CITY OF FAIRFAX

Main Street Road Safety Audit

Final Report

Metropolitan Washington Council of Governments

vhb

Table of Contents

Acronyms

AADT	annual average daily traffic
AASHTO	American Association of State Highway and Transportation Officials
ACS	American Community Survey
ADA	Americans with Disabilities Act
ATR	automated traffic recorder
CMF	crash modification factor
CRF	crash reduction factor
FCDOT	Fairfax County Department of Transportation
FHWA	Federal Highway Administration
FYA	flashing yellow arrow
HCM	Highway Capacity Manual
HSM	Highway Safety Manual
IA	Interim Approval
LOS	level of service
MPH	miles per hour
MUTCD	Manual on Uniform Traffic Control Devices for Streets and Highways
MWCOG	Metropolitan Washington Council of Governments
NCHRP	National Cooperative Highway Research Program
PHB	pedestrian hybrid beacon
PROWAG	Public Right-of-Way Accessibility Guidelines
PSAP	pedestrian safety action plan
RRFB	rectangular rapid flashing beacon
RSA	road safety audit
TMC	turning movement counts
TWLTL	two-way left turn lane
UVC	Uniform Vehicle Code
VDOT	Virginia Department of Transportation
VPD	vehicles per day
WMATA	Washington Metropolitan Area Transit Authority

1

Introduction

1.1. Study Purpose

This report summarizes the preliminary findings of the existing conditions and data collection for Main Street in the City of Fairfax. The City of Fairfax was awarded a grant by the Metropolitan Washington Council of Governments (MWCOG) to conduct a road safety audit (RSA) and identify safety challenges faced by all road users on Main Street.

Between January 2018 and August 2023, over 250 crashes were reported along the corridor, including multiple injuries and two pedestrian fatalities. Main Street is also identified in the top 1 percent of regional and state priorities in Virginia's Pedestrian Safety Action Plan (PSAP). The conclusion of this report includes a prioritized list of short- and long-term strategies that the City may immediately implement or develop into concepts for future funding and implementation.

In accordance with the Federal Highway Administration (FHWA), the goal of an RSA is to answer the following questions:

- What elements of the road may present a safety concern: to what extent, to which road users, and under what circumstances?
- What opportunities exist to eliminate or mitigate identified safety concerns?

This RSA also incorporates principles of the Safe System Approach, which aims to reduce fatalities and life-changing injuries on our roadway system.[1] This involves enhancing transportation systems through five elements: safer people, safer roads, safer vehicles, safer speeds, and post-crash care (shown in **Figure 1**). This study offers recommendations for enhancing safety, and emphasizes the role of education, engagement, enforcement, and emergency response in preventing serious crashes.

Figure 1. Elements and principles of the Safe System Approach *(Source: FHWA)*

1 Federal Highway Administration. "What Is a Safe System Approach?". 2022. https://www.transportation.gov/NRSS/SafeSystem

1.2. Study Area

The study area is a 1.7-mile portion of Main Street between Blenheim Road and Pickett Road within the City of Fairfax. The main trip generators within and near the study area include several low- to medium-density residential neighborhoods, older living facilities (Little River Glen Senior Center, Olley Glen Apartments), and several commercial shopping plazas such as The Shops at Fairfax, Main Street Shopping Center, Fair City Mall, and Main Street Marketplace shopping centers. Institutional trip generators in and around the study area include George Mason University, Woodson High School, and Northern Virginia Community College. An overview of the study area is shown in **Figure 2**.

1.3. RSA Details

To identify and better understand the safety needs and the potential for improvement, the project team conducted a multimodal RSA, which included data analysis, a field review, and post field review analysis. The field review with the full RSA team was held on March 14, 2024, from 7:00 am to 11:30 am.

Additional field observations throughout the corridor were conducted by a focus team during the afternoon and dark hours. This allowed the RSA team to gather input and observations with the broader group, while still observing the corridor during a variety of times of day/conditions. This RSA also included a special focus on lighting levels as part of a FHWA initiative to incorporate lighting considerations in the RSA process for addressing nighttime pedestrian safety. RSA attendees included:

- Curt McCullough, City of Fairfax – Public Works Department
- Chloe Ritter, City of Fairfax – Public Works Department
- Brock Rutter, City of Fairfax Police Department
- Mike Bartholme, City of Fairfax Police Department
- Sunny Sarna, City of Fairfax – Public Works Department
- Paul D'Andrade, Fairfax County Public Schools – Transportation
- Kevin Greata, Fairfax County Public Schools – Woodson High School Principal
- Derrick Gwyn, Fairfax County Public Schools – Safety
- Merari Zemany, Fairfax County Public Schools – Safe Routes to School Coordinator
- Scott Gable, Federal Highway Administration – Office of Safety
- Asma Ali, T3 Design
- Deema Allan, T3 Design
- Taylor Bonner, VHB
- Ian Pike, VHB
- Eric Tang, VHB

Figure 2. Overview of the Main Street Study Area

2

Existing Conditions

2.1. Study Area Characteristics

Main Street is an east-west oriented principal arterial in the City of Fairfax. The study area makes up part of the Virginia State Route 236 network. Main Street connects to several principal arterial roadways in both eastern and western directions, including I-495 Capital Beltway Outer Loop, Chain Bridge Road (Route 123), Blenheim Boulevard / Lee Highway (Route 29), and Fairfax Boulevard Route (Route 50). Within the study area, the majority of Main Street is a four-lane divided roadway commonly featuring right and left lanes at intersections along the corridor. The corridor becomes a six-lane divided roadway east of Estel Road to the project limits at Pickett Road. On Main Street, traffic control at intersections are either signal-controlled or two-way stop-controlled, with the stop signs controlling on the minor roads.

The terrain type on Main Street can be described as 'Rolling Terrain,' where several grade changes occur throughout the corridor that may limit vertical sight distance. Sidewalks are present on both sides of Main Street throughout the study area with connecting sidewalk facilities on most minor streets. For bicyclist facilities, the Fairfax City Bike Trail runs in the southbound direction directly south of Main Street at the Main Street Marketplace. Additionally, Daniels Run Trail runs in the northbound-southbound direction and can be accessed via a shared-use path directly east of the Main Street Marketplace on Main Street. At this time, there is no wayfinding for the connection between Fairfax City Bike Trail and Daniels Run Trail across Main Street. There are no bicyclist facilities on Main Street within the study area.

Land use along this corridor is primarily medium- and low-density residential and commercial uses. There are several shopping malls and plazas along the corridor that generate vehicle traffic. Additionally, Woodson High School and Frost Middle School are located in a complex between Whitacre Road and Pickett Road. A summary of the corridor characteristics is shown in **Table 1**.

Table 1. Corridor Characteristics

Characteristics	Description
Orientation	» East-West
Functional Classification	» Principal Arterial
Estimated Annual Average Daily Traffic (AADT) in 2022 *(vehicles per day)*[2]	» 34,000 vpd
Speed Limit *(miles per hour)*	» 35 *(between the City of Fairfax – Fairfax County line and Farrcroft Drive/ Roberts Road)* » 25 *(between Farrcroft Drive/Roberts Road and East Street/Blenheim Boulevard)* » 25 *(school zone from 7:00-8:25 am and 2-3:25 pm between Pickett Road and Estel Road)*
Number of Lanes	» 4 lanes *(two in each direction)* west of Estel Road » 6 lanes *(three in each direction)* east of Estel Road
Lane Widths *(feet)*	» 12' *(Typical)*
Roadway Features	» Divided roadway with landscaped median throughout the corridor » Westbound: Two lanes throughout the study area with transit only lane between Pickett Road and Fairfax Square » Eastbound: Two lanes west of Estel Road, three lanes east of Estel Road » Right and left turn lanes at most intersections along the corridor
Land Uses	» Low- and Medium-Density Residential, Commercial *(shopping centers and plazas in multiple locations)*, Institutional *(Woodson High School between Whitacre Road and Pickett Road)*
Transit Presence	» 11 bus stops in the westbound direction, 10 bus stops in the eastbound direction – 2 transit providers. » Washington Metropolitan Area Transit Authority *(WMATA)*: Route 29K » Fairfax's City CUE service: Route Green 1, Route Green 2
Pedestrian Facilities	» Sidewalks along both sides of Main Street for the entire corridor. Marked crosswalks are provided at 10 intersections along the corridor – all at signalized intersections except Main Street and Lyndhurst Drive/Trapp Road
Bicycle Facilities	» None on Main Street. Access to Fairfax City Bike Trail and Daniels Run Trail at Main Street Marketplace *(northbound-southbound)*.

2 Estimated Annual Average Daily Traffic with Factored Short Term Traffic Count Data with Growth Element, per VDOT https://www.vdot.virginia.gov/doing-business/technical-guidance-and-support/traffic-operations/traffic-counts/

Table 2 presents the various infrastructure features for vehicles, pedestrians, bicyclists, and transit users at intersections on Main Street with marked pedestrian crossings. The table details features at these intersections including the presence of signals, if the location is within a school zone, has transit stops, is near existing or planned bicyclist facilities, and the walking distances and times from one marked crosswalk to the next closest.

Table 2. Overview of features for intersections with pedestrian crossings across Main Street and nearby bike facilities

Intersection	Signalized	Un-signalized	School Zone	Transit Stop Presence	Bike Facilities on Intersecting Road	Marked Crosswalks (East/West Sides)	Spacing and Walk Time (3.5 feet/sec) from Next Closest Marked Crosswalk
Main Street and Pickett Road	X	-	X	X	Separated Bike Facilities proposed on Pickett Road (long-term)	E+W	1500′ (East) 7.1 minutes 1100′ (West) 5.2 minutes
Main Street and Fair City Mall Shopping Center Driveway	X	-	X	X	-	W	1100′ (East) 5.2 minutes 700′ (West) 3.3 minutes
Main Street and Whitacre Road	X	-	X	X	-	E	700′ (East) 3.3 minutes 800′ (West) 3.8 minutes
Main Street and Lyndhurst Drive/ Trapp Road	-	X		X	Proposed Neighborway on nearby Estel Road	W**	800′ (East) 3.8 minutes 1900′ (West) 9.0 minutes
Main Street and Burke Station Road	X	-	-	-	-	E+W	1900′ (East) 9.0 minutes 1300′ (West) 6.2 minutes
Main Street and Tedrich Boulevard	X	-	-	X	Proposed Neighborway on Tedrich Boulevard	W	1300′ (East) 6.2 minutes 1100′ (West) 5.2 minutes
Main Street and Roberts Road/ Farrcroft Drive	X	-	-	X	Proposed Neighborway on Farrcroft Drive	W	1500′ (East) 7.1 minutes 1500′ (West) 7.1 minutes
Main Street and Locust Street	-	X	-	X	-	None	750′ (East) 3.6 minutes 750′ (West) 3.6 minutes
Main Street and Marketplace Shopping Center Driveway	X	-	-	X	Daniels Run Trail	W	1500′ (East) 7.1 minutes 600′ (West) 2.9 minutes
Main Street and East Street/ Blenheim Boulevard	X	-	-	-	-	E+W	600′ (East) 2.9 minutes 300′ (West) 1.4 minutes

**Indicates crosswalk spacing from middle of the intersection without marked crosswalks.*

***Indicates crosswalk is uncontrolled (not located at a signal or traffic control device requiring traffic on Main Street to stop)*

2.2. Relevant Planning Documents

Planning level documents for the City of Fairfax and regional multimodal plans were reviewed to identify planned or ongoing projects and long-term goals for the corridor. Some of these plans include recommendations and proposed improvements for the study area that may impact the safety alternatives developed as part of this RSA. The relevant planning documents that were reviewed in this study were:

- City of Fairfax Comprehensive Plan
- Small Area Plans for Old Town
- Main Street/Little River Turnpike Bicycle Facility Plan
- City of Fairfax CUE Bus Plan 2017
- City of Fairfax Multimodal Plan 2017
- City of Fairfax Bike Plan 2021

Documents outlined in this section reflect conditions at the time of plan development and may not reflect changes to transit services or agency priorities.

2.2.1. 2035 City of Fairfax Comprehensive Plan

The City of Fairfax 2035 Comprehensive Plan was adopted in 2019 and last updated in 2022. The plan is supported by the Multimodal Transportation Plan (2017) and includes a vision and plans/programs for multimodal transportation within the City. As part of this, the plan proposes to implement Complete Streets improvements on major corridors, including Main Street and Blenheim Boulevard.

The plan also focuses on improving transit services and facilities along key corridors, which includes Main Street and Blenheim Boulevard. The plan identifies the intersection of Main Street and Pickett Road as a significant transit transfer location. The City aims to enhance this area with quality passenger amenities, expanded information, and improved pedestrian facilities.

With respect to bicyclist infrastructure, the plan incorporates action items to expand trail and bicycle networks, aiming to connect to regional facilities and destinations. Main Street and Blenheim Boulevard are designated as locations for proposed on-street bicycle facilities. Furthermore, the area along Main Street from Blenheim Boulevard to Locust Street is proposed as a concentrated area for bicycle-supportive infrastructure. In line with this, the City plans to collaborate with Fairfax County and the Virginia Department of Transportation (VDOT) to provide connecting bicyclist facilities on Main Street with the planned Little River Turnpike bicycle facility.

2.2.2. Small Area Plans for Old Town

The City of Fairfax Old Town Small Area Plan is a comprehensive vision for the future of Fairfax's historic downtown. This plan provides neighborhood-level strategies to guide the development of the City's five Activity Centers, as detailed in the 2035 Comprehensive Plan. Adopted in 2020 and last updated in 2023, the plan offers specific recommendations for land use, multi-modal connections, infrastructure improvements, and public amenities among other key elements.

The plan proposes the establishment of a central pedestrian precinct within Old Town. In the past, the City developed a 30 percent design plan for a streetscape project on Main Street within Old Town, which extends from West Street to Blenheim Boulevard. This project includes curb extensions at intersections to widen pedestrian space and minimize crossing distances. This plan has been incorporated into the Old Town Small Area Plan as a near-term recommendation.

Additionally, Main Street within Old Town is suggested to be designated as a pedestrian-oriented street, primarily for local access and deliveries. There is also potential for this street to be completely closed to vehicular traffic during weekends or special events. To accommodate the existing through traffic on Main Street, a loop road would be designated using surrounding roadways, including Blenheim Boulevard/ East Street. A long-term recommendation proposes studying the network impacts of a new loop road, considering both one-way pair and two-way options.

2.2.3. Main Street/Little River Turnpike Bicycle Facility Plan

In 2017, Fairfax County completed the Little River Turnpike Bicycle Corridor Study, which developed short-

and long-term recommendations for bicycle facilities along Little River Turnpike, from the City of Fairfax-Fairfax County jurisdictional line to the City of Alexandria-Fairfax County jurisdictional line. The study suggests implementing shared-use paths within the portion of Main Street east of Pickett Road and along the Little River Turnpike in the corridor's low-density residential regions. In the more high-density areas of Annadale and Alexandria, the study recommends the implementation of protected bike lanes on Little River Turnpike.

2.2.4. City of Fairfax CUE Bus Plan 2017

The City of Fairfax CUE Transit Development Plan (2017) is a short-term transit strategy that outlines the existing services and anticipated capital improvements for the six-year planning period from 2018 to 2023, based on current funding levels. The plan highlights Main Street as a corridor served by CUE Green Routes 1/2, Metrobus Route 29K, and the final trip of the Mason Shuttles route Sandy Creek-Vienna Metro. Additionally, the plan indicates that Pickett Road is served by CUE Green Routes 1/2 and Metrobus Route 29N, while the CUE Gold Route and several Mason Shuttles routes serve Blenheim Boulevard.

The plan specifically recognizes Main Street and Pickett Road as important transportation corridors, setting objectives for facility enhancements and service improvements along these routes. The City also plans to implement priority treatment measures for transit vehicles when feasible, such as signal prioritization for CUE buses and cue-jumper lanes at busy intersections. Additionally, the plan proposes a new route for CUE, the "NOVA Circulator," to facilitate Northern Virginia Community College students' access from Annandale to shopping and dining options in the City of Fairfax via Main Street.

2.2.5. City of Fairfax Multimodal Plan 2017

The City of Fairfax Multimodal Transportation Plan (2017) outlines a vision for the City's transportation, identifying safety and mobility enhancements and projects that integrate the various transportation modes into a cohesive and interconnected system. The plan introduces a proposed "Link and Place" typology for street design, aimed at guiding the design and management of streets to suit their context and function. The typology of Main Street, designated a link within their system, is shown to vary from an Active Street near Old Town, a Commercial Main near the shopping centers at Pickett Road, and a Boulevard in between. Likewise, Blenheim Boulevard is designated an Active Street while Pickett Road is designated a Commercial Main near their respective intersections with Main Street. Further details on the outcomes of the plan can be found in the City of Fairfax 2035 Comprehensive Plan. Please refer to that section for more information.

2.2.6. City of Fairfax Bike Plan 2021

The Bike Fairfax City Plan (2021) outlines a vision and strategies for a network of on- and off-street bicycle facilities within the City. This plan builds off the 2035 Comprehensive Plan, which aims to enhance access to key locations like the City's Activity Centers through a "Green Ribbon" network. The plan evaluated the existing conditions and planned projects, resulting in a map and a prioritized list of new projects for implementation.

In the short term, the plan proposes designating Farrcroft Drive, Tedrich Boulevard, Orchard Drive, and Estel Road as neighborways. These are low-volume, low-speed streets where bicycle travel is prioritized through signage, pavement markings, and traffic calming measures. Additionally, the plan recommends short-term spot improvements within the study area. These include reconfiguring intersections or enhancing crossings at the Main Street intersections with Orchard Drive/Fairview Drive, Tedrich Boulevard, and Estel Road.

Long-term, the plan recommends conducting feasibility studies for separated bike facilities along Main Street, Pickett Road, and Roberts Road. It also recommends the development of an off-street path connecting Main Street to the Daniels Run Trail. Proposed long-term spot improvements, which require further evaluation to determine appropriate treatments, are suggested at the intersections of Main Street with Roberts Road/Farrcroft Drive, Daniels Run Trail, Fairfax City Bike Trail, and Pickett Road.

2.3. Speed Data

Main Street, 400 feet West of Stone Wall Avenue / Fairfax Square

24-hour speed data was collected on Wednesday, May 1, 2024, and Thursday, May 23, 2024, using Automated Traffic Recorders (ATRs) located approximately 500 feet upstream of the intersection in both directions. In accordance with VDOT's Traffic Operations and Safety Analysis Manual (TOSAM), the data was recorded in 15-minute increments and reported in terms of average (i.e., mean) speed and 85th percentile speed over the data collection period.[3] **Figure 3** shows the speed data collected on Main Street west of Fairfax Square / Stone Wall Avenue.

Figure 3. Location of ATRs on Main Street west of Fairfax Square / Stone Wall Avenue

The eastbound and westbound directions had similarly high 85th percentile travel speeds, approximately 5 mph and 4 mph over the posted speed limit, respectively. The following tables show the summaries of speed data for each direction and associated lane at this location.

Table 3. Speed data collection findings on Main Street west of Fairfax Square / Stone Wall Avenue

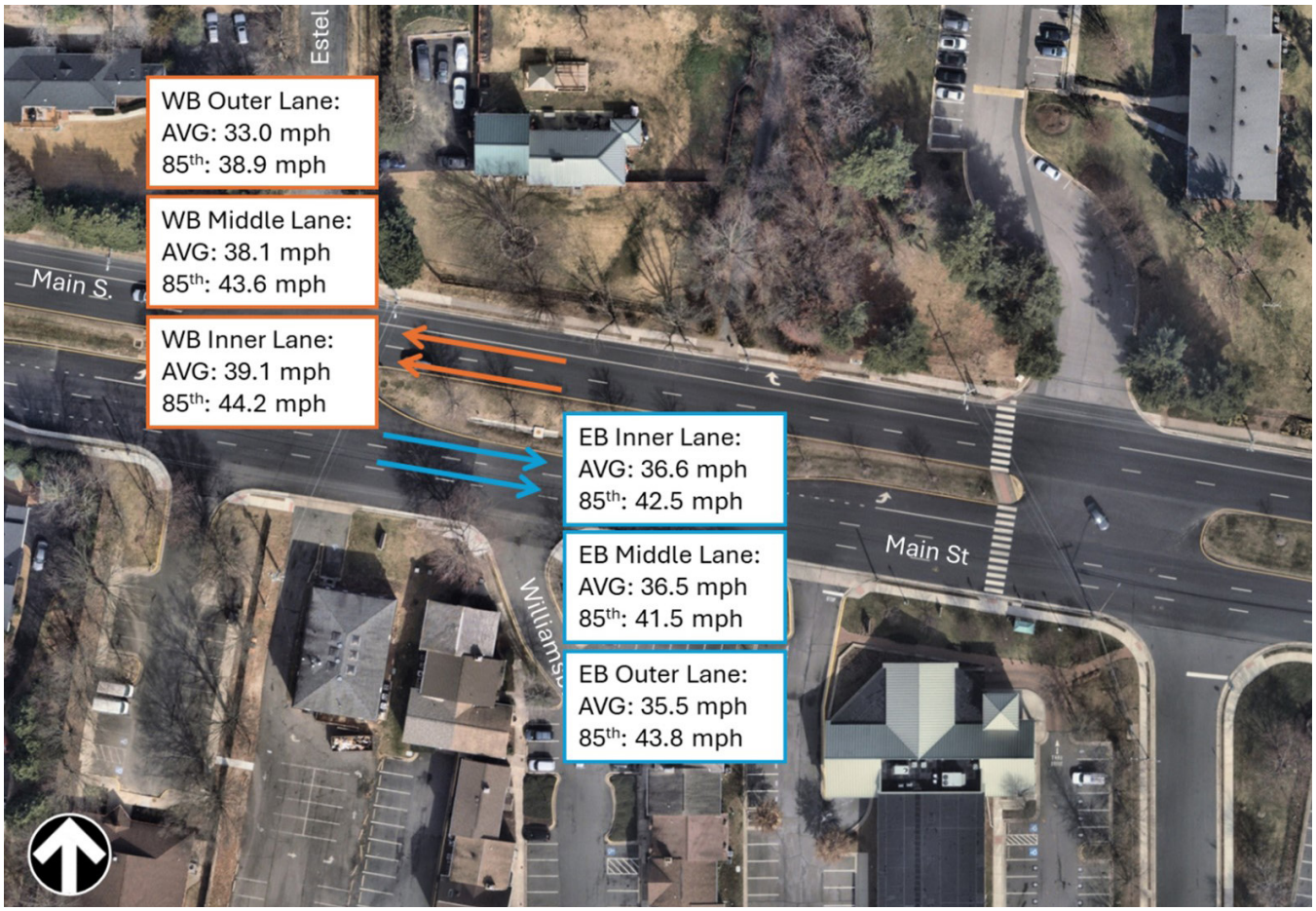
	Westbound, Outer Lane	Westbound, Inner Lane	Eastbound, Inner Lane	Eastbound, Outer Lane
Number of Vehicles	8,525	8,877	8,737	6,049
Number of Vehicles Exceeding 35 mph	1,957 (22.9%)	3,830 (43.1%)	4,430 (50.7%)	1,347 (22.3%)
85th Percentile Speed	37.6 mph	40.0 mph	39.9 mph	37.8 mph
Average Speed	31.5 mph	34.7 mph	34.5 mph	31.1 mph

3 Virginia Department of Transportation. Traffic Operations and Safety Analysis Manual. Virginia Department of Transportation. 2020.

Main Street, between Estel Road and Williamsburg Court

Additional 24-hour speed data was also collected on Wednesday, May 1, 2024, on Main Street between Estel Road and Williamsburg Court. **Figure 4** shows the speed data collection on Main Street between Estel Road and Williamsburg Court.

Figure 4. Location of ATRs on Main Street between Estel Road and Williamsburg Court



85th percentile travel speed on westbound Main Street between Estel Road and Williamsburg Court was found to be approximately 7 mph over the posted speed limit, while the 85th percentile speed in the eastbound direction was over 9 mph over the posted speed limit. The following tables show the summaries of speed data for each direction and associated lane at this location.

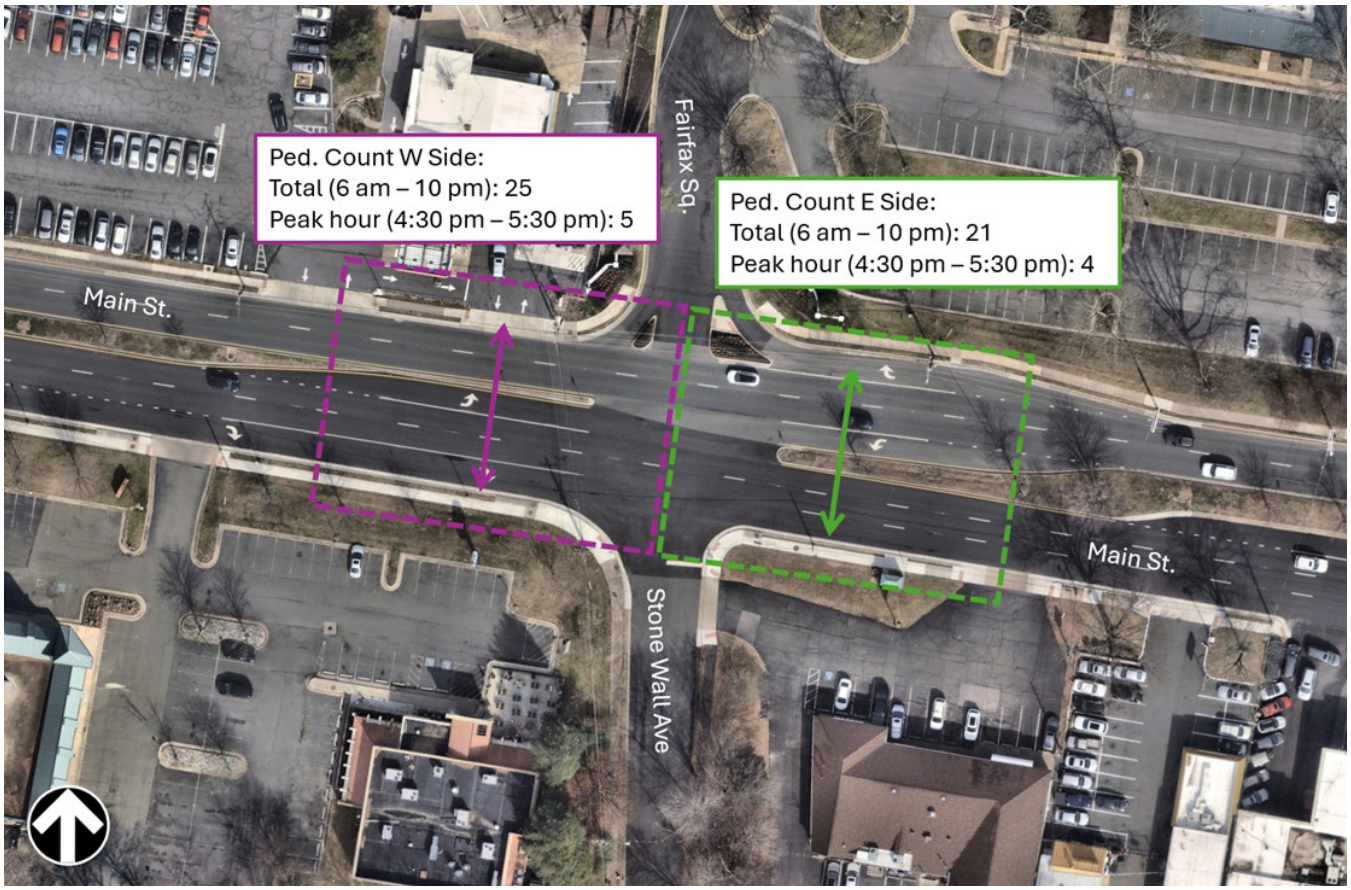
Table 4. Speed data collection findings on Main Street between Estel Road and Williamsburg Court

	Westbound, Outer Lane	Westbound, Middle Lane	Westbound, Inner Lane	Eastbound, Outer Lane	Eastbound, Middle Lane	Eastbound, Inner Lane
Number of Vehicles	592	9,028	8,770	1,537	6,473	9,445
Number of Vehicles Exceeding 35 mph	204 (34.5%)	6,461 (71.6%)	7,005 (79.9%)	948 (61.7%)	4,062 (62.8%)	6,078 (64.4%)
85th Percentile Speed	38.9 mph	43.6 mph	44.2 mph	43.8 mph	41.5 mph	42.5 mph
Average Speed	33.0 mph	38.1 mph	39.1 mph	35.5 mph	36.5 mph	36.6 mph

2.4. Pedestrian Counts

As part of this RSA and identified safety concerns, pedestrian data was collected within a 300-foot buffer of Main Street at Stone Wall Avenue / Fairfax Square. 16-hour pedestrian count data was collected on May 7, 2024, from 6:00 am to 10:00 pm. Weather conditions during this data collection were dry and cloudy, with a high of 81° F and a low of 64° F. This pedestrian count data was collected using Miovision cameras located on light posts on the northwest and southeast corners of the intersection. **Figure 5** shows an overview of the pedestrian data collected on Main Street 150 feet on either side of Stone Wall Avenue / Fairfax Square.

Figure 5. Pedestrian count data collected at the intersection of Main Street and Stone Wall Avenue / Fairfax Square



2.5. Turning Movement Counts

Reviewing turning movement counts, traffic volumes, and types of vehicles using the intersection is essential to the study as potential treatments at the intersection may impact certain turning maneuvers and road users.

Three intersections on the corridor are equipped with Miovision cameras that are able to collect turning movement counts. These three intersections include Main Street and Pickett Road (**Table 5**), Main Street and Burke Station Road (**Table 7**), and Main Street and East Street / Blenheim Boulevard (**Table 8**). For each individual intersection, the morning and afternoon peak hours have also been highlighted in yellow.

One location along the corridor, Main Street and Trapp Road / Lyndhurst Drive had turning movement traffic counts collected on Thursday, March 28, 2023, from 6:00 to 9:00 am and 2:00 to 6:00 pm. Turning movement counts for this intersection are included in **Table 6**.

Table 5. Main Street and Pickett Road Turning Movement Counts (Passenger and Heavy Vehicles Combined)

	Pickett Road Northbound			Pickett Road Southbound			Main Street Eastbound			Main Street Westbound		
	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT
6:00 AM	1	1	1	12	2	5	18	44	10	3	54	20
6:15 AM	3	1	4	28	2	9	27	66	7	3	94	43
6:30 AM	2	1	1	44	3	3	27	103	6	6	96	76
6:45 AM	2	3	2	46	5	7	31	120	14	9	112	80
7:00 AM	7	11	35	77	29	3	30	140	40	39	113	89
7:15 AM	24	30	52	80	16	19	32	156	32	53	124	117
7:30 AM	18	13	33	98	18	17	63	188	15	35	172	144
7:45 AM	9	13	40	72	21	31	81	212	17	46	228	121
8:00 AM	13	33	39	83	20	23	87	230	22	45	220	141
8:15 AM	7	23	14	99	8	17	77	244	6	11	233	155
8:30 AM	10	10	5	87	11	27	59	159	3	7	220	120
8:45 AM	8	11	9	90	6	24	56	184	13	10	221	138
AM Peak Hour Volume	**47**	**82**	**126**	**352**	**67**	**88**	**308**	**874**	**60**	**137**	**853**	**561**
2:00 PM	10	6	12	157	8	31	54	162	7	12	233	100
2:15 PM	13	14	20	155	14	23	56	284	4	13	211	98
2:30 PM	30	8	18	146	5	38	58	180	4	15	208	94
2:45 PM	9	11	9	132	8	26	54	214	4	11	261	105
3:00 PM	24	24	44	13	5	37	73	300	9	22	288	92
3:15 PM	7	21	15	176	8	32	93	275	8	15	246	120
3:30 PM	30	19	34	183	11	36	65	225	10	11	262	132
3:45 PM	13	13	10	195	7	34	64	225	5	12	296	147
4:00 PM	7	12	9	182	5	46	64	268	12	15	353	138
4:15 PM	12	7	20	180	19	35	78	233	12	16	269	140
4:30 PM	23	12	25	215	10	36	65	248	6	14	288	148
4:45 PM	11	10	11	169	10	29	80	250	5	12	358	162
5:00 PM	11	6	8	202	8	40	86	295	8	1	321	168
5:15 PM	7	9	8	229	4	35	83	267	8	5	306	165
5:30 PM	9	9	12	173	8	52	90	232	5	8	326	117
5:45 PM	6	4	7	179	8	56	79	263	2	4	341	145
PM Peak Hour Volume	**52**	**37**	**52**	**815**	**32**	**140**	**314**	**1060**	**27**	**41**	**1273**	**643**

Table 6. Main Street and Trapp Road / Lyndhurst Drive Turning Movement Counts (Passenger and Heavy Vehicles Combined)

	Trapp Road			Lyndhurst Drive			Main Street				Main Street			
	Northbound			Southbound			Eastbound				Westbound			
	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	U-TURN
6:00 AM	1	0	0	0	0	2	0	94	0	0	0	53	0	0
6:15 AM	0	0	0	3	0	1	0	101	1	0	1	115	1	0
6:30 AM	0	0	1	8	0	1	0	143	2	0	0	128	1	1
6:45 AM	2	0	1	3	0	3	1	201	1	0	0	129	0	0
7:00 AM	0	0	0	3	0	4	0	201	1	1	1	127	1	2
7:15 AM	6	0	2	6	0	2	1	219	5	2	0	169	0	0
7:30 AM	0	0	0	7	0	2	2	315	0	1	2	207	0	0
7:45 AM	3	0	0	3	0	2	0	365	8	2	8	265	1	0
8:00 AM	3	0	3	4	0	3	1	318	8	1	8	269	3	0
8:15 AM	0	0	0	6	0	4	1	291	4	1	0	289	3	2
8:30 AM	1	0	0	1	0	4	3	291	4	1	1	280	0	0
8:45 AM	1	0	0	4	0	5	2	281	4	2	1	315	6	1
AM Peak Hour Volume	**10**	**0**	**3**	**14**	**0**	**13**	**5**	**1265**	**24**	**5**	**17**	**1103**	**7**	**2**
2:00 PM	2	0	2	2	0	2	2	217	6	2	3	260	4	1
2:15 PM	1	0	2	1	0	2	1	237	5	3	1	299	6	0
2:30 PM	5	0	2	1	0	3	1	234	4	3	4	315	3	0
2:45 PM	5	0	3	3	0	5	0	256	4	2	3	313	5	0
3:00 PM	7	0	13	1	0	2	1	255	2	0	2	358	3	1
3:15 PM	3	0	4	5	0	4	4	250	2	1	2	385	4	1
3:30 PM	7	0	3	4	0	5	1	228	4	1	6	400	2	1
3:45 PM	3	0	10	2	0	0	0	285	6	1	3	350	2	0
4:00 PM	2	0	5	1	0	1	3	276	2	2	2	344	3	0
4:15 PM	4	0	6	1	0	2	4	295	5	4	5	374	7	1
4:30 PM	6	0	9	2	0	4	6	377	9	4	1	364	1	0
4:45 PM	3	0	4	3	0	0	1	330	1	7	3	421	5	0
5:00 PM	6	0	3	5	0	2	2	354	7	4	2	455	8	0
5:15 PM	6	0	5	3	0	1	2	420	1	3	1	382	9	0
5:30 PM	3	0	1	2	1	4	3	339	2	4	1	399	10	0
5:45 PM	2	0	4	1	0	3	4	335	1	4	2	406	8	1
PM Peak Hour Volume	**21**	**0**	**21**	**13**	**0**	**7**	**11**	**1481**	**18**	**18**	**7**	**1622**	**23**	**0**

Table 7. Main Street and Burke Station Road Turning Movement Counts (Passenger and Heavy Vehicles Combined)

	Burke Station Road			Fairfax Square Commercial Center			Main Street				Main Street			
	Northbound			Southbound			Eastbound				Westbound			
	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	U-TURN
6:00 AM	2	0	8	0	0	2	1	56	3	0	1	67	0	0
6:15 AM	1	1	8	1	0	2	0	93	4	0	6	98	0	0
6:30 AM	6	0	17	0	0	0	0	105	3	0	12	95	1	0
6:45 AM	11	1	13	1	2	0	1	156	7	0	5	129	2	0
7:00 AM	10	0	22	1	1	0	3	158	5	0	8	130	0	0
7:15 AM	20	0	23	2	0	1	0	197	11	0	10	148	0	0
7:30 AM	21	0	15	2	0	4	0	238	5	0	18	187	2	0
7:45 AM	16	2	27	0	2	0	1	287	18	0	12	207	1	0
8:00 AM	27	3	26	5	1	0	4	262	13	0	27	218	1	0
8:15 AM	32	5	24	3	0	5	1	211	8	0	11	222	7	0
8:30 AM	31	2	19	3	3	1	3	182	11	0	20	244	2	0
8:45 AM	29	1	16	3	1	2	3	222	16	0	25	212	4	0
AM Peak Hour Volume	**106**	**12**	**96**	**11**	**6**	**6**	**9**	**942**	**50**	**0**	**70**	**891**	**11**	**0**
2:00 PM	17	1	13	6	0	0	2	231	24	1	23	296	3	0
2:15 PM	16	2	17	6	1	0	1	207	21	0	14	199	6	0
2:30 PM	18	2	20	8	3	2	4	228	21	0	33	266	1	0
2:45 PM	24	1	21	3	3	1	1	263	18	0	27	297	2	0
3:00 PM	27	2	22	8	3	3	3	233	26	0	27	331	2	0
3:15 PM	21	1	18	4	4	1	3	271	24	0	31	294	2	0
3:30 PM	19	5	25	4	1	0	3	272	29	0	38	321	3	0
3:45 PM	22	1	18	6	1	1	4	291	36	1	28	347	9	0
4:00 PM	21	8	15	3	4	1	6	279	32	0	30	282	4	0
4:15 PM	18	5	18	10	2	1	8	295	27	0	34	300	4	1
4:30 PM	33	3	23	7	6	1	2	316	34	1	32	315	5	1
4:45 PM	26	5	16	12	8	1	5	295	30	1	37	305	3	0
5:00 PM	34	4	18	15	6	1	4	284	35	1	37	308	8	0
5:15 PM	14	1	27	7	3	2	4	360	26	0	42	339	11	0
5:30 PM	17	4	20	8	6	6	6	289	27	0	32	361	6	0
5:45 PM	26	6	25	15	3	1	11	238	31	2	37	324	6	0
PM Peak Hour Volume	**91**	**14**	**81**	**42**	**23**	**10**	**19**	**1228**	**118**	**2**	**148**	**1313**	**28**	**0**

Table 8. Main Street and East Street / Blenheim Boulevard Turning Movement Counts (Passenger and Heavy Vehicles Combined)

	East Street			Blenheim Boulevard			Main Street				Main Street			
	Northbound			Southbound			Eastbound				Westbound			
	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	LEFT	THRU	RIGHT	U-TURN	LEFT	THRU	RIGHT	U-TURN
6:00 AM	1	11	1	17	2	2	0	37	0	0	0	18	43	0
6:15 AM	2	15	3	26	2	2	0	45	0	0	0	23	58	0
6:30 AM	0	18	1	43	4	2	0	51	0	0	0	32	82	0
6:45 AM	0	27	2	54	9	2	0	46	2	0	0	33	83	0
7:00 AM	2	29	4	83	8	3	0	80	0	0	0	25	120	0
7:15 AM	3	34	2	91	12	2	0	72	0	0	0	46	137	0
7:30 AM	1	56	1	93	23	5	0	104	0	0	0	50	155	0
7:45 AM	4	59	4	204	27	0	0	89	0	0	0	49	191	0
8:00 AM	5	58	6	124	22	5	0	73	0	0	0	66	165	0
8:15 AM	1	48	2	119	35	1	0	79	0	0	0	59	192	0
8:30 AM	4	61	3	103	20	5	0	86	2	0	0	75	195	0
8:45 AM	3	53	6	113	18	4	0	78	1	0	0	90	218	0
AM Peak Hour Volume	**14**	**226**	**15**	**550**	**14**	**11**	**0**	**327**	**2**	**0**	**0**	**249**	**743**	**0**
2:00 PM	1	33	10	117	22	5	0	79	2	0	0	71	188	0
2:15 PM	4	42	6	120	36	7	0	73	2	0	0	80	162	0
2:30 PM	4	32	7	117	41	12	0	91	3	0	0	57	172	0
2:45 PM	1	54	9	159	30	9	0	77	1	0	0	63	240	0
3:00 PM	6	51	12	162	40	16	0	91	4	0	0	69	251	0
3:15 PM	4	44	13	165	38	19	0	83	3	0	0	70	246	0
3:30 PM	1	43	13	154	41	7	0	73	0	0	0	66	242	0
3:45 PM	4	26	6	161	40	9	0	89	2	0	0	80	269	0
4:00 PM	3	44	9	161	55	16	0	86	3	0	0	70	240	0
4:15 PM	1	46	11	204	40	15	0	101	2	0	0	81	243	0
4:30 PM	1	58	8	203	54	12	0	95	2	0	0	68	271	0
4:45 PM	3	57	11	192	54	24	0	79	1	0	0	67	239	0
5:00 PM	6	57	8	228	45	8	0	91	3	0	0	70	239	0
5:15 PM	6	72	16	226	70	12	0	101	1	0	0	54	211	0
5:30 PM	4	50	7	224	49	16	0	96	4	0	0	76	223	0
5:45 PM	4	56	7	223	67	16	0	87	1	0	0	64	228	0
PM Peak Hour Volume	**20**	**235**	**38**	**901**	**231**	**52**	**0**	**375**	**9**	**0**	**0**	**264**	**901**	**0**

3

Crash Analysis

3.1 Crash Overview

The crash analysis conducted as part of this RSA focused on identifying hotspots, reviewing common contributing factors and crash patterns, and a high-level investigation of serious crashes that occurred within the study period. During the five-year study period from January 1st, 2018, to August 31, 2023, 347 crashes were recorded in the study area. Of the 347 crashes within the study period, there were 2 fatal crashes, 8 severe injury crashes, and 49 visible injury crashes (**Figure 6**). **Figure 7** shows the crash types by year, which shows a steady decline in the number of rear-end crashes and a slight uptick in fixed object crashes.

Figure 6. Overview of crashes by severity

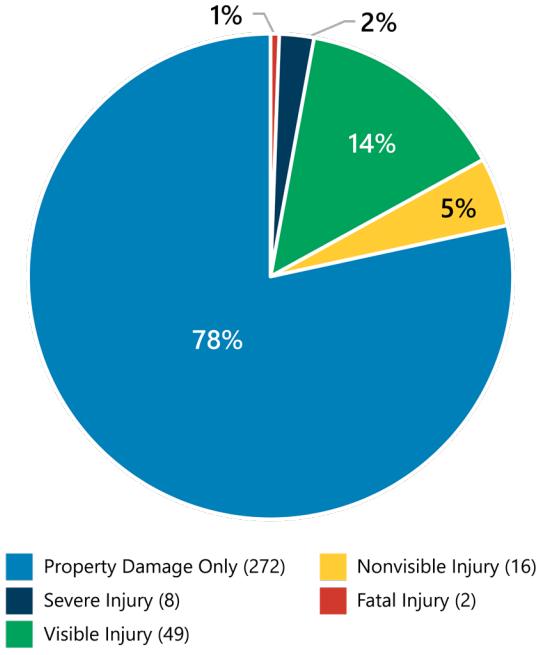
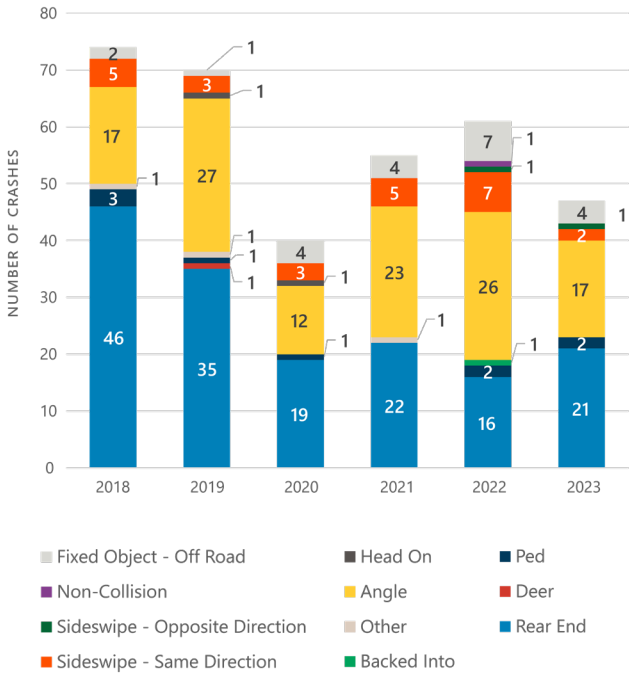


Figure 7. Overview of crash types on Main Street by year[4]



4 2023 crash data is only for a partial year (January 1 – August 31)

Both fatalities were pedestrian crashes during dark conditions, involved larger vehicles (truck and van), and were men, aged 37 and 57. Both crashes also had circumstances where the pedestrian may have been impaired. However, the recommendations from this RSA aim to reduce the risk of someone being killed or experiencing a life-changing injury when struck, despite impairment, by increasing the time that a driver has to perceive, react, and slow down before colliding with a pedestrian – particularly in dark conditions.

Of the 8 serious injury crashes, 4 were pedestrian crashes, 3 were rear-end crashes, and 1 was an angle crash. A brief list of details on these serious injury crashes is listed below:

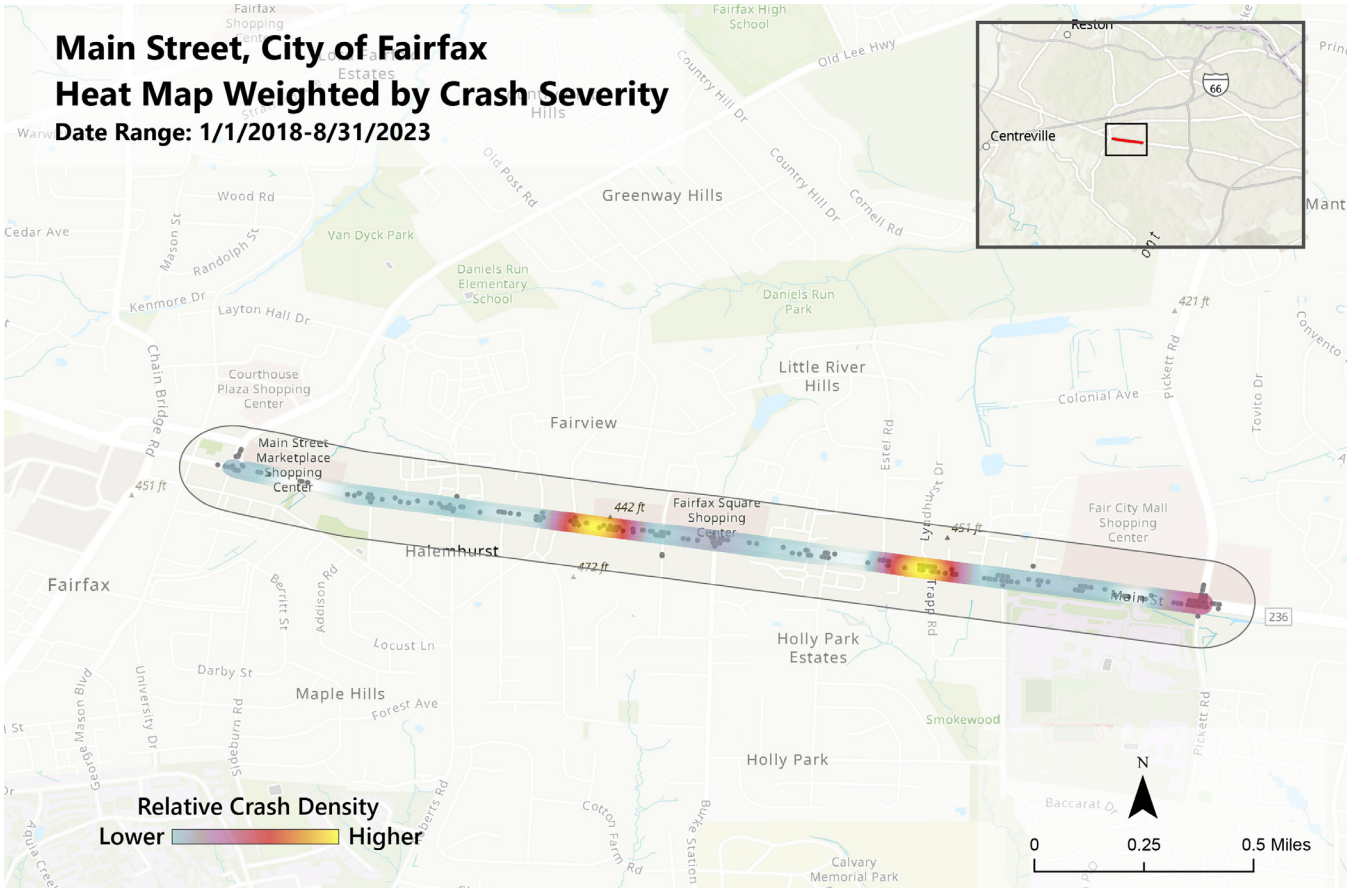
- 1 in 2018 (pedestrian, rainy conditions)
- 1 in 2019 (pedestrian)
- 1 in 2021 (angle)
- 2 in 2022 (rear-end and pedestrian)
- 3 in 2023 (pedestrian, rainy conditions and two rear-ends)
- 2 of the 4 serious injury pedestrian crashes involved teenagers under the age of 18
- 2 of the 3 serious injury rear-end crashes cited speed as a contributing factor

Figure 8 shows all crash points within the study corridor and symbolizes the relative density of crashes based on weighted crash severity. The three areas with the highest density of crashes by severity were investigated as hotspots, discussed further in Section 3.3.

