



February 12, 2021

# Route 711 Safety Study

Powhatan County, VA

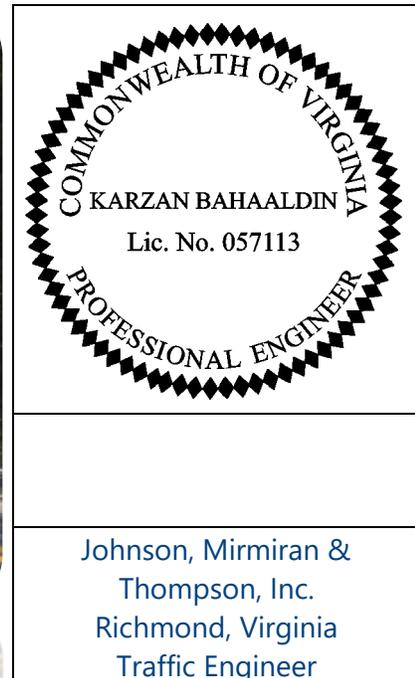
*Final Report*



JMT Project Number: 17-0127-180  
VDOT Project Number HRRR-964-570  
UPC No. 113237; VDOT Contract No. 45921

*Submitted to:*

Virginia Department of Transportation, Richmond District Traffic Engineering





## Table of Contents

<b>EXECUTIVE SUMMARY</b> .....	<b>V</b>
<b>1. INTRODUCTION</b> .....	<b>1</b>
<b>2. TRAFFIC DATA COLLECTION</b> .....	<b>2</b>
<b>3. CRASH ANALYSIS</b> .....	<b>3</b>
3.1 Crash Severity and Collision Types .....	4
3.2 Environmental Factors .....	8
3.3 Intersection and Segment Crashes .....	8
3.4 Corridor Crashes by Mile Point .....	11
3.5 Crash Rates .....	14
3.6 Conclusions .....	15
<b>4. REVIEW OF ROADWAY ELEMENTS &amp; COST ESTIMATES</b> .....	<b>16</b>
4.1 Segment 1: MP 0.46-0.52 .....	21
4.2 Segment 2: MP 4.96-4.98 (Lees Landing Rd. Intersection).....	21
4.3 Segment 3: MP 6.13-6.18 (Three Bridge Rd. Intersection) .....	23
4.4 Segment 4: MP 7.91-8.12 (Judes Ferry Rd. Intersection) .....	25
4.5 Segment 5: MP 9.37-9.57 and Segment 6: MP 9.75-9.78 .....	26
4.6 Segment 7: MP 10.04-10.22 .....	27
4.7 Segment 8: MP 10.92-11.11 and Segment 9: MP 11.22-11.32.....	28
4.8 Segment 10: MP 11.57-11.67 (Manakin Town Rd. Intersection).....	29
4.9 Rumble Stripe Installation at recommended segments .....	31
4.10 Additional Safety Recommendations .....	32
<b>5. PAVEMENT MARKING CONDITIONS</b> .....	<b>41</b>
<b>6. REGULATORY AND WARNING SIGNS</b> .....	<b>41</b>
<b>7. CLEAR ZONE IMPROVEMENTS AND ROADSIDE HAZARDS</b> .....	<b>42</b>
<b>8. EMERGENCY VEHICLE SAFETY STOP LOCATIONS</b> .....	<b>44</b>
<b>9. LONG-TERM IMPROVEMENT PROJECTS</b> .....	<b>45</b>
<b>10. SUMMARY</b> .....	<b>46</b>



## List of Figures

Figure 1: Study Area Map .....	2
Figure 2: Crash Severity by Year .....	5
Figure 3: Collision Type by Year .....	6
Figure 4: Collision Type for Non-Intersection Crashes .....	9
Figure 5: Collision Types of Intersection Crashes.....	10
Figure 6: Collision Type by Mile Point.....	11
Figure 7: MP 6.0 Hotspot Collision Types .....	13
Figure 8: Crash Severity by Mile Point.....	13
Figure 9: Previous and Current Roadway Conditions (MP 6.0–12.3) .....	17
Figure 10: Current Roadway Conditions on Western Part of the Corridor (MP 0.0-6.0).....	18
Figure 11: Huguenot Springs Rd. Intersection Improvement Project .....	18
Figure 12: Crash Hotspot Segments .....	20
Figure 13: Intersection Site Distance – SB on Lees Landing Rd. at Rte. 711 .....	22
Figure 14: Proposed Improvements for Segment 2.....	22
Figure 15: Proposed Improvements for Segment 3.....	24
Figure 16: Proposed Improvements for Segment 4.....	25
Figure 17: WB Existing Warning Signs at Segment 4 .....	26
Figure 18: Proposed Improvements for Segments 5 and 6 .....	27
Figure 19: Proposed Improvements for Segment 7 .....	28
Figure 20: Proposed Improvements for Segments 8 and 9 .....	29
Figure 21: View from Manakin Town Ferry Rd. Blocked by Vegetation .....	30
Figure 22: Proposed Improvements for Segment 10 .....	30
Figure 23: Recommended Rumble Stripe Segments.....	32
Figure 24: Existing Pavement Conditions at MP 1.3 .....	33
Figure 25: Recommended Improvements at MP1.3 .....	33
Figure 26: Site Distance Approaching Manor Oaks Dr./Aston Tr. Intersection, looking west.....	34
Figure 27: Proposed Improvements - MP 1.25 to 1.5 .....	35
Figure 28: Existing Pavement Conditions at MP 1.55.....	35
Figure 29: Recommended Pavement Repair, MP 1.55.....	36
Figure 30: Recommended Improvements at MP 3.25 to 3.5.....	37
Figure 31: EB Street View of Curve at MP 6.3.....	38
Figure 32: Recommendations for Improving Sight Distance at MP 6.3 .....	38
Figure 33: Westbound Sight Distance at St. Marys Way Intersection.....	39
Figure 34: Recommendations for Improving Sight Distance at St. Marys Way Intersection.....	39
Figure 35: Recommended Non-Hotspot Segments for Rumble Stripe Installation .....	40
Figure 36: Warning Signs Approaching Fire Station WB (Left) and EB (Right) .....	42
Figure 37: Existing Potential Emergency Vehicle Safety Stop Area.....	44



## List of Tables

Table 1: Total Proposed Improvement Costs .....	vi
Table 2: AADT for Study Corridor (vpd).....	1
Table 3: Speed Study Comparison.....	3
Table 4: Crash Severity by Collision Type and Secondary Factors.....	7
Table 5: Crash Distributions by Environmental Factors .....	8
Table 6: Collision Type by Intersections and Segments .....	9
Table 7: All Non-Intersection and Fixed Object - Off Road Only Crashes by Human Factors.....	10
Table 8: Intersection Crashes by Human Factors .....	11
Table 9: Hotspot Segments by Mile Points .....	12
Table 10: Statewide Average and Study Corridor Crash Rate Comparison .....	15
Table 11: Proposed Improvement Costs for Segment 1 .....	21
Table 12: Proposed Improvement Costs for Segment 2 .....	23
Table 13: Proposed Improvement Costs for Segment 3 .....	24
Table 14: Proposed Improvement Costs Segment 4 .....	26
Table 15: Recommended Improvement Costs for Segments 5 and 6 .....	27
Table 16: Proposed Improvement Costs for Segment 7 .....	28
Table 17: Proposed Improvement Costs for Segments 8 and 9.....	29
Table 18: Proposed Improvement Costs Segment 10.....	31
Table 19: Installation of Rumble Stripe at all Recommended Segments.....	31
Table 20: Improvement Costs at Non-Hotspot Segments .....	41
Table 21: Existing and Proposed RHR Scores by Segment .....	43
Table 22: Potential Safety Stop Locations.....	45
Table 23: Long-Term Project Cost .....	45
Table 24: Total Costs of All Recommended Improvements.....	47



## Executive Summary

JMT conducted a safety study on a section of Huguenot Trail (Rte. 711) located in Powhatan County, VA. The study corridor is 12.3 miles long and located between Maidens Rd. (US 522) on the west side and Huguenot Springs Rd. (Rte. 607) on the east side. Detailed discussions about the subtasks included in this report are presented in separate sections with the supporting documents and information. The task included the following activities:

1. Traffic speed data collection
2. Field investigations
3. Crash analysis
4. Review of roadway elements
5. Determination of up to three tiers of mitigations
6. Cost estimates for proposed mitigations

Five-year crash data was collected and analyzed for the entire roadway and crash patterns and hotspots (higher-crash segments and intersections) were identified. Field investigations were conducted with the emphasis on the identified crash hotspots. Based on the safety analysis and field observations, up to three tiers (low-, medium-, and high-cost) of applicable mitigations were proposed for each hotspot and cost estimates were prepared for each tier. When applicable, additional improvements for other areas that were not identified as hotspots were also proposed, to further improve the safety along the corridor. The summary costs of proposed improvements are shown in Table 1.



Table 1: Total Proposed Improvement Costs

Hotspot Segment	MP	Length (mile)	Number of Crashes	Proposed Mitigation Cost Level				Notes
				Low	Medium	High	Total	
1	0.46-0.52	0.06	4	\$2,743	-	\$118,493	\$121,236	-
2	4.96-4.98	0.02	5	\$6,935	-	-	\$6,935	Lees Hill Landing intersection area
3	6.13-6.18	0.05	9	\$6,108	-	\$561,250	\$567,358	Three Bridge Rd. intersection area
4	7.91-8.12	0.21	8	\$4,993	-	\$561,250	\$566,243	Judes Ferry Rd. intersection area
5 and 6	9.37-9.57 9.75-9.78	0.23	9	\$6,729	-	-	\$6,729	Combined due to proximity, similarity
7	10.04-10.22	0.18	5	\$4,993	-	-	\$4,993	-
8 and 9	10.92-11.11 11.22-11.32	0.29	12	\$5,088	-	-	\$5,088	Combined due to proximity, similarity
10	11.57-11.67	0.1	6	\$13,376	-	-	\$13,376	Manakin Town Rd. Intersection
Non-Hotspot Segments	Various	-	29	\$43,131	-	\$2,615,970	\$2,659,102	Improvements at eight sections
Subtotal			87	\$94,096	-	\$3,856,963	\$3,951,059	
Preliminary Engineering (20%)				\$9,410	-	\$385,696	\$395,106	
Construction Engineering and Support (20%)				\$18,819	-	\$771,393	\$790,212	
Contingency (10%)				\$18,819	-	\$771,393	\$790,212	
<b>Total</b>				<b>\$141,143</b>	<b>-</b>	<b>\$5,785,445</b>	<b>\$5,926,588</b>	



## 1. Introduction

As per the request from VDOT, JMT conducted a safety study on a 12.3 mile long section of Huguenot Trail (Rte. 711) located in Powhatan County, VA. between Maidens Rd. (US 522) on the west side and Huguenot Springs Rd. (Rte. 607) on the east side. Rte. 711 is a two-lane undivided roadway with a posted speed of 55 MPH from the start of the corridor at US 522, to nearly 0.75 miles from the end of the segment. The eastern 0.75 miles of the segment has a posted speed of 45 MPH. There are 11 sections of the roadway with lower advisory speeds listed, at either 30 MPH, 40 MPH, 45 MPH or 50 MPH.

The study corridor is classified as a minor arterial. Traffic volumes increase from west to east, as shown in Table 2. Traffic volume AADT growth along the corridor has averaged 2% annually over the past five years. The adjacent land use is primarily rural, consisting of farmland and single family residential units. Many residences have direct driveway access to the roadway throughout the corridor in addition to numerous side street intersections. There are two gas station/convenience stores along the corridor, one at Mile Point (MP) 0.0 and one at approximately MP 6.5. There are limited number of other small businesses, primarily near the Judes Ferry Rd. intersection. There are several small churches along the roadway. There is one fire station adjacent to the roadway, just west of the Judes Ferry Rd. intersection.

*Table 2: AADT for Study Corridor (vpd)*

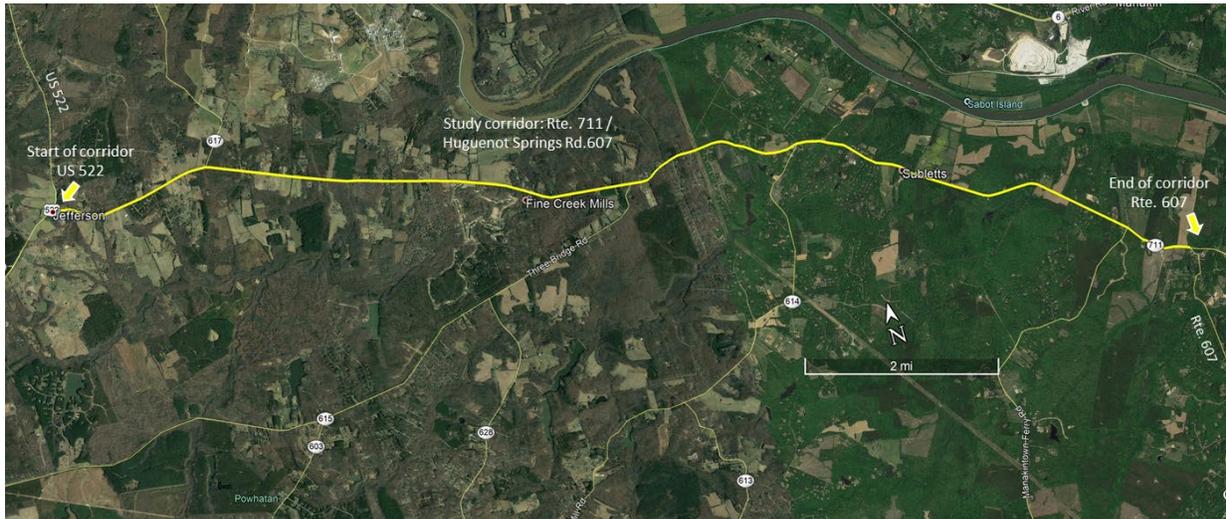
Year	US 522 to Rte. 617 MP 0.00 - 1.70	Rte. 617 to Three Bridge Rd. MP 1.70 - 6.14	Three Bridge Rd. to Manakin Town Ferry Rd. MP 6.14 - 11.66	Manakin Town Ferry Rd. to Rte. 288 MP 11.66 - 12.67	Average	% Growth
2015	1,900	2,300	6,800	7,700	4,675	
2016	2,000	2,500	7,300	8,300	5,025	7%
2017	2,100	2,400	7,100	8,100	4,925	-2%
2018	2,100	2,400	7,200	8,200	4,975	1%
2019	2,100	2,400	7,400	8,400	5,075	2%
Average						2%

Source: VDOT Annual AADT Jurisdiction Publications

The roadway pavement throughout the eastern 6.3 miles of the corridor has been recently repaved and shoulders widened. Currently, this section has approximately 9 ft. wide travel lanes with plastic inlaid markers added to the centerline, and 6" to 18" wide paved shoulders. The western section has between 9 ft. and 9.5 ft. wide travel lanes and between 0" and 6" wide shoulders. Historic aerial photography shows the eastern end to have roadway conditions similar



to the current western end conditions prior to the recent repaving and shoulder widening. Additionally, per field observations and the VDOT website, a project has recently begun to realign the roadway with Huguenot Springs and Woolridge Rd. intersection configurations at the eastern end of the segment. The study area map is shown in Figure 1.



*Figure 1: Study Area Map*

In this study, a comprehensive analysis of crash data has been conducted for a five-year period (January 1, 2015 to December 31, 2019). The crash data from VDOT's PowerBI crash analysis tool and the FR 300 crash forms for the same period were provided by VDOT. Using the five-year crash data, the crash patterns and the hotspots along the study corridor were identified for detailed inspections during the field investigations.

A field investigation was conducted to evaluate the existing pavement markings and signings, roadside safety hazards, sight distance measurements (horizontal, vertical, and intersection), pavement surface conditions, and any other roadway elements that may pose potential safety concerns. Digital photographs and videos were captured for the entire roadway in both directions and items of interest.

The collected field data and the crash history were reviewed carefully to identify the deficiency in roadway elements. Based on the findings of this review, three tiers (low-, medium-, and high-cost) of recommendations have been proposed to mitigate the identified safety concerns.

## 2. Traffic Data Collection

JMT utilized the services of Peggy Malone & Associates, Inc., to collect vehicle count and speed data at six sites identified from a previous speed study provided by VDOT. Vehicle counts and speed data was collected for a period of 24-hours, on Wednesday, September 23, 2020 for five



sites and the data for the sixth site was collected on Thursday, October 1, 2020 due to the counter malfunction on September 23, 2020. A comparison of the two speed datasets (from the speed study provided by VDOT and speed data collected for these six sites under this task) is shown in Table 3 and the raw data collected is shown in Appendix A.

*Table 3: Speed Study Comparison*

Site Location	Direction	VDOT Dec. 2016 speed study				JMT Sept. 2020 speed data				Comparison 2020/2016		
		85 <sup>th</sup> ile (MPH)	Mean (MPH)	Pace (MPH)	# Vehicles	85 <sup>th</sup> ile (MPH)	Mean (MPH)	Pace (MPH)	# Vehicles	85 <sup>th</sup> ile (MPH)	Mean (MPH)	# Vehicles
1.12 Miles east of Route 522	EB	57	52	47-56	898	63.0	55.6	50-60	1062	111%	107%	118%
	WB	63	57	54-63	800	60.5	53.8	50-60	1101	96%	94%	138%
2.59 Miles east of Route 522	EB	58	52	49-58	1056	63.1	56.4	50-60	1165	109%	108%	110%
	WB	59	54	50-59	967	63.4	57.4	55-65	1122	107%	106%	116%
4.45 Miles east of Route 522	EB	57	51	48-57	1690	59.8	53.2	50-60	1798	105%	104%	106%
	WB	54	49	45-54	1537	58.6	51.6	50-60	1749	109%	105%	114%
6.05 Miles east of Route 522	EB	58	52	50-59	1605	62.4	55.1	50-60	1641	108%	106%	102%
	WB	55	49	46-55	1443	59.5	53.6	50-60	1604	108%	109%	111%
8.33 Miles east of Route 522	EB	57	51	49-56	3597	60.0	54.6	50-60	3471	105%	107%	96%
	WB	56	50	48-57	3190	59.9	54.5	50-60	3329	107%	109%	104%
10.01 Miles east of Route 522	EB	57	52	49-58	3790	60.7	55.8	50-60	3744	106%	107%	99%
	WB	59	54	51-60	3366	63.7	58.2	55-65	3416	108%	108%	101%
<b>Average</b>	-	<b>57.5</b>	<b>51.9</b>	-	<b>1,995</b>	<b>61.2</b>	<b>55.0</b>	-	<b>2,100</b>	<b>106%</b>	<b>106%</b>	<b>105%</b>

As shown in Table 3, the speed data collected as part of this task is higher (mean and 85<sup>th</sup> percentile speeds are 6% higher, which is 3.1 MPH and 3.7 MPH higher, respectively) compared to the speed data from VDOT provided speed study, which was collected on December 20, 2016. The comparison table was shared with VDOT on Oct 6, 2020, and VDOT directed JMT to use the 85<sup>th</sup> percentile speeds, collected for this task, for all roadway element evaluations.

### 3. Crash Analysis

A crash analysis was conducted for the study corridor to understand the crash patterns and identify the hotspot segments and/or intersections. Crash history from PowerBI, provided by VDOT, was collected for a five-year period (January 1, 2015 to December 31, 2019). VDOT also provided FR 300 crash forms for the same five-year analysis period. A total of 132 crashes were recorded during the study period that consist of 72 property damage only (PDO) crashes, 40 minor injuries (B and C-injury), 17 incapacitating injuries (A-injury), and three fatalities (K).



### 3.1 Crash Severity and Collision Types

The crash data was organized and plotted to determine the distribution by severity and collision type for each of the five study years. Figure 2 shows the crash severity by year, while Figure 3 shows the collision type by year. The annual crash frequency increased from 2015 to 2018, rising 9%, 16% and 21% over the four years period. However, 2019 recorded nearly 43% drop in the crashes with no fatalities and half the number of crashes resulting in property damage compared to the 2018. The crash analysis data did not provide any insight regarding the drop in 2019 crashes. Additionally, JMT looked at the following four potential factors using available data, including historical aerial images and field observations, to determine if there were any significant changes from 2018 to 2019 in terms of: traffic volumes, traffic patterns, roadway conditions, and land use/developments. No significant changes were identified between 2018 and 2019 that would explain the decrease in crashes. It is worth mentioning that the number of crashes in 2018 were much higher than the prior year (2017) as noted (21% increase).

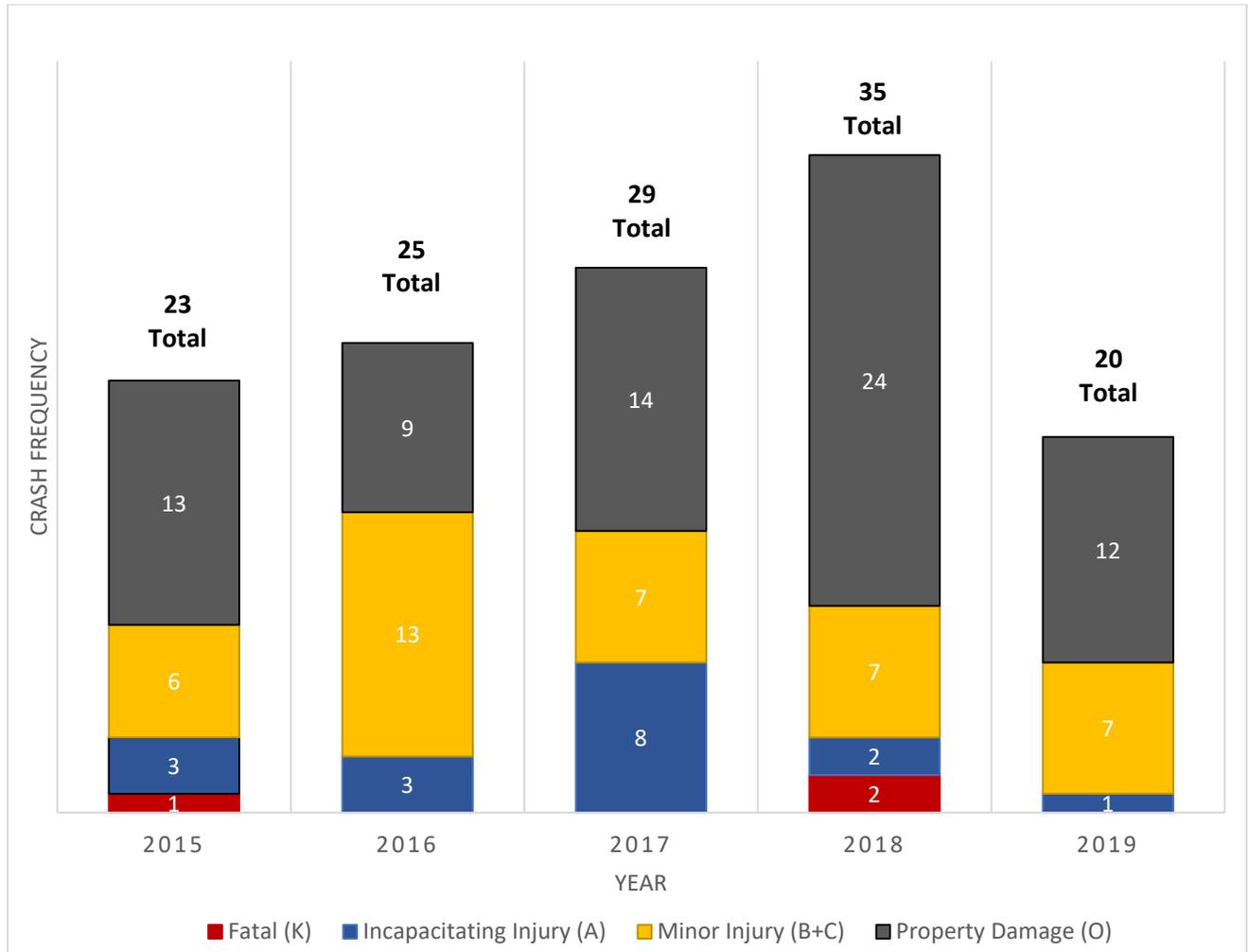


Figure 2: Crash Severity by Year

As shown in Figure 3 the majority of the crashes along the corridor are Fixed Object – Off Road, which comprises 45% of the overall crashes. Other high frequency collision types are Rear End and Angle, which comprises 17% and 14% of the overall crashes, respectively. In addition, only seven crashes in the five-year study period were categorized as “Deer”, the review of the crash forms indicated that 12 incidents actually involved a deer, which was recorded as other collision types, but it was a result of avoiding a deer. Therefore, the Deer related crashes accounted for 9% of the overall crashes.

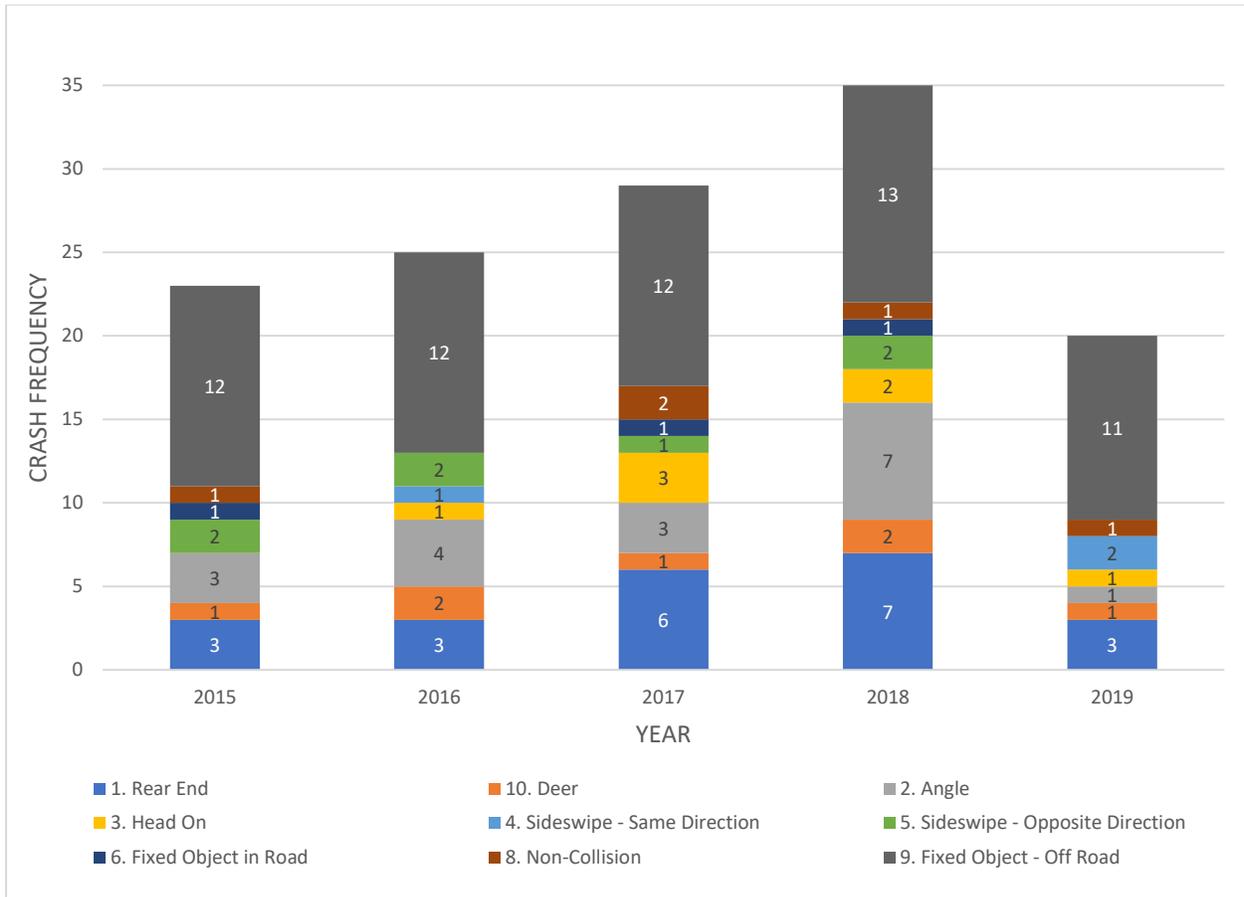


Figure 3: Collision Type by Year

The crash data was further analyzed to determine the percentage of each collision type and the secondary contributing factors, which includes human factors and other modes of transportation (pedestrians and bicyclists). The crash breakdown is shown in Table 4.



Table 4: Crash Severity by Collision Type and Secondary Factors

APPLICABLE CRASH TYPE AND SEVERITY		Crash Severity					
Crash Type Categories		All	Fatal (K)	Incapacitating Injury (A)	Minor Injury (B+C)	Property Damage (O)	
<b>Total Crashes</b>	<b>All</b>	<b>132</b>	<b>3</b>	<b>17</b>	<b>40</b>	<b>72</b>	
Primary Crash Categories							% of Total
<b>Collision Type</b>	Rear End	22	1	2	4	15	17%
	Deer	7		1	1	5	5.5%
	Angle	18		5	6	7	14%
	Head On	7	1	1	3	2	5%
	Sideswipe - Same Direction	3			1	2	2%
	Sideswipe - Opposite Direction	7			3	4	5.5%
	Fixed Object in Road	3		1	2		2%
	Non-Collision	5		1	3	1	4%
	Fixed Object - Off Road	60	1	6	17	36	45%
<b>Non-Motorized</b>	Pedestrian	0	0	0	0	0	0%
	Bicycle	1	0	1	0	0	1%
Human Factors							% of Total
<b>Driver Behavior</b>	Speed related	46	1	9	11	25	35%
	Unbelted	10	1	5	2	2	8%
	Alcohol related	8	0	1	4	3	6%
	Medical Emergency	6	0	4	1	1	5%
	Drowsy	3		1	1	1	2%
	Distracted	13		1	4	8	10%

As shown in Table 4, there was only one crash involving bicyclist and no pedestrian related crashes were recorded. From the human factor's perspective, nearly 35% of the total crashes were recorded to involve speeding, and 10% of the crashes involved distracted drivers. The remaining driver behavior criteria are all under 10% each, with the highest of which being unbelted at 8% of the total crashes. It should be noted that there were six crashes that, at least in part, resulted from a medical emergency according to the crash reports. Johnston-Willis Hospital is located nearly 7 miles east of the project corridor along Route 711.



### 3.2 Environmental Factors

The crash history was also categorized based on three environmental factors: lighting, weather, and roadway surface. The lighting condition was categorized into three subcategories: dawn/dusk, daylight, and dark. The weather condition was categorized into six subcategories; clear, sever crosswinds, fog, mist, rain, and snow. The roadway surface was categorized into three subcategories: dry, wet, and snow/slush/ice. The detailed crash distributions by environmental factors are shown in Table 5.

*Table 5: Crash Distributions by Environmental Factors*

Environmental Factors		Crash Severity					% of Total
		All	Fatal (K)	Incapacitating Injury (A)	Minor Injury (B+C)	Property Damage (O)	
Lighting	Dawn/Dusk	6	0	1	3	2	4.5%
	Darkness	39	1	5	14	19	29.5%
	Daylight	87	2	11	23	51	65.9%
Weather	Clear	107	3	15	34	55	81.1%
	Sever Crosswinds	1			1		0.8%
	Fog	1				1	0.8%
	Mist	2				2	1.5%
	Rain	17		2	5	10	12.9%
	Snow	4				4	3.0%
Surface	Dry	102	3	14	34	51	77.3%
	Wet	24	0	3	6	15	18.2%
	Snow/Slush/Ice	6				6	4.5%

As shown in Table 5, a majority of the crashes occurred during normal conditions: 66% daylight, 81% clear weather, and 77% dry surface. Nearly 34% of the crashes occurred when the lighting condition was not daylight (4.5% during dawn or dusk, and 29.5% during dark conditions). Only about 19% of the crashes occurred during adverse weather (fog, rain, snow, etc.), and about 23% of the crashes occurred when the roadway surface was wet or snow/slush//ice. A total of 67 crashes occurred under combined Dry, Clear and Daylight conditions, which is nearly half (51%) of the total 132 crashes.

### 3.3 Intersection and Segment Crashes

The crash data was categorized based on the location of occurrence as recorded in the crash reports. The main objective is to determine the crashes that occurred at the intersections and the crashes that occurred at non-intersection. The crash distribution based on the locations are shown in Table 6.



Table 6: Collision Type by Intersections and Segments

Collision Type	Not at Intersection	% of Non-Intersection	At an Intersection	% of At Intersection	Total	% of Total
Rear End	17	16%	5	20%	22	17%
Deer	6	6%	1	4%	7	5%
Angle	8	7%	10	40%	18	14%
Head On	3	3%	4	16%	7	5%
Sideswipe - Same Direction	1	1%	2	8%	3	2%
Sideswipe - Opposite Direction	7	7%	0	0%	7	5%
Fixed Object in Road	3	3%	0	0%	3	2%
Non-Collision	5	5%	0	0%	5	4%
Fixed Object - Off Road	57	53%	3	12%	60	45%
<b>Grand Total</b>	<b>107</b>	<b>100%</b>	<b>25</b>	<b>100%</b>	<b>132</b>	<b>100%</b>
<b>Percent of Crashes Along the Corridor</b>	<b>81%</b>		<b>19%</b>			

A total of 107 out of the 132 overall crashes along the project corridor occurred at non-intersection (segment) locations, accounting for nearly 81% of the total crashes. The most frequent crash type is recorded to be Fixed Object – Off Road, with 57 out of the 107 non-intersection crashes (53%). This is mainly due to relatively narrow lanes and presence of multiple horizontal curves. Rear End crashes are the second highest collision type for the non-intersection along the project corridor with a total of 17 crashes, which comprises nearly 16% of the non-intersection crashes. The graphical distribution of the non-intersection crashes is shown in Figure 4.

