

Loudoun County

W&OD Trail Crossings Study, Phase II *Prioritization of the At-Grade Crossings*

FINAL REPORT





W&OD Trail Crossings Study, Phase II

Prioritization of the At-Grade Crossings

Date: March 23, 2018

Produced by Kimley-Horn and Associates under Work Order #48 through Loudoun County Contract C-1822 for Consultant Services for Transportation and Urban Planning, Design and Engineering Services. The development of this report was supported by Loudoun County Staff as well as input from key stakeholder noted below.



This report was prepared for Loudoun County's Department of Transportation and Capital Infrastructure.



Acknowledgement of Key Stakeholders:

- Loudoun County
- Northern Virginia Regional Park Authority (NOVA Parks)
- Town of Leesburg
- Town of Purcellville
- Virginia Department of Transportation





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Executive Summary

The Washington and Old Dominion (W&OD) Trail is located along a former railway that has been developed into a linear, 45-mile long regional park. This non-motorized multi-purpose trail serves commuters and recreational users in Northern Virginia from Arlington County to the Town of Purcellville. There are 23 miles of the W&OD Trail within Loudoun County.

On December 13, 2016, Loudoun County's Finance/Government Operations, and Economic Development Committee (FGOEDC) expressed concerns over safety at several W&OD Trail Crossing locations. The FGOEDC directed County Staff to prepare a report of all public roadway crossings with the W&OD Trail in Loudoun County. Staff returned to the Board of Supervisors on June 6, 2017 with a report and presentation summarizing the information gathered on all 41 roadway crossings. At this meeting the Board of Supervisors then requested staff to collect trail user data for the at-grade roadway crossings and report back to the Finance/Government Operations and Economic Development Committee with a recommended prioritization of safety improvements. This report was prepared in response to the Board's request.

Loudoun County coordinated with the W&OD Trail jurisdictions (NOVA Parks, VDOT, the Town of Leesburg, and the Town of Purcellville) and collected trail user data at 13 representative W&OD Trail crossings in the County in August 2017. The trail user data was coupled with stakeholder input and existing condition data collected previously for the W&OD Trail Crossings Study (Phase I Report dated May 2017) to assist with the prioritization of the 25 at-grade trail crossings. Data collection and evaluation resulted in the formation of two safety improvement categories: Tier 1 and Tier 2. Tier 1 includes the highest-priority trail crossings for safety improvements, which are locations with previous crash history or locations that cross roads with posted speeds of 35 mph or greater. Tier 2 includes trail crossings that did not meet Tier 1 criteria.

Tier 1 crossings were prioritized by the number of potential conflicts at each location. For this study, potential conflicts are defined as the number of trail users multiplied by the vehicular volumes. This method gave priority to crossings at busier roadways that carried higher trail user volumes. Understanding the safety concerns by the Loudoun County Board of Supervisors, recommended safety improvements for the Tier 1 trail crossings were developed. A summary of the Tier 1 Safety Improvements is provided in **Table 1** on the following page.

Recommendations such as tree trimming and replacing signs and pavement markings are maintenance items to be coordinated with the W&OD Trail jurisdictions while others require further study, design, and coordination with VDOT, NOVA Parks, the Town of Leesburg, or the Town of Purcellville depending on the crossing location. The scale of implementing the entire program of Tier 1 Improvements is between \$1,100,000 and \$2,100,000. These safety improvements include recommendations along roads maintained by the Town of Purcellville.

The safety improvements for the Tier 1 projects could be compiled into Capital Improvement Plan projects and be considered in the next update to the six-year improvement plan. If these projects are incorporated in the County's Adopted FY2019 Capital Improvement Program, then staff could move forward with the identified improvements. The implementation of these improvements will depend on



the type of improvement approved, input from Stakeholders, and when funding is secured by the County, NOVA Parks, or VDOT.

The next steps are:

- Report findings to the Board of Supervisors
- If directed by Board, identify funding, and coordinate with VDOT, NOVA Parks, and the Towns to implement Tier 1 Safety Improvements
- Develop Safety Improvements for Tier 2 Locations

Table 1 – Tier 1 Safety Improvements Summary

Tier 1 Ranking	Crossing ID #	Road Crossing	Realign Trail Crossing	Provide Median Refuge	Install Flashing Warning Signs	Install In-Street Warning Signs	Tree Trimming & Clearing	Restrict Parking	Planning Level Costs	Potential Funding Partner ¹
1	1	South Sterling Boulevard	Safety Improvements Recently Completed by NOVA Parks & FY2018 CIP Plans to Construct W&OD Bridge over S. Sterling Blvd							
2	10	Ashburn Road				✓			<\$25K	VDOT
3	21	South King Street ²	Safety Improvements Recently Completed by Town of Leesburg							
4	39	Hirst Road		✓	✓		✓	✓	\$200K-\$400K	TBD
5	8	Smith Switch Road	✓		✓		✓		\$200K-\$400K ⁴	NOVA Parks
6	35	Berlin Turnpike	✓				✓		\$100K-\$200K	TBD
7	41	North Hatcher Avenue ³				✓	✓		<\$25K	Town of Purcellville
8	26	Dry Mill Road near Route 9	✓		✓		✓		\$200K-\$400K	NOVA Parks
9	33	Hamilton Station Road	✓					✓	\$200K-\$400K	TBD
10	38	Route 7 Eastbound off Ramp at 287	✓						\$100K-\$200K	TBD
11	13	Cochran Mill Road					✓		<\$25K	VDOT
12	34	Ivandale Road				✓	✓	✓	<\$25K	VDOT
Total									\$1.1M-\$2.1M	

¹ The level of funding from outside agencies is unidentified at this time

² Roadway crossing maintained by the Town of Leesburg

³ Roadway crossing maintained by the Town of Purcellville

⁴ This cost does not include median refuge and associated roadway widening
All other crossings maintained by VDOT



1. Introduction

The Washington and Old Dominion (W&OD) Trail is a significant regional trail in Northern Virginia that starts at Shirlington Road, Arlington County and ends east of North 21st Street in the Town of Purcellville, Loudoun County. The 45-mile-long paved trail is used daily by thousands of people for walking, running, cycling, roller skating, horseback riding, commuting, and recreational purposes. The westernmost 23 miles of the W&OD Trail are located within Loudoun County. The regional trail has 41 public road crossings within Loudoun County, of which 25 are at-grade intersections. Trail users have expressed safety concerns regarding several existing at-grade road crossings. In response to these concerns, the Department of Transportation and Capital Infrastructure (DTCI) was directed by the Board of Supervisors to collect W&OD Trail user data in the County and to create a prioritization of safety improvements for the at-grade crossings within Loudoun County. The W&OD Trail and all the Loudoun County crossings are shown in [Figure 1](#).

1.1. Background

The W&OD Railroad Regional Park is owned and maintained by NOVA Parks, formerly known as the Northern Virginia Regional Park Authority. The W&OD Trail, located within the Park, is approximately 45 miles in length and is located on the former 100-foot-wide right-of-way for the railroad, which closed in 1968. The Virginia Electric and Power Company, which was incorporated by Dominion Virginia Power, then purchased most of the property for its electric transmission lines, which are located within the right-of-way. In 1974, NOVA Parks signed an agreement with Dominion Virginia Power to purchase the property in stages over a period of years. Dominion Virginia Power retained easements to maintain their existing electrical lines. The first eastern segment of the trail was opened in 1974 within the City of Falls Church under a lease agreement with the City and NOVA Parks. As demand for the trail grew, NOVA Parks purchased additional segments and the trail reached Purcellville in 1988.

The W&OD Trail currently serves many purposes for the communities through which it runs; in addition to the 10-foot wide paved trail for bicyclists, pedestrians, and other non-motorized users, there is a gravel trail adjacent to the paved trail that allows for horseback riding. The gravel trail generally runs parallel to the paved trail from the Town of Vienna, Fairfax County to the Town of Purcellville, Loudoun County.

A previous study, the W&OD Trail Crossings Study Report (Phase I), was completed in May 2017 that outlined the existing conditions at every roadway crossing within Loudoun County. This Phase II study utilizes the existing conditions summaries and recommended improvements for at-grade crossing locations from the Phase I Report. The maintenance responsibilities for the trail and the at-grade crossings were also identified in the Phase I report. The trail crossings within the Towns of Leesburg and Purcellville are maintained by the towns, while crossings within the County are maintained by VDOT.

1.2. Purpose

On June 6, 2017, Loudoun County's Board of Supervisors directed staff of the Department of Transportation and Capital Infrastructure (DTCI) to collect trail user data for the at-grade crossings of the W&OD Trail within Loudoun County. Staff was directed to report back to the Board with data and a recommended prioritization of safety improvements of the at-grade crossings. This report was prepared in response to the Board's request.

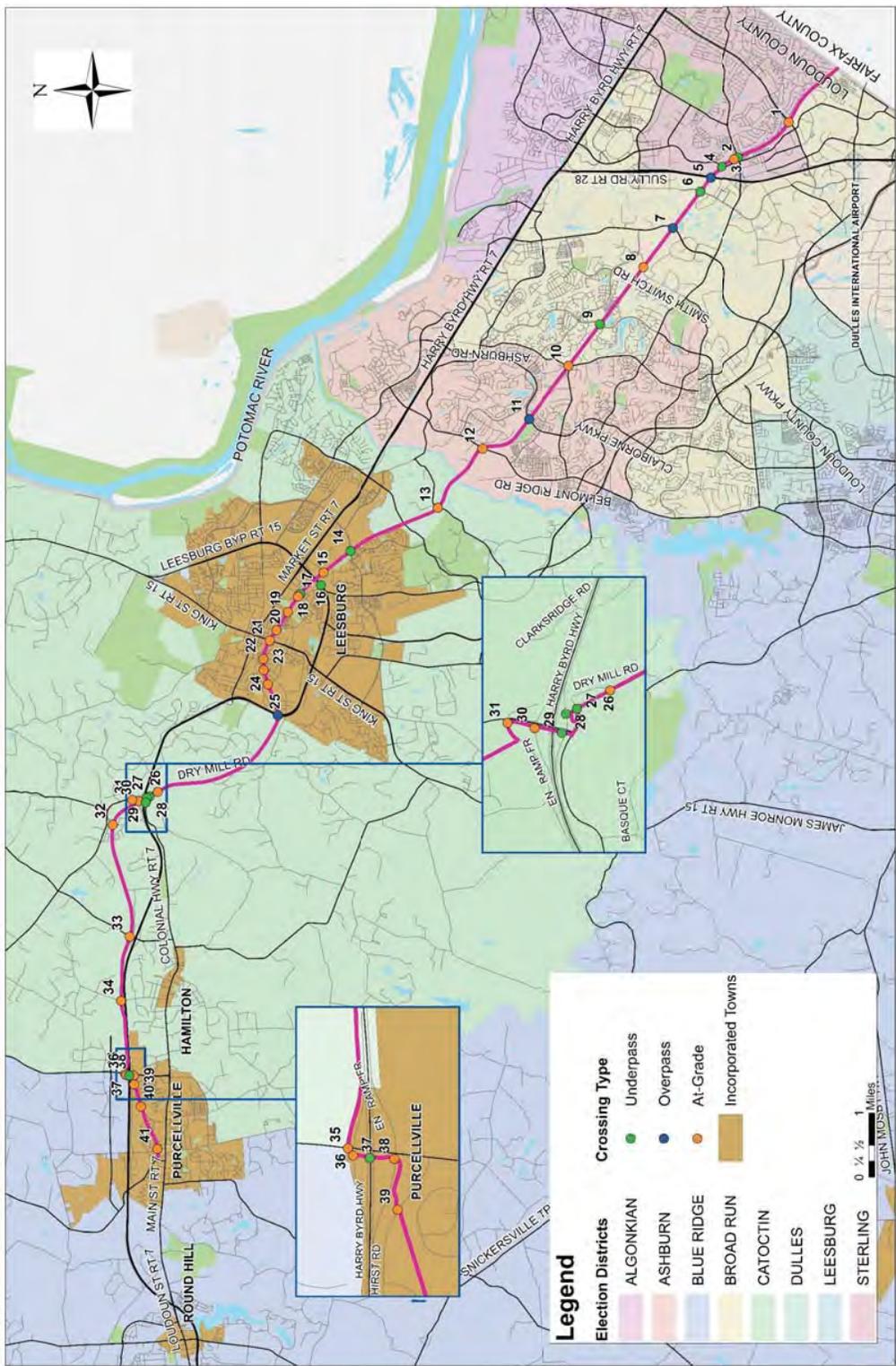


Figure 1 – Study Area Crossing Map



1.3. Coordination

Coordination with NOVA Parks, Virginia Department of Transportation (VDOT), the Town of Leesburg, and the Town of Purcellville occurred in preparation of this report and data collection.

To collect the trail user data, the County worked with NOVA Parks to install cameras at 13 crossings along the trail.

The County also coordinated directly with NOVA Parks, VDOT, the Town of Leesburg, and the Town of Purcellville to review a draft of this report as well as request feedback on the prioritization and recommendations. A stakeholder meeting was held on January 9, 2018, with all parties present. A meeting summary which includes the list of attendees and items discussed is included in [Appendix A](#).

1.4. Completed and Programmed Improvements

Loudoun County and NOVA Parks have programmed and recently completed the following improvements at W&OD Trail crossings within the County, as described below:

1.4.1. Loudoun County Initiated Improvements

Crossing ID# 1 – As part of the County’s Adopted FY2018 Capital Improvement Program (CIP) Budget, the County has identified a project to construct an overpass for the W&OD Trail above South Sterling Boulevard. Funding for this project anticipates using General Obligation Bonds from a November 2020 referendum. If funding is secured, construction could begin as early as 2022.

Crossing ID# 12 – The W&OD Trail Crossing at Belmont Ridge Road was improved as part of Loudoun County’s Belmont Ridge Road widening project from Gloucester Parkway to Hay Road. This project constructed a roadway bridge above the trail. This bridge, which grade separates the W&OD Trail and Belmont Ridge Road, was completed in the summer of 2017 while the entire widening project is expected to be complete in the fall of 2018.

Crossing ID#s 35, 36, & 38 – Although it is not known as to the extents of the improvements, the Route 7/Route 287 Interchange is planned to be improved in the current FY2018 CIP. The interchange improvements were recommended from a 2012 VDOT Interchange Study. It is assumed that any improvement to the interchange will also improve the at-grade W&OD Trail Crossings. Funding for design of the recommended interchange improvements is planned to arrive in FY2021.

1.4.2. NOVA Parks Initiated Improvements

Crossing ID# 1 – NOVA Parks implemented a short-term improvement in the summer of 2017 at the W&OD Trail and South Sterling Boulevard at-grade crossing to address safety concerns. The improvements included removing one left turn lane to shorten crossing distance, installing Rectangular Rapid Flashing Beacons (RRFB), and widening the median. [Figure 2](#) shows the RRFBs and new improvements in place. The adopted FY2018 CIP for Loudoun County includes the long-term improvement for this location a future grade separated overpass of the trail.



Figure 2 – Sterling Boulevard Crossing: Eastbound Approach Showing Recent Improvements

2. Existing Conditions

2.1. Data Collection

The County collected trail user data for 13 of the 25 at-grade crossings of the W&OD Trail that intersect publicly maintained roads within Loudoun County including the Town of Purcellville and the Town of Leesburg. Trail user crossing data was collected by video cameras on Saturday, August 19, 2017, and Tuesday, August 22, 2017, at the following at-grade crossings (with the Crossing ID numbers shown):

- South Sterling Boulevard (#1)
- Smith Switch Road (#8)
- Ashburn Road (#10)
- Cochran Mill Road (#13)
- Catoctin Circle SE (#19)
- South King Street (#21)
- Catoctin Circle SW (#24)
- Dry Mill Road (Near Route 9) (#26)
- Simpson Circle (North Crossing) (#32)
- Hamilton Station Road (#33)
- Ivandale Road (#34)
- Hirst Road (#39)
- North Hatcher Avenue (#41)



On Saturday, August 19, the temperature rose to a high of 90 degrees Fahrenheit and a low of 66 degrees in Leesburg, Virginia while Tuesday, August 22, was a bit warmer with a high of 95 degrees and a low of 70 degrees. Both days were mostly sunny with no major wind or precipitation. At the South Sterling Boulevard crossing location, a camera had rotated during the observation period so the camera was re-established and counts were collected on Wednesday, August 23 for the weekday observation period. The weather on August 23 was similar to that of August 22 in temperature, and the user volumes showed consistency with other crossing locations. The camera was not affected for the initial Saturday observation period. **Figure 3** shows the data collection camera and pole in place at Cochran Mill Road crossing behind the stop sign on the right side.



Figure 3 – Trail User Camera Detection at Cochran Mill Road

As shown on the following page, **Table 2** summarizes Trail user crossing data for the 13 studied at-grade crossings in Loudoun County. The crossings are ordered from the easternmost crossing of South Sterling Boulevard to the westernmost crossing at North Hatcher Avenue. It should be noted that the W&OD Trailhead is just east of North 21st Street in the Town of Purcellville. **Appendix B** includes the detailed trail user counts for the 13 at-grade crossings where count data was recorded.



Table 2 – Trail User Crossing Data Summary

Crossing ID Number	Road Name	Peak Hour			Daily Bike and Pedestrian Volume	
		Weekday		Saturday	Weekday	Saturday
		AM	PM			
1	South Sterling Boulevard	7:30-8:30 AM	6:00-7:00 PM	9:15-10:15 AM	821	2045
8	Smith Switch Road	7:00-8:00 AM	6:00-7:00 PM	8:45-9:45 AM	946	2491
10	Ashburn Road	7:00-8:00 AM	4:45-5:45 PM	8:15-9:15 AM	888	2309
13	Cochran Mill Road	9:45-10:45 AM	5:15-6:15 PM	10:15-11:15 AM	630	2122
19	Catoctin Circle SE ¹	9:30-10:30 AM	4:45-5:45 PM	9:15-10:15 AM	708	1835
21	South King Street ¹	10:00-11:00 AM	4:30-5:30 PM	9:15-10:15 AM	702	1834
24	Catoctin Circle SW ¹	8:45-9:45 AM	5:45-6:45 PM	9:15-10:15 AM	595	1689
26	Dry Mill Road	9:00-10:00 AM	6:15-7:15 PM	9:30-10:30 AM	473	1323
32	Simpson Circle (North)	7:45-8:45 AM	7:00-8:00 PM	9:30-10:30 AM	342	1176
33	Hamilton Station Road	7:30-8:30 AM	4:15-5:15 PM	9:30-10:30 AM	337	1240
34	Ivendale Road	7:30-8:30 AM	4:00-5:00 PM	9:30-10:30 AM	339	1229
39	Hirst Road	8:00-9:00 AM	6:00-7:00 PM	9:15-10:15 AM	336	1230
41	North Hatcher Avenue ²	7:45-8:45 AM	6:15-7:15 PM	9:15-10:15 AM	402	1189

¹ Roadway Crossing Maintained by the Town of Leesburg

² Roadway Crossing Maintained by the Town of Purcellville

All other crossings maintained by VDOT



2.2. Trail Volume Summary

Table 2 shows that daily trail volumes are significantly higher on Saturday, largely due to an increased number of recreational trips. Saturday volumes also differ from weekday volumes in the way they are dispersed throughout the day.

Weekday hourly volume data (total of the 13 locations counted), shown in Figure 4, highlights two different peaks occurring in the morning and afternoon. The trail network peak hours were determined to be 7:30-8:30 AM and 6:00-7:00 PM. The morning and evening peak hours are consistent with typical commuting times. Further study would be needed to determine if the percentage of riders using the trail to commute to and from work.

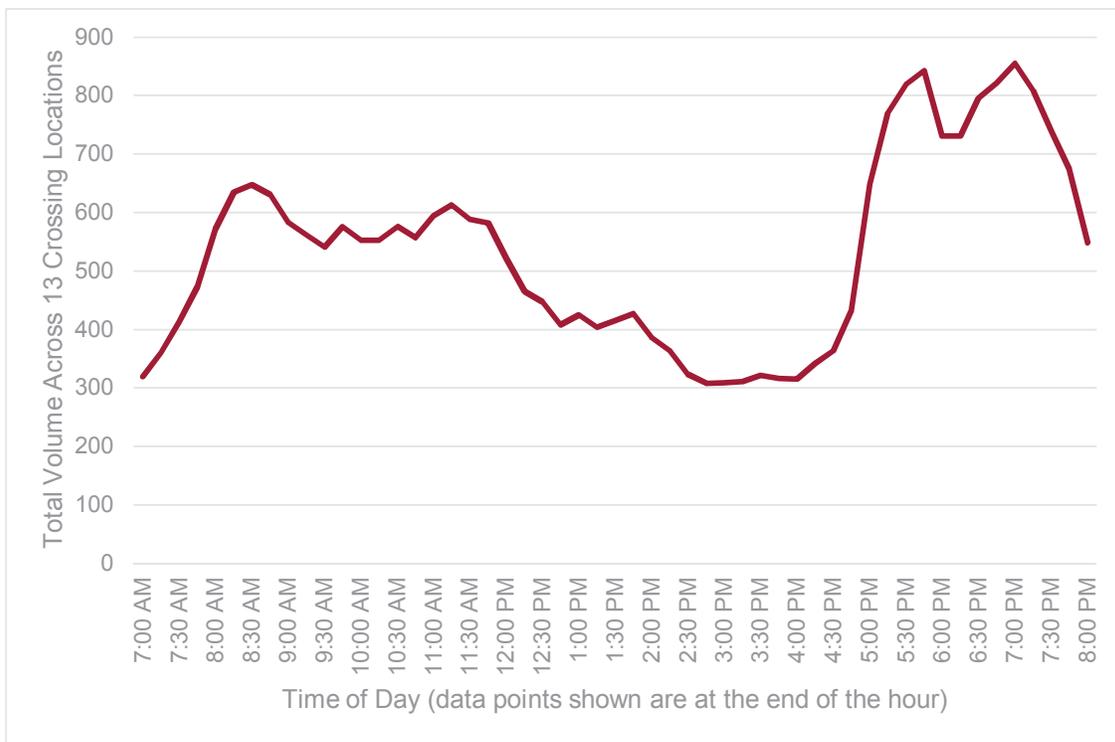


Figure 4 – Weekday Trail Volumes by Time of Day

The collected Saturday hourly volume data, shown in Figure 5, highlights a singular peak hour between 9:15-10:15 AM for the 13 trail crossings counted.

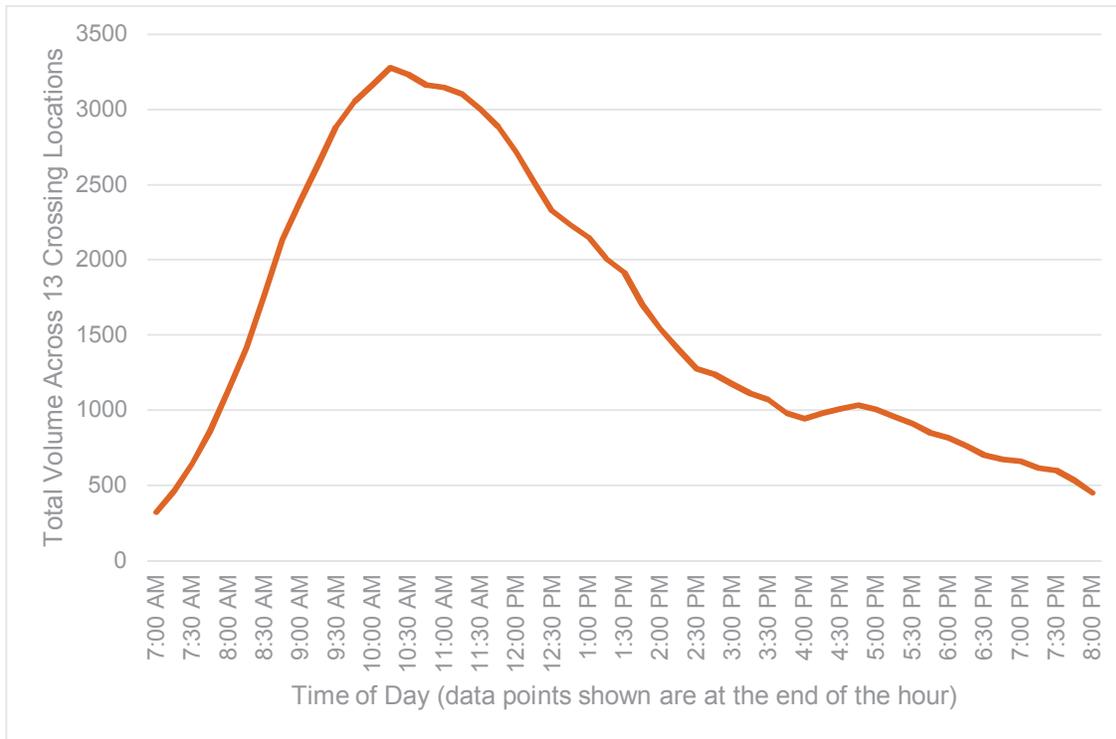


Figure 5 – Saturday Trail Volumes by Time of Day

2.2.1. Volumes by Location

Variations in trail volumes were also apparent when examining different locations along the trail. As shown in Figure 6, higher trail crossing volumes are concentrated on the eastern side of Loudoun County as well as within the Town of Leesburg. Saturday volumes, which are shown in Figure 7, follow a similar trend, with the western portion of the W&OD trail containing fewer users. This trend can be attributed to higher overall density and increased development in the eastern portion of Loudoun County. The W&OD Trail Crossing counted with the highest volume of trail users was at Smith Switch Road.

2.2.2. Trail Users

Figure 8 and Figure 9 illustrate the breakdown of pedestrian and bicycle trail users by location for the weekday and Saturday, respectively. Overall, bicyclists comprise the majority of trail users on both Saturday and the weekday. However, the number of pedestrians increases within the limits of the Town of Leesburg and the Town of Purcellville, particularly during the weekday.

On average, across all Trail Crossings, bicyclists account for 84% and 75% of the trail users on Saturdays and weekdays, respectively. Within the Town of Leesburg the proportion of pedestrians increases to 17% on Saturdays and 39% on weekdays. The proportion of pedestrians on the W&OD Trail in the Town of Purcellville is even higher at 27% on Saturdays and 47% on weekdays. The highest daily volume of pedestrians counted was 426 at Ashburn Road on the Saturday and 286 at Catocin Circle SE on the



weekday. The highest daily volume of bicyclists counted was 2,123 on the Saturday and 827 on the weekday. Both counts were at Smith Switch Road.

Equestrian trail users were counted and only 2 were observed crossing Ashburn Road on the Saturday count. However, it should be noted that during observations for this study, equestrian trail use was observed in some capacity during every visit to the W&OD Trail.