The most frequent type of collision during the study period was rear-end crashes (159 total), followed by angle crashes (122 total). General crash trends include:

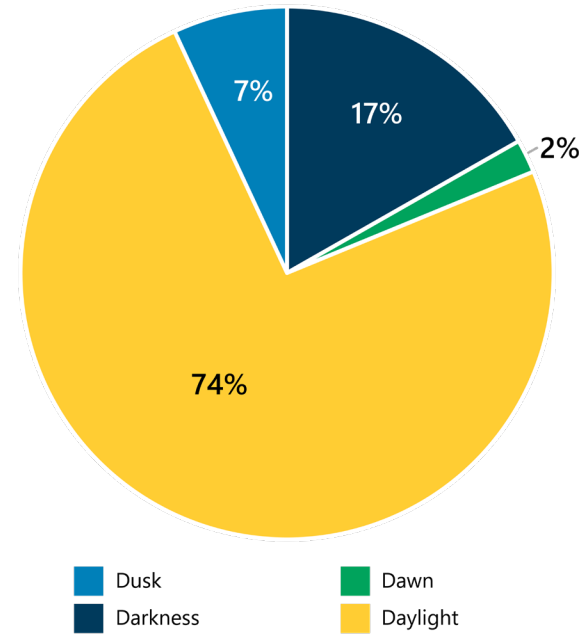
- 25% of crashes involved drivers aged 65 and older
- 41% of crashes involved drivers aged under 25
- 21% of crashes cited distraction as a contributing factor
- 10% of crashes cited speed as a contributing factor
- 4% of crashes involved parties under the influence of drugs and/or alcohol

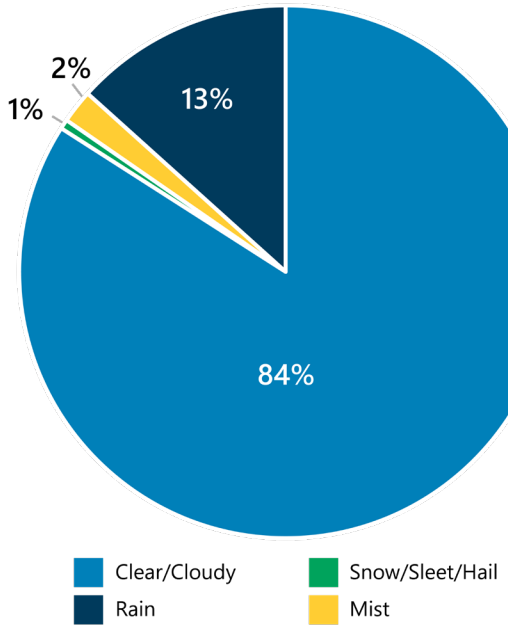
Figure 8. Relative Crash Density on Main Street, Weighted by Crash Severity



A review of the lighting and weather conditions for crashes within the study area was also reviewed for common trends. **Figure 9** shows that most crashes occurred during daylight (74 percent) and dry conditions (84 percent). Other common themes with respect to lighting conditions was the presence of sun glare when heading east on Main Street in the morning and west in the evening, and the influence it has on rear end crashes at signalized intersections.

Figure 9. Lighting and weather conditions for crashes on Main Street





3.2. Vehicle-Pedestrian & Vehicle-Bicyclist Collisions

During the study period, there were 10 vehicle-pedestrian crashes and two vehicle-bicyclist crashes within the study area, most occurring at intersections. Specifically, there were four pedestrian and one bicyclist crash at the intersection of Main Street and Pickett Road, resulting in three severe injury crashes. Additionally, there were two fatal pedestrian crashes within the study area, with one at the intersection of Main Street and Trapp Road and another near the intersection of Main Street and Tedrich Boulevard. More information on specific pedestrian and bicyclist crashes by location are included in the subsections below. **Figure 10** shows the locations of crashes involving pedestrians and bicyclists within the study corridor.

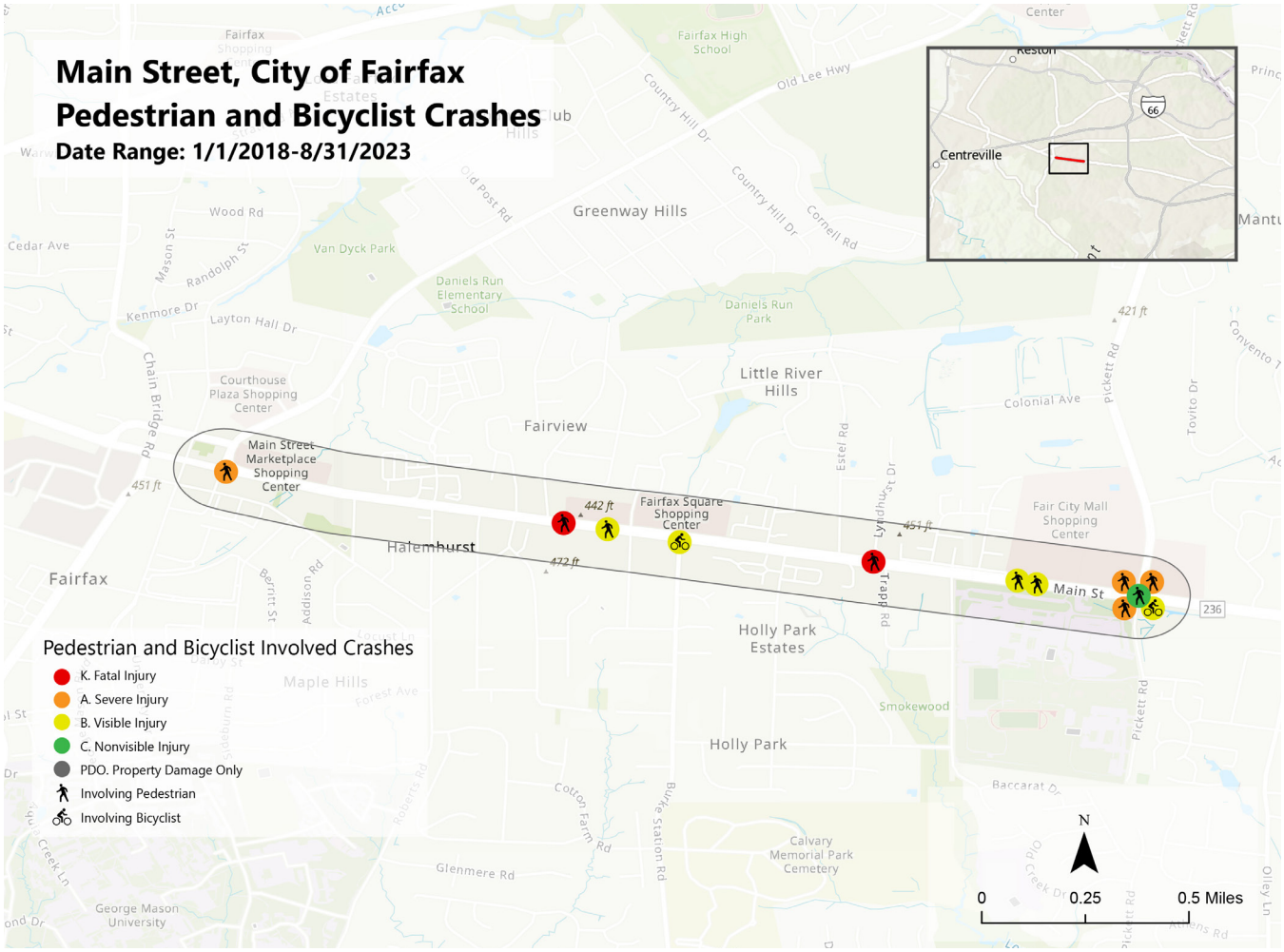
3.3. Corridor Hot Spots

Table 9 details the three crash hotspots identified during the crash analysis. These include the intersection of Main Street and Lyndhurst Drive/Trapp Road (33 crashes), the intersection of Main Street and Pickett Road (67 crashes), and Main Street between Tedrich Boulevard and Stone Wall Avenue (29 crashes). Each review of these hotspots included an investigation of the crash report narratives and a detailed collision diagram. The following subsections outline the crashes within these locations.

Table 9. Corridor Hot Spots

Hot Spot	Crashes
Main Street and Lyndhurst Drive/Trapp Road	33 total crashes, 1 fatal crash, 4 injury crashes
Main Street and Pickett Road	67 total crashes, 19 injury crashes
Main Street from Tedrich Boulevard and Stone Wall Avenue	29 total crashes, 1 fatal crash, 3 injury crashes

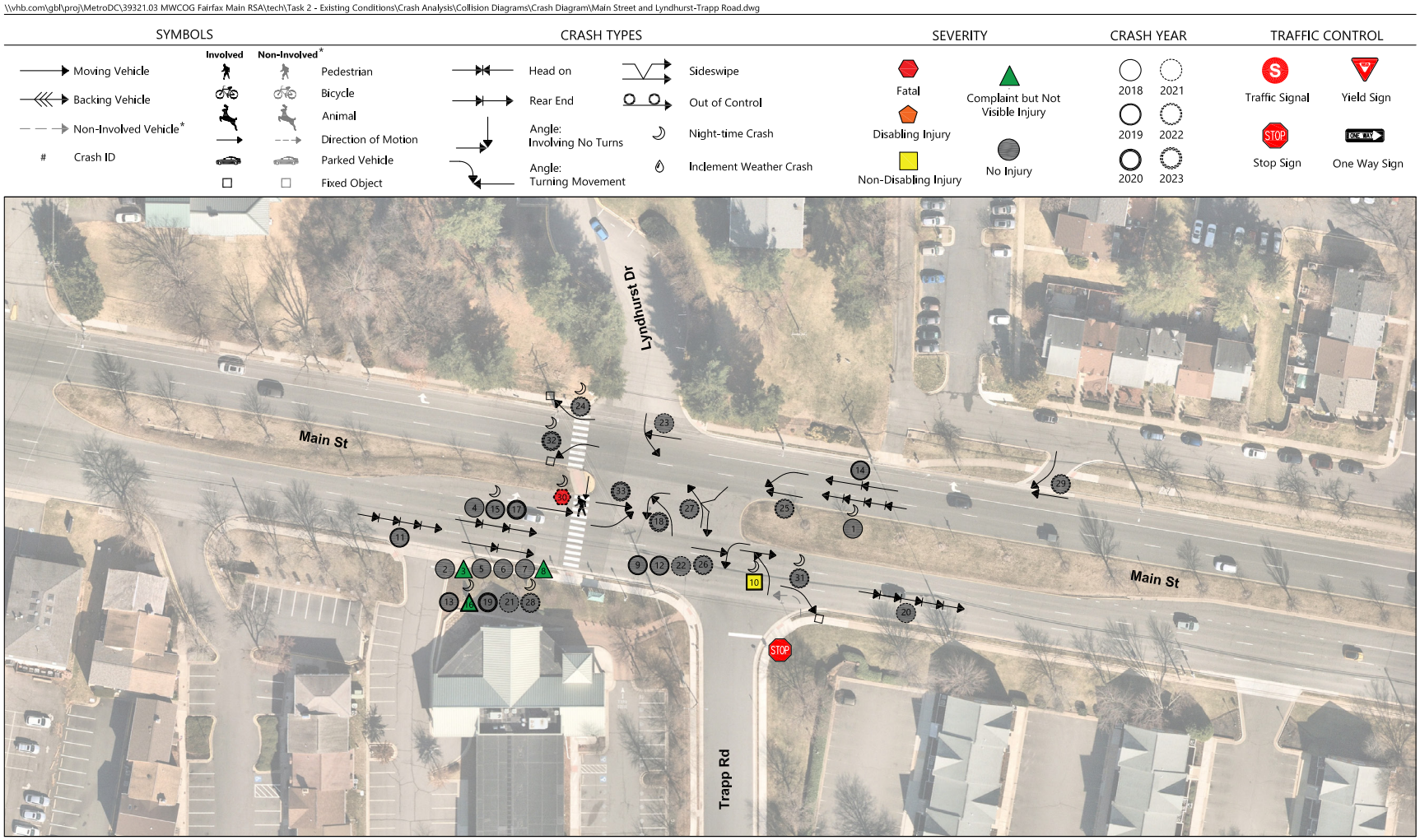
Figure 10. Main Street Pedestrian and Bicycle Involved Crashes



3.3.1. Main Street and Lyndhurst Drive/Trapp Road

There were 33 crashes at the intersection of Main Street and Lyndhurst Drive/Trapp Road, including one fatal crash and four injury crashes. The fatal crash occurred when a vehicle traveling eastbound on Main Street struck a pedestrian using the crosswalk west of Trapp Road entered the eastbound travel lanes from the median (Crash 30 in **Figure 11**). The crash report cites that the pedestrian had been consuming alcohol, but the level of impairment was unknown. A pattern of rear-end collisions involving at least two vehicles was observed, particularly on the eastbound approach to the intersection, where 15 crashes occurred (two injury crashes). Contributing factors recorded for rear ends included vehicles slowing and stopping for various reasons, such as turning vehicles, crossing pedestrians, or buses pulling up at bus stops.

Figure 11. Crash Diagram: Main Street and Lyndhurst Drive/Trapp Road



Source of Crash Reports: VDOT
Map Image from Nearmap

Not to Scale

* "Non-Involved Vehicle" and other "Non-Involved" symbols represent vehicles and other representations that were not physically struck but caused other vehicles to crash

Crash Diagram (2018-2023)
Main St, Trapp Rd, & Lyndhurst Dr
Fairfax, VA

3.3.2. Main Street and Pickett Road

There were 67 crashes, including 19 injury crashes, at the 'hotspot' location of Main Street and Pickett Road. Of the 19 injury crashes, three involved pedestrians being struck within the crosswalk, each involving vehicles traveling in the westbound (Crash 38 in **Figure 12**), eastbound (Crash 11 in **Figure 12**) and southbound direction (Crash 53 in **Figure 12**). All three crashes occurred with pedestrians crossing against the crosswalk signal. Additionally, there was an injury crash that involved a bicyclist within the study, where a southbound traveling vehicle struck an eastbound traveling bicyclist within the intersection. Based on the crash narrative, it was found that the bicyclist entered the intersection against the signal.

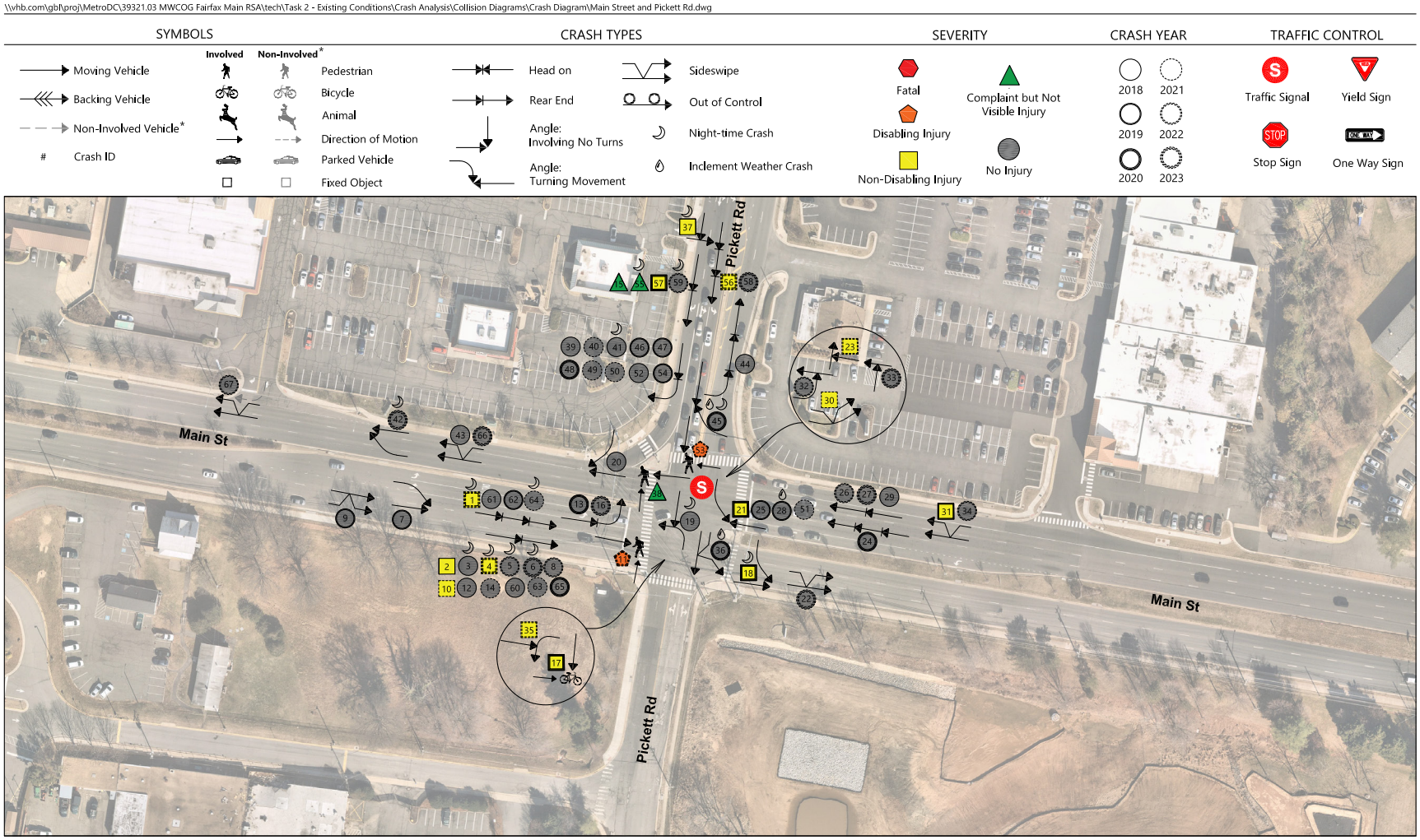
Of the 67 recorded crashes at this intersection, a pattern of rear-end crashes involving at least two vehicles was observed (39 crashes, eight of which were injury crashes). Specifically, there were 17 rear-end crashes (four injury crashes) on the eastbound approach and 18 rear-end crashes (four injury crashes) on the southbound approach of the intersection. The most predominant contributing factors for rear-end crashes at this location were driver failure to leave enough distance while following a vehicle and not being able to stop in time at the intersection traffic signal.

3.3.3. Main Street Between Tedrich Boulevard and Stone Wall Avenue

There was a total of 29 crashes, including one fatal crash and three injury crashes, which occurred on Main Street, between Tedrich Boulevard and Stone Wall Avenue during the five-year study period. The fatal crash occurred when a pedestrian walking westbound in the eastbound travel lane was struck by a vehicle traveling eastbound (Crash 8 in **Figure 13**). The crash occurred in dark lighting conditions and the crash narrative mentioned potential impairment due to a brain tumor. The striking vehicle was found to be traveling at or below the posted speed limit.

Additionally, there was a pedestrian crash that resulted in injury, where a pedestrian was struck within the Main Street crosswalk by a vehicle traveling in the westbound direction (Crash 15 in **Figure 13**). The crash narrative states that the driver lost control of the vehicle and subsequently mounted the curb and struck the fountain and retaining wall. Of all 29 crashes, the most predominant crash types in the study area were rear-end crashes (12 crashes, one injury) and angle crashes (seven crashes, one injury). One area of concern was on the westbound approach of the Main Street and Tedrich Boulevard intersection, where 10 rear-end crashes were observed. Contributing factors described in the crash narratives for rear-end crashes on this approach were following too closely, improper attention, and sudden stops.

Figure 12. Crash Diagram: Main Street and Pickett Road



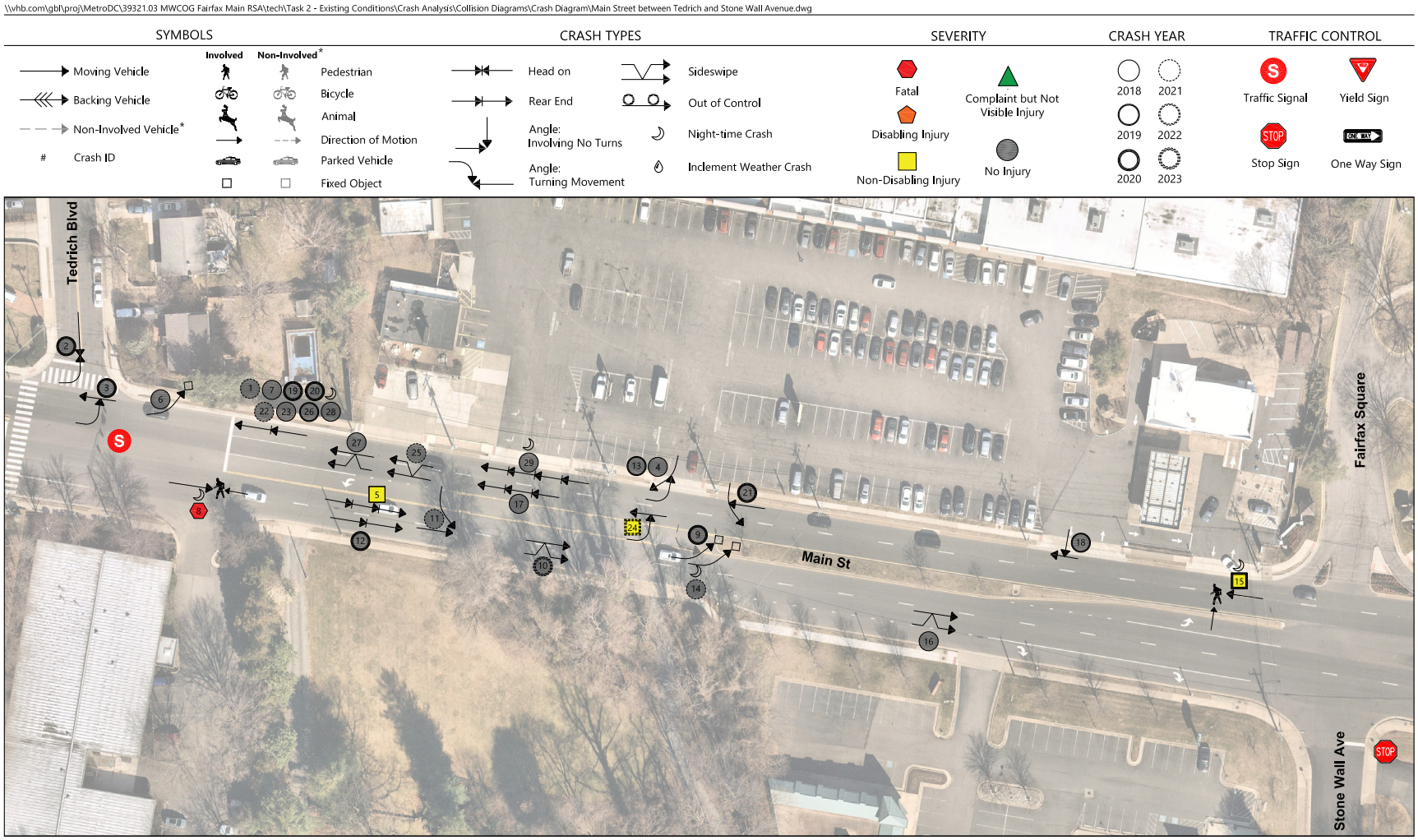
Source of Crash Reports: VDOT
Map Image from Nearmap

Not to Scale

* "Non-Involved Vehicle" and other "Non-Involved" symbols represent vehicles and other representations that were not physically struck but caused other vehicles to crash

Crash Diagram (2018-2023)
Main St & Pickett Rd
Fairfax, VA

Figure 13. Crash Diagram: Main Street, between Tedrich Boulevard and Stone Wall Avenue



Source of Crash Reports: VDOT

Map Image from Nearmap

Not to Scale

* "Non-Involved Vehicle" and other "Non-Involved" symbols represent vehicles and other representations that were not physically struck but caused other vehicles to crash

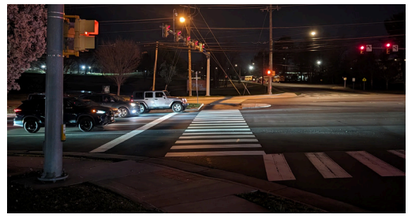
Crash Diagram (2018-2023)
Main St between Tedrich Blvd & Stone Wall Ave
Fairfax, VA

4

Identified Concerns

This section outlines the identified safety concerns and general observations along the corridor and at specific intersections along Main Street. The issues identified span pedestrian, bicyclist, transit access, and vehicle safety and range from general signing and pavement marking improvements, signal modifications and upgrades, and larger geometric/operational changes at the intersection or corridor level. Descriptions of potential countermeasures identified for each of these safety concerns or observations are outlined in Section 5.

CORRIDOR WIDE

Safety Concern/ Observation	Vehicle	Peds	Bikes	Transit User	Safety Concern Description	Reference Photo	Potential Countermeasure(s)
» Lack of bicyclist/micromobility facilities			●		There are no separated bicycle facilities along the corridor, until the Fairfax City Bike Trail and Daniels Run Trail on the west end. This leaves bicyclists to either share the road with high volume and high-speed traffic or use the sidewalk, though biking on the sidewalk is generally not permitted by the city code in most areas.	**Figure 14.** E-scooter user riding on the sidewalk along Main Street 	» Sidewalk widening improvements » New shared-use path » Exclusive shared transit-bike lane
» Low lighting levels	●	●	●	●	There is low-level lighting along the corridor for pedestrians, particularly at crossing locations. This can make it difficult for drivers to see pedestrians in the crosswalk or waiting to cross. Lighting placement also makes a difference in the effectiveness. At some locations on the corridor, lighting is placed within and between tall trees.	**Figure 15.** Dimly lit northeast corner of Main Street and Pickett Road 	» Lighting improvements
» Debris in and around storm drains, curb ramps, and gutters		●	●		Debris was observed in the stormwater infrastructure and near curb ramps. This debris can cause stormwater facilities to back up and eventually flood, as well as pose a safety concern for bicyclists riding near the curb as it increases the risk of skidding or losing control of the bike.		» Roadway maintenance
» Narrow sidewalks throughout the corridor		●	●	●	Sidewalks are present on both sides of Main Street throughout the study area, though some are narrow and have little separation from the adjacent travel lanes. This can cause discomfort among pedestrians walking close to traffic, as well as challenges for people in wheelchairs, using strollers or carts to navigate around one another. Additionally, the lack of bicyclist facilities can result in pedestrians, bicyclists, and e-scooters all using the narrow sidewalk, meaning passing movements may be challenging or uncomfortable. This can also result in pedestrians walking outside of the crosswalk, potentially in the roadway for short distances.	**Figure 16.** Foliage infringing on an already narrow sidewalk on Main Street 	» Shared-use path improvements
» Pedestrian crossings on side streets are often unmarked or aligned with stop line		●	●	●	Pavement markings such as stop lines and crosswalks provide driver and pedestrian guidance on where drivers are to stop prior to the intersection as well as where pedestrians are likely to be crossing. At many locations on the corridor, the unmarked crosswalk falls within the space where a vehicle would be stopped waiting to turn onto Main Street. This poses a risk to pedestrians looking to cross at the same time – they must either cross in front of the stopped vehicle (near moving vehicles on Main Street) or behind the stopped vehicle, which then poses a risk of vehicles turning onto the side street not seeing them cross.	**Figure 17.** Stop sign and median within pedestrian crossing at Estel Road 	» Crosswalk visibility enhancements » Curb extensions/corner improvements » Curb ramp improvements

CORRIDOR WIDE (CONTINUED)

Safety Concern/ Observation	Vehicle	Peds	Bikes	Transit User	Safety Concern Description	Reference Photo	Potential Countermeasure(s)
» Non-compliant curb ramps		●		●	Most intersections on the corridor with crosswalks on the side streets and across Main Street feature only one curb ramp on the corner. While full adoption of Public Right-of-Way Accessibility Guidelines (PROWAG) with the US Department of Justice is still pending, the Final Rule published August 2023, provision R203.6.1.1 states that there shall be a ramp for each receiving end of the crosswalk or a blended transition spanning the width of all intersecting crosswalks. This way, those who are visually impaired or use mobility devices can navigate the crossing through more direct guidance of the crossing location or through easier access onto the sidewalk from the roadway. There are also curb ramps along the corridor that do not have appropriate grades and landing spaces to be easily navigated by those using mobility devices. The grade differential between eastbound and westbound Main Street creates steep curb ramps within the median area that are not compliant with American Disability Act (ADA) standards. This challenge is present at: » Main Street and Fair City Mall Shopping Center Entrance » Main Street and Whitacre Road	**Figure 18.** Steep pedestrian crossing across Main Street at the Fair City Mall Shopping Center Driveway 	» Curb ramp improvements
» Inaccessible pedestrian push buttons		●			At several locations on the corridor, pedestrian push buttons are located far from the edge of the sidewalk, are not aligned with the crossing, and do not feature any audio or tactile feedback. This can result in people with mobility devices being unable to activate the pedestrian phase as they cannot get close enough to the button.	**Figure 19.** Pedestrian push button at Main Street and Fair City Mall Shopping Center Driveway located away from the curb 	» Pedestrian push button upgrades
» Large corner radii for vehicles turning off Main Street		●		●	Along the corridor, some intersections feature large corner radii to accommodate larger design vehicles (such as box trucks and buses). However, these large radii allow for higher turning speeds for passenger vehicle drivers. Since speed greatly influences the likelihood of a severe pedestrian crash, these large corner radii can increase the risk of a serious pedestrian crash occurring with right-turning vehicles from Main Street, especially at night when drivers may not see crossing pedestrians on the side streets. Large corner radii also make the crossing distance longer and increase the time of exposure for pedestrians in the roadway.	**Figure 20.** The large turning radius for right turns onto Maple Avenue 	» Curb extensions/corner improvements
» Transit stops located away from crosswalks		●		●	People accessing transit stops on Main Street could be coming from either side of the road, meaning that there could be a need to cross Main Street when boarding or alighting. There are currently four transit stops that are not located at marked crosswalks and all are unsignalized, including: » Main Street and Maple Avenue » Main Street and Stone Wall Avenue » Main Street and Virginia Street » Main Street and Locust Street This means that to access the transit stop, if not already on the same side of the stop, people would have to walk to the nearest marked crosswalk (in many cases more than 300 feet away) or cross midblock. This is a safety concern due to driver expectations and the lack of facilities to allow pedestrians to cross safely, thus increasing the risk of a severe pedestrian crash. This also results in potential pedestrian crossings at more dispersed locations that can make it harder for drivers to know where to expect pedestrians.	**Figure 21.** Transit stops at Main Street and Virginia Street located away from marked crosswalks 	» Transit stop rebalancing » Unsignalized pedestrian crossing improvements

CORRIDOR WIDE (CONTINUED)

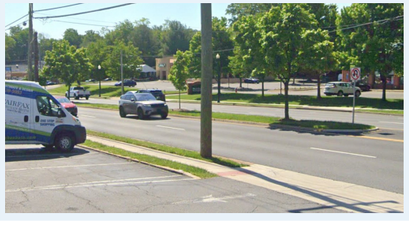
Safety Concern/ Observation	Vehicle	Peds	Bikes	Transit User	Safety Concern Description	Reference Photo	Potential Countermeasure(s)
» Undersized turn lanes on corridor	●				Left turn lanes along the corridor are commonly undersized or shorter than recommended per national design guidance. At intersections where there are a heavy number of left turns, the queues can fill the length of the turn lane and block through traffic on Main Street. Short turn lanes can also result in vehicles not being able to stop in time before entering an unsignalized intersection. When drivers are unable to stop in the turn lane and enter the space in the median of the unsignalized intersection, they are at higher risk of conflicts with other vehicles traveling through or turning at the intersection. Otherwise, drivers may stop abruptly when entering the turn lane, which can lead to rear-ends with drivers on Main Street not expecting the sudden stop.		» Turn lane improvements » Reduce conflict points
» Left turn crashes at signalized intersections	●	●	●	●	The crash history shows crashes involving left turns and conflicting through traffic at the signalized intersections.		» Flashing yellow arrow for left turns
» Sight distance challenges on stop-controlled side streets	●	●	●	●	Some of the uncontrolled side streets have foliage and other objects obstructing sight lines for drivers to see oncoming traffic to merge onto or cross Main Street. These sight distance challenges can result in the need for drivers to pull up closer or often into the path of the pedestrian crossing. Safety concerns include an elevated risk of angle crashes involving vehicles entering from approaches at unsignalized intersections.		» Roadway maintenance /Vegetation trimming
» Vegetation in the median.	●				Vegetation in the median restricts sight distances for the left and right-turning vehicles from side streets when lower branches are not appropriately trimmed. Also, vegetation can restrict the views of signs posted in the median.	**Figure 22.** Sign obstructed by vegetation to the east of Blenheim Boulevard 	» Roadway maintenance / Vegetation trimming
» Queue Spillback at signalized intersections	●	●	●	●	Queue spillback on Main Street at signalized intersections blocks traffic movement from side streets/commercial driveways.	**Figure 23.** Queueing on the westbound approach at the Main Street and Pickett Road intersection 	» Signal timing improvements
» Pedestrians crossing Main Street at unmarked locations	●	●		●	Pedestrians were observed crossing Main Street at midblock where there were no pedestrian crosswalks or warning signs for motorists.	**Figure 24.** Pedestrian crossing Main Street at a midblock location to the east of Blenheim Boulevard 	» Transit stop rebalancing » New pedestrian crosswalks

	Safety Concern/ Observation	Vehicle	Peds	Bikes	Transit User	Safety Concern Description	Reference Photo	Potential Countermeasure(s)
MAIN STREET AND PICKETT ROAD	» Turning conflicts between vehicles and crossing pedestrians		●		●	Due to the phasing of the signal, there are conflicts between right-turning vehicles with crossing pedestrians. This can lead to an increase in drivers not yielding to crossing pedestrians.		» Leading pedestrian interval
	» Pedestrian push buttons are vandalized		●		●	Marketing stickers are posted on pedestrian push buttons hiding pedestrian symbols.	**Figure 25.** Sticker posted on a pedestrian pushbutton at the Main Street and Pickett Road intersection 	» Maintenance
	» Right turn slip lane geometry	●	●		●	The right turn slip lane from Pickett Road onto westbound Main Street has a pattern of rear-end crashes resulting from drivers believing the vehicle in front has merged onto Main Street. Drivers focused on finding a gap in traffic may also be more likely to not notice pedestrians crossing in front of the vehicle. Furthermore, drivers merging onto westbound Main Street commonly use the furthest lane to the right (dedicated transit-only lane) for accelerating into the general-purpose lanes. This location, among others on the corridor, has "No Turn on Red When Pedestrians are Present" signs that can be challenging to enforce.	**Figure 26.** Right turn slip lane for southbound Pickett Road onto westbound Main Street 	» Right turn slip lane improvements
	» Imbalance between westbound Main Street through lanes on approach and receiving side	●			●	There are currently three lanes that continue through on the westbound approach of Main Street at Pickett Road, but only two receiving lanes, as the further right lane transitions into a transit-only lane west of Pickett Road. This results in an effective lane drop on the receiving side of the intersection, requiring drivers to merge left into the general-purpose lane. The transit-only lane is also currently used for passing on the right (illegal per Virginia State code) and merging from southbound Pickett Road. This creates additional lane changes that increase the number of potential conflicts and risk of sideswipe and rear-end crashes. Alternatively, some drivers are remaining in the transit-only lane and using it as a travel or passing lane.		» Exclusive shared transit-bike lane » Main Street and Pickett Road pavement marking and signing improvements
	» School zone speed limit is 20 mph less than westbound Main Street approach	●				Drivers approaching the City of Fairfax – Fairfax County line experience a change in roadway context from a suburban low to medium-density residential context to an urban mixed-use commercial, institutional, medium-density residential land-use. This shift in context means that the posted speed limit transitions from 45 mph to 35 mph at the City-County line, to 25 mph when entering the downtown area of the City of Fairfax just east of Farrcroft Drive/Roberts Road. However, the speed limit for westbound Main Street drivers approaching Pickett Road changes from 45 mph to 25 mph when the school zone is in effect. This abrupt change may result in drivers not having enough time to slow down to the school zone speed.	**Figure 27.** First 35 mph speed limit sign only 170 feet before the school zone speed limit of 25 mph 	» Speed reduction ahead warning signs

	Safety Concern/ Observation	Vehicle	Peds	Bikes	Transit User	Safety Concern Description	Reference Photo	Potential Countermeasure(s)
MAIN STREET BETWEEN FAIR CITY MALL AND PICKETT ROAD	» Faded Crosswalk pavement marking, remove 35 mph posted speed limit within a school zone	●	●		●	Faded crosswalk pavement marking at the southbound approach of Main Street and Whitacre Rd Intersection. Speed limit sign "35 mph" along Main Street just after Whitacre Rd in the eastbound direction should be replaced with a school zone speed limit sign. It can be confusing to have a 35 mph speed limit sign within the 25 mph school zone, as drivers may understand it as the school zone has ended.	**Figure 28.** Posted 35 mph speed limit sign east of Whitacre Road, within 25 mph school zone 	» School zone improvements » Crosswalk visibility enhancements
	» Inadequate sight distance for eastbound left turns. » Issues with the "Protected" left turn phase for eastbound left turn.	●	●		●	Sight distance for the eastbound left-turning vehicles is restricted because of the difference in the eastbound and westbound Main Street vertical slope/grade, Vehicles making a left turn on yield (during permissive phase) sometimes get stuck in the middle of the intersection if there is a conflicting westbound through vehicle is approaching fast. The signal head for eastbound left at Main Street and Fair City Mall Entrance operates as a protected/permissive phase; however, during the field review it only operated as a permissive left turn.	**Figure 29.** Eastbound left turn sight distance constraints at the Fair City Mall Shopping Center Entrance 	» Signal timing improvements
MAIN STREET AND FAIR CITY MALL SHOPPING CENTER	» Turning conflicts between vehicles and crossing pedestrians		●		●	Due to the phasing of the signal, there are conflicts between southbound right-turning vehicles with pedestrians crossing Main St. This can lead to an increase in drivers not yielding to crossing pedestrians. Furthermore, the pedestrian crossing for the uncontrolled driveway exit between Pickett Road and the Fair City Mall signalized driveway is directly within the queuing area for vehicles turning right onto westbound Main Street.	**Figure 30.** Driveway at Fair City Mall and pavement markings within the pedestrian crossing 	» Leading pedestrian interval » Crosswalk improvements
	» No Sidewalk between Main Street and Woodson High School Gate Access		●		●	There is currently a gate that is used by students to access Woodson High School, commonly used when crossing at the Fair City Mall entrance open during arrival and dismissals. This connection has created an informal dirt path over tree roots that is not accessible to people with visual or mobility challenges.		» School zone improvements
	» Missing Pedestrian Signal Heads		●		●	There are currently no signal heads for the pedestrian crossing across the Fair City Mall Shopping Center driveway. This is a safety concern as there is a protected left turn phase for vehicles turning into the shopping center from eastbound Main Street, which may not be noticed by pedestrians who see that the driveway has a red light.		» Pedestrian signal improvements
MAIN STREET AND WHITACRE ROAD	» Turning conflicts between vehicles and crossing pedestrians		●		●	Due to the phasing of the signal, there are conflicts between northbound and southbound vehicles with pedestrians crossing Main St. This can lead to an increase in drivers not yielding to crossing pedestrians.		» Leading pedestrian interval

	Safety Concern/ Observation	Vehicle	Peds	Bikes	Transit User	Safety Concern Description	Reference Photo	Potential Countermeasure(s)
MAIN STREET AND WHITACRE ROAD (CONTINUED)	» Pedestrian push buttons		●		●	The push buttons are not angled properly in the direction of the crossing across Main Street. The southeast corner push buttons are also separated by a curb and may impede accessibility to the button.	**Figure 31.** Pedestrian push buttons on the northeast corner of Main Street and Whitacre Road. 	» Pedestrian signal improvements
	» Crosswalk landing		●		●	The northeast corner of the intersection has a situation where the east crossing simply ends within the roadway		» Curb ramp improvements
	» Inconsistent speed limit	●				School limit posted west of Whitacre Road is then overruled by the regular speed limit east of Whitacre; turning vehicles from Whitacre onto eastbound Main Street does not see the school speed limit. This concern is also present in the westbound direction of Main Street, west of Pickett Road.		» School zone improvements
	» Retroreflective backplate	●				High visibility backplates are present on the signal heads to the westbound direction of Main Street, but not the eastbound direction. The lack of backplates on this east-west corridor may result in drivers experiencing issues with signal visibility during hours when sun glare is a challenge.	**Figure 32.** Traffic signal at Main Street and Whitacre Road 	» High visibility backplates
MAIN STREET AND LYNDHURST DRIVE / TRAPP ROAD	» Multiple Threat and Long Uncontrolled Crossing		●		●	The total pedestrian crossing length across Main Street at Lyndhurst/Trapp is over 100 ft wide with no control device for drivers when pedestrians are crossing. Given the high traffic volumes and number of lanes to cross, it is difficult and unsafe for a pedestrian to find an available gap in traffic to cross or for all lanes of travel to yield appropriately for a crossing pedestrian. Furthermore, drivers in one lane may opt to stop for the crossing pedestrian, but block the visibility between the driver in the adjacent approaching lane and the pedestrian crossing in front of the stopped vehicle. This can result in a severe pedestrian injury or fatality if the vehicle in the adjacent lane does not stop for the pedestrian.	**Figure 33.** Long uncontrolled pedestrian crossing at Main Street and Lyndhurst Drive / Trapp Road 	» Pedestrian hybrid beacon » Crosswalk visibility enhancements
	» Driver Non-Compliance with U-turn Restriction	●	●		●	U-turn is restricted from the innermost lane on the westbound approach of the Trapp Rd intersection. However, during the field visit vehicles were observed making a U-turn through the median crossover opening which can result in angle/sideswipe crashes at the intersection between the U-turning vehicles and the conflicting through vehicle.		» Main Street and Trapp Road / Lyndhurst Drive Improvements

	Safety Concern/ Observation	Vehicle	Peds	Bikes	Transit User	Safety Concern Description	Reference Photo	Potential Countermeasure(s)
MAIN STREET AND LYNDHURST DRIVE / TRAPP ROAD (CONTINUED)	» Challenges Accessing Side Streets due to Geometry and Gaps in Traffic	●				The intersection approaches of Lyndhurst Drive and Trapp Road are offset at the intersection, creating a wide opening in the median. This wide opening and lack of guidance, paired with challenges in finding a gap in traffic make it difficult for drivers to appropriately assess when to turn. Drivers who may be less experienced or have problems with vision (especially at night) may be at higher risk of experiencing an angle crash at the intersection.		» Main Street and Trapp Road / Lyndhurst Drive Improvements
	» Drivers Not Stopping for Crossing Pedestrians		●	●	●	While conducting observations, drivers did not want to stop for crossing pedestrians at the Lyndhurst Drive / Trapp Road crosswalk. This results in either the pedestrian waiting for a gap in traffic (which can take a while in peak hours) or uncomfortably entering the travel lanes and forcing traffic to stop or taking a risk if drivers do not.		» Pedestrian hybrid beacon » Crosswalk visibility enhancements
	» Predominant rear-end and angle crashes at the intersection		●		●	There are multiple angle crashes involving left-turning vehicles from side streets and from the mainline. Also, there is a high frequency of rear-end crashes at the intersection because of the vehicles slowing down either for pedestrians or for turning vehicles.		» Main Street and Trapp Road / Lyndhurst Drive Improvements
MAIN STREET BETWEEN TRAPP / LYNDHURST AND BURKE STATION ROAD	» Long Distance Between Crossing Opportunities		●		●	There are approximately 1,940 feet between the marked crossings at Lyndhurst Drive/ Trapp Road and Burke Station Road, including a bus stop pair halfway between. This greatly increases the distance a pedestrian has to walk to cross within a marked crosswalk across Main Street.		» Transit stop rebalancing » New pedestrian crossings
MAIN STREET AND BURKE STATION ROAD	» Turning Conflicts Between Vehicles and Crossing Pedestrians		●		●	Due to the phasing of the signal, there are conflicts between northbound and southbound vehicles with pedestrians crossing Main Street. This can lead to an increase in drivers not yielding to crossing pedestrians.		» Leading pedestrian interval

	Safety Concern/ Observation	Vehicle	Peds	Bikes	Transit User	Safety Concern Description	Reference Photo	Potential Countermeasure(s)
MAIN STREET AND STONE WALL AVENUE / FAIRFAX SQUARE	» Inadequate signing	●				During the field visit, there was a keep right sign missing on the steep median at the eastbound approach of the intersection. It has since been replaced, but these types of vehicle strikes are common.	**Figure 34.** Missing keep right sign on the median at the eastbound approach of Main Street to Stone Wall Avenue / Fairfax Square 	» Main Street and Stone Wall Avenue / Fairfax Square Improvements » Replace the missing "keep right" sign.
	» Approach Geometry and Landscaping Pose Concerns for Pedestrians Crossing Fairfax Square and Bus Operations		●		●	The Fairfax Square approach at Stone Wall Avenue features a slip lane for the right turn onto and off of Main Street. As a result, the porkchop islands create a pedestrian crossing that is not straight and requires people to walk diagonally off the sidewalk. This path is not intuitive, which poses additional challenges to visually impaired individuals. There is also landscaping on the porkchop islands with waist-high shrubs that could obstruct the sight lines between a driver on Main Street looking to turn left onto Fairfax Square and people that are shorter than 4 feet. This is a particular concern for young children crossing the intersection, especially if darting across Fairfax Square.	**Figure 35.** Misaligned curb ramps and shrubbery across Stone Wall Avenue 	» Main Street and Stone Wall Avenue / Fairfax Square Improvements
	» Demand for Pedestrian Crossing		●		●	There were observed pedestrians during the site visit crossing Main Street in the vicinity of this intersection. There is also likely latent demand given the destinations on each side of the road are major pedestrian generators. Currently, there are a lot of conflict points for pedestrians trying to cross Main Street and the median is not wide enough to cross in two stages. On the east side of the intersection, there is also a significant grade change between eastbound and westbound traffic that adds sight distance and crossing issues.		» New pedestrian crossings » Main Street and Stone Wall Avenue / Fairfax Square Improvements
MAIN STREET SHOPPING CENTER (BETWEEN TEDRICH BOULEVARD AND STONE WALL AVENUE)	» Multiple driveways in/out of Main Street Shopping Center	●	●	●	●	There are multiple closely spaced driveways providing access in and out of the Main Street Shopping Center. In total, there are five driveways, with one exclusive driveway for the Shell Gas Station, one for the Dunkin, and three for the Main Street Shopping Center. The two driveways furthest east on the block (closer to Stone Wall Avenue / Fairfax Square) are both right-in-right-out driveways. The three driveways on the west side of the block (closer to Tedrich Boulevard) have access via right and left turns into the shopping center, as well as right and left turn access onto Main Street. These three access points are closely spaced together, near the signalized intersection of Main Street and Tedrich Boulevard and can have challenges with sight distance and gap acceptance by drivers. Safety challenges with these include: » Parked vehicles blocking sight lines between vehicles exiting from the driveway and through traffic on westbound Main Street; » Exiting vehicles inching forward for better sight lines (to see a gap in westbound traffic) entering the path of pedestrians crossing the driveway; and » Drivers turning left onto eastbound Main Street waiting for a gap in the two-way left turn lane (TWLTL), thus blocking or obstructing sight lines for vehicles attempting to turn left into the shopping center. These safety concerns can increase the risk of angle crashes involving vehicles entering or exiting the shopping center with westbound vehicles traveling on Main Street, as well as the potential for sideswipe crashes while vehicles wait in the TWLTL or merge into eastbound traffic on Main Street. Drivers may also not be looking for the pedestrian walking alongside Main Street in front of the shopping center, posing the risk of a pedestrian getting hit by an existing driver.	**Figure 36.** Main Street Shopping Center driveways (3 west side driveways shown)  **Figure 37.** Access point to Main Street Shopping Center with parking spaces falling in the line of sight between westbound vehicles and existing drivers 	» Access management between Stone Wall Avenue / Fairfax Square and Tedrich Boulevard

MAIN STREET AND TEDRICH BOULEVARD

Safety Concern/ Observation	Vehicle	Peds	Bikes	Transit User	Safety Concern Description	Reference Photo	Potential Countermeasure(s)
» Short walk phase crossing Main Street		●		●	The pedestrian phase to cross Main Street at Tedrich Boulevard is an exclusive phase, but the WALK time is only 4 sec. This limits the amount of time for a pedestrian to enter the crosswalk.		» Leading pedestrian interval » Pedestrian signal improvements
» Limited landing pad		●		●	There is limited space on the northeast and northwest corners at Main Street and Tedrich Boulevard for pedestrians to wait to enter the crosswalk. This can result in people who rely on mobility devices having challenges entering the sidewalk from the roadway.	**Figure 38.** Limited landing area for curb ramp on the northwest corner of Tedrich Boulevard at Main Street 	» Curb ramp improvements
» Inadequate pavement markings and signing	●				The outermost lane on the eastbound approach of Main Street lacks a right-turn-only lane using arrow marking and lane control signs for this approach (left turn/through/through/right turn). Drivers are likely to confuse the outermost lane as the shared through/right turn lane whereas it is a right turn-only lane leading to the United Alliance entrance.	**Figure 39.** Missing right turn lane marking on the eastbound approach of the Main Street and Tedrich Boulevard intersection 	» Main Street and Tedrich Boulevard Improvements
» Missing Pedestrian Push Buttons		●		●	There are currently no push buttons on the northeast corner of the Main Street and Tedrich Boulevard intersection for the pedestrian crossing across Tedrich Boulevard. This is a safety concern as there is no way for a pedestrian on the east side of Tedrich Boulevard to activate the pedestrian signal to cross during off-peak and night hours when the signal operates in a free or flashing mode and there is no pedestrian recall. Additionally, a pedestrian push button for an accessible pedestrian signal can be activated by someone visually impaired and alert them of when to cross.	**Figure 40.** Northeast corner of Main Street and Tedrich Boulevard without pedestrian push buttons 	» Pedestrian signal improvements

	Safety Concern/ Observation	Vehicle	Peds	Bikes	Transit User	Safety Concern Description	Reference Photo	Potential Countermeasure(s)
MAIN STREET AND FARRCROFT DRIVE / ROBERTS ROAD	» No pedestrian signal heads for Farrcroft Drive crosswalk		●		●	There are no pedestrian signal heads for the Farrcroft Drive crosswalk due to the lack of available power on that intersection approach and because Farrcroft Drive is a private road. This can lead to difficulty in judging when to cross that leg of the intersection.	**Figure 41.** Crosswalk across Farrcroft Drive at Main Street 	» Pedestrian signal improvements
	» Turning conflicts between vehicles and crossing pedestrians		●		●	Due to the phasing of the signal, there are conflicts between northbound left turn and southbound right turn vehicles with pedestrians crossing Main St. This can lead to an increase in drivers not yielding to crossing pedestrians.		» Leading pedestrian interval
DANIELS RUN TRAIL	» Lack of Wayfinding Between Trails		●	●		There is a lack of wayfinding from where the Fairfax City Bike Trail crosses Main Street at the shopping center to where Daniels Run Trail intersects the sidewalk 400 feet to the west. This can lead to pedestrians and cyclists crossing outside of the signalized intersection or trying to navigate the shopping center parking lot.	**Figure 42.** Daniels Run Trail Entrance/Exit without wayfinding signs 	» Trail wayfinding signage
MAIN STREET AND MARKETPLACE DRIVEWAY	» Missing Pedestrian Signal Heads		●		●	There are currently no signal heads for the pedestrian crossing across Marketplace Driveway. This is a safety concern as there is no way for a pedestrian on the northeast corner of the intersection to activate the pedestrian signal to cross the Marketplace Driveway. Although pedestrians are likely able to cross the full length of the driveway when Main Street has a green indication, other times when the signal is operating free (after 11 pm), a vehicle exiting the Marketplace driveway could trigger a phase change while a pedestrian is crossing the driveway. The phase change would take at least 6 seconds to allow for the yellow and all red clearance interval for Main Street, which is less than the needed walk time to cross the driveway. A driver, especially under dark conditions and lighting levels at the intersection, may not see the pedestrian crossing in front of their vehicle.	**Figure 43.** Crossing across Marketplace Driveway at Main Street without pedestrian signal heads 	» Pedestrian signal improvements

5

Potential Countermeasures

The following section summarizes potential countermeasures to address the issues and observations from Section 4. When appropriate, the proposed countermeasure lists a crash reduction factor (CRF). CRFs provide some indication of the potential benefit, or lack thereof, associated with specific countermeasures, and represents a percent reduction from the baseline. This section also contains references to the crash modification factor (CMF), which is the counter to a CRF, calculated as 1.0 minus the CRF. A CMF is a multiplicative factor, based on documented safety research studies, used to compute the reduction in the expected number of crashes after implementing a given countermeasure at a specific site.[5]

This section also outlines the relative cost and implementation time frame for each potential countermeasure. **Table 10** shows the approximate time frame for each implementation category (short, intermediate, long) as well as the cost range for each categorization (low, medium, high). Prioritization of countermeasures or treatments should consider the potential safety improvement, impact on community livability, increased opportunities for non-vehicular travel, and effects on traffic operations. The potential safety improvement may also be greater in locations with higher risk, which commonly include a history of severe and fatal crashes, higher driver operating speeds, and a variety of road user types (pedestrians, bicyclists, older adults, children, etc.).