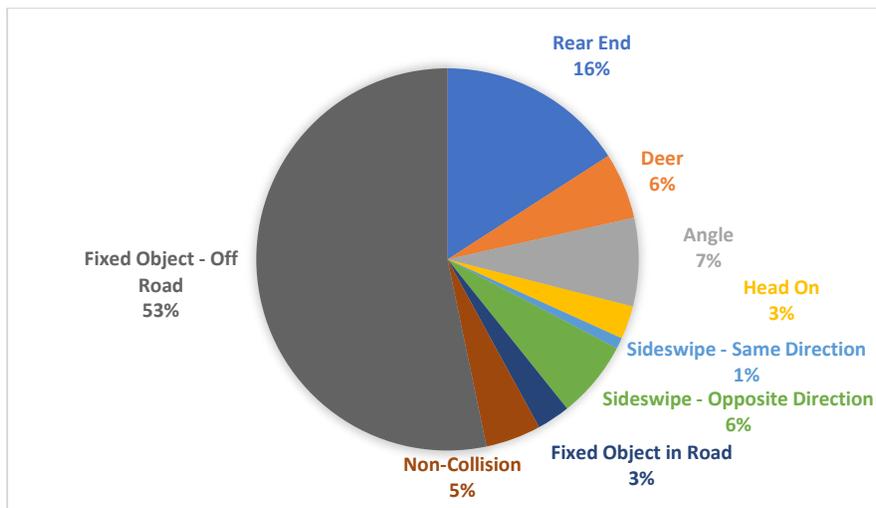


Figure 4: Collision Type for Non-Intersection Crashes

All the non-intersection crashes were further evaluated based on the human factors. Table 7 shows the breakdown of all non-intersection (segment) crashes as well as Fixed Object - Off Road only crashes.



Table 7: All Non-Intersection and Fixed Object - Off Road Only Crashes by Human Factors

FACTOR	All Segment Crashes			Fixed Object - Off Road Only Crashes		
	NO	YES	% YES	NO	YES	% YES
Speeding	66	41	38%	33	24	42%
Alcohol	100	7	7%	53	4	7%
Drugs	107	0	0%	57	0	0%
Distracted	96	11	10%	51	6	11%
Drowsy	104	3	3%	54	3	5%

As shown in Table 7, the percentage breakdown for all segment crashes and Fixed Object - Off Road only crashes are relatively similar, with the highest being Speeding with 38% and 42%, respectively, and the second highest being distracted driving with 10% and 11%, respectively.

As shown in Table 6, only 19% of the total crashes (25 out of 132 total crashes) for the project corridor occurred at the intersections. Out of these 25 crashes, 10 (40%) of the crashes were Angle, five (20%) were Rear End, and four (16%) were Head-On collisions. The graphical distribution of the intersection crashes is shown in Figure 5.

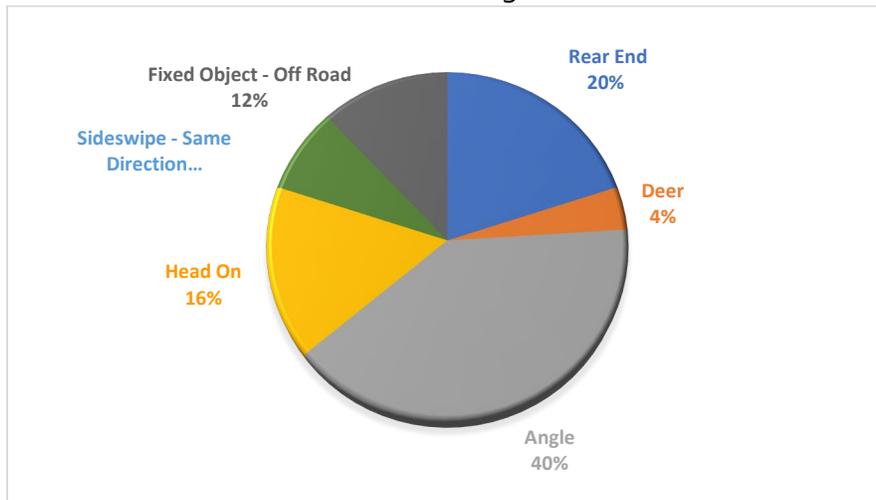


Figure 5: Collision Types of Intersection Crashes

Given the rural nature of the project corridor, all intersections along the project corridor are unsignalized with stop control on the minor road. Many of the intersections are with driveways rather than with major roadways. Angle crashes and Rear End crashes typically occur at intersections when vehicles are turning and/or stopped waiting for others to make a turn. Further evaluating the intersection crashes by human factors shows that only 9% of intersection crashes is due to Speeding, and only 4% of the crashes are due to distracted driving, as shown in Table 8.



Table 8: Intersection Crashes by Human Factors

FACTOR	All Intersection Crashes		
	NO	YES	% YES
Speeding	20	5	9%
Alcohol	24	1	2%
Drugs	25	0	0%
Distracted	23	2	4%
Drowsy	25	0	0%

### 3.4 Corridor Crashes by Mile Point

The study corridor runs approximately 12.35 miles from west to east with MP 0.0 located at the west end at the intersection with Maidens Rd. (Rte. 522) and MP 12.35 located to the east at the intersection with Huguenot Springs Rd. (Rte. 607). VDOT’s PowerBI software was used to generate maps sorted by MP along the project corridor. For example, Figure 6 shows the Collision Type, by MP, for the five-year study period. Figure 6 indicates that there are peaks at/or near multiple MPs.

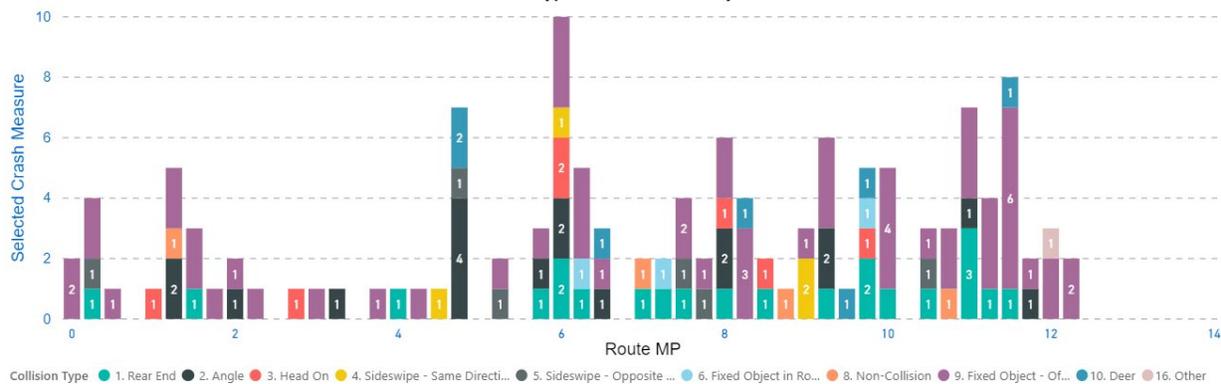


Figure 6: Collision Type by Mile Point

Table 9 summarizes the identified segment hotspots as well as some information about each segment. Some of the segments include intersections but due to multiple reasons such as, crash frequency, crash type, and nature of the minor roads, they were included in the segment crashes and applicable mitigations, including intersection specific, were recommended as needed to address the identified safety concerns.

Table 9: Hotspot Segments by Mile Points

Segment #	Segment MP-MP	Segment Length (Mile)	Number of Crashes	Injury	Property Damage	Common Collision Type	Intersection / Non-Intersection	Speed	Alcohol	Distracted	Drowsy	NOTES
1	0.46-0.52	0.06	4	2	2	2 Fixed Object – Off Road	All Non-Intersection	2				One driveway within the segment
2	4.96-4.98	0.02	5	3 (1A)	2	4 Angle	4 at Intersection		1			Segment contains intersection with Rte. 628 Lee’s Landing Rd. – Intersection has hills on both sides; Intersection has no warning signs.
3	6.13-6.18	0.05	9	5 (3A)	4	3 Fixed Object – Off Road, 2 Angle, 2 Head-on	All at Intersection	4		1		Offset intersection with Three Bridge Rd. and Saint Lukes Pl. – warning signs for Three Bridge Rd. (Rte.615) – but Saint Lukes Pl. is private driveway. East of this intersection is on horizontal curve and elevated.
4	7.91-8.12	0.21	8	4 (2A)	4	3 Fixed Object – Off Road, mix	4 Non, 4 at Intersection	2				Intersection with Route 614 - Judes Ferry Rd. There are warning signs. Intersection is located on a horizontal curve.
5	9.37-9.57	0.20	5	3 (2A)	2	Mix	All Non-Intersection	2		1		Straight segment, tree lined, two driveways. Two crashes report rainy conditions.
6	9.75-9.78	0.03	4	1	3	Mix	All Non-Intersection	1				Straight segment, tree lined, two driveways.
7	10.04-10.22	0.16	5	1	4	4 Fixed Object – Off Road	All Non-Intersection	4		2		All Fixed Object were speeding; 1 Rear-end was distracted and on wet pavement; Segment is between two horizontal curves.
8	10.92-11.11	0.19	7	0	7	4 Fixed Object – Off Road, 2 Rear End	1 at intersection	2				Segment is straight, uphill eastbound, clear sight distance.
9	11.22-11.32	0.10	5	4 (2A)	1	3 Fixed Object – Off Road, 2 Rear Ends	1 at intersection	2	1	2	1	Segment is straight, clear, passing zone, no sight distance issues.
10	11.57-11.67	0.10	6	3	3	5 Fixed Object	2 at intersection	2		1	1	Segment contains intersection with Manakin Town Ferry Rd. (Rte. 635); has intersection warning signs and warning speed sign. Just off a horizontal curve coming from east.
<b>Total</b>		<b>1.12</b>	<b>58</b>	<b>26</b>	<b>32</b>			<b>21</b>	<b>2</b>	<b>7</b>	<b>2</b>	



Table 9 indicates that speeding is one of the key contributing factors when examining the crashes along the project corridor. Out of the 58 crashes that fell within the hotspot segments, 21 of them listed speeding as a contributing factor, which is 36%.

The top hotspot location is at MP 6.13-6.18 and the collision types of this location is shown in Figure 7. Within this short segment, 0.05 miles long, is the offset intersection with Three Bridge Rd. (Rte. 615) to the south and Saint Lukes Pl. (private driveway) to the north. While there are warning signs for the T-intersection with Rte. 615, it is not shown as a full intersection with Saint Lukes Pl. as it is a private driveway. Rte. 711 east of this intersection is on horizontal curve and elevated.

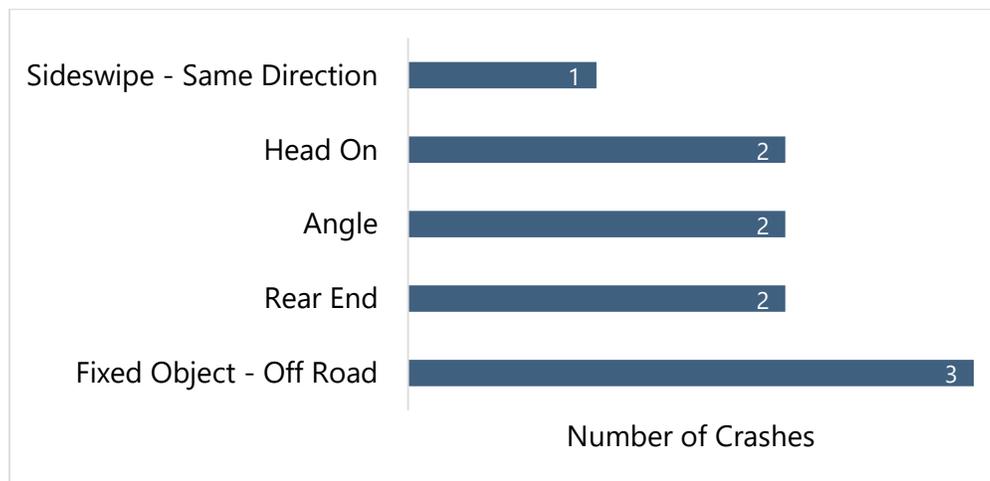


Figure 7: MP 6.0 Hotspot Collision Types

VDOT's PowerBI crash tool was used to display Crash Severity by MPs as shown in Figure 8.

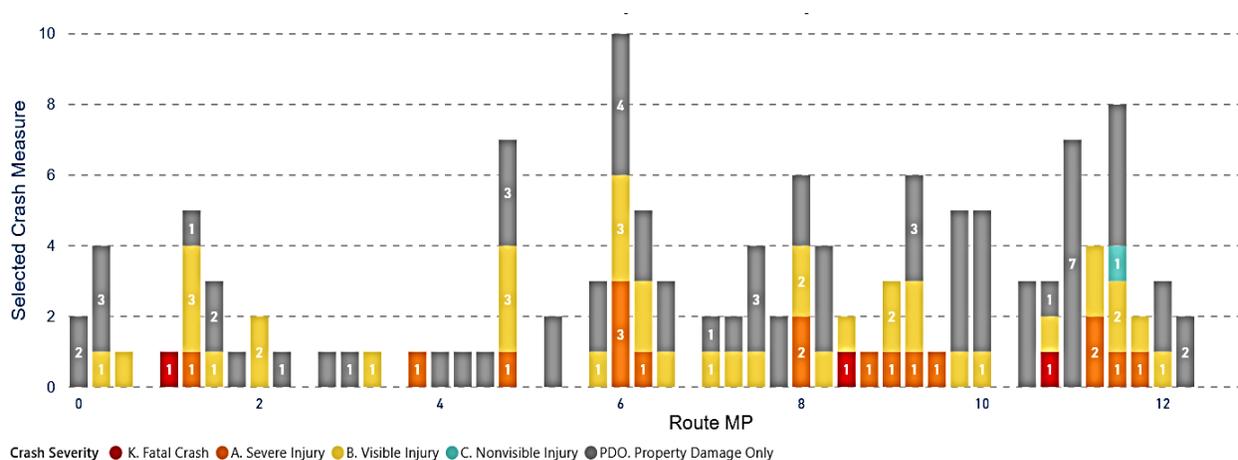


Figure 8: Crash Severity by Mile Point



There was a total of three fatalities recorded along the project corridor for the five-year study period. It is important to note that none of the three fatalities occurred in any of the hotspot locations previously identified. The following summarize each fatality and the recorded cause(s) based on the crash reports:

1. MP 1.07 – Head-On Collision, trying to pass in a no-passing zone, which involved speeding.
2. MP 8.53 – Rear End, vehicle 1 was turning left when vehicle 2 approached, had equipment failure, and could not stop. Vehicle 2 rear ended vehicle 1, and vehicle 2 continued off road and struck a utility pole.
3. MP 10.76 – Fixed Object - Off Road - Vehicle ran off road on the right side struck fixed object (ditch). Vehicle then over corrected, came back onto roadway, and overturned.

### 3.5 Crash Rates

The total crash rates for the project corridor were compared to the average statewide crash rates for a similar facility type. The VDOT published ADTs for 2019 were used and the weighted average based on the length was considered for the calculation. For the purpose of this calculation, the project corridor was broken down into four segments:

- The first section of the project corridor, from Maidens Rd. (US 522) to Old River Trail (Rte. 617), is 1.7 miles with reported ADT of 2,100 vehicles per day (vpd).
- The second section of the project, from Old River Trail (Rte. 617) to Three Bridge Rd. (Rte. 615), is 4.4 miles with reported ADT of 2,400 vpd.
- The third segment, from Three Bridge Rd. (Rte. 615) to Manakin Town Ferry Rd. (Rte. 635), is 5.5 miles with reported ADT of 7,400 vpd.
- The final segment of the project corridor, from Manakin Town Ferry Rd. (Rte. 635) to Huguenot Springs Rd., is 0.7 miles with reported ADT of 8,400 vpd.

The weighted average ADT for the entire section is calculated as the following:

ADT for the section =  $\{(1.7 \times 2,100) + (4.4 \times 2,400) + (5.5 \times 7,400) + (0.7 \times 8,400)\} / 12.3 = 4,936$  vpd

$$R_{\text{sec}} = A \times 10^8 / (365 \times T \times V \times L)$$

Where,

$R_{\text{sec}}$  = Crash rate for the roadway section

A = number of reported crashes

T = time-period for the analysis (yr.)

V = Annual Average Daily Traffic Volume (vpd)

L = Length of the segment (mile)



$$R_{sec} = 132 \times 10^8 / (365 \times 5 \times 4936 \times 12.3) = 119.13 \text{ crashes per 100 million vehicle-miles traveled}$$

The crash rate at this segment of the roadway is considered low based on the comparison with the reported average statewide crash rates for similar roadway sections (two-way undivided) which is 184.30 crashes per 100 million vehicle-miles traveled.

While the average overall crash rate for the project corridor is lower than the state average crash rate, other metrics are higher when compared to the state averages. Table 10 shows the various crash rates for both the State and the study corridor calculated using the same crash rate equation, but applicable crash types is used for each type.

*Table 10: Statewide Average and Study Corridor Crash Rate Comparison*

Type	Statewide	Study Corridor
Overall Crash Rate	184.30	119.13
Injury (B+C) Crash Rate	62.81	36.10
Injury (A) Crash Rate	12.90	15.34
Fatality Rate	1.51	2.71

Unit: Per 100 million VMT

While the study corridor's overall crash rate is less than the state average, and the Injury (B+C) is nearly half of the State average, the Incapacitating Injury (A) and Fatality rates are higher than the State averages.

### 3.6 Conclusions

Based on the analysis for the data collected from PowerBI and the FR 300 forms for a period of five-years, January 1, 2015 – December 31, 2019, for the entire roadway section, the following can be concluded:

#### 3.6.1 Segment Crashes

The analysis of the overall study corridor indicates that Fixed Object - Off Road crashes are the dominant type of crashes. This type of crash accounted for about 53% of the total segment crashes and 45% of the overall crashes. Nearly 55% of the crashes along the project corridor were single vehicle incidents. Speeding contributed to 38% of the segment crashes and 35% of the overall crashes. In general, the potential causes could be summarized as the following:

1. Roadway alignment (multiple horizontal and vertical curves).
2. Speed is relatively high for the study corridor.
3. Relatively narrow lanes (10' or less).
4. Proximity of fixed objects to the travel lanes.
5. Narrow shoulders or no shoulders in some areas.
6. Insufficient sight distance.



### 3.6.2 Intersection Crashes

Of the 132 crashes along the project corridor, only 25 (19%) crashes were occurred at the intersections. Given the rural nature of Route 711, all of the intersections along the study corridor are unsignalized, with stop control on the minor road. Most intersections are for driveways, and very few with two-lane roadways.

Of the 25 crashes at intersections, 10 (40%) of the crashes were Angle crashes, 5 (20%) were Rear End crashes, and 4 (16%) were Head-On crashes. The main intersection hotspots are as follows:

- MP 5.0 - Intersection with Lee's Landing Rd. (Rte. 628) – Intersection has hills on both sides; Intersection has no warning signs.
- MP 6.15 - Offset intersection with Three Bridge Rd. and Saint Lukes Pl. – warning signs for Three Bridge Rd. (Route 615), but Saint Lukes Pl. is a private driveway. East of this intersection has both horizontal and vertical curvature.
- MP 8.0 - Intersection with Judes Ferry Rd. (Rte. 614). There are warning signs. Intersection is located on a horizontal curve.
- MP 11.60 - Intersection with Manakin Town Ferry Rd. (Rte. 635) - has intersection warning signs and speed warning sign.

In general, the potential causes could be summarized as the following:

1. Lack of turn lanes at all intersections. Unlike the west end of the project, none of the intersections listed as hotspots have turn lanes along Route 711.
2. Lack of warning signs at some of these intersections.
3. Speed is relatively high at the study corridor.
4. Insufficient intersection sight distance.

## 4. Review of Roadway Elements & Cost Estimates

As part of the safety study on Route 711, a review of roadway elements was conducted for the entire study corridor with more emphasis on the identified higher crash locations. Elements that were identified as potential safety concerns include roadway geometry, sight distance limitations, roadside hazards, and overall roadway pavement width. The review involved checking for the compliance with standards, missing or deficient roadway elements, and any other items expected to impact the safety on the roadway. For areas with existing or proposed advisory speed, sight distance evaluation is based on the advisory speed, otherwise, the design speed, which is assumed to be 5 MPH above the posted speed, is considered.

Up to three tiers, low-cost, medium-cost, and high-cost, of solutions are proposed for each of the higher-crash segments, where applicable, to mitigate the safety concerns identified from

crash analysis as well as the field investigations. Additionally, there are proposed mitigations, which could be applied to the entire corridor to improve the overall safety. Although the entire roadway section was investigated during the field visit, more focus was on the areas with relatively higher crash frequencies. The identified deficient elements were based on field observations and the review of the photos and videos recorded during the field visits. The field visits were conducted on October 1, November 5, and November 10, 2020.

During the field review, it was observed that the eastern 6.3 miles, from approximately MP 6.0 to the eastern end of the study corridor at MP 12.3 has been recently repaved and shoulder widening conducted, as shown in Figure 9. Based on Google Earth® imagery, previous conditions (labeled as April 2018 Conditions in the Figure 9) appear to mirror existing conditions in the western half of the study corridor: ~9 ft. wide travel lanes and 0"-6" shoulder widths. The repaved sections have similar travel lane widths of ~9 ft. but 9"-18" shoulders. In addition to the shoulders being wider now, there is also additional gravel on the side creating more of a wedge. Vehicles departing the pavement may be better able to return to the roadway with this new gravel wedge area. This work appears to have been completed after the period for which crash data was analyzed (2015-2019), so the crash data more likely reflects the previous roadway conditions. Since this section of the roadway has been improved, it is expected to positively impact the overall safety on the corridor, if other factors remained same/similar.



*Figure 9: Previous and Current Roadway Conditions (MP 6.0–12.3)*

The roadway conditions from MP 0.0 to 6.0 are consistent with ~9 ft. travel lane widths and 0"-6" shoulder widths as shown in Figure 10. This section has not been recently repaved.



*Figure 10: Current Roadway Conditions on Western Part of the Corridor (MP 0.0-6.0)*

The eastern terminus of the study corridor is the Huguenot Springs Rd. intersection. Based on field review and information on VDOT's website, it is determined that this intersection is under construction for being reconfigured and combined with the Woolridge Rd. intersection as shown in Figure 11. Therefore, no safety recommendations are recommended for the existing Huguenot Springs Rd. intersection.



*Figure 11: Huguenot Springs Rd. Intersection Improvement Project*

Low construction costs such as signing, and pavement marking were developed using the two-year historical bid pricing from VDOT's website. An average unit cost per item was calculated based on the location and quantity of each bid. The construction costs for major roadway



improvements (i.e., adjusting the vertical crest profile, and roadway realignment) were obtained from VDOT's Transportation & Mobility Planning Division (TMPD) planning level cost estimates and inflated for the year 2020. For rumble stripe installation, a half mile was considered the minimum length mitigation from a practical standpoint, considering mobilization costs.

The following sections includes detailed discussions regarding the roadway elements identified to be deficient and the recommended mitigations to address the safety issues. The location of each segment is shown approximately in Figure 12. The segment numbers on the figure correspond to the segment number listed in Table 9.



Figure 12: Crash Hotspot Segments



#### 4.1 Segment 1: MP 0.46-0.52

This segment recorded four crashes over the five-year study period. This section of the corridor currently has the lowest traffic volume. The high-cost improvements for this segment may include shoulder widening and rumble stripes. Additionally, since the segment is located on a horizontal curve, two curve warning signs are recommended to warn the drivers, as low-cost mitigation. However, it is recommended that the segment be further evaluated to determine the warning speed and the need for chevrons, this will be considered as low cost mitigation. The estimated cost of proposed improvements is shown in Table 11.

*Table 11: Proposed Improvement Costs for Segment 1*

Seg. #	MP	Length (mi.)	Crash types	#	Mitigation	H/M/L Cost	Cost (\$)	Notes
1	0.46 - 0.52	0.06	Fixed Object - Off Road	2	Evaluate MUTCD curve compliance	L	\$2,000	No existing warning signs. crashes are along horizontal curve
					Install a W1-2 Horizontal Curve Warning sign each direction	L	\$743	
			Other	2	Shoulder widening both directions for 0.52 mile from US 522	H	\$115,500	Existing shoulder width will not accommodate rumble stripe – must follow shoulder widening
					Install RS-4A rumble stripe both directions for 0.52 miles from US 522		\$2,993	
<b>Total</b>	<b>4</b>			<b>\$121,236</b>				

#### 4.2 Segment 2: MP 4.96-4.98 (Lees Landing Rd. Intersection)

This hotspot recorded five crashes over the five-year study period and is the only hotspot where a majority of the crashes (80%) were angle crashes. As shows in Figure 13, sight distance to the right for vehicles entering Rte. 711 from Lees Landing Rd. southbound is 375 ft., below the required 665ft., due to a business sign and vegetation blocking driver’s view. Sight distance on the mainline is more than the required since there are no horizontal curves and a long gradual vertical curve which does not limit the visibility.



Figure 13: Intersection Site Distance – SB on Lees Landing Rd. at Rte. 711

Recommended improvements to address these items are shown in Figure 14. The low-cost options of installation of intersection warning signs, vegetation trimming/removal, and moving the business sign back are recommended.

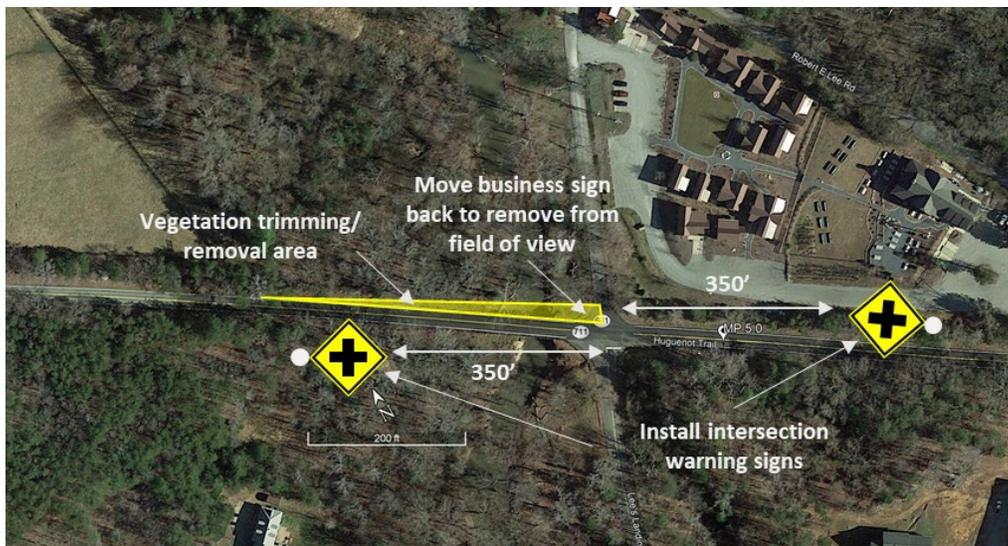


Figure 14: Proposed Improvements for Segment 2



As shown in Table 12 there are no medium or high cost mitigations for this intersection. The low-cost options of intersection warning signs installation, vegetation trimming/removal, and moving the business sign back will improve the sight distance significantly. The cost of the business sign relocation is assumed to be covered by the owner not VDOT. Further evaluation is required to determine the available right of way and correct sign location.

Table 12: Proposed Improvement Costs for Segment 2

Seg. #	MP	Length (mi.)	Crash types	#	Mitigation	H/M/L Cost	Cost (\$)	Notes
2	4.96 - 4.98	0.02	Angle	4	Install (2) intersection warning signs	L	\$743	No existing intersection warning sign for Lees Landing Rd.
					Vegetation trimming/removal on north side of Rte. 711, west of Lees Landing Rd.	L	\$5,192	Sight distance to right currently 375 ft. for southbound vehicles on Lees Landing Rd., vs. required 665 ft. Partially blocked by vegetation and business sign.
			Other	1	Relocation of business sign	L	\$1,000	Cost of business sign relocation is for coordination by VDOT with the owner, and not for removal of the sign.
			<b>Total</b>	<b>5</b>			<b>\$6,935</b>	

#### 4.3 Segment 3: MP 6.13-6.18 (Three Bridge Rd. Intersection)

This hotspot recorded the highest number of crashes. Three Bridge Rd. is one of the busiest side streets on the corridor with an AADT of 2,000. Rte. 711 has an AADT of 7,400 east of this intersection, and an AADT of 2,400 west of this intersection. Since roadway departure is the primary cause of crashes in this hotspot as well as for the 0.50 miles of roadway to the east, installation of RS-4A rumble stripe is recommended. Given the Rte. 711 traffic volume differences on the east and west side of the intersection, and high speed of the roadway, a turn-lane analysis is recommended to determine if westbound left-turn lane is warranted. Additionally, there is currently an intersection warning sign on the eastbound direction only. To further warn drivers of the of turning vehicles, it is proposed to install an intersection warning sign for the westbound direction, and (W11-V3), WATCH FOR TURNING VEHICLES signs 100 ft. upstream of the intersection warning signs in both directions. These recommended improvements are shown in Figure 15.

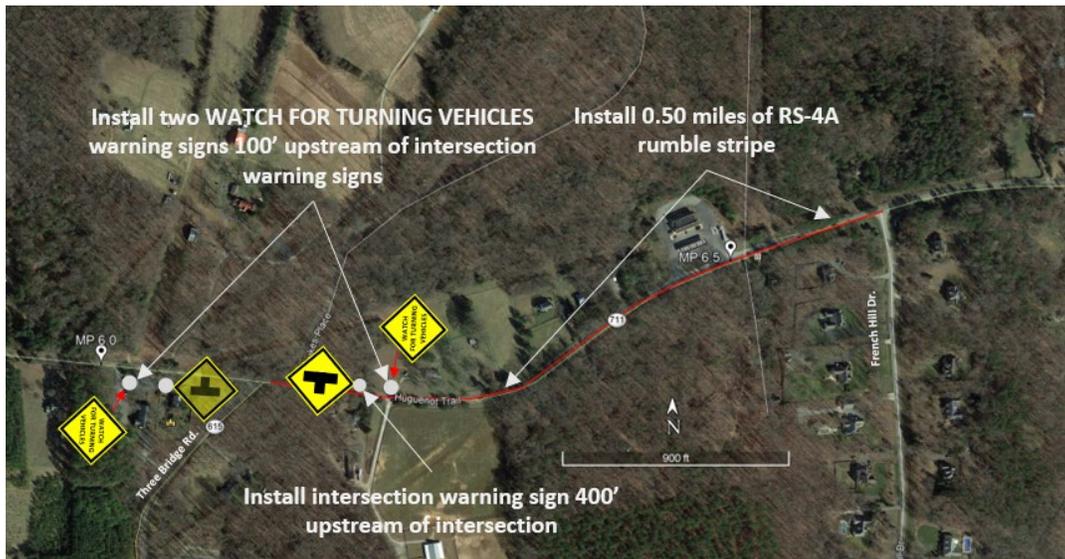


Figure 15: Proposed Improvements for Segment 3

Since this stretch of roadway has been recently repaved and the shoulders already widened, rumble stripe is considered as a low-cost mitigation as shown in Table 13. The shoulder width is not sufficient to consistently support rumble strips through this area, accordingly, RS-4A rumble stripe is recommended. There is sufficient width for RS-4A rumble stripe in the existing pavement conditions. The final recommendation, which is high cost, would be to realign the intersection to improve the current skew of Three Bridge Rd. at the intersection.

Table 13: Proposed Improvement Costs for Segment 3

Seg. #	MP	Length (mi.)	Crash types	#	Mitigation	H/M/L Cost	Cost (\$)	Notes
3	6.13 - 6.18	0.05	Fixed Object - Off Road	3	Install RS-4A rumble stripe both directions for 0.5 miles from Three Bridge Rd. to French Hill Dr.	L	\$2,993	Roadway departure is the top cause of crashes
			Angle	2	Install Intersection Warning sign WB, install (W11-V3) signs both EB and WB	L	\$1,115	Many crashes involved vehicle turning onto Three Bridge Rd. being struck by another vehicle
			Head On	2	Conduct turn-lane warrant analysis	L	\$2,000	Cost of turn-lane include the warrant analysis only, not the turn-lane construction
			Other	2				
					Realign intersection with Three Bridge Rd.	H	\$561,250	Fix intersection skew
<b>Total</b>				<b>9</b>			<b>\$567,358</b>	

#### 4.4 Segment 4: MP 7.91-8.12 (Judes Ferry Rd. Intersection)

This hotspot has one of the highest numbers of crashes. Judes Ferry Rd. is one of the two busy side streets on the corridor with an AADT of 1,900 and 690 for the southern and northern leg of Judes Ferry Rd., respectively, while the AADT on Rte. 711 is 7,400 at the vicinity of this intersection. Given the volume and high speed of roadway, a WB left-turn lane warrant analysis is recommended. Since the roadway departure crashes are the primary type of crashes in this hotspot as well as for the 0.50 miles of roadway to the east, installation of RS-4A rumble stripe is recommended, as shown in Figure 16.



Figure 16: Proposed Improvements for Segment 4

This stretch of the roadway has been recently repaved and the shoulders were widened already, accordingly, rumble stripe is considered as low-cost mitigation. The shoulder width is not sufficient to consistently support rumble strips through this segment. There is sufficient width for RS-4A rumble stripe within the existing pavement. As a high-cost mitigation option, realigning the Judes Ferry Rd. approaches can be considered to remove the skewness and offset at the intersection.