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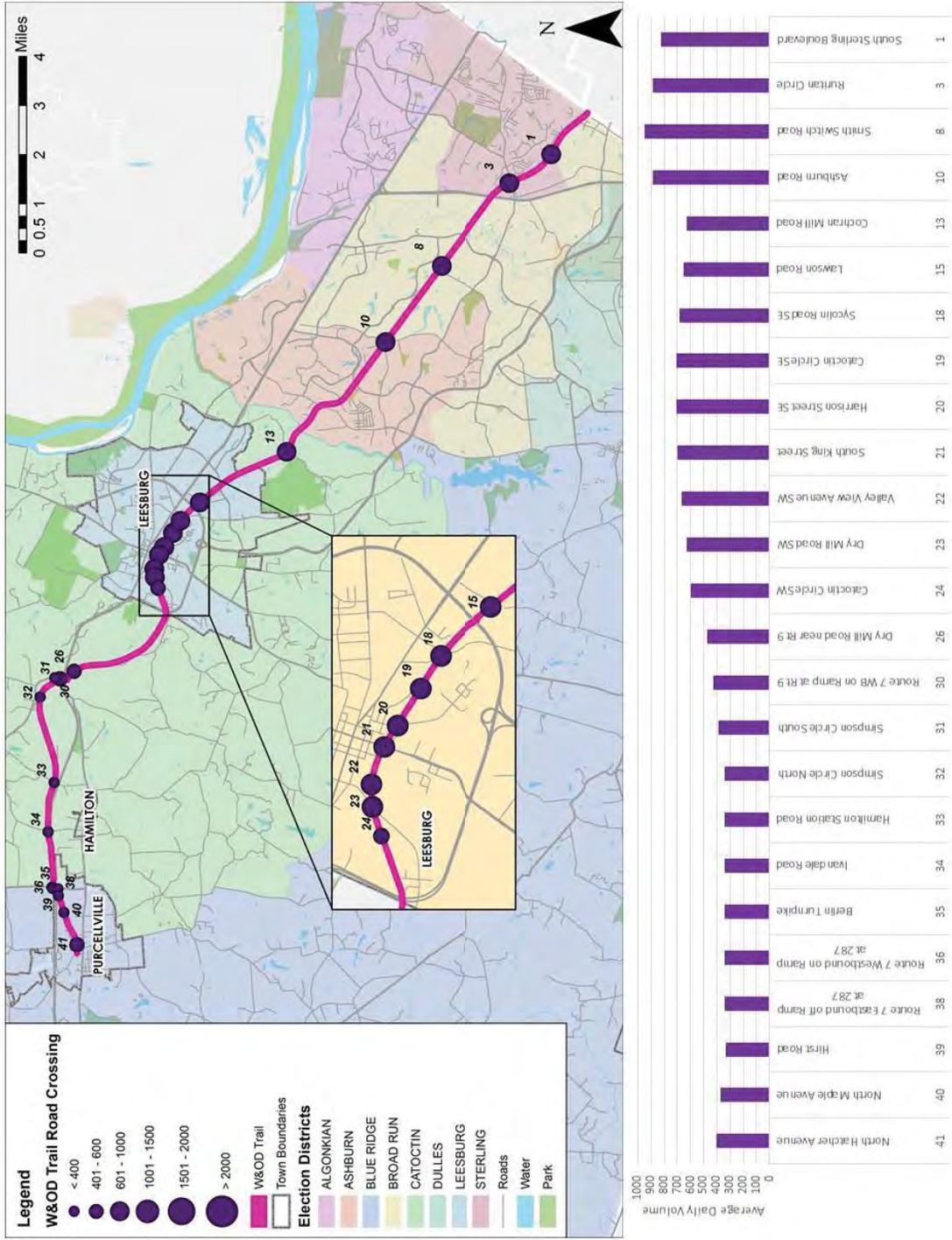


Figure 6 – Weekday Trail Volume Summary by Location



W&OD Trail Crossings Study, Phase II

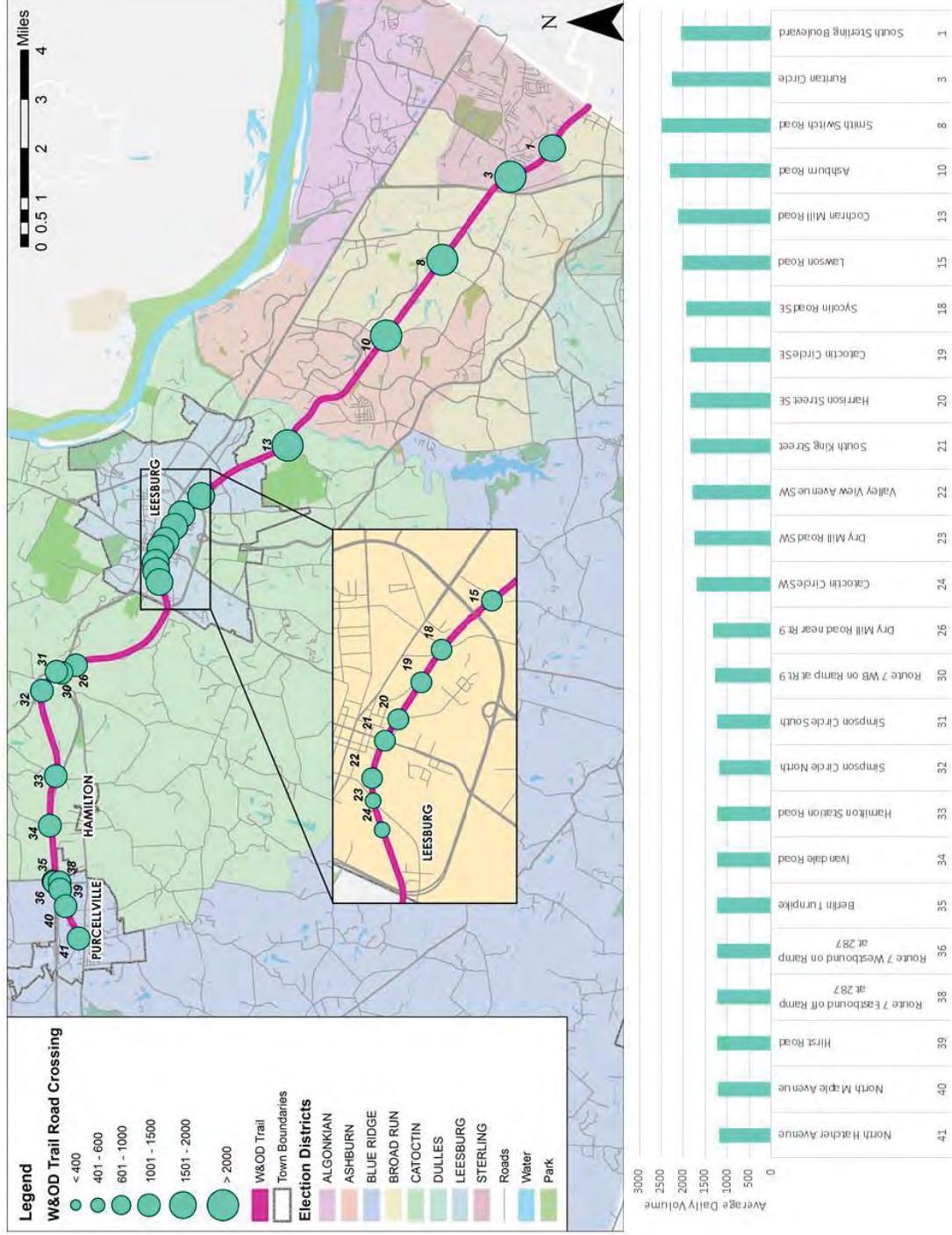


Figure 7 – Saturday Trail Volume Summary by Location



W&OD Trail Crossings Study, Phase II

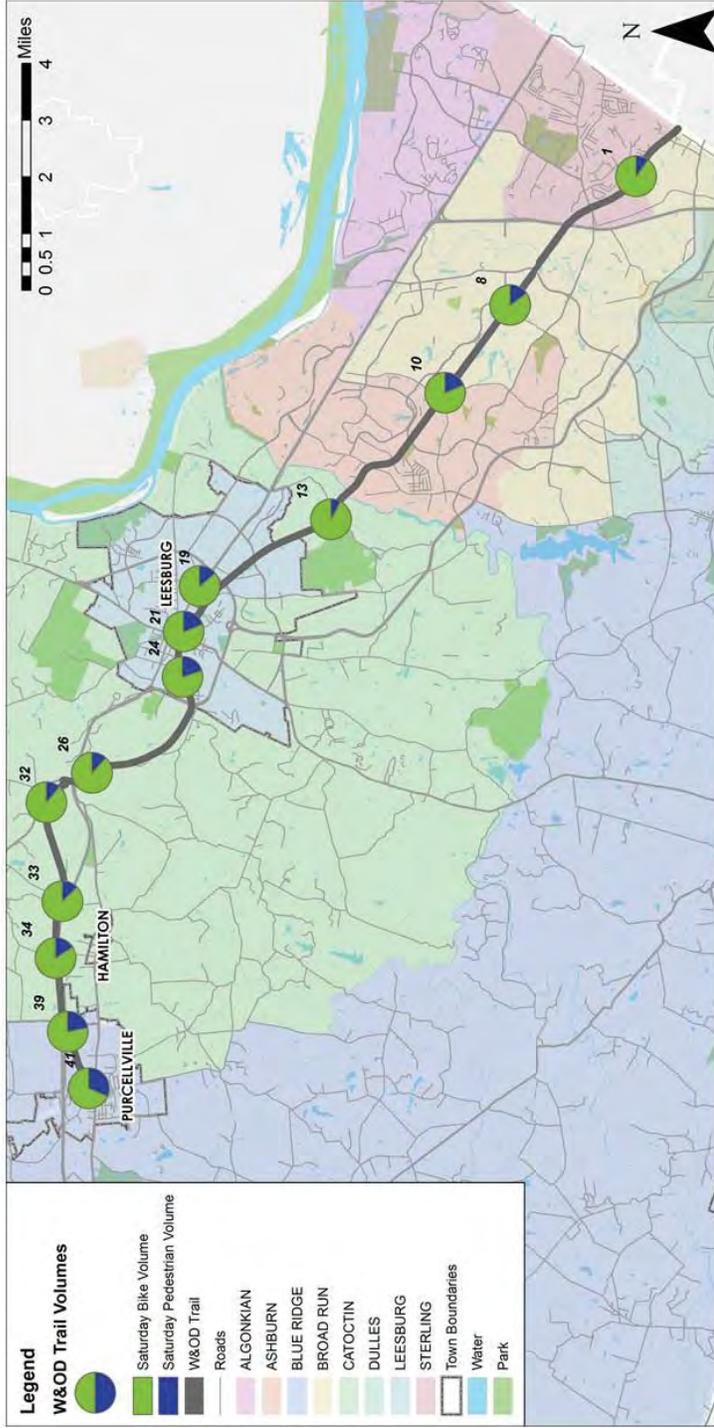


Figure 9 – Saturday Bicycle and Pedestrian Volumes by Location



Table 3, on the following page, combines the trail user data with the existing condition data from the previous W&OD Trail Crossings Report (Phase I), dated May 2017, that is pertinent to prioritization of the at-grade trail crossings in Loudoun County. The crossings are numbered based on the Crossing ID Number assigned from the previous report. **Appendix C** includes a summary of all the data gathered previously for each W&OD trail crossing in Loudoun County from east to west. Details include a description of the crossing, features of the intersecting roadway, and observations and photos from site visits. For trail crossing locations where data was not collected, the average between the two nearest count locations was used for the daily bike and pedestrian volume at those locations.



Table 3 – W&OD Trail At-Grade Crossings Summary in Loudoun County

Crossing ID (East to West)	Road Name	Route Number	Election District	Roadway Maintenance Responsibility	W&OD Trail Milepost	AADT (Vehicles/Day)	Weekday Trail User Volume	Saturday Trail User Volume	Posted Speed Limit	Number of Lanes Crossed	Crashes (2012-2016)
1	South Sterling Boulevard	846	Sterling	VDOT	22.5	27,000	821	2045	40	4	18
3	Rurtan Circle	859	Sterling	VDOT	23.5	400	884	2268	25	2	0
8	Smith Switch Road	1950	Broad Run	VDOT	26	2,700	946	2491	35	2	0
10	Ashburn Road	641	Ashburn / Broad Run	VDOT	27.5	8,700	888	2309	25	2	1
13	Cochran Mill Road	653	Catoctin	VDOT	30.5	490	630	2122	25	2	1
15	Lawson Road	654	Leesburg	Town of Leesburg	33	500	656	2027	25	2	0
18	Sycolin Road SE	4201	Leesburg	Town of Leesburg	33.5	100	682	1930	25	2	0
19	Catoctin Circle SE	4200	Leesburg	Town of Leesburg	34	17,000	708	1835	25	4	0
20	Harrison Street SE	N/A	Leesburg	Town of Leesburg	34	2,499	705	1835	25	2	0
21	South King Street	15	Leesburg	Town of Leesburg	34.5	9,700	702	1834	25	2	1
22	Valley View Avenue SW	N/A	Leesburg	Town of Leesburg	34.5	1,000	667	1786	25	2	0
23	Dry Mill Road SW	699	Leesburg	Town of Leesburg	35	2,300	630	1737	25	2	0
24	Catoctin Circle SW	4200	Leesburg	Town of Leesburg	35	4,800	595	1689	25	2	0
26	Dry Mill Road	699	Catoctin	VDOT	38	2,800	473	1323	35	2	2
30	Route 7 Westbound On-Ramp from Route 9	7	Catoctin	VDOT	38.5	1,500	430	1274	25	1	0
31	Simpson Circle (South)	662	Catoctin	VDOT	38.5	380	385	1225	25	2	0
32	Simpson Circle (North)	662	Catoctin	VDOT	39	380	342	1176	25	2	0
33	Hamilton Station Road	704	Catoctin	VDOT	41	3,000	337	1240	35	3	0
34	Ivendale Road	709	Catoctin	VDOT	42	750	339	1229	35	2	2
35	Berlin Turnpike	287	Catoctin / Blue Ridge	VDOT	43	6,800	338	1230	45	2	2
36	Route 7 Westbound On-Ramp from Route 287	7	Blue Ridge	VDOT	43	1,500	338	1230	25	1	0
38	Route 7 Eastbound Off-Ramp at	7	Blue Ridge	VDOT	43	1,500	338	1230	25	1	2
39	Hirst Road	962	Blue Ridge	VDOT	43.5	11,000	336	1230	45	2	0
40	North Maple Avenue	722	Blue Ridge	Town of Purcellville	44	5,700	369	1210	25	2	0
41	North Hatcher Avenue	611	Blue Ridge	Town of Purcellville	44.5	5,300	402	1189	25	2	1



3. Prioritization

Phase I of the W&OD Trail Crossing Study looked at the existing conditions of all the trail crossings within the County. Twenty-five of the crossings were at-grade crossings and several had a crash history which demonstrated a need for safety improvements. Considering the limited funding available to advance all projects, the Board of Supervisors direct staff to prioritize the crossings for safety improvements. This study developed the following methodology to identify crossings for safety improvements that accounts for the existing condition data compiled (see [Appendix C](#) for more information) and the trail user data summarized in the previous section.

3.1. Methodology

In order to identify the higher priority trail crossings, the 25 at-grade intersections were sorted into two different categories: Tier 1 and Tier 2. Tier 1 includes the highest-priority trail crossings for safety improvements, while Tier 2 includes lower-priority trail crossings for safety improvements. The criteria for each Tier is shown in [Table 4](#). This criteria was selected because crash history indicates that crashes have occurred and higher crossing roadway posted speed limits increases vulnerable trail users (bikes and pedestrians) to serious injury and fatal crash risks.

Table 4 – At-Grade Trail Crossing Categorization Criteria

Tier 1 Trail Crossings Criteria
<ul style="list-style-type: none"> • Crash History: 1 or more reported crashes within the specified time period • High Speed Roadways: Posted speed limits of 35 mph or greater
Tier 2 Trail Crossings Criteria
<ul style="list-style-type: none"> • Crash History: No crashes reported within the time period • Low Speed Roadways: Posted speeds limits of 30 mph or less

The results of this categorization are shown in [Table 5](#).



Table 5 – At-Grade Trail Crossing Categorization

Tier	Crossing ID Number	Road Name	Election District	Speed Limit (mph)	Crashes
1	1	South Sterling Boulevard	Sterling	40	18
	8	Smith Switch Road	Broad Run	35	0
	10	Ashburn Road	Ashburn/Broad Run	25	1
	13	Cochran Mill Road	Catoctin	25	1
	21	South King Street ¹	Leesburg	25	1
	26	Dry Mill Road near Route 9	Catoctin	35	2
	33	Hamilton Station Road	Catoctin	35	0
	34	Ivendale Road	Catoctin	35	2
	35	Berlin Turnpike	Catoctin/Blue Ridge	45	2
	38	Route 7 Eastbound off Ramp at 287	Blue Ridge	25	2
	39	Hirst Road	Blue Ridge	45	0
	41	North Hatcher Avenue ²	Blue Ridge	25	1
2	3	Ruritan Circle	Sterling	25	0
	15	Lawson Road ¹	Leesburg	25	0
	18	Sycolin Road SE ¹	Leesburg	25	0
	19	Catoctin Circle SE ¹	Leesburg	25	0
	20	Harrison Street SE ¹	Leesburg	25	0
	22	Valley View Avenue SW ¹	Leesburg	25	0
	23	Dry Mill Road SW ¹	Leesburg	25	0
	24	Catoctin Circle SW ¹	Leesburg	25	0
	30	Route 7 WB on Ramp at Route 9	Catoctin	25	0
	31	Simpson Circle South	Catoctin	25	0
	32	Simpson Circle North	Catoctin	25	0
	36	Route 7 Westbound on Ramp at 287	Blue Ridge	25	0
40	North Maple Avenue ²	Blue Ridge	25	0	

¹ Roadway crossing maintained by the Town of Leesburg

² Roadway crossing maintained by the Town of Purcellville

All other crossings maintained by VDOT



3.2. Prioritization within the Tiers

After identifying each at-grade trail crossing as either a Tier 1 or Tier 2 priority, each crossing was further ranked within its Tier. The Tier 1 at-grade trail crossings were prioritized by the number of potential conflicts at each location. The number of potential conflicts was calculated by multiplying the roadway's AADT with the weekday trail volume and dividing by 1,000 for simplification purposes. As a result, trail crossings that traversed busier roadways and carried more weekday volume were prioritized over lesser used locations or locations crossing minor streets. Tier 2 crossings were also prioritized separately from Tier 1 using the same methodology. The resulting prioritization is listed in [Table 6](#).



Table 6 – W&OD Trail Crossings Prioritization

Rank	Crossing ID Number	Road Name	Election District	AADT	Trail User Volume (Weekday)	Potential Conflicts
Tier 1						
1	1	South Sterling Boulevard	Sterling	27,000	821	221.7
2	10	Ashburn Road	Ashburn/ Broad Run	8,700	888	77.3
3	21	South King Street ¹	Leesburg	9,700	702	68.1
4	39	Hirst Road	Blue Ridge	11,000	336	37.0
5	8	Smith Switch Road	Broad Run	2,700	946	25.5
6	35	Berlin Turnpike	Catoctin/ Blue Ridge	6,800	338	23.0
7	41	North Hatcher Avenue ²	Blue Ridge	5,300	402	21.3
8	26	Dry Mill Road near Route 9	Catoctin	2,800	473	13.2
9	33	Hamilton Station Road	Catoctin	3,000	337	10.1
10	38	Route 7 EB off Ramp at 287	Blue Ridge	1,500	338	5.1
11	13	Cochran Mill Road	Catoctin	490	630	3.1
12	34	Ivendale Road	Catoctin	750	339	2.5
Tier 2						
1	19	Catoctin Circle SE ¹	Leesburg	17,000	708	120.4
2	24	Catoctin Circle SW ¹	Leesburg	4,800	595	28.6
3	40	North Maple Avenue ²	Blue Ridge	5,700	369	21.0
4	20	Harrison Street SE ¹	Leesburg	2,499	705	17.6
5	23	Dry Mill Road SW ¹	Leesburg	2,300	630	14.5
6	22	Valley View Avenue SW ¹	Leesburg	1,000	667	6.7
7	30	Route 7 WB on Ramp at Route 9	Catoctin	1,500	430	6.5
8	36	Route 7 WB on Ramp at Route 287	Blue Ridge	1,500	338	5.1
9	3	Ruritan Circle	Sterling	400	884	3.5
10	15	Lawson Road ¹	Leesburg	500	656	3.3
11	31	Simpson Circle South	Catoctin	380	385	1.5
12	32	Simpson Circle North	Catoctin	380	342	1.3
13	18	Sycolin Road SE ¹	Leesburg	100	682	0.7

¹ Roadway crossing maintained by the Town of Leesburg

² Roadway crossing maintained by the Town of Purcellville

All other crossings maintained by VDOT



3.3. Tier 1 Project Recommendations

As part of this study, safety improvements are recommended at each of the Tier 1 trail crossings. These recommendations identify short-term improvements that enhance the safety of the crossing. Additional details for each of the following Tier 1 crossings are shown in **Figure 11** through **Figure 20** on pages 25-34.

Trail Crossing #1: South Sterling Boulevard (Route 846)

- No short-term improvement identified since NOVA Parks recently installed safety improvements at this location
- Current CIP project plans to grade-separate crossing during construction. Funding for this project is currently planned for FY2020

Trail Crossing #8: Smith Switch Road (Route 1950)

- Realign the trail crossing to be perpendicular to the road
- Trim trees, remove vegetation, and other obstacles from sight line for approaching traffic
- Refresh existing crosswalk pavement markings as they are worn from nearby construction and deteriorating pavement conditions
- Install flashing warning signs in advance to alert approaching vehicles when trail users are present
- Evaluate feasibility of a median refuge at this trail crossing
- Continue monitoring this crossing as traffic patterns change. The 2016 AADT for this roadway will likely increase in future VDOT Traffic Count Publications with the opening of Gloucester Parkway from Loudoun County Parkway to Pacific Boulevard

Note: Ultimately, this road is planned to be an urban, 4-lane road per the current 2010 Countywide Transportation Plan. When Smith Switch Road is rebuilt, the crossing will become grade-separated based on NOVA Parks Policy

Trail Crossing #10: Ashburn Road (Route 641)

- Install in-street pedestrian crossing signs on each side of the crosswalk
- Replace pedestrian crossing signs at the Ashburn Road crossing with the combined bicycle and pedestrian crossing sign (MUTCD sign W11-15) in fluorescent yellow-green.

Trail Crossing # 13: Cochran Mill Road (Route 653)

- Install two new additional W&OD trail crossing warnings signs on road in advance of the crossing
- Refresh all trail markings including the stop bar and crosswalk
- Trim foliage for the Northbound approach along Cochran Mill Road
- Consider moving the 25-mph speed limit sign 100 feet north of the crossing for Southbound traffic on Cochran Mill Road. This will require a VDOT speed study and resolution to adjust speed limit zone.

Note: Ultimately, this road is planned to be an urban, 4-lane road per the current 2010 Countywide Transportation Plan. When Cochran Mill Road is rebuilt, the crossing will become grade-separated.



Trail Crossing #21: South King Street (Route 15), Town of Leesburg

- Install in-street pedestrian crossing signs on each side of the crosswalk
- Relocate existing speed limit sign on the west side of King Street so that it doesn't block the view of the trail crossing warning sign on the left side for the approaching northbound traffic
- The Town of Leesburg recently completed both safety improvements noted above

Trail Crossing #26: Dry Mill Road (Route 699 near Route 9)

- Install flashing warning signs at the crossing and in advance to warn approaching vehicles when trail users are present
- Install rumble strips on the roadway that are at least 100 feet from the crossing
- Tree trimming and clearing along the east side of Dry Mill Road
- Consider additional trail realignment to improve sight distance for both trail users and drivers

Trail Crossing #33: Hamilton Station Road (Route 704)

- Remove or shorten the southbound right turn lane so trail users only cross two travel lanes
- Restrict parking along the southbound shoulder of Hamilton Station Road to ensure adequate sight distance for oncoming traffic from all directions
- Improve trail vertical alignment to remove or reduce steep trail downgrade approaching roadway
- Further traffic analysis is required by VDOT to justify removal of the southbound right turn lane

Trail Crossing #34: Ivandale Road (Route 709)

- Tree trimming, remove vegetation, and other obstacles from sight line for approaching traffic
- Restrict parking along the shoulder to ensure adequate sight distance for oncoming traffic from all directions
- Install in-street pedestrian crossing signs on each side of the crosswalk
- Consider reducing posted speed limit to 25 mph through the crossing area. This will require a VDOT speed study and resolution

Trail Crossing #35: Berlin Turnpike (Route 287)

- Remove the channelized island and align the right-turn lane to be perpendicular to Berlin Turnpike
- Shift the crosswalk to the south to improve visibility from the roadway
- Both improvements noted require further traffic analysis as this intersection currently experiences traffic congestion
- Any trail crossing improvement at this location should be coordinated with the proposed traffic operations improvements as part of the current CIP project for the Route 7/Route 287 Interchange



Trail Crossing #38: Route 7 Eastbound Off-Ramp at Route 287

- Relocate crosswalk closer to Berlin Turnpike
- Install larger stop signs prior to the W&OD Trail crossing
- Relocate existing route trailblazer sign on west side of Berlin Turnpike out of sight distance
- Install a “Stop Ahead” sign approximately 600 feet from the intersection along the off-ramp
- Any trail crossing improvement at this location should be coordinated with the proposed traffic operations improvements as part of the current CIP project for the Route 7/Route 287 Interchange

Trail Crossing #39: Hirst Road (Route 962)

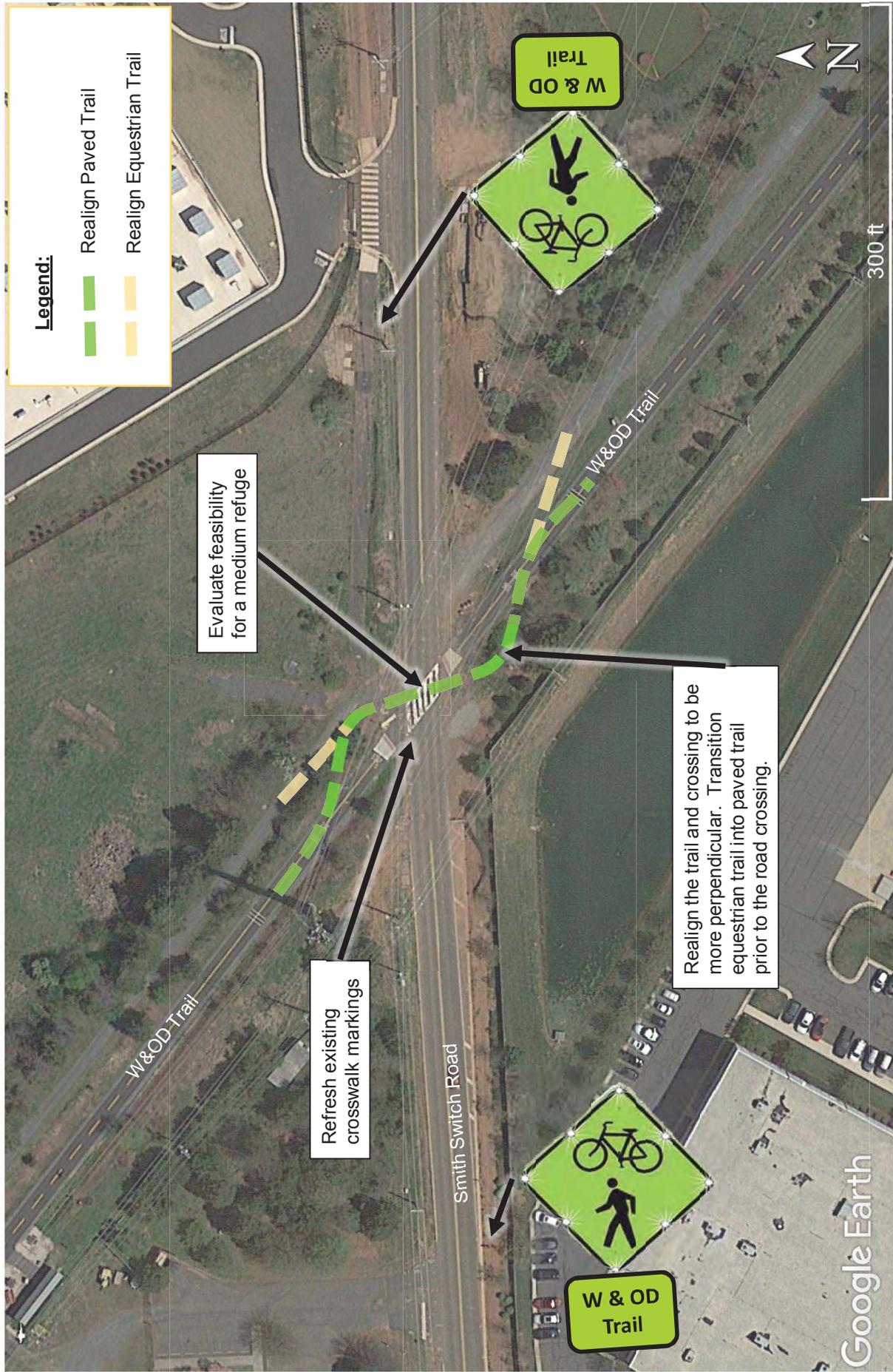
- Install flashing warning signs to alert approaching vehicles when trail users are present
- Restrict parking along the shoulder of Hirst Road to ensure adequate sight distance for oncoming traffic from all directions
- Trim foliage on north and south side of Hirst Road for the westbound approach
- Install a median island in the center of the road to separate vehicles and provide accommodation for additional signs. This improvement is shown in [Figure 10](#), in Purcellville’s Townwide Transportation Plan



Figure 10 – Recommended W&OD Trail Modifications at Hirst Road (Purcellville’s Transportation Plan)

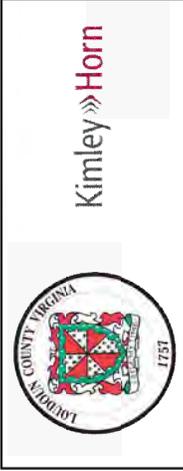
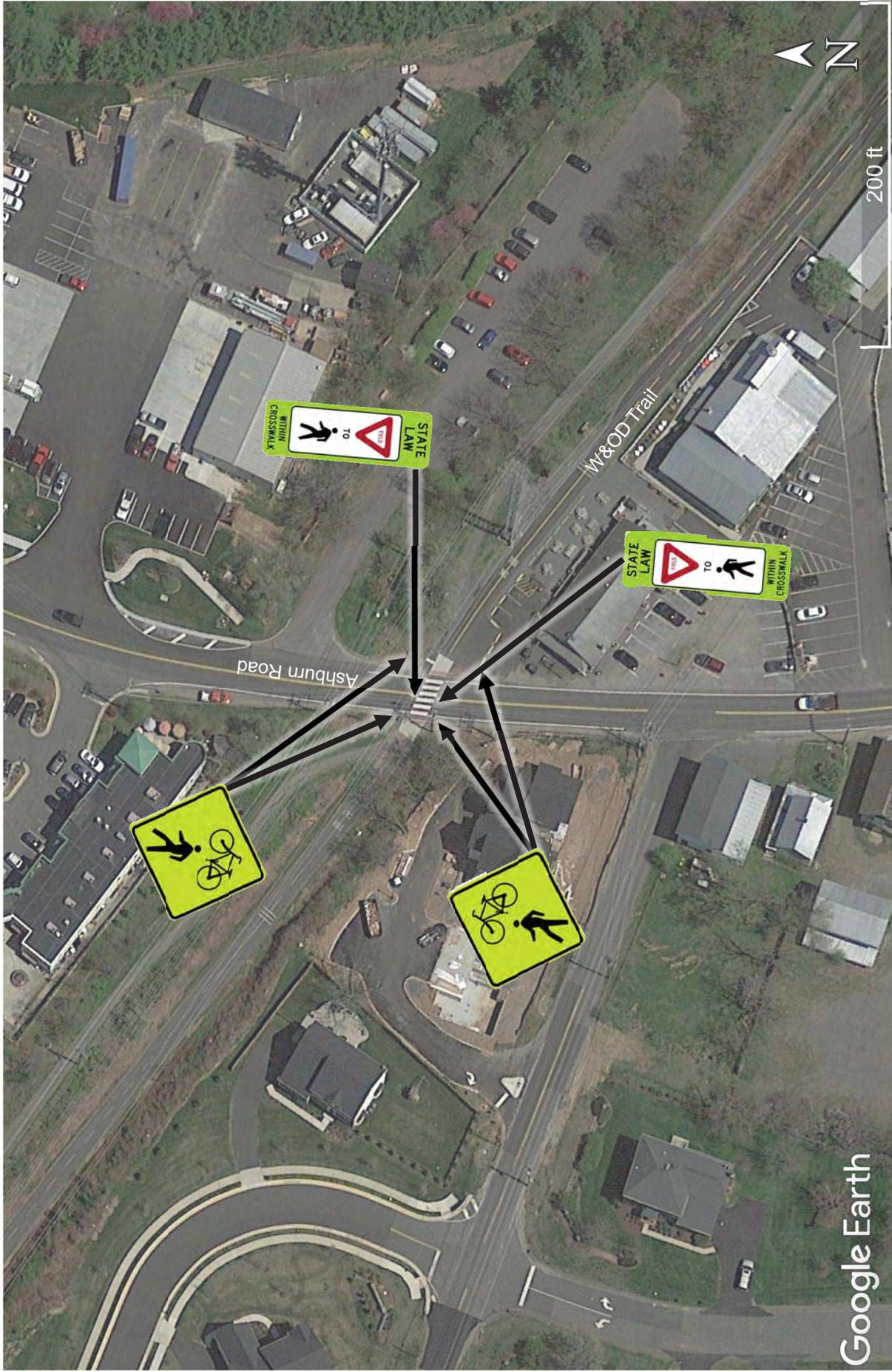
Trail Crossing#41: North Hatcher Avenue (Route 611), Town of Purcellville

