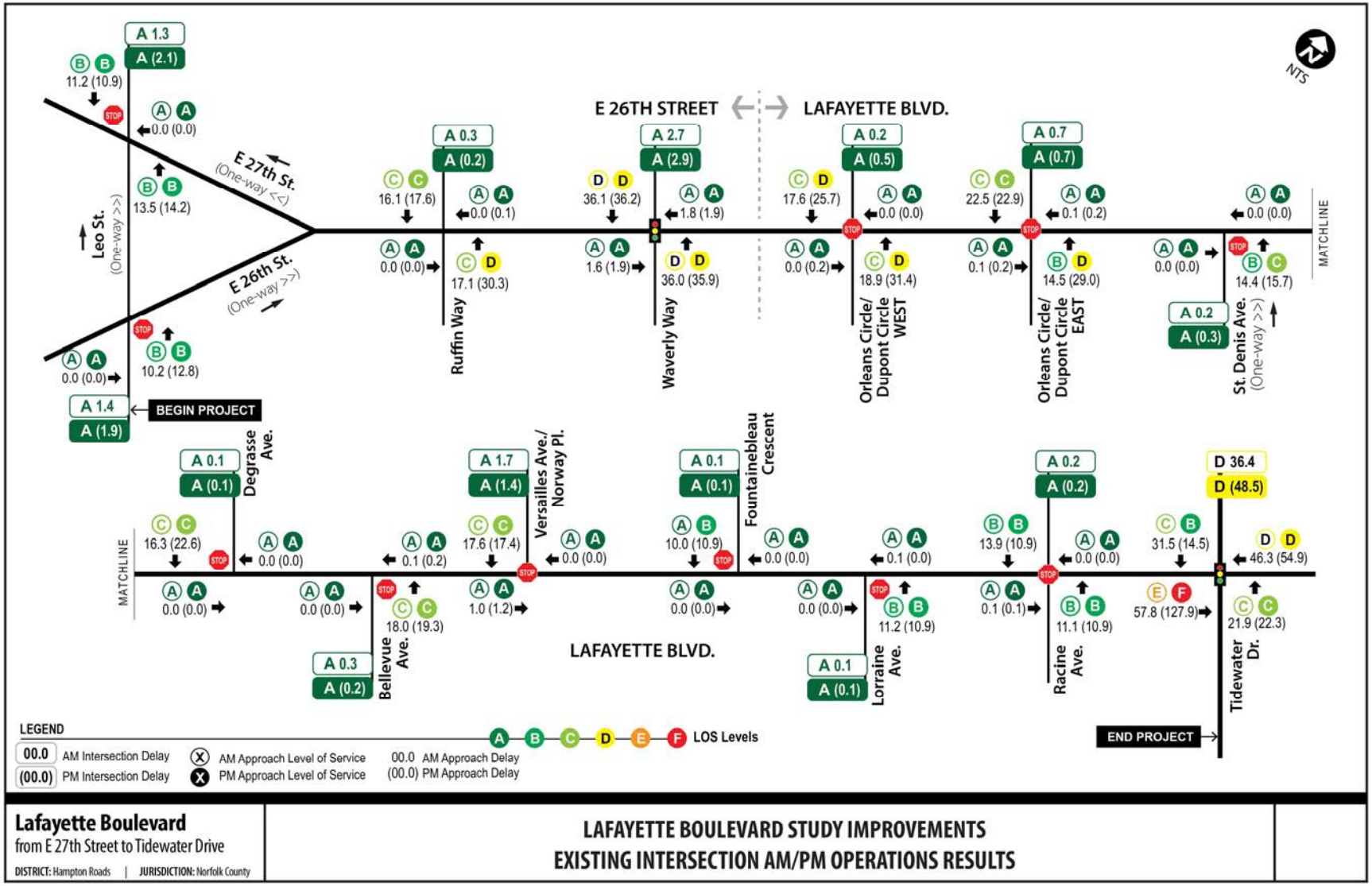


Table 7: Existing Conditions AM and PM Peak Hour Delay

Intersection		Control	Overall Delay (LOS)	Average Delay (sec/veh) and Level of Service											
				Eastbound			Westbound			Northbound			Southbound		
				LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
1	E 27th Street & Leo Street	Two-Way Stop Control	AM Peak Hour												
			1.3 (A)	---			---	0.0 (A)		13.5 (B)		---	---	---	11.2 (B)
				---	---	---	---	0.0	0.0	12.9	17.0	---	---	---	11.2
				---	---	---	---	A	A	B	C	---	---	---	B
			PM Peak Hour												
			2.1 (A)	---			---	0.0 (A)		14.2 (B)		---	---	---	10.9 (B)
				---	---	---	---	0.0	0.0	12.9	17.1	---	---	---	10.9
				---	---	---	---	A	A	B	C	---	---	---	B
2	E 26th Street & Leo Street	Two-Way Stop Control	AM Peak Hour												
			1.4 (A)	0.0 (A)			---			10.2 (B)			---		
				0.0		0.0	---	---	---	---	10.2		---	---	---
				A		A	---	---	---	---	B		---	---	---
			PM Peak Hour												
			1.9 (A)	0.0 (A)			---			12.8 (B)			---		
				0.0		0.0	---	---	---	---	12.8		---	---	---
				A		A	---	---	---	---	B		---	---	---
3	E 26th Street & Ruffin Way	Two-Way Stop Control	AM Peak Hour												
			0.3 (A)	0.0 (A)			0.0 (A)			17.1 (C)			16.1 (C)		
				9.4	0.0		8.4	0.0		17.1			16.1		
				A	A		A	A		C			C		
			PM Peak Hour												
			0.2 (A)	0.0 (A)			0.1 (A)			30.3 (D)			17.6 (C)		
				9.3	0.0		9.5	0.0		30.3			17.6		
				A	A		A	A		D			C		
4	E 26th Street & Waverly Way	Signal	AM Peak Hour												
			2.7 (A)	1.6 (A)			1.8 (A)			36.0 (D)			36.1 (D)		
				1.6			1.8			36.0			36.1		
				A			A			D			D		
			PM Peak Hour												
			2.9 (A)	1.9 (A)			1.9 (A)			35.9 (D)			36.2 (D)		
				1.9			1.9			35.9			36.2		
				A			A			D			D		

Table 7: Existing Conditions AM and PM Peak Hour Delay (Continued)

	Intersection	Control	Overall Delay (LOS)	Average Delay (sec/veh) and Level of Service											
				Eastbound			Westbound			Northbound			Southbound		
				LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
5	Lafayette Boulevard & Orleans Circle/ Dupont Circle WEST	Two-Way Stop Control	**AM Peak Hour**												
			0.2 (A)	0.0 (A)			0.0 (A)			18.9 (C)			17.6 (C)		
				9.3	0.0		8.4	0.0		18.9			17.6		
				A	A		A	A		C			C		
			PM Peak Hour												
			0.5 (A)	0.2 (A)			0.0 (A)			31.4 (D)			25.7 (D)		
				9.3	0.1		9.6	0.0		31.4			25.7		
				A	A		A	A		D			D		
6	Lafayette Boulevard & Orleans Circle/ Dupont Circle EAST	Two-Way Stop Control	**AM Peak Hour**												
			0.7 (A)	0.1 (A)			0.1 (A)			14.5 (B)			22.5 (C)		
				9.4	0.0		8.4	0.0		14.5			22.5		
				A	A		A	A		B			C		
			PM Peak Hour												
			0.7 (A)	0.2 (A)			0.2 (A)			29.0 (D)			22.9 (C)		
				9.3	0.1		9.6	0.1		29.0			22.9		
				A	A		A	A		D			C		
7	Lafayette Boulevard & St Denis Ave	One-Way Stop Control	**AM Peak Hour**												
			0.2 (A)	0.0 (A)			0.0 (A)			14.4 (B)			---		
				---	0.0	8.5	0.0	---		14.4			---	---	---
				---	A	A	A	---		B			---	---	---
			PM Peak Hour												
			0.3 (A)	0.0 (A)			0.2 (A)			15.7 (C)			---		
				---	0.0	9.6	0.1	---		15.7			---	---	---
				---	(A)	A	A	---		C			---	---	---
8	Lafayette Boulevard & Degrasse Ave	One-Way Stop Control	**AM Peak Hour**												
			0.1 (A)	0.0 (A)			0.0 (A)			---			16.3 (C)		
			9.3	0.0	---		---	0.0		---	---	---	16.3		
			A	A	---		---	A		---	---	---	C		
			PM Peak Hour												
			0.1 (A)	0.0 (A)			0.0 (A)			---			22.6 (C)		
			9.3	0.0	---		---	0.0		---	---	---	22.6		
			A	A	---		---	A		---	---	---	C		

Table 7: Existing Conditions AM and PM Peak Hour Delay (Continued)

Intersection		Control	Overall Delay (LOS)	Average Delay (sec/veh) and Level of Service											
				Eastbound				Westbound			Northbound			Southbound		
				LT	TH	RT		LT	TH	RT	LT	TH	RT	LT	TH	RT
9	Lafayette Boulevard & Bellevue Ave	One-Way Stop Control		AM Peak Hour												
			0.3 (A)	0.0 (A)				0.1 (A)			18.0 (C)			---		
				---	0.0	8.5	0.0	---			18.0			---	---	---
				---	A	A	A	---			C			---	---	---
				PM Peak Hour												
			0.2 (A)	0.0 (A)				0.2 (A)			19.3 (C)			---		
				---	0.0	9.6	0.1	---			19.3			---	---	---
				---	A	A	A	---			C			---	---	---
10	Lafayette Boulevard & Versailles Ave/ Norway Pl	Two-Way Stop Control		AM Peak Hour												
			1.7 (A)	1.0 (A)				0.0 (A)			---			17.6 (C)		
				9.3	0.3	---		---	0.0	0.0	---	---	---	17.6		
				A	A	---		---	A	A	---	---	---	C		
				PM Peak Hour												
			1.4 (A)	1.2 (A)				0.0 (A)			---			17.4 (C)		
				9.5	0.5	---		---	0.0	0.0	---	---	---	17.4		
				A	A	---		---	A	A	---	---	---	C		
11	Lafayette Boulevard & Fontaine-bleau Crescent	One-Way Stop Control		AM Peak Hour												
			0.1 (A)	0.0 (A)				0.0 (A)			---			10.0 (A)		
				0.0	0.0	---		---	0.0		---	---	---	10.0		
				A	A	---		---	A		---	---	---	A		
				PM Peak Hour												
			0.1 (A)	0.0 (A)				0.0 (A)			---			10.9 (B)		
				0.0	0.0	---		---	0.0		---	---	---	10.9		
				A	A	---		---	A		---	---	---	B		
12	Lafayette Boulevard & Lorraine Ave	One-Way Stop Control		AM Peak Hour												
			0.1 (A)	0.0 (A)				0.1 (A)			11.2 (B)			---		
				---	0.0			8.5	0.0	---	11.2			---	---	---
				---	A			A	A	---	B			---	---	---
				PM Peak Hour												
			0.1 (A)	0.0 (A)				0.0 (A)			10.9 (B)			---		
				---	0.0			9.3	0.0	---	10.9			---	---	---
				---	A			A	A	---	B			---	---	---

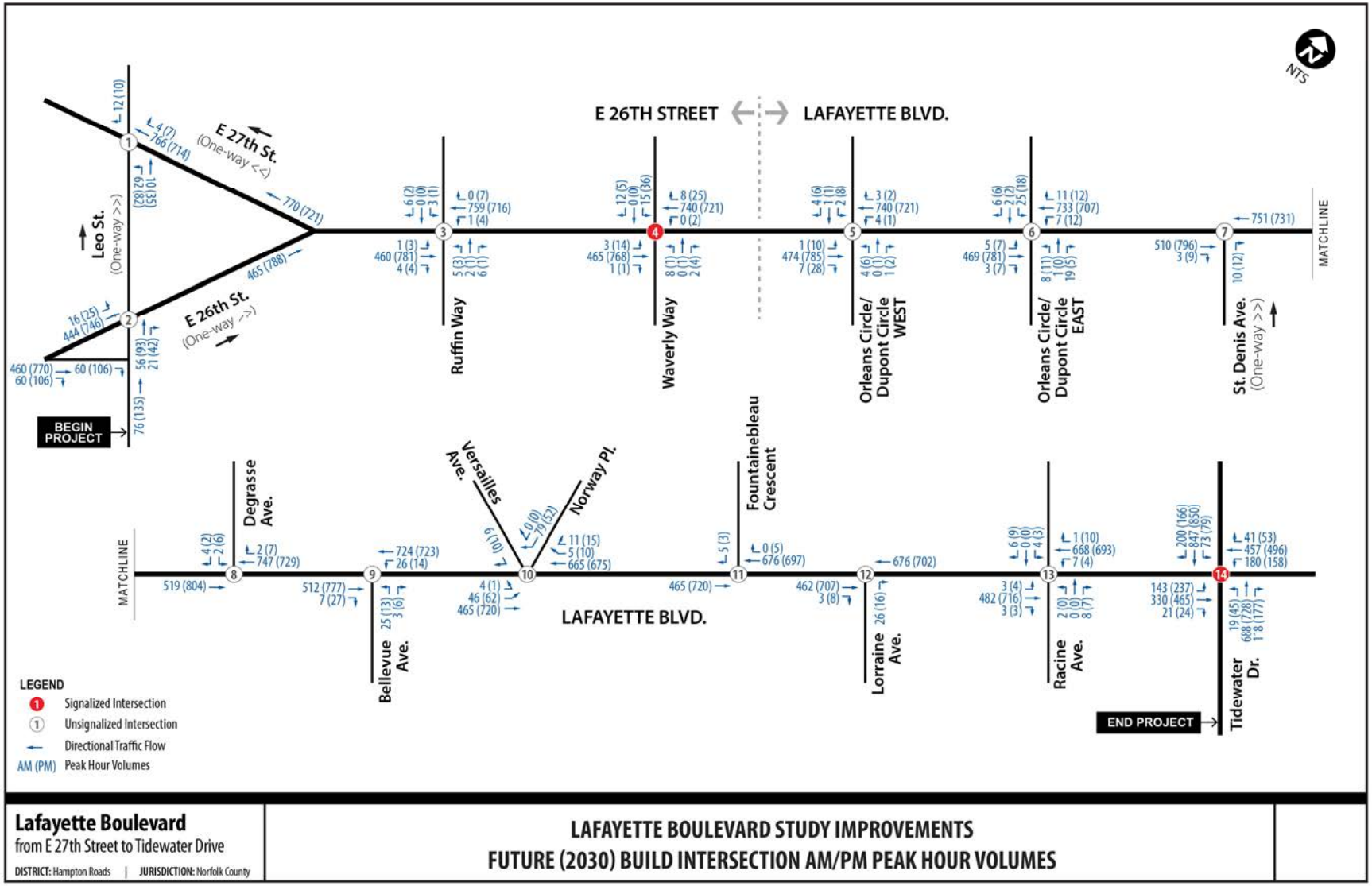
Table 7: Existing Conditions AM and PM Peak Hour Delay (Continued)

Intersection		Control	Overall Delay (LOS)	Average Delay (sec/veh) and Level of Service											
				Eastbound			Westbound			Northbound			Southbound		
				LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
13	Lafayette Boulevard & Racine Ave	Two-Way Stop Control		AM Peak Hour											
			0.2 (A)	0.1 (A)			0.0 (A)			11.1 (B)			13.9 (B)		
				9.1	0.0		8.5	0.0		11.1			13.9		
				A	A		A	A		B			B		
				PM Peak Hour											
			0.2 (A)	0.1 (A)			0.0 (A)			10.9 (B)			10.9 (B)		
				9.2	0.0		9.3	0.0		10.9			10.9		
				A	A		A	A		B			B		
14	Lafayette Boulevard & Tidewater Drive	Signal		AM Peak Hour											
			36.4 (D)	57.8 (E)			46.3 (D)			21.9 (C)			31.5 (C)		
				35.6	68.9	41.0	38.9	49.0		16.2	22.0		13.5	32.8	
				D	E	D	D	D		B	C		B	C	
				PM Peak Hour											
			48.5 (D)	127.9 (F)			54.9 (D)			22.3 (C)			14.5 (B)		
				53.8	170.1	40.7	40.3	59.1		13.1	22.7		13.5	14.6	
				D	F	D	D	E		B	C		B	B	

1.3.4Build Conditions Traffic Operation Analysis Results

After discussions with the City, it was determined that a road diet would be implemented on this roadway. A detailed traffic operations analysis was performed for this study to evaluate the build conditions with the new road diet geometry. The build traffic analysis utilized traffic volumes projected with a 0.5% per year growth rate to the year 2030. This analysis examined traffic operations during the AM and PM peak hours under the proposed roadway geometry with the 2030 future projected traffic volumes provided in **Figure 21**.

Figure 21: 2030 Build Peak Hour Traffic Volumes



Traffic operations analysis for the build 2030 conditions were conducted with Synchro 11 traffic analysis software to evaluate the overall performance of the study intersections within the Lafayette Boulevard corridor with the new road diet geometry. Delay in seconds per vehicle were reported from Synchro for all the signalized and unsignalized intersections. **Figure 20** presents the overall intersection AM and PM peak hour LOS graphically with color coding. **Table 8** summarizes the AM and PM peak hour delay for each movement for the study intersections along the corridor. Synchro output sheets are provided in the **Appendix**.

The results indicate that all intersections along the corridor operate at LOS A, with the exception of the intersection at Tidewater Drive which operates at LOS D in both the AM and PM peak hour with overall delay values that exceed 35 seconds per vehicle. All eastbound and westbound movements along Lafayette Boulevard at Tidewater Drive operate with greater than 35 seconds per vehicle in both the AM and PM peak hour. In addition, both Waverly Way approaches at E. 26th Street operate at LOS D with greater than 35 seconds per vehicle of delay during both the AM and PM peak hour.

All movements along Lafayette Boulevard operate at LOS A, with the exception of the movements at Tidewater Drive. There are several approaches along the side streets that operate at a failing LOS; however, it is important to note that the side streets have very low volumes, especially when compared to the main line volumes along Lafayette Boulevard.

Figure 22: 2030 Build AM/PM Level of Service

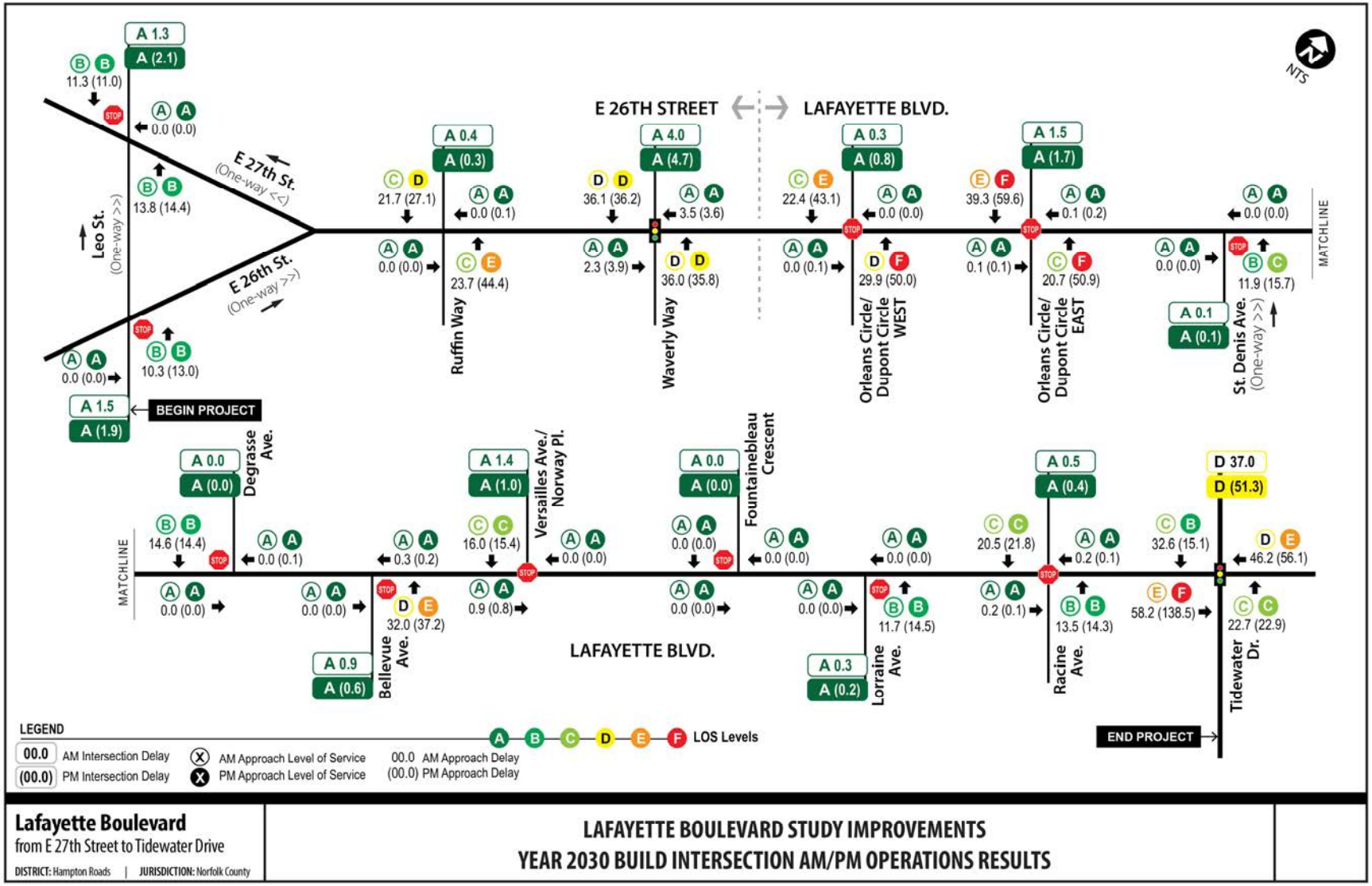


Table 8: 2030 Build Conditions AM and PM Peak Hour Delay

Intersection		Control	Overall Delay (LOS)	Average Delay (sec/veh) and Level of Service											
				Eastbound			Westbound			Northbound			Southbound		
				LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
1	E 27th Street & Leo Street	Two-Way Stop Control	**AM Peak Hour**												
			1.3 (A)	---			---	0.0 (A)		13.8 (B)		---	---	---	11.3 (B)
				---	---	---	---	0.0	0.0	13.2	17.4	---	---	---	11.3
				---	---	---	---	A	A	B	C	---	---	---	B
			PM Peak Hour												
			2.1 (A)	---			---	0.0 (A)		14.4 (B)		---	---	---	11.0 (B)
				---	---	---	---	0.0	0.0	13.1	17.6	---	---	---	11.0
				---	---	---	---	A	A	B	C	---	---	---	B
2	E 26th Street & Leo Street	Two-Way Stop Control	**AM Peak Hour**												
			1.5 (A)	0.0 (A)			---			10.3 (B)			---		
				0.0		0.0	---	---	---	---	10.3		---	---	---
				A		A	---	---	---	---	B		---	---	---
			PM Peak Hour												
			1.9 (A)	0.0 (A)			---			13.0 (B)			---		
				0.0		0.0	---	---	---	---	13.0		---	---	---
				A		A	---	---	---	---	B		---	---	---
3	E 26th Street & Ruffin Way	Two-Way Stop Control	**AM Peak Hour**												
			0.4 (A)	0.0 (A)			0.0 (A)			23.7 (C)			21.7 (C)		
				9.5	0.0		8.4	0.0		23.7			21.7		
				A	A		A	A		C			C		
			PM Peak Hour												
			0.3 (A)	0.0 (A)			0.1 (A)			44.4 (E)			27.1 (D)		
				9.3	0.0		9.6	0.0		44.4			27.1		
				A	A		A	A		E			D		
4	E 26th Street & Waverly Way	Signal	**AM Peak Hour**												
			4.0 (A)	2.3 (A)			3.5 (A)			36.0 (D)			36.1 (D)		
				2.3			3.5			36.0			36.1		
				A			A			D			D		
			PM Peak Hour												
			4.7 (A)	3.9 (A)			3.6 (A)			35.8 (D)			36.2 (D)		
				3.9			3.6			35.8			36.2		
				A			A			D			D		

Table 8: 2030 Build Conditions AM and PM Peak Hour Delay (Continued)

Intersection		Control	Overall Delay (LOS)	Average Delay (sec/veh) and Level of Service											
				Eastbound			Westbound			Northbound			Southbound		
				LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
5	Lafayette Boulevard & Orleans Circle/ Dupont Circle WEST	Two-Way Stop Control	**AM Peak Hour**												
			0.3 (A)	0.0 (A)			0.0 (A)			29.9 (D)			22.4 (C)		
				9.4	0.0		8.5	0.0		29.9			22.4		
				A	A		A	A		D			C		
			PM Peak Hour												
			0.8 (A)	0.1 (A)			0.0 (A)			50.0 (F)			43.1 (E)		
				9.4	0.0		9.7	0.0		50.0			43.1		
				A	A		A	A		F			E		
6	Lafayette Boulevard & Orleans Circle/ Dupont Circle EAST	Two-Way Stop Control	**AM Peak Hour**												
			1.5 (A)	0.1 (A)			0.1 (A)			20.7 (C)			39.3 (E)		
				9.4	0.0		8.4	0.0		20.7			39.3		
				A	A		A	A		C			E		
			PM Peak Hour												
			1.7 (A)	0.1 (A)			0.2 (A)			50.9 (F)			59.6 (F)		
				9.3	0.0		9.6	0.0		50.9			59.6		
				A	A		A	A		F			F		
7	Lafayette Boulevard & St Denis Ave	One-Way Stop Control	**AM Peak Hour**												
			0.1 (A)	0.0 (A)			0.0 (A)			11.9 (B)			---		
				---	0.0		0.0			---	---	11.9	---	---	---
				---	A		A			---	---	B	---	---	---
			PM Peak Hour												
			0.1 (A)	0.0 (A)			0.0 (A)			15.7 (C)			---		
				---	0.0		0.0			---	---	15.7	---	---	---
				---	A		A			---	---	C	---	---	---
8	Lafayette Boulevard & Degrasse Ave	One-Way Stop Control	**AM Peak Hour**												
			0.0 (A)	0.0 (A)			0.0 (A)			---			14.6 (B)		
			9.4	---			---	0.0		---	---	---	---	---	14.6
			A	---			---	A		---	---	---	---	---	B
			PM Peak Hour												

			0.0 (A)		0.0 (A)		0.1 (A)		---			14.4 (B)		
				9.4	---	---	0.0	---	---	---	---	---	---	14.4
				A	---	---	A	---	---	---	---	---	---	B

Table 8: 2030 Build Conditions AM and PM Peak Hour Delay (Continued)

Intersection		Control	Overall Delay (LOS)	Average Delay (sec/veh) and Level of Service											
				Eastbound				Westbound			Northbound			Southbound		
				LT	TH	RT		LT	TH	RT	LT	TH	RT	LT	TH	RT
9	Lafayette Boulevard & Bellevue Ave	One-Way Stop Control		AM Peak Hour												
			0.9 (A)	0.0 (A)				0.3 (A)			32.0 (D)			---		
				---	0.0	8.7	---	---			32.0			---	---	---
				---	A	A	---	---			D			---	---	---
				PM Peak Hour												
			0.6 (A)	0.0 (A)				0.2 (A)			37.2 (E)			---		
				---	0.0	9.8	---	---			37.2			---	---	---
				---	A	A	---	---			E			---	---	---
10	Lafayette Boulevard & Versailles Ave/ Norway Pl	Two-Way Stop Control		AM Peak Hour												
			1.4 (A)	0.9 (A)				0.0 (A)			---			16.0 (C)		
				9.4	0.0	---		---	0.0	0.0	---	---	---	16.0		
				A	A	---		---	A	A	---	---	---	C		
				PM Peak Hour												
			1.0 (A)	0.8 (A)				0.0 (A)			---			15.4 (C)		
				9.6	0.0	---		---	0.0	0.0	---	---	---	15.4		
				A	A	---		---	A	A	---	---	---	C		
11	Lafayette Boulevard & Fontaine-bleau Crescent	One-Way Stop Control		AM Peak Hour												
			0.0 (A)	0.0 (A)				0.0 (A)			---			0.0 (A)		
				0.0	0.0	---		---	0.0		---	---	---	0.0		
				A	A	---		---	A		---	---	---	A		
				PM Peak Hour												
			0.0 (A)	0.0 (A)				0.0 (A)			---			0.0 (A)		
				0.0	0.0	---		---	0.0		---	---	---	0.0		
				A	A	---		---	A		---	---	---	A		
12	Lafayette	One-Way		AM Peak Hour												
				0.0 (A)				0.0 (A)			11.7 (B)			---		

	Boulevard & Lorraine Ave	Stop Control	0.3 (A)	---	0.0	0.0	0.0	---	11.7	---	---	---
				---	A	A	A	---	B	---	---	---
			PM Peak Hour									
			0.2 (A)	0.0 (A)		0.0 (A)			14.5 (B)	---		
				---	0.0	0.0	0.0	---	14.5	---	---	---
				---	A	A	A	---	B	---	---	---

Table 8: 2030 Build Conditions AM and PM Peak Hour Delay (Continued)

Intersection		Control	Overall Delay (LOS)	Average Delay (sec/veh) and Level of Service										
				Eastbound			Westbound			Northbound			Southbound		
				LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
13	Lafayette Boulevard & Racine Ave	Two-Way Stop Control	AM Peak Hour												
			0.5 (A)	0.2 (A)			0.2 (A)			13.5 (B)			20.5 (C)		
				9.2	0.0		8.5	0.0		13.5			20.5		
				A	A		A	A		B			C		
			PM Peak Hour												
			0.4 (A)	0.1 (A)			0.1 (A)			14.3 (B)			21.8 (C)		
				9.3	0.0		9.3	0.0		14.3			21.8		
				A	A		A	A		B			C		
14	Lafayette Boulevard & Tidewater Drive	Signal	AM Peak Hour												
			37.0 (D)	58.2 (E)			46.2 (D)			22.7 (C)			32.6 (C)		
				35.4	69.4	40.8	39.2	48.8		16.9	22.8		14.0	33.9	
				D	E	D	D	D		B	C		B	C	
			PM Peak Hour												
			51.3 (D)	138.5 (F)			56.1 (E)			22.9 (C)			15.1 (B)		
				59.3	184.1	40.8	40.9	60.6		13.5	23.3		13.9	15.3	
				E	F	D	D	E		B	C		B	B	

2 ROADWAY DESIGN

2.1 Existing Corridor

2.1.1 Existing Roadway

Lafayette Boulevard from Leo Street to Tidewater Drive is a four-lane roadway with two (2) 10' wide eastbound lanes and two (2) 10' wide westbound lanes. The roadway was observed to have normal crown (urban low speed) throughout the entire corridor. From the intersection at Leo St. to west of the Orleans Circle / Dupont Circle intersection, the corridor is undivided. East of the Orleans Circle / Dupont Circle intersection, the corridor is divided by a variable width median ranging from 7' to 10'. VDOT standard CG-6 curb, and gutter is consistent along the full length of the corridor both eastbound and westbound. East of Orleans Circle / Dupont Circle, 7' wide on – street parking spans to Tidewater Drive in both directions. Throughout the corridor, the bike users share the outside travel lane in the eastbound and westbound directions. GIS property boundaries were used for the conceptual layout and the corridor improvements are currently within the City's right-of-way. Currently, there are fifteen (15) roadway intersections.

During the site walk, WSP observed existing sidewalks that were deformed from tree roots and concrete spalling throughout the corridor. Multiple intersections were observed as not containing a pedestrian curb ramp across the intersection. Other curb ramps were directed towards medians without median openings or refuge. Observations for sidewalks and curb ramps can be seen in **Appendix E.**

2.1.2 Existing Roadway Classifications

The classification of Lafayette Boulevard is an Urban Minor Arterial (GS-6) by VDOT and Urban Principal Arterial according to the City of Norfolk Roadway Classification. The average daily traffic (ADT) in vehicle per day (VPD) for Lafayette Boulevard between Leo Street and Tidewater Drive is approximately 10,114 EB and 8,799 WB. The posted speed limit on this corridor is 25 mph from Leo Street to West of Dupont Circle and 30mph from Dupont Circle to Tidewater Drive. The existing classifications of the roadways within the project corridor are presented in **Table 9**. The location of the intersections are identified in **Figure 23** below.

Table 9: Existing Roadway Classifications

NO.	Road Name	Classification (VDOT)	GS	Design Speed (mph)	Posted Speed (mph)
1	East 26th Street	Urban Minor Arterial	GS-6	25	20
2	Leo Street	Urban Local Street	GS-8	25	20
3	Ruffin Way	Urban Local Street	GS-8	25	20
4	Waverly Way	Urban Local Street	GS-8	25	20
5	Druid Circle	Urban Local Street	GS-8	25	20

6	Villa Circle	Urban Local Street	GS-8	25	20
7	Orleans Circle	Urban Local Street	GS-8	25	20
8	Dupont Circle	Urban Local Street	GS-8	25	20
9	Royale Terrace	Urban Local Street	GS-8	25	20
10	Saint Denis Avenue	Urban Local Street	GS-8	25	20
11	Degrasse Avenue	Urban Local Street	GS-8	25	20
12	Bellevue Avenue	Urban Local Street	GS-8	25	20
13	Versailles Avenue	Urban Local Street	GS-8	25	20
14	Norway Place	Urban Collector Street	GS-7	30	25
15	Fontainebleau Crescent	Urban Local Street	GS-8	25	20
16	Lorraine Avenue	Urban Local Street	GS-8	25	20
17	Racine Avenue	Urban Local Street	GS-8	25	20
18	Tidewater Drive	Urban Principal Arterial	GS-5	40	35

Figure 23: Existing Intersection Locations

2.2 Corridor Improvements

The proposed roadway improvements along Lafayette Boulevard were designed with a 35 – mph design speed and will maintain the same roadway classification of VDOT GS – 6. The corridor features a single 11' travel lane with dedicated 11' wide left turn lanes at median openings. Additionally, a 5' wide dedicated bike lane was added in both directions with a variable width buffer throughout the full length of the corridor. Where left turn lanes were added, the on – street parking were removed to allow for the bike lane to continue. The left turn lanes were designed using a minimum taper length of 100' and minimum storage length of 100', from VDOT Road Design Manual, Appendix F.

WSP performed a site walk and observed sidewalk obstructions and miscellaneous curb ramp deficiencies. The sidewalks and curb ramps were not considered for corridor improvements, but recommended for future corridor enhancements. Documented photos are referenced in **Appendix E.**

2.2.1 Access Management

Roadway access management options were evaluated throughout the corridor following the VDOT Road Design Manual, Appendix F. The minimum spacing standards for median crossovers for functional classification Minor Arterial at design speed of Lafayette Boulevard is 660 feet. Selected median openings were closed to restrict left turns onto Lafayette Boulevard with a standard VDOT MS-2 grass median strip on horizontal curves and where median openings were close together. The proposed median access configurations are highlighted in the sections below.

Orleans Circle and Dupont Circle

Dedicated left turn lanes were added at the intersections of east and west Dupont Cir along Lafayette Boulevard in both directions. The left turn lanes will allow the thru movement on Lafayette Boulevard to continue uninterrupted. **Figure 24** shows the left turn lane configuration.

Figure 24: Proposed Orleans Circle and Dupont Ave Intersection and Median Access closure at Royale Terrace

Royale Terrace

The median opening at Royal Terrace has been closed to restrict additional left turns onto Lafayette Boulevard. Left turns from Royal Terrace can be directed to Orleans Cir or east Dupont Cir as seen in **Figure 24.**

St. Denis Ave and Degresse Ave

St. Denis Ave and Degrasse Ave intersections are both located on a horizontal curve. Field research revealed that visibility was restricted in both directions by trees, guardrail, and the location of the intersection on the horizontal curve. The two intersections are in close proximity to each other

and are high on the crash hot-spot evaluation in **Table 4**. **Figure 25** shows the proposed median closures at both intersections. Left turn access into the neighborhood will be diverted to Orleans Circle and Bellevue Avenue.

Figure 25: ***Proposed Median Access Closures at St. Denis Ave and Degrasse***

Bellevue Ave

A proposed pedestrian crosswalk with pedestrian median refuge is proposed at the Bellevue Ave intersection because it is located on a tangent section between two horizontal curves. A left turn lane onto Bellevue is also recommended to allow access to Tidewater Dr and St. Denis Avenue that has been closed. **Figure 26** illustrates the pedestrian crosswalk, ADA ramps, median refuge, and left turn lane.

Figure 26: ***Proposed Intersection Improvements at Bellevue Ave***

Norway Place and Versailles Avenue

Two alternatives are recommended to be considered for the Norway Place and Versailles Avenue intersection. Alternative 1 in **Figure 27** depicts a left turn from Lafayette Boulevard eastbound to Norway Place and Versailles Avenue. Left turns onto Lafayette Boulevard from both streets would be restricted. A “Michigan Left” at Bellevue Avenue was evaluated using a passenger car in AutoTURN to see if it was possible to access Lafayette Boulevard heading east towards Tidewater Drive. It was found that the passenger car could not make the U-turn at Bellevue Avenue. Drivers would need to turn left at Bellevue Avenue and use Lorraine Avenue, Racine Avenue, or Tidewater Drive to continue east on Lafayette Boulevard.

Alternative 2 in **Figure 28** is similar to Alternative 1 with left turns onto Norway Place and Versailles Avenue from eastbound Lafayette Avenue. However, an additional median opening is provided for Norway Place to turn left onto Lafayette Boulevard.

Both alternatives have a proposed curb added on between Fontainebleau Crescent and Norway Place to provide 10’ curb separation for the existing fire hydrant as seen in **Figure 27** and **Figure 28**.

Figure 27: Alternative 1 Intersection Improvements at Norway Place, Versailles Avenue and Fontainebleau Cresent

Figure 28: Alternative 2 Intersection Improvements at Norway Place, Versailles Ave.

Fontainebleau Crescent

The median at Fontainebleau Crescent is recommended to be closed due to the angle of the intersection on the horizontal curve and visual constraints from westbound Lafayette Boulevard traffic. Left turns can be directed to Racine Avenue.

Lorraine Avenue

Figure 29 shows the median at Lorraine Avenue being closed due to the location along the horizontal curve on Lafayette Boulevard. Left turns onto Lafayette Boulevard can be directed to Bellevue Avenue.

Racine Avenue

At Racine Avenue, the proposed Lafayette Boulevard thru lanes will match the existing lane configuration on the west side of Racine Avenue. The proposed dedicated bike lanes will use the on-street parking on the west side of Racine Avenue and transition to the existing sharrow configuration on the east side of the street. The improvements at Racine Avenue are seen in **Figure 29**.

Figure 29: ***Proposed Median Access Closures at Lorraine Ave and Intersection Improvements at Racine Ave***

2.3 Bicycle and Pedestrian Facilities

Existing bicycle facilities along Lafayette Boulevard. are shared with the outside travel lanes. Bike lanes were designed with a minimum width of 5' using the VDOT Road Design Manual, Appendix A (1). The proposed bicycle lanes will utilize the existing outside travel lane to create variables from 1-4 feet width buffered bike lane in the eastbound and westbound direction. Existing on – street parking lanes were removed for the bike lanes where dedicated left turn lanes are proposed at intersections. Pavement markings will delineate the separation between vehicle and bicycle traffic.

A crosswalk is proposed at the intersection of Bellevue Avenue and Lafayette Boulevard, featuring a 5' wide, 12' long median refuge and ADA-compliant curb ramps. This stretch of roadway is tangent and provides an increased sight distance for vehicles and pedestrians as seen in **Figure 30**. WSP recommends moving the bus stop located west of Versailles Avenue to just left of the proposed crosswalk to provide easy access for pedestrians.

Figure 30: Proposed Variable Width Buffered Bike Lane and Crosswalk

3 STORMWATER

3.1 Drainage Basins

The project is in the Elizabeth River drainage basin within Virginia Hydrologic Unit Code (VAHUC) JL56. The project area ultimately drains to the Chesapeake Bay via the Lafayette, Elizabeth, and James rivers. The Lafayette River is listed as an impaired waterway for aquatic life, fish and shellfish consumption, and swimming and boating. The Elizabeth and James Rivers and the Chesapeake Bay are listed as impaired for aquatic life and fish and shellfish consumption. The Chesapeake Bay has existing TMDLs for Total Phosphorus (TP), Total Nitrogen (TN), and Total Suspended Solids (TSS).

3.2 Pre-Development Conditions

There are few drainage inlets along Lafayette Boulevard, with only five curb inlets and one drop inlet on the main road between Tidewater Drive and the Lafayette River. The road is crowned and runoff either enters drainage inlets on side streets or sheet flows into drainage channels. Some of the curb inlets on Lafayette Boulevard are partially blocked by layers of road asphalt, as shown in **Figure 31**. The road has poor positive drainage, with evidence of ponding and sedimentation along the gutter pan, as shown in **Figure 32**. This ponding and sedimentation have caused erosion and degradation of curbs and drainage structures, as shown in **Figure 33**.

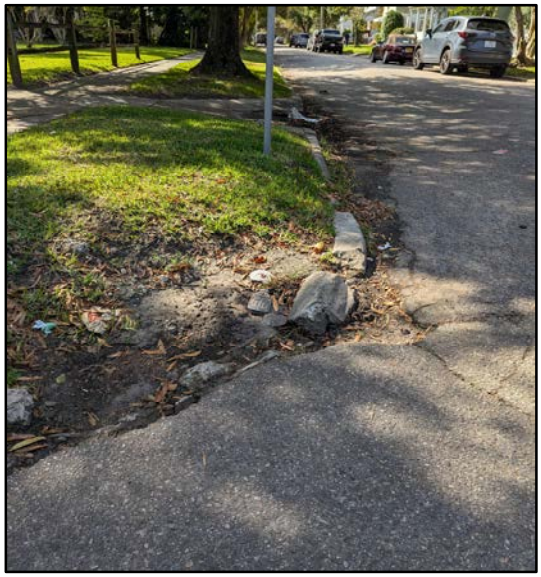
This report assumes that the project area currently experiences localized flooding based on evidence of ponding and sedimentation. A comprehensive stormwater review would need to be conducted to determine the extent and severity of localized flooding.

3.2.1 Site Photos

Figure 31: Curb Inlets Partially Blocked by Layers of Road Asphalt

Figure 32: Evidence of Ponding and Sedimentation on Lafayette Boulevard

Figure 33: Erosion and Degradation of Curb (left) and Drainage Inlet (right)



3.3 Post-Development Conditions

3.3.1 Water Quantity Requirements

Channel Protection

Channel protection requirements shall be in accordance with 9VAC25-875-600, Section B of the VESM. Concentrated stormwater flow shall be released into a stormwater conveyance

system and shall meet the criteria of the manmade or natural stormwater conveyance systems.

Per Section B.1.a, in order to meet channel protection to a manmade made system:

- The manmade stormwater conveyance system shall convey the post-development peak flow rate from the two-year 24-hour storm event without causing erosion of the system, or;
- The peak discharge requirements for concentrated stormwater flow to natural stormwater conveyance systems.

To meet channel protection to a natural conveyance system, Section B.3, the maximum peak flow rate from the one-year 24-hour storm following the land-disturbing activity shall be calculated using the energy balance equation:

$Q_{Developed} \leq I.F.*(Q_{Pre\text{-}developed}* RV_{Pre\text{-}Developed})/RV_{Developed}$

Under no condition shall $Q_{Developed}$ be greater than $Q_{Pre\text{-}Developed}$ nor shall $Q_{Developed}$ be required to be less than that calculated in the equation $(Q_{Forest} * RV_{Forest})/RV_{Developed}$; where

I.F. (Improvement Factor) equals 0.8 for sites > 1 acre or 0.9 for sites ≤ 1 acre.

$Q_{Developed}$ = The allowable peak flow rate of runoff from the developed site.

$RV_{Developed}$ = The volume of runoff from the site in the developed condition.

$Q_{Pre\text{-}Developed}$ = The peak flow rate of runoff from the site in the pre-developed condition.

$RV_{Pre\text{-}Developed}$ = The volume of runoff from the site in pre-developed condition.

Q_{Forest} = The peak flow rate of runoff from the site in a forested condition.

RV_{Forest} = The volume of runoff from the site in a forested condition

By decreasing impervious cover to each of the project outfalls, the project shall meet channel protection requirements. Verification with calculations is required to calculate the two-year 24-hour storm event velocity or energy balance equation.

Flood Protection

The project experiences flood in pre-development conditions. Flood protection requirements shall be in accordance with 9VAC25-875-600, Section C.2 of the VESM. For systems that currently experience localized flooding during the 10-year, 24-hour storm event:

- Confines the post-development peak flow rate form the 10-year 24-hour storm event within the stormwater conveyance system to avoid the localized flooding. Detention of stormwater or downstream improvements may be incorporated into the approved land-disturbing activity to meet this criterion at the discretion of the VESMP authority; or
- Releases a post-development peak flow rate for the 10-year 24-hour storm event that is less than the pre-development peak flow rate from the 10-year 24-hour storm event. Downstream stormwater conveyance systems do not require any additional analysis to show compliance with flood protection criteria if this option is utilized.

The project shall meet flood protection requirements by decreasing impervious land cover to the project drainage areas, thus decreasing the 10-year 24-hour peak flow rate. Verification with calculations is required to calculate pre- and post-development peak flow rates to each outfall's limits of analysis.

Sheet Flow

One drainage area (Project Outfall G11106) discharges off site in the form of sheet flow. Areas that discharge via sheet flow are required to meet the 9VAC25-875-600 Section D, which states:

> "Increased volumes of sheet flow resulting from pervious or disconnected impervious areas or from physical spreading of concentrated flow through level spreaders shall be identified and evaluated for potential impacts on down-gradient properties or resources. Increased volumes of sheet flow that will cause or contribute to erosion, sedimentation, or flooding of down gradient properties or resources shall be diverted to a stormwater management facility or a stormwater conveyance system that conveys the runoff without causing down-gradient erosion, sedimentation, or flooding."

In the Virginia Stormwater Management Handbook (VSMH) Version 1.1 Section 5.3.2.2, it states:

> "Where pre- and post-development stormwater runoff occur as sheet flow, AND the runoff volume and velocity will not increase from pre-development to post-development, the plans, narrative, computations, and existing and proposed grades should demonstrate no increase in the 10-year, 24-hour storm post-development runoff volume and velocity compared to the pre-development volume and velocity."

To meet sheet flow requirements, a grass median is being installed to reduce the impervious area flowing offsite; thus, the proposed sheet flow volume shall be less than the pre-development conditions. Verification is required with calculations to demonstrate there is no increase in post-development runoff volume and velocity.

Spread

Maximum allowable spread was determined for pre-development conditions in accordance with the VDOT Drainage Manual Section 9.3.1, using spread for a minor arterial, collector, or local road without a shoulder. The existing road has a maximum allowable spread of half of the driving lane width plus the gutter pan width. With 10' driving lanes and 24" gutter pans, the existing maximum design spread width is 7'. The existing road also has variable-width buffers for parking spaces which increases the maximum allowable spread.

Post-development conditions propose bike lanes through the corridor within the project area. The bike lanes are 5' wide and the proposed road has a variable-width buffer, significantly reducing the maximum allowable spread through most of the project area. With 5' bike lanes and the existing 24" gutter pans, the proposed maximum allowable spread is 4.5' in areas without the buffer, as spread cannot exceed half the bike lane width. Meeting spread requirements may involve adding additional inlets in locations where inlets currently do not exist. WSP met with the City of Norfolk Department of Public Works on July 16th, 2025, to discuss stormwater management. It was determined that a waiver would be required to reduce the spread requirements in this area, and that Public Works would support the approval of the waiver.

3.3.2 Limits of Analysis

Stormwater runoff from the limits of disturbance (LOD) are conveyed to drainage inlet or stormwater channel limits of analysis (LOA). The outfalls and drainage areas will not change between pre-development and post-development conditions. A full drainage area map is provided in **Appendix D**.

LOA G11106

The northern portion of the project mostly sheet flows down Fontainebleau Crescent. There is evidence of ponding and erosion at the intersection of Fontainebleau Crescent and Lasalle Avenue, and inadequate stormwater infrastructure, so runoff mostly stays trapped in the street. When the volume of runoff overflows these ponded areas, water flows west down Lasalle Avenue towards Norway Place. The curb on the northern side of Lasalle Avenue between Fontainebleau Crescent and Norway Place is degraded so runoff mostly sheet flows directly into the large stormwater channel north of Fontainebleau Crescent. Some runoff may continue to flow west down Lasalle Avenue to the curb inlets on Norway Place which discharge through pipes directly into the Lafayette River at outfall G11106. The LOD in this drainage area is 0.079 acres and the drainage area for outfall G11106 is 23.996 acres, as shown in **Figure 34**.

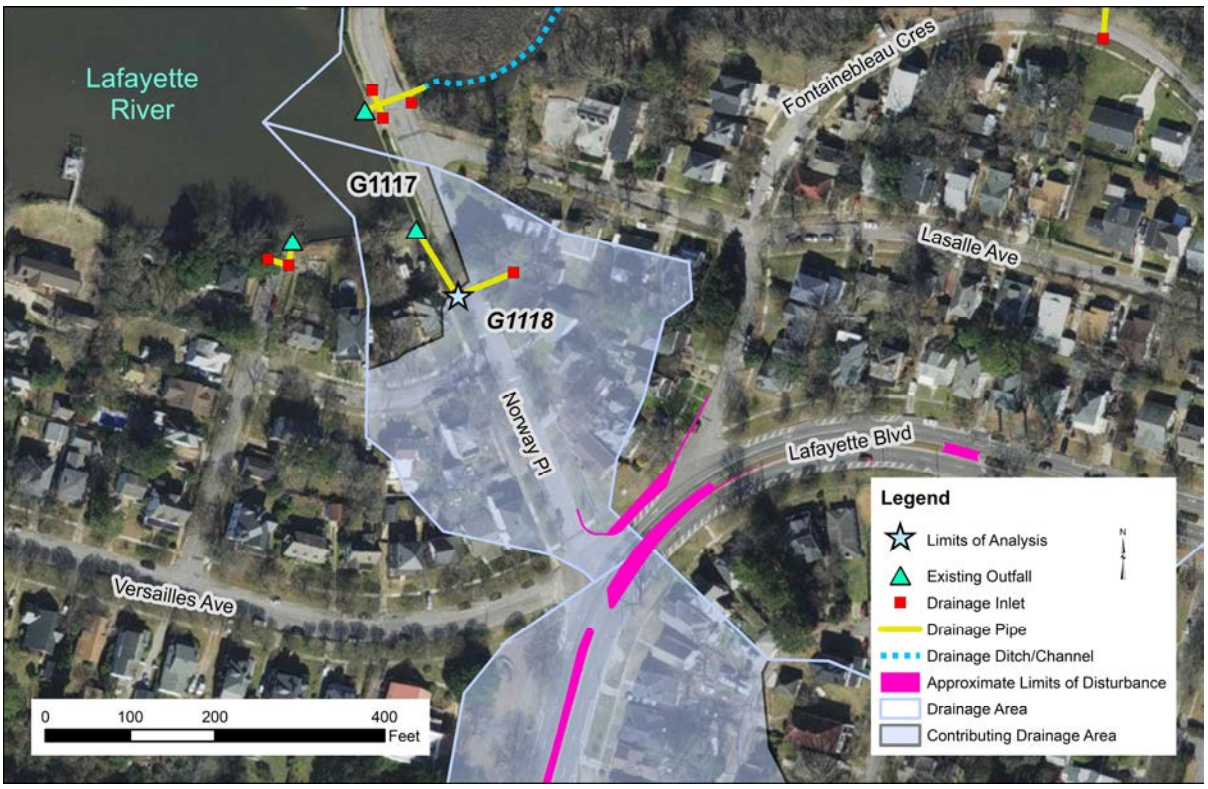
Figure 34: Drainage Area Map for LOA G11106

LOA G1118

The intersection of Norway Place and Lafayette Boulevard drains to curb inlet G1118 on the west side of Norway Place and flows through stormwater pipes to the Lafayette River. There is a curb inlet on the east side of the road but, according to GIS data, the pipe connecting these curb inlets has been abandoned. Water in the curb inlet flows through a stormwater pipe

to discharge into the Lafayette River at outfall G1117. The LOD in this drainage area is 0.013 acres, and the contributing drainage area to curb inlet G1118 is 2.472 acres. The drainage area to outfall G1117 is 3.118 acres, as shown in **Figure 35**.

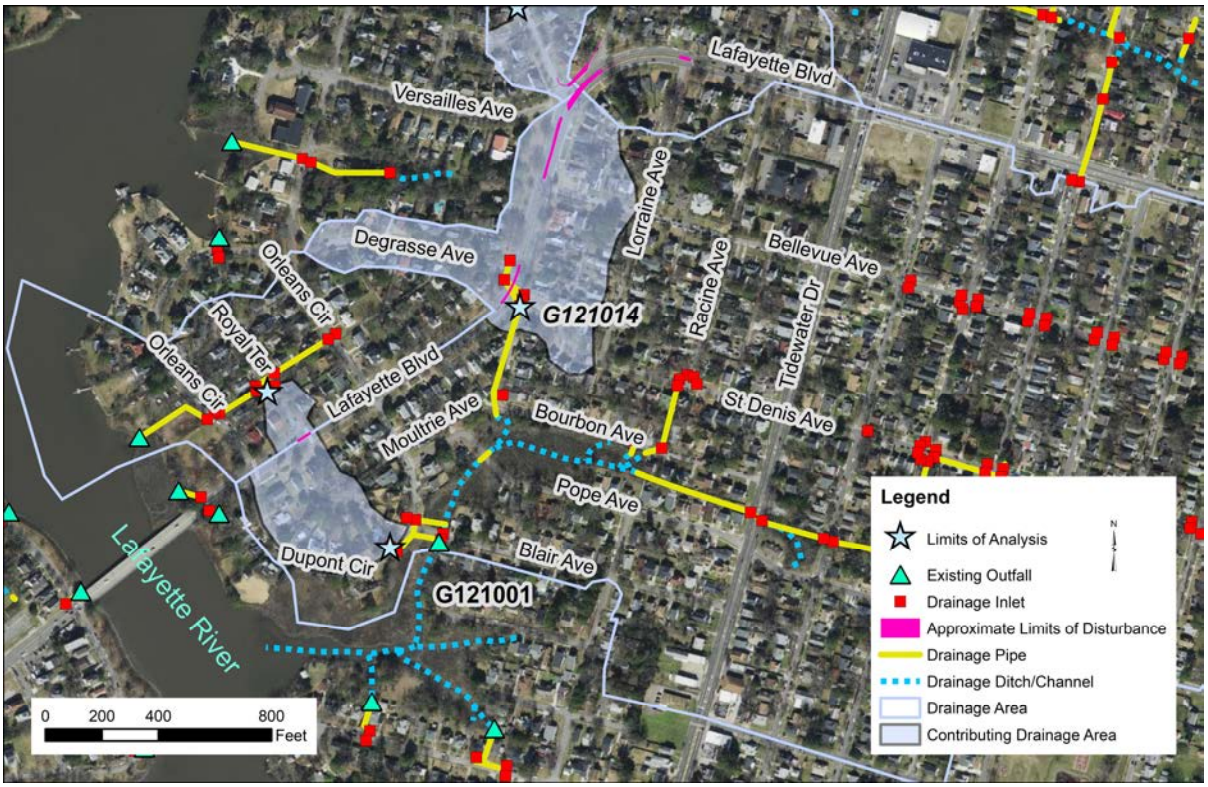
Figure 35: Drainage Area Map for LOA G1118



LOA G121014

Stormwater runoff on Lafayette Boulevard between Versailles Avenue and St Denis Avenue drains into curb inlets, a drop inlet, and gutter basin G121014. The gutter basin drains through stormwater pipes to discharge into a stormwater channel that eventually discharges into the Lafayette River at outfall G121001. The LOD in this drainage area is 0.114 acres and the contributing drainage area to gutter basin G121014 is 10.641 acres. The drainage area to outfall G121001 is 137.342 acres, as shown in **Figure 36**.

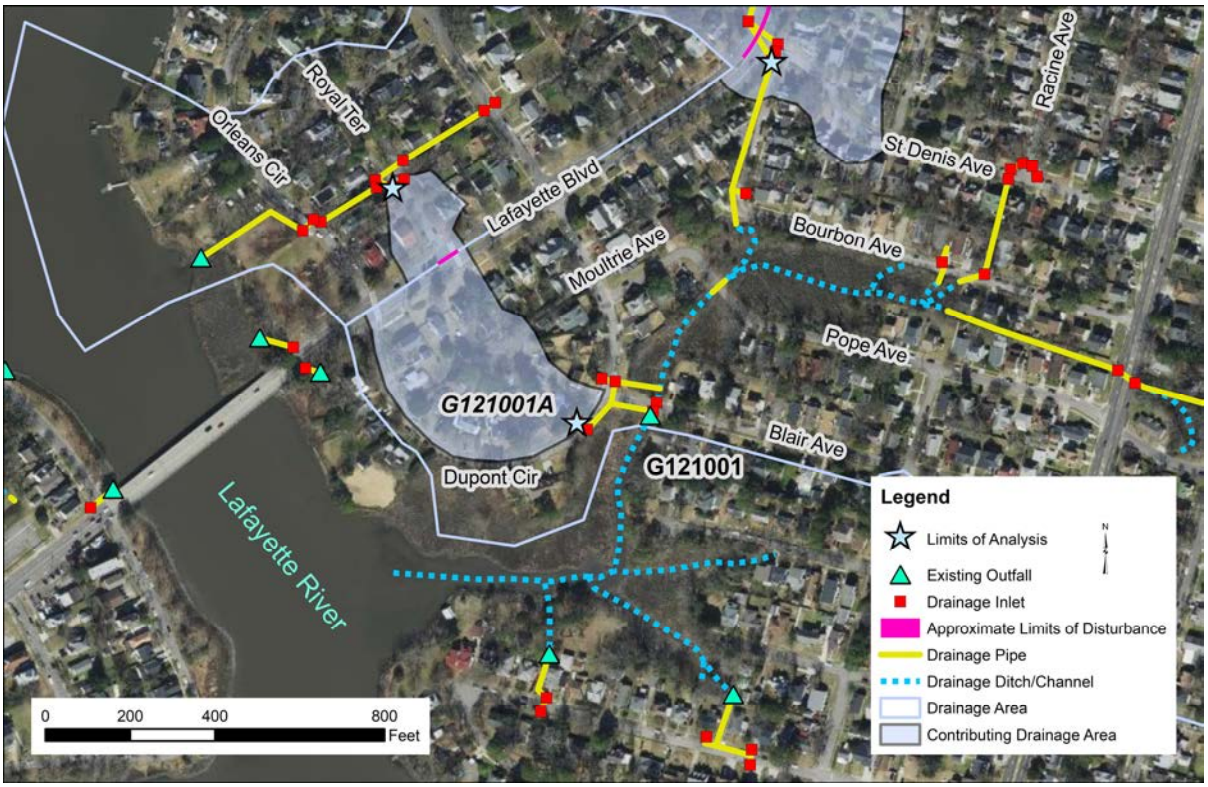
Figure 36: Drainage Area Map for LOA G121014



LOA G121001A

Stormwater runoff on the east side of Lafayette Boulevard between Dupont Circle drains to curb inlet G121001A on Dupont Circle. The water then flows through stormwater pipes to discharge into the Lafayette River at outfall G121001. The LOD in this drainage area is 0.005 acres, and the contributing drainage area to curb inlet G121001A is 3.752 acres. The drainage area to outfall G121001 is 137.342, as shown in **Figure 37**.

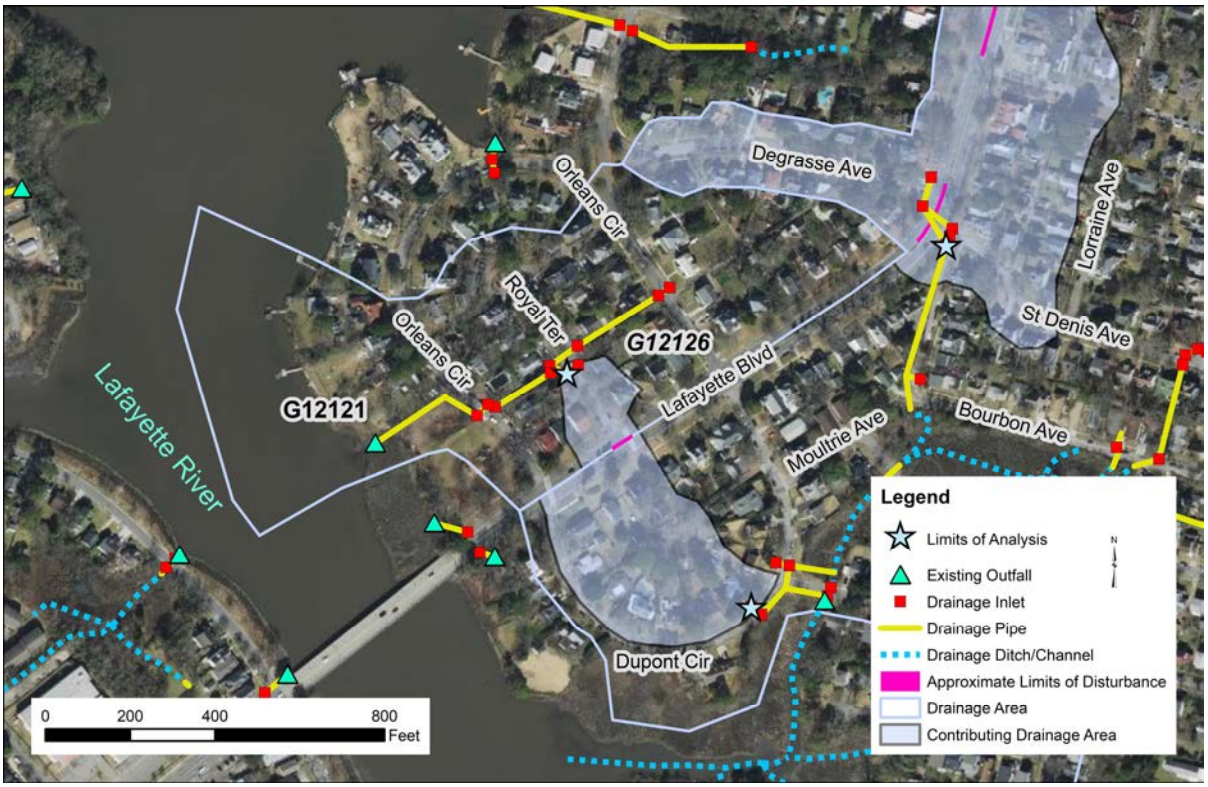
Figure 37: Drainage Area Map for LOA G121001A



LOA G12126

Stormwater runoff on the west side of Lafayette Boulevard between Orleans Circle drains to curb inlets on either side of Royale Terrace. The curb inlet on the east side of Royale Terrace is piped to curb inlet G12126 on the west side. Water flows through stormwater pipes to discharge into the Lafayette River at outfall G12121. The LOD in this drainage area is 0.007, and the contributing drainage area to curb inlet G12126 is 3.752 acres. The drainage area to outfall G12121 is 18.656 acres, as shown in **Figure 38**.

Figure 38: Drainage Area Map to LOA G12126



3.3.3 Water Quality Requirements

This project anticipates 0.22 acres of land disturbance and a decrease in impervious land cover. According to Virginia Erosion and Stormwater Management (VESM) Regulation 9VAC25-875 Section 580, projects disturbing less than one acre with no increase in impervious cover must reduce the Total Phosphorus (TP) load 10% from pre-existing conditions. The Virginia Runoff Reduction Method (VRRM) spreadsheet Version 4.1 was used to determine a TP load reduction of 0.02 lb/yr is required. Any proposed storm pipe or stormwater management facility installation would likely increase the limits of disturbance and thus increase the required TP load reduction. The installation of a small manufactured treatment device without any storm pipe improvements would likely lead to a negligible change in the limits of disturbance and no increase in the TP load reduction required. The VRRM spreadsheet is included in **Appendix D**. A soil map is also provided in **Appendix D**.

Table 10: Land Cover within Limits of Disturbance

Land Cover	Existing	Proposed	Δ
Managed Turf (ac)	0.08	0.18	0.10
Impervious (ac)	0.14	0.04	-0.10

Table 11: TP Load Reduction Requirement

Limits of Disturbance (ac)	0.22
TP Load Reduction Required for Redeveloped Area (lb/yr)	0.02

3.3.4 Potential Stormwater Improvements

Recommended SWMFs

TP load reduction requirements can be achieved by purchasing nutrient credits or by installing on-site stormwater management facilities (SWMFs). The Elizabeth River drainage basin currently has water quality credits available, and the cost will be approximately $30,000 per pound of TP load reduction, or $6,000 for the 0.02 pounds required for this project. Any proprietary manufactured treatment device (MTD) will cost a minimum of $35,000, and a SWMF is not required to meet water quantity requirements. Purchasing credits is the cheapest alternative to comply with stormwater quality requirements; however, based on discussions with the City of Norfolk Public Works on July 16th, 2025, their preferred approach is to install an MTD to support this project.

If nutrient credits are not purchased, then it is recommended that a MTD be implemented to meet reduction requirements, given the site constraints and lack of City-owned property within the project limits. This option is preferable due to the minimal disruption to traffic while installing the SWMF within the right-of-way (ROW) along Lafayette Boulevard with minimal stormwater pipe installation.

MTDs are engineered structural treatment devices that are commercially available to remove pollutants from stormwater runoff. The Virginia Department of Environmental Quality (VDEQ) assigns TP removal rates to different types of MTDs. Hydrodynamic separators (HDS) are assigned a TP removal efficiency of 20% and filtering and biofiltering MTDs are assigned 40%, 50%, or greater than 50% TP removal efficiency depending on the product.

Hydrodynamic Separator

HDS are installed either online or offline in a stormwater system and capture stormwater runoff. Large sediment particles settle to the bottom of the device and water is able to float out of the system. HDS may employ an internal weir or bypass structure to trap water long enough for sediment to settle out while allowing water to bypass the treatment process during larger runoff events. Maintenance of HDS is usually considered minimal compared to other treatment methods, with a vacuum truck removing captured sediment and debris periodically. The maintenance schedule depends on pollutant loadings and typically occurs once per year or every three to five years. VDEQ currently approves 15 HDS at a 20% TP removal rate, and any other HDS can not be used to demonstrate water quality compliance.

Filtering Manufactured Treatment Device

Filtering MTDs are installed either online or offline in a stormwater system and capture stormwater runoff. Treatment occurs by water flowing through proprietary filters or filter media. Many filtering MTDs also incorporate an HDS-type system to settle out large particles before filtering. Filtering MTDs may employ an internal weir or bypass structure to trap for treatment while allowing water to bypass the treatment process during larger runoff events. Maintenance

of filtering MTDs may be more time-consuming or costly than that of HDS. Some filtering MTDs have reusable filters that can be removed and cleaned on a schedule but will eventually need to be replaced. Filtering MTDs that employ a filter media will typically need to have the media replaced on a schedule. Filtering MTDs that incorporate an HDS-type system will also need to be maintained with a vacuum truck to remove sediment and debris. As the filters and filter media are proprietary materials, they will need to be purchased from the MTD manufacturer. VDEQ currently approves 13 filtering MTDs at TP removal rates ranging from 40% to 65%.

Biofiltering Manufactured Treatment Device

Biofiltering MTDs work in the same way as filtering MTDs that utilize filter media but have the addition of a tree or plants growing into the filter media. The plants utilize some of the nutrients extracted by the filter media and provide an aesthetic component to the MTD. Many biofiltering MTDs have mulch on top of the filter media that must be replaced on a maintenance schedule to keep the filter media free of fine sediment and debris. VDEQ currently approves 11 biofiltering MTDs at TP removal rates ranging from 40% to 65%.

Water Quality SWMFs

Other devices and SWMFs designed in accordance with VSMH Version 1.1 Section 8.5 may be used if desired but are not recommended. These SWMFs options are not large enough to support the connection of a large upstream drainage system that resolves the existing drainage issues within Lafayette Blvd. In addition, due to the project's minimal TP load requirements, they are not as cost efficient as purchasing offsite credits or utilizing an MTD adjacent to an existing curb inlet within project limits.

A small water quality-only SWMF such as urban bioretention could be constructed at the northeast corner of 1530 Lafayette Boulevard. This area is adjacent to a private church and is at the intersection of Lafayette Boulevard and Versailles Avenue. There are existing sidewalks that may need to be removed or relocated to make room for a SWMF. This option is not preferable as it may impede pedestrian traffic and conflict with the utility pole and road signs at that location.

Luxembourg Street, Orleans Circle, and Degrass Avenue meet at a non-traditional intersection, with a two-branch fork in the east-west direction and a three-branch fork in the north-south direction. The land between these roads could potentially be used for a smaller bioretention quality-only SWMF and could be designed to fit into the existing landscape islands. This location is not preferable as it would require installation of additional stormwater pipe to outfall to the existing system to the West, within Orleans Circle, and would disrupt traffic at the intersection during construction. The location of these SWMFs are shown in **Figure 39**.

Potential Downstream SWMFs

In addition to identifying the required SWMFs, the project was scoped to identify possible locations for SWMFs downstream of the project corridor. These locations are not required in order to meet the TP load reduction and channel and flood protection requirements but may be implemented if further directed to create positive drainage and regrading throughout the project corridor. These locations are not recommended with the current traffic improvements. In addition, expansion of the existing stormwater conveyance system will be required in addition to the facility. Proposed quantity SWMF locations are shown in **Figure 39**.