Table 10. Implementation Time Frame and Relative Cost for Potential Countermeasures

Implementation Time	
Short	Within 1 year
Intermediate	1 to 5 years
Long	Longer than 5 years

Cost	
Low	less than $150,000
Medium	$150,000 to $500,000
High	greater than $500,000

5 American Association of State Highway and Transportation Officials. Highway Safety Manual. Washington, DC: American Association of State Highway and Transportation Officials, 2010.

There are also currently positive design features on Main Street that should remain through the implementation of recommendations from this RSA. Design features, landscaping, and the urban context all contribute to Main Street being a low-speed roadway, which reduces the risk of severe crashes. There is also strong compliance with the traffic signal at Main Street and Pickett Road due to the existing red light camera, which helps significantly reduce the risk of severe angle crashes. Main Street also serves several different transit routes and sidewalks on both sides of the corridor, which helps create a sense of place for community members utilizing non-vehicle transportation options. There is also maintained landscaping in the median and transit shelters, which can also help contribute to a sense of place for those walking along Main Street.

5.1. Corridor-Level Improvements

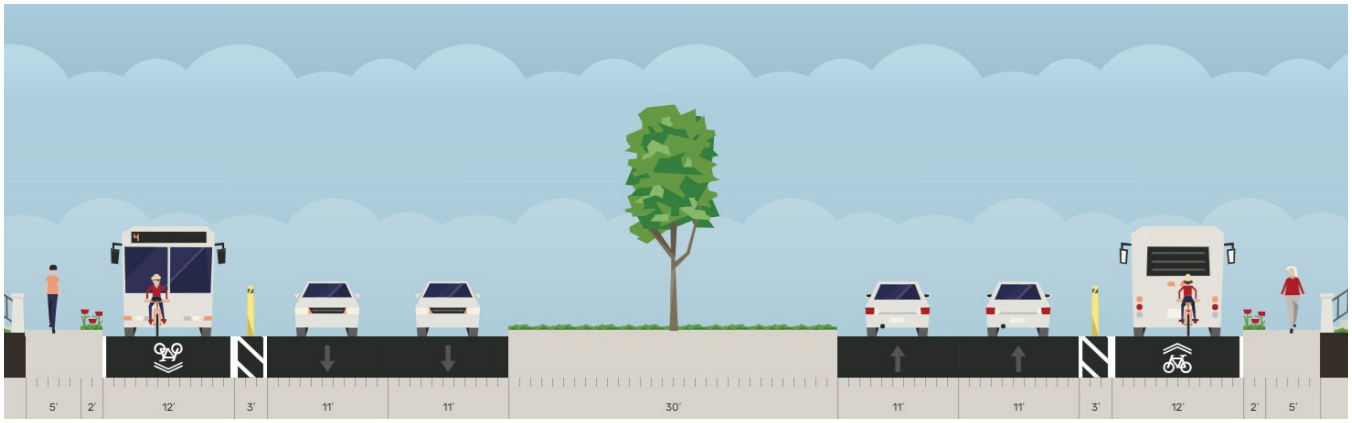
This section details the potential improvements that could be made along Main Street on the corridor-level. These corridor improvements could include the installation of an exclusive shared transit-bike lane, pedestrian lighting improvements, roadway maintenance and foliage trimming, turn lane improvements, conflict point reductions, and crosswalk improvements.

5.1.1. Exclusive shared transit-bike lane

As discussed in Section 4, the existing bus lane along westbound Main Street between Pickett Road and Fairfax Square is commonly used by drivers as a passing lane or general purpose lane, rather than only entering it when turning right. There is currently no bus-only lane heading eastbound on Main Street but there is a third lane along the curb that could potentially be used as an exclusive shared-transit bike lane. Traffic volumes are similar in both directions and volumes are the lowest in the eastbound curbside lane, per data shown in Section 2.3. A shared transit-bike lane means that buses, paratransit, bicyclists, e-scooters, and forms of microtransit or demand-response transit could all utilize the exclusive lane. The adoption of this provision could also be added to the City of Fairfax Code of Ordinances to designate who or what vehicles are allowed to operate in the lane.

There is an opportunity to narrow the existing inner travel lanes on Main Street from roughly 12 feet (typical) to 11 feet to make the outer lane roughly 15 feet. This additional pavement width can be used to install a buffer zone with vertical elements between the shared transit-bike lane and general-purpose lanes to create physical separation between the two facilities. A potential cross-section demonstrating this concept is shown in **Figure 44**.

Figure 44. Proposed cross-section for transit-only lane within curb-to-curb width of Main Street



These improvements would reduce the likelihood of non-compliance with the shared transit-bike lane, as well as provide separated bicyclist facilities for a portion of the corridor. While dedicated bicyclist facilities are generally preferred, the fairly low frequency of transit vehicles could allow for an experience comfortable for most bicyclists, but not all. Long-term bicyclist facility recommendations are included in Section 5.4.

In current conditions, police are unable to effectively enforce compliance with the bus-only lane. Given that the installation of a buffer with vertical elements, and potentially red paint, could require time for funding approval and preliminary engineering, short-term improvements to the bus-only lane could include installing a double white line. The double white line is enforceable per the Virginia State code and effectively indicates to drivers that they shall not cross the line and that the lane is not meant for vehicular traffic. Additionally, integrating dotted lines on the approaches to intersections where drivers can turn right would clarify where drivers can merge into the bus-only lane for turning right. By formally dedicating a bus-only or shared transit-bike lane in both directions, transit operations may be made more efficient, which can encourage overall transit use along Main Street by improving the overall user experience. As transit operations are improved, there could be an increase in passenger demand, potentially increasing route frequency and the overall number of transit vehicles using the lane. As the use of the transit lane increases, separated bicyclist facilities on eastbound and westbound Main Street adjacent to the transit-only lane should be considered.

The narrowing of the general purpose lanes, reduction of the third travel lane, and addition of vertical elements to create visual friction may all provide speed management in this portion of the corridor. The portion of Main Street where the transit lanes are proposed is also where drivers are transitioning from the 45 mph suburban context into the 35 mph urban context before hitting the downtown area of Fairfax. 85th percentile speeds in this portion of the corridor are roughly 43 to 44 mph. While research is currently limited on quantifying the safety benefits of shared transit-bike lanes, there has been research on how context and roadway elements affect driver behavior. Introducing elements that make drivers perceive Main Street as a multimodal urban road can help them transition to the new context and adjust behavior accordingly.

Priority	Medium
Implementation Time	Intermediate
Cost	High

5.1.2. Lighting improvements

During the nighttime RSA, it was noted that lighting levels vary significantly along the corridor but is generally dark. This was identified as a safety concern, particularly due to the two pedestrian fatalities within the study period, both during dark conditions. Furthermore, over two-thirds of pedestrian fatalities nationally occur during dark hours. Nighttime pedestrian crashes are often related to pedestrian conspicuity and the inability of drivers to perceive and react to those crossing. Contributing factors to such pedestrian crashes include low lighting levels, the effects of headlight glare on drivers' visual acuity, and delayed reaction due to misalignment of driver expectations for the corridor at night. Improving street lighting has been found to have substantial safety benefits through multiple studies.[6,7] A 2021 study found that increasing the average lighting illumination of 0.5 to 1.0 footcandles to an average level greater than 1.0 footcandle can have a potential crash reduction of 42 percent.[8]

Traditional roadway lighting may not always be suited for driver visibility of pedestrians, as the lighting levels may be too low, or the placement of the lighting can create a silhouette of the crossing pedestrian. The

6 Li, Qianwen, Z. Wang, M. Li, R. Yang, P., Lin, and X., Li. "Development of crash modification factors for roadway illuminance: A matched case-control study". Accident Analysis and Prevention, Vol. 159. 2021.
7 Elvik, R. and Vaa, T., "Handbook of Road Safety Measures." Oxford, United Kingdom, Elsevier, 2004.
8 Li, Qianwen, Z. Wang, M. Li, R. Yang, P., Lin, and X., Li. "Development of crash modification factors for roadway illuminance: A matched case-control study". Accident Analysis and Prevention, Vol. 159. 2021.

silhouette effect casts a dark shadow on the pedestrian, making them difficult to see for oncoming drivers. This occurs when there is a negative contrast in lighting, and the pedestrian appears darker than the background.[9] This silhouette effect poses a risk to crossing pedestrians, particularly with a wide crossing when pedestrians may still be crossing Main Street at the end of the pedestrian phase, before drivers on Main Street get the green phase.

Additionally, drivers turning left during a permissive phase or right on red may also struggle to see crossing pedestrians during dark hours when lighting is insufficient for pedestrian conspicuity. Pedestrian scale lighting requires a certain type of lighting shape, height, and level to properly illuminate the crosswalk. The FHWA Pedestrian Lighting Primer provides insights on how to appropriately select lighting to increase pedestrian conspicuity during dark hours.[10]

There are low lighting levels along the corridor for pedestrians, particularly at marked crosswalk locations across Main Street. **Figure 45** shows the darkness of the crosswalk across Pickett Road at Main Street with crossing pedestrians and a bicyclist. Without adequate lighting, it can be difficult for drivers to see pedestrians in the crosswalk or waiting to cross. Lighting placement also makes a difference in the effectiveness, as placement behind or above the pedestrian from the perspective of the approaching driver creates a silhouette effect on the crossing pedestrian.

Figure 45. Pedestrians and bicyclists crossing in north crosswalk at Main Street and Pickett Road

Lighting alongside the road and intersection corners is also generally low, with a few exceptions near businesses such as car dealerships or gas stations. **Figure 46** shows the dark conditions of the sidewalk in front of Woodson High School along Main Street between Pickett Road and the Fair City Mall Shopping Center driveway. This can reduce the ability for drivers turning onto off of Main Street to see pedestrians crossing side streets or driveways. At some locations on the corridor, lighting is placed within and between tall trees, blocked by foliage. Additionally, lighting levels also contribute to a pedestrian's perception of personal safety and security.

Figure 46. Dark sidewalk on south curb of Main Street between Pickett Road and Fair City Mall Shopping Center Driveway (in front of Woodson High School)

Recommendations specific to pedestrian lighting needs on the corridor include:

- Upgrade lighting at intersection crosswalks with medium levels of pedestrian activity (11-99 pedestrians per hour) and within crossings highly traveled by school-aged children to 30 lux (2.79 footcandles) at the following intersections:
  - Main Street and Pickett Road
  - Main Street and Fair City Mall Shopping Center Driveway
- Upgrade lighting at intersection crosswalks across Main Street with low levels of pedestrian activity (10 or fewer pedestrians per hour) to 20 lux (1.85 footcandles) at the following intersections:

9 FHWA. Pedestrian lighting primer. Federal Highway Administration. Report No. FHWA-SA-21-087. Washington, D.C. 2022.
10 FHWA. Pedestrian lighting primer. Federal Highway Administration. Report No. FHWA-SA-21-087. Washington, D.C. 2022.

  - Main Street and Whitacre Street
  - Main Street and Trapp Road / Lyndhurst Drive
  - Main Street and Burke Station Road
  - Main Street and Tedrich Boulevard
  - Main Street and Farrcroft Drive/ Roberts Road
- Provide/upgrade existing lighting to 20 lux (1.85 footcandles) on near side corner of traffic approaching from Main Street to enhance visibility of pedestrians crossing side streets for right turning vehicles.
- Adjust lighting placement on south curb at Main Street and Trapp Road / Lyndhurst Drive to eliminate silhouette effect on pedestrian created by lighting behind the crosswalk when approaching from eastbound Main Street.
- Provide lighting for proposed pedestrian crosswalk at Main Street and Stone Wall Avenue / Fairfax Square at a level of 20 lux (1.85 footcandles).
- Upgrade existing gas lamps on the west portion of the corridor (near Main Street Marketplace) to LED bulbs.
  - Supplement marked pedestrian crosswalks at Main Street and Main Street Marketplace Driveway with additional lighting to meet the recommended lighting level of 20 lux (1.85 footcandles). LED upgrades to gas lamps at this crossing location are likely insufficient to provide recommended lighting levels.
- Trim or remove foliage blocking street lighting along the sidewalk, particularly on the south curb between Burke Station Road and Estel Road.
- Upgrade/provide lighting alongside the road for sidewalks within school zone (on Main Street between Pickett Road and Trapp Road / Lyndhurst Drive) to 10 lux (0.9 footcandles).
- Upgrade/provide lighting alongside road for sidewalks on Main Street between Trapp Road / Lyndhurst Drive and Main Street Marketplace Driveway to 2 lux (0.2 footcandles).

Locations for lighting improvements should be prioritized based on risk, meaning that higher speed portions of the corridor, locations where previous pedestrian/bicyclist crashes have occurred, and places where there might be higher proportions of special populations (children and older adults) may be walking and crossing would be pin greatest need. Along the corridor, the lighting improvements should be prioritized in the following order:

1. Main Street and Pickett Road
2. Main Street and Lyndhurst Drive / Trapp Road
3. Main Street and Fair City Mall Driveway
4. Main Street and Whitacre Road
5. Sidewalks between Pickett Road and Lyndhurst Drive / Trapp Road
6. Sidewalks and intersections between Tedrich Boulevard and Burke Station Road
7. Trail Crossing at Main Street Marketplace Intersection
8. Sidewalks and intersections between Lyndhurst Drive / Trapp Road and Burke Station Road
9. Sidewalks and intersections between Tedrich Boulevard and Main Street Marketplace

Priority	High
Implementation Time	Intermediate
Cost	Medium

5.1.3. Roadway maintenance and vegetation trimming

During the field review it was observed that several signs along Main Street were fully or partially covered by vegetation which reduced their visibility to the roadway users. There are signs within the median which were also covered by vegetation. Additionally, a few sections of the sidewalks were also found to be covered by vegetation. **Figure 47** shows a lamppost that has been mostly surrounded by vegetation that now impacts the efficacy of the lighting.

Figure 47. Lamppost alongside south curb of Main Street between Maple Avenue and Burke Station Road blocked by trees

The goals of pruning and maintaining the vegetation include:

- Keeping the signs visible to the drivers
- Keeping pedestrians and bicyclists visible to the drivers and vice versa
- Increasing the line of sight for the drivers on the mainline
- Increasing the line of sight for the drivers from side streets
- Keeping the sidewalks clear for pedestrians
- Maintaining illumination levels of existing street lighting

Maintaining vegetation is a potential improvement for all roadway users along Main Street and side streets and will help mitigate crashes by warning road users in advance of an upcoming hazard. Foliage trimming within the public right-of-way should be done regularly, along with coordination with any property owners that have foliage outside of the public right-of-way but obstruct driver sight lines on side street approaches to Main Street. Potential changes to the City code could include requiring private property owners to maintain foliage that falls within sight lines and poses safety concerns. Other changes could include introducing a policy that also details the regular maintenance of landscaping and street trees by the City of Fairfax Department of Public Works.

Priority	Medium
Implementation Time	Short
Cost	Low

5.1.4. Turn lane improvements

This potential improvement will help reduce traffic congestion and improve safety for all roadway users throughout the corridor. Substandard turn lanes cause queue spillbacks which not only block driveways and side streets but also block through traffic if the queue extends beyond the storage lanes. During the field visit, queues from the left turning lanes at the Main Street at Pickett Road intersection and Main Street at Main Street Shopping Center were observed to be extending beyond the storage lanes.

It is recommended to evaluate left and right turn lanes at both signalized and unsignalized intersections based on the current traffic volumes and heavy vehicle percentages, especially during peak hours. According to the Virginia State Preferred CMF list, the CMF for extending a left or right turn lane is 0.85, or because of the extension of a turn lane, the crashes are expected to be reduced by 15 percent. Turn lane improvements at signalized intersections should be determined following a review of signal operations given turning movement counts in post-covid conditions (more in Section 5.3.1).

7th Edition American Association of State Highway and Transportation Officials (AASHTO) Policy on Geometric Design of Highways and Streets (also known as the "Greenbook") recommends a minimum of 205 feet of deceleration distance plus the length needed for queueing for turn lanes on roads with speeds of 35

mph.[11] At 25 mph, the Greenbook recommends at least 105 feet of deceleration distance plus a distance for queuing. Locations where turn lanes on Main Street are currently more than 10 feet under the recommended deceleration distance include:

- Eastbound Left onto Lyndhurst Drive (roughly 140 feet)
- Westbound Left onto Maple Avenue (roughly 180 feet)
- Eastbound Left onto Fairfax Square, East Side (roughly 150 feet)
- Eastbound Left onto Stone Wall Avenue (roughly 190 feet)
- Eastbound Left onto Tedrich Boulevard (roughly 130 feet)
- Westbound Left onto Orchard Drive (roughly 100 feet)
- Eastbound Left onto Fairview Drive (roughly 130 feet)
- Westbound Left onto Virginia Street (roughly 140 feet)
- Eastbound Left onto Virginia Street (roughly 100 feet)

Turn lane improvements should also be paired with the reduction of conflict points through the implementation of alternative intersections (discussed in Section 5.1.5). For example, improvements at the intersection of Main Street and Lyndhurst Drive / Trapp Road (Section 5.2.3) could be paired with improvements to adjacent intersections that may be affected by displaced turning movements.

Furthermore, there are also some right turn lanes that are longer than needed that could be corrected through a long-term corridor redesign (discussed in Section 5.4). No locations are listed as priorities at this time because of the potential for incorporating turn lane improvements through site-specific projects or alternative intersection designs.

Priority	Low
Implementation Time	Intermediate
Cost	Pair with site improvements

5.1.5. Conflict point reductions

Access management is a set of techniques that helps improve safety for all roadway users by reducing the number of conflict points. Access management can be achieved by consolidating or closing the low volume driveways, or by closing the median openings or restricting certain turning movements along the mainline.

By consolidating the driveways, such as, at the Main Street Center development, and converting full-access driveways to partial access could help the flow of mainline traffic and reduce rear-end and angle collisions throughout the segment. There are four full median crossover openings within a 0.5-mile segment of Main Street between the signalized intersections of Whitacre Road and Burke Station Road. These unsignalized intersections are often wide and can have sight distance challenges due to geometry and/or overgrown vegetation. In addition to vegetation trimming, some alternative intersection designs can be implemented to help reduce conflict points. Movements that are restricted through the implementation of alternative intersection designs must be reassigned to neighboring intersections – often times these are through or left turn movements that are reassigned as U-turns at the next closest intersection where they are allowed.

Some of the access management techniques for full access unsignalized intersections on Main Street could include a Roadway Crossing U-Turn (RCUT) or full median closure. An RCUT eliminates left and through traffic from side streets and reroutes them through a new or existing median cut adjacent to the intersection as a U-turn. The left turns from the mainline can turn onto the side streets. In the RCUT design, the number of conflict points to 18 from 32 at a conventional intersection. According to the Virginia State Preferred CMF list, the CMF for converting an unsignalized intersection to an unsignalized RCUT is 0.54 or the number of crashes is expected to be reduced by 46 percent.[12]

A full median closure converts side streets to right-in/ right-out access only. The number of conflict points are reduced to four as opposed to 32 at a full intersection.

11 American Association of State Highway and Transportation Officials. A Policy on Geometric Design of Highways and Streets. Washington, DC: American Association of State Highway and Transportation Officials, 2018.

12 Sun, X., Y. He, M.A. Rahman, and K. McManis. "Safety of Roundabout: The Details Matter". Presented at the 97th Annual Meeting of the Transportation Research Board, Paper No. 18-00871, Washington, D.C. 2018.

The CMF for a full median closure is 0.55 or the number of crashes are expected to be reduced by 45 percent.

The implementation of reduced conflict intersections should be prioritized based on risk, which is highest on the eastern end of the corridor where operating speeds are highest and drivers are transitioning from a suburban to an urban context. Also, conflict point reductions should be prioritized at locations where movements are uncontrolled and require driver judgment (i.e. left turns off Main Street). Such conflict point reductions at individual intersections may require coordinated improvements at adjacent intersections. Priorities include:

1. Main Street and Lyndhurst Drive / Trapp Road (including the intersections affected by displaced movements, i.e. Maple Avenue, Estel Road) – *Discussed in Section 5.2.3*
2. Main Street and Stone Wall Avenue / Fairfax Square (with pedestrian safety improvements) – *Discussed in Section 5.2.4*
3. Unsignalized intersections on Main Street between Tedrich Boulevard and the Marketplace Driveway – *opportunity for future consideration*

Priority	Medium
Implementation Time	Intermediate
Cost	Pair with site improvements

5.1.6. Crosswalk Improvements

Curb extensions/corner improvements

As noted in Section 4, several intersections have large corner radii that allow for drivers to turn off of Main Street at high speeds, thus increasing the risk of a severe pedestrian crash in side street crossings. Curb extensions (or neckdowns, bump outs) are a commonly used traffic calming countermeasure and can be used on roadways with on-street parking or additional, unneeded pavement width. Benefits of curb extensions can include:

- Reducing a corner radius that is larger than the required inner turn radius of the specified design vehicle and narrowing of curb-to-curb width of a roadway.
- Tightening turning radius can have beneficial traffic calming effects by slowing turning speeds. A recent study found that pedestrian crash medication factors increase with increased turning radius.[13]
- Reducing the curb-to-curb width helps reduce pedestrian exposure to vehicles by shortening the crossing.
- Curb extensions at uncontrolled locations can help reduce vehicle speeds by visually narrowing the street.
- Increasing the visibility of pedestrians at crossings.
- Maintaining intersection clearance by prohibiting standing or parking, which can be critical to ensuring adequate sight lines for drivers.

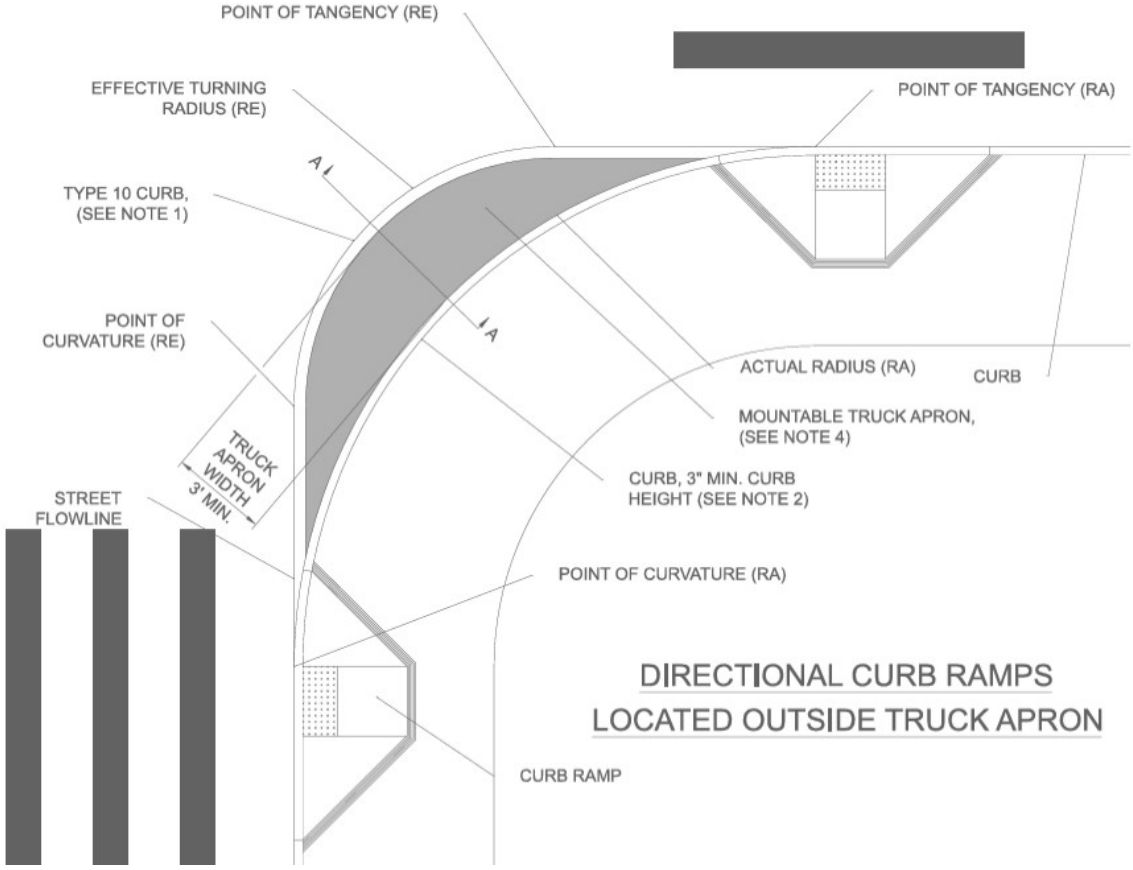
These treatments can be installed with more permanent materials, such as concrete curbing, or with materials that are less expensive and faster to install, such as with pavement markings and raised elements like temporary curbing or flexible delineators. shows a curb extension that is created with lower-cost, faster installation materials. **Figure 48** shows an example of an intersection in Washington, D.C. with temporary curb extensions that is in the process of transitioning into hardening and curb ramp improvements.

Potential drawbacks of curb extensions include challenges navigating the tighter radius for turning large vehicles, such as trucks or buses. In converting a temporary curb extension to permanent materials, truck aprons are often used to effectively tighten the turning radius for passenger vehicles, but still allow for larger vehicles to traverse the corner. **Figure 49** shows an overview of design details for a truck apron at a corner where the turning radius for passenger vehicles could be reduced.

13 Fitzpatrick, K., Avelar, R., Pratt, M., Das, S., Lord, D. "Crash Modification Factor for Corner Radius, Right-Turn Speed, and Prediction of Pedestrian Crashes at Signalized Intersections." Report No. FHWA-HRT-21-106. Federal Highway Administration. (2022).

Figure 48. Example of curb extension with temporary materials at 11th Street and East Capitol Street in Washington, DC (Source: Nearmap)

Figure 49. Truck apron details from Ohio Department of Transportation



Lastly, coordination with City of Fairfax Public Works, Streets Division on snow removal and curb extension material maintenance would be needed, as temporary curbing could be removed prior to significant snow events for plowing. Temporary curb extensions with flexible delineators can increase the need for maintenance, especially in areas with heavy foliage. Street sweepers and snow removal can be a challenge with the vertical elements. Additionally, while the vertical element prevents vehicles from simply driving over the marked gore area, this can result in the vertical elements being hit by turning vehicles. Permanent concrete curb extensions may require costly changes to stormwater drainage if not designed with an open channel that allows water to flow to existing drainage structures.

Locations have been identified as potential candidates for curb extensions based on the existing turning radius and curb-to-curb width of the side street. Prioritization of curb extensions should be based on locations with the highest risk to safety, meaning that corners with large turning radii off Main Street may be at higher risk than stop-controlled right turns from the side streets. Locations by priority include:

1. Main Street and Maple Avenue (SW corner)
2. Main Street and Lyndhurst Drive / Trapp Road (NE and SE corners)
3. Main Street at Whitacre Road (NW and NE corners)
4. Main Street and Fairfax Square, East Entrance (NE corner)
5. Main Street and Stone Wall Avenue (NE, NW, and SW corners)
6. Main Street and Virginia Street (SW corner)
7. Main Street and Orchard Drive / Fairview Drive (SE corner)

Priority	High
Implementation Time	Short
Cost	Low

Curb ramp improvements

Crosswalks on the side streets should be marked when curb ramps are present on either side of the crossing. Marking the side street crosswalks may help drivers expect pedestrians crossing in front of the vehicle, as well as indicate where they should not stop in order to provide a clear walkway.

Furthermore, the curb ramps at some of the crossings along the corridor are not ADA-compliant and are missing detectable warning surfaces. Providing ADA-accessible ramps is important to making sure pedestrian facilities are safe and accessible for people of all abilities, including visually or mobility-impaired persons. The alignment of the ramps and the presence of detectable warning surfaces provide those who cannot see or have limited vision to know where to cross and the direction of the crossing. Similarly, the flared features of a curb ramp, landing area, and slope of the ramp elements all impact the ability that those in wheelchairs need to navigate the transition from the crosswalk to the sidewalk.

Along Main Street, an upgrade of existing curb ramps and marking of the crosswalks on the side streets could help in making the corridor more accessible for all users. It also helps contribute to placemaking for pedestrians along Main Street. The addition of high visibility crosswalks on the side streets should be coordinated with curb extensions and curb ramp improvements. The upgrading of curb ramps along the corridor to meet the newest standards will provide an opportunity to consider relocation or realignment of the curb ramp with new crosswalk markings.

Priority	Medium
Implementation Time	Intermediate
Cost	Low

Pedestrian push button upgrades

During the RSA, it was noted that many of the pedestrian push buttons are set back far from the edge of the sidewalk, not aligned parallel with the crossing, or have been graffitied. Furthermore, not all of the push buttons have accessible pedestrian

features, such as vibrotactile feedback or audible feedback, to indicate when it is safe to cross for those who are vision impaired. Upgrading pedestrian push buttons along Main Street is essential for enhancing the independence and safety of pedestrians with disabilities, particularly those with visual or mobility impairments.

Furthermore, PROWAG includes requirements for the correct placement and height of push buttons and ensuring clear, unobstructed paths to access these buttons. Such measures not only support individuals with disabilities but also benefit other users, including the elderly, individuals with strollers, or those temporarily disabled by injuries. While a full review of the accessibility needs was not included in the RSA, most, if not all, of the pushbuttons, pedestrian signals, and curb ramps will need ADA upgrades. As potential projects recommended by this RSA are implemented, such upgrades could slowly be installed throughout the corridor.

Priority	High
Implementation Time	Intermediate
Cost	Low

5.2. Site Specific Improvements

There are several site-specific safety alternatives that could be implemented along Main Street. In particular, this section focuses on the following intersections and segments:

- Main Street and Pickett Road
- Woodson High School Zone
- Main Street and Lyndhurst Drive / Trapp Road
- Main Street between Stone Wall Avenue / Fairfax Square and Tedrich Boulevard
- Transit stops currently without marked crosswalks
- Daniels Run Trail

Several of these locations also have concepts that have been developed to improve intersection geometry and facilitate safer pedestrian crossings.

5.2.1. Main Street and Pickett Road

Right turn slip lane improvements

The existing right turn slip lane from Pickett Road onto westbound Main Street could use some geometric improvements to encourage compliance with the stop and improve sight lines for drivers of all ages and abilities, as well as mitigate existing crash patterns. Older adults may experience physical limitations, such as restricted neck mobility, which is required for checking oncoming traffic over their shoulders in traditional right-turn slip lanes. By modifying these lanes to intersect at a sharper angle or a 'T' (close to 90 degrees), the direction of the view is straightened, making it easier for drivers to observe oncoming vehicles and see potential non-motorized road users crossing in front of them. Due to the decreased reaction time and visibility that comes with age, these modifications particularly benefit older drivers.[14]

Section 3.3.2 details the crashes at the intersection of Main Street and Pickett Road. In the review of the data, a crash pattern was identified involving the right turn slip lane. Common themes include drivers proceeding ahead of the stop line to merge into westbound traffic, then getting rear-ended by the next driver looking to enter Main Street. This crash risk could be mitigated by creating the 'T' intersection between the slip lane and Main Street, as drivers would be able to focus more on what is directly in front of the vehicle, including other vehicles or potentially pedestrians. **Figure 50** depicts the potential geometric improvements to the right turn slip lane for southbound Pickett Road.

Priority	Medium
Implementation Time	Intermediate
Cost	Medium

14 Schattler, K. and T. Hanson. "Safety Impacts of a Modified Right Turn Lane Design at Intersections". Presented at the 95th Annual Meeting of the Transportation Research Board, Paper No. 16-0790, Washington, D.C., (2016).

Main Street and Pickett Road pavement marking and signing improvements

Improvements to the intersection could also include enhancements to approach the transit lane, which begins just past the driveway entrance into the Fair City Mall Shopping Center (near the Goodyear Tire shop). There are currently no indications to drivers approaching the bus lane heading westbound that the right lane becomes a bus only lane. Pavement markings and signage could be used to indicate to drivers that the lane is not for vehicular use, except at locations where they can enter the lane to turn right. **Figure 50** shows a high-level concept of potential pavement markings and signage that could be used to better provide drivers of the transition.

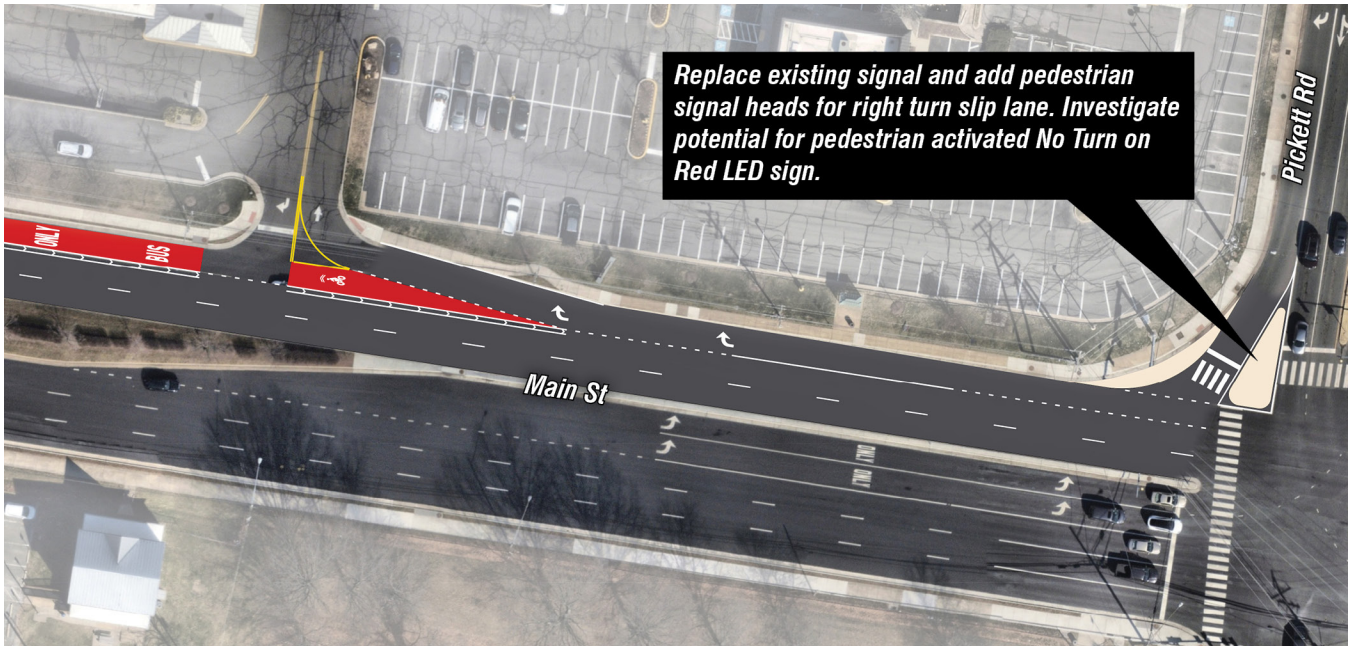
Priority	Medium
Implementation Time	Intermediate
Cost	Pair with shared transit-bike lane

Speed reduction ahead warning signs

As mentioned in the identified concerns, the speed limit for westbound Main Street drivers approaching Pickett Road changes from 45 mph to 35 mph, and 25 mph when the school zone is in effect. This abrupt change may result in drivers not having enough time to slow down to the school zone speed, which also increases the likelihood of a driver getting a photo enforced speed camera ticket in the Woodson High School zone. To provide a warning of the speed limit change and encourage compliance with the posted 35 mph speed limit, it is recommended to install a speed reduction warning sign (MUTCD sign code, W3-5) on westbound Main Street as it approaches Pickett Road. This countermeasure could alert drivers of the transition from a 45 mph to a 35 mph speed limit well in advance, thereby providing ample time for a gradual decrease in speed. Fairfax County Department of Transportation (FCDOT) with coordination from VDOT would be responsible for the implementation of this improvement.

Priority	Medium
Implementation Time	Short
Cost	Low

Figure 50. Potential concept for shared transit-bike lane transition and right turn slip lane improvements for southbound Pickett Road



5.2.2. Woodson High School zone improvements

New sidewalk at Fair City Mall Shopping Center Driveway

In front of Woodson High School, a fence is present that channelizes students to a primary exit/entrance point from the high school to/from the Fair City Mall shopping center. This fence has a gate that is open during arrival and dismissal time and channelizes students to the signalized crossing on Main Street at the shopping center's main driveway. There are sidewalks along both sides of Main Street, but no sidewalk is present through the gate opening. As a result, the gate cannot be easily used by people with mobility impairments or vision disabilities. A potential improvement at this location could be to work with FCPS to construct a connecting sidewalk on the south curb of Main Street through the parking lot for Woodson High School.

Priority	Medium
Implementation Time	Intermediate
Cost	Low

Speed limit signage

To encourage compliance with the school zone speed limit in the vicinity of Woodson High School, one recommendation includes removing the existing 35 mph speed limit signs near the Whitacre Road intersection and the single 35 mph speed limit sign just past the Pickett Road intersection in the westbound direction.

Per group discussions during the RSA, the 35 mph speed limit signs on the receiving side of eastbound and westbound Main Street past Whitacre Road were originally installed to remind students exiting Woodson High School of the speed limit. However, the time when most students would be driving home from school falls during school zone hours when the speed limit is 25 mph. The inclusion of 35 mph speed limit signs within the 25 mph school zone could be confusing to those unfamiliar with the area, as they may interpret it as the end of the 25 mph zone. One recommendation as part of this RSA is to remove the current speed limit signs on eastbound Main Street at Whitacre Road, relocate the westbound signs at Whitacre Road out of the school zone (closer to Lyndhurst / Trapp Road), and remove the westbound speed limit sign just past Pickett Road. The nearest speed limit signs in the eastbound direction are located near the intersection of Burke Station Road and where the speed limit changes to 45 mph just past Pickett Road at the Fairfax County – City of Farifax jurisdictional line.

Priority	Medium
Implementation Time	Short
Cost	Low

5.2.3. Main Street and Lyndhurst Drive / Trapp Road

Pedestrian hybrid beacon

As indicated by the crash history and field observations, a pedestrian crossing safety concern was identified at and within the area surrounding the intersection of Main Street and Lyndhurst Drive / Trapp Road. As stated in the crash analysis, there was a fatal pedestrian crash in 2022 at this intersection that involved a pedestrian being struck by an eastbound driver after crossing through the pedestrian refuge median. The intersection of Main Street and Lyndhurst Drive / Trapp Road falls within a pedestrian desire line, especially when considering the crosswalk spacing to Whitacre Road, the presence of medium-density housing on either side of Main Street, proximity to Woodson High School and Frost Middle School, transit stop locations, and other nearby trip generators. Crosswalk removal at this location was not considered as part of this RSA due to considerations for crosswalks found in VDOT IIM-384.1, which provides guidance on pedestrian crossings at unsignalized locations in the State of Virginia. This guidance states that if the crossing location has adequate stopping sight distance, pedestrian-oriented land uses and destinations, connecting pedestrian facilities, a speed limit greater than or equal to 30 mph or 1,500 ADT, more than 600-foot spacing from the nearest crosswalk, and is on a Virginia PSAP corridor, a crosswalk shall be installed. The guidance also

recommends that the crosswalk is installed with appropriate pedestrian countermeasures dependent on the roadway's speed, vehicular volumes, number of lanes, and presence of a pedestrian refuge island or median.

Per VDOT IIM-384.1 guidance, a 6-lane divided roadway with a 35 mph speed limit and greater than 15,000 vehicles per day is a Tier 4 roadway, meaning that only a pedestrian hybrid beacon (PHB) or roadway reconfiguration should be considered as crossing treatments if a signal is not warranted.[15] A rectangular rapid flashing beacon (RRFB) could only be recommended on a Tier 2 roadway or a Tier 3 roadway if a PHB or roadway reconfiguration is not appropriate. Main Street is a Tier 4 roadway between Pickett Road and Fairfax Square, Tier 3 between Fairfax Square (where 6 lanes become 4) and Farrcroft Drive, and Tier 2 between Farrcroft Drive (where the speed limit drops from 35 to 25 mph) and East Street / Blenheim Boulevard. VDOT IIM-384.1 guidance does not require pedestrian counts, but states that the crosswalk shall be installed if at least 20 pedestrians per hour are crossing.

A PHB operates as a three-light signal that is activated by a pedestrian looking to cross the street at an unsignalized crossing. Benefits of a PHB include enhanced pedestrian safety, as a red signal indication requires drivers to stop for non-motorized road users in the crosswalk. An example of a PHB in Richmond is shown in **Figure 51**. Following the red signal phase, the alternating red, or "wig-wag" indicated to drivers that they may proceed if the crosswalk is clear. PHBs can also include audible signals and tactile push buttons, which make them accessible to visually impaired individuals wanting to cross the street. Overall, the safety impact can lead to a significant crash reduction in vehicle-pedestrian crashes and total crashes. A 2010 study conducted primarily on major arterials found a 69 percent reduction in pedestrian crashes and 29 percent reduction in all crashes in locations where a PHB was installed. An additional study conducted in 2019 found that locations where PHBs had been installed had a 12 percent reduction in all crashes and a 43 percent reduction in pedestrian crashes.[16]

Figure 51. PHB at Grove Avenue at Somerset Avenue in Richmond, Virginia (Source: Google Street View)

15 Virginia Department of Transportation. IIM TE-384.1 Pedestrian Crossing Accommodations at Unsignalized Approaches. Virginia Department of Transportation. 2019

16 Fitzpatrick, K. and Park, E.S. Safety Effectiveness of the HAWK Pedestrian Crossing Treatment. FHWA-HRT-10-042, Federal Highway Administration, Washington, DC. 2010.

Main Street and Lyndhurst Drive / Trapp Road is currently spaced roughly 700 feet from the adjacent intersection of Main Street and Whitacre Road. While the spacing from the Whitacre Road intersection is in line with typical minimum spacing for crosswalks, queues in the eastbound direction may back up to the crosswalk at Lyndhurst Drive / Trapp Road per observations and crash narratives. Given the significant peak hour traffic volumes on Main Street, it is recommended that the PHB be coordinated with the signal system to minimize the impact on vehicular operations while still facilitating a safe pedestrian crossing.

An important consideration in timing the PHB phases between pedestrian activations is the downtime or "dark phase" which greatly influences pedestrian compliance with the walk phase of the PHB. Main Street at Whitacre Road, along with coordinated signals on the eastern portion of Main Street has 220 and 210 second cycle lengths in the AM and PM peak hours, respectively. A coordinated PHB would traditionally be timed with the phasing for minor street approaches to Main Street. However, given the long cycle lengths, pedestrians may opt to cross during the protected eastbound and westbound left phases for Main Street at Whitacre Street. Depending on the traffic modeling and analysis for the PHB, there could be an opportunity to allow for multiple activations within a single cycle length or for the PHB to operate on half cycle lengths during peak hours. During off-peak hours, the PHB could operate free and activate the solid yellow phase upon pedestrian actuation.

The MUTCD also has guidelines for a PHB installation, with a variety of factors to consider. Applicable guidance in the MUTCD relevant to the crossing at Main Street and Lyndhurst Drive / Trapp Road include lines 5 and 7 of Section 4F.01:

05 If a traffic control signal is not justified under the signal warrants of Chapter 4C and if gaps in traffic are not adequate to permit pedestrians to cross, or if the speed for vehicles approaching on the major street is too high to permit pedestrians to cross, or if pedestrian delay is excessive, the need for a pedestrian hybrid beacon should be considered on the basis of an engineering study that considers major-street volumes, speeds, widths, and gaps in conjunction with pedestrian volumes, walking speeds, and delay.

07 For a major street where the posted or statutory speed limit or the 85th-percentile speed exceeds 35 mph, the need for a pedestrian hybrid beacon should be considered if the engineering study finds that the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding total of all pedestrians crossing the major street for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4F-2 for the length of the crosswalk.

The MUTCD guidance detailed in line 5 applies to the current conditions of the crossing at Main Street and Lyndhurst Drive / Trapp Road, particularly during peak hours when traffic volume is high and/or special populations, such as young children or older adults, require more time to cross. Furthermore, the current conditions of the crosswalk may be deterring people from crossing under the existing design, due to perceptions of safety or the challenges in finding a gap in traffic. The existing pedestrian volumes are shown in **Table 11** below.

The peak hour for pedestrians and bicyclist crossings across Main Street at Lyndhurst and Trapp Road is 6:00 to 7:00 pm, which is also when the total pedestrian and bicyclist volume at the intersection peaks. Depending on the origins and destinations of the pedestrians and bicyclists coming through the intersection, a portion of the total volume may be willing to cross Main Street if the perception of safety at the existing crosswalk was improved or the delay to cross was reduced.

Priority	High
Implementation Time	Intermediate
Cost	High

Table 11. Pedestrian and Bicyclist Counts at Main Street and Lyndhurst Drive / Trapp Road

	West Crosswalk			North and South Crosswalks			All Crosswalks
	PEDS	BIKES	TOTAL	PEDS	BIKES	TOTAL	TOTAL PEDS/BIKES
6:00-7:00 AM	0	0	0	3	1	4	4
7:00-8:00 AM	3	0	3	10	0	10	16
8:00-9:00 AM	2	0	2	8	1	9	13
9:00-10:00 AM	3	0	3	13	3	16	22
10:00-11:00 AM	3	0	3	11	3	14	20
11:00-12:00 PM	2	0	2	13	0	13	17
12:00-1:00 PM	3	0	3	12	1	13	19
1:00-2:00 PM	1	0	1	7	1	8	10
2:00-3:00 PM	2	0	2	6	3	9	13
3:00-4:00 PM	2	2	4	21	5	26	34
4:00-5:00 PM	1	0	1	12	5	17	19
5:00-6:00 PM	3	0	3	14	5	19	25
6:00-7:00 PM	2	3	5	25	12	37	47

Turn restrictions and Geometric Improvements

The six-year crash history shows 33 crashes at the intersection, including one pedestrian fatal crash. Rear-end crashes are the predominant crash type followed by angle collisions which typically occur at two-way stop controlled intersections. The concepts in Figure 53, Figure 54, Figure 55, and Figure 56 below show potential safety treatments at the intersection. Note that these concepts also include the potential shared transit-bike lane to show that the proposed crossing would only be across two general purpose lanes. Design details such as crosswalk angle, curb ramps, PHB equipment placement, PHB phasing (single-stage versus two-stage crossing) and stop lines all to be determined through preliminary engineering.

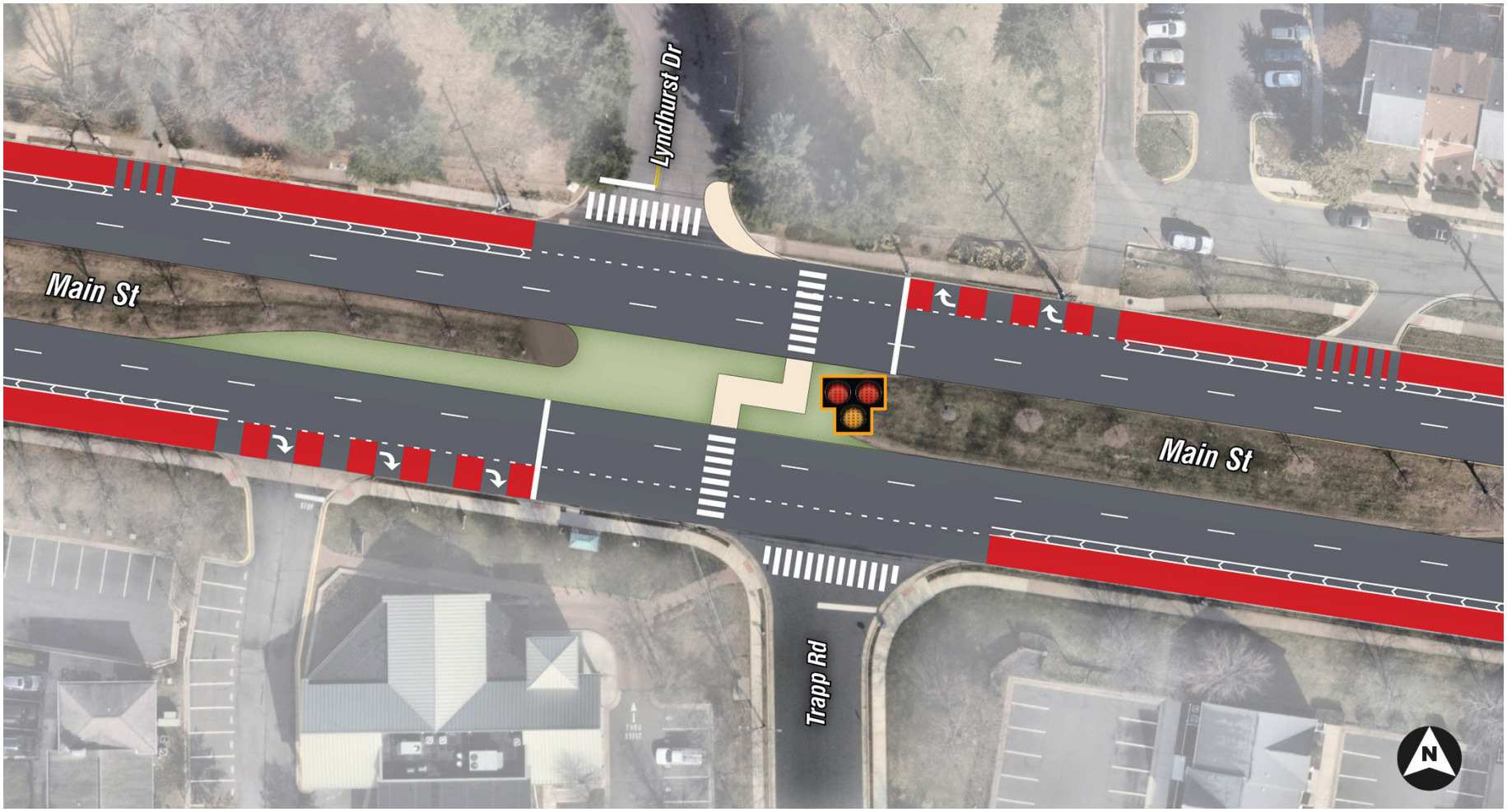
The safety benefits of each of these alternatives will vary, though an RCUT design can have a potential crash reduction of 46 percent, while the restriction of an access point to right-in-right-out can have a similar crash reduction of 45 percent.[17] A full Highway Safety Manual (HSM) safety analysis can also help better estimate the safety impact of improvements at the intersection as well as the affected adjacent intersections.