Table 14: Proposed Improvement Costs Segment 4

Seg. #	MP	Length (mi.)	Crash types	#	Mitigation	H/M/L Cost	Cost (\$)	Notes
4	7.91 - 8.12	0.21	Fixed Object - Off Road	3	Install RS-4A rumble stripe both directions for 0.5 miles from Judes Ferry Rd. to St. Marys Way	L	\$2,993	Roadway departure is the top cause of crash
			Angle	2	Conduct WB left-turn lane warrant analysis	L	\$2,000	Majority of crashes involve vehicles turning onto Judes Ferry Rd.
			Other	3	Realign intersection to remove skew and offset	H	\$561,250	Highly skewed and offset intersection
			<b>Total</b>	<b>8</b>			<b>\$566,243</b>	

Intersection warning signs and 45 MPH advisory speed plaques exist on both sides of the intersection, along with fire station warning signs. There are two warning sign assemblies on the intersection approach from each direction (WB assemblies shown in Figure 17).



Figure 17: WB Existing Warning Signs at Segment 4

#### 4.5 Segment 5: MP 9.37-9.57 and Segment 6: MP 9.75-9.78

Due to the close proximity and similar conditions of these two hotspots, the mitigations are combined. Both sections are on a straight roadway alignment with good visibility. Deer crashes account for three of the nine segment crashes (one of these three crashes was classified as a Rear End collision, but per the description the first vehicle stopped quickly to avoid hitting a deer). The recommended mitigation is to install one Deer crossing sign for each direction, as shown in Figure 18.



While roadway departure crashes accounted for only one of the nine (11%) crashes for Segment 5, it was the cause of three additional crashes within the one mile of roadway between MP 9 and 10 (21% of total crashes within this mile). Accordingly, the installation of rumble stripe is being recommended as well.

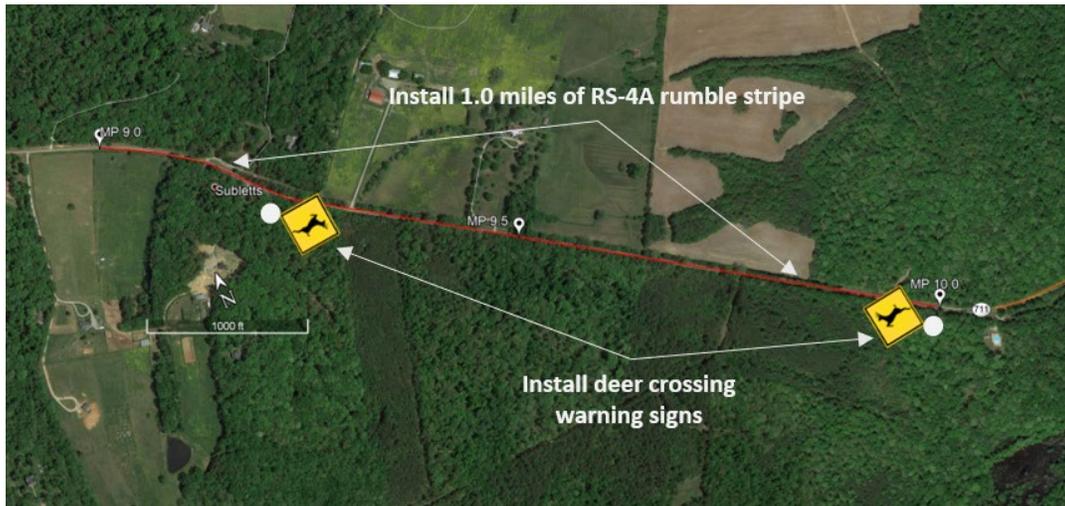


Figure 18: Proposed Improvements for Segments 5 and 6

Since this roadway has been recently repaved and shoulders widened already, rumble stripe is a low-cost safety improvement, as shown in Table 15. The shoulder width is not consistently wide enough to support rumble strips through this area. There is sufficient width for RS-4A rumble stripe within the existing pavement.

Table 15: Recommended Improvement Costs for Segments 5 and 6

Seg. #	MP	Length (mi.)	Crash types	#	Mitigation	H/M/L Cost	Cost (\$)	Notes
5 and 6	9.37 - 9.57	0.23	Deer	3	Install Deer Xing signs, one each direction	L	\$743	Will cover both segments plus prior curve, an area with additional crash history
	9.75 - 9.78		Angle	2	Install RS-4A rumble stripe both directions for 1.0 mile from MP 9 to MP 10	L	\$5,986	
			Other	4				
	<b>Total</b>		<b>9</b>		<b>\$6,729</b>			

#### 4.6 Segment 7: MP 10.04-10.22

This segment is on a horizontal curve that has an existing advisory speed of 50 MPH. Driving at this advisory speed did not feel inappropriate and sight distance is sufficient. Since 80% of the crashes involved a roadway departure, it is recommended to install RS-4A rumble stripe for 0.50 miles, as shown in Figure 19, to cover the hotspot and the subsequent curve to the east.



Figure 19: Proposed Improvements for Segment 7

Since this stretch of roadway has been recently repaved and shoulders widened already, rumble stripe is considered low-cost mitigation, as shown in Table 16. The shoulder width is not consistently wide enough to support rumble strips through this area, but there is sufficient width for RS-4A rumble stripe in existing pavement conditions. The other mitigation is evaluating the curves for MUTCD compliance at the current posted speed.

Table 16: Proposed Improvement Costs for Segment 7

Seg. #	MP	Length (mi.)	Crash types	#	Mitigation	H/M/L Cost	Cost (\$)	Notes
7	10.04 - 10.22	0.18	Fixed Object - Off Road	4	Install RS-4A rumble stripe both directions for 0.5 mile from MP 10 to 10.5 mile	L	\$2,993	Will cover curve to east of hotspots, which has additional roadway departure crash. Starts where Segment 6 proposed rumble stripe ends
			Other	1				
					Evaluate MUTCD curve compliance	L	\$2,000	
		<b>Total</b>		<b>5</b>			<b>\$4,993</b>	

#### 4.7 Segment 8: MP 10.92-11.11 and Segment 9: MP 11.22-11.32

The proposed mitigations for crash hotspot along segments 8 and 9 are combined due to the proximity and similarities of the segments. They are both on a straight roadway alignment with good visibility. Roadway departure crashes account for over half of the crashes on these two segments (58%). Installation of rumble stripe is proposed, as shown in Figure 20.



Figure 20: Proposed Improvements for Segments 8 and 9

Since these two segments have recently been repaved and shoulders widened, there are no other proposed improvements. Installation of RS-4A rumble stripe is considered a low-cost option given this new pavement condition, as shown in Table 17.

Table 17: Proposed Improvement Costs for Segments 8 and 9

Seg. #	MP	Length (mi.)	Crash types	#	Mitigation	H/M/L Cost	Cost (\$)	Notes
8 And 9	10.92	0.29	Fixed Object - Off Road	7	Install 0.85 miles of RS-4A Rumble Stripe both directions from .05 miles west of Happy Hollow Dr. (MP 10.5) to Watkins Landing Rd.	L	\$5,088	Rumble stripe starts where Segment 7 recommended rumble stripe ends
	11.11							
	11.22							
	11.32							
			Rear End	4				
			Other	1				
			<b>Total</b>	<b>12</b>			<b>\$5,088</b>	

#### 4.8 Segment 10: MP 11.57-11.67 (Manakin Town Rd. Intersection)

The Segment 10 hotspot is concentrated around the Manakin Town Rd. intersection (AADT 510). The majority (83%) of the crashes are roadway departure crashes (Fixed Object – Off Road); accordingly, the recommended mitigation is the installation of RS-4A rumble stripe. Additionally, the intersection sight distance for vehicles entering Rte. 711 from Manakin Town Ferry Rd. is at 400 ft. (SDL) and 350 ft. (SDR), which is below the AASHTO required 480 ft. (SDL) and 555 ft. (SDR), as shown in Figure 21.



Figure 21: View from Manakin Town Ferry Rd. Blocked by Vegetation

Vegetation trimming is recommended to improve the intersection sight distance. This improvement, along with the installation of rumble stripe, is shown in Figure 22.

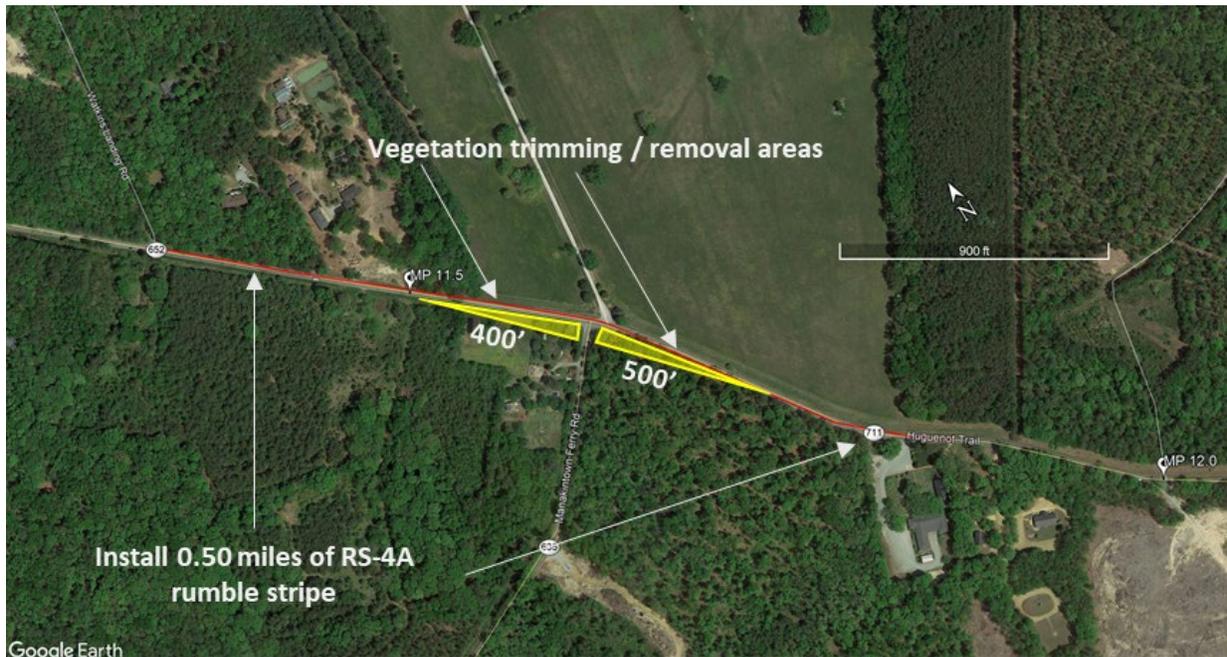


Figure 22: Proposed Improvements for Segment 10

The vegetation trimming on both sides is considered to be a low-cost improvement option. Installation of rumble stripe is also considered to be low-cost, as shown in Table 18, due to the



current roadway repaving and shoulder widening, which can accommodate RS-4A rumble stripe with no further improvements.

*Table 18: Proposed Improvement Costs Segment 10*

Seg. #	MP	Length (mi.)	Crash types	#	Mitigation	H/M/L Cost	Cost (\$)	Notes
10	11.57 - 11.67	0.1	Fixed Object - Off Road	5	Install RS-4A Rumble Stripe both directions for 0.50 mile, from Watkins Landing Rd. (MP 11.3) to MP 11.8	L	\$2,993	
			Other	1	Vegetation trimming, south side of Rte. 711 on both sides of Manakin Town Ferry Rd.	L	\$10,384	Sight distance below required on left and right for vehicles entering Rte. 711
			<b>Total</b>	<b>6</b>			<b>\$13,377</b>	

#### 4.9 Rumble Stripe Installation at recommended segments

The RS-4A rumble stripe recommended at hot spot segments 3-10 can be grouped into a stand-alone project as shown in Table 19. This would allow for an efficient installation of the same mitigation across all recommended segments. Since this project potentially would be implemented as stand-alone by VDOT, we have included the preliminary engineering, construction management and contingency costs to this estimated cost for this recommendation only.

*Table 19: Installation of Rumble Stripe at all Recommended Segments*

Seg. #	Length (mi.)	Crash types	#	Mitigation	Cost (\$)	Notes
3-10	3.85	Fixed Object - Off Road	22	Install RS-4A Rumble Stripe both directions	\$23,045	Rumble stripe installation as recommended in segments 3-10
Preliminary Engineering (20%)					\$4,609	
Construction Engineering and Support (20%)					\$4,609	
Contingency (10%)					\$2,305	
<b>Total</b>					<b>\$34,568</b>	

The locations of the rumble stripe recommendations are shown in Figure 23. Specific location reference points are listed with each individual segment's recommended mitigations.



*Figure 23: Recommended Rumble Stripe Segments*

#### 4.10 Additional Safety Recommendations

The following roadway elements were evaluated, and applicable mitigations were recommended. These elements were not evaluated in the specific crash hotspot segments. The cost of each mitigation recommended for these roadway elements is shown in Table 20.

##### 4.10.1 Pavement repair at MP 1.3

The roadway section just west of Manor Oaks Dr. has a significant drop off, as shown in Figure 24.



Figure 24: Existing Pavement Conditions at MP 1.3

It is recommended to repair the pavement edge with shoulder restoration. The deficient pavement is within a section of roadway that experienced four Fixed Object – Off Road crashes in the five-year analysis period. The area of recommended repair is shown in Figure 25.



Figure 25: Recommended Improvements at MP1.3

#### 4.10.2 Install Hill Blocks View sign and advisory speed plaques/Improve Vertical Profile from MP 1.25 to MP 1.5

There is a vertical crest on Rte. 711 between MP 1.25 and MP 1.5 at the Manor Oaks Dr./Aston Tr. intersection. Stopping sight distance approaching the crest from either the EB or WB direction is limited to 225 ft., below the required 515 ft. stopping sight distance per AASHTO (see Figure 26). There have been two angle crashes at this intersection.



*Figure 26: Site Distance Approaching Manor Oaks Dr./Aston Tr. Intersection, looking west*

A 35 MPH advisory speed is recommended as a low-cost improvement based on this available sight distance along with a Hill Blocks View warning sign, as shown in Figure 27. To eliminate the sight distance issue, it will require changing the vertical profile of the roadway, which is a high-cost mitigation as shown in Table 20.

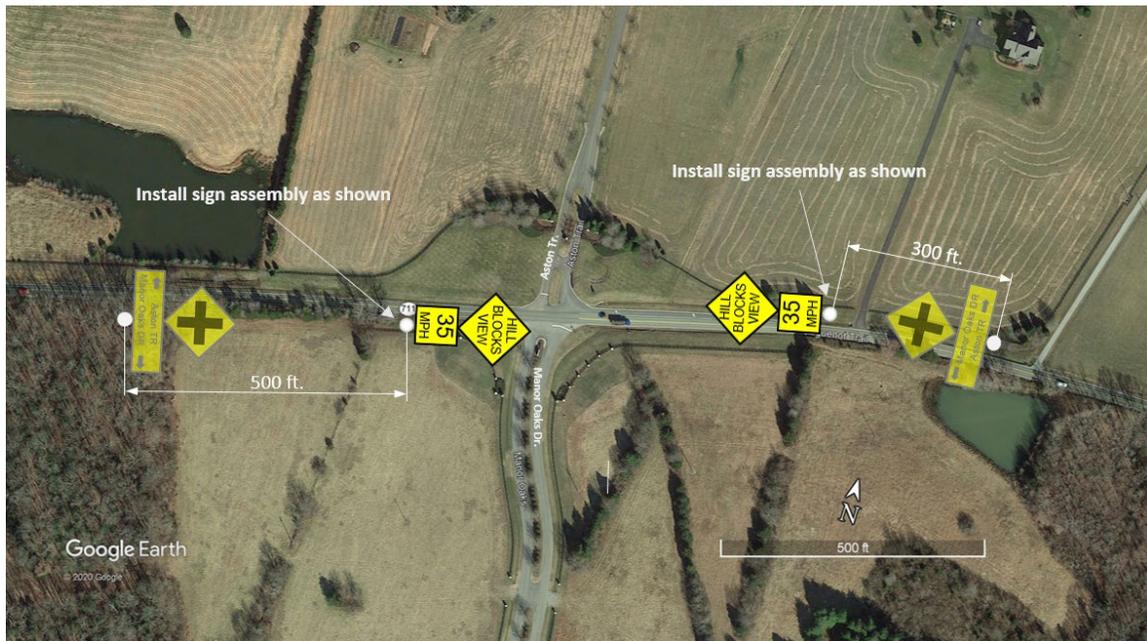


Figure 27: Proposed Improvements - MP 1.25 to 1.5

#### 4.10.3 Pavement repair at MP 1.55

At MP 1.55 there is an approximately 50' long section on the south edge of the roadway where the pavement edge is damaged, as shown in Figure 28.



Figure 28: Existing Pavement Conditions at MP 1.55

This area has relatively steep drop beyond the roadway edge. It is recommended to repair the damaged pavement, restore the shoulder, and re-apply the edge line pavement marking. The area of recommended repair is shown in Figure 29.

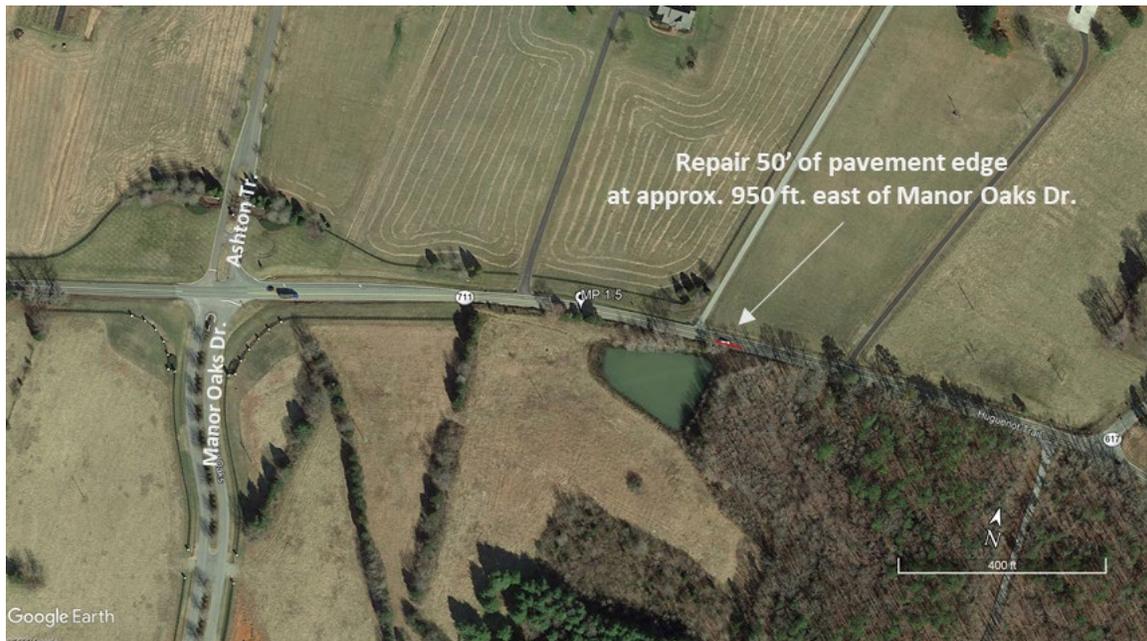


Figure 29: Recommended Pavement Repair, MP 1.55

#### 4.10.4 Install Hill Blocks View sign and advisory speed plaques/Improve Vertical Profile at MP 3.25 to 3.5

There are two vertical crests between MP 3.25 and 3.5 that limit stopping sight distance to 290 ft. and 320 ft., respectively, compared to the AASHTO required 450 ft. stopping sight distance. Accordingly, a 45 MPH advisory speed is recommended based on the available sight distance. There has been one sight-distance related crash at this location (angle crash, vehicle struck when exiting the church at the MP 3.5, which is the crest of the vertical curve). There are currently warning signs present for the MP 3.5, but no signs present at the MP 3.25, the vertical crest at MP 3.5 has a Watch for Turning Vehicles warning sign, and at the WB there is both a Hidden Driveway warning sign and a Watch for Turning Vehicles sign on the same assembly. Because the two crests are close together (~1,200 ft.), a total of one sign on each direction should be installed prior to the first crest. On the WB, the existing warning sign assembly is in the desired location for the Hill Blocks View sign and 45 MPH plaque, so the existing warning sign panels are recommended to be replaced, as shown in Figure 30.



Figure 30: Recommended Improvements at MP 3.25 to 3.5

#### 4.10.5 Vegetation and tree trimming at MP 6.3

The sight distance through the horizontal curve at MP 6.3, between Saint Lukes Pl. and the Lucky's gas station, is limited to 275 ft. due to the horizontal curve and the presence of vegetation near the edge of the travel lane, as shown in Figure 31. The AASHTO required sight distance is 360 ft., based on the existing 45 MPH advisory speed for this curve. Accordingly, trimming the vegetation to levels that obtain the minimum required sight distance is recommended.



Figure 31: EB Street View of Curve at MP 6.3

The recommended area of vegetation trimming to improve the sight distance is shown in Figure 32.



Figure 32: Recommendations for Improving Sight Distance at MP 6.3

#### 4.10.6 Vegetation trimming at MP 8.5 (St. Marys Way intersection)

The sight distance to the left for vehicles entering Rte. 711 from St. Marys Way intersection is currently about 425 ft., as shown in Figure 33. The required SDL per AASHTO standards is 575 ft.



Figure 33: Westbound Sight Distance at St. Marys Way Intersection

It is recommended to trim the trees periodically to provide the minimum required sight distance. The aerial image of the intersection with the recommended area to be trimmed is shown in Figure 34.



Figure 34: Recommendations for Improving Sight Distance at St. Marys Way Intersection

#### 4.10.7 Installation of RS-4A rumble stripe

There are 2.45 miles of roadway between MP 6.0 and the end of the study corridor at MP 12.3 that do not have rumble stripe recommended as part of the segment improvements. Since this section of the roadway has recently been repaved and the shoulder widened enough to accommodate RS-4A rumble stripe without the need for additional improvements, installation of RS-4A rumble stripe is recommended for the entire 2.45 miles (MP 6.7 to MP 8.0, MP 8.5 to 9.0, and MP 11.85 to 12.3) as shown in Figure 35. This mitigation is considered low cost and it is targeted toward the predominant crash type in these segments, accounting for 45% of total crashes. Specifically, there were 21 Fixed Object – Off Road crashes in the non-hotspot sections of Rte. 711 between MP 6 and 12.3.



*Figure 35: Recommended Non-Hotspot Segments for Rumble Stripe Installation*

#### 4.10.8 Costs of safety improvements recommended for non-hotspot segments

The costs of all non-hotspot segment improvements are listed in Table 20. These cost estimates include shoulder widening and subsequent rumble stripe installation for the western six miles of the corridor (MP 0.0 to 6.0). Approximately 29% (17 out of 59) of the Fixed Object – Off Road crashes for the entire corridor were recorded within this western six-miles.



Table 20: Improvement Costs at Non-Hotspot Segments

MP	Length	Crash types	Number of Crashes	Mitigation	H/M/L Cost	Cost (\$)	Notes
0.5 - 6.0	5.5mi.	Fixed Object - Off Road	17	Shoulder widening	H	\$338,049	Shoulder widening must be completed first
				Install RS-4A rumble stripe	H	\$32,922	
1.25 - 1.35	100'			Repair pavement edge westbound, right side	L	\$10,000	West of Manor Oaks Dr. intersection
1.25 - 1.5	0.5 mi.	Angle	2	Install (2) Hill Blocks View signs + 35 MPH advisory speed plaques	L	\$878	Vertical crest along Rte. 711 at Manor Oaks Dr. intersection
				Change roadway vertical profile to improve sight distance	H	\$1,122,500	
1.55	50'	N/A		Repair pavement edge eastbound, right side	L	\$5,000	675 ft. west of Rte. 617
3.25 - 3.5	0.25 mi.	Angle	1	Install (2) Hill Blocks View sign + 45 MPH advisory speed plaques	L	\$1,166	Replace existing Hidden Driveway and Watch for Turning Vehicles signs WB, install new assembly EB
				Change roadway vertical profile to improve sight distance	H	\$1,122,500	
6.0 - 12.3	2.45 mi.	Fixed Object - Off Road	9	Install RS-4A rumble stripe	L	\$14,665	All remaining sections MP 6.0-12.3 not covered in hotspot segment recommendations
6.3	400'	N/A		Vegetation Trimming	L	\$5,192	Sight distance currently 275'
8.5	500'	N/A		Vegetation Trimming	L	\$6,230	SDL at 425' for cars entering Rte. 711 from St. Marys Way
<b>Total:</b>			<b>29</b>			<b>\$2,659,101</b>	

## 5. Pavement Marking Conditions

With the exception of the two short sections noted for pavement edge repair, pavement markings throughout the study corridor are in good condition and no improvements are recommended. The pavement markings on the repaved section (MP 6.0-12.3) are relatively new and in excellent condition. Markings on the section which has not been repaved (MP 0.0-6.0) are also visible and in good condition.

## 6. Regulatory and Warning Signs

During field review, the conditions of all existing warning and regulatory signs were visually evaluated. Overall sign conditions throughout the corridor can be considered very good, with all signs visible and undamaged. No signs were identified to be deficient during the filed visits.

As requested by VDOT, the existing signs were evaluated on both approaches to the Fine Creek Fire Station, located at 575 ft. west of the Judes Ferry Rd. intersection. As shown in Figure 36, warning signs are present and in good condition. Additionally, none of the crashes from the data provided involved emergency vehicles. Therefore, no improvements to enhance any of the warning signs around the fire station is proposed.



*Figure 36: Warning Signs Approaching Fire Station WB (Left) and EB (Right)*

## 7. Clear Zone Improvements and Roadside Hazards

VDOT provided JMT with a spreadsheet, which categorizes the Roadside Hazard Rating (RHR) and the expected Crash Modification Factor (CMF) for roadside improvements. The spreadsheet, a copy is located in Appendix C, was used to determine the existing RHRs for the entire corridor, after dividing the corridor into segments with similar roadside characteristics and rating them based on the most dominant roadside condition. The RHR rating focused mainly on trees, utility poles, ditches, and embankments, no other roadside elements were identified as a hazard such as mailboxes. Per the request from VDOT's Task Manager, the proposed/targeted RHR for each segment is two for hotspots and three for non-hotspots locations. The calculated CMF from the spreadsheet is listed, along with a description of the improvements needed to bring the segment to the desired RHR score as shown in Table 21.



## Route 711 Safety Study Powhatan County VA

*Table 21: Existing and Proposed RHR Scores by Segment*

#	MP Start	MP End	Length (mi.)	Hotspot?	Typical Existing RHR	Proposed RHR	CMF	Required Improvements	# Utility Poles to Relocate
1	0.00	0.75	0.75	Y	4	2	0.83	Clear tree line back from current position at approximately 10 ft. from edge line to establish 20 ft. clear zone. Utility poles need to be relocated from current position at approximately 10 ft. from roadway. Section is typically having RHR 4 on one side and 2 or 3 on other side. Embankment grading likely required.	10
2	0.75	3.75	3.00	N	5	3	0.83	Clear tree line back from current position at approximately 5 ft. from edge line to establish 10 ft. clear zone. Embankment grading needed in many areas. Section is typically having RHR 3 or 4 on one side of roadway and 5 on other, alternating sides.	0
3	3.75	4.20	0.45	N	2	N/A	N/A	No improvements needed.	0
4	4.20	6.10	1.90	N	5	3	0.83	Clear tree line back from current position at approximately 5 ft. from edge line to establish 10 ft. clear zone. One utility pole needs to be relocated out of 10 ft. clear zone. Section is typically having RHR 5 on one side, and 3 or 4 on other side, alternating sides. Embankment grading likely required.	1
5	6.10	6.80	0.70	Y	5	2	0.76	Clear tree line from current position at approximately 5-15 ft. from edge line to establish 20 ft. clear zone. Section is typically having RHR 5 on one side and 2 or 3 on other side. One utility pole to be relocated out of 20 ft. clear zone. Embankment grading likely required.	1
6	6.80	7.85	1.05	N	5	3	0.83	Clear tree line back from current position at approximately 5 ft. from edge line to establish 10 ft. clear zone. One utility pole needs to be relocated out of 10 ft. clear zone. Section is typically having RHR 5 on one side, and 3 or 4 on other side, alternating sides. Embankment grading likely required.	1
7	7.85	8.45	0.60	Y	5	2	0.76	Clear tree line from current position at approximately 5 ft. from edge line to establish 20 ft. clear zone. Section is typically having RHR 5 on one side, and 3 or 4 on other side. Utility poles need to be relocated out of 20 ft. clear zone. Embankment grading likely required.	10
8	8.45	8.65	0.20	N	3	N/A	N/A	More open than previous areas. Utility poles are currently 9-10 ft. back from roadway. No improvements needed.	0
9	8.65	9.00	0.35	N	4	3	0.92	Relocate utility poles out of 10 ft. clear zone.	15
10	9.00	12.00	3.00	Y	5	2	0.76	Clear tree line back from current position at approximately 15 ft. from edge line to establish 20 ft. clear zone. Section is typically having RHR 5 on one side, and 3 or 4 on other side. Utility poles need to be relocated out of 20 ft. clear zone. Embankment grading likely required.	45
11	12.00	12.30	0.30	N	5	3	0.83	Move tree line and utility poles from current position at approximately 5 ft. from edge line to establish 10 ft. clear zone.	5



## 8. Emergency Vehicle Safety Stop Locations

Per VDOT' request, areas suitable for emergency vehicle stops were identified during the field reviews. The study corridor is generally narrow, with multiple horizontal and vertical curvatures and narrow to no shoulders. Therefore, the roadway has very limited areas to be used for emergency vehicle roadside stops. One area was identified that is currently available as a potential location for emergency stop on both sides of the roadway. It is nearly 0.40 miles long from approximately MP 3.8 to 4.2, or from 1,200 ft. west of the intersection with Rte. 616 to 800 ft. east of Rte. 616. This is the only section of the study corridor that has wide-enough shoulders (approximately 8 ft. wide both directions) and generally level ground beyond the pavement surface, as shown in Figure 37. This area was identified based on the high-level observation during the field and is not based on calculations or any type of safety analysis. The use of this area by any vehicle, including the emergency vehicles, should be considered cautiously, and this recommendation herein is not to consider the use of this area as safe. The safety of using the roadside will be impacted by multiple factors that were not evaluated as part of this study.



*Figure 37: Existing Potential Emergency Vehicle Safety Stop Area*

Additionally, several locations were identified that could be improved into safety stop locations with insignificant improvement. These locations were selected based on the existing roadside conditions that were relatively level, and the existing tree line and other roadside hazard items were sufficiently back from the roadway. For the safety of the stopping and considering the speed on the roadway, locations less than 400 ft. were excluded. The identified locations are based on the windshield review and publicly available aerial and street view images, and no field



measurements were conducted for these locations. The approximate start and end MP with some general description of the recommended location is shown in Table 22.

*Table 22: Potential Safety Stop Locations*

Location #	MP Start	MP End	Approx. Length (ft.)	Roadway Side*	Description
1	1.24	1.32	420	WBR	Open area in front of fence.
2	3.06	3.18	635	WBR	More vegetation clearing required.
3	4.25	4.36	580	EBR	Open area in front of fence.
4	4.58	4.68	530	WBR	Open area adjacent to field.
5	6.89	7.03	740	EBR	Open area in front of woods.
6	8.22	8.31	475	WBR	Open area on WBR side.

\* EBR – Eastbound right side  
WBR – Westbound right side

## 9. Long-Term Improvement Projects

Based on this safety analysis and per VDOT’s request, planning-level cost estimates for two long-term projects have been developed. The first project would be the installation of a dedicated left-turn lane in the WB direction at the Three Bridge Rd. intersection. This project could be considered if the recommended turn-lane analysis determined that a turn lane is warranted. The second project would be to widen the entire corridor to 11’ travel lanes with 2’ shoulders on both sides, along with the installation of shoulder and/or centerline rumble strip. These two cost estimates are shown in Table 23. Since these are potential long-term projects, their costs are not included in the summary costs of proposed mitigations listed in Table 24.

*Table 23: Long-Term Project Cost*

Project	MP	Number of Crashes	Cost*
Construction of WB left-turn lane at Three Bridge Rd. intersection	0.46-0.52	9	\$250,000
	Utilities and Right of Way (25%)		\$62,500
	Subtotal		\$312,500
Corridor-wide roadway widening to 11’ lanes + 2’ shoulders and install rumble strip	0.00-12.30	132	\$8,192,000
	Utilities and Right of Way (25%)		\$2,048,000
	Subtotal		\$10,240,000
<b>Total</b>			<b>\$10,552,500</b>

\* Cost is based on TMPD estimates and includes PE and Construction Contingencies estimate



## 10. Summary

Multiple roadway elements have been identified that potentially impact the safety on this section of Rte. 711. In general, the roadway has narrow lanes without any rumble strip and numerous horizontal and vertical curves. Historically, the corridor had very narrow shoulders; however, recently completed road improvements have added wider shoulders to the eastern 6.3 miles of the corridor. Speeds are relatively high on the corridor with posted speed of 55 mph and the 85<sup>th</sup> percentile speed of 61 mph for the majority of the roadway. The predominant type of crashes along the overall corridor are roadway departures (Fixed Object – Off Road), representing 45% of the total crashes.