The first location large enough for a SWMF is the city-owned 0.87 acre parcel bounded by Lafayette Boulevard to the east, Luxembourg Street to the west, Versaille Avenue to the north, and Degrasse Avenue to the south. The parcel has an existing swale and yard drain which outfall west to the Lafayette River via a 15-inch and 24-inch pipe run at outfall G12136. The parcel is in a low-lying area and could be used for a water-quantity and/or quality SWMF. There appears to be an existing channel in this area that could be retrofit to be utilized as a SWMF. This area may require additional permitting for wetland impacts and needs further evaluation to determine the possible required permits. Constructing a retrofit in this location would cause permanent impacts to residents. Additionally, there is a Hampton Roads Sanitation District (HRSD) pump station on the west side of the parcel, so coordination with HRSD would be required to install any SWMF or infrastructure on this lot. Coordination will also be required to identify the location of sanitary sewer force mains and lines. SWMFs that require infiltration or separation from the groundwater are not recommended for this area. A wet pond, wetland cell, wet swale, or a quantity only SWMF with a third-party treatment device could be utilized in this area.

A second potential location for a SWMF is the city-owned 1.47 acre parcel at the intersection of Lafayette Boulevard and Orleans Circle that is currently used for the Lafayette Residence Park and Lafayette Dog Park. This parcel could be used for a water-quality and/or quantity SWMF that discharges directly into the Lafayette River. Some SWMFs have minimal impact to above-ground infrastructure, such as underground detention systems, but the high groundwater and close proximity to a major waterbody would likely make these types of systems infeasible. Constructing a wet pond or other above ground SWMFs at this location may require relocating or modifying the existing parks. SWMFs that require infiltration or separation from groundwater are not recommended for this area. A wet pond, wetland cell, wet swale, or a quantity only SWMF with a third-party treatment device could be utilized in this area. A SWMF at this location could utilize outfall G12121 or G12116.

Figure 39: Potential SWMF Locations

3.3.5 Recommended Stormwater Quality Improvements

WSP met with the City of Norfolk Department of Public Works on July 16th, 2025 to discuss the project's stormwater management. Public Works indicated that an MTD is the preferred approach to address stormwater management for this project, in leu of purchasing credits. As the design progresses, recommended MTD locations can be fully evaluated for implementation or credits could be purchased if the MTDs are more impactful than anticipated.

WSP identified one location for a possible hydrodynamic separator and one recommended location for a filtering manufactured treatment device. Only one of these devices is required to meet the TP load reduction requirements and each has its own drawbacks. At each location, a device could be installed completely within the ROW without any private property acquisition. Excess credits generated by the MTDs can be utilized on other Transportation Projects within the same HUC. Ease of access was considered as MTDs require regular maintenance, and the locations are on smaller residential streets adjacent to Lafayette Boulevard.

Hydrodynamic Separator

A hydrodynamic separator could be installed near the curb inlet on Orleans Circle between Lafayette Residence Park and Lafayette Dog Park, as shown in **Figure 40**. This inlet is connected to nine upstream inlets and the HDS would treat runoff from 4.49 acres within the ROW, including 2.67 acres of impervious landcover and 1.82 acres of managed turf. The HDS would achieve 0.77 lb/yr TP reduction at the approved 20% TP removal efficiency. The VRRM spreadsheet is included in **Appendix D.**

For the purposes of this report, it was assumed the HDS would be installed in-line with the existing stormwater system. Additional bypass manholes and piping could be required to implement this HDS; additional survey and design is required to verify. Depending on the need for bypass piping, this HDS option could require a larger construction footprint and is more costly than the filtering MTD. In addition, installing the structure would increase losses in the existing system and there could be impacts to upstream flooding and hydraulic grade lines (HGLs). The HDS would be accessible to be maintain by a vacuum truck via Orleans Circle.

If an in-line structure cannot be implemented, a separate storm system could be required to pipe the treated flow directly to the river, in parallel to the existing storm system. There would be impacts to the Lafayette Residence Park and Dog Park during construction of this layout. Utility conflicts and potential wetland permitting necessary for a new outfall would incur additional costs. The estimated cost for an HDS (in-line) at this location without wetland permitting and bypass piping is $100,000. This approach is riskier, compared to the filtering MTD, with respect to stakeholder impacts; however, it generates more excess TP credits.

Filtering Manufactured Treatment Device

A filtering manufactured treatment device could be installed in the curb line adjacent to an existing inlet in front of 181 Orleans Circle, at the location shown in **Figure 40**.

The filtering MTD on Orleans Circle would treat runoff from 1.19 acres within the ROW, including 0.75 acres of impervious landcover and 0.44 acres of managed turf. A device with the smallest approved TP removal efficiency of 40% and would achieve 0.41 lb/yr TP reduction. The VRRM spreadsheets for the filtering MTD at 40% efficiency are included in **Appendix D.**

Two filtering MTDs could be installed directly next to the existing curb inlet or the inlet could be replaced by a filtering unit meant for a sag location to treat the entire ROW drainage area. Both configurations would provide a bypass inlet for larger storms to bypass treatment with no adverse effects to existing drainage conditions. Alternatively, one flanking inlet could be provided adjacent to the existing inlet and treat only a portion of the contributing drainage area. A flanking inlet would treat runoff from 0.90 acres within the ROW, including 0.59 acres of impervious landcover and 0.31 acres of managed turf, and achieve 0.31 lb/yr TP reduction at a 40% efficiency rate. The estimated cost for a filtering MTD on one side of the inlet is $35,000 and one on both sides of the inlet is $70,000.

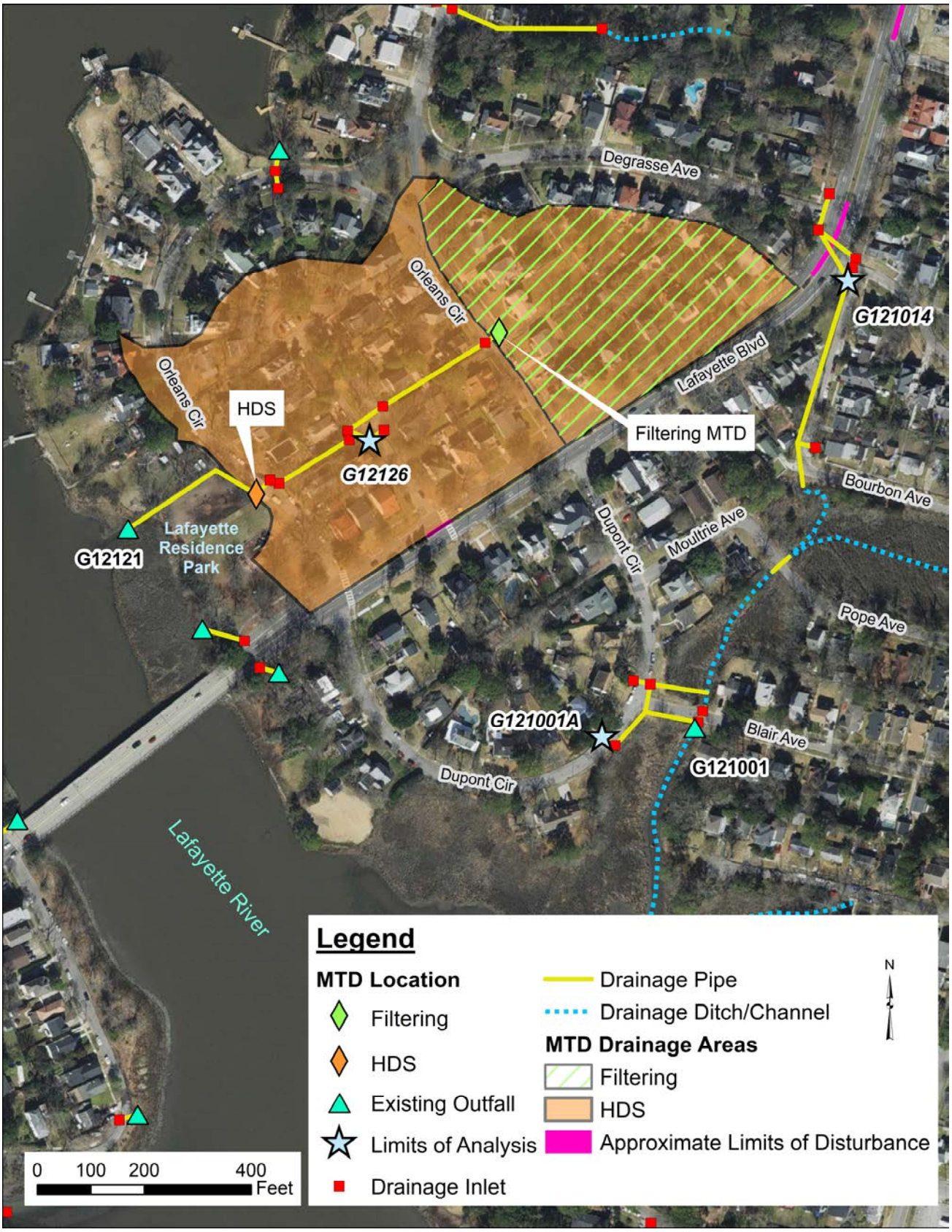
BMP Recommendation

Based on the data gathered with this report and coordination with Public Works, it is recommended to provide one flanking filtering MTD at the 181 Orleans Circle location to meet the project's water quality requirements. We believe this alternative is the more cost-effective and risk-averse approach. Survey of the area is required to identify any possible conflicts with existing utilities and to verify no adverse impacts to existing City and private utility infrastructure. The design can be expanded to include treatment of the entire contributing drainage area at this location if excess TP Reduction (lb/yr) pollutant credits are desired. A summary of the manufactured treatment devices is provided in **Table 12**.

Table 12: Manufactured Treatment Device Comparison

Treatment Type	Treatment Area (ac)	TP Reduction Efficiency	TP Reduction (lb/yr)	Estimated Cost
HDS (in-line)	4.49	20%	0.77	$100,000
Filtering MTD Two-Sided	1.19	40%	0.41	$70,000
Filtering MTD One-Sided	0.90	40%	0.31	$35,000

Figure 40: Recommended MTD Locations



3.3.6 Potential Roadway Design Changes to Avoid Stormwater Requirements

According to 9VAC25-875-470 and the City of Norfolk's Zoning Ordinance, projects with proposed land disturbance less than 2,500 SF are not required to comply with Erosion and Stormwater Management Regulations. Thus, the project would not need to address stormwater quality and quantity if the roadway design is revised to reduce land disturbance below this threshold. Instead of installing grass medians and curbs, other methods such as bollards, road markings or signs, concrete barriers, or other traffic calming measures could be implemented to close off intersections and decrease land disturbance.

4 Cost Estimate

4.1 Cost Analysis

The preliminary cost for improvements along Lafayette Boulevard is $594,268. The costs were developed by completing a summary of quantities using the roadway layouts presented in **Appendix A**. Included in the costs are incidental items for demolition and proposed roadway improvements, a sidewalk improvements allowance for items observed in **Appendix E**, and stormwater treatment. Additional curb ramps beyond the proposed crossing at Bellevue Avenue were not included in the cost. See **Table 13** for the summary of costs and **Appendix B** for a detailed breakdown.

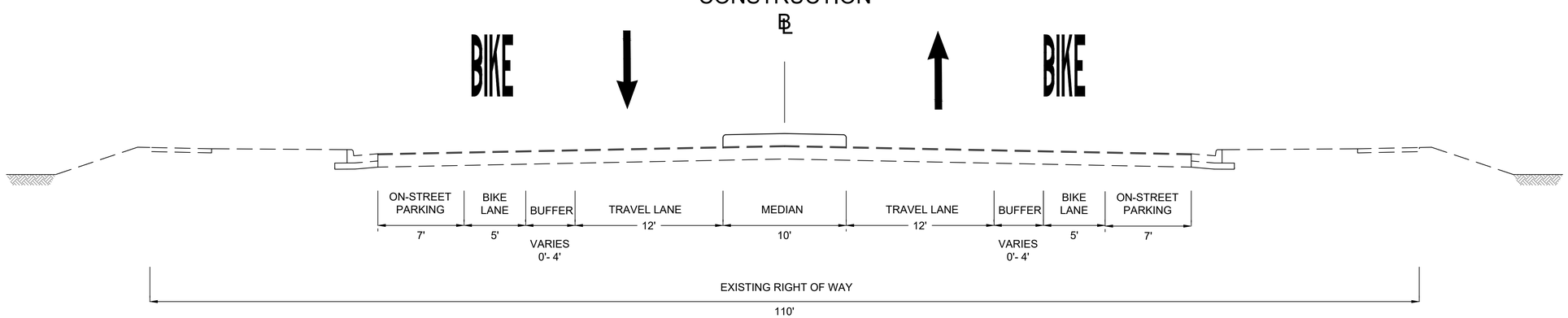
Table 13: Lafayette Boulevard Improvement Project Cost Estimate Summary

ITEM DESCRIPTION	COST
SUB-TOTAL	$403,105
2% EASEMENT AND ROW CONTINGENCY	$8,062
20% MOT CONTINGENCY	$80,621
(CONSTRUCTION SUBTOTAL)	$475,414
25% GENERAL CONTINGENCY	$118,854
CONSTRUCTION TOTAL:	**$594,268**

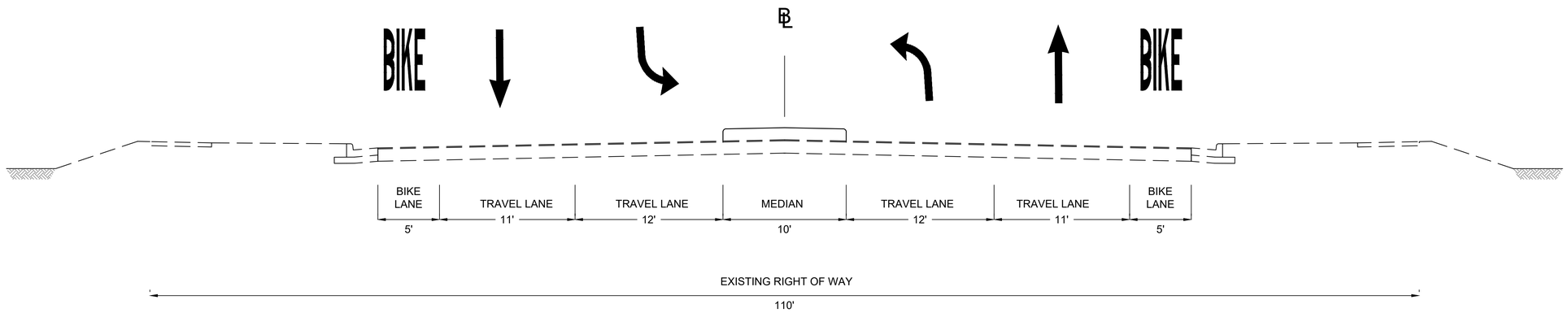
APPENDIX A – CONCEPTUAL PLAN

Typical Sections

LAFAYETTE BOULEVARD
CONSTRUCTION
℄



LAFAYETTE BOULEVARD
CONSTRUCTION
℄



PRELIMINARY NOT FOR CONSTRUCTION OR ACQUISITION OF RIGHT OF WAY

WSP USA Inc.
277 Bendix Road, Suite 300
Virginia Beach, VA 23452
(757) 466-1732

CITY OF NORFOLK
DEPARTMENT OF PUBLIC WORKS

TYPICAL SECTIONS

LAFAYETTE BLVD IMPROVEMENTS
NORFOLK, VIRGINIA

REV #	PROJECT REVISIONS	DATE

DESIGNED BY: *CJF*
PREPARED BY: *JAS*

ISSUE DATE:
AUG 2025

SHEET
1

LEGEND

- PROPERTY LINE
- BIKE LANE BUFFER
- CURB
- MEDIAN IMPROVEMENTS
- 7' WIDE ON STREET PARKING

PRELIMINARY NOT FOR CONSTRUCTION OR ACQUISITION OF RIGHT OF WAY

GRAPHIC SCALE

SCALE: 1 IN = 50 FT

50' 0 50' 100'

WSP USA Inc.
277 Bendix Road, Suite 300
Virginia Beach, VA 23452
(757) 466-1732

CITY OF NORFOLK
DEPARTMENT OF PUBLIC WORKS

ROADWAY PLAN

LAFAYETTE BLVD IMPROVEMENTS
NORFOLK, VIRGINIA

REV. #	PROJECT REVISIONS	DATE

DESIGNED BY: *CJF*
PREPARED BY: *KDS*

ISSUE DATE:
AUG 2025

SHEET
2

LEGEND

- PROPERTY LINE
- BIKE LANE BUFFER
- CURB
- MEDIAN IMPROVEMENTS
- 7' WIDE ON STREET PARKING

PRELIMINARY NOT FOR CONSTRUCTION OR ACQUISITION OF RIGHT OF WAY

GRAPHIC SCALE

SCALE: 1 IN = 50 FT

50' 0 50' 100'

WSP USA Inc.
277 Bendix Road, Suite 300
Virginia Beach, VA 23452
(757) 466-1732

CITY OF NORFOLK
DEPARTMENT OF PUBLIC WORKS

ROADWAY PLAN

LAFAYETTE BLVD IMPROVEMENTS
NORFOLK, VIRGINIA

REV #	PROJECT REVISIONS	DATE

DESIGNED BY: *CJF*
PREPARED BY: *KDS*

ISSUE DATE:
AUG 2025

SHEET
3

LEGEND

- PROPERTY LINE
- BIKE LANE BUFFER
- CURB
- MEDIAN IMPROVEMENTS
- 7' WIDE ON STREET PAR

PRELIMINARY NOT FOR CONSTRUCTION OR ACQUISITION OF RIGHT OF WAY

GRAPHIC SCALE

SCALE: 1 IN = 50 FT

50' 0 50' 100'

CITY OF NORFOLK
DEPARTMENT OF PUBLIC WORKS

ROADWAY PLAN

LAFAYETTE BLVD IMPROVEMENTS
NORFOLK, VIRGINIA

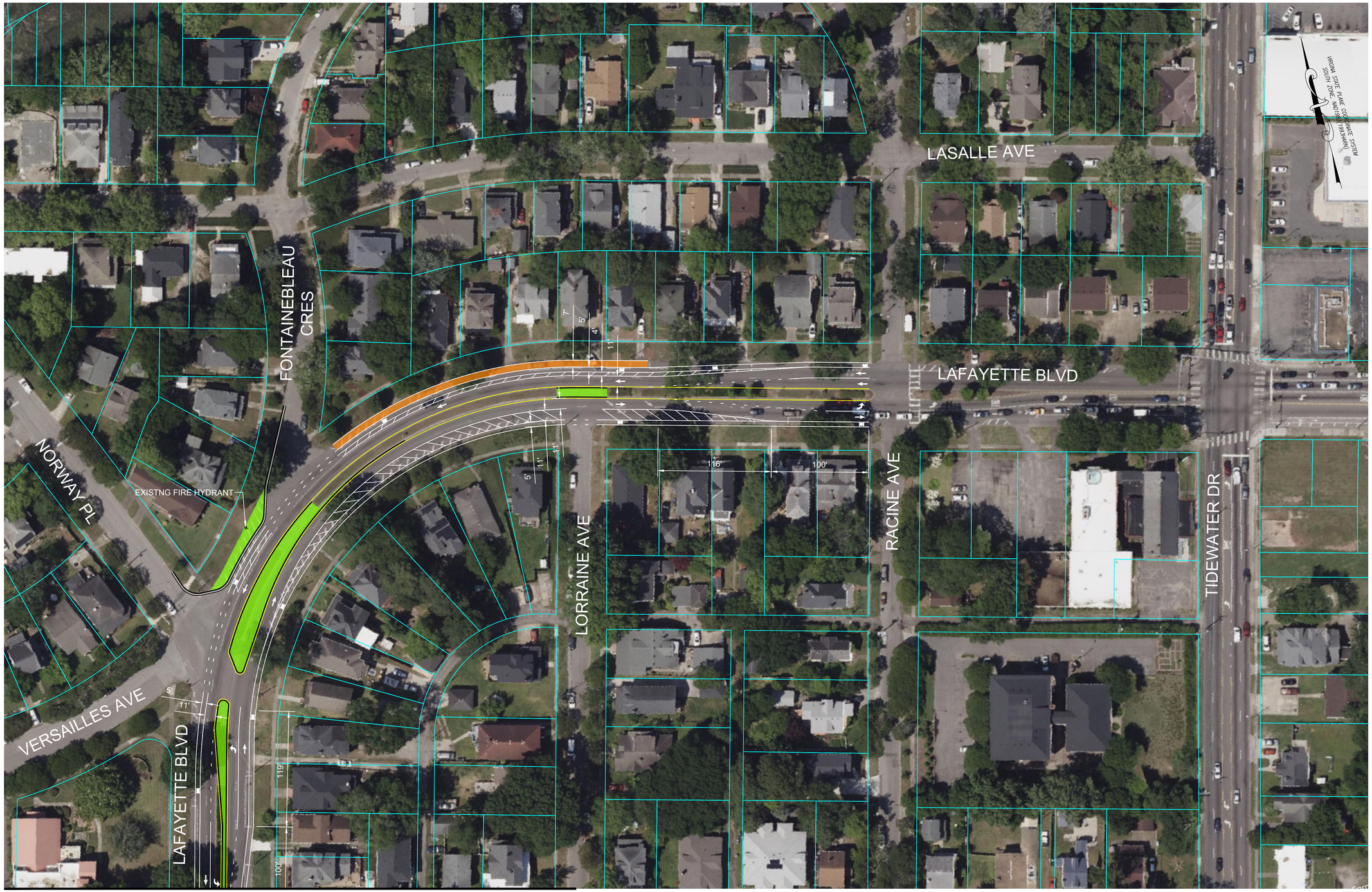
WSP USA Inc.
277 Bendix Road, Suite 300
Virginia Beach, VA 23452
(757) 466-1732

REV #	PROJECT REVISIONS	DATE

DESIGNED BY: *CJF*
PREPARED BY: *KDS*

ISSUE DATE:
AUG 2025

SHEET
4



MATCHLINE SEE SHEET 4

LEGEND

PROPERTY LINE	CURB	7' WIDE ON STREET PARKING
BIKE LANE BUFFER	MEDIAN IMPROVEMENTS	

PRELIMINARY NOT FOR CONSTRUCTION OR ACQUISITION OF RIGHT OF WAY

GRAPHIC SCALE

SCALE: 1 IN = 50 FT

50' 0 50' 100'

WSP USA Inc.
277 Bendix Road, Suite 300
Virginia Beach, VA 23452
(757) 466-1732

CITY OF NORFOLK
DEPARTMENT OF PUBLIC WORKS

ROADWAY PLAN

LAFAYETTE BLVD IMPROVEMENTS
NORFOLK, VIRGINIA

REV #	PROJECT REVISIONS	DATE

DESIGNED BY: *CJF*
PREPARED BY: *KDS*

ISSUE DATE:
AUG 2025

SHEET
5

MATCHLINE SEE SHEET 4

LEGEND

- PROPERTY LINE
- CURB
- 7' WIDE ON STREET PARKING
- BIKE LANE BUFFER
- MEDIAN IMPROVEMENTS

PRELIMINARY NOT FOR CONSTRUCTION OR ACQUISITION OF RIGHT OF WAY

GRAPHIC SCALE

SCALE: 1 IN = 50 FT

50' 0 50' 100'

WSP USA Inc.
277 Bendix Road, Suite 300
Virginia Beach, VA 23452
(757) 466-1732

CITY OF NORFOLK
DEPARTMENT OF PUBLIC WORKS

ROADWAY PLAN ALT 2

LAFAYETTE BLVD IMPROVEMENTS
NORFOLK, VIRGINIA

REV #	PROJECT REVISIONS	DATE

DESIGNED BY: *CJF*
PREPARED BY: *KDS*

ISSUE DATE:
AUG 2025

SHEET
5B

APPENDX B – COST ESTIMATE

wsp	LAFAYETTE BOULEVARD IMPROVEMENTS				
LOCATION:	NORFOLK, VIRGINIA			DATE:	Aug-25
ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST
1	MOBILIZATION	LS	1	$ 43,914	$ 43,914
2	CONSTRUCTION SURVEYING	LS	1	$ 3,390	$ 3,390
3	EROSION AND SEDIMENT CONTROLS	LS	1	$ 16,943	$ 16,943
	SUB-TOTAL				**$ 64,247**
	INCIDENTALS				
4	CG-12 W/ DETECTABLE WARNING SURFACE	EA	2	$ 8,500.00	$ 17,000
5	REMOVAL OF CURB AND GUTTER	LF	144	$ 10.00	$ 1,440
6	HYDRAULIC CEMENT CONCRETE SIDEWALK 4"	SY	18	$ 55.00	$ 990
7	MEDIAN STRIP MS-1A	SY	875	$ 200.00	$ 175,000
8	ERADICATE EXIST. LINEAR PVMT	LF	36,325	$ 1.00	$ 36,325
9	TYPE B CLASS I PAVE. LINE MARKING 8"	LF	160	$ 6.00	$ 960
10	TYPE B CLASS I PAVE. LINE MARKING 6"	LF	31,465	$ 0.75	$ 23,599
11	TYPE B CLASS I PAVE. LINE MARKING 4"	LF	8,365	$ 0.60	$ 5,019
12	SYMB MRKG HELMETED BICYCLIST TY B CL II	EA	32	$ 260.00	$ 8,320
13	PVMT SYMB MRKG SGL TURN ARR. TY B CL II	EA	8	$ 260.00	$ 2,080
14	DEMO OF PAVEMENT FLEXIBLE	SY	875	$ 15.00	$ 13,125
15	SIDEWALK SPOT IMPROVEMENTS ALLOWANCE	LS	1	$ 10,000.00	$ 10,000
16	TRAFFIC SIGNS ALLOWANCE	LS	1	$ 10,000.00	$ 10,000
17	MANUFACTURED TREATMENT DEVICE	LS	1	$ 35,000.00	$ 35,000
	SUB-TOTAL				**$ 338,858**
	(SUB-TOTAL)				**$ 403,105**
	2% EASEMENT AND ROW CONTINGENCY				**$ 8,062**
	20% MOT CONTINGENCY				**$ 80,621**
	(CONSTRUCTION SUBTOTAL)				**$ 475,414**
	25% GENERAL CONTINGENCY				**$ 118,854**
	CONSTRUCTION TOTAL:				**$ 594,268**
	NOTES:				
	DOES NOT INCLUDE PRIVATE UTILITY, LIGHTING, PUBLIC UTILITY, OR STORMWATER DRAINAGE COSTS. ONLY STORMWATER TREATMENT DEVICES ARE INCLUDED.				

APPENDX C –TRAFFIC

Traffic Counts

1-Lafayette Blvd-E 27th St & Leo St (VA24-20... - TMC

Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221177, Location: 36.871438, -76.2767

PMA Traffic Data Collection

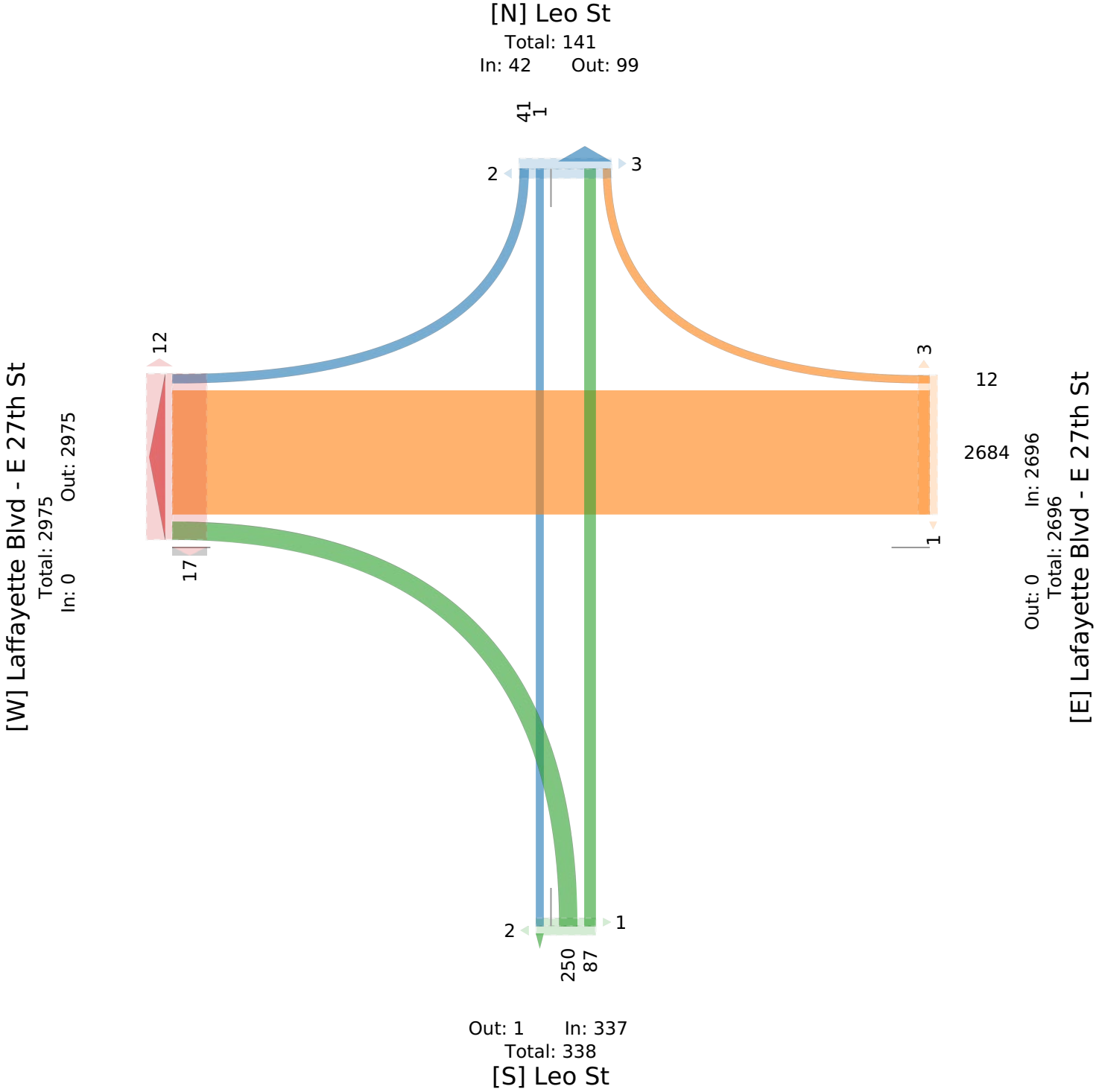
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Leo St Southbound						Lafayette Blvd - E 27th St Westbound						Leo St Northbound						Laffayette Blvd - E 27th St Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 7:00AM	1	0	0	0	**1**	0	0	160	0	0	**160**	2	0	2	10	0	**12**	1	0	0	0	0	**0**	0	**173**
7:15AM	1	0	0	0	**1**	0	0	156	0	0	**156**	0	0	0	11	0	**11**	0	0	0	0	0	**0**	0	**168**
7:30AM	2	0	0	0	**2**	2	3	174	0	0	**177**	0	0	1	19	0	**20**	0	0	0	0	0	**0**	0	**199**
7:45AM	3	0	0	0	**3**	0	1	195	0	0	**196**	0	0	4	14	0	**18**	0	0	0	0	0	**0**	1	**217**
Hourly Total	7	0	0	0	**7**	2	4	685	0	0	**689**	2	0	7	54	0	**61**	1	0	0	0	0	**0**	1	**757**
8:00AM	3	0	0	0	**3**	1	0	215	0	0	**215**	0	0	1	12	0	**13**	0	0	0	0	0	**0**	0	**231**
8:15AM	4	0	0	0	**4**	0	0	157	0	0	**157**	0	0	2	14	0	**16**	0	0	0	0	0	**0**	0	**177**
8:30AM	0	0	0	0	**0**	0	0	146	0	0	**146**	0	0	3	14	0	**17**	0	0	0	0	0	**0**	0	**163**
8:45AM	2	0	0	0	**2**	0	1	138	0	0	**139**	0	0	2	18	0	**20**	0	0	0	0	0	**0**	3	**161**
Hourly Total	9	0	0	0	**9**	1	1	656	0	0	**657**	0	0	8	58	0	**66**	0	0	0	0	0	**0**	3	**732**
9:00AM	0	0	0	0	**0**	0	0	1	0	0	**1**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**1**
Hourly Total	0	0	0	0	**0**	0	0	1	0	0	**1**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**1**
3:30PM	2	1	0	0	**3**	0	2	136	0	0	**138**	0	0	11	21	0	**32**	0	0	0	0	0	**0**	0	**173**
3:45PM	9	0	0	0	**9**	1	1	186	0	0	**187**	0	0	8	15	0	**23**	0	0	0	0	0	**0**	5	**219**
Hourly Total	11	1	0	0	**12**	1	3	322	0	0	**325**	0	0	19	36	0	**55**	0	0	0	0	0	**0**	5	**392**
4:00PM	0	0	0	0	**0**	0	1	163	0	0	**164**	0	0	13	10	0	**23**	1	0	0	0	0	**0**	0	**187**
4:15PM	0	0	0	0	**0**	0	0	156	0	0	**156**	0	0	5	29	0	**34**	0	0	0	0	0	**0**	6	**190**
4:30PM	4	0	0	0	**4**	0	2	152	0	0	**154**	1	0	11	16	0	**27**	1	0	0	0	0	**0**	3	**185**
4:45PM	4	0	0	0	**4**	0	0	192	0	0	**192**	1	0	13	20	0	**33**	0	0	0	0	0	**0**	1	**229**
Hourly Total	8	0	0	0	**8**	0	3	663	0	0	**666**	2	0	42	75	0	**117**	2	0	0	0	0	**0**	10	**791**
5:00PM	2	0	0	0	**2**	0	1	182	0	0	**183**	0	0	5	15	0	**20**	0	0	0	0	0	**0**	7	**205**
5:15PM	4	0	0	0	**4**	1	0	175	0	0	**175**	0	0	6	12	0	**18**	0	0	0	0	0	**0**	3	**197**
5:30PM	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**
Hourly Total	6	0	0	0	**6**	1	1	357	0	0	**358**	0	0	11	27	0	**38**	0	0	0	0	0	**0**	10	**402**
Total	41	1	0	0	**42**	5	12	2684	0	0	**2696**	4	0	87	250	0	**337**	3	0	0	0	0	**0**	29	**3075**
% Approach	97.6%	2.4%	0%	0%	**-**	-	0.4%	99.6%	0%	0%	**-**	-	0%	25.8%	74.2%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	1.3%	0%	0%	0%	**1.4%**	-	0.4%	87.3%	0%	0%	**87.7%**	-	0%	2.8%	8.1%	0%	**11.0%**	-	0%	0%	0%	0%	**0%**	-	-
Lights and Motorcycles	38	1	0	0	**39**	-	9	2578	0	0	**2587**	-	0	81	243	0	**324**	-	0	0	0	0	**0**	-	2950
% Lights and Motorcycles	92.7%	100%	0%	0%	**92.9%**	-	75.0%	96.1%	0%	0%	**96.0%**	-	0%	93.1%	97.2%	0%	**96.1%**	-	0%	0%	0%	0%	**-**	-	95.9%
Heavy	3	0	0	0	**3**	-	3	106	0	0	**109**	-	0	6	7	0	**13**	-	0	0	0	0	**0**	-	125
% Heavy	7.3%	0%	0%	0%	**7.1%**	-	25.0%	3.9%	0%	0%	**4.0%**	-	0%	6.9%	2.8%	0%	**3.9%**	-	0%	0%	0%	0%	**-**	-	4.1%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	4	-	-	-	-	-	3	-	-	-	-	-	29	
% Pedestrians	-	-	-	-	-	80.0%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	20.0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

1-Lafayette Blvd-E 27th St & Leo St (VA24-20... - TMC
Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221177, Location: 36.871438, -76.2767

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



1-Lafayette Blvd-E 27th St & Leo St (VA24-20... - TMC

Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221177, Location: 36.871438, -76.2767

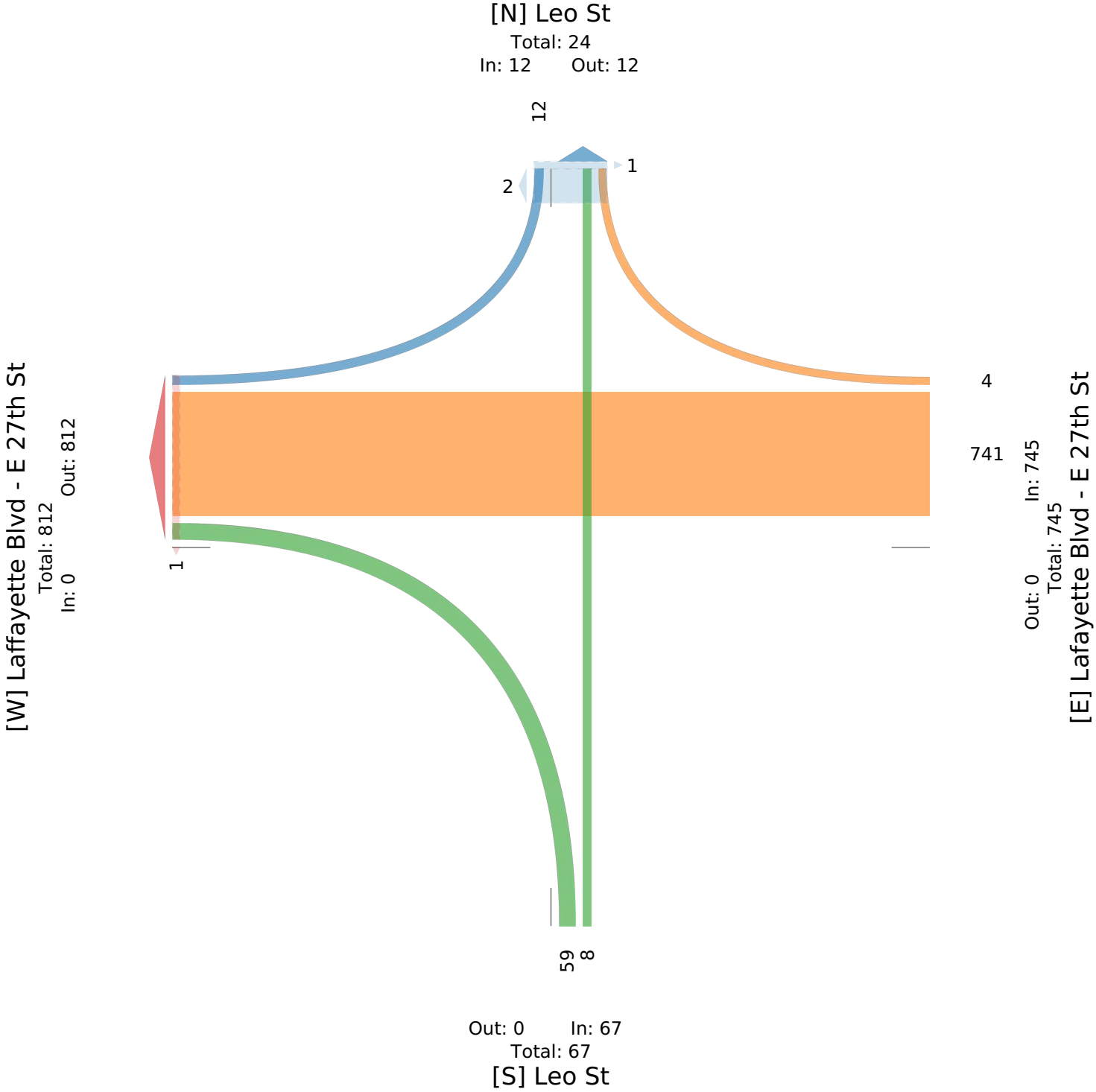
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Leo St Southbound						Lafayette Blvd - E 27th St Westbound						Leo St Northbound						Laffayette Blvd - E 27th St Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 7:30AM	2	0	0	0	**2**	2	3	174	0	0	**177**	0	0	1	19	0	**20**	0	0	0	0	0	**0**	0	**199**
7:45AM	3	0	0	0	**3**	0	1	195	0	0	**196**	0	0	4	14	0	**18**	0	0	0	0	0	**0**	1	**217**
8:00AM	3	0	0	0	**3**	1	0	215	0	0	**215**	0	0	1	12	0	**13**	0	0	0	0	0	**0**	0	**231**
8:15AM	4	0	0	0	**4**	0	0	157	0	0	**157**	0	0	2	14	0	**16**	0	0	0	0	0	**0**	0	**177**
Total	12	0	0	0	**12**	3	4	741	0	0	**745**	0	0	8	59	0	**67**	0	0	0	0	0	**0**	1	**824**
% Approach	100%	0%	0%	0%	**-**	-	0.5%	99.5%	0%	0%	**-**	-	0%	11.9%	88.1%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	1.5%	0%	0%	0%	**1.5%**	-	0.5%	89.9%	0%	0%	**90.4%**	-	0%	1.0%	7.2%	0%	**8.1%**	-	0%	0%	0%	0%	**0%**	-	-
PHF	0.750	-	-	-	**0.750**	-	0.333	0.862	-	-	**0.866**	-	-	0.500	0.776	-	**0.838**	-	-	-	-	-	**-**	-	0.892
Lights and Motorcycles	11	0	0	0	**11**	-	2	688	0	0	**690**	-	0	5	57	0	**62**	-	0	0	0	0	**0**	-	763
% Lights and Motorcycles	91.7%	0%	0%	0%	**91.7%**	-	50.0%	92.8%	0%	0%	**92.6%**	-	0%	62.5%	96.6%	0%	**92.5%**	-	0%	0%	0%	0%	**-**	-	92.6%
Heavy	1	0	0	0	**1**	-	2	53	0	0	**55**	-	0	3	2	0	**5**	-	0	0	0	0	**0**	-	61
% Heavy	8.3%	0%	0%	0%	**8.3%**	-	50.0%	7.2%	0%	0%	**7.4%**	-	0%	37.5%	3.4%	0%	**7.5%**	-	0%	0%	0%	0%	**-**	-	7.4%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	66.7%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	33.3%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

1-Lafayette Blvd-E 27th St & Leo St (VA24-20... - TMC
Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221177, Location: 36.871438, -76.2767

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



1-Lafayette Blvd-E 27th St & Leo St (VA24-20... - TMC

Thu Sep 19, 2024
PM Peak (4:30 PM - 5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221177, Location: 36.871438, -76.2767

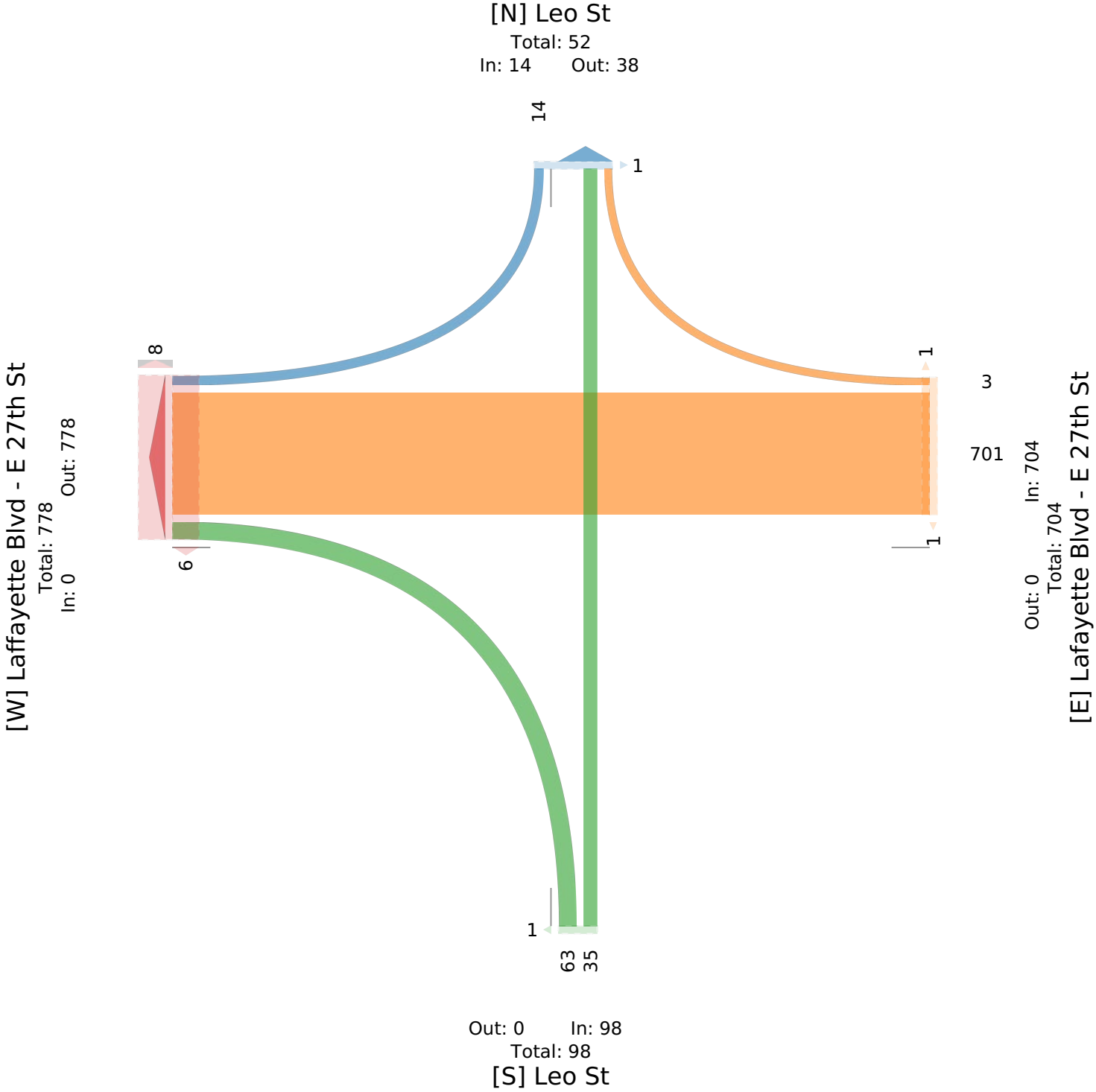
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Leo St Southbound						Lafayette Blvd - E 27th St Westbound						Leo St Northbound						Laffayette Blvd - E 27th St Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 4:30PM	4	0	0	0	**4**	0	2	152	0	0	**154**	1	0	11	16	0	**27**	1	0	0	0	0	**0**	3	**185**
4:45PM	4	0	0	0	**4**	0	0	192	0	0	**192**	1	0	13	20	0	**33**	0	0	0	0	0	**0**	1	**229**
5:00PM	2	0	0	0	**2**	0	1	182	0	0	**183**	0	0	5	15	0	**20**	0	0	0	0	0	**0**	7	**205**
5:15PM	4	0	0	0	**4**	1	0	175	0	0	**175**	0	0	6	12	0	**18**	0	0	0	0	0	**0**	3	**197**
Total	14	0	0	0	**14**	1	3	701	0	0	**704**	2	0	35	63	0	**98**	1	0	0	0	0	**0**	14	**816**
% Approach	100%	0%	0%	0%	**-**	-	0.4%	99.6%	0%	0%	**-**	-	0%	35.7%	64.3%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	1.7%	0%	0%	0%	**1.7%**	-	0.4%	85.9%	0%	0%	**86.3%**	-	0%	4.3%	7.7%	0%	**12.0%**	-	0%	0%	0%	0%	**0%**	-	-
PHF	0.875	-	-	-	**0.875**	-	0.375	0.913	-	-	**0.917**	-	-	0.673	0.788	-	**0.742**	-	-	-	-	-	**-**	-	0.891
Lights and Motorcycles	13	0	0	0	**13**	-	3	689	0	0	**692**	-	0	34	63	0	**97**	-	0	0	0	0	**0**	-	802
% Lights and Motorcycles	92.9%	0%	0%	0%	**92.9%**	-	100%	98.3%	0%	0%	**98.3%**	-	0%	97.1%	100%	0%	**99.0%**	-	0%	0%	0%	0%	**-**	-	98.3%
Heavy	1	0	0	0	**1**	-	0	12	0	0	**12**	-	0	1	0	0	**1**	-	0	0	0	0	**0**	-	14
% Heavy	7.1%	0%	0%	0%	**7.1%**	-	0%	1.7%	0%	0%	**1.7%**	-	0%	2.9%	0%	0%	**1.0%**	-	0%	0%	0%	0%	**-**	-	1.7%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	14	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

1-Lafayette Blvd-E 27th St & Leo St (VA24-20... - TMC
Thu Sep 19, 2024
PM Peak (4:30 PM - 5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221177, Location: 36.871438, -76.2767

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



2-Lafayette Blvd-E 26th St & Leo St (VA24-20... - TMC

Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221178, Location: 36.870854, -76.276543

PMA Traffic Data Collection

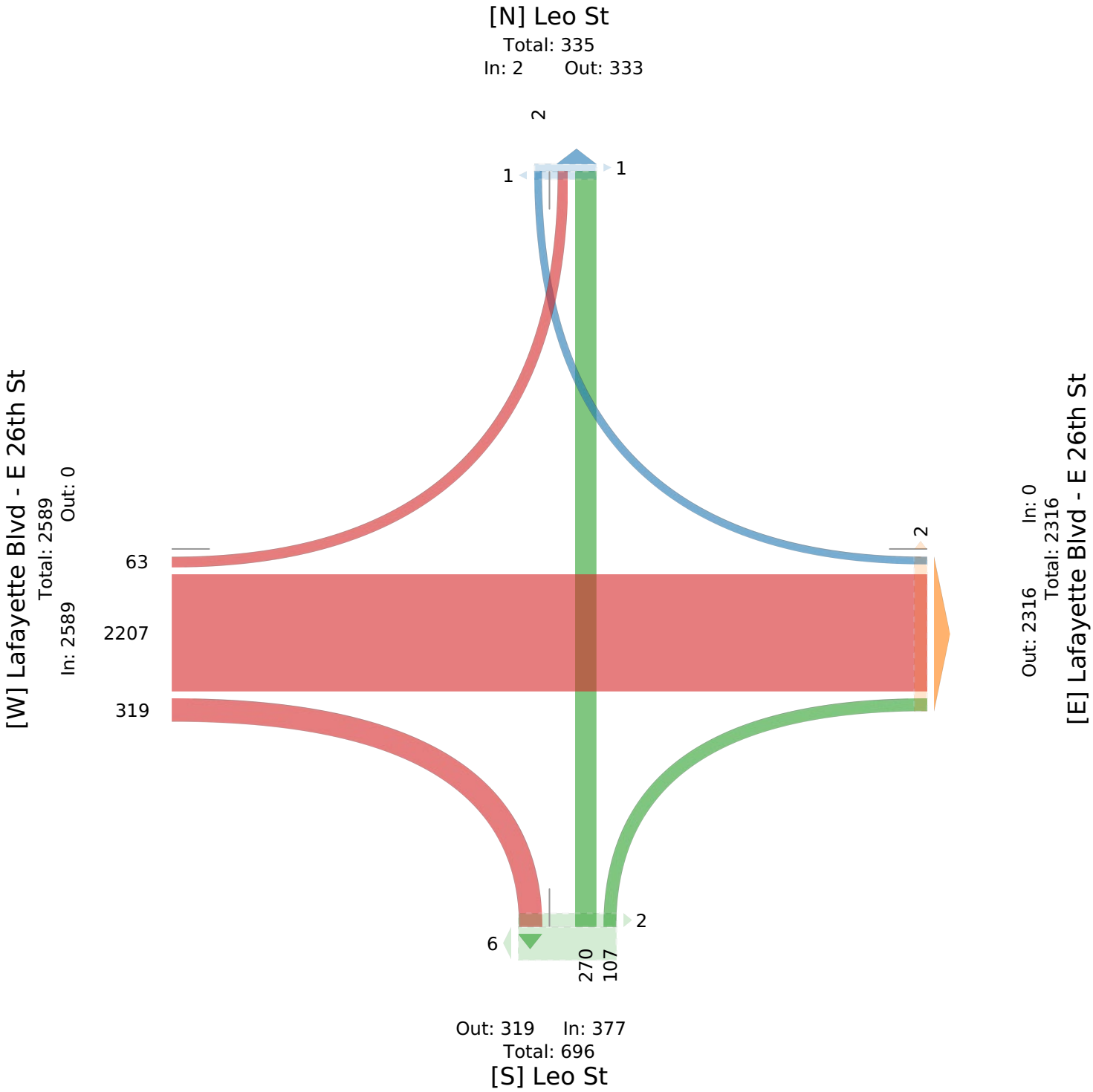
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Leo St Southbound						Lafayette Blvd - E 26th St Westbound						Leo St Northbound						Lafayette Blvd - E 26th St Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 7:00AM	0	0	0	0	**0**	0	0	0	0	0	**0**	2	2	13	0	0	**15**	0	9	82	1	0	**92**	0	**107**
7:15AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	1	11	0	0	**12**	0	15	100	2	0	**117**	0	**129**
7:30AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	5	14	0	0	**19**	2	14	110	4	0	**128**	0	**147**
7:45AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	7	18	0	0	**25**	0	9	104	3	0	**116**	0	**141**
Hourly Total	0	0	0	0	**0**	0	0	0	0	0	**0**	2	15	56	0	0	**71**	2	47	396	10	0	**453**	0	**524**
8:00AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	3	12	0	0	**15**	0	15	97	4	0	**116**	0	**131**
8:15AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	4	10	0	0	**14**	2	20	119	5	0	**144**	0	**158**
8:30AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	1	15	0	0	**16**	0	18	97	2	0	**117**	0	**133**
8:45AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	4	17	0	0	**21**	0	8	98	2	0	**108**	0	**129**
Hourly Total	0	0	0	0	**0**	0	0	0	0	0	**0**	0	12	54	0	0	**66**	2	61	411	13	0	**485**	0	**551**
9:00AM	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**
Hourly Total	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**
3:30PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	16	26	0	0	**42**	1	40	154	5	0	**199**	0	**241**
3:45PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	6	23	0	0	**29**	2	26	155	7	0	**188**	0	**217**
Hourly Total	0	0	0	0	**0**	0	0	0	0	0	**0**	0	22	49	0	0	**71**	3	66	309	12	0	**387**	0	**458**
4:00PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	13	13	0	0	**26**	0	22	190	6	0	**218**	0	**244**
4:15PM	0	0	1	0	**1**	0	0	0	0	0	**0**	0	5	27	0	0	**32**	0	26	198	3	0	**227**	0	**260**
4:30PM	0	0	0	0	**0**	1	0	0	0	0	**0**	0	19	19	0	0	**38**	1	25	184	5	0	**214**	0	**252**
4:45PM	0	0	1	0	**1**	1	0	0	0	0	**0**	0	11	18	0	0	**29**	0	24	160	11	0	**195**	0	**225**
Hourly Total	0	0	2	0	**2**	2	0	0	0	0	**0**	0	48	77	0	0	**125**	1	97	732	25	0	**854**	0	**981**
5:00PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	6	18	0	0	**24**	0	28	180	2	0	**210**	0	**234**
5:15PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	4	16	0	0	**20**	0	20	179	1	0	**200**	0	**220**
5:30PM	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**
Hourly Total	0	0	0	0	**0**	0	0	0	0	0	**0**	0	10	34	0	0	**44**	0	48	359	3	0	**410**	0	**454**
Total	0	0	2	0	**2**	2	0	0	0	0	**0**	2	107	270	0	0	**377**	8	319	2207	63	0	**2589**	0	**2968**
% Approach	0%	0%	100%	0%	**-**	-	0%	0%	0%	0%	**-**	-	28.4%	71.6%	0%	0%	**-**	-	12.3%	85.2%	2.4%	0%	**-**	-	-
% Total	0%	0%	0.1%	0%	**0.1%**	-	0%	0%	0%	0%	**0%**	-	3.6%	9.1%	0%	0%	**12.7%**	-	10.7%	74.4%	2.1%	0%	**87.2%**	-	-
Lights and Motorcycles	0	0	2	0	**2**	-	0	0	0	0	**0**	-	99	258	0	0	**357**	-	303	2116	60	0	**2479**	-	2838
% Lights and Motorcycles	0%	0%	100%	0%	**100%**	-	0%	0%	0%	0%	**-**	-	92.5%	95.6%	0%	0%	**94.7%**	-	95.0%	95.9%	95.2%	0%	**95.8%**	-	95.6%
Heavy	0	0	0	0	**0**	-	0	0	0	0	**0**	-	8	12	0	0	**20**	-	16	91	3	0	**110**	-	130
% Heavy	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	7.5%	4.4%	0%	0%	**5.3%**	-	5.0%	4.1%	4.8%	0%	**4.2%**	-	4.4%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	5	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	50.0%	-	-	-	-	-	100%	-	-	-	-	-	62.5%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	50.0%	-	-	-	-	-	0%	-	-	-	-	-	37.5%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2-Lafayette Blvd-E 26th St & Leo St (VA24-20... - TMC
Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221178, Location: 36.870854, -76.276543

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



2-Lafayette Blvd-E 26th St & Leo St (VA24-20... - TMC

Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221178, Location: 36.870854, -76.276543

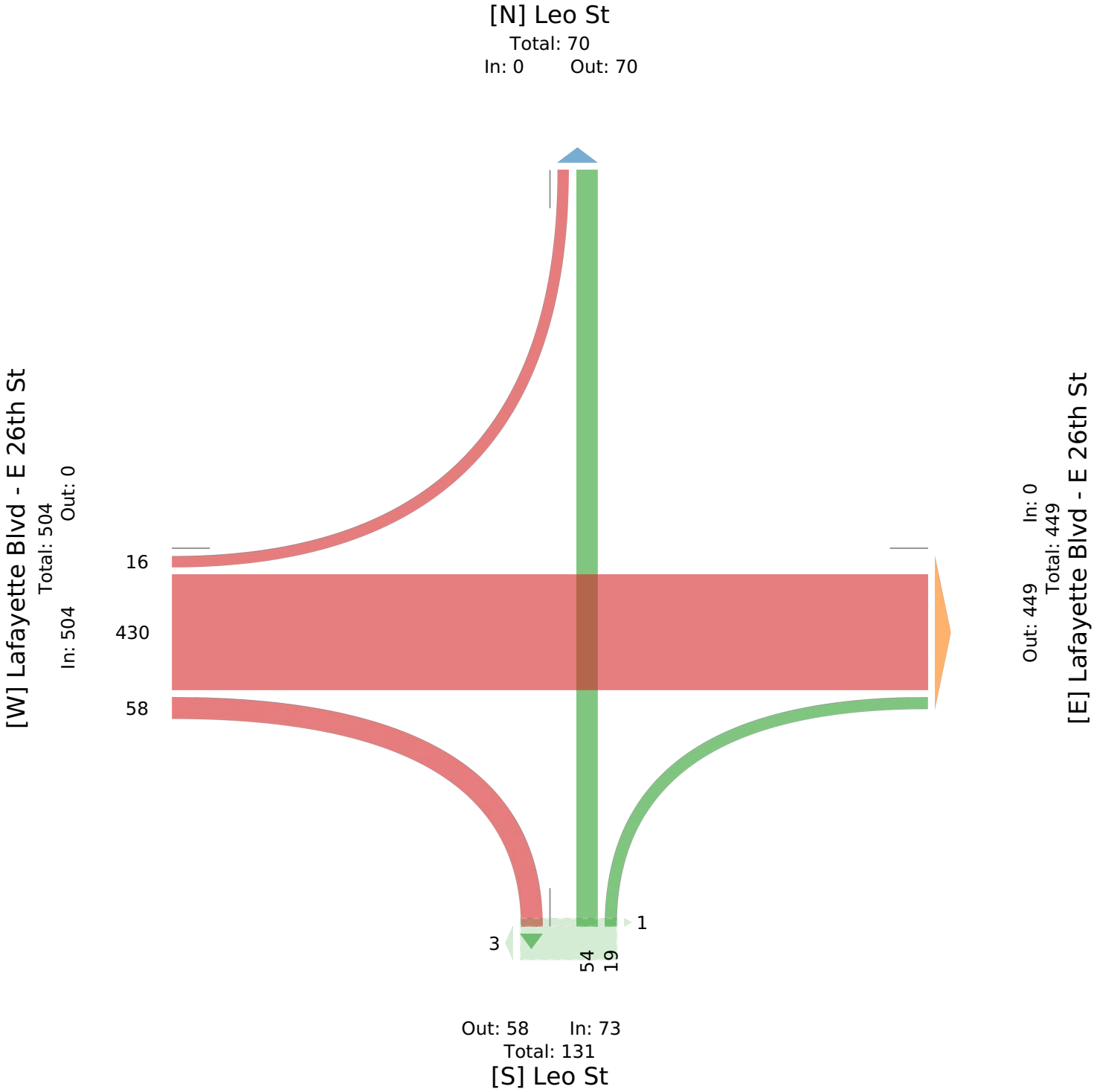
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Leo St Southbound						Lafayette Blvd - E 26th St Westbound						Leo St Northbound						Lafayette Blvd - E 26th St Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 7:30AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	5	14	0	0	**19**	2	14	110	4	0	**128**	0	**147**
7:45AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	7	18	0	0	**25**	0	9	104	3	0	**116**	0	**141**
8:00AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	3	12	0	0	**15**	0	15	97	4	0	**116**	0	**131**
8:15AM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	4	10	0	0	**14**	2	20	119	5	0	**144**	0	**158**
Total	0	0	0	0	**0**	0	0	0	0	0	**0**	0	19	54	0	0	**73**	4	58	430	16	0	**504**	0	**577**
% Approach	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	26.0%	74.0%	0%	0%	**-**	-	11.5%	85.3%	3.2%	0%	**-**	-	**-**
% Total	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	3.3%	9.4%	0%	0%	**12.7%**	-	10.1%	74.5%	2.8%	0%	**87.3%**	-	**-**
PHF	-	-	-	-	**-**	-	-	-	-	-	**-**	-	0.679	0.750	-	-	**0.730**	-	0.725	0.903	0.800	-	**0.875**	-	0.913
Lights and Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	14	48	0	0	**62**	-	55	398	15	0	**468**	-	530
% Lights and Motorcycles	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	73.7%	88.9%	0%	0%	**84.9%**	-	94.8%	92.6%	93.8%	0%	**92.9%**	-	91.9%
Heavy	0	0	0	0	**0**	-	0	0	0	0	**0**	-	5	6	0	0	**11**	-	3	32	1	0	**36**	-	47
% Heavy	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	26.3%	11.1%	0%	0%	**15.1%**	-	5.2%	7.4%	6.3%	0%	**7.1%**	-	8.1%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75.0%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2-Lafayette Blvd-E 26th St & Leo St (VA24-20... - TMC
Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221178, Location: 36.870854, -76.276543

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



2-Lafayette Blvd-E 26th St & Leo St (VA24-20... - TMC

Thu Sep 19, 2024
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221178, Location: 36.870854, -76.276543

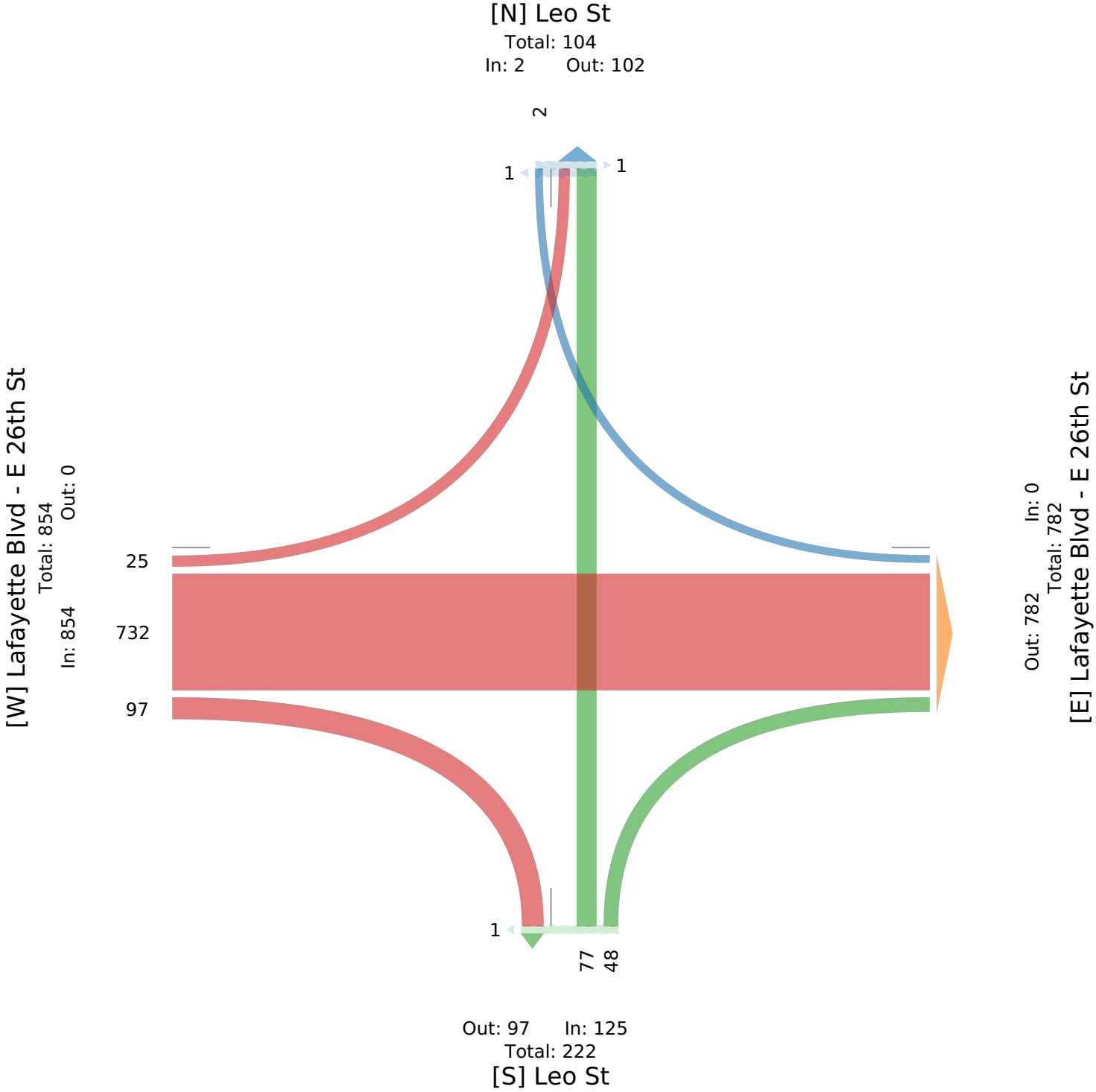
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Leo St Southbound						Lafayette Blvd - E 26th St Westbound						Leo St Northbound						Lafayette Blvd - E 26th St Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 4:00PM	0	0	0	0	**0**	0	0	0	0	0	**0**	0	13	13	0	0	**26**	0	22	190	6	0	**218**	0	**244**
4:15PM	0	0	1	0	**1**	0	0	0	0	0	**0**	0	5	27	0	0	**32**	0	26	198	3	0	**227**	0	**260**
4:30PM	0	0	0	0	**0**	1	0	0	0	0	**0**	0	19	19	0	0	**38**	1	25	184	5	0	**214**	0	**252**
4:45PM	0	0	1	0	**1**	1	0	0	0	0	**0**	0	11	18	0	0	**29**	0	24	160	11	0	**195**	0	**225**
Total	0	0	2	0	**2**	2	0	0	0	0	**0**	0	48	77	0	0	**125**	1	97	732	25	0	**854**	0	**981**
% Approach	0%	0%	100%	0%	**-**	-	0%	0%	0%	0%	**-**	-	38.4%	61.6%	0%	0%	**-**	-	11.4%	85.7%	2.9%	0%	**-**	-	**-**
% Total	0%	0%	0.2%	0%	**0.2%**	-	0%	0%	0%	0%	**0%**	-	4.9%	7.8%	0%	0%	**12.7%**	-	9.9%	74.6%	2.5%	0%	**87.1%**	-	**-**
PHF	-	-	0.500	-	**0.500**	-	-	-	-	-	**-**	-	0.632	0.713	-	-	**0.822**	-	0.933	0.924	0.568	-	**0.941**	-	0.943
Lights and Motorcycles	0	0	2	0	**2**	-	0	0	0	0	**0**	-	47	77	0	0	**124**	-	96	709	25	0	**830**	-	956
% Lights and Motorcycles	0%	0%	100%	0%	**100%**	-	0%	0%	0%	0%	**-**	-	97.9%	100%	0%	0%	**99.2%**	-	99.0%	96.9%	100%	0%	**97.2%**	-	97.5%
Heavy	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	0	0	0	**1**	-	1	23	0	0	**24**	-	25
% Heavy	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	2.1%	0%	0%	0%	**0.8%**	-	1.0%	3.1%	0%	0%	**2.8%**	-	2.5%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

2-Lafayette Blvd-E 26th St & Leo St (VA24-20... - TMC
Thu Sep 19, 2024
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221178, Location: 36.870854, -76.276543

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



3-Lafayette Blvd & Ruffin Way (VA24-203) - TMC

Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221179, Location: 36.871574, -76.275681