- Install in-street pedestrian crossing signs on each side of the crosswalk
- Trim foliage on the west side of Hatcher Avenue



**W&OD Trail Crossings Study, Phase II
 Prioritization of the At-Grade Crossings**
 Safety Improvements at Smith Switch Road
 Trail Crossing #8

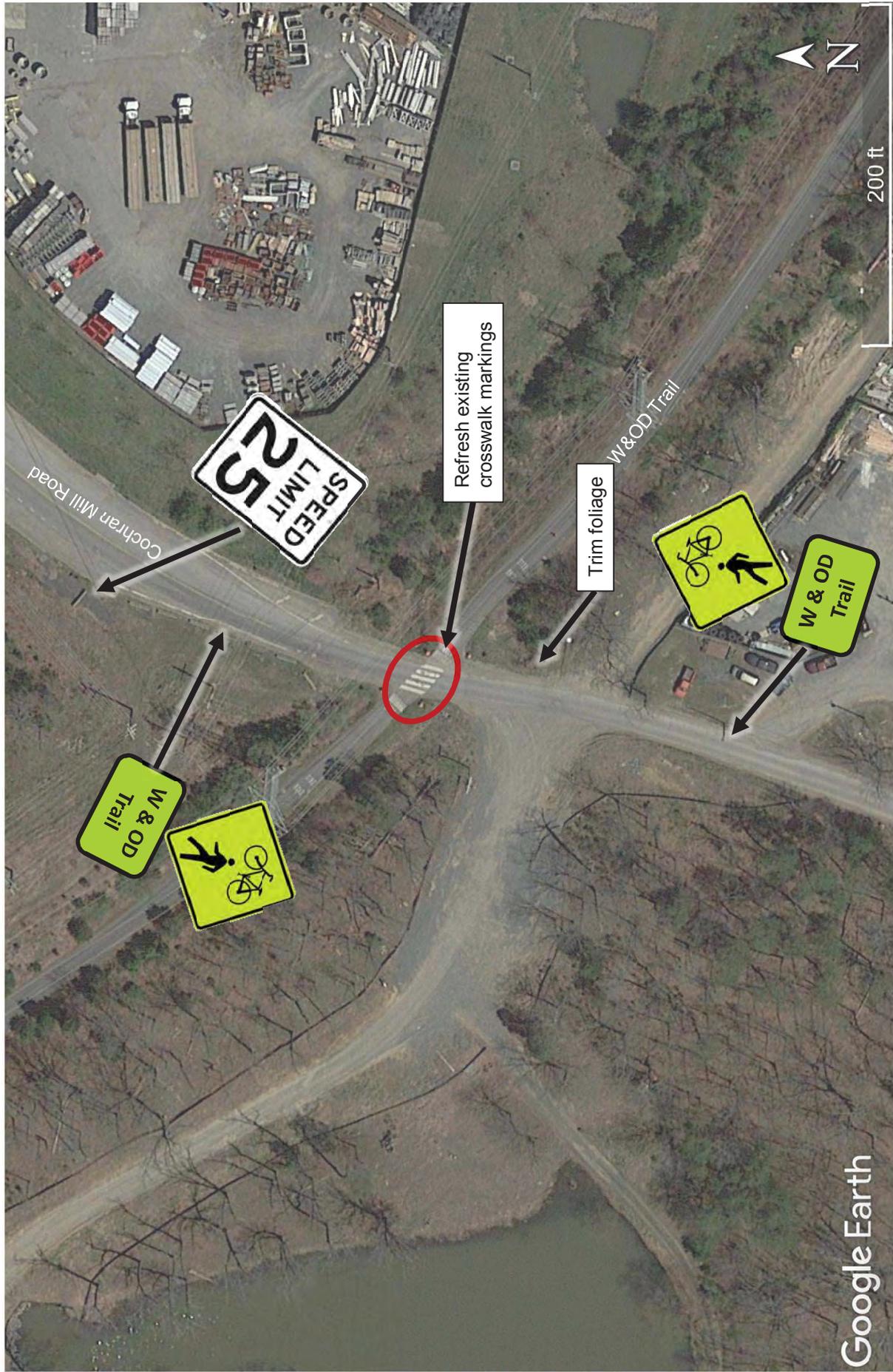
Figure 11



Kimley»Horn

W&OD Trail Crossings Study, Phase II
Prioritization of the At-Grade Crossings
 Safety Improvements at Ashburn Road
 Trail Crossing #10

Figure 12

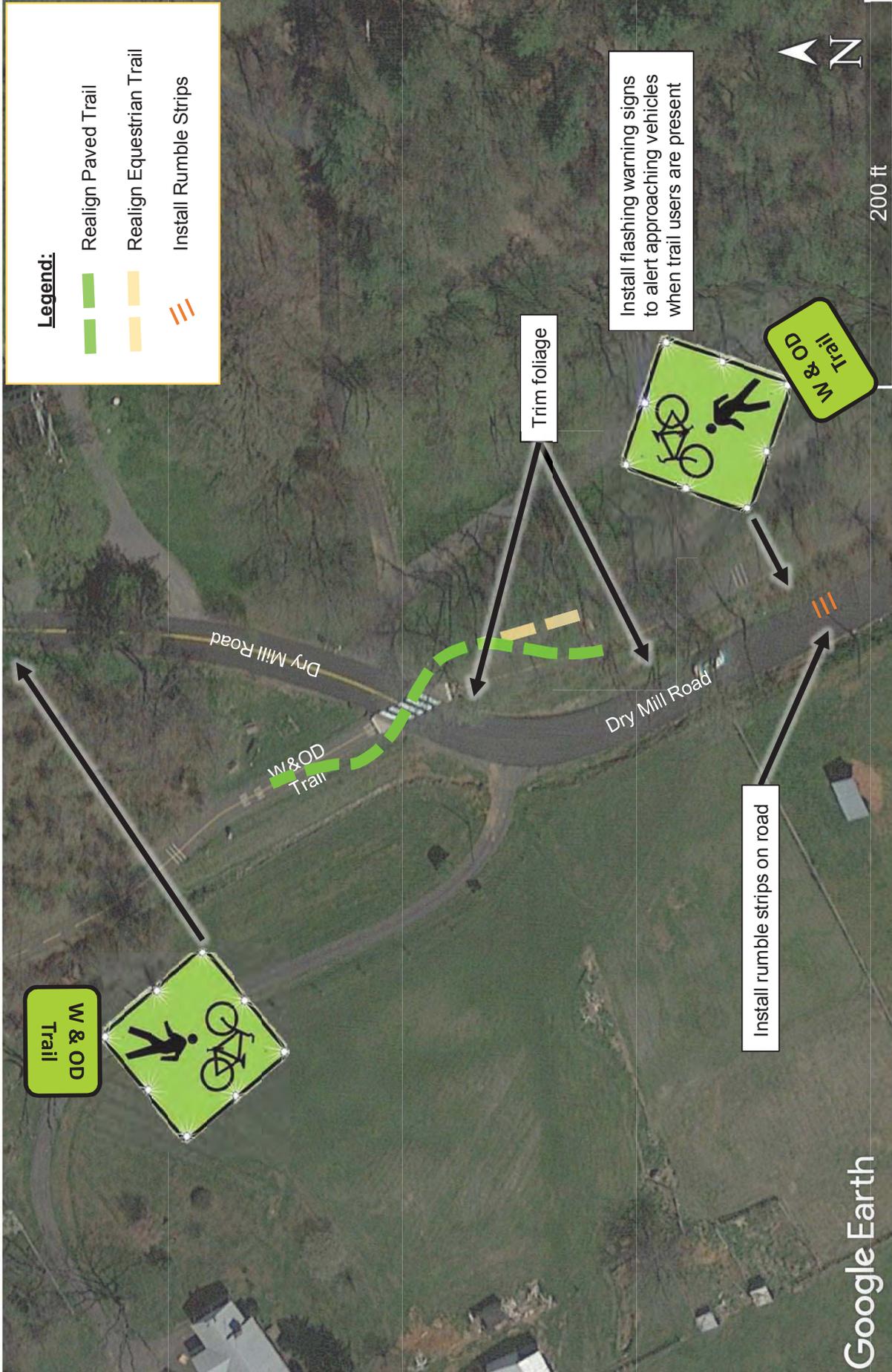


W&OD Trail Crossings Study, Phase II
Prioritization of the At-Grade Crossings
 Safety Improvements at Cochran Mill Road
 Trail Crossing #13

Figure 13



Kimley»Horn

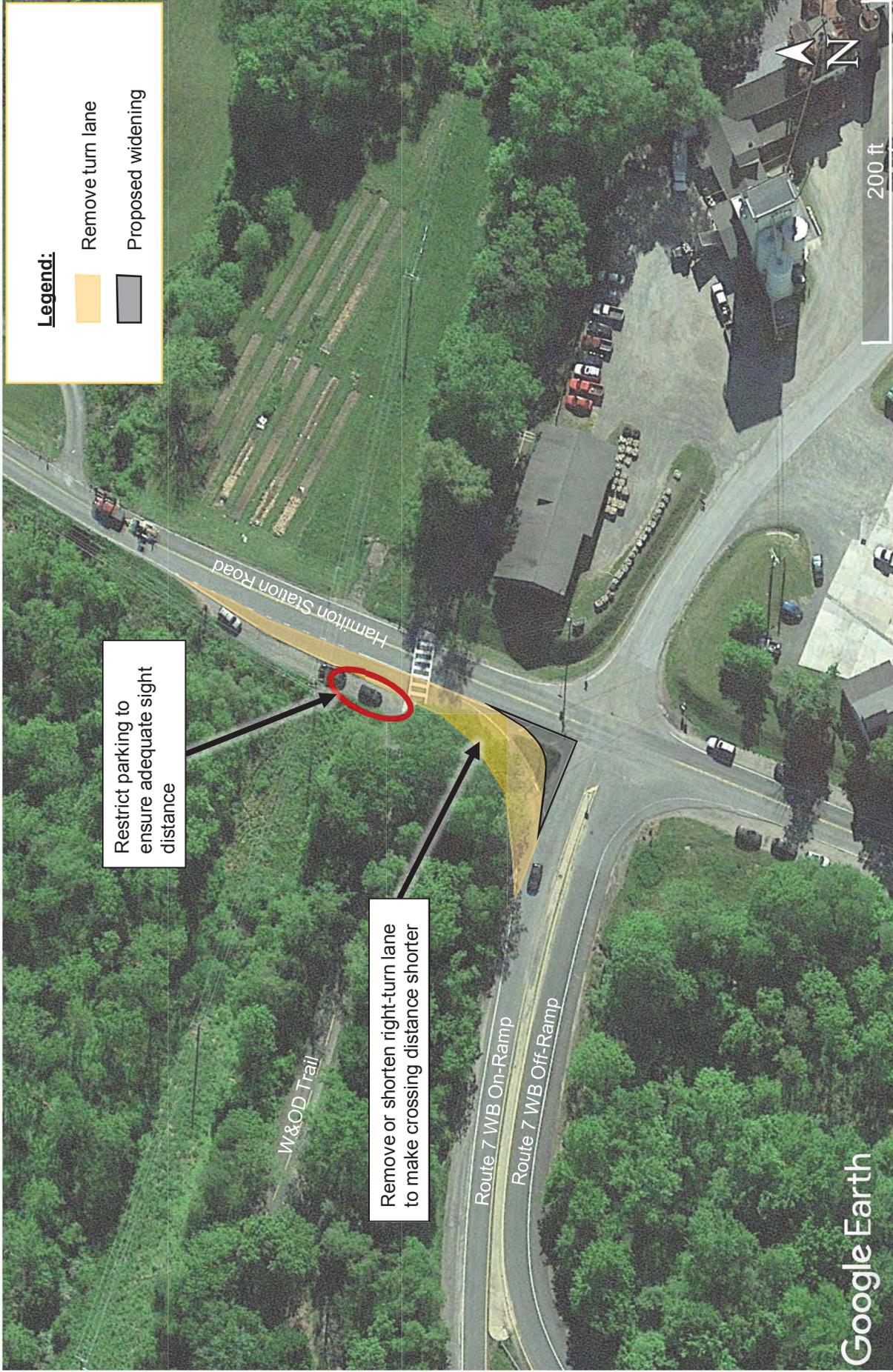


W&OD Trail Crossings Study, Phase II
Prioritization of the At-Grade Crossings
 Safety Improvements at Dry Mill Road
 Trail Crossing #26

Figure 14

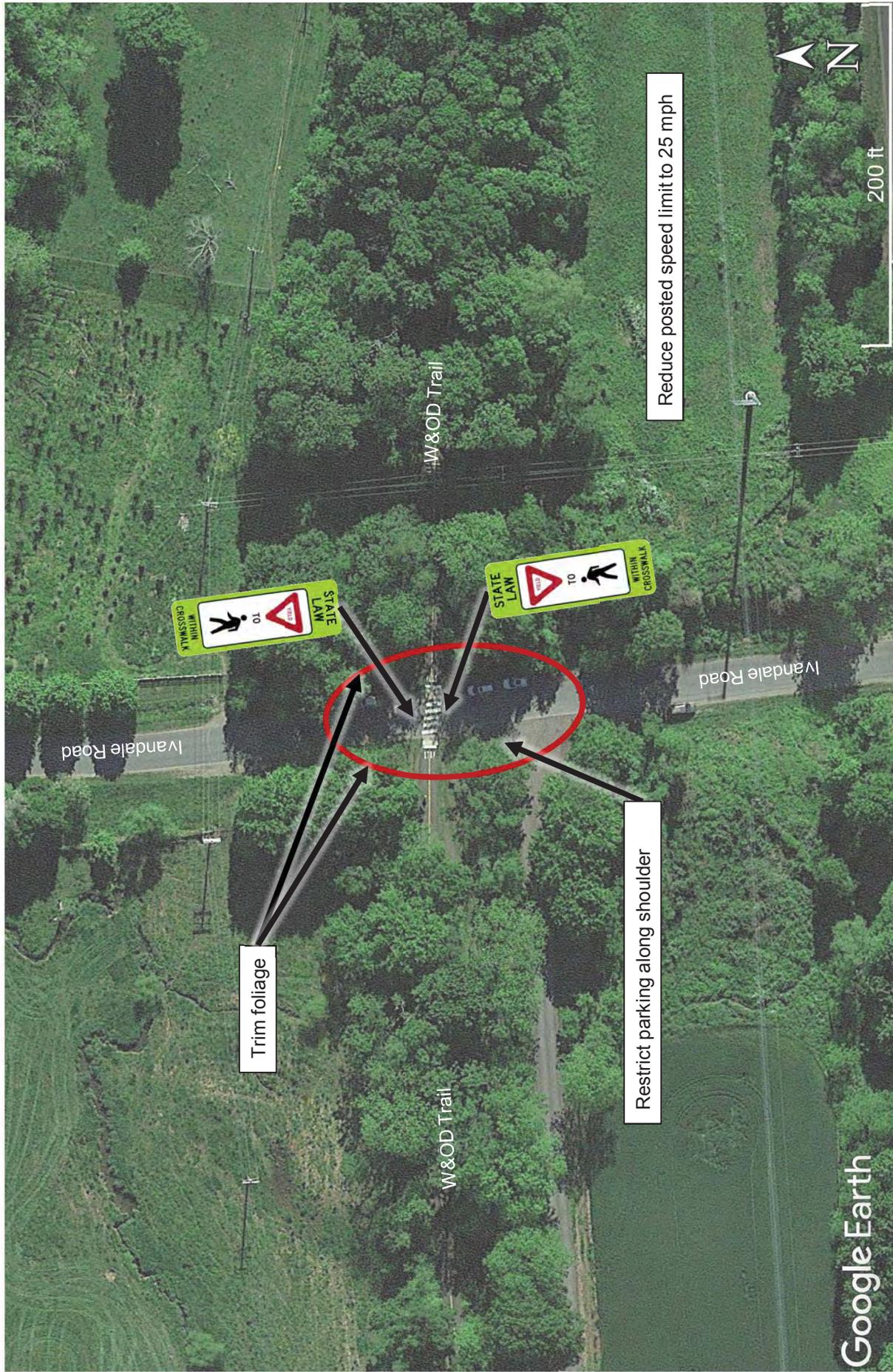


Kimley»Horn



W&OD Trail Crossings Study, Phase II
Prioritization of the At-Grade Crossings
 Safety Improvements at Hamilton Station Road
 Trail Crossing #33

Figure 15

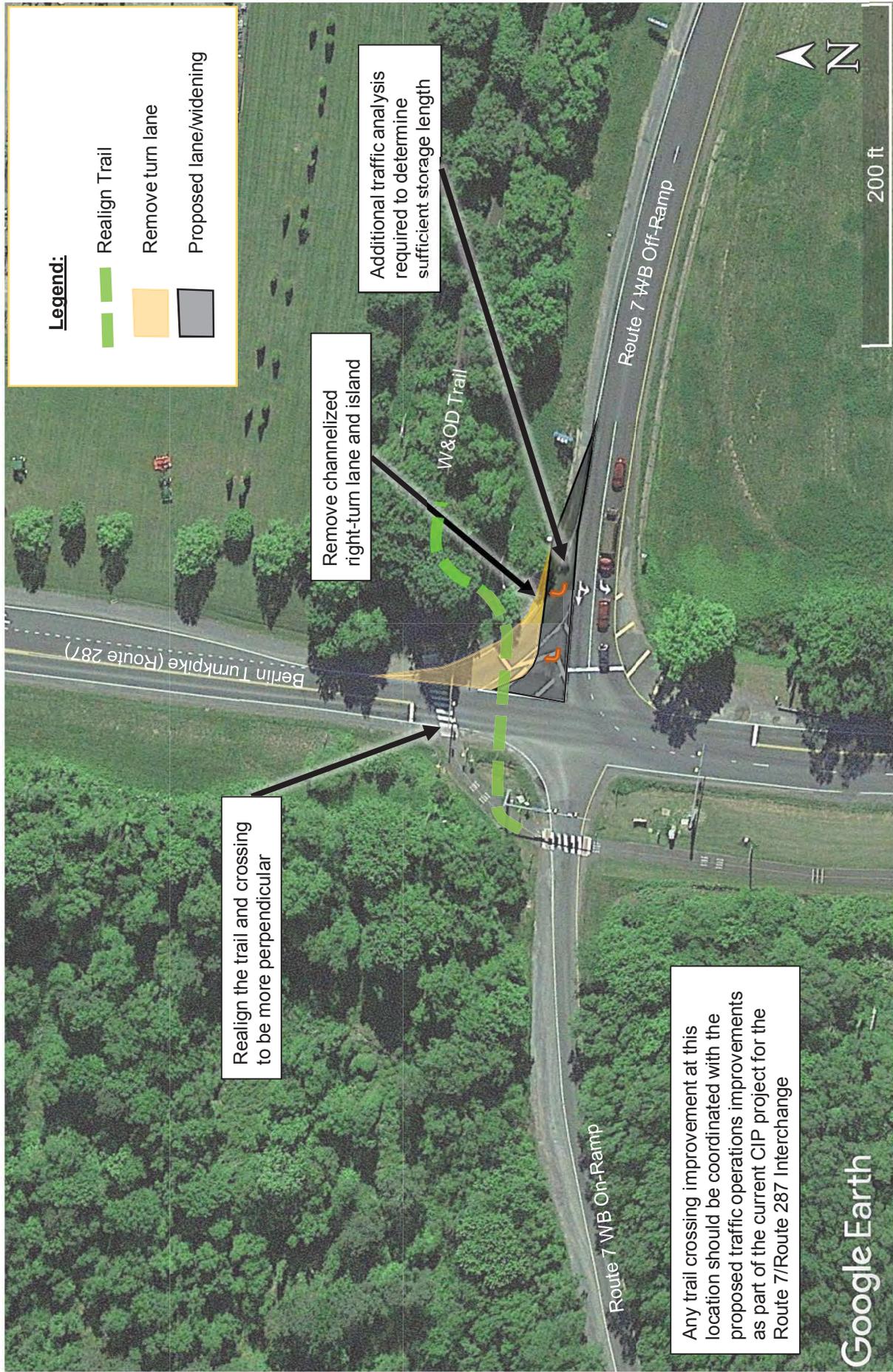


W&OD Trail Crossings Study, Phase II
Prioritization of the At-Grade Crossings
 Safety Improvements at Ivandale Road
 Trail Crossing #34

Figure 16



Kimley»Horn



Realign the trail and crossing to be more perpendicular

Remove channelized right-turn lane and island

Additional traffic analysis required to determine sufficient storage length

Legend:

- Realign Trail
- Remove turn lane
- Proposed lane/widening

Any trail crossing improvement at this location should be coordinated with the proposed traffic operations improvements as part of the current CIP project for the Route 7/Route 287 Interchange

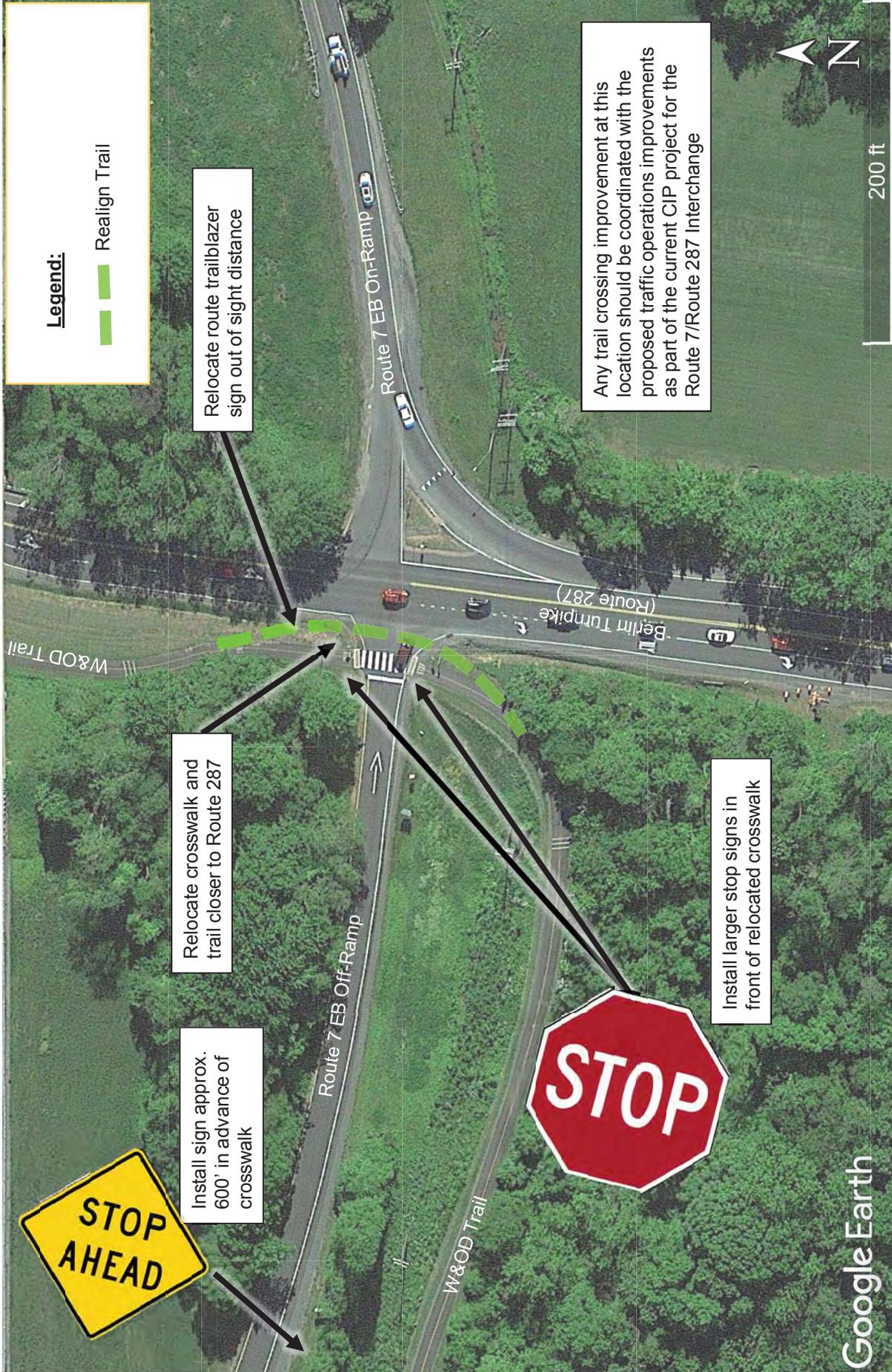
Google Earth

W&OD Trail Crossings Study, Phase II
Prioritization of the At-Grade Crossings
 Safety Improvements at Berlin Turnpike
 Trail Crossing #35

Figure 17



Kimley»Horn



STOP AHEAD

Install sign approx. 600' in advance of crosswalk

Relocate crosswalk and trail closer to Route 287

Relocate route trailblazer sign out of sight distance

Legend:

- Realign Trail

STOP

Install larger stop signs in front of relocated crosswalk

Any trail crossing improvement at this location should be coordinated with the proposed traffic operations improvements as part of the current CIP project for the Route 7/Route 287 Interchange

Google Earth

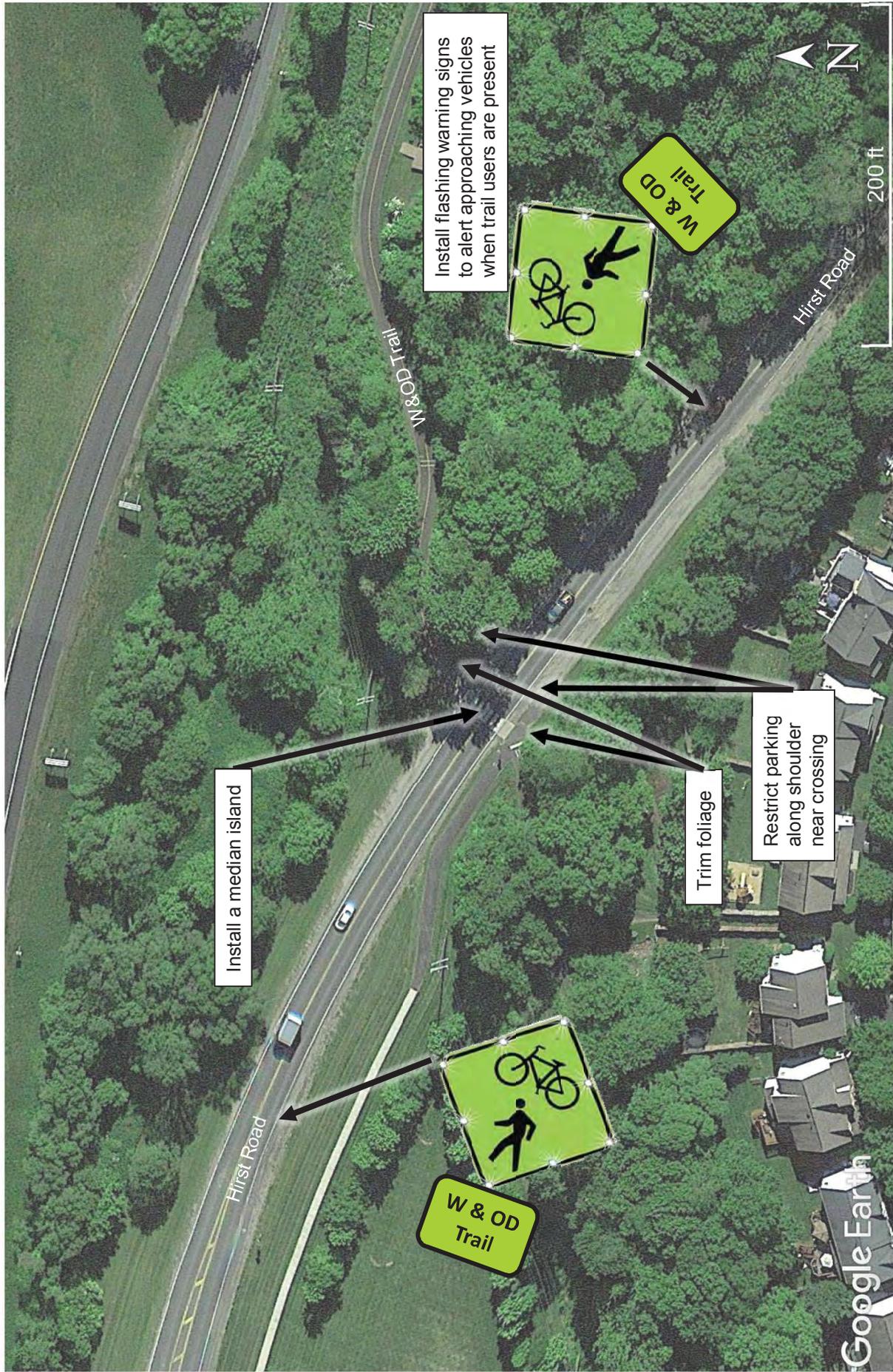
200 ft



Kimley»Horn

W&OD Trail Crossings Study, Phase II
Prioritization of the At-Grade Crossings
 Safety Improvements at Rt. 7 Eastbound Off-Ramp at Rt. 287
 Trail Crossing #38