The safety study of Rte. 711 identified a total of 10 crash hotspot locations, which account for 44% of the total crashes (58 of 132) over the five-year study period, covering nearly 9% of the roadway (1.12 of 12.3 miles). Recommended safety improvements for these segments were determined to cost \$1,291,957. These recommendations include improvement of sight distance through vegetation clearing, installation of warning signs and advisory speeds around key intersections, and installation of edge line rumble stripes. Eight of the hotspot segments occur between MP 6.0 and the eastern end of the study segment (MP 12.3). This entire section has been recently improved with new repaving and wider shoulders. This allows for the rumble stripe to be installed as a low-cost improvement not only in the hotspots, but along the remainder of the newly-paved section as well.

In addition to the hotspots, improvements are also recommended at eight non-hotspot locations. The cost of these improvements is estimated to be \$2,659,102 as shown in Table 24, bringing the total construction cost of all proposed mitigations to \$3,951,059. Mitigations at the non-hotspot locations are based on a total of 29 additional crashes; therefore, the combination of the hotspot and non-hotspot improvements addresses nearly 66% of the total corridor crashes (87 of 132). In addition to the construction costs, Table 24 show high-level cost estimates for Preliminary Engineering, Construction Engineering Support, and Contingency, estimated at 10%, 20% and 20% of construction costs, respectively.



Table 24: Total Costs of All Recommended Improvements

Hotspot Segment	MP	Length	Number of Crashes	Proposed Mitigation Cost Level				Notes
				Low	Medium	High	Total	
1	0.46-0.52	0.06	4	\$2,743	-	\$118,493	\$121,236	-
2	4.96-4.98	0.02	5	\$6,935	-	-	\$6,935	Lees Hill Landing intersection area
3	6.13-6.18	0.05	9	\$6,108	-	\$561,250	\$567,358	Three Bridge Rd. intersection area
4	7.91-8.12	0.21	8	\$4,993	-	\$561,250	\$566,243	Judes Ferry Rd. intersection area
5 and 6	9.37-9.57 9.75-9.78	0.23	9	\$6,729	-	-	\$6,729	Combined due to proximity, similarity
7	10.04-10.22	0.18	5	\$4,993	-	-	\$4,993	-
8 and 9	10.92-11.11 11.22-11.32	0.29	12	\$5,088	-	-	\$5,088	Combined due to proximity, similarity
10	11.57-11.67	0.1	6	\$13,376	-	-	\$13,376	Manakin Town Rd. Intersection
Non-Hotspot Segments	Various	-	29	\$43,131	-	\$2,615,970	\$2,659,102	Improvements at eight sections
Subtotal			87	\$94,096	-	\$3,856,963	\$3,951,059	-
Preliminary Engineering (20%)				\$9,410	-	\$385,696	\$395,106	-
Construction Engineering and Support (20%)				\$18,819	-	\$771,393	\$790,212	-
Contingency (10%)				\$18,819	-	\$771,393	\$790,212	-
<b>Total</b>				<b>\$141,143</b>	<b>-</b>	<b>\$5,785,445</b>	<b>\$5,926,588</b>	<b>-</b>



Appendix A  
Speed Data

---

Site ID: Site 1 EB  
Unit #: 000000003595  
Location: Huguenot Trail 1.12 mi E/o RT 522  
Direction: EAST  
Lane: 1

File: D0923016.prn  
Job #: 20-217 KL MAX  
GPS: 37.61236,-77.88605

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	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	1	0	0	0	0	0	1
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	1	0	0	0	0	0	1
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	0	1	0	2
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	1	0	0	0	1	0	0	0	2
04:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Hour Total	0	0	0	0	0	0	1	0	0	2	1	0	1	0	5
04:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
04:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
04:45	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2
05:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Hour Total	0	0	0	0	0	0	0	0	1	1	0	3	0	0	5
05:15	0	0	0	0	0	0	0	0	0	0	1	1	1	0	3
05:30	0	0	0	0	0	0	0	0	0	2	0	4	0	0	6
05:45	0	0	0	0	0	0	0	0	0	3	2	0	2	0	7
06:00	0	0	0	0	0	0	0	0	1	0	6	3	1	0	11
Hour Total	0	0	0	0	0	0	0	0	1	5	9	8	4	0	27
06:15	0	0	0	0	0	0	0	0	1	4	3	2	2	1	13
06:30	0	0	0	0	0	0	0	0	1	3	7	8	4	0	23
06:45	0	0	0	0	0	0	0	0	6	3	5	3	0	0	17
07:00	0	0	0	1	0	0	0	2	3	12	3	7	0	0	28
Hour Total	0	0	0	1	0	0	0	2	11	22	18	20	6	1	81
07:15	0	0	0	0	0	0	0	0	2	5	11	8	4	0	30
07:30	0	0	0	1	0	0	0	0	0	5	7	10	3	0	26
07:45	0	0	0	0	0	0	0	0	3	2	16	9	2	1	33
08:00	0	1	0	1	0	0	0	5	0	6	9	7	1	0	30
Hour Total	0	1	0	2	0	0	0	5	5	18	43	34	10	1	119
08:15	0	0	0	0	0	0	1	1	1	4	3	1	1	0	12
08:30	0	0	0	0	0	0	0	0	2	1	3	0	0	1	7
08:45	0	0	0	0	0	0	0	0	0	1	10	9	0	0	20
09:00	0	0	0	0	0	0	0	1	2	2	7	8	1	1	22
Hour Total	0	0	0	0	0	0	1	2	5	8	23	18	2	2	61

Site ID: Site 1 EB  
Unit #: 000000003595  
Location: Huguenot Trail 1.12 mi E/o RT 522  
Direction: EAST  
Lane: 1

File: D0923016.prn  
Job #: 20-217 KL MAX  
GPS: 37.61236,-77.88605

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
09:15	0	0	0	0	0	0	0	0	2	4	5	1	0	0	12
09:30	0	0	0	0	0	0	0	0	1	5	6	5	0	0	17
09:45	0	0	0	0	0	0	0	1	2	2	7	1	0	1	14
10:00	0	0	1	0	0	0	0	4	5	1	4	0	1	0	16
Hour Total	0	0	1	0	0	0	0	5	10	12	22	7	1	1	59
10:15	0	0	1	0	0	0	0	0	3	1	1	4	1	0	11
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45	0	0	0	1	0	1	0	0	1	0	2	3	1	0	9
11:00	0	0	0	0	0	0	1	1	0	1	2	2	1	0	8
Hour Total	0	0	1	1	0	1	1	1	4	2	5	9	3	0	28
11:15	0	0	0	0	0	0	1	2	4	2	2	0	0	0	11
11:30	0	0	0	0	0	1	0	0	1	6	8	1	1	0	18
11:45	0	0	0	1	0	0	0	1	2	8	4	2	2	0	20
12:00	0	0	0	0	0	0	1	0	0	3	4	3	0	0	11
Hour Total	0	0	0	1	0	1	2	3	7	19	18	6	3	0	60
12:15	0	0	0	0	0	0	0	1	3	3	9	0	2	1	19
12:30	0	0	0	0	0	0	0	2	5	8	3	2	0	0	20
12:45	0	0	0	0	0	0	0	1	1	6	2	3	0	0	13
13:00	0	0	1	0	0	0	0	0	0	1	3	2	1	0	8
Hour Total	0	0	1	0	0	0	0	4	9	18	17	7	3	1	60
13:15	0	0	0	0	0	0	0	2	2	5	5	6	0	0	20
13:30	0	0	0	0	0	0	0	1	1	3	8	6	0	0	19
13:45	0	0	0	0	0	0	0	1	6	2	1	6	0	0	16
14:00	0	0	0	0	0	0	3	1	0	6	3	5	1	0	19
Hour Total	0	0	0	0	0	0	3	5	9	16	17	23	1	0	74
14:15	0	0	0	0	0	0	0	0	1	8	2	5	1	0	17
14:30	0	0	0	0	0	0	0	0	1	3	4	5	1	0	14
14:45	0	0	0	0	0	0	1	3	0	4	9	3	2	0	22
15:00	0	0	0	0	0	0	0	0	0	4	4	4	1	1	14
Hour Total	0	0	0	0	0	0	1	3	2	19	19	17	5	1	67
15:15	0	0	0	0	0	0	0	2	1	6	1	1	0	0	11
15:30	0	0	0	0	0	1	1	2	2	6	6	3	1	0	22
15:45	0	0	0	0	0	0	0	0	2	12	8	3	3	0	28
16:00	0	0	0	0	0	0	0	0	4	5	7	4	1	0	21
Hour Total	0	0	0	0	0	1	1	4	9	29	22	11	5	0	82
16:15	0	0	0	0	0	1	0	1	0	5	5	7	0	0	19
16:30	0	0	0	0	0	0	0	0	2	2	6	5	1	0	16
16:45	0	0	0	0	0	0	0	0	0	5	6	3	0	0	14
17:00	0	0	1	0	0	0	1	3	5	5	5	7	0	0	27
Hour Total	0	0	1	0	0	1	1	4	7	17	22	22	1	0	76
17:15	0	0	0	0	0	0	0	0	5	4	10	7	1	0	27
17:30	0	0	0	0	0	0	0	1	0	5	9	7	0	0	22
17:45	0	0	0	0	0	0	0	0	1	3	12	3	2	0	21
18:00	0	0	0	0	0	0	0	0	5	5	3	4	2	0	19
Hour Total	0	0	0	0	0	0	0	1	11	17	34	21	5	0	89

Site ID: Site 1 EB  
Unit #: 000000003595  
Location: Huguenot Trail 1.12 mi E/o RT 522  
Direction: EAST  
Lane: 1

File: D0923016.prn  
Job #: 20-217 KL MAX  
GPS: 37.61236,-77.88605

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
18:15	0	0	0	0	0	0	0	0	0	4	2	3	1	0	10
18:30	0	0	0	0	0	0	0	1	0	3	8	5	1	0	18
18:45	0	0	0	0	0	0	0	0	1	1	1	1	1	0	5
19:00	0	0	0	0	0	0	0	0	1	4	3	4	0	0	12
Hour Total	0	0	0	0	0	0	0	1	2	12	14	13	3	0	45
19:15	0	0	0	0	0	0	0	1	4	10	2	5	0	0	22
19:30	0	0	0	1	0	0	0	0	0	4	6	4	0	0	15
19:45	0	0	0	0	0	0	0	0	1	6	4	3	0	0	14
20:00	0	0	0	0	0	0	0	0	1	2	6	3	0	0	12
Hour Total	0	0	0	1	0	0	0	1	6	22	18	15	0	0	63
20:15	0	0	0	0	0	0	0	0	3	5	1	1	0	0	10
20:30	0	0	0	0	0	0	0	0	0	2	3	2	0	0	7
20:45	0	0	1	0	0	0	0	0	0	1	6	3	0	0	11
21:00	0	0	0	0	0	0	0	0	0	4	1	1	2	1	9
Hour Total	0	0	1	0	0	0	0	0	3	12	11	7	2	1	37
21:15	0	0	0	0	0	0	0	0	1	1	0	1	0	0	3
21:30	0	0	0	0	0	0	1	0	1	1	1	1	1	0	6
21:45	0	0	0	0	0	0	0	0	0	0	1	3	0	0	4
22:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Hour Total	0	0	0	0	0	0	1	0	2	2	3	5	1	0	14
22:15	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
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	0	0	1	0	0	1	0	0	2
23:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Hour Total	0	0	0	0	0	0	0	0	1	0	1	2	0	1	5
23:15	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
23:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
23:45	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
24:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	0	0	0	0	0	0	1	1	1	0	1	0	0	4
DAY TOTAL	0	1	5	6	0	4	12	42	107	254	317	249	56	9	1062
PERCENTS	0.0%	0.1%	0.5%	0.6%	0.0%	0.4%	1.1%	4.0%	10.1%	23.9%	29.8%	23.4%	5.3%	0.8%	100.0%

Site ID: Site 1 EB  
Unit #: 000000003595  
Location: Huguenot Trail 1.12 mi E/o RT 522  
Direction: EAST  
Lane: 1

File: D0923016.prn  
Job #: 20-217 KL MAX  
GPS: 37.61236,-77.88605

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-------

---

Statistical Information...

15th Percentile Speed  
49.1 mph

85th Percentile Speed  
63.0 mph

Median Speed  
56.5 mph

Average Speed  
55.6 mph

10 MPH Pace Speed  
50 mph to 60 mph  
571 vehicles in pace  
Representing 54.2% of the total vehicles

Vehicles > 55 MPH  
622  
59.1%

Site ID: Site 1 EB  
Unit #: 000000003595  
Location: Huguenot Trail 1.12 mi E/o RT 522  
Direction: EAST  
Lane: 1

File: D0923016.prn  
Job #: 20-217 KL MAX  
GPS: 37.61236,-77.88605

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
=====															
GRAND TOTAL	0	1	5	6	0	4	12	42	107	254	317	249	56	9	1062
PERCENTS	0.0%	0.1%	0.5%	0.6%	0.0%	0.4%	1.1%	4.0%	10.1%	23.9%	29.8%	23.4%	5.3%	0.8%	100.0%

Site ID: Site 1 WB  
Unit #: 000000020182  
Location: Huguenot Trail 1.12 mi E/o RT 522  
Direction: WEST  
Lane: 1

File: D0923014.prn  
Job #: 20-217 KL MAX  
GPS: 37.61236,-77.88605

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
00:15	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
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	1	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
Hour Total	0	0	0	0	0	0	0	0	0	1	3	1	0	0	5
01:15	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
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	1	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	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	1	1	0	0	0	2
03:30	0	0	0	0	0	0	0	0	0	0	0	1	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	1	0	0	1
Hour Total	0	0	0	0	0	0	0	0	0	1	1	2	0	0	4
04:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
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	1	0	1	0	0	0	0	2
05:00	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Hour Total	0	0	0	0	0	0	0	1	1	1	0	2	0	0	5
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
05:45	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2
06:00	0	0	0	0	0	0	0	0	0	3	1	0	1	0	5
Hour Total	0	0	0	0	0	0	0	0	1	5	1	1	1	0	9
06:15	0	0	0	0	0	0	0	1	2	2	3	0	3	0	11
06:30	0	0	0	0	0	0	0	0	0	1	3	3	1	0	8
06:45	0	0	0	0	0	0	0	0	3	1	3	1	0	0	8
07:00	0	0	0	0	0	0	0	0	5	5	9	0	0	1	20
Hour Total	0	0	0	0	0	0	0	1	10	9	18	4	4	1	47
07:15	0	0	0	0	0	0	0	1	2	2	6	3	1	0	15
07:30	0	0	1	0	0	0	0	1	0	5	8	7	1	0	23
07:45	0	0	0	0	0	0	0	0	1	4	10	2	1	0	18
08:00	0	0	1	0	0	0	0	1	2	3	7	4	0	0	18
Hour Total	0	0	2	0	0	0	0	3	5	14	31	16	3	0	74
08:15	0	0	0	0	0	0	1	1	3	7	3	1	0	0	16
08:30	0	0	0	0	0	0	1	0	4	4	7	0	0	0	16
08:45	0	0	0	0	0	0	0	1	1	9	5	1	0	0	17
09:00	0	0	0	0	0	0	0	2	2	3	7	4	1	0	19
Hour Total	0	0	0	0	0	0	2	4	10	23	22	6	1	0	68

Site ID: Site 1 WB  
Unit #: 000000020182  
Location: Huguenot Trail 1.12 mi E/o RT 522  
Direction: WEST  
Lane: 1

File: D0923014.prn  
Job #: 20-217 KL MAX  
GPS: 37.61236,-77.88605

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
09:15	0	0	0	0	0	0	0	1	0	7	1	2	2	0	13
09:30	0	0	0	0	0	0	0	0	1	4	4	1	0	0	10
09:45	0	0	0	1	0	0	0	3	3	8	3	2	0	0	20
10:00	0	0	0	0	0	0	0	0	3	3	7	0	0	1	14
Hour Total	0	0	0	1	0	0	0	4	7	22	15	5	2	1	57
10:15	0	0	0	1	0	0	1	0	3	4	1	3	0	0	13
10:30	0	0	0	0	0	0	1	3	5	3	5	0	0	0	17
10:45	0	0	0	0	0	0	0	2	1	1	4	0	0	0	8
11:00	0	0	0	0	0	0	0	0	0	8	3	1	0	0	12
Hour Total	0	0	0	1	0	0	2	5	9	16	13	4	0	0	50
11:15	0	0	0	0	0	0	1	4	1	7	0	1	0	1	15
11:30	0	0	0	0	0	1	1	1	2	3	5	1	1	0	15
11:45	0	0	0	0	0	0	0	2	0	7	4	1	0	0	14
12:00	0	0	0	0	0	0	3	1	5	5	4	0	0	0	18
Hour Total	0	0	0	0	0	1	5	8	8	22	13	3	1	1	62
12:15	0	0	0	0	0	0	1	1	3	4	10	8	0	0	27
12:30	0	0	0	0	0	0	0	1	5	7	6	3	0	0	22
12:45	0	0	0	0	0	0	0	2	2	4	8	1	1	0	18
13:00	0	0	0	0	0	1	0	1	2	2	1	2	0	0	9
Hour Total	0	0	0	0	0	1	1	5	12	17	25	14	1	0	76
13:15	0	0	0	0	0	0	0	1	3	7	8	3	0	0	22
13:30	0	0	0	0	0	0	0	2	1	7	6	2	0	0	18
13:45	0	0	0	0	0	0	0	2	4	4	6	3	1	0	20
14:00	0	0	0	0	0	0	1	7	3	6	1	1	1	0	20
Hour Total	0	0	0	0	0	0	1	12	11	24	21	9	2	0	80
14:15	0	0	0	0	0	0	0	1	0	1	7	3	2	0	14
14:30	0	0	0	0	0	0	0	2	4	6	4	4	1	0	21
14:45	0	0	0	0	0	0	1	0	3	8	6	4	1	0	23
15:00	0	1	0	0	0	0	2	1	1	6	1	2	0	1	15
Hour Total	0	1	0	0	0	0	3	4	8	21	18	13	4	1	73
15:15	0	0	0	0	0	0	0	3	5	3	7	3	0	0	21
15:30	0	0	0	0	0	0	0	3	2	5	8	2	0	0	20
15:45	0	0	0	0	0	0	0	1	2	7	9	2	1	0	22
16:00	0	0	0	0	0	0	0	0	5	3	9	6	0	0	23
Hour Total	0	0	0	0	0	0	0	7	14	18	33	13	1	0	86
16:15	0	0	0	1	0	0	0	1	3	9	6	2	0	0	22
16:30	0	0	0	0	0	0	2	5	3	3	10	3	0	0	26
16:45	0	0	0	0	0	0	0	1	5	13	8	2	1	0	30
17:00	0	0	0	0	0	0	0	4	2	11	8	1	1	1	28
Hour Total	0	0	0	1	0	0	2	11	13	36	32	8	2	1	106
17:15	0	0	0	0	0	0	1	0	2	5	3	5	0	0	16
17:30	0	0	0	0	0	0	0	1	0	9	4	5	0	0	19
17:45	0	0	0	0	0	0	0	2	8	3	10	3	0	1	27
18:00	0	0	0	0	0	0	1	0	7	9	14	2	0	0	33
Hour Total	0	0	0	0	0	0	2	3	17	26	31	15	0	1	95

Site ID: Site 1 WB  
Unit #: 000000020182  
Location: Huguenot Trail 1.12 mi E/o RT 522  
Direction: WEST  
Lane: 1

File: D0923014.prn  
Job #: 20-217 KL MAX  
GPS: 37.61236,-77.88605

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
18:15	0	0	0	0	0	0	0	0	1	6	16	7	2	0	32
18:30	0	1	0	1	0	0	0	0	1	6	11	7	0	0	27
18:45	0	0	0	0	0	0	2	2	2	2	4	4	2	0	18
19:00	0	0	0	0	0	0	0	1	2	5	4	1	0	0	13
Hour Total	0	1	0	1	0	0	2	3	6	19	35	19	4	0	90
19:15	0	0	0	0	0	0	1	1	2	4	8	3	0	0	19
19:30	0	0	0	0	0	0	0	3	4	6	4	0	0	0	17
19:45	0	0	0	0	0	0	0	1	2	6	3	1	0	0	13
20:00	0	0	0	0	0	0	0	1	0	6	4	4	0	0	15
Hour Total	0	0	0	0	0	0	1	6	8	22	19	8	0	0	64
20:15	0	0	0	0	0	0	0	0	2	2	3	0	0	0	7
20:30	0	0	0	0	0	0	0	0	0	3	1	5	0	0	9
20:45	0	0	1	0	0	0	0	0	0	2	1	0	0	0	4
21:00	0	0	0	0	0	0	0	0	0	2	2	0	1	0	5
Hour Total	0	0	1	0	0	0	0	0	2	9	7	5	1	0	25
21:15	0	0	0	0	0	0	0	0	1	1	0	0	1	0	3
21:30	0	0	0	0	0	0	1	0	1	1	0	0	0	0	3
21:45	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
22:00	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
Hour Total	0	0	0	0	0	0	1	0	2	3	2	1	1	0	10
22:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
22:30	0	0	0	0	0	0	0	0	1	1	1	0	0	0	3
22:45	0	0	1	0	0	0	0	0	0	1	0	0	0	0	2
23:00	0	0	0	0	0	0	0	0	1	1	0	0	1	0	3
Hour Total	0	0	1	0	0	0	0	0	2	3	2	0	1	0	9
23:15	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
23:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
23:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
24:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Hour Total	0	0	0	0	0	0	0	1	0	2	0	0	1	0	4
DAY TOTAL	0	2	4	5	0	2	22	78	146	314	342	150	30	6	1101
PERCENTS	0.0%	0.2%	0.4%	0.5%	0.0%	0.2%	2.0%	7.1%	13.3%	28.5%	31.1%	13.6%	2.7%	0.5%	100.0%

Site ID: Site 1 WB  
Unit #: 000000020182  
Location: Huguenot Trail 1.12 mi E/o RT 522  
Direction: WEST  
Lane: 1

File: D0923014.prn  
Job #: 20-217 KL MAX  
GPS: 37.61236,-77.88605

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-------

---

Statistical Information...

15th Percentile Speed  
46.8 mph

85th Percentile Speed  
60.5 mph

Median Speed  
54.6 mph

Average Speed  
53.8 mph

10 MPH Pace Speed  
50 mph to 60 mph  
656 vehicles in pace  
Representing 59.9% of the total vehicles

Vehicles > 55 MPH  
522  
47.7%

Site ID: Site 1 WB  
Unit #: 000000020182  
Location: Huguenot Trail 1.12 mi E/o RT 522  
Direction: WEST  
Lane: 1

File: D0923014.prn  
Job #: 20-217 KL MAX  
GPS: 37.61236,-77.88605

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
GRAND TOTAL	0	2	4	5	0	2	22	78	146	314	342	150	30	6	1101
PERCENTS	0.0%	0.2%	0.4%	0.5%	0.0%	0.2%	2.0%	7.1%	13.3%	28.5%	31.1%	13.6%	2.7%	0.5%	100.0%

Site ID: Site 2 EB  
Unit #: 000000023580  
Location: Huguenot Trail 2.59 mi E/o RT 522  
Direction: EAST  
Lane: 1

File: D0923020.prn  
Job #: 20-217 KL MAX  
GPS: 37.60929,-77.86075

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	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	1	0	0	0	0	0	1
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	1	0	0	0	0	0	1
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	0	1	0	2
Hour Total	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
03:15	0	0	0	0	0	0	0	0	0	1	1	0	1	0	3
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	1	0	0	1
04:00	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2
Hour Total	0	0	0	0	0	0	0	1	0	2	1	1	1	0	6
04:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
04:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
04:45	0	0	0	0	0	0	0	1	0	4	1	0	0	0	6
05:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Hour Total	0	0	0	0	0	0	0	1	1	4	3	0	0	0	9
05:15	0	0	0	0	0	0	0	0	0	0	4	0	1	0	5
05:30	0	0	0	0	0	0	0	0	0	1	2	3	0	0	6
05:45	0	0	0	0	0	0	0	0	0	5	2	0	2	1	10
06:00	0	0	0	0	0	0	0	0	0	2	5	5	2	1	15
Hour Total	0	0	0	0	0	0	0	0	0	8	13	8	5	2	36
06:15	0	0	0	0	0	0	0	0	0	5	4	4	2	1	16
06:30	0	0	0	0	0	0	0	0	0	7	8	7	4	0	26
06:45	0	0	0	0	0	0	1	5	0	3	9	3	0	0	21
07:00	0	0	0	0	0	0	0	1	1	12	5	8	0	0	27
Hour Total	0	0	0	0	0	0	1	6	1	27	26	22	6	1	90
07:15	0	0	0	0	0	0	0	0	2	5	13	17	2	1	40
07:30	0	0	0	0	0	0	1	0	1	4	15	12	6	0	39
07:45	0	0	0	0	0	0	0	0	0	6	18	15	3	0	42
08:00	0	0	0	0	0	0	0	0	1	10	7	12	1	0	31
Hour Total	0	0	0	0	0	0	1	0	4	25	53	56	12	1	152
08:15	0	0	0	0	0	0	0	4	0	2	6	6	0	0	18
08:30	0	0	0	0	0	0	1	2	3	4	3	2	0	0	15
08:45	0	0	0	0	0	0	0	0	1	1	8	10	0	0	20
09:00	0	0	0	0	0	0	0	3	0	4	7	7	2	0	23
Hour Total	0	0	0	0	0	0	1	9	4	11	24	25	2	0	76

Site ID: Site 2 EB  
Unit #: 000000023580  
Location: Huguenot Trail 2.59 mi E/o RT 522  
Direction: EAST  
Lane: 1

File: D0923020.prn  
Job #: 20-217 KL MAX  
GPS: 37.60929,-77.86075

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
09:15	0	0	0	0	0	0	0	0	0	2	5	1	1	0	9
09:30	0	0	0	0	0	0	0	1	1	6	4	5	1	0	18
09:45	0	0	0	0	0	0	0	0	2	3	8	3	1	0	17
10:00	0	0	0	0	0	0	0	1	0	3	4	4	1	0	13
Hour Total	0	0	0	0	0	0	0	2	3	14	21	13	4	0	57
10:15	0	0	0	0	0	0	0	0	2	3	5	5	0	0	15
10:30	0	0	0	0	0	0	0	4	1	3	1	4	0	0	13
10:45	0	0	0	0	0	0	0	0	2	2	5	6	0	0	15
11:00	0	0	0	1	0	0	0	1	0	1	7	5	1	0	16
Hour Total	0	0	0	1	0	0	0	5	5	9	18	20	1	0	59
11:15	0	0	0	0	0	0	0	2	1	3	4	2	1	0	13
11:30	0	0	0	0	0	0	0	1	3	3	10	5	1	1	24
11:45	0	0	0	0	0	0	0	1	3	7	5	4	2	0	22
12:00	0	0	0	0	0	0	0	0	0	3	5	2	1	0	11
Hour Total	0	0	0	0	0	0	0	4	7	16	24	13	5	1	70
12:15	0	0	0	0	2	2	1	1	0	8	6	4	1	0	25
12:30	0	0	0	0	0	0	0	0	2	6	3	1	0	0	12
12:45	0	0	0	0	0	0	1	2	3	2	4	3	0	0	15
13:00	0	0	0	0	0	0	0	0	1	2	3	4	0	0	10
Hour Total	0	0	0	0	2	2	2	3	6	18	16	12	1	0	62
13:15	0	0	0	0	0	0	0	0	2	3	2	9	0	0	16
13:30	0	0	0	0	0	0	0	0	3	2	8	4	2	0	19
13:45	0	0	0	0	0	0	0	0	7	3	2	3	0	0	15
14:00	0	0	0	0	0	0	0	1	0	4	6	0	3	0	14
Hour Total	0	0	0	0	0	0	0	1	12	12	18	16	5	0	64
14:15	0	0	0	0	0	0	0	2	1	8	4	5	2	0	22
14:30	0	0	0	0	0	0	0	0	3	3	5	3	1	1	16
14:45	0	0	0	0	0	0	0	0	1	7	9	4	1	0	22
15:00	0	0	0	0	0	0	0	0	0	1	5	3	1	2	12
Hour Total	0	0	0	0	0	0	0	2	5	19	23	15	5	3	72
15:15	0	0	0	0	0	0	0	0	1	3	4	1	0	0	9
15:30	0	0	0	0	0	0	0	2	6	5	3	3	0	0	19
15:45	0	0	0	0	0	0	4	1	1	4	12	4	2	0	28
16:00	0	0	0	0	0	0	0	2	4	5	7	2	1	0	21
Hour Total	0	0	0	0	0	0	4	5	12	17	26	10	3	0	77
16:15	0	0	0	0	0	0	0	0	1	7	5	7	2	0	22
16:30	0	0	0	0	0	0	0	0	2	4	10	3	0	1	20
16:45	0	0	0	0	0	0	0	0	1	2	11	1	0	1	16
17:00	0	0	0	0	0	0	0	0	0	6	2	7	1	1	17
Hour Total	0	0	0	0	0	0	0	0	4	19	28	18	3	3	75
17:15	0	0	0	0	0	0	1	0	1	9	10	5	2	0	28
17:30	0	0	0	0	0	0	0	0	2	12	8	3	2	0	27
17:45	0	0	0	0	0	0	1	4	2	2	9	4	2	1	25
18:00	0	0	0	0	0	0	0	1	0	9	5	4	0	0	19
Hour Total	0	0	0	0	0	0	2	5	5	32	32	16	6	1	99

Site ID: Site 2 EB  
Unit #: 000000023580  
Location: Huguenot Trail 2.59 mi E/o RT 522  
Direction: EAST  
Lane: 1

File: D0923020.prn  
Job #: 20-217 KL MAX  
GPS: 37.60929,-77.86075

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
18:15	0	0	0	0	0	0	0	0	2	3	7	4	1	1	18
18:30	0	0	0	0	0	0	0	0	0	4	5	4	1	0	14
18:45	0	0	0	0	0	0	0	1	0	1	2	4	1	0	9
19:00	0	0	0	0	0	0	0	0	0	4	4	3	1	0	12
Hour Total	0	0	0	0	0	0	0	1	2	12	18	15	4	1	53
19:15	0	0	0	0	0	0	0	0	3	10	6	4	0	1	24
19:30	0	0	0	0	0	0	0	0	0	3	3	1	0	0	7
19:45	0	0	0	0	1	0	0	0	2	2	6	0	0	0	11
20:00	0	0	0	0	0	0	0	1	1	3	2	3	0	0	10
Hour Total	0	0	0	0	1	0	0	1	6	18	17	8	0	1	52
20:15	0	0	0	0	0	0	0	0	0	3	3	0	0	0	6
20:30	0	0	0	0	0	0	0	0	4	2	2	2	0	0	10
20:45	0	0	0	0	0	0	0	0	0	3	2	2	0	0	7
21:00	0	0	0	0	0	0	0	0	0	2	0	1	3	0	6
Hour Total	0	0	0	0	0	0	0	0	4	10	7	5	3	0	29
21:15	0	0	0	0	0	0	0	0	2	0	2	1	0	0	5
21:30	0	0	0	0	0	0	0	0	1	1	0	0	2	0	4
21:45	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
22:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Hour Total	0	0	0	0	0	0	0	0	3	1	4	2	2	0	12
22:15	0	0	0	0	0	0	0	0	0	0	1	0	1	1	3
22:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
22:45	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
23:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Hour Total	0	0	0	0	0	0	0	0	2	1	2	0	1	1	7
23:15	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
23:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
23:45	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
24:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Hour Total	0	0	0	0	0	0	2	0	0	2	1	0	0	0	5
DAY TOTAL	0	0	0	1	3	2	13	46	87	278	375	275	70	15	1165
PERCENTS	0.0%	0.0%	0.0%	0.1%	0.3%	0.2%	1.1%	3.9%	7.5%	23.9%	32.2%	23.6%	6.0%	1.3%	100.0%

Site ID: Site 2 EB  
Unit #: 000000023580  
Location: Huguenot Trail 2.59 mi E/o RT 522  
Direction: EAST  
Lane: 1

File: D0923020.prn  
Job #: 20-217 KL MAX  
GPS: 37.60929,-77.86075

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-------

---

Statistical Information...

