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Comprehensive Transportation Review

Rockshire Village

City of Rockville, MD

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Executive Summary

The following report is a Comprehensive Transportation Review (CTR) for the Rockshire Village redevelopment proposed at 2401 Wootton Parkway in the City of Rockville. This report reviews the transportation aspects of the project's development application in compliance with the City of Rockville's CTR guidelines.

The purpose of this study is to evaluate whether the project will generate a detrimental impact to the surrounding transportation network. This evaluation is based on a technical comparison of the existing conditions, background conditions, and total future conditions. This report concludes that **the project will not have a detrimental impact** on the surrounding transportation network.

Proposed Project

The project is located at 2401 Wootton Parkway. Under existing conditions, the project site is improved with a grocery store building.

The project will replace the existing 52,000-square foot grocery building with 60 residential units and 5,500 square feet of retail.

Access to the proposed project will be provided via two (2) curb cuts, one (1) on Hurley Avenue and one (1) on Wootton Parkway, consistent with existing conditions.

The project includes a designated parking area with 30 parking spaces to serve the existing Rockshire HOA Community Center/Pool that abuts the north side of the property.

Multi-Modal Overview

Transit

The site is well served by local transit service Ride On with stops along the Hurley Avenue and Wootton Parkway frontages. The project site also has access to regional transit facilities within a 10-minute drive at the Rockville station which is serviced by Metrorail, MARC, and Amtrak.

Pedestrian

The site is served by a robust pedestrian network that connects the site to the surrounding community and nearby destinations. Most roadways within a quarter-mile radius provide sidewalks, crosswalks and curb ramps. Most sidewalks meet City of Rockville preferred width of 5 feet, with the exception of minor segments along low volume/low speed residential streets where only one side of the road has a sidewalk. Every intersection within a quarter-mile radius has curb ramps on every corner, but most curb ramps lack detectable warning surfaces. Some low-volume residential streets also lack crosswalks on one or more legs of the intersection.

As part of the project, both site access connections will feature ADA-compliant curb ramps.

The project will be served by a new internal sidewalk network, providing comfortable pedestrian connections within the development and to public sidewalks. The proposed sidewalks will satisfy City of Rockville guidelines and ADA requirements, providing an improved internal pedestrian environment.

Bicycle

The site has access to several bicycle facilities, including the Carl Henn Millennium Trail, and a signed shared roadway along Hurley Avenue.

As part of the project, sharrow markings will be installed along the Hurley Avenue frontage on the northeastern travel lane adjacent to the property.

Vehicular

The site is directly served by Wootton Parkway, an Arterial roadway, and Hurley Avenue, a primary residential roadway. These roadways connect the site to the nearby I-270, which provide access to the Intercounty Connector (MD-200) and the Capital Beltway (I-495).

Site Impact and Mitigation Measures

Per the City of Rockville CTR guidelines, the project is not required to evaluate vehicular capacity as it results in an overall reduction in vehicular trips as compared to the existing grocery land use.

The vehicular capacity analysis provided in this report is for informational purposes only and the scope was vetted and approved by the City of Rockville Staff during the scoping process. The approved scope is included in the Technical Attachments.

In order to determine whether the proposed project will have a negative impact on the transportation network, this report evaluates future conditions with and without the project based on intersection vehicular capacity analyses using the Critical Lane Volume (CLV) methodology. The intersection volume/capacity (v/c) ratios and the corresponding Level of Service (LOS) are compared to the intersection impact thresholds for non-transit-oriented areas (non-TOAs) set by City of Rockville CTR

standards to determine if the site will negatively impact the study area.

Based on the City of Rockville's mitigation requirements outlined in the CTR Guidelines, none of the analyzed study intersections are impacted by the site as the project results in an overall reduction of site-generated trips as compared to the existing grocery land use.

The proposed project generates fewer trips than the existing approved grocery trips and will not have a detrimental impact on the surrounding transportation network based on the analysis.

Summary and Recommendations

This report concludes that the proposed development will not have a detrimental impact on the surrounding transportation network.

The development has several positive elements contained within its design that minimize potential transportation impacts, including:

- The site's adjacency to local and regional transit service;
- The site's location within a well-connected pedestrian and bicycle network;
- Sharrow markings along the site frontage on Hurley Avenue on the travel lane adjacent to the site;
- A new mid-block pedestrian connection to the Millennium Trail;
- An improved connection to the Millennium Trail at the Wootton Parkway access point; and
- Upgrades to the traffic signal equipment at the Wootton Parkway access.

Introduction

This report reviews the transportation elements of the Rockshire Village project. The project site, shown in Figure 1, is located at 2401 Wootton Parkway within the City of Rockville. Figure 2 provides an aerial of the site.

Purpose of Study

The purpose of this report is to:

1. Review the transportation elements of the development site plan and demonstrate that the project conforms to the City of Rockville's CTR policies.
2. Provide information to the City of Rockville and other reviewing agencies on how the project will influence the local transportation network. This report accomplishes this by identifying the potential vehicle trips generated by the project and where these trips will be distributed on the roadway network.
3. Determine whether the proposed project will lead to an adverse impact on the local transportation network. This report accomplishes this by projecting future conditions with and without redevelopment of the site and performing analyses of study area intersections using the CLV methodology as required by the CTR guidelines. Intersection v/c ratios and the corresponding LOS are compared to the impact thresholds set by City of Rockville CTR standards to determine whether the project will negatively impact the study area. The report discusses whether improvements to the transportation network are needed to mitigate adverse impacts, as needed.

Contents of Study

This report contains eight (8) components as follows:

- Project Overview
  This component reviews the area near and adjacent to the proposed project and includes an overview of the project, including existing and proposed land uses, site plan and access, and a summary of the site trip generation before reductions and/or credits.
- Proposed On-Site Transportation
  This component reviews the transportation aspects of the project, including site access, vehicle parking, bicycle parking, pedestrian facilities, and bicycle facilities proposed by the project.
- Study Area and Multimodal Overview
  This component includes the transportation study area and study intersections of the project and provides an overview of the multimodal facilities around the transportation study area.
- Existing Conditions
  This component reviews the existing conditions within the transportation study area, including the roadway network, existing peak-hour traffic volumes, and existing capacity analyses. This component also summarizes the existing pedestrian, bicycle, and transit access and facilities around the site.
- Background Conditions
  This component outlines the background traffic components, including approved pipeline developments and annual traffic growth, and performs capacity analyses for background conditions. This component also reviews planned roadway, pedestrian, bicycle, and transit improvements by other agencies around the site.
- Project Trip Generation and Distribution
  This component outlines the travel demand of the proposed project. It summarizes the proposed trip generation of the project and outlines the applicable trip reduction factors for the site trip generation. The trip distribution assumptions and route assignment for the site-generated trips are also reviewed in this section.
- Total Future Conditions
  This component summarizes the intersection capacity analysis results of the total future conditions.
- Other Studies
  This component includes other requested traffic studies, including a pedestrian study and a speed study.

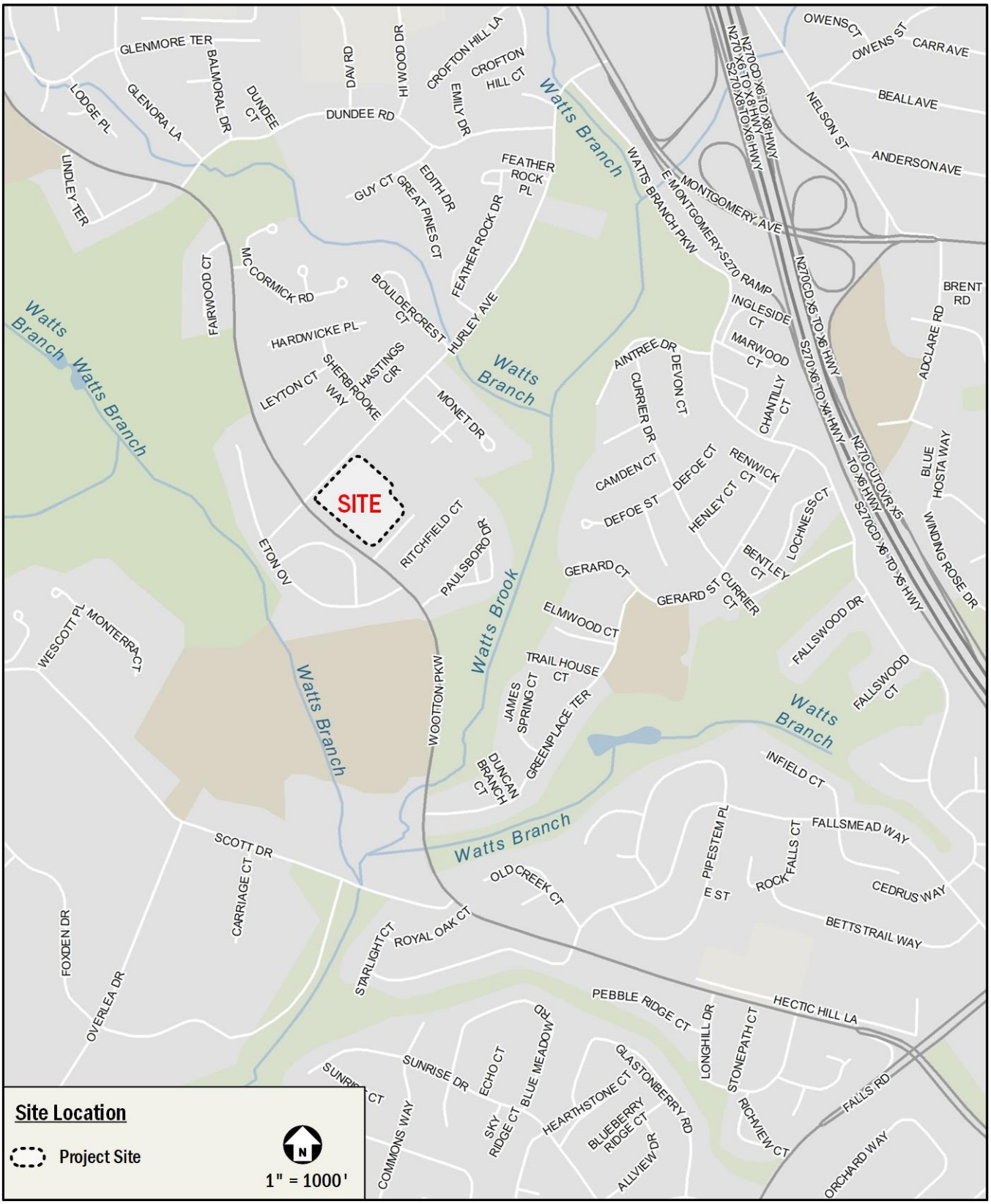


Figure 1: Site Location

Figure 2: Site Aerial

Project Overview

This section provides an overview of the development project, including the existing and proposed land uses, existing and proposed site access, and a summary of the trip generation before any reductions or credits.

Site Land Use

Existing Land Use

The site, located at 2401 Wootton Parkway, is bounded by Wootton Parkway to the southwest, Hurley Avenue to the northwest, the Rockshire Community Center to the northeast, a church and the Rockshire Community Pool and Center, and residential uses to the east. The property is located within the City of Rockville boundaries.

The existing land use is retail as the site is currently improved with an approximately 52,000 square foot-grocery building.

The Rockshire HOA community center/pool that abuts the property to the north is not part of the project and will remain unchanged.

Proposed Land Use

The project will replace the existing grocery retail building and parking lot with up to 60 homes (29 townhomes, 31 single-family homes) and 5,500 square feet of retail.

The retail component of the project is envisioned to operate as a fast-casual restaurant serving the neighborhood.

The retail building will be located on the south side of the property adjacent to the Wootton Parkway access point.

The residential component of the project will occupy the rest of the site.

The project will provide 30 parking spaces designated to the Rockshire HOA Community Center/Pool seasonally per the terms of the existing License Agreement L. 4957 F.697. The Rockshire HOA-designated parking spaces will be located adjacent to the Rockshire HOA Community Center/Pool on the northeastern corner of the site close to the pedestrian path that connects the project site to the Rockshire HOA Community Center/Pool.

Figure 3 shows the proposed site plan.

Site Access

Under existing conditions, access to the grocery store building is available via one (1) full-access curb cut on Hurley Avenue and one (1) full-access curb cut on Wootton Parkway.

The Wootton Parkway access point is controlled by a traffic signal. Additionally, the driveway that connects the property to Wootton Parkway also serves the adjacent residential neighborhood via Newtown Drive.

Vehicle access to the proposed project is consistent with existing conditions. As part of the proposed project the Hurley Avenue curb cut will shift southwest slightly, and the Wootton Parkway curb cut will remain in place with upgraded traffic signal equipment.

The proposed site access is shown in Figure 3.

Trip Generation Summary

Trip generation for the proposed redevelopment was based on the methodology outlined in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11th Edition and the City of Rockville Comprehensive Transportation Review (CTR) guidelines (2018).

Trip generation for the existing grocery land use was calculated using “Supermarket,” (ITE Land Use 850).

Trip generation for the proposed townhouses was calculated using “Multifamily Housing (Low-Rise)” (ITE Land Use 220) and trip generation for the proposed detached single units was calculated using “Single-Family Detached Housing” (ITE Land Use 210).

Trip generation for the retail component was calculated using “Fast Casual Restaurant” (ITE Land Use 930) as this is the highest traffic generator for a potential tenant in the retail.

Consistent with the CTR guidelines and as approved by City of Rockville Staff during the scoping process, pass-by reductions were applied to the existing retail use. Pass-by trips are those that would have otherwise traveled on a street adjacent to the development even if the development had not been constructed. The pass-by reduction percentages used in this study were based on the average pass-by percentages retrieved from ITE Trip Generation Handbook, 3rd Edition. The applied pass-by reductions for the existing grocery retail are 36 percent for the afternoon peak hour from Land Use 850 – Supermarket.

The total site-generated vehicular trip results with reductions are summarized in Table 1.

As shown in Table 1, the trip generation for the development program will generate 83 fewer net trips in the morning peak hour (69 fewer inbound trips, 14 fewer outbound trips), 163 fewer net trips in the afternoon peak hour (70 fewer inbound trips, 93 fewer new outbound trips), and 164 fewer net new trips in the Saturday peak hour (73 fewer inbound trips, 91 fewer outbound trips).

Table 1: Rockshire Village Site Trip Generation Summary

Updated Development Program Project Trip Generation*												
Land Use	Size		AM Peak Hour (veh/hr)			PM Peak Hour (veh/hr)			ADT (veh)	Sat Peak Hour (veh/hr)		
			In	Out	Total	In	Out	Total		In	Out	Total
Existing Site Trip Generation												
Retail with Grocery	52,000	sf	88	61	149	233	232	465	4,876	263	262	525
*Pass-by Reduction for Grocery (36% for PM, 26% for SAT)***			--	--	--	*-84*	*-84*	*-168*	--	*-68*	*-68*	*-136*
Total Primary Grocery Trips			88	61	149	149	148	297	4,876	195	194	389
Updated Development Program Trip Generation												
Residential (220)	29	units	8	24	32	21	12	33	261	6	6	12
Residential (210)	31	units	7	19	26	21	12	33	344	19	17	36
Subtotal Residential Trips (60 units)			*15*	*43*	*58*	*42*	*24*	*66*	*605*	*25*	*23*	*48*
Retail (Fast Casual)	5,500	sf	4	4	8	38	31	69	534	99	81	180
Updated Program Proposed Trips			19	47	66	80	55	135	1,139	124	104	228
Net New Primary Trips			**-69**	**-14**	**-83**	**-69**	**-93**	**-162**	**-3,737**	**-71**	**-90**	**-161**

*Latest edition of the ITE Trip Generation Manual used (11th ed.)

**Based on average pass-by percentages from ITE Trip Generation Handbook, 3rd Edition (PM from LU 850 Supermarket, SAT from LU 820 Shopping Center)

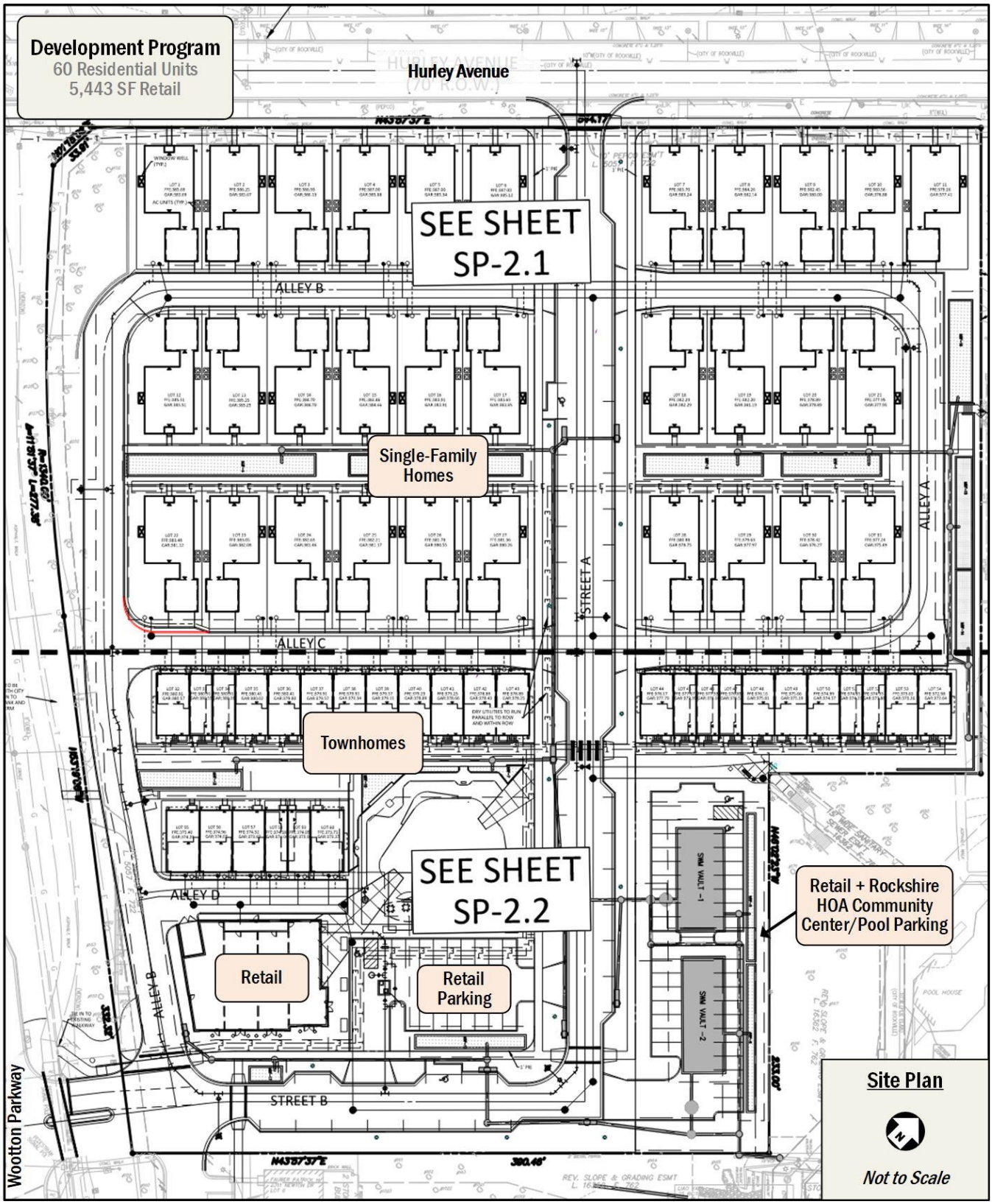


Figure 3: Site Plan

Proposed On-Site Transportation

This section reviews the proposed transportation components of the Rockshire Village, including the proposed parking facilities, pedestrian access, and bicycle access.

Vehicular Access and Parking Circulation

Vehicular access to the site is expected to occur via the Hurley Avenue access point and the Wootton Parkway access point.

The project includes an internal road and alley network that promotes efficient circulation on site. An internal road spine is proposed with Road A and Road B which link the two (2) access points. Road A bisects the site by intersecting Hurley Avenue and connecting to Road B to the southeast. Road B extends from Wootton Parkway to the designated Rockshire HOA Community Center/Pool parking area and intersects Road A.

The existing connection to the residential neighborhood to the east will be maintained via a Newton Drive and Road B intersection consistent with existing conditions.

The retail parking area is proposed to be north of the retail building across from the Rockshire HOA parking area and can be accessed from Road A and Road B.

The proposed internal roadway and alley network is shown on the site plan presented in Figure 3 in the Project Overview section.

Site Parking

The proposed development will provide a total of approximately 210 vehicle parking spaces across the site with the following breakdown:

- 120 residential private garage/driveway parking spaces
- 32 on-street parking spaces serving visitors to the site
- 28 parking spaces designated to the commercial component of the project
- 30 parking spaces designated to serve the Rockshire HOA Community Center/Pool

Pedestrian Access and Circulation

Pedestrian access to the site will be available from the access points with sidewalks on Hurley Avenue and Wootton Parkway.

The Millennium Trail, a shared use path, runs along the project site frontage on Wootton Parkway. The project includes a sidewalk connection to the Millennium Trail on the northwest side of the Road B/Wootton Parkway intersection.

A second connection is to the Millenium Trail is also proposed from Alley B between Alley C and Alley D across from the Townhomes.

Sidewalk connections to the sidewalk along the Hurley Avenue frontage are also proposed on both sides of Road A.

Curb ramps are proposed at all pedestrian sidewalk crossings at road grade.

Pedestrian access to the residential units is proposed via pedestrian-only walkways between the single-family homes and townhomes, parallel to the internal alley network.

Pedestrian access to the retail component is available from the internal sidewalk network. The Millennium Trail connection adjacent to Wootton Parkway provides the closest connection to the retail component from the public right-of-way.

The project also includes a sidewalk connection from the internal sidewalk network to the existing Rockshire HOA Community Center/Pool walkway which will facilitate convenient and direct access between the Rockshire HOA parking area and the community center.

Pedestrian access to the adjacent institutional use (church) is also proposed to be maintained with an improved connection subject to coordination with the church property owner.

The proposed internal sidewalks provide comfortable and convenient access between the project and the surrounding community. Internal connectivity is also convenient with a sidewalk network that connects the residential and retail land uses.

Proposed Bicycle Access and Facilities

Primary bicycle access to the site is expected to occur via the access points on Hurley Avenue and via the Millennium Trail on Wootton Parkway.

Hurley Avenue is a signed shared roadway and as requested by City of Rockville Staff, sharrow markings will be installed on the northeastbound travel lane along the property frontage as part of the project.

Under the City of Rockville's Zoning Ordinance, two (2) short-term bicycle parking spaces per 5,000 SF of GFA and two (2) long-term bicycle parking spaces per 12,000 SF of GFA are required for the project's retail component.

Given that the proposed development consists of up to 5,500 SF of general retail, a total of two (2) short-term bicycle parking spaces are required for the entire project. The proposed development will provide bicycle parking spaces meeting the zoning requirements. A bicycle rack will be placed near the main entrance of the general retail providing two (2) short-term bicycle parking spaces.

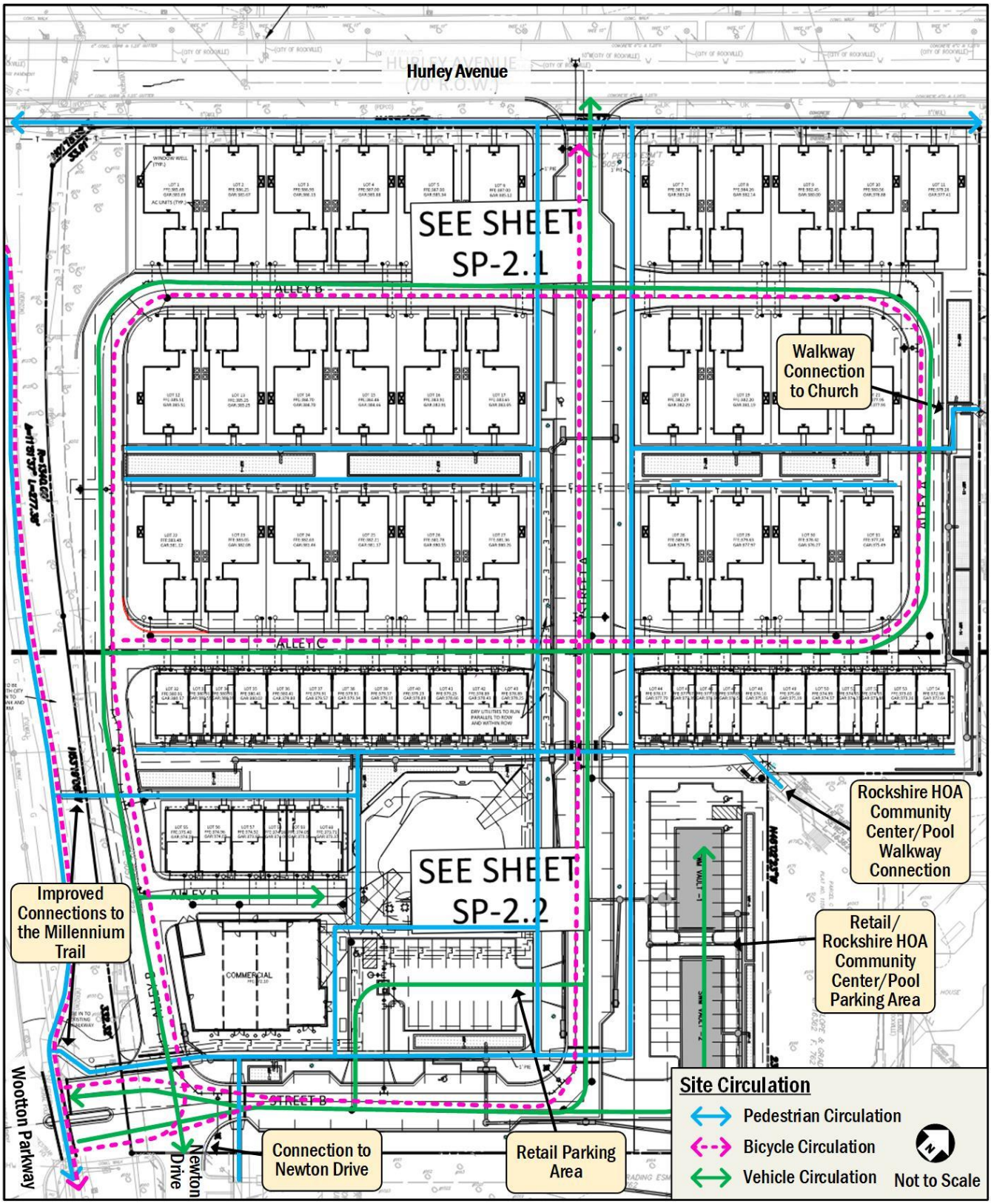


Figure 4: Site Circulation

Study Area and Transportation Network Overview

This section specifies the transportation study area of this project and includes a summary of the major multimodal transportation characteristics of the study area.

This section concludes:

- Three (3) intersections are included in the study area for analysis.
- The site is surrounded by a robust transportation system that will connect the proposed project's residents, visitors, and retail staff and visitors to the surrounding areas.
- The site is well-served by public transportation, being adjacent to three (3) Montgomery County Ride On lines.
- There is existing bicycle infrastructure surrounding the site including the Carl Henn Millennium Trail and a signed shared roadway along Hurley Avenue.
- Pedestrian facilities are available along anticipated major walking routes.

Study Intersections

The City of Rockville CTR guidelines specify the minimum number of intersections to be analyzed and the minimum radius of the transportation study area based on the new peak hour site trips before reductions are applied.

As shown in Table 1, the project generates fewer trips than the existing land use overall and therefore vehicular capacity analysis is not required for the project per the City's CTR guidelines as the project does not generate 30 or more trips.

Per City Staff request, a supplemental vehicular capacity analysis is included in this report to determine the volume to capacity ratio and the level of service (LOS) of the project's access points and the Hurley Avenue and Wootton Parkway intersection.

Consistent with the approved scope, the vehicular capacity analysis was conducted for the weekday morning and afternoon commuter peak hours, using the system peak hours at three (3) study area intersections.

Per the scoping agreement letter approved by the City and included in the Technical Attachments, the following intersections, shown in Figure 5, were chosen for analysis:

1. Hurley Avenue & Wootton Parkway
2. Hurley Avenue & Site Driveway
3. Wootton Parkway & Site Driveway

Major Transportation Features

Overview of Regional Access

The site has ample access to regional transportation options, shown in Figure 6, that connect the site to destinations within Maryland, Virginia, and the District of Columbia.

The site has direct frontage on Wootton Parkway, an arterial roadway, and on Hurley Avenue, a primary residential class I roadway. These two roadways connect the site to I-270, with further connections to the Capital Beltway (I-495) and the Intercounty Connector (MD-200), providing ample connectivity to the Washington DC Metropolitan area and its inner suburbs, as well as regional destinations in Maryland and Virginia.

The site is located approximately 2.9 miles from the Rockville Metrorail station, which is served by the Red Line. The Red Line runs from the Shady Grove station in Rockville to Glenmont in Silver Spring by way of downtown Washington, DC. The Red Line connects with the other five (5) Metrorail lines, allowing access to much of the Washington, DC metropolitan area via transit. The Rockville Metrorail Station is also served by MARC's Brunswick Line (Commuter Rail) and Amtrak (inter-city service). The Brunswick Line provides peak hour access to and from downtown Washington, DC.

Overall, the site has excellent access to regional transportation options, making it convenient to travel between the site and destinations in Maryland, Virginia, the District, and beyond.

Overview of Local Access

There are local transportation options near the site that serve vehicular, transit, walking, and bicycling trips.

Table 2 provides a list of the roadways that provide direct access to the project.

The Montgomery County Ride On bus systems provide local transit service adjacent to the site. Three (3) Montgomery County Ride On routes service the site, providing connections to Metrorail and other destinations.

The site is located adjacent to several bicycle facilities, including the Carl Henn Millennium Trail, and a signed shared roadway along Hurley Avenue. The Carl Henn Millennium Trail runs in a loop around the City of Rockville, connecting to various other bicycle facilities. The signed share roadway on Hurley Avenue

connects the project to Woottons Mill Park, where additional bicycle facilities can be accessed.

The project site is surrounded by a pedestrian network that connects the project to nearby destinations. Most roadways within a quarter-mile radius of the project site provide sidewalks, crosswalks, and curb ramps. A detailed review of existing pedestrian access and infrastructure is provided in the Existing Conditions section of this report.

Overall, the site is surrounded by a local transportation network that allows for convenient transportation options via transit, bicycle, walking, or vehicular modes.

Table 2: Summary of Study Area Roadways

Roadway	Jurisdiction	Functional Classification	Rural vs Urban	# of Lanes	Speed Limit
Wootton Parkway	City of Rockville	Arterial	Urban	2-3	35 mph
Hurley Avenue	City of Rockville	Primary Residential	Urban	2	25 mph

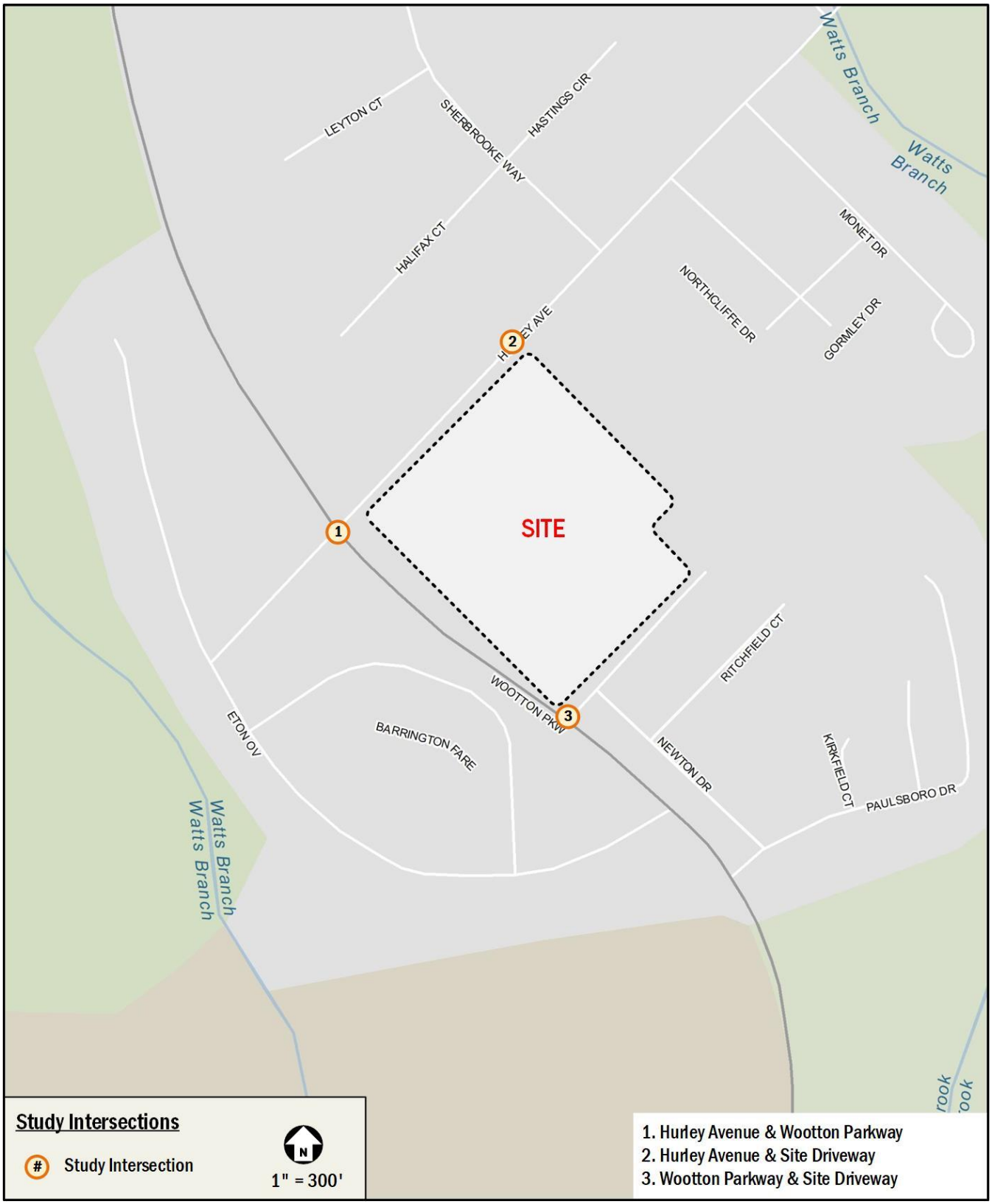


Figure 5: Study Intersections

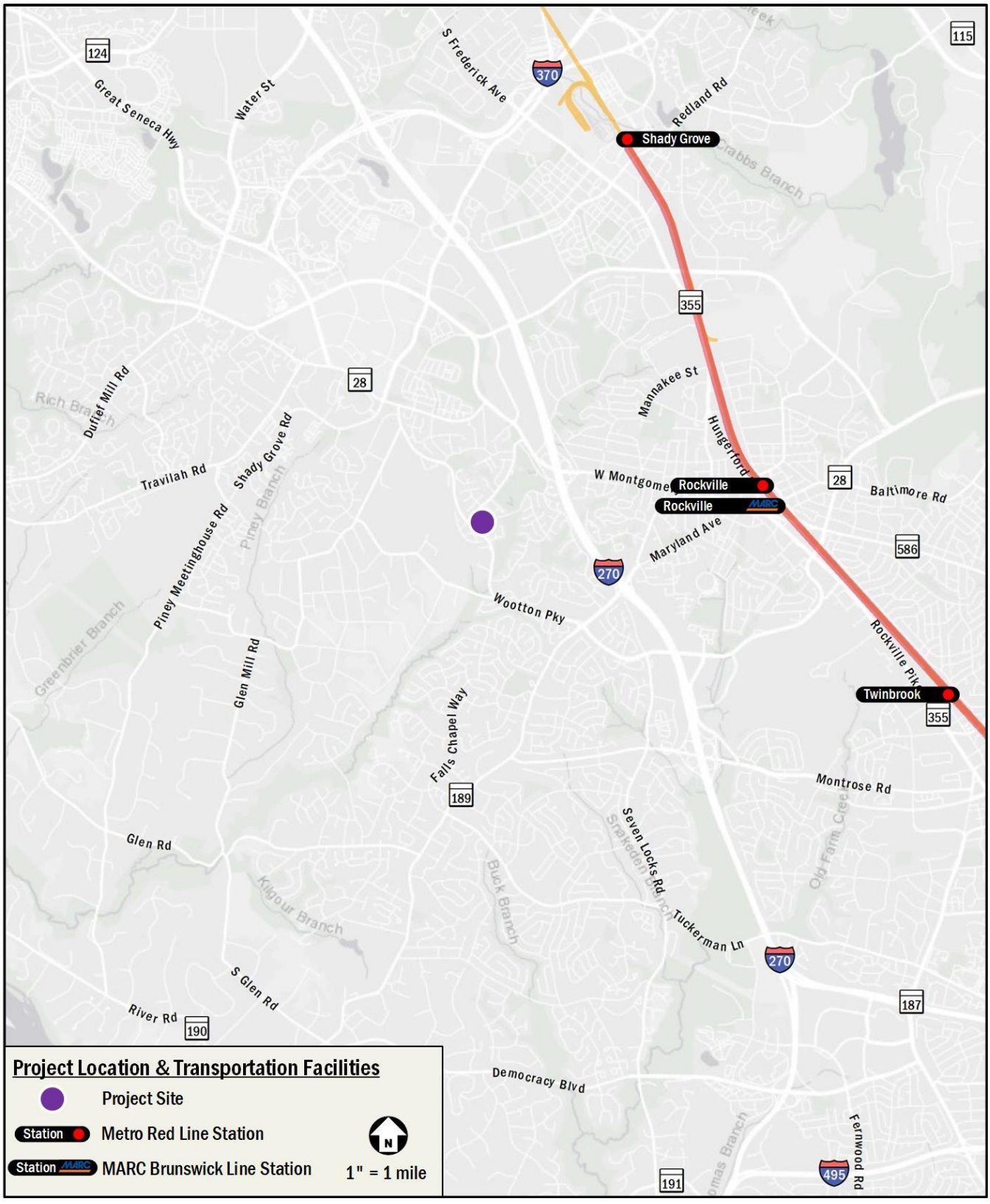


Figure 6: Project Location & Transportation Facilities

Existing Conditions

This section provides a summary of an analysis of the existing roadway capacity in the study area. The capacity analysis focuses on the morning and afternoon commuter peak hours as determined by the existing traffic volumes in the study area. This section also outlines the existing conditions of transit, pedestrian, and bicycle facilities in the vicinity of the site.

Land Parcel

The project site is located at 2401 Wootton Parkway and is directly accessible from Wootton Parkway and Hurley Avenue. The existing land use is retail consisting of approximately 52,000 square feet dedicated to grocery use.

Figure 1 provides an overview of the site location and Table 2 provides a list of the local roadways in the project study area, as described in previous sections of this report.

Existing Traffic Volumes

Weekday peak hour volumes used in this study are based on turning movement count data collected at three (3) study intersections on December 14, 2022, at the following locations:

- Wootton Parkway & Hurley Avenue
- Hurley Avenue & Site Driveway
- Wootton Parkway & Site Driveway

Figure 7 shows the existing peak hour volumes at the three (3) study intersections. Turning movement count data is available in the Technical Attachments.

Existing Geometry and Operations

Field observations and City of Rockville data confirmed the existing lane configurations and traffic controls at the study intersections. Existing signal timings and offsets were obtained from the City of Rockville.

The lane configurations and traffic controls for the existing conditions are shown in Figure 8. Signal timing data provided by the City of Rockville are included in the Technical Attachments.

Intersection Impact Thresholds and Capacity

The City's CTR guidelines outline the intersection impact thresholds based on road classification, as shown in Table 3.

Intersection capacity for each of the study intersections was calculated using Table 4 from the City's CTR guidelines.

Table 3: Intersection Impact Thresholds for Non-TOAs

Road Classification*	Volume/ Capacity Threshold	Corresponding LOS
Primary Residential – Class II (Minor Collector), Secondary Residential	0.79 79%	C
Major Arterials (Except where two Major Arterials connect), Minor Arterials, Primary Residential – Class I (Major Collector), Primary Industrial, Secondary Industrial	0.89 89%	D
Business District roads, freeway ramps, and for locations where two Major Arterials intersect	0.99 99%	E

*At intersections where two or more roads with different road classifications meet, the LOS threshold will be established based on the higher roadway classification (the classification where more congestion is acceptable).