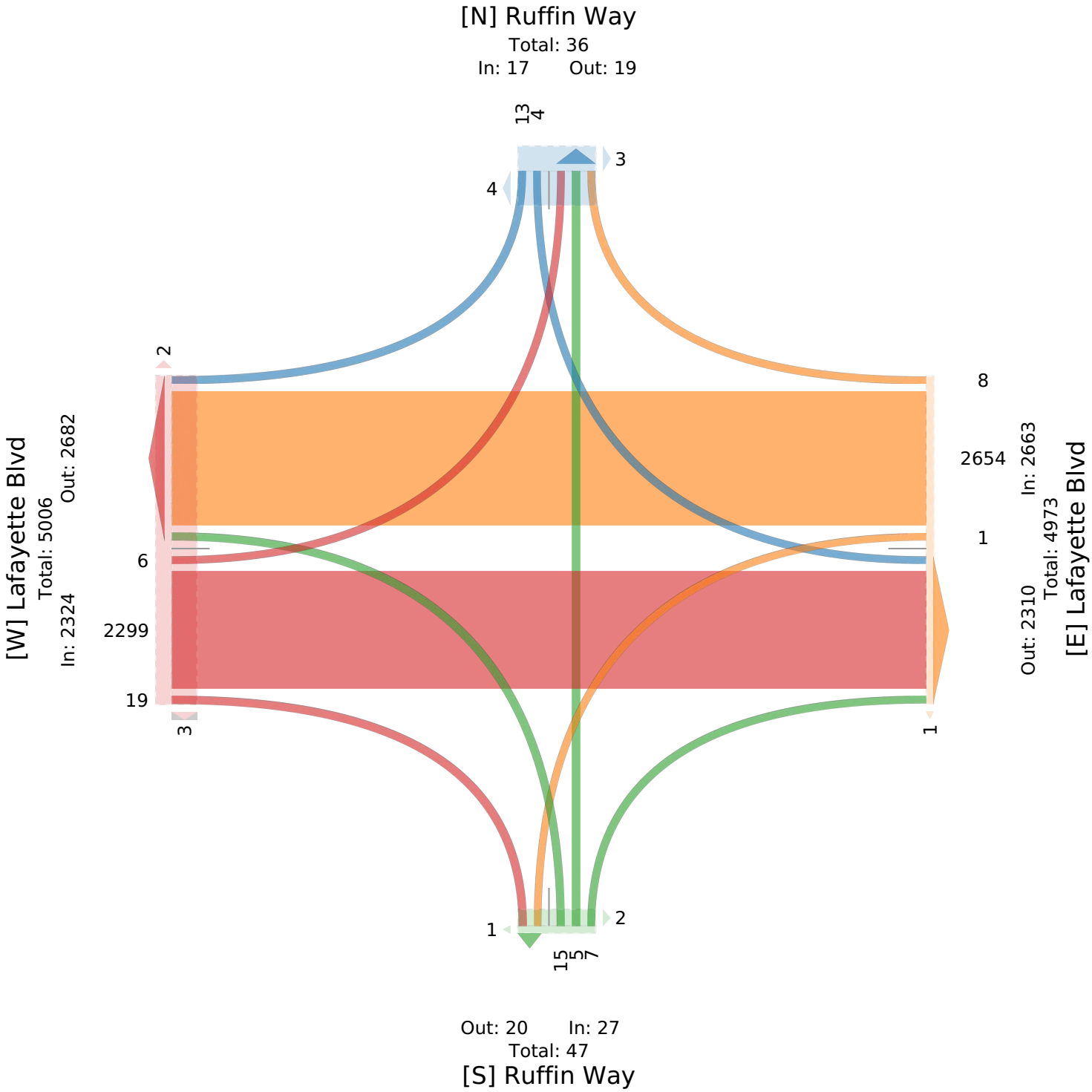
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg	Ruffin Way Southbound						Lafayette Blvd Westbound						Ruffin Way Northbound						Lafayette Blvd Eastbound						
Direction																									
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2024-09-19 7:00AM	0	0	1	0	**1**	0	1	154	0	0	**155**	0	1	0	1	0	**2**	0	0	90	0	0	**90**	0	**248**
7:15AM	1	0	0	0	**1**	0	0	159	0	0	**159**	0	1	0	0	0	**1**	0	1	105	1	0	**107**	0	**268**
7:30AM	2	0	0	0	**2**	1	0	180	0	0	**180**	0	1	0	1	0	**2**	0	0	112	0	0	**112**	3	**296**
7:45AM	2	0	1	0	**3**	0	0	189	0	0	**189**	0	0	0	1	0	**1**	0	2	111	1	0	**114**	0	**307**
Hourly Total	5	0	2	0	**7**	1	1	682	0	0	**683**	0	3	0	3	0	**6**	0	3	418	2	0	**423**	3	**1119**
8:00AM	2	0	0	0	**2**	1	0	204	1	0	**205**	0	2	1	1	0	**4**	0	0	102	0	0	**102**	0	**313**
8:15AM	0	0	0	0	**0**	0	0	164	0	0	**164**	0	0	1	2	0	**3**	0	2	121	0	0	**123**	0	**290**
8:30AM	0	0	0	0	**0**	0	0	144	0	0	**144**	0	0	0	2	0	**2**	0	1	102	0	0	**103**	0	**249**
8:45AM	2	0	1	0	**3**	0	4	131	0	0	**135**	0	1	0	1	0	**2**	1	1	100	0	0	**101**	0	**241**
Hourly Total	4	0	1	0	**5**	1	4	643	1	0	**648**	0	3	2	6	0	**11**	1	4	425	0	0	**429**	0	**1093**
9:00AM	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**
Hourly Total	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**
3:30PM	0	0	0	0	**0**	0	0	130	0	0	**130**	0	0	0	0	0	**0**	0	1	173	1	0	**175**	0	**305**
3:45PM	0	0	0	0	**0**	1	1	181	0	0	**182**	1	1	2	0	0	**3**	1	2	156	1	0	**159**	0	**344**
Hourly Total	0	0	0	0	**0**	1	1	311	0	0	**312**	1	1	2	0	0	**3**	1	3	329	2	0	**334**	0	**649**
4:00PM	1	0	1	0	**2**	0	0	163	0	0	**163**	0	0	0	0	0	**0**	0	3	193	0	0	**196**	0	**361**
4:15PM	1	0	0	0	**1**	0	1	169	0	0	**170**	0	0	0	0	0	**0**	0	1	208	0	0	**209**	0	**380**
4:30PM	0	0	0	0	**0**	2	0	144	0	0	**144**	0	0	0	1	0	**1**	0	0	197	0	0	**197**	1	**342**
4:45PM	0	0	0	0	**0**	0	0	199	0	0	**199**	0	0	0	1	0	**1**	1	1	168	1	0	**170**	0	**370**
Hourly Total	2	0	1	0	**3**	2	1	675	0	0	**676**	0	0	0	2	0	**2**	1	5	766	1	0	**772**	1	**1453**
5:00PM	1	0	0	0	**1**	0	1	178	0	0	**179**	0	0	1	1	0	**2**	0	2	183	1	0	**186**	0	**368**
5:15PM	1	0	0	0	**1**	2	0	165	0	0	**165**	0	0	0	3	0	**3**	0	2	178	0	0	**180**	1	**349**
5:30PM	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**
Hourly Total	2	0	0	0	**2**	2	1	343	0	0	**344**	0	0	1	4	0	**5**	0	4	361	1	0	**366**	1	**717**
Total	13	0	4	0	**17**	7	8	2654	1	0	**2663**	1	7	5	15	0	**27**	3	19	2299	6	0	**2324**	5	**5031**
% Approach	76.5%	0%	23.5%	0%	**-**	-	0.3%	99.7%	0%	0%	**-**	-	25.9%	18.5%	55.6%	0%	**-**	-	0.8%	98.9%	0.3%	0%	**-**	-	**-**
% Total	0.3%	0%	0.1%	0%	**0.3%**	-	0.2%	52.8%	0%	0%	**52.9%**	-	0.1%	0.1%	0.3%	0%	**0.5%**	-	0.4%	45.7%	0.1%	0%	**46.2%**	-	**-**
Lights and Motorcycles	12	0	4	0	**16**	-	7	2546	0	0	**2553**	-	6	2	15	0	**23**	-	17	2200	6	0	**2223**	-	4815
% Lights and Motorcycles	92.3%	0%	100%	0%	**94.1%**	-	87.5%	95.9%	0%	0%	**95.9%**	-	85.7%	40.0%	100%	0%	**85.2%**	-	89.5%	95.7%	100%	0%	**95.7%**	-	95.7%
Heavy	1	0	0	0	**1**	-	1	108	1	0	**110**	-	1	3	0	0	**4**	-	2	99	0	0	**101**	-	216
% Heavy	7.7%	0%	0%	0%	**5.9%**	-	12.5%	4.1%	100%	0%	**4.1%**	-	14.3%	60.0%	0%	0%	**14.8%**	-	10.5%	4.3%	0%	0%	**4.3%**	-	4.3%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	5	
% Pedestrians	-	-	-	-	-	71.4%	-	-	-	-	-	100%	-	-	-	-	-	33.3%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	28.6%	-	-	-	-	-	0%	-	-	-	-	-	66.7%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

3-Lafayette Blvd & Ruffin Way (VA24-203) - TMC
Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221179, Location: 36.871574, -76.275681

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



3-Lafayette Blvd & Ruffin Way (VA24-203) - TMC

Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221179, Location: 36.871574, -76.275681

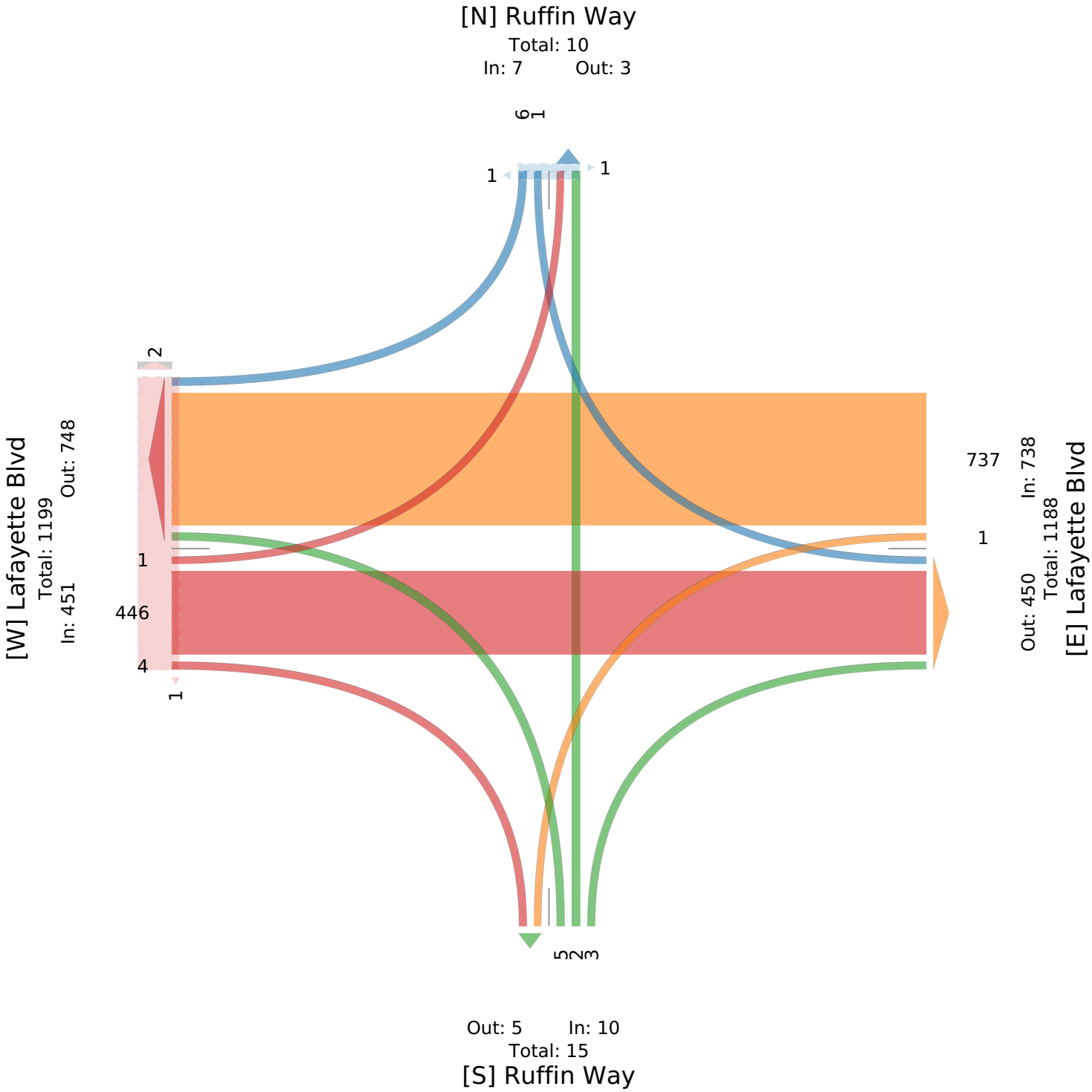
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg	Ruffin Way						Lafayette Blvd						Ruffin Way						Lafayette Blvd						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 7:30AM	2	0	0	0	**2**	1	0	180	0	0	**180**	0	1	0	1	0	**2**	0	0	112	0	0	**112**	3	**296**
7:45AM	2	0	1	0	**3**	0	0	189	0	0	**189**	0	0	0	1	0	**1**	0	2	111	1	0	**114**	0	**307**
8:00AM	2	0	0	0	**2**	1	0	204	1	0	**205**	0	2	1	1	0	**4**	0	0	102	0	0	**102**	0	**313**
8:15AM	0	0	0	0	**0**	0	0	164	0	0	**164**	0	0	1	2	0	**3**	0	2	121	0	0	**123**	0	**290**
Total	6	0	1	0	**7**	2	0	737	1	0	**738**	0	3	2	5	0	**10**	0	4	446	1	0	**451**	3	**1206**
% Approach	85.7%	0%	14.3%	0%	**-**	-	0%	99.9%	0.1%	0%	**-**	-	30.0%	20.0%	50.0%	0%	**-**	-	0.9%	98.9%	0.2%	0%	**-**	-	**-**
% Total	0.5%	0%	0.1%	0%	**0.6%**	-	0%	61.1%	0.1%	0%	**61.2%**	-	0.2%	0.2%	0.4%	0%	**0.8%**	-	0.3%	37.0%	0.1%	0%	**37.4%**	-	**-**
PHF	0.750	-	0.250	-	**0.583**	-	-	0.903	0.250	-	**0.900**	-	0.375	0.500	0.625	-	**0.625**	-	0.500	0.921	0.250	-	**0.917**	-	0.963
Lights and Motorcycles	6	0	1	0	**7**	-	0	685	0	0	**685**	-	2	1	5	0	**8**	-	3	411	1	0	**415**	-	1115
% Lights and Motorcycles	100%	0%	100%	0%	**100%**	-	0%	92.9%	0%	0%	**92.8%**	-	66.7%	50.0%	100%	0%	**80.0%**	-	75.0%	92.2%	100%	0%	**92.0%**	-	92.5%
Heavy	0	0	0	0	**0**	-	0	52	1	0	**53**	-	1	1	0	0	**2**	-	1	35	0	0	**36**	-	91
% Heavy	0%	0%	0%	0%	**0%**	-	0%	7.1%	100%	0%	**7.2%**	-	33.3%	50.0%	0%	0%	**20.0%**	-	25.0%	7.8%	0%	0%	**8.0%**	-	7.5%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	
% Pedestrians	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

3-Lafayette Blvd & Ruffin Way (VA24-203) - TMC
Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221179, Location: 36.871574, -76.275681

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



3-Lafayette Blvd & Ruffin Way (VA24-203) - TMC

Thu Sep 19, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221179, Location: 36.871574, -76.275681

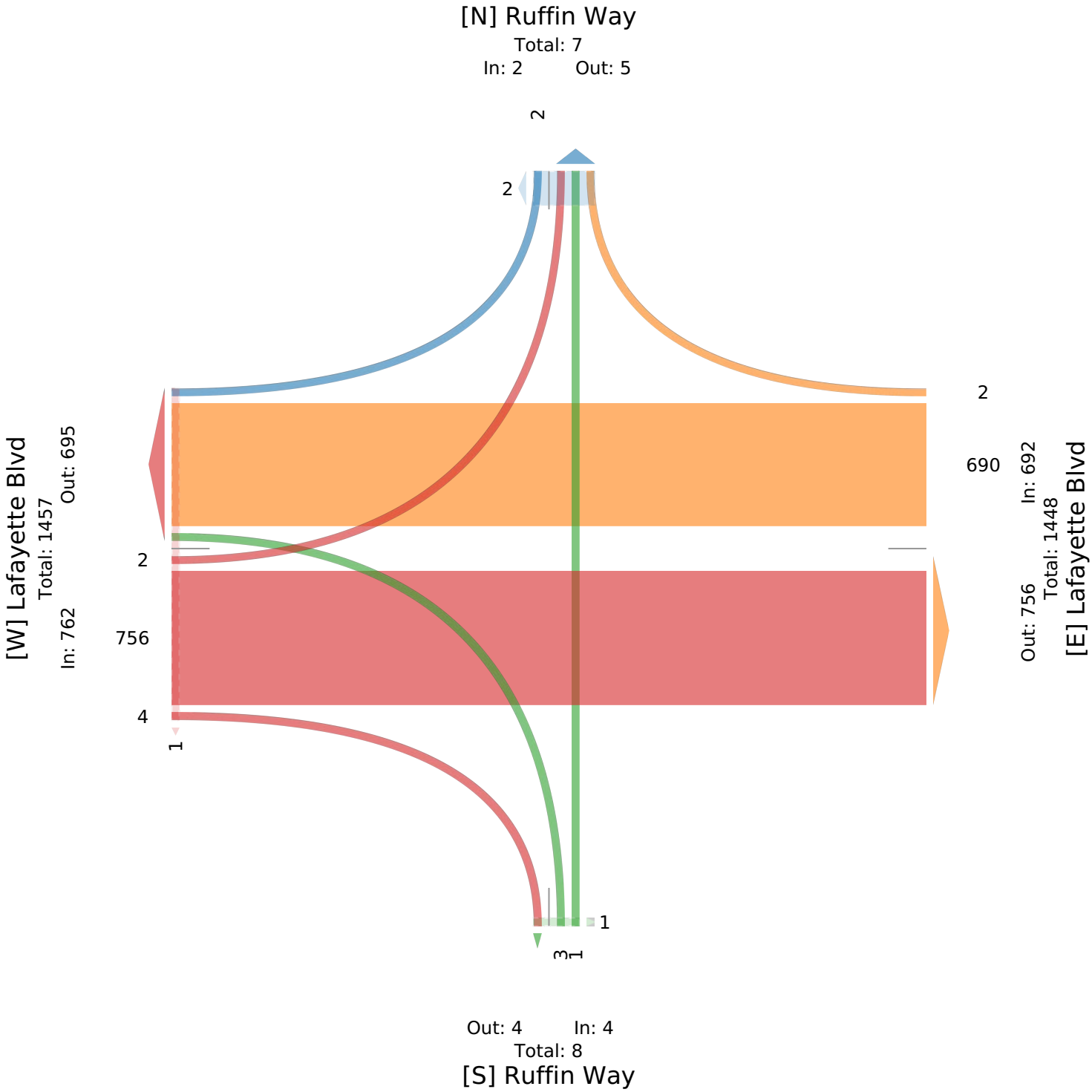
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Ruffin Way Southbound						Lafayette Blvd Westbound						Ruffin Way Northbound						Lafayette Blvd Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 4:15PM	1	0	0	0	**1**	0	1	169	0	0	**170**	0	0	0	0	0	**0**	0	1	208	0	0	**209**	0	**380**
4:30PM	0	0	0	0	**0**	2	0	144	0	0	**144**	0	0	0	1	0	**1**	0	0	197	0	0	**197**	1	**342**
4:45PM	0	0	0	0	**0**	0	0	199	0	0	**199**	0	0	0	1	0	**1**	1	1	168	1	0	**170**	0	**370**
5:00PM	1	0	0	0	**1**	0	1	178	0	0	**179**	0	0	1	1	0	**2**	0	2	183	1	0	**186**	0	**368**
Total	2	0	0	0	**2**	2	2	690	0	0	**692**	0	0	1	3	0	**4**	1	4	756	2	0	**762**	1	**1460**
% Approach	100%	0%	0%	0%	**-**	-	0.3%	99.7%	0%	0%	**-**	-	0%	25.0%	75.0%	0%	**-**	-	0.5%	99.2%	0.3%	0%	**-**	-	**-**
% Total	0.1%	0%	0%	0%	**0.1%**	-	0.1%	47.3%	0%	0%	**47.4%**	-	0%	0.1%	0.2%	0%	**0.3%**	-	0.3%	51.8%	0.1%	0%	**52.2%**	-	**-**
PHF	0.500	-	-	-	**0.500**	-	0.500	0.867	-	-	**0.869**	-	-	0.250	0.750	-	**0.500**	-	0.500	0.909	0.500	-	**0.911**	-	0.961
Lights and Motorcycles	2	0	0	0	**2**	-	2	677	0	0	**679**	-	0	0	3	0	**3**	-	4	737	2	0	**743**	-	1427
% Lights and Motorcycles	100%	0%	0%	0%	**100%**	-	100%	98.1%	0%	0%	**98.1%**	-	0%	0%	100%	0%	**75.0%**	-	100%	97.5%	100%	0%	**97.5%**	-	97.7%
Heavy	0	0	0	0	**0**	-	0	13	0	0	**13**	-	0	1	0	0	**1**	-	0	19	0	0	**19**	-	33
% Heavy	0%	0%	0%	0%	**0%**	-	0%	1.9%	0%	0%	**1.9%**	-	0%	100%	0%	0%	**25.0%**	-	0%	2.5%	0%	0%	**2.5%**	-	2.3%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

3-Lafayette Blvd & Ruffin Way (VA24-203) - TMC
Thu Sep 19, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221179, Location: 36.871574, -76.275681

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



4-Lafayette Blvd & Waverly Way (VA24-203) - TMC

Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221180, Location: 36.872048, -76.274853

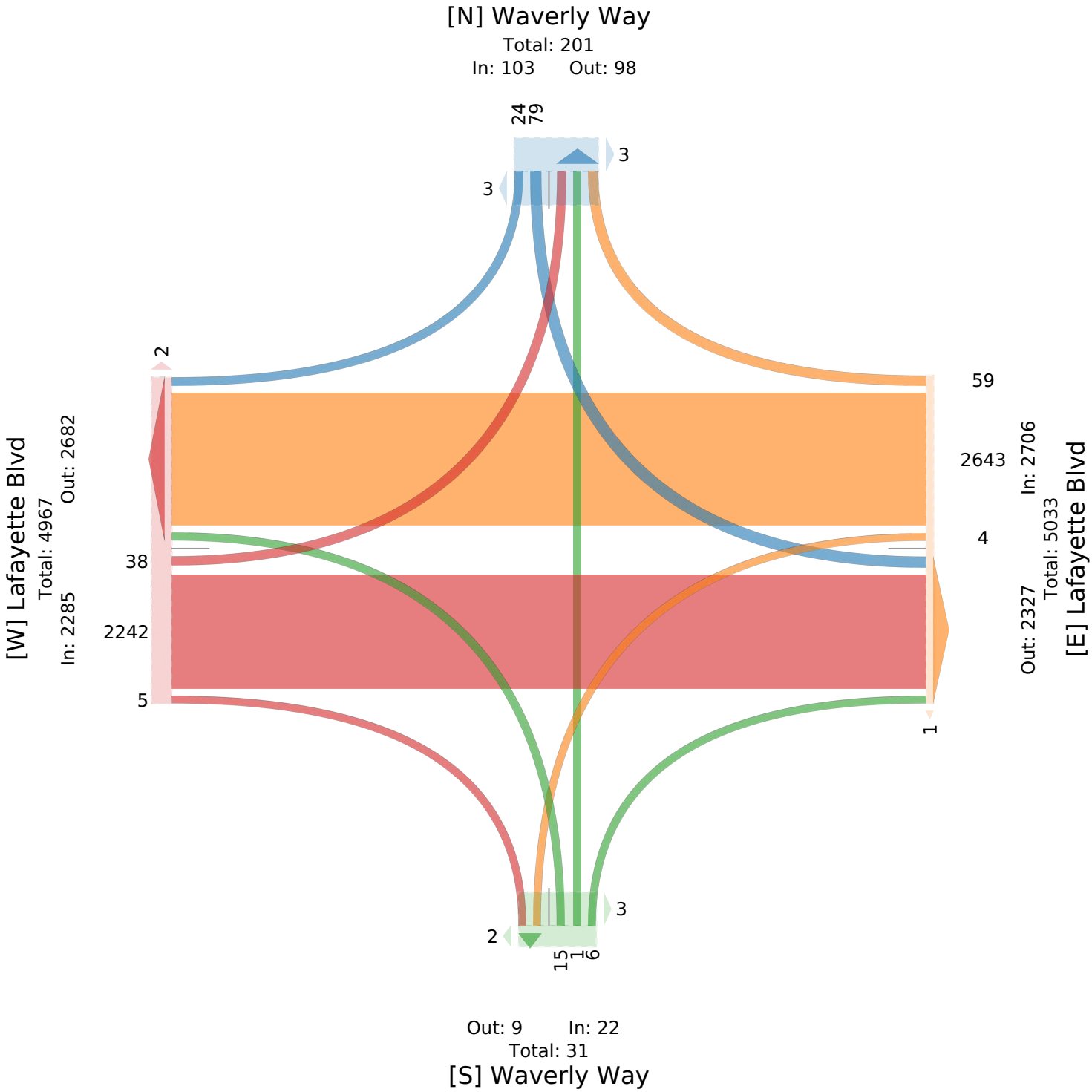
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg	Waverly Way						Lafayette Blvd						Waverly Way						Lafayette Blvd						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2024-09-19 7:00AM	4	0	3	0	**7**	0	1	151	0	0	**152**	0	0	0	1	0	**1**	0	1	81	5	0	**87**	0	**247**
7:15AM	0	0	1	0	**1**	0	2	151	0	0	**153**	0	0	0	2	0	**2**	1	0	104	1	0	**105**	0	**261**
7:30AM	3	0	6	0	**9**	1	2	174	0	0	**176**	0	0	0	1	0	**1**	1	0	118	0	0	**118**	0	**304**
7:45AM	0	0	4	0	**4**	0	1	185	0	0	**186**	0	1	0	1	0	**2**	0	0	113	1	0	**114**	1	**306**
Hourly Total	7	0	14	0	**21**	1	6	661	0	0	**667**	0	1	0	5	0	**6**	2	1	416	7	0	**424**	1	**1118**
8:00AM	2	0	4	0	**6**	3	3	204	0	0	**207**	0	1	0	2	0	**3**	0	0	102	0	0	**102**	0	**318**
8:15AM	2	0	1	0	**3**	0	2	155	0	0	**157**	0	0	0	1	0	**1**	0	1	118	2	0	**121**	0	**282**
8:30AM	0	0	10	0	**10**	0	3	146	1	0	**150**	0	0	0	2	0	**2**	0	0	94	2	0	**96**	0	**258**
8:45AM	2	0	2	0	**4**	0	2	138	0	0	**140**	1	0	0	1	0	**1**	1	1	99	2	0	**102**	1	**247**
Hourly Total	6	0	17	0	**23**	3	10	643	1	0	**654**	1	1	0	6	0	**7**	1	2	413	6	0	**421**	1	**1105**
9:00AM	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**
Hourly Total	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**
3:30PM	1	0	4	0	**5**	0	3	132	0	0	**135**	0	0	0	0	0	**0**	0	0	165	4	0	**169**	0	**309**
3:45PM	0	0	5	0	**5**	0	5	180	0	0	**185**	0	1	0	3	0	**4**	0	0	153	2	0	**155**	0	**349**
Hourly Total	1	0	9	0	**10**	0	8	312	0	0	**320**	0	1	0	3	0	**4**	0	0	318	6	0	**324**	0	**658**
4:00PM	4	0	5	0	**9**	0	5	158	1	0	**164**	0	1	0	0	0	**1**	1	0	196	2	0	**198**	0	**372**
4:15PM	2	0	7	0	**9**	0	1	179	0	0	**180**	0	1	0	1	0	**2**	0	1	198	5	0	**204**	0	**395**
4:30PM	0	0	4	0	**4**	0	11	152	1	0	**164**	0	1	0	0	0	**1**	1	0	191	5	0	**196**	0	**365**
4:45PM	0	0	9	0	**9**	0	6	189	1	0	**196**	0	0	1	0	0	**1**	0	0	168	2	0	**170**	0	**376**
Hourly Total	6	0	25	0	**31**	0	23	678	3	0	**704**	0	3	1	1	0	**5**	2	1	753	14	0	**768**	0	**1508**
5:00PM	3	0	7	0	**10**	0	7	180	0	0	**187**	0	0	0	0	0	**0**	0	0	176	2	0	**178**	0	**375**
5:15PM	1	0	7	0	**8**	2	5	169	0	0	**174**	0	0	0	0	0	**0**	0	1	166	3	0	**170**	0	**352**
5:30PM	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**
Hourly Total	4	0	14	0	**18**	2	12	349	0	0	**361**	0	0	0	0	0	**0**	0	1	342	5	0	**348**	0	**727**
Total	24	0	79	0	**103**	6	59	2643	4	0	**2706**	1	6	1	15	0	**22**	5	5	2242	38	0	**2285**	2	**5116**
% Approach	23.3%	0%	76.7%	0%	**-**	-	2.2%	97.7%	0.1%	0%	**-**	-	27.3%	4.5%	68.2%	0%	**-**	-	0.2%	98.1%	1.7%	0%	**-**	-	**-**
% Total	0.5%	0%	1.5%	0%	**2.0%**	-	1.2%	51.7%	0.1%	0%	**52.9%**	-	0.1%	0%	0.3%	0%	**0.4%**	-	0.1%	43.8%	0.7%	0%	**44.7%**	-	**-**
Lights and Motorcycles	23	0	77	0	**100**	-	56	2538	4	0	**2598**	-	5	1	10	0	**16**	-	5	2148	35	0	**2188**	-	4902
% Lights and Motorcycles	95.8%	0%	97.5%	0%	**97.1%**	-	94.9%	96.0%	100%	0%	**96.0%**	-	83.3%	100%	66.7%	0%	**72.7%**	-	100%	95.8%	92.1%	0%	**95.8%**	-	95.8%
Heavy	1	0	2	0	**3**	-	3	105	0	0	**108**	-	1	0	5	0	**6**	-	0	94	3	0	**97**	-	214
% Heavy	4.2%	0%	2.5%	0%	**2.9%**	-	5.1%	4.0%	0%	0%	**4.0%**	-	16.7%	0%	33.3%	0%	**27.3%**	-	0%	4.2%	7.9%	0%	**4.2%**	-	4.2%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	83.3%	-	-	-	-	-	100%	-	-	-	-	-	40.0%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	16.7%	-	-	-	-	-	0%	-	-	-	-	-	60.0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

4-Lafayette Blvd & Waverly Way (VA24-203) - TMC
Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221180, Location: 36.872048, -76.274853

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



4-Lafayette Blvd & Waverly Way (VA24-203) - TMC

Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221180, Location: 36.872048, -76.274853

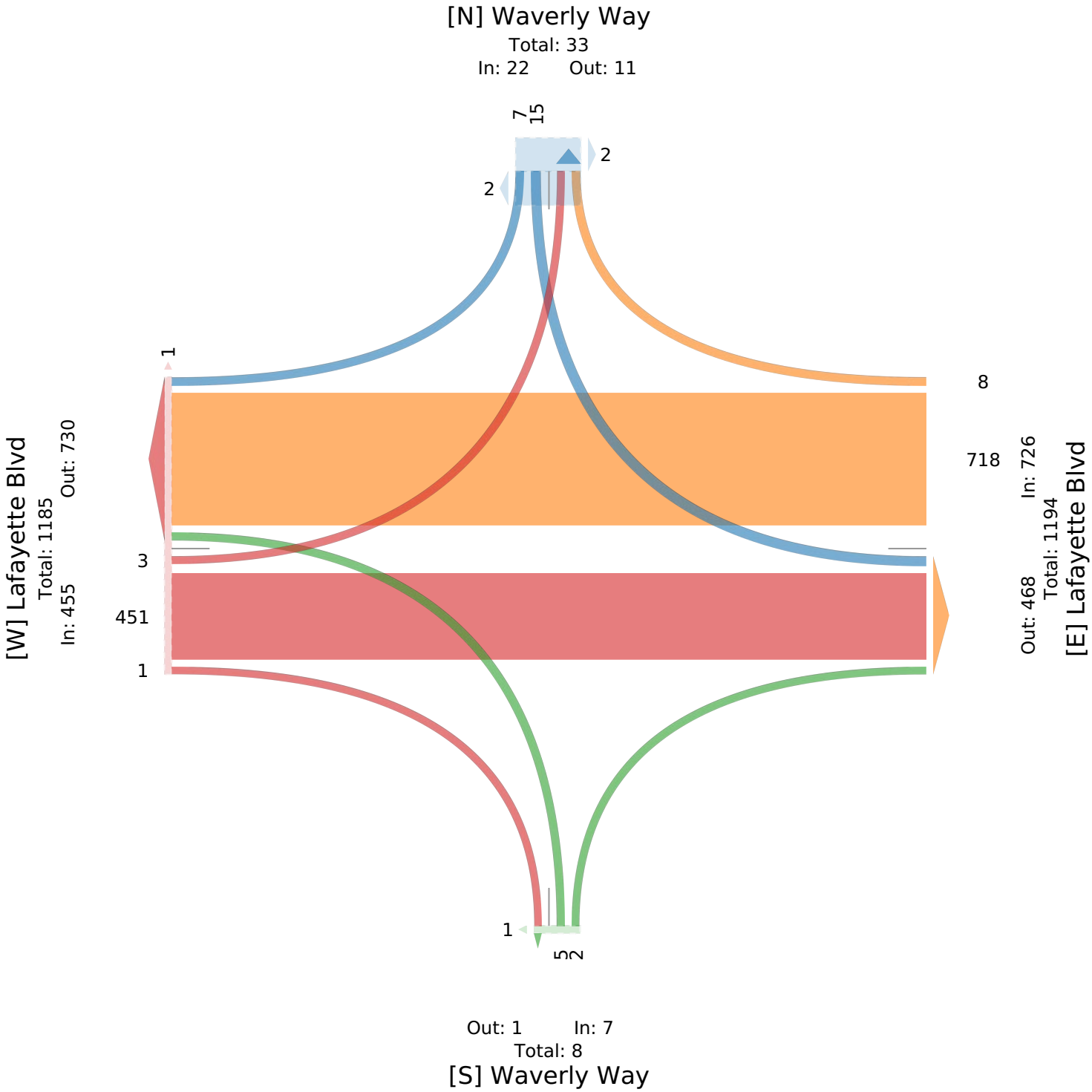
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg	Waverly Way						Lafayette Blvd						Waverly Way						Lafayette Blvd						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 7:30AM	3	0	6	0	**9**	1	2	174	0	0	**176**	0	0	0	1	0	**1**	1	0	118	0	0	**118**	0	**304**
7:45AM	0	0	4	0	**4**	0	1	185	0	0	**186**	0	1	0	1	0	**2**	0	0	113	1	0	**114**	1	**306**
8:00AM	2	0	4	0	**6**	3	3	204	0	0	**207**	0	1	0	2	0	**3**	0	0	102	0	0	**102**	0	**318**
8:15AM	2	0	1	0	**3**	0	2	155	0	0	**157**	0	0	0	1	0	**1**	0	1	118	2	0	**121**	0	**282**
Total	7	0	15	0	**22**	4	8	718	0	0	**726**	0	2	0	5	0	**7**	1	1	451	3	0	**455**	1	**1210**
% Approach	31.8%	0%	68.2%	0%	**-**	-	1.1%	98.9%	0%	0%	**-**	-	28.6%	0%	71.4%	0%	**-**	-	0.2%	99.1%	0.7%	0%	**-**	-	**-**
% Total	0.6%	0%	1.2%	0%	**1.8%**	-	0.7%	59.3%	0%	0%	**60.0%**	-	0.2%	0%	0.4%	0%	**0.6%**	-	0.1%	37.3%	0.2%	0%	**37.6%**	-	**-**
PHF	0.583	-	0.625	-	**0.611**	-	0.667	0.880	-	-	**0.877**	-	0.500	-	0.625	-	**0.583**	-	0.250	0.956	0.375	-	**0.940**	-	0.951
Lights and Motorcycles	7	0	14	0	**21**	-	8	667	0	0	**675**	-	2	0	3	0	**5**	-	1	414	2	0	**417**	-	1118
% Lights and Motorcycles	100%	0%	93.3%	0%	**95.5%**	-	100%	92.9%	0%	0%	**93.0%**	-	100%	0%	60.0%	0%	**71.4%**	-	100%	91.8%	66.7%	0%	**91.6%**	-	92.4%
Heavy	0	0	1	0	**1**	-	0	51	0	0	**51**	-	0	0	2	0	**2**	-	0	37	1	0	**38**	-	92
% Heavy	0%	0%	6.7%	0%	**4.5%**	-	0%	7.1%	0%	0%	**7.0%**	-	0%	0%	40.0%	0%	**28.6%**	-	0%	8.2%	33.3%	0%	**8.4%**	-	7.6%
Pedestrians	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	75.0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	25.0%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

4-Lafayette Blvd & Waverly Way (VA24-203) - TMC
Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221180, Location: 36.872048, -76.274853

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



4-Lafayette Blvd & Waverly Way (VA24-203) - TMC

Thu Sep 19, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221180, Location: 36.872048, -76.274853

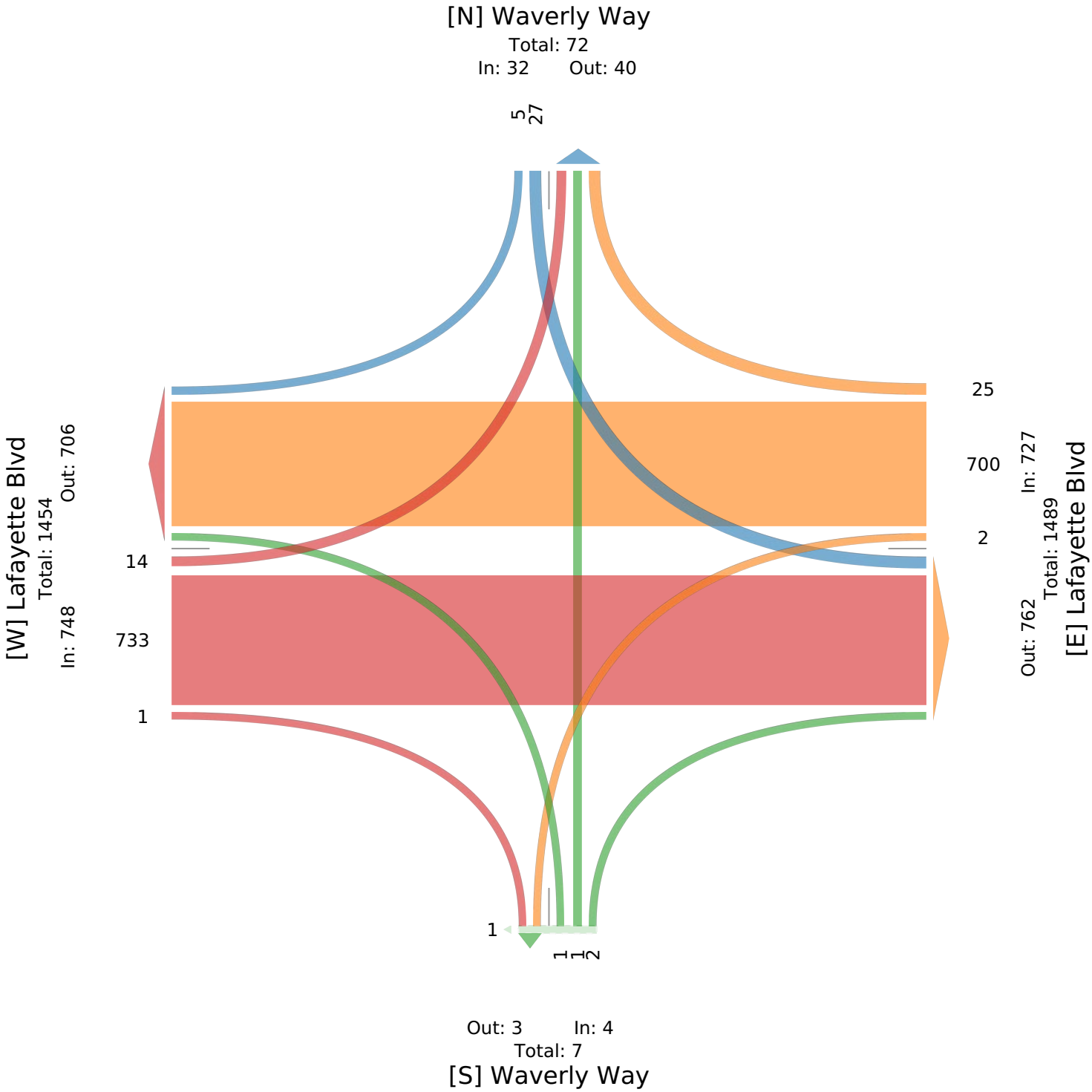
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg	Waverly Way						Lafayette Blvd						Waverly Way						Lafayette Blvd						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 4:15PM	2	0	7	0	**9**	0	1	179	0	0	**180**	0	1	0	1	0	**2**	0	1	198	5	0	**204**	0	**395**
4:30PM	0	0	4	0	**4**	0	11	152	1	0	**164**	0	1	0	0	0	**1**	1	0	191	5	0	**196**	0	**365**
4:45PM	0	0	9	0	**9**	0	6	189	1	0	**196**	0	0	1	0	0	**1**	0	0	168	2	0	**170**	0	**376**
5:00PM	3	0	7	0	**10**	0	7	180	0	0	**187**	0	0	0	0	0	**0**	0	0	176	2	0	**178**	0	**375**
Total	5	0	27	0	**32**	0	25	700	2	0	**727**	0	2	1	1	0	**4**	1	1	733	14	0	**748**	0	**1511**
% Approach	15.6%	0%	84.4%	0%	**-**	-	3.4%	96.3%	0.3%	0%	**-**	-	50.0%	25.0%	25.0%	0%	**-**	-	0.1%	98.0%	1.9%	0%	**-**	-	-
% Total	0.3%	0%	1.8%	0%	**2.1%**	-	1.7%	46.3%	0.1%	0%	**48.1%**	-	0.1%	0.1%	0.1%	0%	**0.3%**	-	0.1%	48.5%	0.9%	0%	**49.5%**	-	-
PHF	0.417	-	0.750	-	**0.800**	-	0.568	0.926	0.500	-	**0.927**	-	0.500	0.250	0.250	-	**0.500**	-	0.250	0.926	0.700	-	**0.917**	-	0.956
Lights and Motorcycles	5	0	26	0	**31**	-	24	688	2	0	**714**	-	2	1	1	0	**4**	-	1	714	13	0	**728**	-	1477
% Lights and Motorcycles	100%	0%	96.3%	0%	**96.9%**	-	96.0%	98.3%	100%	0%	**98.2%**	-	100%	100%	100%	0%	**100%**	-	100%	97.4%	92.9%	0%	**97.3%**	-	97.7%
Heavy	0	0	1	0	**1**	-	1	12	0	0	**13**	-	0	0	0	0	**0**	-	0	19	1	0	**20**	-	34
% Heavy	0%	0%	3.7%	0%	**3.1%**	-	4.0%	1.7%	0%	0%	**1.8%**	-	0%	0%	0%	0%	**0%**	-	0%	2.6%	7.1%	0%	**2.7%**	-	2.3%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

4-Lafayette Blvd & Waverly Way (VA24-203) - TMC
Thu Sep 19, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221180, Location: 36.872048, -76.274853

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



5-Lafayette Blvd & Dupont Circle (West) (VA2... - TMC

Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221181, Location: 36.874214, -76.271108

PMA Traffic Data Collection

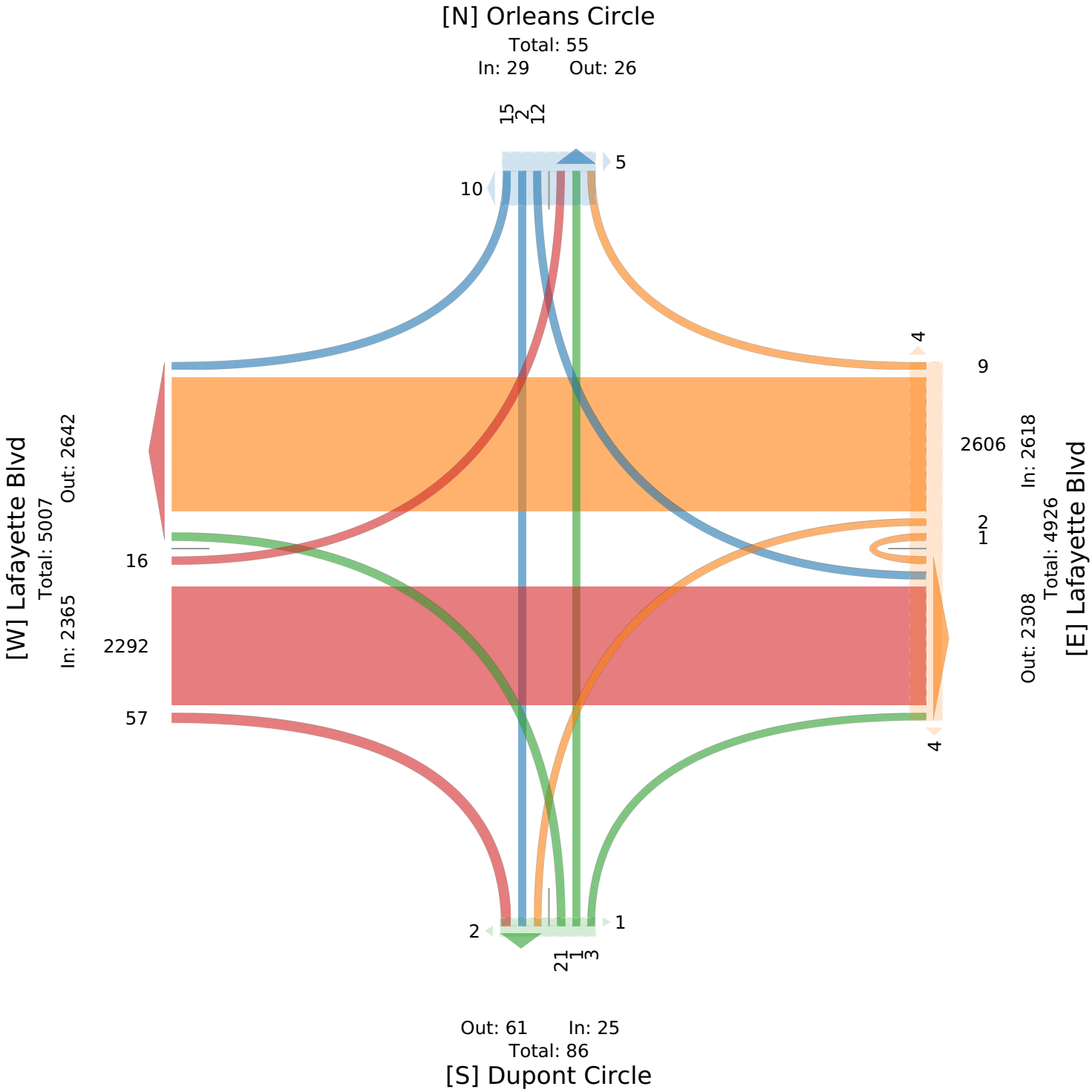
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345, Jacksonville Beach, FL, 32250, US

Leg	Orleans Circle						Lafayette Blvd						Dupont Circle						Lafayette Blvd						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2024-09-19 7:00AM	0	0	0	0	**0**	0	0	154	0	0	**154**	0	0	0	1	0	**1**	0	0	83	0	0	**83**	0	**238**
7:15AM	0	0	2	0	**2**	0	1	149	0	0	**150**	0	0	0	3	0	**3**	0	0	104	0	0	**104**	0	**259**
7:30AM	1	0	1	0	**2**	1	1	169	0	0	**170**	0	0	0	2	0	**2**	0	3	122	1	0	**126**	0	**300**
7:45AM	0	0	0	0	**0**	1	0	181	0	0	**181**	0	0	0	1	0	**1**	0	1	114	0	0	**115**	0	**297**
Hourly Total	1	0	3	0	**4**	2	2	653	0	0	**655**	0	0	0	7	0	**7**	0	4	423	1	0	**428**	0	**1094**
8:00AM	2	0	1	0	**3**	2	0	204	1	0	**205**	0	0	0	0	0	**0**	0	0	107	0	0	**107**	0	**315**
8:15AM	1	1	0	0	**2**	2	0	162	0	0	**162**	2	1	0	1	0	**2**	0	3	117	0	0	**120**	0	**286**
8:30AM	5	0	0	0	**5**	0	2	134	0	0	**136**	0	1	0	4	0	**5**	0	2	106	1	0	**109**	0	**255**
8:45AM	0	0	2	0	**2**	0	0	141	0	0	**141**	0	0	0	2	0	**2**	0	1	104	0	0	**105**	0	**250**
Hourly Total	8	1	3	0	**12**	4	2	641	1	0	**644**	2	2	0	7	0	**9**	0	6	434	1	0	**441**	0	**1106**
9:00AM	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**
Hourly Total	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**
3:30PM	1	0	0	0	**1**	1	0	133	0	1	**134**	0	0	0	0	0	**0**	1	3	167	0	0	**170**	0	**305**
3:45PM	0	0	1	0	**1**	0	1	167	0	0	**168**	0	0	0	1	0	**1**	0	4	152	2	0	**158**	0	**328**
Hourly Total	1	0	1	0	**2**	1	1	300	0	1	**302**	0	0	0	1	0	**1**	1	7	319	2	0	**328**	0	**633**
4:00PM	1	0	0	0	**1**	0	1	157	0	0	**158**	0	0	0	1	0	**1**	0	7	185	1	0	**193**	0	**353**
4:15PM	1	1	1	0	**3**	0	1	155	0	0	**156**	1	0	0	1	0	**1**	0	7	205	2	0	**214**	0	**374**
4:30PM	1	0	0	0	**1**	1	0	162	0	0	**162**	1	1	1	1	0	**3**	0	5	196	1	0	**202**	0	**368**
4:45PM	1	0	2	0	**3**	0	1	189	0	0	**190**	2	0	0	0	0	**0**	0	7	170	5	0	**182**	0	**375**
Hourly Total	4	1	3	0	**8**	1	3	663	0	0	**666**	4	1	1	3	0	**5**	0	26	756	9	0	**791**	0	**1470**
5:00PM	1	0	1	0	**2**	5	0	185	1	0	**186**	1	0	0	1	0	**1**	1	8	181	2	0	**191**	0	**380**
5:15PM	0	0	1	0	**1**	2	1	164	0	0	**165**	1	0	0	2	0	**2**	1	6	179	1	0	**186**	0	**354**
5:30PM	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**
Hourly Total	1	0	2	0	**3**	7	1	349	1	0	**351**	2	0	0	3	0	**3**	2	14	360	3	0	**377**	0	**734**
Total	15	2	12	0	**29**	15	9	2606	2	1	**2618**	8	3	1	21	0	**25**	3	57	2292	16	0	**2365**	0	**5037**
% Approach	51.7%	6.9%	41.4%	0%	**-**	-	0.3%	99.5%	0.1%	0%	**-**	-	12.0%	4.0%	84.0%	0%	**-**	-	2.4%	96.9%	0.7%	0%	**-**	-	**-**
% Total	0.3%	0%	0.2%	0%	**0.6%**	-	0.2%	51.7%	0%	0%	**52.0%**	-	0.1%	0%	0.4%	0%	**0.5%**	-	1.1%	45.5%	0.3%	0%	**47.0%**	-	**-**
Lights and Motorcycles	15	1	11	0	**27**	-	9	2501	1	1	**2512**	-	3	1	21	0	**25**	-	55	2203	16	0	**2274**	-	4838
% Lights and Motorcycles	100%	50.0%	91.7%	0%	**93.1%**	-	100%	96.0%	50.0%	100%	**96.0%**	-	100%	100%	100%	0%	**100%**	-	96.5%	96.1%	100%	0%	**96.2%**	-	96.0%
Heavy	0	1	1	0	**2**	-	0	105	1	0	**106**	-	0	0	0	0	**0**	-	2	89	0	0	**91**	-	199
% Heavy	0%	50.0%	8.3%	0%	**6.9%**	-	0%	4.0%	50.0%	0%	**4.0%**	-	0%	0%	0%	0%	**0%**	-	3.5%	3.9%	0%	0%	**3.8%**	-	4.0%
Pedestrians	-	-	-	-	-	13	-	-	-	-	-	7	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	86.7%	-	-	-	-	-	87.5%	-	-	-	-	-	33.3%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	13.3%	-	-	-	-	-	12.5%	-	-	-	-	-	66.7%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

5-Lafayette Blvd & Dupont Circle (West) (VA2... - TMC
Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221181, Location: 36.874214, -76.271108

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



5-Lafayette Blvd & Dupont Circle (West) (VA2... - TMC

Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221181, Location: 36.874214, -76.271108

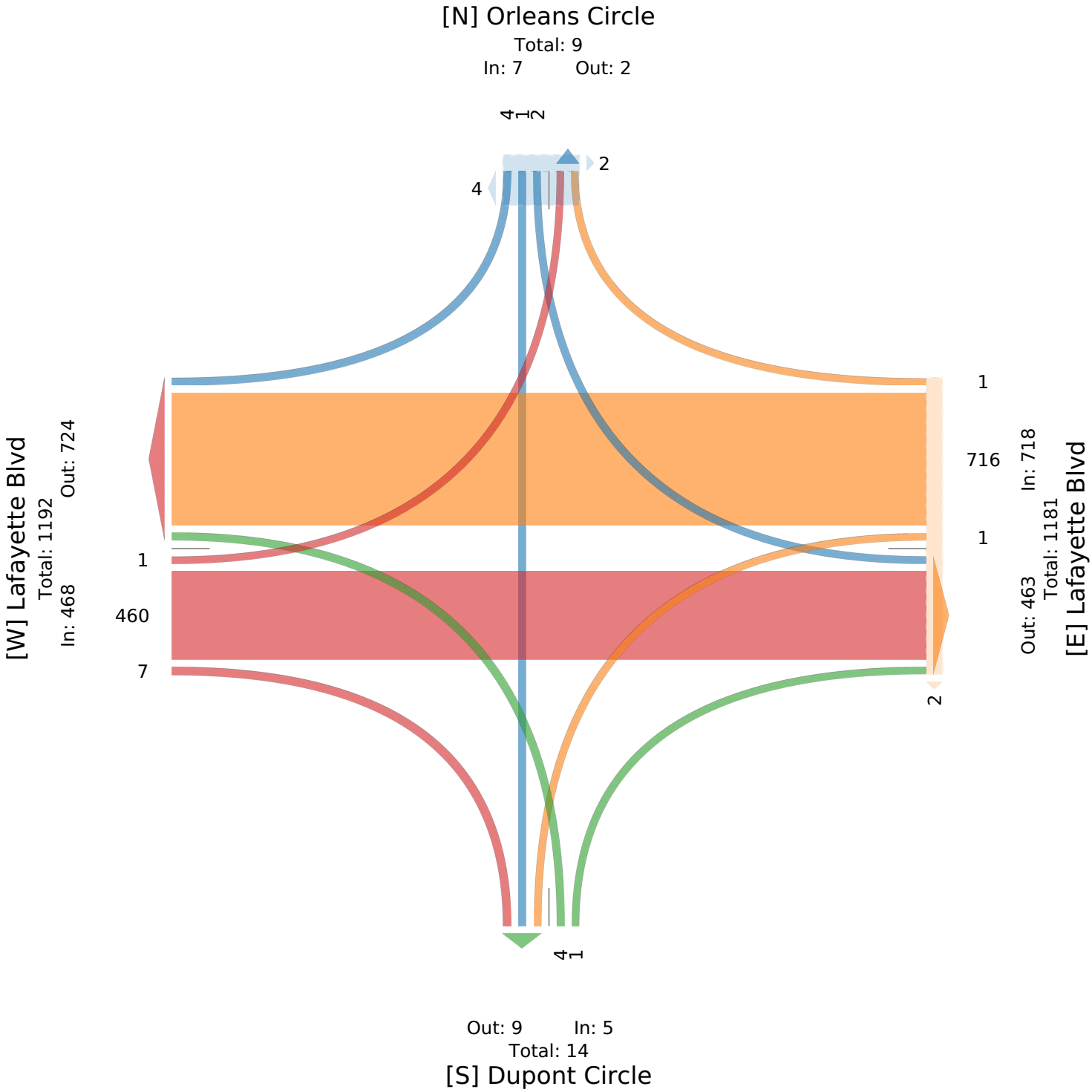
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg	Orleans Circle						Lafayette Blvd						Dupont Circle						Lafayette Blvd						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 7:30AM	1	0	1	0	**2**	1	1	169	0	0	**170**	0	0	0	2	0	**2**	0	3	122	1	0	**126**	0	**300**
7:45AM	0	0	0	0	**0**	1	0	181	0	0	**181**	0	0	0	1	0	**1**	0	1	114	0	0	**115**	0	**297**
8:00AM	2	0	1	0	**3**	2	0	204	1	0	**205**	0	0	0	0	0	**0**	0	0	107	0	0	**107**	0	**315**
8:15AM	1	1	0	0	**2**	2	0	162	0	0	**162**	2	1	0	1	0	**2**	0	3	117	0	0	**120**	0	**286**
Total	4	1	2	0	**7**	6	1	716	1	0	**718**	2	1	0	4	0	**5**	0	7	460	1	0	**468**	0	**1198**
% Approach	57.1%	14.3%	28.6%	0%	**-**	-	0.1%	99.7%	0.1%	0%	**-**	-	20.0%	0%	80.0%	0%	**-**	-	1.5%	98.3%	0.2%	0%	**-**	-	-
% Total	0.3%	0.1%	0.2%	0%	**0.6%**	-	0.1%	59.8%	0.1%	0%	**59.9%**	-	0.1%	0%	0.3%	0%	**0.4%**	-	0.6%	38.4%	0.1%	0%	**39.1%**	-	-
PHF	0.500	0.250	0.500	-	**0.583**	-	0.250	0.877	0.250	-	**0.876**	-	0.250	-	0.500	-	**0.625**	-	0.583	0.943	0.250	-	**0.929**	-	0.951
Lights and Motorcycles	4	1	1	0	**6**	-	1	666	1	0	**668**	-	1	0	4	0	**5**	-	5	427	1	0	**433**	-	1112
% Lights and Motorcycles	100%	100%	50.0%	0%	**85.7%**	-	100%	93.0%	100%	0%	**93.0%**	-	100%	0%	100%	0%	**100%**	-	71.4%	92.8%	100%	0%	**92.5%**	-	92.8%
Heavy	0	0	1	0	**1**	-	0	50	0	0	**50**	-	0	0	0	0	**0**	-	2	33	0	0	**35**	-	86
% Heavy	0%	0%	50.0%	0%	**14.3%**	-	0%	7.0%	0%	0%	**7.0%**	-	0%	0%	0%	0%	**0%**	-	28.6%	7.2%	0%	0%	**7.5%**	-	7.2%
Pedestrians	-	-	-	-	-	6	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

5-Lafayette Blvd & Dupont Circle (West) (VA2... - TMC
Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221181, Location: 36.874214, -76.271108

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



5-Lafayette Blvd & Dupont Circle (West) (VA2... - TMC

Thu Sep 19, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221181, Location: 36.874214, -76.271108

PMA Traffic Data Collection

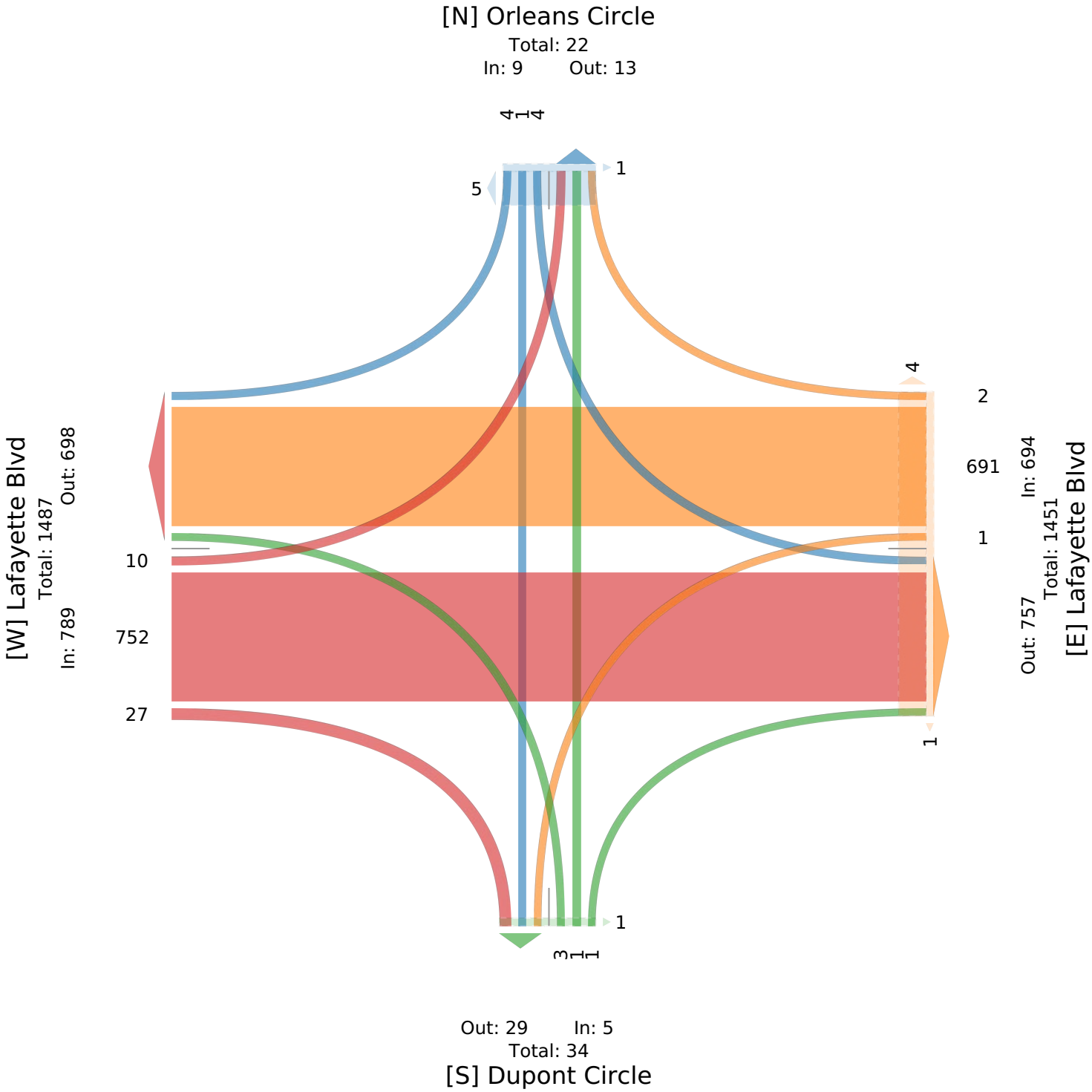
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg	Orleans Circle						Lafayette Blvd						Dupont Circle						Lafayette Blvd						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2024-09-19 4:15PM	1	1	1	0	**3**	0	1	155	0	0	**156**	1	0	0	1	0	**1**	0	7	205	2	0	**214**	0	**374**
4:30PM	1	0	0	0	**1**	1	0	162	0	0	**162**	1	1	1	1	0	**3**	0	5	196	1	0	**202**	0	**368**
4:45PM	1	0	2	0	**3**	0	1	189	0	0	**190**	2	0	0	0	0	**0**	0	7	170	5	0	**182**	0	**375**
5:00PM	1	0	1	0	**2**	5	0	185	1	0	**186**	1	0	0	1	0	**1**	1	8	181	2	0	**191**	0	**380**
Total	4	1	4	0	**9**	6	2	691	1	0	**694**	5	1	1	3	0	**5**	1	27	752	10	0	**789**	0	**1497**
% Approach	44.4%	11.1%	44.4%	0%	**-**	-	0.3%	99.6%	0.1%	0%	**-**	-	20.0%	20.0%	60.0%	0%	**-**	-	3.4%	95.3%	1.3%	0%	**-**	-	**-**
% Total	0.3%	0.1%	0.3%	0%	**0.6%**	-	0.1%	46.2%	0.1%	0%	**46.4%**	-	0.1%	0.1%	0.2%	0%	**0.3%**	-	1.8%	50.2%	0.7%	0%	**52.7%**	-	**-**
PHF	1.000	0.250	0.500	-	**0.750**	-	0.500	0.914	0.250	-	**0.913**	-	0.250	0.250	0.750	-	**0.417**	-	0.844	0.917	0.500	-	**0.922**	-	0.985
Lights and Motorcycles	4	0	4	0	**8**	-	2	677	0	0	**679**	-	1	1	3	0	**5**	-	27	735	10	0	**772**	-	1464
% Lights and Motorcycles	100%	0%	100%	0%	**88.9%**	-	100%	98.0%	0%	0%	**97.8%**	-	100%	100%	100%	0%	**100%**	-	100%	97.7%	100%	0%	**97.8%**	-	97.8%
Heavy	0	1	0	0	**1**	-	0	14	1	0	**15**	-	0	0	0	0	**0**	-	0	17	0	0	**17**	-	33
% Heavy	0%	100%	0%	0%	**11.1%**	-	0%	2.0%	100%	0%	**2.2%**	-	0%	0%	0%	0%	**0%**	-	0%	2.3%	0%	0%	**2.2%**	-	2.2%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	4	-	-	-	-	-	1	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	83.3%	-	-	-	-	-	80.0%	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	16.7%	-	-	-	-	-	20.0%	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

5-Lafayette Blvd & Dupont Circle (West) (VA2... - TMC
Thu Sep 19, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221181, Location: 36.874214, -76.271108

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



6-Lafayette Blvd & Dupont Circle (East) (VA2... - TMC

Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221182, Location: 36.874981, -76.269627

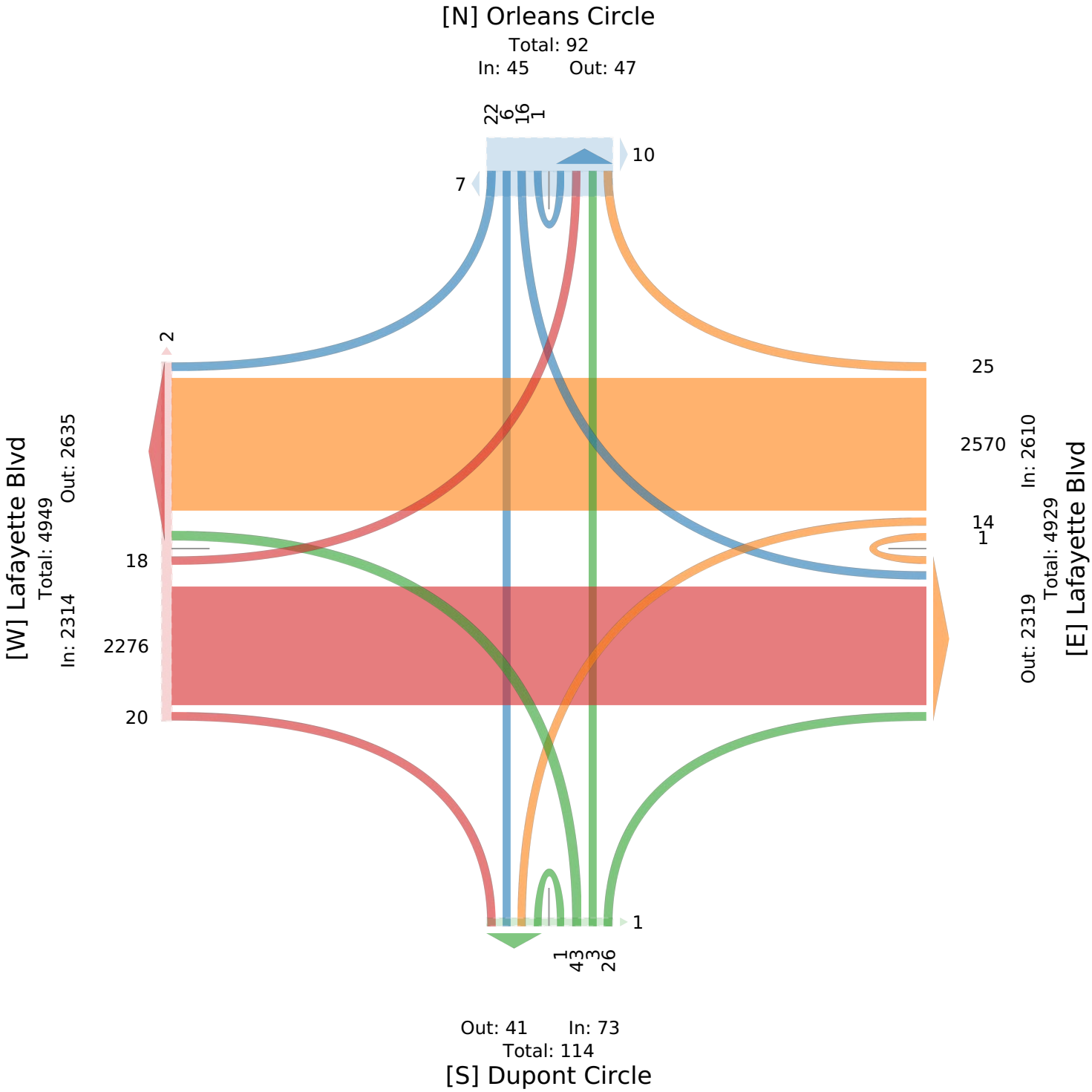
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345, Jacksonville Beach, FL, 32250, US