Priority	High
Implementation Time	Intermediate
Cost	High

17 Sun, X., Y. He, M.A. Rahman, and K. McManis. "Safety of Roundabout: The Details Matter". Presented at the 97th Annual Meeting of the Transportation Research Board, Paper No. 18-00871, Washington, D.C. 2018.

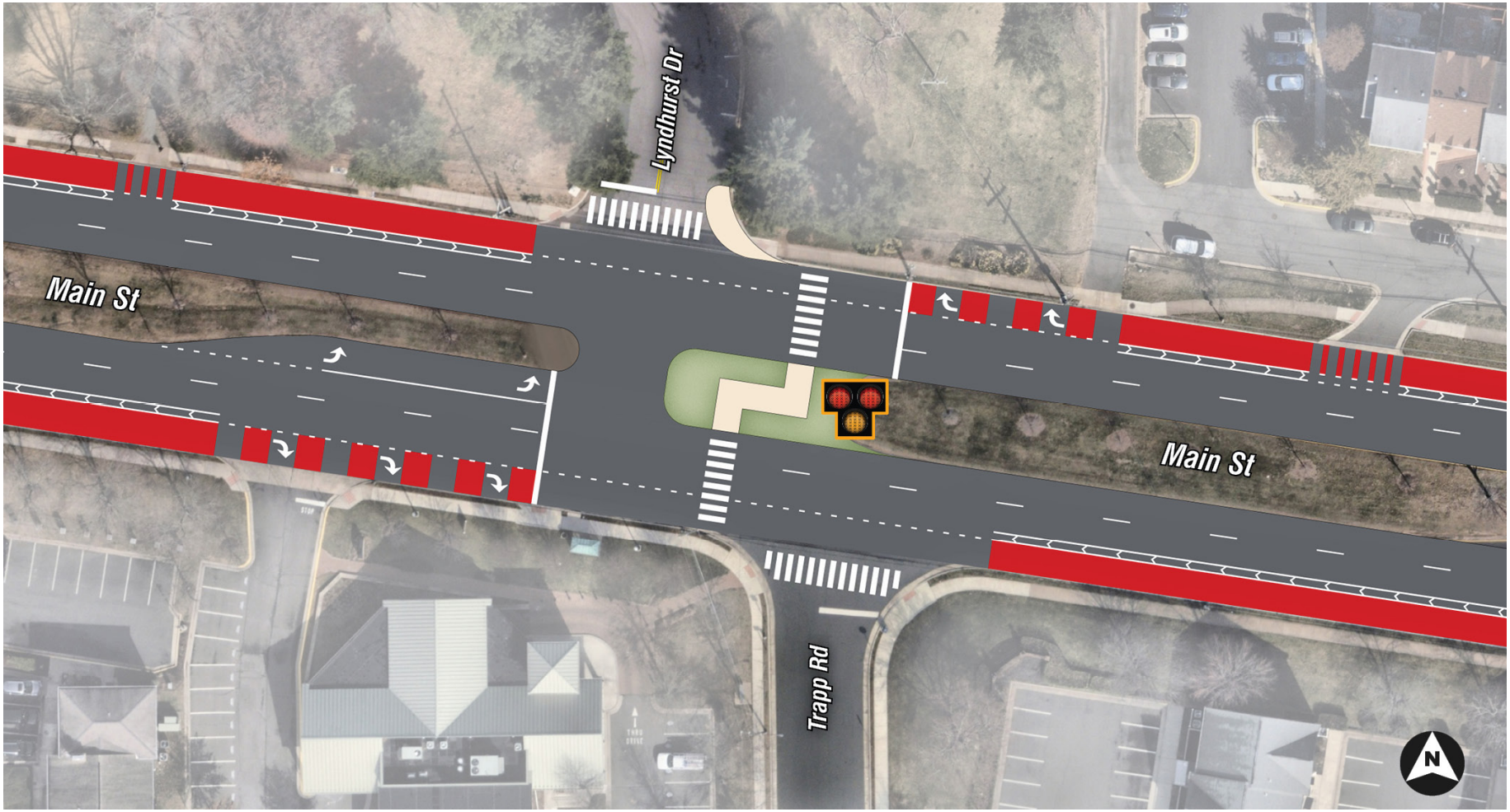
1. Completely close the median crossover along Main Street to eliminate mainline and side street left turns, relocate the existing crosswalk out of the path of vehicles turning right onto Main Street, and add a PHB.

Figure 52. Potential concept for median closure on Main Street at Trapp Road / Lyndhurst Drive, relocated crosswalk, and new PHB



2. Extend the east side median nose to make Trapp Road right-in-right-out, relocate the existing crosswalk out of the path of vehicles turning left onto Lyndhurst Drive or right onto westbound Main Street, and add a PHB.

Figure 53. Potential concept for extended median on Main Street at Trapp Road / Lyndhurst Drive, relocated crosswalk, and new PHB

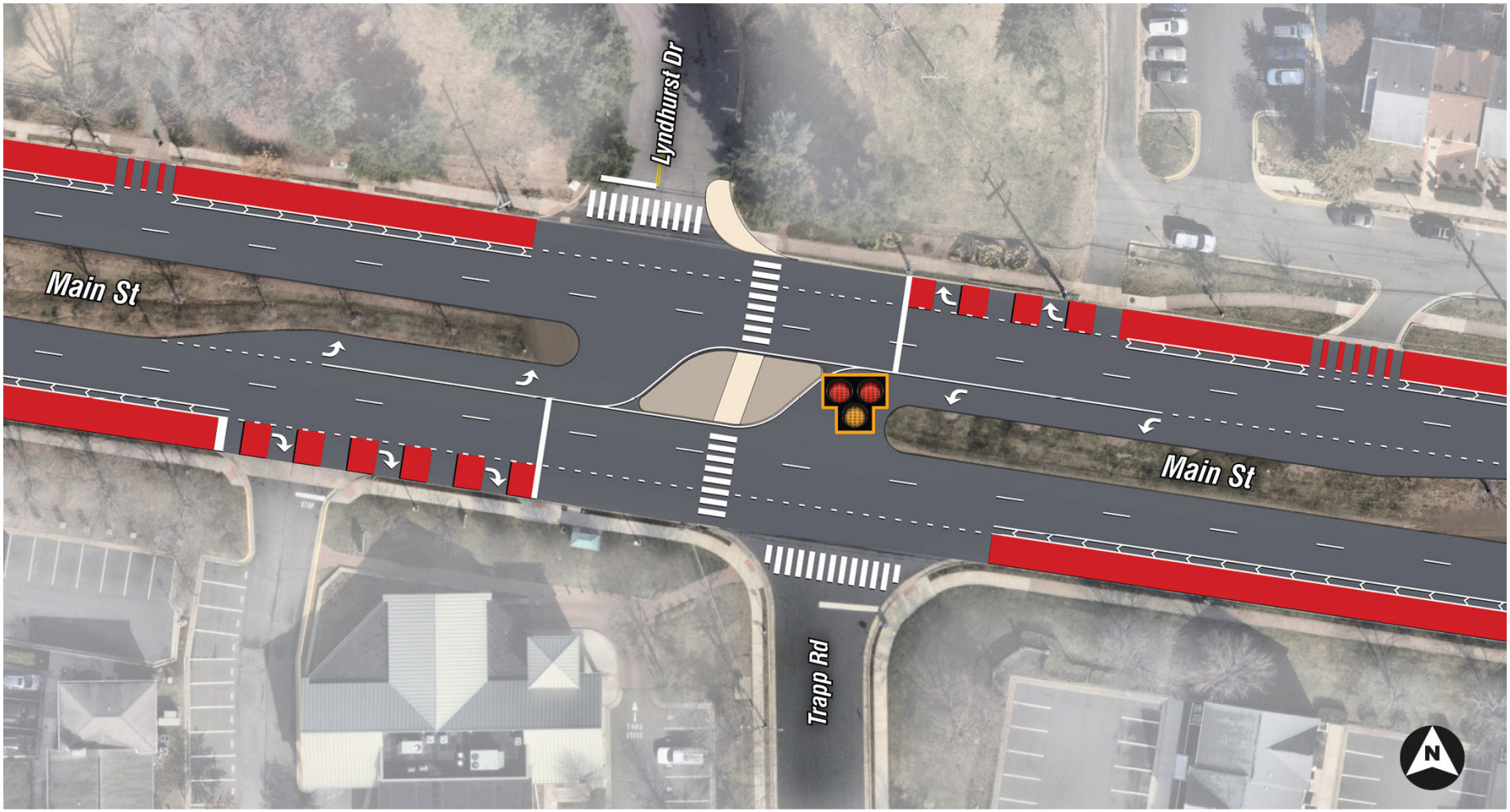


3. Extend the east side median nose to make Trapp Road right-in-right-out and restrict left turns from Lyndhurst Drive, relocate the existing crosswalk out of the path of vehicles turning right onto Main Street, and add a PHB.

Figure 54. Potential concept for extended median on Main Street at Trapp Road / Lyndhurst Drive, relocated crosswalk, and new PHB

4. Add turn lane to westbound Main Street and create RCUT, relocate the existing crosswalk out of the path of vehicles turning right onto Main Street and vehicles turning left off of Main Street, and add a PHB.

Figure 55. Potential concept for RCUT on Main Street at Trapp Road / Lyndhurst Drive, relocated crosswalk, and new PHB



While the alternative selection will include input and engagement with the community, there are a few differences between each concept to consider, as shown in **Table 12**.

Additional signing improvements

There is a no U-turn sign for westbound left turns from Main Street. It is recommended to install a near side no U-turn sign on the median on the NB approach to increase the visibility of the U-turn restriction.

Because of the high frequency of the rear-end and angle crashes, it is recommended to Install "Watch For Turning Vehicle Signs" (W11-V3) on the eastbound and westbound approaches of the intersection on Main Street in advance of the Trapp Road / Lyndhurst Drive intersection. This sign will warn drivers on Main Street of potential left and right turning traffic from Trapp Road and Lyndhurst Road and thus help reduce angle crashes.

Priority	Medium
Implementation Time	Short
Cost	Low

5.2.4. Main Street between Tedrich Boulevard and Burke Station Road

Main Street and Stone Wall Avenue / Fairfax Square Improvements

Several potential improvements are proposed at the intersection of Main Street and Stone Wall Avenue / Fairfax Square to enhance pedestrian safety and reduce conflict points at the unsignalized intersection. Within the five years of recent crash data, there was one visible injury pedestrian crash. However, a brief review of crash history beyond the study period revealed a history of additional pedestrian crashes at this location. This, paired with observations during the nighttime portion of the RSA, transit stop usage, and surrounding land use indicates that the intersection falls within a clear pedestrian desire line.

As discussed in Section 5.2.3, this portion of Main Street is classified as a Tier 3 roadway per VDOT IIM 384.1, which recommends a PHB or roadway reconfiguration to facilitate safe pedestrian crossings. A Tier 3 roadway may also utilize an RRFB if engineering judgment deems it appropriate. Given the current lighting conditions, downgrade of the roadway heading eastbound, and vehicular speeds outlined in Section 2.3, a PHB is preferred for a new crossing at this location. Additionally, the PHB could be

Table 12. Comparison of alternatives for Main Street and Lyndhurst Drive / Trapp Road

Alternative	Pros	Cons
Full Median Closure	» Eliminates 12 crossing conflict points » Left turns onto or off Trapp Road could utilize the signalized Whitacre Road intersection	» Eliminates 4 left turn movements » Displaced left turns onto Lyndhurst Drive would require a U-turn at Whitacre Road » Displaced left turns from Lyndhurst Drive would require a U-turn at Maple Avenue
Full Access for Lyndhurst Drive / Right-In-Right-Out for Trapp Road	» Eliminates 6 crossing conflict points » Left turns onto or off Trapp Road could utilize the signalized Whitacre Road intersection » Lyndhurst Drive would not have any displaced right or left turn movements	» Eliminates 2 movements (both for Trapp Road) » Additional pedestrian conflict point when compared to alternatives
Left Turns off Lyndhurst Drive Restricted / Right-In-Right-Out for Trapp Road	» Eliminates 9 crossing conflict points » Left turns onto or off Trapp Road could utilize the signalized Whitacre Road intersection	» Eliminates 3 left turn movements Displaced left turns from Lyndhurst Drive would require a U-turn at Maple Avenue
RCUT Intersection	» Eliminates 6 crossing conflict points » Left turns off Trapp Road could utilize Whitacre Road	» Eliminates 2 left turn movements » RCUT design may require offsetting the crossing on eastbound and westbound Main Street

coordinated with adjacent signals on Main Street at Tedrich Boulevard and Burke Station Road.

One geometric design change to improve safety could be to close the median opening on Main Street at Stone Wall Avenue / Fairfax Square, which would reduce conflict points, as well as provide space for a pedestrian crossing with a refuge and equipped PHB, as shown in **Figure 56**. This alternative would also be best accompanied by a shift in the eastbound bus stop from the near side of the intersection to the far side. Design details such as crosswalk angle, curb ramps, PHB equipment placement, PHB phasing (single-stage versus two-stage crossing) and stop lines all to be determined through preliminary engineering.

An alternative geometric change could be to allow only left turns from westbound Main Street to allow left turns onto southbound Stone Wall Avenue but restrict left turns from Fairfax Square, Stone Wall Avenue, and eastbound Main Street. In this case, the new pedestrian crossing, equipped with a PHB, could be installed diagonally from the southwest curb to the northeast curb. This option would not require the relocation of the eastbound transit stop and would not fall within the vehicle path of left-turning vehicles.

With this option, allowing left turns from both approaches of Main Street would be challenging to include a diagonal crossing given the intersection geometry and left-turning vehicle paths. Alternatively, left turns from Stone Wall Avenue could be permitted if westbound left turns were restricted so that the crosswalk could remain on the east side of the intersection.

Priority	Medium
Implementation Time	Intermediate
Cost	High

Access management between Stone Wall Avenue / Fairfax Square and Tedrich Boulevard

Intersections with one driveway on the receiving side of an intersection may have 33 percent more crashes, whereas intersections with two driveways on the receiving side may have 76 percent more crashes than intersections without driveways within the intersection

Figure 56. Potential concept for median closure on Main Street at Fairfax Square / Stone Wall Avenue, new crosswalk, and new PHB

area of influence.[18] There are numerous driveways along the westbound side of Main Street in front of the Main Street Shopping Center. While access must be maintained to each parcel along the roadway, many of the various parcels along westbound Main Street make up the single Main Street Shopping Center, which currently has three driveways, and two nearby driveways for the Shell Gas Station and Dunkin Donuts. The existing driveways have been present since the early 1970s when the Main Street Shopping Center was first constructed, and the current location of the Dunkin Donuts was the location of the 7-Eleven gas pumps.

There are several potential ways to reduce conflict points and the risk of angle crashes on Main Street in front of the Main Street Shopping Center between Tedrich Boulevard and Stone Wall Avenue. One could include the reduction and consolidation of driveways/ access points on Main Street in this crash hotspot. The reduction of access points could reduce the risk of angle crashes for those vehicles turning left from driveways, rear end crashes for those entering Main Street, and reduce the additional driver attention required to react to turning vehicles on this block. Given the close spacing of driveways, drivers may not know which driveway the vehicle in front of them may be accessing when indicating a turn (if a turn signal is used). This uncertainty can be lessened by reducing the number of potential driveways closely spaced along the corridor. Studies have found that changing an existing two-way left turn lane to a raised median can have a potential crash reduction of 23 percent.[19] Additionally, changing an access point to right-in-right-out can have a potential crash reduction of 45 percent.[20] Conducting an HSM safety analysis can help determine the potential safety benefit of improvements, and combination of improvements, within the impacted area.

Coordination with the Main Street Shopping Center property owner(s) is needed to reduce the number of access points to the shopping center, as it is currently made up of eight total parcels, seven of which front Main Street (**Figure 57**).

Additionally, with the closure of access points, there could be an opportunity to make adjustments to the parking layout to enhance sightlines. Currently, parked vehicles can block the sight lines between drivers existing the shopping center and westbound vehicles on Main Street. Removing parking near driveway exits and replacing it with space used for existing driveways would benefit both drivers and pedestrians.

Priority	High
Implementation Time	Intermediate
Cost	High

Main Street and Tedrich Boulevard Improvements

Another potential improvement to access management in front of the Main Street Shopping Center ties into additional improvements at Main Street and Tedrich Boulevard. Extending the median on Main Street and establishing a designated left-turn lane at Tedrich Boulevard will facilitate necessary U-turns, especially important after converting the shopping center driveways to right-in-right-out only. The lane widths along east and westbound Main Street between the end of the existing grass median and Tedrich Boulevard could be narrowed to 11 feet to accommodate a new 6-foot wide concrete median to provide additional offset for the U-turn. The inclusion of this median space at the intersection would also require a U-turn to enter the United Alliance print shop but would allow for the stop line for westbound Main Street to be moved up closer to the intersection. The exact placement of the new stop line should also comply with MUTCD minimum distances between the signal face and stop line (40 feet) needed for visibility.

18 Le, T. Q., Gross, F., Harmon, T, & Eccles, K. Safety Evaluation of Corner Clearance at Signalized Intersections. Report No. 18-03676, Federal Highway Administration, Washington, D.C. 2018.

19 Mauga, T. and Kaseko, M., "Modeling and Evaluating the Safety Impacts of Access Management (AM) Features in the Las Vegas Valley." Transportation Research Record: Journal of the Transportation Research Board 2171, pp. 57-65, 2010.

20 Sun, X., Y. He, M.A. Rahman, and K. McManis. "Safety of Roundabout: The Details Matter". Presented at the 97th Annual Meeting of the Transportation Research Board, Paper No. 18-00871, Washington, D.C. 2018.

Figure 57. Parcels making up the Main Street Shopping Center between Stone Wall Avenue / Fairfax Square and Tedrich Boulevard (Source: Nearmap)

Figure 58. Concept for median closure in front of the Main Street Shopping Center

On the receiving side of westbound Main Street at Tedrich Boulevard, the existing curb-to-median width is roughly 26 feet. By narrowing the westbound lanes between Tedrich Boulevard and Orchard Drive to 11 feet, the additional 4 feet of right-of-way width could be used to extend the grass median and sidewalk space. This could then be used to correct the lack of landing space present on the curb ramp on the northwest corner of Main Street and Tedrich Boulevard, as well as tighten the existing corner radius on the northeast corner of Main Street and Orchard Drive.

Lastly, there is also currently a shared bus stop and right turn-only lane into the United Alliance print shop that could be redesigned to accommodate the increased U-turns, designate an exclusive transit space, and implement a curb extension on the southeast corner of Main Street and Orchard Drive. Implementing a curb extension serves as a way to reduce the turning radius and crossing distance for crossings across Orchard Drive, as well as improve sight lines for the side street approach by moving up the stop line. Providing a curb extension also provides an opportunity to install supplemental pavement word markings saying "BUS ONLY" which will reinforce to drivers that the new lane is not an additional through lane and reduce potential conflicts caused by confusion on lane purpose.

In addition to the improved driver guidance of only two eastbound through lanes, another benefit of creating a bus pull-out at this location is the minimal impact on traffic operations as through-traveling vehicles are not impacted by dwell time boarding and alighting passengers. One downside to a bus pullout is that the bus driver is required to merge back into traffic, which can be a challenge during peak hours.

Several of the improvements recommended on Main Street between Orchard Drive and Stone Wall Avenue / Fairfax Square could be done independently. Each of the curb extensions and side street pavement marking improvements could be done as standalone projects. However, pairing the bus only markings with curb extension improvement on the southeast corner of the Orchard Drive intersection would be a relatively low additional cost compared to the overall project cost for a concrete curb extension. The two-way left turn lane closure for access management to/from the Main Street Shopping Center would need to be coordinated with the Tedrich Boulevard intersection improvements to facilitate the new U-turns. Lastly, depending on the selected intersection treatment at Main Street and Stone Wall Avenue / Fairfax Square, improvements at Tedrich Boulevard may need to come first to facilitate displaced left turns.

Priority	High
Implementation Time	Intermediate
Cost	High

5.2.5. Transit stops without marked crosswalks

During the RSA, it was noted that several transit stops do not have a crosswalk nearby and could benefit from relocation or consolidation. By placing stops away from marked crossing locations, drivers may not expect to encounter a crossing pedestrian, thus increasing the risk of a pedestrian crash. Given the high speeds and traffic volumes, crosswalks and associated safety countermeasures (PHBs and RRFBs) can be expensive and may need to be prioritized. If a transit stop is unable to have appropriate safety countermeasures for the adjacent pedestrian crossing, balancing transit stops to reduce or relocate stops to be near the enhanced crossings could be an option. Transit stops should also be easily accessible to all road users and located appropriately near those using transit. However, community input and engagement are also essential to balancing transit stops effectively when removing or relocating transit stops.

As noted in the identified safety concerns, there are currently four transit stops that are not located at marked crosswalks and all are unsignalized. The following locations, in order of priority, include:

1. Main Street and Stone Wall Avenue / Fairfax Square (PHB)
2. Main Street and Virginia Street (RRFB)
3. Main Street and Locust Street (RRFB)
4. Main Street and Maple Avenue (PHB)

At Main Street and Stone Wall Avenue / Fairfax Square, a recommendation has been made in Section 5.2.4 to add a new pedestrian crossing and PHB. Depending on improvements at this location, transit stops could be adjusted to encourage pedestrians to cross within the marked crosswalk. An additional PHB has been recommended at the intersection of Main Street and Trapp Road / Lyndhurst Drive, but no specific new crosswalk recommendation has been proposed for the intersection of Main Street and Maple Avenue. Based on observations during the RSA, crash history, and identified safety concerns, a new crosswalk and PHB would be a lower priority at Maple Avenue than crossings at Stone Wall Avenue / Fairfax Street and Lyndhurst Drive / Trapp Road.

There are currently three transit stops on Main Street between Virginia Street and Locust Street, two of which do not have marked crosswalks. The existing transit stops at Main Street and Farrcroft Drive / Roberts Road are at a signalized intersection, both on the west side of the intersection with the marked crosswalk. However, the transit stops at Main Street and Virginia Street and Main Street and Locust Street, do not have marked crosswalks within 300 feet (generally accepted crosswalk spacing minimum). The Main Street and Virginia Street bus stop is located within an area with medium-density housing, a pre-K facility, and a few commercial businesses. At Main Street and Locust Street, there are transit stops on the north and south side, but most trip generators are on the south side of the intersection. One option could be to remove the westbound transit stop on the north side or provide a new marked crosswalk. If resources are limited to add two new crossings in this section of Main Street, the Virginia Street crossing may need to be prioritized based on the presence of pedestrian generators on both sides of the intersection.

At both Virginia Street and Locust Street, there is an opportunity to add a marked pedestrian crosswalk adjacent to the transit stops at unsignalized intersections in this portion of the corridor without the need for a PHB. As stated in Section 5.2.3 in the discussion of VDOT IIM 384.1, this portion of Main Street transitions from a Tier 3 roadway to a Tier 2 roadway with the speed limit reduction from 35 mph to 25 mph. This means that an RRFB could be a suitable crosswalk enhancement at a pedestrian crossing in this portion of the corridor. Given existing land use, pedestrian generators, and spacing between crosswalks, the intersection of Main Street and Virginia Street could be considered for a new crosswalk. If a new marked crosswalk were installed without a traffic signal or PHB, transit stops should be relocated to the far side of the crosswalk to encourage crossing behind the bus to avoid the multi-threat pedestrian crash threat.[21]

Priority	Medium
Implementation Time	Intermediate
Cost	Medium to High

5.2.6. Daniels Run Trail wayfinding

Daniels Run Trail currently does not have any wayfinding signs to or from the connecting Fairfax City Bike Trail on the south side of Main Street at the intersection with the Marketplace Driveway. Installing trail wayfinding signs for pedestrians and bicyclists looking to connect between the trails would help provide guidance for those unfamiliar with where to cross. By providing clear guidance to connecting trail paths, the interactions between trail users and vehicular traffic at uncontrolled or unmarked crossings on Main Street could be minimized.

There is also an opportunity to improve trail conditions on the Daniels Run Trail portion that loops behind the east side of the Marketplace Shopping Center. Currently, many people currently cut through the parking lot to access the trail. This behavior may be due to the shorter distance required to enter the trail from the shopping center parking lot versus the current trail, or potentially due to the appearance of the trail in the alley portion behind the east-side shopping center buildings.

Priority	Low
Implementation Time	Short
Cost	Low

21 Goughnour, E., Bonner, T., Sweester, E., Smith, D. "Improving Safety for Pedestrians and Bicyclists Accessing Transit Guide". Report No. FHWA-SA-21-130. Federal Highway Administration. Washington, D.C. 2022

5.3. Signal Timing Strategies and Improvements

This section details specific improvements that could be made to signal timing and phasing. Some of these relate to overall corridor operations, while others address vehicular safety and/or pedestrian safety.

5.3.1. Signal optimization

Optimizing traffic signal timings based on the current traffic volumes and lane geometry would potentially reduce queue spillback and improve throughput along the Main Street corridor. During the field review, queueing was observed at signalized intersections extending and blocking driveways, midblock crosswalks, and upstream intersections.

The existing Main Street corridor is part of an actuated-coordinated system during morning, midday, and evening hours, and operates free (actuated, but not coordinated) or flashing during off-peak and nighttime hours. To optimize signal timings on Main Street, new turning movement counts could be used to reevaluate the splits and offsets for each intersection. Since the COVID-19 pandemic, travel patterns have changed by time of day, day of week, and modes of transportation. This change has provided an opportunity to reevaluate signal timing on Main Street to improve congestion caused by shifts in travel patterns or increases in traffic volume. The City is planning to perform this analysis within the next two years, now that traffic volumes have rebalanced to pre-pandemic conditions.

Priority	Low
Implementation Time	Short
Cost	Medium

5.3.2. Left turn phasing / flashing yellow arrow improvements

Flashing Yellow arrow (FYA) is a potential safety countermeasure that could replace the old signal heads with circular green indication for left turns with "Protected/Permissive" phasing along Main Street. FYA is a new type of signal head (with four sections) placed over a left turn lane which provides safe and more efficient left turns for motorists. The Virginia Highway Safety Improvement Program has been implementing the FYA extensively in the past five years using a systemic approach.

FYA helps left-turning drivers by avoiding confusion about who has the right of way as opposed to the old circular green indication and reminds the drivers to proceed cautiously. FYA provides clear guidance to the left-turning drivers that they should proceed with caution when turning left by showing a flashing yellow arrow as an indication to yield. Research has proven that FYA can reduce crashes at signalized intersections by up to 36.5 percent.

At the intersection of Main Street and Fair City Mall Shopping Center Driveway, there could be a line-of-sight issue for the eastbound left turns from Main Street because of the steep grade at the intersection. It is recommended to evaluate and replace the existing "Protected/Permissive" left turn phase with a "Protected" only phase, especially during the AM and PM peak periods. According to research posted on FHWA CMF Clearinghouse, the CMF for changing a left turn from "Protected/Permissive" to a "Protected" only phase is 0.01, meaning that the potential left turn angle crash reduction is 99 percent.

Flashing yellow arrows can also be used to separate the left-turn phase and pedestrian phase through signal timing. This can be carried out through the use of a red arrow for left turns when the concurrent pedestrian walk phase is active. The arrow could then flip back to flashing yellow upon completion of the walk phase. The same timing mechanism can also be used for a flashing yellow right-turn arrow as well.

Signalized intersections where a flashing left arrow may be suitable, depending on where left turns are currently permissive. Locations where improvements to signals, including the potential for protected-only phasing or FYA include (in priority order):

1. Main Street and Fair City Mall Driveway (convert to protected-only left turn phasing)
2. Main Street and Whitacre Road (FYA)

3. Main Street and Burke Station Road (FYA)
4. Main Street and Tedrich Boulevard (FYA)
5. Main Street and Marketplace Driveway (FYA)

Priority	Medium
Implementation Time	Intermediate
Cost	Low

5.3.3. Leading pedestrian interval

A Leading Pedestrian Interval (LPI) is a potential pedestrian safety countermeasure that could be implemented at the signalized intersections along Main Street with pedestrian crossings. An LPI is a signal timing mechanism that begins the pedestrian phase 3 to 7 seconds earlier than the parallel vehicular phase. This treatment allows waiting pedestrians to begin walking first, approaching the center of the crosswalk before vehicles begin to turn. Ultimately it helps drivers to see and yield to pedestrians in the crosswalk. While LPIs are a pedestrian safety treatment, they have been shown to reduce all crashes as much as 13 percent and reduce vehicle-pedestrian crashes as much as 19 percent at treated intersections.

Other benefits include:

- Increased likelihood of drivers yielding to pedestrians in crosswalk
- Increased visibility of pedestrians in crosswalk at start of green phase
- Enhanced safety for slower pedestrians that may need additional crossing time

Per the 2009 MUTCD Section 4E.06, LPI installations must be at least 3 seconds, but are typically 3 to 7 seconds. They can be particularly beneficial when installed at 4-leg intersections where opposing traffic is low and left-turn movements are high, or any signalized intersection with higher risks for turning vehicle-pedestrian crashes. The installation of LPIs can degrade the operational performance of the intersection and increase vehicular delay.

Priority	High
Implementation Time	Short
Cost	Low

5.3.4. Pedestrian signal and timing improvements

Based on signal timing plans, each of the existing signalized pedestrian crossings on Main Street has a minimum of 7 seconds of walk time. Existing signal timings also include the minimum flashing don't walk (FDW) time needed to meet a walking speed of 3.5 feet per second. However, special consideration should be made for those with mobility or vision impairments in areas with long pedestrian crossings, such as the crossings on Main Street at Pickett Road. A potential pedestrian signal timing enhancement could include slowing the walking speed to 3.0 feet per second to better cater to a broader spectrum of pedestrians, such as the elderly or individuals with disabilities. This adjustment in pedestrian signal timing can reduce the likelihood of people being caught in the crosswalk when vehicles start to move.

The Fair City Mall Shopping Center, which has retail, restaurants, grocery stores, and an urgent care facility, is under 0.5 miles from nearby older adult facilities (Little River Glen Senior Center, Olley Glen 55+ apartments). Such facilities likely have residents who do not have personal vehicles and may opt to walk to destinations, if able. These crossings at Main Street and Pickett Road, in particular, are long and may require additional time for nearby residents to cross fully and safely. Further review/analysis and engagement with these communities should be done to identify the need for additional crossing time.

The implementation of an LPI could be another way to include additional time needed for a slower walking speed. In this scenario, adding an additional 3 to 7 seconds at the beginning of the walk phase, in addition to the existing walk time, would give slower pedestrians both a head start in the crossing (to encourage driver yielding) and the extra time needed to fully cross the road, in time.

Priority	High
Implementation Time	Short
Cost	Low

5.3.5. No turn on red (through signage or pedestrian activation)

Implementing a no turn on red (NTOR) restriction at intersections can greatly improve safety and predictability for all road users. An NTOR measure helps to minimize conflicts between vehicles and pedestrians by creating a more consistent and predictable crossing experience. When vehicles are prohibited from turning right on red, pedestrians can cross with greater confidence and less risk.

This can be achieved either through signage or using a red arrow signal indication for right-turning vehicles when an exclusive right turn lane is present. Additionally, the red arrow signal indication could be used when the adjacent vehicles are proceeding straight through the intersection on a green signal to separate the pedestrian phase from the right-turn phase. The red arrow signal indication for right-turns would then serve as an effective NTOR restriction by separating the pedestrian phase (when activated) and right-turn phase. Once the pedestrian signal has switched into the flashing don't walk phase, the signal for the right turn lane could switch to a permissive yellow flashing right turn arrow. All other times when right turns on red are permitted and the pedestrian phase has not been activated, a flashing yellow right arrow display could be used.

However, it is important to note that at some intersections, it may not be immediately feasible to implement these signal upgrades until older signals on the corridor are upgraded to accommodate this new functionality. This treatment could be recommended for the following approaches, in priority order:

1. Main Street and Fair City Mall Driveway (southbound right)
2. Main Street and Whitacre Road (northbound right)
3. Main Street and Marketplace Driveway (southbound right)
4. Main Street and Burke Station Road (northbound and eastbound right)
5. Main Street and Farrcroft Drive (southbound right)

At Main Street and Pickett Road, a pedestrian-activated LED NTOR sign could be installed with geometric and signal improvements to the right turn slip lane from southbound Pickett Road.

Priority	Medium
Implementation Time	Intermediate
Cost	Medium

5.3.6. High visibility backplates

High visibility signal backplates are a potential safety countermeasure that could be implemented for all signal heads at intersections along Main Street. High visibility backplates are backplates with retroreflective borders that provide enhanced signal visibility.

Figure 59. An Example of a High Visibility Backplates in Virginia

High visibility signal backplates in Virginia.

The benefits of adding retroreflective backplates include the following:

- Contrasting against the dark signal plates
- Distinguishing the signal face assembly from background lighting and any other visual distractions
- Drawing drivers' attention after a long distance from an upstream signal
- Provides visibility of the signal heads during power outages

A retroreflective border can also be incorporated by adding retroreflective tape to an existing backplate or purchasing a new backplate with a retroreflective border This is a low-cost, effective countermeasure that can help mitigate serious injury and fatal crashes.

According to research posted on FHWA CMF Clearinghouse, the CMF for adding a 3-inch retroreflective tape to a signal backplate is 0.85 or the crashes are expected to be reduced by 15 percent because of this countermeasure.[22] High visibility backplates are recommended for each of the signalized intersections on Main Street, including:

- Main Street and Pickett Road
- Main Street and Fair City Mall Shopping Center Driveway
- Main Street and Whitacre Road (eastbound and northbound signals)
- Main Street and Burke Station Road
- Main Street and Tedrich Boulevard
- Main Street and Farrcroft Drive / Roberts Road
- Main Street and Marketplace Driveway
- Main Street and East Street / Blenheim Boulevard

The City of Fairfax has also recently ordered backplates for each signalized intersection in the City. Installation of these backplates, once delivered, are likely to take place over the next year.

Priority	High
Implementation Time	Short
Cost	Low

5.4. Long Term Complete Streets Improvements

In line with the discussion of the shared transit-bike lane, there are currently no dedicated bicyclist facilities along Main Street. A cross-section redesign could include the widening of existing sidewalks and the inclusion of new bicyclist infrastructure (as either shared-use paths or sidewalks and separated bike facilities).

Physically separating pedestrians and bicyclists from vehicular traffic has significant safety benefits. Sidewalks have a potential pedestrian crash reduction of 40 percent.[23]

Other benefits include connectivity and accessibility, as residents and visitors of Fairfax would have a connection to transit, retail and commercial businesses, and other essential services along Main Street. A better-connected pedestrian and bicyclist network on Main Street could also potentially reduce the number of home-based vehicle trips from those living on or near the corridor. Furthermore, the expansion and introduction of new pedestrian and bicyclist facilities in the surrounding area could also contribute to this shift.

The current right-of-way varies significantly along the corridor, ranging from as little as 80 feet, to as much as 136 feet. Within the existing right-of-way, planted/grass medians are common throughout the corridor, but often serve as the primary point of drainage along Main Street. For this reason, median widths were maintained in the development of the potential cross-sections. The subsections below get into some of the design considerations and potential improvements in the four typical cross-sections along Main Street.

22 Sayed, T., Leur, P., and Pump, J., "Safety Impact of Increased Traffic Signal Backboards Conspicuity." 2005 TRB 84th Annual Meeting: Compendium of Papers CD-ROM, Vol. TRB#05-16, Washington, D.C. 2005.

23 Abou-Senna, H., E. Radwan, and A. Mohamed. Investigating the Correlation between Sidewalks and Pedestrian Safety. Accident Analysis and Prevention, Vol. 166, 2022.

Main Street between Pickett Road and Whitacre Road

The significant amount of existing right-of-way (136 feet) available allows for a variety of opportunities to change the cross-section, including the potential for one similar to the concept in **Figure 60**. This example cross-section features dedicated transit-only lanes and a shared-use path while maintaining the two general purpose lanes and the existing median. Additional space needed for the shared-use path could come from the right-of-way between the curb and property lines where sidewalks are currently present. Near transit shelters, the shared-use path could narrow and go around the facility to avoid mixing boarding and alighting passengers with bicyclists.

One potential obstacle in implementing shared-use paths on the east side of Pickett Road is limited public right-of-way. Specifically, the roadside right-of-way along westbound Little River Turnpike only includes up to the curb of the right turn lane into the Pickett Shopping Center. This means that a shared-use path would likely only be able to be implemented along eastbound Main Street / Little River Turnpike. A corridor redesign east of Pickett Road transitions into Fairfax County, meaning that coordination with FCDOT and VDOT will be required.

Main Street between Whitacre Road and Estel Road

Between Main Street and Estel Road, there is 118 feet of right-of-way and a 30-foot median. This portion of the corridor also has a very brief break (80 feet) in the sidewalk infrastructure in front of 9735 Main Street, between the KinderCare and Williamsburg Court. The potential improvements outlined in this section would close this short gap in pedestrian infrastructure.

Without impacting the median and associated stormwater, accommodating a 10-foot minimum shared-use path and 2-foot grass median would require reducing the general purpose lanes to 10.5 feet and dropping the buffer between the transit lane and general purpose lanes (**Figure 61**). A double white line between the transit lane and right-most lane would be recommended to discourage drivers from using the transit lane.

Alternatively, a sidewalk and separated bike lane could be installed if the median were reduced and associated stormwater infrastructure improvements were made. However, the drainage improvements could be costly compared to the benefit of physically separating pedestrian and bicyclist infrastructure.

Figure 60. Potential Main Street cross-section between Pickett Road and Whitacre Road

Figure 61. Potential Main Street cross-section between Whitacre Road and Estel Road

The transition to the new cross-section west of Estel Road will also need to be considered, as the shared-use paths on either side would transition into one-way bike lanes. This means that if bicyclists are using the shared-use path in the opposite direction of travel (i.e. traveling eastbound on the north side of Main Street), bicyclists would need to cross Main Street in order to travel in the correct direction of the bike lane. Such crossing would be best at an intersection location where drivers may already be expecting non-motorized crossings. The nearest marked crossing point to Estel Road is the intersection of Lyndhurst Drive / Trapp Road, which could provide a bike crossing with a potential PHB.

Main Street between Estel Road and Stone Wall Avenue / Fairfax Square

There is typically 110 feet of right-of-way and a 30-foot median between Estel Road and Stone Wall Avenue / Fairfax Square. West of Estel Road the right lane, adjacent to the curb, is dropped. While this segment of Main Street could potentially feature transit lanes with median modifications, Main Street west of Stone Wall Avenue / Fairfax Square significantly narrows and cannot accommodate a third lane under the existing right-of-way width. With such constraints, two general purpose lanes, separated bike lanes, and 6-foot sidewalks. Near transit shelters, the separated bike lane could go around the facility to avoid mixing boarding and alighting passengers with bicyclists. A potential cross-section for this portion of Main Street is shown in **Figure 62**.

Main Street between Stone Wall Avenue / Farifax Square and East Street / Blenheim Boulevard

As noted previously, the right-of-way width on Main Street narrows to 80 feet with only a 12-foot median. There is currently a curb-to-median width of roughly 26 feet, meaning that a five-foot bike lane with one foot of separation would require narrowing travel lanes to 10 and 10.5 feet. Alternatively, a higher cost option would be to potentially move the historical lampposts away from the vehicular lanes to between the sidewalk and right-of-way lines. **Figure 63** shows the potential cross-section for the portion of Main Street closest to downtown Fairfax.

Priority	High
Implementation Time	Long
Cost	High

Figure 62. Potential Main Street cross-section between Estel Road and Stone Wall Avenue / Fairfax Square

Figure 63. Potential Main Street cross-section between Stone Wall Avenue / Fairfax Square and East Street / Blenheim Boulevard

6

Conclusion

The RSA team has taken into consideration the existing conditions, planning-level studies, and identified safety concerns at the site to develop a list of recommendations with priorities, implementation timelines, and planning-level costs. Where possible, the proposed treatments also feature a CMF. Not all recommendations had a CMF or reliable CMF, so potential benefits of such countermeasure are unable to be determined without an HSM analysis. The CMFs presented in the table below are for all crashes, unless specified otherwise.

Table 13 outlines a list of the various treatments proposed in this study with prioritized locations for improvements that can be implemented as standalone projects, approximate implementation time high-level costs, and coordination needed with other improvements and partner agencies. The costs are color coded based on ranges established at the beginning of Section 5 (high, medium, low).

Table 13. List of potential treatments on Main Street

Corresponding section	Short Description	Location / Prioritized list of locations (if applicable)	Impacts			Priority	Timeline	Cost	CMF (if applicable)	Coordinate with other improvements	Responsible Party / Coordination Needed
			Safety	Multimodal Options & Livability	Vehicular Operations						
Corridor Wide Improvements											
5.1.1	Exclusive Shared Transit-Bike Lane	Main Street between Pickett Road and Estel Road (Eastbound and Westbound)	◑	●	◑	Medium	Intermediate	$2.8M (epoxy red paint) $800K (no red paint)	-	5.2.1	City of Fairfax
5.1.2	Pedestrian-scale lighting	1. Main Street and Pickett Road 2. Main Street and Lyndhurst Drive / Trapp Road 3. Main Street and Fair City Mall Driveway 4. Main Street and Whitacre Road 5. Sidewalks between Pickett Road and Lyndhurst Drive / Trapp Road 6. Sidewalks and intersections between Tedrich Boulevard and Burke Station Road 7. Trail Crossing at Main Street Marketplace Intersection 8. Sidewalks and intersections between Lyndhurst Drive / Trapp Road and Burke Station Road 9. Sidewalks and intersections between Tedrich Boulevard and Main Street Marketplace	●	●	○	High	Intermediate	$80K-120K per intersection $200K per 500 LF of sidewalk	0.581		City of Fairfax, Dominion Power
5.1.3	Road Maintenance/ vegetation trimming	Corridor wide	◑	◑	○	Medium	Short	$200 per crew hour	-		City of Fairfax, Department of Public Works
5.1.4	Turn lane improvements	Variety of turn lanes (see Section 5.1.4), coordinate with intersection improvements	◑	○	◑	Low	Intermediate	Pair with site improvements	0.95	5.1.6, 5.2.3, 5.2.4	City of Fairfax
5.1.5	Conflict point reductions	1. Main Street and Lyndhurst Drive / Trapp Road (including the intersections affected by displaced movements, i.e. Maple Avenue, Estel Road) 2. Main Street and Stone Wall Avenue / Fairfax Square (with pedestrian safety improvements) 3. Unsignalized intersections on Main Street between Tedrich Boulevard and the Marketplace Driveway	●	◑	◑	Medium	Intermediate	Pair with site improvements	RCUT: 0.54 Right-In-Right-Out Operations: 0.55	5.1.6, 5.2.3, 5.2.4	City of Fairfax
5.1.6	Crosswalk improvements: Curb extensions / corner improvements	1. Main Street and Maple Avenue (SW corner) 2. Main Street and Lyndhurst Drive / Trapp Road (NE and SE corners) 3. Main Street at Whitacre Road (NW and NE corners) 4. Main Street and Fairfax Square (east entrance, NE corner) 5. Main Street and Stone Wall Avenue / Fairfax Square (NE, NW, and SW corners) 6. Main Street and Virginia Street (SW corner) 7. Main Street and Orchard Drive / Fairview Drive (SE corner)	●	●	○	High	Short	$20K (Temporary) $80K-150K (Permanent)	Varies	5.1.5	City of Fairfax

KEY: ● High Impact ◑ Medium Impact ○ Low Impact

Corresponding section	Short Description	Location / Prioritized list of locations (if applicable)	Impacts			Priority	Timeline	Cost	CMF (if applicable)	Coordinate with other improvements	Responsible Party / Coordination Needed
			Safety	Multimodal Options & Livability	Vehicular Operations						
5.1.6	Crosswalk improvements: Curb ramp improvements	Corridor wide, coordinate with intersection improvements	◑	●	○	Medium	Intermediate	$6K per ramp	-	5.1.6, 5.2.1, 5.2.3, 5.2.4	City of Fairfax
5.1.7	Crosswalk improvements: Pedestrian push button upgrades	Corridor wide, coordinate with intersection improvements	●	●	○	High	Intermediate	$30K per intersection	-	5.2.1	City of Fairfax
Site-Specific Treatments											
5.2.1	Right turn slip lane improvements	Main Street and Pickett Road	◑	◑	◑	Medium	Intermediate	~$900K	-		City of Fairfax
5.2.1	Pavement marking and sign improvements	Main Street and Pickett Road	◑	◑	◑	Medium	Intermediate	Pair with shared transit-bike lane	-	5.1.1	City of Fairfax
5.2.1	Speed reduction ahead warning signs	Main Street and Pickett Road	◑	◑	○	Medium	Short	$5K per project	-		Fairfax County DOT and VDOT
5.2.2	New sidewalk from school to Fair City Mall signalized crossing	Woodson High School	◑	●	○	Medium	Intermediate	$30K per project	-		Fairfax County Public Schools
5.2.2	Speed limit signage	Woodson High School	◑	○	○	Medium	Short	$5K per project	-		City of Fairfax
5.2.3	Pedestrian hybrid beacon	Main Street and Lyndhurst Drive / Trapp Road	●	●	◑	High	Intermediate	$400K-600K per PHB	0.883 0.567 (pedestrian crashes)	5.1.5, 5.1.6	City of Fairfax
5.2.3	Turn restrictions / geometric improvements	Main Street and Lyndhurst Drive / Trapp Road	●	●	◑	High	Intermediate	RCUT: $1.2M Median Modifications: $750K-800K	RCUT: 0.54 Right-In-Right-Out Operations: 0.55	5.1.5, 5.1.6	City of Fairfax
5.2.3	Sign improvements	Main Street and Lyndhurst Drive / Trapp Road	◑	○	○	Medium	Short	$5K per project	-		City of Fairfax
5.2.4	Stone Wall Avenue / Fairfax Square improvements	Main Street and Stone Wall Avenue / Fairfax Square	●	●	◑	Medium	Intermediate	Intersection Modifications: $1.4M $400K-600K per PHB	Right-In-Right-Out Operations: 0.55 PHB: 0.883	5.1.5, 5.1.6	City of Fairfax

KEY: ● High Impact ◑ Medium Impact ○ Low Impact

Corresponding section	Short Description	Location / Prioritized list of locations (if applicable)	Impacts			Priority	Timeline	Cost	CMF (if applicable)	Coordinate with other improvements	Responsible Party / Coordination Needed
			Safety	Multimodal Options & Livability	Vehicular Operations						
5.2.4	Access management between Stone Wall Avenue and Tedrich Boulevard	Main Street between Stone Wall Avenue / Fairfax Square and Tedrich Boulevard	●	●	◑	High	Intermediate	$150K per driveway closure	Remove TWLTL: 0.77 Right-In-Right-Out Operations: 0.55		City of Fairfax, Property Owners
5.2.4	Tedrich Boulevard Improvements	Main Street between Stone Wall Avenue / Fairfax Square and Tedrich Boulevard	●	●	◑	High	Intermediate	$1.9M per project	-	5.1.5, 5.1.6	City of Fairfax, Property Owners
5.2.5	Transit stops without marked crosswalks	1. Main Street and Stone Wall Avenue / Fairfax Square (PHB) 2. Main Street and Virginia Street (RRFB) 3. Main Street and Locust Street (RRFB) 4. Main Street and Maple Avenue (PHB)	◑	●	○	Medium	Intermediate	$400K-600K per PHB $100K per RRFB	RRFB: 0.31 (pedestrian crashes) PHB: 0.567 (pedestrian crashes)	5.2.3, 5.2.4	City of Fairfax
5.2.6	Daniels Run Trail Wayfinding	Daniels Run Trail/City Trail crossing	○	◑	○	Low	Short	$25K per project	-		City of Fairfax
Signal Treatments											
5.3.1	Signal optimization	Traffic Signals	○	◑	○	Low	Short	$150K per project	-	5.3.2, 5.3.3, 5.3.5	City of Fairfax
5.3.2	Left turn phasing / flashing yellow	1. Main Street and Fair City Mall Driveway (convert to protected-only left turn phasing) 2. Main Street and Whitacre Road (FYA) 3. Main Street and Burke Station Road (FYA) 4. Main Street and Tedrich Boulevard (FYA) 5. Main Street and Marketplace Driveway (FYA)	●	◑	◑	Medium	Intermediate	$12K per intersection	Protected-only: 0.01 (left turn crashes) FYA: 0.635 (left turn crashes)	5.3.1, 5.3.3, 5.3.5	City of Fairfax
5.3.3	Leading pedestrian interval	All signalized intersections	●	●	◑	High	Short	$20K per intersection (shared cost for both treatments)	0.9 0.81 (pedestrian crashes)	5.3.1, 5.3.2, 5.3.5	City of Fairfax
5.3.4	Pedestrian signal / timing improvements	Main Street and Pickett Road	●	●	◑	High	Short		-	5.3.3	City of Fairfax
5.3.5	No turn on red	1. Main Street and Fair City Mall Driveway (southbound right) 2. Main Street and Whitacre Road (northbound right) 3. Main Street and Marketplace Driveway (southbound right) 4. Main Street and Burke Station Road (northbound and eastbound right) 5. Main Street and Farrcroft Drive (southbound right)	◑	●	◑	Medium	Intermediate to Long (depending on signal system)	$5K per intersection	0.98 (one approach) 0.96 (two approaches)	5.2.1, 5.3.1, 5.3.2, 5.3.3, 5.3.5	City of Fairfax

KEY: ● High Impact ◑ Medium Impact ○ Low Impact

Corresponding section	Short Description	Location / Prioritized list of locations (if applicable)	Impacts			Priority	Timeline	Cost	CMF (if applicable)	Coordinate with other improvements	Responsible Party / Coordination Needed
			Safety	Multimodal Options & Livability	Vehicular Operations						
5.3.6	High visibility backplates	All signalized intersections	●	◑	○	High	Short	$2K per signal head installed $20K per intersection	0.85		City of Fairfax
Long-Term Complete Streets Redesign											
5.4.	Long Term Complete Streets Improvements	Main Street between Pickett Road and Whitacre Road	●	●	◑	High	Long	$30M+	-		City of Fairfax, Fairfax County DOT, VDOT
5.4.	Long Term Complete Streets Improvements	Main Street between Whitacre Road and Estel Road	●	●	◑	High	Long		-		City of Fairfax
5.4.	Long Term Complete Streets Improvements	Main Street between Estel Road and Stone Wall Avenue / Fairfax Square	●	●	○	High	Long		-		City of Fairfax
5.4.	Long Term Complete Streets Improvements	Main Street between Stone Wall Avenue / Fairfax Square and East Street / Blenheim Boulevard	●	●	○	High	Long		-		City of Fairfax

KEY: ● High Impact ◑ Medium Impact ○ Low Impact

Several projects pose significant potential for improving safety on Main Street given the crash history and risk factors identified on the corridor. Projects that should be considered for implementation in the intermediate term include:

1. Main Street and Lyndhurst Drive / Trapp Road – PHB and Turn Restrictions
2. Pedestrian Scale Lighting Improvements
3. Main Street Shopping Center Access Management and Tedrich Boulevard Intersection Improvements

Several low-cost projects that could provide a high return on investment and be implemented relatively quickly could include the implementation of LPIs, high visibility backplates, and temporary curb extensions.