Table 4: Intersection Capacity

Cycle Length (seconds)	Number of Phases		
	2	3	4 or more
89 or less	1500	1400	1300
90 - 119	1600	1500	1400
120 - 149	1650	1600	1500
150 or more	1700	1650	1550

Table 5 summarizes the thresholds for corresponding LOS and intersection capacity for each study intersection, based on roadway classification, traffic control, signal phase, and cycle length.

Table 5: Summary of Capacity Thresholds for Study Intersections

Intersection	Classification	Traffic Control	Signal Phases	Cycle Length		Intersection Capacity		v/c Threshold	LOS Threshold
				AM	*PM*	*AM*	*PM*		
1. Hurley Avenue & Wootton Parkway	Arterial & Primary Residential	Signalized	6	80	80	1300	1300	0.99 (99%)	E
2. Hurley Avenue & Site Driveway	Primary Residential	Unsignalized	2	90	90	1600	1600	0.89 (89%)	D
3. Wootton Parkway & Site Driveway	Arterial	Signalized	4	80	80	1300	1300	0.99 (99%)	E

Existing Conditions Capacity Analysis

Table 6 summarizes the capacity analysis results for existing conditions for the commuter morning and afternoon peak hours. Detailed CLV analyses are provided in the Technical Attachments.

It was found that under existing conditions, no intersections exceed acceptable capacity thresholds based on the CLV methodology.

Table 6: Summary of Existing Conditions Intersection Capacity Results

Intersection	MOE	Existing	
		AM	PM
1. Hurley Avenue & Wootton Parkway	CLV	593	600
	v/c	37%	40%
	LOS	A	A
2. Hurley Avenue & Site Driveway	CLV	242	110
	v/c	15%	7%
	LOS	A	A
3. Wootton Parkway & Site Driveway	CLV	666	534
	v/c	42%	36%
	LOS	A	A

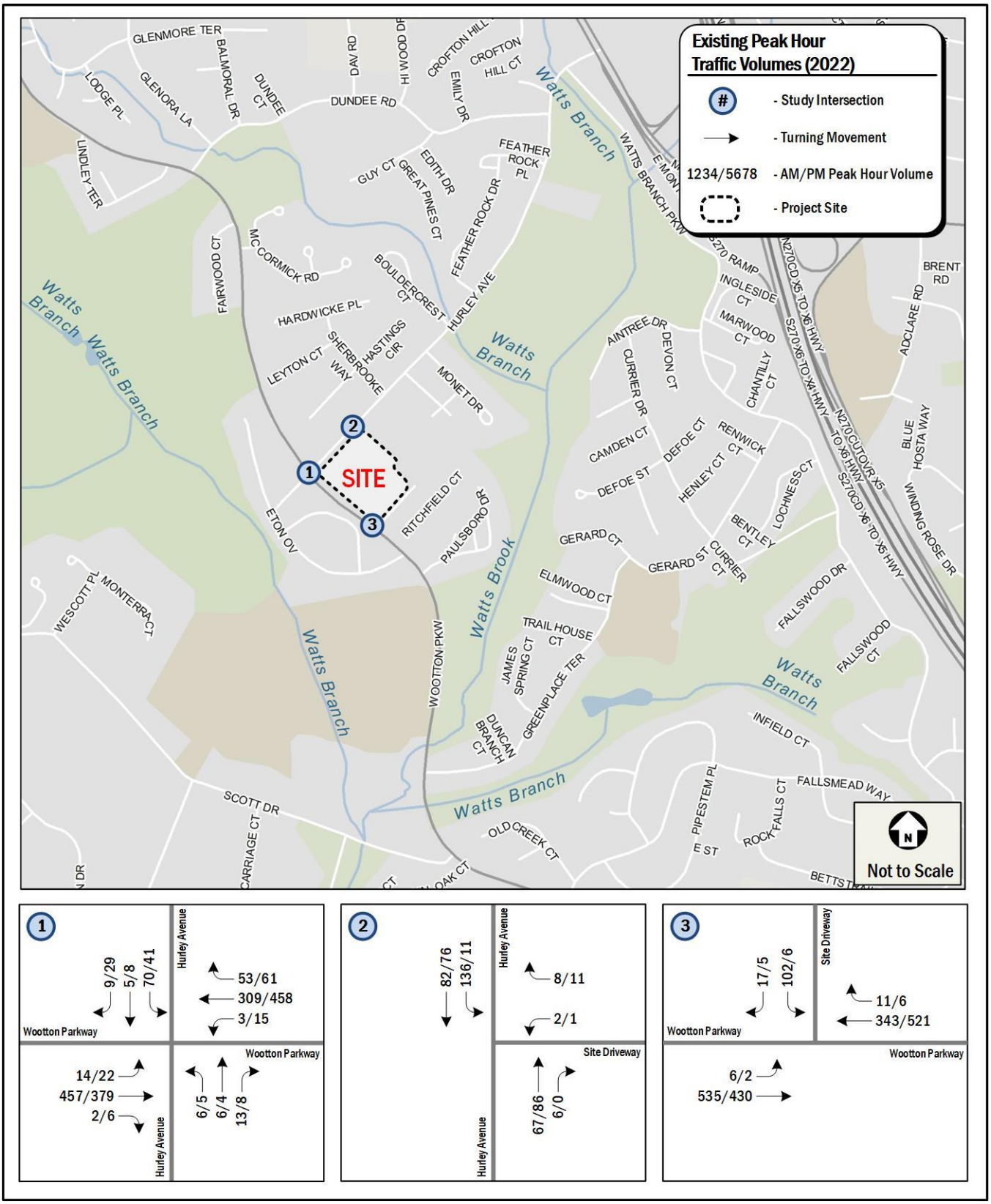


Figure 7: Existing Peak Hour Traffic Volumes

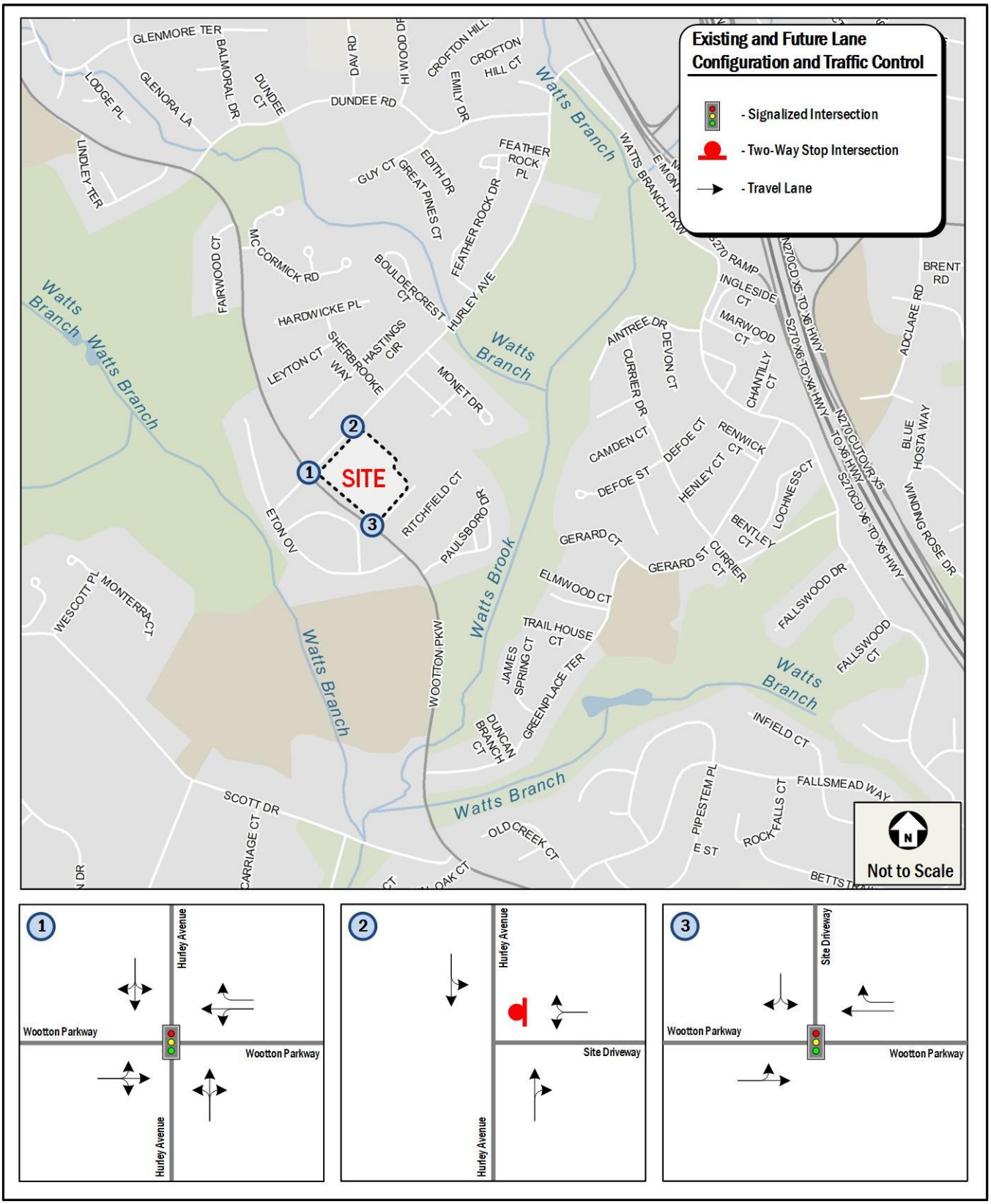


Figure 8: Existing and Future Lane Configurations and Traffic Control

Existing Transit, Pedestrian, and Bicycle Facilities

Existing Pedestrian Facilities

Pedestrian Study Area

Facilities within a quarter mile of the project site were evaluated. The project site has direct access to transit located along Wootton Parkway and Hurley Avenue. There are minor areas of concern within the study area that impact the quality of and attractiveness of the walking environment.

Pedestrian Infrastructure

A review of pedestrian facilities surrounding the proposed project shows that most facilities provide an adequate walking environment. Figure 9 shows a detailed inventory of the existing pedestrian infrastructure surrounding the site. Sidewalks, crosswalks, and curb ramps are evaluated based on the City standards and guidelines in addition to ADA standards.

The City of Rockville minimum sidewalk widths guidelines are shown in Table 7. Per the City of Rockville's Complete Streets policy, the preferred sidewalk width minimum is 5 feet. Where the preferred width is not attainable due to right-of-way constraints, the City defers to ADA standards. Wider sidewalks are desirable in areas with high pedestrian volumes and where there is no buffer between the walking path and high speed/volume roadways.

Figure 10 shows the existing conditions at each study intersection with respect to crosswalks, including the presence of pedestrian automated push buttons. A streetlight inventory around the site between study intersections is presented on Figure 11.

Table 7: Sidewalk Guidelines

Source	Minimum Sidewalk Width	Minimum Buffer Width
Zoning Ordinance Sec. 25.17.05.	6 ft	7 ft
Complete Streets: Priority Area A	6 ft - 10 ft	4 ft – 8 ft
Complete Streets: Priority Area B	4 ft - 8 ft	4 ft - 6 ft
Complete Streets: Priority Area C	5 ft	6 ft - 10 ft

All roadways in the ¼ mile study area were considered "residential" due to the surrounding land use. Additionally, most roadways outside of Wootton Parkway and Hurley Avenue in the study area are low volume and low speed residential streets. A few sidewalks surrounding the project site do not comply with standards due to narrow widths and/or buffer spaces. Additionally, the majority of the low-volume/low-speed residential streets provide sidewalk facilities on one side only.

ADA standards require that all curb ramps be provided wherever an accessible route crosses a curb and must have a detectable warning. Additionally, curb ramps shared between two crosswalks are not desired. As shown in Figure 9, under existing conditions every intersection near the site has curb ramps on every corner, but some curb ramps lack a detectable warning. Some low-volume residential streets also lack crosswalks on one or more legs of the intersection. However, the two (2) intersections on site frontage both have ADA-compliant curb ramps and crosswalks at all legs.

Pedestrian Crossing Distance Analysis

A pedestrian crossing distance analysis was conducted at the signalized study intersections to determine the existing crossing conditions and signal timing necessary to meet the required pedestrian crossing needs. Crosswalk measurements were taken using Montgomery County GIS (MCATLAS) to determine the pedestrian crossing distances, measured curb to curb at each intersection. Using these measurements, the required pedestrian crossing time was calculated by dividing the distance by an average walking speed of 3.5 feet per second. Pedestrian crossing times were provided by the City of Rockville via signal timing sheets.

Table 8 shows the results of the pedestrian crossing distance analysis. Based on the results of the analysis, pedestrians are provided with sufficient crossing time at all signalized intersections.

Table 8: Pedestrian Crossing Distance Analysis Results

Pedestrian Crossing Leg	Crossing Distance (ft)	Required Crossing Time (sec)	Provided Crossing Time AM (sec)	Provided Crossing Time PM (sec)
Wootton Parkway & Hurley Avenue				
North leg (across Hurley Ave)	40	12	45	45
South leg (across Hurley Ave)	41	12	45	45
East leg (across Wootton Pkwy)	39	12	16	19
West leg (across Wootton Pkwy)	36	11	24	21
Wootton Parkway & Site Driveway*				
North Leg	49	14	17	17
East Leg	44	13	20	20

*The provided crossing times are the minimum provided times as the site driveway movements and the ped phase on the east leg operate on recall.

Existing Bicycle Facilities

The site has access to several bicycle facilities, including the Carl Henn Millennium Trail, and a signed shared roadway along Hurley Avenue. The Carl Henn Millennium Trail runs in a loop around the City of Rockville, connecting to various other bicycle facilities. The signed share roadway on Hurley Avenue connects the site to Woottons Mill Park, where more bicycle trails can be found.

The Rockshire Village development will also add sharrow markings to Hurley Avenue, in addition to the existing shared roadway signage.

Existing Transit Service

The site is well served by local and regional transit services. The Montgomery County Ride On bus systems provide local transit service adjacent to the site. Three (3) Montgomery County Ride On routes (the 45, 56, and 301 routes) service the site, providing connections to Metrorail and other destinations.

Additionally, the site is under three (3) miles from the Rockville Metrorail, MARC, and Amtrak station. The project site is located less than 10 minutes (2.9 miles) from the Rockville Metrorail station, which is served by the Red Line. The Red Line runs from the Shady Grove station in Rockville to Glenmont in Silver Spring by way of downtown Washington, DC. The Red Line connects with the other five (5) Metrorail lines, allowing access to much of the Washington, DC metropolitan area via transit. The Rockville Metrorail Station is also served by MARC's Brunswick Line (Commuter Rail) and Amtrak (inter-city service). The Brunswick Line provides peak hour access to and from downtown Washington, DC.

Combined, these transit services provide ample local, city wide, and regional transit connections and link the site with major cultural, residential, employment, and commercial destinations throughout the region. Figure 13 shows the nearby transit routes and stops in the study area.

Table 9 shows a summary of the bus route information for the routes that serve the site, including service hours, headways, and distance to the nearest bus stop.

Table 10 shows a detailed inventory of the amenities available at each of the existing bus stop within the transit study area (1/4 mile from the site).

Table 9: Local Bus Route Information

Route Number	Route Name	Service Hours at Stop Closest to Site			Headway (minutes)	Walking Distance to Nearest Stop
		Weekdays	Saturdays	Sundays		
45	Rockville Regional Transit Center-Twinbrook/Rockville Senior Center	5:26am-8:34pm	6:35am-8:30pm	N.A.	30 - 45	On site
56	Rockville-Lakeforest	5:18am-10:09pm	6:23am-9:23pm	6:28am-9:27pm	15 - 45	On site
301	Rockville-Tobytown	6:19am-6:57pm	6:19am-6:57pm	6:19am-6:57pm	90 - 95	On site

Table 10: Bus Stop Inventory

Location	Stop ID	Routes Served	Amenities								
			Bus stop flag	Route map & sched-ule	Land-ing pad	Side-walk	Bench	Shelter	Dynam-ic info sign	Light-ing	Trash Recp.
Wootton Parkway & Hurley Avenue (NB)	27654	45, 56, 301	●		●	●	●	●			●
Wootton Parkway & Hurley Avenue (SB)	27614	45, 56, 301	●		●	●				●	●
Wootton Parkway & Site Driveway (WB)	27652	56, 301	●		●	●					●
Wootton Parkway & Site Driveway (EB)	27616	56, 301	●		●	●				●	●
Wootton Parkway & Paulsboro Drive (NB)	27650	56, 301	●		●	●	●	●		●	●
Wootton Parkway & 2100 (SB)	27618	56, 301	●		●	●				●	
Hurley Avenue & Wootton Parkway (NB)	23344	45	●		●	●					
Hurley Avenue & Wootton Parkway (SB)	17030	45	●		●	●				●	
Hurley Avenue & Northcliffe Drive (NB)	23346	45	●		●	●					
Hurley Avenue & Sherbrooke Way (SB)	17029	45	●		●	●				●	
Hurley Avenue & Monet Drive (NB)	23348	45	●		●	●					
Hurley Avenue & Bouldercrest Court (SB)	17028	45	●		●	●					
Hurley Avenue & Feather Rock Drive (NB)	17027	45	●		●	●					
Hurley Avenue & Feather Rock Drive (SB)	23350	45	●		●	●					

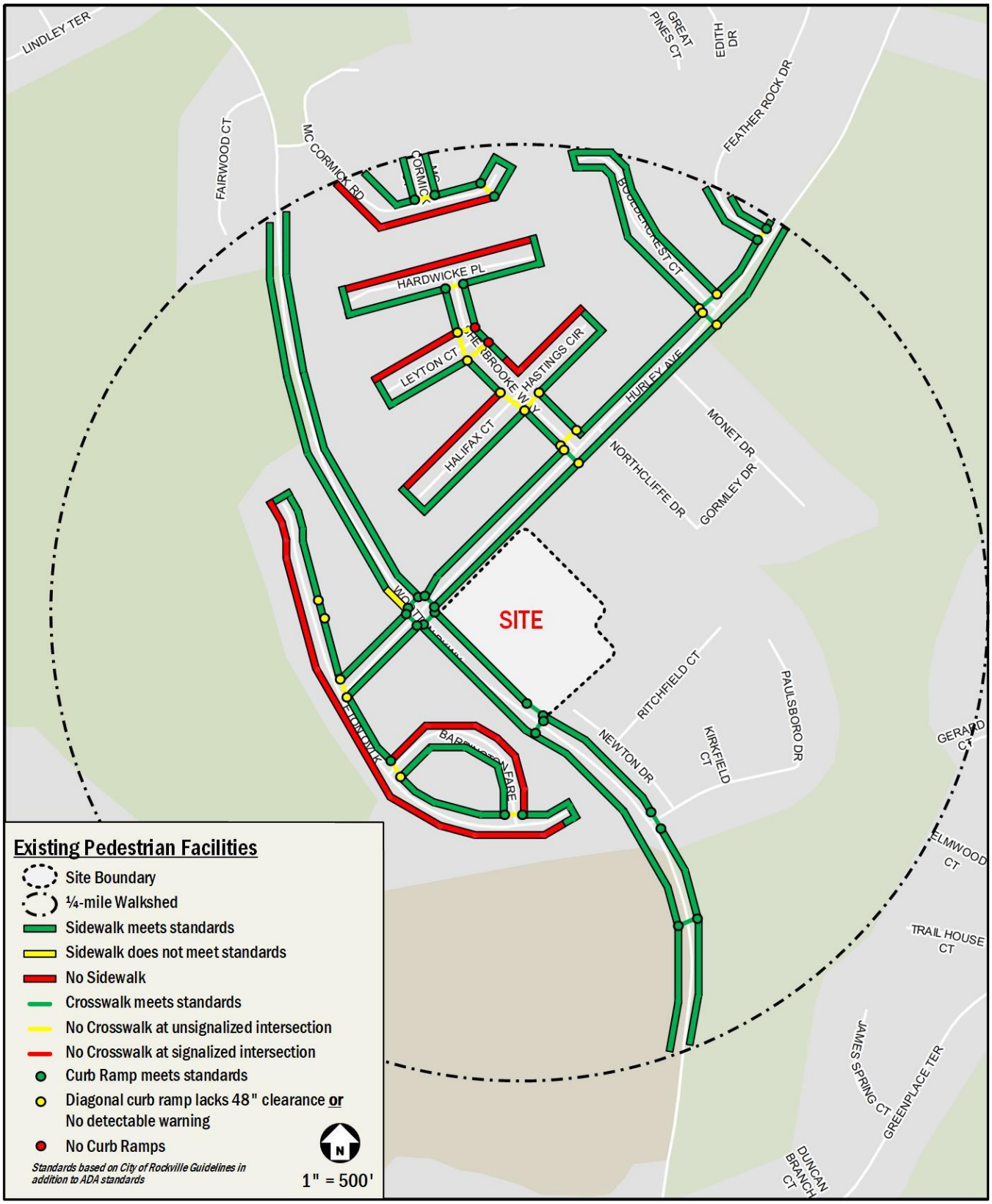


Figure 9: Existing Pedestrian Facilities

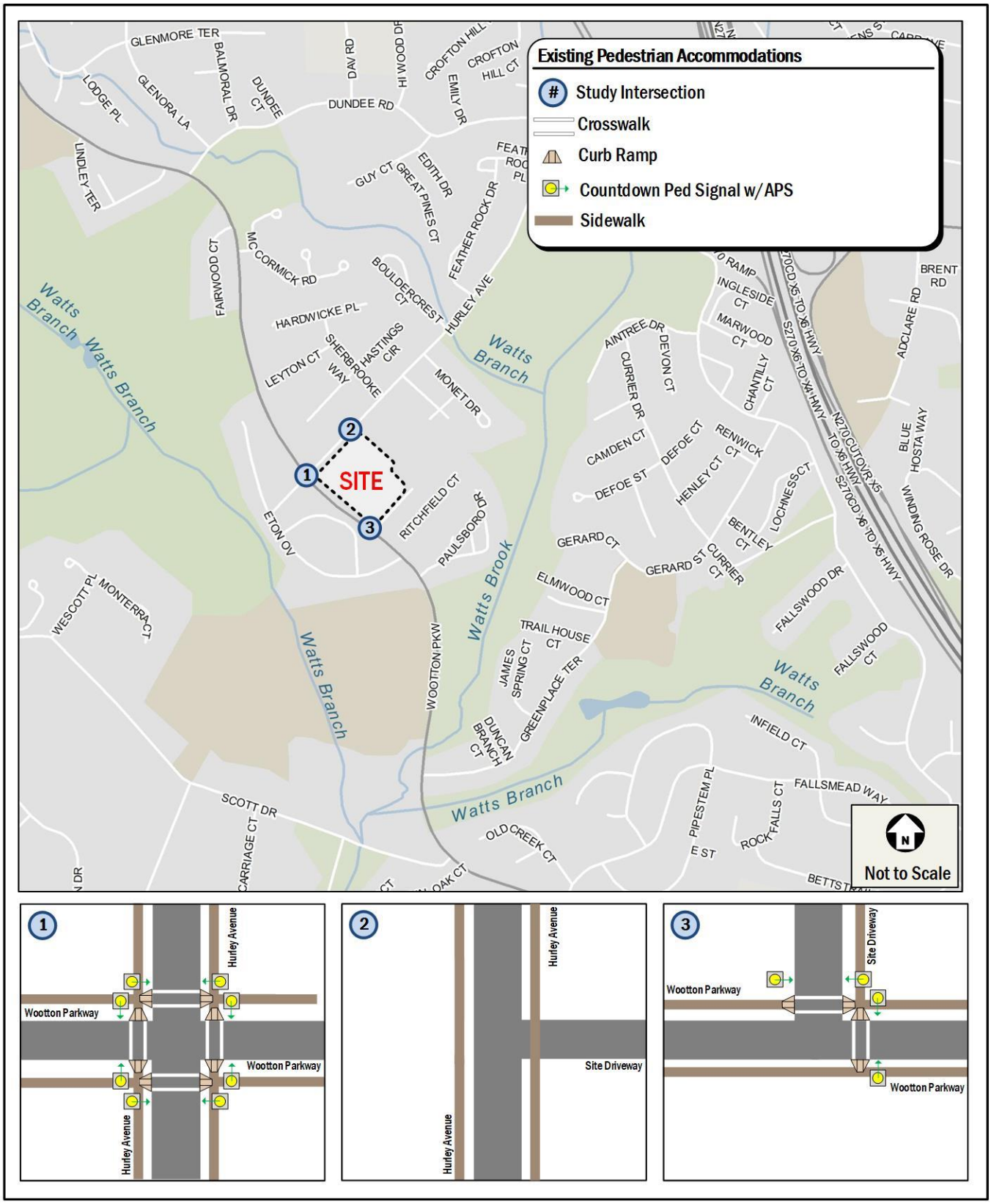


Figure 10: Existing Pedestrian Accommodations

Figure 11: Streetlight Inventory

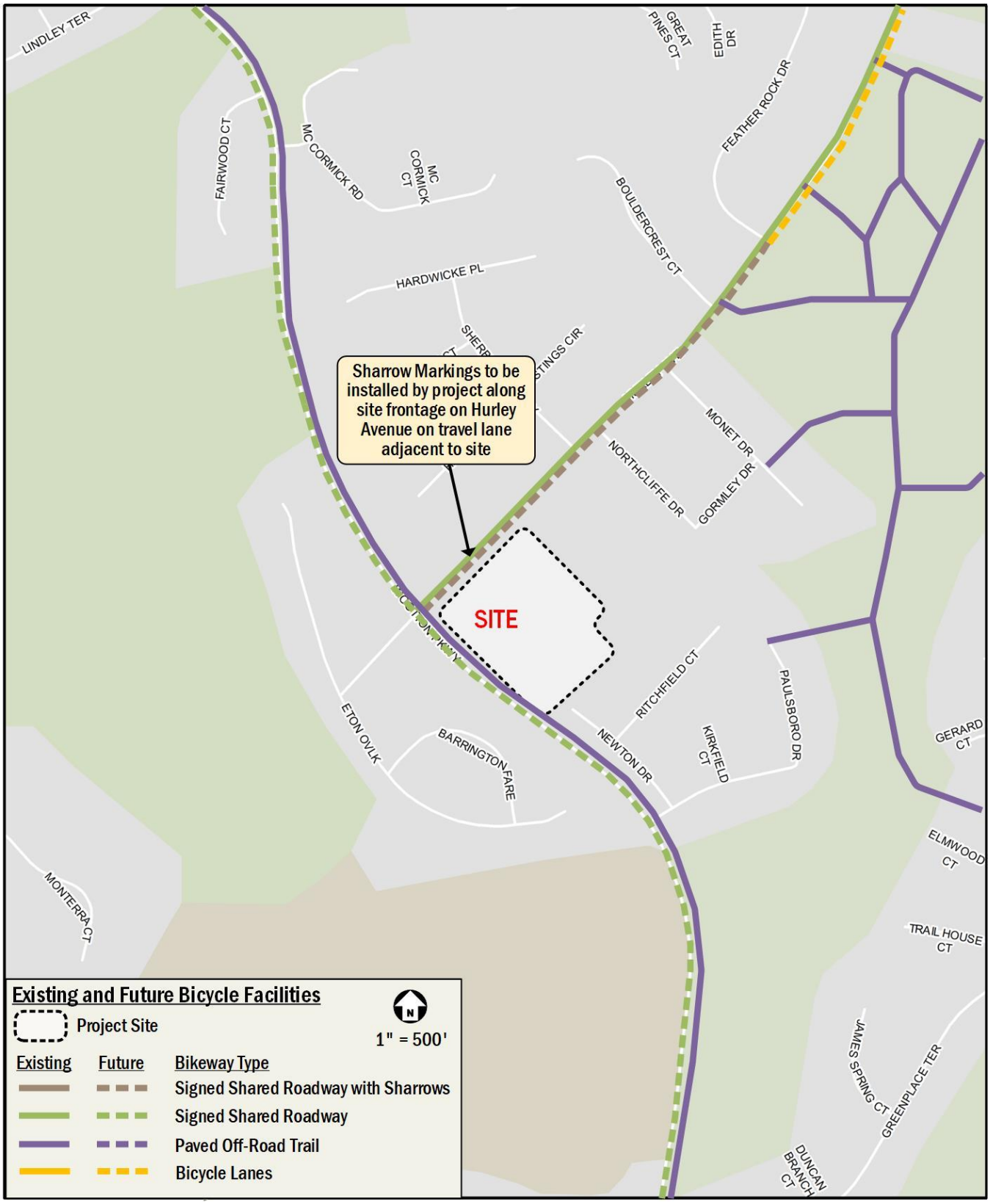


Figure 12: Existing and Future Bicycle Facilities

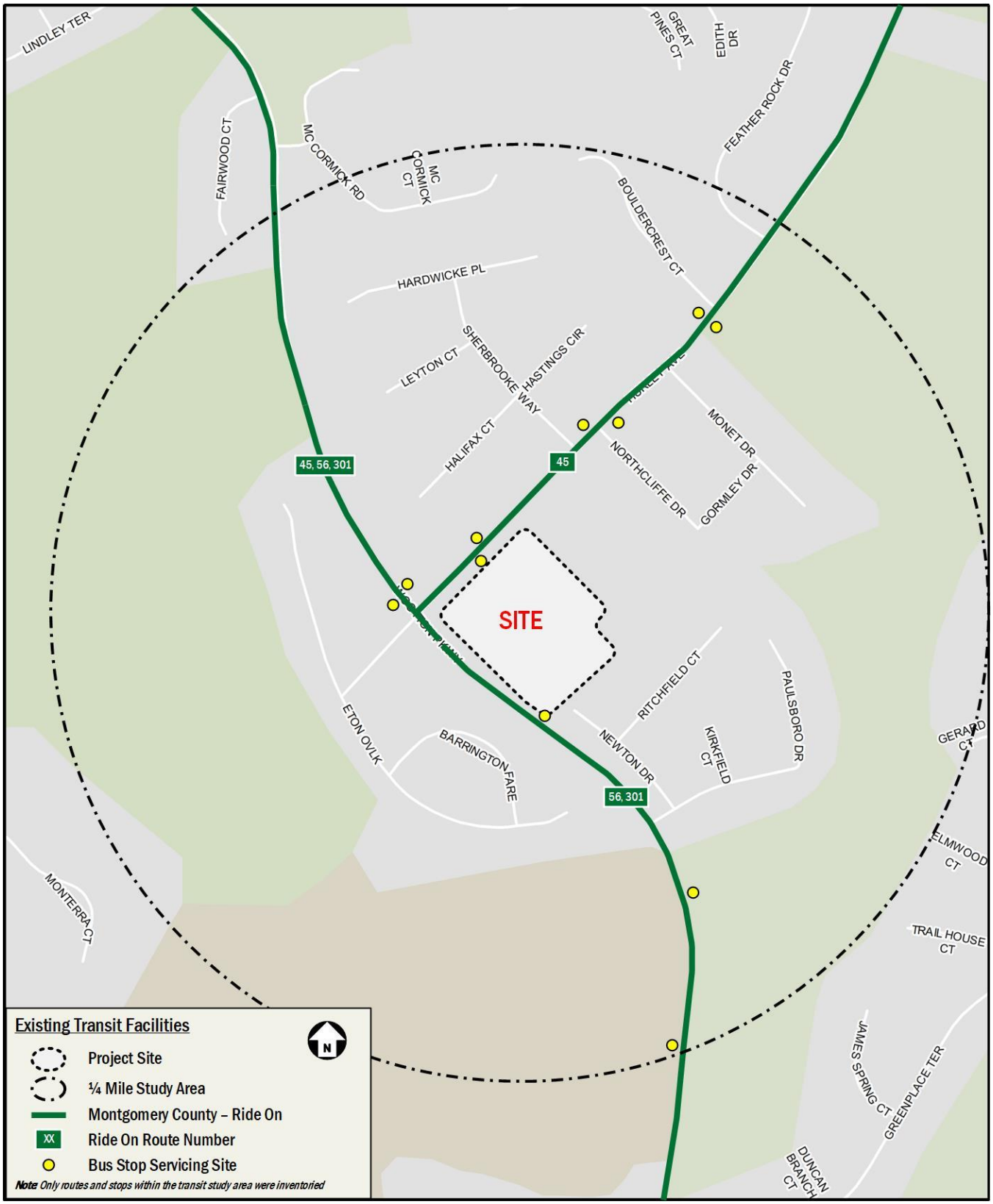


Figure 13: Existing Transit Facilities

Background Conditions

This section evaluates the forecasted 2025 background traffic conditions in the study area, including planned multimodal improvements to the transportation network by other agencies around the project site. Traffic projections for the background conditions consist of:

- Existing peak hour traffic volumes at identified study intersections,
- The addition of approved site-generated trips based on the existing land use,
- Rerouted cut-through site traffic,
- Approved development projects, and
- Traffic growth from land uses outside the transportation study area.

Approved Grocery Land Use Trips

The approved trips generated by the existing grocery were added into the background conditions as approved by City of Rockville Staff during the scoping process. Grocery pass-by trips were also included in the analysis.

Trip generation for the grocery store was calculated using ITE's *11th Edition Trip Generation Manual*, specifically Land Use Code 850, "Supermarket", assuming 52,000 square feet of grocery store space. The distribution assumptions for the existing grocery trips were vetted by City of Rockville Staff during the scoping process and are presented in Figure 22 and in Figure 23. These volumes are shown in Figure 14.

Based on the CTR guidelines, pass-by reduction is allowed to be applied to the existing retail use. Pass-by trips are those that would have otherwise traveled on a street adjacent to the development even without the existing grocery store. The pass-by reduction percentages used in this study were based on the average pass-by percentages retrieved from ITE Trip Generation Handbook, 3rd Edition. The applied pass-by reductions for the existing grocery retail are 36 percent for the afternoon peak hour and are shown in Figure 15.

The total approved grocery trips with cut-through are presented in Figure 16.

Existing Cut-Through Traffic

Under existing conditions and as shown in Figure 7, high levels of cut-through traffic travel through the site during the morning peak hour by entering at the Hurley Avenue access point and exiting at the Wootton Parkway access point. During the morning peak hour cut-through traffic that does not exceed 15 vehicles is also observed in the opposite direction with vehicles entering at the Wootton Parkway access point and exiting at the Hurley Avenue access point.

During the afternoon peak hour, the number of vehicles entering and exiting the site at the Hurley Avenue access point and cutting through the project site does not exceed 25 vehicles.

As the project will be designed to feature low-speed/low-volume residential roadways that are not conducive to high travel speeds or cut-through travel patterns, the existing cut-through trips were rerouted and assigned to Hurley Avenue and Wootton Parkway.

Because the Background Conditions include the approved trips generated by the existing grocery store, it is assumed that the grocery store operations and internal traffic circulation do not support cut-through travel patterns through the project site, therefore the existing cut-through trips were removed and rerouted under Background Conditions.

The rerouted cut-through trips are shown in Figure 17.

Background Developments

Following national methodologies and City of Rockville guidelines, a background development must meet the following criteria to be incorporated into the analysis:

- Be located in the study area, defined as having an origin or destination point within the cluster of study area intersections;
- Have entitlements; and
- Have a construction completion date prior or close to the proposed development.

Based on these criteria, no background development projects were identified in the vicinity of the Rockshire Village development.

Background Regional Traffic Growth

While background developments represent local traffic changes, regional traffic growth is typically accounted for using growth rates. The growth rates used in this analysis were derived using MDOT SHA historical AADT data for the past 10 years, included in the technical attachments. Where negative growth was observed, a conservative 0.10 percent annual growth rate was applied to the roadway. Growth rate assumptions for background

conditions are shown in Table 11. The traffic volumes generated by the inherent growth along the network are shown in Figure 18.

Table 11: Growth Rate Data and Applied Annual and Total Growth Rates

Road	Average Annual AADT Growth 2011-2020	Annual Growth Rate Assumption	Proposed Total Growth Between 2022 and 2025
Hurley Ave	-2.53%	0.10%	0.30%
Wootton Pkwy	-2.19%	0.10%	0.30%

Background Geometry and Operations Assumptions

Following national and City of Rockville CTR methodologies, a background improvement must meet the following criteria to be incorporated into the analysis:

- Be funded; and
- Have a construction completion date prior to or close to the proposed development.

Based on these criteria, the following improvements are considered background improvements:

- Hurley Avenue Sharrow Pavement markings between Wootton Parkway and Feather Rock Drive:
  - This improvement is identified in the Bikeway Master Pian Implementation Strategy to be constructed in fiscal year 2023 based on Hurley Avenue's paving schedule.
- Wootton Parkway Sharrow Pavement markings between Darnestown Road and Rockville Pike:
  - This improvement is identified in the Bikeway Master Pian Implementation Strategy to be completed in fiscal year 2023.

The identified background projects do not affect the study intersections' geometry or operations. The planned bicycle facilities are presented in Figure 12.

The analyzed background geometry and operations at all study intersections are consistent with the existing geometry and operations shown in Figure 8.

Background Conditions Capacity Analysis

In summary the Background Conditions reflect the following traffic volumes:

- Existing peak hour traffic volumes at identified study intersections shown in Figure 7,
- The addition of approved site-generated trips based on the existing land use shown in Figure 16,
- Rerouted cut-through site traffic shown in Figure 17
- Traffic growth from land uses outside the transportation study area shown in Figure 18.

The total peak hour traffic volumes for the 2025 background conditions are shown in Figure 19.

Intersection capacity analyses were performed for the background conditions at the study intersections shown in Figure 5 for the morning and afternoon peak hours using the CLV methodology as outlined in the Appendix E of the CTR guidelines. Table 12 summarizes the capacity analysis results for background conditions. Detailed CLV analyses are provided in the Technical Attachments.

As Table 12 shows, all study intersections operate at acceptable levels of service under background conditions.