Leg Direction	Orleans Circle Southbound						Lafayette Blvd Westbound						Dupont Circle Northbound						Lafayette Blvd Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 7:00AM	2	0	2	0	**4**	0	2	150	0	0	**152**	0	2	0	1	0	**3**	0	0	79	1	0	**80**	0	**239**
7:15AM	0	0	2	0	**2**	0	1	154	1	0	**156**	0	0	0	2	0	**2**	0	0	103	1	0	**104**	0	**264**
7:30AM	4	0	1	0	**5**	1	2	169	1	0	**172**	0	2	0	1	0	**3**	0	1	113	1	0	**115**	0	**295**
7:45AM	1	1	2	0	**4**	2	1	181	0	0	**182**	0	2	0	2	0	**4**	0	0	110	0	0	**110**	0	**300**
Hourly Total	7	1	7	0	**15**	3	6	654	2	0	**662**	0	6	0	6	0	**12**	0	1	405	3	0	**409**	0	**1098**
8:00AM	1	1	1	0	**3**	1	2	208	0	0	**210**	0	1	1	1	0	**3**	0	1	105	0	0	**106**	1	**322**
8:15AM	0	0	1	0	**1**	1	1	153	1	0	**155**	0	7	0	4	0	**11**	0	0	120	4	0	**124**	0	**291**
8:30AM	2	1	0	0	**3**	2	2	140	2	0	**144**	0	1	0	3	0	**4**	0	0	106	1	0	**107**	0	**258**
8:45AM	2	0	1	0	**3**	1	0	127	0	0	**127**	0	3	0	4	0	**7**	0	1	106	0	0	**107**	0	**244**
Hourly Total	5	2	3	0	**10**	5	5	628	3	0	**636**	0	12	1	12	0	**25**	0	2	437	5	0	**444**	1	**1115**
3:30PM	1	1	2	0	**4**	0	4	128	1	0	**133**	0	0	1	2	0	**3**	0	2	175	0	0	**177**	0	**317**
3:45PM	2	0	0	0	**2**	0	0	179	2	0	**181**	0	1	0	3	0	**4**	0	2	140	1	0	**143**	0	**330**
Hourly Total	3	1	2	0	**6**	0	4	307	3	0	**314**	0	1	1	5	0	**7**	0	4	315	1	0	**320**	0	**647**
4:00PM	1	0	0	1	**2**	0	1	152	0	0	**153**	0	0	0	4	0	**4**	0	3	180	2	0	**185**	0	**344**
4:15PM	0	0	0	0	**0**	0	3	151	1	0	**155**	0	1	0	2	1	**4**	0	1	213	2	0	**216**	0	**375**
4:30PM	2	1	1	0	**4**	1	0	155	1	0	**156**	0	0	0	2	0	**2**	0	0	191	3	0	**194**	0	**356**
4:45PM	1	1	2	0	**4**	1	2	187	1	1	**191**	0	3	0	3	0	**6**	1	3	173	0	0	**176**	0	**377**
Hourly Total	4	2	3	1	**10**	2	6	645	3	1	**655**	0	4	0	11	1	**16**	1	7	757	7	0	**771**	0	**1452**
5:00PM	2	0	0	0	**2**	4	1	170	0	0	**171**	0	1	0	4	0	**5**	0	3	181	2	0	**186**	1	**364**
5:15PM	1	0	1	0	**2**	3	3	166	3	0	**172**	0	2	1	5	0	**8**	0	3	181	0	0	**184**	0	**366**
Hourly Total	3	0	1	0	**4**	7	4	336	3	0	**343**	0	3	1	9	0	**13**	0	6	362	2	0	**370**	1	**730**
Total	22	6	16	1	**45**	17	25	2570	14	1	**2610**	0	26	3	43	1	**73**	1	20	2276	18	0	**2314**	2	**5042**
% Approach	48.9%	13.3%	35.6%	2.2%	**-**	-	1.0%	98.5%	0.5%	0%	**-**	-	35.6%	4.1%	58.9%	1.4%	**-**	-	0.9%	98.4%	0.8%	0%	**-**	-	**-**
% Total	0.4%	0.1%	0.3%	0%	**0.9%**	-	0.5%	51.0%	0.3%	0%	**51.8%**	-	0.5%	0.1%	0.9%	0%	**1.4%**	-	0.4%	45.1%	0.4%	0%	**45.9%**	-	**-**
Lights and Motorcycles	22	5	14	1	**42**	-	19	2471	13	1	**2504**	-	23	2	40	0	**65**	-	18	2188	17	0	**2223**	-	4834
% Lights and Motorcycles	100%	83.3%	87.5%	100%	**93.3%**	-	76.0%	96.1%	92.9%	100%	**95.9%**	-	88.5%	66.7%	93.0%	0%	**89.0%**	-	90.0%	96.1%	94.4%	0%	**96.1%**	-	95.9%
Heavy	0	1	2	0	**3**	-	6	99	1	0	**106**	-	3	1	3	1	**8**	-	2	88	1	0	**91**	-	208
% Heavy	0%	16.7%	12.5%	0%	**6.7%**	-	24.0%	3.9%	7.1%	0%	**4.1%**	-	11.5%	33.3%	7.0%	100%	**11.0%**	-	10.0%	3.9%	5.6%	0%	**3.9%**	-	4.1%
Pedestrians	-	-	-	-	-	15	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	88.2%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	11.8%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

6-Lafayette Blvd & Dupont Circle (East) (VA2... - TMC
Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221182, Location: 36.874981, -76.269627

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



6-Lafayette Blvd & Dupont Circle (East) (VA2... - TMC

Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221182, Location: 36.874981, -76.269627

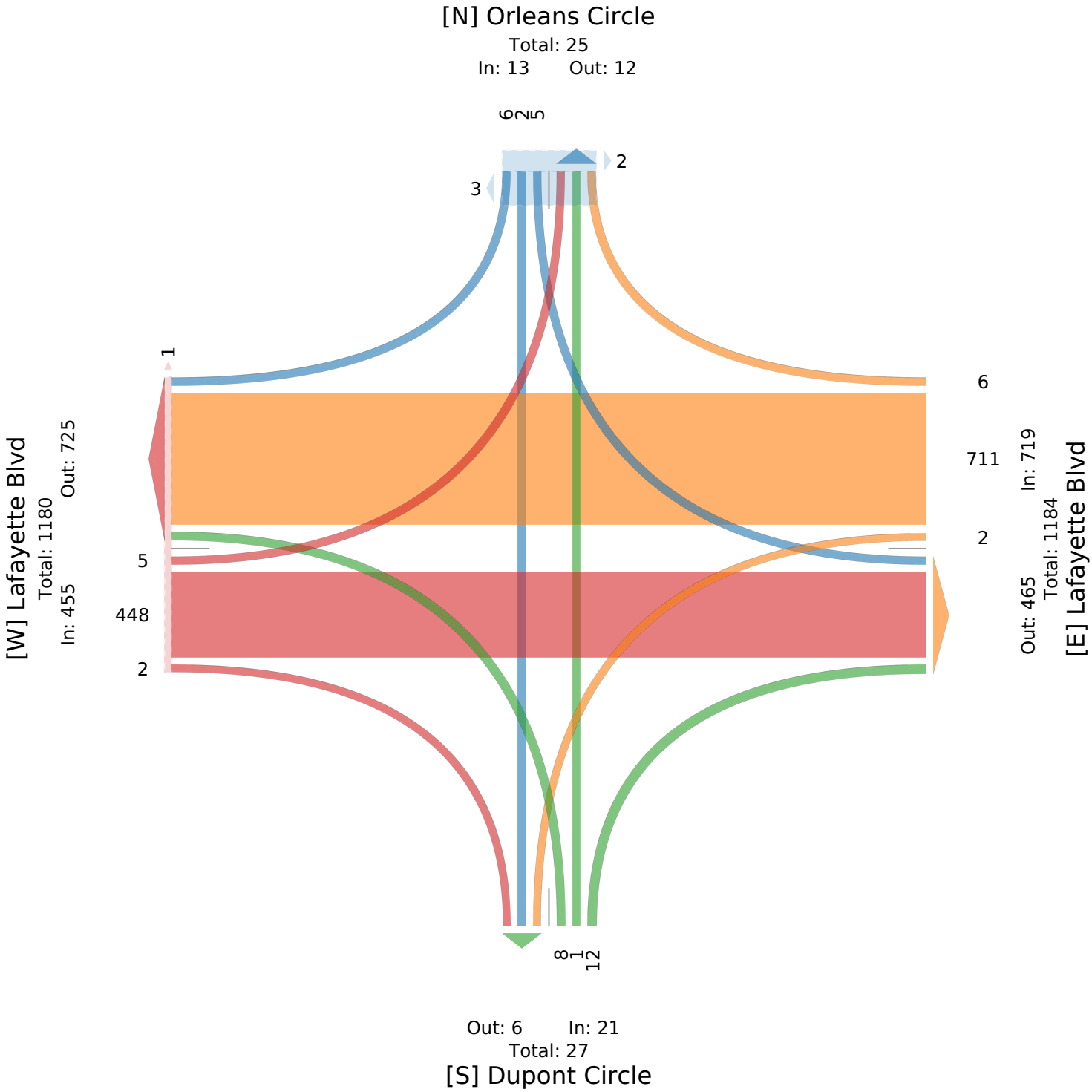
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg	Orleans Circle						Lafayette Blvd						Dupont Circle						Lafayette Blvd						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 7:30AM	4	0	1	0	**5**	1	2	169	1	0	**172**	0	2	0	1	0	**3**	0	1	113	1	0	**115**	0	**295**
7:45AM	1	1	2	0	**4**	2	1	181	0	0	**182**	0	2	0	2	0	**4**	0	0	110	0	0	**110**	0	**300**
8:00AM	1	1	1	0	**3**	1	2	208	0	0	**210**	0	1	1	1	0	**3**	0	1	105	0	0	**106**	1	**322**
8:15AM	0	0	1	0	**1**	1	1	153	1	0	**155**	0	7	0	4	0	**11**	0	0	120	4	0	**124**	0	**291**
Total	6	2	5	0	**13**	5	6	711	2	0	**719**	0	12	1	8	0	**21**	0	2	448	5	0	**455**	1	**1208**
% Approach	46.2%	15.4%	38.5%	0%	**-**	-	0.8%	98.9%	0.3%	0%	**-**	-	57.1%	4.8%	38.1%	0%	**-**	-	0.4%	98.5%	1.1%	0%	**-**	-	-
% Total	0.5%	0.2%	0.4%	0%	**1.1%**	-	0.5%	58.9%	0.2%	0%	**59.5%**	-	1.0%	0.1%	0.7%	0%	**1.7%**	-	0.2%	37.1%	0.4%	0%	**37.7%**	-	-
PHF	0.375	0.500	0.625	-	**0.650**	-	0.750	0.855	0.500	-	**0.856**	-	0.429	0.250	0.500	-	**0.477**	-	0.500	0.933	0.313	-	**0.917**	-	0.938
Lights and Motorcycles	6	2	4	0	**12**	-	4	661	2	0	**667**	-	10	1	7	0	**18**	-	1	422	4	0	**427**	-	1124
% Lights and Motorcycles	100%	100%	80.0%	0%	**92.3%**	-	66.7%	93.0%	100%	0%	**92.8%**	-	83.3%	100%	87.5%	0%	**85.7%**	-	50.0%	94.2%	80.0%	0%	**93.8%**	-	93.0%
Heavy	0	0	1	0	**1**	-	2	50	0	0	**52**	-	2	0	1	0	**3**	-	1	26	1	0	**28**	-	84
% Heavy	0%	0%	20.0%	0%	**7.7%**	-	33.3%	7.0%	0%	0%	**7.2%**	-	16.7%	0%	12.5%	0%	**14.3%**	-	50.0%	5.8%	20.0%	0%	**6.2%**	-	7.0%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	80.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	20.0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

6-Lafayette Blvd & Dupont Circle (East) (VA2... - TMC
Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221182, Location: 36.874981, -76.269627

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



6-Lafayette Blvd & Dupont Circle (East) (VA2... - TMC

Thu Sep 19, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221182, Location: 36.874981, -76.269627

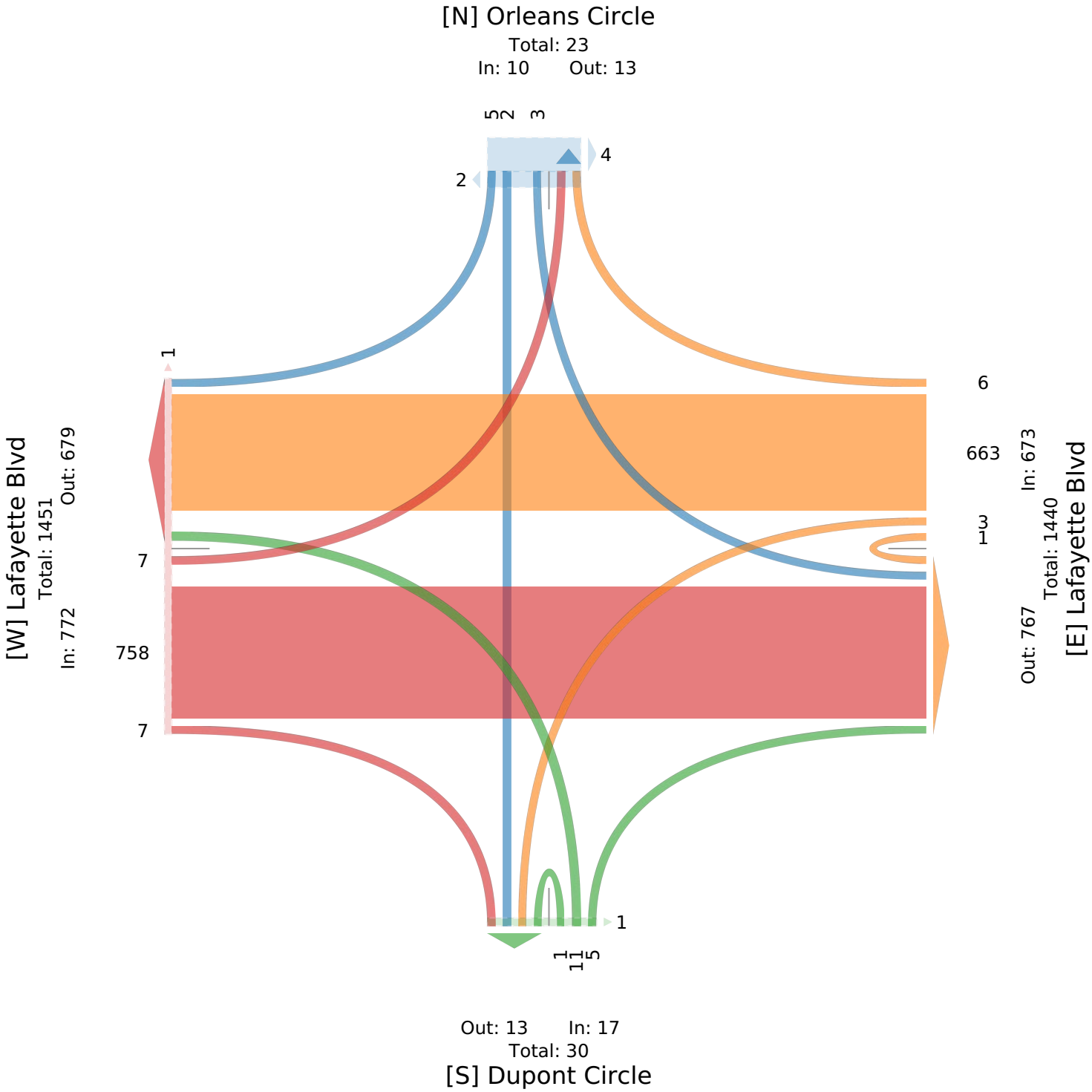
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg	Orleans Circle						Lafayette Blvd						Dupont Circle						Lafayette Blvd						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 4:15PM	0	0	0	0	**0**	0	3	151	1	0	**155**	0	1	0	2	1	**4**	0	1	213	2	0	**216**	0	**375**
4:30PM	2	1	1	0	**4**	1	0	155	1	0	**156**	0	0	0	2	0	**2**	0	0	191	3	0	**194**	0	**356**
4:45PM	1	1	2	0	**4**	1	2	187	1	1	**191**	0	3	0	3	0	**6**	1	3	173	0	0	**176**	0	**377**
5:00PM	2	0	0	0	**2**	4	1	170	0	0	**171**	0	1	0	4	0	**5**	0	3	181	2	0	**186**	1	**364**
Total	5	2	3	0	**10**	6	6	663	3	1	**673**	0	5	0	11	1	**17**	1	7	758	7	0	**772**	1	**1472**
% Approach	50.0%	20.0%	30.0%	0%	**-**	-	0.9%	98.5%	0.4%	0.1%	**-**	-	29.4%	0%	64.7%	5.9%	**-**	-	0.9%	98.2%	0.9%	0%	**-**	-	**-**
% Total	0.3%	0.1%	0.2%	0%	**0.7%**	-	0.4%	45.0%	0.2%	0.1%	**45.7%**	-	0.3%	0%	0.7%	0.1%	**1.2%**	-	0.5%	51.5%	0.5%	0%	**52.4%**	-	**-**
PHF	0.625	0.500	0.375	-	**0.625**	-	0.500	0.886	0.750	0.250	**0.881**	-	0.417	-	0.688	0.250	**0.708**	-	0.583	0.890	0.583	-	**0.894**	-	0.976
Lights and Motorcycles	5	2	2	0	**9**	-	5	653	3	1	**662**	-	4	0	11	0	**15**	-	7	737	7	0	**751**	-	1437
% Lights and Motorcycles	100%	100%	66.7%	0%	**90.0%**	-	83.3%	98.5%	100%	100%	**98.4%**	-	80.0%	0%	100%	0%	**88.2%**	-	100%	97.2%	100%	0%	**97.3%**	-	97.6%
Heavy	0	0	1	0	**1**	-	1	10	0	0	**11**	-	1	0	0	1	**2**	-	0	21	0	0	**21**	-	35
% Heavy	0%	0%	33.3%	0%	**10.0%**	-	16.7%	1.5%	0%	0%	**1.6%**	-	20.0%	0%	0%	100%	**11.8%**	-	0%	2.8%	0%	0%	**2.7%**	-	2.4%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	83.3%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	16.7%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

6-Lafayette Blvd & Dupont Circle (East) (VA2... - TMC
Thu Sep 19, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221182, Location: 36.874981, -76.269627

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



7-Lafayette Blvd & St Denis Ave (VA24-203) - TMC

Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221183, Location: 36.875907, -76.26785

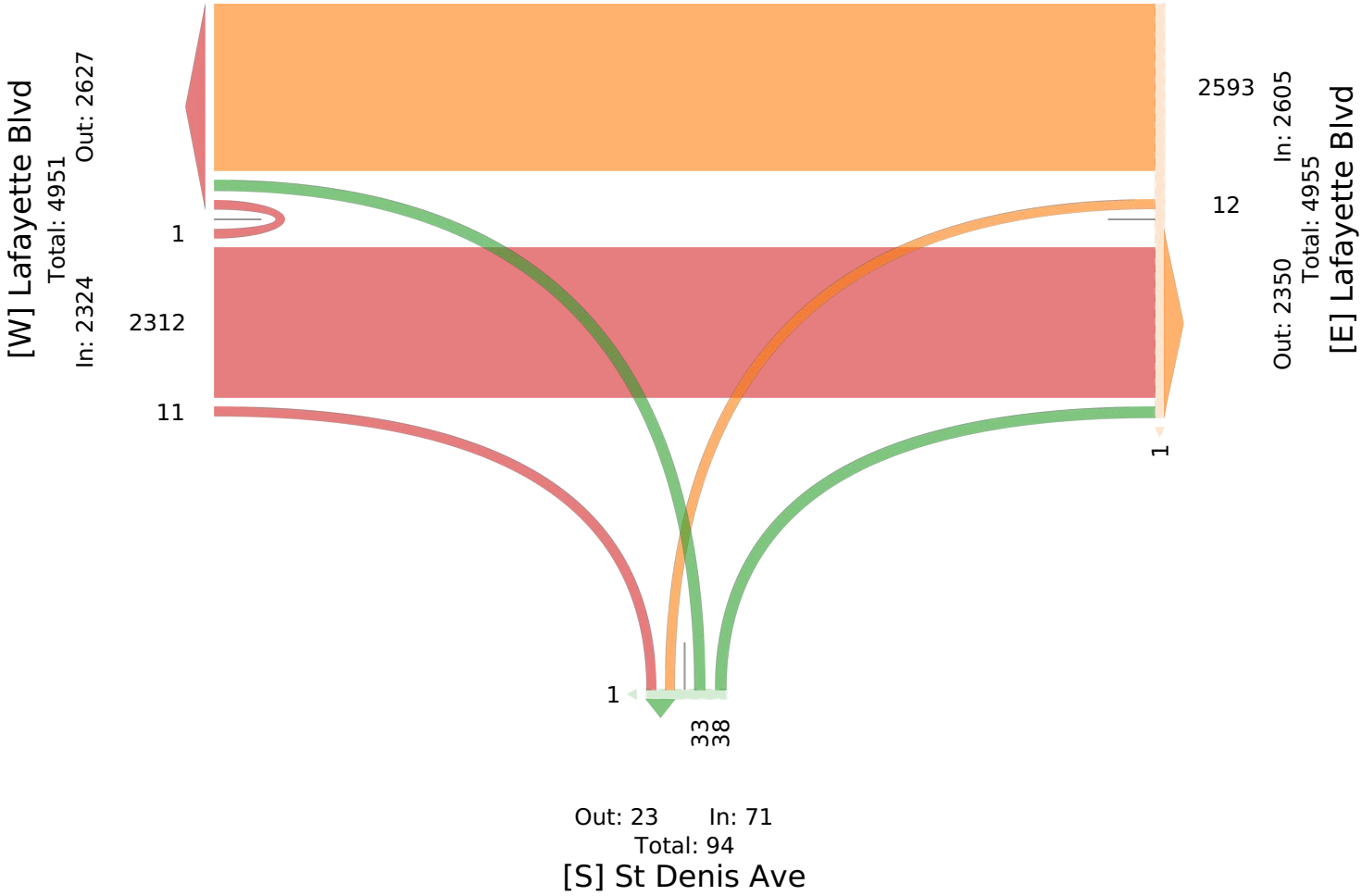
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Lafayette Blvd Westbound					St Denis Ave Northbound					Lafayette Blvd Eastbound					
Time	T	L	U	**App**	Ped*	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	**Int**
2024-09-19 7:00AM	157	0	0	**157**	0	2	4	0	**6**	0	0	91	0	**91**	0	**254**
7:15AM	160	0	0	**160**	0	1	2	0	**3**	0	1	110	0	**111**	0	**274**
7:30AM	169	0	0	**169**	0	4	1	0	**5**	0	1	123	0	**124**	0	**298**
7:45AM	198	1	0	**199**	0	3	4	0	**7**	0	0	116	0	**116**	0	**322**
Hourly Total	684	1	0	**685**	0	10	11	0	**21**	0	2	440	0	**442**	0	**1148**
8:00AM	186	0	0	**186**	0	1	4	0	**5**	0	0	109	0	**109**	0	**300**
8:15AM	165	1	0	**166**	0	0	0	0	**0**	0	1	123	0	**124**	0	**290**
8:30AM	131	2	0	**133**	0	4	3	0	**7**	0	2	104	0	**106**	0	**246**
8:45AM	129	1	0	**130**	0	2	1	0	**3**	0	0	109	0	**109**	0	**242**
Hourly Total	611	4	0	**615**	0	7	8	0	**15**	0	3	445	0	**448**	0	**1078**
9:00AM	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
3:30PM	145	1	0	**146**	0	2	0	0	**2**	0	0	172	0	**172**	0	**320**
3:45PM	170	1	0	**171**	0	0	1	0	**1**	0	0	149	1	**150**	0	**322**
Hourly Total	315	2	0	**317**	0	2	1	0	**3**	0	0	321	1	**322**	0	**642**
4:00PM	150	1	0	**151**	1	2	5	0	**7**	1	0	181	0	**181**	0	**339**
4:15PM	149	0	0	**149**	0	2	2	0	**4**	0	1	202	0	**203**	0	**356**
4:30PM	141	2	0	**143**	0	4	2	0	**6**	0	1	196	0	**197**	0	**346**
4:45PM	192	0	0	**192**	0	3	2	0	**5**	0	1	170	0	**171**	0	**368**
Hourly Total	632	3	0	**635**	1	11	11	0	**22**	1	3	749	0	**752**	0	**1409**
5:00PM	184	1	0	**185**	0	3	1	0	**4**	0	1	180	0	**181**	0	**370**
5:15PM	167	1	0	**168**	0	5	1	0	**6**	0	2	177	0	**179**	0	**353**
5:30PM	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Hourly Total	351	2	0	**353**	0	8	2	0	**10**	0	3	357	0	**360**	0	**723**
Total	2593	12	0	**2605**	1	38	33	0	**71**	1	11	2312	1	**2324**	0	**5000**
% Approach	99.5%	0.5%	0%	**-**	-	53.5%	46.5%	0%	**-**	-	0.5%	99.5%	0%	**-**	-	-
% Total	51.9%	0.2%	0%	**52.1%**	-	0.8%	0.7%	0%	**1.4%**	-	0.2%	46.2%	0%	**46.5%**	-	-
Lights and Motorcycles	2484	12	0	**2496**	-	34	33	0	**67**	-	11	2224	1	**2236**	-	4799
% Lights and Motorcycles	95.8%	100%	0%	**95.8%**	-	89.5%	100%	0%	**94.4%**	-	100%	96.2%	100%	**96.2%**	-	96.0%
Heavy	109	0	0	**109**	-	4	0	0	**4**	-	0	88	0	**88**	-	201
% Heavy	4.2%	0%	0%	**4.2%**	-	10.5%	0%	0%	**5.6%**	-	0%	3.8%	0%	**3.8%**	-	4.0%
Pedestrians	-	-	-	-	1	-	-	-	-	1	-	-	-	-	0	
% Pedestrians	-	-	-	-	100%	-	-	-	-	100%	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

7-Lafayette Blvd & St Denis Ave (VA24-203) - TMC
Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221183, Location: 36.875907, -76.26785

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



7-Lafayette Blvd & St Denis Ave (VA24-203) - TMC

Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221183, Location: 36.875907, -76.26785

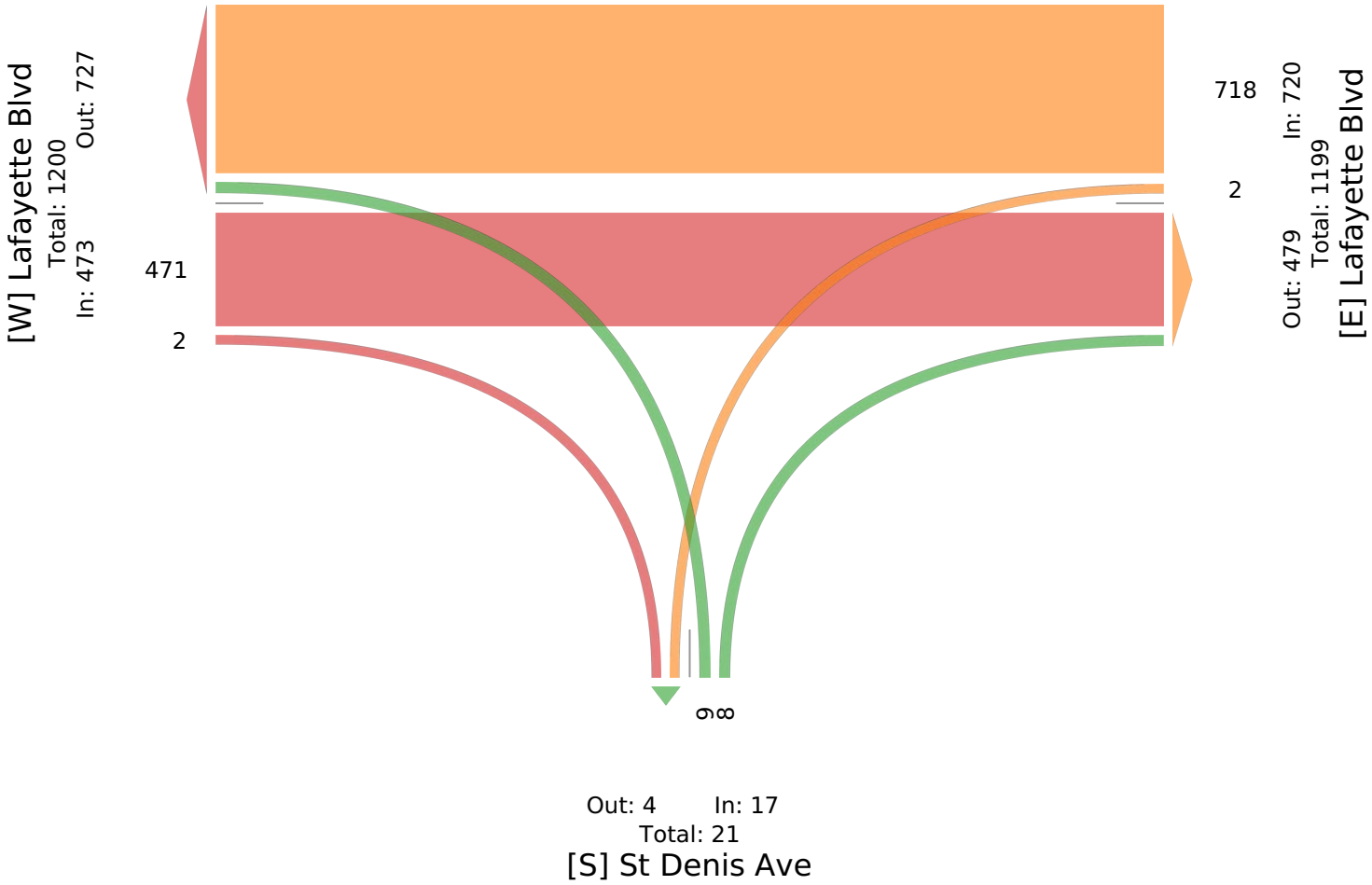
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Lafayette Blvd Westbound					St Denis Ave Northbound					Lafayette Blvd Eastbound					
Time	T	L	U	**App**	Ped*	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	**Int**
2024-09-19 7:30AM	169	0	0	**169**	0	4	1	0	**5**	0	1	123	0	**124**	0	**298**
7:45AM	198	1	0	**199**	0	3	4	0	**7**	0	0	116	0	**116**	0	**322**
8:00AM	186	0	0	**186**	0	1	4	0	**5**	0	0	109	0	**109**	0	**300**
8:15AM	165	1	0	**166**	0	0	0	0	**0**	0	1	123	0	**124**	0	**290**
Total	718	2	0	**720**	0	8	9	0	**17**	0	2	471	0	**473**	0	**1210**
% Approach	99.7%	0.3%	0%	**-**	-	47.1%	52.9%	0%	**-**	-	0.4%	99.6%	0%	**-**	-	**-**
% Total	59.3%	0.2%	0%	**59.5%**	-	0.7%	0.7%	0%	**1.4%**	-	0.2%	38.9%	0%	**39.1%**	-	**-**
PHF	0.907	0.500	-	**0.905**	-	0.500	0.563	-	**0.607**	-	0.500	0.957	-	**0.954**	-	0.939
Lights and Motorcycles	666	2	0	**668**	-	8	9	0	**17**	-	2	442	0	**444**	-	1129
% Lights and Motorcycles	92.8%	100%	0%	**92.8%**	-	100%	100%	0%	**100%**	-	100%	93.8%	0%	**93.9%**	-	93.3%
Heavy	52	0	0	**52**	-	0	0	0	**0**	-	0	29	0	**29**	-	81
% Heavy	7.2%	0%	0%	**7.2%**	-	0%	0%	0%	**0%**	-	0%	6.2%	0%	**6.1%**	-	6.7%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

7-Lafayette Blvd & St Denis Ave (VA24-203) - TMC
Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221183, Location: 36.875907, -76.26785

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



7-Lafayette Blvd & St Denis Ave (VA24-203) - TMC

Thu Sep 19, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221183, Location: 36.875907, -76.26785

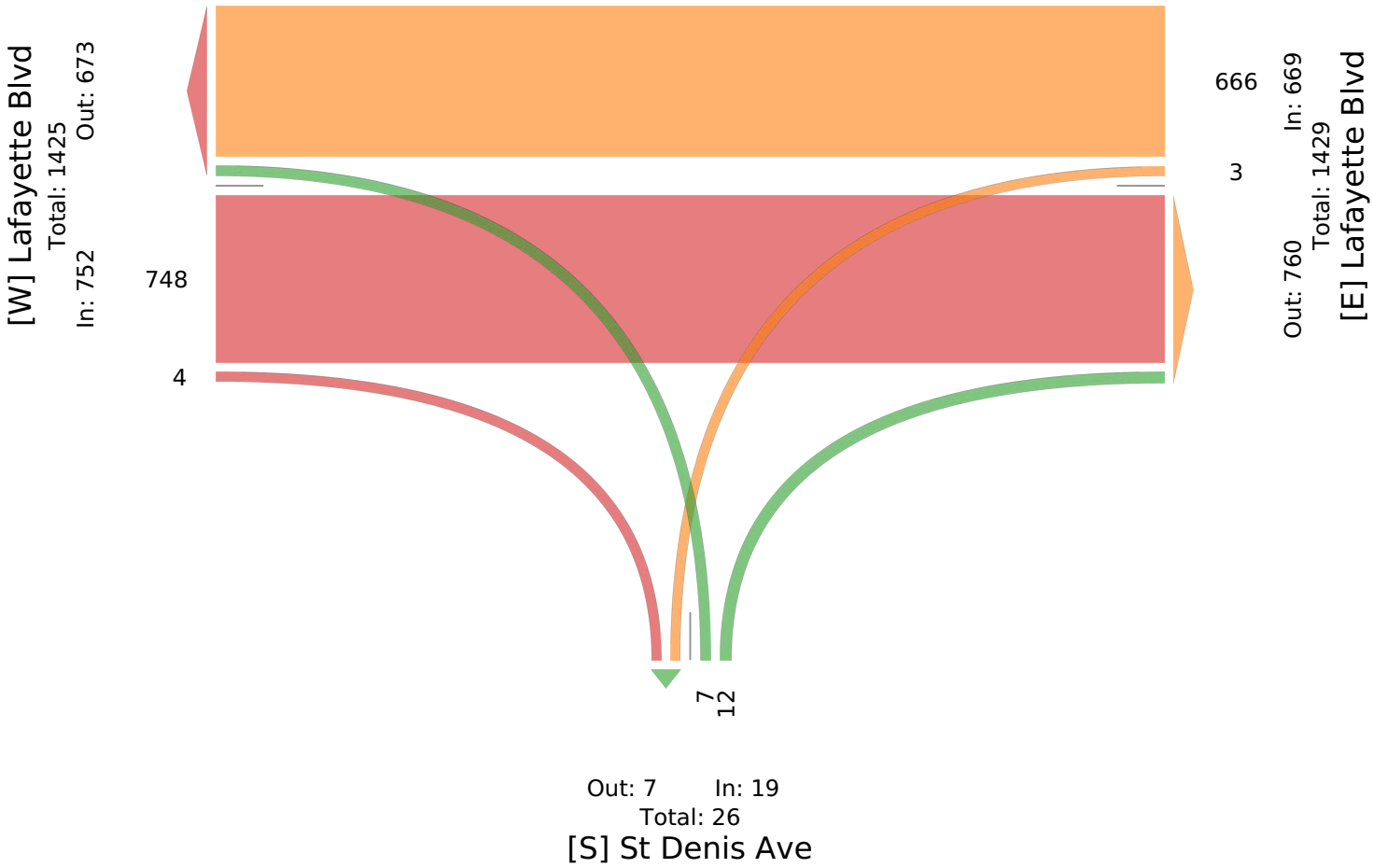
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Lafayette Blvd Westbound					St Denis Ave Northbound					Lafayette Blvd Eastbound					
Time	T	L	U	**App**	Ped*	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	**Int**
2024-09-19 4:15PM	149	0	0	**149**	0	2	2	0	**4**	0	1	202	0	**203**	0	**356**
4:30PM	141	2	0	**143**	0	4	2	0	**6**	0	1	196	0	**197**	0	**346**
4:45PM	192	0	0	**192**	0	3	2	0	**5**	0	1	170	0	**171**	0	**368**
5:00PM	184	1	0	**185**	0	3	1	0	**4**	0	1	180	0	**181**	0	**370**
Total	666	3	0	**669**	0	12	7	0	**19**	0	4	748	0	**752**	0	**1440**
% Approach	99.6%	0.4%	0%	**-**	-	63.2%	36.8%	0%	**-**	-	0.5%	99.5%	0%	**-**	-	**-**
% Total	46.3%	0.2%	0%	**46.5%**	-	0.8%	0.5%	0%	**1.3%**	-	0.3%	51.9%	0%	**52.2%**	-	**-**
PHF	0.867	0.375	-	**0.871**	-	0.750	0.875	-	**0.792**	-	1.000	0.926	-	**0.926**	-	0.973
Lights and Motorcycles	651	3	0	**654**	-	12	7	0	**19**	-	4	728	0	**732**	-	1405
% Lights and Motorcycles	97.7%	100%	0%	**97.8%**	-	100%	100%	0%	**100%**	-	100%	97.3%	0%	**97.3%**	-	97.6%
Heavy	15	0	0	**15**	-	0	0	0	**0**	-	0	20	0	**20**	-	35
% Heavy	2.3%	0%	0%	**2.2%**	-	0%	0%	0%	**0%**	-	0%	2.7%	0%	**2.7%**	-	2.4%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

7-Lafayette Blvd & St Denis Ave (VA24-203) - TMC
Thu Sep 19, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221183, Location: 36.875907, -76.26785

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



8-Lafayette Blvd & Degrasse Ave (VA24-203) - TMC

Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221184, Location: 36.876169, -76.267987

PMA Traffic Data Collection

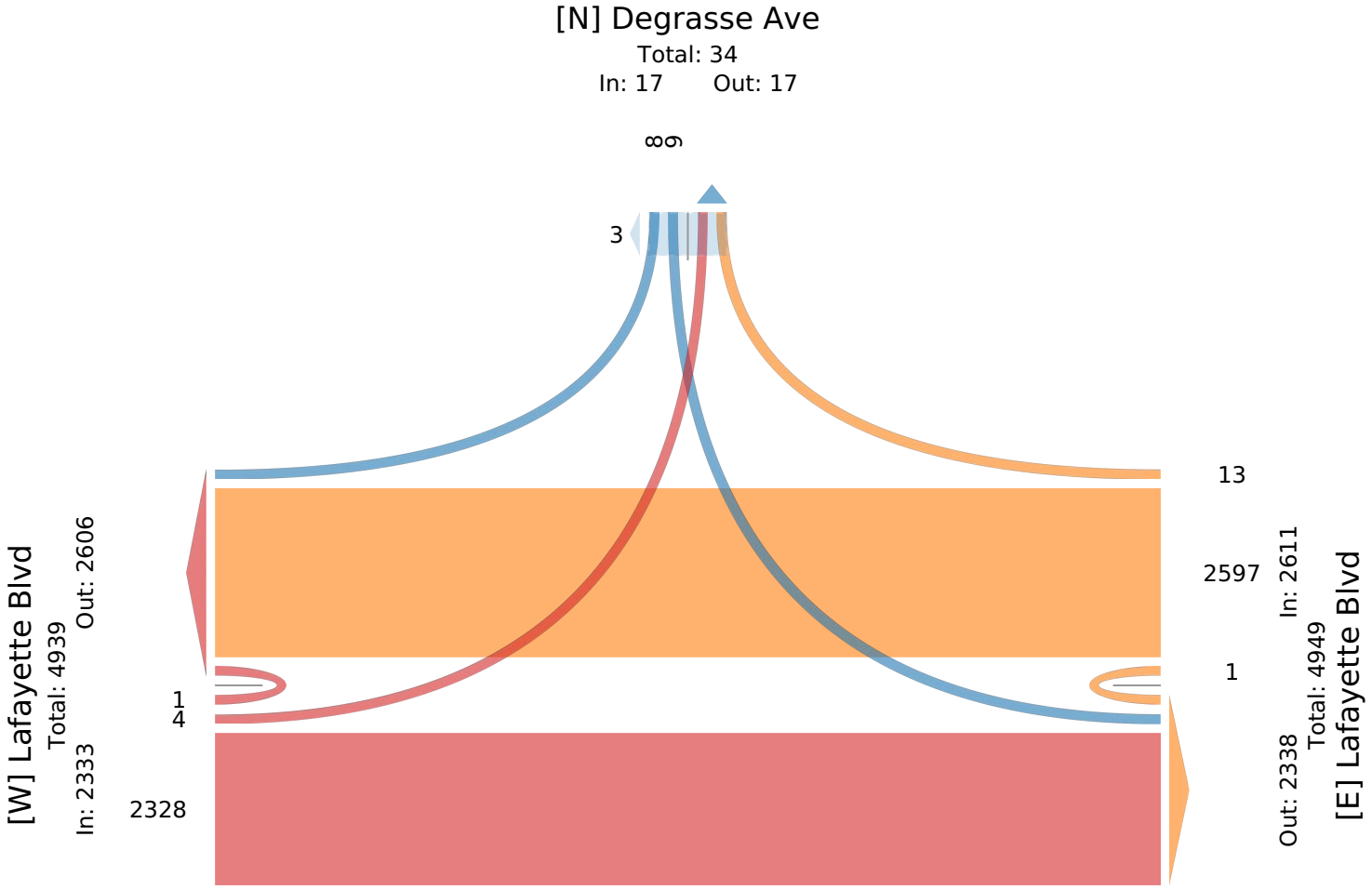
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Degrasse Ave Southbound					Lafayette Blvd Westbound					Lafayette Blvd Eastbound					
Time	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	T	L	U	**App**	Ped*	**Int**
2024-09-19 7:00AM	0	0	0	**0**	0	1	154	0	**155**	0	93	0	0	**93**	0	**248**
7:15AM	1	1	0	**2**	0	0	148	0	**148**	0	111	0	0	**111**	0	**261**
7:30AM	0	2	0	**2**	1	1	165	0	**166**	0	125	1	0	**126**	0	**294**
7:45AM	1	1	0	**2**	0	0	186	0	**186**	0	122	0	0	**122**	0	**310**
Hourly Total	2	4	0	**6**	1	2	653	0	**655**	0	451	1	0	**452**	0	**1113**
8:00AM	0	1	0	**1**	0	0	194	0	**194**	0	115	0	0	**115**	0	**310**
8:15AM	1	0	0	**1**	0	1	158	0	**159**	0	128	0	0	**128**	0	**288**
8:30AM	2	0	0	**2**	0	0	133	0	**133**	0	111	0	0	**111**	0	**246**
8:45AM	0	0	0	**0**	0	0	128	0	**128**	0	116	0	0	**116**	0	**244**
Hourly Total	3	1	0	**4**	0	1	613	0	**614**	0	470	0	0	**470**	0	**1088**
9:00AM	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Hourly Total	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
3:30PM	0	0	0	**0**	0	0	147	1	**148**	0	171	0	0	**171**	0	**319**
3:45PM	0	1	0	**1**	0	1	165	0	**166**	0	145	0	0	**145**	0	**312**
Hourly Total	0	1	0	**1**	0	1	312	1	**314**	0	316	0	0	**316**	0	**631**
4:00PM	1	1	0	**2**	0	0	153	0	**153**	0	180	1	0	**181**	0	**336**
4:15PM	0	0	0	**0**	1	1	172	0	**173**	0	198	0	0	**198**	0	**371**
4:30PM	1	0	0	**1**	0	2	151	0	**153**	0	187	1	0	**188**	0	**342**
4:45PM	1	1	0	**2**	0	2	194	0	**196**	0	171	0	0	**171**	0	**369**
Hourly Total	3	2	0	**5**	1	5	670	0	**675**	0	736	2	0	**738**	0	**1418**
5:00PM	0	1	0	**1**	1	2	184	0	**186**	0	177	0	0	**177**	0	**364**
5:15PM	0	0	0	**0**	0	2	165	0	**167**	0	178	1	1	**180**	0	**347**
5:30PM	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Hourly Total	0	1	0	**1**	1	4	349	0	**353**	0	355	1	1	**357**	0	**711**
Total	8	9	0	**17**	3	13	2597	1	**2611**	0	2328	4	1	**2333**	0	**4961**
% Approach	47.1%	52.9%	0%	**-**	-	0.5%	99.5%	0%	**-**	-	99.8%	0.2%	0%	**-**	-	-
% Total	0.2%	0.2%	0%	**0.3%**	-	0.3%	52.3%	0%	**52.6%**	-	46.9%	0.1%	0%	**47.0%**	-	-
Lights and Motorcycles	8	9	0	**17**	-	12	2489	1	**2502**	-	2239	4	1	**2244**	-	4763
% Lights and Motorcycles	100%	100%	0%	**100%**	-	92.3%	95.8%	100%	**95.8%**	-	96.2%	100%	100%	**96.2%**	-	96.0%
Heavy	0	0	0	**0**	-	1	108	0	**109**	-	89	0	0	**89**	-	198
% Heavy	0%	0%	0%	**0%**	-	7.7%	4.2%	0%	**4.2%**	-	3.8%	0%	0%	**3.8%**	-	4.0%
Pedestrians	-	-	-	-	1	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	33.3%	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	2	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	66.7%	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

8-Lafayette Blvd & Degrasse Ave (VA24-203) - TMC
Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221184, Location: 36.876169, -76.267987

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



8-Lafayette Blvd & Degrasse Ave (VA24-203) - TMC

Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221184, Location: 36.876169, -76.267987

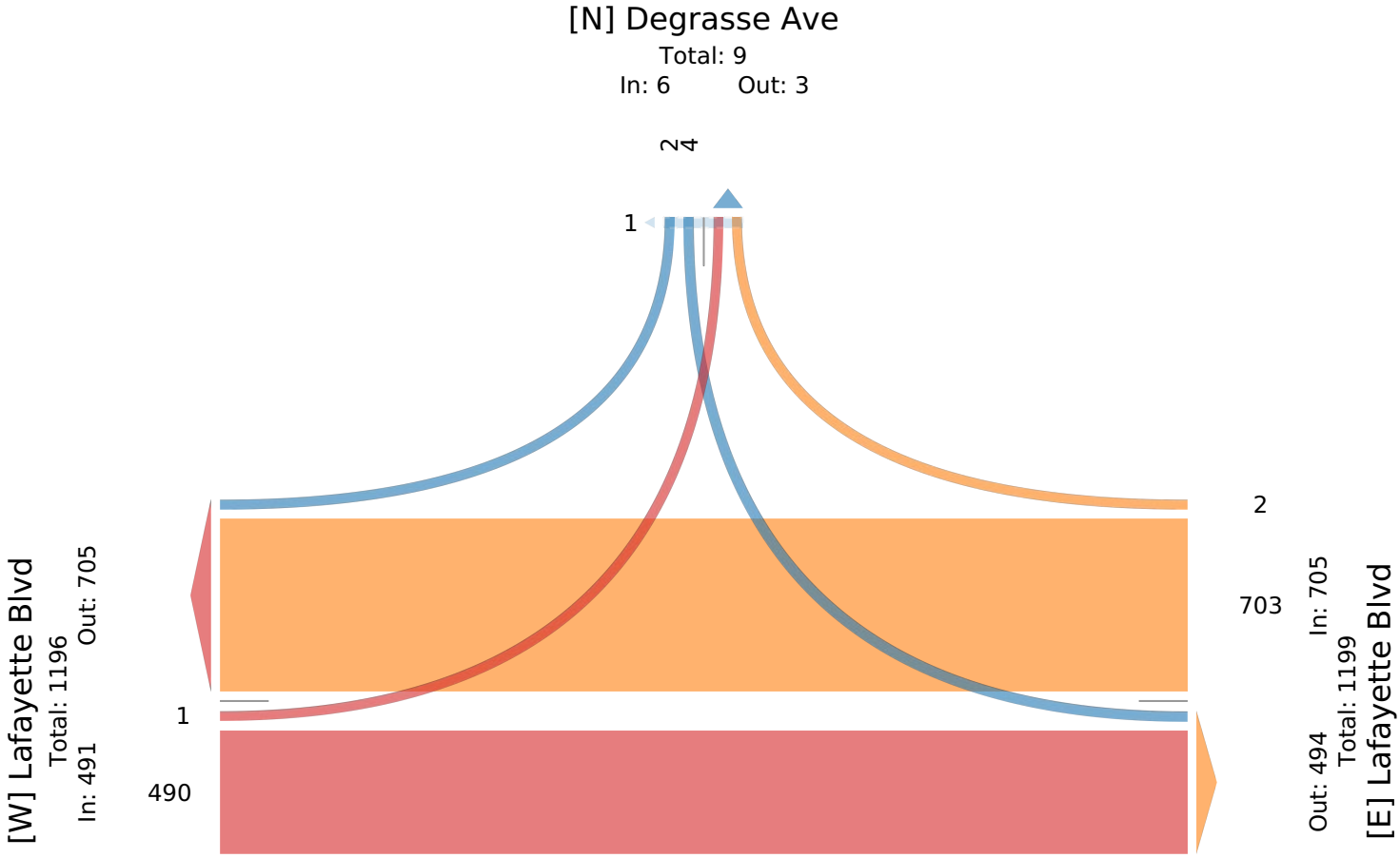
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Degrasse Ave Southbound					Lafayette Blvd Westbound					Lafayette Blvd Eastbound					
Time	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	T	L	U	**App**	Ped*	**Int**
2024-09-19 7:30AM	0	2	0	**2**	1	1	165	0	**166**	0	125	1	0	**126**	0	**294**
7:45AM	1	1	0	**2**	0	0	186	0	**186**	0	122	0	0	**122**	0	**310**
8:00AM	0	1	0	**1**	0	0	194	0	**194**	0	115	0	0	**115**	0	**310**
8:15AM	1	0	0	**1**	0	1	158	0	**159**	0	128	0	0	**128**	0	**288**
Total	2	4	0	**6**	1	2	703	0	**705**	0	490	1	0	**491**	0	**1202**
% Approach	33.3%	66.7%	0%	**-**	-	0.3%	99.7%	0%	**-**	-	99.8%	0.2%	0%	**-**	-	**-**
% Total	0.2%	0.3%	0%	**0.5%**	-	0.2%	58.5%	0%	**58.7%**	-	40.8%	0.1%	0%	**40.8%**	-	**-**
PHF	0.500	0.500	-	**0.750**	-	0.500	0.906	-	**0.909**	-	0.957	0.250	-	**0.959**	-	0.969
Lights and Motorcycles	2	4	0	**6**	-	1	654	0	**655**	-	458	1	0	**459**	-	1120
% Lights and Motorcycles	100%	100%	0%	**100%**	-	50.0%	93.0%	0%	**92.9%**	-	93.5%	100%	0%	**93.5%**	-	93.2%
Heavy	0	0	0	**0**	-	1	49	0	**50**	-	32	0	0	**32**	-	82
% Heavy	0%	0%	0%	**0%**	-	50.0%	7.0%	0%	**7.1%**	-	6.5%	0%	0%	**6.5%**	-	6.8%
Pedestrians	-	-	-	-	1	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

8-Lafayette Blvd & Degrasse Ave (VA24-203) - TMC
Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221184, Location: 36.876169, -76.267987

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



8-Lafayette Blvd & Degrasse Ave (VA24-203) - TMC

Thu Sep 19, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221184, Location: 36.876169, -76.267987

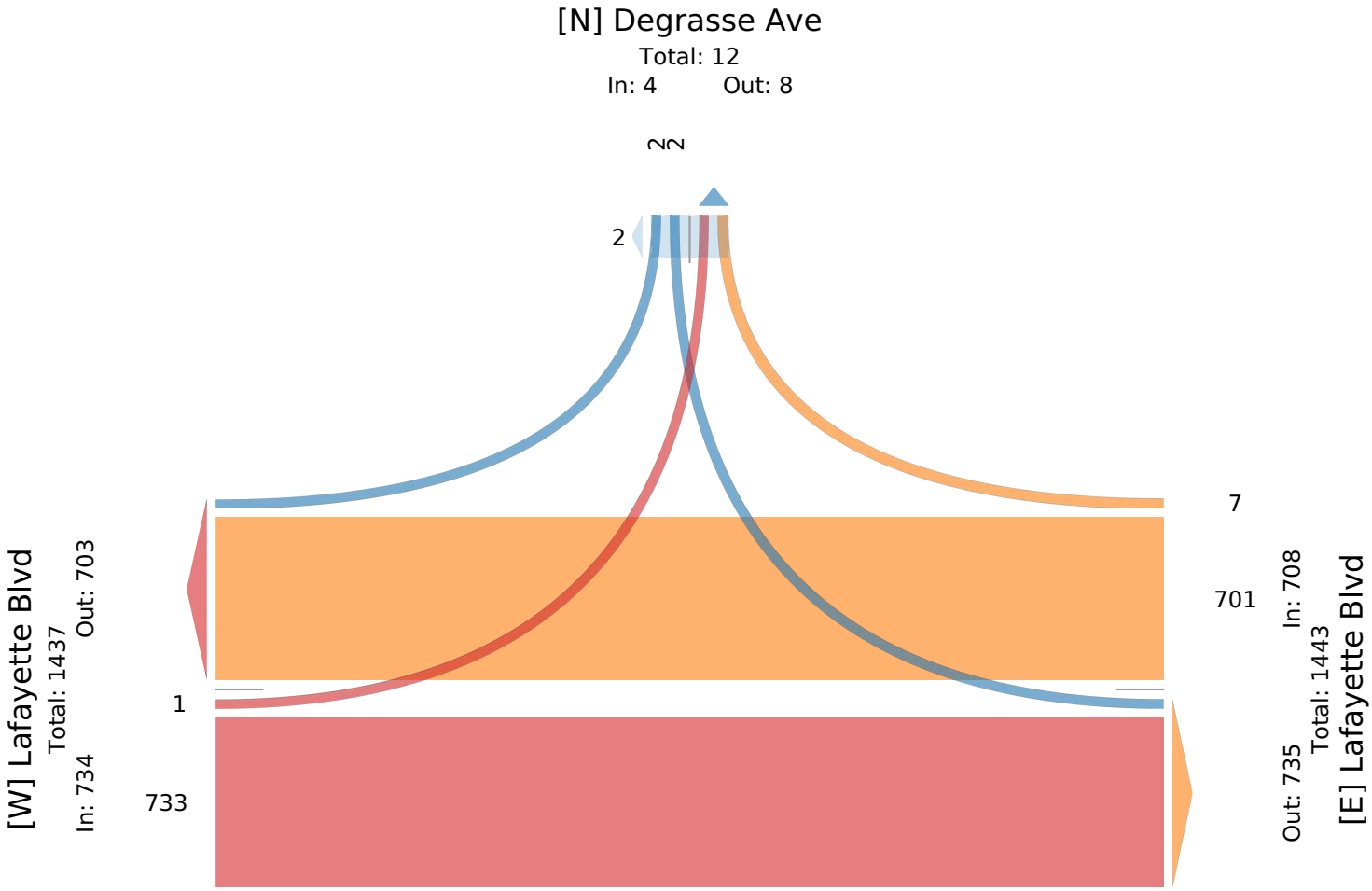
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Degrasse Ave Southbound					Lafayette Blvd Westbound					Lafayette Blvd Eastbound					
Time	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	T	L	U	**App**	Ped*	**Int**
2024-09-19 4:15PM	0	0	0	**0**	1	1	172	0	**173**	0	198	0	0	**198**	0	**371**
4:30PM	1	0	0	**1**	0	2	151	0	**153**	0	187	1	0	**188**	0	**342**
4:45PM	1	1	0	**2**	0	2	194	0	**196**	0	171	0	0	**171**	0	**369**
5:00PM	0	1	0	**1**	1	2	184	0	**186**	0	177	0	0	**177**	0	**364**
Total	2	2	0	**4**	2	7	701	0	**708**	0	733	1	0	**734**	0	**1446**
% Approach	50.0%	50.0%	0%	**-**	-	1.0%	99.0%	0%	**-**	-	99.9%	0.1%	0%	**-**	-	-
% Total	0.1%	0.1%	0%	**0.3%**	-	0.5%	48.5%	0%	**49.0%**	-	50.7%	0.1%	0%	**50.8%**	-	-
PHF	0.500	0.500	-	**0.500**	-	0.875	0.903	-	**0.903**	-	0.926	0.250	-	**0.927**	-	0.974
Lights and Motorcycles	2	2	0	**4**	-	7	684	0	**691**	-	713	1	0	**714**	-	1409
% Lights and Motorcycles	100%	100%	0%	**100%**	-	100%	97.6%	0%	**97.6%**	-	97.3%	100%	0%	**97.3%**	-	97.4%
Heavy	0	0	0	**0**	-	0	17	0	**17**	-	20	0	0	**20**	-	37
% Heavy	0%	0%	0%	**0%**	-	0%	2.4%	0%	**2.4%**	-	2.7%	0%	0%	**2.7%**	-	2.6%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	2	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

8-Lafayette Blvd & Degrasse Ave (VA24-203) - TMC
Thu Sep 19, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221184, Location: 36.876169, -76.267987

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



9-Lafayette Blvd & Bellevue Ave (VA24-203) - TMC

Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221185, Location: 36.876969, -76.267505

PMA Traffic Data Collection

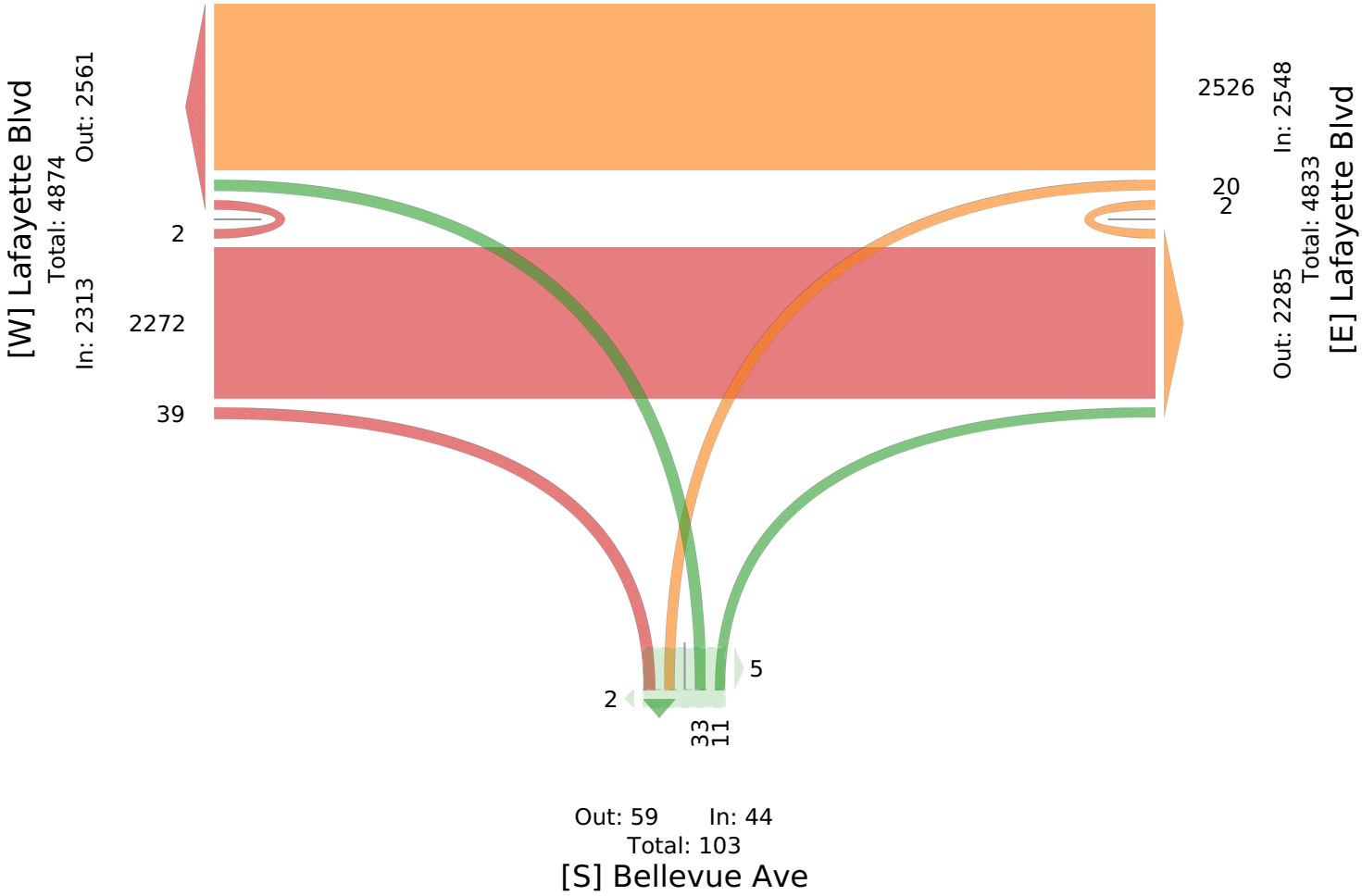
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Lafayette Blvd Westbound					Bellevue Ave Northbound					Lafayette Blvd Eastbound					
Time	T	L	U	**App**	Ped*	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	**Int**
2024-09-19 7:00AM	150	2	0	**152**	0	0	1	0	**1**	0	3	85	0	**88**	0	**241**
7:15AM	144	1	0	**145**	0	0	2	0	**2**	0	0	106	0	**106**	0	**253**
7:30AM	160	1	0	**161**	0	1	1	0	**2**	0	0	121	0	**121**	0	**284**
7:45AM	180	0	0	**180**	0	0	6	0	**6**	0	2	116	0	**118**	0	**304**
Hourly Total	634	4	0	**638**	0	1	10	0	**11**	0	5	428	0	**433**	0	**1082**
8:00AM	184	0	1	**185**	0	2	1	0	**3**	0	3	113	0	**116**	0	**304**
8:15AM	159	1	0	**160**	0	0	3	0	**3**	0	1	118	1	**120**	0	**283**
8:30AM	126	0	0	**126**	0	0	3	0	**3**	0	2	107	0	**109**	0	**238**
8:45AM	130	1	0	**131**	0	0	2	0	**2**	0	1	108	0	**109**	0	**242**
Hourly Total	599	2	1	**602**	0	2	9	0	**11**	0	7	446	1	**454**	0	**1067**
3:30PM	137	4	0	**141**	0	0	0	0	**0**	2	3	166	1	**170**	0	**311**
3:45PM	162	3	0	**165**	0	1	4	0	**5**	0	2	139	0	**141**	0	**311**
Hourly Total	299	7	0	**306**	0	1	4	0	**5**	2	5	305	1	**311**	0	**622**
4:00PM	146	1	0	**147**	0	2	2	0	**4**	2	1	186	0	**187**	0	**338**
4:15PM	161	2	0	**163**	0	1	3	0	**4**	1	2	197	0	**199**	0	**366**
4:30PM	151	2	0	**153**	0	2	1	0	**3**	0	8	200	0	**208**	0	**364**
4:45PM	187	0	0	**187**	0	0	1	0	**1**	0	2	167	0	**169**	0	**357**
Hourly Total	645	5	0	**650**	0	5	7	0	**12**	3	13	750	0	**763**	0	**1425**
5:00PM	185	0	1	**186**	0	1	1	0	**2**	1	7	166	0	**173**	0	**361**
5:15PM	164	2	0	**166**	0	1	2	0	**3**	1	2	177	0	**179**	0	**348**
Hourly Total	349	2	1	**352**	0	2	3	0	**5**	2	9	343	0	**352**	0	**709**
Total	2526	20	2	**2548**	0	11	33	0	**44**	7	39	2272	2	**2313**	0	**4905**
% Approach	99.1%	0.8%	0.1%	**-**	-	25.0%	75.0%	0%	**-**	-	1.7%	98.2%	0.1%	**-**	-	-
% Total	51.5%	0.4%	0%	**51.9%**	-	0.2%	0.7%	0%	**0.9%**	-	0.8%	46.3%	0%	**47.2%**	-	-
Lights and Motorcycles	2415	20	2	**2437**	-	9	33	0	**42**	-	38	2189	2	**2229**	-	4708
% Lights and Motorcycles	95.6%	100%	100%	**95.6%**	-	81.8%	100%	0%	**95.5%**	-	97.4%	96.3%	100%	**96.4%**	-	96.0%
Heavy	111	0	0	**111**	-	2	0	0	**2**	-	1	83	0	**84**	-	197
% Heavy	4.4%	0%	0%	**4.4%**	-	18.2%	0%	0%	**4.5%**	-	2.6%	3.7%	0%	**3.6%**	-	4.0%
Pedestrians	-	-	-	-	0	-	-	-	-	4	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	57.1%	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	3	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	42.9%	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

9-Lafayette Blvd & Bellevue Ave (VA24-203) - TMC
Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221185, Location: 36.876969, -76.267505

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



9-Lafayette Blvd & Bellevue Ave (VA24-203) - TMC

Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221185, Location: 36.876969, -76.267505

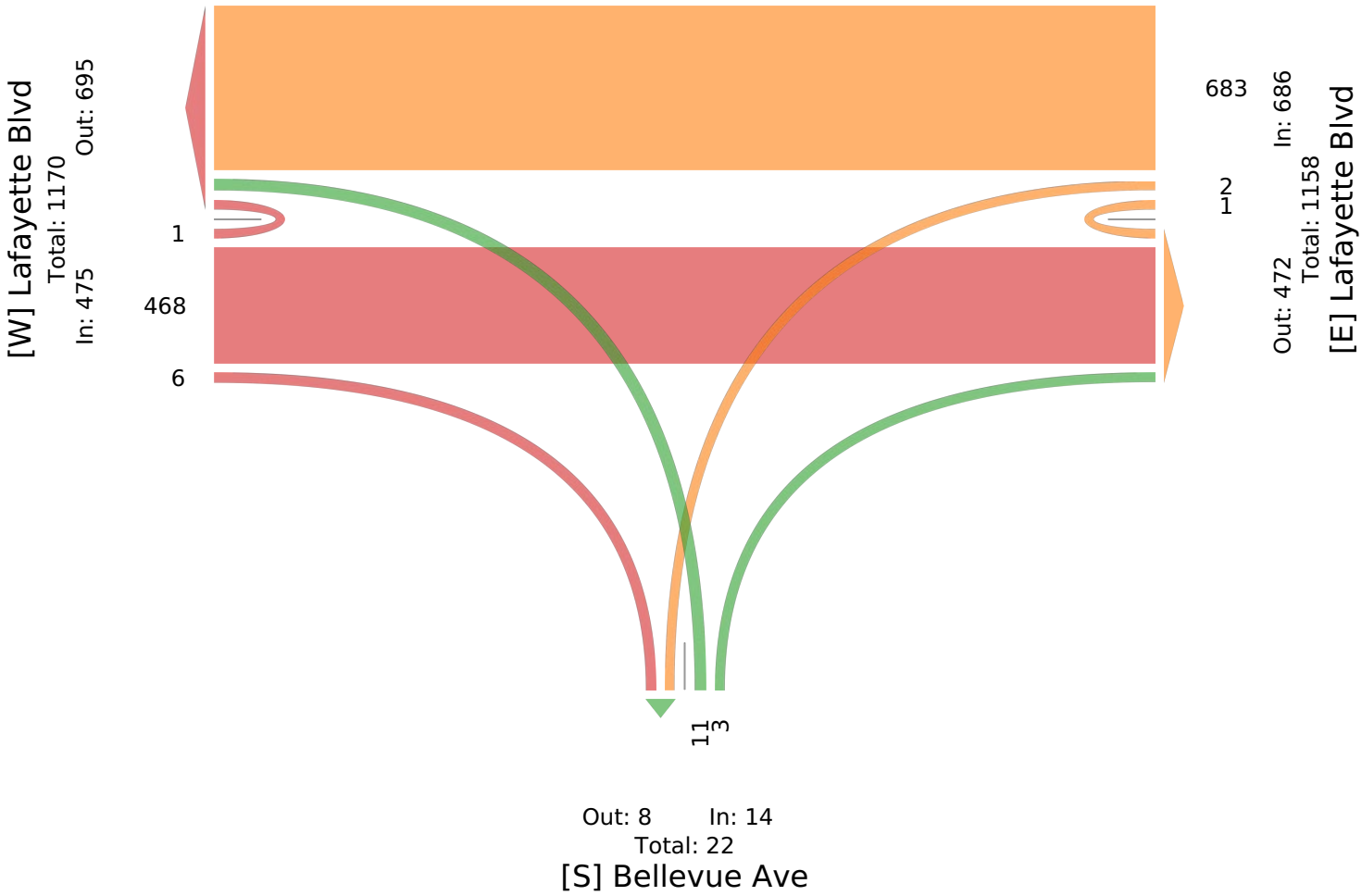
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Lafayette Blvd Westbound					Bellevue Ave Northbound					Lafayette Blvd Eastbound					
Time	T	L	U	**App**	Ped*	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	**Int**
2024-09-19 7:30AM	160	1	0	**161**	0	1	1	0	**2**	0	0	121	0	**121**	0	**284**
7:45AM	180	0	0	**180**	0	0	6	0	**6**	0	2	116	0	**118**	0	**304**
8:00AM	184	0	1	**185**	0	2	1	0	**3**	0	3	113	0	**116**	0	**304**
8:15AM	159	1	0	**160**	0	0	3	0	**3**	0	1	118	1	**120**	0	**283**
Total	683	2	1	**686**	0	3	11	0	**14**	0	6	468	1	**475**	0	**1175**
% Approach	99.6%	0.3%	0.1%	**-**	-	21.4%	78.6%	0%	**-**	-	1.3%	98.5%	0.2%	**-**	-	**-**
% Total	58.1%	0.2%	0.1%	**58.4%**	-	0.3%	0.9%	0%	**1.2%**	-	0.5%	39.8%	0.1%	**40.4%**	-	**-**
PHF	0.928	0.500	0.250	**0.927**	-	0.375	0.458	-	**0.583**	-	0.500	0.967	0.250	**0.981**	-	0.966
Lights and Motorcycles	630	2	1	**633**	-	3	11	0	**14**	-	6	441	1	**448**	-	1095
% Lights and Motorcycles	92.2%	100%	100%	**92.3%**	-	100%	100%	0%	**100%**	-	100%	94.2%	100%	**94.3%**	-	93.2%
Heavy	53	0	0	**53**	-	0	0	0	**0**	-	0	27	0	**27**	-	80
% Heavy	7.8%	0%	0%	**7.7%**	-	0%	0%	0%	**0%**	-	0%	5.8%	0%	**5.7%**	-	6.8%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