15th Percentile Speed  
50.4 mph

85th Percentile Speed  
63.1 mph

Median Speed  
56.9 mph

Average Speed  
56.4 mph

10 MPH Pace Speed  
50 mph to 60 mph  
653 vehicles in pace  
Representing 56.8% of the total vehicles

Vehicles > 55 MPH  
720  
62.6%

Site ID: Site 2 EB  
Unit #: 000000023580  
Location: Huguenot Trail 2.59 mi E/o RT 522  
Direction: EAST  
Lane: 1

File: D0923020.prn  
Job #: 20-217 KL MAX  
GPS: 37.60929,-77.86075

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
GRAND TOTAL	0	0	0	1	3	2	13	46	87	278	375	275	70	15	1165
PERCENTS	0.0%	0.0%	0.0%	0.1%	0.3%	0.2%	1.1%	3.9%	7.5%	23.9%	32.2%	23.6%	6.0%	1.3%	100.0%

Site ID: Site 2 WB  
Unit #: 000000009392  
Location: Huguenot Trail 2.59 mi E/o RT 522  
Direction: WEST  
Lane: 1

File: D0923018.prn  
Job #: 20-217 KL MAX  
GPS: 37.60929,-77.86075

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
00:15	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
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	1	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
Hour Total	0	0	0	0	0	0	0	0	0	1	3	0	1	0	5
01:15	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
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	0	0	0	0	0	0	1	1	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	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	1	0	0	0	0	0	0	1
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	1	0	0	0	0	0	0	1
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45	0	0	0	0	0	0	0	1	0	1	1	0	1	0	4
06:00	0	0	0	0	0	0	0	0	0	3	1	0	0	1	5
Hour Total	0	0	0	0	0	0	0	1	0	4	2	0	1	1	9
06:15	0	0	0	0	0	0	0	0	1	2	1	3	0	0	7
06:30	0	0	0	0	0	0	0	0	0	0	4	1	1	0	6
06:45	0	0	0	0	0	0	0	1	1	2	1	3	0	0	8
07:00	0	0	0	0	0	0	0	1	0	2	6	3	1	0	13
Hour Total	0	0	0	0	0	0	0	2	2	6	12	10	2	0	34
07:15	0	0	0	0	0	0	0	0	0	2	5	3	2	0	12
07:30	0	0	0	0	0	0	0	0	0	2	6	6	2	0	16
07:45	0	0	0	0	0	0	0	0	0	0	6	6	0	0	12
08:00	0	0	0	0	0	0	0	0	2	2	6	9	0	0	19
Hour Total	0	0	0	0	0	0	0	0	2	6	23	24	4	0	59
08:15	0	0	0	0	0	0	0	1	0	5	1	6	1	0	14
08:30	0	0	0	0	0	0	0	0	0	1	9	2	0	0	12
08:45	0	0	0	0	0	0	0	0	2	5	6	6	0	0	19
09:00	0	0	0	0	0	1	0	2	1	1	3	4	1	0	13
Hour Total	0	0	0	0	0	1	0	3	3	12	19	18	2	0	58

Site ID: Site 2 WB  
Unit #: 000000009392  
Location: Huguenot Trail 2.59 mi E/o RT 522  
Direction: WEST  
Lane: 1

File: D0923018.prn  
Job #: 20-217 KL MAX  
GPS: 37.60929,-77.86075

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
09:15	0	0	0	0	0	0	0	1	1	4	8	3	1	0	18
09:30	0	0	0	0	0	0	0	0	0	5	4	4	0	0	13
09:45	0	0	0	0	0	0	0	0	0	7	4	7	0	0	18
10:00	0	0	0	0	0	0	0	0	0	1	6	2	1	0	10
Hour Total	0	0	0	0	0	0	0	1	1	17	22	16	2	0	59
10:15	0	0	0	0	0	0	0	1	2	3	3	3	0	0	12
10:30	0	0	0	0	0	0	0	0	0	3	2	4	3	0	12
10:45	0	0	0	0	0	0	1	1	0	0	6	2	1	0	11
11:00	0	0	0	0	0	0	1	1	1	4	6	0	1	0	14
Hour Total	0	0	0	0	0	0	2	3	3	10	17	9	5	0	49
11:15	0	0	0	0	0	0	0	1	0	1	2	4	1	1	10
11:30	0	0	0	0	0	0	0	1	0	2	3	3	0	0	9
11:45	0	0	0	0	0	0	0	0	2	2	7	4	0	0	15
12:00	0	0	0	0	0	0	0	4	1	3	4	6	1	0	19
Hour Total	0	0	0	0	0	0	0	6	3	8	16	17	2	1	53
12:15	0	0	0	0	0	0	0	1	0	4	6	8	2	0	21
12:30	0	0	0	0	0	0	0	0	4	3	7	3	2	0	19
12:45	0	0	0	0	0	0	0	0	1	3	7	4	2	0	17
13:00	0	0	0	0	0	0	0	0	0	1	1	5	0	0	7
Hour Total	0	0	0	0	0	0	0	1	5	11	21	20	6	0	64
13:15	0	0	0	0	0	0	0	0	1	4	7	5	1	0	18
13:30	0	0	0	0	0	0	3	3	3	6	10	1	2	0	28
13:45	0	0	0	0	0	0	1	2	2	3	7	4	1	0	20
14:00	0	0	0	0	0	0	0	1	3	2	4	7	0	1	18
Hour Total	0	0	0	0	0	0	4	6	9	15	28	17	4	1	84
14:15	0	0	0	0	0	0	0	1	0	3	7	4	0	1	16
14:30	0	0	0	0	0	0	0	0	1	4	4	5	4	1	19
14:45	0	0	0	0	0	0	0	0	2	4	9	5	2	0	22
15:00	0	0	0	0	0	0	0	0	3	6	5	2	0	0	16
Hour Total	0	0	0	0	0	0	0	1	6	17	25	16	6	2	73
15:15	0	0	0	0	0	0	0	1	3	4	10	3	1	0	22
15:30	0	0	0	0	0	0	0	0	1	10	5	7	1	0	24
15:45	0	0	0	0	0	0	0	0	0	6	12	4	2	0	24
16:00	0	0	0	0	0	0	0	0	0	6	17	8	2	0	33
Hour Total	0	0	0	0	0	0	0	1	4	26	44	22	6	0	103
16:15	0	0	0	0	0	0	1	0	1	5	8	9	0	0	24
16:30	0	0	0	0	0	0	0	0	2	4	10	17	2	0	35
16:45	0	0	0	0	0	0	0	0	4	17	11	4	1	0	37
17:00	0	0	0	0	0	0	0	0	3	2	10	7	2	0	24
Hour Total	0	0	0	0	0	0	1	0	10	28	39	37	5	0	120
17:15	0	0	0	0	0	0	0	1	0	2	7	6	2	0	18
17:30	0	0	0	0	0	0	0	0	1	2	9	16	2	0	30
17:45	0	0	0	0	0	0	0	0	0	3	13	9	3	0	28
18:00	0	0	0	0	0	0	0	1	1	7	14	7	1	0	31
Hour Total	0	0	0	0	0	0	0	2	2	14	43	38	8	0	107

SPEED SUMMARY  
Wed 9/23/2020

Site ID: Site 2 WB  
Unit #: 000000009392  
Location: Huguenot Trail 2.59 mi E/o RT 522  
Direction: WEST  
Lane: 1

File: D0923018.prn  
Job #: 20-217 KL MAX  
GPS: 37.60929,-77.86075

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
18:15	0	0	0	0	0	0	0	0	2	1	20	19	2	0	44
18:30	0	0	0	0	0	0	0	0	2	3	13	8	3	0	29
18:45	0	0	0	0	0	0	0	0	1	1	8	11	2	0	23
19:00	0	0	0	0	0	0	0	0	2	2	7	6	0	0	17
Hour Total	0	0	0	0	0	0	0	0	7	7	48	44	7	0	113
19:15	0	0	0	0	0	0	0	0	1	2	9	5	0	0	17
19:30	0	0	0	0	0	0	1	0	1	5	10	3	0	1	21
19:45	0	0	0	0	0	0	1	1	1	3	7	1	0	0	14
20:00	0	0	0	0	0	0	0	0	1	3	5	5	2	0	16
Hour Total	0	0	0	0	0	0	2	1	4	13	31	14	2	1	68
20:15	0	0	0	0	0	0	0	0	0	1	7	4	0	0	12
20:30	0	0	0	0	0	0	0	0	0	0	6	3	1	0	10
20:45	0	0	0	0	0	0	0	0	1	1	1	2	0	0	5
21:00	0	0	0	0	0	0	0	0	1	1	1	3	1	0	7
Hour Total	0	0	0	0	0	0	0	0	2	3	15	12	2	0	34
21:15	0	0	0	0	0	0	0	1	1	0	2	1	0	0	5
21:30	0	0	0	0	0	0	0	0	1	1	0	1	0	0	3
21:45	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3
22:00	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
Hour Total	0	0	0	0	0	0	0	1	2	1	4	5	0	0	13
22:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
22:30	0	0	0	0	0	0	0	0	1	1	1	2	0	0	5
22:45	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3
23:00	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
Hour Total	0	0	0	0	0	0	0	0	4	2	3	2	0	0	11
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
23:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
24:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Hour Total	0	0	0	0	0	0	0	0	0	1	1	1	0	0	3
DAY TOTAL	0	0	0	0	0	1	9	30	69	203	417	322	65	6	1122
PERCENTS	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.8%	2.7%	6.1%	18.1%	37.2%	28.7%	5.8%	0.5%	100.0%

Site ID: Site 2 WB  
Unit #: 000000009392  
Location: Huguenot Trail 2.59 mi E/o RT 522  
Direction: WEST  
Lane: 1

File: D0923018.prn  
Job #: 20-217 KL MAX  
GPS: 37.60929,-77.86075

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-------

---

Statistical Information...

15th Percentile Speed  
51.4 mph

85th Percentile Speed  
63.4 mph

Median Speed  
58.0 mph

Average Speed  
57.4 mph

10 MPH Pace Speed  
55 mph to 65 mph  
739 vehicles in pace  
Representing 66.2% of the total vehicles

Vehicles > 55 MPH  
804  
72.0%

Site ID: Site 2 WB  
Unit #: 000000009392  
Location: Huguenot Trail 2.59 mi E/o RT 522  
Direction: WEST  
Lane: 1

File: D0923018.prn  
Job #: 20-217 KL MAX  
GPS: 37.60929,-77.86075

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
GRAND TOTAL	0	0	0	0	1	9	30	69	203	417	322	65	6	1122	
PERCENTS	0.0%	0.0%	0.0%	0.0%	0.1%	0.8%	2.7%	6.1%	18.1%	37.2%	28.7%	5.8%	0.5%	100.0%	

Site ID: Site 3 EB  
Unit #: 000000003604  
Location: Huguenot Trail 4.45 mi E/o RT 522  
Direction: EAST  
Lane: 1

File: D0923024.prn  
Job #: 20-217 KL MAX  
GPS: 37.60120,-77.82819

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	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	0	0	0	0	0	0	0	0	0	0	0	0
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	2	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
02:15	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
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	1	0	0	0	1
03:00	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
Hour Total	0	0	0	0	1	0	0	0	1	0	1	0	1	0	4
03:15	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
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	1	0	0	0	1
04:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
Hour Total	0	0	0	0	0	0	0	0	2	1	2	0	0	0	5
04:15	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3
04:30	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3
04:45	0	0	0	0	0	1	0	0	2	1	2	0	0	0	6
05:00	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Hour Total	0	0	0	0	0	1	0	1	3	5	4	0	0	0	14
05:15	0	0	0	0	0	0	0	0	1	3	1	0	0	0	5
05:30	0	0	0	0	0	0	0	1	2	1	3	1	0	0	8
05:45	0	0	0	0	0	0	0	0	0	3	1	2	0	1	7
06:00	0	0	0	0	0	0	0	1	0	3	9	3	3	0	19
Hour Total	0	0	0	0	0	0	0	2	3	10	14	6	3	1	39
06:15	0	0	0	0	0	0	0	0	4	11	16	3	1	0	35
06:30	0	0	0	0	0	0	0	2	0	8	10	10	0	0	30
06:45	0	0	0	0	0	0	0	0	3	7	12	4	0	0	26
07:00	0	0	0	0	0	0	0	1	5	10	10	5	0	0	31
Hour Total	0	0	0	0	0	0	0	3	12	36	48	22	1	0	122
07:15	0	0	0	0	0	1	0	2	3	15	18	11	1	0	51
07:30	0	0	0	0	0	0	0	0	4	14	16	16	0	0	50
07:45	0	0	1	0	0	0	0	1	4	18	22	7	2	0	55
08:00	0	0	0	0	0	0	2	4	5	11	15	4	1	0	42
Hour Total	0	0	1	0	0	1	2	7	16	58	71	38	4	0	198
08:15	0	0	0	0	0	0	0	2	5	7	12	4	1	0	31
08:30	0	0	0	0	0	0	1	2	1	10	8	5	1	0	28
08:45	0	0	0	0	0	0	0	3	0	4	15	2	1	1	26
09:00	0	0	0	0	0	0	2	1	7	6	9	5	1	0	31
Hour Total	0	0	0	0	0	0	3	8	13	27	44	16	4	1	116

Site ID: Site 3 EB  
Unit #: 000000003604  
Location: Huguenot Trail 4.45 mi E/o RT 522  
Direction: EAST  
Lane: 1

File: D0923024.prn  
Job #: 20-217 KL MAX  
GPS: 37.60120,-77.82819

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
09:15	0	0	0	0	0	0	1	1	0	2	5	1	1	0	11
09:30	0	0	0	0	0	0	0	0	2	8	7	4	1	0	22
09:45	0	0	0	0	1	0	0	0	4	11	11	4	2	0	33
10:00	0	0	0	0	0	0	1	0	3	8	7	1	0	0	20
Hour Total	0	0	0	0	1	0	2	1	9	29	30	10	4	0	86
10:15	0	0	0	0	0	0	0	5	0	7	6	5	0	1	24
10:30	0	0	0	0	0	3	3	3	8	5	4	0	0	0	26
10:45	0	0	0	0	0	0	0	0	5	6	9	3	0	0	23
11:00	0	0	0	0	0	0	0	2	3	4	7	3	0	0	19
Hour Total	0	0	0	0	0	3	3	10	16	22	26	11	0	1	92
11:15	0	0	1	0	1	0	2	1	3	11	5	1	1	0	26
11:30	0	1	0	0	0	0	1	1	4	5	7	3	2	0	24
11:45	0	1	0	0	0	0	3	3	9	17	6	0	0	0	39
12:00	0	0	0	0	0	0	1	2	8	6	6	2	0	0	25
Hour Total	0	2	1	0	1	0	7	7	24	39	24	6	3	0	114
12:15	0	0	0	0	0	0	0	2	6	7	12	6	2	0	35
12:30	0	0	0	0	0	0	1	5	4	11	4	2	0	0	27
12:45	0	1	0	0	0	0	1	2	3	11	5	1	0	1	25
13:00	0	1	0	0	0	0	1	3	5	2	4	3	0	0	19
Hour Total	0	2	0	0	0	0	3	12	18	31	25	12	2	1	106
13:15	0	0	0	0	0	0	0	4	6	5	7	3	0	0	25
13:30	0	0	0	1	0	0	3	4	6	3	10	1	0	0	28
13:45	0	0	0	0	1	1	1	4	3	6	1	1	0	0	18
14:00	0	0	0	0	0	0	0	2	4	6	1	2	1	0	16
Hour Total	0	0	0	1	1	1	4	14	19	20	19	7	1	0	87
14:15	0	0	0	0	0	0	1	6	8	13	8	0	1	0	37
14:30	0	0	0	0	0	0	2	3	1	7	11	3	1	0	28
14:45	0	0	0	0	0	0	2	2	8	7	9	4	1	0	33
15:00	0	0	0	0	0	1	3	2	1	11	7	3	1	0	29
Hour Total	0	0	0	0	0	1	8	13	18	38	35	10	4	0	127
15:15	0	0	0	0	0	1	0	1	9	8	5	1	0	0	25
15:30	0	0	0	0	0	0	1	3	2	7	10	2	0	0	25
15:45	0	0	0	0	0	0	1	0	6	16	20	2	1	0	46
16:00	0	0	0	0	0	1	1	1	9	11	10	4	0	0	37
Hour Total	0	0	0	0	0	2	3	5	26	42	45	9	1	0	133
16:15	0	0	0	0	0	0	0	1	5	16	15	8	0	0	45
16:30	0	0	0	0	0	0	2	5	9	14	7	6	0	0	43
16:45	0	0	0	0	0	0	1	3	8	17	13	2	2	0	46
17:00	0	0	0	0	0	0	0	3	6	8	8	4	1	0	30
Hour Total	0	0	0	0	0	0	3	12	28	55	43	20	3	0	164
17:15	0	0	0	1	0	0	0	3	6	21	12	6	0	1	50
17:30	0	1	0	0	1	0	1	1	5	13	9	2	1	0	34
17:45	0	0	0	0	0	0	1	5	11	14	15	5	1	0	52
18:00	0	0	0	0	1	0	0	3	4	6	4	2	0	0	20
Hour Total	0	1	0	1	2	0	2	12	26	54	40	15	2	1	156

SPEED SUMMARY  
Wed 9/23/2020

Site ID: Site 3 EB  
Unit #: 000000003604  
Location: Huguenot Trail 4.45 mi E/o RT 522  
Direction: EAST  
Lane: 1

File: D0923024.prn  
Job #: 20-217 KL MAX  
GPS: 37.60120,-77.82819

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
18:15	0	0	0	0	0	0	1	0	8	11	10	5	2	0	37
18:30	0	0	0	1	0	0	1	3	1	14	9	3	1	0	33
18:45	0	0	0	0	0	0	0	1	4	4	2	1	1	0	13
19:00	0	0	0	0	0	0	0	0	1	3	7	2	0	0	13
Hour Total	0	0	0	1	0	0	2	4	14	32	28	11	4	0	96
19:15	0	0	0	0	0	0	1	0	4	8	10	3	0	0	26
19:30	0	0	0	0	0	1	0	2	6	7	2	1	0	0	19
19:45	0	0	0	0	0	0	0	4	2	7	2	0	0	0	15
20:00	0	0	0	0	0	0	0	0	4	3	3	1	0	0	11
Hour Total	0	0	0	0	0	1	1	6	16	25	17	5	0	0	71
20:15	0	0	0	0	0	0	1	1	1	6	1	0	0	0	10
20:30	0	0	0	0	0	0	0	1	0	3	2	2	0	0	8
20:45	0	0	0	1	0	0	1	1	2	1	4	2	0	0	12
21:00	0	0	0	0	0	0	0	0	1	1	2	1	0	0	5
Hour Total	0	0	0	1	0	0	2	3	4	11	9	5	0	0	35
21:15	0	0	0	0	0	0	1	1	0	1	2	1	0	0	6
21:30	0	0	0	0	0	0	0	1	1	0	1	0	0	0	3
21:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
22:00	0	0	0	0	0	0	1	0	0	1	2	1	0	0	5
Hour Total	0	0	0	0	0	0	2	2	2	2	5	2	0	0	15
22:15	0	0	0	0	0	0	0	1	0	1	1	1	0	1	5
22:30	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3
22:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	0	0	0	0	0	0	1	0	1	3	3	0	1	9
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
23:45	0	0	0	0	0	0	0	0	1	1	1	0	0	0	3
24:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
Hour Total	0	0	0	0	0	0	0	0	3	1	2	1	0	0	7
DAY TOTAL	0	5	2	4	6	10	47	125	273	539	535	209	37	6	1798
PERCENTS	0.0%	0.3%	0.1%	0.2%	0.3%	0.6%	2.6%	7.0%	15.2%	30.0%	29.8%	11.6%	2.1%	0.3%	100.0%

Site ID: Site 3 EB  
Unit #: 000000003604  
Location: Huguenot Trail 4.45 mi E/o RT 522  
Direction: EAST  
Lane: 1

File: D0923024.prn  
Job #: 20-217 KL MAX  
GPS: 37.60120,-77.82819

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-------

---

Statistical Information...

15th Percentile Speed  
46.3 mph

85th Percentile Speed  
59.8 mph

Median Speed  
53.9 mph

Average Speed  
53.2 mph

10 MPH Pace Speed  
50 mph to 60 mph  
1074 vehicles in pace  
Representing 59.9% of the total vehicles

Vehicles > 55 MPH  
781  
43.6%

Site ID: Site 3 EB  
Unit #: 000000003604  
Location: Huguenot Trail 4.45 mi E/o RT 522  
Direction: EAST  
Lane: 1

File: D0923024.prn  
Job #: 20-217 KL MAX  
GPS: 37.60120,-77.82819

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
GRAND TOTAL	0	5	2	4	6	10	47	125	273	539	535	209	37	6	1798
PERCENTS	0.0%	0.3%	0.1%	0.2%	0.3%	0.6%	2.6%	7.0%	15.2%	30.0%	29.8%	11.6%	2.1%	0.3%	100.0%

Site ID: Site 3 WB  
Unit #: 000000009372  
Location: Huguenot Trail 4.45 mi E/o RT 522  
Direction: WEST  
Lane: 1

File: D0923022.prn  
Job #: 20-217 KL MAX  
GPS: 37.60120,-77.82819

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
00:15	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
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	2	0	0	0	0	2
01:00	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
Hour Total	0	0	0	0	0	0	0	1	1	3	1	0	0	0	6
01:15	0	0	0	0	0	0	0	0	0	0	1	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	2	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	0	0	0	0	0	0	2	0	0	1	0	0	0	3
02:15	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
02:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
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	1	1	0	0	0	0	0	2
Hour Total	0	0	0	0	1	0	0	2	2	0	0	0	0	0	5
03:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
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	1	0	0	0	0	1
04:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
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	1	1	0	0	0	2
Hour Total	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3
05:15	0	0	0	0	0	0	0	1	2	3	0	1	1	0	8
05:30	0	0	0	0	0	0	0	0	6	4	1	1	1	0	13
05:45	0	0	0	0	0	0	0	0	1	2	2	2	0	0	7
06:00	0	0	0	0	0	0	0	1	2	4	3	0	1	0	11
Hour Total	0	0	0	0	0	0	0	2	11	13	6	4	3	0	39
06:15	0	0	0	0	0	1	0	0	2	3	1	1	0	0	8
06:30	0	0	0	0	0	0	0	3	5	0	4	0	0	0	12
06:45	0	0	0	0	0	0	1	3	10	4	2	2	0	0	22
07:00	0	0	0	0	0	0	0	1	4	15	9	1	0	0	30
Hour Total	0	0	0	0	0	1	1	7	21	22	16	4	0	0	72
07:15	0	0	0	1	0	1	1	3	4	9	6	4	0	0	29
07:30	0	0	0	0	0	0	0	5	7	5	7	3	1	0	28
07:45	0	0	0	0	0	0	0	5	7	9	6	2	2	0	31
08:00	0	0	0	0	2	0	0	2	7	14	3	1	0	0	29
Hour Total	0	0	0	1	2	1	1	15	25	37	22	10	3	0	117
08:15	0	0	0	0	0	0	1	2	4	3	9	2	0	0	21
08:30	0	0	0	0	0	0	1	1	4	4	1	0	1	0	12
08:45	0	0	0	0	0	0	0	1	2	4	10	0	0	0	17
09:00	0	0	0	0	0	0	1	5	6	5	4	2	0	0	23
Hour Total	0	0	0	0	0	0	3	9	16	16	24	4	1	0	73

Site ID: Site 3 WB  
Unit #: 000000009372  
Location: Huguenot Trail 4.45 mi E/o RT 522  
Direction: WEST  
Lane: 1

File: D0923022.prn  
Job #: 20-217 KL MAX  
GPS: 37.60120,-77.82819

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
09:15	0	0	0	0	0	3	1	2	8	6	5	0	0	1	26
09:30	0	0	0	0	0	0	2	2	5	8	7	2	0	0	26
09:45	0	0	0	0	0	0	0	1	13	10	1	0	0	0	25
10:00	0	0	0	0	2	0	1	2	5	7	4	0	1	0	22
Hour Total	0	0	0	0	2	3	4	7	31	31	17	2	1	1	99
10:15	0	0	0	0	0	0	1	2	1	5	4	0	0	0	13
10:30	0	0	0	0	0	3	0	1	2	4	2	1	0	0	13
10:45	0	0	0	0	1	0	0	1	3	6	6	0	1	0	18
11:00	0	0	0	0	0	0	2	1	8	6	3	1	0	0	21
Hour Total	0	0	0	0	1	3	3	5	14	21	15	2	1	0	65
11:15	0	0	0	0	0	0	1	0	1	6	4	3	1	0	16
11:30	0	0	0	0	0	0	0	5	4	5	0	1	0	0	15
11:45	1	0	0	0	0	1	3	2	5	10	5	0	0	0	27
12:00	2	0	0	1	0	0	2	2	3	5	5	3	0	0	23
Hour Total	3	0	0	1	0	1	6	9	13	26	14	7	1	0	81
12:15	0	1	0	0	0	0	0	4	7	3	4	2	0	0	21
12:30	0	0	0	0	0	0	1	8	5	5	6	2	0	0	27
12:45	0	0	0	0	2	0	1	8	2	6	5	2	0	0	26
13:00	0	0	0	0	0	0	0	1	4	11	5	0	0	0	21
Hour Total	0	1	0	0	2	0	2	21	18	25	20	6	0	0	95
13:15	0	0	0	0	0	0	0	5	4	10	5	2	0	0	26
13:30	0	0	0	0	0	1	6	4	5	12	4	2	0	0	34
13:45	0	0	0	0	0	0	6	1	3	6	4	2	0	0	22
14:00	0	0	0	0	0	0	0	2	3	9	4	1	0	0	19
Hour Total	0	0	0	0	0	1	12	12	15	37	17	7	0	0	101
14:15	0	0	0	0	0	0	1	3	4	13	8	1	0	0	30
14:30	0	0	0	0	0	0	0	2	3	9	6	0	0	0	20
14:45	0	0	0	1	0	0	2	0	7	10	3	3	0	0	26
15:00	0	0	0	0	0	0	0	8	9	7	0	1	0	0	25
Hour Total	0	0	0	1	0	0	3	13	23	39	17	5	0	0	101
15:15	0	0	0	0	0	0	2	5	2	8	7	4	0	0	28
15:30	0	0	0	0	0	0	0	7	6	13	7	0	0	0	33
15:45	0	0	0	0	0	0	0	4	10	7	10	2	0	0	33
16:00	0	0	0	0	1	0	3	0	11	12	12	4	0	0	43
Hour Total	0	0	0	0	1	0	5	16	29	40	36	10	0	0	137
16:15	0	1	0	0	0	0	1	0	11	15	7	1	0	0	36
16:30	0	0	0	0	0	0	3	2	3	16	13	3	1	0	41
16:45	0	0	0	0	1	5	5	1	11	14	8	1	0	0	46
17:00	0	0	0	0	0	0	0	4	7	9	13	5	2	0	40
Hour Total	0	1	0	0	1	5	9	7	32	54	41	10	3	0	163
17:15	0	0	0	0	1	0	0	2	5	17	3	3	0	0	31
17:30	0	0	0	0	0	0	0	0	7	22	17	17	0	0	63
17:45	0	0	0	0	1	0	0	0	8	21	20	8	0	0	58
18:00	0	0	0	0	0	0	0	5	13	18	13	1	0	1	51
Hour Total	0	0	0	0	2	0	0	7	33	78	53	29	0	1	203

SPEED SUMMARY  
Wed 9/23/2020

Site ID: Site 3 WB  
Unit #: 000000009372  
Location: Huguenot Trail 4.45 mi E/o RT 522  
Direction: WEST  
Lane: 1

File: D0923022.prn  
Job #: 20-217 KL MAX  
GPS: 37.60120,-77.82819

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
18:15	0	0	0	1	0	0	0	0	14	24	15	4	0	0	58
18:30	0	0	0	0	0	0	2	3	6	5	17	3	0	0	36
18:45	0	0	0	0	0	0	1	1	3	11	13	8	0	0	37
19:00	0	0	0	0	0	0	0	1	10	13	9	0	0	0	33
Hour Total	0	0	0	1	0	0	3	5	33	53	54	15	0	0	164
19:15	0	0	0	0	0	0	0	1	3	13	5	0	1	0	23
19:30	0	0	0	0	0	2	0	7	7	5	5	1	0	0	27
19:45	0	0	0	0	1	0	0	2	2	7	3	4	0	0	19
20:00	0	0	0	0	0	0	0	3	2	8	5	4	0	0	22
Hour Total	0	0	0	0	1	2	0	13	14	33	18	9	1	0	91
20:15	0	0	0	0	0	0	0	0	4	10	4	1	0	0	19
20:30	0	0	0	0	0	0	0	1	4	9	6	1	0	0	21
20:45	0	0	0	1	0	0	0	2	1	4	3	1	0	0	12
21:00	0	0	0	0	0	0	0	2	1	9	3	0	0	0	15
Hour Total	0	0	0	1	0	0	0	5	10	32	16	3	0	0	67
21:15	0	0	0	0	1	0	1	0	4	2	2	2	0	0	12
21:30	0	0	0	0	0	0	0	1	4	2	1	0	0	0	8
21:45	0	0	0	0	0	0	0	0	2	4	0	1	0	0	7
22:00	0	0	0	0	0	0	0	0	0	1	1	1	0	0	3
Hour Total	0	0	0	0	1	0	1	1	10	9	4	4	0	0	30
22:15	0	0	0	0	0	0	0	0	2	1	0	2	0	0	5
22:30	0	0	0	0	0	0	0	0	2	7	2	1	0	0	12
22:45	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
23:00	0	0	0	0	0	0	1	1	1	1	0	1	0	0	5
Hour Total	0	0	0	0	0	0	1	1	6	10	2	4	0	0	24
23:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
23:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
23:45	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
24:00	0	0	0	0	0	0	0	0	0	2	3	0	0	0	5
Hour Total	0	0	0	0	0	0	0	0	3	3	3	0	0	0	9
DAY TOTAL	3	2	0	5	14	17	54	160	360	585	398	135	14	2	1749
PERCENTS	0.2%	0.1%	0.0%	0.3%	0.8%	1.0%	3.1%	9.1%	20.6%	33.4%	22.8%	7.7%	0.8%	0.1%	100.0%

Site ID: Site 3 WB  
Unit #: 000000009372  
Location: Huguenot Trail 4.45 mi E/o RT 522  
Direction: WEST  
Lane: 1

File: D0923022.prn  
Job #: 20-217 KL MAX  
GPS: 37.60120,-77.82819

-----  
TIME      <10   <15   <20   <25   <30   <35   <40   <45   <50   <55   <60   <65   <70   <75   Total  
-----

Statistical Information...