Table 12: Summary of Background Conditions Intersection Capacity Results

Intersection	MOE	Existing		Background	
		AM	PM	AM	PM
1. Hurley Avenue & Wootton Parkway	CLV	593	600	786	689
	v/c	37%	40%	49%	46%
	LOS	A	A	A	A
2. Hurley Avenue & Site Driveway	CLV	242	110	237	155
	v/c	15%	7%	15%	10%
	LOS	A	A	A	A
3. Wootton Parkway & Site Driveway	CLV	666	534	832	911
	v/c	42%	36%	52%	61%
	LOS	A	A	A	A

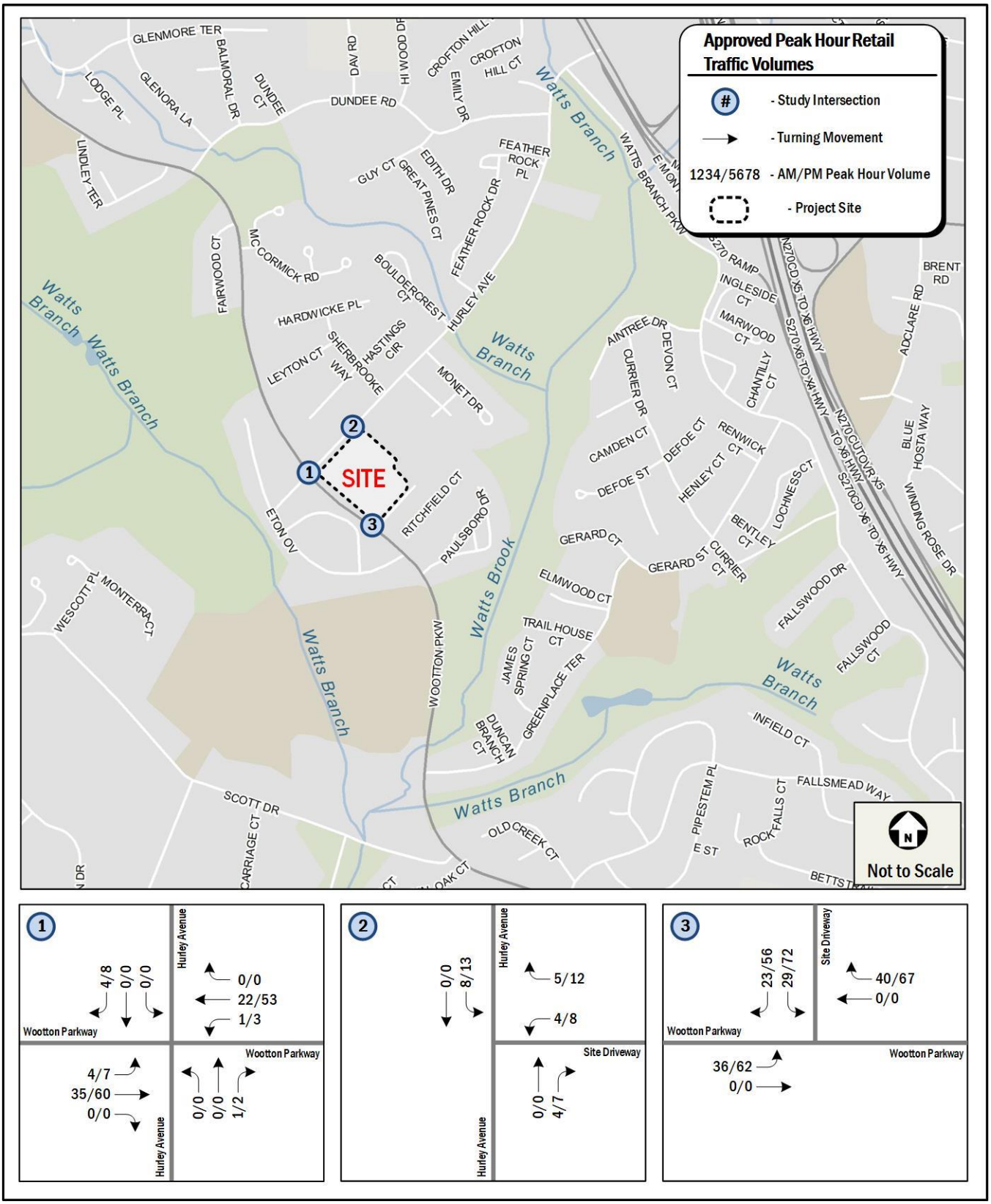


Figure 14: Approved Peak Hour Retail Traffic Volumes

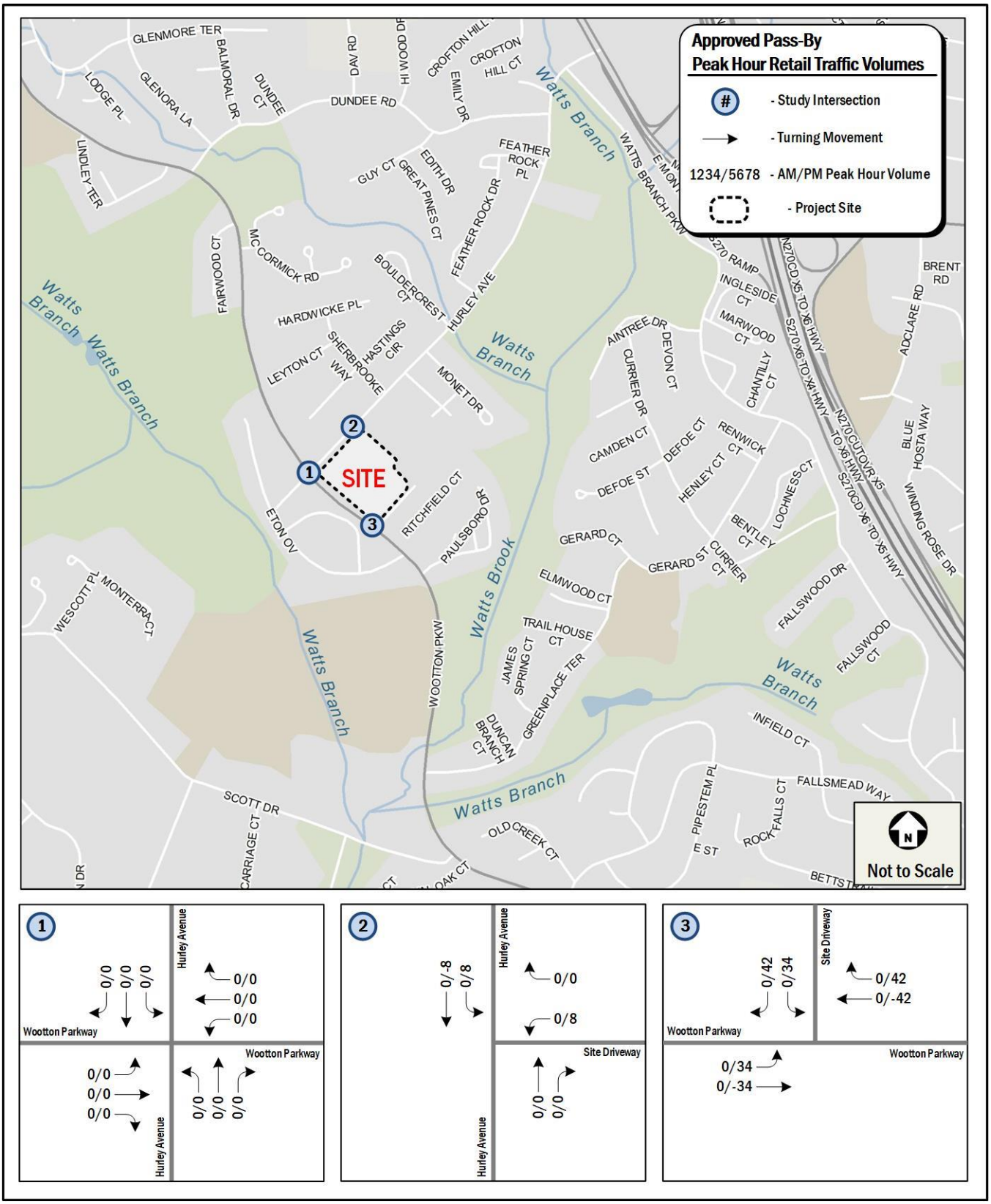


Figure 15: Approved Pass-by Peak Hour Retail Traffic Volumes

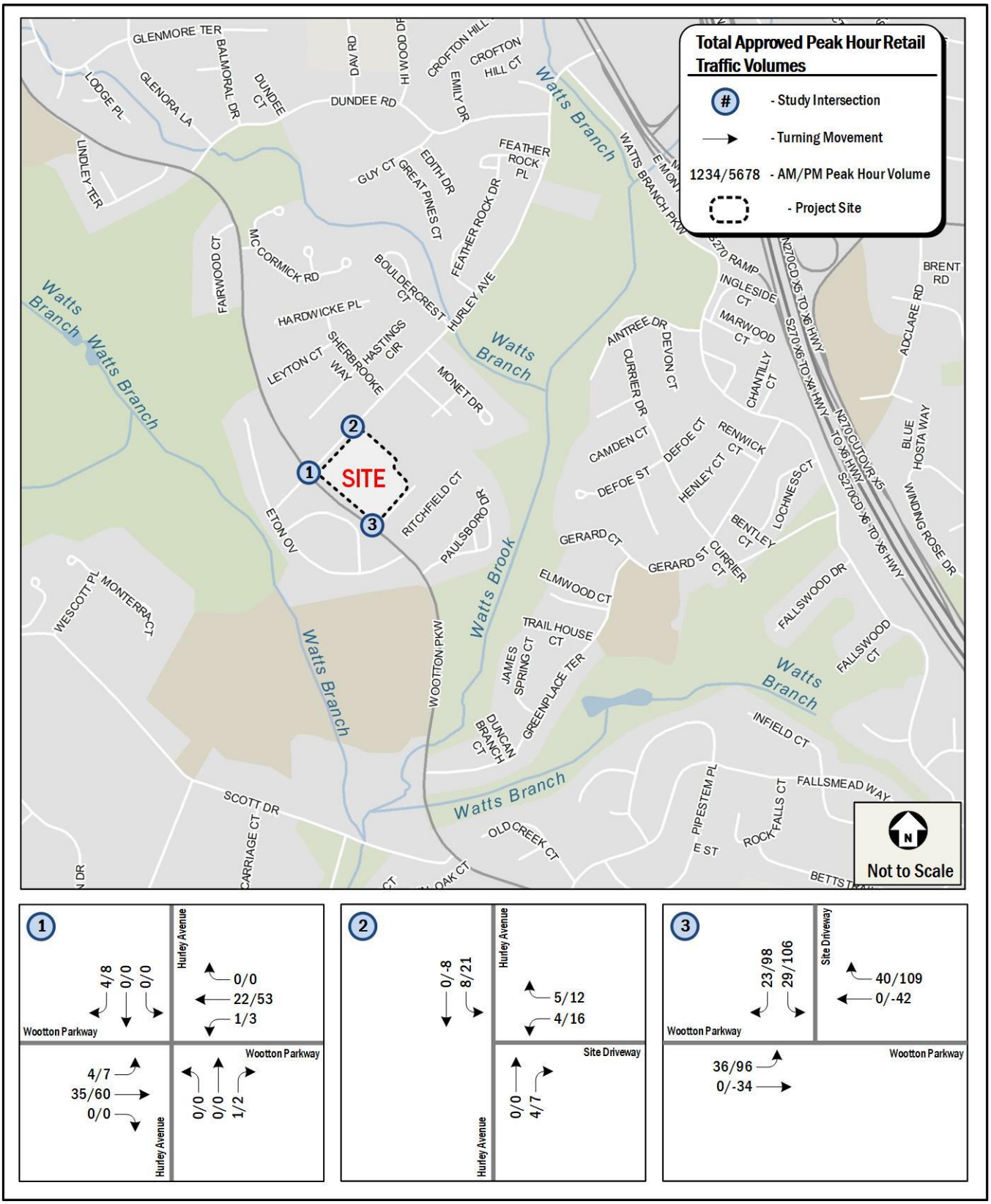


Figure 16: Total Approved Peak Hour Retail Traffic Volumes

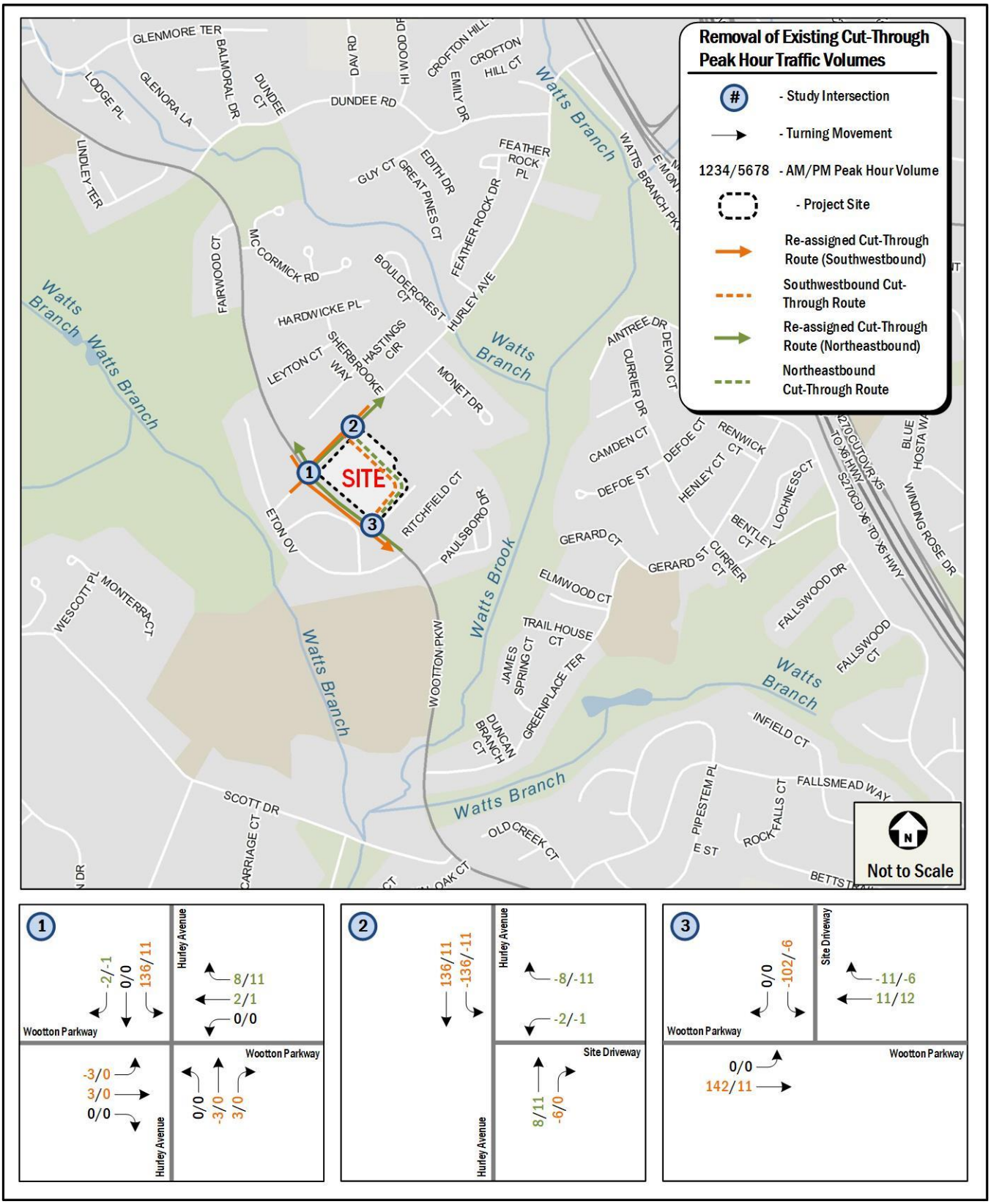


Figure 17: Removal of Existing Cut-Through Peak Hour Traffic Volumes

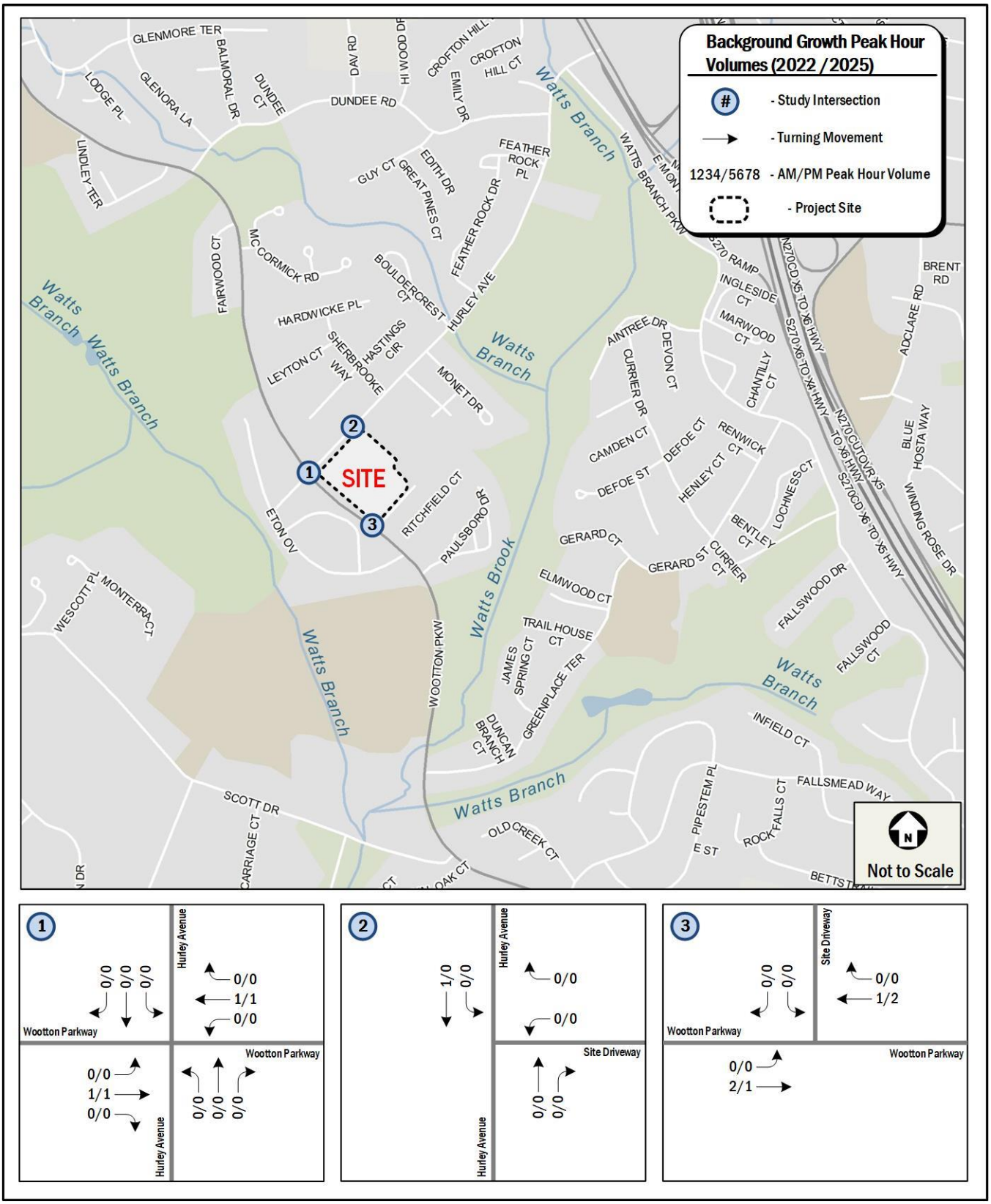


Figure 18: Background Growth Peak Hour Traffic Volumes

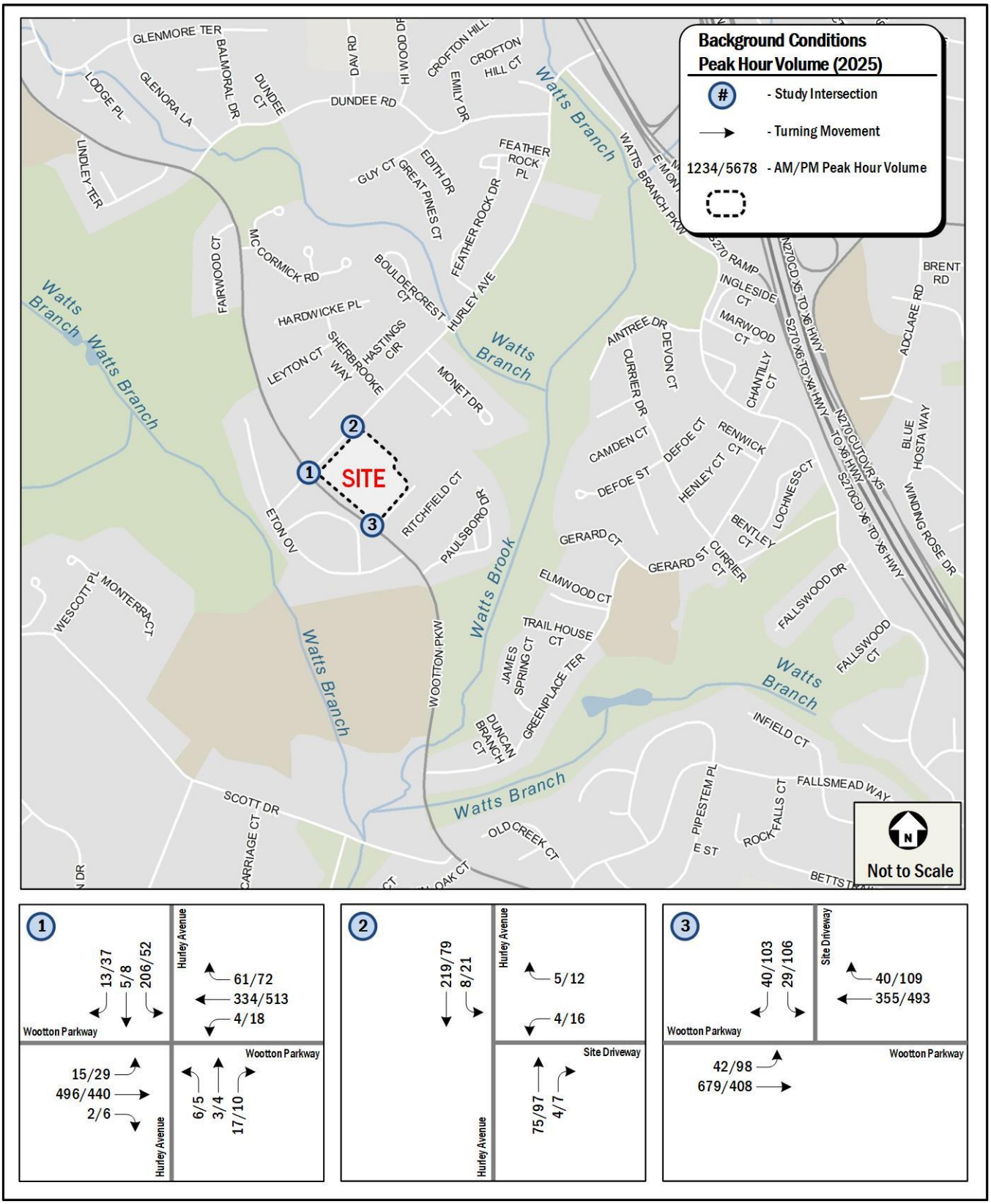


Figure 19: Future without Development (Background Conditions) Peak Hour Traffic Volumes

Project Trip Generation and Distribution

This section outlines the transportation demand of the proposed Rockshire Village site redevelopment. It summarizes the projected trip generation of the site, credit for existing trips generated by existing occupants of the site, and applicable trip reduction. The trip distribution assumptions and trip assignment for the project-generated trips are also reviewed in this section.

Proposed Trip Generation

The proposed development plan includes a maximum of 60 housing units (29 townhomes and 31 single-family homes) and a maximum of 5,500 square feet retail building.

Weekday peak hour trip generation for the proposed use was calculated based on the methodology outlined in the ITE *Trip Generation Manual*, 11th Edition. Residential trip generation was calculated using ITE Land Use Code 220, “Multifamily Housing (Low-Rise)”, and ITE Land Use Code 210, “Single-Family Detached Housing”. Retail trip generation was calculated using ITE Land Use Code 930, “Fast Casual Restaurant” as a conservative measure to analyze the highest potential generator in the retail space.

Existing Trip Generation Reduction

The existing land use is retail consisting of approximately 52,000 square feet dedicated to grocery store retail use.

Weekday peak hour trip generation for the existing use was calculated based on the methodology outlined in the Institute of Transportation Engineers’ (ITE) *Trip Generation Manual*, 11th Edition. Trip generation for the existing use at the site was calculated using ITE Land Use Code 850, “Supermarket”.

Based on the CTR guidelines, pass-by reduction was applied to the existing retail use.

Trip Generation Summary

With the credit of existing approved site trips, the proposed project will generate 83 fewer net new trips in the morning peak hour (69 fewer inbound trips, 14 fewer outbound trips) and 163 fewer net new trips in the afternoon peak hour (70 fewer inbound trips, 93 fewer new outbound trips) as outlined in Table 13.

Detailed calculations are provided in the Technical Attachments of this report.

Trip Distribution Assumptions and Trip Assignment

Residential trip distribution for the site-generated trips was determined based on: (1) Table 2-6 of the M-NCPPC LATR Guidelines, included in the Technical Attachments, (2) existing travel patterns in the study area, (3) the site driveway layout of the development, and (4) in consultation with City Staff during the scoping process.

Retail trip distribution for the site-generated trips was determined based on: (1) TMC data collected at the Wootton Parkway & Hurley Avenue intersection on December 14, 2022, (2) existing travel patterns in the study area, (3) the site driveway layout of the development, and (4) in consultation with City Staff during the scoping process.

Based on traffic patterns and a comprehensive review of the site access locations, the site-generated trips were distributed through the study area intersections. A summary of trip distribution assumptions and routing for each element of the development is provided on Figure 20 for residential inbound trips, Figure 21 for residential outbound trips, Figure 22 for retail inbound trips, and Figure 23 for retail outbound trips.

The assignment of site-generated residential traffic volumes through the study intersections is shown on Figure 24. The assignment of site-generated retail traffic volumes through the study intersections is shown on Figure 25. The total proposed site trip assignments are presented in Figure 26.

Table 13: Rockshire Village Site Trip Generation Summary

Updated Development Program Project Trip Generation*												
Land Use	Size		AM Peak Hour (veh/hr)			PM Peak Hour (veh/hr)			ADT (veh)	Sat Peak Hour (veh/hr)		
			In	Out	Total	In	Out	Total		In	Out	Total
Existing Site Trip Generation												
Retail with Grocery	52,000	sf	88	61	149	233	232	465	4,876	263	262	525
*Pass-by Reduction for Grocery (36% for PM, 26% for SAT)***			--	--	--	*-84*	*-84*	*-168*	--	*-68*	*-68*	*-136*
Total Primary Grocery Trips			88	61	149	149	148	297	4,876	195	194	389
Updated Development Program Trip Generation												
Residential (220)	29	units	8	24	32	21	12	33	261	6	6	12
Residential (210)	31	units	7	19	26	21	12	33	344	19	17	36
Subtotal Residential Trips (60 units)			*15*	*43*	*58*	*42*	*24*	*66*	*605*	*25*	*23*	*48*
Retail (Fast Casual)	5,500	sf	4	4	8	38	31	69	534	99	81	180
Updated Program Proposed Trips			19	47	66	80	55	135	1,139	124	104	228
Net New Primary Trips			**-69**	**-14**	**-83**	**-69**	**-93**	**-162**	**-3,737**	**-71**	**-90**	**-161**

*Latest edition of the ITE Trip Generation Manual used (11th ed.)

**Based on average pass-by percentages from ITE Trip Generation Handbook, 3rd Edition (PM from LU 850 Supermarket, SAT from LU 820 Shopping Center)