9-Lafayette Blvd & Bellevue Ave (VA24-203) - TMC
Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221185, Location: 36.876969, -76.267505

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



9-Lafayette Blvd & Bellevue Ave (VA24-203) - TMC

Thu Sep 19, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221185, Location: 36.876969, -76.267505

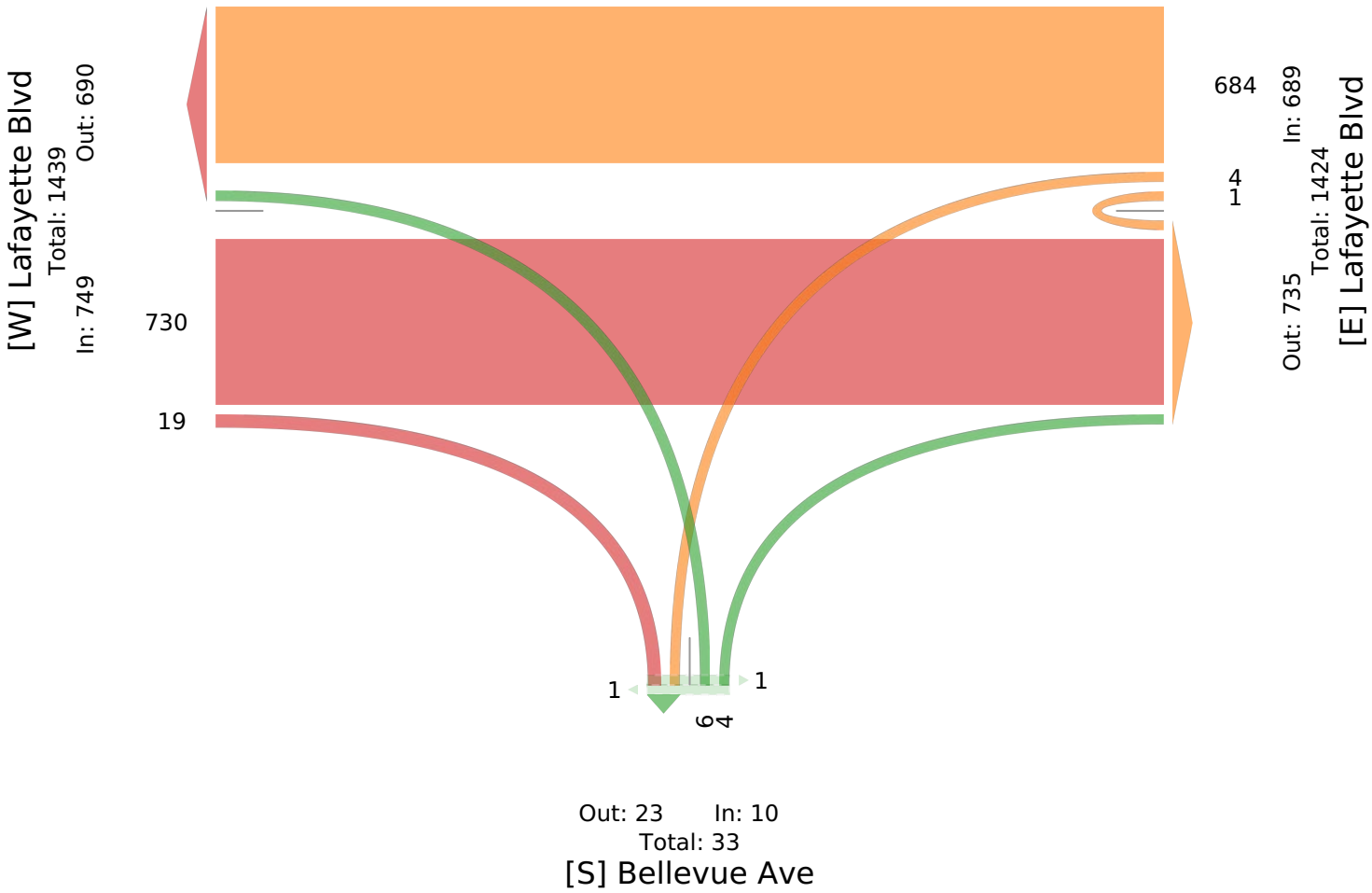
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Lafayette Blvd Westbound					Bellevue Ave Northbound					Lafayette Blvd Eastbound					
Time	T	L	U	**App**	Ped*	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	**Int**
2024-09-19 4:15PM	161	2	0	**163**	0	1	3	0	**4**	1	2	197	0	**199**	0	**366**
4:30PM	151	2	0	**153**	0	2	1	0	**3**	0	8	200	0	**208**	0	**364**
4:45PM	187	0	0	**187**	0	0	1	0	**1**	0	2	167	0	**169**	0	**357**
5:00PM	185	0	1	**186**	0	1	1	0	**2**	1	7	166	0	**173**	0	**361**
Total	684	4	1	**689**	0	4	6	0	**10**	2	19	730	0	**749**	0	**1448**
% Approach	99.3%	0.6%	0.1%	**-**	-	40.0%	60.0%	0%	**-**	-	2.5%	97.5%	0%	**-**	-	-
% Total	47.2%	0.3%	0.1%	**47.6%**	-	0.3%	0.4%	0%	**0.7%**	-	1.3%	50.4%	0%	**51.7%**	-	-
PHF	0.914	0.500	0.250	**0.921**	-	0.500	0.500	-	**0.625**	-	0.594	0.913	-	**0.900**	-	0.989
Lights and Motorcycles	669	4	1	**674**	-	3	6	0	**9**	-	18	711	0	**729**	-	1412
% Lights and Motorcycles	97.8%	100%	100%	**97.8%**	-	75.0%	100%	0%	**90.0%**	-	94.7%	97.4%	0%	**97.3%**	-	97.5%
Heavy	15	0	0	**15**	-	1	0	0	**1**	-	1	19	0	**20**	-	36
% Heavy	2.2%	0%	0%	**2.2%**	-	25.0%	0%	0%	**10.0%**	-	5.3%	2.6%	0%	**2.7%**	-	2.5%
Pedestrians	-	-	-	-	0	-	-	-	-	2	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

9-Lafayette Blvd & Bellevue Ave (VA24-203) - TMC
Thu Sep 19, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221185, Location: 36.876969, -76.267505

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



10-Lafayette Blvd & Versailles Ave - Norway ... - TMC

Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221186, Location: 36.87779, -76.267192

PMA Traffic Data Collection

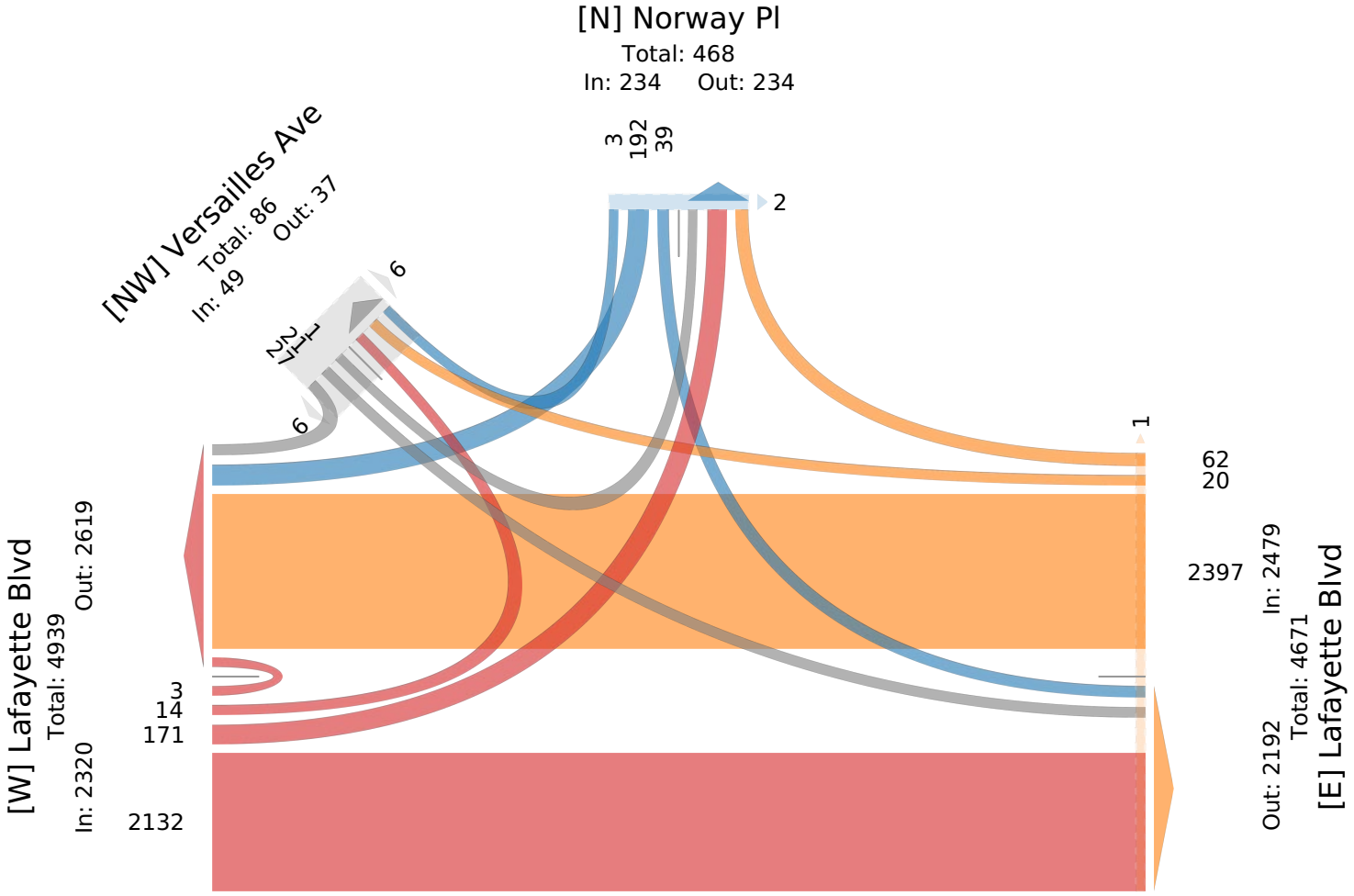
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345, Jacksonville Beach, FL, 32250, US

Leg	Norway Pl						Lafayette Blvd						Lafayette Blvd						Versailles Ave						
Direction	Southbound						Westbound						Eastbound						Southeastbound						
Time	HR	R	L	U	App	Ped*	R	BR	T	U	App	Ped*	T	L	HL	U	App	Ped*	HR	BL	HL	U	App	Ped*	Int
2024-09-19 7:00AM	1	9	2	0	**12**	0	2	1	156	0	**159**	0	83	4	2	0	**89**	0	4	0	0	0	**4**	0	**264**
7:15AM	0	13	3	0	**16**	0	3	1	131	0	**135**	0	104	9	0	0	**113**	0	2	2	0	0	**4**	0	**268**
7:30AM	0	12	5	0	**17**	0	1	2	164	0	**167**	0	120	8	2	0	**130**	0	3	2	0	0	**5**	0	**319**
7:45AM	0	21	5	0	**26**	1	1	0	158	0	**159**	0	111	11	0	0	**122**	0	1	4	0	0	**5**	3	**312**
Hourly Total	1	55	15	0	**71**	1	7	4	609	0	**620**	0	418	32	4	0	**454**	0	10	8	0	0	**18**	3	**1163**
8:00AM	0	15	0	0	**15**	0	3	1	181	0	**185**	0	94	9	1	0	**104**	0	1	0	0	0	**1**	0	**305**
8:15AM	0	8	7	0	**15**	0	4	1	142	0	**147**	0	113	7	1	0	**121**	0	1	3	0	0	**4**	1	**287**
8:30AM	1	16	0	0	**17**	0	1	0	111	0	**112**	0	95	15	0	0	**110**	0	2	2	1	0	**5**	0	**244**
8:45AM	0	10	5	0	**15**	0	10	0	118	0	**128**	0	103	6	0	0	**109**	0	0	1	0	0	**1**	0	**253**
Hourly Total	1	49	12	0	**62**	0	18	2	552	0	**572**	0	405	37	2	0	**444**	0	4	6	1	0	**11**	1	**1089**
9:00AM	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**
Hourly Total	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**
3:30PM	0	13	2	0	**15**	0	11	1	137	0	**149**	1	154	13	3	1	**171**	0	0	0	0	0	**0**	3	**335**
3:45PM	0	10	1	0	**11**	0	3	2	151	0	**156**	0	135	10	0	1	**146**	0	0	1	0	0	**1**	0	**314**
Hourly Total	0	23	3	0	**26**	0	14	3	288	0	**305**	1	289	23	3	2	**317**	0	0	1	0	0	**1**	3	**649**
4:00PM	1	13	0	0	**14**	0	3	2	136	0	**141**	0	176	12	1	0	**189**	0	1	0	0	0	**1**	0	**345**
4:15PM	0	8	4	0	**12**	0	3	5	152	0	**160**	0	179	13	0	0	**192**	0	4	0	0	0	**4**	1	**368**
4:30PM	0	10	1	0	**11**	0	4	2	148	0	**154**	0	174	18	0	0	**192**	0	2	1	0	0	**3**	0	**360**
4:45PM	0	13	0	0	**13**	0	4	1	177	0	**182**	0	162	15	0	0	**177**	0	2	3	0	0	**5**	2	**377**
Hourly Total	1	44	5	0	**50**	0	14	10	613	0	**637**	0	691	58	1	0	**750**	0	9	4	0	0	**13**	3	**1450**
5:00PM	0	11	1	0	**12**	1	2	1	172	0	**175**	0	158	14	1	1	**174**	0	2	2	0	0	**4**	1	**365**
5:15PM	0	10	3	0	**13**	0	7	0	163	0	**170**	0	171	7	3	0	**181**	0	2	0	0	0	**2**	1	**366**
Hourly Total	0	21	4	0	**25**	1	9	1	335	0	**345**	0	329	21	4	1	**355**	0	4	2	0	0	**6**	2	**731**
Total	3	192	39	0	**234**	2	62	20	2397	0	**2479**	1	2132	171	14	3	**2320**	0	27	21	1	0	**49**	12	**5082**
% Approach	1.3%	82.1%	16.7%	0%	**-**	-	2.5%	0.8%	96.7%	0%	**-**	-	91.9%	7.4%	0.6%	0.1%	**-**	-	55.1%	42.9%	2.0%	0%	**-**	-	**-**
% Total	0.1%	3.8%	0.8%	0%	**4.6%**	-	1.2%	0.4%	47.2%	0%	**48.8%**	-	42.0%	3.4%	0.3%	0.1%	**45.7%**	-	0.5%	0.4%	0%	0%	**1.0%**	-	**-**
Lights and Motorcycles	3	191	38	0	**232**	-	57	18	2296	0	**2371**	-	2050	168	11	3	**2232**	-	23	20	1	0	**44**	-	4879
% Lights and Motorcycles	100%	99.5%	97.4%	0%	**99.1%**	-	91.9%	90.0%	95.8%	0%	**95.6%**	-	96.2%	98.2%	78.6%	100%	**96.2%**	-	85.2%	95.2%	100%	0%	**89.8%**	-	96.0%
Heavy	0	1	1	0	**2**	-	5	2	101	0	**108**	-	82	3	3	0	**88**	-	4	1	0	0	**5**	-	203
% Heavy	0%	0.5%	2.6%	0%	**0.9%**	-	8.1%	10.0%	4.2%	0%	**4.4%**	-	3.8%	1.8%	21.4%	0%	**3.8%**	-	14.8%	4.8%	0%	0%	**10.2%**	-	4.0%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	4	
% Pedestrians	-	-	-	-	-	50.0%	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	33.3%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	8	
% Bicycles on Crosswalk	-	-	-	-	-	50.0%	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	66.7%	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

10-Lafayette Blvd & Versailles Ave - Norway ... - TMC
Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221186, Location: 36.87779, -76.267192

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



10-Lafayette Blvd & Versailles Ave - Norway ... - TMC

Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221186, Location: 36.87779, -76.267192

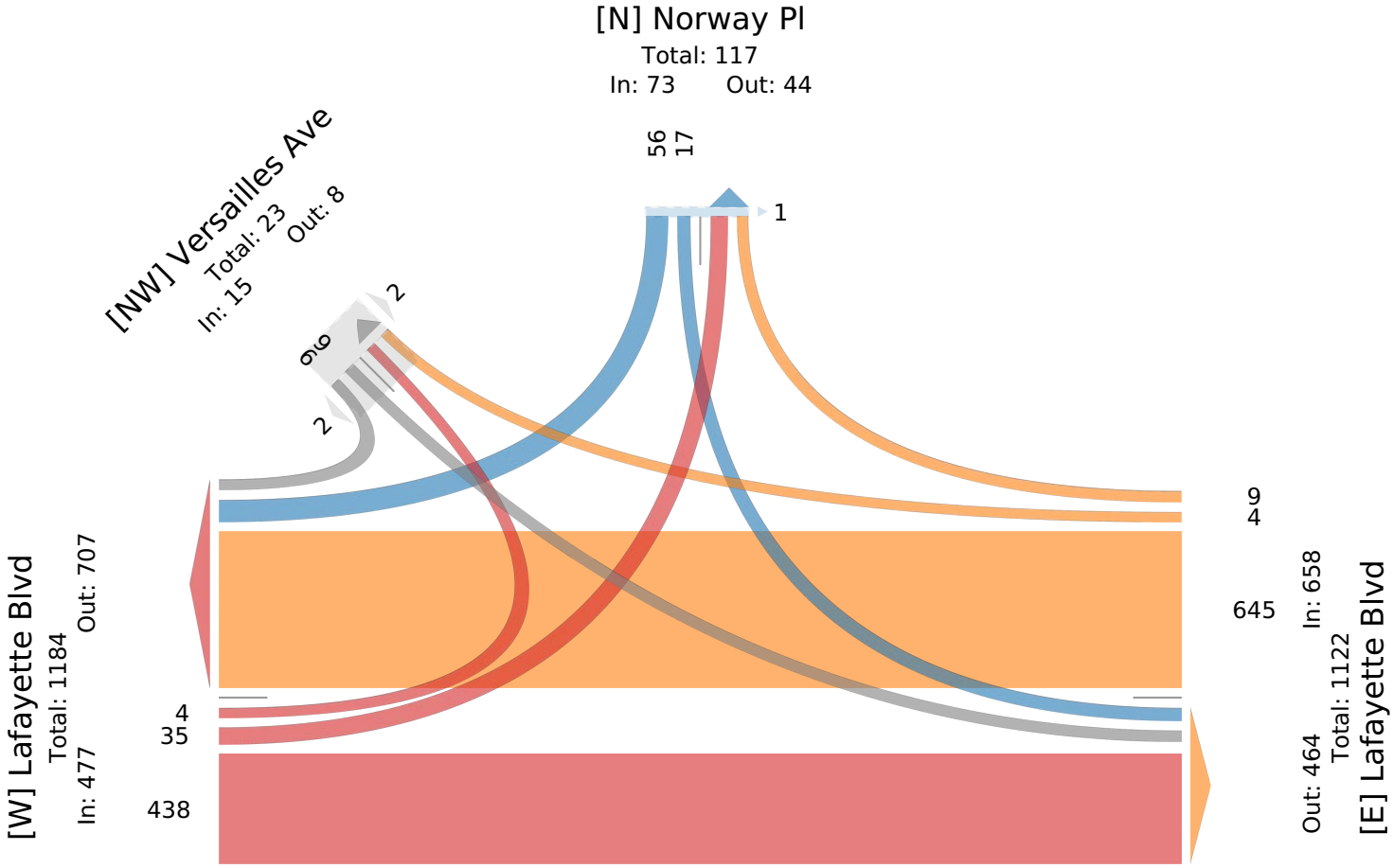
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg	Norway Pl						Lafayette Blvd						Lafayette Blvd						Versailles Ave						
Direction	Southbound						Westbound						Eastbound						Southeastbound						
Time	HR	R	L	U	**App**	Ped*	R	BR	T	U	**App**	Ped*	T	L	HL	U	**App**	Ped*	HR	BL	HL	U	**App**	Ped*	**Int**
2024-09-19 7:30AM	0	12	5	0	**17**	0	1	2	164	0	**167**	0	120	8	2	0	**130**	0	3	2	0	0	**5**	0	**319**
7:45AM	0	21	5	0	**26**	1	1	0	158	0	**159**	0	111	11	0	0	**122**	0	1	4	0	0	**5**	3	**312**
8:00AM	0	15	0	0	**15**	0	3	1	181	0	**185**	0	94	9	1	0	**104**	0	1	0	0	0	**1**	0	**305**
8:15AM	0	8	7	0	**15**	0	4	1	142	0	**147**	0	113	7	1	0	**121**	0	1	3	0	0	**4**	1	**287**
Total	0	56	17	0	**73**	1	9	4	645	0	**658**	0	438	35	4	0	**477**	0	6	9	0	0	**15**	4	**1223**
% Approach	0%	76.7%	23.3%	0%	**-**	-	1.4%	0.6%	98.0%	0%	**-**	-	91.8%	7.3%	0.8%	0%	**-**	-	40.0%	60.0%	0%	0%	**-**	-	-
% Total	0%	4.6%	1.4%	0%	**6.0%**	-	0.7%	0.3%	52.7%	0%	**53.8%**	-	35.8%	2.9%	0.3%	0%	**39.0%**	-	0.5%	0.7%	0%	0%	**1.2%**	-	-
PHF	-	0.667	0.607	-	**0.702**	-	0.563	0.500	0.891	-	**0.889**	-	0.913	0.795	0.500	-	**0.917**	-	0.500	0.563	-	-	**0.750**	-	0.958
Lights and Motorcycles	0	56	16	0	**72**	-	7	3	597	0	**607**	-	409	35	3	0	**447**	-	4	8	0	0	**12**	-	1138
% Lights and Motorcycles	0%	100%	94.1%	0%	**98.6%**	-	77.8%	75.0%	92.6%	0%	**92.2%**	-	93.4%	100%	75.0%	0%	**93.7%**	-	66.7%	88.9%	0%	0%	**80.0%**	-	93.0%
Heavy	0	0	1	0	**1**	-	2	1	48	0	**51**	-	29	0	1	0	**30**	-	2	1	0	0	**3**	-	85
% Heavy	0%	0%	5.9%	0%	**1.4%**	-	22.2%	25.0%	7.4%	0%	**7.8%**	-	6.6%	0%	25.0%	0%	**6.3%**	-	33.3%	11.1%	0%	0%	**20.0%**	-	7.0%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.0%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50.0%	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

10-Lafayette Blvd & Versailles Ave - Norway ... - TMC
Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221186, Location: 36.87779, -76.267192

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



10-Lafayette Blvd & Versailles Ave - Norway ... - TMC

Thu Sep 19, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221186, Location: 36.87779, -76.267192

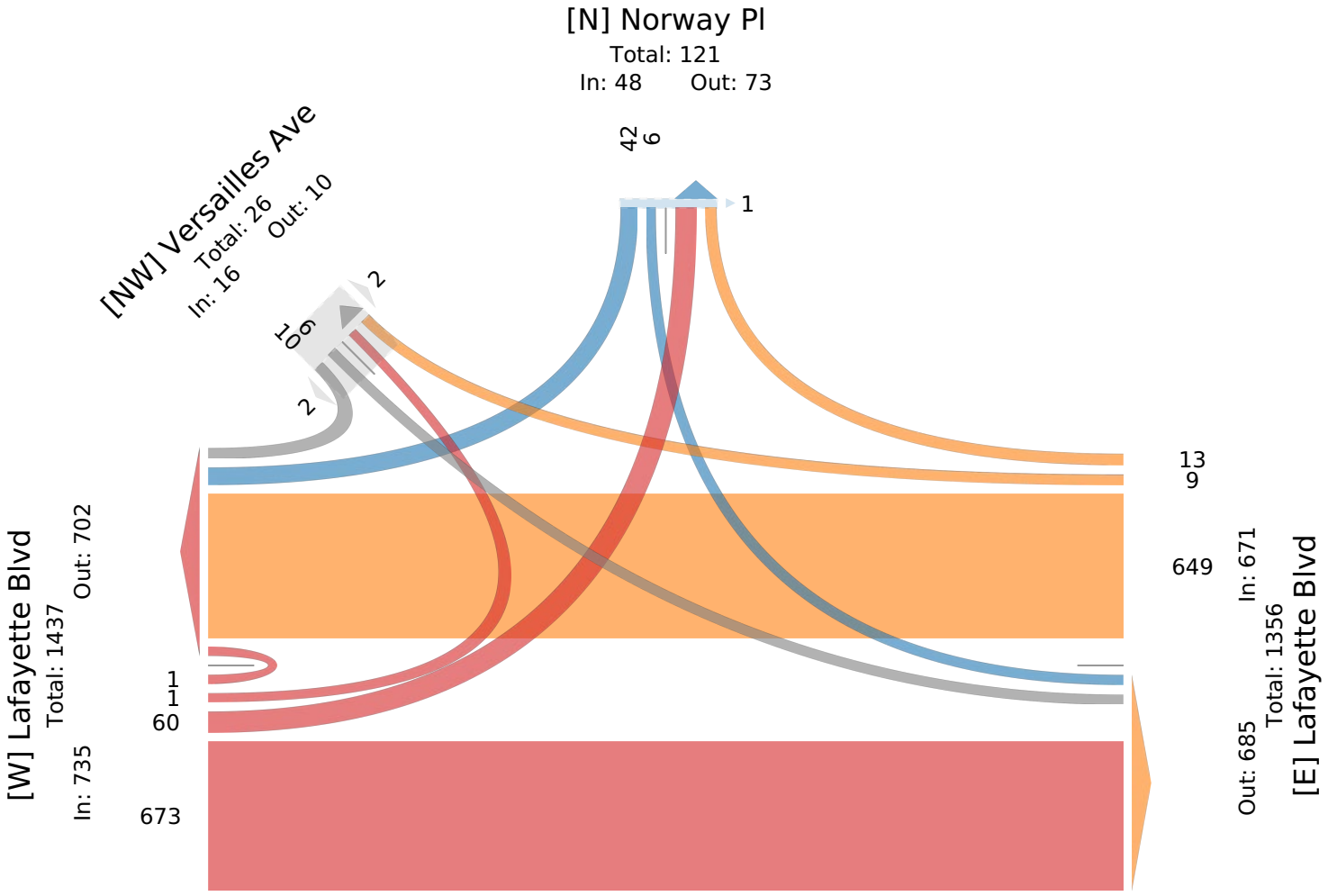
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg	Norway Pl						Lafayette Blvd						Lafayette Blvd						Versailles Ave						
Direction	Southbound						Westbound						Eastbound						Southeastbound						
Time	HR	R	L	U	**App**	Ped*	R	BR	T	U	**App**	Ped*	T	L	HL	U	**App**	Ped*	HR	BL	HL	U	**App**	Ped*	**Int**
2024-09-19 4:15PM	0	8	4	0	**12**	0	3	5	152	0	**160**	0	179	13	0	0	**192**	0	4	0	0	0	**4**	1	**368**
4:30PM	0	10	1	0	**11**	0	4	2	148	0	**154**	0	174	18	0	0	**192**	0	2	1	0	0	**3**	0	**360**
4:45PM	0	13	0	0	**13**	0	4	1	177	0	**182**	0	162	15	0	0	**177**	0	2	3	0	0	**5**	2	**377**
5:00PM	0	11	1	0	**12**	1	2	1	172	0	**175**	0	158	14	1	1	**174**	0	2	2	0	0	**4**	1	**365**
Total	0	42	6	0	**48**	1	13	9	649	0	**671**	0	673	60	1	1	**735**	0	10	6	0	0	**16**	4	**1470**
% Approach	0%	87.5%	12.5%	0%	**-**	-	1.9%	1.3%	96.7%	0%	**-**	-	91.6%	8.2%	0.1%	0.1%	**-**	-	62.5%	37.5%	0%	0%	**-**	-	**-**
% Total	0%	2.9%	0.4%	0%	**3.3%**	-	0.9%	0.6%	44.1%	0%	**45.6%**	-	45.8%	4.1%	0.1%	0.1%	**50.0%**	-	0.7%	0.4%	0%	0%	**1.1%**	-	**-**
PHF	-	0.808	0.375	-	**0.923**	-	0.813	0.450	0.917	-	**0.922**	-	0.940	0.833	0.250	0.250	**0.957**	-	0.625	0.500	-	-	**0.800**	-	0.975
Lights and Motorcycles	0	41	6	0	**47**	-	13	9	635	0	**657**	-	655	59	1	1	**716**	-	9	6	0	0	**15**	-	1435
% Lights and Motorcycles	0%	97.6%	100%	0%	**97.9%**	-	100%	100%	97.8%	0%	**97.9%**	-	97.3%	98.3%	100%	100%	**97.4%**	-	90.0%	100%	0%	0%	**93.8%**	-	97.6%
Heavy	0	1	0	0	**1**	-	0	0	14	0	**14**	-	18	1	0	0	**19**	-	1	0	0	0	**1**	-	35
% Heavy	0%	2.4%	0%	0%	**2.1%**	-	0%	0%	2.2%	0%	**2.1%**	-	2.7%	1.7%	0%	0%	**2.6%**	-	10.0%	0%	0%	0%	**6.3%**	-	2.4%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.0%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75.0%	-

*Pedestrians and Bicycles on Crosswalk. BL: Bear left, BR: Bear right, HL: Hard left, HR: Hard right, L: Left, R: Right, T: Thru, U: U-Turn

10-Lafayette Blvd & Versailles Ave - Norway ... - TMC
Thu Sep 19, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221186, Location: 36.87779, -76.267192

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



11-Lafayette Blvd & Fontainebleau Crescent (... - TMC

Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221187, Location: 36.878189, -76.266755

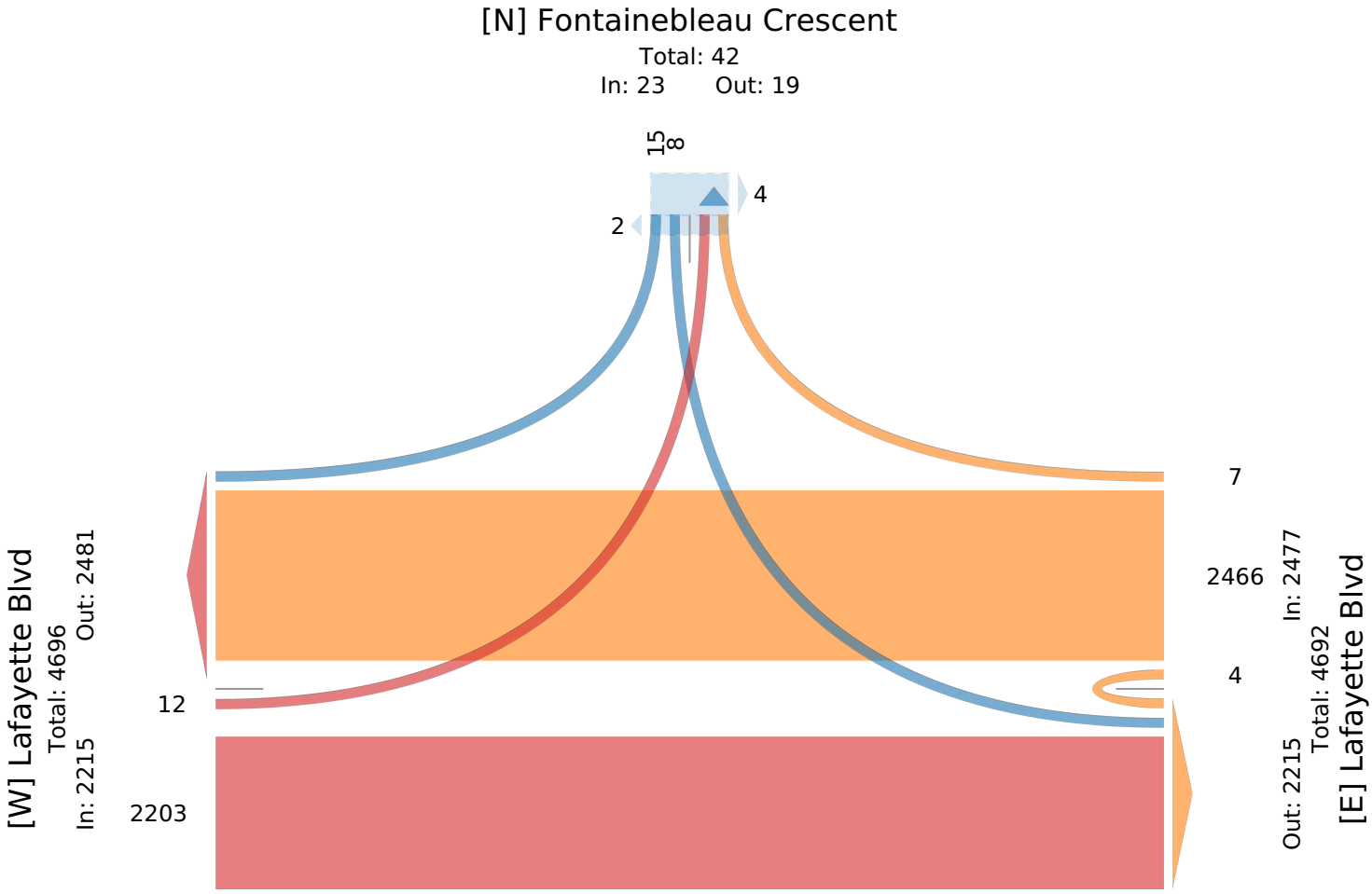
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Fontainebleau Crescent Southbound					Lafayette Blvd Westbound					Lafayette Blvd Eastbound					
Time	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	T	L	U	**App**	Ped*	**Int**
2024-09-19 7:00AM	1	2	0	**3**	0	0	146	0	**146**	0	88	0	0	**88**	0	**237**
7:15AM	1	0	0	**1**	0	0	140	0	**140**	0	108	0	0	**108**	0	**249**
7:30AM	1	1	0	**2**	0	0	155	1	**156**	0	126	0	0	**126**	0	**284**
7:45AM	2	0	0	**2**	3	0	165	0	**165**	0	119	1	0	**120**	0	**287**
Hourly Total	5	3	0	**8**	3	0	606	1	**607**	0	441	1	0	**442**	0	**1057**
8:00AM	0	0	0	**0**	0	0	183	0	**183**	0	99	2	0	**101**	0	**284**
8:15AM	2	0	0	**2**	1	0	149	1	**150**	0	120	2	0	**122**	0	**274**
8:30AM	0	0	0	**0**	0	1	104	0	**105**	0	99	0	0	**99**	0	**204**
8:45AM	0	1	0	**1**	0	0	136	0	**136**	0	109	0	0	**109**	0	**246**
Hourly Total	2	1	0	**3**	1	1	572	1	**574**	0	427	4	0	**431**	0	**1008**
3:30PM	2	2	0	**4**	0	0	152	0	**152**	0	152	1	0	**153**	0	**309**
3:45PM	0	0	0	**0**	0	0	150	0	**150**	0	138	0	0	**138**	0	**288**
Hourly Total	2	2	0	**4**	0	0	302	0	**302**	0	290	1	0	**291**	0	**597**
4:00PM	1	0	0	**1**	0	1	153	0	**154**	0	184	1	0	**185**	0	**340**
4:15PM	0	0	0	**0**	0	1	163	0	**164**	0	177	1	0	**178**	0	**342**
4:30PM	1	1	0	**2**	0	2	156	1	**159**	0	187	2	0	**189**	0	**350**
4:45PM	1	0	0	**1**	2	0	181	0	**181**	0	160	1	0	**161**	0	**343**
Hourly Total	3	1	0	**4**	2	4	653	1	**658**	0	708	5	0	**713**	0	**1375**
5:00PM	1	1	0	**2**	0	1	162	0	**163**	0	162	1	0	**163**	0	**328**
5:15PM	2	0	0	**2**	0	1	171	1	**173**	0	175	0	0	**175**	0	**350**
5:30PM	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	**0**
Hourly Total	3	1	0	**4**	0	2	333	1	**336**	0	337	1	0	**338**	0	**678**
Total	15	8	0	**23**	6	7	2466	4	**2477**	0	2203	12	0	**2215**	0	**4715**
% Approach	65.2%	34.8%	0%	**-**	-	0.3%	99.6%	0.2%	**-**	-	99.5%	0.5%	0%	**-**	-	-
% Total	0.3%	0.2%	0%	**0.5%**	-	0.1%	52.3%	0.1%	**52.5%**	-	46.7%	0.3%	0%	**47.0%**	-	-
Lights and Motorcycles	15	8	0	**23**	-	7	2353	4	**2364**	-	2113	11	0	**2124**	-	4511
% Lights and Motorcycles	100%	100%	0%	**100%**	-	100%	95.4%	100%	**95.4%**	-	95.9%	91.7%	0%	**95.9%**	-	95.7%
Heavy	0	0	0	**0**	-	0	113	0	**113**	-	90	1	0	**91**	-	204
% Heavy	0%	0%	0%	**0%**	-	0%	4.6%	0%	**4.6%**	-	4.1%	8.3%	0%	**4.1%**	-	4.3%
Pedestrians	-	-	-	-	5	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	83.3%	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	16.7%	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

11-Lafayette Blvd & Fontainebleau Crescent (... - TMC
Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221187, Location: 36.878189, -76.266755

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



11-Lafayette Blvd & Fontainebleau Crescent (... - TMC

Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221187, Location: 36.878189, -76.266755

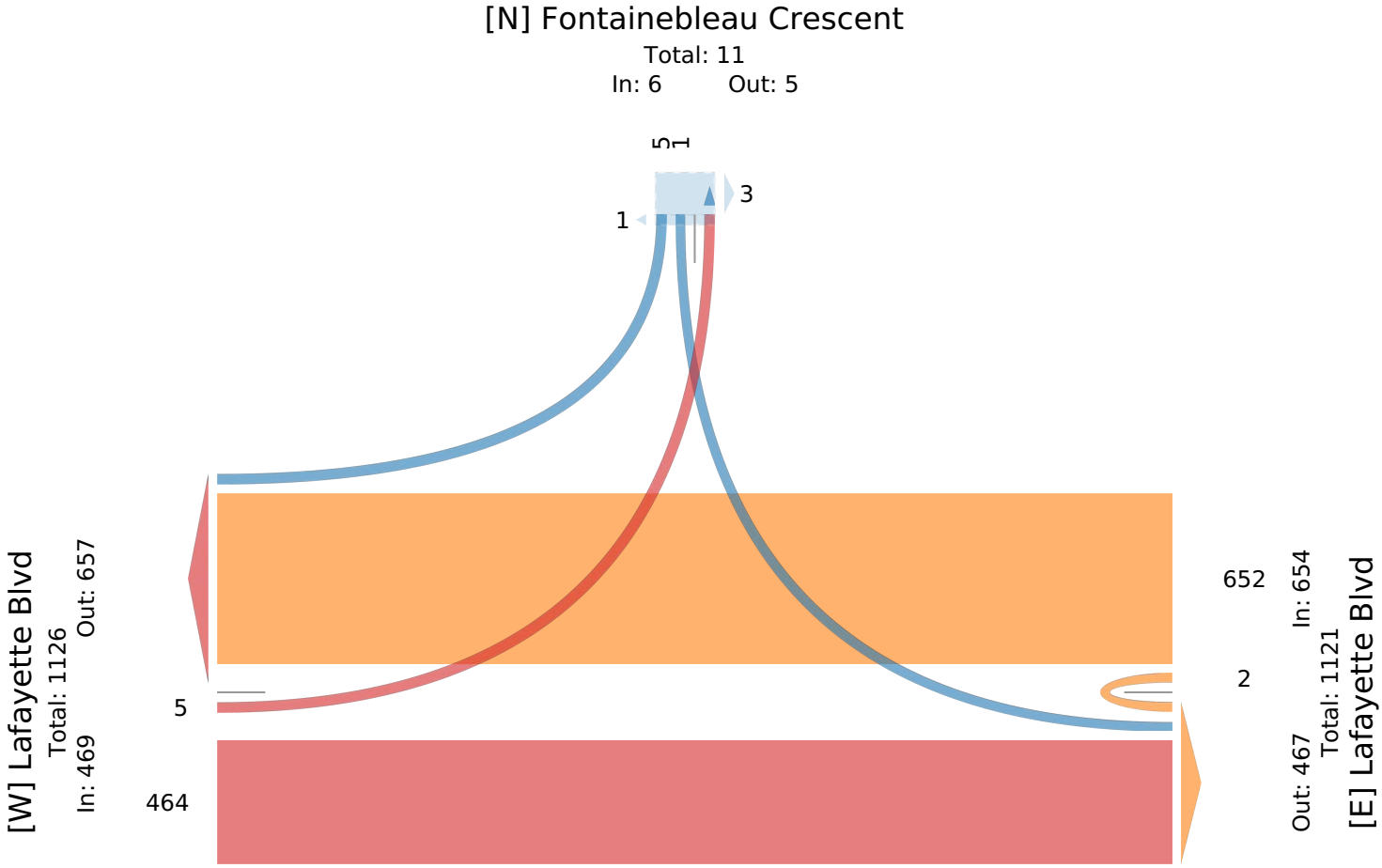
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Fontainebleau Crescent Southbound					Lafayette Blvd Westbound					Lafayette Blvd Eastbound					
Time	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	T	L	U	**App**	Ped*	**Int**
2024-09-19 7:30AM	1	1	0	**2**	0	0	155	1	**156**	0	126	0	0	**126**	0	**284**
7:45AM	2	0	0	**2**	3	0	165	0	**165**	0	119	1	0	**120**	0	**287**
8:00AM	0	0	0	**0**	0	0	183	0	**183**	0	99	2	0	**101**	0	**284**
8:15AM	2	0	0	**2**	1	0	149	1	**150**	0	120	2	0	**122**	0	**274**
Total	5	1	0	**6**	4	0	652	2	**654**	0	464	5	0	**469**	0	**1129**
% Approach	83.3%	16.7%	0%	**-**	-	0%	99.7%	0.3%	**-**	-	98.9%	1.1%	0%	**-**	-	**-**
% Total	0.4%	0.1%	0%	**0.5%**	-	0%	57.8%	0.2%	**57.9%**	-	41.1%	0.4%	0%	**41.5%**	-	**-**
PHF	0.625	0.250	-	**0.750**	-	-	0.891	0.500	**0.893**	-	0.921	0.625	-	**0.931**	-	0.983
Lights and Motorcycles	5	1	0	**6**	-	0	599	2	**601**	-	432	4	0	**436**	-	1043
% Lights and Motorcycles	100%	100%	0%	**100%**	-	0%	91.9%	100%	**91.9%**	-	93.1%	80.0%	0%	**93.0%**	-	92.4%
Heavy	0	0	0	**0**	-	0	53	0	**53**	-	32	1	0	**33**	-	86
% Heavy	0%	0%	0%	**0%**	-	0%	8.1%	0%	**8.1%**	-	6.9%	20.0%	0%	**7.0%**	-	7.6%
Pedestrians	-	-	-	-	4	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

11-Lafayette Blvd & Fontainebleau Crescent (... - TMC
Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221187, Location: 36.878189, -76.266755

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



11-Lafayette Blvd & Fontainebleau Crescent (... - TMC

Thu Sep 19, 2024
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221187, Location: 36.878189, -76.266755

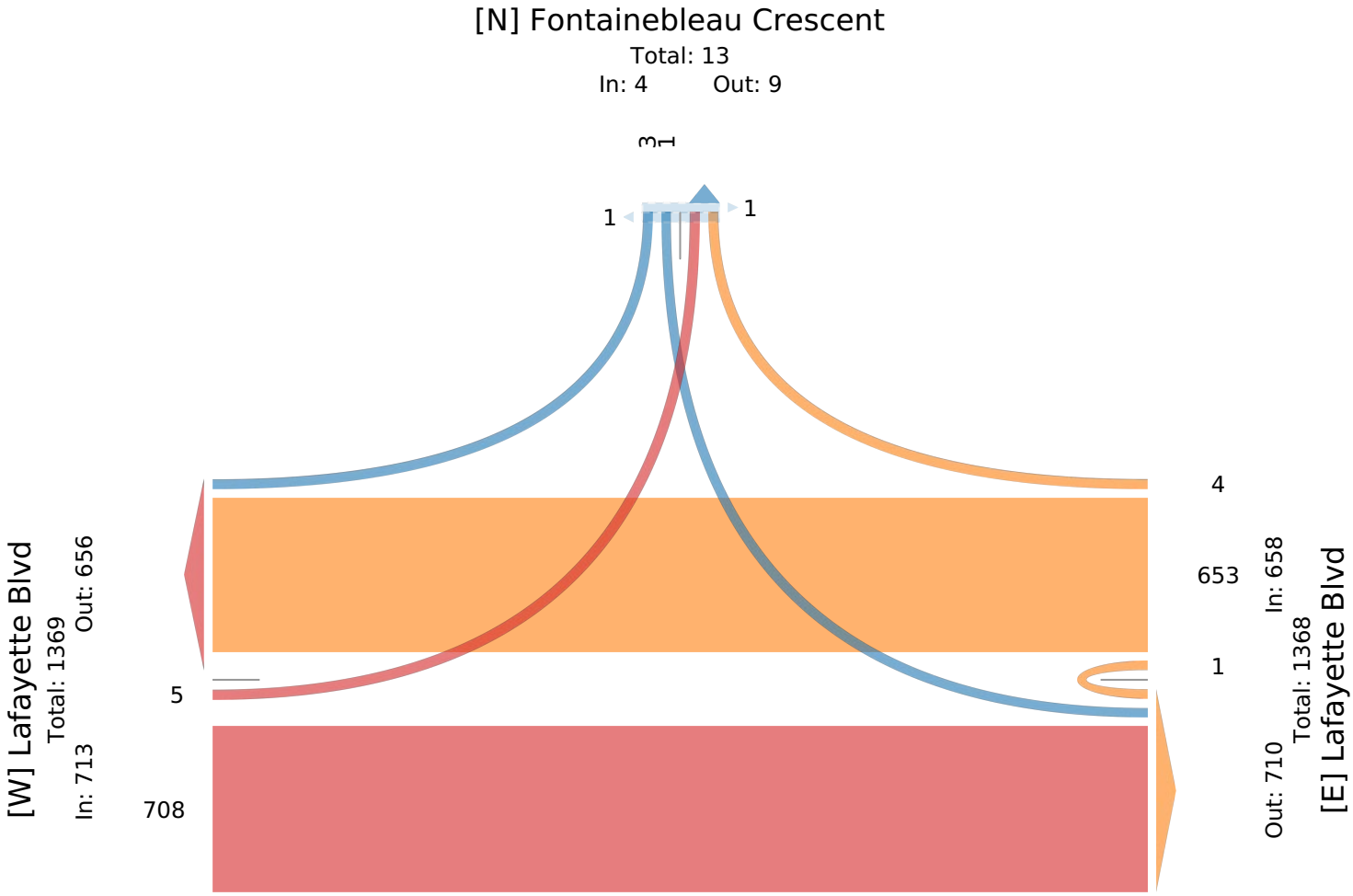
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Fontainebleau Crescent Southbound					Lafayette Blvd Westbound					Lafayette Blvd Eastbound					
Time	R	L	U	**App**	Ped*	R	T	U	**App**	Ped*	T	L	U	**App**	Ped*	**Int**
2024-09-19 4:00PM	1	0	0	**1**	0	1	153	0	**154**	0	184	1	0	**185**	0	**340**
4:15PM	0	0	0	**0**	0	1	163	0	**164**	0	177	1	0	**178**	0	**342**
4:30PM	1	1	0	**2**	0	2	156	1	**159**	0	187	2	0	**189**	0	**350**
4:45PM	1	0	0	**1**	2	0	181	0	**181**	0	160	1	0	**161**	0	**343**
Total	3	1	0	**4**	2	4	653	1	**658**	0	708	5	0	**713**	0	**1375**
% Approach	75.0%	25.0%	0%	**-**	-	0.6%	99.2%	0.2%	**-**	-	99.3%	0.7%	0%	**-**	-	-
% Total	0.2%	0.1%	0%	**0.3%**	-	0.3%	47.5%	0.1%	**47.9%**	-	51.5%	0.4%	0%	**51.9%**	-	-
PHF	0.750	0.250	-	**0.500**	-	0.500	0.902	0.250	**0.909**	-	0.947	0.625	-	**0.943**	-	0.982
Lights and Motorcycles	3	1	0	**4**	-	4	644	1	**649**	-	683	5	0	**688**	-	1341
% Lights and Motorcycles	100%	100%	0%	**100%**	-	100%	98.6%	100%	**98.6%**	-	96.5%	100%	0%	**96.5%**	-	97.5%
Heavy	0	0	0	**0**	-	0	9	0	**9**	-	25	0	0	**25**	-	34
% Heavy	0%	0%	0%	**0%**	-	0%	1.4%	0%	**1.4%**	-	3.5%	0%	0%	**3.5%**	-	2.5%
Pedestrians	-	-	-	-	1	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	50.0%	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

11-Lafayette Blvd & Fontainebleau Crescent (... - TMC
Thu Sep 19, 2024
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221187, Location: 36.878189, -76.266755

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



12-Lafayette Blvd & Lorraine Ave (VA24-203) - TMC

Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221188, Location: 36.87823, -76.265741

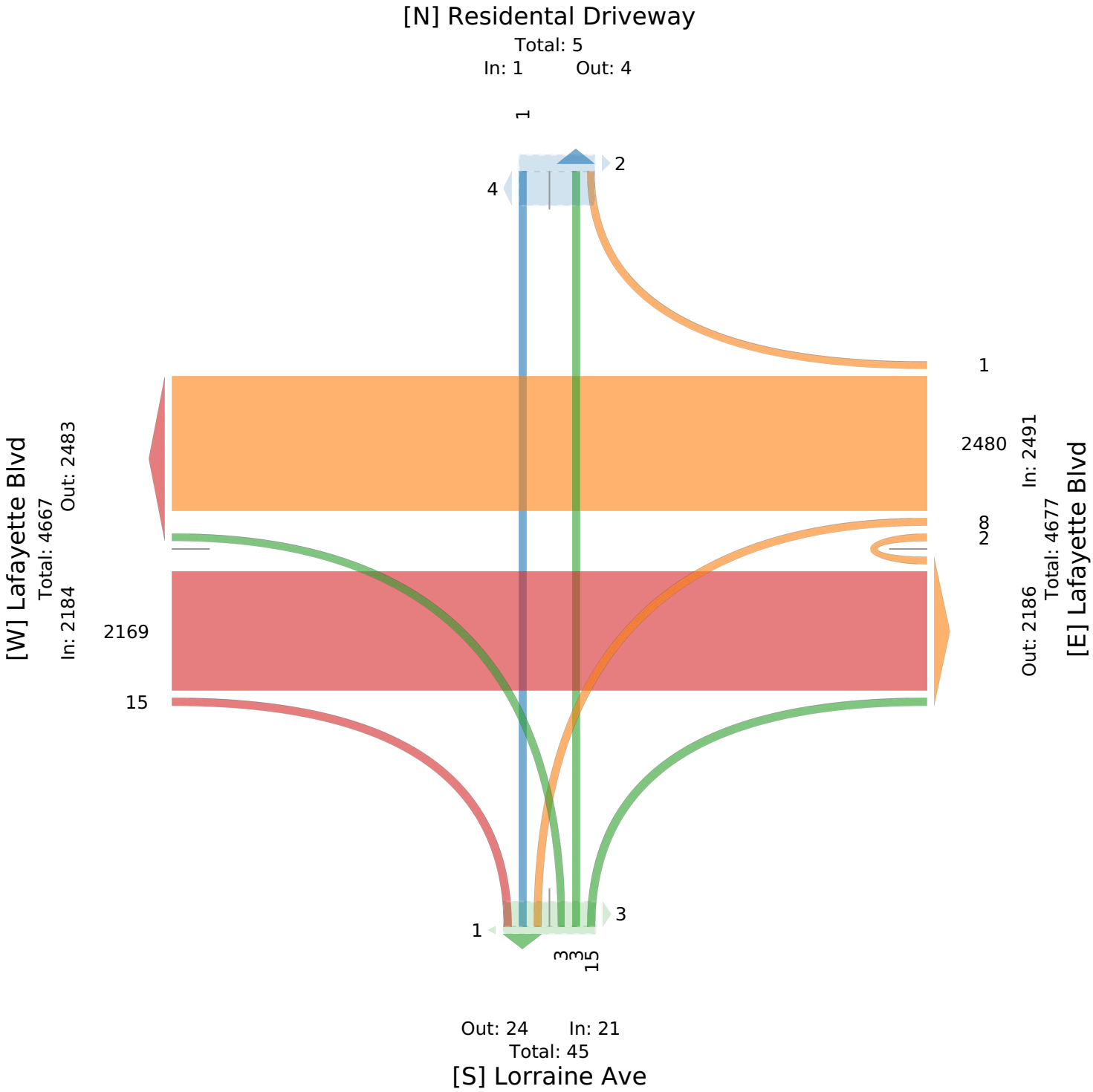
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg	Residental Driveway						Lafayette Blvd						Lorraine Ave						Lafayette Blvd						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2024-09-19 7:00AM	0	0	0	0	**0**	0	0	153	0	0	**153**	0	1	0	0	0	**1**	0	0	84	0	0	**84**	0	**238**
7:15AM	0	0	0	0	**0**	0	0	128	1	0	**129**	0	2	0	1	0	**3**	0	0	103	0	0	**103**	0	**235**
7:30AM	0	0	0	0	**0**	0	0	169	0	0	**169**	0	2	0	0	0	**2**	1	2	124	0	0	**126**	0	**297**
7:45AM	0	0	0	0	**0**	1	0	152	1	0	**153**	0	0	0	0	0	**0**	0	0	113	0	0	**113**	0	**266**
Hourly Total	0	0	0	0	**0**	1	0	602	2	0	**604**	0	5	0	1	0	**6**	1	2	424	0	0	**426**	0	**1036**
8:00AM	0	0	0	0	**0**	0	0	188	2	0	**190**	0	0	0	1	0	**1**	0	1	99	0	0	**100**	0	**291**
8:15AM	0	0	0	0	**0**	1	0	143	0	0	**143**	0	0	0	0	0	**0**	1	0	129	0	0	**129**	0	**272**
8:30AM	0	0	0	0	**0**	0	0	115	0	2	**117**	0	2	0	0	0	**2**	1	0	97	0	0	**97**	0	**216**
8:45AM	0	0	0	0	**0**	1	0	129	1	0	**130**	0	0	0	0	0	**0**	0	1	107	0	0	**108**	0	**238**
Hourly Total	0	0	0	0	**0**	2	0	575	3	2	**580**	0	2	0	1	0	**3**	2	2	432	0	0	**434**	0	**1017**
9:00AM	0	0	0	0	**0**	0	0	1	0	0	**1**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**1**
Hourly Total	0	0	0	0	**0**	0	0	1	0	0	**1**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**1**
3:30PM	0	0	0	0	**0**	0	0	145	0	0	**145**	0	1	1	0	0	**2**	0	2	158	0	0	**160**	0	**307**
3:45PM	0	0	0	0	**0**	0	0	152	2	0	**154**	0	1	0	1	0	**2**	0	0	127	0	0	**127**	0	**283**
Hourly Total	0	0	0	0	**0**	0	0	297	2	0	**299**	0	2	1	1	0	**4**	0	2	285	0	0	**287**	0	**590**
4:00PM	0	0	0	0	**0**	0	0	155	1	0	**156**	0	0	0	0	0	**0**	1	1	171	0	0	**172**	0	**328**
4:15PM	0	0	0	0	**0**	1	0	170	0	0	**170**	0	1	1	0	0	**2**	0	2	177	0	0	**179**	0	**351**
4:30PM	0	1	0	0	**1**	0	1	155	0	0	**156**	0	2	0	0	0	**2**	0	5	165	0	0	**170**	0	**329**
4:45PM	0	0	0	0	**0**	2	0	182	0	0	**182**	0	1	1	0	0	**2**	0	0	175	0	0	**175**	0	**359**
Hourly Total	0	1	0	0	**1**	3	1	662	1	0	**664**	0	4	2	0	0	**6**	1	8	688	0	0	**696**	0	**1367**
5:00PM	0	0	0	0	**0**	0	0	175	0	0	**175**	0	1	0	0	0	**1**	0	1	170	0	0	**171**	0	**347**
5:15PM	0	0	0	0	**0**	0	0	168	0	0	**168**	0	1	0	0	0	**1**	0	0	170	0	0	**170**	0	**339**
5:30PM	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**
Hourly Total	0	0	0	0	**0**	0	0	343	0	0	**343**	0	2	0	0	0	**2**	0	1	340	0	0	**341**	0	**686**
Total	0	1	0	0	**1**	6	1	2480	8	2	**2491**	0	15	3	3	0	**21**	4	15	2169	0	0	**2184**	0	**4697**
% Approach	0%	100%	0%	0%	**-**	-	0%	99.6%	0.3%	0.1%	**-**	-	71.4%	14.3%	14.3%	0%	**-**	-	0.7%	99.3%	0%	0%	**-**	-	**-**
% Total	0%	0%	0%	0%	**0%**	-	0%	52.8%	0.2%	0%	**53.0%**	-	0.3%	0.1%	0.1%	0%	**0.4%**	-	0.3%	46.2%	0%	0%	**46.5%**	-	**-**
Lights and Motorcycles	0	1	0	0	**1**	-	1	2371	8	2	**2382**	-	15	3	3	0	**21**	-	14	2082	0	0	**2096**	-	4500
% Lights and Motorcycles	0%	100%	0%	0%	**100%**	-	100%	95.6%	100%	100%	**95.6%**	-	100%	100%	100%	0%	**100%**	-	93.3%	96.0%	0%	0%	**96.0%**	-	95.8%
Heavy	0	0	0	0	**0**	-	0	109	0	0	**109**	-	0	0	0	0	**0**	-	1	87	0	0	**88**	-	197
% Heavy	0%	0%	0%	0%	**0%**	-	0%	4.4%	0%	0%	**4.4%**	-	0%	0%	0%	0%	**0%**	-	6.7%	4.0%	0%	0%	**4.0%**	-	4.2%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	83.3%	-	-	-	-	-	-	-	-	-	-	-	75.0%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	16.7%	-	-	-	-	-	-	-	-	-	-	-	25.0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

12-Lafayette Blvd & Lorraine Ave (VA24-203) - TMC
Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221188, Location: 36.87823, -76.265741

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



12-Lafayette Blvd & Lorraine Ave (VA24-203) - TMC

Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221188, Location: 36.87823, -76.265741

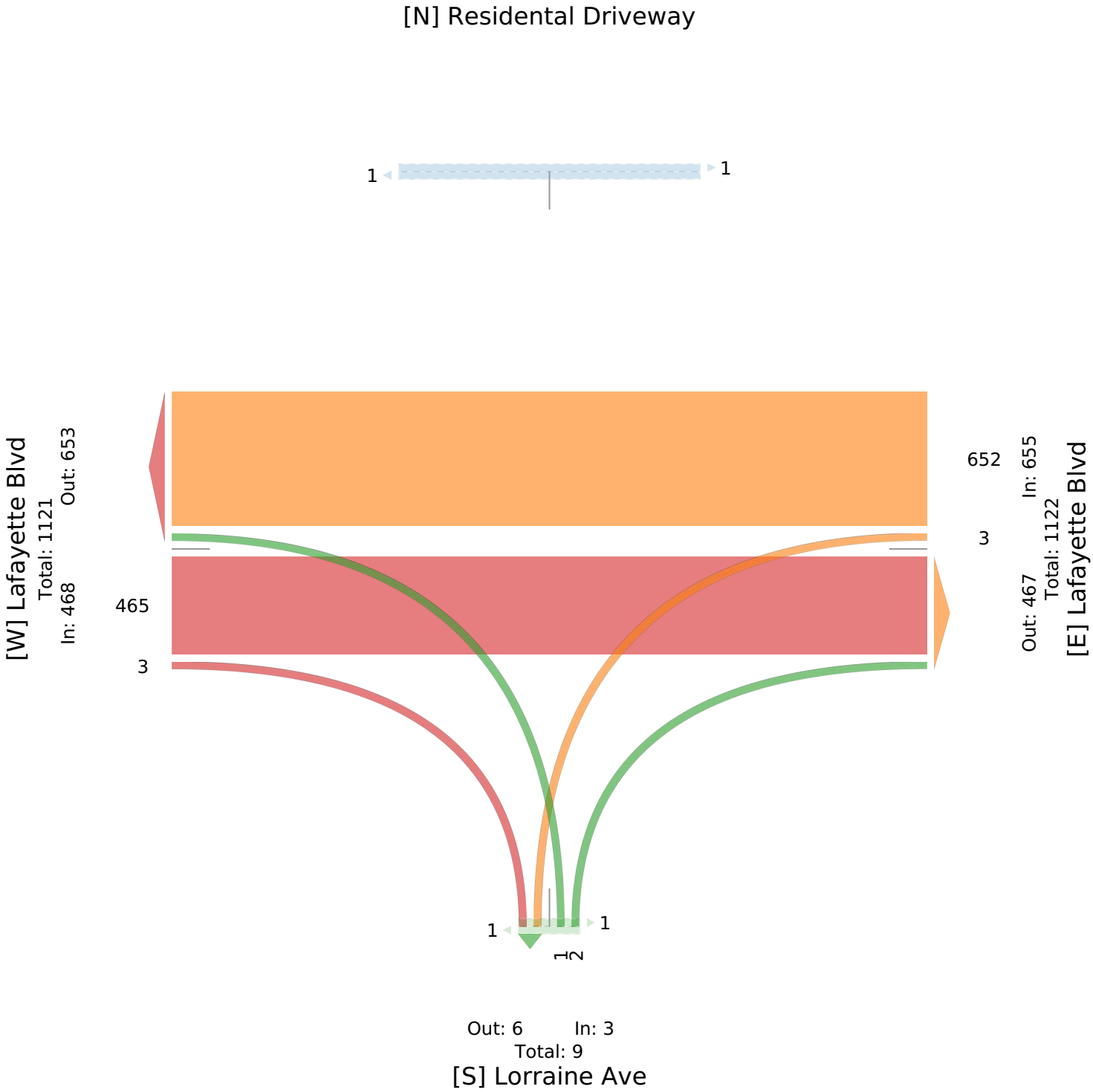
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Residental Driveway Southbound						Lafayette Blvd Westbound						Lorraine Ave Northbound						Lafayette Blvd Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 7:30AM	0	0	0	0	**0**	0	0	169	0	0	**169**	0	2	0	0	0	**2**	1	2	124	0	0	**126**	0	**297**
7:45AM	0	0	0	0	**0**	1	0	152	1	0	**153**	0	0	0	0	0	**0**	0	0	113	0	0	**113**	0	**266**
8:00AM	0	0	0	0	**0**	0	0	188	2	0	**190**	0	0	0	1	0	**1**	0	1	99	0	0	**100**	0	**291**
8:15AM	0	0	0	0	**0**	1	0	143	0	0	**143**	0	0	0	0	0	**0**	1	0	129	0	0	**129**	0	**272**
Total	0	0	0	0	**0**	2	0	652	3	0	**655**	0	2	0	1	0	**3**	2	3	465	0	0	**468**	0	**1126**
% Approach	0%	0%	0%	0%	**-**	-	0%	99.5%	0.5%	0%	**-**	-	66.7%	0%	33.3%	0%	**-**	-	0.6%	99.4%	0%	0%	**-**	-	**-**
% Total	0%	0%	0%	0%	**0%**	-	0%	57.9%	0.3%	0%	**58.2%**	-	0.2%	0%	0.1%	0%	**0.3%**	-	0.3%	41.3%	0%	0%	**41.6%**	-	**-**
PHF	-	-	-	-	**-**	-	-	0.867	0.375	-	**0.862**	-	0.250	-	0.250	-	**0.375**	-	0.375	0.901	-	-	**0.907**	-	0.948
Lights and Motorcycles	0	0	0	0	**0**	-	0	599	3	0	**602**	-	2	0	1	0	**3**	-	3	436	0	0	**439**	-	1044
% Lights and Motorcycles	0%	0%	0%	0%	**-**	-	0%	91.9%	100%	0%	**91.9%**	-	100%	0%	100%	0%	**100%**	-	100%	93.8%	0%	0%	**93.8%**	-	92.7%
Heavy	0	0	0	0	**0**	-	0	53	0	0	**53**	-	0	0	0	0	**0**	-	0	29	0	0	**29**	-	82
% Heavy	0%	0%	0%	0%	**-**	-	0%	8.1%	0%	0%	**8.1%**	-	0%	0%	0%	0%	**0%**	-	0%	6.2%	0%	0%	**6.2%**	-	7.3%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

12-Lafayette Blvd & Lorraine Ave (VA24-203) - TMC
Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221188, Location: 36.87823, -76.265741

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



12-Lafayette Blvd & Lorraine Ave (VA24-203) - TMC

Thu Sep 19, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221188, Location: 36.87823, -76.265741

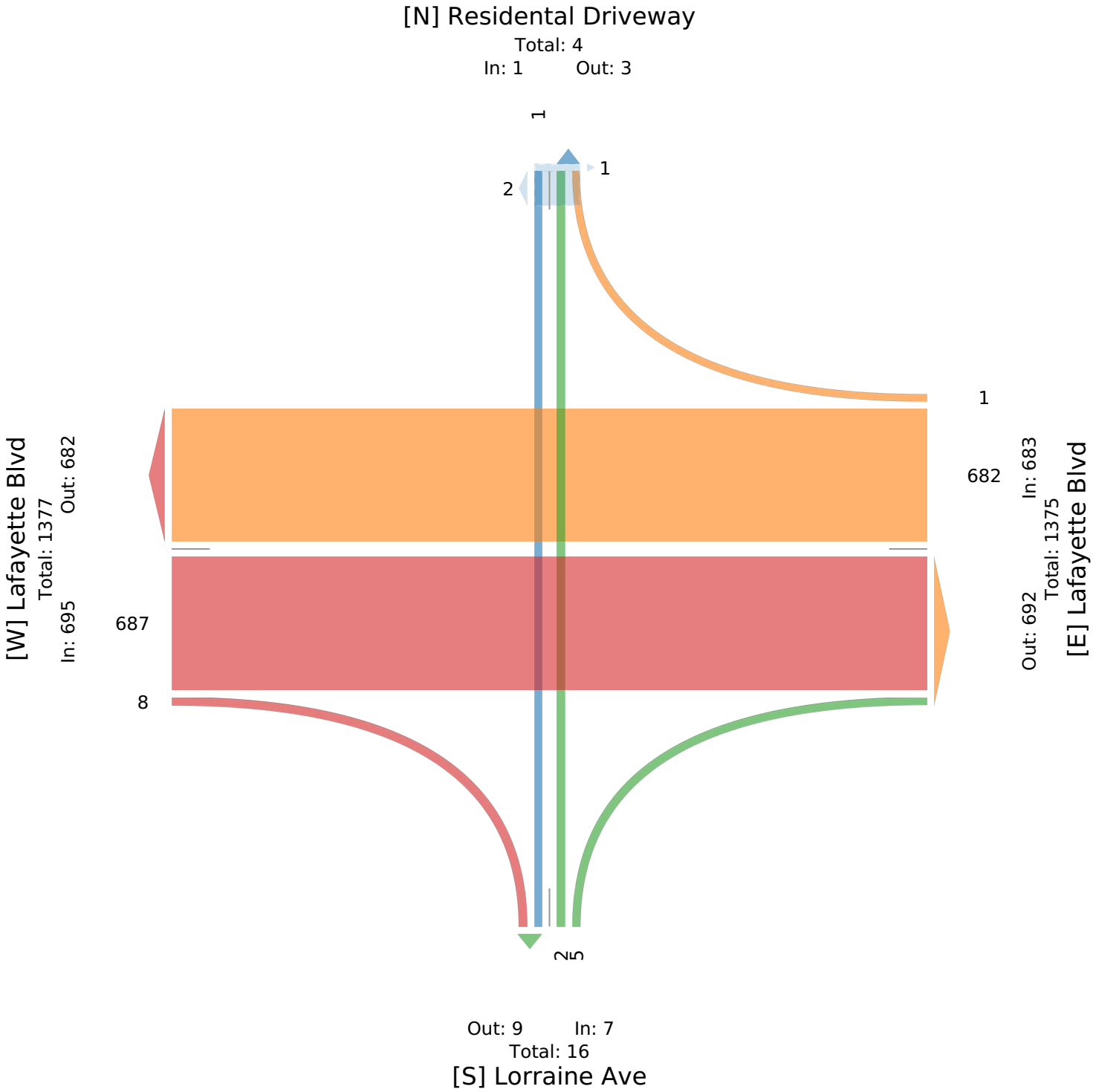
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Residental Driveway Southbound						Lafayette Blvd Westbound						Lorraine Ave Northbound						Lafayette Blvd Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 4:15PM	0	0	0	0	**0**	1	0	170	0	0	**170**	0	1	1	0	0	**2**	0	2	177	0	0	**179**	0	**351**
4:30PM	0	1	0	0	**1**	0	1	155	0	0	**156**	0	2	0	0	0	**2**	0	5	165	0	0	**170**	0	**329**
4:45PM	0	0	0	0	**0**	2	0	182	0	0	**182**	0	1	1	0	0	**2**	0	0	175	0	0	**175**	0	**359**
5:00PM	0	0	0	0	**0**	0	0	175	0	0	**175**	0	1	0	0	0	**1**	0	1	170	0	0	**171**	0	**347**
Total	0	1	0	0	**1**	3	1	682	0	0	**683**	0	5	2	0	0	**7**	0	8	687	0	0	**695**	0	**1386**
% Approach	0%	100%	0%	0%	**-**	-	0.1%	99.9%	0%	0%	**-**	-	71.4%	28.6%	0%	0%	**-**	-	1.2%	98.8%	0%	0%	**-**	-	**-**
% Total	0%	0.1%	0%	0%	**0.1%**	-	0.1%	49.2%	0%	0%	**49.3%**	-	0.4%	0.1%	0%	0%	**0.5%**	-	0.6%	49.6%	0%	0%	**50.1%**	-	**-**
PHF	-	0.250	-	-	**0.250**	-	0.250	0.937	-	-	**0.938**	-	0.625	0.500	-	-	**0.875**	-	0.400	0.970	-	-	**0.971**	-	0.965
Lights and Motorcycles	0	1	0	0	**1**	-	1	667	0	0	**668**	-	5	2	0	0	**7**	-	7	668	0	0	**675**	-	1351
% Lights and Motorcycles	0%	100%	0%	0%	**100%**	-	100%	97.8%	0%	0%	**97.8%**	-	100%	100%	0%	0%	**100%**	-	87.5%	97.2%	0%	0%	**97.1%**	-	97.5%
Heavy	0	0	0	0	**0**	-	0	15	0	0	**15**	-	0	0	0	0	**0**	-	1	19	0	0	**20**	-	35
% Heavy	0%	0%	0%	0%	**0%**	-	0%	2.2%	0%	0%	**2.2%**	-	0%	0%	0%	0%	**0%**	-	12.5%	2.8%	0%	0%	**2.9%**	-	2.5%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	66.7%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	33.3%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