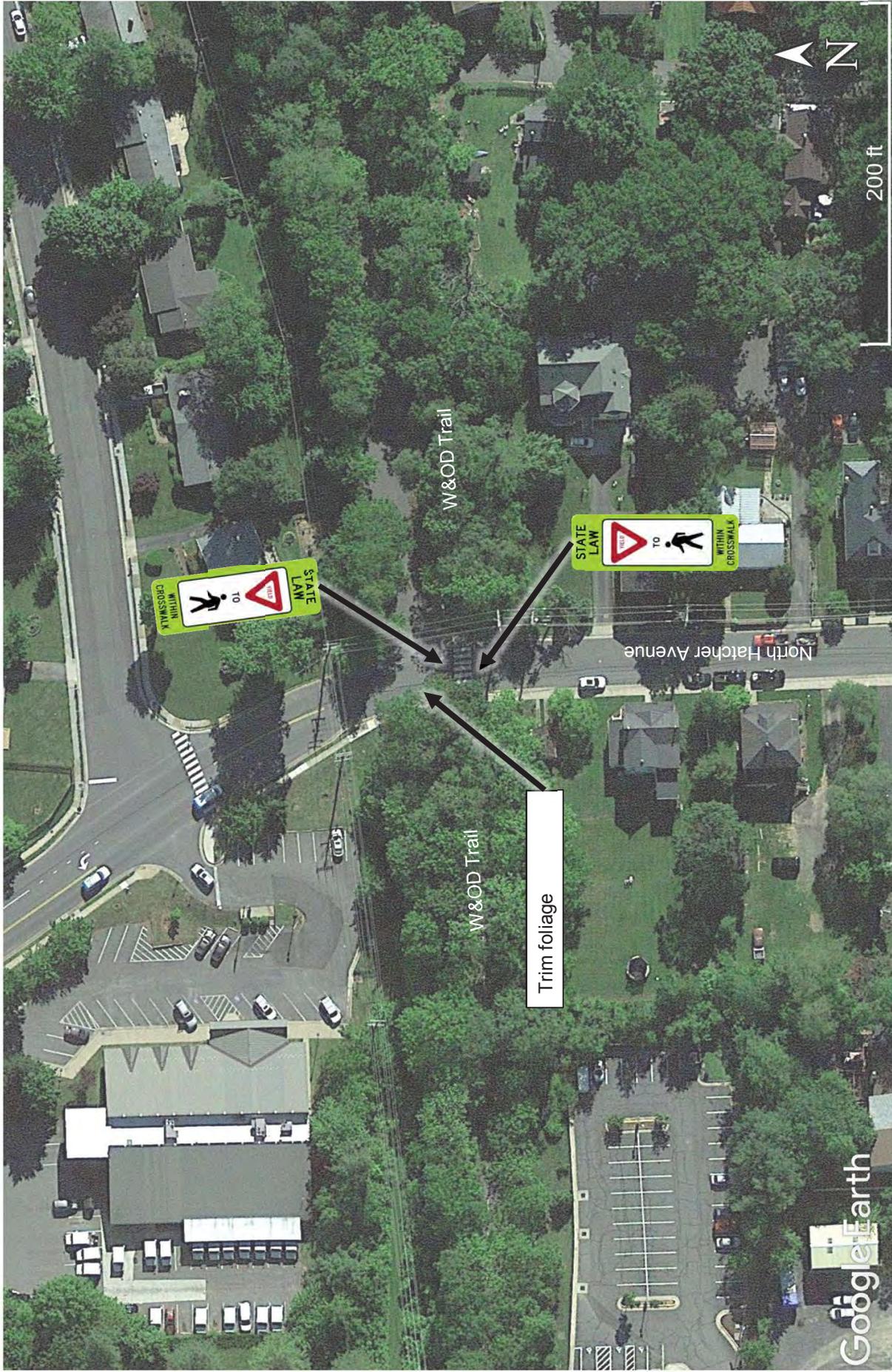
Figure 18



W&OD Trail Crossings Study, Phase II
Prioritization of the At-Grade Crossings
 Safety Improvements at Hirst Road
 Trail Crossing #39



Figure 19



W&OD Trail Crossings Study, Phase II
Prioritization of the At-Grade Crossings

Safety Improvements at N. Hatcher Avenue
 Trail Crossing #4-1

Figure 20



Kimley»Horn



3.4. Planning Level Project Costs

Although no concepts or design plans were prepared as part of this study, project planning level cost estimates were developed based on the recommended safety improvements. **Table 7** identifies which safety improvements are recommended and the estimated planning-level cost for each Tier 1 crossing. These estimates provide project cost ranges in 2018 dollars and assume costs for planning, design, construction, and coordination. No utility relocations or right-of-way acquisitions were assumed as part of these project costs. All improvements are planned within VDOT right-of-way or NOVA Parks property. If all projects were to be taken further as one Capital Improvement Project the total estimated cost ranges between \$1,100,000 and \$2,100,000.

Table 7 – Tier 1 Safety Improvements and Costs Summary

Tier 1 Ranking	Crossing ID #	Road Crossing	Realign Trail Crossing	Provide Median Refuge	Install Flashing Warning Signs	Install In-Street Warning Signs	Tree Trimming & Clearing	Restrict Parking	Planning Level Costs
1	1	South Sterling Boulevard	Safety Improvements Recently Completed by NOVA Parks & FY2018 CIP Plans to Construct W&OD Bridge over S. Sterling Blvd						
2	10	Ashburn Road				✓			<\$25K
3	21	South King Street ¹	Safety Improvements Recently Completed by Town of Leesburg						
4	39	Hirst Road		✓	✓		✓	✓	\$200K-\$400K
5	8	Smith Switch Road	✓		✓		✓		\$200K-\$400K ³
6	35	Berlin Turnpike	✓				✓		\$100K-\$200K
7	41	North Hatcher Avenue ²				✓	✓		<\$25K
8	26	Dry Mill Road near Route 9	✓		✓		✓		\$200K-\$400K
9	33	Hamilton Station Road	✓					✓	\$200K-\$400K
10	38	Route 7 Eastbound off Ramp at 287	✓						\$100K-\$200K
11	13	Cochran Mill Road					✓		<\$25K
12	34	Ivendale Road				✓	✓	✓	<\$25K
Total									\$1.1M-\$2.1M

¹ Roadway crossing maintained by the Town of Leesburg

² Roadway crossing maintained by the Town of Purcellville

³ This cost does not include median refuge and associated roadway widening

All other crossings maintained by VDOT



4. Conclusion

All Tier 1 trail crossings have recommended short-term safety improvements that have been vetted by the key stakeholders. Recommendations like tree trimming and replacing signs and pavement markings are maintenance items to be coordinated with VDOT, NOVA Parks, and the Towns. Other improvements like trail realignment require further study, design, and coordination with VDOT, NOVA Parks, the Town of Leesburg, or the Town of Purcellville depending on the crossing location. The scale of implementing the entire program of Tier 1 Improvements is estimated to be between \$1,100,000 and \$2,100,000. These safety improvements include recommendations along roads maintained by the Town of Purcellville.

The safety improvements for the Tier 1 projects could be compiled into Capital Improvement Plan projects and considered in the next update to the six-year improvement plan. If these projects are incorporated in the County's Adopted FY2019 Capital Improvement Program, then staff could move forward with the identified improvements. The implementation of these improvements will depend on the type of improvement approved, on input from Stakeholders, and when funding is secured by the County, NOVA Parks, or VDOT.

This study has already completed the initial outreach with key stakeholders on the recommended safety improvements. This meeting, which is summarized in Appendix A, took place in January 2018. It is understood through email correspondence that NOVA Parks is willing to provide funding for improvements at Smith Switch Road and Dry Mill Road. Town of Purcellville has indicated that they will take care of the proposed safety improvements at North Hatcher Avenue. Assuming those 3 trail crossing improvements are funded completely by NOVA Parks and the Town of Purcellville respectively, and trail crossings ID#'s 35 and 38 are improved as part of Loudoun County's CIP project for the Route 7/Route 287 interchange improvements, there are just 5 Tier 1 crossings that remain unfunded. These 5 remaining Tier 1 projects have an estimated planning-level cost between \$475,000 and \$875,000. **Table 8** on the next page identifies funding partners for the trail crossing improvements should Loudoun County decide to move these projects forward.

The next steps for this study is to report the findings back to the Board of Supervisors as requested. If directed by the Board, Loudoun County staff should identify funding sources and coordinate with VDOT, NOVA Parks, and the Towns to implement the Tier 1 Safety Improvements. The recommendations in this report should be reevaluated over time when more data is available. Loudoun Staff should also build upon the recommendations presented in this report and develop Safety Improvements for the Tier 2 Locations.



Table 8 – Funding Partners of Tier 1 Safety Improvements

Tier 1 Ranking	Crossing ID #	Road Crossing	Estimated Improvement Cost	Funding Partners ¹
2	10	Ashburn Road	<\$25K	VDOT
4	39	Hirst Road	\$200K-\$400K	TBD
5	8	Smith Switch Road	\$200K-\$400K	NOVA Parks
6	35	Berlin Turnpike	\$100K-\$200K	TBD
7	41	North Hatcher Avenue ²	<\$25K	Town of Purcellville
8	26	Dry Mill Road near Route 9	\$200K-\$400K	NOVA Parks
9	33	Hamilton Station Road	\$200K-\$400K	TBD
10	38	Route 7 Eastbound off Ramp at 287	\$100K-\$200K	TBD
11	13	Cochran Mill Road	<\$25K	VDOT
12	34	Ivandale Road	<\$25K	VDOT

¹ The level of funding from outside agencies is unidentified at this time

² Roadway crossing maintained by the Town of Purcellville

All other crossings maintained by VDOT



APPENDIX A

W&OD Trail Crossing Study, Phase II Stakeholder Meeting (1/9/2018) Summary



W&OD Trail Crossings Study, Phase II Loudoun County, Virginia

STAKEHOLDER MEETING MEETING SUMMARY

Date: January 9, 2018
Time: 10:00 AM to 12:00 PM
Location: 101 Blue Seal Drive, Suite 102 Leesburg, VA 20175
Subject: **W&OD Trail User Counts, Prioritization, & Recommendations**

Summary prepared by: Drew Wolfred/Mark Phillips
Summary prepared on: January 10, 2018 (Revised on February 5, 2018)

**Actions items are shown in italics*

Meeting Attendees:

<u>Name</u>	<u>Organization</u>	<u>Phone</u>	<u>Email</u>
Eloisa Thring	Loudoun County DTCl	571-258-3526	eloisa.thring@loudoun.gov
Sarah Kleckner	Loudoun County DTCl	571-258-3766	sarah.kleckner@loudoun.gov
Cindy Engelhart	VDOT	703-259-2376	Cindy.engelhart@VDOT.Virginia.gov
Thomas Folse	VDOT	703-259-2388	Thomas.Folse@VDOT.Virginia.gov
Dan Iglhaut	NOVA Parks	703-359-4628	dighaut@nvrpa.org
Mike DePue	NOVA Parks		mdepue@nvrpa.org
Mark Whaley	NOVA Parks		mwhaley@nvrpa.org
Karl Mohle	NOVA Parks	703-729-0596	kmohle@nvrpa.org
Andy Kaganowich	NOVA Parks	703-729-0596	akaganowich@nvrpa.org
Calvin Grow	Town of Leesburg	703-771-2791	cgrow@leesburgva.gov
Dale Lehnig	Town of Purcellville	540-751-2327	dlehnic@purcellville.va.gov
Jessica Mehl	Town of Purcellville	540-751-2330	jmehl@purcellville.va.gov
Geoff Giffin	Kimley-Horn	703-674-1355	geoff.giffin@kimley-horn.com
Drew Wolfred	Kimley-Horn	703-674-1366	drew.wolfred@kimley-horn.com
Mark Phillips	Kimley-Horn	703-870-3631	mark.phillips@kimley-horn.com

Introduction

This stakeholder meeting was held on Tuesday morning, January 9, 2018, at the Loudoun County Department of Transportation and Capital Infrastructure (DTCl) in Leesburg, Virginia to present the status of the Phase II report and discuss the recommendations for the Tier 1 trail crossings.



Meeting Summary

Kimley-Horn summarized the study background and the Loudoun County Board of Supervisor (the Board) meetings that led to where the study is today. During the discussion VDOT requested the trail user data collected as a part of this effort for VDOT's communication with the Commonwealth Transportation Board (CTB). VDOT will extrapolate the data to assume 24-hour trail volumes in the region. DTCl noted that the trail user data cannot be released until after the Board is able to review the study. DTCl is currently planning to prepare an item for the Finance/Government Operations and Economic Development Committee in March or April of 2018 which then may go to the full Board of Supervisors at the next possible business meeting. NOVA Parks also asked for the trail user data once it's ready to be shared. *Kimley-Horn will provide the shapefile with the trail user count locations to VDOT and NOVA Parks.*

The trail user data trends noted in Kimley-Horn's summary was in line with NOVA Park's observations. NOVA Parks mentioned on weekends that the high trail user volumes are always between the Smith Switch Road and Ashburn Road crossings as these are popular beginning and end points for events along the trail.

VDOT discussed the termination of Interim Approval 11, which permitted the optional use of rectangular rapid flashing beacons (RRFBs). In the discussion VDOT noted that other flashing beacons (specifically two beacons that have the "wig wag" flash pattern) are still allowed under the MUTCD and could be utilized for the proposed improvements where RRFBs were originally being considered. VDOT also mentioned in-street gateway signs (R6-1) had a similar speed reduction and safety improvement.

A few items noted were:

- The Town of Leesburg noted that Trail Crossing ID #'s 15 and 18 are maintained by the Town of Leesburg and not VDOT as shown in the draft report. *Kimley-Horn will revise the report to show crossings ID numbers 15 and 18 to be maintained by the Town of Leesburg.*
- VDOT has an agreement to maintain all traffic control devices at the crossings, including the recently installed RRFB's at South Sterling Boulevard.
- VDOT noted potential concerns regarding maintenance of solar powered flashing beacons and LED border signs due to the short battery life (~2 years for the RRFB's)
- VDOT noted potential concerns regarding the in-street signs due to snow plows and frequent replacement. These signs are only used at a few locations on VDOT roads. VDOT mentioned that there are manufacturers that provide more sustainable attachments to the pavement that minimize the maintenance effort. *VDOT will check internally whether they will allow these signs at W&OD Trail crossing.*

Kimley-Horn next summarized the methodology for categorizing the at-grade crossings into Tier 1 and 2 and the prioritization. The Tier 1 recommendations were then discussed and a summary of each is provided starting on the next page.

**Tier 1 Recommendations (By Crossing ID#)**

- **1 – South Sterling Boulevard:** There are no recommended improvements at South Sterling Boulevard as NOVA Parks has recently completed a project which installed a median refuge, removed a turn lane, and installed RRFBs at this location. Since the installation of the median refuge and RRFBs in the Fall of 2017 there have been no reported crashes at this location. It is also noted that South Sterling Boulevard has been added to the FY 2018 CIP for a future grade separation at the W&OD Trail crossing to remove all vehicle/trail user conflicts.
- **8 – Smith Switch Road:** The recommended improvements were agreed upon with the addition of relocating the equestrian trail crossing as part of the trail crossing realignment. The equestrian trail will transition into the paved trail on both approaches to the roadway crossing and both equestrian and paved trail users will cross at a singular crossing location. NOVA Parks requested considering adding curb and gutter to delineate the travelway for drivers as well as a median refuge. There are existing tire paths outside of the existing pavement. VDOT suggested adding landscaping elements deter trail users from cutting through and using the existing alignment to take the shortest path rather than following the trail. The stakeholders also suggested adding the flashing beacons with the realignment. NOVA Parks noted that the southwest corner berm contains a large number of underground utilities and may create challenges during implementation.
- **10 – Ashburn Road:** The recommended improvements were agreed upon NOVA Parks had concerns about the sign placement of the in-street panels within the crosswalk but were assured these signs are planned to be outside of the crosswalk and not within the crossing.
- **13 – Cochran Mill Road:** The recommended improvements were agreed upon. VDOT noted that a speed study and resolution would be required to adjust the existing 25mph speed limit sign north of the trail crossing.
- **21 – South King Street:** The Town of Leesburg presented pictures depicting that the recommended improvements had already been completed by the Town. As such the improvements will be noted in the study. In addition to the improvements completed by the Town, the Stakeholder group recommended moving the existing speed limit sign on the west side of King Street so it doesn't block the Trail Crossing Warning Sign on the left side for northbound traffic
- **26 – Dry Mill Road:** In addition to the recommended improvements, NOVA Parks noted that they would like to consider a trail realignment to create better sight distance for both trail users and drivers. NOVA Parks also informed the group there have been incidents where northbound vehicles have veered off Dry Mill Road as they exit the curve just before the crossing and have damaged park property along the west side of Dry Mill Road.
- **33 – Hamilton Station Road:** The improvements at this location were agreed upon however VDOT noted that traffic volumes would need to be reviewed to determine the effects of removing the turn lane to shorten the trail crossing.
- **34 – Ivandale Road:** The recommended improvements were agreed upon. VDOT noted that a speed study and resolution is required to lower the speed limit at this location.



- **35 – Berlin Turnpike:** The recommended improvements were agreed upon however VDOT noted that this location experiences traffic congestion and further vehicular improvements are likely necessary. A few items noted was the short length of the westbound right-turn lane and the lack of a dedicated northbound left-turn lane. A few other items noted was to shift the proposed crosswalk location closer to the intersection to improve trail user visibility and consider signalizing the west leg approach.
- **38 – Route 7 Eastbound Off-Ramp at Route 287:** The recommended improvements were agreed upon.
- **39 – Hirst Road:** The recommended improvements were agreed upon. Hirst Road, NOVA Parks, the Town of Purcellville, and VDOT discussed an issue with the stop sign on the sidepath that has created confusion for drivers approaching this crossing on Hirst Road. The Town of Purcellville noted that they would look into the situation to have the stop sign removed in order to remove the conflict with drivers. VDOT noted that they had previously investigated reducing the speed limit and this is unlikely under the existing configuration. VDOT did note that this could be revisited after a median was installed.
- **40 – Maple Avenue:** While not discussed as part of the Loudoun County's Tier 1 recommendations, the Town of Purcellville noted the residents had brought up issues with lighting at this crossing as many students use it after school. NOVA parks stated that they would not object to the installation of lighting in their right-of-way as long as the Town of Purcellville installs and maintains the lighting.
- **41 – North Hatcher Avenue:** The recommended improvements were agreed upon. *The Town of Purcellville noted that they will likely be able to trim the foliage and install the in-street signs as noted at this location but will confirm with the County.*

Wrap Up

DTCI closed in asking the stakeholders to please identify and submit any comments on the study or recommendations by January 23rd, 2018.

The meeting adjourned at 12:00 PM.

Closing

Request that the attendees review the content of this summary and advise the authors of any necessary revisions within one week of the preparation date, after which time these meeting minutes will be considered final.

Respectfully submitted,
KIMLEY-HORN AND ASSOCIATES, INC.



APPENDIX B

W&OD Trail Crossing Study, Phase II Trail User Data

Location	Peak Hour			Daily Volume	
	Weekend	Weekday		Weekend	Weekday
		AM	PM		
Location 1	9:15 AM	7:30 AM	6:00 PM	2045	821
Location 2	8:45 AM	7:00 AM	6:00 PM	2491	946
Location 3	8:15 AM	7:00 AM	4:45 PM	2309	888
Location 4	10:15 AM	9:45 AM	5:15 PM	2122	630
Location 5	9:15 AM	9:30 AM	4:45 PM	1835	708
Location 6	9:15 AM	10:00 AM	4:30 PM	1834	702
Location 7	9:15 AM	8:45 AM	5:45 PM	1689	595
Location 8	9:30 AM	9:00 AM	6:15 PM	1323	473
Location 9	9:30 AM	7:45 AM	7:00 PM	1176	342
Location 10	9:30 AM	7:30 AM	4:15 PM	1240	337
Location 11	9:30 AM	7:30 AM	4:00 PM	1229	339
Location 12	9:15 AM	8:00 AM	6:00 PM	1230	336
Location 13	9:15 AM	7:45 AM	6:15 PM	1189	402

Trail Total			
Time		Weekend	Weekday
Start	End	Volume Per Hour	Per Hour
6:00 AM	7:00 AM	322	319
6:15 AM	7:15 AM	464	361
6:30 AM	7:30 AM	642	413
6:45 AM	7:45 AM	859	473
7:00 AM	8:00 AM	1127	571
7:15 AM	8:15 AM	1416	635
7:30 AM	8:30 AM	1769	648
7:45 AM	8:45 AM	2131	631
8:00 AM	9:00 AM	2387	583
8:15 AM	9:15 AM	2632	562
8:30 AM	9:30 AM	2882	541
8:45 AM	9:45 AM	3051	576
9:00 AM	10:00 AM	3161	552
9:15 AM	10:15 AM	3276	552
9:30 AM	10:30 AM	3234	576
9:45 AM	10:45 AM	3161	557
10:00 AM	11:00 AM	3147	594
10:15 AM	11:15 AM	3103	613
10:30 AM	11:30 AM	3002	588
10:45 AM	11:45 AM	2885	582
11:00 AM	12:00 PM	2716	522
11:15 AM	12:15 PM	2519	465
11:30 AM	12:30 PM	2327	447
11:45 AM	12:45 PM	2231	408
12:00 PM	1:00 PM	2150	425
12:15 PM	1:15 PM	2007	404
12:30 PM	1:30 PM	1915	415
12:45 PM	1:45 PM	1701	427
1:00 PM	2:00 PM	1541	386
1:15 PM	2:15 PM	1404	364
1:30 PM	2:30 PM	1275	324
1:45 PM	2:45 PM	1237	308
2:00 PM	3:00 PM	1174	309
2:15 PM	3:15 PM	1113	311
2:30 PM	3:30 PM	1068	321
2:45 PM	3:45 PM	980	316
3:00 PM	4:00 PM	944	315
3:15 PM	4:15 PM	978	342
3:30 PM	4:30 PM	1007	364
3:45 PM	4:45 PM	1032	432
4:00 PM	5:00 PM	1003	649
4:15 PM	5:15 PM	955	770
4:30 PM	5:30 PM	910	819
4:45 PM	5:45 PM	850	843
5:00 PM	6:00 PM	816	731
5:15 PM	6:15 PM	764	731
5:30 PM	6:30 PM	702	795
5:45 PM	6:45 PM	672	822
6:00 PM	7:00 PM	658	855
6:15 PM	7:15 PM	614	808
6:30 PM	7:30 PM	599	739
6:45 PM	7:45 PM	532	674
7:00 PM	8:00 PM	450	548

Network Peak		
Start	End	Volume
Weekend		
9:15 AM	10:15 AM	3276
Weekday		
AM		
7:30 AM	8:30 AM	648
PM		
6:00 PM	7:00 PM	855

Washington & Old Dominion Trail Study

Location: W&OD Trail Crossing @ Smith Switch Rd
 City: Ashburn

TIME	Saturday 8/19/17											TIME	Tuesday 8/22/17										
	Pedestrians			Bikes			Equestrian		Totals		Grand Totals		Pedestrians			Bikes			Equestrian		Totals		Grand Totals
	NB	SB	TOTAL	NB	SB	TOTAL	NB	SB	NB	SB			NB	SB	TOTAL	NB	SB	TOTAL	NB	SB	NB	SB	
5:30 AM	0	0	0	3	0	3	0	0	3	0	3	5:30 AM	2	0	2	2	4	6	0	0	4	4	8
5:45 AM	0	0	0	0	1	1	0	0	0	1	1	5:45 AM	0	1	1	5	7	12	0	0	5	8	13
6:00 AM	3	1	4	1	2	3	0	0	4	3	7	6:00 AM	0	0	0	9	4	13	0	0	9	4	13
6:15 AM	0	0	0	4	2	6	0	0	4	2	6	6:15 AM	1	1	2	1	9	10	0	0	2	10	12
6:30 AM	6	3	9	9	1	10	0	0	15	4	19	6:30 AM	1	2	3	3	11	14	0	0	4	13	17
6:45 AM	3	4	7	10	1	11	0	0	13	5	18	6:45 AM	0	1	1	9	8	17	0	0	9	9	18
7:00 AM	3	7	10	19	6	25	0	0	22	13	35	7:00 AM	1	1	2	9	8	17	0	0	10	9	19
7:15 AM	10	7	17	21	5	26	0	0	31	12	43	7:15 AM	1	1	2	5	15	20	0	0	6	16	22
7:30 AM	2	4	6	24	13	37	0	0	26	17	43	7:30 AM	3	1	4	3	10	13	0	0	6	11	17
7:45 AM	2	6	8	15	6	21	0	0	17	12	29	7:45 AM	2	1	3	4	16	20	0	0	6	17	23
8:00 AM	9	1	10	29	7	36	0	0	38	8	46	8:00 AM	0	1	1	7	9	16	0	0	7	10	17
8:15 AM	9	9	18	35	25	60	0	0	44	34	78	8:15 AM	0	2	2	11	7	18	0	0	11	9	20
8:30 AM	11	30	41	22	22	44	0	0	33	52	85	8:30 AM	1	1	2	6	9	15	0	0	7	10	17
8:45 AM	13	17	30	33	29	62	0	0	46	46	92	8:45 AM	0	1	1	8	10	18	0	0	8	11	19
9:00 AM	24	8	32	40	31	71	0	0	64	39	103	9:00 AM	0	3	3	9	7	16	0	0	9	10	19
9:15 AM	15	6	21	44	27	71	0	0	59	33	92	9:15 AM	2	0	2	10	7	17	0	0	12	7	19
9:30 AM	8	10	18	54	18	72	0	0	62	28	90	9:30 AM	4	3	7	7	6	13	0	0	11	9	20
9:45 AM	7	4	11	31	32	63	0	0	38	36	74	9:45 AM	1	2	3	5	7	12	0	0	6	9	15
10:00 AM	4	9	13	40	33	73	0	0	44	42	86	10:00 AM	0	1	1	6	2	8	0	0	6	3	9
10:15 AM	2	5	7	38	31	69	0	0	40	36	76	10:15 AM	0	0	0	4	5	9	0	0	4	5	9
10:30 AM	4	5	9	43	32	75	0	0	47	37	84	10:30 AM	0	1	1	8	7	15	0	0	8	8	16
10:45 AM	2	2	4	28	40	68	0	0	30	42	72	10:45 AM	2	2	4	8	2	10	0	0	10	4	14
11:00 AM	2	3	5	31	48	79	0	0	33	51	84	11:00 AM	3	1	4	8	7	15	0	0	11	8	19
11:15 AM	1	2	3	22	55	77	0	0	23	57	80	11:15 AM	2	0	2	5	8	13	0	0	7	8	15
11:30 AM	2	1	3	28	55	83	0	0	30	56	86	11:30 AM	0	0	0	6	7	13	0	0	6	7	13
11:45 AM	2	0	2	14	31	45	0	0	16	31	47	11:45 AM	1	0	1	3	7	10	0	0	4	7	11
12:00 PM	3	3	6	29	29	58	0	0	32	32	64	12:00 PM	0	1	1	2	5	7	0	0	2	6	8
12:15 PM	1	3	4	19	34	53	0	0	20	37	57	12:15 PM	1	1	2	5	10	15	0	0	6	11	17
12:30 PM	1	1	2	28	33	61	0	0	29	34	63	12:30 PM	0	0	0	5	4	9	0	0	5	4	9
12:45 PM	2	2	4	25	22	47	0	0	27	24	51	12:45 PM	1	2	3	6	5	11	0	0	7	7	14
1:00 PM	2	2	4	17	38	55	0	0	19	40	59	1:00 PM	0	0	0	1	2	3	0	0	1	2	3
1:15 PM	1	0	1	18	40	58	0	0	19	40	59	1:15 PM	0	0	0	10	4	14	0	0	10	4	14
1:30 PM	1	1	2	16	24	40	0	0	17	25	42	1:30 PM	0	0	0	3	6	9	0	0	3	6	9
1:45 PM	1	4	5	14	33	47	0	0	15	37	52	1:45 PM	0	1	1	0	2	2	0	0	0	3	3
2:00 PM	1	1	2	12	14	26	0	0	13	15	28	2:00 PM	1	0	1	4	4	8	0	0	5	4	9
2:15 PM	0	2	2	12	16	28	0	0	12	18	30	2:15 PM	0	1	1	1	4	5	0	0	1	5	6
2:30 PM	1	0	1	19	14	33	0	0	20	14	34	2:30 PM	1	0	1	6	4	10	0	0	7	4	11
2:45 PM	1	1	2	14	15	29	0	0	15	16	31	2:45 PM	0	1	1	4	3	7	0	0	4	4	8
3:00 PM	1	0	1	9	10	19	0	0	10	10	20	3:00 PM	0	1	1	3	3	6	0	0	3	4	7
3:15 PM	2	0	2	7	10	17	0	0	9	10	19	3:15 PM	0	0	0	1	6	7	0	0	1	6	7
3:30 PM	0	1	1	16	14	30	0	0	16	15	31	3:30 PM	0	1	1	3	5	8	0	0	3	6	9
3:45 PM	0	2	2	10	18	28	0	0	10	20	30	3:45 PM	1	0	1	5	1	6	0	0	6	1	7
4:00 PM	0	0	0	14	12	26	0	0	14	12	26	4:00 PM	0	0	0	10	5	15	0	0	10	5	15
4:15 PM	0	0	0	8	13	21	0	0	8	13	21	4:15 PM	0	0	0	6	2	8	0	0	6	2	8
4:30 PM	1	0	1	6	14	20	0	0	7	14	21	4:30 PM	0	1	1	12	6	18	0	0	12	7	19
4:45 PM	0	1	1	6	20	26	0	0	6	21	27	4:45 PM	2	2	4	20	4	24	0	0	22	6	28
5:00 PM	2	2	4	13	12	25	0	0	15	14	29	5:00 PM	1	0	1	9	5	14	0	0	10	5	15
5:15 PM	2	2	4	5	12	17	0	0	7	14	21	5:15 PM	1	0	1	20	4	24	0	0	21	4	25
5:30 PM	1	0	1	6	11	17	0	0	7	11	18	5:30 PM	0	0	0	14	10	24	0	0	14	10	24
5:45 PM	1	0	1	1	11	12	0	0	2	11	13	5:45 PM	2	0	2	9	14	23	0	0	11	14	25
6:00 PM	0	2	2	4	20	24	0	0	4	22	26	6:00 PM	3	1	4	26	18	44	0	0	29	19	48
6:15 PM	3	1	4	10	3	13	0	0	13	4	17	6:15 PM	13	2	15	15	18	33	0	0	28	20	48
6:30 PM	0	1	1	10	7	17	0	0	10	8	18	6:30 PM	0	12	12	14	6	20	0	0	14	18	32
6:45 PM	0	1	1	2	14	16	0	0	2	15	17	6:45 PM	0	3	3	12	21	33	0	0	12	24	36
7:00 PM	1	2	3	13	4	17	0	0	14	6	20	7:00 PM	1	1	2	7	8	15	0	0	8	9	17
7:15 PM	2	4	6	4	11	15	0	0	6	15	21	7:15 PM	0	3	3	6	12	18	0	0	6	15	21
7:30 PM	2	1	3	5	12	17	0	0	7	13	20	7:30 PM	3	0	3	5	5	10	0	0	8	5	13
7:45 PM	3	1	4	1	8	9	0	0	4	9	13	7:45 PM	0	0	0	5	4	9	0	0	5	4	9
8:00 PM	1	2	3	4	2	6	0	0	5	4	9	8:00 PM	0	0	0	3	1	4	0	0	3	1	4
8:15 PM	0	0	0	3	2	5	0	0	3	2	5	8:15 PM	0	0	0	3	1	4	0	0	3	1	4
Totals	181	187	368	1018	1105	2123	0	0	1199	1292	2491	Totals	58	61	119	416	411	827	0	0	474	472	946