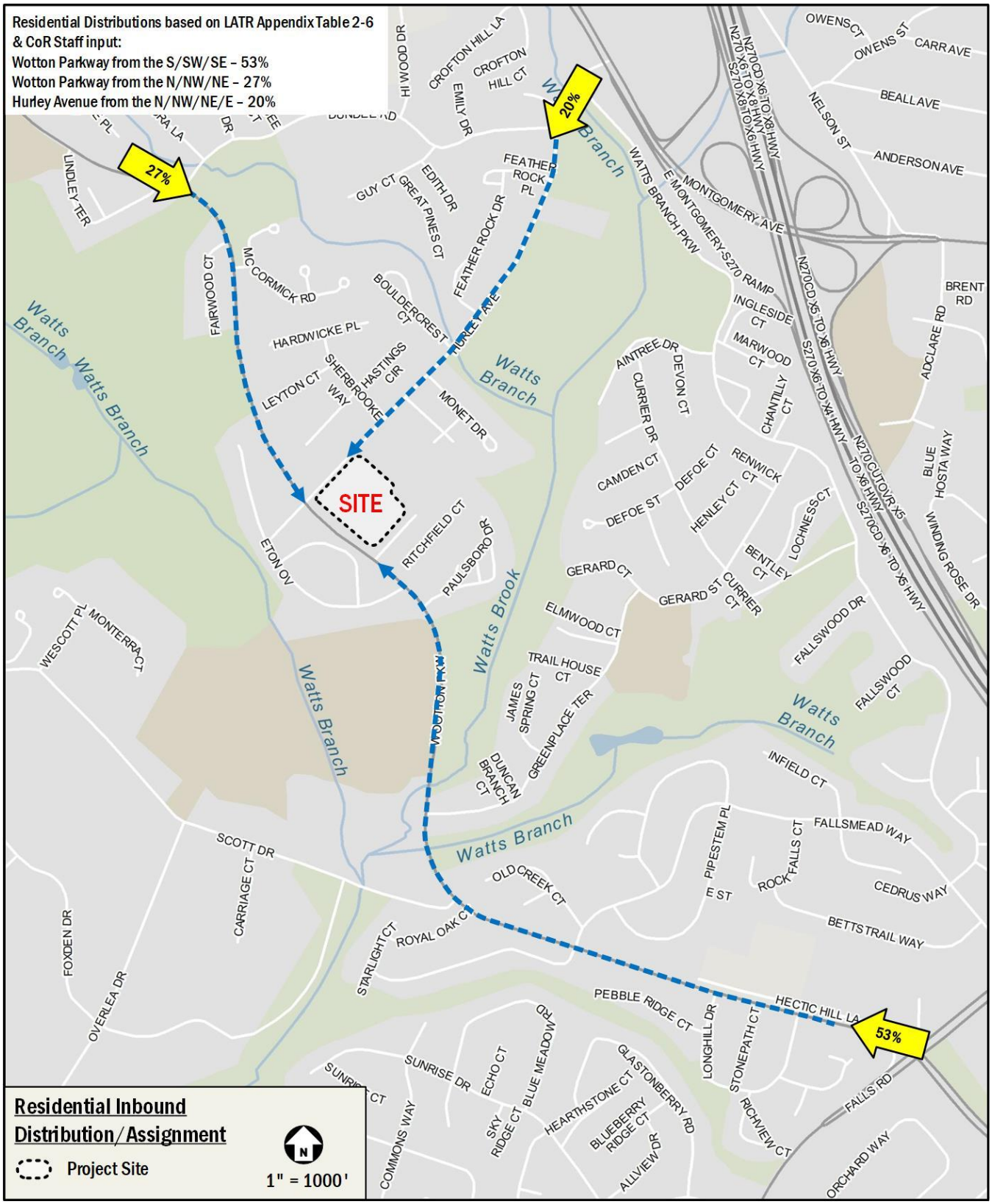


Figure 20: Residential Inbound Distribution

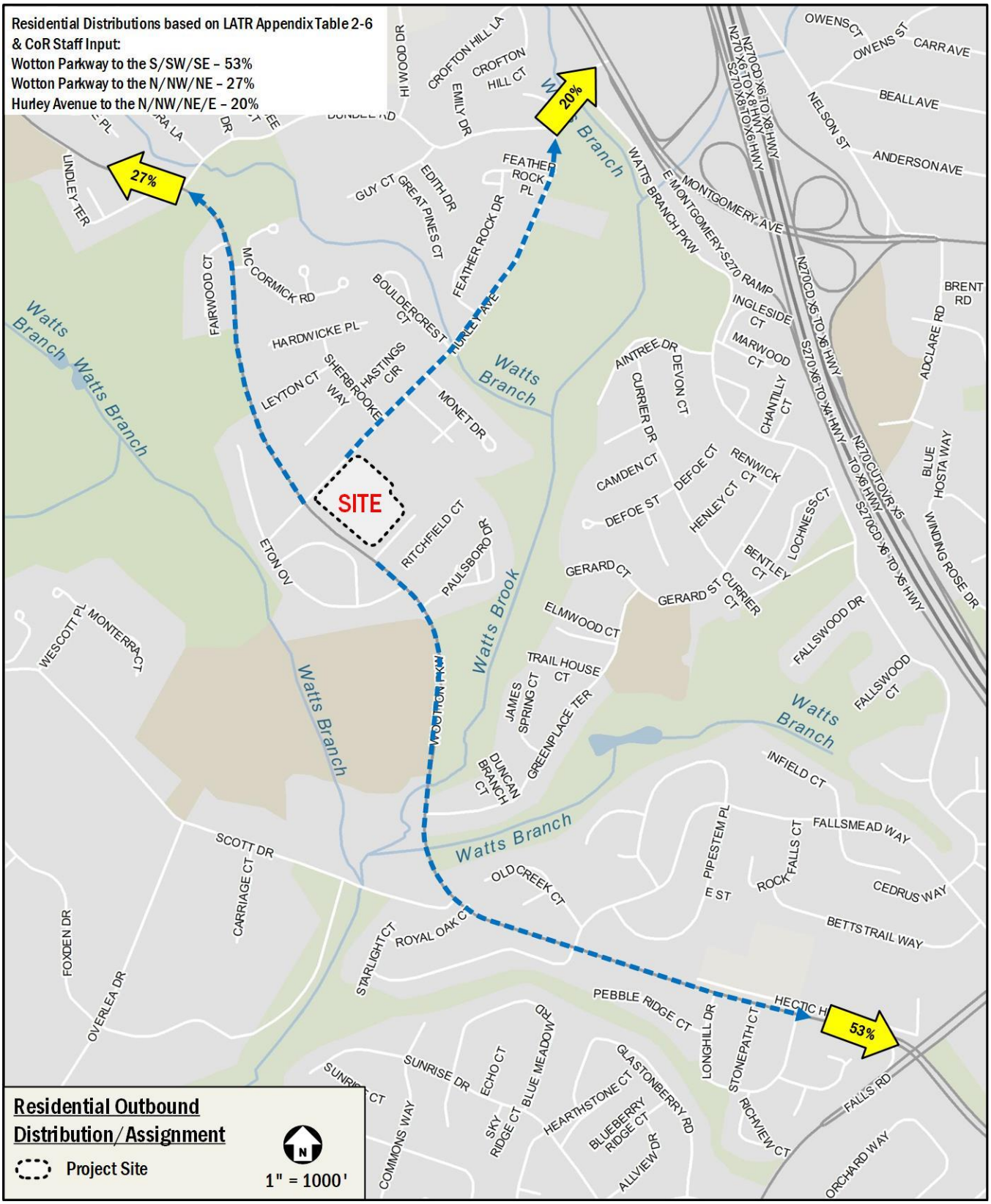


Figure 21: Residential Outbound Distribution

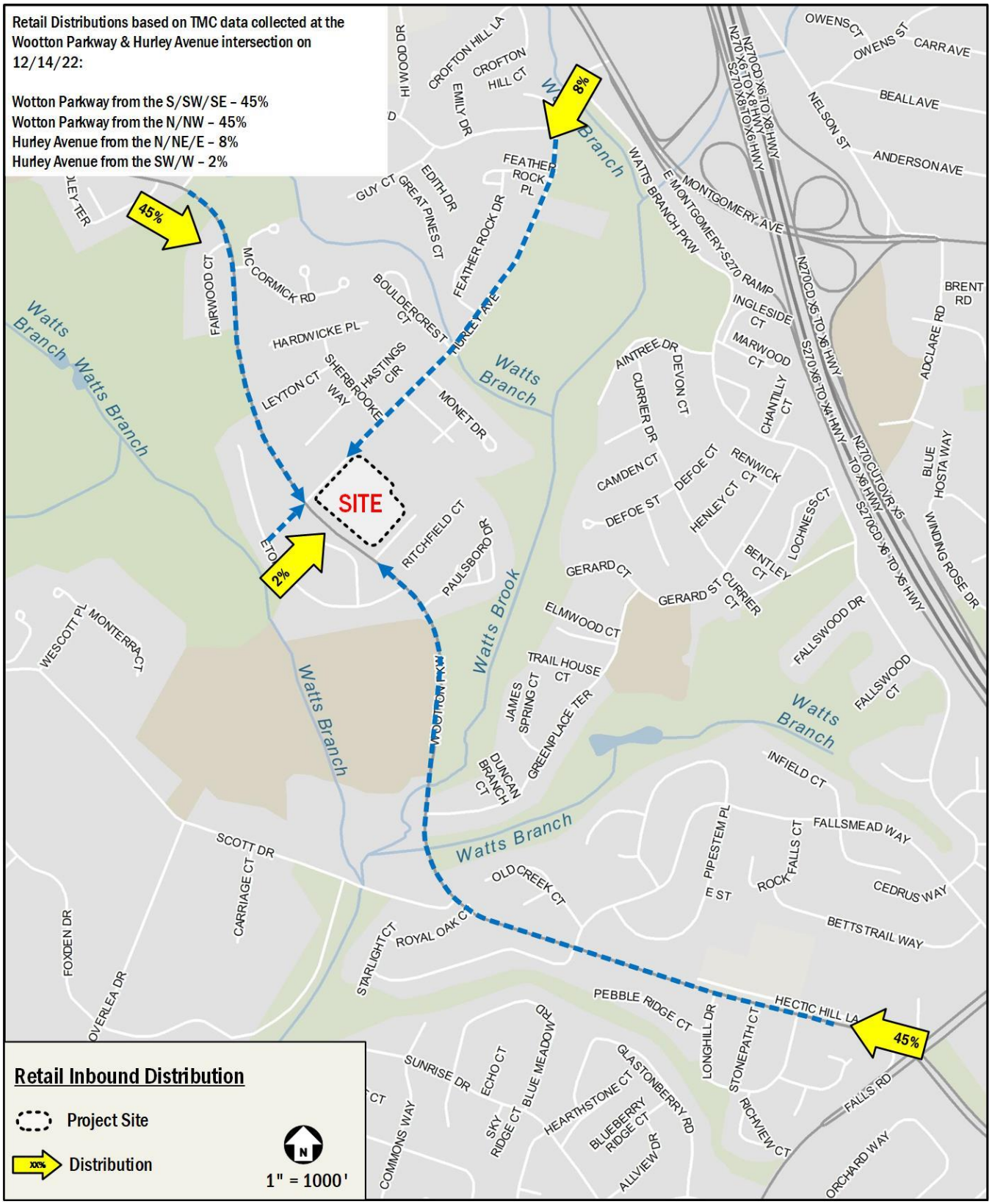


Figure 22: Retail Inbound Distribution

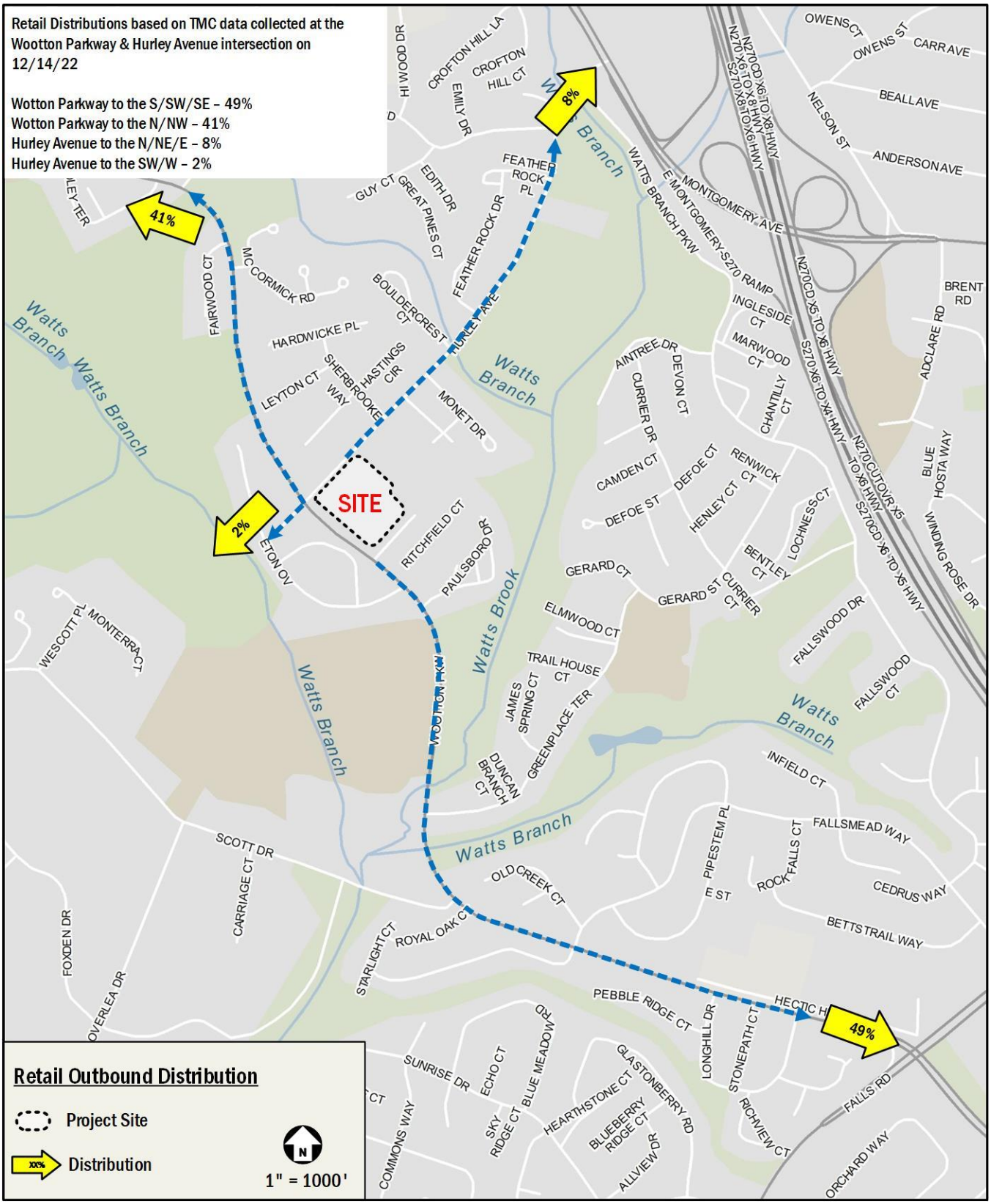


Figure 23: Retail Outbound Distribution

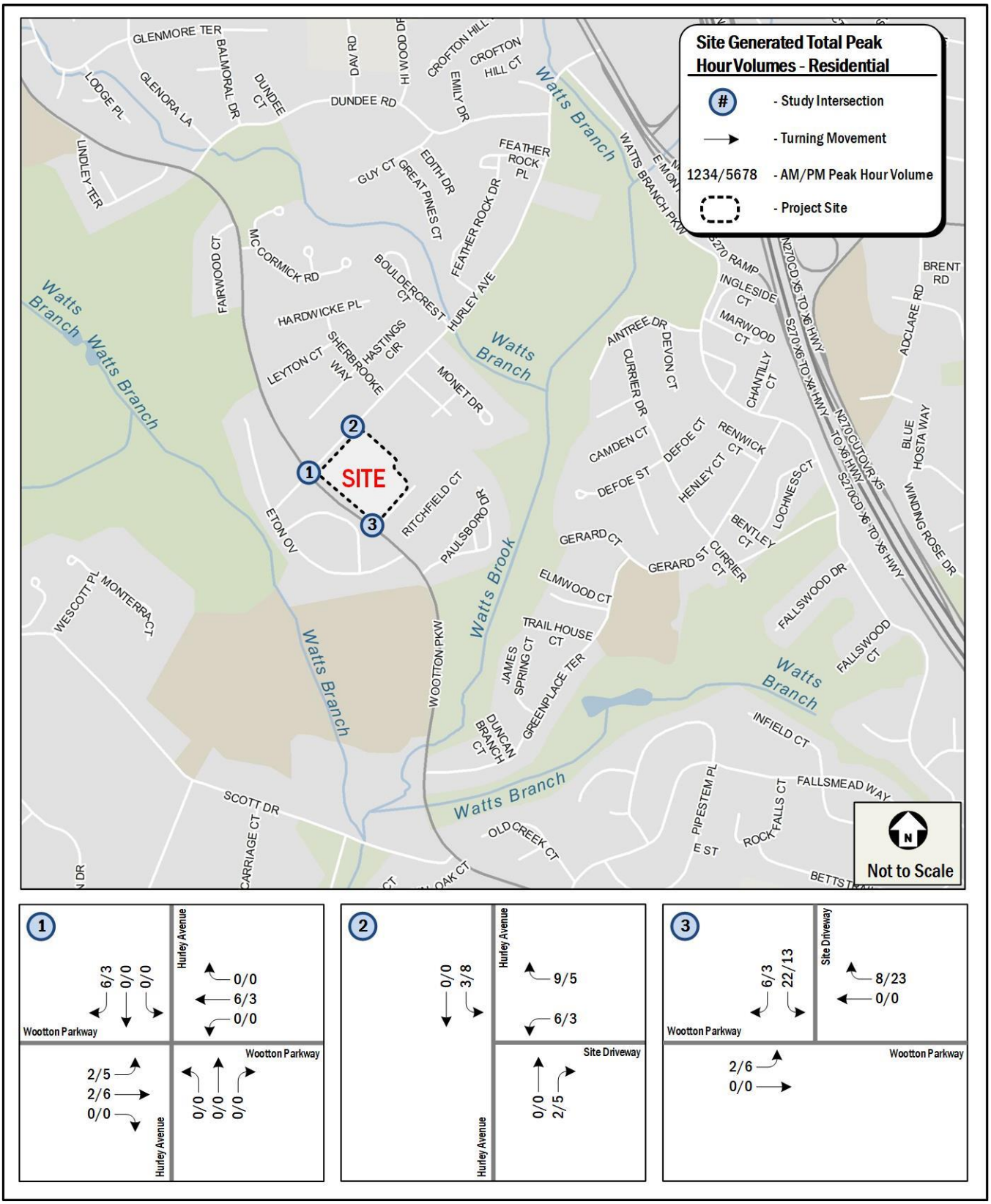


Figure 24: Site-Generated Residential Peak Hour Traffic Volumes

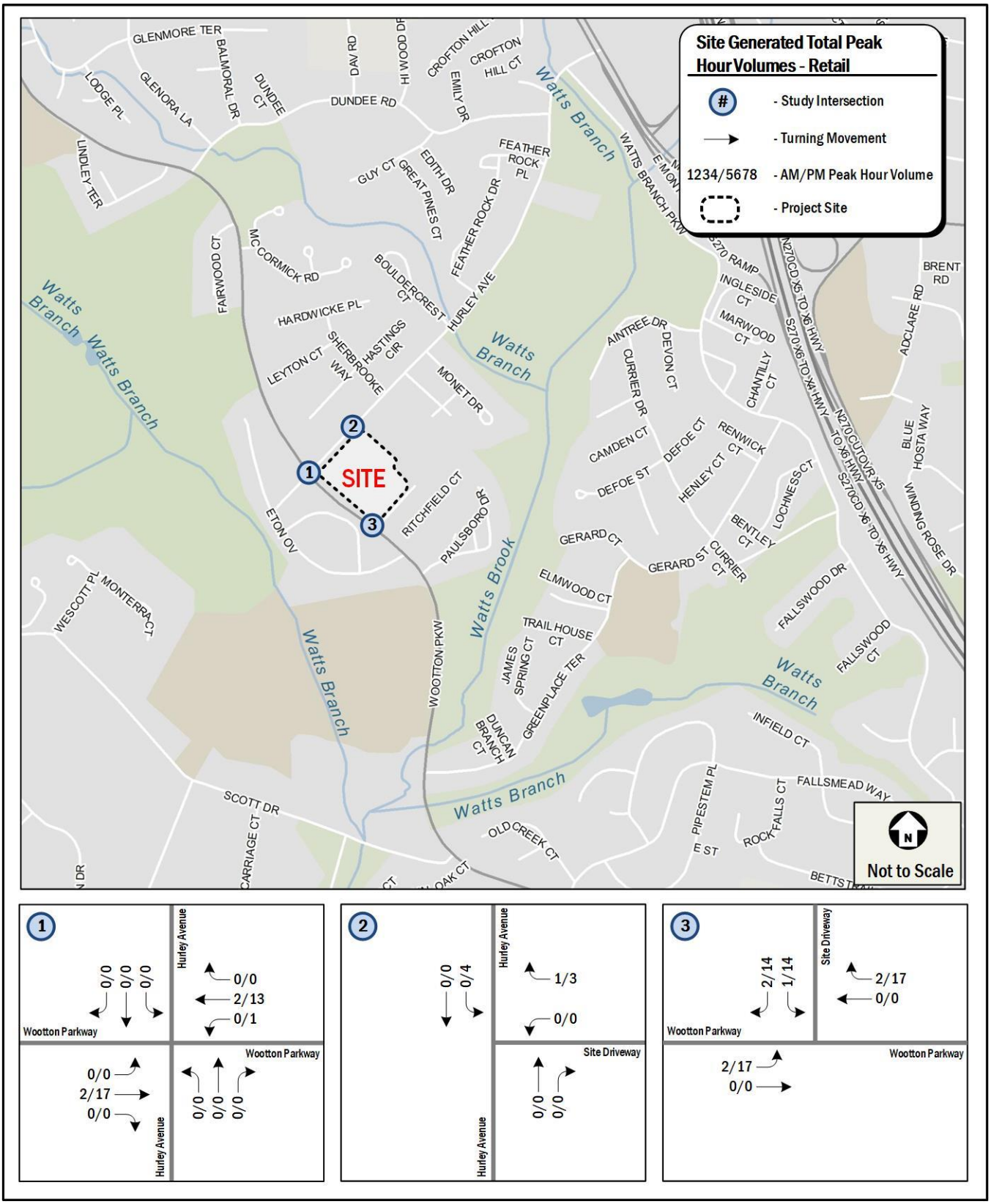


Figure 25: Site-Generated Retail Peak Hour Traffic Volumes

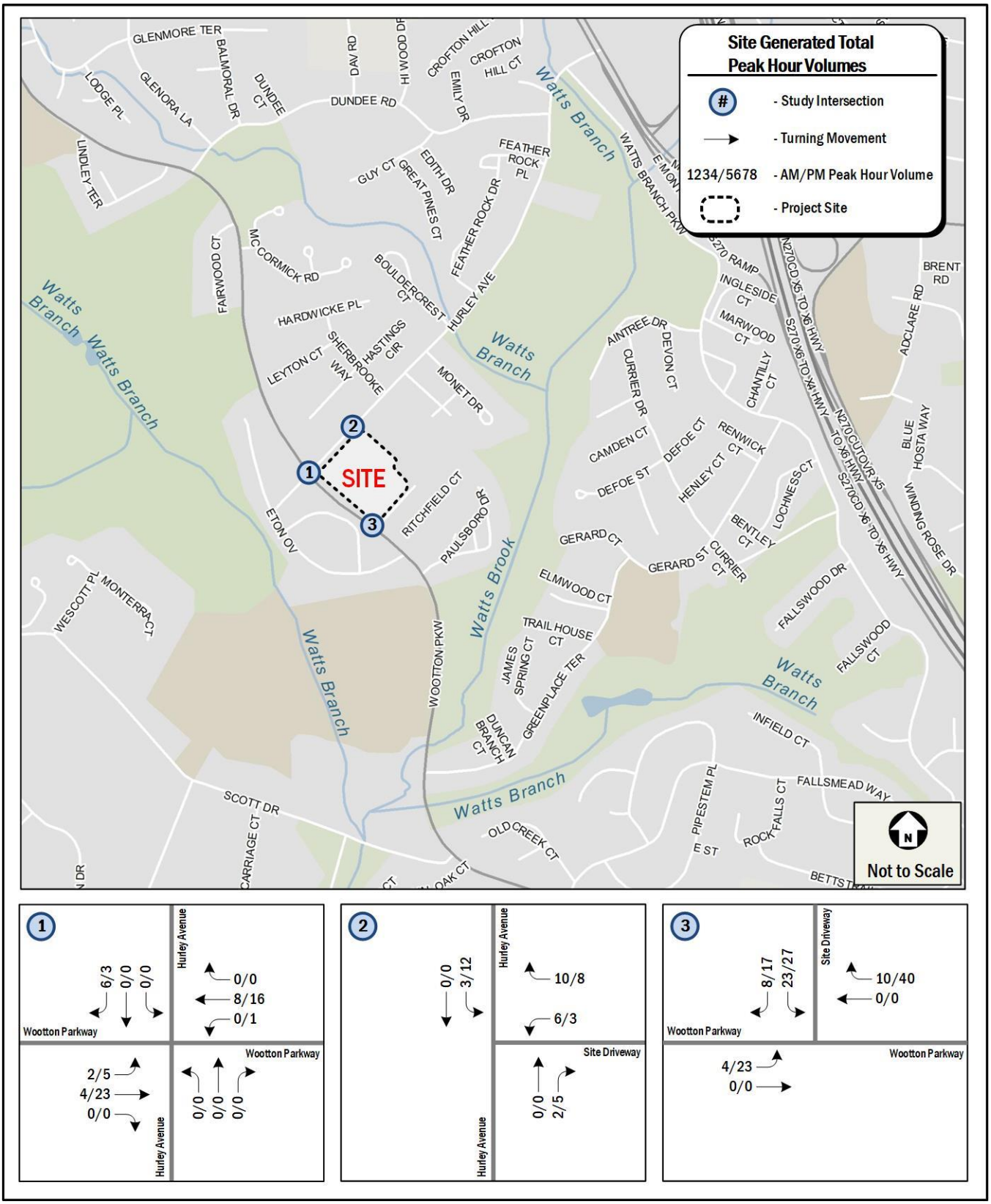


Figure 26: Total Site-Generated Peak Hour Traffic Volumes

Total Future Conditions

This section summarizes the capacity analysis results at the study intersections for Total Future conditions. The Total Future traffic volumes consist of the following:

- Background volumes shown in Figure 19
- The removal of the approved retail volumes based on the existing grocery land use (and pass-by volumes), shown in Figure 27 and Figure 28, and
- The addition of the total traffic volumes generated by the proposed development shown in Figure 26.

Thus, the Total Future traffic volumes include traffic generated by the existing volumes, background developments, background growth, the removal of approved (existing) retail volumes, and the proposed project.

The total future conditions volumes are presented in Figure 29.

Future Geometry and Operations Assumptions

While the project shifts the Hurley Avenue access point slightly the geometry, lane use, and traffic control at all study intersections in the network remain consistent with existing conditions. The lane configuration and traffic controls assumed in total future conditions are presented in Figure 8.

The project does not include any changes to the lane configuration or curbside management at study intersections or along Wootton Parkway and Hurley Avenue.

Total Future Conditions Capacity Analysis

Intersection capacity analyses were performed for the Total Future conditions at the study intersections shown in Figure 5 for the morning and afternoon peak hours. The CLV methodology was used to analyze the study intersections as outlined in Appendix E of the CTR guidelines.

Table 14 summarizes the capacity analysis results for Total Future conditions. Detailed CLV analyses are provided in the Technical Attachments.

It was found that under Total Future conditions, all study intersections continue to operate well within the City's established level of service thresholds.

Based on the CLV methodology and results presented in Table 14 the project does not impact capacity at any study intersection and the trips generated by the proposed project can be adequately accommodated in the existing roadway network.

Site Impact and Mitigation Requirements

Based on the City of Rockville CTR guidelines and established mitigation requirements, the project is not required to mitigated roadway conditions as the project results in fewer trips relative to the existing grocery land use and the project does not impact auto capacity at any of the analyzed study intersections.

Table 14: Summary of Total Future Conditions Intersection Capacity Results

Intersection	MOE	Existing		Background		Total Future	
		AM	PM	AM	PM	AM	PM
1. Hurley Avenue & Wootton Parkway	CLV	593	600	786	689	750	641
	v/c	37%	40%	49%	46%	47%	43%
	LOS	A	A	A	A	A	A
2. Hurley Avenue & Site Driveway	CLV	242	110	237	155	238	126
	v/c	15%	7%	15%	10%	15%	8%
	LOS	A	A	A	A	A	A
3. Wootton Parkway & Site Driveway	CLV	666	534	832	911	747	612
	v/c	42%	36%	52%	61%	47%	41%
	LOS	A	A	A	A	A	A

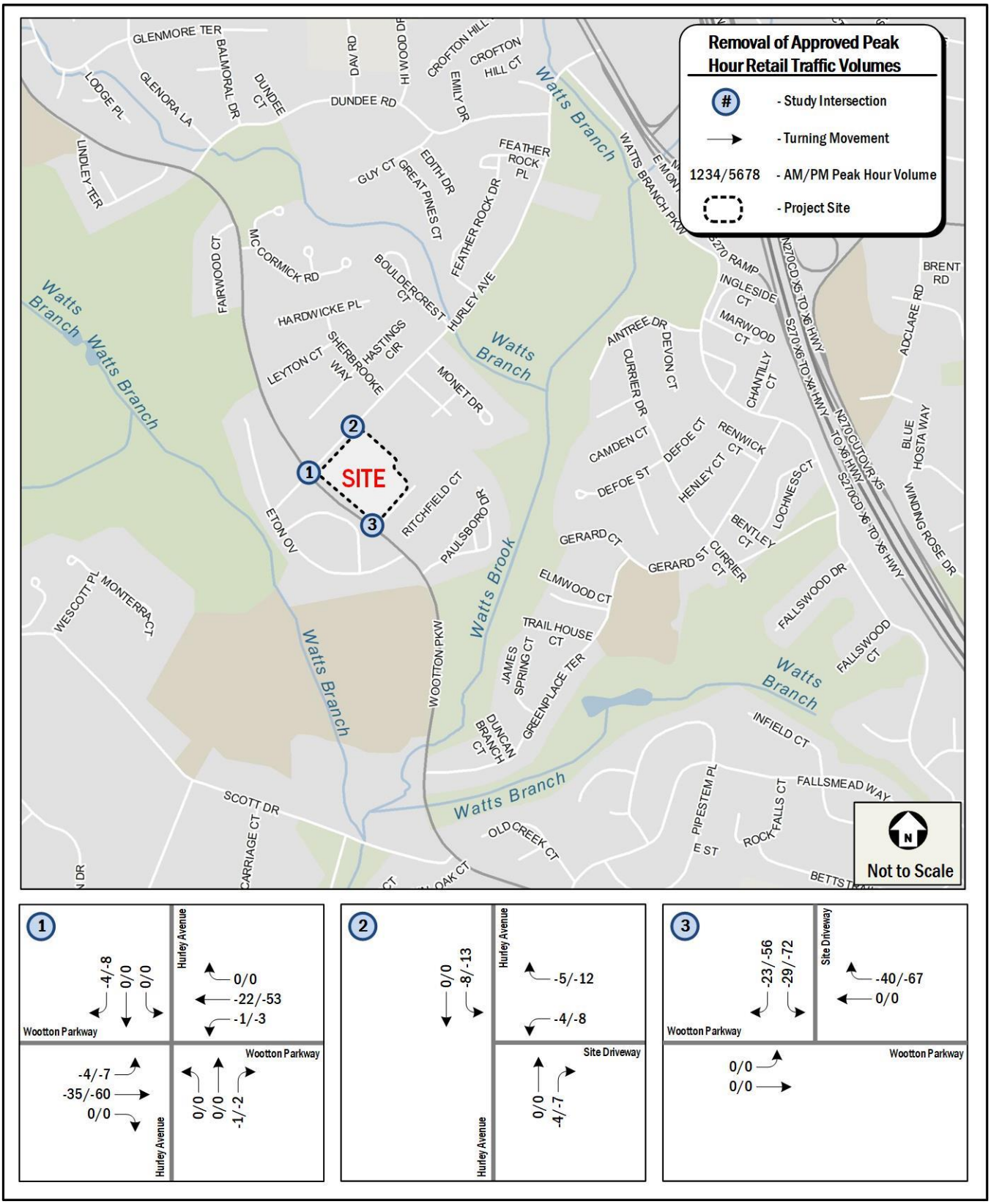


Figure 27: Removal of Approved Peak Hour Retail Traffic Volumes

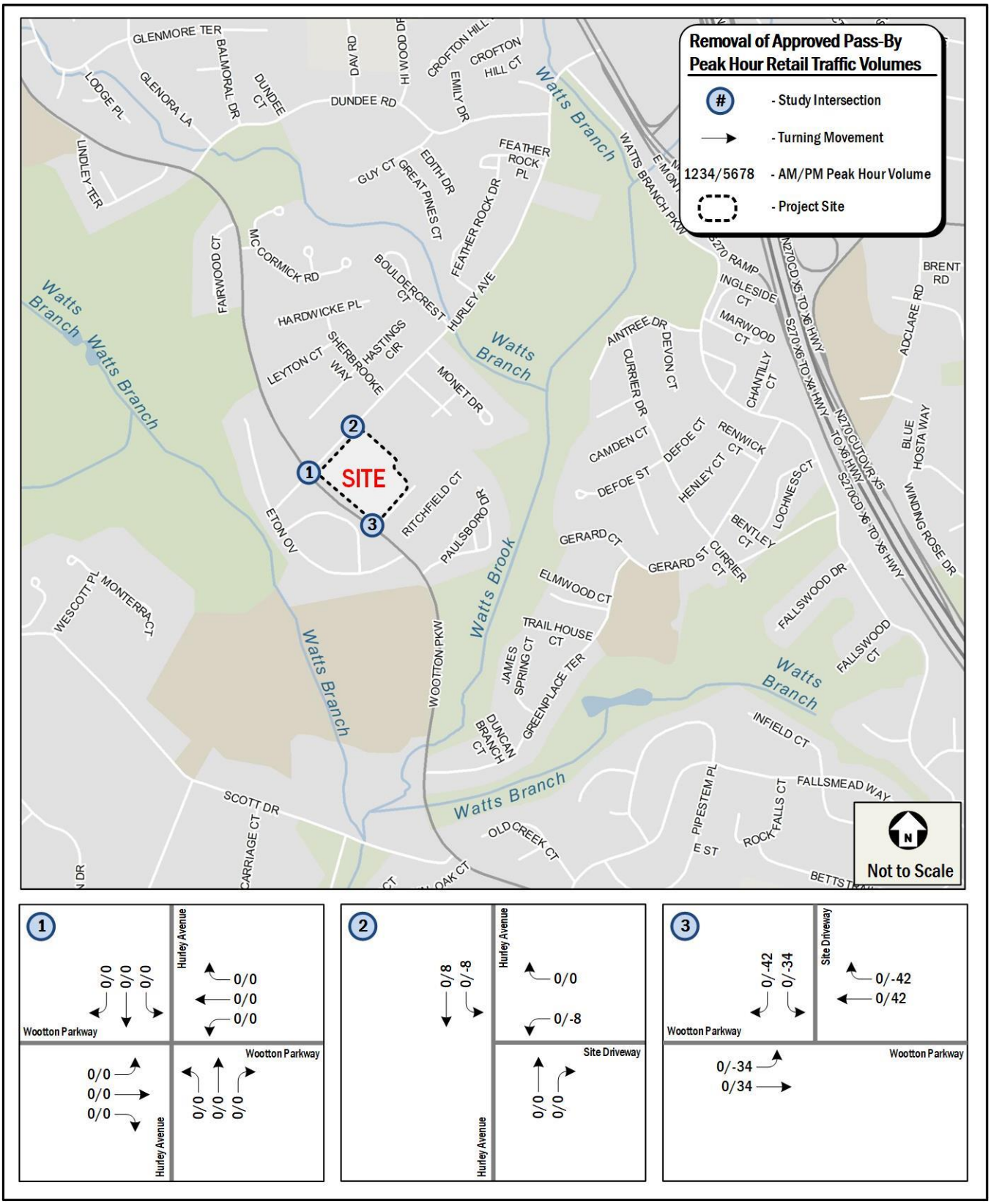


Figure 28: Removal of Approved Pass-by Peak Hour Retail Traffic Volumes

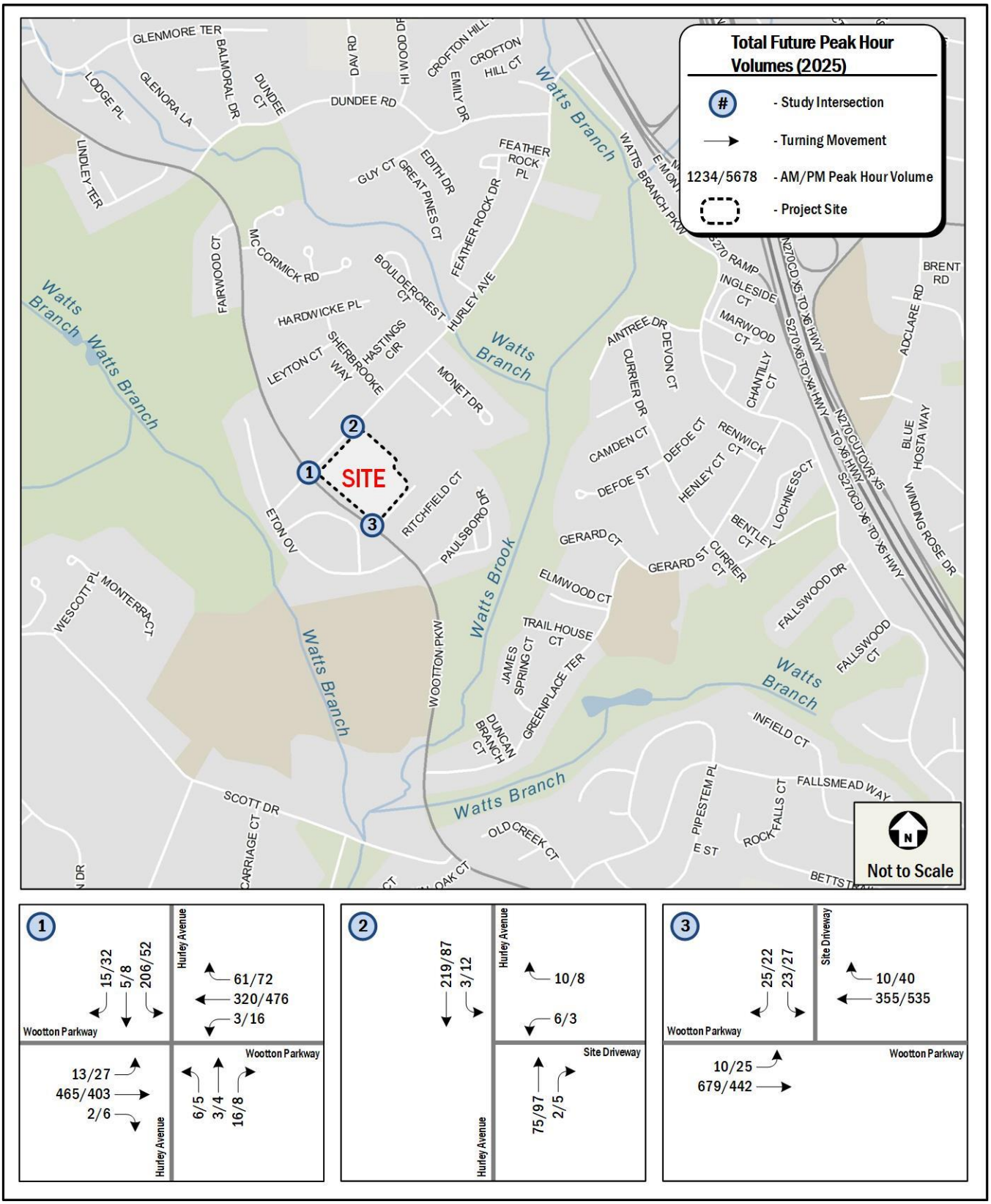


Figure 29: Future with Development Peak Hour Traffic Volumes (Total Traffic Conditions)

Other Studies

This section outlines any special study requested by the City of Rockville during the scoping process. Per the City's Staff request, a Pedestrian Study at the Wootton Parkway & Site Driveway intersection was conducted and summarized in this section. A Speed Study at two (2) locations near the site was also requested and conducted. The findings of the speed studies are also summarized in this section.

Pedestrian Study

As part of the pedestrian study the following were reviewed and/or evaluated:

- Pedestrian volumes during the peak hours
- Existing pedestrian facilities and accommodations
- Crossing time and distance
- Crash data
- Streetlights

Peak Hour Pedestrian Volumes

Gorove Slade collected pedestrian counts during the morning and afternoon commuter peak periods on Thursday, December 14, 2022.

Figure 30 shows the distribution of pedestrian volumes crossing the Site Driveway using the northern crosswalk and crossing Wootton Parkway using the eastern crosswalk. Figure 31 shows the peak period distribution of total hourly pedestrian volumes using crosswalks at the Wootton Parkway & Site Driveway intersection. As Figure 30 and Figure 31, show, the peak hour of pedestrians crossing this intersection is between 7:30 am and 8:30 am in the morning and between 4:00 pm and 5:00 pm in the afternoon/evening. The pedestrian peak hour during the morning coincides with the Thomas S. Wootton High School morning arrival period. The afternoon period does not include the school's dismissal and the captured volumes are consistent with after-school departures.

During the morning peak hour, 17 pedestrians used the northern crosswalk during the morning peak hour and one (1) pedestrian used the eastern crosswalk. It can be assumed that at least 17 pedestrians were traveling on Wootton Parkway's Carl Henn Millennium Trail along the project site frontage during the morning peak hour. Similarly, during the afternoon peak hour, at least approximately 13 pedestrians were traveling on Wootton Parkway's Carl Henn Millennium Trail. Figure 32 illustrates the peak hour pedestrian volumes at the study intersection.

During the morning peak period, approximately 39 pedestrians used the northern crosswalk and approximately four (4) pedestrians used the eastern crosswalk. During the afternoon peak period approximately 29 pedestrians used the northern crosswalk and approximately six (6) pedestrians used the eastern crosswalk. Detailed pedestrian counts are included with turning movement count data that is available in the Technical Attachments of this report.

Pedestrian Facilities and Accommodations

The Carl Henn Millennium Trail along the northeastern side of Wootton Parkway near the intersection is a 10-foot-wide shared use path striped as a cycle track to accommodate bidirectional bicycle traffic along with pedestrians. The southwestern side of Wootton Parkway has a 5-foot-wide sidewalk.

The curb ramps at each landing of the two (2) crosswalks meet City of Rockville and ADA standards. Detectable warning surfaces are available on all the curb ramps.

A streetlight inventory along the project site frontage was reviewed under the existing conditions. Currently, there is one (1) streetlight at the southwestern corner of the intersection. Lighting along Wootton Parkway is provided with streetlights lining the southwestern sidewalk as shown in Figure 11.

Pedestrian Crossing Time, Distance

A pedestrian crossing distance analysis was conducted at study intersections to determine the existing crossing conditions and signal timing necessary to meet the required pedestrian crossing needs. The required pedestrian crossing time was calculated by dividing the distance by an average walking speed of 3.5 feet per second. Pedestrian crossing times were provided by Montgomery County via signal timing sheets. Table 15 shows the results of the pedestrian crossing distance analysis. Based on the results of the analysis, pedestrians are provided sufficient crossing time.

The eastern crosswalk across Wootton Parkway operates as an exclusive pedestrian-only phase that operates on pedestrian recall only following the Rockshire access vehicle phase. The pedestrian phase on the north crosswalk across the site driveway runs concurrently with Wootton Parkway vehicular traffic.

Table 15: Pedestrian Crossing Distance Analysis Results

Pedestrian Crossing Leg	Crossing Distance (ft)	Required Crossing Time (sec)	Minimum Provided Crossing Time	
			AM (sec)	PM (sec)
Wootton Pkwy & Site Access				
North Leg*	49	14	17	17
East Leg	44	13	20	20

* The crossing time on the north leg across the site driveway is the minimum provided time as other phases operate on recall.

Pedestrian Delay

According to the signal timing information provided by the City of Rockville, the minimum split interval for the major approaches at the Wootton Parkway & Site Driveway intersection is 50 seconds during both the morning and the afternoon peak hours. The maximum split interval for the minor approach on the Site Driveway is approximately 22 seconds in total during both the morning and the afternoon peak hours.

Therefore, it is expected that pedestrians crossing the Site Driveway will experience a maximum 22 seconds of waiting time or delay, and pedestrians crossing Wootton Parkway will experience a maximum of 50 seconds of waiting time or delay.

Pedestrian Safety

To evaluate the pedestrian safety at the Wootton Parkway & Site Driveway intersection, crash data from the Montgomery County's Interactive Crash Map and the Montgomery County's Crash Reporting – Incidents Data online database were reviewed.

One (1) crash was reported from January 2015 through April 2023 at the Wootton Parkway & Site Driveway. The incident occurred in 2016 and was categorized as a same-direction/rear-end incident without reported injuries. No pedestrians or bicycles were reported to be involved.

Figure 33 shows the crash data as retrieved from the dataMontgomery visualization tool.

Speed Study

As part of this CTR, speed studies were requested at the following locations:

- Wootton Parkway south of Hurley Avenue between the site driveway and Paulsboro Drive (#1)
- Wootton Parkway north of the Hurley Avenue & Wootton Parkway intersection (#2)

The speed data was collected on two (2) different dates: Tuesday, December 20, 2022 and Tuesday, January 10, 2023. Schools were in session on the days the data was collected. The collected speed data is included in the Technical Attachments.

Table 16 summarizes the observed speed data, including the 50th and 85th percentile speeds for each direction at the study location. The plotted cumulative distributions and the density distributions of the speed data are included in the Technical Attachments.

Based on the speed study results, the observed 50th and 85th percentile speed along Wootton Parkway at both locations do not exceed the posted speed of 35 mph by more than 20 percent.

Speeds were also reviewed specifically around the Thomas S. Wootton High School morning arrival and dismissal periods (7:00 – 8:00 AM and 2:15 – 3:15 PM) when the posted speed limit south of the project site is temporarily reduced to 25 mph. The results of the school period speed studies are also presented in Table 16.

Average speeds did not exceed the reduced posted speed limit by more than 20 percent during the school arrival and departure periods when the speed limit is reduced to 25 mph while 85th percentile speeds were found to exceed the reduced speed limit. Neither the average nor the 85th percentile speeds were found to exceed the reduced speed limit of 25 mph by at least 12 mph, which is the speeding threshold before a citation can be issued.

The speed study location that captured the temporary reduced speed limit was located on the edge of the reduced speed limit area and there are existing automated enforcement speed cameras located along the Thomas S. Wootton High School frontage monitoring northbound and southbound speeds between the school front loop entrance and exit driveways.

Because the observed average and 85th percentile speeds were not found to exceed the posted speed limit of 35 mph or the reduced speed limit of 25 mph during school arrival and dismissal periods by at least 12 mph or more, additional potential speed management measures are not warranted.

Table 16: Speed Data Summary

Roadway	Approach	Posted Speed Limit	Day 1 (12/20/22)			Day 2 (1/10/23)		
			50th %	*85th %*	*Pace*	*50th %*	*85th %*	*Pace*
Wootton Parkway (south)	NB	35 mph	28 mph	34 mph	26-36	29 mph	35 mph	26-36
	SB		33 mph	39 mph	30-40	29 mph	35 mph	27-37
Wootton Parkway (south) during School AM Peak (7:00 - 8:00 AM)	NB	25 mph	24 mph	29 mph	21-31	23 mph	29 mph	21-31
	SB		26 mph	33 mph	23-33	24 mph	29 mph	22-32
Wootton Parkway (south) during School PM Peak (2:15 - 3:15 PM)	NB	25 mph	25 mph	32 mph	23-33	25 mph	34 mph	22-32
	SB		30 mph	36 mph	27-37	28 mph	34 mph	25-35
Wootton Parkway (north)	NB	35 mph	30 mph	35 mph	28-38	30 mph	35 mph	27-37
	SB		34 mph	39 mph	32-42	27 mph	33 mph	24-34

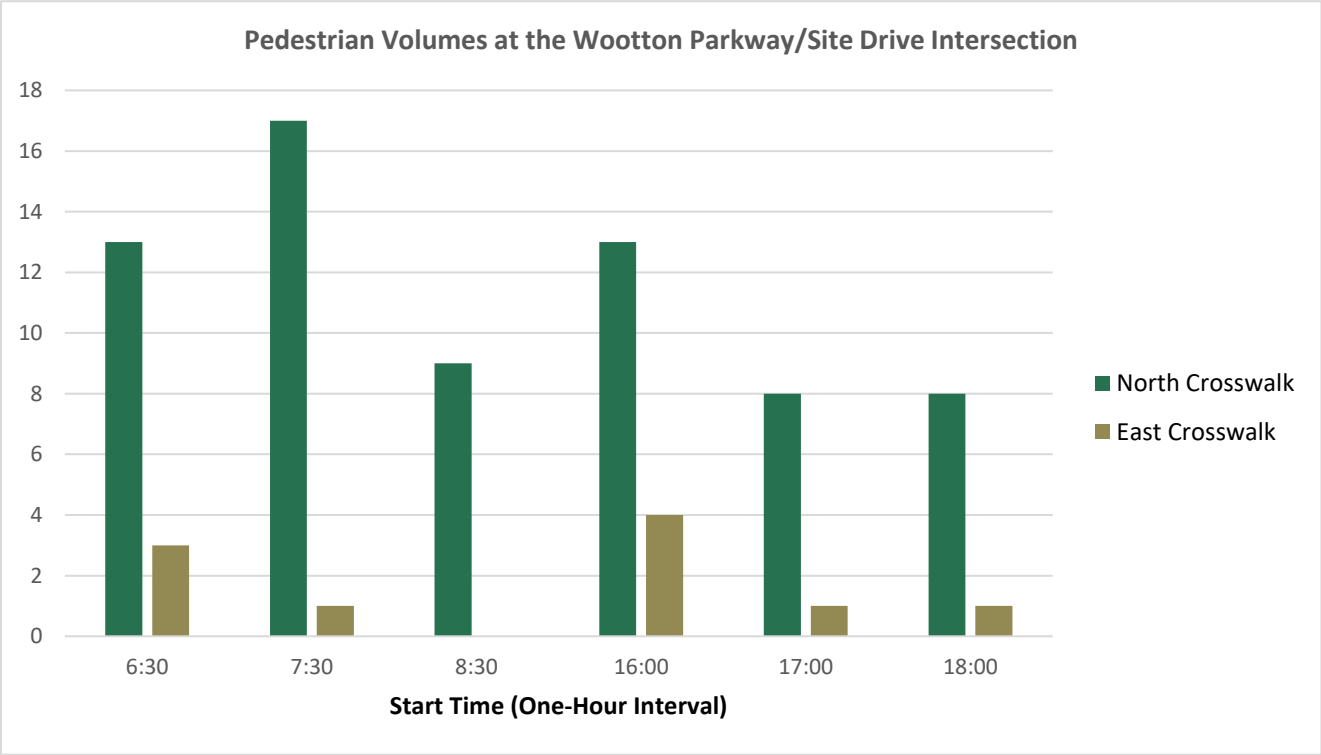


Figure 30: Pedestrian Volumes Crossing MD 355 at King Farm Boulevard/Metro Access Road

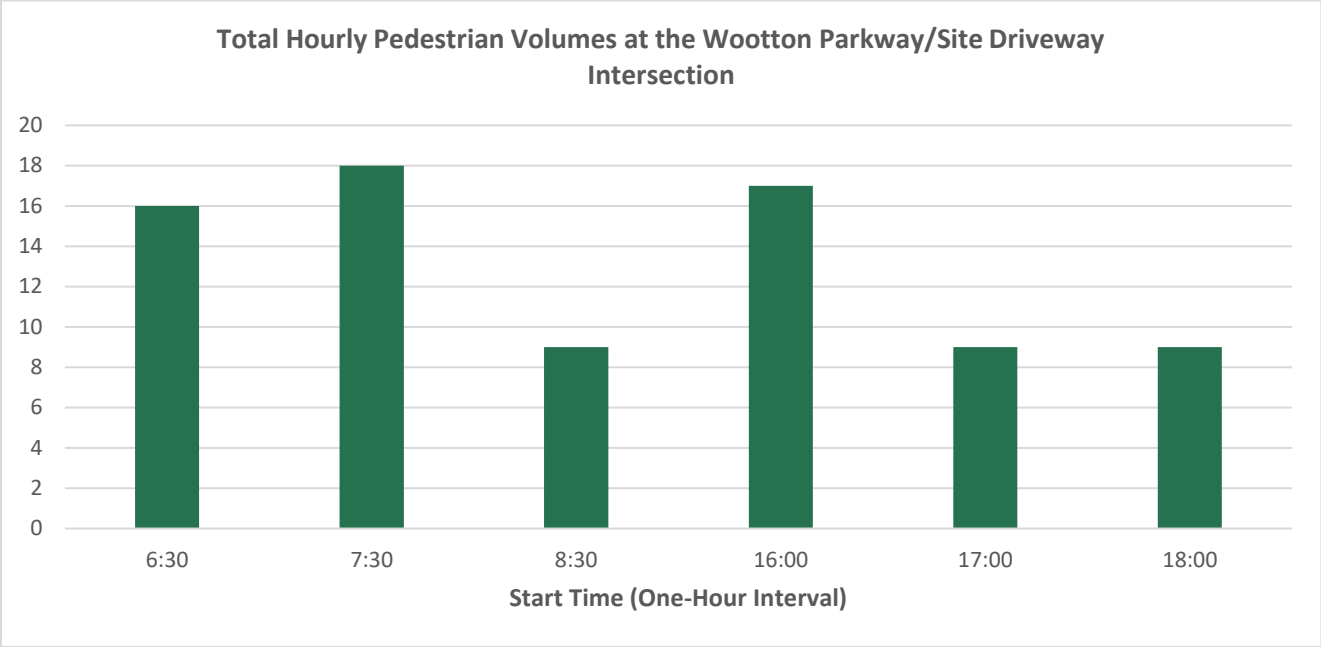


Figure 31: Total Hourly Pedestrian Volumes at the MD 355 & King Farm Boulevard/Metro Access Road Intersection

Figure 32: Peak Hour Pedestrian Volumes

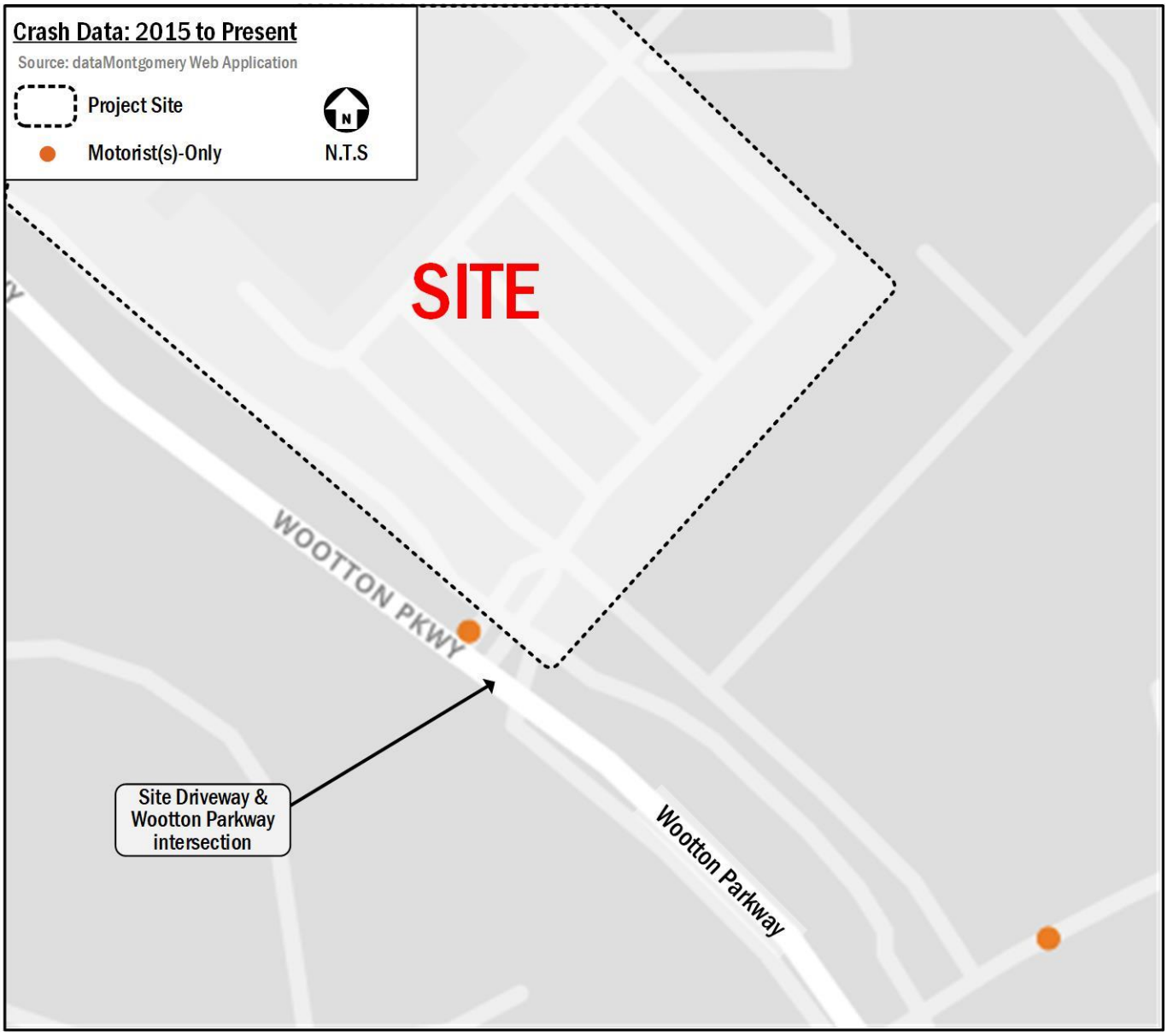


Figure 33: Crash Data: 2015 to Present

Summary & Conclusions

The following report is a Comprehensive Transportation Review (CTR) for the Rockshire Village redevelopment proposed at 2401 Wootton Parkway in the City of Rockville. This report reviews the transportation aspects of the project's development application in compliance with the City of Rockville's CTR guidelines.