12-Lafayette Blvd & Lorraine Ave (VA24-203) - TMC
Thu Sep 19, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221188, Location: 36.87823, -76.265741

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



13-Lafayette Blvd & Racine Ave (VA24-203) - TMC

Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221189, Location: 36.877927, -76.264727

PMA Traffic Data Collection

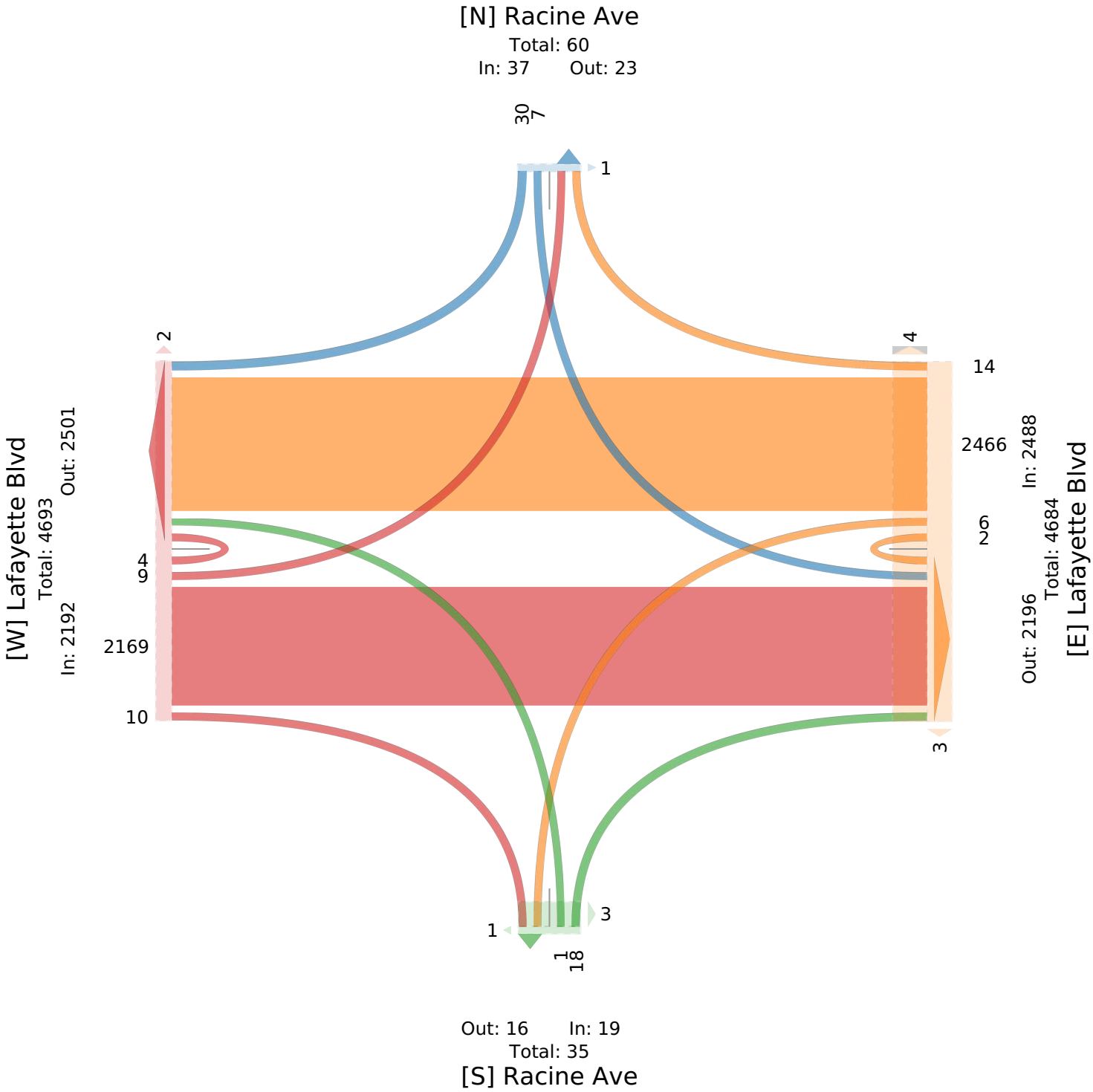
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg	Racine Ave						Lafayette Blvd						Racine Ave						Lafayette Blvd						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 7:00AM	0	0	0	0	**0**	0	0	158	0	0	**158**	0	0	0	0	0	**0**	0	0	87	0	0	**87**	0	**245**
7:15AM	2	0	0	0	**2**	0	0	131	0	0	**131**	0	2	0	0	0	**2**	0	0	94	0	0	**94**	0	**229**
7:30AM	2	0	0	0	**2**	0	1	157	0	0	**158**	0	2	0	0	0	**2**	2	0	130	2	0	**132**	0	**294**
7:45AM	2	0	0	0	**2**	1	0	155	1	0	**156**	0	0	0	1	0	**1**	0	1	116	0	0	**117**	0	**276**
Hourly Total	6	0	0	0	**6**	1	1	601	1	0	**603**	0	4	0	1	0	**5**	2	1	427	2	0	**430**	0	**1044**
8:00AM	2	0	1	0	**3**	0	0	189	1	0	**190**	0	1	0	0	0	**1**	0	1	100	0	0	**101**	2	**295**
8:15AM	0	0	0	0	**0**	0	0	152	0	0	**152**	0	1	0	0	0	**1**	1	1	124	1	0	**126**	0	**279**
8:30AM	2	0	2	0	**4**	0	0	106	0	0	**106**	1	2	0	0	0	**2**	0	0	101	0	0	**101**	0	**213**
8:45AM	1	0	0	0	**1**	0	0	133	1	1	**135**	0	0	0	0	0	**0**	0	0	103	0	1	**104**	0	**240**
Hourly Total	5	0	3	0	**8**	0	0	580	2	1	**583**	1	4	0	0	0	**4**	1	2	428	1	1	**432**	2	**1027**
9:00AM	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**
Hourly Total	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**
3:30PM	3	0	0	0	**3**	0	1	147	0	1	**149**	0	0	0	0	0	**0**	0	0	160	1	0	**161**	0	**313**
3:45PM	2	0	1	0	**3**	0	0	154	0	0	**154**	1	0	0	0	0	**0**	0	1	132	1	0	**134**	0	**291**
Hourly Total	5	0	1	0	**6**	0	1	301	0	1	**303**	1	0	0	0	0	**0**	0	1	292	2	0	**295**	0	**604**
4:00PM	1	0	2	0	**3**	0	2	156	1	0	**159**	0	3	0	0	0	**3**	1	2	155	0	0	**157**	0	**322**
4:15PM	2	0	0	0	**2**	0	2	160	2	0	**164**	0	2	0	0	0	**2**	0	0	173	0	0	**173**	0	**341**
4:30PM	3	0	0	0	**3**	0	3	149	0	0	**152**	1	3	0	0	0	**3**	0	1	173	1	0	**175**	0	**333**
4:45PM	2	0	0	0	**2**	0	2	177	0	0	**179**	0	2	0	0	0	**2**	0	2	184	2	1	**189**	0	**372**
Hourly Total	8	0	2	0	**10**	0	9	642	3	0	**654**	1	10	0	0	0	**10**	1	5	685	3	1	**694**	0	**1368**
5:00PM	2	0	0	0	**2**	0	2	172	0	0	**174**	2	0	0	0	0	**0**	0	0	168	1	2	**171**	0	**347**
5:15PM	4	0	1	0	**5**	0	1	170	0	0	**171**	2	0	0	0	0	**0**	0	1	169	0	0	**170**	0	**346**
5:30PM	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**
Hourly Total	6	0	1	0	**7**	0	3	342	0	0	**345**	4	0	0	0	0	**0**	0	1	337	1	2	**341**	0	**693**
Total	30	0	7	0	**37**	1	14	2466	6	2	**2488**	7	18	0	1	0	**19**	4	10	2169	9	4	**2192**	2	**4736**
% Approach	81.1%	0%	18.9%	0%	**-**	-	0.6%	99.1%	0.2%	0.1%	**-**	-	94.7%	0%	5.3%	0%	**-**	-	0.5%	99.0%	0.4%	0.2%	**-**	-	-
% Total	0.6%	0%	0.1%	0%	**0.8%**	-	0.3%	52.1%	0.1%	0%	**52.5%**	-	0.4%	0%	0%	0%	**0.4%**	-	0.2%	45.8%	0.2%	0.1%	**46.3%**	-	-
Lights and Motorcycles	30	0	7	0	**37**	-	14	2351	6	2	**2373**	-	17	0	0	0	**17**	-	9	2090	9	4	**2112**	-	4539
% Lights and Motorcycles	100%	0%	100%	0%	**100%**	-	100%	95.3%	100%	100%	**95.4%**	-	94.4%	0%	0%	0%	**89.5%**	-	90.0%	96.4%	100%	100%	**96.4%**	-	95.8%
Heavy	0	0	0	0	**0**	-	0	115	0	0	**115**	-	1	0	1	0	**2**	-	1	79	0	0	**80**	-	197
% Heavy	0%	0%	0%	0%	**0%**	-	0%	4.7%	0%	0%	**4.6%**	-	5.6%	0%	100%	0%	**10.5%**	-	10.0%	3.6%	0%	0%	**3.6%**	-	4.2%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	7	-	-	-	-	-	3	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	75.0%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	25.0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

13-Lafayette Blvd & Racine Ave (VA24-203) - TMC
Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221189, Location: 36.877927, -76.264727

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



13-Lafayette Blvd & Racine Ave (VA24-203) - TMC

Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221189, Location: 36.877927, -76.264727

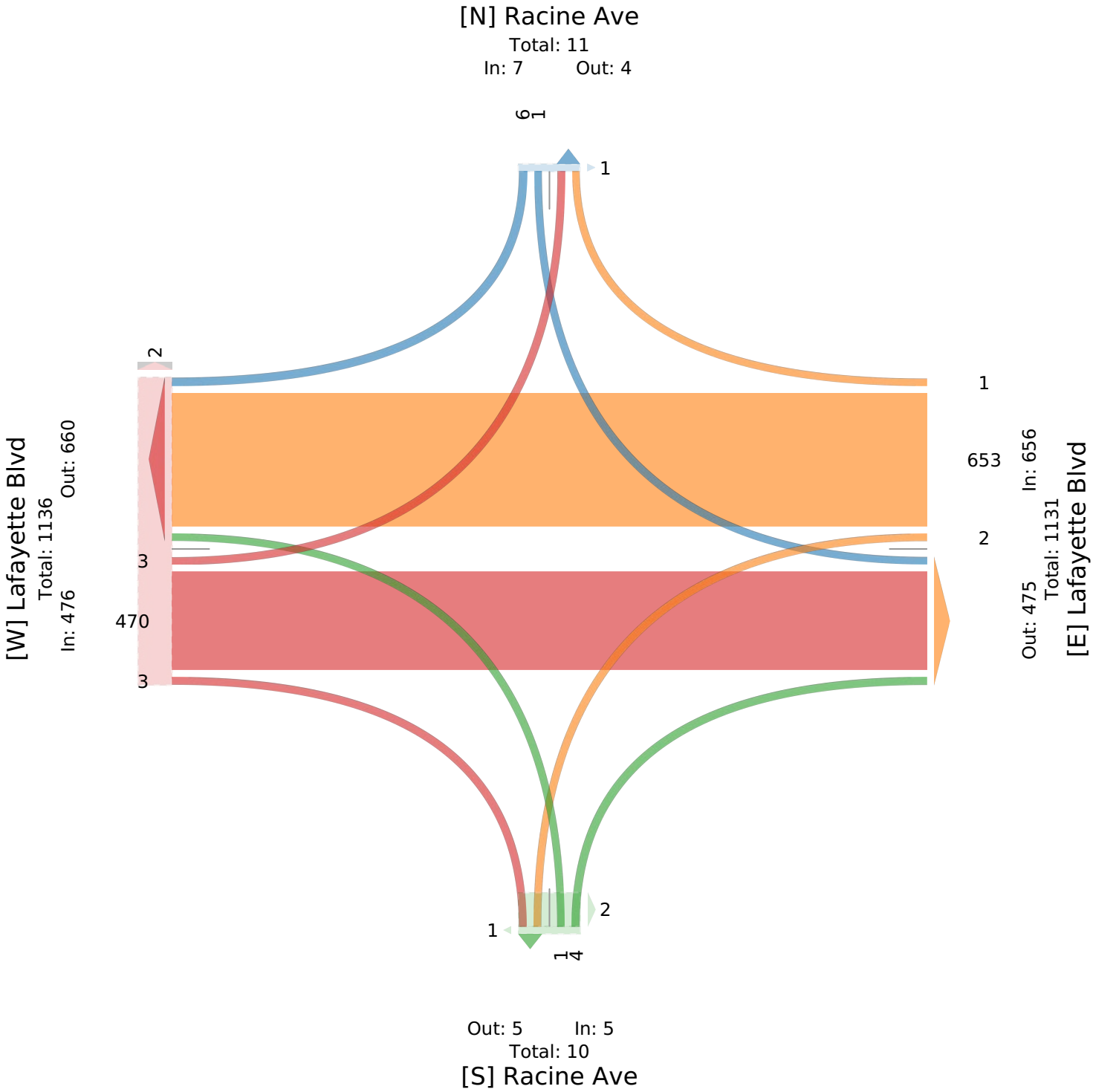
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg	Racine Ave						Lafayette Blvd						Racine Ave						Lafayette Blvd						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 7:30AM	2	0	0	0	**2**	0	1	157	0	0	**158**	0	2	0	0	0	**2**	2	0	130	2	0	**132**	0	**294**
7:45AM	2	0	0	0	**2**	1	0	155	1	0	**156**	0	0	0	1	0	**1**	0	1	116	0	0	**117**	0	**276**
8:00AM	2	0	1	0	**3**	0	0	189	1	0	**190**	0	1	0	0	0	**1**	0	1	100	0	0	**101**	2	**295**
8:15AM	0	0	0	0	**0**	0	0	152	0	0	**152**	0	1	0	0	0	**1**	1	1	124	1	0	**126**	0	**279**
Total	6	0	1	0	**7**	1	1	653	2	0	**656**	0	4	0	1	0	**5**	3	3	470	3	0	**476**	2	**1144**
% Approach	85.7%	0%	14.3%	0%	**-**	-	0.2%	99.5%	0.3%	0%	**-**	-	80.0%	0%	20.0%	0%	**-**	-	0.6%	98.7%	0.6%	0%	**-**	-	-
% Total	0.5%	0%	0.1%	0%	**0.6%**	-	0.1%	57.1%	0.2%	0%	**57.3%**	-	0.3%	0%	0.1%	0%	**0.4%**	-	0.3%	41.1%	0.3%	0%	**41.6%**	-	-
PHF	0.750	-	0.250	-	**0.583**	-	0.250	0.864	0.500	-	**0.863**	-	0.500	-	0.250	-	**0.625**	-	0.750	0.904	0.375	-	**0.902**	-	0.969
Lights and Motorcycles	6	0	1	0	**7**	-	1	603	2	0	**606**	-	4	0	0	0	**4**	-	3	442	3	0	**448**	-	1065
% Lights and Motorcycles	100%	0%	100%	0%	**100%**	-	100%	92.3%	100%	0%	**92.4%**	-	100%	0%	0%	0%	**80.0%**	-	100%	94.0%	100%	0%	**94.1%**	-	93.1%
Heavy	0	0	0	0	**0**	-	0	50	0	0	**50**	-	0	0	1	0	**1**	-	0	28	0	0	**28**	-	79
% Heavy	0%	0%	0%	0%	**0%**	-	0%	7.7%	0%	0%	**7.6%**	-	0%	0%	100%	0%	**20.0%**	-	0%	6.0%	0%	0%	**5.9%**	-	6.9%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

13-Lafayette Blvd & Racine Ave (VA24-203) - TMC
Thu Sep 19, 2024
AM Peak (7:30 AM - 8:30 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221189, Location: 36.877927, -76.264727

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



13-Lafayette Blvd & Racine Ave (VA24-203) - TMC

Thu Sep 19, 2024
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221189, Location: 36.877927, -76.264727

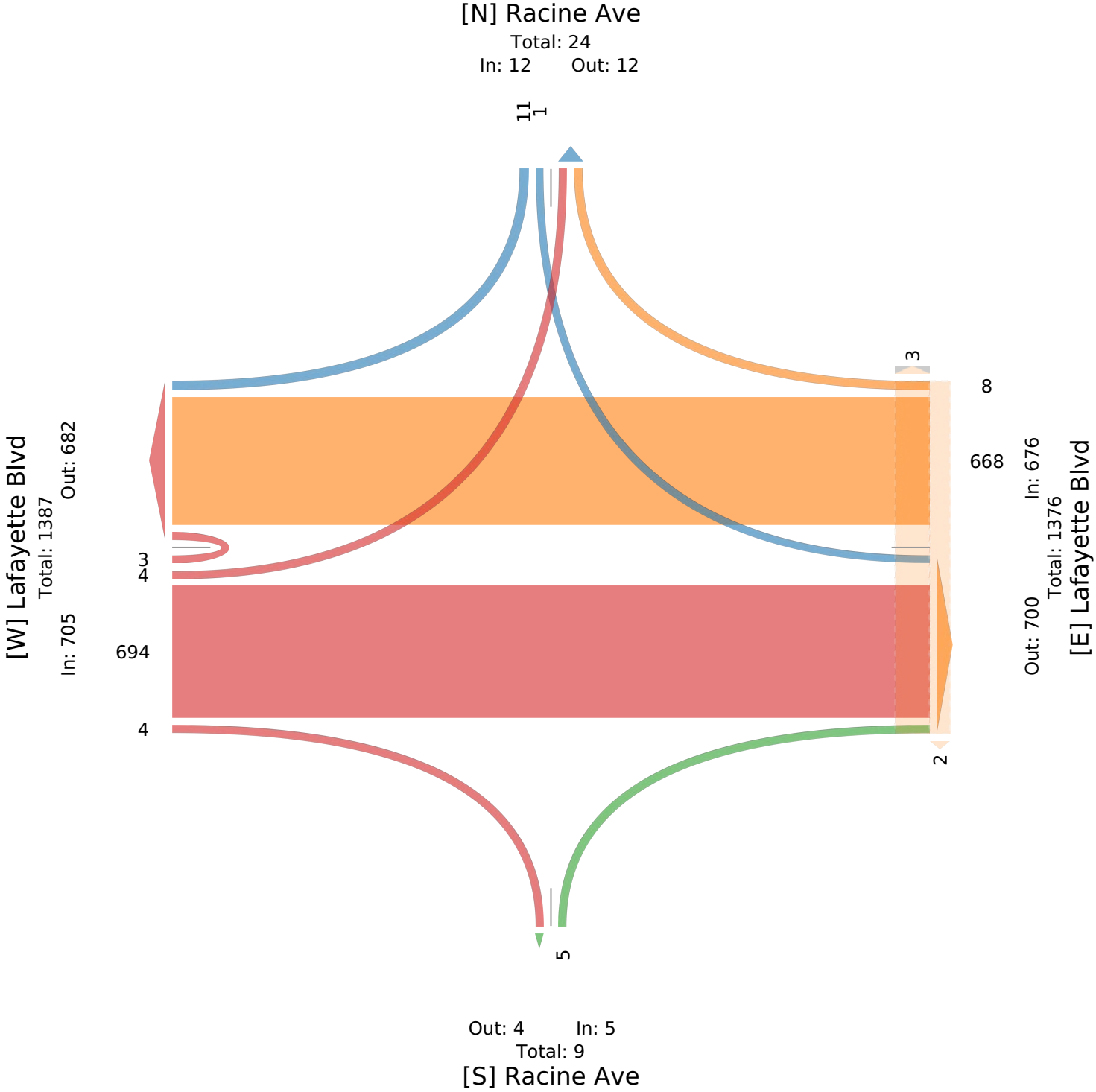
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Racine Ave Southbound						Lafayette Blvd Westbound						Racine Ave Northbound						Lafayette Blvd Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 4:30PM	3	0	0	0	**3**	0	3	149	0	0	**152**	1	3	0	0	0	**3**	0	1	173	1	0	**175**	0	**333**
4:45PM	2	0	0	0	**2**	0	2	177	0	0	**179**	0	2	0	0	0	**2**	0	2	184	2	1	**189**	0	**372**
5:00PM	2	0	0	0	**2**	0	2	172	0	0	**174**	2	0	0	0	0	**0**	0	0	168	1	2	**171**	0	**347**
5:15PM	4	0	1	0	**5**	0	1	170	0	0	**171**	2	0	0	0	0	**0**	0	1	169	0	0	**170**	0	**346**
Total	11	0	1	0	**12**	0	8	668	0	0	**676**	5	5	0	0	0	**5**	0	4	694	4	3	**705**	0	**1398**
% Approach	91.7%	0%	8.3%	0%	**-**	-	1.2%	98.8%	0%	0%	**-**	-	100%	0%	0%	0%	**-**	-	0.6%	98.4%	0.6%	0.4%	**-**	-	-
% Total	0.8%	0%	0.1%	0%	**0.9%**	-	0.6%	47.8%	0%	0%	**48.4%**	-	0.4%	0%	0%	0%	**0.4%**	-	0.3%	49.6%	0.3%	0.2%	**50.4%**	-	-
PHF	0.688	-	0.250	-	**0.600**	-	0.667	0.944	-	-	**0.944**	-	0.417	-	-	-	**0.417**	-	0.500	0.943	0.500	0.375	**0.933**	-	0.940
Lights and Motorcycles	11	0	1	0	**12**	-	8	653	0	0	**661**	-	5	0	0	0	**5**	-	3	678	4	3	**688**	-	1366
% Lights and Motorcycles	100%	0%	100%	0%	**100%**	-	100%	97.8%	0%	0%	**97.8%**	-	100%	0%	0%	0%	**100%**	-	75.0%	97.7%	100%	100%	**97.6%**	-	97.7%
Heavy	0	0	0	0	**0**	-	0	15	0	0	**15**	-	0	0	0	0	**0**	-	1	16	0	0	**17**	-	32
% Heavy	0%	0%	0%	0%	**0%**	-	0%	2.2%	0%	0%	**2.2%**	-	0%	0%	0%	0%	**0%**	-	25.0%	2.3%	0%	0%	**2.4%**	-	2.3%
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	5	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

13-Lafayette Blvd & Racine Ave (VA24-203) - TMC
Thu Sep 19, 2024
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221189, Location: 36.877927, -76.264727

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



14-Lafayette Blvd & Tidewater Dr (VA24-203) - TMC

Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221190, Location: 36.877682, -76.263549

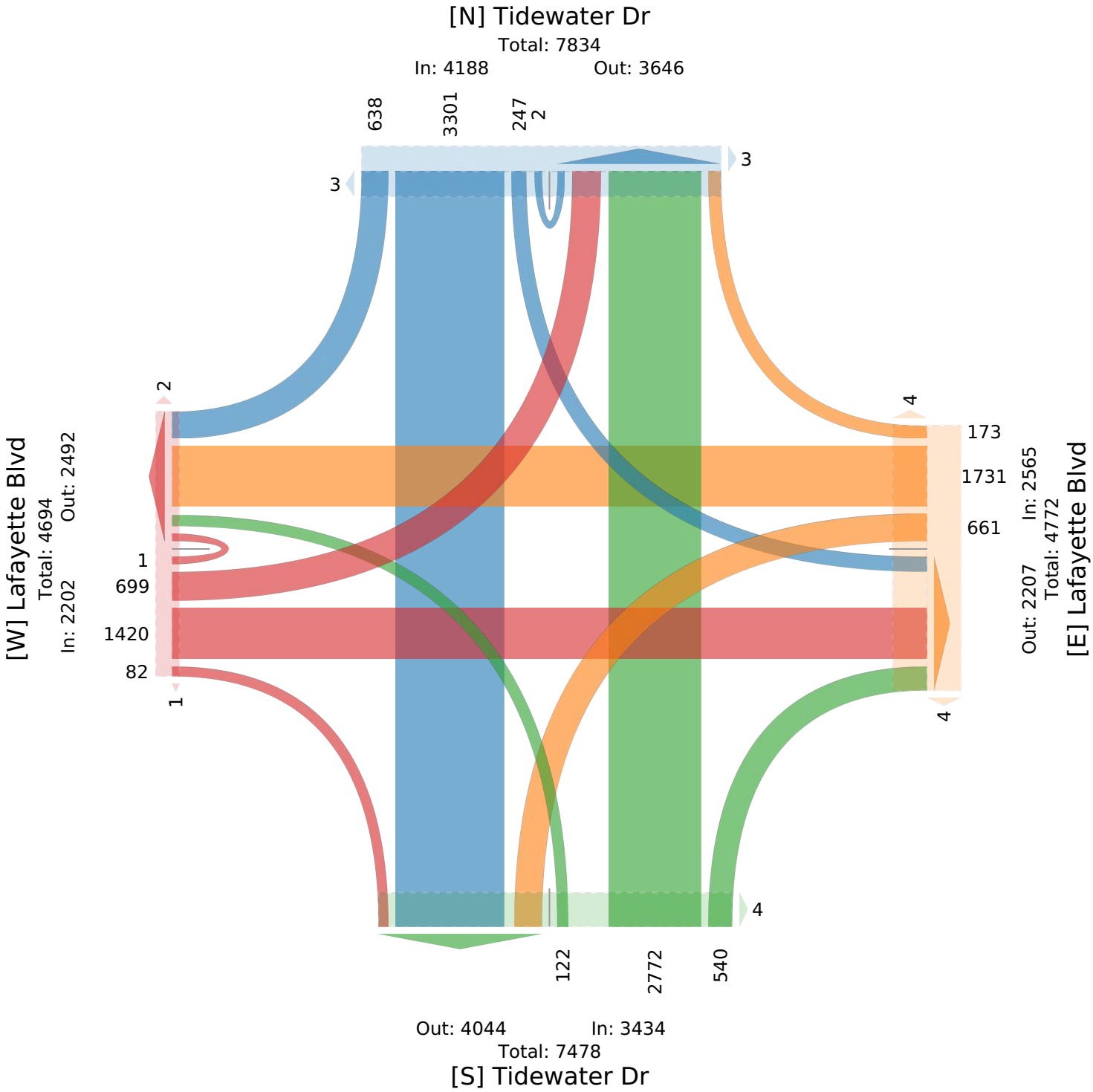
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345, Jacksonville Beach, FL, 32250, US

Leg	Tidewater Dr						Lafayette Blvd						Tidewater Dr						Lafayette Blvd						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2024-09-19 7:00AM	43	186	6	0	**235**	0	12	99	39	0	**150**	0	19	177	9	0	**205**	0	1	51	35	0	**87**	1	**677**
7:15AM	31	182	9	0	**222**	0	13	98	38	0	**149**	0	31	208	8	0	**247**	0	6	62	25	0	**93**	0	**711**
7:30AM	36	189	11	0	**236**	0	11	117	54	0	**182**	1	33	165	4	0	**202**	1	7	77	42	0	**126**	0	**746**
7:45AM	46	240	26	0	**312**	0	14	110	47	0	**171**	0	20	170	3	0	**193**	1	4	93	32	0	**129**	1	**805**
Hourly Total	156	797	52	0	**1005**	0	50	424	178	0	**652**	1	103	720	24	0	**847**	2	18	283	134	0	**435**	2	**2939**
8:00AM	67	196	24	0	**287**	1	11	114	49	0	**174**	0	21	176	7	0	**204**	0	2	71	34	0	**107**	0	**772**
8:15AM	44	197	10	0	**251**	0	4	100	25	0	**129**	0	41	157	4	0	**202**	0	7	79	36	0	**122**	0	**704**
8:30AM	27	165	7	0	**199**	0	12	78	43	0	**133**	0	27	104	5	0	**136**	0	4	72	31	0	**107**	0	**575**
8:45AM	37	186	19	0	**242**	0	3	85	46	0	**134**	0	25	181	9	0	**215**	0	5	63	33	0	**101**	0	**692**
Hourly Total	175	744	60	0	**979**	1	30	377	163	0	**570**	0	114	618	25	0	**757**	0	18	285	134	0	**437**	0	**2743**
9:00AM	0	1	0	0	**1**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**1**
Hourly Total	0	1	0	0	**1**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**1**
3:30PM	32	241	14	2	**289**	0	11	107	45	0	**163**	4	41	166	8	0	**215**	1	5	103	54	0	**162**	0	**829**
3:45PM	40	260	13	0	**313**	0	6	113	41	0	**160**	1	37	157	6	0	**200**	0	7	85	39	0	**131**	0	**804**
Hourly Total	72	501	27	2	**602**	0	17	220	86	0	**323**	5	78	323	14	0	**415**	1	12	188	93	0	**293**	0	**1633**
4:00PM	41	217	13	0	**271**	2	11	101	35	0	**147**	0	34	179	10	0	**223**	1	4	102	50	1	**157**	0	**798**
4:15PM	39	209	20	0	**268**	0	10	121	40	0	**171**	1	51	145	8	0	**204**	0	4	108	56	0	**168**	0	**811**
4:30PM	32	200	18	0	**250**	0	11	112	40	0	**163**	0	48	175	14	0	**237**	0	6	114	65	0	**185**	0	**835**
4:45PM	41	196	19	0	**256**	1	12	126	31	0	**169**	0	36	188	16	0	**240**	0	6	119	59	0	**184**	1	**849**
Hourly Total	153	822	70	0	**1045**	3	44	460	146	0	**650**	1	169	687	48	0	**904**	1	20	443	230	1	**694**	1	**3293**
5:00PM	49	220	20	0	**289**	2	18	123	42	0	**183**	1	37	199	6	0	**242**	0	7	110	50	0	**167**	0	**881**
5:15PM	33	215	18	0	**266**	0	14	127	46	0	**187**	0	39	225	5	0	**269**	0	7	111	58	0	**176**	0	**898**
5:30PM	0	1	0	0	**1**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	**1**
Hourly Total	82	436	38	0	**556**	2	32	250	88	0	**370**	1	76	424	11	0	**511**	0	14	221	108	0	**343**	0	**1780**
Total	638	3301	247	2	**4188**	6	173	1731	661	0	**2565**	8	540	2772	122	0	**3434**	4	82	1420	699	1	**2202**	3	**12389**
% Approach	15.2%	78.8%	5.9%	0%	**-**	-	6.7%	67.5%	25.8%	0%	**-**	-	15.7%	80.7%	3.6%	0%	**-**	-	3.7%	64.5%	31.7%	0%	**-**	-	-
% Total	5.1%	26.6%	2.0%	0%	**33.8%**	-	1.4%	14.0%	5.3%	0%	**20.7%**	-	4.4%	22.4%	1.0%	0%	**27.7%**	-	0.7%	11.5%	5.6%	0%	**17.8%**	-	-
Lights and Motorcycles	599	3143	235	2	**3979**	-	166	1667	634	0	**2467**	-	523	2682	114	0	**3319**	-	78	1367	672	1	**2118**	-	11883
% Lights and Motorcycles	93.9%	95.2%	95.1%	100%	**95.0%**	-	96.0%	96.3%	95.9%	0%	**96.2%**	-	96.9%	96.8%	93.4%	0%	**96.7%**	-	95.1%	96.3%	96.1%	100%	**96.2%**	-	95.9%
Heavy	39	158	12	0	**209**	-	7	64	27	0	**98**	-	17	90	8	0	**115**	-	4	53	27	0	**84**	-	506
% Heavy	6.1%	4.8%	4.9%	0%	**5.0%**	-	4.0%	3.7%	4.1%	0%	**3.8%**	-	3.1%	3.2%	6.6%	0%	**3.3%**	-	4.9%	3.7%	3.9%	0%	**3.8%**	-	4.1%
Pedestrians	-	-	-	-	-	5	-	-	-	-	-	6	-	-	-	-	-	2	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	83.3%	-	-	-	-	-	75.0%	-	-	-	-	-	50.0%	-	-	-	-	-	33.3%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	2	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	16.7%	-	-	-	-	-	25.0%	-	-	-	-	-	50.0%	-	-	-	-	-	66.7%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

14-Lafayette Blvd & Tidewater Dr (VA24-203) - TMC
Thu Sep 19, 2024
Full Length (7 AM-9 AM, 3:30 PM-5:30 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221190, Location: 36.877682, -76.263549

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



14-Lafayette Blvd & Tidewater Dr (VA24-203) - TMC

Thu Sep 19, 2024
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221190, Location: 36.877682, -76.263549

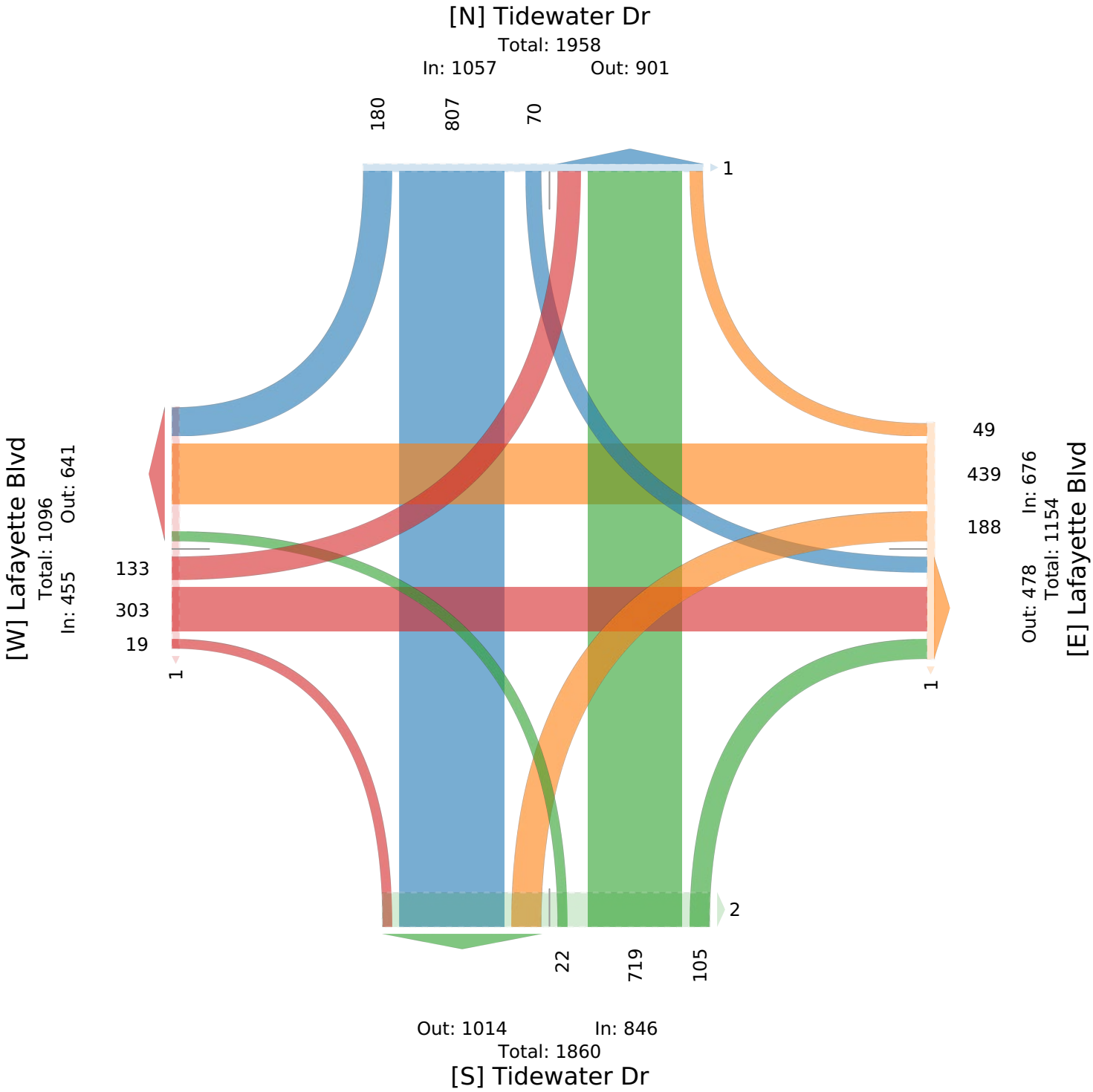
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345, Jacksonville Beach, FL, 32250, US

Leg	Tidewater Dr						Lafayette Blvd						Tidewater Dr						Lafayette Blvd						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 7:15AM	31	182	9	0	**222**	0	13	98	38	0	**149**	0	31	208	8	0	**247**	0	6	62	25	0	**93**	0	**711**
7:30AM	36	189	11	0	**236**	0	11	117	54	0	**182**	1	33	165	4	0	**202**	1	7	77	42	0	**126**	0	**746**
7:45AM	46	240	26	0	**312**	0	14	110	47	0	**171**	0	20	170	3	0	**193**	1	4	93	32	0	**129**	1	**805**
8:00AM	67	196	24	0	**287**	1	11	114	49	0	**174**	0	21	176	7	0	**204**	0	2	71	34	0	**107**	0	**772**
Total	180	807	70	0	**1057**	1	49	439	188	0	**676**	1	105	719	22	0	**846**	2	19	303	133	0	**455**	1	**3034**
% Approach	17.0%	76.3%	6.6%	0%	**-**	-	7.2%	64.9%	27.8%	0%	**-**	-	12.4%	85.0%	2.6%	0%	**-**	-	4.2%	66.6%	29.2%	0%	**-**	-	**-**
% Total	5.9%	26.6%	2.3%	0%	**34.8%**	-	1.6%	14.5%	6.2%	0%	**22.3%**	-	3.5%	23.7%	0.7%	0%	**27.9%**	-	0.6%	10.0%	4.4%	0%	**15.0%**	-	**-**
PHF	0.672	0.841	0.673	-	**0.847**	-	0.875	0.938	0.870	-	**0.929**	-	0.795	0.864	0.688	-	**0.856**	-	0.679	0.815	0.792	-	**0.882**	-	0.942
Lights and Motorcycles	155	786	66	0	**1007**	-	46	416	178	0	**640**	-	99	692	20	0	**811**	-	17	287	126	0	**430**	-	2888
% Lights and Motorcycles	86.1%	97.4%	94.3%	0%	**95.3%**	-	93.9%	94.8%	94.7%	0%	**94.7%**	-	94.3%	96.2%	90.9%	0%	**95.9%**	-	89.5%	94.7%	94.7%	0%	**94.5%**	-	95.2%
Heavy	25	21	4	0	**50**	-	3	23	10	0	**36**	-	6	27	2	0	**35**	-	2	16	7	0	**25**	-	146
% Heavy	13.9%	2.6%	5.7%	0%	**4.7%**	-	6.1%	5.2%	5.3%	0%	**5.3%**	-	5.7%	3.8%	9.1%	0%	**4.1%**	-	10.5%	5.3%	5.3%	0%	**5.5%**	-	4.8%
Pedestrians	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	1	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	50.0%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	50.0%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

14-Lafayette Blvd & Tidewater Dr (VA24-203) - TMC
Thu Sep 19, 2024
AM Peak (7:15 AM - 8:15 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221190, Location: 36.877682, -76.263549

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



14-Lafayette Blvd & Tidewater Dr (VA24-203) - TMC

Thu Sep 19, 2024
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221190, Location: 36.877682, -76.263549

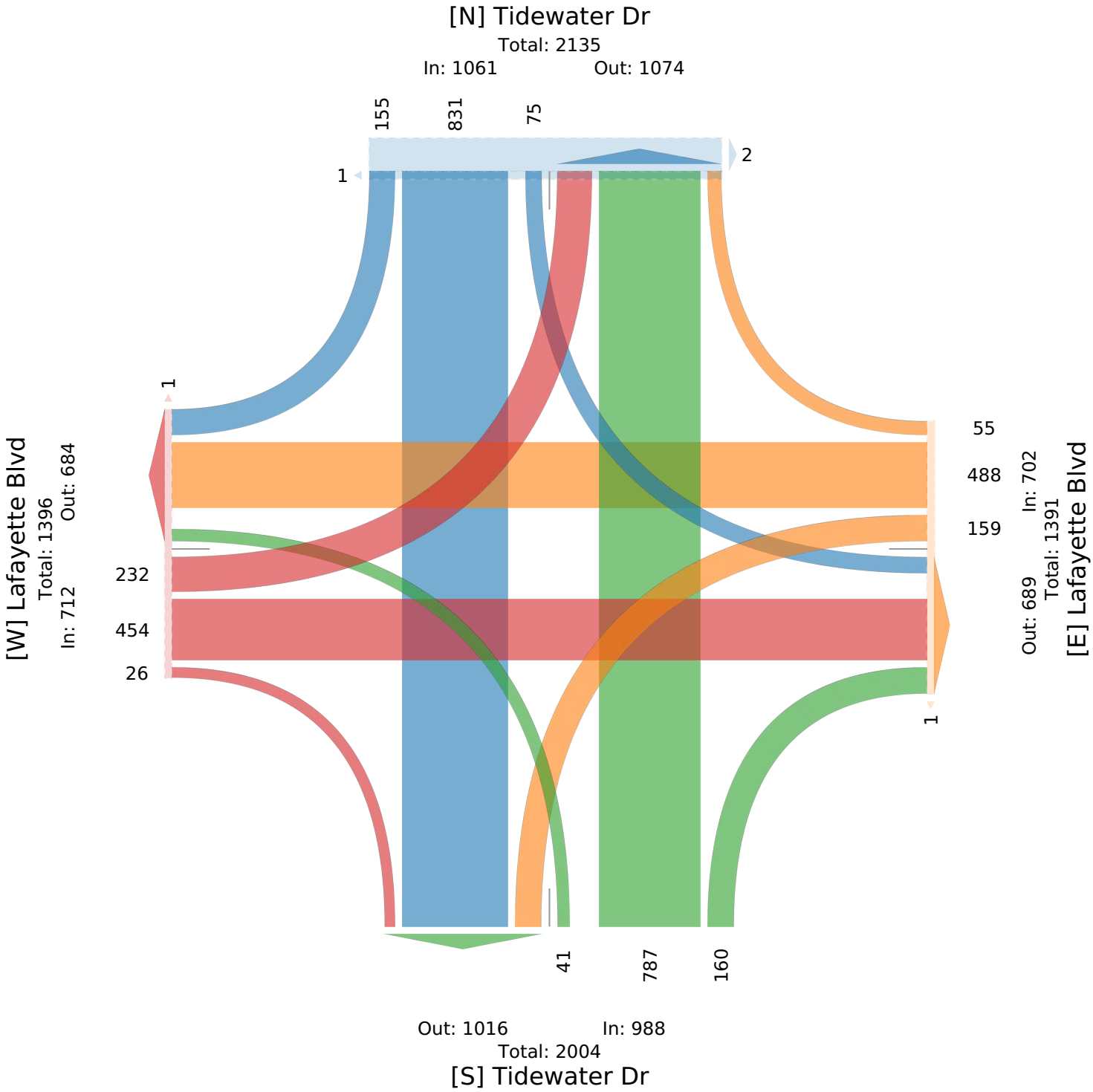
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	Tidewater Dr Southbound						Lafayette Blvd Westbound						Tidewater Dr Northbound						Lafayette Blvd Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-09-19 4:30PM	32	200	18	0	**250**	0	11	112	40	0	**163**	0	48	175	14	0	**237**	0	6	114	65	0	**185**	0	**835**
4:45PM	41	196	19	0	**256**	1	12	126	31	0	**169**	0	36	188	16	0	**240**	0	6	119	59	0	**184**	1	**849**
5:00PM	49	220	20	0	**289**	2	18	123	42	0	**183**	1	37	199	6	0	**242**	0	7	110	50	0	**167**	0	**881**
5:15PM	33	215	18	0	**266**	0	14	127	46	0	**187**	0	39	225	5	0	**269**	0	7	111	58	0	**176**	0	**898**
Total	155	831	75	0	**1061**	3	55	488	159	0	**702**	1	160	787	41	0	**988**	0	26	454	232	0	**712**	1	**3463**
% Approach	14.6%	78.3%	7.1%	0%	**-**	-	7.8%	69.5%	22.6%	0%	**-**	-	16.2%	79.7%	4.1%	0%	**-**	-	3.7%	63.8%	32.6%	0%	**-**	-	**-**
% Total	4.5%	24.0%	2.2%	0%	**30.6%**	-	1.6%	14.1%	4.6%	0%	**20.3%**	-	4.6%	22.7%	1.2%	0%	**28.5%**	-	0.8%	13.1%	6.7%	0%	**20.6%**	-	**-**
PHF	0.791	0.944	0.938	-	**0.918**	-	0.764	0.961	0.864	-	**0.939**	-	0.833	0.874	0.641	-	**0.918**	-	0.929	0.954	0.892	-	**0.962**	-	0.964
Lights and Motorcycles	153	761	74	0	**988**	-	53	476	156	0	**685**	-	158	774	41	0	**973**	-	26	441	228	0	**695**	-	3341
% Lights and Motorcycles	98.7%	91.6%	98.7%	0%	**93.1%**	-	96.4%	97.5%	98.1%	0%	**97.6%**	-	98.8%	98.3%	100%	0%	**98.5%**	-	100%	97.1%	98.3%	0%	**97.6%**	-	96.5%
Heavy	2	70	1	0	**73**	-	2	12	3	0	**17**	-	2	13	0	0	**15**	-	0	13	4	0	**17**	-	122
% Heavy	1.3%	8.4%	1.3%	0%	**6.9%**	-	3.6%	2.5%	1.9%	0%	**2.4%**	-	1.3%	1.7%	0%	0%	**1.5%**	-	0%	2.9%	1.7%	0%	**2.4%**	-	3.5%
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	66.7%	-	-	-	-	-	100%	-	-	-	-	-	-	-	-	-	-	-	0%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	33.3%	-	-	-	-	-	0%	-	-	-	-	-	-	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

14-Lafayette Blvd & Tidewater Dr (VA24-203) - TMC
Thu Sep 19, 2024
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1221190, Location: 36.877682, -76.263549

Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US



Synchro Results

Intersection	
Int Delay, s/veh	1.4

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	54	20	0	0	0	16	431	0	0	0	0
Future Vol, veh/h	0	54	20	0	0	0	16	431	0	0	0	0
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	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	59	22	0	0	0	17	468	0	0	0	0

Major/Minor	Minor1			Major1		
Conflicting Flow All	-	502	234	0	0	-
Stage 1	-	502	-	-	-	-
Stage 2	-	0	-	-	-	-
Critical Hdwy	-	6.54	6.94	4.14	-	-
Critical Hdwy Stg 1	-	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.02	3.32	2.22	-	-
Pot Cap-1 Maneuver	0	470	768	-	-	0
Stage 1	0	540	-	-	-	0
Stage 2	0	-	-	-	-	0
Platoon blocked, %					-	
Mov Cap-1 Maneuver	-	0	768	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-
Stage 1	-	0	-	-	-	-
Stage 2	-	0	-	-	-	-

Approach	NB	NE
HCM Control Delay, s	10.2	
HCM LOS	B	

Minor Lane/Major Mvmt	NEL	NET	NBLn1
Capacity (veh/h)	-	-	768
HCM Lane V/C Ratio	-	-	0.105
HCM Control Delay (s)	-	-	10.2
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.3

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	744	4	60	10	0	0	0	12
Future Vol, veh/h	0	0	0	0	744	4	60	10	0	0	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	809	4	65	11	0	0	0	13

Major/Minor	Major2			Minor1			Minor2		
Conflicting Flow All	-	-	0	405	813	-	-	-	407
Stage 1	-	-	-	0	0	-	-	-	-
Stage 2	-	-	-	405	813	-	-	-	-
Critical Hdwy	-	-	-	7.54	6.54	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	-	-	-	3.52	4.02	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	530	311	0	0	0	593
Stage 1	0	-	-	-	-	0	0	0	-
Stage 2	0	-	-	593	390	0	0	0	-
Platoon blocked, %		-	-						
Mov Cap-1 Maneuver	-	-	-	518	311	-	-	-	593
Mov Cap-2 Maneuver	-	-	-	518	311	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	580	390	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	13.5	11.2
HCM LOS		B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	WBT	WBR	SBLn1
Capacity (veh/h)	518	311	-	-	593
HCM Lane V/C Ratio	0.126	0.035	-	-	0.022
HCM Control Delay (s)	12.9	17	-	-	11.2
HCM Lane LOS	B	C	-	-	B
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	0.3

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	5	2	6	3	0	6	1	446	4	1	737	0
Future Vol, veh/h	5	2	6	3	0	6	1	446	4	1	737	0
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	-	-	-	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	2	7	3	0	7	1	485	4	1	801	0

Major/Minor	Minor1			Minor2			Major1			Major2		
Conflicting Flow All	892	1292	245	1049	1294	401	801	0	0	489	0	0
Stage 1	489	489	-	803	803	-	-	-	-	-	-	-
Stage 2	403	803	-	246	491	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	237	162	755	182	161	599	818	-	-	1070	-	-
Stage 1	529	548	-	343	394	-	-	-	-	-	-	-
Stage 2	595	394	-	736	546	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	234	161	755	178	160	599	818	-	-	1070	-	-
Mov Cap-2 Maneuver	234	161	-	178	160	-	-	-	-	-	-	-
Stage 1	528	547	-	342	393	-	-	-	-	-	-	-
Stage 2	587	393	-	725	545	-	-	-	-	-	-	-

Approach	NB	SB	NE	SW
HCM Control Delay, s	17.1	16.1	0	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NEL	NET	NER	NBLn1	SBLn1	SWL	SWT	SWR
Capacity (veh/h)	818	-	-	311	335	1070	-	-
HCM Lane V/C Ratio	0.001	-	-	0.045	0.029	0.001	-	-
HCM Control Delay (s)	9.4	0	-	17.1	16.1	8.4	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	460	7	4	718	3	4	0	1	2	1	4
Future Vol, veh/h	1	460	7	4	718	3	4	0	1	2	1	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	500	8	4	780	3	4	0	1	2	1	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	783	0	0	508	0	0	905	1297	254	1042	1300	392
Stage 1	-	-	-	-	-	-	506	506	-	790	790	-
Stage 2	-	-	-	-	-	-	399	791	-	252	510	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	831	-	-	1053	-	-	232	161	745	184	160	607
Stage 1	-	-	-	-	-	-	517	538	-	350	400	-
Stage 2	-	-	-	-	-	-	598	399	-	730	536	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	831	-	-	1053	-	-	228	160	745	183	159	607
Mov Cap-2 Maneuver	-	-	-	-	-	-	228	160	-	183	159	-
Stage 1	-	-	-	-	-	-	516	537	-	349	397	-
Stage 2	-	-	-	-	-	-	588	396	-	727	535	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	18.9	17.6
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	265	831	-	-	1053	-	-	294
HCM Lane V/C Ratio	0.021	0.001	-	-	0.004	-	-	0.026
HCM Control Delay (s)	18.9	9.3	0	-	8.4	0	-	17.6
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	455	3	5	711	11	8	1	18	10	2	6
Future Vol, veh/h	5	455	3	5	711	11	8	1	18	10	2	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	495	3	5	773	12	9	1	20	11	2	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	785	0	0	498	0	0	905	1302	249	1047	1297	393
Stage 1	-	-	-	-	-	-	507	507	-	789	789	-
Stage 2	-	-	-	-	-	-	398	795	-	258	508	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	829	-	-	1062	-	-	232	160	751	182	161	606
Stage 1	-	-	-	-	-	-	516	538	-	350	400	-
Stage 2	-	-	-	-	-	-	599	398	-	724	537	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	829	-	-	1062	-	-	224	157	751	174	158	606
Mov Cap-2 Maneuver	-	-	-	-	-	-	224	157	-	174	158	-
Stage 1	-	-	-	-	-	-	512	534	-	347	397	-
Stage 2	-	-	-	-	-	-	585	395	-	698	533	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	14.5	22.5
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	409	829	-	-	1062	-	-	225
HCM Lane V/C Ratio	0.072	0.007	-	-	0.005	-	-	0.087
HCM Control Delay (s)	14.5	9.4	0	-	8.4	0	-	22.5
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	10	481	2	2	718
Future Vol, veh/h	9	10	481	2	2	718
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	11	523	2	2	780

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	918	263	0	0	525	0
Stage 1	524	-	-	-	-	-
Stage 2	394	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	271	735	-	-	1038	-
Stage 1	559	-	-	-	-	-
Stage 2	650	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	270	735	-	-	1038	-
Mov Cap-2 Maneuver	270	-	-	-	-	-
Stage 1	559	-	-	-	-	-
Stage 2	648	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	405	1038	-
HCM Lane V/C Ratio	-	-	0.051	0.002	-
HCM Control Delay (s)	-	-	14.4	8.5	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	4	1	490	716	2
Future Vol, veh/h	4	4	1	490	716	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	4	1	533	778	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1048	390	780	0	-	0
Stage 1	779	-	-	-	-	-
Stage 2	269	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	223	609	833	-	-	-
Stage 1	413	-	-	-	-	-
Stage 2	752	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	223	609	833	-	-	-
Mov Cap-2 Maneuver	223	-	-	-	-	-
Stage 1	412	-	-	-	-	-
Stage 2	752	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.3	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	833	-	326	-	-
HCM Lane V/C Ratio	0.001	-	0.027	-	-
HCM Control Delay (s)	9.3	0	16.3	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	3	487	7	5	703
Future Vol, veh/h	15	3	487	7	5	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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	3	529	8	5	764

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	925	269	0	0	537	0
Stage 1	533	-	-	-	-	-
Stage 2	392	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	268	729	-	-	1027	-
Stage 1	553	-	-	-	-	-
Stage 2	652	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	266	729	-	-	1027	-
Mov Cap-2 Maneuver	266	-	-	-	-	-
Stage 1	553	-	-	-	-	-
Stage 2	647	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	297	1027	-
HCM Lane V/C Ratio	-	-	0.066	0.005	-
HCM Control Delay (s)	-	-	18	8.5	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	656	0	5	476	2	5
Future Vol, veh/h	656	0	5	476	2	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
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, %	2	2	2	2	2	2
Mvmt Flow	713	0	5	517	2	5

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	264	522
Stage 1	-	-	0	0
Stage 2	-	-	264	522
Critical Hdwy	-	-	6.42	6.52
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.42	5.52
Follow-up Hdwy	-	-	3.518	4.018
Pot Cap-1 Maneuver	-	-	725	459
Stage 1	-	-	-	-
Stage 2	-	-	780	531
Platoon blocked, %	-	-		
Mov Cap-1 Maneuver	-	-	725	0
Mov Cap-2 Maneuver	-	-	725	0
Stage 1	-	-	-	0
Stage 2	-	-	780	0

Approach	NB	SB
HCM Control Delay, s	0	10
HCM LOS		B

Minor Lane/Major Mvmt	NBT	NBR	SBLn1
Capacity (veh/h)	-	-	725
HCM Lane V/C Ratio	-	-	0.01
HCM Control Delay (s)	-	-	10
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	475	3	5	655	1	5
Future Vol, veh/h	475	3	5	655	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	516	3	5	712	1	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	519	0	884	260
Stage 1	-	-	-	-	518	-
Stage 2	-	-	-	-	366	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1043	-	285	739
Stage 1	-	-	-	-	563	-
Stage 2	-	-	-	-	672	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1043	-	283	739
Mov Cap-2 Maneuver	-	-	-	-	283	-
Stage 1	-	-	-	-	563	-
Stage 2	-	-	-	-	667	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	583	-	-	1043	-
HCM Lane V/C Ratio	0.011	-	-	0.005	-
HCM Control Delay (s)	11.2	-	-	8.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	474	3	2	653	1	1	0	8	2	0	6
Future Vol, veh/h	3	474	3	2	653	1	1	0	8	2	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	515	3	2	710	1	1	0	9	2	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	711	0	0	518	0	0	882	1238	259	979	1239	356
Stage 1	-	-	-	-	-	-	523	523	-	715	715	-
Stage 2	-	-	-	-	-	-	359	715	-	264	524	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	884	-	-	1044	-	-	241	174	740	204	174	640
Stage 1	-	-	-	-	-	-	505	529	-	388	433	-
Stage 2	-	-	-	-	-	-	632	433	-	718	528	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	884	-	-	1044	-	-	237	173	740	200	173	640
Mov Cap-2 Maneuver	-	-	-	-	-	-	237	173	-	200	173	-
Stage 1	-	-	-	-	-	-	502	526	-	386	432	-
Stage 2	-	-	-	-	-	-	624	432	-	706	525	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	11.1	13.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	599	884	-	-	1044	-	-	413
HCM Lane V/C Ratio	0.016	0.004	-	-	0.002	-	-	0.021
HCM Control Delay (s)	11.1	9.1	0	-	8.5	0	-	13.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	320	20	175	444	40	18	668	115	71	822	194
Future Volume (veh/h)	144	320	20	175	444	40	18	668	115	71	822	194
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1796	1870	1870	1796	1796	1796
Adj Flow Rate, veh/h	157	348	22	190	483	43	20	726	125	77	893	211
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	311	396	335	287	746	66	264	1549	267	402	1481	350
Arrive On Green	0.10	0.21	0.21	0.11	0.23	0.23	0.04	0.51	0.51	0.05	0.36	0.36
Sat Flow, veh/h	1781	1870	1585	1781	3301	293	1710	3032	522	1710	2738	647
Grp Volume(v), veh/h	157	348	22	190	259	267	20	425	426	77	556	548
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1818	1710	1777	1776	1710	1706	1679
Q Serve(g_s), s	8.7	23.4	1.4	10.5	17.2	17.3	0.6	20.0	20.0	2.5	34.6	34.6
Cycle Q Clear(g_c), s	8.7	23.4	1.4	10.5	17.2	17.3	0.6	20.0	20.0	2.5	34.6	34.6
Prop In Lane	1.00		1.00	1.00		0.16	1.00		0.29	1.00		0.39
Lane Grp Cap(c), veh/h	311	396	335	287	402	411	264	908	908	402	923	908
V/C Ratio(X)	0.51	0.88	0.07	0.66	0.65	0.65	0.08	0.47	0.47	0.19	0.60	0.60
Avail Cap(c_a), veh/h	342	403	341	320	410	419	374	908	908	462	923	908
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.92	0.92	0.92	0.91	0.91	0.91
Uniform Delay (d), s/veh	35.1	49.6	41.0	35.9	45.6	45.6	16.2	20.4	20.4	13.4	30.0	30.1
Incr Delay (d2), s/veh	0.5	19.2	0.1	3.0	3.4	3.4	0.0	1.6	1.6	0.1	2.7	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	13.0	0.6	4.8	8.0	8.2	0.2	8.5	8.5	0.9	15.6	15.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.6	68.9	41.0	38.9	49.0	49.0	16.2	22.0	22.0	13.5	32.7	32.8
LnGrp LOS	D	E	D	D	D	D	B	C	C	B	C	C
Approach Vol, veh/h		527			716			871			1181	
Approach Delay, s/veh		57.8			46.3			21.9			31.5	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	69.4	17.6	30.5	8.6	73.3	15.7	32.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	12.0	57.0	15.0	26.0	12.0	57.0	13.0	28.0
Max Q Clear Time (g_c+I1), s	4.5	22.0	12.5	25.4	2.6	36.6	10.7	19.3
Green Ext Time (p_c), s	0.0	5.4	0.1	0.1	0.0	6.7	0.1	1.2

Intersection Summary	
HCM 6th Ctrl Delay	36.4
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	320	20	175	444	40	18	668	115	71	822	194
Future Volume (veh/h)	144	320	20	175	444	40	18	668	115	71	822	194
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1796	1870	1870	1796	1796	1796
Adj Flow Rate, veh/h	157	348	22	190	483	43	20	726	125	77	893	211
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	311	396	335	287	746	66	264	1549	267	402	1481	350
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Prop Arrive On Green	0.10	0.21	0.21	0.11	0.23	0.23	0.04	0.51	0.51	0.05	0.36	0.36
Unsig. Movement Delay												
Ln Grp Delay, s/veh	35.6	68.9	41.0	38.9	49.0	49.0	16.2	22.0	22.0	13.5	32.7	32.8
Ln Grp LOS	D	E	D	D	D	D	B	C	C	B	C	C
Approach Vol, veh/h		527			716			871			1181	
Approach Delay, s/veh		57.8			46.3			21.9			31.5	
Approach LOS		E			D			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	1.1	3.0	1.1	4.0	1.1	4.0
Phs Duration (G+Y+Rc), s	12.5	69.4	17.6	30.5	8.6	73.3	15.7	32.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green (Gmax), s	12.0	57.0	15.0	26.0	12.0	57.0	13.0	28.0
Max Allow Headway (MAH), s	2.9	4.9	3.0	3.9	2.9	4.9	3.0	3.9
Max Q Clear (g_c+I1), s	4.5	22.0	12.5	25.4	2.6	36.6	10.7	19.3
Green Ext Time (g_e), s	0.0	5.4	0.1	0.1	0.0	6.7	0.1	1.2
Prob of Phs Call (p_c)	0.94	1.00	1.00	1.00	0.51	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.15

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1710		1781		1710		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3032		1870		2738		3301

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		522		1585		647		293

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	77	0	190	0	20	0	157	0
Grp Sat Flow (s), veh/h/ln	1710	0	1781	0	1710	0	1781	0
Q Serve Time (g_s), s	2.5	0.0	10.5	0.0	0.6	0.0	8.7	0.0
Cycle Q Clear Time (g_c), s	2.5	0.0	10.5	0.0	0.6	0.0	8.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	622	0	1012	0	490	0	877	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	68.4	0.0	27.5	0.0	70.3	0.0	27.5	0.0
Perm LT Serve Time (g_u), s	46.4	0.0	4.1	0.0	35.7	0.0	12.1	0.0
Perm LT Q Serve Time (g_ps), s	3.2	0.0	4.1	0.0	1.5	0.0	3.4	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	402	0	287	0	264	0	311	0
V/C Ratio (X)	0.19	0.00	0.66	0.00	0.08	0.00	0.51	0.00
Avail Cap (c_a), veh/h	462	0	320	0	374	0	342	0
Upstream Filter (I)	0.91	0.00	1.00	0.00	0.92	0.00	1.00	0.00
Uniform Delay (d1), s/veh	13.4	0.0	35.9	0.0	16.2	0.0	35.1	0.0
Incr Delay (d2), s/veh	0.1	0.0	3.0	0.0	0.0	0.0	0.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	13.5	0.0	38.9	0.0	16.2	0.0	35.6	0.0
1st-Term Q (Q1), veh/ln	0.9	0.0	4.6	0.0	0.2	0.0	3.8	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.9	0.0	4.8	0.0	0.2	0.0	3.8	0.0
%ile Storage Ratio (RQ%)	0.13	0.00	0.61	0.00	0.03	0.00	0.36	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	425	0	348	0	556	0	259
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1706	0	1777
Q Serve Time (g_s), s	0.0	20.0	0.0	23.4	0.0	34.6	0.0	17.2
Cycle Q Clear Time (g_c), s	0.0	20.0	0.0	23.4	0.0	34.6	0.0	17.2
Lane Grp Cap (c), veh/h	0	908	0	396	0	923	0	402
V/C Ratio (X)	0.00	0.47	0.00	0.88	0.00	0.60	0.00	0.65
Avail Cap (c_a), veh/h	0	908	0	403	0	923	0	410
Upstream Filter (I)	0.00	0.92	0.00	1.00	0.00	0.91	0.00	1.00
Uniform Delay (d1), s/veh	0.0	20.4	0.0	49.6	0.0	30.0	0.0	45.6
Incr Delay (d2), s/veh	0.0	1.6	0.0	19.2	0.0	2.7	0.0	3.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.0	0.0	68.9	0.0	32.7	0.0	49.0
1st-Term Q (Q1), veh/ln	0.0	8.1	0.0	10.9	0.0	14.9	0.0	7.6
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	2.1	0.0	0.7	0.0	0.4

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.5	0.0	13.0	0.0	15.6	0.0	8.0
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	1.23	0.00	0.18	0.00	0.93
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	426	0	22	0	548	0	267
Grp Sat Flow (s), veh/h/ln	0	1776	0	1585	0	1679	0	1818
Q Serve Time (g_s), s	0.0	20.0	0.0	1.4	0.0	34.6	0.0	17.3
Cycle Q Clear Time (g_c), s	0.0	20.0	0.0	1.4	0.0	34.6	0.0	17.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.29	0.00	1.00	0.00	0.39	0.00	0.16
Lane Grp Cap (c), veh/h	0	908	0	335	0	908	0	411
V/C Ratio (X)	0.00	0.47	0.00	0.07	0.00	0.60	0.00	0.65
Avail Cap (c_a), veh/h	0	908	0	341	0	908	0	419
Upstream Filter (I)	0.00	0.92	0.00	1.00	0.00	0.91	0.00	1.00
Uniform Delay (d1), s/veh	0.0	20.4	0.0	41.0	0.0	30.1	0.0	45.6
Incr Delay (d2), s/veh	0.0	1.6	0.0	0.1	0.0	2.7	0.0	3.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.0	0.0	41.0	0.0	32.8	0.0	49.0
1st-Term Q (Q1), veh/ln	0.0	8.1	0.0	0.6	0.0	14.7	0.0	7.8
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.7	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.5	0.0	0.6	0.0	15.4	0.0	8.2
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.29	0.00	0.18	0.00	0.95
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	36.4
HCM 6th LOS	D

HCM 6th Edition methodology does not support Non-NEMA phasing.

HCM 6th Edition methodology does not support Non-NEMA phasing.