Washington & Old Dominion Trail Study

Location: W&OD Trail Crossing @ Ashburn Rd
City: Ashburn

TIME	Saturday 8/19/17										TIME	Tuesday 8/22/17											
	Pedestrians			Bikes			Equestrian		Totals			Grand Totals	Pedestrians			Bikes			Equestrian		Totals		Grand Totals
	EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	EB	WB			EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	EB	WB	
5:30 AM	0	0	0	1	1	2	0	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	
5:45 AM	0	0	0	1	2	3	0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	
6:00 AM	0	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	
6:15 AM	1	3	4	0	2	2	0	0	1	5	6	0	0	0	0	0	0	0	0	0	0	0	
6:30 AM	2	6	8	0	7	7	0	0	2	13	15	0	0	0	0	0	0	0	0	0	0	0	
6:45 AM	1	6	7	4	9	13	0	0	5	15	20	0	0	0	0	0	0	0	0	0	0	0	
7:00 AM	9	5	14	6	5	11	0	0	15	10	25	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	7	4	11	7	22	29	0	0	14	26	40	0	0	0	0	0	0	0	0	0	0	0	
7:30 AM	9	15	24	9	27	36	0	0	18	42	60	0	0	0	0	0	0	0	0	0	0	0	
7:45 AM	13	6	19	8	27	35	0	0	21	33	54	0	0	0	0	0	0	0	0	0	0	0	
8:00 AM	6	2	8	12	24	36	0	0	18	26	44	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	47	4	51	22	24	46	0	0	69	28	97	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	24	14	38	19	35	54	0	0	43	49	92	0	0	0	0	0	0	0	0	0	0	0	
8:45 AM	10	14	24	21	18	39	0	0	31	32	63	0	0	0	0	0	0	0	0	0	0	0	
9:00 AM	2	26	28	20	43	63	0	0	22	69	91	0	0	0	0	0	0	0	0	0	0	0	
9:15 AM	11	13	24	23	46	69	0	0	34	59	93	0	0	0	0	0	0	0	0	0	0	0	
9:30 AM	8	12	20	18	34	52	0	0	26	46	72	0	0	0	0	0	0	0	0	0	0	0	
9:45 AM	2	5	7	26	44	70	0	0	28	49	77	0	0	0	0	0	0	0	0	0	0	0	
10:00 AM	4	4	8	26	26	52	0	0	30	30	60	0	0	0	0	0	0	0	0	0	0	0	
10:15 AM	8	4	12	34	42	76	0	0	42	46	88	0	0	0	0	0	0	0	0	0	0	0	
10:30 AM	1	6	7	42	35	77	0	0	43	41	84	0	0	0	0	0	0	0	0	0	0	0	
10:45 AM	3	7	10	36	43	79	0	0	39	50	89	0	0	0	0	0	0	0	0	0	0	0	
11:00 AM	2	1	3	42	25	67	0	0	44	26	70	0	0	0	0	0	0	0	0	0	0	0	
11:15 AM	4	2	6	49	25	74	0	0	53	27	80	0	0	0	0	0	0	0	0	0	0	0	
11:30 AM	2	1	3	27	21	48	0	0	29	22	51	0	0	0	0	0	0	0	0	0	0	0	
11:45 AM	3	2	5	34	14	48	0	0	37	16	53	0	0	0	0	0	0	0	0	0	0	0	
12:00 PM	2	5	7	44	13	57	0	0	46	18	64	0	0	0	0	0	0	0	0	0	0	0	
12:15 PM	2	3	5	27	11	38	0	0	29	14	43	0	0	0	0	0	0	0	0	0	0	0	
12:30 PM	0	0	0	30	24	54	0	0	30	24	54	0	0	0	0	0	0	0	0	0	0	0	
12:45 PM	1	2	3	27	21	48	0	0	28	23	51	0	0	0	0	0	0	0	0	0	0	0	
1:00 PM	2	3	5	36	16	52	0	0	38	19	57	0	0	0	0	0	0	0	0	0	0	0	
1:15 PM	1	1	2	27	11	38	0	0	28	12	40	0	0	0	0	0	0	0	0	0	0	0	
1:30 PM	4	0	4	18	9	27	0	0	22	9	31	0	0	0	0	0	0	0	0	0	0	0	
1:45 PM	1	0	1	21	10	31	0	0	22	10	32	0	0	0	0	0	0	0	0	0	0	0	
2:00 PM	2	1	3	19	8	27	0	0	21	9	30	0	0	0	0	0	0	0	0	0	0	0	
2:15 PM	0	2	2	10	18	28	0	0	10	20	30	0	0	0	0	0	0	0	0	0	0	0	
2:30 PM	0	0	0	13	12	25	0	0	13	12	25	0	0	0	0	0	0	0	0	0	0	0	
2:45 PM	1	0	1	10	17	27	0	0	11	17	28	0	0	0	0	0	0	0	0	0	0	0	
3:00 PM	2	3	5	6	10	16	0	0	8	13	21	0	0	0	0	0	0	0	0	0	0	0	
3:15 PM	1	0	1	11	6	17	0	0	12	6	18	0	0	0	0	0	0	0	0	0	0	0	
3:30 PM	1	1	2	21	11	32	0	0	22	12	34	0	0	0	0	0	0	0	0	0	0	0	
3:45 PM	2	0	2	11	12	23	0	0	13	12	25	0	0	0	0	0	0	0	0	0	0	0	
4:00 PM	2	0	2	8	11	19	0	0	10	11	21	0	0	0	0	0	0	0	0	0	0	0	
4:15 PM	0	2	2	17	9	26	0	0	17	11	28	0	0	0	0	0	0	0	0	0	0	0	
4:30 PM	0	1	1	11	6	17	0	0	11	7	18	0	0	0	0	0	0	0	0	0	0	0	
4:45 PM	3	1	4	18	4	22	0	0	21	5	26	0	0	0	0	0	0	0	0	0	0	0	
5:00 PM	1	2	3	6	6	12	0	0	7	8	15	0	0	0	0	0	0	0	0	0	0	0	
5:15 PM	0	0	0	10	5	15	0	0	10	5	15	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	6	5	11	0	0	6	5	11	0	0	0	0	0	0	0	0	0	0	0	
5:45 PM	1	0	1	24	3	27	0	0	25	3	28	0	0	0	0	0	0	0	0	0	0	0	
6:00 PM	0	0	0	5	6	11	0	0	5	6	11	0	0	0	0	0	0	0	0	0	0	0	
6:15 PM	0	3	3	2	6	8	0	0	2	9	11	0	0	0	0	0	0	0	0	0	0	0	
6:30 PM	0	0	0	9	6	15	0	0	9	6	15	0	0	0	0	0	0	0	0	0	0	0	
6:45 PM	2	1	3	9	2	11	0	0	11	3	14	0	0	0	0	0	0	0	0	0	0	0	
7:00 PM	0	7	7	9	5	14	2	0	11	12	23	0	0	0	0	0	0	0	0	0	0	0	
7:15 PM	2	2	4	18	6	24	0	0	20	8	28	0	0	0	0	0	0	0	0	0	0	0	
7:30 PM	6	0	6	3	6	9	0	0	9	6	15	0	0	0	0	0	0	0	0	0	0	0	
7:45 PM	3	2	5	2	0	2	0	2	5	4	9	0	0	0	0	0	0	0	0	0	0	0	
8:00 PM	0	1	1	2	1	3	0	0	2	2	4	0	0	0	0	0	0	0	0	0	0	0	
8:15 PM	0	0	0	3	2	5	0	0	3	2	5	0	0	0	0	0	0	0	0	0	0	0	
Totals	221	205	426	979	900	1879	2	2	1202	1107	2309	104	106	210	338	340	678	0	0	442	446	888	

Washington & Old Dominion Trail Study

Location: W&OD Trail Crossing @ Catocin Circle SE
 City: Leesburg

TIME	Saturday 8/19/17										Grand Totals	TIME	Tuesday 8/22/17										Grand Totals
	Pedestrians			Bikes			Equestrian		Totals				Pedestrians			Bikes			Equestrian		Totals		
	EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	EB	WB			EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	EB	WB	
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	5:30 AM	2	3	5	0	0	0	0	0	2	3	5
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	5:45 AM	0	2	2	1	0	1	0	0	1	2	3
6:00 AM	0	2	2	1	1	2	0	0	1	3	4	6:00 AM	0	0	0	1	0	1	0	0	1	0	1
6:15 AM	0	1	1	1	3	4	0	0	1	4	5	6:15 AM	2	13	15	0	1	1	0	0	2	14	16
6:30 AM	0	2	2	2	1	3	0	0	2	3	5	6:30 AM	0	1	1	1	0	1	0	0	1	1	2
6:45 AM	2	4	6	0	7	7	0	0	2	11	13	6:45 AM	1	0	1	0	4	4	0	0	1	4	5
7:00 AM	2	2	4	1	7	8	0	0	3	9	12	7:00 AM	0	0	0	8	3	11	0	0	8	3	11
7:15 AM	1	3	4	7	4	11	0	0	8	7	15	7:15 AM	2	1	3	3	2	5	0	0	5	3	8
7:30 AM	4	4	8	1	18	19	0	0	5	22	27	7:30 AM	1	0	1	0	2	2	0	0	1	2	3
7:45 AM	7	4	11	3	21	24	0	0	10	25	35	7:45 AM	3	1	4	6	10	16	0	0	9	11	20
8:00 AM	4	8	12	8	33	41	0	0	12	41	53	8:00 AM	2	5	7	1	3	4	0	0	3	8	11
8:15 AM	2	0	2	14	17	31	0	0	16	17	33	8:15 AM	1	1	2	3	3	6	0	0	4	4	8
8:30 AM	1	3	4	17	24	41	0	0	18	27	45	8:30 AM	1	2	3	4	0	4	0	0	5	2	7
8:45 AM	7	1	8	20	27	47	0	0	27	28	55	8:45 AM	6	1	7	5	4	9	0	0	11	5	16
9:00 AM	12	3	15	18	25	43	0	0	30	28	58	9:00 AM	2	0	2	1	8	9	0	0	3	8	11
9:15 AM	5	3	8	25	37	62	0	0	30	40	70	9:15 AM	1	0	1	8	3	11	0	0	9	3	12
9:30 AM	4	6	10	23	42	65	0	0	27	48	75	9:30 AM	3	3	6	4	6	10	0	0	7	9	16
9:45 AM	3	1	4	17	36	53	0	0	20	37	57	9:45 AM	1	5	6	6	1	7	0	0	7	6	13
10:00 AM	3	3	6	38	35	73	0	0	41	38	79	10:00 AM	1	0	1	5	22	27	0	0	6	22	28
10:15 AM	4	1	5	29	23	52	0	0	33	24	57	10:15 AM	4	3	7	4	6	10	0	0	8	9	17
10:30 AM	4	5	9	31	33	64	0	0	35	38	73	10:30 AM	0	1	1	2	5	7	0	0	2	6	8
10:45 AM	1	2	3	39	25	64	0	0	40	27	67	10:45 AM	1	0	1	3	5	8	0	0	4	5	9
11:00 AM	4	2	6	34	35	69	0	0	38	37	75	11:00 AM	1	3	4	6	5	11	0	0	7	8	15
11:15 AM	2	3	5	21	38	59	0	0	23	41	64	11:15 AM	1	2	3	3	5	8	0	0	4	7	11
11:30 AM	3	0	3	34	29	63	0	0	37	29	66	11:30 AM	0	6	6	8	2	10	0	0	8	8	16
11:45 AM	3	1	4	41	18	59	0	0	44	19	63	11:45 AM	2	0	2	2	3	5	0	0	4	3	7
12:00 PM	2	5	7	28	13	41	0	0	30	18	48	12:00 PM	2	0	2	7	6	13	0	0	9	6	15
12:15 PM	0	0	0	19	12	31	0	0	19	12	31	12:15 PM	2	1	3	3	0	3	0	0	5	1	6
12:30 PM	4	6	10	30	13	43	0	0	34	19	53	12:30 PM	0	2	2	3	3	6	0	0	3	5	8
12:45 PM	2	0	2	32	12	44	0	0	34	12	46	12:45 PM	1	0	1	8	4	12	0	0	9	4	13
1:00 PM	4	1	5	15	23	38	0	0	19	24	43	1:00 PM	0	1	1	1	2	3	0	0	1	3	4
1:15 PM	1	4	5	16	12	28	0	0	17	16	33	1:15 PM	1	1	2	3	2	5	0	0	4	3	7
1:30 PM	0	0	0	17	14	31	0	0	17	14	31	1:30 PM	0	0	0	9	5	14	0	0	9	5	14
1:45 PM	0	0	0	9	14	23	0	0	9	14	23	1:45 PM	7	1	8	9	2	11	0	0	16	3	19
2:00 PM	1	1	2	7	10	17	0	0	8	11	19	2:00 PM	1	4	5	1	2	3	0	0	2	6	8
2:15 PM	4	0	4	9	4	13	0	0	13	4	17	2:15 PM	2	0	2	2	0	2	0	0	4	0	4
2:30 PM	1	1	2	13	8	21	0	0	14	9	23	2:30 PM	0	2	2	2	2	4	0	0	2	4	6
2:45 PM	3	4	7	11	13	24	0	0	14	17	31	2:45 PM	1	1	2	4	3	7	0	0	5	4	9
3:00 PM	6	0	6	9	11	20	0	0	15	11	26	3:00 PM	1	1	2	2	0	2	0	0	3	1	4
3:15 PM	1	2	3	10	6	16	0	0	11	8	19	3:15 PM	1	2	3	3	5	8	0	0	4	7	11
3:30 PM	1	1	2	8	5	13	0	0	9	6	15	3:30 PM	1	1	2	1	1	2	0	0	2	2	4
3:45 PM	2	1	3	15	9	24	0	0	17	10	27	3:45 PM	1	0	1	5	5	10	0	0	6	5	11
4:00 PM	3	6	9	9	9	18	0	0	12	15	27	4:00 PM	0	0	0	0	1	1	0	0	0	1	1
4:15 PM	1	8	9	10	14	24	0	0	11	22	33	4:15 PM	0	1	1	1	3	4	0	0	1	4	5
4:30 PM	2	3	5	7	10	17	0	0	9	13	22	4:30 PM	1	5	6	3	1	4	0	0	4	6	10
4:45 PM	2	1	3	9	6	15	0	0	11	7	18	4:45 PM	9	46	55	3	2	5	0	0	12	48	60
5:00 PM	0	0	0	12	7	19	0	0	12	7	19	5:00 PM	42	2	44	5	2	7	0	0	47	4	51
5:15 PM	0	1	1	19	2	21	0	0	19	3	22	5:15 PM	2	1	3	1	4	5	0	0	3	5	8
5:30 PM	0	1	1	4	8	12	0	0	4	9	13	5:30 PM	3	1	4	3	15	18	0	0	6	16	22
5:45 PM	0	2	2	12	3	15	0	0	12	5	17	5:45 PM	0	0	0	4	6	10	0	0	4	6	10
6:00 PM	0	9	9	2	4	6	0	0	2	13	15	6:00 PM	0	13	13	7	6	13	0	0	7	19	26
6:15 PM	2	4	6	5	3	8	0	0	7	7	14	6:15 PM	1	2	3	10	2	12	0	0	11	4	15
6:30 PM	0	1	1	6	3	9	0	0	6	4	10	6:30 PM	0	0	0	4	7	11	0	0	4	7	11
6:45 PM	0	2	2	11	3	14	0	0	11	5	16	6:45 PM	3	2	5	4	6	10	0	0	7	8	15
7:00 PM	0	0	0	2	1	3	0	0	2	1	3	7:00 PM	3	2	5	3	2	5	0	0	6	4	10
7:15 PM	1	0	1	1	0	1	0	0	2	0	2	7:15 PM	5	0	5	3	5	8	0	0	8	5	13
7:30 PM	0	0	0	5	1	6	0	0	5	1	6	7:30 PM	0	3	3	2	2	4	0	0	2	5	7
7:45 PM	1	0	1	4	0	4	0	0	5	0	5	7:45 PM	1	0	1	4	0	4	0	0	5	0	5
8:00 PM	0	1	1	0	0	0	0	0	0	1	1	8:00 PM	6	0	6	3	3	6	0	0	9	3	12
8:15 PM	0	0	0	1	0	1	0	0	1	0	1	8:15 PM	2	1	3	2	0	2	0	0	4	1	5
Totals	122	129	251	792	792	1584	0	0	914	921	1835	Totals	137	149	286	210	212	422	0	0	347	361	708

Washington & Old Dominion Trail Study

Location: W&OD Trail Crossing @ South King Street
 City: Leesburg

TIME	Saturday 8/19/17											TIME	Tuesday 8/22/17											
	Pedestrians			Bikes			Equestrian		Totals		Grand Totals		Pedestrians			Bikes			Equestrian		Totals		Grand Totals	
	EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	EB	WB			EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	EB	WB		
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	5:30 AM	0	1	1	1	0	1	0	0	1	1	2
5:45 AM	0	0	0	1	0	1	0	0	1	0	1	0	5:45 AM	0	3	3	3	0	3	0	3	0	3	6
6:00 AM	0	3	3	0	1	1	0	0	0	4	4	4	6:00 AM	2	13	15	0	2	2	0	0	2	15	17
6:15 AM	0	0	0	2	3	5	0	0	2	3	5	5	6:15 AM	3	1	4	0	0	0	0	0	3	1	4
6:30 AM	0	2	2	0	1	1	0	0	0	3	3	3	6:30 AM	1	0	1	3	0	3	0	0	4	0	4
6:45 AM	3	6	9	1	2	3	0	0	4	8	12	12	6:45 AM	0	1	1	1	2	3	0	0	1	3	4
7:00 AM	0	1	1	1	9	10	0	0	1	10	11	11	7:00 AM	2	0	2	3	4	7	0	0	5	4	9
7:15 AM	2	2	4	6	5	11	0	0	8	7	15	15	7:15 AM	1	3	4	0	1	1	0	0	1	4	5
7:30 AM	6	4	10	1	16	17	0	0	7	20	27	27	7:30 AM	1	1	2	3	1	4	0	0	4	2	6
7:45 AM	4	10	14	4	24	28	0	0	8	34	42	42	7:45 AM	1	3	4	5	6	11	0	0	6	9	15
8:00 AM	3	9	12	9	35	44	0	0	12	44	56	56	8:00 AM	4	2	6	3	4	7	0	0	7	6	13
8:15 AM	12	4	16	14	17	31	0	0	26	21	47	47	8:15 AM	2	2	4	2	3	5	0	0	4	5	9
8:30 AM	5	5	10	12	14	26	0	0	17	19	36	36	8:30 AM	1	3	4	5	0	5	0	0	6	3	9
8:45 AM	15	4	19	18	26	44	0	0	33	30	63	63	8:45 AM	1	0	1	1	7	8	0	0	2	7	9
9:00 AM	17	6	23	26	27	53	0	0	43	33	76	76	9:00 AM	2	0	2	9	4	13	0	0	11	4	15
9:15 AM	26	20	46	16	25	41	0	0	42	45	87	87	9:15 AM	2	0	2	1	6	7	0	0	3	6	9
9:30 AM	3	14	17	18	37	55	0	0	21	51	72	72	9:30 AM	1	7	8	6	2	8	0	0	7	9	16
9:45 AM	5	2	7	24	43	67	0	0	29	45	74	74	9:45 AM	1	1	2	3	2	5	0	0	4	3	7
10:00 AM	4	5	9	38	36	74	0	0	42	41	83	83	10:00 AM	0	0	0	1	17	18	0	0	1	17	18
10:15 AM	6	4	10	28	22	50	0	0	34	26	60	60	10:15 AM	2	1	3	5	4	9	0	0	7	5	12
10:30 AM	4	0	4	29	31	60	0	0	33	31	64	64	10:30 AM	0	0	0	3	9	12	0	0	3	9	12
10:45 AM	1	4	5	42	21	63	0	0	43	25	68	68	10:45 AM	0	3	3	9	5	14	0	0	9	8	17
11:00 AM	1	1	2	34	27	61	0	0	35	28	63	63	11:00 AM	1	3	4	3	2	5	0	0	4	5	9
11:15 AM	2	1	3	21	26	47	0	0	23	27	50	50	11:15 AM	1	0	1	6	6	12	0	0	7	6	13
11:30 AM	6	0	6	33	26	59	0	0	39	26	65	65	11:30 AM	1	3	4	3	2	5	0	0	4	5	9
11:45 AM	1	5	6	33	15	48	0	0	34	20	54	54	11:45 AM	5	3	8	5	1	6	0	0	10	4	14
12:00 PM	1	4	5	31	17	48	0	0	32	21	53	53	12:00 PM	5	2	7	6	9	15	0	0	11	11	22
12:15 PM	2	1	3	14	7	21	0	0	16	8	24	24	12:15 PM	1	0	1	1	2	3	0	0	2	2	4
12:30 PM	1	0	1	27	18	45	0	0	28	18	46	46	12:30 PM	2	0	2	5	9	14	0	0	7	9	16
12:45 PM	2	4	6	33	15	48	0	0	35	19	54	54	12:45 PM	0	4	4	1	3	4	0	0	1	7	8
1:00 PM	2	1	3	22	20	42	0	0	24	21	45	45	1:00 PM	5	2	7	5	2	7	0	0	10	4	14
1:15 PM	3	3	6	10	9	19	0	0	13	12	25	25	1:15 PM	3	1	4	8	1	9	0	0	11	2	13
1:30 PM	1	0	1	14	12	26	0	0	15	12	27	27	1:30 PM	4	2	6	9	3	12	0	0	13	5	18
1:45 PM	3	4	7	10	9	19	0	0	13	13	26	26	1:45 PM	1	0	1	3	2	5	0	0	4	2	6
2:00 PM	1	0	1	12	16	28	0	0	13	16	29	29	2:00 PM	0	2	2	2	0	2	0	0	2	2	4
2:15 PM	1	2	3	8	3	11	0	0	9	5	14	14	2:15 PM	0	1	1	3	2	5	0	0	3	3	6
2:30 PM	3	0	3	18	8	26	0	0	21	8	29	29	2:30 PM	1	1	2	5	1	6	0	0	6	2	8
2:45 PM	2	4	6	8	12	20	0	0	10	16	26	26	2:45 PM	2	1	3	1	3	4	0	0	3	4	7
3:00 PM	0	3	3	9	9	18	0	0	9	12	21	21	3:00 PM	0	1	1	4	2	6	0	0	4	3	7
3:15 PM	3	0	3	10	3	13	0	0	13	3	16	16	3:15 PM	1	0	1	1	1	2	0	0	2	1	3
3:30 PM	1	1	2	9	6	15	0	0	10	7	17	17	3:30 PM	4	3	7	2	3	5	0	0	6	6	12
3:45 PM	1	0	1	12	6	18	0	0	13	6	19	19	3:45 PM	1	0	1	9	4	13	0	0	10	4	14
4:00 PM	3	0	3	14	6	20	0	0	17	6	23	23	4:00 PM	0	0	0	1	5	6	0	0	1	5	6
4:15 PM	4	1	5	8	12	20	0	0	12	13	25	25	4:15 PM	0	0	0	2	4	6	0	0	2	4	6
4:30 PM	0	3	3	6	5	11	0	0	6	8	14	14	4:30 PM	0	28	28	5	3	8	0	0	5	31	36
4:45 PM	0	1	1	13	4	17	0	0	13	5	18	18	4:45 PM	39	13	52	5	9	14	0	0	44	22	66
5:00 PM	0	6	6	3	11	14	0	0	3	17	20	20	5:00 PM	1	0	1	1	2	3	0	0	2	2	4
5:15 PM	10	0	10	7	1	8	0	0	17	1	18	18	5:15 PM	2	0	2	3	5	8	0	0	5	5	10
5:30 PM	2	0	2	2	7	9	0	0	4	7	11	11	5:30 PM	0	0	0	5	9	14	0	0	5	9	14
5:45 PM	0	1	1	8	1	9	0	0	8	2	10	10	5:45 PM	0	1	1	7	5	12	0	0	7	6	13
6:00 PM	1	3	4	5	3	8	0	0	6	6	12	12	6:00 PM	5	9	14	10	10	20	0	0	15	19	34
6:15 PM	4	2	6	3	2	5	0	0	7	4	11	11	6:15 PM	6	0	6	4	1	5	0	0	10	1	11
6:30 PM	2	1	3	5	1	6	0	0	7	2	9	9	6:30 PM	2	2	4	3	5	8	0	0	5	7	12
6:45 PM	2	0	2	14	2	16	0	0	16	2	18	18	6:45 PM	4	6	10	4	6	10	0	0	8	12	20
7:00 PM	0	0	0	3	3	6	0	0	3	3	6	6	7:00 PM	4	1	5	6	5	11	0	0	10	6	16
7:15 PM	0	3	3	3	0	3	0	0	3	3	6	6	7:15 PM	0	0	0	1	0	1	0	0	1	0	1
7:30 PM	0	2	2	4	3	7	0	0	4	5	9	9	7:30 PM	1	4	5	5	2	7	0	0	6	6	12
7:45 PM	1	2	3	6	0	6	0	0	7	2	9	9	7:45 PM	4	0	4	2	2	4	0	0	6	2	8
8:00 PM	2	0	2	0	3	3	0	0	2	3	5	5	8:00 PM	0	4	4	2	2	4	0	0	2	6	8
8:15 PM	0	0	0	1	0	1	0	0	1	0	1	1	8:15 PM	0	0	0	0	0	0	0	0	0	0	0
Totals	184	164	348	763	723	1486	0	0	947	887	1834	1834	Totals	133	142	275	215	212	427	0	0	348	354	702