Some of these recommendations can be coordinated with other improvements, such as the installation of curb extensions with new curb ramps and high visibility crosswalks on the side streets. All of the suggested infrastructure improvements require additional engineering and assembly of plans for construction, funding for implementation, and coordination between appropriate entities (City of Fairfax, Fairfax County, VDOT, etc.)

Next steps for this study include a formal response from the roadway owner, the City of Fairfax. This formal response will include a list of preferred alternatives of the several defined in this document, estimated costs, and delegation of the actions to each responsible party.

APPENDIX A: Turning Movement Counts

Start Time 4/25/2024 0:00
End Time 4/25/2024 23:59
Location Main Street and Pickett Road
Latitude an 38.84120259,-77.27200615
Lights

Entry	Pickett Road				Main Street				Pickett Road				Main Street			
Direction	Southbound				Westbound				Northbound				Eastbound			
Start Time	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
0:00:00	0	0	11	0	0	15	0	0	0	0	1	0	2	15	7	0
0:15:00	0	2	15	0	0	14	1	0	0	1	0	0	0	19	5	0
0:30:00	1	1	11	0	2	11	0	0	0	0	1	0	0	10	4	0
0:45:00	0	0	8	0	2	14	1	0	0	0	0	0	0	11	3	0
1:00:00	1	0	11	0	1	5	0	0	0	0	0	0	0	15	4	0
1:15:00	0	0	6	0	2	5	1	0	0	0	0	0	0	8	3	0
1:30:00	0	0	5	0	1	8	0	0	0	0	0	0	0	7	3	0
1:45:00	0	0	7	0	0	6	1	0	1	0	0	0	0	3	4	0
2:00:00	0	0	4	0	2	11	0	0	0	0	0	0	0	7	6	0
2:15:00	0	0	2	0	2	5	0	0	0	1	0	0	0	8	4	0
2:30:00	0	0	7	0	4	5	0	0	0	0	1	0	1	6	3	0
2:45:00	0	1	4	0	1	6	0	0	1	1	0	0	0	6	3	0
3:00:00	0	0	2	0	3	2	0	0	0	0	0	0	0	2	2	0
3:15:00	0	0	7	0	0	4	0	0	1	2	0	0	0	4	0	0
3:30:00	0	0	2	0	2	6	1	0	0	0	0	0	0	6	0	0
3:45:00	0	0	3	0	1	7	1	0	0	1	1	0	0	5	2	0
4:00:00	0	0	6	0	3	8	1	0	0	0	0	0	0	10	0	0
4:15:00	1	1	3	0	2	16	2	0	1	0	1	0	0	8	3	0
4:30:00	0	0	4	0	1	16	0	0	0	0	1	0	1	12	5	0
4:45:00	0	0	8	0	3	27	1	0	0	2	0	0	2	17	5	0
5:00:00	0	2	16	0	5	32	2	0	3	1	0	0	1	26	8	0
5:15:00	1	2	11	0	8	34	7	0	2	1	1	0	7	33	15	0
5:30:00	1	2	22	0	12	39	6	0	1	0	1	0	10	28	9	0
5:45:00	0	1	20	0	13	54	9	0	4	3	0	0	9	55	25	0
6:00:00	5	2	12	0	20	54	3	0	1	1	1	0	10	44	18	0
6:15:00	9	2	28	0	43	94	3	0	4	1	3	0	7	66	27	0
6:30:00	3	3	44	0	76	96	6	0	1	1	2	0	6	103	27	0
6:45:00	7	5	46	0	80	112	9	0	2	3	2	0	14	120	31	0
7:00:00	3	29	77	0	89	113	39	0	35	11	7	0	40	140	30	0
7:15:00	19	16	80	0	117	124	53	0	52	30	24	0	32	156	32	0
7:30:00	17	18	98	0	144	172	35	0	33	13	18	0	15	188	63	0
7:45:00	31	21	72	0	121	228	46	0	40	13	9	0	17	212	81	0
8:00:00	23	20	83	0	141	220	45	0	39	33	13	0	22	230	87	0

8:15:00	17	8	99	0	155	233	11	0	14	23	7	0	6	244	77	0
8:30:00	27	11	87	0	120	220	7	0	5	10	10	0	3	159	59	0
8:45:00	24	6	90	0	138	221	10	0	9	11	8	0	13	184	56	0
9:00:00	24	6	82	0	135	262	7	0	4	6	4	0	5	167	52	0
9:15:00	22	8	107	0	153	207	5	0	5	10	4	0	6	176	68	0
9:30:00	27	6	130	0	131	200	8	0	11	8	6	0	2	139	46	0
9:45:00	32	6	111	0	105	235	3	0	10	7	7	0	7	143	41	0
10:00:00	27	7	86	0	96	214	6	0	11	10	10	0	3	120	55	0
10:15:00	22	7	95	0	70	185	3	0	17	6	12	0	7	149	43	0
10:30:00	17	7	105	0	95	191	9	0	7	11	5	0	2	134	41	0
10:45:00	15	12	112	0	92	181	5	0	3	6	6	0	3	149	59	0
11:00:00	27	6	118	0	88	161	5	0	7	12	6	0	9	154	39	0
11:15:00	20	7	87	0	96	187	9	0	11	13	7	0	7	151	35	0
11:30:00	24	12	124	0	115	194	10	0	8	7	6	0	3	157	71	0
11:45:00	19	11	113	0	101	195	5	0	4	7	7	0	6	150	71	0
12:00:00	15	9	123	0	107	249	3	0	4	4	7	0	4	171	71	0
12:15:00	28	7	154	0	106	198	6	0	5	9	4	0	1	153	65	0
12:30:00	19	9	121	0	99	244	8	0	4	9	8	0	5	189	48	0
12:45:00	22	7	146	0	122	200	10	0	6	10	4	0	4	191	48	0
13:00:00	23	7	122	0	100	245	5	0	8	3	2	0	5	174	52	0
13:15:00	31	6	147	0	81	199	6	0	11	7	3	0	2	150	61	0
13:30:00	26	2	155	0	113	244	7	0	9	15	12	0	2	184	67	0
13:45:00	16	14	117	0	110	198	15	0	3	8	7	0	7	180	67	0
14:00:00	31	8	157	0	100	233	12	0	12	6	10	0	7	162	54	0
14:15:00	23	14	155	0	98	211	13	0	20	14	13	0	4	184	56	0
14:30:00	38	5	146	0	94	208	15	0	18	8	30	0	4	180	58	0
14:45:00	26	8	132	0	105	261	11	0	9	11	9	0	4	214	54	0
15:00:00	37	5	139	0	92	288	22	0	44	24	24	0	9	300	73	0
15:15:00	32	8	176	0	120	246	15	0	15	21	7	0	8	275	93	0
15:30:00	36	11	183	0	132	262	11	0	34	19	30	0	10	225	65	0
15:45:00	34	7	195	0	147	296	12	0	10	13	13	0	5	225	64	0
16:00:00	46	5	182	0	138	353	15	0	9	12	7	0	12	268	64	0
16:15:00	35	19	180	0	140	269	16	0	20	7	12	0	12	233	78	0
16:30:00	36	10	215	0	148	288	14	0	25	12	23	0	6	248	65	0
16:45:00	29	10	169	0	162	358	12	0	11	10	11	0	5	250	80	0
17:00:00	40	8	202	0	168	321	10	0	8	6	11	0	8	295	86	0
17:15:00	35	4	229	0	165	306	5	0	8	9	7	0	8	267	83	0
17:30:00	52	8	173	0	117	326	8	0	12	9	9	0	5	232	90	0
17:45:00	56	8	179	0	145	341	4	0	7	4	6	0	2	263	79	0
18:00:00	38	11	198	0	125	247	3	0	4	4	3	0	3	209	86	0
18:15:00	44	13	173	0	107	255	7	0	2	3	3	0	6	177	70	0

18:30:00	48	6	172	0	108	309	10	0	8	6	4	0	7	227	73	0
18:45:00	30	9	144	0	111	193	16	0	9	1	5	0	4	193	77	0
19:00:00	52	5	166	0	84	176	6	0	8	9	7	0	0	148	60	0
19:15:00	48	6	171	0	84	188	3	0	7	2	6	0	8	216	70	0
19:30:00	35	8	125	0	90	165	4	0	7	6	5	0	7	151	56	0
19:45:00	35	6	123	0	74	147	2	0	3	4	5	0	4	177	56	0
20:00:00	33	8	148	0	43	138	6	0	13	2	2	0	5	149	58	0
20:15:00	11	8	146	0	22	133	3	0	12	4	4	0	7	148	55	0
20:30:00	1	9	130	0	19	105	8	0	9	6	4	0	4	141	36	0
20:45:00	0	5	105	0	20	94	10	0	9	7	4	0	3	101	32	0
21:00:00	1	4	100	0	17	94	6	0	22	8	4	0	6	124	19	0
21:15:00	1	4	101	0	23	72	5	0	9	10	6	0	3	122	24	0
21:30:00	0	1	85	0	14	64	4	0	8	3	2	0	1	96	18	0
21:45:00	1	8	73	0	15	86	13	0	14	1	4	0	3	78	25	0
22:00:00	3	0	58	0	9	56	4	0	8	0	0	0	1	57	12	0
22:15:00	0	6	49	0	7	63	1	0	6	5	5	0	2	70	24	0
22:30:00	1	2	28	0	8	48	3	0	3	0	2	0	0	46	8	0
22:45:00	1	2	39	0	8	39	0	0	3	2	0	0	1	42	8	0
23:00:00	0	1	35	0	3	42	0	0	3	0	0	0	1	45	13	0
23:15:00	0	0	28	0	1	37	0	0	0	0	0	0	0	37	5	0
23:30:00	0	0	22	0	2	36	2	0	0	0	0	0	0	20	5	0
23:45:00	0	1	15	0	0	22	1	0	0	0	1	0	0	16	4	0

Intersection: Main St (Route 236) at Trapp Rd / Lyndhurst Dr
Date observed: 3/28/2023
Collected by: T3 Design
Vehicle Classification: Regular & Heavy

Count Period: 6AM to 7PM
Weather: Sunny
County: Fairfax
Town/City: Fairfax

Street Name:	Lyndhurst Dr					Main St					Trapp Rd					Main St				
Direction:	Southbound					Westbound					Northbound					Eastbound				
Movement:	Right	Through	Left	U-Turn	Total	Right	Through	Left	U-Turn	Total	Right	Through	Left	U-Turn	Total	Right	Through	Left	U-Turn	Total
6:00	2	0	0	0	**2**	0	53	0	0	**53**	0	0	1	0	**1**	0	94	0	0	**94**
6:15	1	0	3	0	**4**	1	115	1	0	**117**	0	0	0	0	**0**	1	101	0	0	**102**
6:30	1	0	8	0	**9**	1	128	0	1	**130**	1	0	0	0	**1**	2	143	0	0	**145**
6:45	3	0	3	0	**6**	0	129	0	0	**129**	1	0	2	0	**3**	1	201	1	0	**203**
7:00	4	0	3	0	**7**	1	127	1	2	**131**	0	0	0	0	**0**	1	201	0	1	**203**
7:15	2	0	6	0	**8**	0	169	0	0	**169**	2	0	6	0	**8**	5	219	1	2	**227**
7:30	2	0	7	0	**9**	0	207	2	0	**209**	0	0	0	0	**0**	0	315	2	1	**318**
7:45	2	0	3	0	**5**	1	265	8	0	**274**	0	0	3	0	**3**	8	365	0	2	**375**
8:00	3	0	4	0	**7**	3	269	8	0	**280**	3	0	3	0	**6**	8	318	1	1	**328**
8:15	4	0	6	0	**10**	3	289	0	2	**294**	0	0	0	0	**0**	4	291	1	1	**297**
8:30	4	0	1	0	**5**	0	280	1	0	**281**	0	0	1	0	**1**	4	291	3	1	**299**
8:45	5	0	4	0	**9**	6	315	1	1	**323**	0	0	1	0	**1**	4	281	2	2	**289**
9:00	2	1	5	0	**8**	1	271	1	0	**273**	4	0	0	0	**4**	1	260	2	1	**264**
9:15	5	0	4	0	**9**	2	252	3	0	**257**	2	0	0	0	**2**	5	282	3	1	**291**
9:30	2	0	1	0	**3**	1	260	2	0	**263**	1	0	5	0	**6**	3	233	0	1	**237**
9:45	3	0	3	0	**6**	2	232	7	0	**241**	5	0	4	0	**9**	9	244	0	2	**255**
10:00	3	0	4	0	**7**	0	235	2	0	**237**	6	0	3	0	**9**	1	209	2	2	**214**
10:15	4	0	2	0	**6**	2	243	1	0	**246**	8	0	1	0	**9**	6	210	1	2	**219**
10:30	1	0	5	0	**6**	0	204	7	0	**211**	1	0	1	0	**2**	5	223	1	1	**230**
10:45	1	0	2	0	**3**	1	252	5	0	**258**	3	0	6	0	**9**	2	195	0	0	**197**
11:00	5	0	3	0	**8**	4	243	3	0	**250**	0	0	2	0	**2**	1	234	3	1	**239**
11:15	0	0	4	0	**4**	1	231	1	0	**233**	5	0	4	0	**9**	2	208	0	0	**210**
11:30	0	0	2	0	**2**	2	261	4	1	**268**	2	0	0	0	**2**	1	202	0	2	**205**
11:45	1	0	4	1	**6**	2	275	1	0	**278**	5	0	5	0	**10**	2	220	0	1	**223**
12:00	2	0	1	0	**3**	3	225	4	0	**232**	3	0	6	0	**9**	1	195	1	1	**198**
12:15	0	0	2	0	**2**	2	239	6	0	**247**	2	0	1	0	**3**	4	256	0	2	**262**
12:30	2	0	3	0	**5**	1	253	8	0	**262**	5	0	6	0	**11**	2	265	0	1	**268**
12:45	2	0	1	0	**3**	4	307	5	0	**316**	8	0	3	0	**11**	3	224	1	2	**230**
13:00	2	0	2	0	**4**	1	246	3	0	**250**	3	0	5	0	**8**	3	233	6	0	**242**
13:15	3	0	2	0	**5**	3	300	4	0	**307**	5	0	2	0	**7**	5	247	2	1	**255**
13:30	0	0	3	0	**3**	4	258	3	0	**265**	7	0	0	0	**7**	3	207	1	0	**211**
13:45	2	0	4	0	**6**	2	275	5	0	**282**	9	0	1	0	**10**	3	259	3	1	**266**
14:00	2	0	2	0	**4**	4	260	3	1	**268**	2	0	2	1	**5**	6	217	2	2	**227**
14:15	2	0	1	0	**3**	6	299	1	0	**306**	2	0	1	0	**3**	5	237	1	3	**246**
14:30	3	0	1	0	**4**	3	315	4	0	**322**	2	0	5	0	**7**	4	234	1	3	**242**
14:45	5	0	3	1	**9**	5	313	3	0	**321**	3	0	5	0	**8**	4	256	0	2	**262**
15:00	2	0	1	0	**3**	3	358	2	1	**364**	13	0	7	0	**20**	2	255	1	0	**258**
15:15	4	0	5	0	**9**	4	385	2	1	**392**	4	0	3	0	**7**	2	250	4	1	**257**
15:30	5	0	4	0	**9**	2	400	6	1	**409**	3	0	7	0	**10**	4	228	1	1	**234**
15:45	0	0	2	0	**2**	2	350	3	0	**355**	10	0	3	0	**13**	6	285	0	1	**292**
16:00	1	0	1	0	**2**	3	344	2	0	**349**	5	0	2	0	**7**	2	276	3	2	**283**
16:15	2	0	1	0	**3**	7	375	5	1	**388**	6	0	4	0	**10**	5	295	4	4	**308**
16:30	4	0	2	0	**6**	1	364	1	0	**366**	9	0	6	0	**15**	9	377	6	4	**396**
16:45	0	0	3	0	**3**	5	421	3	0	**429**	4	0	3	0	**7**	1	330	1	7	**339**
17:00	2	0	5	0	**7**	8	455	2	0	**465**	3	0	6	0	**9**	7	354	2	4	**367**
17:15	1	0	3	0	**4**	9	382	1	0	**392**	5	0	6	0	**11**	1	420	2	3	**426**
17:30	4	1	2	0	**7**	10	399	1	0	**410**	1	0	3	0	**4**	2	339	3	4	**348**
17:45	3	0	1	0	**4**	8	406	2	1	**417**	4	0	2	0	**6**	1	335	4	4	**344**
18:00	1	0	1	0	**2**	6	353	1	0	**360**	1	0	0	0	**1**	1	316	5	3	**325**

18:15	0	0	2	0	**2**	3	306	1	2	**312**	3	0	1	0	**4**	2	325	5	3	**335**
18:30	4	0	7	0	**11**	8	345	0	0	**353**	2	0	1	0	**3**	1	244	4	0	**249**
18:45	4	0	1	0	**5**	4	325	1	0	**330**	1	0	2	0	**3**	2	248	5	0	**255**
Total	122	2	153	2	**279**	155	14563	141	15	**14874**	174	0	141	1	**316**	167	13247	91	84	**13589**

Start Time 4/25/2024 0:00
End Time 4/25/2024 23:59
Location Main Street and Burke Station Road
Latitude an 38.843433,-77.28785

Entry	Fairfax Square Commercial Entrance				Main Street				Burke Station				Main Street			
Direction	Southbound				Westbound				Northbound				Eastbound			
Start Time	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
0:00:00	0	1	0	0	1	23	2	0	1	0	3	0	1	22	0	0
0:15:00	0	0	0	0	0	17	0	0	2	0	1	0	0	25	0	0
0:30:00	0	0	0	0	0	11	3	0	1	0	0	0	1	15	1	0
0:45:00	0	0	0	0	0	19	1	0	0	0	0	0	2	17	0	0
1:00:00	0	0	0	0	0	6	1	0	0	0	1	0	2	19	0	0
1:15:00	0	0	0	0	0	11	0	0	1	0	0	0	0	12	0	0
1:30:00	0	0	0	0	0	12	0	0	1	0	0	0	0	7	0	0
1:45:00	0	0	0	0	0	5	1	0	0	0	0	0	0	8	0	0
2:00:00	0	0	1	0	0	11	1	0	2	0	1	0	0	8	0	0
2:15:00	0	0	0	0	0	5	1	0	0	0	1	0	0	12	1	0
2:30:00	0	0	0	0	0	11	0	0	0	0	0	0	0	11	0	0
2:45:00	0	0	0	0	0	9	0	0	0	0	0	0	1	11	0	0
3:00:00	0	0	0	0	0	4	0	0	0	0	0	0	0	6	0	0
3:15:00	0	0	0	0	0	4	1	0	0	0	1	0	1	3	0	0
3:30:00	0	0	0	0	0	7	1	0	1	0	0	0	0	5	0	0
3:45:00	0	0	0	0	0	13	0	0	1	0	1	0	0	4	0	0
4:00:00	0	0	0	0	0	10	0	0	0	0	0	0	0	12	0	0
4:15:00	1	0	0	0	0	11	0	0	1	0	1	0	0	12	0	0
4:30:00	0	0	1	0	0	25	1	0	2	0	0	0	0	15	0	0
4:45:00	0	0	0	0	0	32	1	0	0	0	2	0	0	20	0	0
5:00:00	0	0	0	0	0	37	0	0	2	0	0	0	1	30	0	0
5:15:00	0	0	0	0	0	47	2	0	5	0	2	0	0	33	0	0
5:30:00	1	0	0	0	0	45	1	0	2	0	2	0	1	56	0	0
5:45:00	0	0	0	0	1	49	3	0	6	2	7	0	3	72	3	0
6:00:00	2	0	0	0	0	67	1	0	8	0	2	0	3	56	1	0
6:15:00	2	0	1	0	0	98	6	0	8	1	1	0	4	93	0	0
6:30:00	0	0	0	0	1	95	12	0	17	0	6	0	3	105	0	0
6:45:00	0	2	1	0	2	129	5	0	13	1	11	0	7	156	1	0
7:00:00	0	1	1	0	0	130	8	0	22	0	10	0	5	158	3	0
7:15:00	1	0	2	0	0	148	10	0	23	0	20	0	11	197	0	0
7:30:00	4	0	2	0	2	187	18	0	15	0	21	0	5	238	0	0
7:45:00	0	2	0	0	1	207	12	0	27	2	16	0	18	287	1	0
8:00:00	0	1	5	0	1	218	27	0	26	3	27	0	13	262	4	0

8:15:00	5	0	3	0	7	222	11	0	24	5	32	0	8	211	1	0
8:30:00	1	3	3	0	2	244	20	0	19	2	31	0	11	182	3	0
8:45:00	2	1	3	0	4	212	25	0	16	1	29	0	16	222	3	0
9:00:00	0	1	2	0	2	267	12	0	19	1	37	0	13	208	2	0
9:15:00	2	0	2	0	3	222	23	0	22	1	30	0	19	204	2	0
9:30:00	2	1	4	0	1	206	16	0	9	1	12	0	6	201	1	0
9:45:00	2	0	1	0	5	259	19	0	16	1	26	0	14	174	2	0
10:00:00	2	1	3	0	2	218	20	0	17	3	10	0	8	170	1	0
10:15:00	2	0	2	0	4	221	24	0	10	3	21	0	10	153	3	0
10:30:00	2	1	4	0	4	203	19	0	14	0	19	0	17	190	2	1
10:45:00	2	3	7	0	2	195	20	0	12	0	26	0	12	182	6	0
11:00:00	2	1	2	0	3	194	27	0	5	2	6	0	13	193	2	0
11:15:00	3	0	3	0	3	178	22	0	16	1	26	0	30	177	1	0
11:30:00	1	1	7	0	2	225	17	0	14	0	24	0	20	201	2	0
11:45:00	2	2	4	0	4	240	17	0	23	1	17	0	16	181	4	0
12:00:00	1	3	3	0	2	225	26	1	7	0	15	0	15	219	4	0
12:15:00	0	0	8	0	1	222	31	0	19	0	17	0	30	228	4	1
12:30:00	1	2	4	0	2	239	28	0	7	1	18	0	14	222	1	0
12:45:00	0	0	6	0	4	233	24	0	6	1	20	0	18	211	4	0
13:00:00	1	0	7	0	3	219	24	0	6	0	16	0	14	198	4	2
13:15:00	3	1	3	0	3	234	34	0	11	0	21	0	18	220	5	2
13:30:00	1	1	5	0	1	244	34	0	23	2	20	0	10	200	3	0
13:45:00	2	1	3	0	4	220	28	0	17	1	17	0	17	198	5	0
14:00:00	0	0	6	0	3	296	23	0	13	1	17	0	24	231	2	1
14:15:00	0	1	6	0	6	199	14	0	17	2	16	0	21	207	1	0
14:30:00	2	3	8	0	1	266	33	0	20	2	18	0	21	228	4	0
14:45:00	1	3	3	0	2	297	27	0	21	1	24	0	18	263	1	0
15:00:00	3	3	8	0	2	331	27	0	22	2	27	0	26	233	3	0
15:15:00	1	4	4	0	2	294	31	0	18	1	21	0	24	271	3	0
15:30:00	0	1	4	0	3	321	38	0	25	5	19	0	29	272	3	0
15:45:00	1	1	6	0	9	347	28	0	18	1	22	0	36	291	4	1
16:00:00	1	4	3	0	4	282	30	0	15	8	21	0	32	279	6	0
16:15:00	1	2	10	0	4	300	34	1	18	5	18	0	27	295	8	0
16:30:00	1	6	7	0	5	315	32	1	23	3	33	0	34	316	2	1
16:45:00	1	8	12	0	3	305	37	0	16	5	26	0	30	295	5	1
17:00:00	1	6	15	0	8	308	37	0	18	4	34	0	35	284	4	1
17:15:00	2	3	7	0	11	339	42	0	27	1	14	0	26	360	4	0
17:30:00	6	6	8	0	6	361	32	0	20	4	17	0	27	289	6	0
17:45:00	1	3	15	0	6	324	37	0	25	6	26	0	31	238	11	2
18:00:00	2	7	8	0	10	295	46	0	16	1	14	0	24	273	9	1
18:15:00	1	4	15	0	6	281	32	0	17	6	26	0	14	228	6	0

18:30:00	2	7	13	0	4	259	57	1	15	4	20	0	16	233	1	0
18:45:00	2	5	10	0	1	225	26	0	16	1	13	0	17	216	4	0
19:00:00	2	3	9	0	5	201	18	0	12	0	16	0	25	217	4	1
19:15:00	3	4	12	0	2	228	33	0	15	1	12	0	27	199	2	1
19:30:00	2	0	4	0	2	185	19	0	19	1	10	0	14	183	4	1
19:45:00	2	1	3	0	0	156	22	0	18	1	10	0	10	169	3	1
20:00:00	0	0	1	0	1	188	24	0	11	1	13	0	18	185	0	0
20:15:00	2	0	2	0	0	165	22	0	9	0	13	0	13	157	1	0
20:30:00	0	0	1	0	1	137	12	2	12	0	13	0	14	164	0	0
20:45:00	1	1	3	0	2	115	11	0	4	1	5	0	10	107	1	0
21:00:00	3	1	1	0	1	114	17	0	9	3	9	0	17	146	3	0
21:15:00	1	1	2	0	0	112	16	0	6	1	5	0	9	121	2	0
21:30:00	0	1	0	0	1	96	14	0	5	0	5	0	7	117	2	0
21:45:00	0	1	2	0	1	101	12	0	8	2	6	0	5	94	2	0
22:00:00	1	0	0	0	0	75	12	0	1	0	4	0	7	88	0	0
22:15:00	0	1	3	0	0	79	6	0	5	0	3	0	6	71	2	0
22:30:00	0	0	0	0	0	63	3	0	4	0	3	0	9	61	0	0
22:45:00	0	1	0	0	0	46	2	0	5	2	1	0	2	47	0	0
23:00:00	1	0	1	0	1	44	2	0	1	0	1	0	3	46	0	0
23:15:00	1	1	0	0	0	43	3	0	0	0	1	0	1	44	2	0
23:30:00	0	0	1	0	0	36	2	0	0	3	2	0	3	29	1	0
23:45:00	0	0	0	0	0	32	1	0	1	0	1	0	3	21	1	0

Start Time 4/25/2024 0:00
End Time 4/25/2024 23:59
Location Main Street and Burke Station Road
Latitude an 38.843433,-77.28785

Entry	Fairfax Square Commercial Entrance				Main Street				Burke Station				Main Street			
Direction	Southbound				Westbound				Northbound				Eastbound			
Start Time	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
0:00:00	0	1	0	0	1	23	2	0	1	0	3	0	1	22	0	0
0:15:00	0	0	0	0	0	17	0	0	2	0	1	0	0	25	0	0
0:30:00	0	0	0	0	0	11	3	0	1	0	0	0	1	15	1	0
0:45:00	0	0	0	0	0	19	1	0	0	0	0	0	2	17	0	0
1:00:00	0	0	0	0	0	6	1	0	0	0	1	0	2	19	0	0
1:15:00	0	0	0	0	0	11	0	0	1	0	0	0	0	12	0	0
1:30:00	0	0	0	0	0	12	0	0	1	0	0	0	0	7	0	0
1:45:00	0	0	0	0	0	5	1	0	0	0	0	0	0	8	0	0
2:00:00	0	0	1	0	0	11	1	0	2	0	1	0	0	8	0	0
2:15:00	0	0	0	0	0	5	1	0	0	0	1	0	0	12	1	0
2:30:00	0	0	0	0	0	11	0	0	0	0	0	0	0	11	0	0
2:45:00	0	0	0	0	0	9	0	0	0	0	0	0	1	11	0	0
3:00:00	0	0	0	0	0	4	0	0	0	0	0	0	0	6	0	0
3:15:00	0	0	0	0	0	4	1	0	0	0	1	0	1	3	0	0
3:30:00	0	0	0	0	0	7	1	0	1	0	0	0	0	5	0	0
3:45:00	0	0	0	0	0	13	0	0	1	0	1	0	0	4	0	0
4:00:00	0	0	0	0	0	10	0	0	0	0	0	0	0	12	0	0
4:15:00	1	0	0	0	0	11	0	0	1	0	1	0	0	12	0	0
4:30:00	0	0	1	0	0	25	1	0	2	0	0	0	0	15	0	0
4:45:00	0	0	0	0	0	32	1	0	0	0	2	0	0	20	0	0
5:00:00	0	0	0	0	0	37	0	0	2	0	0	0	1	30	0	0
5:15:00	0	0	0	0	0	47	2	0	5	0	2	0	0	33	0	0
5:30:00	1	0	0	0	0	45	1	0	2	0	2	0	1	56	0	0
5:45:00	0	0	0	0	1	49	3	0	6	2	7	0	3	72	3	0
6:00:00	2	0	0	0	0	67	1	0	8	0	2	0	3	56	1	0
6:15:00	2	0	1	0	0	98	6	0	8	1	1	0	4	93	0	0
6:30:00	0	0	0	0	1	95	12	0	17	0	6	0	3	105	0	0
6:45:00	0	2	1	0	2	129	5	0	13	1	11	0	7	156	1	0
7:00:00	0	1	1	0	0	130	8	0	22	0	10	0	5	158	3	0
7:15:00	1	0	2	0	0	148	10	0	23	0	20	0	11	197	0	0
7:30:00	4	0	2	0	2	187	18	0	15	0	21	0	5	238	0	0
7:45:00	0	2	0	0	1	207	12	0	27	2	16	0	18	287	1	0
8:00:00	0	1	5	0	1	218	27	0	26	3	27	0	13	262	4	0

8:15:00	5	0	3	0	7	222	11	0	24	5	32	0	8	211	1	0
8:30:00	1	3	3	0	2	244	20	0	19	2	31	0	11	182	3	0
8:45:00	2	1	3	0	4	212	25	0	16	1	29	0	16	222	3	0
9:00:00	0	1	2	0	2	267	12	0	19	1	37	0	13	208	2	0
9:15:00	2	0	2	0	3	222	23	0	22	1	30	0	19	204	2	0
9:30:00	2	1	4	0	1	206	16	0	9	1	12	0	6	201	1	0
9:45:00	2	0	1	0	5	259	19	0	16	1	26	0	14	174	2	0
10:00:00	2	1	3	0	2	218	20	0	17	3	10	0	8	170	1	0
10:15:00	2	0	2	0	4	221	24	0	10	3	21	0	10	153	3	0
10:30:00	2	1	4	0	4	203	19	0	14	0	19	0	17	190	2	1
10:45:00	2	3	7	0	2	195	20	0	12	0	26	0	12	182	6	0
11:00:00	2	1	2	0	3	194	27	0	5	2	6	0	13	193	2	0
11:15:00	3	0	3	0	3	178	22	0	16	1	26	0	30	177	1	0
11:30:00	1	1	7	0	2	225	17	0	14	0	24	0	20	201	2	0
11:45:00	2	2	4	0	4	240	17	0	23	1	17	0	16	181	4	0
12:00:00	1	3	3	0	2	225	26	1	7	0	15	0	15	219	4	0
12:15:00	0	0	8	0	1	222	31	0	19	0	17	0	30	228	4	1
12:30:00	1	2	4	0	2	239	28	0	7	1	18	0	14	222	1	0
12:45:00	0	0	6	0	4	233	24	0	6	1	20	0	18	211	4	0
13:00:00	1	0	7	0	3	219	24	0	6	0	16	0	14	198	4	2
13:15:00	3	1	3	0	3	234	34	0	11	0	21	0	18	220	5	2
13:30:00	1	1	5	0	1	244	34	0	23	2	20	0	10	200	3	0
13:45:00	2	1	3	0	4	220	28	0	17	1	17	0	17	198	5	0
14:00:00	0	0	6	0	3	296	23	0	13	1	17	0	24	231	2	1
14:15:00	0	1	6	0	6	199	14	0	17	2	16	0	21	207	1	0
14:30:00	2	3	8	0	1	266	33	0	20	2	18	0	21	228	4	0
14:45:00	1	3	3	0	2	297	27	0	21	1	24	0	18	263	1	0
15:00:00	3	3	8	0	2	331	27	0	22	2	27	0	26	233	3	0
15:15:00	1	4	4	0	2	294	31	0	18	1	21	0	24	271	3	0
15:30:00	0	1	4	0	3	321	38	0	25	5	19	0	29	272	3	0
15:45:00	1	1	6	0	9	347	28	0	18	1	22	0	36	291	4	1
16:00:00	1	4	3	0	4	282	30	0	15	8	21	0	32	279	6	0
16:15:00	1	2	10	0	4	300	34	1	18	5	18	0	27	295	8	0
16:30:00	1	6	7	0	5	315	32	1	23	3	33	0	34	316	2	1
16:45:00	1	8	12	0	3	305	37	0	16	5	26	0	30	295	5	1
17:00:00	1	6	15	0	8	308	37	0	18	4	34	0	35	284	4	1
17:15:00	2	3	7	0	11	339	42	0	27	1	14	0	26	360	4	0
17:30:00	6	6	8	0	6	361	32	0	20	4	17	0	27	289	6	0
17:45:00	1	3	15	0	6	324	37	0	25	6	26	0	31	238	11	2
18:00:00	2	7	8	0	10	295	46	0	16	1	14	0	24	273	9	1
18:15:00	1	4	15	0	6	281	32	0	17	6	26	0	14	228	6	0

18:30:00	2	7	13	0	4	259	57	1	15	4	20	0	16	233	1	0
18:45:00	2	5	10	0	1	225	26	0	16	1	13	0	17	216	4	0
19:00:00	2	3	9	0	5	201	18	0	12	0	16	0	25	217	4	1
19:15:00	3	4	12	0	2	228	33	0	15	1	12	0	27	199	2	1
19:30:00	2	0	4	0	2	185	19	0	19	1	10	0	14	183	4	1
19:45:00	2	1	3	0	0	156	22	0	18	1	10	0	10	169	3	1
20:00:00	0	0	1	0	1	188	24	0	11	1	13	0	18	185	0	0
20:15:00	2	0	2	0	0	165	22	0	9	0	13	0	13	157	1	0
20:30:00	0	0	1	0	1	137	12	2	12	0	13	0	14	164	0	0
20:45:00	1	1	3	0	2	115	11	0	4	1	5	0	10	107	1	0
21:00:00	3	1	1	0	1	114	17	0	9	3	9	0	17	146	3	0
21:15:00	1	1	2	0	0	112	16	0	6	1	5	0	9	121	2	0
21:30:00	0	1	0	0	1	96	14	0	5	0	5	0	7	117	2	0
21:45:00	0	1	2	0	1	101	12	0	8	2	6	0	5	94	2	0
22:00:00	1	0	0	0	0	75	12	0	1	0	4	0	7	88	0	0
22:15:00	0	1	3	0	0	79	6	0	5	0	3	0	6	71	2	0
22:30:00	0	0	0	0	0	63	3	0	4	0	3	0	9	61	0	0
22:45:00	0	1	0	0	0	46	2	0	5	2	1	0	2	47	0	0
23:00:00	1	0	1	0	1	44	2	0	1	0	1	0	3	46	0	0
23:15:00	1	1	0	0	0	43	3	0	0	0	1	0	1	44	2	0
23:30:00	0	0	1	0	0	36	2	0	0	3	2	0	3	29	1	0
23:45:00	0	0	0	0	0	32	1	0	1	0	1	0	3	21	1	0

Start Time 4/24/2024 0:00
End Time 4/24/2024 23:59
Location Main Street and East Street
Latitude an 38.845737,-77.30378
Lights

Entry	Blenheim Boulevard				Main Street				East Street				Main Street			
Direction	Southbound				Westbound				Northbound				Eastbound			
Start Time	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn	Right	Thru	Left	U-Turn
0:00:00	0	4	6	0	5	12	0	0	0	3	0	0	0	18	0	0
0:15:00	1	1	10	0	2	7	0	0	0	5	0	0	0	16	0	0
0:30:00	0	1	6	0	2	8	0	0	0	1	0	0	0	6	0	0
0:45:00	1	1	6	0	3	7	0	0	3	1	0	0	0	11	0	0
1:00:00	0	1	1	0	0	4	0	0	0	1	0	0	1	5	0	0
1:15:00	0	0	4	0	1	9	0	0	0	1	0	0	0	8	0	0
1:30:00	1	0	1	0	5	5	0	0	0	0	0	0	0	2	0	0
1:45:00	0	0	3	0	0	2	0	0	0	0	0	0	0	5	0	0
2:00:00	0	2	1	0	1	4	0	0	0	1	0	0	0	1	0	0
2:15:00	0	0	2	0	7	3	0	0	1	2	0	0	0	2	0	0
2:30:00	0	0	2	0	2	7	0	0	0	0	0	0	0	8	0	0
2:45:00	1	0	2	0	2	3	0	0	0	0	0	0	0	5	0	0
3:00:00	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0
3:15:00	0	1	2	0	1	0	0	0	0	0	0	0	0	6	0	0
3:30:00	0	1	2	0	2	0	0	0	0	0	0	0	0	2	0	0
3:45:00	1	0	2	0	3	2	0	0	0	0	0	0	0	5	0	0
4:00:00	0	0	1	0	4	3	0	0	0	1	0	0	0	6	0	0
4:15:00	0	0	3	0	7	3	0	0	0	1	0	0	0	5	0	0
4:30:00	1	3	2	0	7	6	0	0	0	2	0	0	0	6	0	0
4:45:00	1	2	4	0	13	5	0	0	0	3	0	0	0	3	0	0
5:00:00	0	2	9	0	20	8	0	0	0	1	0	0	0	14	0	0
5:15:00	0	1	16	0	19	11	0	0	1	3	0	0	0	7	0	0
5:30:00	0	4	18	0	19	12	0	0	2	9	0	0	0	27	0	0
5:45:00	0	4	24	0	27	12	0	0	3	6	1	0	0	21	0	0
6:00:00	2	2	17	0	43	18	0	0	1	11	1	0	0	37	0	0
6:15:00	2	2	26	0	58	23	0	0	3	15	2	0	0	45	0	0
6:30:00	2	4	43	0	82	32	0	0	1	18	0	0	0	51	0	0
6:45:00	2	9	54	0	83	33	0	0	2	27	0	0	2	46	0	0
7:00:00	3	8	83	0	120	25	0	0	4	29	2	0	0	80	0	0
7:15:00	2	12	91	0	137	46	0	0	2	34	3	0	0	72	0	0
7:30:00	5	23	93	0	155	50	0	0	1	56	1	0	0	104	0	0
7:45:00	0	27	204	0	191	49	0	0	4	59	4	0	0	89	0	0
8:00:00	5	22	124	0	165	66	0	0	6	58	5	0	0	73	0	0

8:15:00	1	35	119	0	192	59	0	0	2	48	1	0	0	79	0	0
8:30:00	5	20	103	0	195	75	0	0	3	61	4	0	2	86	0	0
8:45:00	4	18	113	0	218	90	0	0	6	53	3	0	1	78	0	0
9:00:00	6	35	124	0	169	69	0	0	3	32	1	0	0	79	0	0
9:15:00	5	17	107	0	156	87	0	0	8	48	4	0	1	102	0	0
9:30:00	7	20	104	0	183	47	0	0	3	36	1	0	0	85	0	0
9:45:00	12	19	85	0	143	57	0	0	6	50	4	0	2	77	0	0
10:00:00	1	24	95	0	142	59	0	0	6	32	1	0	3	74	0	0
10:15:00	4	26	103	0	112	70	0	0	7	45	1	0	1	68	0	0
10:30:00	4	18	84	0	179	79	0	0	9	26	1	0	4	105	0	0
10:45:00	6	19	89	0	116	62	0	0	9	42	2	0	2	91	0	0
11:00:00	5	19	138	0	160	82	0	0	8	30	1	0	0	103	0	0
11:15:00	11	25	102	0	129	70	0	0	14	43	2	0	0	75	0	0
11:30:00	6	28	90	0	163	94	0	0	11	36	1	0	3	88	0	0
11:45:00	8	35	124	0	146	68	0	0	7	43	7	0	2	82	0	0
12:00:00	3	32	135	0	159	69	0	0	14	37	3	0	2	109	0	0
12:15:00	8	27	106	0	167	70	0	0	11	35	2	0	4	83	0	0
12:30:00	4	27	129	0	181	90	0	0	10	33	5	0	3	88	0	0
12:45:00	4	38	108	0	168	73	0	0	7	27	7	0	2	87	0	0
13:00:00	5	29	140	0	144	83	0	0	6	32	4	0	2	96	0	0
13:15:00	8	35	114	0	160	77	0	0	6	30	8	0	4	72	0	0
13:30:00	4	27	108	0	191	89	0	0	13	38	5	0	2	109	0	0
13:45:00	6	38	108	0	165	66	0	0	8	32	6	0	3	82	0	0
14:00:00	5	22	117	0	188	71	0	0	10	33	1	0	2	79	0	0
14:15:00	7	36	120	0	162	80	0	0	6	42	4	0	2	73	0	0
14:30:00	12	41	117	0	172	57	0	0	7	32	4	0	3	91	0	0
14:45:00	9	30	159	0	240	63	0	0	9	54	1	0	1	77	0	0
15:00:00	16	40	162	0	251	69	0	0	12	51	6	0	4	91	0	0
15:15:00	19	38	165	0	246	70	0	0	13	44	4	0	3	83	0	0
15:30:00	7	41	154	0	242	66	0	0	13	43	1	0	0	73	0	0
15:45:00	9	40	161	0	269	80	0	0	6	26	4	0	2	89	0	0
16:00:00	16	55	161	0	240	70	0	0	9	44	3	0	3	86	0	0
16:15:00	15	40	204	0	243	81	0	0	11	46	1	0	2	101	0	0
16:30:00	12	54	203	0	271	68	0	0	8	58	1	0	2	95	0	0
16:45:00	24	54	192	0	239	67	0	0	11	57	3	0	1	79	0	0
17:00:00	8	45	228	0	239	70	0	0	8	57	6	0	3	91	0	0
17:15:00	12	70	226	0	211	54	0	0	16	72	6	0	1	101	0	0
17:30:00	16	49	224	0	223	76	0	0	7	50	4	0	4	96	0	0
17:45:00	16	67	223	0	228	64	0	0	7	56	4	0	1	87	0	0
18:00:00	9	48	209	0	241	69	0	0	7	50	5	0	0	98	0	0
18:15:00	8	44	176	0	217	55	0	0	13	37	0	0	2	84	0	0

18:30:00	10	54	161	0	172	64	0	0	6	44	1	0	2	85	0	0
18:45:00	6	44	149	0	170	70	0	0	4	33	5	0	0	92	0	0
19:00:00	11	59	130	0	159	73	0	0	10	39	2	0	3	95	0	0
19:15:00	12	44	131	0	165	54	0	0	3	55	4	0	1	77	0	0
19:30:00	11	32	86	0	138	63	0	0	4	32	2	0	0	93	0	0
19:45:00	18	33	79	0	125	58	0	0	7	38	1	0	2	73	0	0
20:00:00	8	28	116	0	107	54	0	0	4	13	1	0	1	85	0	0
20:15:00	10	29	106	0	73	43	0	0	4	18	2	0	1	66	0	0
20:30:00	6	26	80	0	46	63	0	0	8	17	0	0	4	94	0	0
20:45:00	7	40	84	0	57	59	0	0	6	24	1	0	4	57	0	0
21:00:00	2	24	79	0	66	39	0	0	1	16	2	0	1	44	0	0
21:15:00	5	19	53	0	55	30	0	0	3	17	1	0	0	41	0	0
21:30:00	8	25	67	0	49	51	0	0	3	18	1	0	2	66	0	0
21:45:00	4	18	40	0	41	37	0	0	4	13	0	0	1	33	0	0
22:00:00	6	22	32	0	26	23	0	0	1	9	0	0	1	51	0	0
22:15:00	4	20	29	0	20	19	0	0	0	11	0	0	1	37	0	0
22:30:00	3	18	26	0	27	21	0	0	0	8	0	0	0	33	0	0
22:45:00	3	7	23	0	9	17	0	0	4	6	0	0	0	25	0	0
23:00:00	2	4	14	0	22	20	0	0	2	8	1	0	0	22	0	0
23:15:00	2	8	16	0	12	16	0	0	0	5	1	0	1	14	0	0
23:30:00	0	6	15	0	8	14	0	0	0	4	1	0	1	25	0	0
23:45:00	1	4	9	0	8	6	0	0	0	4	0	0	0	21	0	0

APPENDIX B: Speed Data

Peggy Malone & Associates

SPEED SUMMARY
Thu 5/23/2024

Page: 1

Station #: 2 EBI/O
Site ID: 000000008510
Loc: MAIN ST W/O FAIRFAX SQ/STONE WALL AVE
Direction: EAST
Lane: 1

File: D0501002.prn
Info: 24-126 TO MIN
GPS: 38.84361,-77.29117

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
00:15	0	1	2	3	2	4	8	1	0	0	0	0	0	0	21
00:30	1	0	0	0	1	2	4	1	0	0	0	0	0	0	9
00:45	0	1	0	0	0	5	2	2	0	0	0	0	0	0	10
01:00	0	0	1	0	1	5	4	2	0	0	0	0	0	0	13
Hour Total	1	2	3	3	4	16	18	6	0	0	0	0	0	0	53
01:15	0	0	0	1	0	5	2	1	0	0	0	0	0	0	9
01:30	0	1	2	1	0	0	3	0	0	0	0	0	0	0	7
01:45	0	0	1	0	2	1	4	1	0	0	0	0	0	0	9
02:00	0	0	0	1	1	3	0	1	0	0	0	0	0	0	6
Hour Total	0	1	3	3	3	9	9	3	0	0	0	0	0	0	31
02:15	0	0	0	0	0	5	2	0	0	0	0	0	0	0	7
02:30	0	0	0	0	1	2	1	1	0	0	0	0	0	0	5
02:45	0	0	0	1	0	4	1	0	0	0	0	0	0	0	6
03:00	0	0	0	0	0	0	2	2	3	0	0	0	0	0	7
Hour Total	0	0	0	1	1	11	6	3	3	0	0	0	0	0	25
03:15	0	0	0	0	0	2	2	0	0	0	0	0	0	0	4
03:30	0	0	0	0	1	1	1	1	0	0	0	0	0	0	4
03:45	0	0	0	0	2	0	2	1	0	0	0	0	0	0	5
04:00	0	0	0	0	0	0	4	1	0	0	0	0	0	0	5
Hour Total	0	0	0	0	3	3	9	3	0	0	0	0	0	0	18
04:15	0	0	0	1	0	2	3	0	0	0	0	0	0	0	6
04:30	0	0	0	0	0	2	1	2	0	0	0	0	0	0	5
04:45	0	0	0	0	0	0	5	0	0	0	0	0	0	0	5
05:00	0	0	0	0	0	0	2	5	0	0	0	0	0	0	7
Hour Total	0	0	0	1	0	4	11	7	0	0	0	0	0	0	23
05:15	0	0	0	2	0	5	7	2	1	0	0	0	0	0	17
05:30	0	0	0	1	1	2	6	3	2	0	0	0	0	0	15
05:45	1	2	0	0	1	5	18	6	1	2	0	0	0	0	36
06:00	0	2	0	2	2	7	17	13	6	0	0	0	0	0	49
Hour Total	1	4	0	5	4	19	48	24	10	2	0	0	0	0	117
06:15	0	0	0	2	3	5	16	12	2	0	0	0	0	0	40
06:30	0	0	0	1	1	6	17	10	7	0	0	0	0	0	42
06:45	0	0	1	2	3	10	20	19	3	0	0	0	0	0	58
07:00	0	0	0	3	5	15	39	20	3	2	0	0	0	0	87
Hour Total	0	0	1	8	12	36	92	61	15	2	0	0	0	0	227
07:15	1	3	4	5	3	24	38	30	5	0	0	0	0	0	113
07:30	0	1	6	1	5	12	39	25	6	1	0	1	0	0	97
07:45	0	1	0	2	8	41	52	33	5	0	0	0	0	0	142
08:00	0	4	2	7	8	38	71	22	10	0	0	0	0	0	162
Hour Total	1	9	12	15	24	115	200	110	26	1	0	1	0	0	514
08:15	0	0	5	3	10	49	63	20	1	0	0	0	0	1	152
08:30	0	2	3	1	7	47	45	25	2	0	0	0	0	1	133
08:45	0	0	3	1	6	45	42	31	3	0	0	0	0	0	131
09:00	0	2	1	0	6	30	58	19	4	0	0	0	0	0	120
Hour Total	0	4	12	5	29	171	208	95	10	0	0	0	0	2	536

Peggy Malone & Associates

SPEED SUMMARY
Thu 5/23/2024

Page: 2

Station #: 2 EBI/O
Site ID: 000000008510
Loc: MAIN ST W/O FAIRFAX SQ/STONE WALL AVE
Direction: EAST
Lane: 1

File: D0501002.prn
Info: 24-126 TO MIN
GPS: 38.84361,-77.29117

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
09:15	0	0	0	3	3	28	47	39	1	0	0	0	0	0	121
09:30	0	0	1	1	8	54	51	10	1	0	0	0	0	0	126
09:45	1	0	1	5	4	32	53	20	3	0	1	0	0	0	120
10:00	0	0	3	1	6	34	34	26	1	0	0	0	0	0	105
Hour Total	1	0	5	10	21	148	185	95	6	0	1	0	0	0	472
10:15	0	2	2	3	3	27	42	9	2	0	0	0	0	0	90
10:30	0	1	3	1	6	42	32	14	2	1	0	0	0	0	102
10:45	0	0	7	6	11	38	40	17	1	1	0	0	0	0	121
11:00	0	5	10	5	14	39	31	11	0	0	0	0	1	0	116
Hour Total	0	8	22	15	34	146	145	51	5	2	0	0	1	0	429
11:15	1	0	2	5	10	30	50	11	3	0	0	0	0	1	113
11:30	0	3	5	3	10	35	51	9	2	0	0	0	0	0	118
11:45	1	6	7	5	18	39	37	13	3	0	0	0	0	0	129
12:00	0	1	2	2	6	32	52	18	3	0	0	0	0	0	116
Hour Total	2	10	16	15	44	136	190	51	11	0	0	0	0	1	476
12:15	0	3	5	8	7	47	62	13	1	0	0	0	0	0	146
12:30	0	2	4	1	15	39	40	13	0	0	0	0	0	0	114
12:45	0	5	4	8	20	50	32	18	0	0	0	0	0	0	137
13:00	1	1	5	3	21	38	35	13	2	0	0	0	0	0	119
Hour Total	1	11	18	20	63	174	169	57	3	0	0	0	0	0	516
13:15	0	3	3	2	16	56	57	10	1	0	0	0	0	0	148
13:30	1	4	2	2	18	43	51	13	2	0	0	0	0	1	137
13:45	0	1	6	5	24	37	48	16	0	0	0	0	0	0	137
14:00	0	0	7	2	17	46	36	17	0	0	0	0	0	2	127
Hour Total	1	8	18	11	75	182	192	56	3	0	0	0	0	3	549
14:15	0	1	6	1	13	52	61	8	1	0	0	0	0	0	143
14:30	0	3	7	2	10	54	52	9	1	0	0	0	0	0	138
14:45	0	2	7	4	19	50	47	5	0	0	0	0	0	0	134
15:00	1	1	8	3	27	56	41	7	1	1	0	0	0	0	146
Hour Total	1	7	28	10	69	212	201	29	3	1	0	0	0	0	561
15:15	0	1	6	1	7	48	77	11	3	0	0	0	0	0	154
15:30	0	1	5	2	18	31	69	21	0	1	0	0	0	0	148
15:45	0	2	6	2	15	57	62	15	4	0	0	0	0	0	163
16:00	0	0	3	1	6	77	61	12	1	0	0	0	0	0	161
Hour Total	0	4	20	6	46	213	269	59	8	1	0	0	0	0	626
16:15	0	2	4	3	12	52	63	23	0	2	0	0	0	2	163
16:30	5	4	5	5	28	46	80	28	1	0	0	0	0	2	204
16:45	3	4	5	3	5	73	77	24	0	0	0	0	0	1	195
17:00	0	2	1	4	22	83	64	16	1	0	1	0	0	2	196
Hour Total	8	12	15	15	67	254	284	91	2	2	1	0	0	7	758
17:15	1	3	5	16	28	86	57	5	2	0	0	0	0	2	205
17:30	3	5	6	7	27	86	67	16	4	0	0	0	0	1	222
17:45	6	6	2	5	21	48	55	19	4	2	0	0	0	0	168
18:00	2	1	5	1	14	63	40	19	3	0	0	0	0	0	148
Hour Total	12	15	18	29	90	283	219	59	13	2	0	0	0	3	743

Peggy Malone & Associates

SPEED SUMMARY
Thu 5/23/2024

Page: 3

Station #: 2 EBI/O
Site ID: 000000008510
Loc: MAIN ST W/O FAIRFAX SQ/STONE WALL AVE
Direction: EAST
Lane: 1

File: D0501002.prn
Info: 24-126 TO MIN
GPS: 38.84361,-77.29117

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
18:15	1	1	4	7	25	68	58	11	2	0	0	0	0	0	177
18:30	0	0	0	2	20	52	56	16	2	2	0	0	0	0	150
18:45	1	5	5	4	19	48	42	20	2	0	0	0	0	0	146
19:00	1	0	5	1	15	36	79	17	1	0	0	0	0	0	155
Hour Total	3	6	14	14	79	204	235	64	7	2	0	0	0	0	628
19:15	1	3	4	1	14	35	43	20	1	1	0	0	0	0	123
19:30	0	1	6	3	16	52	39	8	1	0	0	0	0	0	126
19:45	0	5	4	8	19	33	34	9	2	0	0	0	0	0	114
20:00	1	2	7	2	15	52	28	7	0	0	0	0	0	0	114
Hour Total	2	11	21	14	64	172	144	44	4	1	0	0	0	0	477
20:15	1	2	4	1	24	53	21	7	0	0	0	0	0	0	113
20:30	0	0	6	5	21	30	42	10	0	0	0	0	0	0	114
20:45	0	1	7	9	18	34	38	10	0	0	0	0	0	0	117
21:00	0	0	2	3	6	35	36	14	1	0	0	0	0	0	97
Hour Total	1	3	19	18	69	152	137	41	1	0	0	0	0	0	441
21:15	0	1	2	3	2	20	39	7	3	0	0	0	0	0	77
21:30	0	2	6	2	12	27	24	5	1	0	0	0	0	0	79
21:45	0	0	0	4	9	14	26	8	2	0	0	0	0	0	63
22:00	0	0	1	2	8	18	14	6	0	1	0	0	0	0	50
Hour Total	0	3	9	11	31	79	103	26	6	1	0	0	0	0	269
22:15	0	0	2	4	2	7	17	5	1	0	0	0	0	0	38
22:30	0	0	1	1	4	9	26	10	1	0	0	0	0	0	52
22:45	0	0	0	1	3	10	11	8	4	1	0	0	0	0	38
23:00	0	0	0	0	1	10	7	6	0	0	0	0	0	0	24
Hour Total	0	0	3	6	10	36	61	29	6	1	0	0	0	0	152
23:15	0	0	1	3	0	4	12	6	0	0	0	0	0	0	26
23:30	0	2	1	0	1	8	6	9	2	0	0	0	0	0	29
23:45	0	1	0	2	0	4	4	0	2	0	0	0	0	0	13
24:00	0	1	2	2	1	6	12	2	2	0	0	0	0	0	28
Hour Total	0	4	4	7	2	22	34	17	6	0	0	0	0	0	96
DAY TOTAL	35	122	261	242	844	2797	3169	1081	148	18	2	1	1	16	8737
PERCENTS	0.4%	1.4%	3.0%	2.8%	9.7%	32.0%	36.3%	12.4%	1.7%	0.2%	0.0%	0.0%	0.0%	0.2%	100.0%

Peggy Malone & Associates

SPEED SUMMARY
Thu 5/23/2024

Page: 4

Station #: 2 EBI/O
Site ID: 000000008510
Loc: MAIN ST W/O FAIRFAX SQ/STONE WALL AVE
Direction: EAST
Lane: 1

File: D0501002.prn
Info: 24-126 TO MIN
GPS: 38.84361,-77.29117

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total

Statistical Information...