Intersection	
Int Delay, s/veh	1.9

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	90	41	0	0	0	24	724	0	0	0	0
Future Vol, veh/h	0	90	41	0	0	0	24	724	0	0	0	0
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	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	98	45	0	0	0	26	787	0	0	0	0

Major/Minor	Minor1			Major1		
Conflicting Flow All	-	839	394	0	0	-
Stage 1	-	839	-	-	-	-
Stage 2	-	0	-	-	-	-
Critical Hdwy	-	6.54	6.94	4.14	-	-
Critical Hdwy Stg 1	-	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.02	3.32	2.22	-	-
Pot Cap-1 Maneuver	0	300	605	-	-	0
Stage 1	0	379	-	-	-	0
Stage 2	0	-	-	-	-	0
Platoon blocked, %					-	
Mov Cap-1 Maneuver	-	0	605	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-
Stage 1	-	0	-	-	-	-
Stage 2	-	0	-	-	-	-

Approach	NB	NE
HCM Control Delay, s	12.8	
HCM LOS	B	

Minor Lane/Major Mvmt	NEL	NET	NBLn1
Capacity (veh/h)	-	-	605
HCM Lane V/C Ratio	-	-	0.235
HCM Control Delay (s)	-	-	12.8
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.9

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	693	7	80	34	0	0	0	10
Future Vol, veh/h	0	0	0	0	693	7	80	34	0	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	753	8	87	37	0	0	0	11

Major/Minor	Major2			Minor1			Minor2		
Conflicting Flow All	-	-	0	377	761	-	-	-	381
Stage 1	-	-	-	0	0	-	-	-	-
Stage 2	-	-	-	377	761	-	-	-	-
Critical Hdwy	-	-	-	7.54	6.54	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	-	-	-	3.52	4.02	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	555	334	0	0	0	617
Stage 1	0	-	-	-	-	0	0	0	-
Stage 2	0	-	-	616	412	0	0	0	-
Platoon blocked, %		-	-						
Mov Cap-1 Maneuver	-	-	-	545	334	-	-	-	617
Mov Cap-2 Maneuver	-	-	-	545	334	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	605	412	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	14.2	10.9
HCM LOS		B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	WBT	WBR	SBLn1
Capacity (veh/h)	545	334	-	-	617
HCM Lane V/C Ratio	0.16	0.111	-	-	0.018
HCM Control Delay (s)	12.9	17.1	-	-	10.9
HCM Lane LOS	B	C	-	-	B
HCM 95th %tile Q(veh)	0.6	0.4	-	-	0.1

Intersection	
Int Delay, s/veh	0.2

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	3	1	1	1	0	2	3	758	4	4	695	7
Future Vol, veh/h	3	1	1	1	0	2	3	758	4	4	695	7
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	-	-	-	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	1	1	1	0	2	3	824	4	4	755	8

Major/Minor	Minor1			Minor2			Major1			Major2		
Conflicting Flow All	1218	1603	414	1186	1601	382	763	0	0	828	0	0
Stage 1	832	832	-	767	767	-	-	-	-	-	-	-
Stage 2	386	771	-	419	834	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	136	105	587	144	105	616	845	-	-	799	-	-
Stage 1	330	382	-	361	410	-	-	-	-	-	-	-
Stage 2	609	408	-	582	381	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	134	103	587	141	103	616	845	-	-	799	-	-
Mov Cap-2 Maneuver	134	103	-	141	103	-	-	-	-	-	-	-
Stage 1	328	379	-	358	406	-	-	-	-	-	-	-
Stage 2	601	404	-	575	378	-	-	-	-	-	-	-

Approach	NB	SB	NE	SW
HCM Control Delay, s	30.3	17.6	0	0.1
HCM LOS	D	C		

Minor Lane/Major Mvmt	NEL	NET	NER	NBLn1	SBLn1	SWL	SWT	SWR
Capacity (veh/h)	845	-	-	148	290	799	-	-
HCM Lane V/C Ratio	0.004	-	-	0.037	0.011	0.005	-	-
HCM Control Delay (s)	9.3	0	-	30.3	17.6	9.5	0	-
HCM Lane LOS	A	A	-	D	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	762	27	1	700	2	6	1	2	8	1	6
Future Vol, veh/h	10	762	27	1	700	2	6	1	2	8	1	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	828	29	1	761	2	7	1	2	9	1	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	763	0	0	857	0	0	1248	1630	429	1201	1643	382
Stage 1	-	-	-	-	-	-	865	865	-	764	764	-
Stage 2	-	-	-	-	-	-	383	765	-	437	879	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	845	-	-	779	-	-	130	101	574	140	99	616
Stage 1	-	-	-	-	-	-	315	369	-	362	411	-
Stage 2	-	-	-	-	-	-	611	410	-	568	363	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	845	-	-	779	-	-	125	98	574	136	96	616
Mov Cap-2 Maneuver	-	-	-	-	-	-	125	98	-	136	96	-
Stage 1	-	-	-	-	-	-	307	360	-	353	410	-
Stage 2	-	-	-	-	-	-	602	409	-	550	354	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	31.4	25.7
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	146	845	-	-	779	-	-	190
HCM Lane V/C Ratio	0.067	0.013	-	-	0.001	-	-	0.086
HCM Control Delay (s)	31.4	9.3	0.1	-	9.6	0	-	25.7
HCM Lane LOS	D	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.3

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	758	7	6	686	12	11	0	5	3	2	6
Future Vol, veh/h	7	758	7	6	686	12	11	0	5	3	2	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	824	8	7	746	13	12	0	5	3	2	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	759	0	0	832	0	0	1232	1617	416	1195	1615	380
Stage 1	-	-	-	-	-	-	844	844	-	767	767	-
Stage 2	-	-	-	-	-	-	388	773	-	428	848	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	848	-	-	796	-	-	133	103	585	142	103	618
Stage 1	-	-	-	-	-	-	324	377	-	361	410	-
Stage 2	-	-	-	-	-	-	607	407	-	575	376	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	848	-	-	796	-	-	126	100	585	137	100	618
Mov Cap-2 Maneuver	-	-	-	-	-	-	126	100	-	137	100	-
Stage 1	-	-	-	-	-	-	318	370	-	355	404	-
Stage 2	-	-	-	-	-	-	588	401	-	559	369	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	29	22.9
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	167	848	-	-	796	-	-	213
HCM Lane V/C Ratio	0.104	0.009	-	-	0.008	-	-	0.056
HCM Control Delay (s)	29	9.3	0.1	-	9.6	0.1	-	22.9
HCM Lane LOS	D	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.2

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	12	758	8	6	697
Future Vol, veh/h	7	12	758	8	6	697
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	13	824	9	7	758

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1222	417	0	0	833	0
Stage 1	829	-	-	-	-	-
Stage 2	393	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	172	585	-	-	796	-
Stage 1	389	-	-	-	-	-
Stage 2	651	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	169	585	-	-	796	-
Mov Cap-2 Maneuver	169	-	-	-	-	-
Stage 1	389	-	-	-	-	-
Stage 2	641	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.6	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	307	796	-
HCM Lane V/C Ratio	-	-	0.067	0.008	-
HCM Control Delay (s)	-	-	17.6	9.6	0.1
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	2	3	767	701	7
Future Vol, veh/h	7	2	3	767	701	7
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	2	3	834	762	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1189	385	770	0	-	0
Stage 1	766	-	-	-	-	-
Stage 2	423	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	181	613	840	-	-	-
Stage 1	419	-	-	-	-	-
Stage 2	629	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	180	613	840	-	-	-
Mov Cap-2 Maneuver	180	-	-	-	-	-
Stage 1	416	-	-	-	-	-
Stage 2	629	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	840	-	214	-	-
HCM Lane V/C Ratio	0.004	-	0.046	-	-
HCM Control Delay (s)	9.3	0	22.6	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	6	747	27	5	702
Future Vol, veh/h	6	6	747	27	5	702
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	7	812	29	5	763

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1219	421	0	0	841	0
Stage 1	827	-	-	-	-	-
Stage 2	392	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	173	581	-	-	790	-
Stage 1	390	-	-	-	-	-
Stage 2	652	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	171	581	-	-	790	-
Mov Cap-2 Maneuver	171	-	-	-	-	-
Stage 1	390	-	-	-	-	-
Stage 2	645	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.3	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	264	790	-
HCM Lane V/C Ratio	-	-	0.049	0.007	-
HCM Control Delay (s)	-	-	19.3	9.6	0.1
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	677	5	5	702	3	3
Future Vol, veh/h	677	5	5	702	3	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
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, %	2	2	2	2	2	2
Mvmt Flow	736	5	5	763	3	3

Major/Minor	Major1		Minor2	
Conflicting Flow All	0	0	387	768
Stage 1	-	-	0	0
Stage 2	-	-	387	768
Critical Hdwy	-	-	6.42	6.52
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.42	5.52
Follow-up Hdwy	-	-	3.518	4.018
Pot Cap-1 Maneuver	-	-	616	332
Stage 1	-	-	-	-
Stage 2	-	-	686	411
Platoon blocked, %	-	-		
Mov Cap-1 Maneuver	-	-	616	0
Mov Cap-2 Maneuver	-	-	616	0
Stage 1	-	-	-	0
Stage 2	-	-	686	0

Approach	NB	SB
HCM Control Delay, s	0	10.9
HCM LOS		B

Minor Lane/Major Mvmt	NBT	NBR	SBLn1
Capacity (veh/h)	-	-	616
HCM Lane V/C Ratio	-	-	0.011
HCM Control Delay (s)	-	-	10.9
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	697	8	1	682	0	8
Future Vol, veh/h	697	8	1	682	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	758	9	1	741	0	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	767	0	1136	384
Stage 1	-	-	-	-	763	-
Stage 2	-	-	-	-	373	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	842	-	196	614
Stage 1	-	-	-	-	421	-
Stage 2	-	-	-	-	666	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	842	-	196	614
Mov Cap-2 Maneuver	-	-	-	-	196	-
Stage 1	-	-	-	-	421	-
Stage 2	-	-	-	-	665	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	614	-	-	842	-
HCM Lane V/C Ratio	0.014	-	-	0.001	-
HCM Control Delay (s)	10.9	-	-	9.3	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	698	3	3	674	10	0	0	7	0	0	9
Future Vol, veh/h	4	698	3	3	674	10	0	0	7	0	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	759	3	3	733	11	0	0	8	0	0	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	744	0	0	762	0	0	1142	1519	381	1133	1515	372
Stage 1	-	-	-	-	-	-	769	769	-	745	745	-
Stage 2	-	-	-	-	-	-	373	750	-	388	770	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	859	-	-	846	-	-	155	118	617	158	118	625
Stage 1	-	-	-	-	-	-	360	409	-	372	419	-
Stage 2	-	-	-	-	-	-	620	417	-	607	408	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	859	-	-	846	-	-	151	116	617	154	116	625
Mov Cap-2 Maneuver	-	-	-	-	-	-	151	116	-	154	116	-
Stage 1	-	-	-	-	-	-	357	406	-	369	416	-
Stage 2	-	-	-	-	-	-	607	414	-	595	405	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	10.9	10.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	617	859	-	-	846	-	-	625
HCM Lane V/C Ratio	0.012	0.005	-	-	0.004	-	-	0.016
HCM Control Delay (s)	10.9	9.2	0	-	9.3	0	-	10.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	452	23	153	482	51	44	707	172	77	825	161
Future Volume (veh/h)	230	452	23	153	482	51	44	707	172	77	825	161
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1796	1870	1870	1796	1796	1796
Adj Flow Rate, veh/h	250	491	25	166	524	55	48	768	187	84	897	175
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	300	403	341	236	654	68	345	1464	357	372	1512	295
Arrive On Green	0.12	0.22	0.22	0.10	0.20	0.20	0.06	0.52	0.52	0.10	0.71	0.71
Sat Flow, veh/h	1781	1870	1585	1781	3246	340	1710	2833	690	1710	2846	555
Grp Volume(v), veh/h	250	491	25	166	286	293	48	482	473	84	537	535
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1809	1710	1777	1746	1710	1706	1696
Q Serve(g_s), s	14.4	28.0	1.6	9.1	19.9	20.1	1.5	23.4	23.4	2.7	20.7	20.7
Cycle Q Clear(g_c), s	14.4	28.0	1.6	9.1	19.9	20.1	1.5	23.4	23.4	2.7	20.7	20.7
Prop In Lane	1.00		1.00	1.00		0.19	1.00		0.40	1.00		0.33
Lane Grp Cap(c), veh/h	300	403	341	236	358	364	345	918	903	372	906	901
V/C Ratio(X)	0.83	1.22	0.07	0.70	0.80	0.80	0.14	0.52	0.52	0.23	0.59	0.59
Avail Cap(c_a), veh/h	300	403	341	288	410	418	427	918	903	430	906	901
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.88	0.88	0.88	0.92	0.92	0.92
Uniform Delay (d), s/veh	37.0	51.0	40.7	36.5	49.4	49.5	13.0	20.8	20.8	13.3	12.0	12.0
Incr Delay (d2), s/veh	16.8	119.1	0.1	3.9	9.5	9.7	0.1	1.9	1.9	0.1	2.6	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	26.4	0.7	4.2	9.8	10.1	0.6	10.0	9.8	1.0	6.6	6.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.8	170.1	40.7	40.3	58.9	59.1	13.1	22.7	22.7	13.5	14.6	14.6
LnGrp LOS	D	F	D	D	E	E	B	C	C	B	B	B
Approach Vol, veh/h		766			745			1003			1156	
Approach Delay, s/veh		127.9			54.9			22.3			14.5	
Approach LOS		F			D			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	70.2	16.2	31.0	10.8	72.0	18.0	29.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	12.0	57.0	15.0	26.0	12.0	57.0	13.0	28.0
Max Q Clear Time (g_c+I1), s	4.7	25.4	11.1	30.0	3.5	22.7	16.4	22.1
Green Ext Time (p_c), s	0.1	6.2	0.1	0.0	0.0	7.4	0.0	1.1

Intersection Summary	
HCM 6th Ctrl Delay	48.5
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	452	23	153	482	51	44	707	172	77	825	161
Future Volume (veh/h)	230	452	23	153	482	51	44	707	172	77	825	161
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1796	1870	1870	1796	1796	1796
Adj Flow Rate, veh/h	250	491	25	166	524	55	48	768	187	84	897	175
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	300	403	341	236	654	68	345	1464	357	372	1512	295
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Prop Arrive On Green	0.12	0.22	0.22	0.10	0.20	0.20	0.06	0.52	0.52	0.10	0.71	0.71
Unsig. Movement Delay												
Ln Grp Delay, s/veh	53.8	170.1	40.7	40.3	58.9	59.1	13.1	22.7	22.7	13.5	14.6	14.6
Ln Grp LOS	D	F	D	D	E	E	B	C	C	B	B	B
Approach Vol, veh/h		766			745			1003			1156	
Approach Delay, s/veh		127.9			54.9			22.3			14.5	
Approach LOS		F			D			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	1.1	3.0	1.1	4.0	1.1	4.0
Phs Duration (G+Y+Rc), s	12.6	70.2	16.2	31.0	10.8	72.0	18.0	29.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green (Gmax), s	12.0	57.0	15.0	26.0	12.0	57.0	13.0	28.0
Max Allow Headway (MAH), s	2.9	4.9	3.0	3.9	2.9	4.9	3.0	3.9
Max Q Clear (g_c+I1), s	4.7	25.4	11.1	30.0	3.5	22.7	16.4	22.1
Green Ext Time (g_e), s	0.1	6.2	0.1	0.0	0.0	7.4	0.0	1.1
Prob of Phs Call (p_c)	0.95	1.00	1.00	1.00	0.82	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	0.37	1.00	0.00	0.00	1.00	0.47

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1710		1781		1710		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2833		1870		2846		3246

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		690		1585		555		340

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	84	0	166	0	48	0	250	0
Grp Sat Flow (s), veh/h/ln	1710	0	1781	0	1710	0	1781	0
Q Serve Time (g_s), s	2.7	0.0	9.1	0.0	1.5	0.0	14.4	0.0
Cycle Q Clear Time (g_c), s	2.7	0.0	9.1	0.0	1.5	0.0	14.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	564	0	885	0	505	0	835	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	68.0	0.0	28.0	0.0	69.0	0.0	27.0	0.0
Perm LT Serve Time (g_u), s	43.8	0.0	0.0	0.0	48.3	0.0	6.1	0.0
Perm LT Q Serve Time (g_ps), s	4.1	0.0	0.0	0.0	2.2	0.0	6.1	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	372	0	236	0	345	0	300	0
V/C Ratio (X)	0.23	0.00	0.70	0.00	0.14	0.00	0.83	0.00
Avail Cap (c_a), veh/h	430	0	288	0	427	0	300	0
Upstream Filter (I)	0.92	0.00	1.00	0.00	0.88	0.00	1.00	0.00
Uniform Delay (d1), s/veh	13.3	0.0	36.5	0.0	13.0	0.0	37.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	3.9	0.0	0.1	0.0	16.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	13.5	0.0	40.3	0.0	13.1	0.0	53.8	0.0
1st-Term Q (Q1), veh/ln	1.0	0.0	4.0	0.0	0.6	0.0	6.3	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	0.0	0.0	1.4	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	1.0	0.0	4.2	0.0	0.6	0.0	7.7	0.0
%ile Storage Ratio (RQ%)	0.14	0.00	0.54	0.00	0.08	0.00	0.72	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	482	0	491	0	537	0	286
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1706	0	1777
Q Serve Time (g_s), s	0.0	23.4	0.0	28.0	0.0	20.7	0.0	19.9
Cycle Q Clear Time (g_c), s	0.0	23.4	0.0	28.0	0.0	20.7	0.0	19.9
Lane Grp Cap (c), veh/h	0	918	0	403	0	906	0	358
V/C Ratio (X)	0.00	0.52	0.00	1.22	0.00	0.59	0.00	0.80
Avail Cap (c_a), veh/h	0	918	0	403	0	906	0	410
Upstream Filter (I)	0.00	0.88	0.00	1.00	0.00	0.92	0.00	1.00
Uniform Delay (d1), s/veh	0.0	20.8	0.0	51.0	0.0	12.0	0.0	49.4
Incr Delay (d2), s/veh	0.0	1.9	0.0	119.1	0.0	2.6	0.0	9.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.7	0.0	170.1	0.0	14.6	0.0	58.9
1st-Term Q (Q1), veh/ln	0.0	9.5	0.0	13.1	0.0	6.0	0.0	8.9
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	13.3	0.0	0.7	0.0	0.9

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.0	0.0	26.4	0.0	6.6	0.0	9.8
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	2.49	0.00	0.08	0.00	1.14
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	22.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	473	0	25	0	535	0	293
Grp Sat Flow (s), veh/h/ln	0	1746	0	1585	0	1696	0	1809
Q Serve Time (g_s), s	0.0	23.4	0.0	1.6	0.0	20.7	0.0	20.1
Cycle Q Clear Time (g_c), s	0.0	23.4	0.0	1.6	0.0	20.7	0.0	20.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.40	0.00	1.00	0.00	0.33	0.00	0.19
Lane Grp Cap (c), veh/h	0	903	0	341	0	901	0	364
V/C Ratio (X)	0.00	0.52	0.00	0.07	0.00	0.59	0.00	0.80
Avail Cap (c_a), veh/h	0	903	0	341	0	901	0	418
Upstream Filter (I)	0.00	0.88	0.00	1.00	0.00	0.92	0.00	1.00
Uniform Delay (d1), s/veh	0.0	20.8	0.0	40.7	0.0	12.0	0.0	49.5
Incr Delay (d2), s/veh	0.0	1.9	0.0	0.1	0.0	2.6	0.0	9.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.7	0.0	40.7	0.0	14.6	0.0	59.1
1st-Term Q (Q1), veh/ln	0.0	9.3	0.0	0.6	0.0	5.9	0.0	9.1
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.7	0.0	1.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.8	0.0	0.7	0.0	6.6	0.0	10.1
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.33	0.00	0.08	0.00	1.17
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 6th Ctrl Delay		48.5						
HCM 6th LOS		D						

HCM 6th Edition methodology does not support Non-NEMA phasing.

HCM 6th Edition methodology does not support Non-NEMA phasing.

HCM Signalized Intersection Capacity Analysis
229: Waverly Way & 26th St/Lafayette Blvd

11/14/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	451	1	0	718	8	8	0	2	15	0	12
Future Volume (vph)	3	451	1	0	718	8	8	0	2	15	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		1.00			1.00			0.98			0.94	
Flt Protected		1.00			1.00			0.96			0.97	
Satd. Flow (prot)		3537			3533			1746			1703	
Flt Permitted		0.95			1.00			0.74			0.82	
Satd. Flow (perm)		3369			3533			1353			1439	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	490	1	0	780	9	9	0	2	16	0	13
RTOR Reduction (vph)	0	0	0	0	0	0	0	10	0	0	27	0
Lane Group Flow (vph)	0	494	0	0	789	0	0	1	0	0	2	0
Turn Type	Perm	NA			NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			4	
Permitted Phases	2			6			4			4		
Actuated Green, G (s)		67.7			67.7			4.3			4.3	
Effective Green, g (s)		69.7			69.7			6.3			6.3	
Actuated g/C Ratio		0.83			0.83			0.07			0.07	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		2795			2931			101			107	
v/s Ratio Prot					c0.22							
v/s Ratio Perm		0.15						0.00			c0.00	
v/c Ratio		0.18			0.27			0.01			0.02	
Uniform Delay, d1		1.4			1.6			36.0			36.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.1			0.2			0.0			0.1	
Delay (s)		1.6			1.8			36.0			36.1	
Level of Service		A			A			D			D	
Approach Delay (s)		1.6			1.8			36.0			36.1	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	2.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.25		
Actuated Cycle Length (s)	84.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	32.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis
229: Waverly Way & 26th St/Lafayette Blvd

11/14/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	745	1	2	700	25	1	1	4	35	0	5
Future Volume (vph)	14	745	1	2	700	25	1	1	4	35	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frt		1.00			0.99			0.91			0.98	
Flt Protected		1.00			1.00			0.99			0.96	
Satd. Flow (prot)		3535			3521			1681			1756	
Flt Permitted		0.94			0.95			0.94			0.75	
Satd. Flow (perm)		3318			3359			1601			1369	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	810	1	2	761	27	1	1	4	38	0	5
RTOR Reduction (vph)	0	0	0	0	1	0	0	4	0	0	36	0
Lane Group Flow (vph)	0	826	0	0	789	0	0	2	0	0	7	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			4	
Permitted Phases	2			6			4			4		
Actuated Green, G (s)		67.5			67.5			4.5			4.5	
Effective Green, g (s)		69.5			69.5			6.5			6.5	
Actuated g/C Ratio		0.83			0.83			0.08			0.08	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		2745			2779			123			105	
v/s Ratio Prot												
v/s Ratio Perm		c0.25			0.23			0.00			c0.01	
v/c Ratio		0.30			0.28			0.02			0.07	
Uniform Delay, d1		1.7			1.6			35.8			35.9	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.3			0.3			0.1			0.3	
Delay (s)		1.9			1.9			35.9			36.2	
Level of Service		A			A			D			D	
Approach Delay (s)		1.9			1.9			35.9			36.2	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	2.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	84.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	39	451	646	15	30	62
Future Vol, veh/h	39	451	646	15	30	62
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	490	702	16	33	67

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	718	0	-	0	1039	359
Stage 1	-	-	-	-	710	-
Stage 2	-	-	-	-	329	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	879	-	-	-	226	638
Stage 1	-	-	-	-	448	-
Stage 2	-	-	-	-	701	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	879	-	-	-	211	638
Mov Cap-2 Maneuver	-	-	-	-	211	-
Stage 1	-	-	-	-	418	-
Stage 2	-	-	-	-	701	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	17.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	879	-	-	-	384
HCM Lane V/C Ratio	0.048	-	-	-	0.26
HCM Control Delay (s)	9.3	0.3	-	-	17.6
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	1

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	61	692	655	25	15	52
Future Vol, veh/h	61	692	655	25	15	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	66	752	712	27	16	57

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	739	0	-	0	1234	370
Stage 1	-	-	-	-	726	-
Stage 2	-	-	-	-	508	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	863	-	-	-	169	627
Stage 1	-	-	-	-	440	-
Stage 2	-	-	-	-	569	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	863	-	-	-	147	627
Mov Cap-2 Maneuver	-	-	-	-	147	-
Stage 1	-	-	-	-	382	-
Stage 2	-	-	-	-	569	-

Approach	EB	WB	SB
HCM Control Delay, s	1.2	0	17.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	863	-	-	-	362
HCM Lane V/C Ratio	0.077	-	-	-	0.201
HCM Control Delay (s)	9.5	0.5	-	-	17.4
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	0.7

Intersection	
Int Delay, s/veh	1.5

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	54	20	0	0	0	16	431	0	0	0	0
Future Vol, veh/h	0	54	20	0	0	0	16	431	0	0	0	0
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	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	60	22	0	0	0	18	483	0	0	0	0

Major/Minor	Minor1			Major1		
Conflicting Flow All	-	519	242	0	0	-
Stage 1	-	519	-	-	-	-
Stage 2	-	0	-	-	-	-
Critical Hdwy	-	6.54	6.94	4.14	-	-
Critical Hdwy Stg 1	-	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.02	3.32	2.22	-	-
Pot Cap-1 Maneuver	0	460	759	-	-	0
Stage 1	0	531	-	-	-	0
Stage 2	0	-	-	-	-	0
Platoon blocked, %					-	
Mov Cap-1 Maneuver	-	0	759	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-
Stage 1	-	0	-	-	-	-
Stage 2	-	0	-	-	-	-

Approach	NB	NE
HCM Control Delay, s	10.3	
HCM LOS	B	

Minor Lane/Major Mvmt	NEL	NET	NBLn1
Capacity (veh/h)	-	-	759
HCM Lane V/C Ratio	-	-	0.109
HCM Control Delay (s)	-	-	10.3
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	0.4

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	744	4	60	10	0	0	0	12
Future Vol, veh/h	0	0	0	0	744	4	60	10	0	0	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	833	4	67	11	0	0	0	13

Major/Minor	Major2			Minor1			Minor2		
Conflicting Flow All	-	-	0	417	837	-	-	-	419
Stage 1	-	-	-	0	0	-	-	-	-
Stage 2	-	-	-	417	837	-	-	-	-
Critical Hdwy	-	-	-	7.54	6.54	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	-	-	-	3.52	4.02	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	520	301	0	0	0	583
Stage 1	0	-	-	-	-	0	0	0	-
Stage 2	0	-	-	584	380	0	0	0	-
Platoon blocked, %		-	-						
Mov Cap-1 Maneuver	-	-	-	508	301	-	-	-	583
Mov Cap-2 Maneuver	-	-	-	508	301	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	571	380	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	13.8	11.3
HCM LOS		B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	WBT	WBR	SBLn1
Capacity (veh/h)	508	301	-	-	583
HCM Lane V/C Ratio	0.132	0.037	-	-	0.023
HCM Control Delay (s)	13.2	17.4	-	-	11.3
HCM Lane LOS	B	C	-	-	B
HCM 95th %tile Q(veh)	0.5	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	0.4

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	5	2	6	3	0	6	1	447	4	1	737	0
Future Vol, veh/h	5	2	6	3	0	6	1	447	4	1	737	0
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	-	-	-	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	2	7	3	0	7	1	500	4	1	825	0

Major/Minor	Minor1			Minor2			Major1			Major2		
Conflicting Flow All	1335	1331	502	1336	1333	825	825	0	0	504	0	0
Stage 1	504	504	-	827	827	-	-	-	-	-	-	-
Stage 2	831	827	-	509	506	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	131	154	569	130	154	372	805	-	-	1061	-	-
Stage 1	550	541	-	366	386	-	-	-	-	-	-	-
Stage 2	364	386	-	547	540	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	128	153	569	127	153	372	805	-	-	1061	-	-
Mov Cap-2 Maneuver	128	153	-	127	153	-	-	-	-	-	-	-
Stage 1	549	540	-	365	385	-	-	-	-	-	-	-
Stage 2	357	385	-	537	539	-	-	-	-	-	-	-

Approach	NB	SB	NE	SW
HCM Control Delay, s	23.7	21.7	0	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NEL	NET	NER	NBLn1	SBLn1	SWL	SWT	SWR
Capacity (veh/h)	805	-	-	207	226	1061	-	-
HCM Lane V/C Ratio	0.001	-	-	0.07	0.045	0.001	-	-
HCM Control Delay (s)	9.5	0	-	23.7	21.7	8.4	0	-
HCM Lane LOS	A	A	-	C	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	460	7	4	718	3	4	0	1	2	1	4
Future Vol, veh/h	1	460	7	4	718	3	4	0	1	2	1	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	0	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	515	8	4	804	3	4	0	1	2	1	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	807	0	0	523	0	0	1337	1336	519	1336	1339	806
Stage 1	-	-	-	-	-	-	521	521	-	814	814	-
Stage 2	-	-	-	-	-	-	816	815	-	522	525	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	818	-	-	1043	-	-	130	153	557	130	153	382
Stage 1	-	-	-	-	-	-	539	532	-	372	391	-
Stage 2	-	-	-	-	-	-	371	391	-	538	529	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	818	-	-	1043	-	-	127	152	557	129	152	382
Mov Cap-2 Maneuver	-	-	-	-	-	-	127	152	-	129	152	-
Stage 1	-	-	-	-	-	-	538	531	-	372	389	-
Stage 2	-	-	-	-	-	-	364	389	-	536	528	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	29.9	22.4
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	150	818	-	-	1043	-	-	215
HCM Lane V/C Ratio	0.037	0.001	-	-	0.004	-	-	0.036
HCM Control Delay (s)	29.9	9.4	-	-	8.5	-	-	22.4
HCM Lane LOS	D	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	455	3	7	712	11	8	1	18	24	2	6
Future Vol, veh/h	5	455	3	7	712	11	8	1	18	24	2	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	509	3	8	797	12	9	1	20	27	2	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	809	0	0	512	0	0	1347	1348	511	1352	1343	803
Stage 1	-	-	-	-	-	-	523	523	-	819	819	-
Stage 2	-	-	-	-	-	-	824	825	-	533	524	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	817	-	-	1053	-	-	128	151	563	127	152	383
Stage 1	-	-	-	-	-	-	537	530	-	369	389	-
Stage 2	-	-	-	-	-	-	367	387	-	531	530	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	817	-	-	1053	-	-	123	149	563	120	150	383
Mov Cap-2 Maneuver	-	-	-	-	-	-	123	149	-	120	150	-
Stage 1	-	-	-	-	-	-	533	526	-	366	386	-
Stage 2	-	-	-	-	-	-	356	384	-	507	526	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	20.7	39.3
HCM LOS			C	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	260	817	-	-	1053	-	-	140
HCM Lane V/C Ratio	0.116	0.007	-	-	0.007	-	-	0.256
HCM Control Delay (s)	20.7	9.4	-	-	8.4	-	-	39.3
HCM Lane LOS	C	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	1

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	10	495	3	0	729
Future Vol, veh/h	0	10	495	3	0	729
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	11	554	3	0	816

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	556	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	531	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	531	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	531	-
HCM Lane V/C Ratio	-	-	0.021	-
HCM Control Delay (s)	-	-	11.9	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	1	504	725	2
Future Vol, veh/h	0	4	1	504	725	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	4	1	564	812	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	813	814	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	4.12	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	0	378	813	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	378	813	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	813	-	378	-	-
HCM Lane V/C Ratio	0.001	-	0.012	-	-
HCM Control Delay (s)	9.4	-	14.6	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	24	3	497	7	25	703
Future Vol, veh/h	24	3	497	7	25	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	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	3	556	8	28	787

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1403	560	0	0	564	0
Stage 1	560	-	-	-	-	-
Stage 2	843	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	154	528	-	-	1008	-
Stage 1	572	-	-	-	-	-
Stage 2	422	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	150	528	-	-	1008	-
Mov Cap-2 Maneuver	150	-	-	-	-	-
Stage 1	572	-	-	-	-	-
Stage 2	410	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	32	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	163	1008	-
HCM Lane V/C Ratio	-	-	0.185	0.028	-
HCM Control Delay (s)	-	-	32	8.7	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0.1	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	449	3	0	656	0	25
Future Vol, veh/h	449	3	0	656	0	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	503	3	0	734	0	28

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	505
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	567
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	567
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	567	-	-	-
HCM Lane V/C Ratio	0.049	-	-	-
HCM Control Delay (s)	11.7	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	463	3	7	649	1	2	0	8	4	0	6
Future Vol, veh/h	8	463	3	7	649	1	2	0	8	4	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	518	3	8	727	1	2	0	9	4	0	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	728	0	0	521	0	0	918	1282	520	1286	1283	364
Stage 1	-	-	-	-	-	-	538	538	-	744	744	-
Stage 2	-	-	-	-	-	-	380	744	-	542	539	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.23	7.33	6.53	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	873	-	-	1043	-	-	239	165	555	131	164	634
Stage 1	-	-	-	-	-	-	526	521	-	373	421	-
Stage 2	-	-	-	-	-	-	615	421	-	524	521	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	873	-	-	1043	-	-	232	161	555	127	160	634
Mov Cap-2 Maneuver	-	-	-	-	-	-	232	161	-	127	160	-
Stage 1	-	-	-	-	-	-	521	516	-	369	416	-
Stage 2	-	-	-	-	-	-	601	416	-	510	516	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	13.5	20.5
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	434	873	-	-	1043	-	-	244
HCM Lane V/C Ratio	0.026	0.01	-	-	0.008	-	-	0.046
HCM Control Delay (s)	13.5	9.2	-	-	8.5	0.1	-	20.5
HCM Lane LOS	B	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	316	20	175	444	40	18	668	115	71	822	194
Future Volume (veh/h)	139	316	20	175	444	40	18	668	115	71	822	194
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1796	1870	1870	1796	1796	1796
Adj Flow Rate, veh/h	156	354	22	196	497	45	20	748	129	79	920	217
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	310	401	340	290	763	69	252	1533	264	389	1468	346
Arrive On Green	0.10	0.21	0.21	0.11	0.23	0.23	0.04	0.51	0.51	0.05	0.36	0.36
Sat Flow, veh/h	1781	1870	1585	1781	3296	298	1710	3031	523	1710	2740	645
Grp Volume(v), veh/h	156	354	22	196	267	275	20	438	439	79	572	565
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1817	1710	1777	1776	1710	1706	1679
Q Serve(g_s), s	8.6	23.8	1.4	10.8	17.7	17.8	0.6	21.1	21.1	2.6	36.1	36.2
Cycle Q Clear(g_c), s	8.6	23.8	1.4	10.8	17.7	17.8	0.6	21.1	21.1	2.6	36.1	36.2
Prop In Lane	1.00		1.00	1.00		0.16	1.00		0.29	1.00		0.38
Lane Grp Cap(c), veh/h	310	401	340	290	412	421	252	899	898	389	914	900
V/C Ratio(X)	0.50	0.88	0.06	0.68	0.65	0.65	0.08	0.49	0.49	0.20	0.63	0.63
Avail Cap(c_a), veh/h	343	403	341	319	412	421	362	899	898	448	914	900
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91	0.91	0.91	0.91	0.91
Uniform Delay (d), s/veh	34.9	49.5	40.7	35.6	45.2	45.2	16.9	21.1	21.1	13.9	30.9	30.9
Incr Delay (d2), s/veh	0.5	19.9	0.1	3.6	3.6	3.6	0.0	1.7	1.7	0.1	2.9	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	13.3	0.6	5.0	8.2	8.5	0.2	9.0	9.0	1.0	16.3	16.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.4	69.4	40.8	39.2	48.7	48.8	16.9	22.8	22.8	14.0	33.8	33.9
LnGrp LOS	D	E	D	D	D	D	B	C	C	B	C	C
Approach Vol, veh/h		532			738			897			1216	
Approach Delay, s/veh		58.2			46.2			22.7			32.6	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	68.7	17.9	30.9	8.6	72.7	15.6	33.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	12.0	57.0	15.0	26.0	12.0	57.0	13.0	28.0
Max Q Clear Time (g_c+I1), s	14.6	23.1	12.8	25.8	2.6	38.2	10.6	19.8
Green Ext Time (p_c), s	0.0	5.6	0.1	0.0	0.0	6.7	0.1	1.2

Intersection Summary	
HCM 6th Ctrl Delay	37.0
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	316	20	175	444	40	18	668	115	71	822	194
Future Volume (veh/h)	139	316	20	175	444	40	18	668	115	71	822	194
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1796	1870	1870	1796	1796	1796
Adj Flow Rate, veh/h	156	354	22	196	497	45	20	748	129	79	920	217
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	310	401	340	290	763	69	252	1533	264	389	1468	346
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.67	0.67	0.67
Prop Arrive On Green	0.10	0.21	0.21	0.11	0.23	0.23	0.04	0.51	0.51	0.05	0.36	0.36
Unsig. Movement Delay												
Ln Grp Delay, s/veh	35.4	69.4	40.8	39.2	48.7	48.8	16.9	22.8	22.8	14.0	33.8	33.9
Ln Grp LOS	D	E	D	D	D	D	B	C	C	B	C	C
Approach Vol, veh/h		532			738			897			1216	
Approach Delay, s/veh		58.2			46.2			22.7			32.6	
Approach LOS		E			D			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	1.1	3.0	1.1	4.0	1.1	4.0
Phs Duration (G+Y+Rc), s	12.5	68.7	17.9	30.9	8.6	72.7	15.6	33.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green (Gmax), s	12.0	57.0	15.0	26.0	12.0	57.0	13.0	28.0
Max Allow Headway (MAH), s	2.9	4.9	3.0	3.9	2.9	4.9	3.0	3.9
Max Q Clear (g_c+I1), s	4.6	23.1	12.8	25.8	2.6	38.2	10.6	19.8
Green Ext Time (g_e), s	0.0	5.6	0.1	0.0	0.0	6.7	0.1	1.2
Prob of Phs Call (p_c)	0.94	1.00	1.00	1.00	0.51	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	1.00	1.00	0.00	0.00	1.00	0.19

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1710		1781		1710		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		3031		1870		2740		3296

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		523		1585		645		298

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	79	0	196	0	20	0	156	0
Grp Sat Flow (s), veh/h/ln	1710	0	1781	0	1710	0	1781	0
Q Serve Time (g_s), s	2.6	0.0	10.8	0.0	0.6	0.0	8.6	0.0
Cycle Q Clear Time (g_c), s	2.6	0.0	10.8	0.0	0.6	0.0	8.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	607	0	1007	0	475	0	864	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	67.7	0.0	27.9	0.0	69.7	0.0	27.9	0.0
Perm LT Serve Time (g_u), s	44.7	0.0	4.0	0.0	33.5	0.0	12.3	0.0
Perm LT Q Serve Time (g_ps), s	3.6	0.0	4.0	0.0	1.6	0.0	3.4	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	389	0	290	0	252	0	310	0
V/C Ratio (X)	0.20	0.00	0.68	0.00	0.08	0.00	0.50	0.00
Avail Cap (c_a), veh/h	448	0	319	0	362	0	343	0
Upstream Filter (I)	0.91	0.00	1.00	0.00	0.91	0.00	1.00	0.00
Uniform Delay (d1), s/veh	13.9	0.0	35.6	0.0	16.9	0.0	34.9	0.0
Incr Delay (d2), s/veh	0.1	0.0	3.6	0.0	0.0	0.0	0.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	14.0	0.0	39.2	0.0	16.9	0.0	35.4	0.0
1st-Term Q (Q1), veh/ln	1.0	0.0	4.7	0.0	0.2	0.0	3.7	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	1.0	0.0	5.0	0.0	0.2	0.0	3.8	0.0
%ile Storage Ratio (RQ%)	0.14	0.00	0.63	0.00	0.03	0.00	0.36	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	438	0	354	0	572	0	267
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1706	0	1777
Q Serve Time (g_s), s	0.0	21.1	0.0	23.8	0.0	36.1	0.0	17.7
Cycle Q Clear Time (g_c), s	0.0	21.1	0.0	23.8	0.0	36.1	0.0	17.7
Lane Grp Cap (c), veh/h	0	899	0	401	0	914	0	412
V/C Ratio (X)	0.00	0.49	0.00	0.88	0.00	0.63	0.00	0.65
Avail Cap (c_a), veh/h	0	899	0	403	0	914	0	412
Upstream Filter (I)	0.00	0.91	0.00	1.00	0.00	0.91	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.1	0.0	49.5	0.0	30.9	0.0	45.2
Incr Delay (d2), s/veh	0.0	1.7	0.0	19.9	0.0	2.9	0.0	3.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.8	0.0	69.4	0.0	33.8	0.0	48.7
1st-Term Q (Q1), veh/ln	0.0	8.6	0.0	11.1	0.0	15.6	0.0	7.8
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	2.2	0.0	0.7	0.0	0.4

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.0	0.0	13.3	0.0	16.3	0.0	8.2
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	1.26	0.00	0.19	0.00	0.95
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	439	0	22	0	565	0	275
Grp Sat Flow (s), veh/h/ln	0	1776	0	1585	0	1679	0	1817
Q Serve Time (g_s), s	0.0	21.1	0.0	1.4	0.0	36.2	0.0	17.8
Cycle Q Clear Time (g_c), s	0.0	21.1	0.0	1.4	0.0	36.2	0.0	17.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.29	0.00	1.00	0.00	0.38	0.00	0.16
Lane Grp Cap (c), veh/h	0	898	0	340	0	900	0	421
V/C Ratio (X)	0.00	0.49	0.00	0.06	0.00	0.63	0.00	0.65
Avail Cap (c_a), veh/h	0	898	0	341	0	900	0	421
Upstream Filter (I)	0.00	0.91	0.00	1.00	0.00	0.91	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.1	0.0	40.7	0.0	30.9	0.0	45.2
Incr Delay (d2), s/veh	0.0	1.7	0.0	0.1	0.0	3.0	0.0	3.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	22.8	0.0	40.8	0.0	33.9	0.0	48.8
1st-Term Q (Q1), veh/ln	0.0	8.6	0.0	0.6	0.0	15.4	0.0	8.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.8	0.0	0.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.0	0.0	0.6	0.0	16.1	0.0	8.5
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.29	0.00	0.19	0.00	0.98
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	37.0
HCM 6th LOS	D

HCM 6th Edition methodology does not support Non-NEMA phasing.

HCM 6th Edition methodology does not support Non-NEMA phasing.

Intersection	
Int Delay, s/veh	1.9

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	0	90	41	0	0	0	24	724	0	0	0	0
Future Vol, veh/h	0	90	41	0	0	0	24	724	0	0	0	0
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	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	101	46	0	0	0	27	811	0	0	0	0

Major/Minor	Minor1			Major1		
Conflicting Flow All	-	865	406	0	0	-
Stage 1	-	865	-	-	-	-
Stage 2	-	0	-	-	-	-
Critical Hdwy	-	6.54	6.94	4.14	-	-
Critical Hdwy Stg 1	-	5.54	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	4.02	3.32	2.22	-	-
Pot Cap-1 Maneuver	0	290	594	-	-	0
Stage 1	0	369	-	-	-	0
Stage 2	0	-	-	-	-	0
Platoon blocked, %					-	
Mov Cap-1 Maneuver	-	0	594	-	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-
Stage 1	-	0	-	-	-	-
Stage 2	-	0	-	-	-	-

Approach	NB	NE
HCM Control Delay, s	13	
HCM LOS	B	

Minor Lane/Major Mvmt	NEL	NET	NBLn1
Capacity (veh/h)	-	-	594
HCM Lane V/C Ratio	-	-	0.247
HCM Control Delay (s)	-	-	13
HCM Lane LOS	-	-	B
HCM 95th %tile Q(veh)	-	-	1

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	693	7	80	34	0	0	0	10
Future Vol, veh/h	0	0	0	0	693	7	80	34	0	0	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	-	-	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	776	8	90	38	0	0	0	11

Major/Minor	Major2			Minor1			Minor2		
Conflicting Flow All	-	-	0	388	784	-	-	-	392
Stage 1	-	-	-	0	0	-	-	-	-
Stage 2	-	-	-	388	784	-	-	-	-
Critical Hdwy	-	-	-	7.54	6.54	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.54	5.54	-	-	-	-
Follow-up Hdwy	-	-	-	3.52	4.02	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	545	323	0	0	0	607
Stage 1	0	-	-	-	-	0	0	0	-
Stage 2	0	-	-	607	402	0	0	0	-
Platoon blocked, %		-	-						
Mov Cap-1 Maneuver	-	-	-	535	323	-	-	-	607
Mov Cap-2 Maneuver	-	-	-	535	323	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	596	402	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	14.4	11
HCM LOS		B	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	WBT	WBR	SBLn1
Capacity (veh/h)	535	323	-	-	607
HCM Lane V/C Ratio	0.167	0.118	-	-	0.018
HCM Control Delay (s)	13.1	17.6	-	-	11
HCM Lane LOS	B	C	-	-	B
HCM 95th %tile Q(veh)	0.6	0.4	-	-	0.1

Intersection	
Int Delay, s/veh	0.3

Movement	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Vol, veh/h	3	1	1	1	0	2	3	758	4	4	695	7
Future Vol, veh/h	3	1	1	1	0	2	3	758	4	4	695	7
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	-	-	-	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	1	1	1	0	2	3	849	4	4	778	8

Major/Minor	Minor1			Minor2			Major1			Major2		
Conflicting Flow All	1648	1651	851	1648	1649	782	786	0	0	853	0	0
Stage 1	857	857	-	790	790	-	-	-	-	-	-	-
Stage 2	791	794	-	858	859	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	79	99	360	79	99	394	833	-	-	786	-	-
Stage 1	352	374	-	383	402	-	-	-	-	-	-	-
Stage 2	383	400	-	352	373	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	78	97	360	77	97	394	833	-	-	786	-	-
Mov Cap-2 Maneuver	78	97	-	77	97	-	-	-	-	-	-	-
Stage 1	350	371	-	380	398	-	-	-	-	-	-	-
Stage 2	377	396	-	347	370	-	-	-	-	-	-	-

Approach	NB	SB	NE	SW
HCM Control Delay, s	44.4	27.1	0	0.1
HCM LOS	E	D		

Minor Lane/Major Mvmt	NEL	NET	NER	NBLn1	SBLn1	SWL	SWT	SWR
Capacity (veh/h)	833	-	-	97	166	786	-	-
HCM Lane V/C Ratio	0.004	-	-	0.058	0.02	0.006	-	-
HCM Control Delay (s)	9.3	0	-	44.4	27.1	9.6	0	-
HCM Lane LOS	A	A	-	E	D	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	0	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	762	27	1	700	2	6	1	2	8	1	6
Future Vol, veh/h	10	762	27	1	700	2	6	1	2	8	1	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	0	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	853	30	1	784	2	7	1	2	9	1	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	786	0	0	883	0	0	1681	1678	868	1679	1692	785
Stage 1	-	-	-	-	-	-	890	890	-	787	787	-
Stage 2	-	-	-	-	-	-	791	788	-	892	905	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	833	-	-	766	-	-	75	95	352	75	93	393
Stage 1	-	-	-	-	-	-	337	361	-	385	403	-
Stage 2	-	-	-	-	-	-	383	402	-	337	355	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	833	-	-	766	-	-	72	94	352	73	92	393
Mov Cap-2 Maneuver	-	-	-	-	-	-	72	94	-	73	92	-
Stage 1	-	-	-	-	-	-	333	356	-	380	403	-
Stage 2	-	-	-	-	-	-	375	402	-	329	350	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0	50	43.1
HCM LOS			F	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	90	833	-	-	766	-	-	111
HCM Lane V/C Ratio	0.112	0.013	-	-	0.001	-	-	0.151
HCM Control Delay (s)	50	9.4	-	-	9.7	-	-	43.1
HCM Lane LOS	F	A	-	-	A	-	-	E
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.5

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	758	7	12	686	12	11	0	5	17	2	6
Future Vol, veh/h	7	758	7	12	686	12	11	0	5	17	2	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	849	8	13	768	13	12	0	6	19	2	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	781	0	0	857	0	0	1674	1676	853	1673	1674	775
Stage 1	-	-	-	-	-	-	869	869	-	801	801	-
Stage 2	-	-	-	-	-	-	805	807	-	872	873	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	837	-	-	783	-	-	76	95	359	76	95	398
Stage 1	-	-	-	-	-	-	347	369	-	378	397	-
Stage 2	-	-	-	-	-	-	376	394	-	345	368	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	837	-	-	783	-	-	72	92	359	73	92	398
Mov Cap-2 Maneuver	-	-	-	-	-	-	72	92	-	73	92	-
Stage 1	-	-	-	-	-	-	344	365	-	374	390	-
Stage 2	-	-	-	-	-	-	361	387	-	336	364	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.2	50.9	59.6
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	96	837	-	-	783	-	-	93
HCM Lane V/C Ratio	0.187	0.009	-	-	0.017	-	-	0.301
HCM Control Delay (s)	50.9	9.3	-	-	9.7	-	-	59.6
HCM Lane LOS	F	A	-	-	A	-	-	F
HCM 95th %tile Q(veh)	0.6	0	-	-	0.1	-	-	1.1

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	12	772	9	0	710
Future Vol, veh/h	0	12	772	9	0	710
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	13	864	10	0	795

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	869	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	351	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	351	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	351	-
HCM Lane V/C Ratio	-	-	0.038	-
HCM Control Delay (s)	-	-	15.7	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2	3	781	708	7
Future Vol, veh/h	0	2	3	781	708	7
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	2	3	874	793	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	797	801	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	4.12	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	0	387	822	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	387	822	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	822	-	387	-	-
HCM Lane V/C Ratio	0.004	-	0.006	-	-
HCM Control Delay (s)	9.4	-	14.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	13	6	754	26	14	702
Future Vol, veh/h	13	6	754	26	14	702
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	7	844	29	16	786

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1677	859	0	0	873	0
Stage 1	859	-	-	-	-	-
Stage 2	818	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	105	356	-	-	773	-
Stage 1	415	-	-	-	-	-
Stage 2	434	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	103	356	-	-	773	-
Mov Cap-2 Maneuver	103	-	-	-	-	-
Stage 1	415	-	-	-	-	-
Stage 2	425	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	37.2	0	0.2
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	133	773	-
HCM Lane V/C Ratio	-	-	0.16	0.02	-
HCM Control Delay (s)	-	-	37.2	9.8	-
HCM Lane LOS	-	-	E	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0.1	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	691	8	0	682	0	16
Future Vol, veh/h	691	8	0	682	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	774	9	0	764	0	18

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	779
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.318
Pot Cap-1 Maneuver	-	-	0	-	0	396
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	396
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	396	-	-	-
HCM Lane V/C Ratio	0.045	-	-	-
HCM Control Delay (s)	14.5	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	695	3	4	673	10	0	0	7	3	0	9
Future Vol, veh/h	9	695	3	4	673	10	0	0	7	3	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	-	-	-	-	-	-	-	-	-
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	778	3	4	753	11	0	0	8	3	0	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	764	0	0	781	0	0	1185	1572	780	1571	1568	382
Stage 1	-	-	-	-	-	-	800	800	-	767	767	-
Stage 2	-	-	-	-	-	-	385	772	-	804	801	-
Critical Hdwy	4.13	-	-	4.13	-	-	7.33	6.53	6.23	7.33	6.53	6.93
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.53	-	6.53	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.53	5.53	-	6.13	5.53	-
Follow-up Hdwy	2.219	-	-	2.219	-	-	3.519	4.019	3.319	3.519	4.019	3.319
Pot Cap-1 Maneuver	847	-	-	834	-	-	155	110	394	82	110	617
Stage 1	-	-	-	-	-	-	378	396	-	362	410	-
Stage 2	-	-	-	-	-	-	611	408	-	376	396	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	847	-	-	834	-	-	150	108	394	79	108	617
Mov Cap-2 Maneuver	-	-	-	-	-	-	150	108	-	79	108	-
Stage 1	-	-	-	-	-	-	373	391	-	358	407	-
Stage 2	-	-	-	-	-	-	596	405	-	364	391	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	14.3	21.8
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	394	847	-	-	834	-	-	228
HCM Lane V/C Ratio	0.02	0.012	-	-	0.005	-	-	0.059
HCM Control Delay (s)	14.3	9.3	-	-	9.3	0	-	21.8
HCM Lane LOS	B	A	-	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	451	23	153	482	51	44	707	172	77	825	161
Future Volume (veh/h)	230	451	23	153	482	51	44	707	172	77	825	161
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1796	1870	1870	1796	1796	1796
Adj Flow Rate, veh/h	258	505	26	171	540	57	49	792	193	86	924	180
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	297	403	341	240	660	70	334	1458	355	361	1505	293
Arrive On Green	0.12	0.22	0.22	0.10	0.20	0.20	0.06	0.51	0.51	0.10	0.70	0.70
Sat Flow, veh/h	1781	1870	1585	1781	3244	342	1710	2833	690	1710	2847	554
Grp Volume(v), veh/h	258	505	26	171	295	302	49	497	488	86	553	551
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1809	1710	1777	1746	1710	1706	1696
Q Serve(g_s), s	14.9	28.0	1.7	9.4	20.6	20.7	1.6	24.5	24.5	2.8	22.0	22.1
Cycle Q Clear(g_c), s	14.9	28.0	1.7	9.4	20.6	20.7	1.6	24.5	24.5	2.8	22.0	22.1
Prop In Lane	1.00		1.00	1.00		0.19	1.00		0.40	1.00		0.33
Lane Grp Cap(c), veh/h	297	403	341	240	362	368	334	914	898	361	902	896
V/C Ratio(X)	0.87	1.25	0.08	0.71	0.82	0.82	0.15	0.54	0.54	0.24	0.61	0.61
Avail Cap(c_a), veh/h	297	403	341	288	410	417	416	914	898	418	902	896
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.88	0.88	0.88	0.92	0.92	0.92
Uniform Delay (d), s/veh	37.2	51.0	40.7	36.4	49.4	49.5	13.4	21.3	21.3	13.8	12.4	12.4
Incr Delay (d2), s/veh	22.1	133.1	0.1	4.5	10.9	11.1	0.1	2.0	2.1	0.1	2.9	2.9
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	8.3	27.9	0.7	4.4	10.3	10.5	0.6	10.5	10.3	1.0	7.1	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.3	184.1	40.8	40.9	60.3	60.6	13.5	23.3	23.3	13.9	15.2	15.3
LnGrp LOS	E	F	D	D	E	E	B	C	C	B	B	B
Approach Vol, veh/h		789			768			1034			1190	
Approach Delay, s/veh		138.5			56.1			22.9			15.1	
Approach LOS		F			E			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	69.9	16.5	31.0	10.8	71.7	18.0	29.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	12.0	57.0	15.0	26.0	12.0	57.0	13.0	28.0
Max Q Clear Time (g_c+I1), s	14.8	26.5	11.4	30.0	3.6	24.1	16.9	22.7
Green Ext Time (p_c), s	0.1	6.5	0.1	0.0	0.0	7.7	0.0	1.1

Intersection Summary	
HCM 6th Ctrl Delay	51.3
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	451	23	153	482	51	44	707	172	77	825	161
Future Volume (veh/h)	230	451	23	153	482	51	44	707	172	77	825	161
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, 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	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1796	1870	1870	1796	1796	1796
Adj Flow Rate, veh/h	258	505	26	171	540	57	49	792	193	86	924	180
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	297	403	341	240	660	70	334	1458	355	361	1505	293
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Prop Arrive On Green	0.12	0.22	0.22	0.10	0.20	0.20	0.06	0.51	0.51	0.10	0.70	0.70
Unsig. Movement Delay												
Ln Grp Delay, s/veh	59.3	184.1	40.8	40.9	60.3	60.6	13.5	23.3	23.3	13.9	15.2	15.3
Ln Grp LOS	E	F	D	D	E	E	B	C	C	B	B	B
Approach Vol, veh/h		789			768			1034			1190	
Approach Delay, s/veh		138.5			56.1			22.9			15.1	
Approach LOS		F			E			C			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	4.0	1.1	3.0	1.1	4.0	1.1	4.0
Phs Duration (G+Y+Rc), s	12.6	69.9	16.5	31.0	10.8	71.7	18.0	29.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green (Gmax), s	12.0	57.0	15.0	26.0	12.0	57.0	13.0	28.0
Max Allow Headway (MAH), s	2.9	4.9	3.0	3.9	2.9	4.9	3.0	3.9
Max Q Clear (g_c+I1), s	4.8	26.5	11.4	30.0	3.6	24.1	16.9	22.7
Green Ext Time (g_e), s	0.1	6.5	0.1	0.0	0.0	7.7	0.0	1.1
Prob of Phs Call (p_c)	0.96	1.00	1.00	1.00	0.83	1.00	1.00	1.00
Prob of Max Out (p_x)	0.00	0.00	0.51	1.00	0.00	0.00	1.00	0.62

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1710		1781		1710		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		2833		1870		2847		3244

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		690		1585		554		342

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	86	0	171	0	49	0	258	0
Grp Sat Flow (s), veh/h/ln	1710	0	1781	0	1710	0	1781	0
Q Serve Time (g_s), s	2.8	0.0	9.4	0.0	1.6	0.0	14.9	0.0
Cycle Q Clear Time (g_c), s	2.8	0.0	9.4	0.0	1.6	0.0	14.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	549	0	873	0	490	0	821	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	67.7	0.0	28.0	0.0	68.7	0.0	27.0	0.0
Perm LT Serve Time (g_u), s	42.4	0.0	0.0	0.0	46.7	0.0	5.7	0.0
Perm LT Q Serve Time (g_ps), s	4.6	0.0	0.0	0.0	2.4	0.0	5.7	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	361	0	240	0	334	0	297	0
V/C Ratio (X)	0.24	0.00	0.71	0.00	0.15	0.00	0.87	0.00
Avail Cap (c_a), veh/h	418	0	288	0	416	0	297	0
Upstream Filter (I)	0.92	0.00	1.00	0.00	0.88	0.00	1.00	0.00
Uniform Delay (d1), s/veh	13.8	0.0	36.4	0.0	13.4	0.0	37.2	0.0
Incr Delay (d2), s/veh	0.1	0.0	4.5	0.0	0.1	0.0	22.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	13.9	0.0	40.9	0.0	13.5	0.0	59.3	0.0
1st-Term Q (Q1), veh/ln	1.0	0.0	4.1	0.0	0.6	0.0	6.5	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	0.0	0.0	1.8	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	1.0	0.0	4.4	0.0	0.6	0.0	8.3	0.0
%ile Storage Ratio (RQ%)	0.14	0.00	0.56	0.00	0.08	0.00	0.79	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	497	0	505	0	553	0	295
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1706	0	1777
Q Serve Time (g_s), s	0.0	24.5	0.0	28.0	0.0	22.0	0.0	20.6
Cycle Q Clear Time (g_c), s	0.0	24.5	0.0	28.0	0.0	22.0	0.0	20.6
Lane Grp Cap (c), veh/h	0	914	0	403	0	902	0	362
V/C Ratio (X)	0.00	0.54	0.00	1.25	0.00	0.61	0.00	0.82
Avail Cap (c_a), veh/h	0	914	0	403	0	902	0	410
Upstream Filter (I)	0.00	0.88	0.00	1.00	0.00	0.92	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.3	0.0	51.0	0.0	12.4	0.0	49.4
Incr Delay (d2), s/veh	0.0	2.0	0.0	133.1	0.0	2.9	0.0	10.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.3	0.0	184.1	0.0	15.2	0.0	60.3
1st-Term Q (Q1), veh/ln	0.0	9.9	0.0	13.1	0.0	6.4	0.0	9.2
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	14.9	0.0	0.7	0.0	1.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.5	0.0	27.9	0.0	7.1	0.0	10.3
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	2.64	0.00	0.08	0.00	1.19
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	25.5	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	488	0	26	0	551	0	302
Grp Sat Flow (s), veh/h/ln	0	1746	0	1585	0	1696	0	1809
Q Serve Time (g_s), s	0.0	24.5	0.0	1.7	0.0	22.1	0.0	20.7
Cycle Q Clear Time (g_c), s	0.0	24.5	0.0	1.7	0.0	22.1	0.0	20.7
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.40	0.00	1.00	0.00	0.33	0.00	0.19
Lane Grp Cap (c), veh/h	0	898	0	341	0	896	0	368
V/C Ratio (X)	0.00	0.54	0.00	0.08	0.00	0.61	0.00	0.82
Avail Cap (c_a), veh/h	0	898	0	341	0	896	0	417
Upstream Filter (I)	0.00	0.88	0.00	1.00	0.00	0.92	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.3	0.0	40.7	0.0	12.4	0.0	49.5
Incr Delay (d2), s/veh	0.0	2.1	0.0	0.1	0.0	2.9	0.0	11.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	23.3	0.0	40.8	0.0	15.3	0.0	60.6
1st-Term Q (Q1), veh/ln	0.0	9.8	0.0	0.7	0.0	6.4	0.0	9.4
2nd-Term Q (Q2), veh/ln	0.0	0.5	0.0	0.0	0.0	0.7	0.0	1.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.3	0.0	0.7	0.0	7.1	0.0	10.5
%ile Storage Ratio (RQ%)	0.00	0.12	0.00	0.35	0.00	0.08	0.00	1.22
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	51.3
HCM 6th LOS	D

HCM 6th Edition methodology does not support Non-NEMA phasing.

HCM 6th Edition methodology does not support Non-NEMA phasing.