Washington & Old Dominion Trail Study

Location: W&OD Trail Crossing @ Catocin Circle SW
 City: Leesburg

TIME	Saturday 8/19/17										Grand Totals	TIME	Tuesday 8/22/17										Grand Totals
	Pedestrians			Bikes			Equestrian		Totals				Pedestrians			Bikes			Equestrian		Totals		
	EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	EB	WB			EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	EB	WB	
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	5:30 AM	0	0	0	1	0	1	0	0	1	0	1
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	5:45 AM	0	0	0	1	1	2	0	0	1	1	2
6:00 AM	0	0	0	0	1	1	0	0	0	1	2	6:00 AM	0	3	3	1	0	1	0	0	1	3	4
6:15 AM	0	2	2	0	0	0	0	0	0	2	2	6:15 AM	2	1	3	0	1	1	0	0	2	2	4
6:30 AM	0	0	0	0	1	1	0	0	0	1	1	6:30 AM	1	1	2	1	0	1	0	0	2	1	3
6:45 AM	2	2	4	0	1	1	0	0	2	3	5	6:45 AM	1	1	2	1	1	2	0	0	2	2	4
7:00 AM	0	6	6	1	4	5	0	0	1	10	11	7:00 AM	1	4	5	1	2	3	0	0	2	6	8
7:15 AM	1	0	1	5	7	12	0	0	6	7	13	7:15 AM	0	1	1	0	2	2	0	0	0	3	3
7:30 AM	3	1	4	0	5	5	0	0	3	6	9	7:30 AM	0	2	2	5	0	5	0	0	5	2	7
7:45 AM	4	2	6	1	22	23	0	0	5	24	29	7:45 AM	0	3	3	4	1	5	0	0	4	4	8
8:00 AM	0	9	9	9	21	30	0	0	9	30	39	8:00 AM	2	4	6	4	5	9	0	0	6	9	15
8:15 AM	5	9	14	9	33	42	0	0	14	42	56	8:15 AM	5	6	11	1	5	6	0	0	6	11	17
8:30 AM	10	6	16	11	11	22	0	0	21	17	38	8:30 AM	2	1	3	2	3	5	0	0	4	4	8
8:45 AM	8	2	10	13	18	31	0	0	21	20	41	8:45 AM	6	6	12	4	2	6	0	0	10	8	18
9:00 AM	14	5	19	21	23	44	0	0	35	28	63	9:00 AM	6	6	12	4	6	10	0	0	10	12	22
9:15 AM	30	8	38	11	35	46	0	0	41	43	84	9:15 AM	0	0	0	4	4	8	0	0	4	4	8
9:30 AM	5	25	30	15	28	43	0	0	20	53	73	9:30 AM	8	0	8	7	5	12	0	0	15	5	20
9:45 AM	8	16	24	13	35	48	0	0	21	51	72	9:45 AM	2	0	2	0	1	1	0	0	2	1	3
10:00 AM	2	8	10	32	29	61	0	0	34	37	71	10:00 AM	1	4	5	1	3	4	0	0	2	7	9
10:15 AM	5	4	9	28	36	64	0	0	33	40	73	10:15 AM	2	4	6	4	15	19	0	0	6	19	25
10:30 AM	6	5	11	20	30	50	0	0	26	35	61	10:30 AM	2	4	6	3	6	9	0	0	5	10	15
10:45 AM	3	1	4	27	32	59	0	0	30	33	63	10:45 AM	0	0	0	6	6	12	0	0	6	6	12
11:00 AM	2	3	5	36	22	58	0	0	38	25	63	11:00 AM	2	0	2	4	5	9	0	0	6	5	11
11:15 AM	5	4	9	17	34	51	0	0	22	38	60	11:15 AM	0	2	2	6	2	8	0	0	6	4	10
11:30 AM	2	0	2	25	19	44	0	0	27	19	46	11:30 AM	0	0	0	4	5	9	0	0	4	5	9
11:45 AM	3	0	3	27	24	51	0	0	30	24	54	11:45 AM	2	2	4	1	1	2	0	0	3	3	6
12:00 PM	0	3	3	33	17	50	0	0	33	20	53	12:00 PM	3	0	3	8	3	11	0	0	11	3	14
12:15 PM	4	5	9	11	12	23	0	0	15	17	32	12:15 PM	0	0	0	5	8	13	0	0	5	8	13
12:30 PM	2	3	5	22	17	39	0	0	24	20	44	12:30 PM	1	2	3	3	1	4	0	0	4	3	7
12:45 PM	1	1	2	26	12	38	0	0	27	13	40	12:45 PM	2	0	2	4	6	10	0	0	6	6	12
1:00 PM	4	2	6	16	17	33	0	0	20	19	39	1:00 PM	0	1	1	2	6	8	0	0	2	7	9
1:15 PM	4	2	6	14	6	20	0	0	18	8	26	1:15 PM	3	2	5	8	0	8	0	0	11	2	13
1:30 PM	0	1	1	10	8	18	0	0	10	9	19	1:30 PM	1	1	2	13	5	18	0	0	14	6	20
1:45 PM	1	1	2	10	13	23	0	0	11	14	25	1:45 PM	0	1	1	2	3	5	0	0	2	4	6
2:00 PM	2	2	4	11	10	21	0	0	13	12	25	2:00 PM	0	1	1	1	3	4	0	0	1	4	5
2:15 PM	1	1	2	10	12	22	0	0	11	13	24	2:15 PM	4	0	4	3	0	3	0	0	7	0	7
2:30 PM	3	1	4	11	4	15	0	0	14	5	19	2:30 PM	15	1	16	3	1	4	0	0	18	2	20
2:45 PM	1	0	1	7	5	12	0	0	8	5	13	2:45 PM	0	11	11	1	1	2	0	0	1	12	13
3:00 PM	1	0	1	8	12	20	0	0	9	12	21	3:00 PM	0	0	0	3	2	5	0	0	3	2	5
3:15 PM	2	9	11	9	3	12	0	0	11	12	23	3:15 PM	1	1	2	3	3	6	0	0	4	4	8
3:30 PM	2	0	2	5	9	14	0	0	7	9	16	3:30 PM	1	2	3	2	1	3	0	0	3	3	6
3:45 PM	0	3	3	15	9	24	0	0	15	12	27	3:45 PM	4	0	4	3	2	5	0	0	7	2	9
4:00 PM	7	1	8	10	7	17	0	0	17	8	25	4:00 PM	1	0	1	3	6	9	0	0	4	6	10
4:15 PM	1	0	1	9	2	11	0	0	10	2	12	4:15 PM	2	1	3	0	4	4	0	0	2	5	7
4:30 PM	1	2	3	6	12	18	0	0	7	14	21	4:30 PM	3	1	4	3	1	4	0	0	6	2	8
4:45 PM	1	3	4	10	5	15	0	0	11	8	19	4:45 PM	1	0	1	6	3	9	0	0	7	3	10
5:00 PM	0	0	0	9	9	18	0	0	9	9	18	5:00 PM	0	0	0	2	2	4	0	0	2	2	4
5:15 PM	4	0	4	12	9	21	0	0	16	9	25	5:15 PM	0	0	0	4	2	6	0	0	4	2	6
5:30 PM	2	2	4	5	5	10	0	0	7	7	14	5:30 PM	1	0	1	3	6	9	0	0	4	6	10
5:45 PM	1	0	1	3	4	7	0	0	4	4	8	5:45 PM	0	2	2	6	8	14	0	0	6	10	16
6:00 PM	1	1	2	2	2	4	0	0	3	3	6	6:00 PM	0	0	0	3	6	9	0	0	3	6	9
6:15 PM	0	0	0	7	2	9	0	0	7	2	9	6:15 PM	0	6	6	8	9	17	0	0	8	15	23
6:30 PM	0	1	1	5	0	5	0	0	5	1	6	6:30 PM	5	4	9	2	3	5	0	0	7	7	14
6:45 PM	0	0	0	8	2	10	0	0	8	2	10	6:45 PM	1	5	6	3	2	5	0	0	4	7	11
7:00 PM	2	0	2	2	4	6	0	0	4	4	8	7:00 PM	3	2	5	3	6	9	0	0	6	8	14
7:15 PM	0	0	0	3	0	3	0	0	3	0	3	7:15 PM	5	5	10	1	1	2	0	0	6	6	12
7:30 PM	2	0	2	4	0	4	0	0	6	0	6	7:30 PM	1	3	4	3	0	3	0	0	4	3	7
7:45 PM	0	1	1	7	6	13	0	0	7	7	14	7:45 PM	3	1	4	5	0	5	0	0	8	1	9
8:00 PM	0	2	2	2	0	2	0	0	2	2	4	8:00 PM	0	0	0	1	1	2	0	0	1	1	2
8:15 PM	2	0	2	1	4	5	0	0	3	4	7	8:15 PM	2	2	4	0	0	0	0	0	2	2	4
Totals	170	165	335	644	710	1354	0	0	814	875	1689	Totals	108	110	218	190	187	377	0	0	298	297	595

Washington & Old Dominion Trail Study

Location: W&OD Trail Crossing @ Dry Mill Rd (Near Route 9)
 City: Leesburg

TIME	Saturday 8/19/17											TIME	Tuesday 8/22/17														
	Pedestrians			Bikes			Equestrian		Totals		Grand Totals		Pedestrians			Bikes			Equestrian		Totals		Grand Totals				
	NB	SB	TOTAL	NB	SB	TOTAL	NB	SB	NB	SB			NB	SB	TOTAL	NB	SB	TOTAL	NB	SB	NB	SB					
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	5:30 AM	0	0	0	0	0	1	1	0	0	0	0	1	1		
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	6:00 AM	0	0	0	0	0	1	1	0	0	0	0	1	1		
6:15 AM	0	0	0	1	0	1	0	0	1	0	1	6:15 AM	0	0	0	0	0	1	1	0	0	0	0	1	1		
6:30 AM	1	0	1	1	1	2	0	0	2	1	3	6:30 AM	0	0	0	1	3	4	0	0	1	3	4	3	4		
6:45 AM	0	0	0	1	1	2	0	0	1	1	2	6:45 AM	0	1	1	3	2	5	0	0	3	3	6	3	6		
7:00 AM	2	4	6	3	3	6	0	0	5	7	12	7:00 AM	0	0	0	2	1	3	0	0	2	1	3	2	1	3	
7:15 AM	0	1	1	2	0	2	0	0	2	1	3	7:15 AM	0	0	0	1	4	5	0	0	1	4	5	1	4	5	
7:30 AM	6	3	9	4	0	4	0	0	10	3	13	7:30 AM	0	0	0	3	5	8	0	0	3	5	8	3	5	8	
7:45 AM	2	3	5	11	5	16	0	0	13	8	21	7:45 AM	0	1	1	1	2	3	0	0	1	3	4	1	3	4	
8:00 AM	1	4	5	20	6	26	0	0	21	10	31	8:00 AM	0	0	0	1	0	1	0	0	1	0	1	0	1	0	1
8:15 AM	0	1	1	28	5	33	0	0	28	6	34	8:15 AM	0	0	0	2	1	3	0	0	2	1	3	2	1	3	
8:30 AM	30	18	48	18	11	29	0	0	48	29	77	8:30 AM	0	0	0	2	2	4	0	0	2	2	4	2	2	4	
8:45 AM	2	13	15	14	19	33	0	0	16	32	48	8:45 AM	0	0	0	3	1	4	0	0	3	1	4	3	1	4	
9:00 AM	3	1	4	15	7	22	0	0	18	8	26	9:00 AM	0	0	0	3	5	8	0	0	3	5	8	3	5	8	
9:15 AM	1	1	2	27	15	42	0	0	28	16	44	9:15 AM	1	0	1	3	2	5	0	0	4	2	6	4	2	6	
9:30 AM	5	5	10	29	15	44	0	0	34	20	54	9:30 AM	0	1	1	9	3	12	0	0	9	4	13	9	4	13	
9:45 AM	3	8	11	30	21	51	0	0	33	29	62	9:45 AM	2	2	4	6	4	10	0	0	8	6	14	8	6	14	
10:00 AM	1	0	1	35	23	58	0	0	36	23	59	10:00 AM	0	0	0	5	2	7	0	0	5	2	7	5	2	7	
10:15 AM	1	0	1	27	24	51	0	0	28	24	52	10:15 AM	0	0	0	4	3	7	0	0	4	3	7	4	3	7	
10:30 AM	6	1	7	20	22	42	0	0	26	23	49	10:30 AM	0	0	0	2	3	5	0	0	2	3	5	2	3	5	
10:45 AM	0	0	0	22	28	50	0	0	22	28	50	10:45 AM	1	0	1	8	10	18	0	0	9	10	19	9	10	19	
11:00 AM	2	3	5	17	19	36	0	0	19	22	41	11:00 AM	0	1	1	4	12	16	0	0	4	13	17	4	13	17	
11:15 AM	3	0	3	18	22	40	0	0	21	22	43	11:15 AM	0	0	0	7	1	8	0	0	7	1	8	7	1	8	
11:30 AM	2	1	3	24	27	51	0	0	26	28	54	11:30 AM	0	0	0	5	2	7	0	0	5	2	7	5	2	7	
11:45 AM	0	0	0	11	29	40	0	0	11	29	40	11:45 AM	0	0	0	1	3	4	0	0	1	3	4	1	3	4	
12:00 PM	1	0	1	22	10	32	0	0	23	10	33	12:00 PM	1	0	1	3	7	10	0	0	4	7	11	4	7	11	
12:15 PM	1	0	1	11	16	27	0	0	12	16	28	12:15 PM	0	1	1	2	5	7	0	0	2	6	8	2	6	8	
12:30 PM	0	0	0	6	23	29	0	0	6	23	29	12:30 PM	0	1	1	3	1	4	0	0	3	2	5	3	2	5	
12:45 PM	0	0	0	14	17	31	0	0	14	17	31	12:45 PM	0	0	0	2	7	9	0	0	2	7	9	2	7	9	
1:00 PM	2	1	3	14	13	27	0	0	16	14	30	1:00 PM	0	0	0	4	3	7	0	0	4	3	7	4	3	7	
1:15 PM	0	2	2	13	8	21	0	0	13	10	23	1:15 PM	0	0	0	1	3	4	0	0	1	3	4	1	3	4	
1:30 PM	0	0	0	7	11	18	0	0	7	11	18	1:30 PM	1	0	1	6	2	8	0	0	7	2	9	7	2	9	
1:45 PM	0	1	1	10	9	19	0	0	10	10	20	1:45 PM	0	0	0	5	2	7	0	0	5	2	7	5	2	7	
2:00 PM	1	0	1	15	8	23	0	0	16	8	24	2:00 PM	0	0	0	2	7	9	0	0	2	7	9	2	7	9	
2:15 PM	0	0	0	9	17	26	0	0	9	17	26	2:15 PM	1	0	1	7	4	11	0	0	8	4	12	8	4	12	
2:30 PM	0	0	0	10	7	17	0	0	10	7	17	2:30 PM	0	1	1	2	0	2	0	0	2	1	3	2	1	3	
2:45 PM	0	0	0	5	5	10	0	0	5	5	10	2:45 PM	0	0	0	4	2	6	0	0	4	2	6	4	2	6	
3:00 PM	0	0	0	3	7	10	0	0	3	7	10	3:00 PM	0	0	0	4	2	6	0	0	4	2	6	4	2	6	
3:15 PM	0	1	1	4	11	15	0	0	4	12	16	3:15 PM	0	0	0	3	4	7	0	0	3	4	7	3	4	7	
3:30 PM	0	0	0	4	10	14	0	0	4	10	14	3:30 PM	0	0	0	2	8	10	0	0	2	8	10	2	8	10	
3:45 PM	0	0	0	12	11	23	0	0	12	11	23	3:45 PM	0	0	0	3	5	8	0	0	3	5	8	3	5	8	
4:00 PM	0	1	1	6	6	12	0	0	6	7	13	4:00 PM	0	0	0	1	5	6	0	0	1	5	6	1	5	6	
4:15 PM	0	0	0	9	6	15	0	0	9	6	15	4:15 PM	0	0	0	4	2	6	0	0	4	2	6	4	2	6	
4:30 PM	0	0	0	6	8	14	0	0	6	8	14	4:30 PM	0	0	0	5	5	10	0	0	5	5	10	5	5	10	
4:45 PM	2	0	2	6	11	17	0	0	8	11	19	4:45 PM	0	0	0	1	5	6	0	0	1	5	6	1	5	6	
5:00 PM	0	0	0	5	5	10	0	0	5	5	10	5:00 PM	0	0	0	8	2	10	0	0	8	2	10	8	2	10	
5:15 PM	0	0	0	12	5	17	0	0	12	5	17	5:15 PM	0	0	0	3	6	9	0	0	3	6	9	3	6	9	
5:30 PM	0	0	0	4	4	8	0	0	4	4	8	5:30 PM	1	1	2	13	4	17	0	0	14	5	19	14	5	19	
5:45 PM	0	0	0	6	2	8	0	0	6	2	8	5:45 PM	0	0	0	7	6	13	0	0	7	6	13	7	6	13	
6:00 PM	0	0	0	2	7	9	0	0	2	7	9	6:00 PM	0	0	0	5	7	12	0	0	5	7	12	5	7	12	
6:15 PM	0	0	0	4	7	11	0	0	4	7	11	6:15 PM	0	0	0	14	3	17	0	0	14	3	17	14	3	17	
6:30 PM	1	0	1	2	10	12	0	0	3	10	13	6:30 PM	0	0	0	14	10	24	0	0	14	10	24	14	10	24	
6:45 PM	0	0	0	0	2	2	0	0	0	2	2	6:45 PM	1	0	1	13	5	18	0	0	14	5	19	14	5	19	
7:00 PM	0	1	1	2	1	3	0	0	2	2	4	7:00 PM	0	0	0	2	11	13	0	0	2	11	13	2	11	13	
7:15 PM	0	0	0	1	5	6	0	0	1	5	6	7:15 PM	0	0	0	3	3	6	0	0	3	3	6	3	3	6	
7:30 PM	0	0	0	0	2	2	0	0	0	2	2	7:30 PM	0	0	0	1	8	9	0	0	1	8	9	1	8	9	
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	7:45 PM	0	0	0	2	4	6	0	0	2	4	6	2	4	6	
8:00 PM	0	0	0	0	1	1	0	0	0	1	1	8:00 PM	0	0	0	1	6	7	0	0	1	6	7	1	6	7	
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals	79	74	153	602	568	1170	0	0	681	642	1323	Totals	9	10	19	226	228	454	0	0	235	238	473	235	238	473	

Washington & Old Dominion Trail Study

Location: W&OD Trail Crossing @ Simpson Circle (Northernmost Crossing)
 City: Paeonian Springs

TIME	Saturday 8/19/17											TIME	Tuesday 8/22/17										
	Pedestrians			Bikes			Equestrian		Totals		Grand Totals		Pedestrians			Bikes			Equestrian		Totals		Grand Totals
	EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	EB	WB			EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	EB	WB	
5:30 AM	0	2	2	0	0	0	0	0	0	2	2	5:30 AM	0	0	0	1	0	1	0	0	1	0	1
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	5:45 AM	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	6:00 AM	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	1	1	0	0	0	1	1	6:15 AM	0	0	0	1	0	1	0	0	1	0	1
6:30 AM	0	0	0	2	1	3	0	0	2	1	3	6:30 AM	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	3	1	4	0	0	0	0	0	3	1	4	6:45 AM	0	0	0	2	5	7	0	0	2	5	7
7:00 AM	0	1	1	2	1	3	0	0	2	2	4	7:00 AM	2	1	3	0	0	0	0	0	2	1	3
7:15 AM	2	1	3	1	2	3	0	0	3	3	6	7:15 AM	1	1	2	0	1	1	0	0	2	1	3
7:30 AM	2	1	3	1	5	6	0	0	3	6	9	7:30 AM	0	0	0	2	1	3	0	0	2	1	3
7:45 AM	5	6	11	5	5	10	0	0	10	11	21	7:45 AM	3	14	17	3	3	6	0	0	6	17	23
8:00 AM	4	1	5	8	15	23	0	0	12	16	28	8:00 AM	14	2	16	1	2	3	0	0	15	4	19
8:15 AM	3	4	7	9	21	30	0	0	12	25	37	8:15 AM	0	0	0	2	2	4	0	0	2	2	4
8:30 AM	1	1	2	13	10	23	0	0	14	11	25	8:30 AM	2	0	2	2	2	4	0	0	4	2	6
8:45 AM	1	4	5	13	6	19	0	0	14	10	24	8:45 AM	1	4	5	2	2	4	0	0	3	6	9
9:00 AM	1	0	1	12	14	26	0	0	13	14	27	9:00 AM	0	0	0	2	0	2	0	0	2	0	2
9:15 AM	5	4	9	7	24	31	0	0	12	28	40	9:15 AM	0	0	0	3	3	6	0	0	3	3	6
9:30 AM	4	0	4	16	19	35	0	0	20	19	39	9:30 AM	1	0	1	2	2	4	0	0	3	2	5
9:45 AM	2	3	5	18	15	33	0	0	20	18	38	9:45 AM	3	0	3	0	5	5	0	0	3	5	8
10:00 AM	0	2	2	24	27	51	0	0	24	29	53	10:00 AM	0	3	3	3	2	5	0	0	3	5	8
10:15 AM	3	4	7	18	28	46	0	0	21	32	53	10:15 AM	1	0	1	3	2	5	0	0	4	2	6
10:30 AM	2	1	3	19	16	35	0	0	21	17	38	10:30 AM	0	1	1	1	11	12	0	0	1	12	13
10:45 AM	3	4	7	15	12	27	0	0	18	16	34	10:45 AM	0	1	1	2	1	3	0	0	2	2	4
11:00 AM	0	2	2	29	20	49	0	0	29	22	51	11:00 AM	0	0	0	5	5	10	0	0	5	5	10
11:15 AM	0	0	0	24	13	37	0	0	24	13	37	11:15 AM	1	0	1	2	3	5	0	0	3	3	6
11:30 AM	0	0	0	27	21	48	0	0	27	21	48	11:30 AM	0	0	0	2	3	5	0	0	2	3	5
11:45 AM	1	6	7	10	9	19	0	0	11	15	26	11:45 AM	0	0	0	5	1	6	0	0	5	1	6
12:00 PM	0	0	0	6	12	18	0	0	6	12	18	12:00 PM	0	1	1	3	1	4	0	0	3	2	5
12:15 PM	6	1	7	28	16	44	0	0	34	17	51	12:15 PM	0	0	0	3	1	4	0	0	3	1	4
12:30 PM	0	1	1	21	15	36	0	0	21	16	37	12:30 PM	0	0	0	1	3	4	0	0	1	3	4
12:45 PM	1	0	1	17	9	26	0	0	18	9	27	12:45 PM	0	1	1	2	3	5	0	0	2	4	6
1:00 PM	0	0	0	12	14	26	0	0	12	14	26	1:00 PM	0	0	0	4	0	4	0	0	4	0	4
1:15 PM	1	0	1	7	13	20	0	0	8	13	21	1:15 PM	2	1	3	9	3	12	0	0	11	4	15
1:30 PM	0	0	0	3	4	7	0	0	3	4	7	1:30 PM	0	0	0	0	2	2	0	0	0	2	2
1:45 PM	0	2	2	7	7	14	0	0	7	9	16	1:45 PM	0	0	0	3	0	3	0	0	3	0	3
2:00 PM	1	0	1	14	17	31	0	0	15	17	32	2:00 PM	0	0	0	1	3	4	0	0	1	3	4
2:15 PM	1	1	2	10	6	16	0	0	11	7	18	2:15 PM	1	0	1	1	2	3	0	0	2	2	4
2:30 PM	0	1	1	9	9	18	0	0	9	10	19	2:30 PM	0	0	0	1	2	3	0	0	1	2	3
2:45 PM	3	0	3	6	9	15	0	0	9	9	18	2:45 PM	1	0	1	4	0	4	0	0	5	0	5
3:00 PM	2	0	2	9	3	12	0	0	11	3	14	3:00 PM	0	0	0	2	2	4	0	0	2	2	4
3:15 PM	1	0	1	10	4	14	0	0	11	4	15	3:15 PM	0	0	0	3	2	5	0	0	3	2	5
3:30 PM	0	0	0	9	2	11	0	0	9	2	11	3:30 PM	0	0	0	3	2	5	0	0	3	2	5
3:45 PM	1	1	2	4	11	15	0	0	5	12	17	3:45 PM	0	0	0	1	2	3	0	0	1	2	3
4:00 PM	0	0	0	7	8	15	0	0	7	8	15	4:00 PM	0	0	0	1	2	3	0	0	1	2	3
4:15 PM	1	0	1	1	6	7	0	0	2	6	8	4:15 PM	0	1	1	2	5	7	0	0	2	6	8
4:30 PM	0	0	0	14	9	23	0	0	14	9	23	4:30 PM	0	0	0	3	1	4	0	0	3	1	4
4:45 PM	0	0	0	8	4	12	0	0	8	4	12	4:45 PM	0	0	0	3	6	9	0	0	3	6	9
5:00 PM	1	0	1	5	7	12	0	0	6	7	13	5:00 PM	0	0	0	4	1	5	0	0	4	1	5
5:15 PM	0	1	1	8	6	14	0	0	8	7	15	5:15 PM	0	0	0	3	3	6	0	0	3	3	6
5:30 PM	2	0	2	2	8	10	0	0	4	8	12	5:30 PM	1	1	2	4	1	5	0	0	5	2	7
5:45 PM	2	2	4	4	4	8	0	0	6	6	12	5:45 PM	0	0	0	1	9	10	0	0	1	9	10
6:00 PM	0	1	1	10	5	15	0	0	10	6	16	6:00 PM	0	0	0	1	3	4	0	0	1	3	4
6:15 PM	2	0	2	10	3	13	0	0	12	3	15	6:15 PM	1	0	1	1	2	3	0	0	2	2	4
6:30 PM	0	0	0	5	2	7	0	0	5	2	7	6:30 PM	0	0	0	0	3	3	0	0	0	3	3
6:45 PM	1	0	1	3	1	4	0	0	4	1	5	6:45 PM	1	1	2	3	1	4	0	0	4	2	6
7:00 PM	0	0	0	11	1	12	0	0	11	1	12	7:00 PM	0	4	4	1	2	3	0	0	1	6	7
7:15 PM	0	0	0	4	3	7	0	0	4	3	7	7:15 PM	2	0	2	1	0	1	0	0	3	0	3
7:30 PM	0	0	0	3	2	5	0	0	3	2	5	7:30 PM	1	1	2	10	4	14	0	0	11	5	16
7:45 PM	0	0	0	1	1	2	0	0	1	1	2	7:45 PM	2	2	4	3	2	5	0	0	5	4	9
8:00 PM	1	0	1	1	0	1	0	0	2	0	2	8:00 PM	0	0	0	1	0	1	0	0	1	0	1
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	8:15 PM	0	0	0	1	2	3	0	0	1	2	3
Totals	69	59	128	542	506	1048	0	0	611	565	1176	Totals	41	40	81	130	131	261	0	0	171	171	342