15th Percentile Speed
28.9 mph

85th Percentile Speed
39.9 mph

Median Speed
35.1 mph

Average Speed
34.5 mph

10 MPH Pace Speed
30 mph to 40 mph
5966 vehicles in pace
Representing 68.3% of the total vehicles

Vehicles > 25 MPH
8077
92.4%

Peggy Malone & Associates

SPEED SUMMARY
Thu 5/23/2024

Page: 10

Station #: 2 EBI/O
Site ID: 000000008510
Loc: MAIN ST W/O FAIRFAX SQ/STONE WALL AVE
Direction: EAST
Lane: 2

File: D0501002.prn
Info: 24-126 TO MIN
GPS: 38.84361,-77.29117

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
00:15	0	0	1	2	3	4	2	1	0	0	0	0	0	0	13
00:30	0	0	1	2	3	4	2	1	0	0	0	0	0	0	13
00:45	0	0	0	1	2	3	1	0	0	0	0	0	0	0	7
01:00	0	0	0	1	2	3	1	0	0	0	0	0	0	0	7
Hour Total	0	0	2	6	10	14	6	2	0	0	0	0	0	0	40
01:15	0	0	0	1	2	3	1	0	0	0	0	0	0	0	7
01:30	0	0	0	1	3	3	1	0	0	0	0	0	0	0	8
01:45	0	0	0	1	1	1	1	0	0	0	0	0	0	0	4
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	0	0	3	6	7	3	0	0	0	0	0	0	0	19
02:15	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
02:30	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
02:45	0	0	0	1	1	1	1	0	0	0	0	0	0	0	4
03:00	0	0	0	1	1	1	1	0	0	0	0	0	0	0	4
Hour Total	0	0	0	2	4	4	2	0	0	0	0	0	0	0	12
03:15	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
03:30	0	0	0	1	1	1	1	0	0	0	0	0	0	0	4
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
Hour Total	0	0	0	1	3	3	1	0	0	0	0	0	0	0	8
04:15	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
04:30	0	0	1	2	3	3	2	1	0	0	0	0	0	0	12
04:45	0	0	0	1	1	1	1	0	0	0	0	0	0	0	4
05:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
Hour Total	0	0	1	3	6	6	3	1	0	0	0	0	0	0	20
05:15	1	0	1	3	5	5	3	1	0	0	0	0	0	0	19
05:30	1	0	1	3	5	6	3	1	0	0	0	0	0	0	20
05:45	1	0	2	5	9	10	5	2	0	1	0	0	0	0	35
06:00	1	0	2	5	9	10	5	2	1	1	0	0	0	0	36
Hour Total	4	0	6	16	28	31	16	6	1	2	0	0	0	0	110
06:15	1	0	1	5	8	9	5	1	0	1	0	0	0	0	31
06:30	1	1	2	6	11	13	7	2	1	1	0	0	0	0	45
06:45	2	1	3	8	15	16	8	3	1	1	0	0	0	1	59
07:00	2	1	3	10	18	20	10	3	1	1	0	0	0	1	70
Hour Total	6	3	9	29	52	58	30	9	3	4	0	0	0	2	205
07:15	3	1	4	14	25	28	14	4	1	2	0	0	0	1	97
07:30	3	1	4	13	24	27	14	4	1	2	0	0	0	1	94
07:45	3	1	4	13	24	27	14	4	1	2	0	0	0	1	94
08:00	4	2	6	18	33	37	19	6	2	3	0	0	0	1	131
Hour Total	13	5	18	58	106	119	61	18	5	9	0	0	0	4	416
08:15	3	1	5	15	27	30	15	5	1	2	0	0	0	1	105
08:30	3	1	5	14	26	29	15	5	1	2	0	0	0	1	102
08:45	3	1	4	13	23	26	13	4	1	2	0	0	0	1	91
09:00	3	1	4	13	23	26	13	4	1	2	0	0	0	1	91
Hour Total	12	4	18	55	99	111	56	18	4	8	0	0	0	4	389

Peggy Malone & Associates

SPEED SUMMARY
Thu 5/23/2024

Page: 11

Station #: 2 EBI/O
Site ID: 000000008510
Loc: MAIN ST W/O FAIRFAX SQ/STONE WALL AVE
Direction: EAST
Lane: 2

File: D0501002.prn
Info: 24-126 TO MIN
GPS: 38.84361,-77.29117

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
09:15	3	1	4	12	21	24	12	4	1	2	0	0	0	1	85
09:30	3	1	4	13	23	26	13	4	1	2	0	0	0	1	91
09:45	3	1	4	12	22	25	13	4	1	2	0	0	0	1	88
10:00	3	1	4	12	21	24	12	4	1	2	0	0	0	1	85
Hour Total	12	4	16	49	87	99	50	16	4	8	0	0	0	4	349
10:15	2	1	3	10	19	21	11	3	1	1	0	0	0	1	73
10:30	2	1	4	11	20	23	12	4	1	2	0	0	0	1	81
10:45	2	1	3	10	18	20	10	3	1	1	0	0	0	1	70
11:00	3	1	4	12	21	24	12	4	1	2	0	0	0	1	85
Hour Total	9	4	14	43	78	88	45	14	4	6	0	0	0	4	309
11:15	3	1	4	12	22	25	13	4	1	2	0	0	0	1	88
11:30	2	1	4	11	20	23	12	4	1	2	0	0	0	1	81
11:45	3	1	4	12	22	25	13	4	1	2	0	0	0	1	88
12:00	3	1	4	12	21	23	12	4	1	2	0	0	0	1	84
Hour Total	11	4	16	47	85	96	50	16	4	8	0	0	0	4	341
12:15	3	1	4	12	21	24	12	4	1	2	0	0	0	1	85
12:30	3	1	4	12	21	23	12	4	1	2	0	0	0	1	84
12:45	3	1	4	12	22	24	12	4	1	2	0	0	0	1	86
13:00	2	1	4	11	20	23	12	4	1	2	0	0	0	1	81
Hour Total	11	4	16	47	84	94	48	16	4	8	0	0	0	4	336
13:15	3	1	4	13	25	27	14	4	1	2	0	0	0	1	95
13:30	3	1	4	12	21	24	12	4	1	2	0	0	0	1	85
13:45	3	1	4	13	24	27	14	4	1	2	0	0	0	1	94
14:00	3	1	4	12	22	25	13	4	1	2	0	0	0	1	88
Hour Total	12	4	16	50	92	103	53	16	4	8	0	0	0	4	362
14:15	3	1	4	12	23	25	13	4	1	2	0	0	0	1	89
14:30	3	1	4	13	24	27	14	4	1	2	0	0	0	1	94
14:45	3	1	4	12	23	25	13	4	1	2	0	0	0	1	89
15:00	3	1	5	15	28	31	16	5	2	2	0	0	0	1	109
Hour Total	12	4	17	52	98	108	56	17	5	8	0	0	0	4	381
15:15	3	1	5	14	26	29	15	4	1	2	0	0	0	1	101
15:30	3	1	5	14	26	29	15	4	1	2	0	0	0	1	101
15:45	3	1	5	15	27	30	15	5	1	2	0	0	0	1	105
16:00	3	1	5	14	25	28	15	4	1	2	0	0	0	1	99
Hour Total	12	4	20	57	104	116	60	17	4	8	0	0	0	4	406
16:15	3	1	4	13	24	26	13	4	1	2	0	0	0	1	92
16:30	4	1	5	16	30	33	17	5	2	2	0	0	0	1	116
16:45	4	1	5	16	29	33	17	5	2	2	0	0	0	1	115
17:00	3	1	5	14	26	29	15	5	1	2	0	0	0	1	102
Hour Total	14	4	19	59	109	121	62	19	6	8	0	0	0	4	425
17:15	3	1	5	16	28	32	16	5	2	2	0	0	0	1	111
17:30	4	1	5	17	30	34	17	5	2	2	0	0	0	1	118
17:45	4	1	5	16	30	34	17	5	2	2	0	0	0	1	117
18:00	3	1	4	13	23	26	13	4	1	2	0	0	0	1	91
Hour Total	14	4	19	62	111	126	63	19	7	8	0	0	0	4	437

Peggy Malone & Associates

SPEED SUMMARY
Thu 5/23/2024

Page: 12

Station #: 2 EBI/O
Site ID: 000000008510
Loc: MAIN ST W/O FAIRFAX SQ/STONE WALL AVE
Direction: EAST
Lane: 2

File: D0501002.prn
Info: 24-126 TO MIN
GPS: 38.84361,-77.29117

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
18:15	3	1	5	14	26	29	15	5	1	2	0	0	0	1	102
18:30	3	1	5	15	27	30	16	5	1	2	0	0	0	1	106
18:45	3	1	4	13	23	26	13	4	1	2	0	0	0	1	91
19:00	3	1	5	16	28	32	16	5	2	2	0	0	0	1	111
Hour Total	12	4	19	58	104	117	60	19	5	8	0	0	0	4	410
19:15	3	1	4	13	24	27	14	4	1	2	0	0	0	1	94
19:30	2	1	3	11	20	22	11	3	1	2	0	0	0	1	77
19:45	2	1	4	11	20	22	11	3	1	2	0	0	0	1	78
20:00	2	1	3	10	17	19	10	3	1	1	0	0	0	1	68
Hour Total	9	4	14	45	81	90	46	13	4	7	0	0	0	4	317
20:15	2	1	3	11	19	22	11	3	1	2	0	0	0	1	76
20:30	2	1	3	10	18	20	10	3	1	1	0	0	0	1	70
20:45	2	1	3	10	19	21	11	3	1	1	0	0	0	1	73
21:00	2	1	3	9	16	18	9	3	1	1	0	0	0	1	64
Hour Total	8	4	12	40	72	81	41	12	4	5	0	0	0	4	283
21:15	2	1	3	9	17	19	10	3	1	1	0	0	0	1	67
21:30	2	1	3	9	16	18	9	3	1	1	0	0	0	1	64
21:45	2	1	3	9	16	18	9	3	1	1	0	0	0	1	64
22:00	1	1	2	6	11	12	6	2	1	1	0	0	0	0	43
Hour Total	7	4	11	33	60	67	34	11	4	4	0	0	0	3	238
22:15	1	0	2	6	11	12	6	2	1	1	0	0	0	0	42
22:30	1	0	2	6	10	11	6	2	1	1	0	0	0	0	40
22:45	1	0	1	3	6	7	4	1	0	0	0	0	0	0	23
23:00	1	0	1	4	8	9	5	1	0	1	0	0	0	0	30
Hour Total	4	0	6	19	35	39	21	6	2	3	0	0	0	0	135
23:15	1	0	2	5	9	10	5	1	0	1	0	0	0	0	34
23:30	1	0	1	4	7	8	4	1	0	1	0	0	0	0	27
23:45	1	0	1	3	5	6	3	1	0	0	0	0	0	0	20
24:00	1	0	1	3	5	6	3	1	0	0	0	0	0	0	20
Hour Total	4	0	5	15	26	30	15	4	0	2	0	0	0	0	101
DAY TOTAL	186	64	274	849	1540	1728	882	269	74	122	0	0	0	61	6049
PERCENTS	3.1%	1.1%	4.5%	14.0%	25.5%	28.6%	14.6%	4.4%	1.2%	2.0%	0.0%	0.0%	0.0%	1.0%	100.0%

Peggy Malone & Associates

SPEED SUMMARY
Thu 5/23/2024

Page: 13

Station #: 2 EBI/O
Site ID: 000000008510
Loc: MAIN ST W/O FAIRFAX SQ/STONE WALL AVE
Direction: EAST
Lane: 2

File: D0501002.prn
Info: 24-126 TO MIN
GPS: 38.84361,-77.29117

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total

Statistical Information...

15th Percentile Speed
22.3 mph

85th Percentile Speed
37.8 mph

Median Speed
30.3 mph

Average Speed
31.1 mph

10 MPH Pace Speed
25 mph to 35 mph
3268 vehicles in pace
Representing 54.0% of the total vehicles

Vehicles > 25 MPH
4676
77.3%

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 1

Station #: 2 WBI
Site ID: 000000008690
Loc: MAIN ST W/O FAIRFAX SQ/STONE WALL AVE
Direction: WEST
Lane: 1

File: D0501005.prn
Info: 24-126 TO MIN
GPS: 38.84369,-77.29099

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
00:15	0	0	0	0	1	3	4	2	1	0	0	0	0	0	11
00:30	0	0	0	1	2	2	4	1	2	1	0	0	0	0	13
00:45	0	0	0	0	1	1	3	3	1	0	0	0	0	0	9
01:00	0	0	0	0	3	2	1	4	0	0	0	0	0	0	10
Hour Total	0	0	0	1	7	8	12	10	4	1	0	0	0	0	43
01:15	0	0	0	0	0	1	2	1	1	0	0	0	0	0	5
01:30	0	0	0	0	0	2	4	2	1	0	1	0	0	0	10
01:45	0	0	0	0	0	2	0	2	0	0	0	0	0	0	4
02:00	0	0	0	0	1	2	1	0	0	0	0	0	0	0	4
Hour Total	0	0	0	0	1	7	7	5	2	0	1	0	0	0	23
02:15	0	0	0	0	0	1	0	1	1	0	0	0	0	0	3
02:30	0	0	0	0	0	1	0	2	1	0	0	0	0	0	4
02:45	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	1	1	1	0	1	0	0	0	1	5
Hour Total	0	0	0	0	0	4	1	4	2	1	0	0	0	1	13
03:15	0	0	0	0	0	0	3	3	0	0	0	0	0	0	6
03:30	0	0	0	1	1	0	1	0	1	0	0	0	0	0	4
03:45	0	0	0	0	0	3	0	1	0	0	0	0	0	0	4
04:00	0	0	0	0	0	2	2	1	0	0	0	0	0	0	5
Hour Total	0	0	0	1	1	5	6	5	1	0	0	0	0	0	19
04:15	0	0	0	0	0	2	1	0	1	0	0	0	0	0	4
04:30	0	0	0	0	1	8	2	2	0	0	0	0	0	0	13
04:45	0	0	0	1	1	2	3	1	0	0	0	0	0	0	8
05:00	0	0	0	0	0	2	2	1	1	0	0	0	0	0	6
Hour Total	0	0	0	1	2	14	8	4	2	0	0	0	0	0	31
05:15	0	0	0	0	0	4	6	3	2	1	0	0	0	0	16
05:30	0	0	1	0	1	2	9	8	3	0	0	0	0	0	24
05:45	0	0	0	1	1	7	9	3	2	0	1	0	0	0	24
06:00	0	0	0	1	1	3	13	7	3	4	0	0	0	0	32
Hour Total	0	0	1	2	3	16	37	21	10	5	1	0	0	0	96
06:15	0	0	0	0	1	4	9	14	3	0	0	0	0	0	31
06:30	1	0	1	1	2	9	16	8	2	3	0	0	0	0	43
06:45	0	0	0	3	0	11	36	15	5	0	1	0	0	0	71
07:00	1	0	0	0	16	15	23	15	3	0	0	0	0	1	74
Hour Total	2	0	1	4	19	39	84	52	13	3	1	0	0	1	219
07:15	6	0	2	6	14	22	29	16	2	4	0	0	0	2	103
07:30	0	1	0	5	5	17	40	23	5	0	0	0	0	0	96
07:45	4	5	8	4	14	29	38	29	1	0	0	0	0	1	133
08:00	0	0	0	7	18	52	41	21	2	0	0	0	0	0	141
Hour Total	10	6	10	22	51	120	148	89	10	4	0	0	0	3	473
08:15	1	0	7	1	16	46	43	28	4	0	1	0	0	1	148
08:30	2	3	1	2	25	49	55	16	2	0	0	0	0	0	155
08:45	7	1	13	16	31	29	15	11	1	0	0	0	0	1	125
09:00	4	4	7	22	38	39	20	9	4	0	0	0	0	6	153
Hour Total	14	8	28	41	110	163	133	64	11	0	1	0	0	8	581

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 2

Station #: 2 WBI
Site ID: 000000008690
Loc: MAIN ST W/O FAIRFAX SQ/STONE WALL AVE
Direction: WEST
Lane: 1

File: D0501005.prn
Info: 24-126 TO MIN
GPS: 38.84369,-77.29099

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
09:15	3	5	13	20	32	34	25	9	1	1	0	0	1	4	148
09:30	8	9	3	11	19	40	18	8	1	0	0	0	0	1	118
09:45	3	2	4	12	17	38	39	22	3	0	0	0	0	1	141
10:00	2	4	6	3	14	31	47	18	4	0	0	0	0	2	131
Hour Total	16	20	26	46	82	143	129	57	9	1	0	0	1	8	538
10:15	0	0	0	1	23	30	56	12	4	0	0	0	0	0	126
10:30	1	0	0	6	4	36	30	25	9	1	0	0	0	1	113
10:45	0	1	0	0	16	42	43	18	0	0	0	0	0	0	120
11:00	3	2	0	5	16	38	40	12	2	0	0	0	0	3	121
Hour Total	4	3	0	12	59	146	169	67	15	1	0	0	0	4	480
11:15	0	0	0	1	9	30	42	19	6	0	0	0	0	3	110
11:30	1	0	2	3	9	37	46	15	5	1	0	0	0	2	121
11:45	0	0	1	3	11	44	48	18	5	0	0	0	0	0	130
12:00	0	0	0	5	16	34	52	22	4	0	0	0	0	1	134
Hour Total	1	0	3	12	45	145	188	74	20	1	0	0	0	6	495
12:15	1	5	1	3	19	48	31	13	0	0	0	0	0	4	125
12:30	1	2	1	8	16	29	31	18	0	0	0	0	0	3	109
12:45	4	5	8	3	20	44	20	7	0	2	0	0	0	0	113
13:00	0	0	0	2	38	63	31	11	0	0	0	0	0	2	147
Hour Total	6	12	10	16	93	184	113	49	0	2	0	0	0	9	494
13:15	1	0	1	8	19	50	32	9	1	0	0	0	0	1	122
13:30	5	1	5	5	13	48	44	5	2	0	0	0	0	1	129
13:45	1	0	2	7	15	37	52	15	2	1	0	0	0	0	132
14:00	2	0	1	11	16	32	44	13	3	0	0	0	0	3	125
Hour Total	9	1	9	31	63	167	172	42	8	1	0	0	0	5	508
14:15	1	0	0	0	42	21	43	24	3	1	0	0	0	2	137
14:30	3	0	2	6	33	44	27	10	0	0	0	0	0	2	127
14:45	3	0	4	17	54	55	32	10	1	0	0	0	0	5	181
15:00	10	13	6	14	25	57	38	11	1	0	0	0	0	1	176
Hour Total	17	13	12	37	154	177	140	55	5	1	0	0	0	10	621
15:15	1	0	0	10	39	42	51	26	5	0	0	0	0	0	174
15:30	8	3	7	19	50	54	30	10	4	0	0	0	0	7	192
15:45	2	0	1	5	32	84	35	26	1	0	0	0	0	2	188
16:00	10	3	5	11	35	43	46	25	6	0	0	0	0	6	190
Hour Total	21	6	13	45	156	223	162	87	16	0	0	0	0	15	744
16:15	5	3	5	9	28	64	39	12	2	0	0	0	0	3	170
16:30	1	6	2	8	47	88	44	12	2	0	1	0	0	2	213
16:45	1	2	3	13	22	44	64	21	2	0	0	0	0	1	173
17:00	4	2	2	5	34	53	69	14	3	0	0	0	0	4	190
Hour Total	11	13	12	35	131	249	216	59	9	0	1	0	0	10	746
17:15	17	6	20	25	40	55	27	3	0	0	0	0	0	6	199
17:30	2	0	0	14	42	43	69	11	1	0	0	0	0	3	185
17:45	2	0	0	4	41	76	65	20	6	0	0	0	0	3	217
18:00	5	0	3	13	40	53	60	14	1	0	0	0	0	0	189
Hour Total	26	6	23	56	163	227	221	48	8	0	0	0	0	12	790

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 3

Station #: 2 WBI
Site ID: 000000008690
Loc: MAIN ST W/O FAIRFAX SQ/STONE WALL AVE
Direction: WEST
Lane: 1

File: D0501005.prn
Info: 24-126 TO MIN
GPS: 38.84369,-77.29099

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
18:15	2	4	2	10	23	57	59	5	0	0	0	0	0	3	165
18:30	2	0	3	9	39	71	33	20	1	0	0	0	0	3	181
18:45	1	1	2	6	11	43	57	16	3	0	0	0	0	0	140
19:00	0	0	0	6	23	46	53	8	2	0	0	0	0	2	140
Hour Total	5	5	7	31	96	217	202	49	6	0	0	0	0	8	626
19:15	1	4	2	11	19	36	32	17	4	0	0	0	0	0	126
19:30	0	0	1	4	25	48	30	9	0	0	0	0	0	0	117
19:45	0	0	13	25	25	30	16	6	0	0	0	0	0	6	121
20:00	7	1	6	16	29	30	13	8	0	0	2	0	0	4	116
Hour Total	8	5	22	56	98	144	91	40	4	0	2	0	0	10	480
20:15	2	2	6	6	13	29	17	8	0	0	0	0	0	2	85
20:30	0	0	0	0	14	33	20	11	2	0	0	0	0	0	80
20:45	0	0	0	2	12	30	30	15	1	0	0	0	0	0	90
21:00	0	0	2	7	15	24	27	4	1	0	0	0	0	1	81
Hour Total	2	2	8	15	54	116	94	38	4	0	0	0	0	3	336
21:15	0	0	1	2	3	18	20	7	3	0	0	0	0	0	54
21:30	0	0	3	3	12	46	18	3	0	0	0	0	0	0	85
21:45	0	0	0	2	24	33	19	3	0	0	0	0	0	2	83
22:00	0	0	0	1	7	21	13	7	2	2	0	0	0	0	53
Hour Total	0	0	4	8	46	118	70	20	5	2	0	0	0	2	275
22:15	0	0	0	0	1	13	23	15	1	0	0	0	0	0	53
22:30	0	0	0	1	2	12	14	5	5	0	0	0	0	0	39
22:45	0	0	2	2	1	6	11	9	2	0	1	0	0	0	34
23:00	0	0	0	1	2	4	18	7	1	1	0	0	0	0	34
Hour Total	0	0	2	4	6	35	66	36	9	1	1	0	0	0	160
23:15	0	0	0	0	1	7	14	10	1	1	0	0	0	0	34
23:30	0	0	0	0	2	3	5	5	4	1	0	0	0	0	20
23:45	0	0	0	0	0	6	4	5	1	0	0	0	0	0	16
24:00	0	0	0	0	0	2	4	5	3	0	1	0	1	0	16
Hour Total	0	0	0	0	3	18	27	25	9	2	1	0	1	0	86
DAY TOTAL	152	100	191	476	1443	2685	2496	1000	182	26	9	0	2	115	8877
PERCENTS	1.7%	1.1%	2.2%	5.4%	16.3%	30.2%	28.1%	11.3%	2.1%	0.3%	0.1%	0.0%	0.0%	1.3%	100.0%

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 4

Station #: 2 WBI
Site ID: 000000008690
Loc: MAIN ST W/O FAIRFAX SQ/STONE WALL AVE
Direction: WEST
Lane: 1

File: D0501005.prn
Info: 24-126 TO MIN
GPS: 38.84369,-77.29099

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total

Statistical Information...

15th Percentile Speed
26.4 mph

85th Percentile Speed
40.0 mph

Median Speed
33.9 mph

Average Speed
34.7 mph

10 MPH Pace Speed
30 mph to 40 mph
5181 vehicles in pace
Representing 58.4% of the total vehicles

Vehicles > 35 MPH
3830
43.1%

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 1

Station #: 2 WBO
Site ID: 000000027292
Loc: MAIN ST W/O FAIRFAX SQ/STONE WALL AVE
Direction: WEST
Lane: 1

File: D0501008.prn
Info: 24-126 TO MIN
GPS: 38.84369,-77.29099

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
00:15	0	0	2	2	1	1	3	2	1	0	0	0	0	0	12
00:30	0	0	0	4	1	2	3	2	0	0	0	0	0	0	12
00:45	0	0	0	1	0	2	2	2	0	0	0	0	0	0	7
01:00	0	0	0	0	1	2	1	2	2	0	0	0	0	0	8
Hour Total	0	0	2	7	3	7	9	8	3	0	0	0	0	0	39
01:15	0	0	0	0	1	1	2	1	0	0	0	0	0	0	5
01:30	0	0	1	0	1	1	2	1	1	0	0	0	0	0	7
01:45	0	0	1	0	0	1	1	2	0	0	0	0	0	0	5
02:00	0	0	0	0	0	3	0	2	1	0	0	0	0	0	6
Hour Total	0	0	2	0	2	6	5	6	2	0	0	0	0	0	23
02:15	0	0	0	0	1	3	1	0	0	0	0	0	0	0	5
02:30	0	0	0	0	2	3	2	2	0	0	0	0	0	0	9
02:45	0	0	0	2	0	1	2	1	0	0	0	0	0	0	6
03:00	0	0	0	0	0	1	2	1	0	0	0	0	0	0	4
Hour Total	0	0	0	2	3	8	7	4	0	0	0	0	0	0	24
03:15	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
03:30	0	0	0	0	0	0	1	2	0	0	0	0	0	0	3
03:45	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
04:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Hour Total	0	0	0	0	0	2	3	2	0	0	0	0	0	0	7
04:15	0	0	0	0	0	1	4	1	0	0	0	0	0	0	6
04:30	0	0	0	1	1	2	4	2	0	0	0	0	0	0	10
04:45	0	0	0	1	2	2	0	5	2	0	0	0	0	0	12
05:00	0	0	0	0	3	2	7	2	2	0	1	0	0	0	17
Hour Total	0	0	0	2	6	7	15	10	4	0	1	0	0	0	45
05:15	0	0	0	0	0	6	10	2	2	0	0	0	0	0	20
05:30	0	0	2	0	1	6	9	2	2	1	0	0	0	0	23
05:45	0	0	0	2	3	3	8	4	1	1	0	0	0	0	22
06:00	0	0	0	0	6	8	10	9	2	0	0	0	0	0	35
Hour Total	0	0	2	2	10	23	37	17	7	2	0	0	0	0	100
06:15	0	1	1	1	6	13	10	4	0	0	1	0	0	0	37
06:30	0	0	0	1	9	15	13	10	2	0	0	0	0	0	50
06:45	0	2	1	14	18	14	17	5	0	0	0	0	0	0	71
07:00	4	1	5	18	17	23	15	6	1	0	0	0	0	3	93
Hour Total	4	4	7	34	50	65	55	25	3	0	1	0	0	3	251
07:15	3	4	4	17	22	16	14	4	1	0	0	0	0	0	85
07:30	1	0	0	4	14	38	36	12	0	1	0	0	0	0	106
07:45	4	8	4	16	16	33	27	10	0	0	0	0	0	4	122
08:00	1	0	3	16	24	47	28	10	0	0	0	0	0	3	132
Hour Total	9	12	11	53	76	134	105	36	1	1	0	0	0	7	445
08:15	1	0	1	2	31	66	36	5	0	0	0	0	0	5	147
08:30	5	1	5	18	37	57	24	5	1	0	0	0	0	2	155
08:45	7	6	13	19	32	28	13	6	1	0	0	0	1	3	129
09:00	2	1	9	44	31	32	14	7	1	0	0	0	0	2	143
Hour Total	15	8	28	83	131	183	87	23	3	0	0	0	1	12	574

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 2

Station #: 2 WBO
Site ID: 000000027292
Loc: MAIN ST W/O FAIRFAX SQ/STONE WALL AVE
Direction: WEST
Lane: 1

File: D0501008.prn
Info: 24-126 TO MIN
GPS: 38.84369,-77.29099

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
09:15	3	1	16	29	17	31	21	6	3	1	0	0	0	5	133
09:30	9	7	7	28	21	23	15	6	1	0	0	2	0	2	121
09:45	6	4	7	21	35	32	16	3	1	0	0	0	0	2	127
10:00	3	2	3	17	40	42	18	7	1	0	0	0	0	2	135
Hour Total	21	14	33	95	113	128	70	22	6	1	0	2	0	11	516
10:15	1	0	7	11	28	40	16	7	4	0	0	0	0	0	114
10:30	4	3	1	13	22	30	24	10	1	1	1	1	1	2	114
10:45	1	2	4	14	32	38	23	7	0	0	0	0	0	0	121
11:00	1	2	4	21	26	32	18	3	0	0	0	0	0	0	107
Hour Total	7	7	16	59	108	140	81	27	5	1	1	1	1	2	456
11:15	0	0	0	9	32	44	18	8	1	0	0	0	0	5	117
11:30	3	0	4	15	42	50	10	3	0	0	0	0	0	0	127
11:45	2	0	0	20	34	48	27	2	0	0	0	0	0	2	135
12:00	3	4	10	14	34	35	21	6	2	0	0	0	0	2	131
Hour Total	8	4	14	58	142	177	76	19	3	0	0	0	0	9	510
12:15	3	4	10	33	30	28	21	5	0	0	0	0	0	1	135
12:30	0	1	6	18	30	51	14	6	0	0	0	0	0	3	129
12:45	1	6	8	27	38	28	12	4	2	0	0	0	0	0	126
13:00	6	1	9	24	40	43	17	4	1	0	0	0	0	2	147
Hour Total	10	12	33	102	138	150	64	19	3	0	0	0	0	6	537
13:15	2	0	4	15	28	37	22	2	3	0	0	0	0	4	117
13:30	2	7	6	18	48	33	13	3	0	0	0	0	0	0	130
13:45	1	2	7	11	39	34	21	6	2	0	0	0	0	0	123
14:00	10	5	12	24	36	29	20	4	1	0	0	0	0	0	141
Hour Total	15	14	29	68	151	133	76	15	6	0	0	0	0	4	511
14:15	0	0	3	6	25	43	28	4	2	0	0	0	0	0	111
14:30	6	1	8	14	36	32	13	6	1	0	0	0	0	0	117
14:45	9	3	4	34	66	44	6	6	1	0	0	0	0	0	173
15:00	7	4	16	36	61	37	3	1	2	0	0	0	0	4	171
Hour Total	22	8	31	90	188	156	50	17	6	0	0	0	0	4	572
15:15	0	0	8	36	38	64	22	12	2	1	0	0	0	2	185
15:30	8	11	18	21	57	17	13	5	1	0	0	0	0	5	156
15:45	0	0	0	26	54	59	22	4	3	0	0	0	0	2	170
16:00	4	10	6	19	40	50	26	9	2	1	0	0	0	2	169
Hour Total	12	21	32	102	189	190	83	30	8	2	0	0	0	11	680
16:15	5	2	7	20	49	51	19	4	3	0	0	0	0	6	166
16:30	8	0	5	18	74	51	19	5	1	0	0	0	0	6	187
16:45	0	0	1	19	63	55	21	10	1	0	0	0	0	0	170
17:00	9	13	8	19	44	58	17	4	0	0	0	0	0	6	178
Hour Total	22	15	21	76	230	215	76	23	5	0	0	0	0	18	701
17:15	10	6	15	29	71	32	13	2	0	0	0	2	0	9	189
17:30	4	0	4	7	53	58	26	10	1	0	0	0	0	0	163
17:45	0	0	2	24	46	71	26	6	2	1	0	0	0	0	178
18:00	5	2	6	39	59	40	18	3	0	0	0	0	0	3	175
Hour Total	19	8	27	99	229	201	83	21	3	1	0	2	0	12	705

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 3

Station #: 2 WBO
Site ID: 000000027292
Loc: MAIN ST W/O FAIRFAX SQ/STONE WALL AVE
Direction: WEST
Lane: 1

File: D0501008.prn
Info: 24-126 TO MIN
GPS: 38.84369,-77.29099

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
18:15	6	2	6	35	64	38	16	2	0	0	0	0	0	3	172
18:30	2	0	10	23	53	45	10	3	1	0	0	0	0	0	147
18:45	1	2	2	11	29	49	28	14	0	0	0	0	0	4	140
19:00	4	1	10	22	33	32	28	5	1	0	0	0	0	0	136
Hour Total	13	5	28	91	179	164	82	24	2	0	0	0	0	7	595
19:15	1	2	7	10	19	40	23	3	1	0	0	0	0	0	106
19:30	1	0	10	17	32	32	12	7	1	0	1	0	0	4	117
19:45	0	6	11	15	36	22	9	3	0	0	0	0	0	4	106
20:00	7	8	5	11	30	18	8	3	0	0	0	0	0	0	90
Hour Total	9	16	33	53	117	112	52	16	2	0	1	0	0	8	419
20:15	2	4	4	15	32	20	11	3	0	0	0	0	0	4	95
20:30	0	0	4	7	22	35	12	5	1	0	0	1	0	0	87
20:45	0	0	1	7	12	19	15	7	1	0	0	0	0	2	64
21:00	0	0	4	9	22	37	8	0	1	0	0	0	0	0	81
Hour Total	2	4	13	38	88	111	46	15	3	0	0	1	0	6	327
21:15	0	0	2	8	7	27	8	9	0	0	0	0	0	0	61
21:30	0	0	1	8	10	23	13	3	0	0	0	0	0	0	58
21:45	0	0	3	3	8	35	14	3	1	0	0	0	0	0	67
22:00	0	3	2	3	7	13	24	1	1	1	0	0	0	2	57
Hour Total	0	3	8	22	32	98	59	16	2	1	0	0	0	2	243
22:15	0	1	2	3	6	17	15	6	1	0	0	0	0	0	51
22:30	0	0	1	0	5	12	13	5	1	0	0	0	0	0	37
22:45	0	0	0	0	5	10	10	9	0	0	0	0	0	0	34
23:00	0	0	0	1	2	6	12	6	0	0	0	0	0	0	27
Hour Total	0	1	3	4	18	45	50	26	2	0	0	0	0	0	149
23:15	0	0	2	4	3	8	12	5	1	0	0	0	0	0	35
23:30	0	0	0	2	2	8	6	2	1	0	0	0	0	0	21
23:45	0	0	0	3	3	7	5	1	0	1	0	0	0	0	20
24:00	0	0	0	4	3	4	5	2	2	0	0	0	0	0	20
Hour Total	0	0	2	13	11	27	28	10	4	1	0	0	0	0	96
DAY TOTAL	188	156	375	1153	2214	2482	1299	431	83	10	4	6	2	122	8525
PERCENTS	2.2%	1.8%	4.4%	13.5%	26.0%	29.1%	15.2%	5.1%	1.0%	0.1%	0.0%	0.1%	0.0%	1.4%	100.0%

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 4

Station #: 2 WBO
Site ID: 000000027292
Loc: MAIN ST W/O FAIRFAX SQ/STONE WALL AVE
Direction: WEST
Lane: 1

File: D0501008.prn
Info: 24-126 TO MIN
GPS: 38.84369,-77.29099

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total

Statistical Information...

15th Percentile Speed
22.4 mph

85th Percentile Speed
37.6 mph

Median Speed
30.4 mph

Average Speed
31.5 mph

10 MPH Pace Speed
25 mph to 35 mph
4696 vehicles in pace
Representing 55.1% of the total vehicles

Vehicles > 35 MPH
1957
23.0%

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 1

Station #: 3 EBI
Site ID: 000000008689
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: EAST
Lane: 1

File: D0501004.prn
Info: 24-126 TO MIN
GPS: 38.84242,-77.28223

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
00:15	0	0	0	0	3	5	3	3	2	0	0	0	0	0	16
00:30	0	0	0	0	0	2	3	1	0	0	0	0	0	0	6
00:45	0	0	0	0	0	2	3	4	0	0	0	0	0	0	9
01:00	0	0	0	0	2	5	0	2	1	0	0	0	0	0	10
Hour Total	0	0	0	0	5	14	9	10	3	0	0	0	0	0	41
01:15	0	0	0	0	0	2	4	1	4	0	0	0	0	0	11
01:30	0	0	0	0	1	0	3	2	0	0	0	0	0	0	6
01:45	0	0	0	0	0	1	2	2	1	0	0	0	0	0	6
02:00	0	0	0	0	1	1	1	1	0	0	0	0	0	0	4
Hour Total	0	0	0	0	2	4	10	6	5	0	0	0	0	0	27
02:15	0	0	0	0	1	0	5	1	0	0	0	0	0	0	7
02:30	0	0	0	0	0	2	1	1	0	0	0	0	0	0	4
02:45	0	0	0	0	0	0	2	3	0	0	0	0	0	0	5
03:00	0	0	0	0	0	0	1	2	3	0	0	0	0	0	6
Hour Total	0	0	0	0	1	2	9	7	3	0	0	0	0	0	22
03:15	0	0	0	0	0	2	0	2	1	0	0	0	0	0	5
03:30	0	0	0	0	0	0	2	1	1	0	0	0	0	0	4
03:45	0	0	0	0	0	2	2	3	1	0	0	0	0	0	8
04:00	0	0	0	0	0	1	4	0	1	0	0	0	0	0	6
Hour Total	0	0	0	0	0	5	8	6	4	0	0	0	0	0	23
04:15	0	0	0	0	0	2	4	1	0	0	0	0	0	0	7
04:30	0	0	0	0	1	1	1	5	4	0	0	0	0	0	12
04:45	0	0	0	0	0	0	5	0	0	2	0	0	0	0	7
05:00	0	0	0	1	0	1	4	4	2	0	0	0	0	0	12
Hour Total	0	0	0	1	1	4	14	10	6	2	0	0	0	0	38
05:15	0	0	1	2	0	4	9	6	2	0	0	0	0	0	24
05:30	0	0	0	1	0	3	4	9	2	0	0	0	0	0	19
05:45	0	0	0	1	0	4	22	11	3	1	1	0	0	0	43
06:00	0	0	1	1	0	9	17	19	4	2	0	0	0	0	53
Hour Total	0	0	2	5	0	20	52	45	11	3	1	0	0	0	139
06:15	0	0	1	4	1	6	14	15	1	1	0	0	0	0	43
06:30	0	0	2	1	2	7	24	13	5	0	1	0	0	0	55
06:45	0	0	0	3	5	16	25	15	5	1	1	0	0	0	71
07:00	0	0	0	2	1	16	49	30	6	1	0	0	0	0	105
Hour Total	0	0	3	10	9	45	112	73	17	3	2	0	0	0	274
07:15	0	0	3	5	9	34	50	21	1	1	0	0	0	0	124
07:30	0	0	5	5	4	41	40	20	3	0	0	0	0	0	118
07:45	0	0	1	13	25	52	48	11	1	0	0	0	0	1	152
08:00	2	4	9	13	21	65	45	18	4	0	0	0	0	2	183
Hour Total	2	4	18	36	59	192	183	70	9	1	0	0	0	3	577
08:15	3	5	6	7	21	65	45	15	0	0	0	0	0	0	167
08:30	0	0	5	6	32	53	47	29	7	0	0	0	0	1	180
08:45	0	0	0	3	14	26	53	38	5	0	0	0	0	0	139
09:00	0	0	4	1	1	15	67	35	11	2	0	0	0	0	136
Hour Total	3	5	15	17	68	159	212	117	23	2	0	0	0	1	622

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 2

Station #: 3 EBI
Site ID: 000000008689
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: EAST
Lane: 1

File: D0501004.prn
Info: 24-126 TO MIN
GPS: 38.84242,-77.28223

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
09:15	0	0	3	7	3	25	58	45	12	3	0	0	0	0	156
09:30	0	0	1	2	3	48	76	32	3	1	0	0	0	2	168
09:45	0	0	4	2	9	26	69	31	4	2	1	0	0	0	148
10:00	0	0	0	2	4	20	50	41	9	1	0	0	0	0	127
Hour Total	0	0	8	13	19	119	253	149	28	7	1	0	0	2	599
10:15	0	0	6	1	3	15	49	45	5	3	0	0	0	0	127
10:30	0	0	0	2	3	26	57	21	5	0	0	0	0	0	114
10:45	0	2	0	2	2	32	51	31	9	1	0	0	0	0	130
11:00	0	0	1	0	7	29	54	33	3	1	0	0	0	2	130
Hour Total	0	2	7	5	15	102	211	130	22	5	0	0	0	2	501
11:15	0	0	5	3	2	31	62	28	6	1	0	0	0	0	138
11:30	2	0	1	2	10	30	57	22	2	0	0	0	0	0	126
11:45	0	1	4	4	4	35	67	31	7	0	0	0	0	0	153
12:00	0	0	2	1	7	21	55	39	8	0	0	0	0	0	133
Hour Total	2	1	12	10	23	117	241	120	23	1	0	0	0	0	550
12:15	0	0	0	3	9	33	59	26	6	0	0	0	0	0	136
12:30	0	0	1	1	5	26	70	34	7	0	0	0	0	0	144
12:45	1	0	1	4	10	39	53	31	3	2	0	0	0	1	145
13:00	0	0	0	4	6	33	49	28	6	1	0	0	0	0	127
Hour Total	1	0	2	12	30	131	231	119	22	3	0	0	0	1	552
13:15	0	0	2	6	10	28	59	25	5	0	0	0	0	0	135
13:30	0	0	1	4	5	38	74	25	6	0	0	0	0	0	153
13:45	0	0	2	6	23	37	56	28	1	1	0	0	0	0	154
14:00	1	0	0	0	5	44	65	18	3	2	0	0	0	1	139
Hour Total	1	0	5	16	43	147	254	96	15	3	0	0	0	1	581
14:15	0	0	5	3	25	44	61	17	1	0	0	0	0	0	156
14:30	0	0	2	3	21	31	60	18	3	0	0	0	0	1	139
14:45	2	0	1	2	21	60	36	9	1	0	0	0	0	1	133
15:00	0	0	2	3	6	49	59	30	2	0	0	0	0	0	151
Hour Total	2	0	10	11	73	184	216	74	7	0	0	0	0	2	579
15:15	1	0	2	1	18	74	46	26	0	0	0	0	0	0	168
15:30	3	0	0	2	24	59	45	24	6	0	0	0	0	1	164
15:45	0	1	2	2	12	40	64	37	8	4	0	0	0	0	170
16:00	2	7	3	6	17	53	62	32	5	0	0	0	0	5	192
Hour Total	6	8	7	11	71	226	217	119	19	4	0	0	0	6	694
16:15	0	0	1	3	5	34	70	39	10	0	0	0	0	0	162
16:30	13	2	5	19	26	40	52	24	2	0	0	0	0	0	183
16:45	4	1	5	11	24	46	71	28	5	2	0	0	0	5	202
17:00	4	1	7	11	9	55	79	26	2	1	0	0	0	0	195
Hour Total	21	4	18	44	64	175	272	117	19	3	0	0	0	5	742
17:15	3	1	1	8	13	65	68	34	6	0	1	0	0	4	204
17:30	6	3	6	16	20	70	79	28	2	2	0	0	0	1	233
17:45	0	0	0	1	7	29	96	59	5	2	0	0	0	0	199
18:00	6	1	4	7	17	34	75	22	1	0	0	0	0	1	168
Hour Total	15	5	11	32	57	198	318	143	14	4	1	0	0	6	804

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 3

Station #: 3 EBI
Site ID: 000000008689
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: EAST
Lane: 1

File: D0501004.prn
Info: 24-126 TO MIN
GPS: 38.84242,-77.28223

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
18:15	0	0	0	5	3	50	78	35	5	1	0	0	0	0	177
18:30	0	0	1	8	6	30	91	39	6	4	0	0	0	0	185
18:45	1	0	2	1	2	19	72	39	10	0	0	0	0	0	146
19:00	1	0	2	3	8	43	55	32	4	2	0	0	0	1	151
Hour Total	2	0	5	17	19	142	296	145	25	7	0	0	0	1	659
19:15	0	0	1	1	5	32	58	42	7	1	0	0	0	0	147
19:30	2	1	2	7	1	35	65	23	3	1	0	0	0	1	141
19:45	0	0	2	1	7	27	50	20	2	1	0	0	0	0	110
20:00	0	0	0	2	2	34	52	16	4	2	0	0	0	0	112
Hour Total	2	1	5	11	15	128	225	101	16	5	0	0	0	1	510
20:15	0	0	3	0	6	27	49	16	3	1	0	0	0	0	105
20:30	0	0	0	1	0	16	50	32	4	1	0	0	0	0	104
20:45	0	0	1	2	10	34	41	17	3	0	0	0	0	0	108
21:00	0	0	1	0	2	15	50	23	3	0	1	0	0	0	95
Hour Total	0	0	5	3	18	92	190	88	13	2	1	0	0	0	412
21:15	0	0	0	0	1	16	41	18	4	0	0	0	0	0	80
21:30	0	0	0	0	1	16	33	17	4	0	0	0	0	0	71
21:45	0	0	0	0	0	11	27	19	7	0	0	0	0	0	64
22:00	0	0	0	1	1	7	16	26	2	2	0	0	0	2	57
Hour Total	0	0	0	1	3	50	117	80	17	2	0	0	0	2	272
22:15	0	0	1	1	0	7	12	14	2	1	0	0	0	0	38
22:30	0	0	0	2	1	5	18	19	1	3	0	0	0	0	49
22:45	0	0	0	0	0	4	12	15	7	0	2	0	0	0	40
23:00	0	0	0	0	1	3	5	8	4	1	0	0	0	0	22
Hour Total	0	0	1	3	2	19	47	56	14	5	2	0	0	0	149
23:15	0	0	0	2	1	3	12	6	0	0	0	0	0	0	24
23:30	0	0	0	0	1	1	7	8	2	1	0	0	0	0	20
23:45	0	0	0	0	0	1	6	4	3	1	0	0	0	0	15
24:00	0	0	0	0	1	6	5	6	0	0	1	0	0	0	19
Hour Total	0	0	0	2	3	11	30	24	5	2	1	0	0	0	78
DAY TOTAL	57	30	134	260	600	2286	3727	1905	340	64	9	0	0	33	9445
PERCENTS	0.6%	0.3%	1.4%	2.8%	6.4%	24.2%	39.5%	20.2%	3.6%	0.7%	0.1%	0.0%	0.0%	0.3%	100.0%

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 4

Station #: 3 EBI
Site ID: 000000008689
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: EAST
Lane: 1

File: D0501004.prn
Info: 24-126 TO MIN
GPS: 38.84242,-77.28223

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total

Statistical Information...