The purpose of this study is to evaluate whether the project will generate a detrimental impact to the surrounding transportation network. This evaluation is based on a technical comparison of the existing conditions, background conditions, and total future conditions. This report concludes that **the project will not have a detrimental impact** on the surrounding transportation network.

Proposed Project

The project is located at 2401 Wootton Parkway. Under existing conditions, the project site is improved with a grocery store building.

The project will replace the existing 52,000-square foot grocery building with 60 residential units and 5,500 square feet of retail.

Access to the proposed project will be provided via two (2) curb cuts, one (1) on Hurley Avenue and one (1) on Wootton Parkway, consistent with existing conditions.

The project includes a designated parking area with 30 parking spaces to serve the existing Rockshire HOA Community Center/Pool that abuts the north side of the property.

As part of the project, sharrow markings will be installed along the Hurley Avenue frontage on the northeastern travel lane adjacent to the property.

As part of the project, the Applicant will upgrade the traffic signal equipment at the Wootton Parkway and site access intersection.

Site Impact and Mitigation Measures

Per the City of Rockville CTR guidelines, the project is not required to evaluate vehicular capacity as it results in an overall reduction in vehicular trips as compared to the existing grocery land use.

The vehicular capacity analysis provided in this report is for informational purposes only and the scope was vetted and approved by the City of Rockville Staff during the scoping process.

In order to determine whether the proposed project will have a negative impact on the transportation network, this report evaluates future conditions with and without the project based on intersection vehicular capacity analyses using the CLV methodology and the intersection impact thresholds set by City of Rockville CTR guidelines.

None of the analyzed study intersections are impacted by the proposed redevelopment as the project results in an overall reduction of site-generated trips as compared to the existing grocery land use.

The proposed project generates fewer trips than the existing approved grocery trips and will not have a detrimental impact on the surrounding transportation network based on the analysis.

Summary and Recommendations

This report concludes that the proposed development will not have a detrimental impact on the surrounding transportation network.

The development has several positive elements contained within its design that minimize potential transportation impacts, including:

- The site's adjacency to local and regional transit service;
- The site's location within a well-connected pedestrian and bicycle network;
- Sharrow markings along the site frontage on Hurley Avenue on the travel lane adjacent to the site;
- A new mid-block pedestrian connection to the Millennium Trail;
- An improved connection to the Millennium Trail at the Wootton Parkway access point; and
- Upgrades to the traffic signal equipment at the Wootton Parkway access.

Transportation Technical Attachments

Rockshire Village

City of Rockville, MD

June 9, 2023

GOROVE SLADE
Transportation Planners and Engineers

CONTENTS

(Note: Click on heading to navigate directly to each section of the Technical Attachments)

A. Scoping Information

City of Rockville

Comprehensive Transportation Review
SCOPING INTAKE FORM

Project Name:	Rockshire			
Permit No. (if available):				
Subject Property Address:	2401 Wootton Pkwy, Rockville, MD 20850			
Contact Person:	Katie Wagner, PE, PTOE			
Contact Phone Number:	202-540-1927			
Contact Email Address:	klw@goroveslade.com			
Proposed Land Use Density:	**Use**	**Square Footage/ Dwelling Units**		
	Existing - Grocery Store	52,000 sf		
	Proposed - Attached/Dettached Residential Units	60 units total (31 SFH, 29 TH)		
	Proposed - retail	5,300 sf		
Trip Generation	**Peak Hour Site Trips**			
	Peak Period	IN	OUT	TOTAL
	AM	23 / -65(net)	48 / -13(net)	38 / -78(net)
	PM	54 / -95(net)	35 / -95(net)	36/ -208(net)
	SAT	38 / -157(net)	36 / -158(net)	74 / -315(net)
Proposed Study Area (Boundaries and Intersections)	As requested by Staff, the site access points and the Hurley Avenue and Wootton Parkway intersection will be analyzed using CLV.			
Proposed Access Points:	A full movement driveway on Wootton Parkway and a full movement driveway on Hurley Avenue			
Projected Horizon (Build Out) Date:	2025			
Statement of Operations	The project redevelops the existing grocery store on site, replacing it with 60 townhouse units and 5,300 sf of retail. The project includes 36 designated parking spaces for the adjacent community center and pool facility. See attached trip generation spreadsheet for the breakdown of change of uses. The community pool facility trips are not part of the project.			

GOROVE SLADE
Transportation Planners and Engineers

TECHNICAL MEMORANDUM

To:	Faramarz Mokhtari	City of Rockville
	Andrew Luetkemeier	City of Rockville
From:	Maribel Wong	
	Katie Wagner, PE, PTOE	
Date:	December 14, 2022	
Subject:	Updated Rockshire Transportation Statement Scope	

Introduction

This memorandum outlines the proposed analysis methodology and assumptions for the proposed transportation statement for the proposed redevelopment of the 2401 Wootton Parkway site located in the City of Rockville.

The project redevelops the existing grocery store site and replaces it with 60 residential units and 5,300 square feet of retail. Parking for the existing community center and pool will be designated in 36 parking spaces near to the existing pedestrian connection between the project site and community center.

The project includes two (2) curb cuts to service the site:

- One (1) relocated access along Hurley Avenue; and
- One (1) existing access along Wootton Parkway.

Per the City of Rockville Comprehensive Transportation Review guidelines, a traffic impact study is not required for the project as the project results in a net reduction in traffic as compared to the existing land uses on site. At the request of City Staff, a transportation statement is proposed with the following components:

- Proposed On-Site Transportation
    - Proposed Access
        - Vehicle Access
        - Pedestrian and Bicycle Access
    - Proposed Pedestrian/Bicycle Facilities
        - Proposed On-Site Facilities
        - Conformance to the approved Bikeway Master Plan
        - Zoning Requirements
    - Curbside Management
        - Designated Pick-Up/Drop-Off Areas
    - Loading
        - Loading Facilities
        - Loading Access and Circulation

- Intersection Capacity Analysis for the morning and afternoon peak hours at the site driveways and the intersection of Wootton Parkway and Hurley Avenue for the following scenarios:
    - Existing Conditions
    - Background Conditions
    - Total Future Conditions with the Project
- Other Studies
    - Pedestrian Study
    - Speed Study

The proposed methodology and assumptions for these analyses are outlined in the following sections.

Proposed On-Site Transportation

This component is proposed to include a detailed discussion on the transportation aspects of the project, including site access, vehicle parking, bicycle parking, pedestrian facilities, bicycle facilities, and loading facilities proposed by the project. The City's zoning requirements for vehicle parking, and bicycle parking are also included.

Proposed Analysis Methodology & Assumptions

Intersection capacity analysis that follows City of Rockville CTR guidelines is proposed to determine the impact of the project. The objective of this analysis is to determine whether the project will generate a detrimental impact to the surrounding transportation network.

This evaluation is based on a technical comparison of three (3) traffic volume scenarios during the weekday AM and PM peak hours:

1. Existing Scenario, representing existing 2022 conditions and roadway volumes, detailed below.
2. Background Scenario (Future without the Project), representing Existing Scenario with the addition of background traffic growth to 2025 in the area.
3. Total Future Scenario (Future with the Project), representing the 2025 Background Scenario with the addition of the site trip generation.

Study Intersections

Based on the projected future trip generation and the location of site driveways, the following intersections are proposed for analysis:

1. Hurley Avenue and Wootton Parkway
2. Hurley Avenue and Site Driveway
3. Wootton Parkway and Site Driveway

Traffic Volumes

New peak period traffic counts will be collected by Gorove Slade at the study intersections listed above. The new counts will be collected on a typical weekday in the Fall of 2022 when school is in session. Consistent with the latest M-NCPPC policy pertaining to traffic counts, the collected counts will be used to establish existing conditions without adjustment factors.

Analysis Scenarios

Existing Scenario

Existing conditions for weekday AM and PM peak hours will be established based the Fall 2022 traffic volumes.

Background Scenario

The "Future Background Scenario without the Project" analysis scenario will be based on the 1) existing conditions' traffic volumes and 2) background traffic growth, outlined in Table 1. No approved pipeline developments generating traffic volumes assigned to the proposed study intersections were found in the vicinity of the proposed development.

Table 1: Growth Rate Data and Applied Annual and Total Background Growth Rates

Road	Average Annual AADT Growth 2011-2020	Annual Growth Rate Assumption	Proposed Total Growth Between 2021 and 2025
Hurley Avenue	-2.53%	0.10%	0.40%
Wootton Parkway	-2.19%	0.10%	0.40%

Background Transportation Improvements

No planned improvements are proposed to be assumed in background and total future conditions.

Total Future Scenario

The "Future Scenario with the Project" analysis scenario will be based on the 1) background conditions' traffic volumes and 2) the proposed site trip generation.

Trip Generation Rates

Trip generation for the proposed redevelopment was based on the methodology outlined in the Institute of Transportation Engineers (ITE) Trip Generation, 11th Edition and the City of Rockville Comprehensive Transportation Review (2018).

The development features 60 residential units total (31 single family homes and 29 townhomes) and 5,300 square feet of retail. Trip generation rates for "Residential (Low-Rise)" (Land Use 220) were used in trip generation calculations for the townhomes and "Single-Family Detached Housing" (Land Use 210) were used in trip generation calculations for the single-family homes. The retail trip generation was calculated based on trip generation rates for "Strip Retail Plaza (<40k)" (Land Use 822). Existing land use consists of approximately 52,000 square feet of retail space with grocery. Trip generation rates for the "Grocery" (Land Use 850) were used in trip generation calculations for the existing development. The total site-generated vehicular trip results with credits and reductions are summarized in Table 2.

Trip generation for the adjacent community center and pool facility is not part of the proposed development as these trips exist under existing conditions. In order to provide a conservative analysis, the community center/pool trips were added to the background trips to account for the periods of overlap between pool operations and the school year.

As shown in Table 2, the trip generation for the development program will result in an overall reduction in vehicle trips in the area as compared to the existing development. The project will generate -78 net new trips in the morning peak hour (-65 inbound, -13 outbound), -208 net new trips in the afternoon peak hour (-95 inbound, -113 outbound), and -315 net new trips in the Saturday peak hour (-157 inbound, -158 outbound).

Table 2: Proposed Trip Generation

Land Use	Size	AM Peak Hour (veh/hr)			PM Peak Hour (veh/hr)			ADT (veh)	Sat Peak Hour (veh/hr)		
		In	Out	Total	In	Out	Total		In	Out	Total
Existing											
Retail with Grocery(850)	52,000 sf	119	80	199	245	235	480	5,553	274	264	538
*Pass-by Reduction for Grocery (36% for PM, 26% for SAT)**		--	--	--	*-88*	*-85*	*-173*	--	*-71*	*-69*	*-140*
Total Primary Grocery Trips		119	80	199	157	150	307	5,553	203	195	398
Proposed											
Residential (220)	29 units	8	24	32	21	12	33	261	6	6	12
Residential (210)	31 units	7	19	26	21	12	33	344	19	17	36
Retail	5,300 sf	8	5	13	18	17	35	453	18	17	35
Pass-by Reduction for Shopping Center (34% for PM, 26% for SAT)		--	--	--	*-6*	*-6*	*-12*	--	*-5*	*-4*	*-9*
Subtotal Proposed Trips		23	48	71	54	35	89	1,058	38	36	74
Net New Primary Trips		-65	-13	-78	-95	-113	-208	-3,818	-157	-158	-315

*Based on average pass-by percentages from ITE Trip Generation Handbook, 3rd Edition (PM from LU 850 Supermarket, SAT from LU 820 Shopping Center)

Proposed Capacity Analysis

Capacity Analysis is not required because the project results in a reduction of traffic on the transportation network and does not generate 30 or more trips. Per City Staff request, a supplemental vehicular capacity analyses will be performed using the critical lane analysis technique (CLV method) to determine the volume to capacity ratio and the level of service (LOS). The supplemental analysis will be provided for informational purposes only. At the request of City Staff, we propose to analyze the weekday morning and afternoon commuter peak hours, using the intersection peak hours at all study area intersections. Signal timings for the signalized study intersections will be obtained from MCDOT.

The capacity analysis results will show the volume to capacity ratio (V/C) and the resulting LOS for the overall intersection.

- We will highlight intersections exceeding the threshold for V/C or LOS for Primary Residential – Class I (Major Collector).
- We will highlight intersections causing General Traffic Impact (Table 6 in City of Rockville CTR guidelines).
- We will propose mitigation measures at intersections that meet mitigation thresholds as outlined in the CTR guidelines.

Special Studies

Pedestrian Study

Per the City of Rockville's Staff request, a Pedestrian Study at the Wootton Parkway and Site driveway intersection will be included with the CTR.

The Pedestrian Study will assess existing pedestrian conditions and include a review of the following:

- Pedestrian volumes, to be collected in December of 2022, at this intersection;
- Pedestrian facilities and accommodations at this intersection with an inventory of streetlights along the site frontage;
- Crossing time and distance at this intersection; and,
- Crash data involving pedestrians at or around this intersection.

Speed Study

Per the City of Rockville's Staff request, a speed study will be conducted along Wootton Parkway at two (2) locations. Speed data will be collected over 48 hours at the following locations:

- South of Hurley Avenue between the site driveway and Paulsboro Drive.
- North of the Hurley Avenue and Wootton Parkway intersection

SCOPING ATTACHMENTS

A. Project Location

B. Site Plan

C. Study Intersections

D. Proposed Site Trip Distribution Assumptions

A. Project Location

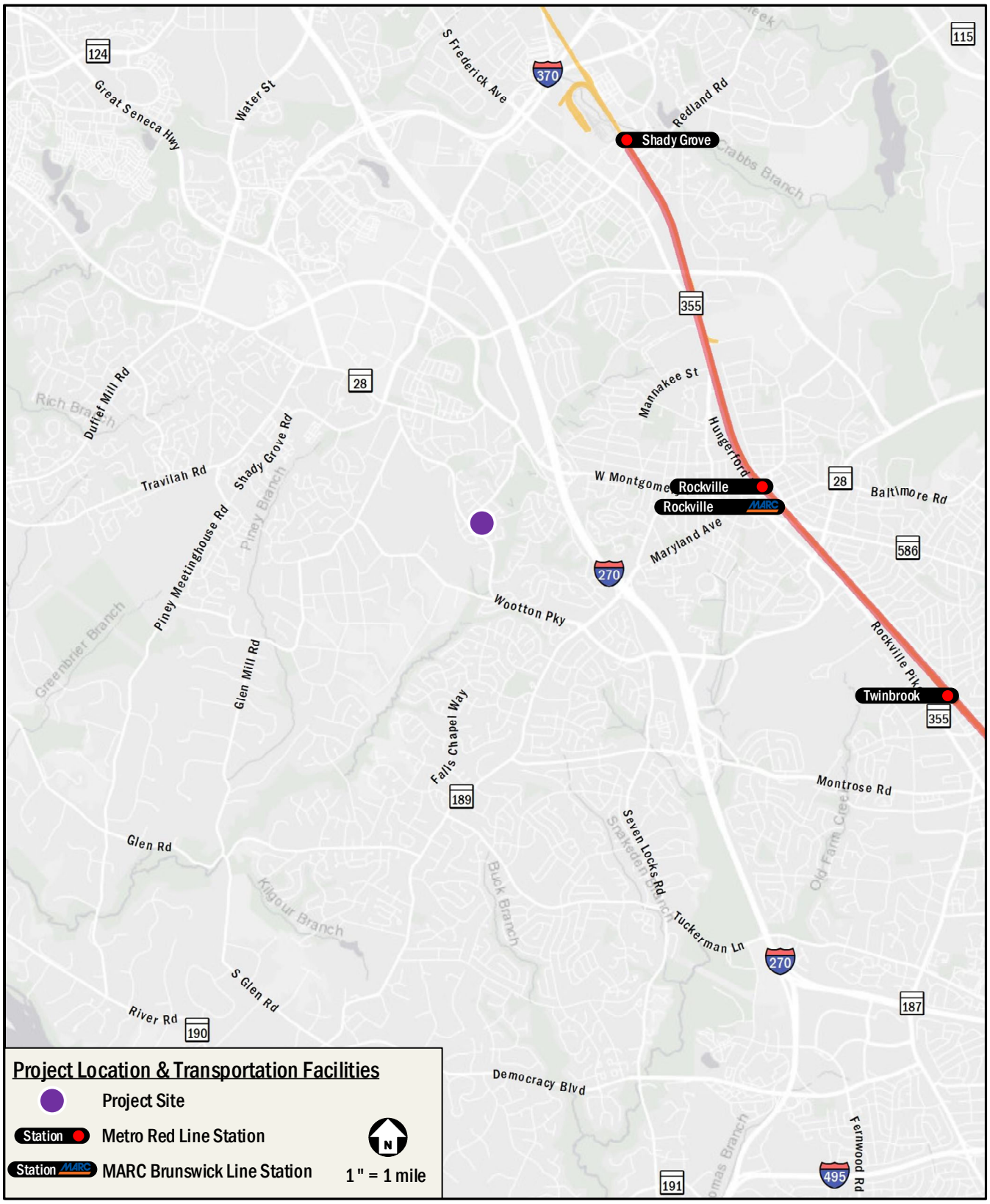


Figure 1: Project Location and Regional Transportation Facilities

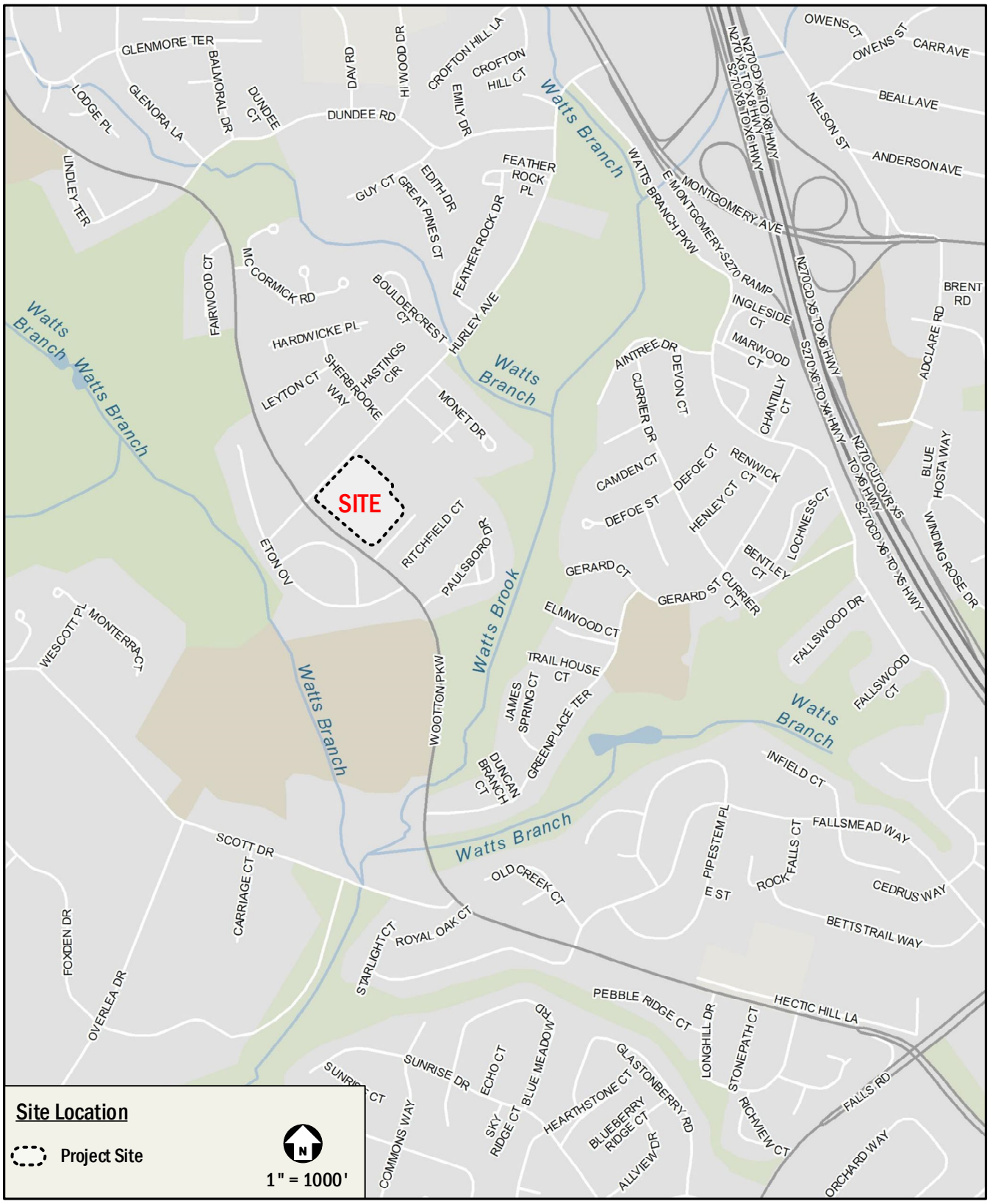


Figure 2: Site Location

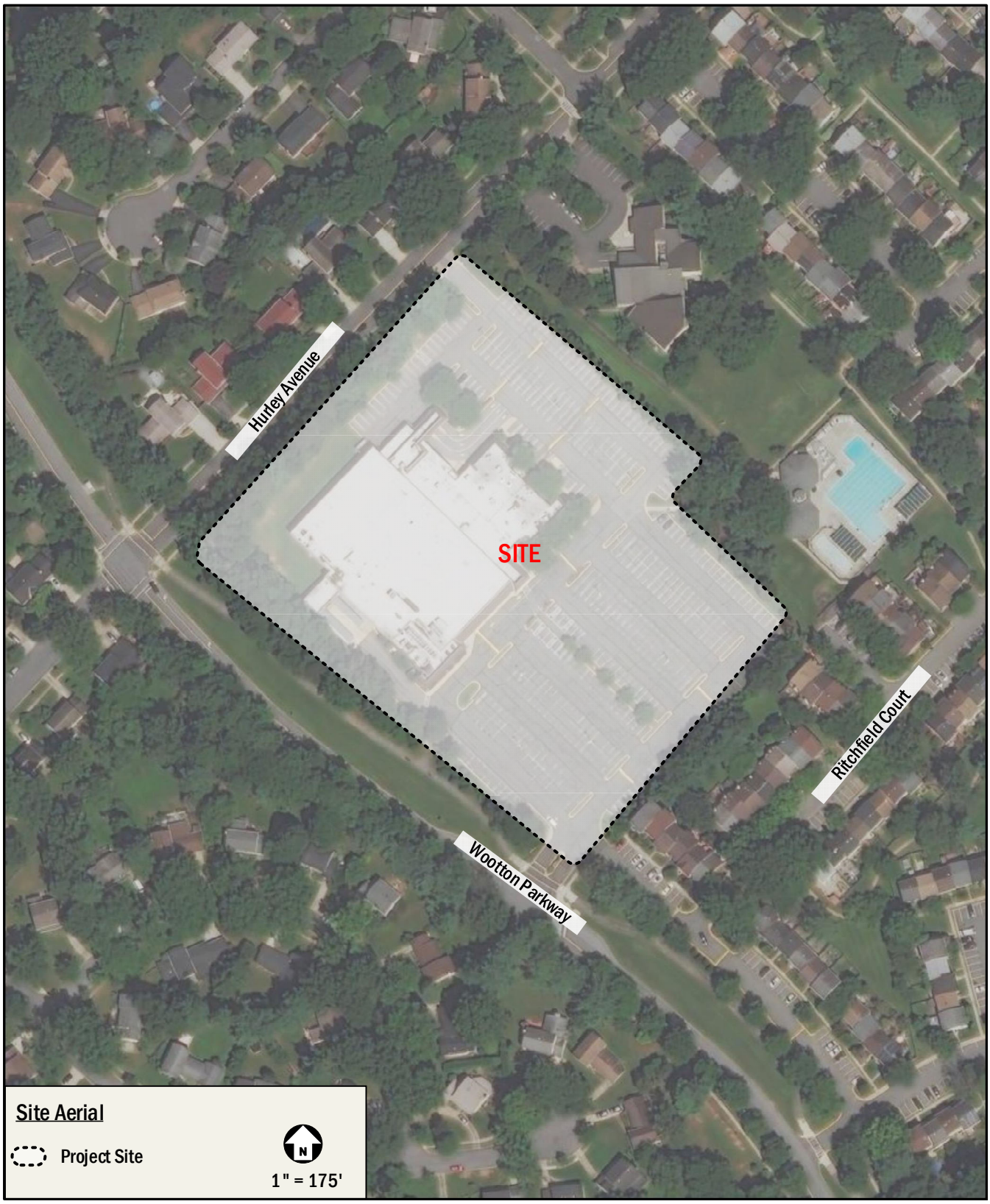


Figure 3: Site Aerial

B. Site Plan

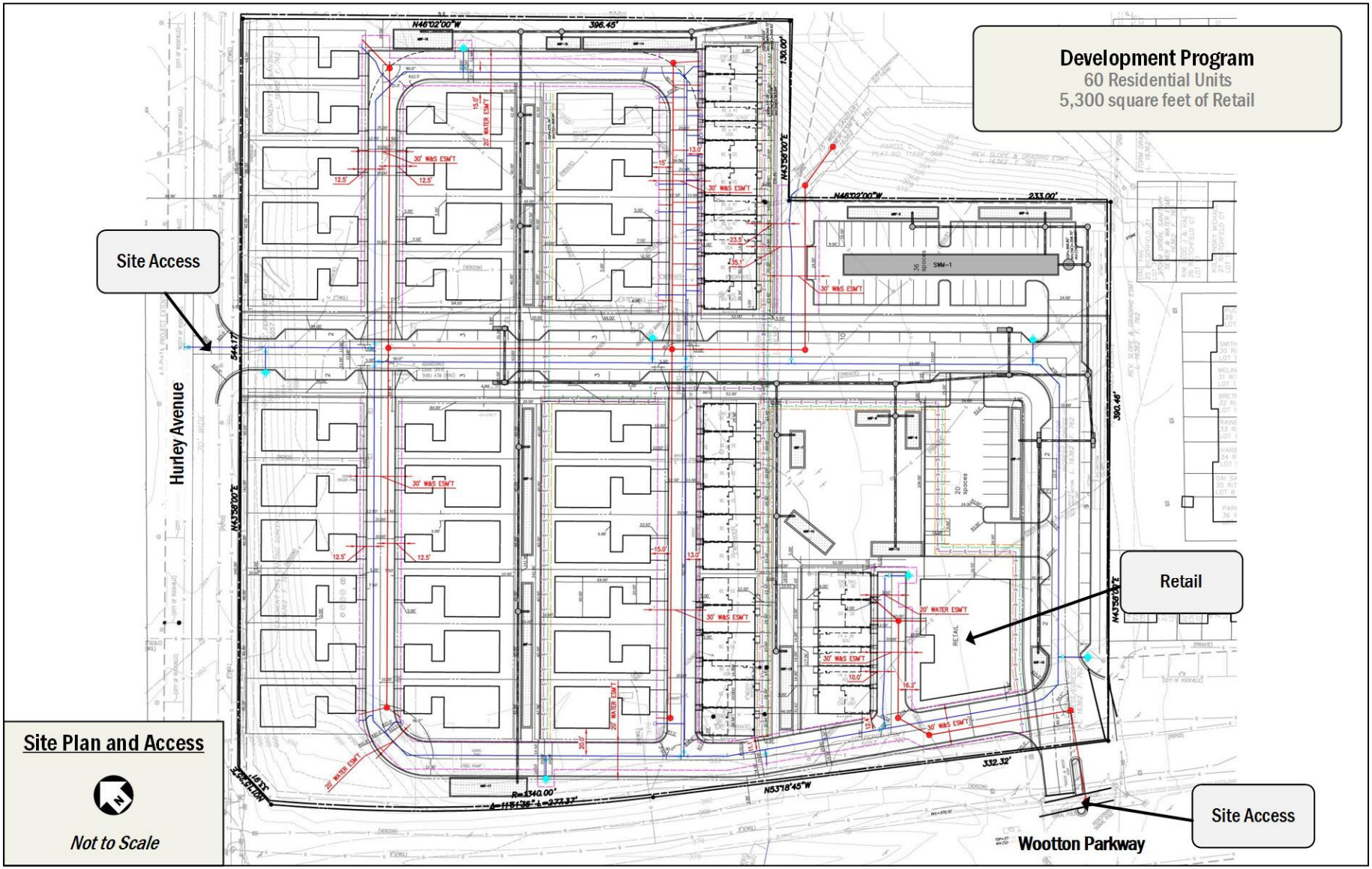


Figure 4: Site Plan and Access

C. Study Intersections

Figure 5: Study Intersections

D. Proposed Site Trip Distribution Assumptions

Preliminary Site Distributions

**Derived from Appendix Table 2-6 of the M-NCPPC LATR Guidelines, City of Rockville Staff feedback, and approved studies.*

Trip Assignment for Super District (Residential Development Located in Super District 4--Rockville/North Bethesda)

Super District	Direction			Sum	Auto Driver Distribution-District 4 Residential
	Wootton Pkwy (to/from the S, SE, SW)	Wootton Pkwy (to/from the N, NE. NW)	Hurley Ave (to/from the NE, E, SE)		
1 (Bethesda/Chevy Chase)	90%		10%	100%	**7.4%**
2 (Silver Spring/Takoma Park)	90%		10%	100%	**2.3%**
3 (Potomac/Darnestown/Travilah)	35%	65%		100%	**5.4%**
4 (Rockville/North Bethesda)	45%	30%	25%	100%	**38.2%**
5 (Kensington/Wheaton)	60%		40%	100%	**4.1%**
6 (White Oak/Fairland/Cloverly)	50%	30%	20%	100%	**1.6%**
7 (Gaithersburg/Shady Grove)		50%	50%	100%	**13.4%**
8 (Aspen Hill/Olney)	40%	40%	20%	100%	**2.8%**
9 (Germantown/Clarksburg)		30%	70%	100%	**1.7%**
10 (Rural West of I-270)		50%	50%	100%	**0.1%**
11 (Rural East of I-270)		75%	25%	100%	**0.3%**
12 (Washington, DC)	75%		25%	100%	**11.0%**
13 (PG/AA/Cal/St. M/Chls Cos., MD)	85%		15%	100%	**4.4%**
14 (VA/WV)	40%	40%	20%	100%	**6.5%**
15 (Frederick Co., MD)		40%	60%	100%	**0.3%**
16 (Howard Co./Carroll Co., MD)	10%	40%	50%	100%	**0.5%**

Trip Assignment for Development Case

Super District	Direction			Auto Driver Distribution-District 4 Residential
	Wootton Pkwy (to/from the S, SE, SW)	Wootton Pkwy (to/from the N, NE. NW)	Hurley Ave (to/from the NE, E, SE)	
1 (Bethesda/Chevy Chase)	6.7%		0.7%	**7.4%**
2 (Silver Spring/Takoma Park)	2.1%		0.2%	**2.3%**
3 (Potomac/Darnestown/Travilah)	1.9%	3.5%		**5.4%**
4 (Rockville/North Bethesda)	17.2%	11.5%	9.6%	**38.2%**
5 (Kensington/Wheaton)	2.5%		1.6%	**4.1%**
6 (White Oak/Fairland/Cloverly)	0.8%	0.5%	0.3%	**1.6%**
7 (Gaithersburg/Shady Grove)		6.7%	6.7%	**13.4%**
8 (Aspen Hill/Olney)	1.1%	1.1%	0.6%	**2.8%**
9 (Germantown/Clarksburg)		0.5%	1.2%	**1.7%**
10 (Rural West of I-270)		0.1%	0.1%	**0.1%**
11 (Rural East of I-270)		0.2%	0.1%	**0.3%**
12 (Washington, DC)	8.3%		2.8%	**11.0%**
13 (PG/AA/Cal/St. M/Chls Cos., MD)	3.7%		0.7%	**4.4%**
14 (VA/WV)	2.6%	2.6%	1.3%	**6.5%**
15 (Frederick Co., MD)		0.1%	0.2%	**0.3%**
16 (Howard Co./Carroll Co., MD)	0.1%	0.2%	0.3%	**0.5%**
Distribution (Sum)	**46.8%**	**27.0%**	**26.2%**	**100.0%**
Distribution (Assumed)	**47%**	**27%**	**26%**	**100.0%**