15th Percentile Speed  
45.1 mph

85th Percentile Speed  
58.6 mph

Median Speed  
52.2 mph

Average Speed  
51.6 mph

10 MPH Pace Speed  
50 mph to 60 mph  
983 vehicles in pace  
Representing 56.4% of the total vehicles

Vehicles > 55 MPH  
547  
31.4%

Site ID: Site 3 WB  
Unit #: 000000009372  
Location: Huguenot Trail 4.45 mi E/o RT 522  
Direction: WEST  
Lane: 1

File: D0923022.prn  
Job #: 20-217 KL MAX  
GPS: 37.60120,-77.82819

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
GRAND TOTAL	3	2	0	5	14	17	54	160	360	585	398	135	14	2	1749
PERCENTS	0.2%	0.1%	0.0%	0.3%	0.8%	1.0%	3.1%	9.1%	20.6%	33.4%	22.8%	7.7%	0.8%	0.1%	100.0%

Site ID: Site 4 EB  
Unit #: 000000003563  
Location: Huguenot Trail 6.05 Mi E of Rt 522  
Direction: EAST  
Lane: 1

File: D0923012.prn  
Job #: 20-217 TO Max  
GPS: 37.59466 -77.80119

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	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	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	0	0	0	0	0	0	1
02:45	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Hour Total	0	0	0	0	0	0	1	1	0	0	0	1	0	1	4
03:15	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
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	1	0	0	1
04:00	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2
Hour Total	0	0	0	0	0	0	0	0	1	0	1	3	0	0	5
04:15	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
04:30	0	0	0	0	0	0	0	0	0	2	0	2	0	0	4
04:45	0	0	0	0	0	0	0	0	0	1	3	1	0	0	5
05:00	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
Hour Total	0	0	0	0	0	0	0	0	3	3	4	3	1	0	14
05:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
05:30	0	0	0	0	0	0	0	0	0	1	3	5	0	0	9
05:45	0	0	0	0	0	0	0	0	0	2	1	1	2	0	6
06:00	0	0	0	0	0	0	0	1	0	0	8	6	3	1	19
Hour Total	0	0	0	0	0	0	0	1	0	3	12	13	5	1	35
06:15	0	0	0	1	0	0	0	0	3	8	10	8	0	0	30
06:30	0	0	0	0	0	0	0	1	2	2	16	7	3	0	31
06:45	0	0	0	0	0	0	0	1	0	6	11	9	2	0	29
07:00	0	0	0	0	0	0	1	1	3	5	14	7	1	0	32
Hour Total	0	0	0	1	0	0	1	3	8	21	51	31	6	0	122
07:15	0	0	0	0	0	0	0	2	0	2	20	13	4	0	41
07:30	0	0	0	0	0	0	0	0	6	8	17	21	3	1	56
07:45	0	0	0	0	0	0	0	0	6	11	16	15	4	0	52
08:00	0	0	0	0	0	0	0	4	2	10	9	10	1	0	36
Hour Total	0	0	0	0	0	0	0	6	14	31	62	59	12	1	185
08:15	0	0	0	0	0	0	0	0	0	7	19	7	2	0	35
08:30	0	0	0	0	0	0	0	0	2	7	7	5	2	0	23
08:45	0	0	0	0	0	0	0	1	1	3	9	8	2	0	24
09:00	0	0	0	0	0	0	0	2	3	3	6	5	3	0	22
Hour Total	0	0	0	0	0	0	0	3	6	20	41	25	9	0	104

Site ID: Site 4 EB  
Unit #: 000000003563  
Location: Huguenot Trail 6.05 Mi E of Rt 522  
Direction: EAST  
Lane: 1

File: D0923012.prn  
Job #: 20-217 TO Max  
GPS: 37.59466 -77.80119

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
09:15	0	0	0	0	0	0	0	1	1	2	8	5	1	0	18
09:30	0	0	0	0	0	0	0	1	1	4	7	4	1	0	18
09:45	0	0	0	0	0	0	2	0	2	5	7	9	2	0	27
10:00	0	0	0	0	0	3	3	0	2	0	8	1	1	0	18
Hour Total	0	0	0	0	0	3	5	2	6	11	30	19	5	0	81
10:15	0	0	0	0	0	0	0	2	0	3	4	6	1	0	16
10:30	0	0	0	0	0	1	3	5	2	3	5	5	2	0	26
10:45	0	0	0	0	0	0	0	1	0	8	6	4	1	0	20
11:00	0	0	0	0	0	0	1	1	0	2	6	6	1	0	17
Hour Total	0	0	0	0	0	1	4	9	2	16	21	21	5	0	79
11:15	0	0	0	0	0	0	1	1	1	8	8	3	2	0	24
11:30	0	0	0	0	0	0	0	0	4	14	6	1	1	0	26
11:45	0	0	0	0	0	0	0	3	1	13	13	2	0	0	32
12:00	0	0	1	0	0	0	0	1	2	7	4	3	1	0	19
Hour Total	0	0	1	0	0	0	1	5	8	42	31	9	4	0	101
12:15	0	0	0	0	0	2	0	0	1	8	12	4	1	0	28
12:30	0	0	0	0	0	0	1	1	3	7	3	3	2	1	21
12:45	1	0	0	0	0	1	0	0	5	8	5	2	0	1	23
13:00	0	0	0	0	0	1	1	1	3	7	1	1	0	1	16
Hour Total	1	0	0	0	0	4	2	2	12	30	21	10	3	3	88
13:15	0	0	0	0	0	0	1	0	6	4	9	4	5	0	29
13:30	0	0	0	0	0	0	0	5	4	0	9	4	0	0	22
13:45	0	0	0	0	0	0	0	5	7	7	3	1	0	0	23
14:00	0	0	0	0	0	0	0	0	1	4	4	1	1	0	11
Hour Total	0	0	0	0	0	0	1	10	18	15	25	10	6	0	85
14:15	0	0	0	0	0	0	0	2	12	8	5	3	0	0	30
14:30	0	0	2	2	0	0	0	2	6	4	8	1	1	0	26
14:45	0	0	0	0	0	0	0	1	10	12	3	5	2	0	33
15:00	0	0	0	0	0	0	1	3	4	7	8	4	0	0	27
Hour Total	0	0	2	2	0	0	1	8	32	31	24	13	3	0	116
15:15	0	0	0	0	1	0	4	4	5	11	6	1	0	0	32
15:30	0	0	0	0	0	0	0	0	2	7	9	4	0	0	22
15:45	0	0	0	0	0	0	0	2	2	15	15	9	1	0	44
16:00	0	0	0	0	0	0	0	0	1	12	9	7	0	0	29
Hour Total	0	0	0	0	1	0	4	6	10	45	39	21	1	0	127
16:15	0	0	0	0	0	0	0	2	5	10	16	9	0	0	42
16:30	0	0	0	0	2	1	0	0	6	9	15	6	0	1	40
16:45	0	0	0	0	0	0	0	1	2	9	18	3	3	0	36
17:00	0	0	0	0	0	0	0	2	3	8	12	2	3	0	30
Hour Total	0	0	0	0	2	1	0	5	16	36	61	20	6	1	148
17:15	0	0	0	0	0	0	0	1	5	11	21	7	2	0	47
17:30	0	0	0	0	0	0	0	0	3	10	12	4	1	0	30
17:45	0	0	0	0	1	4	3	1	4	10	12	8	3	0	46
18:00	0	0	0	0	0	1	1	3	5	2	7	3	0	0	22
Hour Total	0	0	0	0	1	5	4	5	17	33	52	22	6	0	145

Site ID: Site 4 EB  
Unit #: 000000003563  
Location: Huguenot Trail 6.05 Mi E of Rt 522  
Direction: EAST  
Lane: 1

File: D0923012.prn  
Job #: 20-217 TO Max  
GPS: 37.59466 -77.80119

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
18:15	0	0	0	0	0	0	0	0	3	8	11	6	3	1	32
18:30	0	0	0	1	0	1	0	0	1	15	13	2	0	1	34
18:45	0	0	0	0	0	0	0	1	7	5	2	2	1	0	18
19:00	0	0	0	0	0	0	0	1	3	4	5	3	1	0	17
Hour Total	0	0	0	1	0	1	0	2	14	32	31	13	5	2	101
19:15	0	0	0	0	0	0	0	0	5	11	5	2	1	0	24
19:30	0	0	0	0	0	0	0	3	2	4	2	2	0	0	13
19:45	0	0	0	0	0	0	0	1	3	4	4	1	0	0	13
20:00	0	0	0	0	0	0	0	0	1	4	0	2	0	0	7
Hour Total	0	0	0	0	0	0	0	4	11	23	11	7	1	0	57
20:15	0	0	0	0	0	0	0	1	1	3	4	1	0	0	10
20:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:45	0	0	0	0	0	0	0	0	2	1	4	1	1	1	10
21:00	0	0	0	0	0	0	0	0	1	0	2	0	0	0	3
Hour Total	0	0	0	0	0	0	0	1	4	4	10	2	1	1	23
21:15	0	0	0	0	0	0	0	0	3	0	0	2	1	0	6
21:30	0	0	0	0	0	0	0	0	1	1	0	1	0	0	3
21:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
22:00	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
Hour Total	0	0	0	0	0	0	0	0	4	2	1	4	1	0	12
22:15	0	0	0	0	0	0	0	0	1	0	0	0	0	2	3
22:30	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
22:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
23:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Hour Total	0	0	0	0	0	0	0	1	1	0	0	3	0	2	7
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24:00	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	2	0	0	0	2
DAY TOTAL	1	0	3	4	4	15	24	74	187	398	530	309	80	12	1641
PERCENTS	0.1%	0.0%	0.2%	0.2%	0.2%	0.9%	1.5%	4.5%	11.4%	24.3%	32.3%	18.8%	4.9%	0.7%	100.0%

Site ID: Site 4 EB  
Unit #: 000000003563  
Location: Huguenot Trail 6.05 Mi E of Rt 522  
Direction: EAST  
Lane: 1

File: D0923012.prn  
Job #: 20-217 TO Max  
GPS: 37.59466 -77.80119

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-------

---

Statistical Information...

15th Percentile Speed  
48.2 mph

85th Percentile Speed  
62.4 mph

Median Speed  
56.0 mph

Average Speed  
55.1 mph

10 MPH Pace Speed  
50 mph to 60 mph  
928 vehicles in pace  
Representing 57.0% of the total vehicles

Vehicles > 55 MPH  
919  
56.4%

Site ID: Site 4 EB  
Unit #: 000000003563  
Location: Huguenot Trail 6.05 Mi E of Rt 522  
Direction: EAST  
Lane: 1

File: D0923012.prn  
Job #: 20-217 TO Max  
GPS: 37.59466 -77.80119

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
GRAND TOTAL	1	0	3	4	4	15	24	74	187	398	530	309	80	12	1641
PERCENTS	0.1%	0.0%	0.2%	0.2%	0.2%	0.9%	1.5%	4.5%	11.4%	24.3%	32.3%	18.8%	4.9%	0.7%	100.0%

Site ID: Site 4 WB  
Unit #: 000000009347  
Location: Huguenot Trail 6.05 Mi E of Rt 522  
Direction: WEST  
Lane: 1

File: D0923010.prn  
Job #: 20-217 TO Max  
GPS: 37.59466 -77.80119

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
00:15	0	0	0	0	0	0	0	0	0	0	1	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	1	1	0	0	0	2
01:00	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2
Hour Total	0	0	0	0	0	0	0	1	0	1	3	0	0	0	5
01:15	0	0	0	0	0	0	0	0	0	0	0	1	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	0	0	0	0	0	0	0	0	1	0	0	1
02:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
02:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
02:45	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Hour Total	0	0	0	0	0	0	0	1	1	0	1	1	0	0	4
03:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
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	1	0	0	1
04:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
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	1	0	0	0	1
05:00	0	0	0	0	0	0	0	0	0	1	0	1	1	0	3
Hour Total	0	0	0	0	0	0	0	0	0	1	1	2	1	0	5
05:15	0	0	0	0	0	0	0	0	0	2	4	1	0	0	7
05:30	0	0	0	0	0	0	0	0	3	5	1	1	1	0	11
05:45	0	0	0	0	0	0	0	0	1	1	3	1	0	0	6
06:00	0	0	0	0	0	0	0	0	2	2	0	0	3	0	7
Hour Total	0	0	0	0	0	0	0	0	6	10	8	3	4	0	31
06:15	0	0	0	1	0	0	0	0	2	2	3	2	0	0	10
06:30	0	0	0	0	0	0	0	3	3	3	1	2	0	0	12
06:45	0	0	0	0	0	0	0	0	3	8	6	2	0	0	19
07:00	0	0	0	0	0	0	0	2	0	13	10	1	1	0	27
Hour Total	0	0	0	1	0	0	0	5	8	26	20	7	1	0	68
07:15	0	0	0	0	0	0	0	0	6	9	9	2	1	0	27
07:30	0	0	0	0	0	0	0	2	1	8	9	4	0	1	25
07:45	0	0	0	0	0	0	0	1	11	10	2	3	1	0	28
08:00	0	0	0	0	0	0	0	0	4	7	6	2	0	0	19
Hour Total	0	0	0	0	0	0	0	3	22	34	26	11	2	1	99
08:15	0	0	0	0	0	0	1	4	3	7	4	3	0	0	22
08:30	0	0	0	0	0	0	0	3	6	8	4	1	0	0	22
08:45	0	0	0	0	0	0	0	1	4	8	7	0	0	0	20
09:00	0	0	0	0	0	0	0	4	6	9	6	4	0	0	29
Hour Total	0	0	0	0	0	0	1	12	19	32	21	8	0	0	93

Site ID: Site 4 WB  
Unit #: 000000009347  
Location: Huguenot Trail 6.05 Mi E of Rt 522  
Direction: WEST  
Lane: 1

File: D0923010.prn  
Job #: 20-217 TO Max  
GPS: 37.59466 -77.80119

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
09:15	0	0	0	0	0	0	0	0	7	5	9	2	0	0	23
09:30	0	0	0	0	0	0	1	0	1	4	7	2	0	0	15
09:45	0	0	0	0	0	0	0	2	5	9	7	2	0	0	25
10:00	0	0	0	0	0	4	2	4	5	2	5	0	0	0	22
Hour Total	0	0	0	0	0	4	3	6	18	20	28	6	0	0	85
10:15	0	0	0	0	0	1	0	0	2	3	5	1	0	0	12
10:30	0	0	0	0	0	0	3	2	2	4	3	2	0	0	16
10:45	0	0	0	0	0	0	1	0	5	6	3	3	0	0	18
11:00	0	0	0	0	0	1	0	0	3	11	5	1	0	0	21
Hour Total	0	0	0	0	0	2	4	2	12	24	16	7	0	0	67
11:15	0	0	0	0	0	0	0	0	2	7	6	2	0	0	17
11:30	0	0	0	0	0	0	1	1	2	10	2	0	0	0	16
11:45	0	0	0	0	0	0	0	0	6	5	10	1	0	0	22
12:00	0	0	1	0	0	1	0	1	3	11	7	4	1	0	29
Hour Total	0	0	1	0	0	1	1	2	13	33	25	7	1	0	84
12:15	0	0	0	0	0	0	2	1	5	13	8	0	1	0	30
12:30	0	0	0	0	0	0	0	2	8	6	5	2	0	0	23
12:45	0	0	0	0	0	0	0	1	4	22	8	0	0	0	35
13:00	0	0	0	0	0	2	0	1	4	6	6	1	1	0	21
Hour Total	0	0	0	0	0	2	2	5	21	47	27	3	2	0	109
13:15	0	1	0	0	0	0	0	2	1	7	2	1	1	0	15
13:30	0	0	0	0	0	0	1	7	0	13	8	1	1	0	31
13:45	0	0	0	0	0	0	1	1	4	5	8	0	1	0	20
14:00	0	0	0	0	0	1	0	1	2	6	6	1	0	0	17
Hour Total	0	1	0	0	0	1	2	11	7	31	24	3	3	0	83
14:15	0	0	2	0	0	0	0	0	2	11	10	2	0	0	27
14:30	0	0	0	0	1	1	0	2	2	5	5	2	0	0	18
14:45	0	0	0	0	0	0	0	0	2	11	9	1	1	0	24
15:00	0	0	0	0	0	0	0	1	6	5	5	3	0	0	20
Hour Total	0	0	2	0	1	1	0	3	12	32	29	8	1	0	89
15:15	0	0	0	0	0	0	0	0	3	8	10	2	1	1	25
15:30	0	0	0	0	0	0	0	1	3	8	16	2	0	0	30
15:45	0	0	0	0	0	0	0	0	4	6	13	5	1	0	29
16:00	0	0	0	0	1	0	0	0	8	16	10	3	1	0	39
Hour Total	0	0	0	0	1	0	0	1	18	38	49	12	3	1	123
16:15	0	0	0	0	0	1	0	2	5	19	8	1	0	1	37
16:30	0	0	0	0	0	0	1	1	6	7	12	6	0	0	33
16:45	0	0	0	0	0	0	0	5	9	20	10	5	0	1	50
17:00	0	0	0	0	0	0	0	0	2	14	8	7	1	0	32
Hour Total	0	0	0	0	0	1	1	8	22	60	38	19	1	2	152
17:15	0	0	0	0	0	0	0	0	1	10	13	3	0	0	27
17:30	0	0	0	0	0	0	2	1	4	22	25	10	1	0	65
17:45	0	0	0	0	0	0	0	1	12	16	15	3	1	0	48
18:00	0	0	0	1	0	1	1	2	7	14	17	3	0	0	46
Hour Total	0	0	0	1	0	1	3	4	24	62	70	19	2	0	186

Site ID: Site 4 WB  
Unit #: 000000009347  
Location: Huguenot Trail 6.05 Mi E of Rt 522  
Direction: WEST  
Lane: 1

File: D0923010.prn  
Job #: 20-217 TO Max  
GPS: 37.59466 -77.80119

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
18:15	0	0	0	0	1	0	0	0	3	14	22	3	1	0	44
18:30	0	0	0	0	0	0	0	1	5	11	10	5	1	0	33
18:45	0	0	0	0	0	0	0	2	6	9	15	1	0	0	33
19:00	0	0	0	0	0	0	0	1	4	13	6	4	0	0	28
Hour Total	0	0	0	0	1	0	0	4	18	47	53	13	2	0	138
19:15	0	0	0	0	0	0	1	0	0	7	10	2	0	0	20
19:30	0	0	0	0	0	0	0	1	7	7	6	2	0	0	23
19:45	0	0	0	0	0	0	0	0	1	6	4	5	0	0	16
20:00	0	0	0	0	0	0	0	0	0	12	8	2	0	0	22
Hour Total	0	0	0	0	0	0	1	1	8	32	28	11	0	0	81
20:15	0	0	0	0	0	0	0	0	1	7	5	1	1	0	15
20:30	0	0	0	0	0	0	0	1	1	6	2	2	1	0	13
20:45	0	0	0	0	0	0	0	1	1	2	7	2	0	0	13
21:00	0	0	0	0	0	0	0	0	1	4	3	0	0	0	8
Hour Total	0	0	0	0	0	0	0	2	4	19	17	5	2	0	49
21:15	0	0	0	0	0	0	0	0	3	2	0	3	0	0	8
21:30	0	0	0	0	0	0	0	0	0	1	4	0	0	0	5
21:45	0	0	0	0	0	0	0	0	0	2	1	1	1	0	5
22:00	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3
Hour Total	0	0	0	0	0	0	0	0	3	7	6	4	1	0	21
22:15	0	0	0	0	0	0	0	1	0	1	1	2	0	0	5
22:30	0	0	0	0	0	0	0	0	2	3	2	2	0	0	9
22:45	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
23:00	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3
Hour Total	0	0	0	0	0	0	0	1	2	4	5	8	0	0	20
23:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
23:30	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2
23:45	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
24:00	0	0	0	0	0	0	0	0	0	0	2	2	1	0	5
Hour Total	0	0	0	0	0	0	0	0	2	1	2	4	1	0	10
DAY TOTAL	0	1	3	2	3	13	18	72	240	561	497	163	27	4	1604
PERCENTS	0.0%	0.1%	0.2%	0.1%	0.2%	0.8%	1.1%	4.5%	15.0%	35.0%	31.0%	10.2%	1.7%	0.2%	100.0%

Site ID: Site 4 WB  
Unit #: 000000009347  
Location: Huguenot Trail 6.05 Mi E of Rt 522  
Direction: WEST  
Lane: 1

File: D0923010.prn  
Job #: 20-217 TO Max  
GPS: 37.59466 -77.80119

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-------

---

Statistical Information...

15th Percentile Speed  
47.7 mph

85th Percentile Speed  
59.5 mph

Median Speed  
54.0 mph

Average Speed  
53.6 mph

10 MPH Pace Speed  
50 mph to 60 mph  
1058 vehicles in pace  
Representing 66.1% of the total vehicles

Vehicles > 55 MPH  
687  
42.9%

Site ID: Site 4 WB  
Unit #: 000000009347  
Location: Huguenot Trail 6.05 Mi E of Rt 522  
Direction: WEST  
Lane: 1

File: D0923010.prn  
Job #: 20-217 TO Max  
GPS: 37.59466 -77.80119

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
GRAND TOTAL	0	1	3	2	3	13	18	72	240	561	497	163	27	4	1604
PERCENTS	0.0%	0.1%	0.2%	0.1%	0.2%	0.8%	1.1%	4.5%	15.0%	35.0%	31.0%	10.2%	1.7%	0.2%	100.0%

Site ID: Site 5 EB  
Unit #: 000000001262  
Location: Huguenot Trail 8.33 Mi E of Rt 522  
Direction: EAST  
Lane: 1

File: D0923008.prn  
Job #: 20-217 TO Max  
GPS: 37.59262, -77.76170

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	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	1	0	0	0	0	1
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	1	0	0	0	0	1
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
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	1	0	0	0	0	0	0	1
Hour Total	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
02:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
02:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
02:45	0	0	0	0	0	0	0	1	1	0	1	0	0	0	3
03:00	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
Hour Total	0	0	0	0	0	0	0	1	1	2	2	1	0	0	7
03:15	0	0	0	0	0	0	0	0	0	2	0	1	0	0	3
03:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
03:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
Hour Total	0	0	0	0	0	0	0	0	0	3	2	2	0	0	7
04:15	0	0	0	0	0	0	0	0	1	1	0	1	0	0	3
04:30	0	0	0	0	0	0	0	0	0	1	5	3	1	0	10
04:45	0	0	0	0	0	0	0	0	0	0	3	2	0	0	5
05:00	0	0	0	0	0	0	0	1	0	4	5	0	0	0	10
Hour Total	0	0	0	0	0	0	0	1	1	6	13	6	1	0	28
05:15	0	0	0	0	0	0	0	2	0	6	4	2	0	0	14
05:30	0	0	0	0	0	0	0	0	2	2	12	2	2	0	20
05:45	0	0	0	0	0	0	0	0	2	5	6	9	3	0	25
06:00	0	0	0	0	0	1	0	2	3	11	14	12	0	0	43
Hour Total	0	0	0	0	0	1	0	4	7	24	36	25	5	0	102
06:15	0	0	0	0	0	0	0	0	6	17	21	16	2	0	62
06:30	0	0	0	0	0	0	0	1	2	24	32	15	0	0	74
06:45	0	0	0	0	0	0	0	0	4	31	39	15	0	0	89
07:00	0	0	0	0	0	0	0	0	0	25	50	21	2	0	98
Hour Total	0	0	0	0	0	0	0	1	12	97	142	67	4	0	323
07:15	0	0	0	0	0	0	0	0	6	26	38	20	4	0	94
07:30	0	0	0	0	0	0	1	7	6	33	63	14	7	0	131
07:45	0	0	0	0	0	0	0	2	6	43	68	21	5	0	145
08:00	0	0	0	0	0	0	0	8	20	28	37	17	3	0	113
Hour Total	0	0	0	0	0	0	1	17	38	130	206	72	19	0	483
08:15	0	0	0	0	0	0	0	0	5	37	46	21	3	0	112
08:30	0	0	0	0	0	0	0	0	5	24	39	4	1	0	73
08:45	0	0	0	0	0	0	2	0	10	17	34	9	2	0	74
09:00	0	0	0	0	0	0	0	1	3	11	16	8	4	0	43
Hour Total	0	0	0	0	0	0	2	1	23	89	135	42	10	0	302

Site ID: Site 5 EB  
Unit #: 000000001262  
Location: Huguenot Trail 8.33 Mi E of Rt 522  
Direction: EAST  
Lane: 1

File: D0923008.prn  
Job #: 20-217 TO Max  
GPS: 37.59262, -77.76170

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
09:15	0	0	0	0	0	0	0	0	6	22	26	12	0	0	66
09:30	0	0	0	1	0	1	0	0	4	12	19	6	1	0	44
09:45	0	0	0	0	0	0	0	0	12	14	21	6	1	0	54
10:00	0	0	0	0	0	0	0	5	5	8	23	7	1	0	49
Hour Total	0	0	0	1	0	1	0	5	27	56	89	31	3	0	213
10:15	0	0	0	0	0	0	0	0	5	9	24	4	2	0	44
10:30	0	0	0	0	0	1	0	4	7	17	11	4	2	0	46
10:45	0	0	0	0	0	0	0	4	13	13	15	10	0	0	55
11:00	0	0	0	0	0	0	0	2	5	11	17	7	1	0	43
Hour Total	0	0	0	0	0	1	0	10	30	50	67	25	5	0	188
11:15	0	0	0	0	0	1	0	5	5	15	14	6	1	0	47
11:30	0	0	0	0	0	0	0	1	8	14	19	7	0	0	49
11:45	0	0	0	0	0	0	1	1	14	20	18	5	1	0	60
12:00	0	0	0	0	0	0	1	0	3	14	12	8	1	0	39
Hour Total	0	0	0	0	0	1	2	7	30	63	63	26	3	0	195
12:15	0	0	0	0	0	0	0	1	5	18	11	6	0	0	41
12:30	0	0	1	0	6	0	1	7	4	11	9	3	0	0	42
12:45	0	0	0	0	0	0	2	1	2	17	19	3	0	0	44
13:00	0	0	0	0	0	0	0	2	12	10	5	3	1	1	34
Hour Total	0	0	1	0	6	0	3	11	23	56	44	15	1	1	161
13:15	0	0	0	0	0	1	0	6	8	18	15	2	0	0	50
13:30	0	0	0	0	0	0	2	6	10	16	12	3	1	0	50
13:45	0	0	0	0	0	0	0	2	12	15	7	1	0	0	37
14:00	0	0	0	0	0	0	3	6	5	11	14	4	0	1	44
Hour Total	0	0	0	0	0	1	5	20	35	60	48	10	1	1	181
14:15	0	0	0	0	0	0	0	6	6	13	13	4	0	0	42
14:30	0	0	0	0	0	0	0	2	9	20	16	0	0	0	47
14:45	0	0	0	0	0	0	0	4	7	19	15	6	0	0	51
15:00	0	0	0	0	0	0	0	1	8	17	13	5	1	0	45
Hour Total	0	0	0	0	0	0	0	13	30	69	57	15	1	0	185
15:15	0	0	0	0	0	0	6	10	23	18	10	2	0	0	69
15:30	0	0	0	0	0	0	0	3	1	25	18	3	2	0	52
15:45	0	0	0	0	0	0	0	1	4	24	21	4	0	0	54
16:00	0	0	0	0	0	0	0	6	2	16	27	4	0	0	55
Hour Total	0	0	0	0	0	0	6	20	30	83	76	13	2	0	230
16:15	0	0	0	0	0	0	0	2	10	23	17	10	0	0	62
16:30	0	0	0	0	0	0	1	1	12	26	16	14	0	0	70
16:45	0	0	0	0	0	0	0	2	6	33	22	2	1	0	66
17:00	0	0	0	0	0	0	0	3	10	24	19	3	1	0	60
Hour Total	0	0	0	0	0	0	1	8	38	106	74	29	2	0	258
17:15	0	0	0	0	0	0	0	0	7	21	22	12	2	0	64
17:30	0	0	0	0	0	0	0	4	14	25	23	2	0	0	68
17:45	0	0	0	0	0	0	0	0	6	23	15	10	1	0	55
18:00	0	0	0	1	0	0	1	1	20	11	12	7	1	1	55
Hour Total	0	0	0	1	0	0	1	5	47	80	72	31	4	1	242

Site ID: Site 5 EB  
Unit #: 000000001262  
Location: Huguenot Trail 8.33 Mi E of Rt 522  
Direction: EAST  
Lane: 1

File: D0923008.prn  
Job #: 20-217 TO Max  
GPS: 37.59262, -77.76170

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
18:15	0	0	0	0	0	0	0	2	15	12	13	4	1	0	47
18:30	0	0	0	0	0	0	2	1	0	25	24	7	1	0	60
18:45	0	0	0	0	0	0	0	0	12	7	9	5	0	0	33
19:00	0	0	0	0	0	0	0	1	5	5	13	5	1	0	30
Hour Total	0	0	0	0	0	0	2	4	32	49	59	21	3	0	170
19:15	0	0	0	0	0	0	0	2	5	19	6	0	0	0	32
19:30	0	0	0	0	0	0	0	0	7	7	5	4	0	0	23
19:45	0	0	0	0	0	0	0	1	7	7	2	1	0	1	19
20:00	0	0	0	0	0	0	0	1	3	2	5	0	1	1	13
Hour Total	0	0	0	0	0	0	0	4	22	35	18	5	1	2	87
20:15	0	0	0	0	0	0	0	3	5	7	4	0	0	0	19
20:30	0	0	0	0	0	0	0	1	2	4	1	2	0	1	11
20:45	0	0	0	0	0	0	1	1	4	6	5	2	1	0	20
21:00	0	0	0	0	0	0	0	1	1	2	3	1	0	0	8
Hour Total	0	0	0	0	0	0	1	6	12	19	13	5	1	1	58
21:15	0	0	0	0	0	0	0	0	1	0	1	3	0	0	5
21:30	0	0	0	0	0	0	0	0	3	3	2	0	0	0	8
21:45	0	0	0	0	0	0	0	0	1	1	2	0	0	0	4
22:00	0	0	0	0	0	0	0	0	0	1	1	1	0	0	3
Hour Total	0	0	0	0	0	0	0	0	5	5	6	4	0	0	20
22:15	0	0	0	0	0	0	0	0	2	0	1	0	2	0	5
22:30	0	0	0	0	0	0	0	0	2	1	1	0	1	0	5
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	1	1	1	0	0	2	0	0	5
Hour Total	0	0	0	0	0	0	1	1	5	1	2	2	3	0	15
23:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
23:30	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3
23:45	0	0	0	0	0	5	0	1	0	0	1	0	0	0	7
24:00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
Hour Total	0	0	0	0	0	5	0	1	1	3	3	0	0	0	13
DAY TOTAL	0	0	1	2	6	10	25	141	449	1087	1227	448	69	6	3471
PERCENTS	0.0%	0.0%	0.0%	0.1%	0.2%	0.3%	0.7%	4.1%	12.9%	31.3%	35.4%	12.9%	2.0%	0.2%	100.0%

Site ID: Site 5 EB  
Unit #: 000000001262  
Location: Huguenot Trail 8.33 Mi E of Rt 522  
Direction: EAST  
Lane: 1

File: D0923008.prn  
Job #: 20-217 TO Max  
GPS: 37.59262, -77.76170

-----  
TIME <10 <15 <20 <25 <30 <35 <40 <45 <50 <55 <60 <65 <70 <75 Total  
-----

Statistical Information...

15th Percentile Speed  
48.7 mph

85th Percentile Speed  
60.0 mph

Median Speed  
55.1 mph

Average Speed  
54.6 mph

10 MPH Pace Speed  
50 mph to 60 mph  
2314 vehicles in pace  
Representing 66.8% of the total vehicles

Vehicles > 55 MPH  
1744  
50.3%

Site ID: Site 5 EB  
Unit #: 000000001262  
Location: Huguenot Trail 8.33 Mi E of Rt 522  
Direction: EAST  
Lane: 1

File: D0923008.prn  
Job #: 20-217 TO Max  
GPS: 37.59262, -77.76170

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
=====															
GRAND TOTAL	0	1	6	25	141	449	1227	448	69						3471
PERCENTS	0.0%	0.0%	0.1%	0.2%	0.3%	0.7%	4.1%	12.9%	31.3%	35.4%	12.9%	2.0%	0.2%		100.0%

Site ID: Site 5 WB  
Unit #: 000000020168  
Location: Huguenot Trail 8.33 Mi E of Rt 522  
Direction: WEST  
Lane: 1

File: D0923006.prn  
Job #: 20-217 TO Max  
GPS: 37.59262, -77.76170

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
00:15	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
00:30	0	0	0	0	0	0	0	0	0	1	3	2	0	1	7
00:45	0	0	0	0	0	0	0	0	0	0	0	3	0	1	4
01:00	0	0	0	0	0	0	0	0	1	1	1	0	0	0	3
Hour Total	0	0	0	0	0	0	0	0	1	3	5	5	0	2	16
01:15	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
01:30	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
01:45	0	0	0	0	0	0	0	0	0	1	1	1	0	0	3
02:00	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2
Hour Total	0	0	0	0	0	0	0	1	0	3	3	1	0	0	8
02:15	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
02:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
02:45	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	1	0	0	2	0	0	3
Hour Total	0	0	0	0	0	0	0	1	3	2	0	2	0	0	8
03:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
03:30	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3
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	2	2	0	0	4
04:15	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2
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	1	0	0	2	0	0	0	3
05:00	0	0	0	0	0	0	0	0	0	2	1	0	2	0	5
Hour Total	0	0	0	0	0	0	0	1	0	3	3	1	2	0	10
05:15	0	0	0	0	0	0	1	1	1	3	3	2	0	0	11
05:30	0	0	0	0	0	0	0	0	3	5	1	3	0	0	12
05:45	0	0	0	0	0	0	0	0	0	2	1	4	0	0	7
06:00	0	0	0	0	0	1	0	0	0	4	2	3	1	2	13
Hour Total	0	0	0	0	0	1	1	1	4	14	7	12	1	2	43
06:15	0	0	0	0	0	0	0	0	2	4	4	2	1	0	13
06:30	0	0	0	0	0	0	0	0	5	8	7	1	1	0	22
06:45	0	0	0	0	0	0	1	1	1	6	10	3	0	0	22
07:00	0	0	0	0	0	0	0	5	4	4	13	8	2	0	36
Hour Total	0	0	0	0	0	0	1	6	12	22	34	14	4	0	93
07:15	0	0	0	0	0	0	0	0	1	13	19	5	1	0	39
07:30	0	0	0	0	0	0	3	1	2	16	18	3	0	0	43
07:45	0	0	0	0	0	0	0	4	4	16	18	3	0	0	45
08:00	0	0	0	0	0	1	3	2	2	10	21	6	0	0	45
Hour Total	0	0	0	0	0	1	6	7	9	55	76	17	1	0	172
08:15	0	0	0	0	0	0	0	2	11	18	5	7	1	0	44
08:30	0	0	0	0	0	0	0	3	3	10	17	5	1	0	39
08:45	0	0	0	0	0	0	4	5	8	15	5	5	0	0	42
09:00	0	0	0	0	0	0	0	6	3	21	14	6	0	0	50
Hour Total	0	0	0	0	0	0	4	16	25	64	41	23	2	0	175

Site ID: Site 5 WB  
Unit #: 000000020168  
Location: Huguenot Trail 8.33 Mi E of Rt 522  
Direction: WEST  
Lane: 1

File: D0923006.prn  
Job #: 20-217 TO Max  
GPS: 37.59262, -77.76170

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
09:15	0	0	0	0	0	0	0	1	3	12	13	1	0	0	30
09:30	0	0	0	0	0	0	0	1	10	7	15	5	0	0	38
09:45	0	0	0	0	0	0	1	0	1	22	10	1	1	0	36
10:00	0	0	0	0	0	2	0	0	6	13	11	2	0	0	34
Hour Total	0	0	0	0	0	2	1	2	20	54	49	9	1	0	138
10:15	0	0	0	0	0	0	0	0	5	7	7	3	0	0	22
10:30	0	0	0	0	0	0	0	3	4	9	6	6	1	0	29
10:45	0	0	0	0	0	0	0	3	4	10	14	5	0	0	36
11:00	0	0	0	0	0	0	0	1	3	17	15	3	2	0	41
Hour Total	0	0	0	0	0	0	0	7	16	43	42	17	3	0	128
11:15	0	0	0	0	0	0	2	0	5	6	11	5	1	0	30
11:30	0	0	0	0	0	0	0	1	8	9	13	2	0	0	33
11:45	0	0	0	0	0	0	0	0	5	14	18	8	0	0	45
12:00	0	0	0	0	0	0	0	0	4	23	19	7	0	0	53
Hour Total	0	0	0	0	0	0	2	1	22	52	61	22	1	0	161
12:15	0	0	0	0	0	0	0	2	8	10	21	5	1	0	47
12:30	0	0	0	0	0	0	1	1	6	11	13	6	0	0	38
12:45	0	0	0	0	0	1	3	1	1	21	22	3	0	0	52
13:00	0	0	0	0	0	0	2	4	0	14	23	7	1	0	51
Hour Total	0	0	0	0	0	1	6	8	15	56	79	21	2	0	188
13:15	0	0	0	0	0	0	1	5	7	11	17	7	0	0	48
13:30	0	0	0	0	0	0	1	2	7	18	24	6	0	0	58
13:45	0	0	0	1	2	1	0	2	9	15	9	5	0	0	44
14:00	0	0	0	0	0	0	0	1	2	17	21	4	1	0	46
Hour Total	0	0	0	1	2	1	2	10	25	61	71	22	1	0	196
14:15	0	0	0	0	0	0	0	0	4	16	9	8	1	0	38
14:30	0	0	0	0	0	0	0	2	7	12	19	6	1	0	47
14:45	0	0	0	0	1	0	0	2	7	16	20	5	0	0	51
15:00	0	0	0	0	0	0	0	1	8	14	15	5	3	0	46
Hour Total	0	0	0	0	1	0	0	5	26	58	63	24	5	0	182
15:15	0	0	0	0	0	0	1	0	10	28	14	8	0	0	61
15:30	0	0	0	0	0	0	2	2	4	19	32	10	0	0	69
15:45	0	0	0	0	0	0	0	9	3	14	29	9	2	0	66
16:00	0	0	0	0	0	0	1	0	6	40	11	6	1	0	65
Hour Total	0	0	0	0	0	0	4	11	23	101	86	33	3	0	261
16:15	0	0	0	3	0	1	1	4	14	44	21	8	1	0	97
16:30	0	0	0	0	0	0	0	7	12	22	37	11	0	0	89
16:45	0	0	0	0	0	4	4	4	7	39	49	8	1	0	116
17:00	0	0	0	0	0	0	0	0	6	27	43	15	1	1	93
Hour Total	0	0	0	3	0	5	5	15	39	132	150	42	3	1	395
17:15	0	0	0	0	0	0	0	8	10	31	32	15	1	0	97
17:30	0	0	0	0	0	0	0	1	24	40	66	9	2	0	142
17:45	0	0	0	0	0	0	0	1	7	44	55	13	2	0	122
18:00	0	0	0	0	0	0	0	0	4	38	34	11	0	0	87
Hour Total	0	0	0	0	0	0	0	10	45	153	187	48	5	0	448

Site ID: Site 5 WB  
Unit #: 000000020168  
Location: Huguenot Trail 8.33 Mi E of Rt 522  
Direction: WEST  
Lane: 1

File: D0923006.prn  
Job #: 20-217 TO Max  
GPS: 37.59262, -77.76170

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
18:15	0	0	0	0	0	0	1	5	1	19	30	11	3	1	71
18:30	0	0	0	0	0	0	1	12	16	31	22	10	0	0	92
18:45	0	0	0	0	0	0	0	0	7	8	28	12	1	0	56
19:00	0	0	0	0	0	0	0	0	5	27	17	8	0	0	57
Hour Total	0	0	0	0	0	0	2	17	29	85	97	41	4	1	276
19:15	0	0	0	0	0	0	0	1	5	9	12	7	0	0	34
19:30	0	0	0	0	0	0	1	0	1	15	14	9	0	0	40
19:45	0	0	0	0	0	0	0	0	8	19	15	5	0	1	48
20:00	0	0	0	0	3	3	2	1	1	7	15	8	1	0	41
Hour Total	0	0	0	0	3	3	3	2	15	50	56	29	1	1	163
20:15	0	0	0	0	1	1	3	9	0	11	8	4	2	0	39
20:30	0	0	0	0	0	0	0	3	4	14	14	4	0	0	39
20:45	0	0	0	0	0	0	0	0	3	8	12	6	1	0	30
21:00	0	0	0	0	0	0	0	1	2	11	8	6	0	0	28
Hour Total	0	0	0	0	1	1	3	13	9	44	42	20	3	0	136
21:15	0	0	0	0	0	0	0	2	6	5	5	2	0	0	20
21:30	0	0	0	0	0	0	0	0	0	5	8	1	0	1	15
21:45	0	0	0	0	0	0	0	1	1	7	7	4	0	0	20
22:00	0	0	0	0	0	0	0	0	3	4	3	4	0	0	14
Hour Total	0	0	0	0	0	0	0	3	10	21	23	11	0	1	69
22:15	0	0	0	0	0	0	0	1	0	2	6	4	0	1	14
22:30	0	0	0	0	0	0	0	1	5	3	5	1	0	0	15
22:45	0	0	0	0	0	0	0	0	0	1	1	1	1	0	4
23:00	0	0	0	0	0	0	0	0	0	0	3	3	1	0	7
Hour Total	0	0	0	0	0	0	0	2	5	6	15	9	2	1	40
23:15	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
23:30	0	0	0	0	0	0	0	0	1	4	1	0	0	0	6
23:45	0	0	0	0	0	0	0	0	1	2	1	2	0	0	6
24:00	0	0	0	0	0	0	0	0	0	0	3	2	0	0	5
Hour Total	0	0	0	0	0	0	0	0	3	6	6	4	0	0	19
DAY TOTAL	0	0	0	4	7	15	40	139	356	1088	1198	429	44	9	3329
PERCENTS	0.0%	0.0%	0.0%	0.1%	0.2%	0.5%	1.2%	4.2%	10.7%	32.7%	36.0%	12.9%	1.3%	0.3%	100.0%

Site ID: Site 5 WB  
Unit #: 000000020168  
Location: Huguenot Trail 8.33 Mi E of Rt 522  
Direction: WEST  
Lane: 1

File: D0923006.prn  
Job #: 20-217 TO Max  
GPS: 37.59262, -77.76170

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-------

---

Statistical Information...