15th Percentile Speed
30.7 mph

85th Percentile Speed
42.5 mph

Median Speed
36.8 mph

Average Speed
36.6 mph

10 MPH Pace Speed
30 mph to 40 mph
6013 vehicles in pace
Representing 63.7% of the total vehicles

Vehicles > 25 MPH
8964
94.9%

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 1

Station #: 3 EBM_O
Site ID: 000000008694
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: EAST
Lane: 1

File: D0501006.prn
Info: 24-126 TO MIN
GPS: 38.84242,-77.28223

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Hour Total	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
Hour Total	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
05:15	0	0	0	0	0	1	0	2	0	0	0	0	0	0	3
05:30	0	0	0	0	0	0	1	2	2	0	0	0	0	0	5
05:45	0	1	0	0	0	1	2	4	0	0	0	0	0	0	8
06:00	0	0	0	1	1	0	2	3	1	0	0	0	0	0	8
Hour Total	0	1	0	1	1	2	5	11	3	0	0	0	0	0	24
06:15	0	0	0	0	0	0	2	4	1	0	0	0	0	0	7
06:30	0	0	0	0	2	3	6	2	2	2	0	0	0	0	17
06:45	0	0	0	0	1	3	5	1	2	1	0	0	0	0	13
07:00	0	0	0	0	3	0	10	8	2	0	0	0	0	0	23
Hour Total	0	0	0	0	6	6	23	15	7	3	0	0	0	0	60
07:15	0	0	2	1	1	12	15	10	0	0	0	0	0	0	41
07:30	0	0	0	1	2	9	11	8	1	2	0	0	0	0	34
07:45	0	0	0	3	1	10	22	8	2	2	0	0	0	0	48
08:00	0	0	5	3	11	32	30	14	0	0	0	0	0	0	95
Hour Total	0	0	7	8	15	63	78	40	3	4	0	0	0	0	218
08:15	0	1	3	2	6	25	16	14	3	0	0	0	0	0	70
08:30	1	2	8	2	7	5	10	7	3	0	0	0	0	0	45
08:45	0	1	4	8	3	1	6	5	3	0	0	0	0	0	31
09:00	0	1	7	3	3	3	4	7	4	0	0	0	0	0	32
Hour Total	1	5	22	15	19	34	36	33	13	0	0	0	0	0	178

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 2

Station #: 3 EBM_O
Site ID: 000000008694
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: EAST
Lane: 1

File: D0501006.prn
Info: 24-126 TO MIN
GPS: 38.84242,-77.28223

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
09:15	0	2	3	2	3	1	6	6	5	1	0	0	0	0	29
09:30	0	2	7	3	4	1	4	9	1	0	0	0	0	0	31
09:45	0	1	9	0	2	2	7	11	7	0	0	0	0	0	39
10:00	0	1	0	2	0	1	4	6	0	0	0	0	0	0	14
Hour Total	0	6	19	7	9	5	21	32	13	1	0	0	0	0	113
10:15	0	0	5	0	1	4	8	3	0	0	0	0	0	0	21
10:30	0	0	1	0	2	3	4	6	1	0	0	0	0	0	17
10:45	0	0	0	0	1	5	5	4	2	0	0	0	0	0	17
11:00	0	0	1	0	1	1	9	8	0	0	0	0	0	0	20
Hour Total	0	0	7	0	5	13	26	21	3	0	0	0	0	0	75
11:15	0	1	1	2	2	2	7	6	3	1	0	0	0	0	25
11:30	0	1	1	0	1	2	5	2	0	0	0	0	0	0	12
11:45	0	0	3	2	1	1	3	3	0	0	0	0	0	0	13
12:00	0	1	1	1	0	1	6	6	2	1	0	0	0	0	19
Hour Total	0	3	6	5	4	6	21	17	5	2	0	0	0	0	69
12:15	0	2	0	0	0	1	6	3	2	1	0	0	0	0	15
12:30	0	0	3	1	0	0	8	3	2	0	0	0	0	0	17
12:45	0	0	7	1	0	3	6	4	0	0	0	0	0	0	21
13:00	0	1	3	1	2	3	7	4	1	0	0	0	0	0	22
Hour Total	0	3	13	3	2	7	27	14	5	1	0	0	0	0	75
13:15	0	3	1	1	0	4	8	5	2	0	0	0	0	0	24
13:30	0	0	2	0	0	3	8	4	1	0	0	0	0	0	18
13:45	0	1	4	0	0	5	8	2	2	0	0	0	0	0	22
14:00	0	2	3	1	1	1	4	2	2	2	0	0	0	0	18
Hour Total	0	6	10	2	1	13	28	13	7	2	0	0	0	0	82
14:15	0	1	1	1	2	2	4	7	1	0	0	0	0	0	19
14:30	0	0	0	0	1	3	5	6	0	0	0	0	0	0	15
14:45	0	1	1	0	1	5	7	2	2	0	0	0	0	0	19
15:00	0	1	0	2	2	4	13	8	2	0	0	0	0	0	32
Hour Total	0	3	2	3	6	14	29	23	5	0	0	0	0	0	85
15:15	0	0	1	3	3	7	6	3	1	0	0	0	0	0	24
15:30	0	0	1	0	0	2	8	7	2	0	0	0	0	0	20
15:45	0	0	3	0	4	6	4	6	0	0	0	0	0	0	23
16:00	0	0	2	0	2	1	9	4	3	0	0	0	0	0	21
Hour Total	0	0	7	3	9	16	27	20	6	0	0	0	0	0	88
16:15	0	0	1	0	3	3	4	8	2	1	0	0	0	0	22
16:30	0	0	2	0	4	3	9	8	3	0	0	0	0	0	29
16:45	0	1	1	3	6	6	7	4	1	3	0	0	0	2	34
17:00	1	0	0	4	2	3	5	11	3	0	0	0	0	0	29
Hour Total	1	1	4	7	15	15	25	31	9	4	0	0	0	2	114
17:15	0	0	7	2	3	1	6	10	5	0	0	0	0	0	34
17:30	0	1	2	3	2	4	14	9	7	1	0	0	0	0	43
17:45	1	0	3	4	5	3	9	7	2	0	0	0	0	0	34
18:00	0	0	1	7	4	1	12	8	0	1	1	0	0	0	35
Hour Total	1	1	13	16	14	9	41	34	14	2	1	0	0	0	146

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 3

Station #: 3 EBM_O
Site ID: 000000008694
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: EAST
Lane: 1

File: D0501006.prn
Info: 24-126 TO MIN
GPS: 38.84242,-77.28223

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
18:15	0	0	0	2	4	2	6	7	2	1	0	0	0	0	24
18:30	0	0	0	3	3	1	2	6	1	0	0	0	0	1	17
18:45	0	1	0	0	2	0	2	8	1	0	0	0	0	0	14
19:00	0	0	1	0	1	1	5	6	0	0	0	0	0	0	14
Hour Total	0	1	1	5	10	4	15	27	4	1	0	0	0	1	69
19:15	0	0	0	0	1	6	4	6	3	0	1	0	0	0	21
19:30	0	0	0	0	1	2	3	3	2	0	0	0	0	0	11
19:45	0	0	3	0	2	4	3	3	0	0	0	0	0	0	15
20:00	0	1	0	0	0	1	3	11	0	0	0	0	0	0	16
Hour Total	0	1	3	0	4	13	13	23	5	0	1	0	0	0	63
20:15	0	0	1	0	0	3	5	1	0	0	0	0	0	0	10
20:30	0	0	0	0	0	1	4	4	2	0	0	0	0	0	11
20:45	0	0	0	0	1	0	3	4	1	0	0	0	0	0	9
21:00	0	0	2	0	1	0	3	4	1	1	0	0	0	0	12
Hour Total	0	0	3	0	2	4	15	13	4	1	0	0	0	0	42
21:15	0	0	0	0	0	3	1	0	0	0	0	0	0	0	4
21:30	0	0	0	0	1	3	3	2	1	0	0	0	0	0	10
21:45	0	1	0	0	0	1	0	1	0	0	0	0	0	0	3
22:00	0	1	0	0	0	0	0	2	3	0	0	0	0	0	6
Hour Total	0	2	0	0	1	7	4	5	4	0	0	0	0	0	23
22:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
23:00	0	0	0	0	0	0	0	1	2	0	0	0	0	0	3
Hour Total	0	0	0	0	1	0	1	1	2	0	0	0	0	0	5
23:15	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	0	1	0	0	1	0	0	1	0	0	0	0	0	3
DAY TOTAL	3	33	119	77	124	233	435	374	113	21	2	0	0	3	1537
PERCENTS	0.2%	2.1%	7.7%	5.0%	8.1%	15.2%	28.3%	24.3%	7.4%	1.4%	0.1%	0.0%	0.0%	0.2%	100.0%

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 4

Station #: 3 EBM_O
Site ID: 000000008694
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: EAST
Lane: 1

File: D0501006.prn
Info: 24-126 TO MIN
GPS: 38.84242,-77.28223

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total

Statistical Information...

15th Percentile Speed
24.9 mph

85th Percentile Speed
43.8 mph

Median Speed
37.1 mph

Average Speed
35.5 mph

10 MPH Pace Speed
35 mph to 45 mph
809 vehicles in pace
Representing 52.6% of the total vehicles

Vehicles > 25 MPH
1305
84.9%

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 10

Station #: 3 EBM_O
Site ID: 000000008694
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: EAST
Lane: 2

File: D0501006.prn
Info: 24-126 TO MIN
GPS: 38.84242,-77.28223

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
00:15	0	0	0	0	0	1	5	2	0	0	0	0	0	0	8
00:30	0	0	0	0	0	6	3	1	1	0	0	0	0	0	11
00:45	0	0	0	0	0	4	6	1	1	0	0	0	0	0	12
01:00	0	0	0	0	0	1	3	1	1	0	0	0	0	0	6
Hour Total	0	0	0	0	0	12	17	5	3	0	0	0	0	0	37
01:15	0	0	0	0	0	2	2	0	1	0	0	0	0	0	5
01:30	0	0	0	0	0	3	2	2	1	1	0	0	0	0	9
01:45	0	0	0	0	0	0	3	1	0	0	0	0	0	0	4
02:00	0	0	0	0	0	0	3	0	0	1	0	0	0	0	4
Hour Total	0	0	0	0	0	5	10	3	2	2	0	0	0	0	22
02:15	0	0	0	0	0	1	2	2	0	0	0	0	0	0	5
02:30	0	0	0	0	1	1	1	0	0	0	0	0	0	0	3
02:45	0	0	0	0	0	0	0	2	3	0	0	0	0	0	5
03:00	0	0	0	0	0	0	2	0	0	1	0	0	0	0	3
Hour Total	0	0	0	0	1	2	5	4	3	1	0	0	0	0	16
03:15	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
03:30	0	0	0	0	2	1	1	1	0	0	0	0	0	0	5
03:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	1	0	0	1	1	0	0	0	0	0	0	0	3
Hour Total	0	0	2	0	2	2	2	3	0	0	0	0	0	0	11
04:15	0	0	0	0	1	1	0	1	0	0	0	0	0	0	3
04:30	0	0	0	0	1	1	4	2	0	0	0	0	0	0	8
04:45	0	0	0	0	0	1	5	3	1	0	0	0	0	0	10
05:00	0	0	0	0	0	0	3	1	1	0	0	0	0	0	5
Hour Total	0	0	0	0	2	3	12	7	2	0	0	0	0	0	26
05:15	0	0	0	1	1	1	7	4	1	0	0	0	0	0	15
05:30	0	0	0	1	0	4	8	8	0	0	0	0	0	0	21
05:45	0	0	0	0	3	6	16	9	3	0	0	0	0	0	37
06:00	0	0	0	0	0	8	17	8	2	0	0	1	0	0	36
Hour Total	0	0	0	2	4	19	48	29	6	0	0	1	0	0	109
06:15	1	0	0	0	0	8	16	9	5	1	0	0	0	0	40
06:30	0	0	0	0	4	7	13	21	1	0	0	0	0	0	46
06:45	0	0	0	0	1	12	22	12	2	0	0	0	0	0	49
07:00	1	0	0	2	1	26	40	20	1	0	0	0	0	0	91
Hour Total	2	0	0	2	6	53	91	62	9	1	0	0	0	0	226
07:15	1	0	0	0	8	40	37	6	3	0	0	0	0	0	95
07:30	0	0	0	4	4	48	34	1	1	0	0	0	0	0	92
07:45	1	1	0	6	17	61	25	3	1	0	0	0	0	2	117
08:00	2	2	0	13	22	48	13	0	2	0	0	0	0	2	104
Hour Total	4	3	0	23	51	197	109	10	7	0	0	0	0	4	408
08:15	0	0	0	4	26	64	23	0	0	0	0	0	0	1	118
08:30	1	0	0	4	20	50	34	11	0	0	0	0	0	5	125
08:45	2	0	1	3	2	28	56	12	2	1	0	0	0	2	109
09:00	0	0	0	0	5	15	51	16	0	1	0	0	0	0	88
Hour Total	3	0	1	11	53	157	164	39	2	2	0	0	0	8	440

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 11

Station #: 3 EBM_O
Site ID: 000000008694
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: EAST
Lane: 2

File: D0501006.prn
Info: 24-126 TO MIN
GPS: 38.84242,-77.28223

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
09:15	0	0	1	0	3	21	43	18	0	1	0	0	0	2	89
09:30	0	0	0	0	0	34	35	12	7	1	0	0	0	0	89
09:45	1	0	0	2	10	25	33	30	0	1	0	0	0	1	103
10:00	0	0	0	0	5	10	41	23	9	2	0	0	0	0	90
Hour Total	1	0	1	2	18	90	152	83	16	5	0	0	0	3	371
10:15	1	0	0	0	4	17	33	12	6	1	0	0	0	0	74
10:30	0	0	0	1	4	19	36	7	5	0	0	0	0	0	72
10:45	0	0	0	2	1	35	33	11	4	0	0	0	0	0	86
11:00	1	0	0	2	7	32	33	15	6	2	0	0	0	0	98
Hour Total	2	0	0	5	16	103	135	45	21	3	0	0	0	0	330
11:15	0	0	1	3	4	17	35	11	2	0	0	0	0	0	73
11:30	1	0	0	1	12	17	47	7	4	2	0	1	0	1	93
11:45	1	1	0	2	3	23	34	33	4	0	0	0	0	0	101
12:00	0	1	1	1	4	15	43	17	7	0	0	0	0	0	89
Hour Total	2	2	2	7	23	72	159	68	17	2	0	1	0	1	356
12:15	0	0	0	0	3	30	30	24	4	1	1	0	0	0	93
12:30	0	1	0	1	6	21	37	19	1	1	0	1	0	0	88
12:45	0	0	0	0	5	24	41	15	4	1	0	0	0	0	90
13:00	0	1	1	5	1	19	27	10	2	0	0	0	0	0	66
Hour Total	0	2	1	6	15	94	135	68	11	3	1	1	0	0	337
13:15	0	0	0	0	3	34	39	10	0	0	0	0	0	0	86
13:30	0	0	0	0	1	23	42	14	2	1	0	0	0	0	83
13:45	0	1	0	5	15	26	29	13	2	0	0	0	0	1	92
14:00	0	0	2	2	7	37	36	8	1	0	0	0	0	0	93
Hour Total	0	1	2	7	26	120	146	45	5	1	0	0	0	1	354
14:15	0	0	0	0	12	43	34	9	1	0	0	0	0	1	100
14:30	1	0	0	1	5	40	31	5	2	0	0	0	0	0	85
14:45	0	0	0	1	22	31	21	9	0	1	0	0	0	0	85
15:00	0	0	1	2	5	51	37	6	2	0	0	0	0	0	104
Hour Total	1	0	1	4	44	165	123	29	5	1	0	0	0	1	374
15:15	0	0	1	0	17	62	27	11	0	0	0	0	0	0	118
15:30	0	0	0	2	17	50	30	11	0	0	0	0	0	1	111
15:45	0	1	0	1	14	44	40	12	3	0	0	0	0	0	115
16:00	2	0	1	6	3	37	40	23	3	1	0	0	0	1	117
Hour Total	2	1	2	9	51	193	137	57	6	1	0	0	0	2	461
16:15	0	0	1	3	5	16	48	26	2	0	0	0	0	0	101
16:30	4	3	6	6	32	62	28	2	2	0	0	0	0	4	149
16:45	2	0	3	3	30	62	56	10	0	0	0	0	0	0	166
17:00	0	0	1	0	6	61	49	20	0	0	0	0	0	0	137
Hour Total	6	3	11	12	73	201	181	58	4	0	0	0	0	4	553
17:15	1	0	0	0	20	56	49	14	2	1	1	0	0	2	146
17:30	1	2	3	1	6	63	61	14	0	1	0	0	0	6	158
17:45	0	0	2	1	5	22	65	33	7	1	0	0	0	0	136
18:00	1	0	1	2	2	26	62	20	0	0	0	0	0	2	116
Hour Total	3	2	6	4	33	167	237	81	9	3	1	0	0	10	556

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 12

Station #: 3 EBM_O
Site ID: 000000008694
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: EAST
Lane: 2

File: D0501006.prn
Info: 24-126 TO MIN
GPS: 38.84242,-77.28223

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
18:15	1	0	1	2	6	41	49	18	1	0	0	0	0	0	119
18:30	0	1	0	1	2	24	62	28	3	3	0	0	0	0	124
18:45	0	1	2	0	4	28	39	26	7	1	0	0	0	0	108
19:00	0	0	0	1	0	60	46	12	3	0	0	0	0	0	122
Hour Total	1	2	3	4	12	153	196	84	14	4	0	0	0	0	473
19:15	1	0	1	0	7	16	37	18	7	0	1	0	0	0	88
19:30	1	0	0	1	5	29	41	18	1	0	0	0	0	0	96
19:45	0	0	0	0	10	14	37	12	2	0	0	0	0	0	75
20:00	0	0	0	0	10	12	31	13	2	0	0	0	0	0	68
Hour Total	2	0	1	1	32	71	146	61	12	0	1	0	0	0	327
20:15	0	0	0	0	1	25	29	15	1	0	0	0	0	0	71
20:30	0	0	0	0	4	22	34	13	4	0	0	0	0	0	77
20:45	0	0	0	0	5	27	19	11	2	1	0	0	0	0	65
21:00	0	0	0	0	1	22	22	9	0	0	1	0	0	0	55
Hour Total	0	0	0	0	11	96	104	48	7	1	1	0	0	0	268
21:15	0	0	0	0	1	13	29	14	1	0	0	0	0	0	58
21:30	0	0	0	0	1	17	25	14	3	0	0	0	0	0	60
21:45	0	0	0	0	2	9	21	14	3	2	0	0	0	0	51
22:00	0	0	0	0	0	6	18	16	0	1	0	0	0	0	41
Hour Total	0	0	0	0	4	45	93	58	7	3	0	0	0	0	210
22:15	0	0	0	0	1	4	15	11	3	1	0	0	0	0	35
22:30	0	0	0	0	0	7	18	9	2	2	0	0	0	0	38
22:45	0	0	0	0	0	2	11	10	6	0	0	0	0	0	29
23:00	0	0	0	0	0	4	4	11	3	1	0	0	0	0	23
Hour Total	0	0	0	0	1	17	48	41	14	4	0	0	0	0	125
23:15	0	0	0	0	2	6	11	6	0	2	1	0	0	0	28
23:30	0	0	0	0	0	5	8	6	3	2	0	0	0	0	24
23:45	0	0	0	0	2	2	8	4	0	1	0	0	0	0	17
24:00	0	0	0	0	0	2	9	2	0	1	0	0	0	0	14
Hour Total	0	0	0	0	4	15	36	18	3	6	1	0	0	0	83
DAY TOTAL	29	16	33	99	482	2052	2486	1006	185	43	5	3	0	34	6473
PERCENTS	0.4%	0.2%	0.5%	1.5%	7.4%	31.7%	38.4%	15.5%	2.9%	0.7%	0.1%	0.0%	0.0%	0.5%	100.0%

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 13

Station #: 3 EBM_O
Site ID: 000000008694
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: EAST
Lane: 2

File: D0501006.prn
Info: 24-126 TO MIN
GPS: 38.84242,-77.28223

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total

Statistical Information...

15th Percentile Speed
30.8 mph

85th Percentile Speed
41.5 mph

Median Speed
36.1 mph

Average Speed
36.5 mph

10 MPH Pace Speed
30 mph to 40 mph
4538 vehicles in pace
Representing 70.1% of the total vehicles

Vehicles > 25 MPH
6296
97.3%

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 1

Station #: 3 WBI
Site ID: 000000008507
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: WEST
Lane: 1

File: D0501001.prn
Info: 24-126 TO MIN
GPS: 38.84253,-77.28164

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
00:15	0	0	0	0	1	2	1	1	1	1	0	0	0	0	7
00:30	0	0	0	0	1	1	4	6	1	0	0	0	0	0	13
00:45	0	0	0	0	0	1	1	0	4	2	0	0	0	0	8
01:00	0	0	0	0	0	0	2	1	2	0	0	0	0	0	5
Hour Total	0	0	0	0	2	4	8	8	8	3	0	0	0	0	33
01:15	0	0	0	0	1	1	2	1	1	0	0	0	0	0	6
01:30	0	0	0	0	0	1	0	2	3	2	0	0	0	0	8
01:45	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	1	2	0	0	0	0	0	0	0	3
Hour Total	0	0	0	0	1	4	4	3	4	2	0	0	0	0	18
02:15	0	0	0	0	0	0	1	2	1	1	0	0	0	0	5
02:30	0	0	0	0	0	0	0	1	1	0	0	1	0	0	3
02:45	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
03:00	0	0	0	0	0	1	0	0	1	0	0	1	0	0	3
Hour Total	0	0	0	0	0	1	1	4	3	1	0	2	0	0	12
03:15	0	0	0	0	0	0	3	2	2	0	0	0	0	0	7
03:30	0	0	0	0	0	1	1	0	1	0	0	1	0	0	4
03:45	0	0	0	0	0	0	2	2	0	0	0	0	0	0	4
04:00	0	0	0	0	0	1	1	1	0	0	0	0	0	0	3
Hour Total	0	0	0	0	0	2	7	5	3	0	0	1	0	0	18
04:15	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
04:30	0	0	0	0	1	0	3	5	0	0	0	0	0	0	9
04:45	0	0	0	0	1	1	1	3	0	0	0	0	0	0	6
05:00	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5
Hour Total	0	0	0	0	2	1	4	14	1	0	0	0	0	0	22
05:15	0	0	0	0	0	1	6	6	1	2	0	0	0	0	16
05:30	0	0	0	1	0	0	2	14	5	2	0	0	0	0	24
05:45	0	0	0	0	0	4	2	5	4	4	0	0	0	0	19
06:00	0	0	0	0	2	1	3	7	8	1	2	0	0	0	24
Hour Total	0	0	0	1	2	6	13	32	18	9	2	0	0	0	83
06:15	0	0	0	0	0	0	3	13	4	3	0	0	0	0	23
06:30	0	0	0	0	0	2	12	21	7	5	0	0	0	0	47
06:45	0	0	0	1	0	6	13	29	4	6	0	0	0	0	59
07:00	0	0	0	0	1	7	23	24	10	7	1	0	0	1	74
Hour Total	0	0	0	1	1	15	51	87	25	21	1	0	0	1	203
07:15	0	0	0	0	2	14	32	25	8	0	0	0	0	0	81
07:30	0	0	0	1	7	16	42	25	4	4	1	0	0	0	100
07:45	0	0	0	1	4	31	30	36	9	2	0	0	0	0	113
08:00	0	0	0	0	1	8	45	40	7	3	0	0	0	0	104
Hour Total	0	0	0	2	14	69	149	126	28	9	1	0	0	0	398
08:15	0	0	0	0	1	23	43	44	23	1	1	0	0	0	136
08:30	1	0	0	1	11	29	31	42	7	2	0	0	0	1	125
08:45	0	0	0	0	2	21	56	38	6	2	0	1	0	0	126
09:00	2	0	0	0	4	16	58	44	12	3	1	0	0	1	141
Hour Total	3	0	0	1	18	89	188	168	48	8	2	1	0	2	528

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 2

Station #: 3 WBI
Site ID: 000000008507
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: WEST
Lane: 1

File: D0501001.prn
Info: 24-126 TO MIN
GPS: 38.84253,-77.28164

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
09:15	1	0	0	0	4	14	72	46	8	3	0	0	0	0	148
09:30	0	0	0	0	3	14	60	35	12	10	1	0	0	0	135
09:45	0	0	0	3	2	17	44	38	10	3	0	0	0	0	117
10:00	0	0	0	0	0	9	64	47	11	2	0	0	0	0	133
Hour Total	1	0	0	3	9	54	240	166	41	18	1	0	0	0	533
10:15	1	0	0	0	4	14	32	33	16	1	0	0	0	0	101
10:30	0	0	0	0	1	26	37	38	11	5	1	0	0	0	119
10:45	0	0	0	0	1	4	32	52	14	1	0	0	0	0	104
11:00	0	0	0	0	0	13	39	59	10	3	0	0	0	0	124
Hour Total	1	0	0	0	6	57	140	182	51	10	1	0	0	0	448
11:15	0	0	0	1	9	15	40	38	11	1	1	0	0	0	116
11:30	0	0	0	1	3	9	47	32	10	1	1	0	0	0	104
11:45	0	0	0	0	1	23	55	52	9	0	0	0	0	0	140
12:00	0	0	0	0	2	9	25	44	23	3	0	0	0	0	106
Hour Total	0	0	0	2	15	56	167	166	53	5	2	0	0	0	466
12:15	0	0	0	0	1	24	39	46	7	2	0	0	0	0	119
12:30	0	0	0	1	3	27	61	24	7	1	0	0	0	0	124
12:45	0	0	0	0	2	18	50	50	6	2	1	0	0	0	129
13:00	0	0	0	1	1	18	87	35	3	0	0	0	0	0	145
Hour Total	0	0	0	2	7	87	237	155	23	5	1	0	0	0	517
13:15	0	0	0	1	4	12	56	31	11	4	0	0	0	0	119
13:30	0	0	0	0	2	31	55	28	1	0	0	0	0	0	117
13:45	0	0	0	2	1	21	67	34	2	2	0	0	0	0	129
14:00	0	0	0	0	2	24	49	41	6	1	0	0	0	2	125
Hour Total	0	0	0	3	9	88	227	134	20	7	0	0	0	2	490
14:15	0	0	0	1	4	43	46	28	7	1	0	0	0	0	130
14:30	0	0	0	0	8	32	55	26	5	2	0	0	0	2	130
14:45	0	0	0	0	7	33	86	35	9	2	1	0	0	0	173
15:00	0	0	0	0	3	14	72	47	9	2	0	0	0	0	147
Hour Total	0	0	0	1	22	122	259	136	30	7	1	0	0	2	580
15:15	0	0	0	0	8	46	95	32	13	1	0	0	1	1	197
15:30	10	1	1	3	13	47	74	28	7	1	0	0	0	1	186
15:45	0	0	0	0	1	43	83	46	9	2	0	0	0	0	184
16:00	0	0	0	3	30	52	71	34	8	2	0	0	0	0	200
Hour Total	10	1	1	6	52	188	323	140	37	6	0	0	1	2	767
16:15	0	0	0	0	3	26	82	64	15	3	0	1	0	1	195
16:30	0	0	0	1	5	38	101	58	15	0	0	0	0	1	219
16:45	0	0	0	0	5	28	95	48	4	0	0	0	0	1	181
17:00	0	0	0	0	4	58	88	50	12	3	0	0	0	1	216
Hour Total	0	0	0	1	17	150	366	220	46	6	0	1	0	4	811
17:15	2	0	3	3	3	25	91	85	10	3	1	0	0	3	229
17:30	8	2	1	1	20	44	59	60	6	0	0	0	0	0	201
17:45	1	0	0	0	1	25	101	46	15	4	1	0	0	3	197
18:00	0	0	0	0	10	34	91	57	12	1	0	0	0	0	205
Hour Total	11	2	4	4	34	128	342	248	43	8	2	0	0	6	832

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 3

Station #: 3 WBI
Site ID: 000000008507
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: WEST
Lane: 1

File: D0501001.prn
Info: 24-126 TO MIN
GPS: 38.84253,-77.28164

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
18:15	0	0	0	1	1	26	72	80	9	2	0	0	0	2	193
18:30	0	0	0	1	1	12	57	52	32	2	0	0	0	0	157
18:45	0	0	0	0	1	21	63	59	19	1	0	0	0	0	164
19:00	0	0	0	0	0	26	65	39	19	2	0	0	0	0	151
Hour Total	0	0	0	2	3	85	257	230	79	7	0	0	0	2	665
19:15	0	0	0	0	0	22	48	33	12	4	0	0	0	0	119
19:30	0	0	0	0	3	29	61	27	14	0	0	0	0	0	134
19:45	0	0	1	5	4	42	42	20	2	1	0	0	0	0	117
20:00	0	0	0	0	5	33	54	23	5	0	0	0	0	1	121
Hour Total	0	0	1	5	12	126	205	103	33	5	0	0	0	1	491
20:15	0	0	0	1	0	29	26	26	4	0	0	0	0	0	86
20:30	0	0	0	0	0	8	33	35	7	0	1	0	0	0	84
20:45	0	0	0	1	2	20	39	27	1	0	0	0	0	0	90
21:00	0	0	0	1	1	19	36	28	7	0	0	0	0	0	92
Hour Total	0	0	0	3	3	76	134	116	19	0	1	0	0	0	352
21:15	0	0	0	0	0	10	31	14	3	5	0	0	0	0	63
21:30	0	0	0	0	0	7	54	27	6	2	0	0	0	0	96
21:45	0	0	0	0	6	14	32	27	4	1	0	0	0	0	84
22:00	0	0	0	0	1	4	15	18	10	1	0	0	0	0	49
Hour Total	0	0	0	0	7	35	132	86	23	9	0	0	0	0	292
22:15	0	0	0	0	0	2	13	26	3	3	0	0	1	0	48
22:30	0	0	0	0	0	1	15	14	1	1	0	0	0	0	32
22:45	0	0	0	0	0	2	12	8	8	0	0	0	0	0	30
23:00	0	0	0	0	2	1	3	16	5	2	0	0	0	0	29
Hour Total	0	0	0	0	2	6	43	64	17	6	0	0	1	0	139
23:15	0	0	0	0	0	0	10	15	6	1	0	0	0	0	32
23:30	0	0	0	0	0	2	3	7	3	2	0	0	0	0	17
23:45	0	0	0	0	1	1	4	0	4	0	0	0	0	0	10
24:00	0	0	0	0	1	1	2	8	1	0	0	0	0	0	13
Hour Total	0	0	0	0	2	4	19	30	14	3	0	0	0	0	72
DAY TOTAL	26	3	6	37	240	1453	3516	2623	667	155	15	5	2	22	8770
PERCENTS	0.3%	0.0%	0.1%	0.4%	2.7%	16.6%	40.1%	29.9%	7.6%	1.8%	0.2%	0.1%	0.0%	0.3%	100.0%

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 4

Station #: 3 WBI
Site ID: 000000008507
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: WEST
Lane: 1

File: D0501001.prn
Info: 24-126 TO MIN
GPS: 38.84253,-77.28164

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total

Statistical Information...

15th Percentile Speed
33.5 mph

85th Percentile Speed
44.2 mph

Median Speed
38.7 mph

Average Speed
39.1 mph

10 MPH Pace Speed
35 mph to 45 mph
6139 vehicles in pace
Representing 70.0% of the total vehicles

Vehicles > 25 MPH
8698
99.2%

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 1

Station #: 3 WBM_O
Site ID: 000000008699
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: WEST
Lane: 1

File: D0501007.prn
Info: 24-126 TO MIN
GPS: 38.84253,-77.28164

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
00:15	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
Hour Total	0	0	0	0	0	2	1	0	0	0	0	0	0	0	3
01:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
05:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
Hour Total	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
06:15	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
06:30	1	0	0	0	0	2	1	0	0	0	0	0	0	0	4
06:45	0	1	0	2	0	2	0	0	0	0	1	0	0	0	6
07:00	0	0	0	2	1	1	0	1	0	1	0	0	0	0	6
Hour Total	1	1	0	5	2	5	1	1	0	1	1	0	0	0	18
07:15	0	0	1	0	2	1	0	0	0	0	0	0	0	0	4
07:30	0	0	0	0	2	2	0	0	0	0	0	0	0	0	4
07:45	0	0	1	1	5	1	1	0	0	0	0	0	0	0	9
08:00	0	0	0	0	0	3	2	0	1	0	0	0	0	0	6
Hour Total	0	0	2	1	9	7	3	0	1	0	0	0	0	0	23
08:15	0	1	0	1	1	2	1	0	1	0	0	0	0	0	7
08:30	0	0	0	1	0	3	0	0	0	0	0	0	0	0	4
08:45	0	1	0	1	3	1	1	0	1	0	0	0	0	0	8
09:00	0	1	0	0	0	4	2	0	0	0	0	0	0	0	7
Hour Total	0	3	0	3	4	10	4	0	2	0	0	0	0	0	26

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 2

Station #: 3 WBM_O
Site ID: 000000008699
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: WEST
Lane: 1

File: D0501007.prn
Info: 24-126 TO MIN
GPS: 38.84253,-77.28164

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
09:15	0	0	0	0	1	4	2	1	0	0	0	0	0	0	8
09:30	0	0	1	0	2	1	1	0	0	0	0	0	0	0	5
09:45	0	0	0	0	1	1	2	0	0	0	0	0	0	0	4
10:00	0	0	0	0	0	2	3	1	0	0	0	1	0	0	7
Hour Total	0	0	1	0	4	8	8	2	0	0	0	1	0	0	24
10:15	0	0	0	0	2	2	0	0	0	0	0	0	0	0	4
10:30	0	1	0	0	1	1	1	0	0	0	1	0	0	0	5
10:45	0	0	0	0	0	1	0	2	0	0	0	0	0	0	3
11:00	0	0	0	0	0	4	5	0	1	0	0	0	0	0	10
Hour Total	0	1	0	0	3	8	6	2	1	0	1	0	0	0	22
11:15	0	0	1	1	0	6	0	0	2	0	0	0	0	0	10
11:30	0	0	0	0	1	4	3	1	0	0	0	0	0	0	9
11:45	0	0	0	1	0	4	3	0	0	0	1	0	0	0	9
12:00	0	0	0	0	1	2	1	0	0	0	0	0	0	0	4
Hour Total	0	0	1	2	2	16	7	1	2	0	1	0	0	0	32
12:15	0	0	0	0	1	3	3	0	0	0	0	0	0	0	7
12:30	0	0	0	0	1	5	2	0	0	0	0	0	0	0	8
12:45	0	0	0	1	1	4	2	1	0	0	0	0	0	0	9
13:00	0	1	0	1	1	1	2	1	0	1	0	0	0	0	8
Hour Total	0	1	0	2	4	13	9	2	0	1	0	0	0	0	32
13:15	0	0	0	1	1	4	1	0	1	0	0	0	0	0	8
13:30	0	0	0	3	3	2	0	0	0	0	0	0	0	0	8
13:45	0	0	0	1	2	3	5	0	0	0	0	0	0	0	11
14:00	0	0	0	0	2	3	1	0	0	0	0	0	0	0	6
Hour Total	0	0	0	5	8	12	7	0	1	0	0	0	0	0	33
14:15	0	0	0	0	6	4	3	0	0	0	0	0	0	0	13
14:30	0	1	0	0	2	3	2	1	0	0	0	0	0	0	9
14:45	0	0	0	0	3	2	2	0	2	1	0	0	0	0	10
15:00	0	0	1	1	0	4	0	0	1	0	0	0	0	0	7
Hour Total	0	1	1	1	11	13	7	1	3	1	0	0	0	0	39
15:15	0	1	0	1	5	3	4	0	1	0	0	0	0	0	15
15:30	0	0	0	2	4	6	2	1	0	0	0	0	0	0	15
15:45	0	0	1	1	0	4	4	0	0	0	0	0	0	0	10
16:00	0	0	0	2	4	3	7	1	0	1	0	0	0	0	18
Hour Total	0	1	1	6	13	16	17	2	1	1	0	0	0	0	58
16:15	1	0	0	1	2	2	6	1	0	1	0	0	0	0	14
16:30	0	0	0	2	2	6	5	3	0	0	0	0	0	0	18
16:45	0	0	0	0	1	6	5	0	0	0	0	0	0	0	12
17:00	0	0	0	1	2	6	7	1	0	0	0	0	0	0	17
Hour Total	1	0	0	4	7	20	23	5	0	1	0	0	0	0	61
17:15	0	0	0	1	1	8	7	1	0	0	0	0	0	0	18
17:30	0	0	0	2	2	6	2	0	0	0	0	0	0	0	12
17:45	0	0	0	1	3	4	3	3	1	0	0	0	0	0	15
18:00	0	0	1	1	1	3	3	2	0	0	0	0	0	0	11
Hour Total	0	0	1	5	7	21	15	6	1	0	0	0	0	0	56

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 3

Station #: 3 WBM_O
Site ID: 000000008699
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: WEST
Lane: 1

File: D0501007.prn
Info: 24-126 TO MIN
GPS: 38.84253,-77.28164

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
18:15	0	1	0	1	3	3	5	0	0	0	0	0	0	0	13
18:30	0	0	0	1	2	5	2	1	0	0	0	0	0	0	11
18:45	0	0	0	0	2	3	7	1	0	0	0	0	0	0	13
19:00	0	0	0	1	1	1	3	0	0	0	0	0	0	0	6
Hour Total	0	1	0	3	8	12	17	2	0	0	0	0	0	0	43
19:15	0	1	0	0	2	8	1	1	0	0	0	0	0	0	13
19:30	0	0	0	1	2	6	3	1	0	0	0	0	0	2	15
19:45	0	0	0	1	2	1	2	0	0	0	0	0	0	0	6
20:00	0	0	0	1	5	2	0	0	0	0	0	0	0	0	8
Hour Total	0	1	0	3	11	17	6	2	0	0	0	0	0	2	42
20:15	0	0	0	1	4	2	1	1	0	0	0	0	0	0	9
20:30	0	0	0	2	1	2	3	1	1	0	0	0	0	0	10
20:45	0	0	0	0	1	1	2	0	0	0	0	0	0	0	4
21:00	0	0	0	0	4	2	2	0	0	0	0	0	0	0	8
Hour Total	0	0	0	3	10	7	8	2	1	0	0	0	0	0	31
21:15	0	0	0	0	4	3	1	0	0	0	0	0	0	0	8
21:30	0	0	0	1	2	3	1	1	0	0	0	0	0	0	8
21:45	0	0	0	1	3	0	0	0	0	0	0	0	0	0	4
22:00	0	0	0	0	0	1	2	1	0	0	0	0	0	0	4
Hour Total	0	0	0	2	9	7	4	2	0	0	0	0	0	0	24
22:15	0	0	0	1	0	0	2	0	1	0	0	0	0	0	4
22:30	0	0	0	0	1	1	2	0	0	0	0	0	0	0	4
22:45	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
23:00	0	0	0	0	2	0	1	0	0	0	0	0	0	0	3
Hour Total	0	0	0	1	3	2	5	0	1	0	0	0	0	0	12
23:15	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
23:30	0	0	0	0	1	2	0	1	0	0	0	0	0	0	4
23:45	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
24:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Hour Total	0	0	0	0	7	2	0	1	0	0	0	0	0	0	10
DAY TOTAL	2	10	7	47	123	199	148	31	14	5	3	1	0	2	592
PERCENTS	0.3%	1.7%	1.2%	7.9%	20.8%	33.6%	25.0%	5.2%	2.4%	0.8%	0.5%	0.2%	0.0%	0.3%	100.0%

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 4

Station #: 3 WBM_O
Site ID: 000000008699
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: WEST
Lane: 1

File: D0501007.prn
Info: 24-126 TO MIN
GPS: 38.84253,-77.28164

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total

Statistical Information...

15th Percentile Speed
25.9 mph

85th Percentile Speed
38.9 mph

Median Speed
32.7 mph

Average Speed
33.0 mph

10 MPH Pace Speed
30 mph to 40 mph
347 vehicles in pace
Representing 58.6% of the total vehicles

Vehicles > 25 MPH
526
88.9%

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 10

Station #: 3 WBM_O
Site ID: 000000008699
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: WEST
Lane: 2

File: D0501007.prn
Info: 24-126 TO MIN
GPS: 38.84253,-77.28164

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
00:15	0	0	0	0	1	2	5	8	1	1	0	0	0	0	18
00:30	0	0	0	0	1	2	0	1	2	0	0	0	0	0	6
00:45	0	0	0	0	0	0	2	9	2	1	0	0	0	0	14
01:00	0	0	0	0	0	2	3	0	2	4	0	0	0	0	11
Hour Total	0	0	0	0	2	6	10	18	7	6	0	0	0	0	49
01:15	0	0	0	0	3	2	1	2	1	0	0	0	0	0	9
01:30	0	0	0	0	0	1	3	6	4	1	0	0	1	0	16
01:45	0	0	0	0	0	0	1	1	3	0	0	0	0	0	5
02:00	0	0	0	0	0	3	3	0	1	0	0	0	0	0	7
Hour Total	0	0	0	0	3	6	8	9	9	1	0	0	1	0	37
02:15	0	0	0	0	0	0	6	1	1	0	0	0	0	0	8
02:30	0	0	0	0	2	1	1	4	2	0	0	0	0	0	10
02:45	0	0	0	1	1	0	3	0	1	0	0	0	0	0	6
03:00	0	0	0	2	0	0	0	2	1	0	0	0	0	0	5
Hour Total	0	0	0	3	3	1	10	7	5	0	0	0	0	0	29
03:15	0	0	0	0	0	0	1	0	2	0	0	0	0	0	3
03:30	0	0	0	0	0	0	3	0	3	0	0	0	0	0	6
03:45	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
04:00	0	0	0	0	0	2	0	3	2	0	0	0	0	0	7
Hour Total	0	0	0	0	0	2	4	4	8	0	0	0	0	0	18
04:15	0	0	0	0	0	2	1	1	2	1	0	0	0	0	7
04:30	0	0	0	0	1	2	2	2	3	0	0	0	0	0	10
04:45	0	0	0	0	1	1	3	3	2	1	0	1	0	0	12
05:00	0	0	0	0	1	2	4	2	3	1	0	1	0	0	14
Hour Total	0	0	0	0	3	7	10	8	10	3	0	2	0	0	43
05:15	0	0	0	0	0	4	6	6	2	3	0	1	0	0	22
05:30	0	0	0	1	0	3	7	5	1	1	0	0	0	0	18
05:45	0	0	0	1	0	3	9	6	3	0	0	0	0	0	22
06:00	0	0	0	2	3	2	13	13	3	1	0	0	0	0	37
Hour Total	0	0	0	4	3	12	35	30	9	5	0	1	0	0	99
06:15	0	0	0	1	0	13	9	8	7	1	0	1	0	0	40
06:30	0	0	0	0	0	7	20	13	10	0	0	0	0	0	50
06:45	0	0	0	3	2	7	20	27	6	3	0	1	0	0	69
07:00	0	0	0	0	2	16	29	30	9	3	1	0	0	0	90
Hour Total	0	0	0	4	4	43	78	78	32	7	1	2	0	0	249
07:15	0	0	0	1	6	28	20	22	4	5	0	0	0	0	86
07:30	0	1	0	4	6	18	35	23	7	2	0	0	0	0	96
07:45	0	0	0	1	11	21	47	23	4	1	0	0	0	0	108
08:00	0	0	0	0	13	40	32	27	2	3	1	0	0	0	118
Hour Total	0	1	0	6	36	107	134	95	17	11	1	0	0	0	408
08:15	0	0	0	1	5	26	46	49	9	2	1	0	0	0	139
08:30	0	0	0	3	17	44	39	27	8	1	0	0	0	0	139
08:45	0	0	0	3	4	22	64	29	4	2	1	0	0	0	129
09:00	0	0	0	1	0	14	61	47	18	0	1	0	0	0	142
Hour Total	0	0	0	8	26	106	210	152	39	5	3	0	0	0	549

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 11

Station #: 3 WBM_O
Site ID: 000000008699
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: WEST
Lane: 2

File: D0501007.prn
Info: 24-126 TO MIN
GPS: 38.84253,-77.28164

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
09:15	0	0	0	1	4	30	54	41	17	1	3	0	0	0	151
09:30	0	0	0	1	1	14	56	29	10	3	0	0	0	0	114
09:45	0	0	0	0	12	24	61	30	15	1	0	0	0	0	143
10:00	2	0	0	0	0	13	48	51	10	0	0	0	0	0	124
Hour Total	2	0	0	2	17	81	219	151	52	5	3	0	0	0	532
10:15	0	0	0	0	0	16	62	22	13	0	0	0	0	0	113
10:30	0	0	0	0	4	18	56	29	10	1	0	0	0	0	118
10:45	0	0	0	0	0	19	51	41	9	1	0	0	0	0	121
11:00	0	0	0	1	2	25	49	32	8	3	1	0	0	0	121
Hour Total	0	0	0	1	6	78	218	124	40	5	1	0	0	0	473
11:15	1	0	0	3	8	29	57	26	7	1	0	0	0	0	132
11:30	0	0	0	1	3	19	53	37	7	0	0	0	0	1	121
11:45	0	0	0	1	6	31	77	33	10	1	0	0	0	0	159
12:00	1	0	0	0	3	19	52	43	10	0	0	0	0	0	128
Hour Total	2	0	0	5	20	98	239	139	34	2	0	0	0	1	540
12:15	0	0	0	1	7	22	49	41	6	5	0	0	0	0	131
12:30	0	0	0	0	4	25	78	35	2	0	0	0	0	0	144
12:45	0	0	0	1	6	30	64	32	5	0	0	0	0	1	139
13:00	0	0	0	0	4	33	68	27	5	1	0	0	0	1	139
Hour Total	0	0	0	2	21	110	259	135	18	6	0	0	0	2	553
13:15	0	0	0	1	2	24	52	33	5	0	0	0	0	0	117
13:30	0	0	0	0	5	42	64	24	6	2	0	0	0	0	143
13:45	0	0	0	2	10	44	43	24	3	2	0	0	0	0	128
14:00	0	0	0	0	2	22	68	34	4	0	0	0	0	2	132
Hour Total	0	0	0	3	19	132	227	115	18	4	0	0	0	2	520
14:15	0	0	0	0	2	36	51	27	5	1	0	0	0	0	122
14:30	0	0	0	0	18	36	56	17	9	5	0	0	0	0	141
14:45	0	0	0	1	4	66	66	37	6	2	1	0	0	0	183
15:00	0	0	0	1	6	40	81	23	8	0	0	0	0	0	159
Hour Total	0	0	0	2	30	178	254	104	28	8	1	0	0	0	605
15:15	0	0	1	4	40	61	61	26	4	3	0	1	0	2	203
15:30	9	3	0	9	10	65	52	29	8	3	0	0	0	2	190
15:45	0	0	0	0	16	62	60	37	6	0	0	0	0	1	182
16:00	3	0	0	3	9	38	95	24	9	2	0	0	0	2	185
Hour Total	12	3	1	16	75	226	268	116	27	8	0	1	0	7	760
16:15	0	0	0	0	9	43	66	53	11	2	1	1	0	1	187
16:30	2	0	1	0	10	41	103	38	11	0	0	0	0	2	208
16:45	0	0	0	0	5	31	93	41	9	0	0	0	0	1	180
17:00	0	0	0	0	4	30	85	56	14	0	1	0	0	0	190
Hour Total	2	0	1	0	28	145	347	188	45	2	2	1	0	4	765
17:15	3	1	2	5	3	31	98	54	13	5	1	0	0	1	217
17:30	3	3	3	1	20	39	79	30	1	1	0	0	0	0	180
17:45	0	0	0	0	6	35	89	53	11	2	0	0	0	0	196
18:00	0	0	0	0	0	45	91	49	11	4	1	0	0	2	203
Hour Total	6	4	5	6	29	150	357	186	36	12	2	0	0	3	796

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 12

Station #: 3 WBM_O
Site ID: 000000008699
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: WEST
Lane: 2

File: D0501007.prn
Info: 24-126 TO MIN
GPS: 38.84253,-77.28164

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total
18:15	1	0	1	0	5	35	83	53	21	0	0	0	0	0	199
18:30	0	0	0	0	6	24	67	48	7	3	0	0	0	0	155
18:45	0	0	0	0	2	32	52	47	20	0	0	0	0	0	153
19:00	1	0	0	0	0	40	56	46	7	2	0	0	0	0	152
Hour Total	2	0	1	0	13	131	258	194	55	5	0	0	0	0	659
19:15	0	0	0	1	16	29	33	24	6	0	0	0	0	0	109
19:30	0	0	0	1	10	25	53	24	4	1	0	0	0	0	118
19:45	0	0	0	4	19	46	34	10	2	0	1	0	0	0	116
20:00	1	0	0	1	8	26	39	24	4	0	0	0	0	0	103
Hour Total	1	0	0	7	53	126	159	82	16	1	1	0	0	0	446
20:15	0	0	0	0	7	22	27	18	5	2	0	0	0	0	81
20:30	0	0	0	1	0	17	30	20	9	1	0	0	0	0	78
20:45	0	0	0	2	1	14	43	26	2	0	0	0	0	0	88
21:00	0	0	0	0	7	22	33	20	5	1	0	0	0	0	88
Hour Total	0	0	0	3	15	75	133	84	21	4	0	0	0	0	335
21:15	0	0	0	1	0	13	30	20	4	1	1	0	0	0	70
21:30	0	0	0	0	0	19	39	11	5	0	0	0	1	0	75
21:45	0	0	0	1	4	13	34	14	5	1	0	0	0	0	72
22:00	0	0	0	0	0	8	15	20	8	1	0	0	0	0	52
Hour Total	0	0	0	2	4	53	118	65	22	3	1	0	1	0	269
22:15	0	0	0	2	1	5	20	21	5	1	1	0	0	0	56
22:30	0	0	0	0	1	6	20	19	5	0	0	0	0	0	51
22:45	0	0	0	1	3	4	11	13	4	1	0	0	0	0	37
23:00	0	0	0	0	5	1	13	11	3	2	0	0	0	0	35
Hour Total	0	0	0	3	10	16	64	64	17	4	1	0	0	0	179
23:15	0	0	0	1	4	2	17	7	7	4	1	0	0	0	43
23:30	0	0	0	0	1	2	7	8	4	1	0	0	0	0	23
23:45	0	0	0	0	1	7	8	6	3	2	0	0	0	0	27
24:00	0	0	0	0	1	4	5	5	4	1	1	0	0	1	22
Hour Total	0	0	0	1	7	15	37	26	18	8	2	0	0	1	115
DAY TOTAL	27	8	8	78	427	1904	3656	2174	583	115	19	7	2	20	9028
PERCENTS	0.3%	0.1%	0.1%	0.9%	4.7%	21.1%	40.5%	24.1%	6.5%	1.3%	0.2%	0.1%	0.0%	0.2%	100.0%

Peggy Malone & Associates

SPEED SUMMARY
Wed 5/1/2024

Page: 13

Station #: 3 WBM_O
Site ID: 000000008699
Loc: MAIN ST BTW ESTEL RD/WILLIAMSBURG CT
Direction: WEST
Lane: 2

File: D0501007.prn
Info: 24-126 TO MIN
GPS: 38.84253,-77.28164

TIME	10	15	20	25	30	35	40	45	50	55	60	65	70	250	Total

Statistical Information...