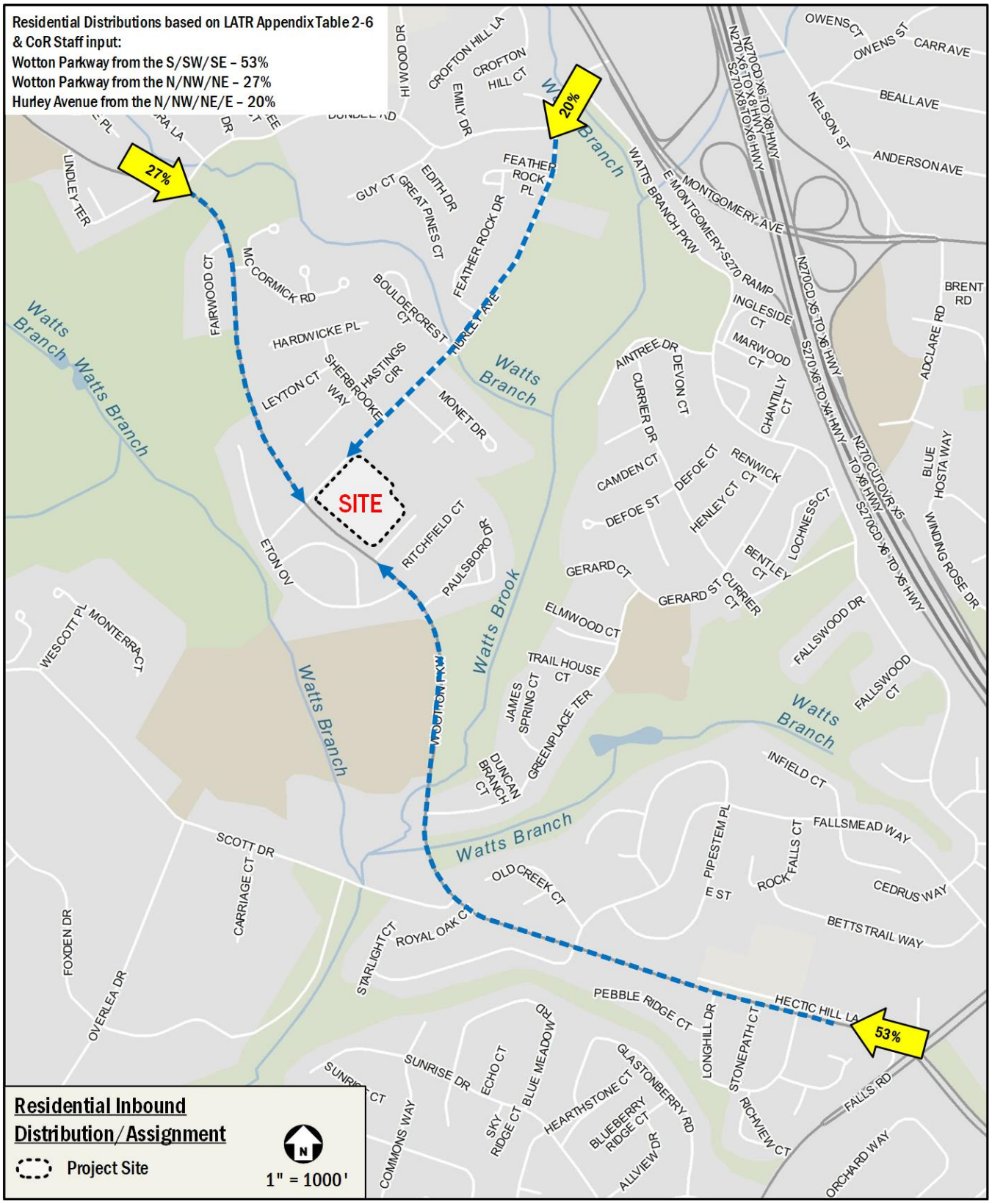


Figure 6: Residential Inbound Trip Distribution/Assignment

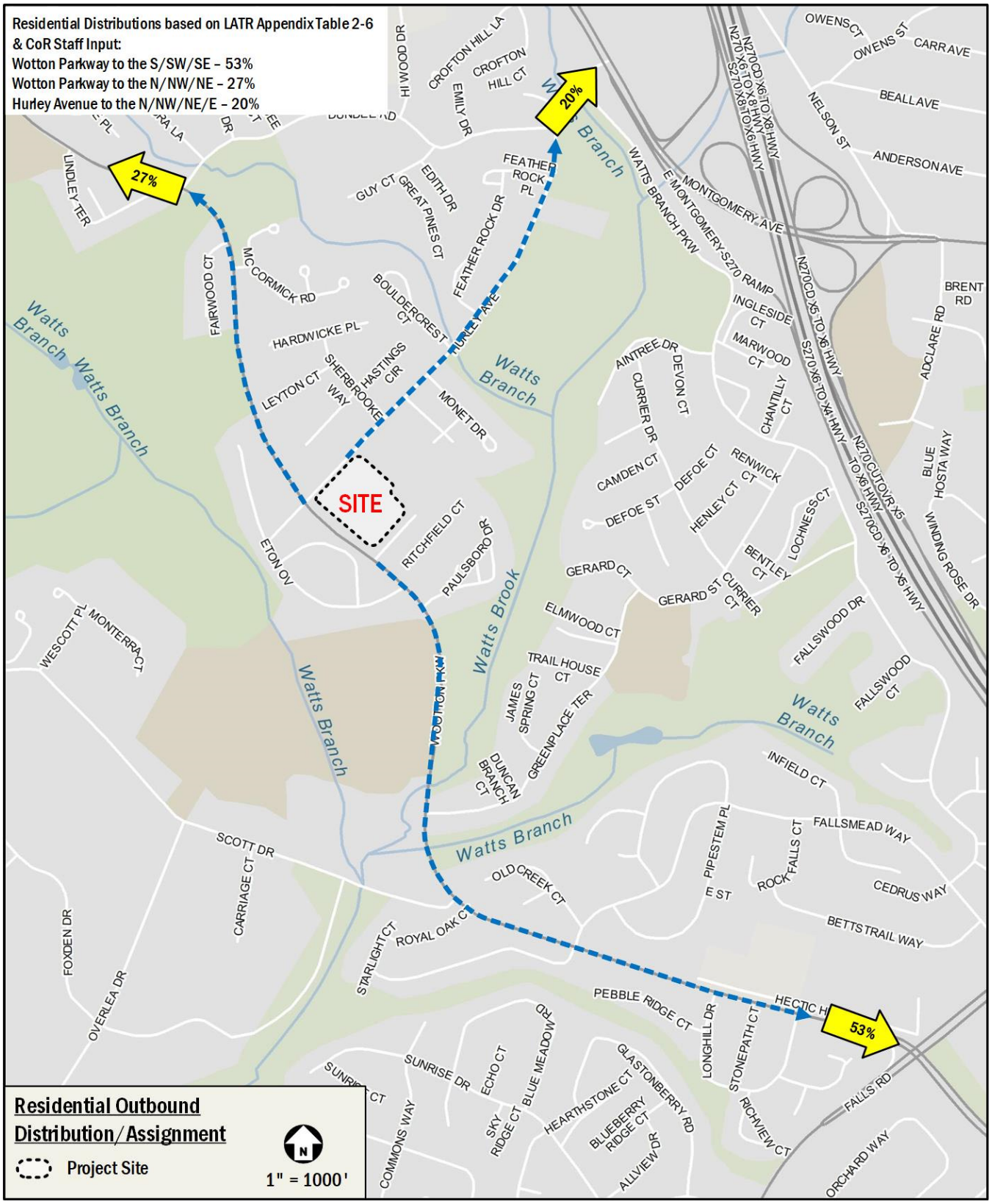
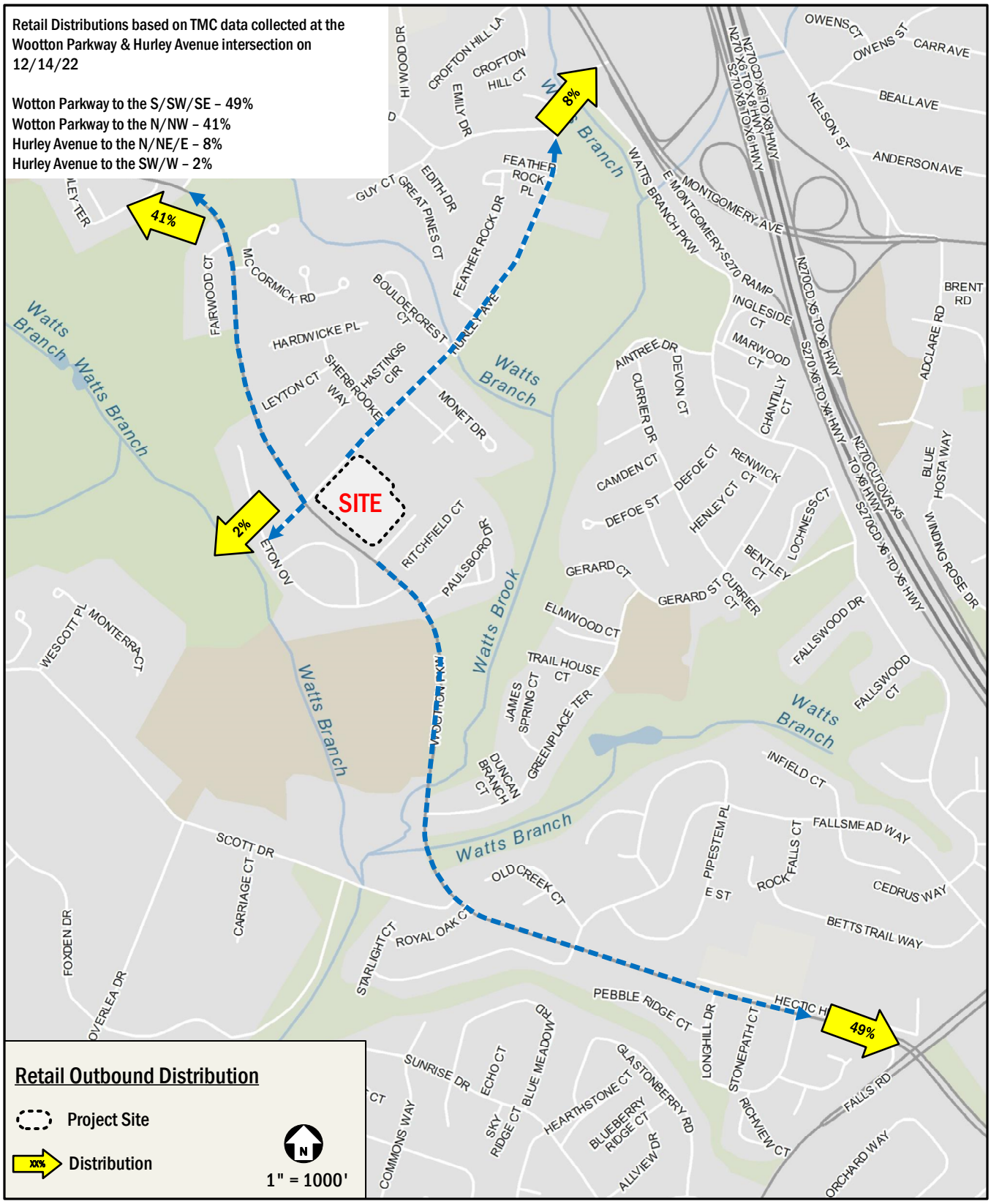
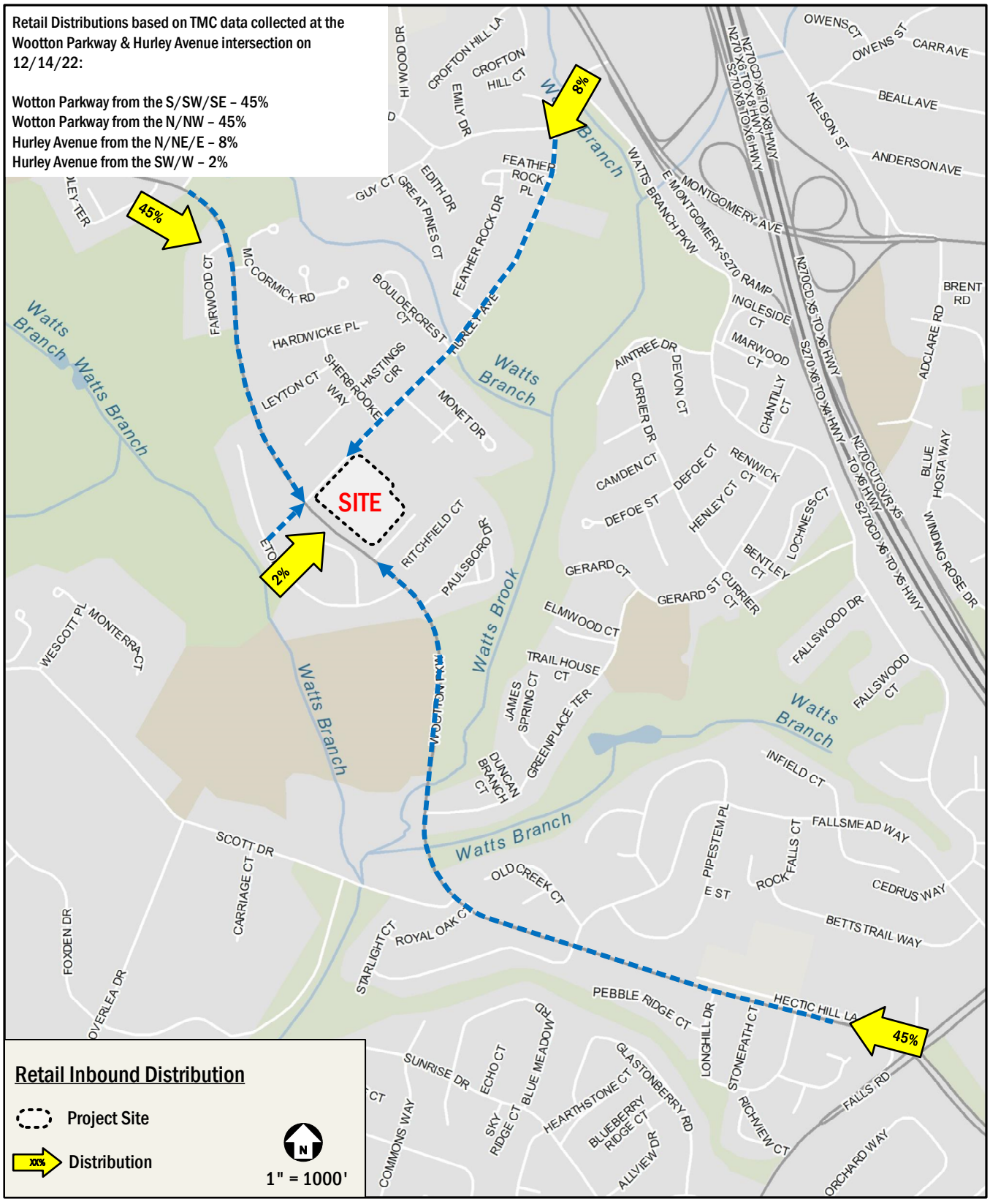


Figure 7: Residential Outbound Trip Distribution/Assignment


Retail Distributions based on TMC data collected at the Wootton Parkway & Hurley Avenue intersection on 12/14/22
Wotton Parkway to the S/SW/SE – 49%
Wotton Parkway to the N/NW – 41%
Hurley Avenue to the N/NE/E – 8%
Hurley Avenue to the SW/W – 2%
41%
8%
2%
49%
SITE
Watts Branch
Watts Brook
WOOTTON PKWY
HURLEY AVE
MONTGOMERY AVE
E MONTGOMERY S270 RAMP
WATTS BRANCH PKWY
FEATHER ROCK DR
FEATHER ROCK PL
GUY CT
GREAT PINES CT
EDITH DR
CROFTON HILL LA
CROFTON HILL CT
EMILY DR
HI WOOD DR
OWENS CT
OWENS ST
CARR AVE
BEALL AVE
NELSON ST
ANDERSON AVE
N270CD X6 TO X8 HWY
S270 X8 TO X6 HWY
N270CD X5 TO X6 HWY
S270 X6 TO X4 HWY
N270CD TO VR X5
S270CD X6 TO X5 HWY
BRENT RD
ADCLARE RD
INGLESIDE CT
MARWOOD CT
CHANTILLY CT
AINTREE DR
DEVON CT
CURRIER DR
CAMDEN CT
DEFOE CT
DEFOE ST
RENWICK CT
HENLEY CT
LOCHNESS CT
BENTLEY CT
GERARD CT
GERARD ST
CURRIER CT
BLUE HOSTA WAY
WINDING ROSE DR
FALLSWOOD DR
FALLSWOOD CT
ELMWOOD CT
TRAIL HOUSE CT
JAMES SPRING CT
GREENPLACE TER
DUNCAN BRANCH CT
INFIELD CT
FALLSMEAD WAY
PIPESTEM PL
E ST
ROCK FALLS CT
CEDRUS WAY
BETTS TRAIL WAY
OLD CREEK CT
ROYAL OAK CT
STARLIGHT CT
PEBBLE RIDGE CT
HECTIC H
LONGHILL DR
STONEPATH CT
RICHVIEW CT
FALLS RD
ORCHARD WAY
GLASTONBERRY RD
BLUEBERRY RIDGE CT
HEARTHSTONE CT
ALLVIEW DR
SUNRISE DR
ECHO CT
BLUE MEADOW RD
SKY RIDGE CT
COMMONS WAY
SCOTT DR
CARRIAGE CT
FOXDEN DR
OVERLEA DR
WESCOTT PL
MONTERRA CT
FAIRWOOD CT
MC CORMICK RD
BOULDERCREST CT
HARDWICKE PL
LEYTON CT
SHERBROOKE WAY
HASTINGS CIR
MONET DR
RITCHFIELD CT
PAULSBORO DR
ETTON OV
LEY TER
Retail Outbound Distribution
Project Site
Distribution
N
1" = 1000'


Retail Distributions based on TMC data collected at the Wootton Parkway & Hurley Avenue intersection on 12/14/22:
Wotton Parkway from the S/SW/SE – 45%
Wotton Parkway from the N/NW – 45%
Hurley Avenue from the N/NE/E – 8%
Hurley Avenue from the SW/W – 2%
45%
8%
2%
45%
SITE
Watts Branch
Watts Brook
WOOTTON PKWY
WATTS BRANCH PKWY
E MONTGOMERY AVE
MONTGOMERY-S270 RAMP
N270CD-X6-TO-X8 HWY
S270-X8-TO-X6 HWY
N270CD-X5-TO-X6 HWY
S270-X6-TO-X4 HWY
N270CUTOVR-X5-TO-X6 HWY
S270CD-X6-TO-X5 HWY
FEATHER ROCK PL
FEATHER ROCK DR
GREAT PINES CT
GUY CT
EDITH DR
CROFTON HILL LA
CROFTON HILL CT
EMILY DR
HI WOOD DR
OWENS CT
OWENS ST
CARR AVE
BEALL AVE
NELSON ST
ANDERSON AVE
BRENT RD
ADCLARE RD
INGLESIDE CT
MARWOOD CT
CHANTILLY CT
AINTREE DR
DEVON CT
CURRIER DR
CAMDEN CT
DEFOE CT
DEFOE ST
RENWICK CT
HENLEY CT
LOCHNESS CT
BENTLEY CT
GERARD CT
GERARD ST
CURRIER CT
BLUE HOSTA WAY
WINDING ROSE DR
FALLSWOOD DR
FALLSWOOD CT
ELMWOOD CT
TRAIL HOUSE CT
JAMES SPRING CT
GREENPLACE TER
DUNCAN BRANCH CT
INFIELD CT
FALLSMEAD WAY
ROCK FALLS CT
PIPESTEM PL
E ST
CEDRUS WAY
BETTS TRAIL WAY
HECTIC HILL LA
PEBBLE RIDGE CT
LONGHILL DR
STONEPATH CT
RICHVIEW CT
FALLS RD
ORCHARD WAY
GLASTONBERRY RD
HEARTHSTONE CT
BLUEBERRY RIDGE CT
ALLVIEW DR
BLUE MEADOW RD
ECHO CT
SKY RIDGE CT
SUNRISE DR
COMMONS WAY
OLD CREEK CT
ROYAL OAK CT
STARLIGHT CT
SCOTT DR
CARRIAGE CT
FOXDEN DR
OVERLEA DR
WESCOTT PL
MONTERRA CT
RITCHFIELD CT
PAULSBORO DR
MONET DR
SHERBROOKE WAY
HASTINGS CIR
LEYTON CT
HARDWICKE PL
BOULDERCREST CT
FAIRWOOD CT
MCCORMICK RD
Retail Inbound Distribution
Project Site
XX% Distribution
N
1" = 1000'

B. Turning Movement Count Data

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Rockshire
Project # : 2592-012
Location Montgomery County, MD
Data Source: Gorove/Slade Associates, Inc.

Analysis Period: STUDY_PERIOD 06:30 AM to 09:30 AM
Date of Counts: Thursday, December 14, 2023
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 07:15 AM to 08:15 AM
System Peak Hour (all vehicles): 07:15 AM to 08:15 AM
User-Defined Peak Hour: 07:30 AM to 08:30 AM

Intersection: 1. Hurley Avenue & Wootton Parkway

ALL VEHICLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Hurley Avenue					Wootton Parkway					Hurley Avenue					Wootton Parkway				
Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
06:30 AM to 06:45 AM	0	5	0	0	4	0	0	6	3	2	0	1	1	0	0	0	1	25	0	0
06:45 AM to 07:00 AM	0	7	0	1	0	0	0	10	1	1	0	0	1	2	0	0	1	29	0	0
07:00 AM to 07:15 AM	0	10	0	3	3	0	0	36	4	0	0	0	2	3	1	0	1	80	1	0
07:15 AM to 07:30 AM	0	28	1	2	6	0	0	68	7	0	0	2	3	1	2	0	2	165	0	0
07:30 AM to 07:45 AM	0	21	3	4	11	0	0	93	15	0	0	1	0	4	1	0	3	110	1	1
07:45 AM to 08:00 AM	0	11	0	3	0	0	1	101	24	0	0	2	1	6	2	0	6	109	1	0
08:00 AM to 08:15 AM	0	10	1	0	3	0	2	47	7	0	0	1	2	2	0	0	3	73	0	0
08:15 AM to 08:30 AM	0	5	1	7	3	0	1	35	11	1	0	0	0	2	1	0	4	81	2	2
08:30 AM to 08:45 AM	0	11	0	13	6	0	0	72	8	0	0	1	1	3	1	0	6	93	1	2
08:45 AM to 09:00 AM	0	10	0	0	1	0	2	57	10	0	0	0	0	2	0	0	5	70	1	1
09:00 AM to 09:15 AM	0	6	0	3	0	0	0	47	6	0	0	0	1	4	0	0	3	71	0	1
09:15 AM to 09:30 AM	0	2	2	3	2	0	2	29	5	0	0	0	1	3	0	0	5	43	0	0
09:30 AM to 09:45 AM																				
09:45 AM to 10:00 AM																				
10:00 AM to 10:15 AM																				
10:15 AM to 10:30 AM																				
10:30 AM to 10:45 AM																				
10:45 AM to 11:00 AM																				
11:00 AM to 11:15 AM																				
11:15 AM to 11:30 AM																				
SYSTEM PEAK HR (VEH.)	84				20	365				0	25				5	473				1
07:15 AM to 08:15 AM	0	70	5	9		0	3	309	53		0	6	6	13		0	14	457	2	
Peak Hour Overall	U	Left	Thru	Right	**SB**	U	Left	Thru	Right	**WB**	U	Left	Thru	Right	**NB**	U	Left	Thru	Right	**EB**
Factor (PHF) 0.85	n/a	0.63	0.42	0.56	**0.68**	n/a	0.38	0.76	0.55	**0.72**	n/a	0.75	0.50	0.54	**0.69**	n/a	0.58	0.69	0.50	**0.71**

HEAVY VEHICLES (FHWA 4+)

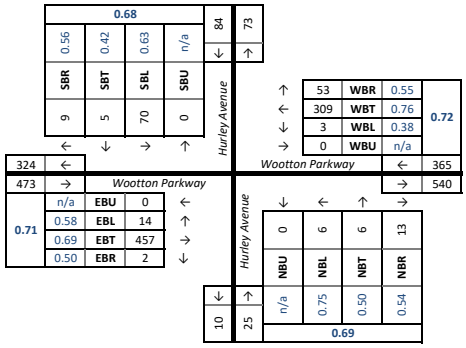
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	Hurley Avenue				Wootton Parkway				Hurley Avenue				Wootton Parkway			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
06:30 AM to 06:45 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
06:45 AM to 07:00 AM	0	0	0	1	0	0	3	0	0	0	0	0	0	1	5	0
07:00 AM to 07:15 AM	0	0	0	0	0	0	10	0	0	0	1	0	0	0	13	1
07:15 AM to 07:30 AM	0	0	0	1	0	0	11	0	0	0	0	0	0	1	12	0
07:30 AM to 07:45 AM	0	0	0	1	0	0	4	0	0	0	0	0	0	0	1	0
07:45 AM to 08:00 AM	0	0	0	1	0	0	2	0	0	0	0	0	0	2	3	0
08:00 AM to 08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
08:15 AM to 08:30 AM	0	0	1	2	0	0	3	2	0	0	0	1	0	3	3	0
08:30 AM to 08:45 AM	0	1	0	3	0	0	2	0	0	0	0	0	0	0	8	0
08:45 AM to 09:00 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	3	0
09:00 AM to 09:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	3	0
09:15 AM to 09:30 AM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	0
09:30 AM to 09:45 AM																
09:45 AM to 10:00 AM																
10:00 AM to 10:15 AM																
10:15 AM to 10:30 AM																
10:30 AM to 10:45 AM																
10:45 AM to 11:00 AM																
11:00 AM to 11:15 AM																
11:15 AM to 11:30 AM																
SYSTEM PEAK HR (VEH.)	3				17				0				22			
07:15 AM to 08:15 AM	0	0	0	3	0	0	17	0	0	0	0	0	0	3	19	0
Heavy Vehicle % (PHV):	0.0%	0.0%	0.0%	33.3%	0.0%	0.0%	5.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	21.4%	4.2%	0.0%
INT. PEAK HR (HV ONLY)	3				28				1				34			
06:45 AM to 07:45 AM	0	0	0	3	0	0	28	0	0	0	1	0	0	2	31	1
Heavy Vehicle % (PHV):	0.0%	0.0%	0.0%	30.0%	0.0%	0.0%	13.5%	0.0%	0.0%	0.0%	16.7%	0.0%	0.0%	28.6%	8.1%	50.0%

BICYCLES

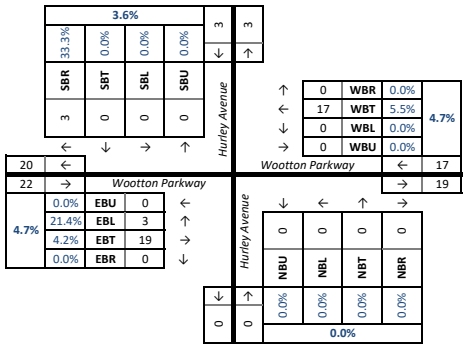
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	Hurley Avenue				Wootton Parkway				Hurley Avenue				Wootton Parkway			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
06:30 AM to 06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
06:45 AM to 07:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
07:00 AM to 07:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
07:15 AM to 07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM to 07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
07:45 AM to 08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
08:00 AM to 08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM to 08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM to 08:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
08:45 AM to 09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 AM to 09:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
09:15 AM to 09:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
09:30 AM to 09:45 AM																
09:45 AM to 10:00 AM																
10:00 AM to 10:15 AM																
10:15 AM to 10:30 AM																
10:30 AM to 10:45 AM																
10:45 AM to 11:00 AM																
11:00 AM to 11:15 AM																
11:15 AM to 11:30 AM																
SYSTEM PEAK HR (VEH.)	0				0				0				8			
07:15 AM to 08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0
INT. PEAK HR (BIKES)	0				1				0				8			
07:00 AM to 08:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	8	0

DATA COLLECTION NOTES :

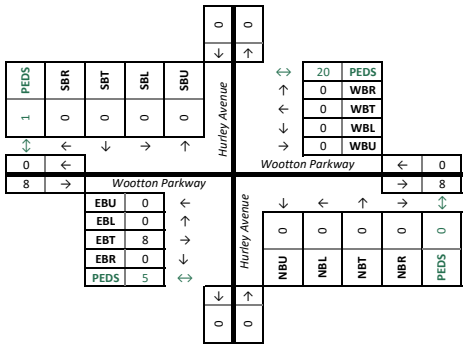
VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Rockshire
Project # : 2592-012
Location Montgomery County, MD
Data Source: Gorove/Slade Associates, Inc.

Analysis Period: STUDY_PERIOD 06:30 AM to 09:30 AM
Date of Counts: Thursday, December 14, 2023
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 07:15 AM to 08:15 AM
System Peak Hour (all vehicles): 07:15 AM to 08:15 AM
User-Defined Peak Hour: 07:30 AM to 08:30 AM

Intersection: 1. Hurley Avenue & Site Driveway/House Driveway

ALL VEHICLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Hurley Avenue					Site Driveway					Hurley Avenue					House Driveway				
Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
06:30 AM to 06:45 AM	0	0	5	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0
06:45 AM to 07:00 AM	0	1	7	0	0	0	0	0	1	0	0	0	4	0	0	0	0	0	0	0
07:00 AM to 07:15 AM	0	0	13	0	0	0	0	0	0	1	0	0	5	1	0	0	0	0	0	1
07:15 AM to 07:30 AM	0	23	31	0	0	0	0	0	0	1	0	0	11	1	0	0	0	0	0	0
07:30 AM to 07:45 AM	0	102	26	0	0	0	1	0	4	3	0	0	15	3	1	0	0	0	0	1
07:45 AM to 08:00 AM	0	10	14	0	1	0	1	0	2	1	0	0	29	1	0	0	0	0	0	0
08:00 AM to 08:15 AM	0	1	11	0	0	0	0	0	2	0	0	0	12	1	0	0	0	0	0	1
08:15 AM to 08:30 AM	0	2	13	0	1	0	0	0	1	4	0	0	14	0	0	0	1	0	0	2
08:30 AM to 08:45 AM	0	1	21	0	0	0	0	0	0	1	0	0	13	1	0	0	0	0	0	0
08:45 AM to 09:00 AM	0	0	12	0	0	0	0	0	2	1	0	0	16	0	0	0	0	0	0	3
09:00 AM to 09:15 AM	0	0	8	0	0	0	0	0	1	2	0	0	10	0	0	0	0	0	0	0
09:15 AM to 09:30 AM	0	2	7	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	4
09:30 AM to 09:45 AM																				
09:45 AM to 10:00 AM																				
10:00 AM to 10:15 AM																				
10:15 AM to 10:30 AM																				
10:30 AM to 10:45 AM																				
10:45 AM to 11:00 AM																				
11:00 AM to 11:15 AM																				
11:15 AM to 11:30 AM																				
SYSTEM PEAK HR (VEH.)	218				1	10				5	73				1	0				2
07:15 AM to 08:15 AM	0	136	82	0		0	2	0	8		0	0	67	6		0	0	0	0	
Peak Hour Factor (PHF) Overall **0.50**	U	Left	Thru	Right	**SB 0.43**	U	Left	Thru	Right	**WB 0.50**	U	Left	Thru	Right	**NB 0.61**	U	Left	Thru	Right	**EB n/a**
	n/a	0.33	0.66	n/a		n/a	0.50	n/a	0.50		n/a	n/a	0.58	0.50		n/a	n/a	n/a	n/a	

HEAVY VEHICLES (FHWA 4+)

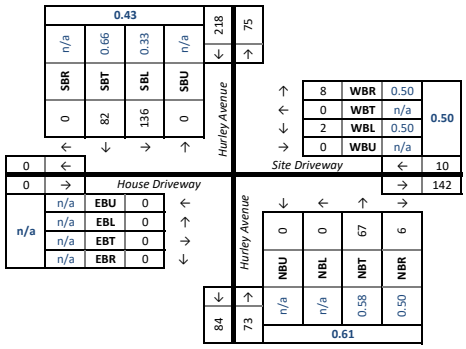
Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Hurley Avenue					Site Driveway					Hurley Avenue					House Driveway				
Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
06:30 AM to 06:45 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
06:45 AM to 07:00 AM	0	0	1	0		0	0	0	0		0	0	1	0		0	0	0	0	
07:00 AM to 07:15 AM	0	0	0	0		0	0	0	0		0	0	1	0		0	0	0	0	
07:15 AM to 07:30 AM	0	0	1	0		0	0	0	0		0	0	1	0		0	0	0	0	
07:30 AM to 07:45 AM	0	1	1	0		0	0	0	0		0	0	0	0		0	0	0	0	
07:45 AM to 08:00 AM	0	0	1	0		0	0	0	1		0	0	1	0		0	0	0	0	
08:00 AM to 08:15 AM	0	0	0	0		0	0	0	0		0	0	1	0		0	0	0	0	
08:15 AM to 08:30 AM	0	0	3	0		0	0	0	0		0	0	4	0		0	0	0	0	
08:30 AM to 08:45 AM	0	0	4	0		0	0	0	0		0	0	1	0		0	0	0	0	
08:45 AM to 09:00 AM	0	0	1	0		0	0	0	0		0	0	0	0		0	0	0	0	
09:00 AM to 09:15 AM	0	0	0	0		0	0	0	0		0	0	2	0		0	0	0	0	
09:15 AM to 09:30 AM	0	0	1	0		0	0	0	0		0	0	0	0		0	0	0	0	
09:30 AM to 09:45 AM																				
09:45 AM to 10:00 AM																				
10:00 AM to 10:15 AM																				
10:15 AM to 10:30 AM																				
10:30 AM to 10:45 AM																				
10:45 AM to 11:00 AM																				
11:00 AM to 11:15 AM																				
11:15 AM to 11:30 AM																				
SYSTEM PEAK HR (VEH.)	4					1					3					0				
07:15 AM to 08:15 AM	0	1	3	0		0	0	0	1		0	0	3	0		0	0	0	0	
Heavy Vehicle % (PHV):	0.0%	0.7%	3.7%	0.0%	**1.8%**	0.0%	0.0%	0.0%	12.5%	**10.0%**	0.0%	0.0%	4.5%	0.0%	**4.1%**	0.0%	0.0%	0.0%	0.0%	**0.0%**
INT. PEAK HR (HV ONLY)	8					1					7					0				
07:45 AM to 08:45 AM	0	0	8	0		0	0	0	1		0	0	7	0		0	0	0	0	
Heavy Vehicle % (PHV):	0.0%	0.0%	13.6%	0.0%	**11.0%**	0.0%	0.0%	0.0%	20.0%	**16.7%**	0.0%	0.0%	10.3%	0.0%	**9.9%**	0.0%	0.0%	0.0%	0.0%	**0.0%**

BICYCLES

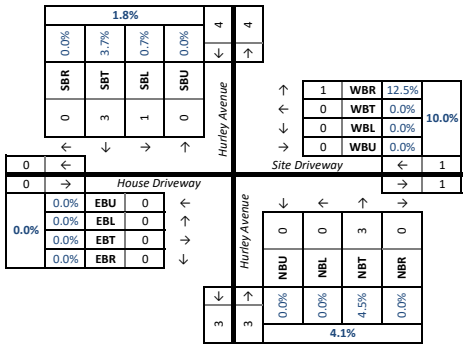
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	Hurley Avenue				Site Driveway				Hurley Avenue				House Driveway			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
06:30 AM to 06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM to 07:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
07:00 AM to 07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM to 07:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
07:30 AM to 07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM to 08:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM to 08:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM to 08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM to 08:45 AM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
08:45 AM to 09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 AM to 09:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15 AM to 09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30 AM to 09:45 AM																
09:45 AM to 10:00 AM																
10:00 AM to 10:15 AM																
10:15 AM to 10:30 AM																
10:30 AM to 10:45 AM																
10:45 AM to 11:00 AM																
11:00 AM to 11:15 AM																
11:15 AM to 11:30 AM																
SYSTEM PEAK HR (VEH.)	4				0				1				0			
07:15 AM to 08:15 AM	0	4	0	0	0	0	0	0	0	0	1	0	0	0	0	0
INT. PEAK HR (BIKES)	5				0				1				0			
07:45 AM to 08:45 AM	0	4	1	0	0	0	0	0	0	0	1	0	0	0	0	0

DATA COLLECTION NOTES :

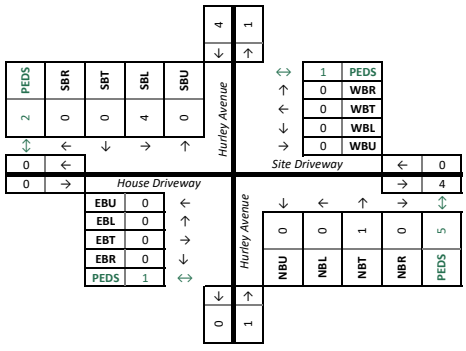
VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Rockshire
Project # : 2592-012
Location Montgomery County, MD
Data Source: Gorove/Slade Associates, Inc.

Analysis Period: STUDY_PERIOD 06:30 AM to 09:30 AM
Date of Counts: Thursday, December 14, 2023
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 07:15 AM to 08:15 AM
System Peak Hour (all vehicles): 07:15 AM to 08:15 AM
User-Defined Peak Hour: 07:30 AM to 08:30 AM

Intersection: 1. Site Driveway/ & Wootton Parkway

ALL VEHICLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Site Driveway					Wootton Parkway										Wootton Parkway				
Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
06:30 AM to 06:45 AM	0	0	0	0	2	0	0	9	0	0	0	0	0	0	0	0	0	27	0	0
06:45 AM to 07:00 AM	0	1	0	1	0	0	0	10	0	0	0	0	0	0	0	0	1	40	0	0
07:00 AM to 07:15 AM	0	1	0	0	2	0	0	42	0	1	0	0	0	0	0	0	3	91	0	0
07:15 AM to 07:30 AM	0	18	0	2	4	0	0	72	4	25	0	0	0	0	0	0	2	177	0	0
07:30 AM to 07:45 AM	0	71	0	13	13	0	0	91	2	60	0	0	0	0	0	0	2	126	0	0
07:45 AM to 08:00 AM	0	12	0	1	3	0	0	125	1	9	0	0	0	0	0	0	1	145	0	0
08:00 AM to 08:15 AM	0	1	0	1	4	0	0	55	4	3	0	0	0	0	0	0	1	87	0	0
08:15 AM to 08:30 AM	0	0	0	2	3	0	0	44	0	1	0	0	0	0	0	0	2	87	0	0
08:30 AM to 08:45 AM	0	1	0	0	6	0	0	77	0	1	0	0	0	0	0	0	1	95	0	0
08:45 AM to 09:00 AM	0	0	0	0	1	0	0	70	0	0	0	0	0	0	0	0	1	89	0	0
09:00 AM to 09:15 AM	0	0	0	2	6	0	0	50	4	2	0	0	0	0	0	0	0	83	0	0
09:15 AM to 09:30 AM	0	0	0	0	2	0	0	39	0	3	0	0	0	0	0	0	0	43	0	0
09:30 AM to 09:45 AM																				
09:45 AM to 10:00 AM																				
10:00 AM to 10:15 AM																				
10:15 AM to 10:30 AM																				
10:30 AM to 10:45 AM																				
10:45 AM to 11:00 AM																				
11:00 AM to 11:15 AM																				
11:15 AM to 11:30 AM																				
SYSTEM PEAK HR (VEH.)	119				24	354				97	0				0	541				0
07:15 AM to 08:15 AM	0	102	0	17		0	0	343	11		0	0	0	0		0	6	535	0	
Peak Hour Factor (PHF) Overall	**0.83**																			
	U	Left	Thru	Right	**SB**	U	Left	Thru	Right	**WB**	U	Left	Thru	Right	**NB**	U	Left	Thru	Right	**EB**
	n/a	0.36	n/a	0.33	**0.35**	n/a	n/a	0.69	0.69	**0.70**	n/a	n/a	n/a	n/a	**n/a**	n/a	0.75	0.76	n/a	**0.76**

HEAVY VEHICLES (FHWA 4+)

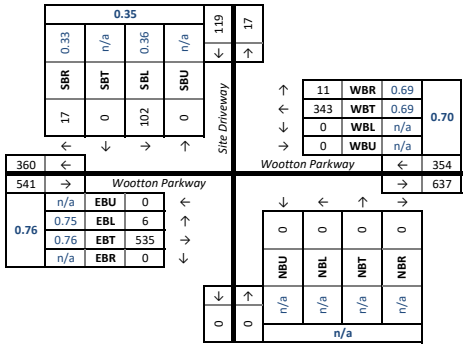
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	Site Driveway				Wootton Parkway								Wootton Parkway			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
06:30 AM to 06:45 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
06:45 AM to 07:00 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	5	0
07:00 AM to 07:15 AM	0	0	0	0	0	0	11	0	0	0	0	0	0	0	13	0
07:15 AM to 07:30 AM	0	0	0	0	0	0	10	0	0	0	0	0	0	0	12	0
07:30 AM to 07:45 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	1	0
07:45 AM to 08:00 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	4	0
08:00 AM to 08:15 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	3	0
08:15 AM to 08:30 AM	0	0	0	1	0	0	4	0	0	0	0	0	0	2	2	0
08:30 AM to 08:45 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	7	0
08:45 AM to 09:00 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	3	0
09:00 AM to 09:15 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	4	0
09:15 AM to 09:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0
09:30 AM to 09:45 AM																
09:45 AM to 10:00 AM																
10:00 AM to 10:15 AM																
10:15 AM to 10:30 AM																
10:30 AM to 10:45 AM																
10:45 AM to 11:00 AM																
11:00 AM to 11:15 AM																
11:15 AM to 11:30 AM																
SYSTEM PEAK HR (VEH.)	0				18				0				20			
07:15 AM to 08:15 AM	0	0	0	0	0	0	16	2	0	0	0	0	0	0	20	0
Heavy Vehicle % (PHV):	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.7%	18.2%	5.1%	0.0%	0.0%	0.0%	0.0%	0.0%	3.7%	0.0%	3.7%
INT. PEAK HR (HV ONLY)	0				28				0				31			
06:45 AM to 07:45 AM	0	0	0	0	0	0	28	0	0	0	0	0	0	0	31	0
Heavy Vehicle % (PHV):	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	13.0%	0.0%	12.7%	0.0%	0.0%	0.0%	0.0%	0.0%	7.1%	0.0%	7.0%

BICYCLES

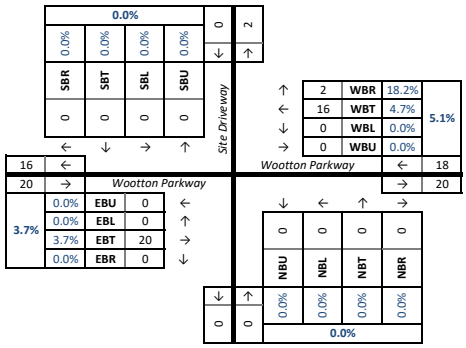
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	Site Driveway				Wootton Parkway								Wootton Parkway			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
06:30 AM to 06:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
06:45 AM to 07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
07:00 AM to 07:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
07:15 AM to 07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM to 07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
07:45 AM to 08:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5	0
08:00 AM to 08:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
08:15 AM to 08:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
08:30 AM to 08:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
08:45 AM to 09:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00 AM to 09:15 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
09:15 AM to 09:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
09:30 AM to 09:45 AM																
09:45 AM to 10:00 AM																
10:00 AM to 10:15 AM																
10:15 AM to 10:30 AM																
10:30 AM to 10:45 AM																
10:45 AM to 11:00 AM																
11:00 AM to 11:15 AM																
11:15 AM to 11:30 AM																
SYSTEM PEAK HR (VEH.)	2				0				0				8			
07:15 AM to 08:15 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	8	0
INT. PEAK HR (BIKES)	2				1				0				8			
07:30 AM to 08:30 AM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	8	0

DATA COLLECTION NOTES :

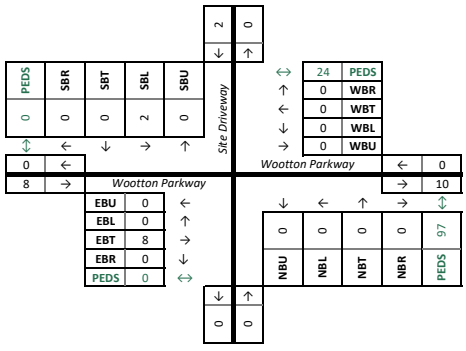
VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Rockshire
Project # : 2592-012
Location Montgomery County, MD
Data Source: Gorove/Slade Associates, Inc.