15th Percentile Speed  
49.1 mph

85th Percentile Speed  
59.9 mph

Median Speed  
55.1 mph

Average Speed  
54.5 mph

10 MPH Pace Speed  
50 mph to 60 mph  
2286 vehicles in pace  
Representing 68.9% of the total vehicles

Vehicles > 55 MPH  
1671  
50.3%

Site ID: Site 5 WB  
Unit #: 000000020168  
Location: Huguenot Trail 8.33 Mi E of Rt 522  
Direction: WEST  
Lane: 1

File: D0923006.prn  
Job #: 20-217 TO Max  
GPS: 37.59262, -77.76170

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
GRAND TOTAL	0	0	0	4	7	15	40	139	356	1088	1198	429	44	9	3329
PERCENTS	0.0%	0.0%	0.0%	0.1%	0.2%	0.5%	1.2%	4.2%	10.7%	32.7%	36.0%	12.9%	1.3%	0.3%	100.0%

Site ID: Site 6 EB  
Unit #: 000000009366  
Location: Huguenot Trail 10.01 miles E/o RT 522  
Direction: EAST  
Lane: 1

File: D1001002.prn  
Job #: 20-217 TO MAX  
GPS: 37.57912,-77.73670

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
00:15	0	0	0	0	0	0	0	0	0	1	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	1	0	0	0	0	0	1
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	1	1	0	0	0	0	2
01:15	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1
01:30	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
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	2	0	0	0	0	2
Hour Total	0	0	0	0	0	1	0	0	2	2	0	0	0	0	5
02:15	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
02:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
02:45	0	0	0	0	0	0	0	1	0	1	1	0	0	0	3
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	1	0	2	1	1	0	0	5
03:15	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3
03:30	0	0	0	0	0	0	0	0	0	0	1	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	1	1	0	0	2
Hour Total	0	0	0	0	0	0	0	0	0	1	4	1	0	0	6
04:15	0	0	0	0	0	0	0	1	0	3	1	0	0	0	5
04:30	0	0	0	0	0	0	0	0	0	3	4	1	0	0	8
04:45	0	0	0	0	0	0	0	0	1	1	5	2	0	0	9
05:00	0	0	0	0	0	0	0	0	0	2	4	2	0	0	8
Hour Total	0	0	0	0	0	0	0	1	1	9	14	5	0	0	30
05:15	0	0	0	0	0	0	0	0	0	1	6	4	1	0	12
05:30	0	0	0	0	0	0	0	0	0	5	13	7	4	0	29
05:45	0	0	0	0	0	0	0	0	1	6	10	8	3	0	28
06:00	0	0	0	0	0	0	0	0	0	4	14	9	1	1	29
Hour Total	0	0	0	0	0	0	0	0	1	16	43	28	9	1	98
06:15	0	0	0	0	0	0	0	0	3	4	31	13	1	0	52
06:30	0	0	0	0	0	0	0	0	3	18	40	13	0	0	74
06:45	0	0	0	0	0	0	0	0	1	17	50	23	3	0	94
07:00	0	0	0	0	0	0	0	1	8	13	57	17	0	1	97
Hour Total	0	0	0	0	0	0	0	1	15	52	178	66	4	1	317
07:15	0	0	0	0	0	0	0	3	3	36	51	14	1	0	108
07:30	0	0	0	0	0	0	0	0	10	43	64	20	3	0	140
07:45	0	0	0	0	0	0	0	0	2	38	71	19	4	0	134
08:00	0	0	0	0	0	0	0	0	8	21	53	23	2	0	107
Hour Total	0	0	0	0	0	0	0	3	23	138	239	76	10	0	489
08:15	0	0	0	0	0	0	0	0	1	20	54	15	2	2	94
08:30	0	0	0	0	0	0	0	0	6	23	30	13	2	0	74
08:45	0	0	0	0	0	0	0	0	4	27	55	21	2	0	109
09:00	0	0	0	0	0	0	0	0	8	20	26	12	1	0	67
Hour Total	0	0	0	0	0	0	0	0	19	90	165	61	7	2	344

Site ID: Site 6 EB  
Unit #: 000000009366  
Location: Huguenot Trail 10.01 miles E/o RT 522  
Direction: EAST  
Lane: 1

File: D1001002.prn  
Job #: 20-217 TO MAX  
GPS: 37.57912,-77.73670

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
09:15	0	0	0	0	0	0	0	2	4	13	32	19	1	0	71
09:30	0	0	0	0	0	0	0	0	4	30	33	2	0	0	69
09:45	0	0	0	0	0	0	0	3	11	27	23	6	3	0	73
10:00	0	0	0	0	0	0	0	0	8	14	14	13	0	0	49
Hour Total	0	0	0	0	0	0	0	5	27	84	102	40	4	0	262
10:15	0	0	0	0	0	0	0	0	9	11	23	13	0	2	58
10:30	0	0	0	0	0	0	0	0	1	13	29	7	1	0	51
10:45	0	0	0	0	0	0	0	0	2	16	32	14	1	0	65
11:00	0	0	0	0	0	0	0	0	7	19	22	5	1	0	54
Hour Total	0	0	0	0	0	0	0	0	19	59	106	39	3	2	228
11:15	0	0	0	0	0	0	0	0	3	9	17	8	0	0	37
11:30	0	0	0	0	0	0	0	0	2	23	29	6	1	0	61
11:45	0	0	0	0	0	0	0	0	5	27	27	10	1	0	70
12:00	0	0	0	0	0	0	0	0	6	18	15	4	2	0	45
Hour Total	0	0	0	0	0	0	0	0	16	77	88	28	4	0	213
12:15	0	0	0	0	0	0	0	0	10	21	20	5	0	1	57
12:30	0	0	0	0	0	0	0	0	4	11	20	4	3	0	42
12:45	0	0	0	0	0	0	0	0	9	16	15	3	0	0	43
13:00	0	0	0	0	0	0	0	2	11	16	10	4	2	0	45
Hour Total	0	0	0	0	0	0	0	2	34	64	65	16	5	1	187
13:15	0	0	0	0	0	0	0	0	7	13	19	8	1	1	49
13:30	0	0	0	0	0	0	0	0	9	23	13	8	0	0	53
13:45	0	0	0	0	0	0	0	0	3	21	16	10	1	0	51
14:00	0	0	0	0	0	0	0	1	10	10	15	6	0	0	42
Hour Total	0	0	0	0	0	0	0	1	29	67	63	32	2	1	195
14:15	0	0	0	0	0	0	0	0	3	19	15	4	1	0	42
14:30	0	0	0	0	0	0	0	1	8	15	23	3	1	0	51
14:45	0	0	0	0	0	0	0	0	20	17	11	8	2	0	58
15:00	0	0	0	0	0	0	0	0	12	28	21	5	1	0	67
Hour Total	0	0	0	0	0	0	0	1	43	79	70	20	5	0	218
15:15	0	0	0	0	0	0	3	2	17	29	9	2	1	0	63
15:30	0	0	0	0	0	0	0	0	2	12	22	6	0	1	43
15:45	0	0	0	0	0	0	0	5	19	11	15	9	0	0	59
16:00	0	0	0	0	0	0	0	0	7	14	26	14	3	0	64
Hour Total	0	0	0	0	0	0	3	7	45	66	72	31	4	1	229
16:15	0	0	0	0	0	0	0	1	7	21	20	7	1	0	57
16:30	0	0	0	0	0	0	0	0	2	27	36	3	0	0	68
16:45	0	0	0	0	0	0	0	0	4	20	21	17	1	0	63
17:00	0	0	0	0	0	0	0	1	7	30	26	2	0	0	66
Hour Total	0	0	0	0	0	0	0	2	20	98	103	29	2	0	254
17:15	0	0	0	0	0	0	0	1	8	20	18	13	1	0	61
17:30	0	0	0	0	0	0	0	2	5	14	29	8	2	0	60
17:45	0	0	0	0	0	0	0	0	10	29	20	6	1	0	66
18:00	0	0	0	0	0	0	0	4	4	17	27	8	0	0	60
Hour Total	0	0	0	0	0	0	0	7	27	80	94	35	4	0	247

SPEED SUMMARY  
Thu 10/1/2020

Site ID: Site 6 EB  
Unit #: 000000009366  
Location: Huguenot Trail 10.01 miles E/o RT 522  
Direction: EAST  
Lane: 1

File: D1001002.prn  
Job #: 20-217 TO MAX  
GPS: 37.57912,-77.73670

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
18:15	0	0	0	0	0	0	0	0	6	14	20	6	0	1	47
18:30	0	0	0	0	0	0	1	5	9	14	24	9	2	0	64
18:45	0	0	0	0	0	0	0	0	1	16	21	11	0	0	49
19:00	0	0	0	0	0	0	0	0	1	12	17	3	0	0	33
Hour Total	0	0	0	0	0	0	1	5	17	56	82	29	2	1	193
19:15	0	0	0	0	0	0	0	0	4	19	8	3	1	0	35
19:30	0	0	0	0	0	0	0	0	3	17	10	1	1	1	33
19:45	0	0	0	0	0	0	0	0	3	8	6	6	1	1	25
20:00	0	0	0	0	0	0	0	1	1	3	7	3	0	0	15
Hour Total	0	0	0	0	0	0	0	1	11	47	31	13	3	2	108
20:15	0	0	0	0	0	0	0	1	2	6	7	5	0	0	21
20:30	0	0	0	0	0	0	0	0	0	4	7	4	1	0	16
20:45	0	0	0	0	0	0	0	0	6	3	7	1	0	0	17
21:00	0	0	0	0	0	0	0	0	1	5	6	1	0	0	13
Hour Total	0	0	0	0	0	0	0	1	9	18	27	11	1	0	67
21:15	0	0	0	0	0	0	0	0	1	2	1	1	0	0	5
21:30	0	0	0	0	0	0	0	0	0	2	4	1	0	0	7
21:45	0	0	0	0	0	0	0	0	0	3	1	2	1	0	7
22:00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
Hour Total	0	0	0	0	0	0	0	0	2	8	6	4	1	0	21
22:15	0	0	0	0	0	0	0	0	1	1	1	2	0	0	5
22:30	0	0	0	0	0	0	0	0	0	1	2	2	0	0	5
22:45	0	0	0	0	0	0	0	0	0	1	0	3	0	0	4
23:00	0	0	0	0	0	0	0	0	1	0	3	0	0	0	4
Hour Total	0	0	0	0	0	0	0	0	2	3	6	7	0	0	18
23:15	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
23:30	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2
23:45	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2
24:00	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2
Hour Total	0	0	0	0	0	0	0	1	1	1	3	1	0	1	8
DAY TOTAL	0	0	0	0	0	1	4	39	364	1118	1562	573	70	13	3744
PERCENTS	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	1.0%	9.7%	29.9%	41.7%	15.3%	1.9%	0.3%	100.0%

Site ID: Site 6 EB  
Unit #: 000000009366  
Location: Huguenot Trail 10.01 miles E/o RT 522  
Direction: EAST  
Lane: 1

File: D1001002.prn  
Job #: 20-217 TO MAX  
GPS: 37.57912,-77.73670

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-------

---

Statistical Information...

15th Percentile Speed  
50.7 mph

85th Percentile Speed  
60.7 mph

Median Speed  
56.1 mph

Average Speed  
55.8 mph

10 MPH Pace Speed  
50 mph to 60 mph  
2680 vehicles in pace  
Representing 71.8% of the total vehicles

Vehicles > 55 MPH  
2205  
59.1%

Site ID: Site 6 EB  
 Unit #: 000000009366  
 Location: Huguenot Trail 10.01 miles E/o RT 522  
 Direction: EAST  
 Lane: 1

File: D1001002.prn  
 Job #: 20-217 TO MAX  
 GPS: 37.57912,-77.73670

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
GRAND TOTAL	0	0	0	0	1	4	39	364	1118	1562	70	13	3744		
PERCENTS	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	1.0%	9.7%	29.9%	41.7%	15.3%	1.9%	0.3%	100.0%	

Site ID: Site 6 WB  
Unit #: 000000020168  
Location: Huguenot Trail 10.01 miles E/o RT 522  
Direction: WEST  
Lane: 1

File: D1001004.prn  
Job #: 20-217 TO MAX  
GPS: 37.57912,-77.73670

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
00:15	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2
00:30	0	0	0	0	0	0	0	0	0	2	0	0	1	0	3
00:45	0	0	0	0	0	0	0	0	1	0	1	0	0	0	2
01:00	0	0	0	0	0	0	0	0	1	1	0	1	0	0	3
Hour Total	0	0	0	0	0	0	0	0	2	4	1	1	2	0	10
01:15	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
01:30	0	0	0	0	0	1	0	0	0	0	1	0	0	0	2
01:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Hour Total	0	0	0	0	0	1	0	0	2	1	1	0	0	0	5
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	2	0	1	0	0	0	0	3
03:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Hour Total	0	0	0	0	0	0	0	2	0	1	0	1	0	0	4
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	1	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Hour Total	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2
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	1	1	0	1	0	3
04:45	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
05:00	0	0	0	0	0	0	0	0	1	1	3	1	1	0	7
Hour Total	0	0	0	0	0	0	0	0	1	2	6	1	2	0	12
05:15	0	0	0	0	0	0	0	0	1	2	4	5	0	0	12
05:30	0	0	0	0	0	0	0	0	0	1	4	1	0	0	6
05:45	0	0	0	0	0	0	0	0	0	0	1	1	3	1	6
06:00	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2
Hour Total	0	0	0	0	0	0	0	0	1	4	10	7	3	1	26
06:15	0	0	0	0	0	0	0	0	0	3	4	3	0	1	11
06:30	0	0	0	0	0	0	0	1	3	2	6	6	1	0	19
06:45	0	0	0	0	0	0	0	0	0	8	16	4	0	0	28
07:00	0	0	0	0	0	0	0	0	1	6	16	11	2	0	36
Hour Total	0	0	0	0	0	0	0	1	4	19	42	24	3	1	94
07:15	0	0	0	0	0	0	0	0	0	0	6	15	3	1	25
07:30	0	0	0	0	0	0	0	0	0	7	21	7	7	0	42
07:45	0	0	0	0	0	0	0	0	4	8	27	6	4	0	49
08:00	0	0	0	0	0	0	0	0	0	12	17	12	4	1	46
Hour Total	0	0	0	0	0	0	0	0	4	27	71	40	18	2	162
08:15	0	0	0	0	0	0	0	0	0	16	12	6	2	0	36
08:30	0	0	0	0	0	0	0	0	0	11	19	7	4	0	41
08:45	0	0	0	0	0	0	0	0	1	12	17	5	3	0	38
09:00	0	0	0	0	0	0	0	0	3	9	13	10	1	1	37
Hour Total	0	0	0	0	0	0	0	0	4	48	61	28	10	1	152

Site ID: Site 6 WB  
Unit #: 000000020168  
Location: Huguenot Trail 10.01 miles E/o RT 522  
Direction: WEST  
Lane: 1

File: D1001004.prn  
Job #: 20-217 TO MAX  
GPS: 37.57912,-77.73670

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
09:15	0	0	0	0	0	0	0	0	2	7	17	3	2	0	31
09:30	0	0	0	0	0	0	0	0	4	11	6	6	5	0	32
09:45	0	0	0	0	0	0	0	1	6	7	17	8	4	0	43
10:00	0	0	0	0	0	0	0	0	0	5	17	4	1	0	27
Hour Total	0	0	0	0	0	0	0	1	12	30	57	21	12	0	133
10:15	0	0	0	0	0	0	0	0	1	9	12	6	0	0	28
10:30	0	0	0	0	0	0	0	0	1	12	14	9	0	0	36
10:45	0	0	0	0	0	0	0	0	3	4	11	3	1	0	22
11:00	0	0	0	0	0	0	0	1	4	9	22	7	3	0	46
Hour Total	0	0	0	0	0	0	0	1	9	34	59	25	4	0	132
11:15	0	0	0	0	0	0	0	0	2	8	11	11	1	0	33
11:30	0	0	0	0	0	0	0	1	3	13	19	9	1	1	47
11:45	0	0	0	0	0	0	0	0	0	12	5	14	0	0	31
12:00	0	0	0	0	0	0	0	0	4	7	21	6	1	0	39
Hour Total	0	0	0	0	0	0	0	1	9	40	56	40	3	1	150
12:15	0	0	0	0	0	0	0	0	0	4	24	17	0	0	45
12:30	0	0	0	0	0	0	0	0	1	16	16	13	2	2	50
12:45	0	0	0	0	0	0	0	2	3	12	25	6	3	1	52
13:00	0	0	0	0	0	0	0	0	0	5	16	18	5	0	44
Hour Total	0	0	0	0	0	0	0	2	4	37	81	54	10	3	191
13:15	0	0	0	0	0	0	1	0	2	16	10	12	4	0	45
13:30	0	0	0	0	0	0	0	0	2	8	11	13	3	0	37
13:45	0	0	0	0	0	0	1	0	0	8	13	20	2	0	44
14:00	0	0	0	0	0	0	0	0	6	11	9	16	1	0	43
Hour Total	0	0	0	0	0	0	2	0	10	43	43	61	10	0	169
14:15	0	0	0	0	0	0	0	0	3	16	28	15	1	0	63
14:30	0	0	0	0	0	0	0	0	4	6	34	16	3	0	63
14:45	0	0	0	0	0	0	0	0	5	14	21	17	1	0	58
15:00	0	0	0	0	0	0	0	0	0	6	14	26	8	0	54
Hour Total	0	0	0	0	0	0	0	0	12	42	97	74	13	0	238
15:15	0	0	0	0	0	0	0	0	3	10	28	20	7	1	69
15:30	0	0	0	0	0	0	1	3	0	16	25	26	9	0	80
15:45	0	0	0	0	0	0	0	0	0	4	32	31	4	0	71
16:00	0	0	0	0	0	0	0	1	7	22	41	14	4	0	89
Hour Total	0	0	0	0	0	0	1	4	10	52	126	91	24	1	309
16:15	0	0	0	0	0	0	0	1	9	17	38	21	2	0	88
16:30	0	0	0	0	0	0	0	0	0	23	50	29	4	1	107
16:45	0	0	0	0	0	0	0	6	5	9	32	43	16	1	112
17:00	0	0	0	0	0	0	0	0	1	22	38	25	4	2	92
Hour Total	0	0	0	0	0	0	0	7	15	71	158	118	26	4	399
17:15	0	0	0	0	0	0	0	0	4	21	33	42	8	0	108
17:30	0	0	0	0	0	0	0	3	3	13	66	57	8	1	151
17:45	0	0	0	0	0	0	0	0	3	15	48	55	15	0	136
18:00	0	0	0	0	0	0	0	0	1	12	34	37	7	2	93
Hour Total	0	0	0	0	0	0	0	3	11	61	181	191	38	3	488

Site ID: Site 6 WB  
Unit #: 000000020168  
Location: Huguenot Trail 10.01 miles E/o RT 522  
Direction: WEST  
Lane: 1

File: D1001004.prn  
Job #: 20-217 TO MAX  
GPS: 37.57912,-77.73670

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
18:15	0	0	0	0	0	0	0	0	7	11	16	29	6	4	73
18:30	0	0	0	0	0	0	0	0	5	20	24	29	8	1	87
18:45	0	0	0	0	0	0	0	0	0	10	20	22	2	1	55
19:00	0	0	0	0	0	0	0	0	3	5	19	26	5	2	60
Hour Total	0	0	0	0	0	0	0	0	15	46	79	106	21	8	275
19:15	0	0	0	0	0	0	0	4	2	11	11	22	5	0	55
19:30	0	0	0	0	0	0	0	0	1	10	28	12	3	0	54
19:45	0	0	0	0	0	0	0	0	6	2	16	12	1	1	38
20:00	0	0	0	0	0	0	0	0	0	8	8	14	1	0	31
Hour Total	0	0	0	0	0	0	0	4	9	31	63	60	10	1	178
20:15	0	0	0	0	0	0	0	0	0	10	15	13	2	0	40
20:30	0	0	0	0	0	0	0	0	3	7	13	20	5	0	48
20:45	0	0	0	0	0	0	0	2	2	7	8	13	1	0	33
21:00	0	0	0	0	0	0	0	0	0	11	11	6	5	0	33
Hour Total	0	0	0	0	0	0	0	2	5	35	47	52	13	0	154
21:15	0	0	0	0	0	0	0	0	0	1	8	9	4	0	22
21:30	0	0	0	0	0	0	0	0	0	3	8	8	2	0	21
21:45	0	0	0	0	0	0	0	0	0	2	7	3	0	1	13
22:00	0	0	0	0	0	0	0	0	0	0	7	7	1	1	16
Hour Total	0	0	0	0	0	0	0	0	0	6	30	27	7	2	72
22:15	0	0	0	0	0	0	0	0	0	1	8	3	1	0	13
22:30	0	0	0	0	0	0	0	0	2	1	4	2	0	0	9
22:45	0	0	0	0	0	0	0	0	0	1	5	1	1	0	8
23:00	0	0	0	0	0	0	0	0	2	1	4	4	0	1	12
Hour Total	0	0	0	0	0	0	0	0	4	4	21	10	2	1	42
23:15	0	0	0	0	0	0	0	0	0	0	1	0	2	0	3
23:30	0	0	0	0	0	0	0	0	1	1	1	1	2	0	6
23:45	0	0	0	0	0	0	0	0	1	2	1	3	0	0	7
24:00	0	0	0	0	0	0	0	0	0	2	0	1	0	0	3
Hour Total	0	0	0	0	0	0	0	0	2	5	3	5	4	0	19
DAY TOTAL	0	0	0	0	0	1	4	28	145	643	1293	1037	236	29	3416
PERCENTS	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.8%	4.2%	18.8%	37.9%	30.4%	6.9%	0.8%	100.0%

Site ID: Site 6 WB  
Unit #: 000000020168  
Location: Huguenot Trail 10.01 miles E/o RT 522  
Direction: WEST  
Lane: 1

File: D1001004.prn  
Job #: 20-217 TO MAX  
GPS: 37.57912,-77.73670

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-------

---

Statistical Information...

15th Percentile Speed  
52.6 mph

85th Percentile Speed  
63.7 mph

Median Speed  
58.4 mph

Average Speed  
58.2 mph

10 MPH Pace Speed  
55 mph to 65 mph  
2330 vehicles in pace  
Representing 68.8% of the total vehicles

Vehicles > 55 MPH  
2566  
75.8%

Site ID: Site 6 WB  
Unit #: 000000020168  
Location: Huguenot Trail 10.01 miles E/o RT 522  
Direction: WEST  
Lane: 1

File: D1001004.prn  
Job #: 20-217 TO MAX  
GPS: 37.57912,-77.73670

TIME	<10	<15	<20	<25	<30	<35	<40	<45	<50	<55	<60	<65	<70	<75	Total
=====															
GRAND TOTAL	0	0	0	0	1	4	28	145	643	1293	1037	236	29	3416	
PERCENTS	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.8%	4.2%	18.8%	37.9%	30.4%	6.9%	0.8%	100.0%	

CLASSIFICATION SUMMARY  
Wed 9/23/2020

Site ID: Site 1 EB  
Unit #: 000000003595  
Location: Huguenot Trail 1.12 mi E/o RT 522  
Direction: EAST  
Lane: 1

File: D0923015.prn  
Job #: 20-217 KL MAX  
GPS: 37.61236,-77.88605

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
00:45	0	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	0
Hour Total	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	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	0
02:00	0	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	0
02:15	0	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	0
02:45	0	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	0
Hour Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	5
04:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	5
05:15	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
05:30	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
05:45	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
06:00	0	7	4	0	0	0	0	0	0	0	0	0	0	0	0	11
Hour Total	0	21	6	0	0	0	0	0	0	0	0	0	0	0	0	27
06:15	0	6	7	0	0	0	0	0	0	0	0	0	0	0	0	13
06:30	0	15	6	0	2	0	0	0	0	0	0	0	0	0	0	23
06:45	1	11	4	0	0	1	0	0	0	0	0	0	0	0	0	17
07:00	0	17	9	0	0	0	1	0	0	1	0	0	0	0	0	28
Hour Total	1	49	26	0	2	1	1	0	0	1	0	0	0	0	0	81
07:15	0	23	7	0	0	0	0	0	0	0	0	0	0	0	0	30
07:30	0	18	7	0	1	0	0	0	0	0	0	0	0	0	0	26
07:45	1	18	12	0	1	0	0	1	0	0	0	0	0	0	0	33
08:00	1	15	9	0	3	1	0	1	0	0	0	0	0	0	0	30
Hour Total	2	74	35	0	5	1	0	2	0	0	0	0	0	0	0	119
08:15	0	5	7	0	0	0	0	0	0	0	0	0	0	0	0	12
08:30	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	7
08:45	0	16	3	0	0	0	0	0	1	0	0	0	0	0	0	20
09:00	0	16	5	0	0	0	0	0	1	0	0	0	0	0	0	22
Hour Total	0	42	17	0	0	0	0	0	2	0	0	0	0	0	0	61



CLASSIFICATION SUMMARY  
Wed 9/23/2020

Site ID: Site 1 EB  
Unit #: 000000003595  
Location: Huguenot Trail 1.12 mi E/o RT 522  
Direction: EAST  
Lane: 1

File: D0923015.prn  
Job #: 20-217 KL MAX  
GPS: 37.61236,-77.88605

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
18:15	0	6	4	0	0	0	0	0	0	0	0	0	0	0	0	10
18:30	0	13	5	0	0	0	0	0	0	0	0	0	0	0	0	18
18:45	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
19:00	0	8	3	0	0	1	0	0	0	0	0	0	0	0	0	12
Hour Total	0	31	13	0	0	1	0	0	0	0	0	0	0	0	0	45
19:15	0	19	3	0	0	0	0	0	0	0	0	0	0	0	0	22
19:30	0	12	3	0	0	0	0	0	0	0	0	0	0	0	0	15
19:45	0	11	3	0	0	0	0	0	0	0	0	0	0	0	0	14
20:00	0	11	1	0	0	0	0	0	0	0	0	0	0	0	0	12
Hour Total	0	53	10	0	0	0	0	0	0	0	0	0	0	0	0	63
20:15	0	9	1	0	0	0	0	0	0	0	0	0	0	0	0	10
20:30	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
20:45	0	8	3	0	0	0	0	0	0	0	0	0	0	0	0	11
21:00	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	9
Hour Total	0	31	6	0	0	0	0	0	0	0	0	0	0	0	0	37
21:15	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
21:30	0	4	1	0	1	0	0	0	0	0	0	0	0	0	0	6
21:45	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
22:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	10	3	0	1	0	0	0	0	0	0	0	0	0	0	14
22:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
22:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:45	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
23:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	5
23:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
23:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
24:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
DAY TOTAL	12	670	325	0	24	16	2	6	6	1	0	0	0	0	0	1062
PERCENTS	1.1%	63.1%	30.6%	0.0%	2.3%	1.5%	0.2%	0.6%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

Passenger Vehicles 94.8% Trucks & Buses 5.2%

AM Times	07:15	07:00	07:00		07:15	09:30	06:15	07:15	08:15	06:15						07:15
AM Peaks	2	76	35		5	5	1	2	2	1						119
PM Times	13:45	17:00	15:30		12:15	13:00		12:15	12:15							17:00
PM Peaks	3	59	34		3	3		1	1							97



CLASSIFICATION SUMMARY  
Wed 9/23/2020

Site ID: Site 1 WB  
Unit #: 000000020182  
Location: Huguenot Trail 1.12 mi E/o RT 522  
Direction: WEST  
Lane: 1

File: D0923013.prn  
Job #: 20-217 KL MAX  
GPS: 37.61236,-77.88605

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
01:15	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
01:30	0	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	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	0	2	0	0	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	0
02:30	0	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	0
03:00	0	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	0
03:15	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
03:30	0	0	1	0	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	0
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
04:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
05:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
05:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
06:00	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	0	4	5	0	0	0	0	0	0	0	0	0	0	0	0	9
06:15	0	5	6	0	0	0	0	0	0	0	0	0	0	0	0	11
06:30	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	8
06:45	0	5	2	0	0	1	0	0	0	0	0	0	0	0	0	8
07:00	0	14	5	0	0	0	0	1	0	0	0	0	0	0	0	20
Hour Total	0	30	15	0	0	1	0	1	0	0	0	0	0	0	0	47
07:15	0	7	8	0	0	0	0	0	0	0	0	0	0	0	0	15
07:30	0	14	9	0	0	0	0	0	0	0	0	0	0	0	0	23
07:45	0	8	10	0	0	0	0	0	0	0	0	0	0	0	0	18
08:00	0	11	6	0	0	1	0	0	0	0	0	0	0	0	0	18
Hour Total	0	40	33	0	0	1	0	0	0	0	0	0	0	0	0	74
08:15	0	12	4	0	0	0	0	0	0	0	0	0	0	0	0	16
08:30	0	10	4	0	1	0	0	1	0	0	0	0	0	0	0	16
08:45	0	11	4	0	1	0	0	0	1	0	0	0	0	0	0	17
09:00	0	11	7	0	1	0	0	0	0	0	0	0	0	0	0	19
Hour Total	0	44	19	0	3	0	0	1	1	0	0	0	0	0	0	68