15th Percentile Speed
32.1 mph

85th Percentile Speed
43.6 mph

Median Speed
37.8 mph

Average Speed
38.1 mph

10 MPH Pace Speed
35 mph to 45 mph
5830 vehicles in pace
Representing 64.6% of the total vehicles

Vehicles > 25 MPH
8907
98.7%

APPENDIX C: Pedestrian Counts

1-Main St & Fairfax Sq-Stone Wall Ave-North ... - Ped & Bike Pathway
Wed May 1, 2024
Full Length (6 AM-10 PM)
All Classes (Pedestrians, Bicycles, Bicycles)
All Channels
ID: 1186527, Location: 38.843504, -77.289796

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

Leg Direction	North Southbound		South Northbound		
Time	T	**App**	T	**App**	**Int**
2024-05-01 6:00AM	1	**1**	0	**0**	**1**
6:15AM	0	**0**	0	**0**	**0**
6:30AM	0	**0**	0	**0**	**0**
6:45AM	0	**0**	0	**0**	**0**
Hourly Total	1	**1**	0	**0**	**0**
7:00AM	0	**0**	0	**0**	**0**
7:15AM	0	**0**	0	**0**	**0**
7:30AM	0	**0**	0	**0**	**0**
7:45AM	0	**0**	0	**0**	**0**
Hourly Total	0	**0**	0	**0**	**0**
8:00AM	0	**0**	0	**0**	**0**
8:15AM	0	**0**	0	**0**	**0**
8:30AM	0	**0**	0	**0**	**0**
8:45AM	0	**0**	0	**0**	**0**
Hourly Total	0	**0**	0	**0**	**0**
9:00AM	1	**1**	0	**0**	**1**
9:15AM	0	**0**	0	**0**	**0**
9:30AM	1	**1**	0	**0**	**1**
9:45AM	0	**0**	0	**0**	**0**
Hourly Total	2	**2**	0	**0**	**0**
10:00AM	0	**0**	0	**0**	**0**
10:15AM	0	**0**	0	**0**	**0**
10:30AM	0	**0**	0	**0**	**0**
10:45AM	0	**0**	0	**0**	**0**
Hourly Total	0	**0**	0	**0**	**0**
11:00AM	0	**0**	0	**0**	**0**
11:15AM	1	**1**	0	**0**	**1**
11:30AM	0	**0**	0	**0**	**0**
11:45AM	0	**0**	0	**0**	**0**
Hourly Total	1	**1**	0	**0**	**0**
12:00PM	0	**0**	0	**0**	**0**
12:15PM	0	**0**	0	**0**	**0**
12:30PM	0	**0**	0	**0**	**0**
12:45PM	0	**0**	0	**0**	**0**
Hourly Total	0	**0**	0	**0**	**0**
1:00PM	0	**0**	0	**0**	**0**
1:15PM	0	**0**	0	**0**	**0**
1:30PM	0	**0**	0	**0**	**0**
1:45PM	0	**0**	2	**2**	**2**
Hourly Total	0	**0**	2	**2**	**0**
2:00PM	0	**0**	0	**0**	**0**
2:15PM	0	**0**	0	**0**	**0**
2:30PM	0	**0**	0	**0**	**0**
2:45PM	1	**1**	0	**0**	**1**
Hourly Total	1	**1**	0	**0**	**0**
3:00PM	0	**0**	1	**1**	**1**
3:15PM	0	**0**	0	**0**	**0**
3:30PM	0	**0**	0	**0**	**0**
3:45PM	0	**0**	1	**1**	**1**
Hourly Total	0	**0**	2	**2**	**0**
4:00PM	1	**1**	0	**0**	**1**
4:15PM	1	**1**	0	**0**	**1**
4:30PM	0	**0**	0	**0**	**0**

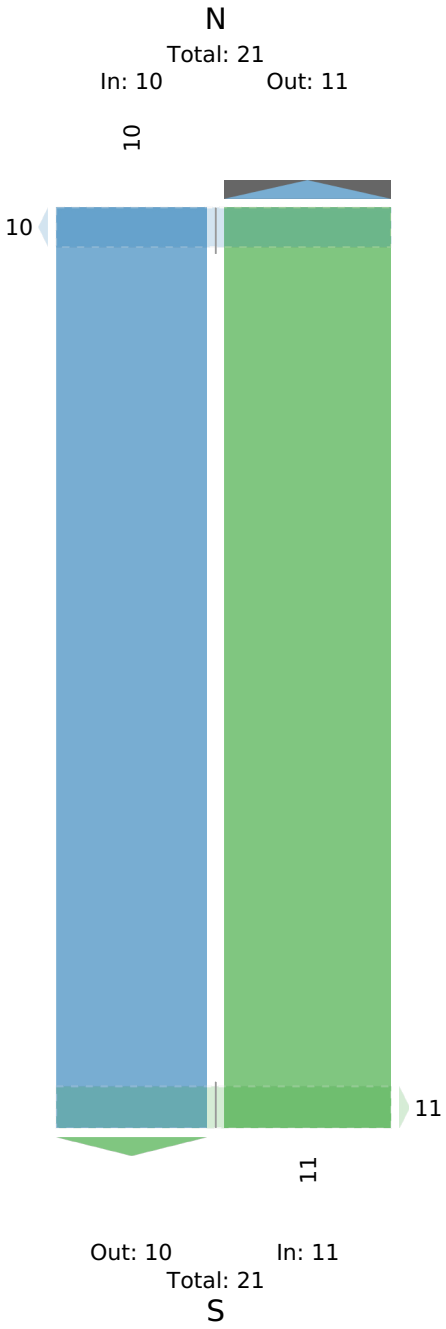
Leg Direction	North Southbound		South Northbound		
Time	T	**App**	T	**App**	**Int**
4:45PM	0	**0**	1	**1**	**1**
Hourly Total	2	**2**	1	**1**	**0**
5:00PM	2	**2**	0	**0**	**2**
5:15PM	0	**0**	0	**0**	**0**
5:30PM	0	**0**	0	**0**	**0**
5:45PM	0	**0**	0	**0**	**0**
Hourly Total	2	**2**	0	**0**	**0**
6:00PM	0	**0**	0	**0**	**0**
6:15PM	0	**0**	1	**1**	**1**
6:30PM	0	**0**	0	**0**	**0**
6:45PM	0	**0**	0	**0**	**0**
Hourly Total	0	**0**	1	**1**	**0**
7:00PM	0	**0**	0	**0**	**0**
7:15PM	0	**0**	0	**0**	**0**
7:30PM	0	**0**	0	**0**	**0**
7:45PM	0	**0**	0	**0**	**0**
Hourly Total	0	**0**	0	**0**	**0**
8:00PM	0	**0**	1	**1**	**1**
8:15PM	0	**0**	1	**1**	**1**
8:30PM	0	**0**	0	**0**	**0**
8:45PM	0	**0**	2	**2**	**2**
Hourly Total	0	**0**	4	**4**	**0**
9:00PM	1	**1**	0	**0**	**1**
9:15PM	0	**0**	1	**1**	**1**
9:30PM	0	**0**	0	**0**	**0**
9:45PM	0	**0**	0	**0**	**0**
Hourly Total	1	**1**	1	**1**	**0**
Total	10	**10**	11	**11**	**21**
% Approach	100%	**-**	100%	**-**	-
% Total	47.6%	**47.6%**	52.4%	**52.4%**	-
Bicycles	**0**	**0**	0		
% Bicycles	0%	**0%**	0%	**0%**	0%
Pedestrians	9	9	11	11	20
% Pedestrians	100%	90.0%	100%	100%	95.2%
Bicycles	1	1	0	0	1
% Bicycles	100%	10.0%	-	0%	4.8%

*T: Thru

1-Main St & Fairfax Sq-Stone Wall Ave-North ... - Ped & Bike Pathway
Wed May 1, 2024
Full Length (6 AM-10 PM)
All Classes (Pedestrians, Bicycles, Bicycles)
All Channels
ID: 1186527, Location: 38.843504, -77.289796

PMA Traffic Data Collection

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



1-Main St & Fairfax Sq-Stone Wall Ave-North ... - Ped & Bike Pathway

Wed May 1, 2024
AM Peak (9 AM - 10 AM)
All Classes (Pedestrians, Bicycles, Bicycles)
All Channels
ID: 1186527, Location: 38.843504, -77.289796

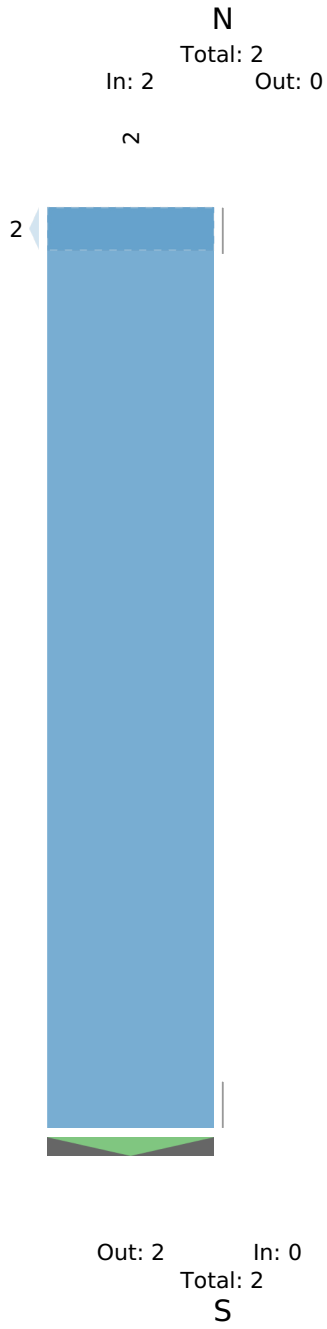
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	North Southbound		South Northbound		
Time	T	**App**	T	**App**	**Int**
2024-05-01 9:00AM	1	**1**	0	**0**	**1**
9:15AM	0	**0**	0	**0**	**0**
9:30AM	1	**1**	0	**0**	**1**
9:45AM	0	**0**	0	**0**	**0**
Total	2	**2**	0	**0**	**2**
% Approach	100%	**-**	0%	**-**	-
% Total	100%	**100%**	0%	**0%**	-
Bicycles	**0**	**0**	0		
% Bicycles	0%	**0%**	0%	**-**	0%
Pedestrians	2	2	0	0	2
% Pedestrians	100%	100%	-	0%	100.0%
Bicycles	0	0	0	0	0
% Bicycles	-	0%	-	0%	0.0%

*T: Thru

1-Main St & Fairfax Sq-Stone Wall Ave-North ... - Ped & Bike Pathway
Wed May 1, 2024
AM Peak (9 AM - 10 AM)
All Classes (Pedestrians, Bicycles, Bicycles)
All Channels
ID: 1186527, Location: 38.843504, -77.289796

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



1-Main St & Fairfax Sq-Stone Wall Ave-North ... - Ped & Bike Pathway

Wed May 1, 2024
Midday Peak (11:15 AM - 12:15 PM)
All Classes (Pedestrians, Bicycles, Bicycles)
All Channels
ID: 1186527, Location: 38.843504, -77.289796

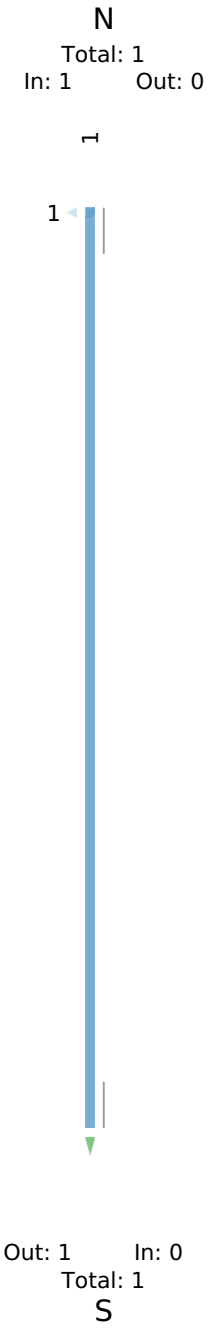
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	North Southbound		South Northbound		
Time	T	**App**	T	**App**	**Int**
2024-05-01 11:15AM	1	**1**	0	**0**	**1**
11:30AM	0	**0**	0	**0**	**0**
11:45AM	0	**0**	0	**0**	**0**
12:00PM	0	**0**	0	**0**	**0**
Total	1	**1**	0	**0**	**1**
% Approach	100%	**-**	0%	**-**	-
% Total	100%	**100%**	0%	**0%**	-
Bicycles	**0**	**0**	0		
% Bicycles	0%	**0%**	0%	**-**	0%
Pedestrians	0	0	0	0	0
% Pedestrians	-	0%	-	0%	0.0%
Bicycles	1	1	0	0	1
% Bicycles	100%	100%	-	0%	100.0%

*T: Thru

1-Main St & Fairfax Sq-Stone Wall Ave-North ... - Ped & Bike Pathway
Wed May 1, 2024
Midday Peak (11:15 AM - 12:15 PM)
All Classes (Pedestrians, Bicycles, Bicycles)
All Channels
ID: 1186527, Location: 38.843504, -77.289796

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



1-Main St & Fairfax Sq-Stone Wall Ave-North ... - Ped & Bike Pathway

Wed May 1, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Pedestrians, Bicycles, Bicycles)
All Channels
ID: 1186527, Location: 38.843504, -77.289796

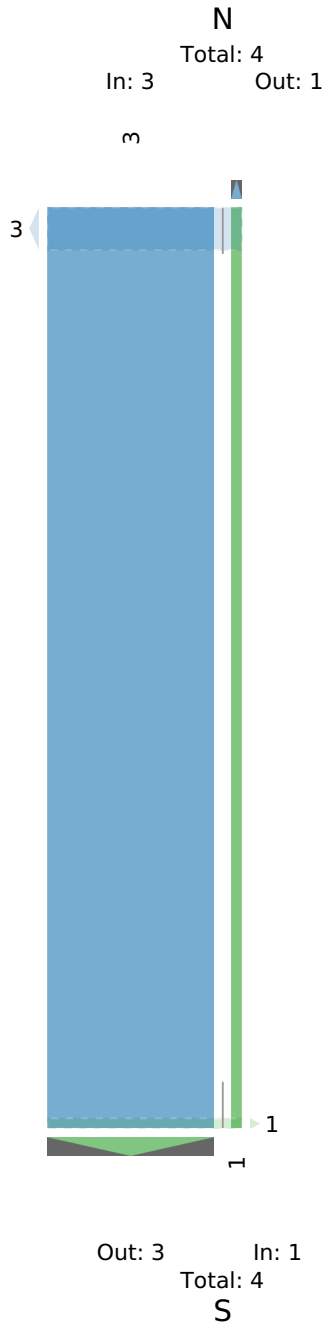
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	North Southbound		South Northbound		
Time	T	**App**	T	**App**	**Int**
2024-05-01 4:15PM	1	**1**	0	**0**	**1**
4:30PM	0	**0**	0	**0**	**0**
4:45PM	0	**0**	1	**1**	**1**
5:00PM	2	**2**	0	**0**	**2**
Total	3	**3**	1	**1**	**4**
% Approach	100%	**-**	100%	**-**	-
% Total	75.0%	**75.0%**	25.0%	**25.0%**	-
Bicycles	**0**	**0**	0		
% Bicycles	0%	**0%**	0%	**0%**	0%
Pedestrians	3	3	1	1	4
% Pedestrians	100%	100%	100%	100%	100.0%
Bicycles	0	0	0	0	0
% Bicycles	-	0%	-	0%	0.0%

*T: Thru

1-Main St & Fairfax Sq-Stone Wall Ave-North ... - Ped & Bike Pathway
Wed May 1, 2024
PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour
All Classes (Pedestrians, Bicycles, Bicycles)
All Channels
ID: 1186527, Location: 38.843504, -77.289796

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



Pathway

Wed May 1, 2024
Full Length (6 AM-10 PM)
All Classes (Pedestrians, Bicycles, Bicycles)
All Channels
ID: 1186526, Location: 38.843504, -77.289796

PMA Traffic Data Collection

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

Leg Direction	North Southbound		South Northbound		
Time	T	**App**	T	**App**	**Int**
2024-05-01 6:00AM	1	**1**	0	**0**	**1**
6:15AM	0	**0**	0	**0**	**0**
6:30AM	0	**0**	0	**0**	**0**
6:45AM	0	**0**	0	**0**	**0**
Hourly Total	1	**1**	0	**0**	**0**
7:00AM	0	**0**	0	**0**	**0**
7:15AM	0	**0**	0	**0**	**0**
7:30AM	0	**0**	0	**0**	**0**
7:45AM	0	**0**	0	**0**	**0**
Hourly Total	0	**0**	0	**0**	**0**
8:00AM	0	**0**	0	**0**	**0**
8:15AM	0	**0**	0	**0**	**0**
8:30AM	0	**0**	0	**0**	**0**
8:45AM	0	**0**	0	**0**	**0**
Hourly Total	0	**0**	0	**0**	**0**
9:00AM	0	**0**	0	**0**	**0**
9:15AM	1	**1**	0	**0**	**1**
9:30AM	1	**1**	0	**0**	**1**
9:45AM	0	**0**	0	**0**	**0**
Hourly Total	2	**2**	0	**0**	**0**
10:00AM	0	**0**	0	**0**	**0**
10:15AM	0	**0**	0	**0**	**0**
10:30AM	0	**0**	0	**0**	**0**
10:45AM	0	**0**	0	**0**	**0**
Hourly Total	0	**0**	0	**0**	**0**
11:00AM	1	**1**	0	**0**	**1**
11:15AM	1	**1**	0	**0**	**1**
11:30AM	0	**0**	0	**0**	**0**
11:45AM	0	**0**	0	**0**	**0**
Hourly Total	2	**2**	0	**0**	**0**
12:00PM	0	**0**	0	**0**	**0**
12:15PM	0	**0**	0	**0**	**0**
12:30PM	0	**0**	0	**0**	**0**
12:45PM	0	**0**	0	**0**	**0**
Hourly Total	0	**0**	0	**0**	**0**
1:00PM	0	**0**	1	**1**	**1**
1:15PM	0	**0**	0	**0**	**0**
1:30PM	0	**0**	0	**0**	**0**
1:45PM	0	**0**	2	**2**	**2**
Hourly Total	0	**0**	3	**3**	**0**
2:00PM	0	**0**	0	**0**	**0**
2:15PM	0	**0**	0	**0**	**0**
2:30PM	0	**0**	0	**0**	**0**
2:45PM	0	**0**	0	**0**	**0**
Hourly Total	0	**0**	0	**0**	**0**
3:00PM	0	**0**	1	**1**	**1**
3:15PM	0	**0**	0	**0**	**0**
3:30PM	0	**0**	1	**1**	**1**
3:45PM	0	**0**	0	**0**	**0**
Hourly Total	0	**0**	2	**2**	**0**
4:00PM	0	**0**	0	**0**	**0**
4:15PM	0	**0**	0	**0**	**0**

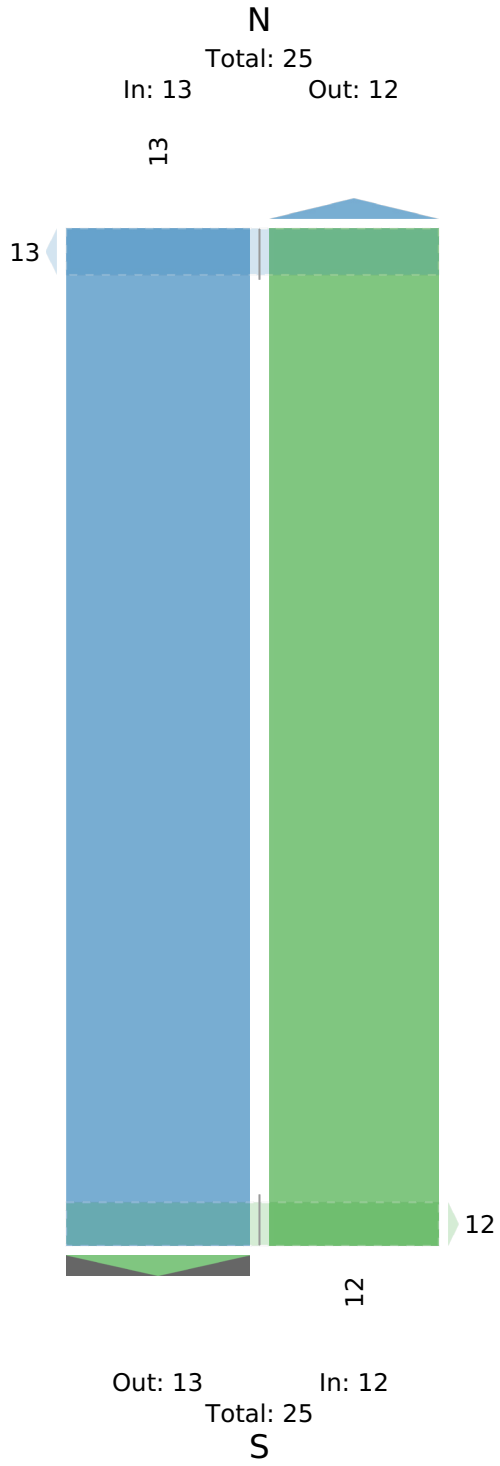
Direction	Southbound		Northbound		
Time	T	**App**	T	**App**	**Int**
4:45PM	0	**0**	0	**0**	**0**
Hourly Total	2	**2**	0	**0**	**0**
5:00PM	2	**2**	1	**1**	**3**
5:15PM	0	**0**	0	**0**	**0**
5:30PM	1	**1**	0	**0**	**1**
5:45PM	0	**0**	1	**1**	**1**
Hourly Total	3	**3**	2	**2**	**0**
6:00PM	0	**0**	0	**0**	**0**
6:15PM	0	**0**	1	**1**	**1**
6:30PM	0	**0**	0	**0**	**0**
6:45PM	2	**2**	0	**0**	**2**
Hourly Total	2	**2**	1	**1**	**0**
7:00PM	0	**0**	0	**0**	**0**
7:15PM	0	**0**	0	**0**	**0**
7:30PM	0	**0**	0	**0**	**0**
7:45PM	0	**0**	0	**0**	**0**
Hourly Total	0	**0**	0	**0**	**0**
8:00PM	0	**0**	1	**1**	**1**
8:15PM	0	**0**	0	**0**	**0**
8:30PM	0	**0**	1	**1**	**1**
8:45PM	0	**0**	0	**0**	**0**
Hourly Total	0	**0**	2	**2**	**0**
9:00PM	1	**1**	0	**0**	**1**
9:15PM	0	**0**	2	**2**	**2**
9:30PM	0	**0**	0	**0**	**0**
9:45PM	0	**0**	0	**0**	**0**
Hourly Total	1	**1**	2	**2**	**0**
Total	13	**13**	12	**12**	**25**
% Approach	100%	**-**	100%	**-**	-
% Total	52.0%	**52.0%**	48.0%	**48.0%**	-
Bicycles	**0**	**0**	0		
% Bicycles	0%	**0%**	0%	**0%**	0%
Pedestrians	11	11	12	12	23
% Pedestrians	100%	84.6%	100%	100%	92.0%
Bicycles	2	2	0	0	2
% Bicycles	100%	15.4%	-	0%	8.0%

*T: Thru

Pathway
Wed May 1, 2024
Full Length (6 AM-10 PM)
All Classes (Pedestrians, Bicycles, Bicycles)
All Channels
ID: 1186526, Location: 38.843504, -77.289796

Traffic Data Collection

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



Main St & Fairfax Sq Stone Wall Ave South ... Ped & Bike Pathway

Wed May 1, 2024
AM Peak (9:15 AM - 10:15 AM)
All Classes (Pedestrians, Bicycles, Bicycles)
All Channels
ID: 1186526, Location: 38.843504, -77.289796

PMA Traffic Data Collection

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

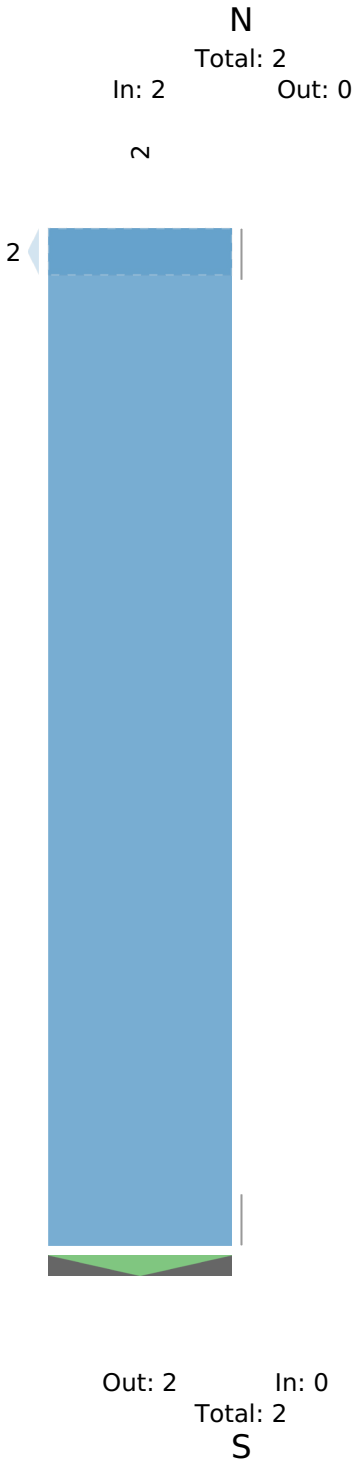
Leg Direction	North Southbound		South Northbound		
Time	T	**App**	T	**App**	**Int**
2024-05-01 9:15AM	1	**1**	0	**0**	**1**
9:30AM	1	**1**	0	**0**	**1**
9:45AM	0	**0**	0	**0**	**0**
10:00AM	0	**0**	0	**0**	**0**
Total	2	**2**	0	**0**	**2**
% Approach	100%	**-**	0%	**-**	-
% Total	100%	**100%**	0%	**0%**	-
Bicycles	**0**	**0**	0		
% Bicycles	0%	**0%**	0%	**-**	0%
Pedestrians	2	2	0	0	2
% Pedestrians	100%	100%	-	0%	100.0%
Bicycles	0	0	0	0	0
% Bicycles	-	0%	-	0%	0.0%

*T: Thru

Pathway
Wed May 1, 2024
AM Peak (9:15 AM - 10:15 AM)
All Classes (Pedestrians, Bicycles, Bicycles)
All Channels
ID: 1186526, Location: 38.843504, -77.289796

PMA Traffic Data Collection

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



Main St & Fairfax Sq Stone Wall Ave South ... Ped & Bike Pathway

Wed May 1, 2024
Midday Peak (1 PM - 2 PM)
All Classes (Pedestrians, Bicycles, Bicycles)
All Channels
ID: 1186526, Location: 38.843504, -77.289796

PMA Traffic Data Collection

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

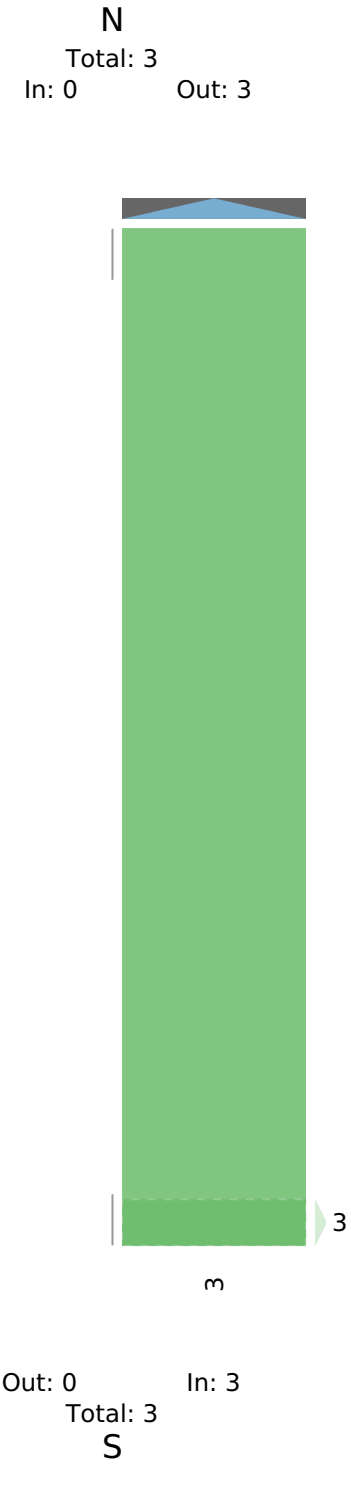
Leg Direction	North Southbound		South Northbound		
Time	T	**App**	T	**App**	**Int**
2024-05-01 1:00PM	0	**0**	1	**1**	**1**
1:15PM	0	**0**	0	**0**	**0**
1:30PM	0	**0**	0	**0**	**0**
1:45PM	0	**0**	2	**2**	**2**
Total	0	**0**	3	**3**	**3**
% Approach	0%	**-**	100%	**-**	-
% Total	0%	**0%**	100%	**100%**	-
Bicycles	**0**	**0**	0		
% Bicycles	0%	**-**	0%	**0%**	0%
Pedestrians	0	0	3	3	3
% Pedestrians	-	0%	100%	100%	100.0%
Bicycles	0	0	0	0	0
% Bicycles	-	0%	-	0%	0.0%

*T: Thru

Main St & Fairfax Sq Stone Wall Ave South ... Ped & Bike Pathway
Wed May 1, 2024
Midday Peak (1 PM - 2 PM)
All Classes (Pedestrians, Bicycles, Bicycles)
All Channels
ID: 1186526, Location: 38.843504, -77.289796

PMA Traffic Data Collection

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



Main St & Fairfax Sq Stone Wall Ave South ... Ped & Bike Pathway

Wed May 1, 2024
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Pedestrians, Bicycles, Bicycles)
All Channels
ID: 1186526, Location: 38.843504, -77.289796

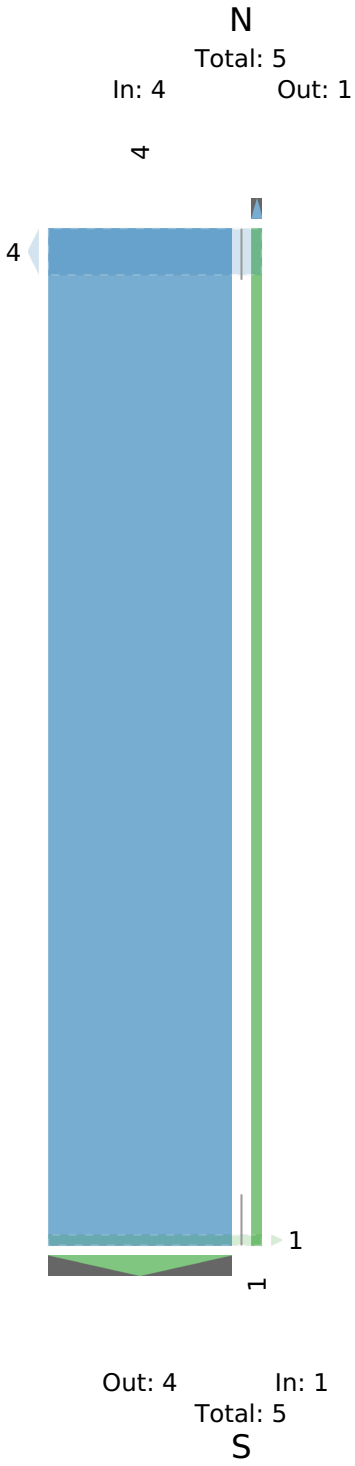
Provided by: Peggy Malone & Associates
14286 Beach Blvd, 19-345,
Jacksonville Beach, FL, 32250, US

Leg Direction	North Southbound		South Northbound		
Time	T	**App**	T	**App**	**Int**
2024-05-01 4:30PM	2	**2**	0	**0**	**2**
4:45PM	0	**0**	0	**0**	**0**
5:00PM	2	**2**	1	**1**	**3**
5:15PM	0	**0**	0	**0**	**0**
Total	4	**4**	1	**1**	**5**
% Approach	100%	**-**	100%	**-**	-
% Total	80.0%	**80.0%**	20.0%	**20.0%**	-
Bicycles	**0**	**0**	0		
% Bicycles	0%	**0%**	0%	**0%**	0%
Pedestrians	4	4	1	1	5
% Pedestrians	100%	100%	100%	100%	100.0%
Bicycles	0	0	0	0	0
% Bicycles	-	0%	-	0%	0.0%

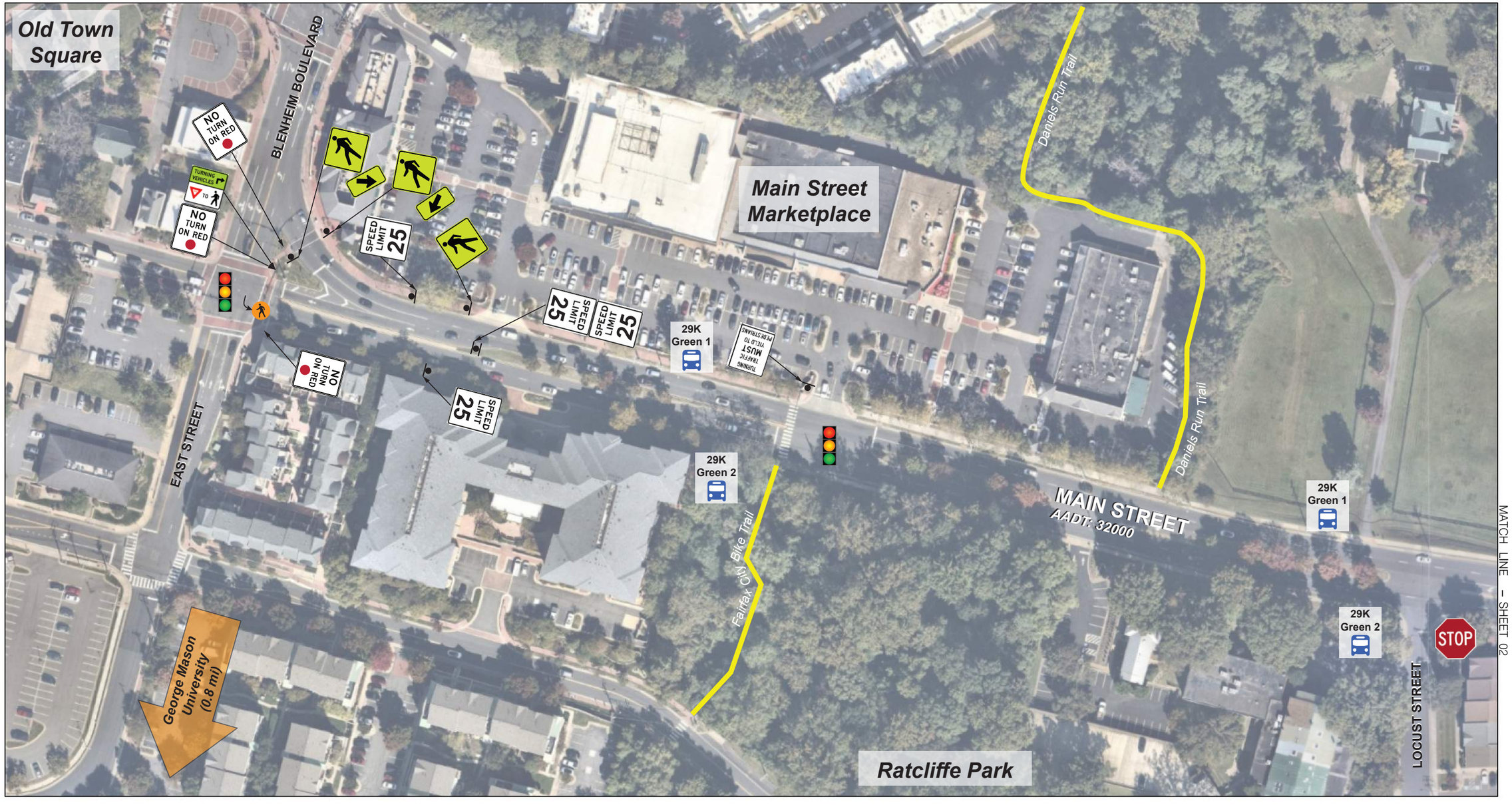
*T: Thru

Pathway
Wed May 1, 2024
PM Peak (4:30 PM - 5:30 PM) - Overall Peak Hour
All Classes (Pedestrians, Bicycles, Bicycles)
All Channels
ID: 1186526, Location: 38.843504, -77.289796

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



APPENDIX D: Existing Conditions Map



50' 0 50' 100'
SCALE: 1" = 100'

N

Legend

- Proposed Neighborway
- Proposed Separated Bike Lanes
- Existing Trail
- Sign Location
- Signalized Intersection
- Stop-Controlled Approach
- Bus Stop (with corresponding routes)
- Fatal Pedestrian Crash
- Incapacitating Injury Pedestrian Crash
- Non-Incapacitating Injury Pedestrian Crash
- Possible Injury Pedestrian Crash
- Non-Incapacitating Injury Bicyclist Crash

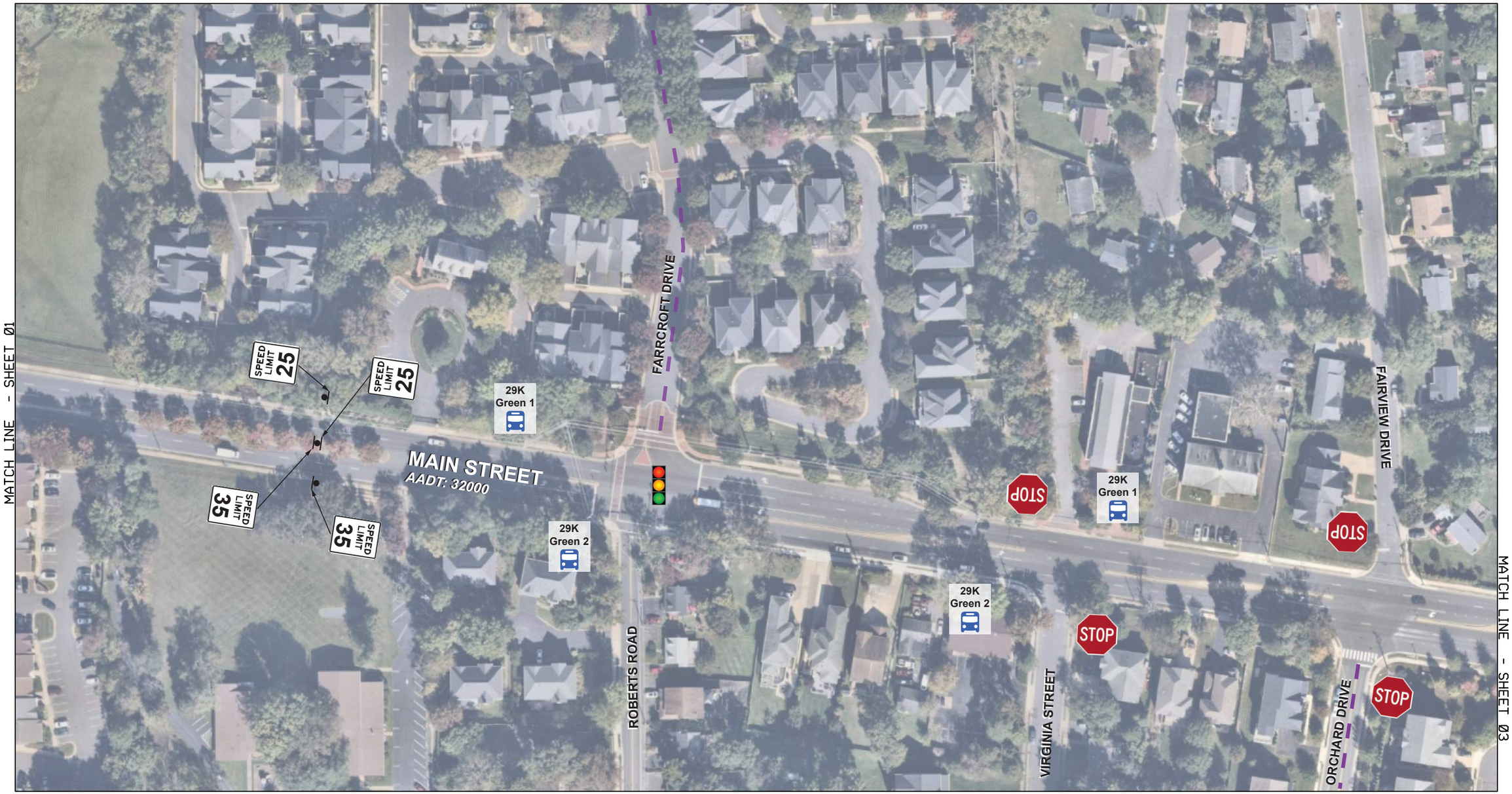
Main Street Road Safety Audit

Existing Conditions Map

East Street/Blenheim Boulevard to Locust Street

Sheet 1 of 6

Metropolitan Washington Council of Governments



Main Street Road Safety Audit

Existing Conditions Map

Roberts Road to Orchard Drive/Fairview Drive

Sheet 2 of 6

Metropolitan Washington Council of Governments

50' 0 50' 100'
SCALE: 1" = 100'

N

Legend

- Proposed Neighborway
- Proposed Separated Bike Lanes
- Existing Trail
- Sign Location
- Signalized Intersection
- Stop-Controlled Approach
- Bus Stop (with corresponding routes)
- Fatal Pedestrian Crash
- Incapacitating Injury Pedestrian Crash
- Non-Incapacitating Injury Pedestrian Crash
- Possible Injury Pedestrian Crash
- Non-Incapacitating Injury Bicyclist Crash

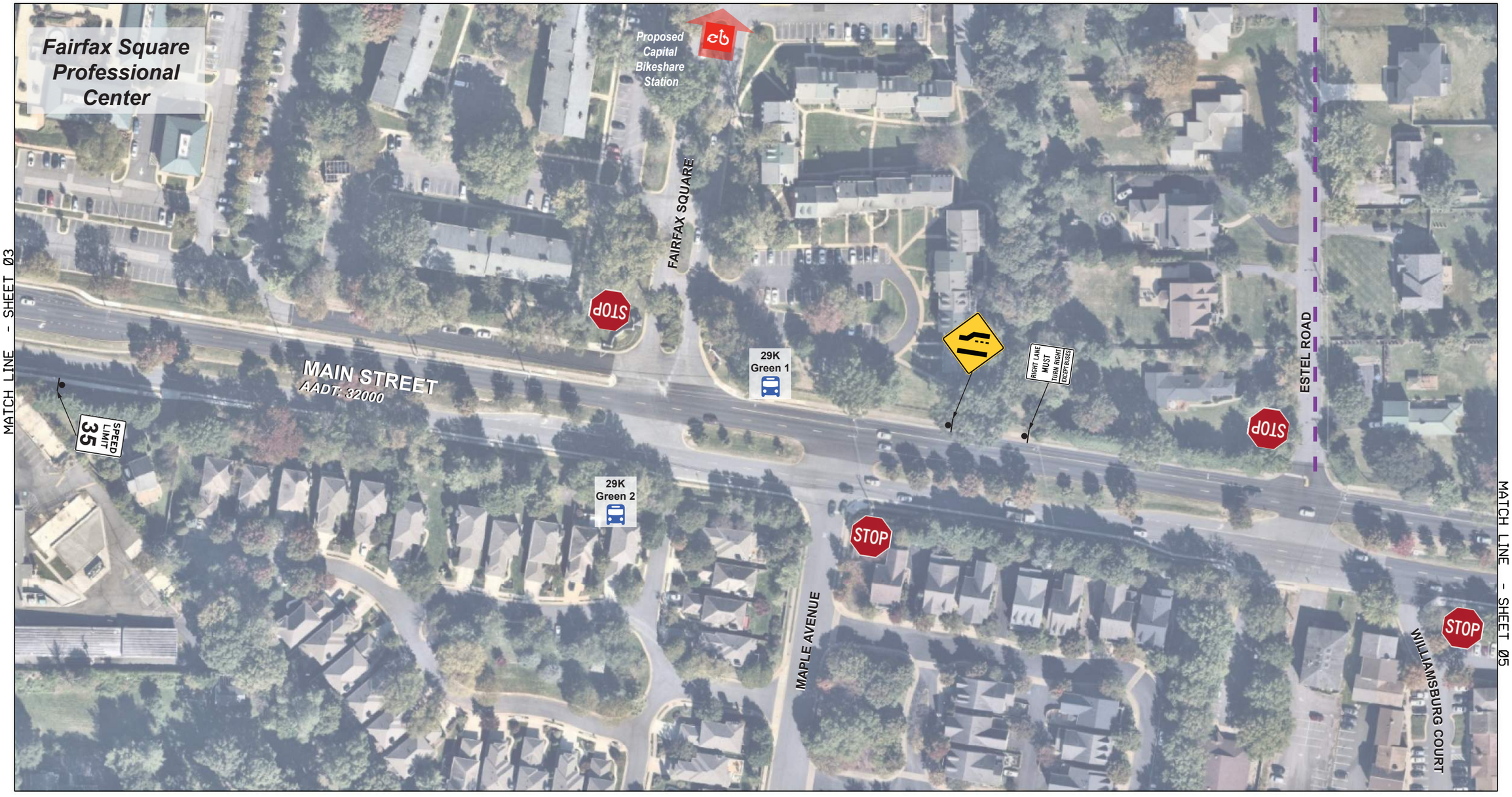
Main Street Road Safety Audit

Existing Conditions Map

Tedrich Boulevard to Burke Station Road

Sheet 3 of 6

Metropolitan Washington Council of Governments



50' 0 50' 100'
SCALE: 1" = 100'

N

Legend

- Proposed Neighborway
- Proposed Separated Bike Lanes
- Existing Trail
- Sign Location
- Signalized Intersection
- Stop-Controlled Approach
- Bus Stop (with corresponding routes)
- Fatal Pedestrian Crash
- Incapacitating Injury Pedestrian Crash
- Non-Incapacitating Injury Pedestrian Crash
- Possible Injury Pedestrian Crash
- Non-Incapacitating Injury Bicyclist Crash

Main Street Road Safety Audit

Existing Conditions Map

Fairfax Square to Estel Road

Sheet 4 of 6

Metropolitan Washington Council of Governments

CITY OF FAIRFAX VIRGINIA 1805

50' 0 50' 100'
SCALE: 1" = 100'

N

Legend

- Proposed Neighborway
- Proposed Separated Bike Lanes
- Existing Trail
- Sign Location
- Signalized Intersection
- Stop-Controlled Approach
- Bus Stop (with corresponding routes)
- Fatal Pedestrian Crash
- Incapacitating Injury Pedestrian Crash
- Non-Incapacitating Injury Pedestrian Crash
- Possible Injury Pedestrian Crash
- Non-Incapacitating Injury Bicyclist Crash

Main Street Road Safety Audit

Existing Conditions Map

Lyndhurst Drive/Trapp Road to Whitacre Road

Sheet 5 of 6

Metropolitan Washington Council of Governments

50' 0 50' 100'
SCALE: 1" = 100'

N

Legend

- Proposed Neighborway
- Proposed Separated Bike Lanes
- Existing Trail
- Sign Location
- Signalized Intersection
- Stop-Controlled Approach
- Bus Stop (with corresponding routes)
- Fatal Pedestrian Crash
- Incapacitating Injury Pedestrian Crash
- Non-Incapacitating Injury Pedestrian Crash
- Possible Injury Pedestrian Crash
- Non-Incapacitating Injury Bicyclist Crash

Main Street Road Safety Audit

Existing Conditions Map

Mathy Drive to Pickett Road

Sheet 6 of 6

Metropolitan Washington Council of Governments

CITY OF FAIRFAX VIRGINIA FAIRE FAC 1805


CITY OF FAIRFAX
FAIRE FAC
1805
VIRGINIA