Analysis Period: STUDY_PERIOD 04:00 PM to 07:00 PM
Date of Counts: Thursday, December 14, 2023
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 05:00 PM to 06:00 PM
System Peak Hour (all vehicles): 05:00 PM to 06:00 PM
User-Defined Peak Hour: 05:00 PM to 06:00 PM

Intersection: 1. Hurley Avenue & Wootton Parkway

ALL VEHICLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Hurley Avenue					Wootton Parkway					Hurley Avenue					Wootton Parkway				
Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
04:00 PM to 04:15 PM	0	4	1	5	10	0	3	76	9	0	0	2	2	2	0	0	2	49	5	0
04:15 PM to 04:30 PM	0	9	2	8	0	0	3	64	7	1	0	1	2	0	0	0	5	57	1	0
04:30 PM to 04:45 PM	0	10	0	2	2	0	4	118	15	3	0	0	1	1	1	0	6	48	1	0
04:45 PM to 05:00 PM	0	10	2	5	1	0	1	73	11	0	0	1	2	0	0	0	3	59	1	1
05:00 PM to 05:15 PM	0	13	3	10	1	0	3	119	23	0	0	0	0	1	1	0	3	72	0	0
05:15 PM to 05:30 PM	0	7	1	6	1	0	2	117	12	0	0	1	3	1	6	0	3	88	3	0
05:30 PM to 05:45 PM	0	14	2	10	5	0	3	119	13	1	0	0	0	4	0	0	8	144	2	0
05:45 PM to 06:00 PM	0	7	2	3	1	0	7	103	13	0	0	4	1	2	0	0	8	75	1	0
06:00 PM to 06:15 PM	0	9	1	5	2	0	2	78	9	1	0	0	1	2	1	0	10	70	3	0
06:15 PM to 06:30 PM	0	10	2	8	1	0	1	74	11	0	0	3	3	1	2	0	4	91	2	1
06:30 PM to 06:45 PM	0	8	3	6	3	0	1	47	8	0	0	0	3	1	0	0	7	63	1	0
06:45 PM to 07:00 PM	0	4	3	5	2	0	1	52	8	0	0	0	0	0	0	0	6	38	1	0
07:00 PM to 07:15 PM																				
07:15 PM to 07:30 PM																				
07:30 PM to 07:45 PM																				
07:45 PM to 08:00 PM																				
08:00 PM to 08:15 PM																				
08:15 PM to 08:30 PM																				
08:30 PM to 08:45 PM																				
08:45 PM to 09:00 PM																				
SYSTEM PEAK HR (VEH.)		78			8		534			1		17			7		407			0
05:00 PM to 06:00 PM	0	41	8	29		0	15	458	61		0	5	4	8		0	22	379	6	
Peak Hour Factor (PHF) Overall	U	Left	Thru	Right	**SB**	U	Left	Thru	Right	**WB**	U	Left	Thru	Right	**NB**	U	Left	Thru	Right	**EB**
0.81	n/a	0.73	0.67	0.73	**0.75**	n/a	0.54	0.96	0.66	**0.92**	n/a	0.31	0.33	0.50	**0.61**	n/a	0.69	0.66	0.50	**0.66**

HEAVY VEHICLES (FHWA 4+)

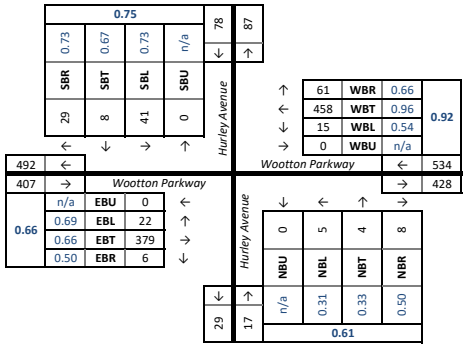
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	Hurley Avenue				Wootton Parkway				Hurley Avenue				Wootton Parkway			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
04:00 PM to 04:15 PM	0	0	0	1	0	0	7	1	0	0	0	1	0	1	2	0
04:15 PM to 04:30 PM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	0
04:30 PM to 04:45 PM	0	0	0	1	0	0	3	0	0	0	0	0	0	1	1	0
04:45 PM to 05:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	1	2	0
05:00 PM to 05:15 PM	0	0	0	1	0	0	2	0	0	0	0	0	0	1	1	0
05:15 PM to 05:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
05:30 PM to 05:45 PM	0	0	0	1	0	0	1	0	0	0	0	0	0	1	2	0
05:45 PM to 06:00 PM	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	0
06:00 PM to 06:15 PM	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	1
06:15 PM to 06:30 PM	0	0	0	1	0	0	2	0	0	0	0	0	0	1	2	0
06:30 PM to 06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
06:45 PM to 07:00 PM	0	0	0	1	0	0	2	0	0	0	0	0	0	0	2	0
07:00 PM to 07:15 PM																
07:15 PM to 07:30 PM																
07:30 PM to 07:45 PM																
07:45 PM to 08:00 PM																
08:00 PM to 08:15 PM																
08:15 PM to 08:30 PM																
08:30 PM to 08:45 PM																
08:45 PM to 09:00 PM																
SYSTEM PEAK HR (VEH.)		3				6				0				9		
05:00 PM to 06:00 PM	0	0	0	3	0	0	6	0	0	0	0	0	0	3	6	0
Heavy Vehicle % (PHV):	0.0%	0.0%	0.0%	10.3% **3.8%**	0.0%	0.0%	1.3%	0.0% **1.1%**	0.0%	0.0%	0.0%	0.0% **0.0%**	0.0%	13.6%	1.6%	0.0% **2.2%**
INT. PEAK HR (HV ONLY)		3				14				1				10		
04:00 PM to 05:00 PM	0	0	0	3	0	0	13	1	0	0	0	1	0	3	7	0
Heavy Vehicle % (PHV):	0.0%	0.0%	0.0%	15.0% **5.2%**	0.0%	0.0%	3.9%	2.4% **3.6%**	0.0%	0.0%	0.0%	33.3% **7.1%**	0.0%	18.8%	3.3%	0.0% **4.2%**

BICYCLES

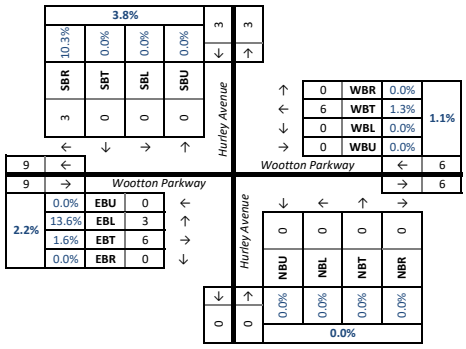
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	Hurley Avenue				Wootton Parkway				Hurley Avenue				Wootton Parkway			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
04:00 PM to 04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM to 04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM to 04:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
04:45 PM to 05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM to 05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
05:15 PM to 05:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
05:30 PM to 05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
05:45 PM to 06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 PM to 06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
06:15 PM to 06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM to 06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM to 07:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
07:00 PM to 07:15 PM																
07:15 PM to 07:30 PM																
07:30 PM to 07:45 PM																
07:45 PM to 08:00 PM																
08:00 PM to 08:15 PM																
08:15 PM to 08:30 PM																
08:30 PM to 08:45 PM																
08:45 PM to 09:00 PM																
SYSTEM PEAK HR (VEH.)		0				1				0				2		
05:00 PM to 06:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0
INT. PEAK HR (BIKES)		0				2				0				2		
04:30 PM to 05:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0

DATA COLLECTION NOTES :

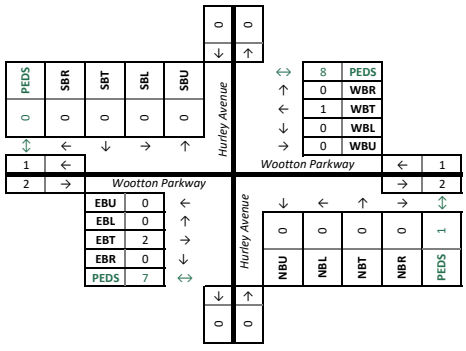
VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Rockshire
Project # : 2592-012
Location Montgomery County, MD
Data Source: Gorove/Slade Associates, Inc.

Analysis Period: STUDY_PERIOD 04:00 PM to 07:00 PM
Date of Counts: Thursday, December 14, 2023
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 05:00 PM to 06:00 PM
System Peak Hour (all vehicles): 05:00 PM to 06:00 PM
User-Defined Peak Hour: 05:00 PM to 06:00 PM

Intersection: 1. Hurley Avenue & Site Driveway/House Driveway

ALL VEHICLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Hurley Avenue					Site Driveway					Hurley Avenue					House Driveway				
Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
04:00 PM to 04:15 PM	0	3	10	0	0	0	0	0	1	0	0	0	13	0	0	0	0	0	0	6
04:15 PM to 04:30 PM	0	3	17	0	0	0	1	0	2	1	0	0	12	0	0	0	0	0	0	3
04:30 PM to 04:45 PM	0	0	12	0	0	0	0	0	1	0	0	0	23	0	0	0	0	0	0	9
04:45 PM to 05:00 PM	0	0	18	0	1	0	0	0	0	1	0	0	16	0	0	0	0	0	0	3
05:00 PM to 05:15 PM	0	4	24	0	0	0	1	0	2	1	0	0	25	0	0	0	0	0	0	1
05:15 PM to 05:30 PM	0	1	16	0	0	0	0	0	1	0	0	0	17	0	0	0	0	0	0	0
05:30 PM to 05:45 PM	0	2	23	0	0	0	0	0	2	0	0	0	21	0	0	0	0	0	1	0
05:45 PM to 06:00 PM	0	4	13	0	0	0	0	0	6	0	0	0	23	0	0	0	0	0	0	0
06:00 PM to 06:15 PM	0	0	15	0	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	1
06:15 PM to 06:30 PM	0	0	20	0	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0
06:30 PM to 06:45 PM	0	2	16	0	0	0	0	0	1	0	0	1	15	1	0	0	0	0	0	0
06:45 PM to 07:00 PM	0	1	11	0	0	0	0	0	1	0	0	0	12	0	0	0	0	0	0	0
07:00 PM to 07:15 PM																				
07:15 PM to 07:30 PM																				
07:30 PM to 07:45 PM																				
07:45 PM to 08:00 PM																				
08:00 PM to 08:15 PM																				
08:15 PM to 08:30 PM																				
08:30 PM to 08:45 PM																				
08:45 PM to 09:00 PM																				
SYSTEM PEAK HR (VEH.)	87				0	12				1	86				0	1				1
05:00 PM to 06:00 PM	0	11	76	0		0	1	0	11		0	0	86	0		0	0	0	1	
Peak Hour Overall	U	Left	Thru	Right	**SB**	U	Left	Thru	Right	**WB**	U	Left	Thru	Right	**NB**	U	Left	Thru	Right	**EB**
Factor (PHF) **0.83**	n/a	0.69	0.79	n/a	**0.78**	n/a	0.25	n/a	0.46	**0.50**	n/a	n/a	0.86	n/a	**0.86**	n/a	n/a	n/a	0.25	**0.25**

HEAVY VEHICLES (FHWA 4+)

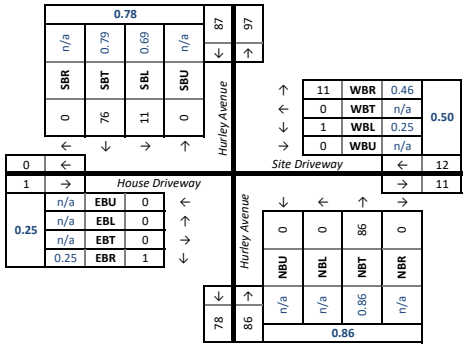
Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Hurley Avenue					Site Driveway					Hurley Avenue					House Driveway				
Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
04:00 PM to 04:15 PM	0	0	1	0		0	0	0	0		0	0	2	0		0	0	0	0	
04:15 PM to 04:30 PM	0	0	1	0		0	0	0	0		0	0	0	0		0	0	0	0	
04:30 PM to 04:45 PM	0	0	1	0		0	0	0	0		0	0	1	0		0	0	0	0	
04:45 PM to 05:00 PM	0	0	1	0		0	0	0	0		0	0	1	0		0	0	0	0	
05:00 PM to 05:15 PM	0	0	1	0		0	0	0	0		0	0	1	0		0	0	0	0	
05:15 PM to 05:30 PM	0	0	1	0		0	0	0	0		0	0	0	0		0	0	0	0	
05:30 PM to 05:45 PM	0	0	0	0		0	0	0	0		0	0	1	0		0	0	0	0	
05:45 PM to 06:00 PM	0	0	1	0		0	0	0	0		0	0	1	0		0	0	0	0	
06:00 PM to 06:15 PM	0	0	0	0		0	0	0	0		0	0	1	0		0	0	0	0	
06:15 PM to 06:30 PM	0	0	1	0		0	0	0	0		0	0	1	0		0	0	0	0	
06:30 PM to 06:45 PM	0	0	0	0		0	0	0	0		0	0	1	0		0	0	0	0	
06:45 PM to 07:00 PM	0	0	2	0		0	0	0	0		0	0	0	0		0	0	0	0	
07:00 PM to 07:15 PM																				
07:15 PM to 07:30 PM																				
07:30 PM to 07:45 PM																				
07:45 PM to 08:00 PM																				
08:00 PM to 08:15 PM																				
08:15 PM to 08:30 PM																				
08:30 PM to 08:45 PM																				
08:45 PM to 09:00 PM																				
SYSTEM PEAK HR (VEH.)	3					0					3					0				
05:00 PM to 06:00 PM	0	0	3	0		0	0	0	0		0	0	3	0		0	0	0	0	
Heavy Vehicle % (PHV):	0.0%	0.0%	3.9%	0.0%	**3.4%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	3.5%	0.0%	**3.5%**	0.0%	0.0%	0.0%	0.0%	**0.0%**
INT. PEAK HR (HV ONLY)	4					0					4					0				
04:00 PM to 05:00 PM	0	0	4	0		0	0	0	0		0	0	4	0		0	0	0	0	
Heavy Vehicle % (PHV):	0.0%	0.0%	7.0%	0.0%	**6.3%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	6.3%	0.0%	**6.3%**	0.0%	0.0%	0.0%	0.0%	**0.0%**

BICYCLES

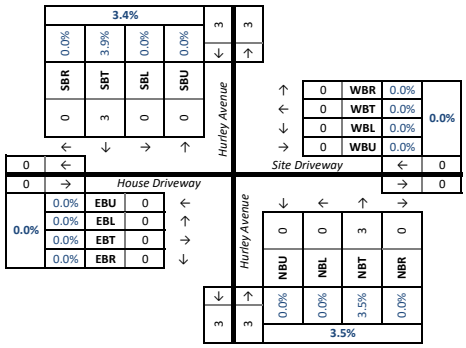
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	Hurley Avenue				Site Driveway				Hurley Avenue				House Driveway			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
04:00 PM to 04:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM to 04:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
04:30 PM to 04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM to 05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM to 05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM to 05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM to 05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM to 06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 PM to 06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM to 06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM to 06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM to 07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 PM to 07:15 PM																
07:15 PM to 07:30 PM																
07:30 PM to 07:45 PM																
07:45 PM to 08:00 PM																
08:00 PM to 08:15 PM																
08:15 PM to 08:30 PM																
08:30 PM to 08:45 PM																
08:45 PM to 09:00 PM																
SYSTEM PEAK HR (VEH.)	0				0				0				0			
05:00 PM to 06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INT. PEAK HR (BIKES)	1				1				0				0			
04:00 PM to 05:00 PM	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0

DATA COLLECTION NOTES :

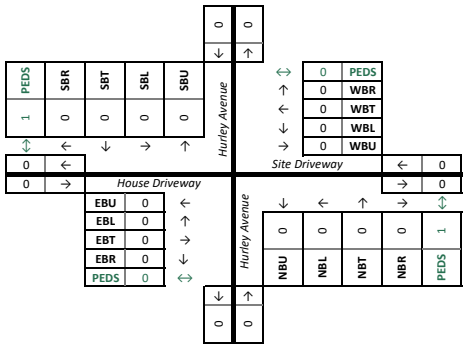
VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : Rockshire
Project # : 2592-012
Location Montgomery County, MD
Data Source: Gorove/Slade Associates, Inc.

Analysis Period: STUDY_PERIOD 04:00 PM to 07:00 PM
Date of Counts: Thursday, December 14, 2023
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 05:00 PM to 06:00 PM
System Peak Hour (all vehicles): 05:00 PM to 06:00 PM
User-Defined Peak Hour: 05:00 PM to 06:00 PM

Intersection: 1. Site Driveway/ & Wootton Parkway

ALL VEHICLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Site Driveway					Wootton Parkway										Wootton Parkway				
Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
04:00 PM to 04:15 PM	0	1	0	3	8	0	0	83	1	1	0	0	0	0	0	0	2	51	0	0
04:15 PM to 04:30 PM	0	1	0	0	3	0	0	79	1	1	0	0	0	0	0	0	0	65	0	0
04:30 PM to 04:45 PM	0	1	0	4	6	0	0	130	1	0	0	0	0	0	0	0	3	56	0	0
04:45 PM to 05:00 PM	0	0	0	1	3	0	0	94	0	1	0	0	0	0	0	0	3	64	0	0
05:00 PM to 05:15 PM	0	0	0	2	1	0	0	136	1	1	0	0	0	0	0	0	0	87	0	0
05:15 PM to 05:30 PM	0	1	0	0	6	0	0	136	0	3	0	0	0	0	0	0	1	98	0	0
05:30 PM to 05:45 PM	0	3	0	2	2	0	0	125	1	2	0	0	0	0	0	0	0	146	0	0
05:45 PM to 06:00 PM	0	2	0	1	0	0	0	124	4	1	0	0	0	0	0	0	1	99	0	0
06:00 PM to 06:15 PM	0	0	0	0	4	0	0	89	1	0	0	0	0	0	0	0	0	78	0	0
06:15 PM to 06:30 PM	0	0	0	0	1	0	0	89	1	0	0	0	0	0	0	0	2	104	0	0
06:30 PM to 06:45 PM	0	0	0	3	2	0	0	54	1	0	0	0	0	0	0	0	6	67	0	0
06:45 PM to 07:00 PM	0	2	0	0	4	0	0	57	1	0	0	0	0	0	0	0	2	40	0	0
07:00 PM to 07:15 PM																				
07:15 PM to 07:30 PM																				
07:30 PM to 07:45 PM																				
07:45 PM to 08:00 PM																				
08:00 PM to 08:15 PM																				
08:15 PM to 08:30 PM																				
08:30 PM to 08:45 PM																				
08:45 PM to 09:00 PM																				
SYSTEM PEAK HR (VEH.)	11				9	527				7	0				0	432				0
05:00 PM to 06:00 PM	0	6	0	5		0	0	521	6		0	0	0	0		0	2	430	0	
Peak Hour Factor (PHF) Overall	U	Left	Thru	Right	**SB**	U	Left	Thru	Right	**WB**	U	Left	Thru	Right	**NB**	U	Left	Thru	Right	**EB**
0.88	n/a	0.50	n/a	0.63	**0.55**	n/a	n/a	0.96	0.38	**0.96**	n/a	n/a	n/a	n/a	**n/a**	n/a	0.50	0.74	n/a	**0.74**

HEAVY VEHICLES (FHWA 4+)

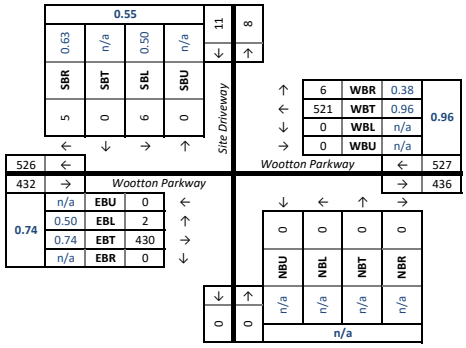
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	Site Driveway				Wootton Parkway								Wootton Parkway			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
04:00 PM to 04:15 PM	0	0	0	1	0	0	5	0	0	0	0	0	0	1	2	0
04:15 PM to 04:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0
04:30 PM to 04:45 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0
04:45 PM to 05:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3	0
05:00 PM to 05:15 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0
05:15 PM to 05:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
05:30 PM to 05:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0
05:45 PM to 06:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
06:00 PM to 06:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
06:15 PM to 06:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
06:30 PM to 06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM to 07:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0
07:00 PM to 07:15 PM																
07:15 PM to 07:30 PM																
07:30 PM to 07:45 PM																
07:45 PM to 08:00 PM																
08:00 PM to 08:15 PM																
08:15 PM to 08:30 PM																
08:30 PM to 08:45 PM																
08:45 PM to 09:00 PM																
SYSTEM PEAK HR (VEH.)	0				6				0				6			
05:00 PM to 06:00 PM	0	0	0	0	0	0	6	0	0	0	0	0	0	0	6	0
Heavy Vehicle % (PHV):	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%
INT. PEAK HR (HV ONLY)	1				11				0				9			
04:00 PM to 05:00 PM	0	0	0	1	0	0	11	0	0	0	0	0	0	1	8	0
Heavy Vehicle % (PHV):	0.0%	0.0%	0.0%	12.5%	0.0%	0.0%	2.8%	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	12.5%	3.4%	0.0%

BICYCLES

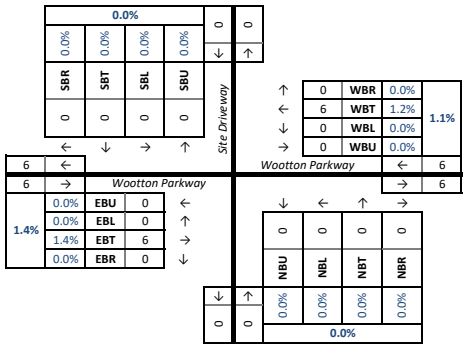
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	Site Driveway				Wootton Parkway								Wootton Parkway			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
04:00 PM to 04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM to 04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM to 04:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
04:45 PM to 05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM to 05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
05:15 PM to 05:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
05:30 PM to 05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
05:45 PM to 06:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
06:00 PM to 06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM to 06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM to 06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM to 07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 PM to 07:15 PM																
07:15 PM to 07:30 PM																
07:30 PM to 07:45 PM																
07:45 PM to 08:00 PM																
08:00 PM to 08:15 PM																
08:15 PM to 08:30 PM																
08:30 PM to 08:45 PM																
08:45 PM to 09:00 PM																
SYSTEM PEAK HR (VEH.)	1				1				0				2			
05:00 PM to 06:00 PM	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	0
INT. PEAK HR (BIKES)	0				2				0				2			
04:30 PM to 05:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0

DATA COLLECTION NOTES :

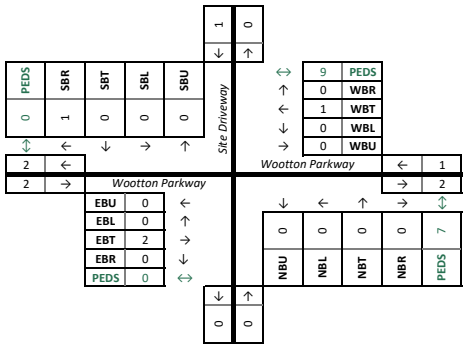
VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



PED AND BIKE PEAK HOUR VOLUMES: System Peak (vehicle)



C. Signal Timing Data

TRAFFIC SIGNAL TIMING CHART

SIGNAL NO: 47 **INTERSECTION: Wootton Parkway/Rockshire Center** **PHONE # x-3823** **INITIAL DATE: 9/9/2004**

ROAD AND DIRECTION →		EB Wootton				WB Wootton + North Side Ped Crossing	Exclusive Ped	Rockshire Ctr
INTERVAL / PHASE	1	2	3	4	5	6	8	7
RECALL/MEMORY		Max				Ped/Max	Lock	NL
MINIMUM GREEN		17				17	(5)	5
WALK						7	7	
PED CLEARANCE						10	13	
VEH EXTENSION		(5.0)				(5.0)	(3.0)	3.0
MAXIMUM I		30				30	(40)	15
MAXIMUM II		40				40	(40)	15
YELLOW		4.0				4.0	(3.0)	3.0
ALL RED		2.0				2.0	2.0	2.5
RED REVERT		8.0				8.0	8.0	8.0
AMPLIFIER DELAY/STRETCH								(future) 5.0 Delay on Right Turn

TRAFFIC SIGNAL TIMING CHART

SIGNAL NO:21 **INTERSECTION: Wootton Pkwy./Hurley Ave.** **PHONE #: X-3821** **INITIAL DATE:1/11/2008**

ROAD AND DIRECTION →		WB Wootton	NB Hurley	SB Hurley		EB Wootton		
INTERVAL / PHASE	1	2	3	4	5	6	7	8
RECALL/MEMORY		Ped/Max	NL	NL		Max		
MINIMUM GREEN		(7)	5	7		(17)		
WALK		7	7	7				
PED CLEARANCE		10	7	7				
VEH EXTENSION		(3.0)	2.0	3.0		(3.0)		
MAXIMUM I		40	16	25		40		
MAXIMUM II		(40)	(20)	(30)		(40)		
YELLOW		4.0	3.5	3.5		4.0		
ALL RED		1.0	1.0	1.0		1.0		
RED REVERT		8.0	8.0	8.0		8.0		
AMPLIFIER DELAY/STRETCH								

TRAFFIC SIGNAL TIMING CHART

SIGNAL NO:21 **INTERSECTION: Wootton Pkwy./Hurley Ave.** **PHONE #: x-3821** **INITIAL DATE: 1/11/2008**

PHASE	1	2	3	4	5	6	7	8
INITIALIZATION		Green				Green		
CNA I		X				X		
CNA II								
REST IN WALK								
DUAL ENTRY		X				X		
OVERLAP A								
OVERLAP B								
OVERLAP C								
OVERLAP D								

POWER-UP FLASH 8.0 seconds

OPTIONS/SPECIAL FEATURES	YES	NO
PED CLEARANCE PROTECTION		X
RED REST		X

PROGRAM HIGHLIGHTS/COMMENTS (including description of overlap functions)

Flash: 11 PM to 6AM, 7 days

REVISIONS (use for minor changes only)	PHASE(S)	FROM	TO

Sigchart BLANK.doc

TRAFFIC SIGNAL COORDINATION/TOD PROGRAM

LOCATION: Wootton Parkway at Hurley Avenue | **SIGNAL NO.: 21** | **DATE: 11/20/2009**

COORDINATION PATTERNS

PATTERN	USAGE NOTE:	COORD PHASE(S)	CYCLE (seconds)	OFFSET (percent)	PHASE SPLITS (percent)							
					1	**2**	**3**	**4**	**5**	**6**	**8**	**7**
1	offpk	2/6	60	0		38	31	31		38		
2	AM 2	2/6	80	0		46	24	30		46		
3	School	2/6	70	0		46	27	27		46		
4	PM pk	2/6	80	0		50	24	26		50		
5	AM 1	2/6	90	0		50	21	29		50		
6												
7												
8												

DAY OF WEEK

DAY	DAY PGM NO.
SUN	2
MON	1
TUE	1
WED	1
THU	1
FRI	1
SAT	2
Alternate Week:	
SUN	
MON	
TUE	
WED	
THU	
FRI	
SAT	

HOLIDAYS

HOLIDAY NUMBER	TYPE: FLOAT / FIXED	MONTH	DAY OF: WEEK / MONTH	WOM / 0 or YR	DAY PGM NO.
1	FIXED	1	1	0	2
2	FIXED	7	4	0	2
3	FLOAT	9	2	1	2
4	FLOAT	11	5	4	2
5	FIXED	12	25	0	2
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

MONTH/DAY

ALT WEEK ON	
ALT WEEK OFF	

MANUAL CONTROL

TOD STEP:	
COORD PATTERN:	0 (Free)

NIC/TOD PROGRAM STEPS

STEP	DAY PGM NO.	START TIME (24 HR)	COORD PATTERN	FLASH	MAX 2	PHASE OMIT	SPECIAL FUNCTN	OTHER//REMARKS e.g.: Recall On/Off, MAX 3, Red Rest, etc.
1	1	0600	5					
2	1	0930	1					
3	1	1400	3					
4	1	1600	4					
5	1	1900	1					
6	1	2300	0	x				
7	2	0600	0					
8	2	2300	0	x				
9	1	0730	2					
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								

TRAFFIC SIGNAL TIMING CHART

SIGNAL NO: 47 **INTERSECTION: Wootton Parkway/Rockshire Center** **PHONE: x-3823** **INITIAL DATE: 9/9/2004**

PHASE	1	2	3	4	5	6	7	8
INITIALIZATION		Green				Green		
CNA I		X				X		
CNA II								
REST IN WALK						X		
DUAL ENTRY		X				X		
OVERLAP A								
OVERLAP B								
OVERLAP C								
OVERLAP D								

POWER-UP FLASH 8.0 seconds

OPTIONS/SPECIAL FEATURES	YES	NO
PED CLEARANCE PROTECTION		X
RED REST		X

PROGRAM HIGHLIGHTS/COMMENTS (including description of overlap functions)

Phases 2 and 6 are reversed from their normal directions on Wootton Parkway.
Note sequence reversal of Phases 7 and 8. Phase 7 **follows** Phase 8 exclusive ped movement.
Note that exclusive ped phase times All Red but not Yellow.
FLASH: 11 PM - 6 AM, Mon-Fri, all day Saturday and Sunday, INTERRUPTABLE BY PED CALL

REVISIONS (use for minor changes only)	PHASE(S)	FROM	TO

Sigchart 47 Wootton-Rockshire Ctr

TRAFFIC SIGNAL COORDINATION/TOD PROGRAM

LOCATION: Wootton Parkway at Rockshire Center | **SIGNAL NO.: 47** | **DATE: 11/20/2009**

COORDINATION PATTERNS

PATTERN	USAGE NOTE:	COORD PHASE(S)	CYCLE (seconds)	OFFSET (percent)	PHASE SPLITS (percent)							
					1	2	3	4	5	6	8	7
1	offpk	2/6	60	10		40				40	37	23
2	AM 2	2/6	80	20		50				50	28	22
3	School	2/6	70	76		43				43	32	25
4	PM pk	2/6	80	83		50				50	28	22
5	AM 1	2/6	90	18		56				56	25	19
6												
7												
8												

DAY OF WEEK

DAY	DAY PGM NO.
SUN	2
MON	1
TUE	1
WED	1
THU	1
FRI	1
SAT	2
Alternate Week:	
SUN	
MON	
TUE	
WED	
THU	
FRI	
SAT	

HOLIDAYS

HOLIDAY NUMBER	TYPE: FLOAT / FIXED	MONTH	DAY OF: WEEK / MONTH	WOM / 0 or YR	DAY PGM NO.
1	FIXED	1	1	0	2
2	FIXED	7	4	0	2
3	FLOAT	9	2	1	2
4	FLOAT	11	5	4	2
5	FIXED	12	25	0	2
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

MONTH/DAY

ALT WEEK ON	
ALT WEEK OFF	

MANUAL CONTROL

TOD STEP:	
COORD PATTERN:	0 (Free)

NIC/TOD PROGRAM STEPS

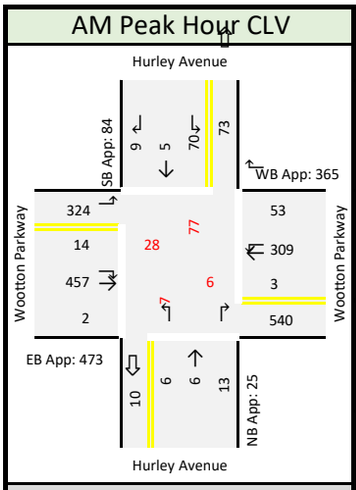
STEP	DAY PGM NO.	START TIME (24 HR)	COORD PATTERN	FLASH	MAX 2	PHASE OMIT	SPECIAL FUNCTN	OTHER//REMARKS e.g.: Recall On/Off, MAX 3, Red Rest, etc.
1	1	0600	5		x			
2	1	0930	1					
3	1	1400	3					
4	1	1600	4		x			
5	1	1900	1					
6	1	2300	0	x				
7	2	0000	0	x				
8								
9	1	0730	2		x			
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								

D. CLV Analyses

GOROVE SLADE
Transportation Planners and Engineers

Project: Rockshire Village Center
Intersection: 1. Hurley Avenue & Wootton Parkway
Scenario: Existing
Jurisdiction: City of Rockville

AM Peak Hour CLV

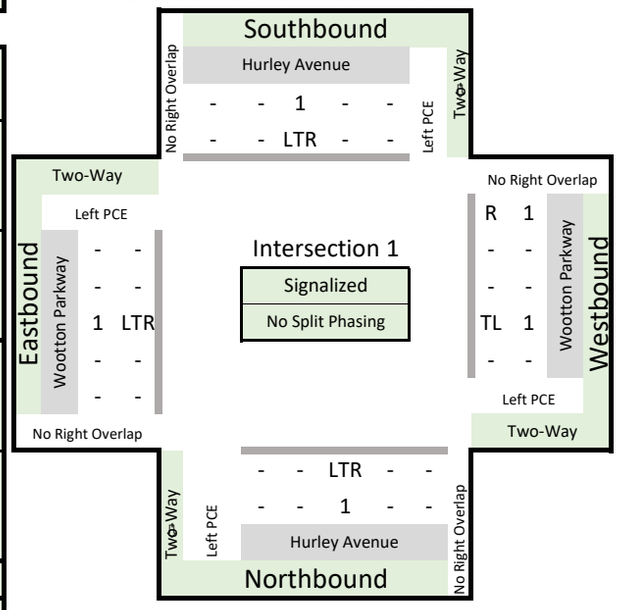


Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LTR	487		1.00	487				490	«	✓
					0	3	1.10	3	3		
	R	2	0	1.00	2				5		
Westbound	TL	315		1.00	315				330	«	
					0	14	1.10	15	15		
	R	53	0	1.00	53				68		
Northbound	LTR	26		1.00	26				103	«	✓
					0	70	1.10	77	77		
	R	13	0	1.00	13				90		
Southbound	LTR	91		1.00	91				98	«	
					0	6	1.10	7	7		
	R	9	0	1.00	9				16		

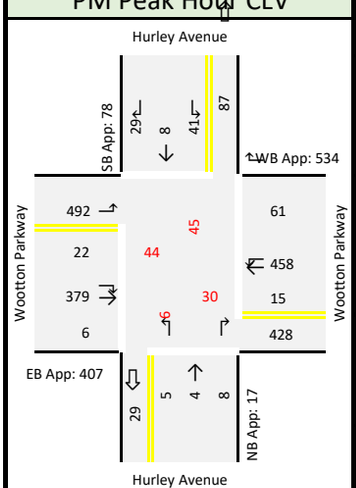
Total Intersection: 947 veh/hr

Notes: * Defacto right-turn lane test, if applicable

Cycle Length	Phases	Capacity	v/c	CLV	593
90	2	1,600	37%	LOS	A



PM Peak Hour CLV



Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LTR	429		1.00	429				446	«	
					0	15	1.10	17	17		
	R	6	0		0				17		
Westbound	TL	488		1.00	488				512	«	✓
					0	22	1.10	24	24		
	R	61	0		0				24		
Northbound	LTR	18		1.00	18				63	«	
					0	41	1.10	45	45		
	R	8	0		0				45		
Southbound	LTR	82		1.00	82				88	«	✓
					0	5	1.10	6	6		
	R	29	0		0				6		

Total Intersection: 1,036 veh/hr

Notes: * Defacto right-turn lane test, if applicable

Cycle Length	Phases	Capacity	v/c	CLV	600
80	2	1,500	40%	LOS	A

Right Turn Overlap Adjustments

	Eastbound AM	Eastbound PM	Westbound AM	Westbound PM	Northbound AM	Northbound PM	Southbound AM	Southbound PM
Right Turns	2	6	53	61	13	8	9	29
RT LUF	n/a		n/a		n/a		n/a	
Adjusted Rights	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	6	5	70	41	3	15	14	22
Adj. LT LUF	1.10		1.10		1.10		1.10	
Adjusted Adj. Lefts	7	6	77	45	3	17	15	24
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Passenger Car Equivalent (PCE) Adjustments

	Eastbound AM	Eastbound PM	Westbound AM	Westbound PM	Northbound AM	Northbound PM	Southbound AM	Southbound PM
Left Turns	14	22	3	15	6	5	70	41
Not Split & TL or LTR	Yes: PCE		Yes: PCE		Yes: PCE		Yes: PCE	
Opposing T+R	362	519	459	385	14	37	19	12
PCE Factor	2.0	2.0	2.0	2.0	1.1	1.1	1.1	1.1
PCE Adjusted Lefts	**28**	**44**	**6**	**30**	**7**	**6**	**77**	**45**

City of Rockville Standards

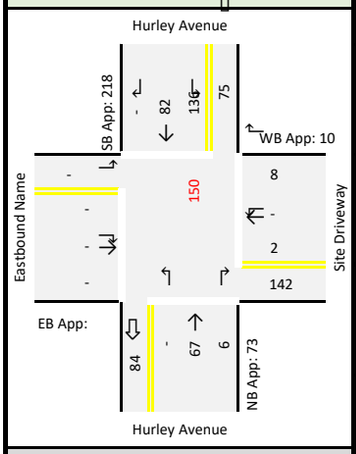
Lane Use Factors #	Th & R	L
1	1.00	1.10
2	0.53	0.60
3	0.37	0.40
4	0.30	0.00
5	0.25	0.00

LOS	CLV Range			PCE	Opposing Through+Right		
A	0	to	1,000	1.10	0	to	199
B	1,001	to	1,150	2.00	200	to	599
C	1,151	to	1,300	3.00	600	to	799
D	1,301	to	1,450	4.00	800	to	999
E	1,451	to	1,600	5.00	1,000	to	9,999
F	1,601	to	9,999				

GOROVE SLADE
Transportation Planners and Engineers

Project: Rockshire Village Center
Intersection: 2. Hurley Avenue & Site Driveway
Scenario: Existing
Jurisdiction: City of Rockville

AM Peak Hour CLV



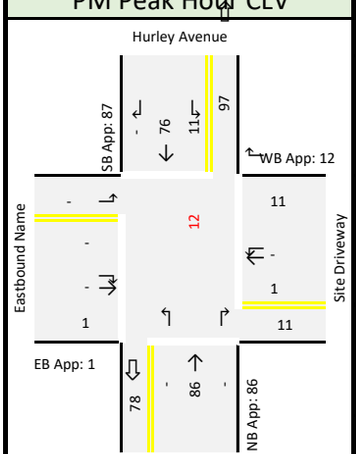
Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound										«	
Westbound	LR	10		1.00	10				10	«	✓
					0	-	0.00	0	0		
	R	8	0		0				0		
Northbound	TR	73		1.00	73				223	«	
					0	136	1.10	150	150		
	R	6	0		0				150		
Southbound	TL	232		1.00	232				232	«	✓
					0	-	0.00	0	0		
	R	-	0		0				0		

Total Intersection: 301 veh/hr

Notes: * Defacto right-turn lane test, if applicable

Cycle Length	Phases	Capacity	v/c	CLV	242
90	2	1,600	15%	LOS	A

PM Peak Hour CLV

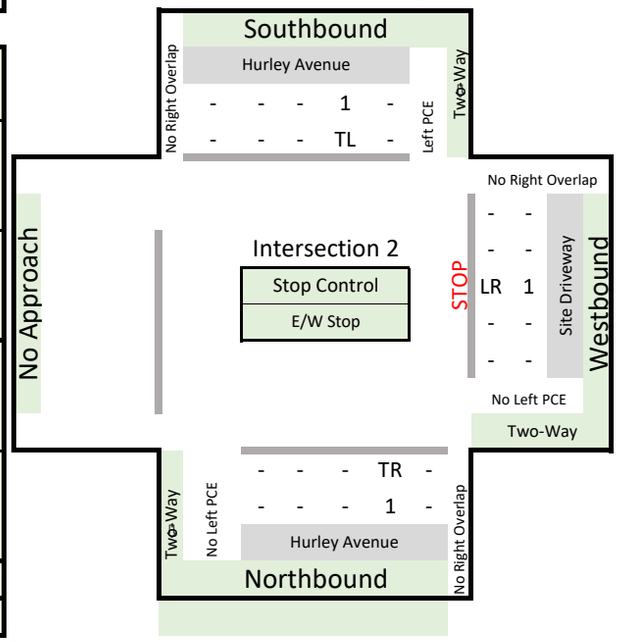


Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound											
Westbound	LR	12		1.00	12				12	«	✓
					0	-	0.00	0	0		
	R	11	0		0				0		
Northbound	TR	86		1.00	86				98	«	✓
					0	11	1.10	12	12		
	R	-	0		0				12		
Southbound	TL	88		1.00	88				88	«	
					0	-	0.00	0	0		
	R	-	0		0				0		

Total Intersection: 186 veh/hr

Notes: * Defacto right-turn lane test, if applicable

Cycle Length	Phases	Capacity	v/c	CLV	110
90	2	1,600	7%	LOS	A



Right Turn Overlap Adjustments

	Eastbound AM	Eastbound PM	Westbound AM	Westbound PM	Northbound AM	Northbound PM	Southbound AM	Southbound PM
Right Turns	-	1	8	11	6	-	-	-
RT LUF		n/a		n/a		n/a		n/a
Adjusted Rights	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	-	-	136	11	2	1	-	-
Adj. LT LUF		0.00		1.10		1.10		0.00
Adjusted Adj. Lefts	0	0	150	12	2	1	0	0
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Passenger Car Equivalent (PCE) Adjustments

	Eastbound AM	Eastbound PM	Westbound AM	Westbound PM	Northbound AM	Northbound PM	Southbound AM	Southbound PM
Left Turns	-	-	2	1	-	-	136	11
Not Split & TL or LTR		No: No PCE		No: No PCE		No: No PCE		Yes: PCE
Opposing T+R	8	11	-	1	82	76	73	86
PCE Factor	n/a	n/a	n/a	n/a	n/a	n/a	1.1	1.1
PCE Adjusted Lefts	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**150**	**12**

City of Rockville Standards

Lane Use Factors #	Th & R	L
1	1.00	1.10
2	0.53	0.60
3	0.37	0.40
4	0.30	0.00
5	0.25	0.00

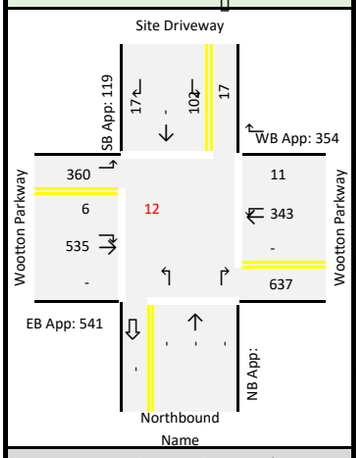
LOS	CLV Range		
A	0	to	1,000
B	1,001	to	1,150
C	1,151	to	1,300
D	1,301	to	1,450
E	1,451	to	1,600
F	1,601	to	9,999