HCM Signalized Intersection Capacity Analysis
229: Waverly Way & Lafayette Blvd

05/05/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	451	1	0	718	8	8	0	2	15	0	12
Future Volume (vph)	3	451	1	0	718	8	8	0	2	15	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frt		1.00			1.00			0.98			0.94	
Flt Protected		1.00			1.00			0.96			0.97	
Satd. Flow (prot)		1862			1860			1746			1705	
Flt Permitted		1.00			1.00			0.74			0.82	
Satd. Flow (perm)		1857			1860			1352			1435	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%
Adj. Flow (vph)	3	505	1	0	804	9	9	0	2	17	0	13
RTOR Reduction (vph)	0	0	0	0	0	0	0	10	0	0	28	0
Lane Group Flow (vph)	0	509	0	0	813	0	0	1	0	0	2	0
Turn Type	Perm	NA			NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			4	
Permitted Phases	2			6			4			4		
Actuated Green, G (s)		67.7			67.7			4.3			4.3	
Effective Green, g (s)		69.7			69.7			6.3			6.3	
Actuated g/C Ratio		0.83			0.83			0.07			0.07	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1540			1543			101			107	
v/s Ratio Prot					c0.44							
v/s Ratio Perm		0.27						0.00			c0.00	
v/c Ratio		0.33			0.53			0.01			0.02	
Uniform Delay, d1		1.7			2.2			36.0			36.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.6			1.3			0.0			0.1	
Delay (s)		2.3			3.5			36.0			36.1	
Level of Service		A			A			D			D	
Approach Delay (s)		2.3			3.5			36.0			36.1	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	4.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	84.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis
229: Waverly Way & Lafayette Blvd

05/05/2025

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	746	1	2	700	24	1	1	4	35	0	5
Future Volume (vph)	14	746	1	2	700	24	1	1	4	35	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			1.00			1.00	
Frt		1.00			1.00			0.91			0.98	
Flt Protected		1.00			1.00			0.99			0.96	
Satd. Flow (prot)		1861			1854			1681			1753	
Flt Permitted		0.98			1.00			0.95			0.75	
Satd. Flow (perm)		1831			1852			1603			1373	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor (vph)	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%	103%
Adj. Flow (vph)	16	835	1	2	784	27	1	1	4	39	0	6
RTOR Reduction (vph)	0	0	0	0	1	0	0	4	0	0	36	0
Lane Group Flow (vph)	0	852	0	0	812	0	0	2	0	0	9	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		2			6			4			4	
Permitted Phases	2			6			4			4		
Actuated Green, G (s)		67.4			67.4			4.6			4.6	
Effective Green, g (s)		69.4			69.4			6.6			6.6	
Actuated g/C Ratio		0.83			0.83			0.08			0.08	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1512			1530			125			107	
v/s Ratio Prot												
v/s Ratio Perm		c0.47			0.44			0.00			c0.01	
v/c Ratio		0.56			0.53			0.02			0.08	
Uniform Delay, d1		2.4			2.3			35.7			35.9	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		1.5			1.3			0.1			0.3	
Delay (s)		3.9			3.6			35.8			36.2	
Level of Service		A			A			D			D	
Approach Delay (s)		3.9			3.6			35.8			36.2	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	4.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	84.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lanes, Volumes, Timings
22: Lafayette Blvd & Fontainebleau Crescent

05/05/2025

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	656	0	0	451	0	5
Future Volume (vph)	656	0	0	451	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.865		
Flt Protected	0.950					
Satd. Flow (prot)	1770	0	0	1611	0	1863
Flt Permitted	0.950					
Satd. Flow (perm)	1770	0	0	1611	0	1863
Link Speed (mph)	30		30			30
Link Distance (ft)	307		170			447
Travel Time (s)	7.0		3.9			10.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	103%	103%	103%	103%	103%	103%
Adj. Flow (vph)	734	0	0	505	0	6
Shared Lane Traffic (%)						
Lane Group Flow (vph)	734	0	0	505	0	6
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	33		22			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	30	9		30	15	
Sign Control	Free		Free			Stop

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 47.4%		ICU Level of Service A	
Analysis Period (min) 15			

Lanes, Volumes, Timings
22: Lafayette Blvd & Fontainebleau Crescent

05/05/2025

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	677	5	0	699	0	3
Future Volume (vph)	677	5	0	699	0	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.999			0.865		
Flt Protected	0.953					
Satd. Flow (prot)	1773	0	0	1611	0	1863
Flt Permitted	0.953					
Satd. Flow (perm)	1773	0	0	1611	0	1863
Link Speed (mph)	30		30			25
Link Distance (ft)	307		170			447
Travel Time (s)	7.0		3.9			12.2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	103%	103%	103%	103%	103%	103%
Adj. Flow (vph)	758	6	0	783	0	3
Shared Lane Traffic (%)						
Lane Group Flow (vph)	764	0	0	783	0	3
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	33		22			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	30	9		30	15	
Sign Control	Free		Free			Stop

Intersection Summary	
Area Type:	Other
Control Type: Unsignalized	
Intersection Capacity Utilization 48.9%	ICU Level of Service A
Analysis Period (min) 15	

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	49	451	646	16	0	83
Future Vol, veh/h	49	451	646	16	0	83
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	55	505	723	18	0	93

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	741	0	-	0	-	732
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	866	-	-	-	0	421
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	866	-	-	-	-	421
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	16
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	866	-	-	-	421
HCM Lane V/C Ratio	0.063	-	-	-	0.221
HCM Control Delay (s)	9.4	-	-	-	16
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	0.8

Intersection	
Int Delay, s/veh	1

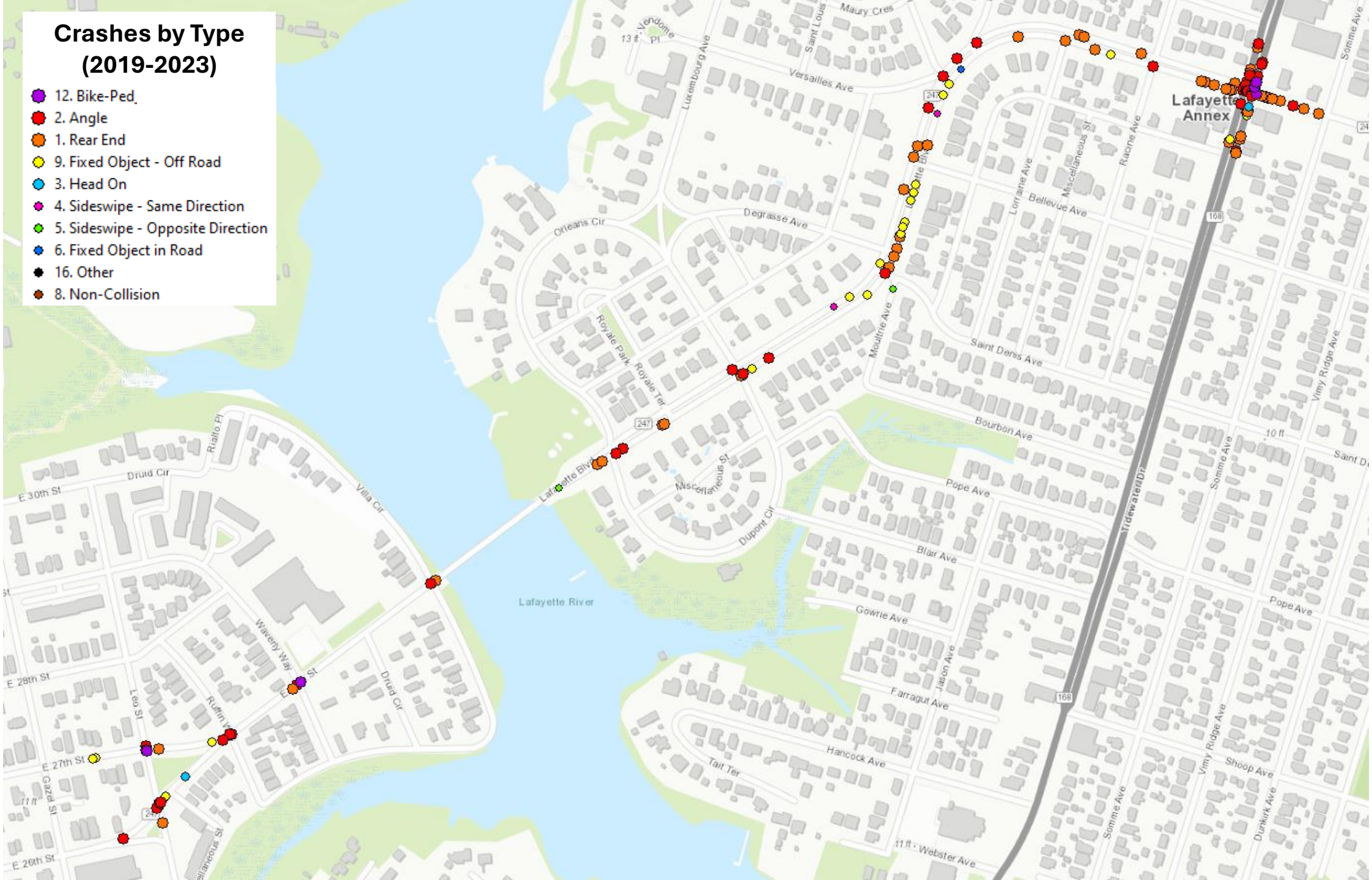
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	61	699	655	24	0	60
Future Vol, veh/h	61	699	655	24	0	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	68	783	733	27	0	67

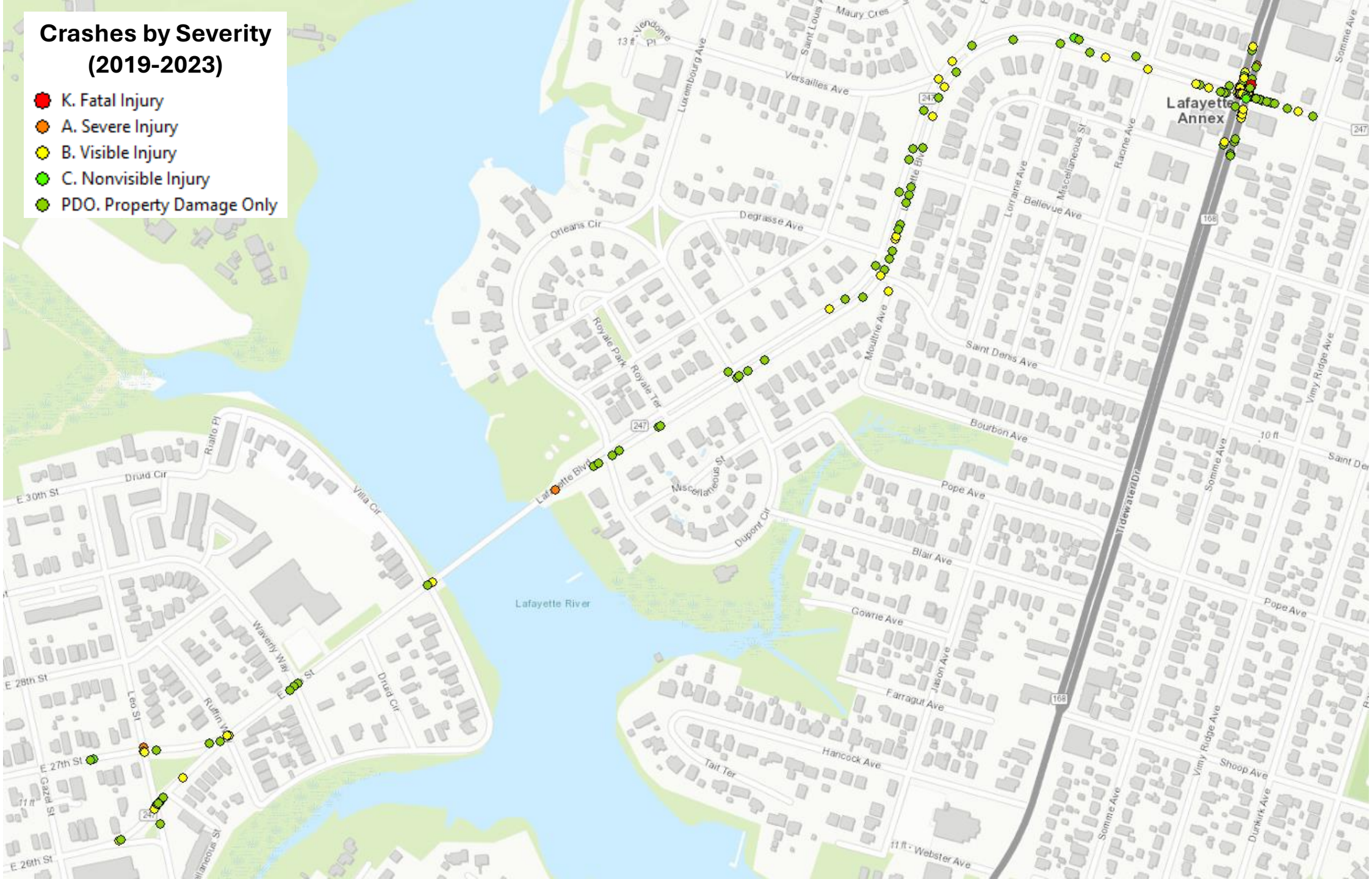
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	760	0	-	0	-	747
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	4.12	-	-	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	2.218	-	-	-	-	3.318
Pot Cap-1 Maneuver	852	-	-	-	0	413
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	852	-	-	-	-	413
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	15.4
HCM LOS			C

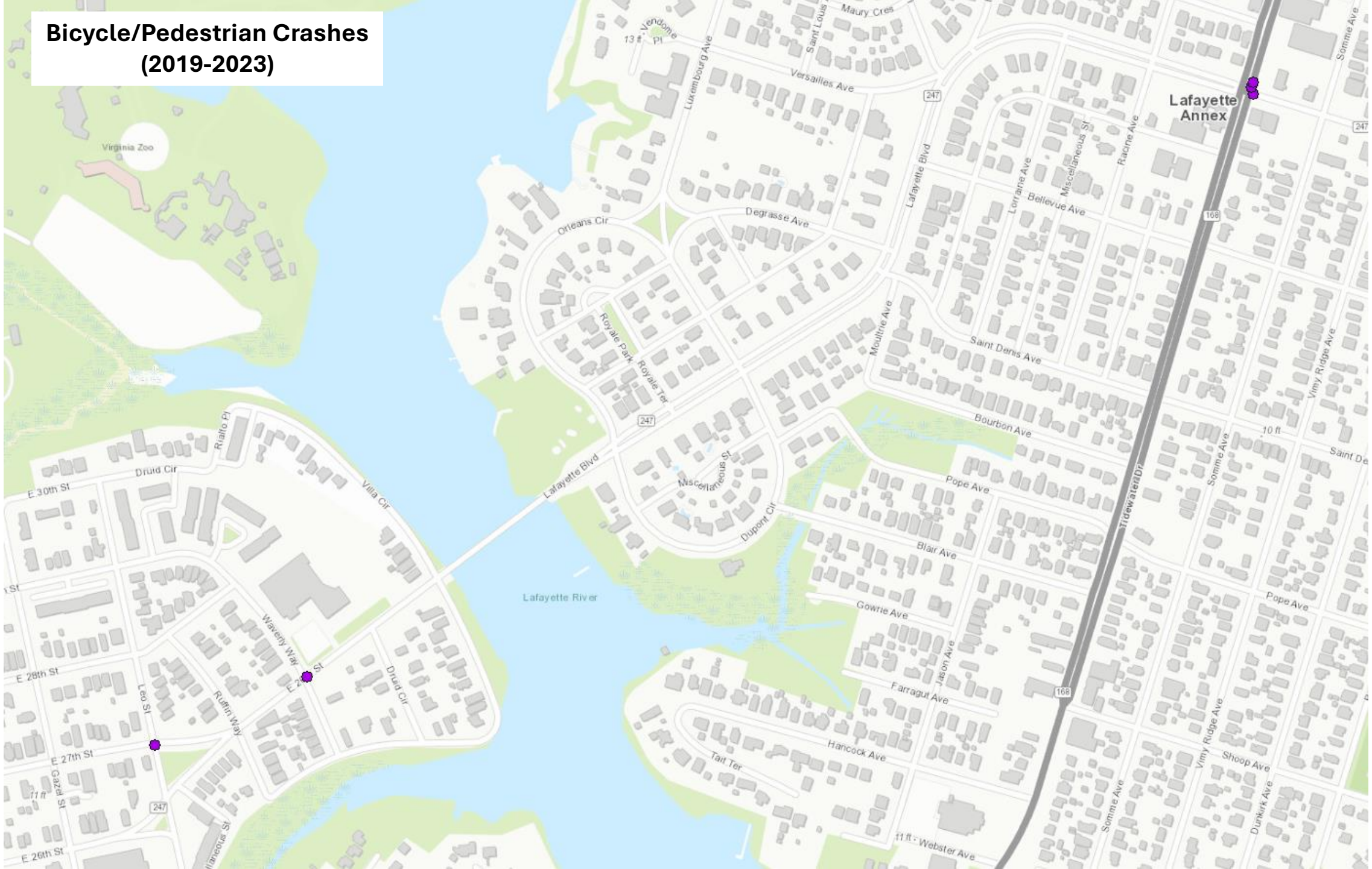
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	852	-	-	-	413
HCM Lane V/C Ratio	0.08	-	-	-	0.163
HCM Control Delay (s)	9.6	-	-	-	15.4
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.3	-	-	-	0.6

Crash Location Maps

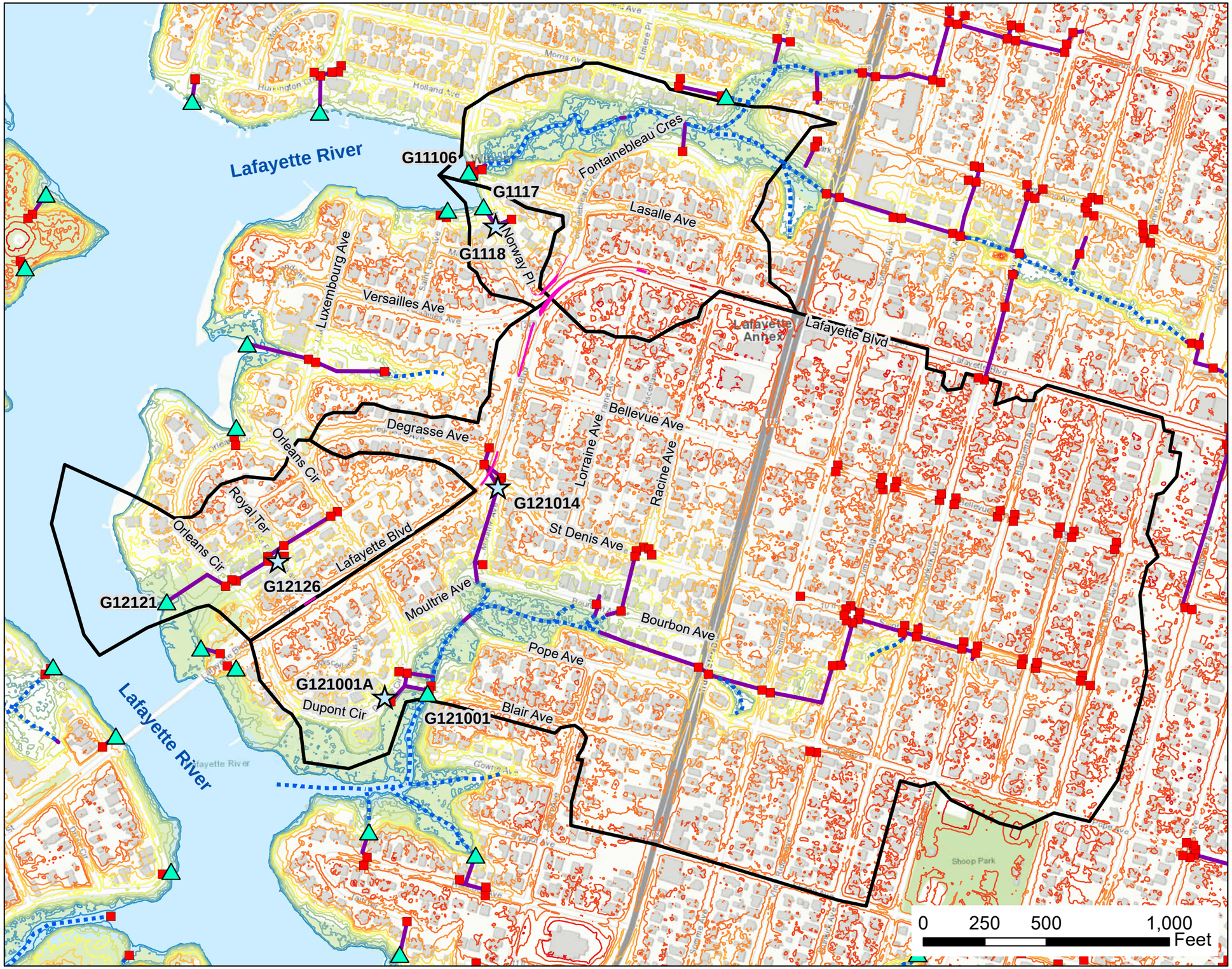

Crashes by Type
(2019-2023)
12. Bike-Ped
2. Angle
1. Rear End
9. Fixed Object - Off Road
3. Head On
4. Sideswipe - Same Direction
5. Sideswipe - Opposite Direction
6. Fixed Object in Road
16. Other
8. Non-Collision
Lafayette River
Lafayette Annex
Maury Cres
Versailles Ave
Luxembourg Ave
Saint Louis
Vendome Pl
Orleans Cir
Degrasse Ave
Lorraine Ave
Bellevue Ave
Miscellaneous St
Racine Ave
Saint Denis Ave
Moultrie Ave
Royale Park
Royale Ter
Bourbon Ave
Pope Ave
Blair Ave
Gowrie Ave
Farragut Ave
Jason Ave
Hancock Ave
Tait Ter
Dupont Cir
Lafayette Blvd
Villa Cir
Rialto Pl
Druid Cir
E 30th St
E 28th St
E 27th St
E 26th St
Leo St
Ruffin Way
Waverly Way
Gazel St
Tidewater Dr
Somme Ave
Vimy Ridge Ave
Shoop Ave
Dunkirk Ave
11 ft - Webster Ave
10 ft
13 ft
11 ft


Crashes by Severity
(2019-2023)
K. Fatal Injury
A. Severe Injury
B. Visible Injury
C. Nonvisible Injury
PDO. Property Damage Only
Lafayette Annex
Lafayette River
Versailles Ave
Maury Cres
Luxembourg Ave
Saint Louis
Vendome Pl
Orleans Cir
Degrasse Ave
Lafayette Blvd
Moultrie Ave
Lorraine Ave
Bellevue Ave
Miscellaneous St
Racine Ave
Saint Denis Ave
Bourbon Ave
Pope Ave
Blair Ave
Gowrie Ave
Farragut Ave
Jason Ave
Hancock Ave
Tait Ter
11 ft - Webster Ave
Tidewater Dr
Somme Ave
Vimy Ridge Ave
Shoop Ave
Dunkirk Ave
Royale Park
Royale Ter
Dupont Cir
Rialto Pl
Druid Cir
Villa Cir
E 30th St
E 28th St
E 27th St
E 26th St
Leo St
Ruffin Ln
Waverly Way
E Gazel St
Miscellaneous St
168
247

Bicycle/Pedestrian Crashes (2019-2023)



APPENDX D – STORMWATER



Legend

- Limits of Analysis
- Existing Outfall
- Approximate Limits of Disturbance
- Drainage Inlet
- Drainage Ditch/Channel
- Drainage Pipe
- Drainage Area

1 ft Elevation Contour

0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12

G00000 Inlet/Outfall Name

N

LAFAYETTE BOULEVARD IMPROVEMENTS

DRAINAGE AREA MAP

	Date	Sheet
wsp	MAY 2025	1

CLEAR ALL
(Ctrl+Shift+R)

data input cells	
constant values	
calculation cells	
final results	

Project Name:	Lafayette Boulevard Improvements
Date:	8/8/2025
Linear Development Project?	No

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area *(acres)* → 0.22

Maximum reduction required:	*10%*
The site's net increase in impervious cover (acres) is:	*0*
Post-Development TP Load Reduction for Site (lb/yr):	*0.02*

Check:

BMP Design Specifications List:	2024 Stds & Specs
Linear project?	No
Land cover areas entered correctly?	✓
Total disturbed area entered?	✓

Pre-ReDevelopment Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest (acres) -- undisturbed, protected forest or reforested land					0.00
Mixed Open (acres) -- undisturbed/infrequently maintained grass or shrub land					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be mowed/managed				0.08	0.08
Impervious Cover (acres)				0.14	0.14
					0.22

Post-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest or reforested land					0.00
Mixed Open (acres) -- undisturbed/infrequently maintained grass or shrub land					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be mowed/managed				0.18	0.18
Impervious Cover (acres)				0.04	0.04
Area Check	OK.	OK.	OK.	OK.	0.22

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)	0.02

Nitrogen Loads (Informational Purposes Only)

Pre-ReDevelopment TN Load (lb/yr)	2.45

Final Post-Development TN Load	2.11

LAND COVER SUMMARY -- PRE-REDEVELOPMENT

Land Cover Summary-Pre

Pre-ReDevelopment	Listed	Adjusted[1]
Forest Cover (acres)	0.00	0.00
Weighted Rv(forest)	0.00	0.00
Weighted Loading Rate(forest)	0.00	0.00
% Forest	0%	0%
Mixed Open Cover (acres)	0.00	0.00
Weighted Rv(mixed)	0.00	0.00
Weighted Loading Rate(mixed)	0.00	0.00
% Mixed Open	0%	0%
Managed Turf Cover (acres)	0.08	0.08
Weighted Rv(turf)	0.25	0.25
Weighted Loading Rate(turf)	0.85	0.85
% Managed Turf	36%	36%
Impervious Cover (acres)	0.14	0.14
Rv(impervious)	0.95	0.95
Weighted Loading Rate(impervious)	0.86	0.86
% Impervious	64%	64%
Total Site Area (acres)	0.22	0.22
Site Rv	0.70	0.70

Treatment Volume and Nutrient Load

Pre-ReDevelopment Treatment Volume (acre-ft)	0.0128	0.0128
Pre-ReDevelopment Treatment Volume (cubic feet)	555	555
Pre-ReDevelopment TP Load (lb/yr)	0.19	0.19
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	0.85	0.85
Baseline TP Load (lb/yr) (0.26 lbs/acre/yr applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		*0.06*

[1] *Adjusted Land Cover Summary:*
Pre ReDevelopment land cover minus pervious land cover (forest, mixed open or managed turf) acreage proposed for new impervious cover.

Adjusted total acreage is consistent with Post-ReDevelopment acreage (minus acreage of new impervious cover).

Column I shows load reduction requriement for new impervious cover (based on new development load limit, 0.26 lbs/acre/year).

LAND COVER SUMMARY -- POST DEVELOPMENT

Land Cover Summary-Post (Final)

Post ReDev. & New Impervious	
Forest Cover (acres)	0.00
Weighted Rv(forest)	0.00
Wgt. Ld. Rate(forest)	0.00
% Forest	0%
Mixed Open Cover (acres)	0.00
Weighted Rv(mixed)	0.00
Wgt. Ld. Rate(mixed)	0.00
% Mixed Open	0%
Managed Turf Cover (acres)	0.18
Weighted Rv (turf)	0.25
Wgt. Ld. Rate(turf)	0.85
% Managed Turf	82%
Impervious Cover (acres)	0.04
Rv(impervious)	0.95
Wgt. Ld. Rate(imperv.)	0.86
% Impervious	18%
Final Site Area (acres)	0.22
Final Post Dev Site Rv	0.38

Land Cover Summary-Post

Post-ReDevelopment	
Forest Cover (acres)	0.00
Weighted Rv(forest)	0.00
Wgt. Ld. Rate(forest)	0.00
% Forest	0%
Mixed Open Cover (acres)	0.00
Weighted Rv(mixed)	0.00
Wgt. Ld. Rate(mixed)	0.00
% Mixed Open	0%
Managed Turf Cover (acres)	0.18
Weighted Rv (turf)	0.25
Wgt. Ld. Rate(turf)	0.85
% Managed Turf	82%
ReDev. Impervious Cover (acres)	0.04
Rv(impervious)	0.95
Wgt. Ld. Rate(imperv.)	0.86
% Impervious	18%
Total ReDev. Site Area (acres)	0.22
ReDev Site Rv	0.38

Land Cover Summary-Post

Post-Development New Impervious	
New Impervious Cover (acres)	0.00
Rv(impervious)	--

Treatment Volume and Nutrient Load

Final Post-Development Treatment Volume (acre-ft)	0.0069	Post-ReDevelopment Treatment Volume (acre-ft)	0.0069	Post-Development Treatment Volume (acre-ft)	--
Final Post-Development Treatment Volume (cubic feet)	301	Post-ReDevelopment Treatment Volume (cubic feet)	301	Post-Development Treatment Volume (cubic feet)	--
Final Post-Development TP Load (lb/yr)	0.19	Post-ReDevelopment Load (TP) (lb/yr)*	0.19	Post-Development TP Load (lb/yr)	--
Final Post-Development TP Load per acre (lb/acre/yr)	0.85	Post-ReDevelopment TP Load per acre (lb/acre/yr)	0.85		
		Max. Reduction Required (Below Pre-ReDevelopment Load)	10%		
		TP Load Reduction Required for Redeveloped Area (lb/yr)	0.02	TP Load Reduction Required for New Impervious Area (lb/yr)	0

Hydrodynamic Separator - Orleans Circle near Lafayette Residence Park

Drainage Area A

VRRM 4.1, 2024

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv	Composite Loading P	Composite Loading N
Forest (acres)					0.00	0.00	0.00	0.00
Mixed Open (acres)					0.00	0.00	0.00	0.00
Managed Turf (acres)				1.82	1.82	0.25	0.85	9.01
Impervious Cover (acres)				2.67	2.67	0.95	0.86	12.33
				Total	4.49			

CLEAR BMP AREAS

Total Phosphorus Available for Removal in D.A. A (lb/yr) 3.83

Post Development Treatment Volume in D.A. A (ft^3) 10,859

Stormwater Best Management Practices (RR = Runoff Reduction)

--Select from dropdown lists--

Practice	Runoff Reduction Credit (%)	Mixed Open Credit Area (acres)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft^3)	Runoff Reduction (ft^3)	Remaining Runoff Volume (ft^3)	Total BMP Treatment Volume (ft^3)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
1. Vegetated Roof (RR)														
1.a. Vegetated Roof #1 (P-FIL-02)	45					0	0	0	0		0.00	0.00	0.00	
1.b. Vegetated Roof #2 (P-FIL-02)	60					0	0	0	0		0.00	0.00	0.00	
2. Rooftop Disconnection (RR)														
2.a. Simple Disconnection to A/B Soils (P-FIL-01)	50				0	0	0	0	0	0.00	0.00	0.00	0.00	
2.b. Simple Disconnection to C/D Soils (P-FIL-01)	25				0	0	0	0	0	0.00	0.00	0.00	0.00	
2.c. To Soil Amended Filter Path as per specifications (existing C/D soils) (P-FIL-08)	50				0	0	0	0	0	0.00	0.00	0.00	0.00	
2.d. To Dry Well or French Drain #1, Micro-Infiltration #1 (P-FIL-04)	50				0	0	0	0	25	0.00	0.00	0.00	0.00	
2.e. To Dry Well or French Drain #2, Micro-Infiltration #2 (P-FIL-04)	90				0	0	0	0	25	0.00	0.00	0.00	0.00	
2.f. To Rain Garden #1, Micro-Bioretention #1 (P-FIL-05)	40				0	0	0	0	25	0.00	0.00	0.00	0.00	
2.g. To Rain Garden #2, Micro-Bioretention #2 (P-FIL-05)	80				0	0	0	0	50	0.00	0.00	0.00	0.00	
2.h. To Rainwater Harvesting (P-BAS-04)	0				0	0	0	0	0	0.00	0.00	0.00	0.00	
2.i. To Stormwater Planter, Urban Bioretention (P-FIL-05)	40				0	0	0	0	25	0.00	0.00	0.00	0.00	
3. Permeable Pavement (RR)														
3.a. Permeable Pavement #1 (P-FIL-03)	45				0	0	0	0	25	0.00	0.00	0.00	0.00	
3.b. Permeable Pavement #2 (P-FIL-03)	75					0	0	0	25		0.00	0.00	0.00	
4. Grass Channel (RR)														
4.a. Grass Channel A/B Soils (P-CNV-01)	20				0	0	0	0	15	0.00	0.00	0.00	0.00	
4.b. Grass Channel C/D Soils (P-CNV-01)	10				0	0	0	0	15	0.00	0.00	0.00	0.00	
4.c. Grass Channel with Compost Amended Soils as per specs (P-FIL-08)	20				0	0	0	0	15	0.00	0.00	0.00	0.00	
5. Dry Swale (RR)														
5.a. Dry Swale #1 (P-CNV-02)	40				0	0	0	0	20	0.00	0.00	0.00	0.00	
5.b. Dry Swale #2 (P-CNV-02)	60				0	0	0	0	40	0.00	0.00	0.00	0.00	
6. Bioretention (RR)														
6.a. Bioretention #1 or Micro-Bioretention #1 or Urban Bioretention (P-FIL-05)	40				0	0	0	0	25	0.00	0.00	0.00	0.00	
6.b. Bioretention #2 or Micro-Bioretention #2 (P-FIL-05)	80				0	0	0	0	50	0.00	0.00	0.00	0.00	
7. Infiltration (RR)														
7.a. Infiltration #1 (P-FIL-04)	50				0	0	0	0	25	0.00	0.00	0.00	0.00	
7.b. Infiltration #2 (P-FIL-04)	90				0	0	0	0	25	0.00	0.00	0.00	0.00	
8. Extended Detention Pond (RR)														
8.a. ED #1 (P-BAS-03)	0				0	0	0	0	15	0.00	0.00	0.00	0.00	
8.b. ED #2 (P-BAS-03)	15				0	0	0	0	15	0.00	0.00	0.00	0.00	
9. Sheetflow to Filter/Open Space (RR)														
9.a. Sheetflow to Conservation Areas, A/B Soils (P-FIL-07)	75				0	0	0	0	0	0.00	0.00	0.00	0.00	
9.b. Sheetflow to Conservation Area, C/D Soils (P-FIL-07)	50				0	0	0	0	0	0.00	0.00	0.00	0.00	
9.c. Sheetflow to Vegetated Filter Strip, A Soils or Compost Amended B/C/D Soils (Spec P-FIL-07 & P-FIL-08)	50				0	0	0	0	0	0.00	0.00	0.00	0.00	
10. Regenerative Stormwater Conveyance														
10.a. Regenerative Stormwater Conveyance (P-CNV-04)	0				0	0	0	0	20	0.00	0.00	0.00	0.00	
10.b. Regenerative Stormwater Conveyance (P-CNV-04)	0				0	0	0	0	40	0.00	0.00	0.00	0.00	
11. Tree BMP														
11.a. Trees over Pervious, A/B (P-FIL-09)	16				0	0	0	0	0	0.00	0.00	0.00	0.00	
11.b. Trees over Pervious, C/D (P-FIL-09)	12				0	0	0	0	0	0.00	0.00	0.00	0.00	
11.c. Trees over Impervious (P-FIL-09)	3.5				0	0	0	0	0	0.00	0.00	0.00	0.00	

Practice	Nitrogen Removal Efficiency (%)	Nitrogen Load from Upstream Practices (lbs)	Untreated Nitrogen Load to Practice (lbs)	Nitrogen Removed By Practice (lbs)	Remaining Nitrogen Load (lbs)
1. Vegetated Roof (RR)					
1.a. Vegetated Roof #1 (P-FIL-02)	0		0.00	0.00	0.00
1.b. Vegetated Roof #2 (P-FIL-02)	0		0.00	0.00	0.00
2. Rooftop Disconnection (RR)					
2.a. Simple Disconnection to A/B Soils (P-FIL-01)	0	0.00	0.00	0.00	0.00
2.b. Simple Disconnection to C/D Soils (P-FIL-01)	0	0.00	0.00	0.00	0.00
2.c. To Soil Amended Filter Path as per specifications (existing C/D soils) (P-FIL-08)	0	0.00	0.00	0.00	0.00
2.d. To Dry Well or French Drain #1, Micro-Infiltration #1 (P-FIL-04)	15	0.00	0.00	0.00	0.00
2.e. To Dry Well or French Drain #2, Micro-Infiltration #2 (P-FIL-04)	15	0.00	0.00	0.00	0.00
2.f. To Rain Garden #1, Micro-Bioretention #1 (P-FIL-05)	40	0.00	0.00	0.00	0.00
2.g. To Rain Garden #2, Micro-Bioretention #2 (P-FIL-05)	60	0.00	0.00	0.00	0.00
2.h. To Rainwater Harvesting (P-BAS-04)	0	0.00	0.00	0.00	0.00
2.i. To Stormwater Planter, Urban Bioretention (P-FIL-05)	40	0.00	0.00	0.00	0.00
3. Permeable Pavement (RR)					
3.a. Permeable Pavement #1 (P-FIL-03)	25	0.00	0.00	0.00	0.00
3.b. Permeable Pavement #2 (P-FIL-03)	25		0.00	0.00	0.00
4. Grass Channel (RR)					
4.a. Grass Channel A/B Soils (P-CNV-01)	20	0.00	0.00	0.00	0.00
4.b. Grass Channel C/D Soils (P-CNV-01)	20	0.00	0.00	0.00	0.00
4.c. Grass Channel with Compost Amended Soils as per specs (P-FIL-08)	20	0.00	0.00	0.00	0.00
5. Dry Swale (RR)					
5.a. Dry Swale #1 (P-CNV-02)	25	0.00	0.00	0.00	0.00
5.b. Dry Swale #2 (P-CNV-02)	35	0.00	0.00	0.00	0.00
6. Bioretention (RR)					
6.a. Bioretention #1 or Micro-Bioretention #1 or Urban Bioretention (P-FIL-05)	40	0.00	0.00	0.00	0.00
6.b. Bioretention #2 or Micro-Bioretention #2 (P-FIL-05)	60	0.00	0.00	0.00	0.00
7. Infiltration (RR)					
7.a. Infiltration #1 (P-FIL-04)	15	0.00	0.00	0.00	0.00
7.b. Infiltration #2 (P-FIL-04)	15	0.00	0.00	0.00	0.00
8. Extended Detention Pond (RR)					
8.a. ED #1 (P-BAS-03)	10	0.00	0.00	0.00	0.00
8.b. ED #2 (P-BAS-03)	10	0.00	0.00	0.00	0.00
9. Sheetflow to Filter/Open Space (RR)					
9.a. Sheetflow to Conservation Areas, A/B Soils (P-FIL-07)	0	0.00	0.00	0.00	0.00
9.b. Sheetflow to Conservation Area, C/D Soils (P-FIL-07)	0	0.00	0.00	0.00	0.00
9.c. Sheetflow to Vegetated Filter Strip, A Soils or Compost Amended B/C/D Soils (Spec P-FIL-07 & P-FIL-08)	0	0.00	0.00	0.00	0.00
10. Regenerative Stormwater Conveyance					
10.a. Regenerative Stormwater Conveyance (P-CNV-04)	25	0.00	0.00	0.00	0.00
10.b. Regenerative Stormwater Conveyance (P-CNV-04)	35	0.00	0.00	0.00	0.00
11. Tree BMP					
11.a. Trees over Pervious, A/B (P-FIL-09)	0	0.00	0.00	0.00	0.00
11.b. Trees over Pervious, C/D (P-FIL-09)	0	0.00	0.00	0.00	0.00
11.c. Trees over Impervious (P-FIL-09)	0	0.00	0.00	0.00	0.00

TOTAL IMPERVIOUS COVER TREATED (ac)	0.00	AREA CHECK: OK.
TOTAL MIXED OPEN TREATED (ac)	0.00	AREA CHECK: OK.
TOTAL MANAGED TURF AREA TREATED (ac)	0.00	AREA CHECK: OK.
TOTAL RUNOFF REDUCTION IN D.A. A (ft^3)	0	
TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (lb/yr)	3.83	
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.00	
TOTAL PHOSPHORUS REMAINING AFTER APPLYING RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	3.83	

SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS

TOTAL RUNOFF REDUCTION IN D.A. A (ft^3)	0
NITROGEN REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.00

SEE WATER QUALITY COMPLIANCE TAB FOR SITE CALCULATIONS (Information Only)

Practice	Runoff Reduction Credit (%)	Mixed Open Credit Area (acres)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft^3)	Runoff Reduction (ft^3)	Remaining Runoff Volume (ft^3)	Total BMP Treatment Volume (ft^3)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
12. Wet Swale (no RR)														
12.a. Wet Swale #1 (P-CNV-03)	0				0	0	0	0	20	0.00	0.00	0.00	0.00	
12.b. Wet Swale #2 (P-CNV-03)	0				0	0	0	0	40	0.00	0.00	0.00	0.00	
13. Filtering Practices (no RR)														
13.a.Filtering Practice #1 (P-FIL-06)	0				0	0	0	0	60	0.00	0.00	0.00	0.00	
13.b. Filtering Practice #2 (P-FIL-06)	0				0	0	0	0	65	0.00	0.00	0.00	0.00	
14. Constructed Wetland (no RR)														
14.a.Constructed Wetland #1 (P-BAS-01)	0				0	0	0	0	50	0.00	0.00	0.00	0.00	
14.b. Constructed Wetland #2 (P-BAS-01)	0				0	0	0	0	75	0.00	0.00	0.00	0.00	
15. Wet Ponds (no RR)														
15.a. Wet Pond #1 (P-BAS-02)	0				0	0	0	0	50	0.00	0.00	0.00	0.00	
15.b. Wet Pond #1 (Coastal Plain) (P-BAS-02)	0				0	0	0	0	45	0.00	0.00	0.00	0.00	
15.c. Wet Pond #2 (P-BAS-02)	0				0	0	0	0	75	0.00	0.00	0.00	0.00	
15.d. Wet Pond #2 (Coastal Plain) (P-BAS-02)	0				0	0	0	0	65	0.00	0.00	0.00	0.00	
16. Manufactured Treatment Devices (no RR)														
16.a. Manufactured Treatment Device-Hydrodynamic	0		1.82	2.67	0	0	10,859	10,859	20	0.00	3.83	0.77	3.06	
16.b. Manufactured Treatment Device-Filtering	0				0	0	0	0	20	0.00	0.00	0.00	0.00	
16.c. Manufactured Treatment Device-Generic	0				0	0	0	0	20	0.00	0.00	0.00	0.00	

Practice	Nitrogen Removal Efficiency (%)	Nitrogen Load from Upstream Practices (lbs)	Untreated Nitrogen Load to Practice (lbs)	Nitrogen Removed By Practice (lbs)	Remaining Nitrogen Load (lbs)
12. Wet Swale (Coastal Plain) (no RR)					
12.a. Wet Swale #1 (P-CNV-03)	25	0.00	0.00	0.00	0.00
12.b. Wet Swale #2 (P-CNV-03)	35	0.00	0.00	0.00	0.00
13. Filtering Practices (no RR)					
13.a.Filtering Practice #1 (P-FIL-06)	30	0.00	0.00	0.00	0.00
13.b. Filtering Practice #2 (P-FIL-06)	45	0.00	0.00	0.00	0.00
14. Constructed Wetland (no RR)					
14.a.Constructed Wetland #1 (P-BAS-01)	25	0.00	0.00	0.00	0.00
14.b. Constructed Wetland #2 (P-BAS-01)	55	0.00	0.00	0.00	0.00
15. Wet Ponds (no RR)					
15.a. Wet Pond #1 (P-BAS-02)	30	0.00	0.00	0.00	0.00
15.b. Wet Pond #1 (Coastal Plain) (P-BAS-02)	20	0.00	0.00	0.00	0.00
15.c. Wet Pond #2 (P-BAS-02)	40	0.00	0.00	0.00	0.00
15.d. Wet Pond #2 (Coastal Plain) (P-BAS-02)	30	0.00	0.00	0.00	0.00
16. Manufactured BMP (no RR)					
16.a. Manufactured Treatment Device-Hydrodynamic	0	0.00	49.33	0.00	49.33
16.b. Manufactured Treatment Device-Filtering	0	0.00	0.00	0.00	0.00
16.c. Manufactured Treatment Device-Generic	0	0.00	0.00	0.00	0.00

TOTAL IMPERVIOUS COVER TREATED (ac)	2.67	AREA CHECK: OK.
TOTAL MIXED OPEN TREATED (ac)	0.00	AREA CHECK: OK.
TOTAL MANAGED TURF AREA TREATED (ac)	1.82	AREA CHECK: OK.
TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr)	0.00	
TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (lb/yr)	3.83	
TOTAL PHOSPHORUS REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.77	
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.00	
TOTAL PHOSPHORUS LOAD REDUCTION ACHIEVED IN D.A. A (lb/yr)	0.77	
TOTAL PHOSPHORUS REMAINING AFTER APPLYING BMP LOAD REDUCTIONS IN D.A. A (lb/yr)	3.06	

SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS

NITROGEN REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.00
NITROGEN REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.00
TOTAL NITROGEN REMOVED IN D.A. A (lb/yr)	0.00

Filtering Manufactured Treatment Device (Two-Sided) - 181 Orleans Circle

Drainage Area B

VRRM 4.1, 2024

Drainage Area B Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv	Composite Loading P	Composite Loading N
Forest (acres)					0.00	0.00	0.00	0.00
Mixed Open (acres)					0.00	0.00	0.00	0.00
Managed Turf (acres)				0.44	0.44	0.25	0.85	9.01
Impervious Cover (acres)				0.75	0.75	0.95	0.86	12.33
				Total	1.19			

CLEAR BMP AREAS

Total Phosphorus Available for Removal in D.A. B (lb/yr)	1.02
Post Development Treatment Volume in D.A. B (ft3)	2,986

Stormwater Best Management Practices (RR = Runoff Reduction)

--Select from dropdown lists--

Practice	Runoff Reduction Credit (%)	Mixed Open Credit Area (acres)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft^3)	Runoff Reduction (ft^3)	Remaining Runoff Volume (ft^3)	Total BMP Treatment Volume (ft^3)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
1. Vegetated Roof (RR)														
1.a. Vegetated Roof #1 (P-FIL-02)	45					0	0	0	0		0.00	0.00	0.00	
1.b. Vegetated Roof #2 (P-FIL-02)	60					0	0	0	0		0.00	0.00	0.00	
2. Rooftop Disconnection (RR)														
2.a. Simple Disconnection to A/B Soils (P-FIL-01)	50				0	0	0	0	0	0.00	0.00	0.00	0.00	
2.b. Simple Disconnection to C/D Soils (P-FIL-01)	25				0	0	0	0	0	0.00	0.00	0.00	0.00	
2.c. To Soil Amended Filter Path as per specifications (existing C/D soils) (P-FIL-08)	50				0	0	0	0	0	0.00	0.00	0.00	0.00	
2.d. To Dry Well or French Drain #1, Micro-Infiltration #1 (P-FIL-04)	50				0	0	0	0	25	0.00	0.00	0.00	0.00	
2.e. To Dry Well or French Drain #2, Micro-Infiltration #2 (P-FIL-04)	90				0	0	0	0	25	0.00	0.00	0.00	0.00	
2.f. To Rain Garden #1, Micro-Bioretention #1 (P-FIL-05)	40				0	0	0	0	25	0.00	0.00	0.00	0.00	
2.g. To Rain Garden #2, Micro-Bioretention #2 (P-FIL-05)	80				0	0	0	0	50	0.00	0.00	0.00	0.00	
2.h. To Rainwater Harvesting (P-BAS-04)	0				0	0	0	0	0	0.00	0.00	0.00	0.00	
2.i. To Stormwater Planter, Urban Bioretention (P-FIL-05)	40				0	0	0	0	25	0.00	0.00	0.00	0.00	
3. Permeable Pavement (RR)														
3.a. Permeable Pavement #1 (P-FIL-03)	45				0	0	0	0	25	0.00	0.00	0.00	0.00	
3.b. Permeable Pavement #2 (P-FIL-03)	75					0	0	0	25		0.00	0.00	0.00	
4. Grass Channel (RR)														
4.a. Grass Channel A/B Soils (P-CNV-01)	20				0	0	0	0	15	0.00	0.00	0.00	0.00	
4.b. Grass Channel C/D Soils (P-CNV-01)	10				0	0	0	0	15	0.00	0.00	0.00	0.00	
4.c. Grass Channel with Compost Amended Soils as per specs (P-FIL-08)	20				0	0	0	0	15	0.00	0.00	0.00	0.00	
5. Dry Swale (RR)														
5.a. Dry Swale #1 (P-CNV-02)	40				0	0	0	0	20	0.00	0.00	0.00	0.00	
5.b. Dry Swale #2 (P-CNV-02)	60				0	0	0	0	40	0.00	0.00	0.00	0.00	
6. Bioretention (RR)														
6.a. Bioretention #1 or Micro-Bioretention #1 or Urban Bioretention (P-FIL-05)	40				0	0	0	0	25	0.00	0.00	0.00	0.00	
6.b. Bioretention #2 or Micro-Bioretention #2 (P-FIL-05)	80				0	0	0	0	50	0.00	0.00	0.00	0.00	
7. Infiltration (RR)														
7.a. Infiltration #1 (P-FIL-04)	50				0	0	0	0	25	0.00	0.00	0.00	0.00	
7.b. Infiltration #2 (P-FIL-04)	90				0	0	0	0	25	0.00	0.00	0.00	0.00	
8. Extended Detention Pond (RR)														
8.a. ED #1 (P-BAS-03)	0				0	0	0	0	15	0.00	0.00	0.00	0.00	
8.b. ED #2 (P-BAS-03)	15				0	0	0	0	15	0.00	0.00	0.00	0.00	
9. Sheetflow to Filter/Open Space (RR)														
9.a. Sheetflow to Conservation Area, A/B Soils (P-FIL-07)	75				0	0	0	0	0	0.00	0.00	0.00	0.00	
9.b. Sheetflow to Conservation Area, C/D Soils (P-FIL-07)	50				0	0	0	0	0	0.00	0.00	0.00	0.00	
9.c. Sheetflow to Vegetated Filter Strip, A Soils or Compost Amended B/C/D Soils (P-FIL-07 & P-FIL-08)	50				0	0	0	0	0	0.00	0.00	0.00	0.00	
10. Regenerative Stormwater Conveyance														
10.a. Regenerative Stormwater Conveyance (P-CNV-04)	0				0	0	0	0	20	0.00	0.00	0.00	0.00	
10.b. Regenerative Stormwater Conveyance (P-CNV-04)	0				0	0	0	0	40	0.00	0.00	0.00	0.00	
11. Tree BMP														
11.a. Trees over Pervious, A/B (P-FIL-09)	18				0	0	0	0	0	0.00	0.00	0.00	0.00	
11.b. Trees over Pervious, C/D (P-FIL-09)	12				0	0	0	0	0	0.00	0.00	0.00	0.00	
11.c. Trees over Impervious (P-FIL-09)	3.5				0	0	0	0	0	0.00	0.00	0.00	0.00	

Practice	Nitrogen Removal Efficiency (%)	Nitrogen Load from Upstream Practices (lbs)	Untreated Nitrogen Load to Practice (lbs)	Nitrogen Removed By Practice (lbs)	Remaining Nitrogen Load (lbs)
1. Vegetated Roof (RR)					
1.a. Vegetated Roof #1 (P-FIL-02)	0		0.00	0.00	0.00
1.b. Vegetated Roof #2 (P-FIL-02)	0		0.00	0.00	0.00
2. Rooftop Disconnection (RR)					
2.a. Simple Disconnection to A/B Soils (P-FIL-01)	0	0.00	0.00	0.00	0.00
2.b. Simple Disconnection to C/D Soils (P-FIL-01)	0	0.00	0.00	0.00	0.00
2.c. To Soil Amended Filter Path as per specifications (existing C/D soils) (P-FIL-08)	0	0.00	0.00	0.00	0.00
2.d. To Dry Well or French Drain #1, Micro-Infiltration #1 (P-FIL-04)	15	0.00	0.00	0.00	0.00
2.e. To Dry Well or French Drain #2, Micro-Infiltration #2 (P-FIL-04)	15	0.00	0.00	0.00	0.00
2.f. To Rain Garden #1, Micro-Bioretention #1 (P-FIL-05)	40	0.00	0.00	0.00	0.00
2.g. To Rain Garden #2, Micro-Bioretention #2 (P-FIL-05)	60	0.00	0.00	0.00	0.00
2.h. To Rainwater Harvesting (P-BAS-04)	0	0.00	0.00	0.00	0.00
2.i. To Stormwater Planter, Urban Bioretention (P-FIL-05)	40	0.00	0.00	0.00	0.00
3. Permeable Pavement (RR)					
3.a. Permeable Pavement #1 (P-FIL-03)	25	0.00	0.00	0.00	0.00
3.b. Permeable Pavement #2 (P-FIL-03)	25		0.00	0.00	0.00
4. Grass Channel (RR)					
4.a. Grass Channel A/B Soils (P-CNV-01)	20	0.00	0.00	0.00	0.00
4.b. Grass Channel C/D Soils (P-CNV-01)	20	0.00	0.00	0.00	0.00
4.c. Grass Channel with Compost Amended Soils as per specs (P-FIL-08)	20	0.00	0.00	0.00	0.00
5. Dry Swale (RR)					
5.a. Dry Swale #1 (P-CNV-02)	25	0.00	0.00	0.00	0.00
5.b. Dry Swale #2 (P-CNV-02)	35	0.00	0.00	0.00	0.00
6. Bioretention (RR)					
6.a. Bioretention #1 or Micro-Bioretention #1 or Urban Bioretention (P-FIL-05)	40	0.00	0.00	0.00	0.00
6.b. Bioretention #2 or Micro-Bioretention #2 (P-FIL-05)	60	0.00	0.00	0.00	0.00
7. Infiltration (RR)					
7.a. Infiltration #1 (P-FIL-04)	15	0.00	0.00	0.00	0.00
7.b. Infiltration #2 (P-FIL-04)	15	0.00	0.00	0.00	0.00
8. Extended Detention Pond (RR)					
8.a. ED #1 (P-BAS-03)	10	0.00	0.00	0.00	0.00
8.b. ED #2 (P-BAS-03)	10	0.00	0.00	0.00	0.00
9. Sheetflow to Filter/Open Space (RR)					
9.a. Sheetflow to Conservation Area, A/B Soils (P-FIL-07)	0	0.00	0.00	0.00	0.00
9.b. Sheetflow to Conservation Area, C/D Soils (P-FIL-07)	0	0.00	0.00	0.00	0.00
9.c. Sheetflow to Vegetated Filter Strip, A Soils or Compost Amended B/C/D Soils (P-FIL-07 & P-FIL-08)	0	0.00	0.00	0.00	0.00
10. Regenerative Stormwater Conveyance					
10.a. Regenerative Stormwater Conveyance (P-CNV-04)	25	0.00	0.00	0.00	0.00
10.b. Regenerative Stormwater Conveyance (P-CNV-04)	35	0.00	0.00	0.00	0.00
11. Tree BMP					
11.a. Trees over Pervious, A/B (P-FIL-09)	0	0.00	0.00	0.00	0.00
11.b. Trees over Pervious, C/D (P-FIL-09)	0	0.00	0.00	0.00	0.00
11.c. Trees over Impervious (P-FIL-09)	0	0.00	0.00	0.00	0.00

TOTAL IMPERVIOUS COVER TREATED (ac)	0.00	AREA CHECK: OK.
TOTAL MIXED OPEN TREATED (ac)	0.00	AREA CHECK: OK.
TOTAL MANAGED TURF AREA TREATED (ac)	0.00	AREA CHECK: OK.
TOTAL RUNOFF REDUCTION IN D.A. B (ft3)	0	
TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. B (lb/yr)	1.02	
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. B (lb/yr)	0.00	
TOTAL PHOSPHORUS REMAINING AFTER APPLYING RUNOFF REDUCTION PRACTICES IN D.A. B (lb/yr)	1.02	

SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS

TOTAL RUNOFF REDUCTION IN D.A. B (ft3)	0
NITROGEN REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. B (lb/yr)	0.00

SEE WATER QUALITY COMPLIANCE TAB FOR SITE CALCULATIONS (Information Only)

Practice	Runoff Reduction Credit (%)	Mixed Open Credit Area (acres)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft^3)	Runoff Reduction (ft^3)	Remaining Runoff Volume (ft^3)	Total BMP Treatment Volume (ft^3)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
12. Wet Swale (no RR)														
12.a. Wet Swale #1 (P-CNV-03)	0				0	0	0	0	20	0.00	0.00	0.00	0.00	
12.b. Wet Swale #2 (P-CNV-03)	0				0	0	0	0	40	0.00	0.00	0.00	0.00	
13. Filtering Practices (no RR)														
13.a.Filtering Practice #1 (P-FIL-06)	0				0	0	0	0	60	0.00	0.00	0.00	0.00	
13.b. Filtering Practice #2 (P-FIL-06)	0				0	0	0	0	65	0.00	0.00	0.00	0.00	
14. Constructed Wetland (no RR)														
14.a.Constructed Wetland #1 (P-BAS-01)	0				0	0	0	0	50	0.00	0.00	0.00	0.00	
14.b. Constructed Wetland #2 (P-BAS-01)	0				0	0	0	0	75	0.00	0.00	0.00	0.00	
15. Wet Ponds (no RR)														
15.a. Wet Pond #1 (P-BAS-02)	0				0	0	0	0	50	0.00	0.00	0.00	0.00	
15.b. Wet Pond #1 (Coastal Plain) (P-BAS-02)	0				0	0	0	0	45	0.00	0.00	0.00	0.00	
15.c. Wet Pond #2 (P-BAS-02)	0				0	0	0	0	75	0.00	0.00	0.00	0.00	
15.d. Wet Pond #2 (Coastal Plain) (P-BAS-02)	0				0	0	0	0	65	0.00	0.00	0.00	0.00	
16. Manufactured Treatment Devices (no RR)														
16.a. Manufactured Treatment Device-Hydrodynamic	0				0	0	0	0	20	0.00	0.00	0.00	0.00	
16.b. Manufactured Treatment Device-Filtering	0		0.44	0.75	0	0	2,986	2,986	40	0.00	1.02	0.41	0.61	
16.c. Manufactured Treatment Device-Generic	0				0	0	0	0	20	0.00	0.00	0.00	0.00	

Practice	Nitrogen Removal Efficiency (%)	Nitrogen Load from Upstream Practices (lbs)	Untreated Nitrogen Load to Practice (lbs)	Nitrogen Removed By Practice (lbs)	Remaining Nitrogen Load (lbs)
12. Wet Swale (Coastal Plain) (no RR)					
12.a. Wet Swale #1 (P-CNV-03)	25	0.00	0.00	0.00	0.00
12.b. Wet Swale #2 (P-CNV-03)	35	0.00	0.00	0.00	0.00
13. Filtering Practices (no RR)					
13.a.Filtering Practice #1 (P-FIL-06)	30	0.00	0.00	0.00	0.00
13.b. Filtering Practice #2 (P-FIL-06)	45	0.00	0.00	0.00	0.00
14. Constructed Wetland (no RR)					
14.a.Constructed Wetland #1 (P-BAS-01)	25	0.00	0.00	0.00	0.00
14.b. Constructed Wetland #2 (P-BAS-01)	55	0.00	0.00	0.00	0.00
15. Wet Ponds (no RR)					
15.a. Wet Pond #1 (P-BAS-02)	30	0.00	0.00	0.00	0.00
15.b. Wet Pond #1 (Coastal Plain) (P-BAS-02)	20	0.00	0.00	0.00	0.00
15.c. Wet Pond #2 (P-BAS-02)	40	0.00	0.00	0.00	0.00
15.d. Wet Pond #2 (Coastal Plain) (P-BAS-02)	30	0.00	0.00	0.00	0.00
16. Manufactured BMP (no RR)					
16.a. Manufactured Treatment Device-Hydrodynamic	0	0.00	0.00	0.00	0.00
16.b. Manufactured Treatment Device-Filtering	0	0.00	13.21	0.00	13.21
16.c. Manufactured Treatment Device-Generic	0	0.00	0.00	0.00	0.00

TOTAL IMPERVIOUS COVER TREATED (ac)	0.75	AREA CHECK: OK.
TOTAL MIXED OPEN TREATED (ac)	0.00	AREA CHECK: OK.
TOTAL MANAGED TURF AREA TREATED (ac)	0.44	AREA CHECK: OK.
TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr)	0.00	
TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. B (lb/yr)	1.02	
TOTAL PHOSPHORUS REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. B (lb/yr)	0.41	
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. B (lb/yr)	0.00	
TOTAL PHOSPHORUS LOAD REDUCTION ACHIEVED IN D.A. B (lb/yr)	0.41	
TOTAL PHOSPHORUS REMAINING AFTER APPLYING BMP LOAD REDUCTIONS IN D.A. B (lb/yr)	0.61	

SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS

NITROGEN REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. B (lb/yr)	0.00
NITROGEN REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. B (lb/yr)	0.00
TOTAL NITROGEN REMOVED IN D.A. B (lb/yr)	0.00

Filtering Manufactured Treatment Device (One-Sided) - 181 Orleans Circle

Drainage Area C

VRRM 4.1, 2024

Drainage Area C Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv	Composite Loading P	Composite Loading N
Forest (acres)					0.00	0.00	0.00	0.00
Mixed Open (acres)					0.00	0.00	0.00	0.00
Managed Turf (acres)				0.31	0.31	0.25	0.85	9.01
Impervious Cover (acres)				0.59	0.59	0.95	0.86	12.33
				Total	0.90			

CLEAR BMP AREAS

Total Phosphorus Available for Removal in D.A. C (lb/yr)	0.77
Post Development Treatment Volume in D.A. C (ft3)	2,316

Stormwater Best Management Practices (RR = Runoff Reduction)

--Select from dropdown lists--

Practice	Runoff Reduction Credit (%)	Mixed Open Credit Area (acres)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft^3)	Runoff Reduction (ft^3)	Remaining Runoff Volume (ft^3)	Total BMP Treatment Volume (ft^3)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed	Nitrogen Removal Efficiency (%)	Nitrogen Load from Upstream Practices (lbs)	Untreated Nitrogen Load to Practice (lbs)	Nitrogen Removed By Practice (lbs)	Remaining Nitrogen Load (lbs)
1. Vegetated Roof (RR)															**1. Vegetated Roof (RR)**				
1.a. Vegetated Roof #1 (P-FIL-02)	45					0	0	0	0		0.00	0.00	0.00		0		0.00	0.00	0.00
1.b. Vegetated Roof #2 (P-FIL-02)	60					0	0	0	0		0.00	0.00	0.00		0		0.00	0.00	0.00
2. Rooftop Disconnection (RR)															**2. Rooftop Disconnection (RR)**				
2.a. Simple Disconnection to A/B Soils (P-FIL-01)	50				0	0	0	0	0	0.00	0.00	0.00	0.00		0	0.00	0.00	0.00	0.00
2.b. Simple Disconnection to C/D Soils (P-FIL-01)	25				0	0	0	0	0	0.00	0.00	0.00	0.00		0	0.00	0.00	0.00	0.00
2.c. To Soil Amended Filter Path as per specifications (existing C/D soils) (P-FIL-08)	50				0	0	0	0	0	0.00	0.00	0.00	0.00		0	0.00	0.00	0.00	0.00
2.d. To Dry Well or French Drain #1, Micro-Infiltration #1 (P-FIL-04)	50				0	0	0	0	25	0.00	0.00	0.00	0.00		15	0.00	0.00	0.00	0.00
2.e. To Dry Well or French Drain #2, Micro-Infiltration #2 (P-FIL-04)	90				0	0	0	0	25	0.00	0.00	0.00	0.00		15	0.00	0.00	0.00	0.00
2.f. To Rain Garden #1, Micro-Bioretention #1 (P-FIL-05)	40				0	0	0	0	25	0.00	0.00	0.00	0.00		40	0.00	0.00	0.00	0.00
2.g. To Rain Garden #2, Micro-Bioretention #2 (P-FIL-05)	80				0	0	0	0	50	0.00	0.00	0.00	0.00		60	0.00	0.00	0.00	0.00
2.h. To Rainwater Harvesting (P-BAS-04)	0				0	0	0	0	0	0.00	0.00	0.00	0.00		0	0.00	0.00	0.00	0.00
2.i. To Stormwater Planter, Urban Bioretention (P-FIL-05)	40				0	0	0	0	25	0.00	0.00	0.00	0.00		40	0.00	0.00	0.00	0.00
3. Permeable Pavement (RR)															**3. Permeable Pavement (RR)**				
3.a. Permeable Pavement #1 (P-FIL-03)	45				0	0	0	0	25	0.00	0.00	0.00	0.00		25	0.00	0.00	0.00	0.00
3.b. Permeable Pavement #2 (P-FIL-03)	75					0	0	0	25		0.00	0.00	0.00		25		0.00	0.00	0.00
4. Grass Channel (RR)															**4. Grass Channel (RR)**				
4.a. Grass Channel A/B Soils (P-CNV-01)	20				0	0	0	0	15	0.00	0.00	0.00	0.00		20	0.00	0.00	0.00	0.00
4.b. Grass Channel C/D Soils (P-CNV-01)	10				0	0	0	0	15	0.00	0.00	0.00	0.00		20	0.00	0.00	0.00	0.00
4.c. Grass Channel with Compost Amended Soils as per specs (P-FIL-08)	20				0	0	0	0	15	0.00	0.00	0.00	0.00		20	0.00	0.00	0.00	0.00
5. Dry Swale (RR)															**5. Dry Swale (RR)**				
5.a. Dry Swale #1 (P-CNV-02)	40				0	0	0	0	20	0.00	0.00	0.00	0.00		25	0.00	0.00	0.00	0.00
5.b. Dry Swale #2 (P-CNV-02)	60				0	0	0	0	40	0.00	0.00	0.00	0.00		35	0.00	0.00	0.00	0.00
6. Bioretention (RR)															**6. Bioretention (RR)**				
6.a. Bioretention #1 or Micro-Bioretention #1 or Urban Bioretention (P-FIL-05)	40				0	0	0	0	25	0.00	0.00	0.00	0.00		40	0.00	0.00	0.00	0.00
6.b. Bioretention #2 or Micro-Bioretention #2 (P-FIL-05)	80				0	0	0	0	50	0.00	0.00	0.00	0.00		60	0.00	0.00	0.00	0.00
7. Infiltration (RR)															**7. Infiltration (RR)**				
7.a. Infiltration #1 (P-FIL-04)	50				0	0	0	0	25	0.00	0.00	0.00	0.00		15	0.00	0.00	0.00	0.00
7.b. Infiltration #2 (P-FIL-04)	90				0	0	0	0	25	0.00	0.00	0.00	0.00		15	0.00	0.00	0.00	0.00
8. Extended Detention Pond (RR)															**8. Extended Detention Pond (RR)**				
8.a. ED #1 (P-BAS-03)	0				0	0	0	0	15	0.00	0.00	0.00	0.00		10	0.00	0.00	0.00	0.00
8.b. ED #2 (P-BAS-03)	15				0	0	0	0	15	0.00	0.00	0.00	0.00		10	0.00	0.00	0.00	0.00
9. Sheetflow to Filter/Open Space (RR)															**9. Sheetflow to Filter/Open Space (RR)**				
9.a. Sheetflow to Conservation Area, A/B Soils (P-FIL-07)	75				0	0	0	0	0	0.00	0.00	0.00	0.00		0	0.00	0.00	0.00	0.00
9.b. Sheetflow to Conservation Area, C/D Soils (P-FIL-07)	50				0	0	0	0	0	0.00	0.00	0.00	0.00		0	0.00	0.00	0.00	0.00
9.c. Sheetflow to Vegetated Filter Strip, A Soils or Compost Amended B/C/D Soils (P-FIL-07 & P-FIL-08)	50				0	0	0	0	0	0.00	0.00	0.00	0.00		0	0.00	0.00	0.00	0.00
10. Regenerative Stormwater Conveyance															**10. Regenerative Stormwater Conveyance**				
10.a. Regenerative Stormwater Conveyance (P-CNV-04)	0				0	0	0	0	20	0.00	0.00	0.00	0.00		25	0.00	0.00	0.00	0.00
10.b. Regenerative Stormwater Conveyance (P-CNV-04)	0				0	0	0	0	40	0.00	0.00	0.00	0.00		35	0.00	0.00	0.00	0.00
11. Tree BMP															**11. Tree BMP**				
11.a. Trees over Pervious, A/B (P-FIL-09)	18				0	0	0	0	0	0.00	0.00	0.00	0.00		0	0.00	0.00	0.00	0.00
11.b. Trees over Pervious, C/D (P-FIL-09)	12				0	0	0	0	0	0.00	0.00	0.00	0.00		0	0.00	0.00	0.00	0.00
11.c. Trees over Impervious (P-FIL-09)	3.5				0	0	0	0	0	0.00	0.00	0.00	0.00		0	0.00	0.00	0.00	0.00

TOTAL IMPERVIOUS COVER TREATED (ac)	0.00	AREA CHECK: OK.
TOTAL MIXED OPEN TREATED (ac)	0.00	AREA CHECK: OK.
TOTAL MANAGED TURF AREA TREATED (ac)	0.00	AREA CHECK: OK.
TOTAL RUNOFF REDUCTION IN D.A. C (ft3)	0	
TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. C (lb/yr)	0.77	
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. C (lb/yr)	0.00	
TOTAL PHOSPHORUS REMAINING AFTER APPLYING RUNOFF REDUCTION PRACTICES IN D.A. C (lb/yr)	0.77	

SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS

TOTAL RUNOFF REDUCTION IN D.A. C (ft3)	0
NITROGEN REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. C (lb/yr)	0.00

SEE WATER QUALITY COMPLIANCE TAB FOR SITE CALCULATIONS (Information Only)

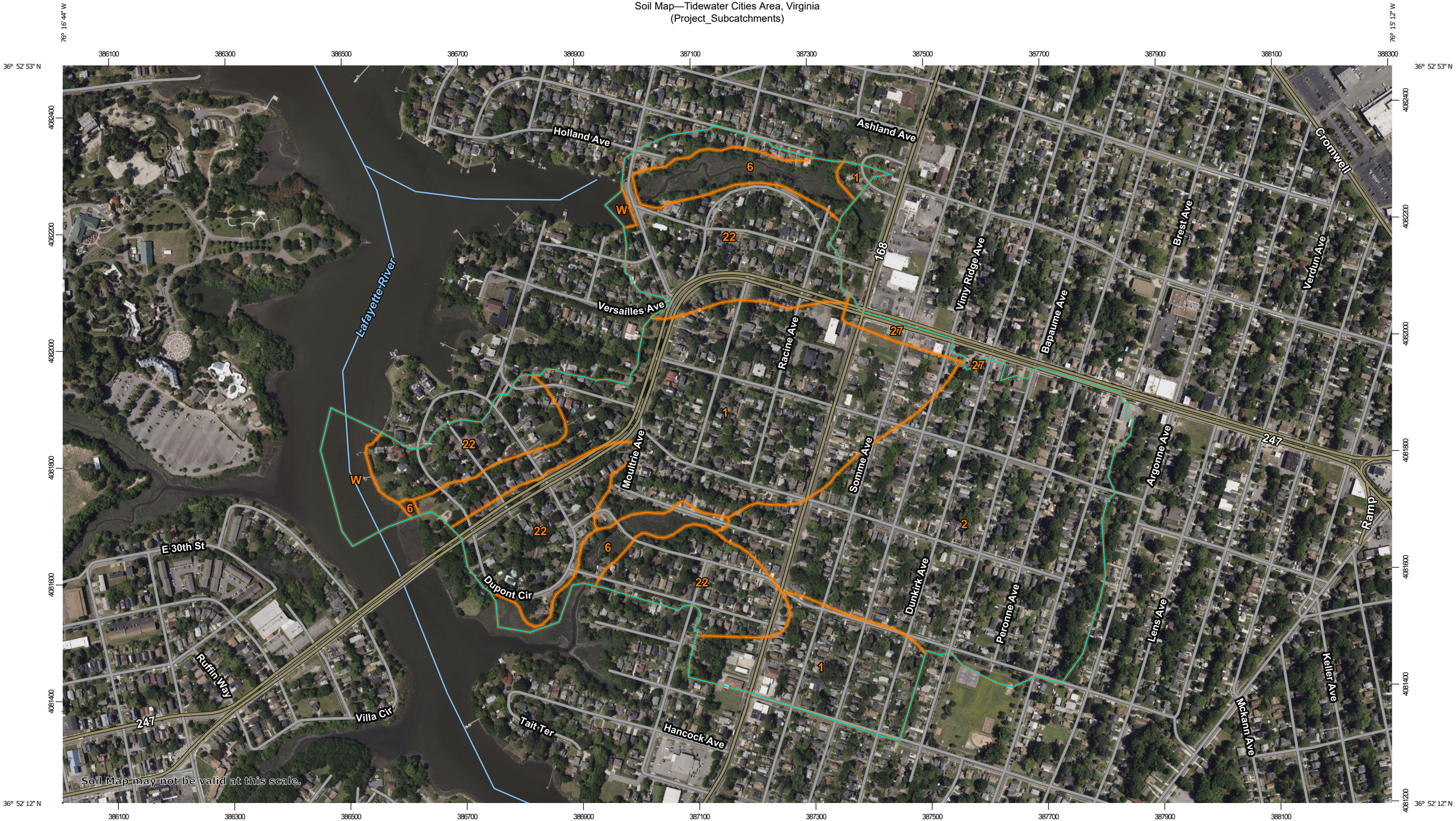
Practice	Runoff Reduction Credit (%)	Mixed Open Credit Area (acres)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft^3)	Runoff Reduction (ft^3)	Remaining Runoff Volume (ft^3)	Total BMP Treatment Volume (ft^3)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed	Nitrogen Removal Efficiency (%)	Nitrogen Load from Upstream Practices (lbs)	Untreated Nitrogen Load to Practice (lbs)	Nitrogen Removed By Practice (lbs)	Remaining Nitrogen Load (lbs)
12. Wet Swale (no RR)															**12. Wet Swale (Coastal Plain) (no RR)**				
12.a. Wet Swale #1 (P-CNV-03)	0				0	0	0	0	20	0.00	0.00	0.00	0.00		25	0.00	0.00	0.00	0.00
12.b. Wet Swale #2 (P-CNV-03)	0				0	0	0	0	40	0.00	0.00	0.00	0.00		35	0.00	0.00	0.00	0.00
13. Filtering Practices (no RR)															**13. Filtering Practices (no RR)**				
13.a.Filtering Practice #1 (P-FIL-06)	0				0	0	0	0	60	0.00	0.00	0.00	0.00		30	0.00	0.00	0.00	0.00
13.b. Filtering Practice #2 (P-FIL-06)	0				0	0	0	0	65	0.00	0.00	0.00	0.00		45	0.00	0.00	0.00	0.00
14. Constructed Wetland (no RR)															**14. Constructed Wetland (no RR)**				
14.a.Constructed Wetland #1 (P-BAS-01)	0				0	0	0	0	50	0.00	0.00	0.00	0.00		25	0.00	0.00	0.00	0.00
14.b. Constructed Wetland #2 (P-BAS-01)	0				0	0	0	0	75	0.00	0.00	0.00	0.00		55	0.00	0.00	0.00	0.00
15. Wet Ponds (no RR)															**15. Wet Ponds (no RR)**				
15.a. Wet Pond #1 (P-BAS-02)	0				0	0	0	0	50	0.00	0.00	0.00	0.00		30	0.00	0.00	0.00	0.00
15.b. Wet Pond #1 (Coastal Plain) (P-BAS-02)	0				0	0	0	0	45	0.00	0.00	0.00	0.00		20	0.00	0.00	0.00	0.00
15.c. Wet Pond #2 (P-BAS-02)	0				0	0	0	0	75	0.00	0.00	0.00	0.00		40	0.00	0.00	0.00	0.00
15.d. Wet Pond #2 (Coastal Plain) (P-BAS-02)	0				0	0	0	0	65	0.00	0.00	0.00	0.00		30	0.00	0.00	0.00	0.00
16. Manufactured Treatment Devices (no RR)															**16. Manufactured BMP (no RR)**				
16.a. Manufactured Treatment Device-Hydrodynamic	0				0	0	0	0	20	0.00	0.00	0.00	0.00		0	0.00	0.00	0.00	0.00
16.b. Manufactured Treatment Device-Filtering	0		0.31	0.59	0	0	2,316	2,316	40	0.00	0.77	0.31	0.46		0	0.00	10.07	0.00	10.07
16.c. Manufactured Treatment Device-Generic	0				0	0	0	0	20	0.00	0.00	0.00	0.00		0	0.00	0.00	0.00	0.00

TOTAL IMPERVIOUS COVER TREATED (ac)	0.59
TOTAL MIXED OPEN TREATED (ac)	0.00
TOTAL MANAGED TURF AREA TREATED (ac)	0.31
TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr)	0.00
TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. C (lb/yr)	0.77
TOTAL PHOSPHORUS REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. C (lb/yr)	0.31
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. C (lb/yr)	0.00
TOTAL PHOSPHORUS LOAD REDUCTION ACHIEVED IN D.A. C (lb/yr)	0.31
TOTAL PHOSPHORUS REMAINING AFTER APPLYING BMP LOAD REDUCTIONS IN D.A. C (lb/yr)	0.46

SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS

NITROGEN REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. C (lb/yr)	0.00
NITROGEN REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. C (lb/yr)	0.00
TOTAL NITROGEN REMOVED IN D.A. C (lb/yr)	0.00

Soil Map—Tidewater Cities Area, Virginia
(Project_Subcatchments)



Map Scale: 1:6,160 if printed on B landscape (17" x 11") sheet.

N

Meters
0 50 100 200 300

Feet
0 250 500 1000 1500

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Map Unit Polygons

Soil Map Unit Lines

Soil Map Unit Points

Special Point Features

Blowout

Borrow Pit

Clay Spot

Closed Depression

Gravel Pit

Gravelly Spot

Landfill

Lava Flow

Marsh or swamp

Mine or Quarry

Miscellaneous Water

Perennial Water

Rock Outcrop

Saline Spot

Sandy Spot

Severely Eroded Spot

Sinkhole

Slide or Slip

Sodic Spot

Spoil Area

Stony Spot

Very Stony Spot

Wet Spot

Other

Special Line Features

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Tidewater Cities Area, Virginia
Survey Area Data: Version 22, Aug 30, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 9, 2022—Aug 15, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
1	Altavista-Urban land complex, 0 to 3 percent slopes	60.0	32.8%
2	Augusta-Urban land complex, 0 to 2 percent slopes	57.7	31.5%
6	Bohicket muck, 0 to 1 percent slopes, very frequently flooded	10.2	5.6%
22	State-Urban land complex, 0 to 3 percent slopes	48.6	26.6%
27	Urban land	1.6	0.9%
W	Water	4.9	2.7%
Totals for Area of Interest		**183.1**	**100.0%**

APPENDX E – OBSERVATIONS

SIDEWALK OBSERVATIONS

Sidewalks had deformations at expansion joints and spalling in several locations.

CURB RAMP OBSERVATIONS

Curb ramps were missing a ramp on the opposite side of the street.

Curb ramps at intersections were found to be obstructed by medians.

Curb ramps appeared to guiding pedestrians diagonally across the intersection without a clear destination.