CLASSIFICATION SUMMARY  
Wed 9/23/2020

Site ID: Site 2 EB  
Unit #: 000000023580  
Location: Huguenot Trail 2.59 mi E/o RT 522  
Direction: EAST  
Lane: 1

File: D0923019.prn  
Job #: 20-217 KL MAX  
GPS: 37.60929,-77.86075

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
00:45	0	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	0
Hour Total	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	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	0
02:00	0	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	0
02:15	0	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	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
03:15	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
04:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:45	0	3	2	0	0	1	0	0	0	0	0	0	0	0	0	6
05:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	4	4	0	0	1	0	0	0	0	0	0	0	0	0	9
05:15	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
05:30	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
05:45	0	8	1	1	0	0	0	0	0	0	0	0	0	0	0	10
06:00	0	10	5	0	0	0	0	0	0	0	0	0	0	0	0	15
Hour Total	0	28	7	1	0	0	0	0	0	0	0	0	0	0	0	36
06:15	0	10	6	0	0	0	0	0	0	0	0	0	0	0	0	16
06:30	0	16	8	0	2	0	0	0	0	0	0	0	0	0	0	26
06:45	0	15	5	0	0	1	0	0	0	0	0	0	0	0	0	21
07:00	0	17	10	0	0	0	0	0	0	0	0	0	0	0	0	27
Hour Total	0	58	29	0	2	1	0	0	0	0	0	0	0	0	0	90
07:15	0	30	10	0	0	0	0	0	0	0	0	0	0	0	0	40
07:30	0	29	9	0	0	1	0	0	0	0	0	0	0	0	0	39
07:45	0	34	7	0	1	0	0	0	0	0	0	0	0	0	0	42
08:00	0	18	11	0	1	0	0	1	0	0	0	0	0	0	0	31
Hour Total	0	111	37	0	2	1	0	1	0	0	0	0	0	0	0	152
08:15	0	11	6	0	1	0	0	0	0	0	0	0	0	0	0	18
08:30	0	7	8	0	0	0	0	0	0	0	0	0	0	0	0	15
08:45	0	15	4	0	0	0	0	0	1	0	0	0	0	0	0	20
09:00	0	19	3	0	1	0	0	0	0	0	0	0	0	0	0	23
Hour Total	0	52	21	0	2	0	0	0	1	0	0	0	0	0	0	76



CLASSIFICATION SUMMARY  
Wed 9/23/2020

Site ID: Site 2 EB  
Unit #: 000000023580  
Location: Huguenot Trail 2.59 mi E/o RT 522  
Direction: EAST  
Lane: 1

File: D0923019.prn  
Job #: 20-217 KL MAX  
GPS: 37.60929,-77.86075

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
18:15	0	12	6	0	0	0	0	0	0	0	0	0	0	0	0	18
18:30	0	9	5	0	0	0	0	0	0	0	0	0	0	0	0	14
18:45	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	9
19:00	0	8	4	0	0	0	0	0	0	0	0	0	0	0	0	12
Hour Total	0	36	17	0	0	0	0	0	0	0	0	0	0	0	0	53
19:15	0	21	3	0	0	0	0	0	0	0	0	0	0	0	0	24
19:30	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
19:45	0	6	5	0	0	0	0	0	0	0	0	0	0	0	0	11
20:00	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Hour Total	0	44	8	0	0	0	0	0	0	0	0	0	0	0	0	52
20:15	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
20:30	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	10
20:45	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	7
21:00	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
Hour Total	0	25	4	0	0	0	0	0	0	0	0	0	0	0	0	29
21:15	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	5
21:30	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
21:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
22:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	9	3	0	0	0	0	0	0	0	0	0	0	0	0	12
22:15	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
22:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22:45	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
23:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	7
23:15	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
23:30	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
24:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	5
DAY TOTAL	4	770	348	2	20	13	1	5	2	0	0	0	0	0	0	1165
PERCENTS	0.3%	66.1%	29.9%	0.2%	1.7%	1.1%	0.1%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

Passenger Vehicles 96.3% Trucks & Buses 3.7%

AM Times	09:15	07:15	07:15	05:00	11:00	09:30		07:15	08:00							07:15
AM Peaks	1	111	37	1	4	3		1	1							152
PM Times	13:45	15:45	17:15	13:30	12:15	13:00	14:30	13:00	12:15							17:15
PM Peaks	2	66	39	1	2	4	1	1	1							99







CLASSIFICATION SUMMARY  
Wed 9/23/2020

Site ID: Site 2 WB  
Unit #: 000000009392  
Location: Huguenot Trail 2.59 mi E/o RT 522  
Direction: WEST  
Lane: 1

File: D0923017.prn  
Job #: 20-217 KL MAX  
GPS: 37.60929,-77.86075

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
18:15	0	32	11	0	1	0	0	0	0	0	0	0	0	0	0	44
18:30	0	26	3	0	0	0	0	0	0	0	0	0	0	0	0	29
18:45	0	17	6	0	0	0	0	0	0	0	0	0	0	0	0	23
19:00	0	12	4	0	0	0	0	1	0	0	0	0	0	0	0	17
Hour Total	0	87	24	0	1	0	0	1	0	0	0	0	0	0	0	113
19:15	0	12	4	0	1	0	0	0	0	0	0	0	0	0	0	17
19:30	0	18	3	0	0	0	0	0	0	0	0	0	0	0	0	21
19:45	0	13	1	0	0	0	0	0	0	0	0	0	0	0	0	14
20:00	0	14	2	0	0	0	0	0	0	0	0	0	0	0	0	16
Hour Total	0	57	10	0	1	0	0	0	0	0	0	0	0	0	0	68
20:15	0	7	5	0	0	0	0	0	0	0	0	0	0	0	0	12
20:30	0	5	5	0	0	0	0	0	0	0	0	0	0	0	0	10
20:45	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
21:00	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	7
Hour Total	0	21	13	0	0	0	0	0	0	0	0	0	0	0	0	34
21:15	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	5
21:30	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	3
21:45	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
22:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	10	2	0	1	0	0	0	0	0	0	0	0	0	0	13
22:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22:30	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
22:45	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
23:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	8	3	0	0	0	0	0	0	0	0	0	0	0	0	11
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
24:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
DAY TOTAL	0	725	342	1	41	0	0	13	0	0	0	0	0	0	0	1122
PERCENTS	0.0%	64.6%	30.5%	0.1%	3.7%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

Passenger Vehicles 95.1% Trucks & Buses 4.9%

AM Times	08:00	07:15	05:00	11:15	08:30	08:00
AM Peaks	45	25	1	7	3	64
PM Times	17:45	16:00	13:15	13:15	17:30	
PM Peaks	98	40	7	3	133	







CLASSIFICATION SUMMARY  
Wed 9/23/2020

Site ID: Site 3 EB  
Unit #: 000000003604  
Location: Huguenot Trail 4.45 mi E/o RT 522  
Direction: EAST  
Lane: 1

File: D0923023.prn  
Job #: 20-217 KL MAX  
GPS: 37.60120,-77.82819

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
18:15	1	25	8	1	1	1	0	0	0	0	0	0	0	0	0	37
18:30	0	24	8	0	1	0	0	0	0	0	0	0	0	0	0	33
18:45	0	12	1	0	0	0	0	0	0	0	0	0	0	0	0	13
19:00	0	10	3	0	0	0	0	0	0	0	0	0	0	0	0	13
Hour Total	1	71	20	1	2	1	0	0	0	0	0	0	0	0	0	96
19:15	0	22	4	0	0	0	0	0	0	0	0	0	0	0	0	26
19:30	0	14	4	0	1	0	0	0	0	0	0	0	0	0	0	19
19:45	0	11	4	0	0	0	0	0	0	0	0	0	0	0	0	15
20:00	0	9	2	0	0	0	0	0	0	0	0	0	0	0	0	11
Hour Total	0	56	14	0	1	0	0	0	0	0	0	0	0	0	0	71
20:15	0	7	2	0	0	1	0	0	0	0	0	0	0	0	0	10
20:30	0	6	1	0	1	0	0	0	0	0	0	0	0	0	0	8
20:45	0	10	2	0	0	0	0	0	0	0	0	0	0	0	0	12
21:00	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	0	27	6	0	1	1	0	0	0	0	0	0	0	0	0	35
21:15	0	4	1	0	1	0	0	0	0	0	0	0	0	0	0	6
21:30	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
21:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22:00	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	0	11	3	0	1	0	0	0	0	0	0	0	0	0	0	15
22:15	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
22:30	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
22:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	8	1	0	0	0	0	0	0	0	0	0	0	0	0	9
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
23:45	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3
24:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	7
DAY TOTAL	8	1212	512	3	27	22	3	7	4	0	0	0	0	0	0	1798
PERCENTS	0.4%	67.4%	28.5%	0.2%	1.5%	1.2%	0.2%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

Passenger Vehicles 96.3% Trucks & Buses 3.7%

AM Times	07:15	07:15	07:15	05:00	11:00	09:30	11:15	09:45	09:15							07:15
AM Peaks	2	133	59	1	4	6	1	2	1							198
PM Times	14:00	16:00	17:00	13:30	13:15	13:00	12:15	13:00	12:15							15:45
PM Peaks	3	128	61	1	5	4	1	2	2							171







CLASSIFICATION SUMMARY  
Wed 9/23/2020

Site ID: Site 3 WB  
Unit #: 000000009372  
Location: Huguenot Trail 4.45 mi E/o RT 522  
Direction: WEST  
Lane: 1

File: D0923021.prn  
Job #: 20-217 KL MAX  
GPS: 37.60120,-77.82819

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
18:15	0	41	15	0	0	2	0	0	0	0	0	0	0	0	0	58
18:30	0	27	9	0	0	0	0	0	0	0	0	0	0	0	0	36
18:45	0	22	14	0	1	0	0	0	0	0	0	0	0	0	0	37
19:00	0	27	5	0	1	0	0	0	0	0	0	0	0	0	0	33
Hour Total	0	117	43	0	2	2	0	0	0	0	0	0	0	0	0	164
19:15	0	17	6	0	0	0	0	0	0	0	0	0	0	0	0	23
19:30	0	19	7	0	1	0	0	0	0	0	0	0	0	0	0	27
19:45	0	15	4	0	0	0	0	0	0	0	0	0	0	0	0	19
20:00	0	20	2	0	0	0	0	0	0	0	0	0	0	0	0	22
Hour Total	0	71	19	0	1	0	0	0	0	0	0	0	0	0	0	91
20:15	0	13	5	0	0	1	0	0	0	0	0	0	0	0	0	19
20:30	0	13	8	0	0	0	0	0	0	0	0	0	0	0	0	21
20:45	1	8	3	0	0	0	0	0	0	0	0	0	0	0	0	12
21:00	0	8	7	0	0	0	0	0	0	0	0	0	0	0	0	15
Hour Total	1	42	23	0	0	1	0	0	0	0	0	0	0	0	0	67
21:15	0	9	2	0	1	0	0	0	0	0	0	0	0	0	0	12
21:30	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	8
21:45	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
22:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	0	23	6	0	1	0	0	0	0	0	0	0	0	0	0	30
22:15	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
22:30	0	10	2	0	0	0	0	0	0	0	0	0	0	0	0	12
22:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
23:00	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	0	20	4	0	0	0	0	0	0	0	0	0	0	0	0	24
23:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23:30	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
23:45	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
24:00	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	0	6	3	0	0	0	0	0	0	0	0	0	0	0	0	9
DAY TOTAL	12	1152	519	3	26	20	6	7	3	0	1	0	0	0	0	1749
PERCENTS	0.7%	65.9%	29.7%	0.2%	1.5%	1.1%	0.3%	0.4%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	100.0%
Passenger Vehicles	96.2%															
Trucks & Buses																3.8%
AM Times	09:00	07:00	09:00	05:00	11:15	09:15	08:15	08:30	10:30							07:00
AM Peaks	1	82	43	1	3	4	1	3	2							118
PM Times	13:30	17:30	17:30	13:30	12:30	16:00	12:45	12:45				12:45				17:30
PM Peaks	4	169	57	1	5	3	1	3				1				230

Site ID: Site 3 WB  
Unit #: 000000009372  
Location: Huguenot Trail 4.45 mi E/o RT 522  
Direction: WEST  
Lane: 1

File: D0923021.prn  
Job #: 20-217 KL MAX  
GPS: 37.60120,-77.82819

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	-------

---

GRAND TOTAL	12	1152	519	3	26	20	6	7	3	0	1	0	0	0	0	1749
PERCENTS	0.7%	65.9%	29.7%	0.2%	1.5%	1.1%	0.3%	0.4%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	100.0%





CLASSIFICATION SUMMARY  
Wed 9/23/2020

Site ID: Site 4 EB  
Unit #: 000000003563  
Location: Huguenot Trail 6.05 Mi E of Rt 522  
Direction: EAST  
Lane: 1

File: D0923011.prn  
Job #: 20-217 TO Max  
GPS: 37.59466 -77.80119

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
18:15	0	22	8	0	1	1	0	0	0	0	0	0	0	0	0	32
18:30	0	22	11	0	1	0	0	0	0	0	0	0	0	0	0	34
18:45	0	15	3	0	0	0	0	0	0	0	0	0	0	0	0	18
19:00	0	14	3	0	0	0	0	0	0	0	0	0	0	0	0	17
Hour Total	0	73	25	0	2	1	0	0	0	0	0	0	0	0	0	101
19:15	0	22	2	0	0	0	0	0	0	0	0	0	0	0	0	24
19:30	0	11	1	0	1	0	0	0	0	0	0	0	0	0	0	13
19:45	0	9	4	0	0	0	0	0	0	0	0	0	0	0	0	13
20:00	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Hour Total	0	49	7	0	1	0	0	0	0	0	0	0	0	0	0	57
20:15	0	9	1	0	0	0	0	0	0	0	0	0	0	0	0	10
20:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:45	0	9	1	0	0	0	0	0	0	0	0	0	0	0	0	10
21:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	0	21	2	0	0	0	0	0	0	0	0	0	0	0	0	23
21:15	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
21:30	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
21:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
22:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	10	2	0	0	0	0	0	0	0	0	0	0	0	0	12
22:15	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
22:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
22:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
23:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour Total	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
DAY TOTAL	3	1087	486	4	27	22	1	8	3	0	0	0	0	0	0	1641
PERCENTS	0.2%	66.2%	29.6%	0.2%	1.6%	1.3%	0.1%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

Passenger Vehicles 96.0% Trucks & Buses 4.0%

AM Times	09:00	07:15	07:00	05:00	06:15	09:30	09:15	07:15	07:15							07:15
AM Peaks	1	118	62	1	4	5	1	1	1							185
PM Times	13:45	15:45	17:00	13:30	13:00	13:00		13:00	12:15							15:45
PM Peaks	2	109	54	2	5	4		2	1							155















CLASSIFICATION SUMMARY  
Wed 9/23/2020

Site ID: Site 5 EB  
Unit #: 000000001262  
Location: Huguenot Trail 8.33 Mi E of Rt 522  
Direction: EAST  
Lane: 1

File: D0923007.prn  
Job #: 20-217 TO Max  
GPS: 37.59262, -77.76170

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
18:15	0	34	11	0	0	1	0	1	0	0	0	0	0	0	0	47
18:30	0	41	19	0	0	0	0	0	0	0	0	0	0	0	0	60
18:45	0	25	7	0	1	0	0	0	0	0	0	0	0	0	0	33
19:00	0	20	10	0	0	0	0	0	0	0	0	0	0	0	0	30
Hour Total	0	120	47	0	1	1	0	1	0	0	0	0	0	0	0	170
19:15	0	27	5	0	0	0	0	0	0	0	0	0	0	0	0	32
19:30	0	17	5	0	1	0	0	0	0	0	0	0	0	0	0	23
19:45	0	14	5	0	0	0	0	0	0	0	0	0	0	0	0	19
20:00	0	10	3	0	0	0	0	0	0	0	0	0	0	0	0	13
Hour Total	0	68	18	0	1	0	0	0	0	0	0	0	0	0	0	87
20:15	0	15	4	0	0	0	0	0	0	0	0	0	0	0	0	19
20:30	0	8	3	0	0	0	0	0	0	0	0	0	0	0	0	11
20:45	0	14	6	0	0	0	0	0	0	0	0	0	0	0	0	20
21:00	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Hour Total	0	45	13	0	0	0	0	0	0	0	0	0	0	0	0	58
21:15	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
21:30	0	5	3	0	0	0	0	0	0	0	0	0	0	0	0	8
21:45	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	4
22:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	0	15	5	0	0	0	0	0	0	0	0	0	0	0	0	20
22:15	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
22:30	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
22:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	0	13	2	0	0	0	0	0	0	0	0	0	0	0	0	15
23:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
23:30	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
23:45	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	7
24:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	11	2	0	0	0	0	0	0	0	0	0	0	0	0	13
DAY TOTAL	8	2367	1000	8	51	19	1	12	4	0	0	1	0	0	0	3471
PERCENTS	0.2%	68.2%	28.8%	0.2%	1.5%	0.5%	0.0%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%
Passenger Vehicles	97.2%															
Trucks & Buses																2.8%
AM Times	04:45	07:30	07:00	05:30	07:30	07:30		07:15	07:15							07:30
AM Peaks	1	358	137	2	9	5		3	1							501
PM Times	15:15	16:30	17:15	12:15	13:15	13:30	12:15	13:00	12:15			13:30				16:30
PM Peaks	2	196	82	2	11	3	1	2	1			1				260







CLASSIFICATION SUMMARY  
Wed 9/23/2020

Site ID: Site 5 WB  
Unit #: 000000020168  
Location: Huguenot Trail 8.33 Mi E of Rt 522  
Direction: WEST  
Lane: 1

File: D0923005.prn  
Job #: 20-217 TO Max  
GPS: 37.59262, -77.76170

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
18:15	1	47	21	1	1	0	0	0	0	0	0	0	0	0	0	71
18:30	0	64	27	0	1	0	0	0	0	0	0	0	0	0	0	92
18:45	1	43	10	0	2	0	0	0	0	0	0	0	0	0	0	56
19:00	0	46	11	0	0	0	0	0	0	0	0	0	0	0	0	57
Hour Total	2	200	69	1	4	0	0	0	0	0	0	0	0	0	0	276
19:15	0	27	7	0	0	0	0	0	0	0	0	0	0	0	0	34
19:30	0	27	12	0	1	0	0	0	0	0	0	0	0	0	0	40
19:45	0	37	10	0	1	0	0	0	0	0	0	0	0	0	0	48
20:00	0	31	9	0	0	1	0	0	0	0	0	0	0	0	0	41
Hour Total	0	122	38	0	2	1	0	0	0	0	0	0	0	0	0	163
20:15	0	27	12	0	0	0	0	0	0	0	0	0	0	0	0	39
20:30	0	30	9	0	0	0	0	0	0	0	0	0	0	0	0	39
20:45	0	23	7	0	0	0	0	0	0	0	0	0	0	0	0	30
21:00	0	20	8	0	0	0	0	0	0	0	0	0	0	0	0	28
Hour Total	0	100	36	0	0	0	0	0	0	0	0	0	0	0	0	136
21:15	0	14	5	0	1	0	0	0	0	0	0	0	0	0	0	20
21:30	0	13	1	1	0	0	0	0	0	0	0	0	0	0	0	15
21:45	0	14	6	0	0	0	0	0	0	0	0	0	0	0	0	20
22:00	0	11	3	0	0	0	0	0	0	0	0	0	0	0	0	14
Hour Total	0	52	15	1	1	0	0	0	0	0	0	0	0	0	0	69
22:15	0	10	4	0	0	0	0	0	0	0	0	0	0	0	0	14
22:30	0	12	3	0	0	0	0	0	0	0	0	0	0	0	0	15
22:45	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
23:00	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	7
Hour Total	0	31	9	0	0	0	0	0	0	0	0	0	0	0	0	40
23:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
23:30	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	6
23:45	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
24:00	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
Hour Total	0	15	4	0	0	0	0	0	0	0	0	0	0	0	0	19
DAY TOTAL	21	2201	1014	4	48	20	6	9	6	0	0	0	0	0	0	3329
PERCENTS	0.6%	66.1%	30.5%	0.1%	1.4%	0.6%	0.2%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

Passenger Vehicles 97.2% Trucks & Buses 2.8%

AM Times	09:00	07:15	07:30	09:30	08:30	07:00	05:45	08:15	07:15							07:30
AM Peaks	3	110	66	1	4	5	1	2	2							177
PM Times	16:15	17:00	17:15	12:30	13:00	12:15	12:45	13:30	12:30							17:00
PM Peaks	5	326	126	1	9	3	2	3	1							454







CLASSIFICATION SUMMARY  
Thu 10/1/2020

Site ID: Site 6 EB  
Unit #: 000000009366  
Location: Huguenot Trail 10.01 miles E/o RT 522  
Direction: EAST  
Lane: 1

File: D1001001.prn  
Job #: 20-217 TO MAX  
GPS: 37.57912,-77.73670

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
18:15	0	40	7	0	0	0	0	0	0	0	0	0	0	0	0	47
18:30	0	49	15	0	0	0	0	0	0	0	0	0	0	0	0	64
18:45	1	41	7	0	0	0	0	0	0	0	0	0	0	0	0	49
19:00	0	27	6	0	0	0	0	0	0	0	0	0	0	0	0	33
Hour Total	1	157	35	0	0	0	0	0	0	0	0	0	0	0	0	193
19:15	0	28	6	0	1	0	0	0	0	0	0	0	0	0	0	35
19:30	1	28	4	0	0	0	0	0	0	0	0	0	0	0	0	33
19:45	1	21	3	0	0	0	0	0	0	0	0	0	0	0	0	25
20:00	1	13	1	0	0	0	0	0	0	0	0	0	0	0	0	15
Hour Total	3	90	14	0	1	0	0	0	0	0	0	0	0	0	0	108
20:15	0	20	1	0	0	0	0	0	0	0	0	0	0	0	0	21
20:30	0	14	2	0	0	0	0	0	0	0	0	0	0	0	0	16
20:45	0	13	4	0	0	0	0	0	0	0	0	0	0	0	0	17
21:00	0	11	2	0	0	0	0	0	0	0	0	0	0	0	0	13
Hour Total	0	58	9	0	0	0	0	0	0	0	0	0	0	0	0	67
21:15	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
21:30	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
21:45	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
22:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	19	2	0	0	0	0	0	0	0	0	0	0	0	0	21
22:15	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
22:30	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	5
22:45	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4
23:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
Hour Total	0	14	4	0	0	0	0	0	0	0	0	0	0	0	0	18
23:15	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
23:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
23:45	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
24:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	7	1	0	0	0	0	0	0	0	0	0	0	0	0	8
DAY TOTAL	16	2745	922	1	29	17	0	10	3	1	0	0	0	0	0	3744
PERCENTS	0.4%	73.3%	24.6%	0.0%	0.8%	0.5%	0.0%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%

Passenger Vehicles 98.4% Trucks & Buses 1.6%

AM Times	04:45	07:15	06:45	05:45	09:15	09:00	07:30	10:45	07:00	07:15
AM Peaks	1	374	120	1	8	4	2	2	1	489
PM Times	12:45	16:30	17:15	14:15	13:45	14:30	12:45	16:30		
PM Peaks	4	204	62	3	3	4	1	258		



CLASSIFICATION SUMMARY  
Thu 10/1/2020

Site ID: Site 6 WB  
Unit #: 000000020168  
Location: Huguenot Trail 10.01 miles E/o RT 522  
Direction: WEST  
Lane: 1

File: D1001003.prn  
Job #: 20-217 TO MAX  
GPS: 37.57912,-77.73670

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
00:15	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
00:30	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
00:45	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	0	8	2	0	0	0	0	0	0	0	0	0	0	0	0	10
01:15	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
01:30	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
01:45	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
02:15	0	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	0
02:45	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
03:15	0	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	0
03:45	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Hour Total	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
04:45	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
05:00	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
Hour Total	0	10	1	0	0	1	0	0	0	0	0	0	0	0	0	12
05:15	0	10	2	0	0	0	0	0	0	0	0	0	0	0	0	12
05:30	0	4	2	0	0	0	0	0	0	0	0	0	0	0	0	6
05:45	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	6
06:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Hour Total	0	21	5	0	0	0	0	0	0	0	0	0	0	0	0	26
06:15	0	9	2	0	0	0	0	0	0	0	0	0	0	0	0	11
06:30	0	11	8	0	0	0	0	0	0	0	0	0	0	0	0	19
06:45	0	19	8	0	1	0	0	0	0	0	0	0	0	0	0	28
07:00	1	27	8	0	0	0	0	0	0	0	0	0	0	0	0	36
Hour Total	1	66	26	0	1	0	0	0	0	0	0	0	0	0	0	94
07:15	0	20	5	0	0	0	0	0	0	0	0	0	0	0	0	25
07:30	0	34	8	0	0	0	0	0	0	0	0	0	0	0	0	42
07:45	0	25	21	0	2	0	0	1	0	0	0	0	0	0	0	49
08:00	0	26	19	0	0	0	0	1	0	0	0	0	0	0	0	46
Hour Total	0	105	53	0	2	0	0	2	0	0	0	0	0	0	0	162
08:15	0	16	16	0	3	0	0	1	0	0	0	0	0	0	0	36
08:30	0	25	12	0	3	0	0	1	0	0	0	0	0	0	0	41
08:45	0	21	15	1	1	0	0	0	0	0	0	0	0	0	0	38
09:00	0	18	11	2	4	0	0	0	1	1	0	0	0	0	0	37
Hour Total	0	80	54	3	11	0	0	2	1	1	0	0	0	0	0	152



CLASSIFICATION SUMMARY  
Thu 10/1/2020

Site ID: Site 6 WB  
Unit #: 000000020168  
Location: Huguenot Trail 10.01 miles E/o RT 522  
Direction: WEST  
Lane: 1

File: D1001003.prn  
Job #: 20-217 TO MAX  
GPS: 37.57912,-77.73670

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
18:15	1	52	20	0	0	0	0	0	0	0	0	0	0	0	0	73
18:30	0	63	23	0	1	0	0	0	0	0	0	0	0	0	0	87
18:45	1	44	8	0	1	0	0	1	0	0	0	0	0	0	0	55
19:00	0	43	17	0	0	0	0	0	0	0	0	0	0	0	0	60
Hour Total	2	202	68	0	2	0	0	1	0	0	0	0	0	0	0	275
19:15	0	45	8	0	0	1	0	1	0	0	0	0	0	0	0	55
19:30	0	40	12	0	1	0	0	1	0	0	0	0	0	0	0	54
19:45	0	28	9	0	1	0	0	0	0	0	0	0	0	0	0	38
20:00	0	23	8	0	0	0	0	0	0	0	0	0	0	0	0	31
Hour Total	0	136	37	0	2	1	0	2	0	0	0	0	0	0	0	178
20:15	0	33	6	0	1	0	0	0	0	0	0	0	0	0	0	40
20:30	0	38	10	0	0	0	0	0	0	0	0	0	0	0	0	48
20:45	1	20	12	0	0	0	0	0	0	0	0	0	0	0	0	33
21:00	0	25	8	0	0	0	0	0	0	0	0	0	0	0	0	33
Hour Total	1	116	36	0	1	0	0	0	0	0	0	0	0	0	0	154
21:15	0	17	5	0	0	0	0	0	0	0	0	0	0	0	0	22
21:30	0	14	7	0	0	0	0	0	0	0	0	0	0	0	0	21
21:45	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	13
22:00	0	15	1	0	0	0	0	0	0	0	0	0	0	0	0	16
Hour Total	0	59	13	0	0	0	0	0	0	0	0	0	0	0	0	72
22:15	0	10	3	0	0	0	0	0	0	0	0	0	0	0	0	13
22:30	0	7	2	0	0	0	0	0	0	0	0	0	0	0	0	9
22:45	0	6	2	0	0	0	0	0	0	0	0	0	0	0	0	8
23:00	0	10	2	0	0	0	0	0	0	0	0	0	0	0	0	12
Hour Total	0	33	9	0	0	0	0	0	0	0	0	0	0	0	0	42
23:15	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
23:30	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	6
23:45	0	6	1	0	0	0	0	0	0	0	0	0	0	0	0	7
24:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
Hour Total	0	17	2	0	0	0	0	0	0	0	0	0	0	0	0	19
DAY TOTAL	21	2307	999	5	46	13	2	17	2	2	0	2	0	0	0	3416
PERCENTS	0.6%	67.5%	29.2%	0.1%	1.3%	0.4%	0.1%	0.5%	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	100.0%

Passenger Vehicles 97.4% Trucks & Buses 2.6%

AM Times	10:45	07:00	07:45	08:15	08:15	04:00	09:00	07:45	08:15	08:15						07:30
AM Peaks	5	106	68	3	11	1	1	4	1	1						173
PM Times	12:45	17:00	17:15		12:45	14:00	12:15	18:45	13:00	15:45		12:15				17:15
PM Peaks	4	337	149		8	3	1	3	1	1		1				488

CLASSIFICATION SUMMARY  
Thu 10/1/2020

Site ID: Site 6 WB  
Unit #: 000000020168  
Location: Huguenot Trail 10.01 miles E/o RT 522  
Direction: WEST  
Lane: 1

File: D1001003.prn  
Job #: 20-217 TO MAX  
GPS: 37.57912,-77.73670

TIME	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
------	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	-------

GRAND TOTAL	21	2307	999	5	46	13	2	17	2	2	0	2	0	0	0	3416
PERCENTS	0.6%	67.5%	29.2%	0.1%	1.3%	0.4%	0.1%	0.5%	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	100.0%



Appendix B  
Unit Costs



*Unit Cost Details*

#	Item Number	Item	Unit	Unit Cost
1	10700	RUMBLE STRIP, ASPHALT	LF	\$0.54
2	10701	LIQUID ASPHALT RUMBLE STRIP COATING	SY	\$0.68
3	-	SHOULDER WIDENING (to 1 ft.)	MILE	\$115,500
4	-	PAVEMENT RECONSTRUCTION (20 ft., 2 lanes)	MILE	\$2,245,000
5	27000	SELECTIVE TREE REMOVAL TRIMMING AND CLEANUP	ACRE	\$20,767.04
6		RESTORE THE SOILD AND REPAIR THE DAMAGED PAVEMENT WITH ASPHALT	LF	\$100.00
7	50108	SIGN PANEL	SF	\$26.00
8	51963	REMOVE & DISPOSE SIGN STRUCTURE TYPE STP-1	EA	\$122.00
9	51963	REMOVE & DISPOSE SIGN PANEL TYPE SP-1	EA	\$253.00
10	50490	CONCRETE SIGN FOUNDATION STP-1, TYPE F	EA	\$142.00
11	50430	SIGN POST 2", 14 GAUGE, SINGLE LANE	LF	\$6.00



Appendix C  
VDOT RHR Rating Spreadsheet

---

### Inputs

Existing Roadside Hazard Rating:	5
Proposed Roadside Hazard Rating:	3

Targeted CMF for Roadway Departure Crashes:	0.83
---	------

### RHR

### Description

- 1 Wide clear zones greater than or equal to 30 ft from the pavement edgeline; sideslope flatter than 1:4; recoverable
- 2 Clear zone between 20 and 25 feet from pavement edgeline; sideslope about 1:4; recoverable
- 3 Clear zone about 10 feet from pavement edgeline; sideslope about 1:3 or 1:4; rough roadside surface; marginally recoverable
- 4 Clear zone between 5 to 10 feet from pavement edgeline; sideslope about 1:3 or 1:4; may have guardrail (6.5 feet from pavement edgeline); may have exposed trees, poles, or other objects (about 10 ft from pavement edgeline); marginally forgiving, but increased chance of a reportable roadside collision
- 5 Clear zone between 5 to 10 feet from pavement edgeline; sideslope about 1:3; may have guardrail (0 to 5 feet from pavement edgeline); may have rigid obstacles or embankment within 6.5 to 10 feet of pavement edgeline; virtually non-recoverable
- 6 Clear zone less than or equal to 5 feet; sideslope about 1:2; no guardrail; exposed rigid obstacles within 0 to 6.5 feet of the pavement edgeline; non-recoverable
- 7 Clear zone less than or equal to 5 feet; sideslope 1:2 or steeper; cliff or vertical rock cut; no guardrail; non-recoverable with high likelihood of severe injuries from roadside collision

For more information, please visit:

[https://safety.fhwa.dot.gov/tools/data\\_tools/mirereport/67.cfm](https://safety.fhwa.dot.gov/tools/data_tools/mirereport/67.cfm)



Typical Roadway with Roadside Hazard Rating Equal to 1.



Typical Roadway with Roadside Hazard Rating Equal to 2.



Typical Roadway with Roadside Hazard Rating Equal to 3.



Typical Roadway with Roadside Hazard Rating Equal to 4.



Typical Roadway with Roadside Hazard Rating Equal to 5.



Typical Roadway with Roadside Hazard Rating Equal to 6.



Typical Roadway with Roadside Hazard Rating Equal to 7.

CMF for Roadway Departure Crashes					
CMF, Improved by 1	CMF, Improved by 2	CMF, Improved by 3	CMF, Improved by 4	CMF, Improved by 5	CMF, Improved by 6
0.92	0.83	0.76	0.69	0.62	0.56

Improved By:	Targeted CMF
1	0.92
2	0.83
3	0.76
4	0.69
5	0.62
6	0.56