Washington & Old Dominion Trail Study

Location: W&OD Trail Crossing @ Hamilton Station Road
 City: Hamilton

TIME	Saturday 8/19/17											TIME	Tuesday 8/22/17													
	Pedestrians			Bikes			Equestrian		Totals		Grand Totals		Pedestrians			Bikes			Equestrian		Totals		Grand Totals			
	EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	EB	WB			EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	EB	WB				
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	5:30 AM	0	0	0	1	0	1	0	0	1	0	0	1	0	0
5:45 AM	0	2	2	0	0	0	0	0	0	2	2	5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	1	1	2	0	0	1	1	2	6:15 AM	0	0	0	1	0	1	0	0	1	0	0	1	0	1
6:30 AM	2	1	3	1	1	2	0	0	3	2	5	6:30 AM	2	0	2	0	0	0	0	0	2	0	0	2	0	2
6:45 AM	5	0	5	3	1	4	0	0	8	1	9	6:45 AM	1	0	1	2	0	2	0	0	3	0	0	3	0	3
7:00 AM	0	1	1	1	1	2	0	0	1	2	3	7:00 AM	0	0	0	0	4	4	0	0	0	0	0	4	4	4
7:15 AM	7	2	9	0	3	3	0	0	7	5	12	7:15 AM	2	0	2	0	0	0	0	0	2	0	0	2	0	2
7:30 AM	0	6	6	3	4	7	0	0	3	10	13	7:30 AM	2	3	5	4	1	5	0	0	6	4	0	10	6	16
7:45 AM	2	0	2	10	8	18	0	0	12	8	20	7:45 AM	13	5	18	1	1	2	0	0	14	6	0	20	14	34
8:00 AM	4	3	7	9	10	19	0	0	13	13	26	8:00 AM	1	9	10	2	3	5	0	0	3	12	0	15	12	27
8:15 AM	2	2	4	5	13	18	0	0	7	15	22	8:15 AM	1	2	3	2	1	3	0	0	3	3	0	6	3	9
8:30 AM	8	3	11	12	19	31	0	0	20	22	42	8:30 AM	0	1	1	2	4	6	0	0	2	5	0	7	2	9
8:45 AM	3	5	8	6	11	17	0	0	9	16	25	8:45 AM	2	2	4	5	1	6	0	0	7	3	0	10	4	14
9:00 AM	4	8	12	14	16	30	0	0	18	24	42	9:00 AM	1	0	1	1	4	5	0	0	2	4	0	6	2	8
9:15 AM	2	3	5	13	17	30	0	0	15	20	35	9:15 AM	1	1	2	4	1	5	0	0	5	2	0	7	2	9
9:30 AM	3	0	3	29	27	56	0	0	32	27	59	9:30 AM	0	3	3	0	2	2	0	0	0	5	0	5	0	5
9:45 AM	2	1	3	25	21	46	0	0	27	22	49	9:45 AM	0	1	1	0	5	5	0	0	0	6	0	6	0	6
10:00 AM	2	3	5	24	27	51	0	0	26	30	56	10:00 AM	0	0	0	3	2	5	0	0	3	2	0	5	0	5
10:15 AM	2	2	4	16	32	48	0	0	18	34	52	10:15 AM	0	0	0	3	1	4	0	0	3	1	0	4	0	4
10:30 AM	0	1	1	22	21	43	0	0	22	22	44	10:30 AM	1	0	1	2	2	4	0	0	3	2	0	5	0	5
10:45 AM	3	3	6	20	10	30	0	0	23	13	36	10:45 AM	0	0	0	3	11	14	0	0	3	11	0	14	0	14
11:00 AM	3	4	7	33	14	47	0	0	36	18	54	11:00 AM	2	1	3	4	2	6	0	0	6	3	0	9	0	9
11:15 AM	1	1	2	24	12	36	0	0	25	13	38	11:15 AM	0	0	0	1	5	6	0	0	1	5	0	6	0	6
11:30 AM	1	1	2	19	18	37	0	0	20	19	39	11:30 AM	0	0	0	2	3	5	0	0	2	3	0	5	0	5
11:45 AM	2	3	5	8	18	26	0	0	10	21	31	11:45 AM	0	0	0	6	3	9	0	0	6	3	0	9	0	9
12:00 PM	4	3	7	22	9	31	0	0	26	12	38	12:00 PM	0	1	1	1	1	2	0	0	1	2	0	3	0	3
12:15 PM	0	2	2	27	11	38	0	0	27	13	40	12:15 PM	1	0	1	3	2	5	0	0	4	2	0	6	0	6
12:30 PM	0	2	2	11	25	36	0	0	11	27	38	12:30 PM	0	2	2	0	0	0	0	0	0	2	0	2	0	2
12:45 PM	2	1	3	19	6	25	0	0	21	7	28	12:45 PM	0	1	1	2	1	3	0	0	2	2	0	4	0	4
1:00 PM	1	0	1	4	10	14	0	0	5	10	15	1:00 PM	0	0	0	10	3	13	0	0	10	3	0	13	0	13
1:15 PM	0	0	0	7	11	18	0	0	7	11	18	1:15 PM	2	1	3	2	1	3	0	0	4	2	0	6	0	6
1:30 PM	1	0	1	7	10	17	0	0	8	10	18	1:30 PM	0	0	0	2	2	4	0	0	2	2	0	4	0	4
1:45 PM	1	0	1	12	8	20	0	0	13	8	21	1:45 PM	0	1	1	1	2	3	0	0	1	3	0	4	0	4
2:00 PM	0	0	0	11	6	17	0	0	11	6	17	2:00 PM	0	0	0	2	3	5	0	0	2	3	0	5	0	5
2:15 PM	1	1	2	8	13	21	0	0	9	14	23	2:15 PM	1	0	1	0	0	0	0	0	1	0	0	1	0	1
2:30 PM	0	1	1	6	8	14	0	0	6	9	15	2:30 PM	0	0	0	1	3	4	0	0	1	3	0	4	0	4
2:45 PM	0	1	1	8	9	17	0	0	8	10	18	2:45 PM	1	0	1	3	1	4	0	0	4	1	0	5	0	5
3:00 PM	0	0	0	10	3	13	0	0	10	3	13	3:00 PM	0	0	0	1	0	1	0	0	1	0	0	1	0	1
3:15 PM	1	0	1	8	3	11	0	0	9	3	12	3:15 PM	0	0	0	4	1	5	0	0	4	1	0	5	0	5
3:30 PM	0	0	0	8	2	10	0	0	8	2	10	3:30 PM	0	0	0	1	4	5	0	0	1	4	0	5	0	5
3:45 PM	0	0	0	4	2	6	0	0	4	2	6	3:45 PM	0	0	0	3	1	4	0	0	3	1	0	4	0	4
4:00 PM	2	1	3	4	15	19	0	0	6	16	22	4:00 PM	0	0	0	1	2	3	0	0	1	2	0	3	0	3
4:15 PM	0	1	1	10	5	15	0	0	10	6	16	4:15 PM	1	0	1	5	2	7	0	0	6	2	0	8	0	8
4:30 PM	4	0	4	7	7	14	0	0	11	7	18	4:30 PM	0	1	1	7	5	12	0	0	7	6	0	13	0	13
4:45 PM	0	0	0	8	5	13	0	0	8	5	13	4:45 PM	0	0	0	5	7	12	0	0	5	7	0	12	0	12
5:00 PM	0	3	3	5	9	14	0	0	5	12	17	5:00 PM	0	0	0	4	3	7	0	0	4	3	0	7	0	7
5:15 PM	0	0	0	3	7	10	0	0	3	7	10	5:15 PM	1	0	1	0	2	2	0	0	1	2	0	3	0	3
5:30 PM	2	1	3	2	8	10	0	0	4	9	13	5:30 PM	0	0	0	2	1	3	0	0	2	1	0	3	0	3
5:45 PM	0	1	1	6	5	11	0	0	6	6	12	5:45 PM	0	1	1	1	4	5	0	0	1	5	0	6	0	6
6:00 PM	1	1	2	10	2	12	0	0	11	3	14	6:00 PM	0	1	1	0	4	4	0	0	0	5	0	5	0	5
6:15 PM	0	2	2	11	3	14	0	0	11	5	16	6:15 PM	0	0	0	0	4	4	0	0	0	4	0	4	0	4
6:30 PM	1	0	1	5	5	10	0	0	6	5	11	6:30 PM	0	0	0	0	1	1	0	0	0	1	0	1	0	1
6:45 PM	1	1	2	9	1	10	0	0	10	2	12	6:45 PM	0	0	0	3	4	7	0	0	3	4	0	7	0	7
7:00 PM	0	0	0	6	2	8	0	0	6	2	8	7:00 PM	1	0	1	4	1	5	0	0	5	1	0	6	0	6
7:15 PM	0	0	0	3	4	7	0	0	3	4	7	7:15 PM	1	3	4	2	3	5	0	0	3	6	0	9	0	9
7:30 PM	0	0	0	1	0	1	0	0	1	0	1	7:30 PM	2	2	4	3	0	3	0	0	5	2	0	7	0	7
7:45 PM	0	0	0	1	3	4	0	0	1	3	4	7:45 PM	0	0	0	2	2	4	0	0	2	2	0	4	0	4
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	8:00 PM	0	0	0	1	0	1	0	0	1	0	0	1	0	1
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	8:15 PM	1	0	1	2	1	3	0	0	3	1	0	4	0	4
Totals	80	77	157	561	522	1083	0	0	641	599	1240	Totals	41	42	83	127	127	254	0	0	168	169	0	337	0	337

Washington & Old Dominion Trail Study

Location: W&OD Trail Crossing @ Ivandale Road
 City: Hamilton

TIME	Saturday 8/19/17											TIME	Tuesday 8/22/17										
	Pedestrians			Bikes			Equestrian		Totals		Grand Totals		Pedestrians			Bikes			Equestrian		Totals		Grand Totals
	EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	EB	WB			EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	EB	WB	
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	5:30 AM	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	5:45 AM	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0	2	2	0	0	0	0	0	0	2	2	6:00 AM	0	0	0	1	2	3	0	0	1	2	3
6:15 AM	2	1	3	1	0	1	0	0	3	1	4	6:15 AM	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	2	1	3	1	0	1	0	0	3	1	4	6:30 AM	0	0	0	2	0	2	0	0	2	0	2
6:45 AM	2	2	4	3	1	4	0	0	5	3	8	6:45 AM	0	2	2	0	0	0	0	0	0	2	2
7:00 AM	6	0	6	0	1	1	0	0	6	1	7	7:00 AM	1	0	1	0	0	0	0	0	1	0	1
7:15 AM	3	5	8	1	1	2	0	0	4	6	10	7:15 AM	0	1	1	0	0	0	0	0	0	1	1
7:30 AM	5	3	8	4	3	7	0	0	9	6	15	7:30 AM	19	3	22	3	0	3	0	0	22	3	25
7:45 AM	2	2	4	9	5	14	0	0	11	7	18	7:45 AM	3	11	14	2	2	4	0	0	5	13	18
8:00 AM	7	2	9	7	14	21	0	0	14	16	30	8:00 AM	1	9	10	3	3	6	0	0	4	12	16
8:15 AM	5	9	14	7	10	17	0	0	12	19	31	8:15 AM	5	4	9	1	1	2	0	0	6	5	11
8:30 AM	5	3	8	15	15	30	0	0	20	18	38	8:30 AM	4	3	7	1	2	3	0	0	5	5	10
8:45 AM	8	8	16	13	17	30	0	0	21	25	46	8:45 AM	2	0	2	3	2	5	0	0	5	2	7
9:00 AM	3	6	9	4	15	19	0	0	7	21	28	9:00 AM	1	2	3	2	4	6	0	0	3	6	9
9:15 AM	0	4	4	13	13	26	0	0	13	17	30	9:15 AM	2	2	4	3	0	3	0	0	5	2	7
9:30 AM	5	2	7	36	22	58	0	0	41	24	65	9:30 AM	0	0	0	0	3	3	0	0	0	3	3
9:45 AM	3	3	6	21	21	42	0	0	24	24	48	9:45 AM	0	3	3	1	5	6	0	0	1	8	9
10:00 AM	2	1	3	11	26	37	0	0	13	27	40	10:00 AM	0	1	1	3	2	5	0	0	3	3	6
10:15 AM	0	3	3	14	26	40	0	0	14	29	43	10:15 AM	1	0	1	3	1	4	0	0	4	1	5
10:30 AM	2	0	2	25	25	50	0	0	27	25	52	10:30 AM	0	0	0	4	2	6	0	0	4	2	6
10:45 AM	1	2	3	32	11	43	0	0	33	13	46	10:45 AM	0	0	0	4	9	13	0	0	4	9	13
11:00 AM	0	1	1	26	7	33	0	0	26	8	34	11:00 AM	0	0	0	1	3	4	0	0	1	3	4
11:15 AM	2	2	4	24	14	38	0	0	26	16	42	11:15 AM	0	1	1	1	6	7	0	0	1	7	8
11:30 AM	5	1	6	11	16	27	0	0	16	17	33	11:30 AM	1	0	1	3	2	5	0	0	4	2	6
11:45 AM	1	0	1	9	18	27	0	0	10	18	28	11:45 AM	0	1	1	4	2	6	0	0	4	3	7
12:00 PM	2	1	3	23	10	33	0	0	25	11	36	12:00 PM	0	0	0	2	0	2	0	0	2	0	2
12:15 PM	5	2	7	21	10	31	0	0	26	12	38	12:15 PM	0	0	0	0	2	2	0	0	0	2	2
12:30 PM	1	5	6	17	17	34	0	0	18	22	40	12:30 PM	0	0	0	0	0	0	0	0	0	0	0
12:45 PM	1	3	4	13	15	28	0	0	14	18	32	12:45 PM	0	2	2	4	0	4	0	0	4	2	6
1:00 PM	0	4	4	1	7	8	0	0	1	11	12	1:00 PM	1	0	1	10	2	12	0	0	11	2	13
1:15 PM	1	1	2	11	15	26	0	0	12	16	28	1:15 PM	0	0	0	0	0	0	0	0	0	0	0
1:30 PM	0	0	0	9	11	20	0	0	9	11	20	1:30 PM	0	0	0	2	2	4	0	0	2	2	4
1:45 PM	1	0	1	11	9	20	0	0	12	9	21	1:45 PM	1	0	1	2	3	5	0	0	3	3	6
2:00 PM	0	0	0	7	3	10	0	0	7	3	10	2:00 PM	0	1	1	1	1	2	0	0	1	2	3
2:15 PM	0	0	0	6	12	18	0	0	6	12	18	2:15 PM	0	0	0	0	2	2	0	0	0	2	2
2:30 PM	1	0	1	8	9	17	0	0	9	9	18	2:30 PM	0	0	0	5	2	7	0	0	5	2	7
2:45 PM	1	1	2	12	7	19	0	0	13	8	21	2:45 PM	0	0	0	0	2	2	0	0	0	2	2
3:00 PM	0	0	0	8	6	14	0	0	8	6	14	3:00 PM	1	0	1	2	0	2	0	0	3	0	3
3:15 PM	0	0	0	8	2	10	0	0	8	2	10	3:15 PM	1	0	1	3	0	3	0	0	4	0	4
3:30 PM	0	0	0	8	3	11	0	0	8	3	11	3:30 PM	0	0	0	2	4	6	0	0	2	4	6
3:45 PM	0	0	0	5	2	7	0	0	5	2	7	3:45 PM	0	0	0	1	0	1	0	0	1	0	1
4:00 PM	1	0	1	5	10	15	0	0	6	10	16	4:00 PM	0	0	0	3	3	6	0	0	3	3	6
4:15 PM	3	1	4	11	10	21	0	0	14	11	25	4:15 PM	0	0	0	7	1	8	0	0	7	1	8
4:30 PM	0	0	0	2	5	7	0	0	2	5	7	4:30 PM	1	0	1	2	5	7	0	0	3	5	8
4:45 PM	0	0	0	8	5	13	0	0	8	5	13	4:45 PM	0	0	0	3	6	9	0	0	3	6	9
5:00 PM	2	0	2	7	9	16	0	0	9	9	18	5:00 PM	0	1	1	2	2	4	0	0	2	3	5
5:15 PM	2	4	6	2	9	11	0	0	4	13	17	5:15 PM	0	0	0	2	1	3	0	0	2	1	3
5:30 PM	0	2	2	3	5	8	0	0	3	7	10	5:30 PM	1	0	1	2	1	3	0	0	3	1	4
5:45 PM	2	1	3	5	6	11	0	0	7	7	14	5:45 PM	0	0	0	1	2	3	0	0	1	2	3
6:00 PM	1	0	1	9	2	11	0	0	10	2	12	6:00 PM	0	0	0	0	6	6	0	0	0	6	6
6:15 PM	1	2	3	5	3	8	0	0	6	5	11	6:15 PM	0	0	0	0	3	3	0	0	0	3	3
6:30 PM	0	0	0	3	3	6	0	0	3	3	6	6:30 PM	0	1	1	2	2	4	0	0	2	3	5
6:45 PM	2	2	4	10	4	14	0	0	12	6	18	6:45 PM	1	0	1	3	5	8	0	0	4	5	9
7:00 PM	0	0	0	7	2	9	0	0	7	2	9	7:00 PM	0	2	2	2	1	3	0	0	2	3	5
7:15 PM	0	2	2	1	2	3	0	0	1	4	5	7:15 PM	1	2	3	5	3	8	0	0	6	5	11
7:30 PM	1	0	1	1	2	3	0	0	2	2	4	7:30 PM	2	0	2	2	0	2	0	0	4	0	4
7:45 PM	0	2	2	1	0	1	0	0	1	2	3	7:45 PM	1	1	2	0	1	1	0	0	1	2	3
8:00 PM	0	0	0	0	3	3	0	0	0	3	3	8:00 PM	2	1	3	2	1	3	0	0	4	2	6
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	8:15 PM	0	0	0	0	1	1	0	0	0	1	1
Totals	99	96	195	535	499	1034	0	0	634	595	1229	Totals	53	54	107	117	115	232	0	0	170	169	339

Washington & Old Dominion Trail Study

Location: W&OD Trail Crossing @ Hirst Road
 City: Purcellville

TIME	Saturday 8/19/17											TIME	Tuesday 8/22/17										
	Pedestrians			Bikes			Equestrian		Totals		Grand Totals		Pedestrians			Bikes			Equestrian		Totals		Grand Totals
	NB	SB	TOTAL	NB	SB	TOTAL	NB	SB	NB	SB			NB	SB	TOTAL	NB	SB	TOTAL	NB	SB	NB	SB	
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	5:30 AM	0	0	0	0	0	0	0	0	0	0	0
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	5:45 AM	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	2	0	2	0	0	0	0	0	2	0	2	6:00 AM	0	0	0	1	0	1	0	0	1	0	1
6:15 AM	2	2	4	1	0	1	0	0	3	2	5	6:15 AM	0	0	0	0	2	2	0	0	0	2	2
6:30 AM	3	1	4	0	0	0	0	0	3	1	4	6:30 AM	0	1	1	2	0	2	0	0	2	1	3
6:45 AM	5	1	6	2	0	2	0	0	7	1	8	6:45 AM	2	0	2	0	0	0	0	0	2	0	2
7:00 AM	7	1	8	0	0	0	0	0	7	1	8	7:00 AM	1	1	2	0	0	0	0	0	1	1	2
7:15 AM	4	3	7	1	1	2	0	0	5	4	9	7:15 AM	15	0	15	2	0	2	0	0	17	0	17
7:30 AM	3	5	8	4	2	6	0	0	7	7	14	7:30 AM	4	0	4	2	0	2	0	0	6	0	6
7:45 AM	8	7	15	10	4	14	0	0	18	11	29	7:45 AM	0	4	4	0	0	0	0	0	4	4	4
8:00 AM	5	7	12	5	6	11	0	0	10	13	23	8:00 AM	2	9	11	1	0	1	0	0	3	9	12
8:15 AM	10	1	11	4	8	12	0	0	14	9	23	8:15 AM	1	6	7	2	3	5	0	0	3	9	12
8:30 AM	10	6	16	14	14	28	0	0	24	20	44	8:30 AM	4	3	7	2	0	2	0	0	6	3	9
8:45 AM	6	12	18	13	17	30	0	0	19	29	48	8:45 AM	1	3	4	1	3	4	0	0	2	6	8
9:00 AM	4	7	11	4	14	18	0	0	8	21	29	9:00 AM	1	1	2	2	1	3	0	0	3	2	5
9:15 AM	1	8	9	15	15	30	0	0	16	23	39	9:15 AM	0	1	1	0	2	2	0	0	0	3	3
9:30 AM	5	5	10	33	14	47	0	0	38	19	57	9:30 AM	0	2	2	3	2	5	0	0	3	4	7
9:45 AM	3	3	6	21	17	38	0	0	24	20	44	9:45 AM	2	2	4	1	3	4	0	0	3	5	8
10:00 AM	1	4	5	19	22	41	0	0	20	26	46	10:00 AM	1	1	2	5	4	9	0	0	6	5	11
10:15 AM	1	2	3	6	26	32	0	0	7	28	35	10:15 AM	0	0	0	3	4	7	0	0	3	4	7
10:30 AM	4	6	10	17	18	35	0	0	21	24	45	10:30 AM	3	0	3	5	1	6	0	0	8	1	9
10:45 AM	1	0	1	31	19	50	0	0	32	19	51	10:45 AM	2	2	4	2	6	8	0	0	4	8	12
11:00 AM	4	3	7	24	8	32	0	0	28	11	39	11:00 AM	2	2	4	0	8	8	0	0	2	10	12
11:15 AM	4	2	6	24	8	32	0	0	28	10	38	11:15 AM	2	0	2	1	2	3	0	0	3	2	5
11:30 AM	2	2	4	5	13	18	0	0	7	15	22	11:30 AM	0	4	4	5	4	9	0	0	5	8	13
11:45 AM	7	4	11	14	15	29	0	0	21	19	40	11:45 AM	1	0	1	1	2	3	0	0	2	2	4
12:00 PM	3	2	5	22	19	41	0	0	25	21	46	12:00 PM	0	2	2	2	3	5	0	0	2	5	7
12:15 PM	0	4	4	18	8	26	0	0	18	12	30	12:15 PM	0	1	1	0	1	1	0	0	0	2	2
12:30 PM	5	1	6	21	7	28	0	0	26	8	34	12:30 PM	0	0	0	2	0	2	0	0	2	0	2
12:45 PM	0	0	0	8	19	27	0	0	8	19	27	12:45 PM	1	1	2	11	0	11	0	0	12	1	13
1:00 PM	0	5	5	5	10	15	0	0	5	15	20	1:00 PM	0	0	0	0	0	0	0	0	0	0	0
1:15 PM	0	2	2	7	10	17	0	0	7	12	19	1:15 PM	1	2	3	2	1	3	0	0	3	3	6
1:30 PM	0	0	0	10	16	26	0	0	10	16	26	1:30 PM	1	0	1	1	1	2	0	0	2	1	3
1:45 PM	1	2	3	14	10	24	0	0	15	12	27	1:45 PM	1	1	2	1	2	3	0	0	2	3	5
2:00 PM	0	1	1	3	6	9	0	0	3	7	10	2:00 PM	0	0	0	1	2	3	0	0	1	2	3
2:15 PM	2	0	2	7	6	13	0	0	9	6	15	2:15 PM	0	0	0	2	2	4	0	0	2	2	4
2:30 PM	3	0	3	7	11	18	0	0	10	11	21	2:30 PM	1	0	1	1	2	3	0	0	2	2	4
2:45 PM	0	0	0	10	9	19	0	0	10	9	19	2:45 PM	0	0	0	1	1	2	0	0	1	1	2
3:00 PM	1	2	3	8	6	14	0	0	9	8	17	3:00 PM	2	0	2	2	2	4	0	0	4	2	6
3:15 PM	0	0	0	8	6	14	0	0	8	6	14	3:15 PM	0	0	0	2	0	2	0	0	2	0	2
3:30 PM	2	0	2	6	4	10	0	0	8	4	12	3:30 PM	0	0	0	2	2	4	0	0	2	2	4
3:45 PM	1	0	1	5	1	6	0	0	6	1	7	3:45 PM	0	2	2	1	2	3	0	0	1	4	5
4:00 PM	2	0	2	7	4	11	0	0	9	4	13	4:00 PM	0	0	0	3	1	4	0	0	3	1	4
4:15 PM	2	4	6	6	7	13	0	0	8	11	19	4:15 PM	1	0	1	7	2	9	0	0	8	2	10
4:30 PM	1	2	3	4	5	9	0	0	5	7	12	4:30 PM	0	0	0	1	3	4	0	0	1	3	4
4:45 PM	2	0	2	6	4	10	0	0	8	4	12	4:45 PM	0	0	0	3	3	6	0	0	3	3	6
5:00 PM	0	3	3	5	7	12	0	0	5	10	15	5:00 PM	1	0	1	1	4	5	0	0	2	4	6
5:15 PM	1	0	1	1	10	11	0	0	2	10	12	5:15 PM	0	0	0	4	2	6	0	0	4	2	6
5:30 PM	0	3	3	4	5	9	0	0	4	8	12	5:30 PM	1	2	3	1	2	3	0	0	2	4	6
5:45 PM	3	0	3	6	6	12	0	0	9	6	15	5:45 PM	1	0	1	0	0	0	0	0	1	0	1
6:00 PM	3	2	5	7	4	11	0	0	10	6	16	6:00 PM	2	1	3	1	4	5	0	0	3	5	8
6:15 PM	0	1	1	2	3	5	0	0	2	4	6	6:15 PM	0	1	1	2	5	7	0	0	2	6	8
6:30 PM	2	0	2	9	2	11	0	0	11	2	13	6:30 PM	0	2	2	3	2	5	0	0	3	4	7
6:45 PM	0	2	2	6	3	9	0	0	6	5	11	6:45 PM	1	0	1	2	1	3	0	0	3	1	4
7:00 PM	0	2	2	5	1	6	0	0	5	3	8	7:00 PM	1	0	1	3	3	6	0	0	4	3	7
7:15 PM	1	0	1	1	5	6	0	0	2	5	7	7:15 PM	0	1	1	3	3	6	0	0	3	4	7
7:30 PM	0	0	0	3	3	6	0	0	3	3	6	7:30 PM	0	1	1	2	1	3	0	0	2	2	4
7:45 PM	0	1	1	1	0	1	0	0	1	1	2	7:45 PM	1	0	1	0	0	0	0	0	1	0	1
8:00 PM	0	2	2	0	1	1	0	0	0	3	3	8:00 PM	2	0	2	0	1	1	0	0	2	1	3
8:15 PM	0	0	0	0	2	2	0	0	0	2	2	8:15 PM	0	2	2	0	0	0	0	0	0	2	2
Totals	137	133	270	499	461	960	0	0	636	594	1230	Totals	62	61	123	108	105	213	0	0	170	166	336

Washington & Old Dominion Trail Study

Location: W&OD Trail Crossing @ North Hatcher Avenue
 City: Purcellville

TIME	Saturday 8/19/17										TIME	Tuesday 8/22/17											
	Pedestrians			Bikes			Equestrian		Totals			Grand Totals	Pedestrians			Bikes			Equestrian		Totals		Grand Totals
	EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	EB	WB			EB	WB	TOTAL	EB	WB	TOTAL	EB	WB	EB	WB	
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:45 AM	2	0	2	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	
6:00 AM	3	0	3	1	0	1	0	0	4	0	4	0	4	0	0	0	0	0	8	1	9	0	
6:15 AM	1	0	1	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	2	2	4	0	
6:30 AM	2	3	5	1	0	1	0	0	3	3	6	0	0	0	0	0	0	0	1	2	3	0	
6:45 AM	5	1	6	0	0	0	0	0	5	1	6	0	0	0	0	0	0	0	1	2	3	0	
7:00 AM	6	0	6	0	0	0	0	0	6	0	6	0	0	0	0	0	0	0	4	1	5	0	
7:15 AM	4	5	9	1	1	2	0	0	5	6	11	0	0	0	0	0	0	0	5	6	11	0	
7:30 AM	6	4	10	3	2	5	0	0	9	6	15	0	0	0	0	0	0	0	2	1	3	0	
7:45 AM	5	3	8	4	4	8	0	0	9	7	16	0	0	0	0	0	0	0	7	4	11	0	
8:00 AM	9	5	14	3	5	8	0	0	12	10	22	0	0	0	0	0	0	0	6	5	11	0	
8:15 AM	11	5	16	11	6	17	0	0	22	11	33	0	0	0	0	0	0	0	5	1	6	0	
8:30 AM	7	8	15	6	12	18	0	0	13	20	33	0	0	0	0	0	0	0	5	9	14	0	
8:45 AM	8	10	18	13	9	22	0	0	21	19	40	0	0	0	0	0	0	0	2	4	6	0	
9:00 AM	5	9	14	10	11	21	0	0	15	20	35	0	0	0	0	0	0	0	2	8	10	0	
9:15 AM	4	3	7	24	16	40	0	0	28	19	47	0	0	0	0	0	0	0	2	4	6	0	
9:30 AM	2	6	8	18	17	35	0	0	20	23	43	0	0	0	0	0	0	0	4	2	6	0	
9:45 AM	9	12	21	12	13	25	0	0	21	25	46	0	0	0	0	0	0	0	4	4	8	0	
10:00 AM	4	7	11	14	13	27	0	0	18	20	38	0	0	0	0	0	0	0	8	4	12	0	
10:15 AM	2	0	2	12	13	25	0	0	14	13	27	0	0	0	0	0	0	0	4	8	12	0	
10:30 AM	4	1	5	21	12	33	0	0	25	13	38	0	0	0	0	0	0	0	6	1	7	0	
10:45 AM	6	5	11	11	14	25	0	0	17	19	36	0	0	0	0	0	0	0	3	3	6	0	
11:00 AM	6	5	11	22	16	38	0	0	28	21	49	0	0	0	0	0	0	0	4	15	19	0	
11:15 AM	6	1	7	15	7	22	0	0	21	8	29	0	0	0	0	0	0	0	1	7	8	0	
11:30 AM	3	7	10	3	11	14	0	0	6	18	24	0	0	0	0	0	0	0	5	3	8	0	
11:45 AM	4	1	5	14	18	32	0	0	18	19	37	0	0	0	0	0	0	0	4	0	4	0	
12:00 PM	1	5	6	22	14	36	0	0	23	19	42	0	0	0	0	0	0	0	2	4	6	0	
12:15 PM	2	5	7	17	14	31	0	0	19	19	38	0	0	0	0	0	0	0	0	2	2	0	
12:30 PM	1	5	6	15	5	20	0	0	16	10	26	0	0	0	0	0	0	0	3	2	5	0	
12:45 PM	1	3	4	5	6	11	0	0	6	9	15	0	0	0	0	0	0	0	12	1	13	0	
1:00 PM	2	0	2	2	9	11	0	0	4	9	13	0	0	0	0	0	0	0	2	1	3	0	
1:15 PM	0	2	2	11	7	18	0	0	11	9	20	0	0	0	0	0	0	0	2	1	3	0	
1:30 PM	0	1	1	12	11	23	0	0	12	12	24	0	0	0	0	0	0	0	0	4	4	0	
1:45 PM	2	1	3	7	11	18	0	0	9	12	21	0	0	0	0	0	0	0	2	1	3	0	
2:00 PM	7	4	11	7	8	15	0	0	14	12	26	0	0	0	0	0	0	0	0	2	2	0	
2:15 PM	0	2	2	6	4	10	0	0	6	6	12	0	0	0	0	0	0	0	4	4	8	0	
2:30 PM	1	0	1	6	13	19	0	0	7	13	20	0	0	0	0	0	0	0	5	2	7	0	
2:45 PM	0	2	2	7	4	11	0	0	7	6	13	0	0	0	0	0	0	0	3	2	5	0	
3:00 PM	1	2	3	6	10	16	0	0	7	12	19	0	0	0	0	0	0	0	1	3	4	0	
3:15 PM	3	1	4	7	5	12	0	0	10	6	16	0	0	0	0	0	0	0	3	1	4	0	
3:30 PM	0	4	4	4	3	7	0	0	4	7	11	0	0	0	0	0	0	0	1	2	3	0	
3:45 PM	7	1	8	4	4	8	0	0	11	5	16	0	0	0	0	0	0	0	3	3	6	0	
4:00 PM	2	3	5	9	3	12	0	0	11	6	17	0	0	0	0	0	0	0	6	4	10	0	
4:15 PM	3	5	8	2	6	8	0	0	5	11	16	0	0	0	0	0	0	0	6	5	11	0	
4:30 PM	4	6	10	5	12	17	0	0	9	18	27	0	0	0	0	0	0	0	2	1	3	0	
4:45 PM	1	1	2	5	3	8	0	0	6	4	10	0	0	0	0	0	0	0	3	2	5	0	
5:00 PM	2	1	3	1	11	12	0	0	3	12	15	0	0	0	0	0	0	0	7	3	10	0	
5:15 PM	4	0	4	2	4	6	0	0	6	4	10	0	0	0	0	0	0	0	6	3	9	0	
5:30 PM	2	0	2	10	9	19	0	0	12	9	21	0	0	0	0	0	0	0	1	1	2	0	
5:45 PM	4	4	8	7	2	9	0	0	11	6	17	0	0	0	0	0	0	0	3	6	9	0	
6:00 PM	0	0	0	6	4	10	0	0	6	4	10	0	0	0	0	0	0	0	1	2	3	0	
6:15 PM	3	1	4	1	0	1	0	0	4	1	5	0	0	0	0	0	0	0	2	8	10	0	
6:30 PM	0	1	1	7	2	9	0	0	7	3	10	0	0	0	0	0	0	0	5	3	8	0	
6:45 PM	4	3	7	4	3	7	0	0	8	6	14	0	0	0	0	0	0	0	5	7	12	0	
7:00 PM	1	0	1	2	2	4	0	0	3	2	5	0	0	0	0	0	0	0	10	7	17	0	
7:15 PM	2	5	7	1	4	5	0	0	3	9	12	0	0	0	0	0	0	0	4	4	8	0	
7:30 PM	0	2	2	0	1	1	0	0	0	3	3	0	0	0	0	0	0	0	1	3	4	0	
7:45 PM	1	0	1	1	0	1	0	0	2	0	2	0	0	0	0	0	0	0	0	3	3	0	
8:00 PM	8	3	11	0	0	0	0	0	8	3	11	0	0	0	0	0	0	0	3	3	6	0	
8:15 PM	0	6	6	1	1	2	0	0	1	7	8	0	0	0	0	0	0	0	1	1	2	0	
Totals	193	180	373	421	395	816	0	0	614	575	1189	112	113	225	92	85	177	0	0	204	198	402	



APPENDIX C

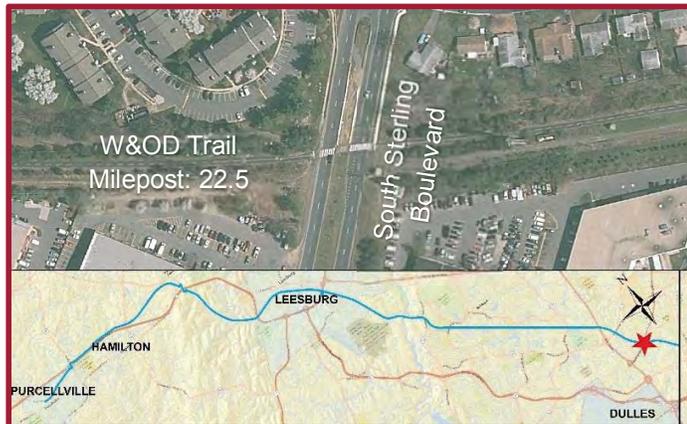
W&OD Trail Crossing Study, Report dated May 2017
Existing Conditions Summaries from Appendix A



1. South Sterling Boulevard (Route 846)

Description

- At-grade crossing
- Easternmost crossing of the W&OD Trail in Loudoun County.
- Highest vehicular volume of at-grade crossing within Loudoun County
- Crossing with most safety concerns reported to NOVA Parks, Bike Loudoun, and Loudoun County staff
- Short-term safety improvements currently underway to remove left turn lane to shorten crossing distance, install Rectangular Rapid Flashing Beacons (RRFB), and widen the pedestrian refuge area ([Appendix D](#))
- Due to active construction, existing signage and markings were not captured during site visit inventory; however, new signing and markings will be implemented as part of the short-term improvement project
- Long-term improvement for a grade-separated crossing in County’s Adopted FY2018 Capital Improvement Program
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - present
- Sight Distance - No observed restrictions



Nearby Facilities

- No dedicated parking nearby
- 2.5-mile radial distance to Future Loudoun Gateway Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
South Sterling Boulevard	Sterling	846	22.5	40	16	27,000	18





2. West Church Road (Route 625)

Description

- Grade-separated crossing, underpass
- 4-lane bridge over the W&OD Trail
- Trail recently repaved and remarked
- Signing and marking – N/A
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - N/A
- Sight distance - N/A



Nearby Facilities

- No dedicated parking nearby
- 2-mile radial distance to Future Loudoun Gateway Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
West Church Road	Sterling	625	23	35	12	34,000	0





3. Ruritan Circle (Route 859)

Description

- At-grade crossing
- 2 lane roadway
- All existing signing and marking to NOVA Parks standards
- Trail detectable warning surface - not present
- Sight distance - adequate
- Roadway traffic control - uncontrolled



Nearby Facilities

- Parking locations along both sides of the road shoulder
- 2-mile radial distance to Future Loudoun Gateway Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Ruritan Circle	Sterling	859	23.5	25	12	400	0

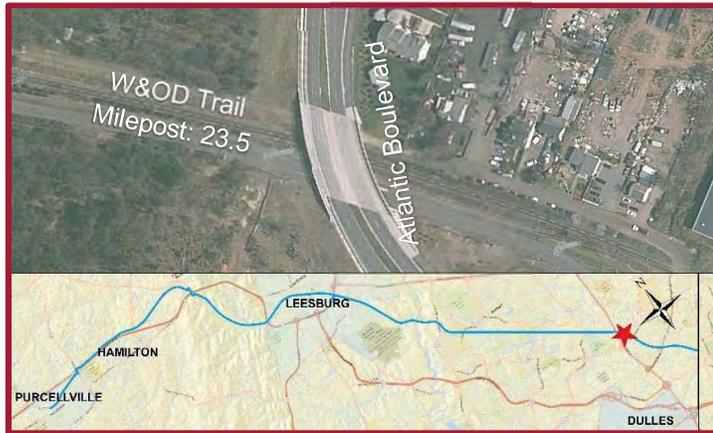




4. Atlantic Boulevard (Route 1902)

Description

- Grade separated crossing, underpass
- 4 Lane bridge over the W&OD Trail
- Trail recently repaved and remarked
- Signing and marking – N/A
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - N/A
- Sight distance - N/A



Nearby Facilities

- No dedicated parking nearby
- 2-mile radial distance to Future Loudoun Gateway Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Atlantic Boulevard	Sterling	1902	23.5	45	11	10,000	0





5. Sully Road (Route 28)

Description

- Grade separated crossing, overpass
- 20-foot-wide pedestrian bridge over 8 lane Sully Road
- Longest elevated bridge crossing along the trail in the County approximately 265 feet long
- Signing and marking – N/A
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - N/A
- Sight distance - N/A



Nearby Facilities

- No dedicated parking nearby
- 2-mile radial distance to Future Loudoun Gateway Metrorail Station.

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Sully Road	Broad Run/Sterling	28	24	55	10	75,000	0





6. Pacific Boulevard (Route 1036)

Description

- Grade separated crossing, underpass
- Two-2 lane bridges over the W&OD Trail.
- Signing and marking – N/A
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - N/A
- Sight distance - N/A



Nearby Facilities

- Dedicated adjacent parking lot with approximately 60 spaces accessible from Pacific Boulevard
- 2-mile radial distance to Future Loudoun Gateway Metrorail Station.

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Pacific Blvd	Broad Run	1036	24	45	10	22,000	0





7. Loudoun County Parkway (Route 606)

Description

- Grade separated crossing, overpass
- 4-lane divided roadway travels under the W&OD Trail.
- Signing and marking – centerline trail marking is faded
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - N/A
- Sight distance - N/A



Nearby Facilities

- No dedicated parking nearby
- 2.1-mile radial distance to Future Loudoun Gateway Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Loudoun County Parkway	Broad Run	607	25	45	10	15,000	0





8. Smith Switch Road (Route 1950)

Description

- At-grade crossing
- 2 lane roadway with approximate skew of 60 degrees to the trail.
- Signing is to NOVA Standard the pavement markings are faded
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - present
- Sight distance - obscured by vegetation and roadway/trail crossing skew.



Nearby Facilities

- No dedicated parking nearby
- 2.3-mile radial distance to Future Ashburn Station Metrorail Station.

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Smith Switch Road	Broad Run	1950	26	35	10.5	2,700	0





9. Ashburn Village Boulevard (Route 2020)

Description

- Grade separated crossing, underpass
- 2-2 lane bridges over the W&OD Trail.
- Signing and marking – N/A
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - N/A
- Sight distance - N/A



Nearby Facilities

- No dedicated parking nearby
- 2.3-mile radial distance to Future Ashburn Station Metrorail Station.

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Ashburn Village Boulevard	Broad Run	2020	26.5	40	10	15,000	0





10. Ashburn Road (Route 641)

Description

- At-grade crossing
- 2 lane roadway
- Signing and marking is to NOVA Parks standard
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - present
- Sight distance - adequate

Nearby Facilities

- Dedicated parking lot with approximately 40 spaces adjacent to the crossing
- 2.7-mile radial distance to future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Ashburn Road	Ashburn / Broad Run	641	27.5	25	10.5	8,700	1





11. Claiborne Parkway (Route 901)

Description

- Grade separated, overpass
- 4 lane divided road travelling under the W&OD Trail
- Signing and marking – N/A
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - N/A
- Sight distance - N/A



Nearby Facilities

- Parking lot with approximately 120 spaces from adjacent Trilside Park
- 3.3-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Claiborne Parkway	Ashburn	901	28.5	45	10	17,000	0





12. Belmont Ridge Road (Route 659)

Description

- At-grade crossing
- 2 lane roadway
- Currently under construction
- Roadway improvements will make this crossing location grade-separated - construction is estimated to be completed in late 2018.
- The current signing and marking along the roadway is to NOVA Parks standards
- Roadway traffic control - RRFBs
- Trail detectable warning surface - present
- Sight distance - adequate



Nearby Facilities

- No dedicated parking nearby, a 20-space trail user parking lot is being constructed as part of the grade separation project.
- 4.2-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Belmont Ridge Road	Ashburn	659	29.5	45	10	12,000	14

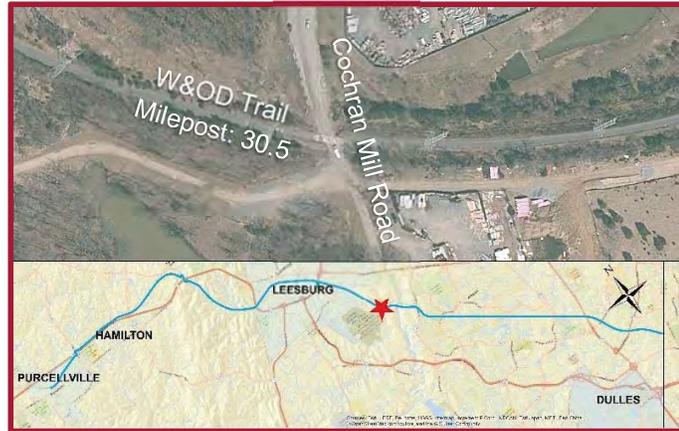




13. Cochran Mill Road (Route 653)

Description

- At-grade crossing
- 2 lane roadway
- Safety concerns at this crossing location were raised by Stakeholders due to the amount of truck traffic and heavy industrial use along this corridor.
- Existing markings are faded and signing is not to NOVA Parks standards, signage is only on the right-hand side of the road.
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - present
- Sight distance - adequate



Nearby Facilities

- No dedicated parking nearby
- 5.1-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Cochran Mill Road	Catoctin	653	30.5	35	11	1,100	1





14. Battlefield Parkway (Leesburg Route 1)

Description

- Grade separated crossing, underpass
- Two-2 lane bridges over the W&OD Trail
- Signing and marking – N/A
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - N/A
- Sight distance - N/A



Nearby Facilities

- Parking lot with approximately 60 spaces adjacent to the trail at Tuscarora Creek Park
- 6.6-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Battlefield Parkway	Leesburg	1	32.5	40	11	11,000	0





15. Lawson Road (Route 654)

Description

- At-grade crossing
- 2 lane roadway
- Signing and marking is to NOVA Parks standard
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - not present
- Sight distance - adequate



Nearby Facilities

- Parking available on-street south of the crossing along the Lawson Road cul-de-sac.
- 7.1-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Lawson Road	Leesburg	654	33	25	10.25	500	0





16. Harry Byrd Highway (Route 7)

Description

- Grade separated crossing, underpass
- 6 lane roadway bridging over the W&OD Trail
- The trail crossing makes a U-shaped curve to travel under the highway
- Signing and marking - Signs for cyclist to dismount and walk bike through underpass, mirrors to alert trail users to the sharp curve under the bridge
- Roadway traffic control - uncontrolled
- Detectable warning surface - N/A
- Sight distance - N/A



Nearby Facilities

- No dedicated parking nearby
- 7.3-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Harry Byrd Highway	Leesburg	7	33	55	9.5	52,000	0





17. Plaza Street SE (Leesburg Route 4)

Description

- Grade separated crossing, underpass
- 4 lane roadway bridging over the W&OD Trail
- Signing and marking – N/A
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - N/A
- Sight distance, N/A.



Nearby Facilities

- No dedicated parking nearby
- 7.6-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Plaza Street SE	Leesburg	4	33.5	30	10.2	10,000	0





18. Sycolin Road SE (Route 4201)

Description

- At-grade crossing
- 2 lane roadway at a 60-degree skew to the Trail
- Signing and markings are to NOVA Parks standard
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - not present
- Sight distance - adequate



Nearby Facilities

- No dedicated parking nearby
- 7.7-mile radial distance to Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Sycolin Road SE	Leesburg	4201	33.5	25	10	100	0

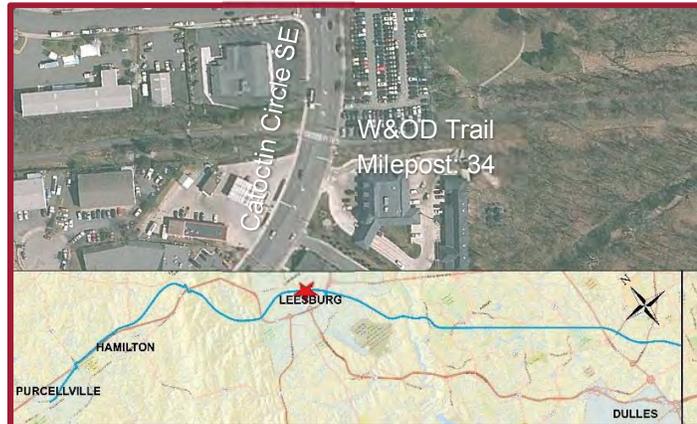




19. Catoclin Circle SE (Route 4200)

Description

- At-grade crossing
- 4 lane roadway has the second highest AADT for at-grade crossings in the County
- Signing and markings are to NOVA Parks standard
- Roadway traffic control - signalized
- Trail detectable warning surface - present
- Sight distance - adequate



Nearby Facilities

- No dedicated parking nearby
- 7.9-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Catoclin Circle SE	Leesburg	4200	34	25	10	17,000	0

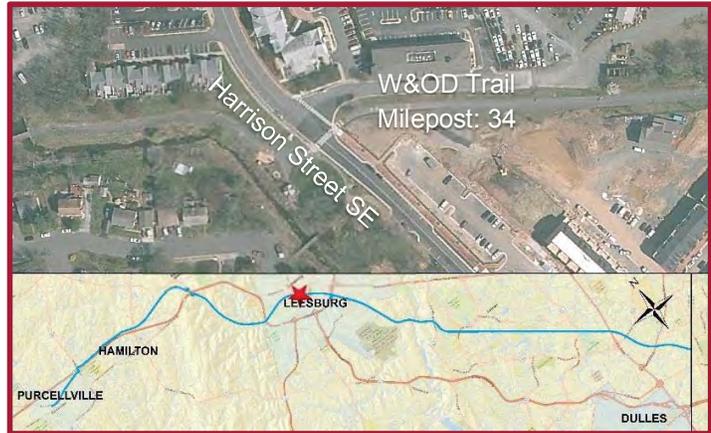




20. Harrison Street SE

Description

- At-grade crossing
- 2 lane roadway
- Signing and markings are to NOVA Parks standard
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - present
- Sight distance - adequate



Nearby Facilities

- Parking is available on both sides of Harrison Street SE
- 8.2-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)	Election District
Harrison Street SE	N/A	34	25	10	UNK	0	Leesburg





21. South King Street (Route 15 Business)

Description

- At-grade crossing
- 2 lane roadway
- Signing and markings are to NOVA Parks standard
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - present
- Sight distance - restricted by buildings



Nearby Facilities

- No dedicated parking nearby
- 8.4-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
South King Street	Leesburg	15	34.5	25	10.25	9,700	1

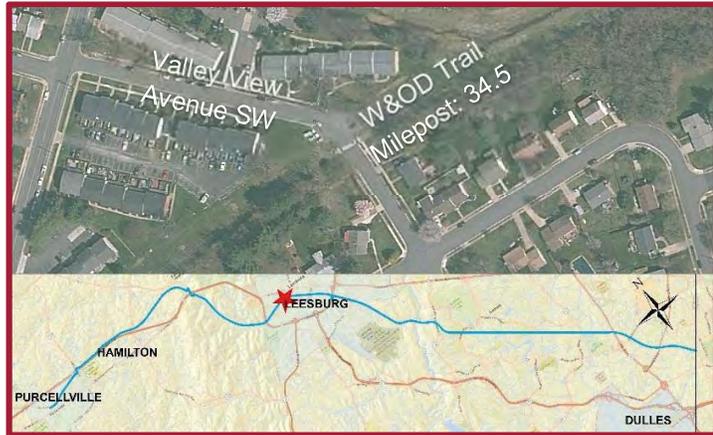




22. Valley View Avenue SW

Description

- At-grade crossing
- 2 lane roadway
- Signing and markings are to NOVA Parks standard
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - not present
- Sight distance - adequate



Nearby Facilities

- Parking is available on the shoulder for approximately 5 vehicles north of this crossing.
- 8.6-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Valley View Avenue SW	Leesburg	N/A	34.5	25	10.5	UNK	0





23. Dry Mill Road SW (Route 699)

Description

- At-grade crossing
- 2 lane roadway with a 45 degree skew
- Signing and markings are to NOVA Parks standard
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - not present
- Sight distance - adequate



Nearby Facilities

- No dedicated parking nearby
- 8.7-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Dry Mill Road SW	Leesburg	699	35	25	10	2,200	0





24. Catoctin Circle SW (Route 4200)

Description

- At-grade crossing
- 2 lane roadway
- Signing and markings are to NOVA Parks standard new signs and markings were installed recently
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - present
- Sight distance - adequate



Nearby Facilities

- Parking available on street and at Loudoun County High School on weekends
- 8.8-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Catoctin Circle SW	Leesburg	4200	35	25	10.25	4,800	0





25. Harry Byrd Highway (Route 7)

Description

- Grade separated crossing, overpass
- 4 lane roadway travels underneath the W&OD Trail
- Signing and marking – N/A
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - N/A
- Sight distance - N/A



Nearby Facilities

- No dedicated parking nearby
- 8.9-mile radial distance to Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Harry Byrd Highway	Leesburg	7	35.5	55	10.5	54,000	0





26. Dry Mill Road (South Crossing) (Route 699)

Description

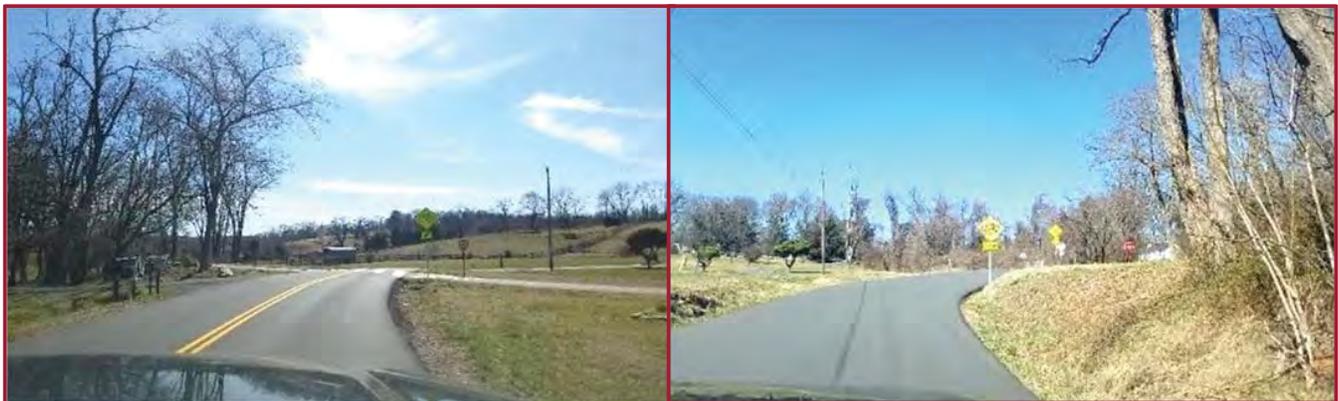
- At-grade crossing
- 2 lane roadway that intersects the W&OD Trail with an approximate 30 degree skew
- The crossing at Dry mill road has been identified as a safety concern by Bike Loudoun and NOVA Parks.
- Signing and markings are to NOVA Parks standard
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - present
- Sight distance - restricted for the westbound roadway approach obscured by vegetation and elevation difference between the trail and roadway



Nearby Facilities

- No dedicated parking nearby
- 11.1-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Dry Mill Road	Catoctin	699	38	35	10.75	2,800	2





27. Dry Mill Road (North Crossing) (Route 699)

Description

- Grade separated crossing, underpass
- 2 lane roadway bridges over the W&OD Trail, bridge is currently under repair with a temporary structure in place to protect trail users while maintenance work continues
- Signing and marking - N/A
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - N/A
- Sight distance - N/A



Nearby facilities

- No dedicated parking nearby
- 11.3-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Dry Mill Road	Catoctin	699	38.5	35	10.5	2,800	0





28. Route 7 Eastbound on Ramp at Route 9

Description

- Grade separated crossing, underpass
- Single lane roadway ramp bridges over the W&OD Trail
- Newly constructed with lighting within the tunnel for trail users
- Signing and marking – N/A
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - N/A
- Sight distance - N/A



Nearby Facilities

- No dedicated parking nearby
- 11.3-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Rt 7 Eastbound on Ramp	Catoctin	7	38.5	25	10.5	UNK	0





29. Charles Town Pike Overpass at Route 7 (Route 9)

Description

- Grade separated crossing, underpass
- 3 lane roadway ramp bridges over the W&OD Trail
- Newly constructed with lighting within the tunnel for trail users
- Signing and marking – N/A
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - N/A
- Sight distance - N/A



Nearby facilities

- No dedicated parking nearby
- 11.3-mile radial distance to Future Ashburn Station Metrorail Station.

Road Name	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)	Election District
Charles Town Pike	9	38.5	35	10.5	20,000	0	Catoctin





30. Route 7 Westbound on Ramp at Route 9

Description

- At-grade crossing
- Single lane highway ramp
- The location at the roundabout raised concerns by Bike Loudoun and NOVA Parks Staff about the irregular crossing location on the exit to a roundabout. Although vehicles approaching this crossing come from one direction, it's hard to determine if vehicles will proceed around the circle or exit onto the Route 7 on-ramp
- Signing and markings are to NOVA Parks standard
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - present
- Sight distance - adequate



Nearby facilities

- No dedicated parking nearby
- 11.4-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Rt 7 Westbound on Ramp	Catoctin	7	38.5	25	10.7	UNK	0





31. Simpson Circle (South Crossing) (Route 662)

Description

- At-grade crossing
- 2 lane roadway at the intersection of Route 9
- Signing and markings are to NOVA Parks standard with additional orange delineator posts between the trail and roadway
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - present
- Sight distance - poor due to vegetation



Nearby Facilities

- No dedicated parking nearby
- 11.5-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Simpson Circle	Catoctin	662	38.5	25	8	380	0





32. Simpson Circle (North Crossing) (Route 662)

Description

- At-grade crossing
- 2 lane roadway
- Signing and markings are to NOVA Parks standard
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - present
- Sight distance - adequate



Nearby Facilities

- No dedicated parking nearby
- 12-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Simpson Circle	Catoctin	662	39	25	10.3	380	0





33. Hamilton Station Road (Route 704)

Description

- At-grade crossing
- 3 lane roadway lanes due to a right-turn lane to westbound Route 7 on-ramp
- Signing and markings are to NOVA Parks standard
- Roadway traffic control - uncontrolled
- Trail detectable warning surface – present, steep trail grades leading into the roadway
- Sight distance - restricted by vegetation and vehicles parked along the roadway shoulder



Nearby Facilities

- Parking available for approximately 4 vehicles along the west shoulder of Hamilton Station Road
- 12.9-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Hamilton Station Road	Catoctin	704	41	35	10.3	3,000	0

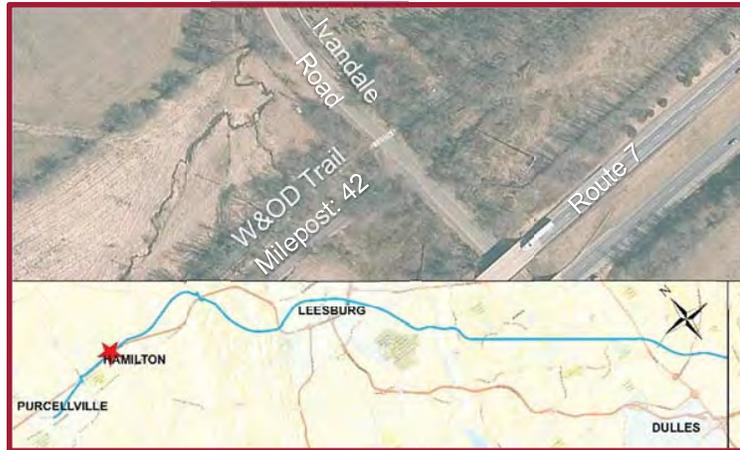




34. Ivandale Road (Route 709)

Description

- At-grade crossing
- 2 lane roadway
- Signing and markings are to NOVA Parks standard new pavement markings were observed at this location along with signs stating “Stop Play it safe Stop and Look” on both approaches to the roadway
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - present
- Sight distance - obscured by vegetation



Nearby Facilities

- Parking available along both sides of the roadway shoulder for approximately 8 vehicles
- 13.7-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Ivandale Road	Catoctin	709	42	35	10	1,300	2





35. Berlin Turnpike (Route 287)

Description

- At-grade crossing
- 2 lane roadway
- Signing and markings are to NOVA Parks standard, one exception is the eastbound stop bar missing the white pavement marking "STOP"
- Roadway traffic control - signalized
- Trail detectable warning surface - present
- Sight distance - adequate



Nearby Facilities

- No dedicated parking nearby
- 14.4-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Berlin Turnpike	Catoctin/Blue Ridge	287	43	45	11	6,500	2





36. Route 7 Westbound On-Ramp from Route 287

Description

- At-grade crossing
- Single lane highway ramp
- Signing and markings are to NOVA Parks standard
- Roadway traffic control - signalized
- Trail detectable warning surface - present
- Sight distance - adequate



Nearby Facilities

- No dedicated parking nearby
- 14.5-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
7/287 Westbound On Ramp	Blue Ridge	7	43	25	10.5	UNK	0





37. Harry Byrd Highway Overpass (Route 7)

Description

- Grade separated crossing, underpass
- 4 lane roadway bridging over the W&OD Trail
- Signing and marking – N/A
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - N/A
- Sight distance - N/A



Nearby Facilities

- No dedicated parking nearby
- 14.4-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Harry Byrd Highway	Blue Ridge	7	43	55	10.6	28,000	0





38. Route 7 Eastbound Off-Ramp to Route 287

Description

- At-grade crossing
- Single lane highway ramp
- The stop bar on this off-ramp is located prior to the W&OD Trail Crossing however vehicles must move forward to gain better sight distance at the intersection before turning left or right onto Route 287
- Signing and markings are to NOVA Parks standard
- Roadway traffic control - stop controlled
- Trail detectable warning surface - present
- Sight distance - adequate



Nearby facilities

- No dedicated parking nearby
- 14.4-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
7/287 Eastbound Off Ramp	Blue Ridge	7	43	25	11	UNK	2





39. Hirst Road (Route 962)

Description

- At-grade crossing
- 2 lane roadway
- This crossing has an AADT of 11,000 one of the highest at-grade crossing volumes in the County
- Signing and markings are to NOVA Parks standard
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - present
- Sight distance – inadequate, vehicles traveling westbound are obstructed by vegetation and steep grade/curvature of the roadway



Nearby Facilities

- Parking available along both shoulders of the roadway
- 14.5-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
Hirst Road	Blue Ridge	962	43.5	45	10.8	11,000	0

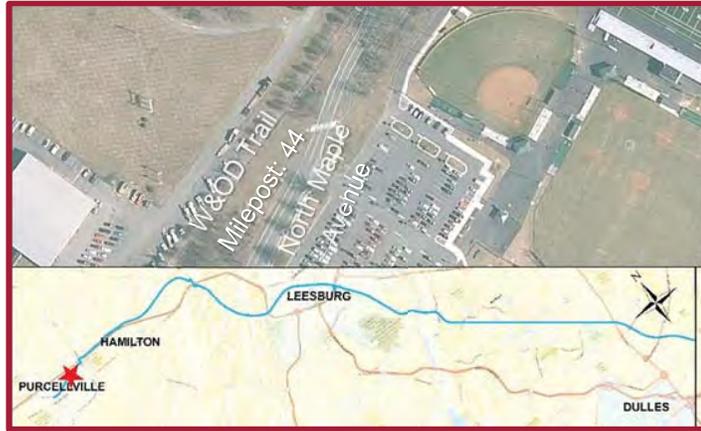




40. North Maple Avenue (Route 722)

Description

- At-grade crossing
- 2 lane roadway
- Signing and markings are to NOVA Parks standard
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - present
- Sight distance - adequate



Nearby Facilities

- Dedicated Parking available at Loudoun Valley High School
- 14.7-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
North Maple Avenue	Blue Ridge	722	44	25	10	5,700	0





41. North Hatcher Avenue (Route 611)

Description

- At-grade crossing
- 2 lane roadway
- Signing and markings are to NOVA Parks standard
- Roadway traffic control - uncontrolled
- Trail detectable warning surface - present
- Sight distance - adequate
- Sight distance - adequate minimally obscured by vegetation



Nearby Facilities

- Dedicated 20 space parking lot adjacent to the roadway
- 15-mile radial distance to Future Ashburn Station Metrorail Station

Road Name	Election District	Route Number	Milepost	Speed Limit (mph)	Trail Width (ft)	AADT	Crashes (2012-2016)
North Hatcher Avenue	Blue Ridge	611	44.5	25	10.6	5,300	1