PCE	Opposing Through+Right		
1.10	0	to	199
2.00	200	to	599
3.00	600	to	799
4.00	800	to	999
5.00	1,000	to	9,999

GOROVE SLADE
Transportation Planners and Engineers

Project: Rockshire Village Center
Intersection: 3. Wootton Parkway & Site Driveway
Scenario: Existing
Jurisdiction: City of Rockville

AM Peak Hour CLV

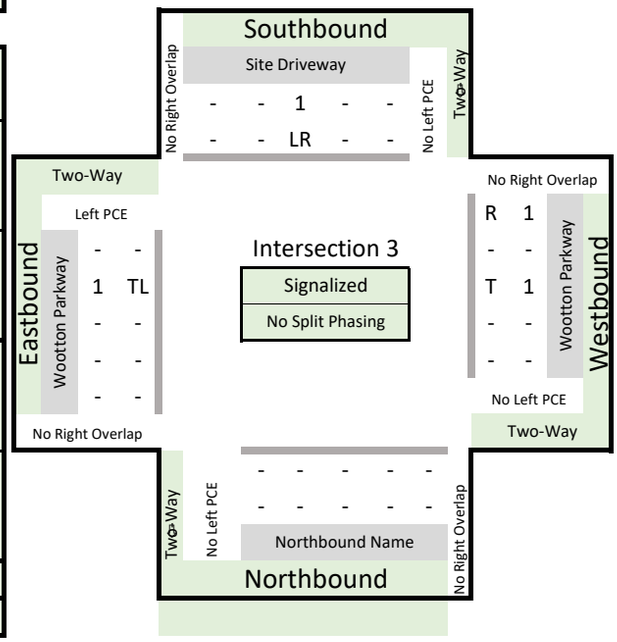


Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	TL	547		1.00	547				547	«	✓
					0	-	0.00	0	0		
	R	-	0		0				0		
Westbound	T	343		1.00	343				350	«	
					0	6	1.10	7	7		
	R	11	0		0				7		
Northbound											
Southbound	LR	119		1.00	119				119	«	✓
					0	-	0.00	0	0		
	R	17	0		0				0		

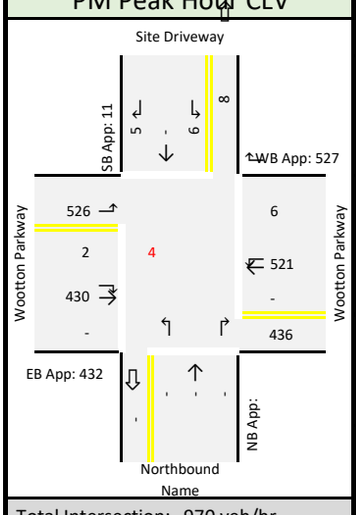
Total Intersection: 1,014 veh/hr

Notes: * Defacto right-turn lane test, if applicable

Cycle Length	Phases	Capacity	v/c	CLV	666
90	2	1,600	42%	LOS	A



PM Peak Hour CLV



Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	TL	434		1.00	434				434	«	
					0	-	0.00	0	0		
	R	-	0		0				0		
Westbound	T	521		1.00	521				523	«	✓
					0	2	1.10	2	2		
	R	6	0		0				2		
Northbound											
Southbound	LR	11		1.00	11				11	«	✓
					0	-	0.00	0	0		
	R	5	0		0				0		

Total Intersection: 970 veh/hr

Notes: * Defacto right-turn lane test, if applicable

Cycle Length	Phases	Capacity	v/c	CLV	534
80	2	1,500	36%	LOS	A

Right Turn Overlap Adjustments

	Eastbound AM	Eastbound PM	Westbound AM	Westbound PM	Northbound AM	Northbound PM	Southbound AM	Southbound PM
Right Turns	-	-	11	6	-	-	17	5
RT LUF	n/a		n/a		n/a		n/a	
Adjusted Rights	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	-	-	102	6	-	-	6	2
Adj. LT LUF	0.00		1.10		0.00		1.10	
Adjusted Adj. Lefts	0	0	112	7	0	0	7	2
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Passenger Car Equivalent (PCE) Adjustments

	Eastbound AM	Eastbound PM	Westbound AM	Westbound PM	Northbound AM	Northbound PM	Southbound AM	Southbound PM
Left Turns	6	2	-	-	-	-	102	6
Not Split & TL or LTR	Yes: PCE		No: No PCE		No: No PCE		No: No PCE	
Opposing T+R	354	527	535	430	17	5	-	-
PCE Factor	2.0	2.0	n/a	n/a	n/a	n/a	n/a	n/a
PCE Adjusted Lefts	**12**	**4**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**

City of Rockville Standards

Lane Use Factors #	Th & R	L
1	1.00	1.10
2	0.53	0.60
3	0.37	0.40
4	0.30	0.00
5	0.25	0.00

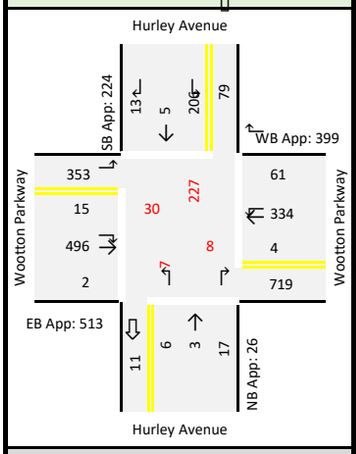
LOS	CLV Range
A	0 to 1,000
B	1,001 to 1,150
C	1,151 to 1,300
D	1,301 to 1,450
E	1,451 to 1,600
F	1,601 to 9,999

PCE	Opposing Through+Right
1.10	0 to 199
2.00	200 to 599
3.00	600 to 799
4.00	800 to 999
5.00	1,000 to 9,999

GOROVE SLADE
Transportation Planners and Engineers

Project: Rockshire Village Center
Intersection: 1. Hurley Avenue & Wootton Parkway
Scenario: Background
Jurisdiction: City of Rockville

AM Peak Hour CLV

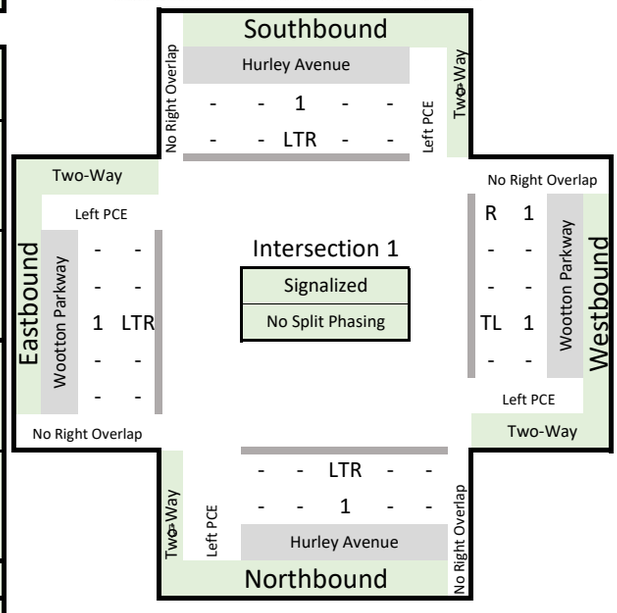


Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LTR	528		1.00	528				532	«	✓
					0	4	1.10	4	4		
	R	2	0	1.00	2				6		
Westbound	TL	342		1.00	342				359	«	
					0	15	1.10	17	17		
	R	61	0	1.00	61				78		
Northbound	LTR	27		1.00	27				254	«	✓
					0	206	1.10	227	227		
	R	17	0	1.00	17				244		
Southbound	LTR	245		1.00	245				252	«	
					0	6	1.10	7	7		
	R	13	0	1.00	13				20		

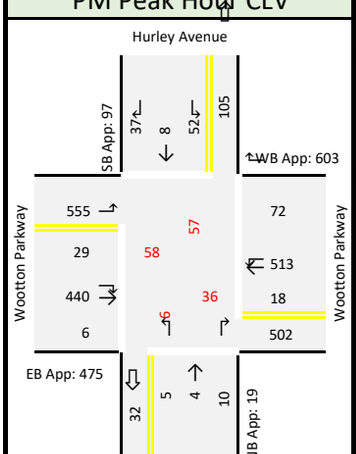
Total Intersection: 1,162 veh/hr

Notes: * Defacto right-turn lane test, if applicable

Cycle Length	Phases	Capacity	v/c	CLV	786
90	2	1,600	49%	LOS	A



PM Peak Hour CLV



Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LTR	504		1.00	504				524	«	
					0	18	1.10	20	20		
	R	6	0		0				20		
Westbound	TL	549		1.00	549				581	«	✓
					0	29	1.10	32	32		
	R	72	0		0				32		
Northbound	LTR	20		1.00	20				77	«	
					0	52	1.10	57	57		
	R	10	0		0				57		
Southbound	LTR	102		1.00	102				108	«	✓
					0	5	1.10	6	6		
	R	37	0		0				6		

Total Intersection: 1,194 veh/hr

Notes: * Defacto right-turn lane test, if applicable

Cycle Length	Phases	Capacity	v/c	CLV	689
80	2	1,500	46%	LOS	A

Right Turn Overlap Adjustments

	Eastbound AM	Eastbound PM	Westbound AM	Westbound PM	Northbound AM	Northbound PM	Southbound AM	Southbound PM
Right Turns	2	6	61	72	17	10	13	37
RT LUF		n/a		n/a		n/a		n/a
Adjusted Rights	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	6	5	206	52	4	18	15	29
Adj. LT LUF		1.10		1.10		1.10		1.10
Adjusted Adj. Lefts	7	6	227	57	4	20	17	32
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Passenger Car Equivalent (PCE) Adjustments

	Eastbound AM	Eastbound PM	Westbound AM	Westbound PM	Northbound AM	Northbound PM	Southbound AM	Southbound PM
Left Turns	15	29	4	18	6	5	206	52
Not Split & TL or LTR		Yes: PCE		Yes: PCE		Yes: PCE		Yes: PCE
Opposing T+R	395	585	498	446	18	45	20	14
PCE Factor	2.0	2.0	2.0	2.0	1.1	1.1	1.1	1.1
PCE Adjusted Lefts	**30**	**58**	**8**	**36**	**7**	**6**	**227**	**57**

City of Rockville Standards

Lane Use Factors #	Th & R	L
1	1.00	1.10
2	0.53	0.60
3	0.37	0.40
4	0.30	0.00
5	0.25	0.00

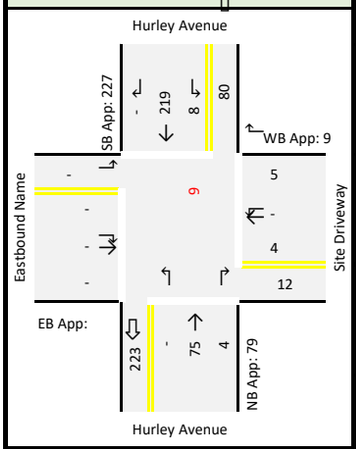
LOS	CLV Range
A	0 to 1,000
B	1,001 to 1,150
C	1,151 to 1,300
D	1,301 to 1,450
E	1,451 to 1,600
F	1,601 to 9,999

PCE	Opposing Through+Right
1.10	0 to 199
2.00	200 to 599
3.00	600 to 799
4.00	800 to 999
5.00	1,000 to 9,999

GOROVE SLADE
Transportation Planners and Engineers

Project: Rockshire Village Center
Intersection: 2. Hurley Avenue & Site Driveway
Scenario: Background
Jurisdiction: City of Rockville

AM Peak Hour CLV



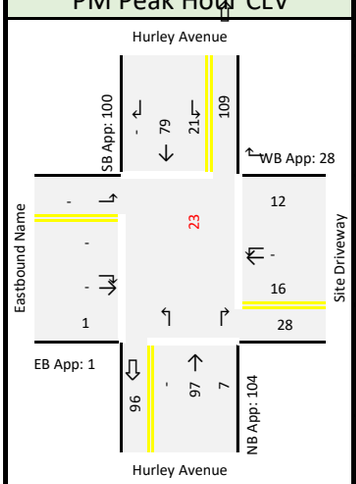
Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound										«	
Westbound	LR	9		1.00	9				9	«	✓
					0	-	0.00	0	0		
	R	5	0		0				0		
Northbound	TR	79		1.00	79				88	«	
					0	8	1.10	9	9		
	R	4	0		0				9		
Southbound	TL	228		1.00	228				228	«	✓
					0	-	0.00	0	0		
	R	-	0		0				0		

Total Intersection: 315 veh/hr

Notes: * Defacto right-turn lane test, if applicable

Cycle Length	Phases	Capacity	v/c	CLV	237
90	2	1,600	15%	LOS	A

PM Peak Hour CLV

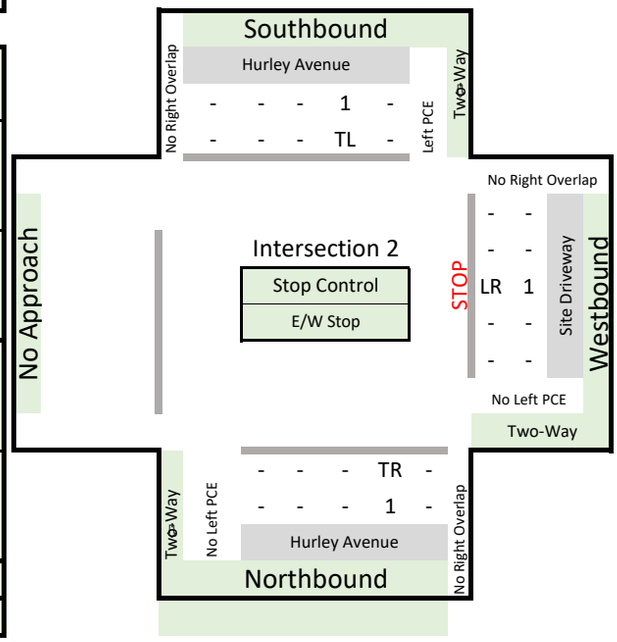


Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound											
Westbound	LR	28		1.00	28				28	«	✓
					0	-	0.00	0	0		
	R	12	0		0				0		
Northbound	TR	104		1.00	104				127	«	✓
					0	21	1.10	23	23		
	R	7	0		0				23		
Southbound	TL	102		1.00	102				102	«	
					0	-	0.00	0	0		
	R	-	0		0				0		

Total Intersection: 233 veh/hr

Notes: * Defacto right-turn lane test, if applicable

Cycle Length	Phases	Capacity	v/c	CLV	155
90	2	1,600	10%	LOS	A



Right Turn Overlap Adjustments

	Eastbound AM	Eastbound PM	Westbound AM	Westbound PM	Northbound AM	Northbound PM	Southbound AM	Southbound PM
Right Turns	-	1	5	12	4	7	-	-
RT LUF		n/a		n/a		n/a		n/a
Adjusted Rights	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	-	-	8	21	4	16	-	-
Adj. LT LUF		0.00		1.10		1.10		0.00
Adjusted Adj. Lefts	0	0	9	23	4	18	0	0
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Passenger Car Equivalent (PCE) Adjustments

	Eastbound AM	Eastbound PM	Westbound AM	Westbound PM	Northbound AM	Northbound PM	Southbound AM	Southbound PM
Left Turns	-	-	4	16	-	-	8	21
Not Split & TL or LTR		No: No PCE		No: No PCE		No: No PCE		Yes: PCE
Opposing T+R	5	12	-	1	219	79	79	104
PCE Factor	n/a	n/a	n/a	n/a	n/a	n/a	1.1	1.1
PCE Adjusted Lefts	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**9**	**23**

City of Rockville Standards

Lane Use Factors #	Th & R	L
1	1.00	1.10
2	0.53	0.60
3	0.37	0.40
4	0.30	0.00
5	0.25	0.00

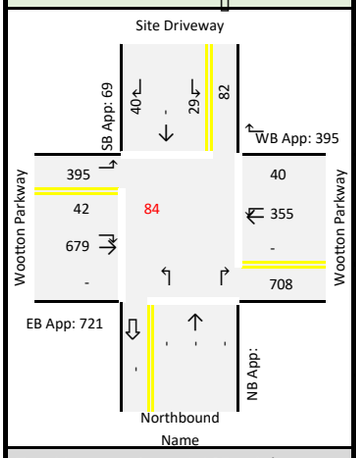
LOS	CLV Range		
A	0	to	1,000
B	1,001	to	1,150
C	1,151	to	1,300
D	1,301	to	1,450
E	1,451	to	1,600
F	1,601	to	9,999

PCE	Opposing Through+Right		
1.10	0	to	199
2.00	200	to	599
3.00	600	to	799
4.00	800	to	999
5.00	1,000	to	9,999

GOROVE SLADE
Transportation Planners and Engineers

Project: Rockshire Village Center
Intersection: 3. Wootton Parkway & Site Driveway
Scenario: Background
Jurisdiction: City of Rockville

AM Peak Hour CLV

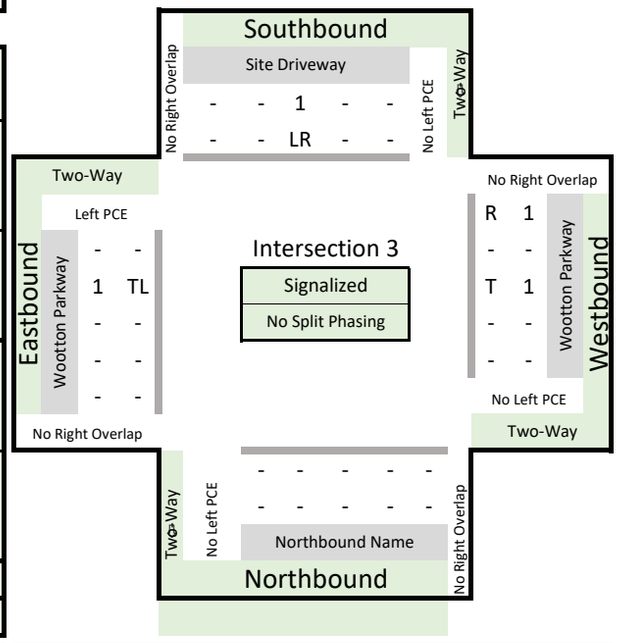


Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	TL	763		1.00	763				763	«	✓
					0	-	0.00	0	0		
	R	-	0		0				0		
Westbound	T	355		1.00	355				401	«	
					0	42	1.10	46	46		
	R	40	0		0				46		
Northbound											
Southbound	LR	69		1.00	69				69	«	✓
					0	-	0.00	0	0		
	R	40	0		0				0		

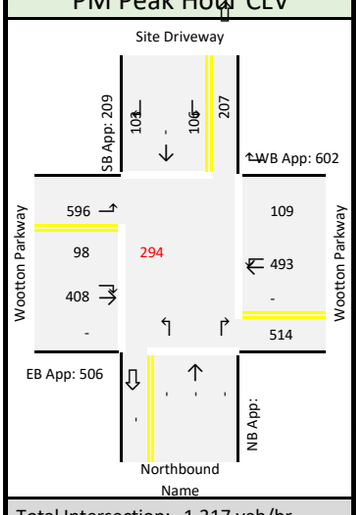
Total Intersection: 1,185 veh/hr

Notes: * Defacto right-turn lane test, if applicable

Cycle Length	Phases	Capacity	v/c	CLV	832
90	2	1,600	52%	LOS	A



PM Peak Hour CLV



Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	TL	702		1.00	702				702	«	✓
					0	-	0.00	0	0		
	R	-	0		0				0		
Westbound	T	493		1.00	493				601	«	
					0	98	1.10	108	108		
	R	109	0		0				108		
Northbound											
Southbound	LR	209		1.00	209				209	«	✓
					0	-	0.00	0	0		
	R	103	0		0				0		

Total Intersection: 1,317 veh/hr

Notes: * Defacto right-turn lane test, if applicable

Cycle Length	Phases	Capacity	v/c	CLV	911
80	2	1,500	61%	LOS	A

Right Turn Overlap Adjustments

	Eastbound AM	Eastbound PM	Westbound AM	Westbound PM	Northbound AM	Northbound PM	Southbound AM	Southbound PM
Right Turns	-	-	40	109	-	-	40	103
RT LUF	n/a		n/a		n/a		n/a	
Adjusted Rights	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	-	-	29	106	-	-	42	98
Adj. LT LUF	0.00		1.10		0.00		1.10	
Adjusted Adj. Lefts	0	0	32	117	0	0	46	108
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Passenger Car Equivalent (PCE) Adjustments

	Eastbound AM	Eastbound PM	Westbound AM	Westbound PM	Northbound AM	Northbound PM	Southbound AM	Southbound PM
Left Turns	42	98	-	-	-	-	29	106
Not Split & TL or LTR	Yes: PCE		No: No PCE		No: No PCE		No: No PCE	
Opposing T+R	395	602	679	408	40	103	-	-
PCE Factor	2.0	3.0	n/a	n/a	n/a	n/a	n/a	n/a
PCE Adjusted Lefts	**84**	**294**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**

City of Rockville Standards

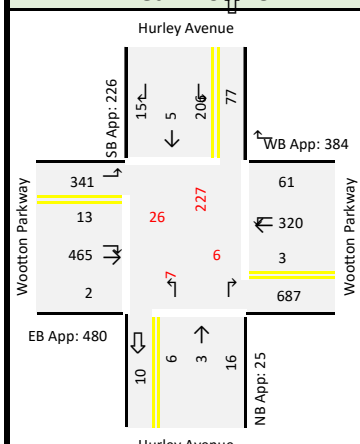
Lane Use Factors #	Th & R	L
1	1.00	1.10
2	0.53	0.60
3	0.37	0.40
4	0.30	0.00
5	0.25	0.00

LOS	CLV Range	PCE	Opposing Through+Right
A	0 to 1,000	1.10	0 to 199
B	1,001 to 1,150	2.00	200 to 599
C	1,151 to 1,300	3.00	600 to 799
D	1,301 to 1,450	4.00	800 to 999
E	1,451 to 1,600	5.00	1,000 to 9,999
F	1,601 to 9,999		

Project: Rockshire Village Center
Intersection: 1. Hurley Avenue & Wootton Parkway
Scenario: Total Future
Jurisdiction: City of Rockville

GOROVE SLADE
Transportation Planners and Engineers

AM Peak Hour CLV

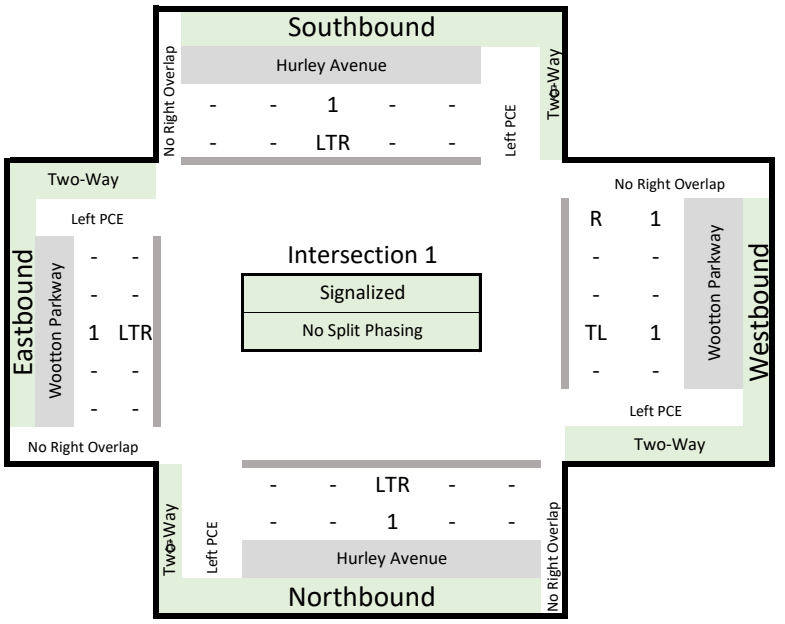


Total Intersection: 1,115 veh/hr

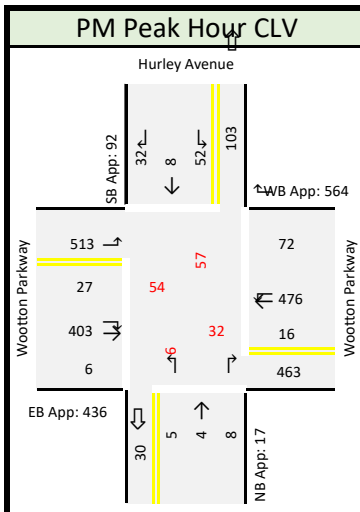
Notes: * Defacto right-turn lane test, if applicable

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LTR	493		1.00	493				496	«	✓
					0	3	1.10	3	3		
	R	2	0	1.00	2				5		
Westbound	TL	326		1.00	326				340	«	
					0	13	1.10	14	14		
	R	61	0	1.00	61				75		
Northbound	LTR	26		1.00	26				253	«	
					0	206	1.10	227	227		
	R	16	0	1.00	16				243		
Southbound	LTR	247		1.00	247				254	«	✓
					0	6	1.10	7	7		
	R	15	0	1.00	15				22		

Cycle Length	Phases	Capacity	v/c	CLV	750
90	2	1,600	47%	LOS	A



PM Peak Hour CLV



Total Intersection: 1,109 veh/hr

Notes: * Defacto right-turn lane test, if applicable

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LTR	463		1.00	463				481	«	
					0	16	1.10	18	18		
	R	6	0		0				18		
Westbound	TL	508		1.00	508				538	«	✓
					0	27	1.10	30	30		
	R	72	0		0				30		
Northbound	LTR	18		1.00	18				75	«	
					0	52	1.10	57	57		
	R	8	0		0				57		
Southbound	LTR	97		1.00	97				103	«	✓
					0	5	1.10	6	6		
	R	32	0		0				6		

Cycle Length	Phases	Capacity	v/c	CLV	641
80	2	1,500	43%	LOS	A

Right Turn Overlap Adjustments

	Eastbound AM	Eastbound PM	Westbound AM	Westbound PM	Northbound AM	Northbound PM	Southbound AM	Southbound PM
Right Turns	2	6	61	72	16	8	15	32
RT LUF	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjusted Rights	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	6	5	206	52	3	16	13	27
Adj. LT LUF	1.10		1.10		1.10		1.10	
Adjusted Adj. Lefts	7	6	227	57	3	18	14	30
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Passenger Car Equivalent (PCE) Adjustments

	Eastbound AM	Eastbound PM	Westbound AM	Westbound PM	Northbound AM	Northbound PM	Southbound AM	Southbound PM
Left Turns	13	27	3	16	6	5	206	52
Not Split & TL or LTR	Yes: PCE		Yes: PCE		Yes: PCE		Yes: PCE	
Opposing T+R	381	548	467	409	20	40	19	12
PCE Factor	2.0	2.0	2.0	2.0	1.1	1.1	1.1	1.1
PCE Adjusted Lefts	**26**	**54**	**6**	**32**	**7**	**6**	**227**	**57**

City of Rockville Standards

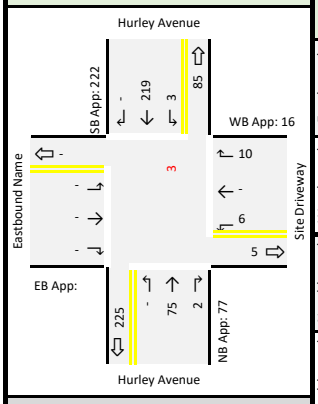
Lane Use Factors #	Th & R	L
1	1.00	1.10
2	0.53	0.60
3	0.37	0.40
4	0.30	0.00
5	0.25	0.00

LOS	CLV Range			PCE	Opposing Through+Right		
A	0	to	1,000	1.10	0	to	199
B	1,001	to	1,150	2.00	200	to	599
C	1,151	to	1,300	3.00	600	to	799
D	1,301	to	1,450	4.00	800	to	999
E	1,451	to	1,600	5.00	1,000	to	9,999
F	1,601	to	9,999				

Project: Rockshire Village Center
Intersection: 2. Hurley Avenue & Site Driveway
Scenario: Total Future
Jurisdiction: City of Rockville

GOROVE SLADE
Transportation Planners and Engineers

AM Peak Hour CLV



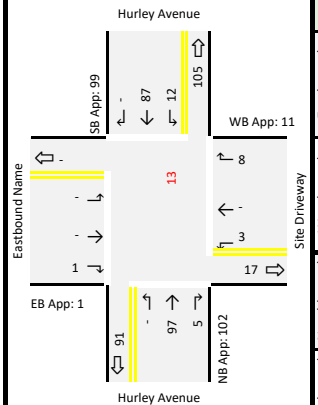
Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound										«	
Westbound	LR	16		1.00	16				16	«	✓
					0	-	0.00	0	0		
	R	10	0		0				0		
Northbound	TR	77		1.00	77				80	«	
					0	3	1.10	3	3		
	R	2	0		0				3		
Southbound	TL	222		1.00	222				222	«	✓
					0	-	0.00	0	0		
	R	-	0		0				0		

Total Intersection: 315 veh/hr

Notes: * Defacto right-turn lane test, if applicable

Cycle Length	Phases	Capacity	v/c	CLV	238
90	2	1,600	15%	LOS	A

PM Peak Hour CLV

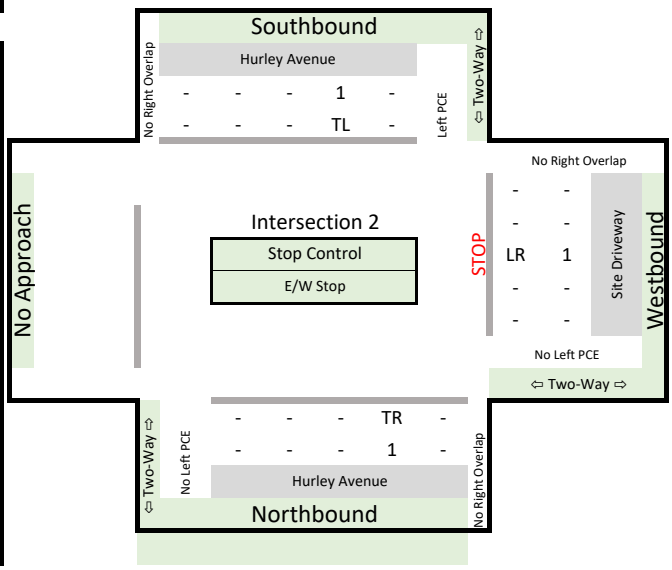


Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound											
Westbound	LR	11		1.00	11				11	«	✓
					0	-	0.00	0	0		
	R	8	0		0				0		
Northbound	TR	102		1.00	102				115	«	✓
					0	12	1.10	13	13		
	R	5	0		0				13		
Southbound	TL	100		1.00	100				100	«	
					0	-	0.00	0	0		
	R	-	0		0				0		

Total Intersection: 213 veh/hr

Notes: * Defacto right-turn lane test, if applicable

Cycle Length	Phases	Capacity	v/c	CLV	126
90	2	1,600	8%	LOS	A



Right Turn Overlap Adjustments

	Eastbound AM	Eastbound PM	Westbound AM	Westbound PM	Northbound AM	Northbound PM	Southbound AM	Southbound PM
Right Turns	-	1	10	8	2	5	-	-
RT LUF		n/a		n/a		n/a		n/a
Adjusted Rights	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	-	-	3	12	6	3	-	-
Adj. LT LUF		0.00		1.10		1.10		0.00
Adjusted Adj. Lefts	0	0	3	13	7	3	0	0
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Passenger Car Equivalent (PCE) Adjustments

	Eastbound AM	Eastbound PM	Westbound AM	Westbound PM	Northbound AM	Northbound PM	Southbound AM	Southbound PM
Left Turns	-	-	6	3	-	-	3	12
Not Split & TL or LTR		No: No PCE		No: No PCE		No: No PCE		Yes: PCE
Opposing T+R	10	8	-	1	219	87	77	102
PCE Factor	n/a	n/a	n/a	n/a	n/a	n/a	1.1	1.1
PCE Adjusted Lefts	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**3**	**13**

City of Rockville Standards

Lane Use Factors		
#	Th & R	L
1	1.00	1.10
2	0.53	0.60
3	0.37	0.40
4	0.30	0.00
5	0.25	0.00

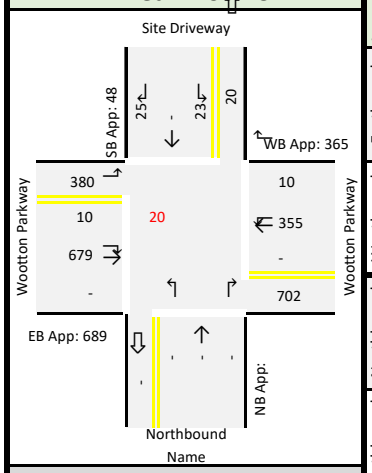
LOS	CLV Range		
A	0	to	1,000
B	1,001	to	1,150
C	1,151	to	1,300
D	1,301	to	1,450
E	1,451	to	1,600
F	1,601	to	9,999

PCE	Opposing Through+Right		
1.10	0	to	199
2.00	200	to	599
3.00	600	to	799
4.00	800	to	999
5.00	1,000	to	9,999

Project: Rockshire Village Center
Intersection: 3. Wootton Parkway & Site Driveway
Scenario: Total Future
Jurisdiction: City of Rockville

GOROVE SLADE
Transportation Planners and Engineers

AM Peak Hour CLV

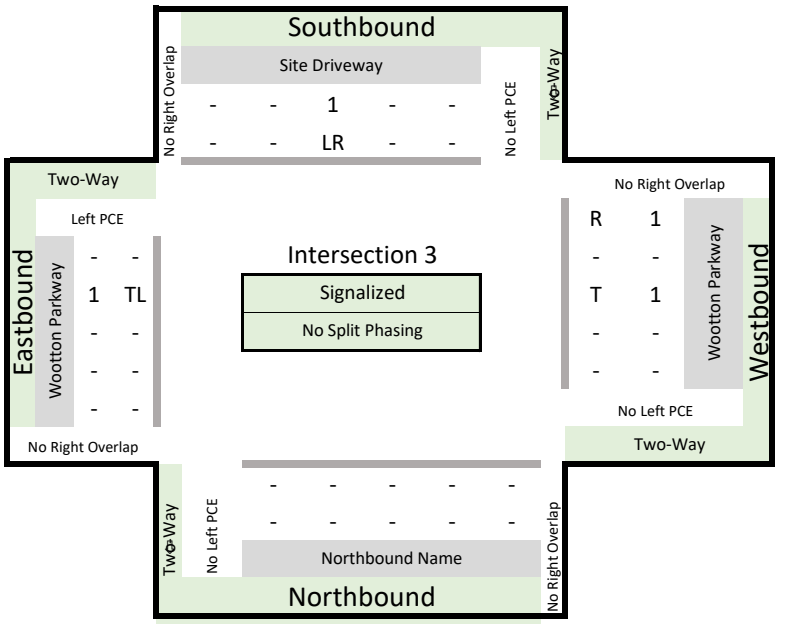


Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	TL	699		1.00	699				699	«	✓
					0	-	0.00	0	0		
	R	-	0		0				0		
Westbound	T	355		1.00	355				366	«	
					0	10	1.10	11	11		
	R	10	0		0				11		
Northbound											
Southbound	LR	48		1.00	48				48	«	✓
					0	-	0.00	0	0		
	R	25	0		0				0		

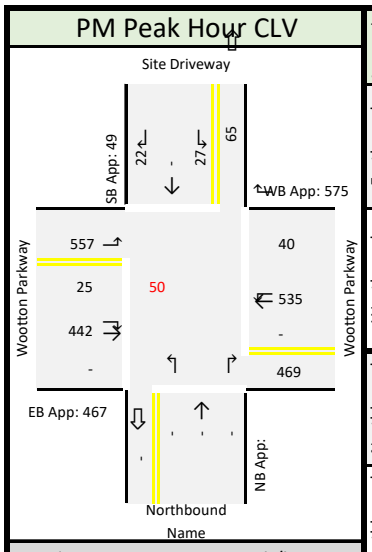
Total Intersection: 1,102 veh/hr

Notes: * Defacto right-turn lane test, if applicable

Cycle Length	Phases	Capacity	v/c	CLV	747
90	2	1,600	47%	LOS	A



PM Peak Hour CLV



Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	TL	492		1.00	492				492	«	
					0	-	0.00	0	0		
	R	-	0		0				0		
Westbound	T	535		1.00	535				563	«	✓
					0	25	1.10	28	28		
	R	40	0		0				28		
Northbound											
Southbound	LR	49		1.00	49				49	«	✓
					0	-	0.00	0	0		
	R	22	0		0				0		

Total Intersection: 1,091 veh/hr

Notes: * Defacto right-turn lane test, if applicable

Cycle Length	Phases	Capacity	v/c	CLV	612
80	2	1,500	41%	LOS	A

Right Turn Overlap Adjustments

	Eastbound AM	Eastbound PM	Westbound AM	Westbound PM	Northbound AM	Northbound PM	Southbound AM	Southbound PM
Right Turns	-	-	10	40	-	-	25	22
RT LUF	n/a		n/a		n/a		n/a	
Adjusted Rights	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	-	-	23	27	-	-	10	25
Adj. LT LUF	0.00		1.10		0.00		1.10	
Adjusted Adj. Lefts	0	0	25	30	0	0	11	28
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Passenger Car Equivalent (PCE) Adjustments

	Eastbound AM	Eastbound PM	Westbound AM	Westbound PM	Northbound AM	Northbound PM	Southbound AM	Southbound PM
Left Turns	10	25	-	-	-	-	23	27
Not Split & TL or LTR	Yes: PCE		No: No PCE		No: No PCE		No: No PCE	
Opposing T+R	365	575	679	442	25	22	-	-
PCE Factor	2.0	2.0	n/a	n/a	n/a	n/a	n/a	n/a
PCE Adjusted Lefts	**20**	**50**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**	**n/a**

City of Rockville Standards

Lane Use Factors #	Th & R	L
1	1.00	1.10
2	0.53	0.60
3	0.37	0.40
4	0.30	0.00
5	0.25	0.00

LOS	CLV Range		
A	0	to	1,000
B	1,001	to	1,150
C	1,151	to	1,300
D	1,301	to	1,450
E	1,451	to	1,600
F	1,601	to	9,999

PCE	Opposing Through+Right		
1.10	0	to	199
2.00	200	to	599
3.00	600	to	799
4.00	800	to	999
5.00	1,000	to	9,999

E. MDOT SHA Historical AADT Data

Road	Location	Historical AADT's (Source: MDOT SHA I-TMS)										
		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Hurley Avenue	BETWEEN MD 28 & WATTS BRANCH PKWY	--	6210	6221	6202	6363	6484	6645	5940	5941	4962	5683
Wotton Parkway	Burning Tree Road to MD 188	16620	16491	16522	16230	16651	16972	15490	15351	16002	13362	15293

ANNUAL CHANGES

AVG INCLUDES 202(W/O 2020

Annual Growth									Avg Annual Growth Between 2012-2020	Avg Annual Growth Between 2012-2019	Annual Growth Used in Analysis
2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020			
N/A	0.18%	-0.31%	2.60%	1.90%	2.48%	-10.61%	0.02%	-16.48%	-2.53%	-0.53%	0.1%
-0.78%	0.19%	-1.77%	2.59%	1.93%	-8.73%	-0.90%	4.24%	-16.50%	-2.19%	-0.40%	0.1%

CHANGES FROM PRIOR YEARS TO 2020 AADTS

2011-2020	2012-2020	2013-2020	2014-2020	2015-2020	2016-2020	2017-2020	2018-2020	2019-2020	Avg Annual Growth Between 2012-2019
N/A	-2.77%	-3.18%	-3.65%	-4.85%	-6.47%	-9.28%	-8.60%	-16.48%	-6.91%
-2.40%	-2.60%	-2.99%	-3.19%	-4.31%	-5.80%	-4.81%	-6.70%	-16.50%	-5.48%

CHANGES FROM PRIOR YEARS TO 2019 AADTS

2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	Avg Annual Growth Between 2012-2019
N/A	-0.63%	-0.76%	-0.86%	-1.70%	-2.87%	-5.45%	0.02%		-1.75%
-0.47%	-0.43%	-0.53%	-0.28%	-0.99%	-1.94%	1.64%	4.24%		0.15%

ANNUAL CHANGES

AVG INCLUDES 202(W/O 2020

Annual Growth									Avg Annual Growth Between 2012-2020	Avg Annual Growth Between 2012-2019	Annual Growth Used in Analysis
2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020			
N/A	0.18%	-0.31%	2.60%	1.90%	2.48%	-10.61%	0.02%	-16.48%	-2.53%	-0.53%	0.1%
-0.78%	0.19%	-1.77%	2.59%	1.93%	-8.73%	-0.90%	4.24%	-16.50%	-2.19%	-0.40%	0.1%

CHANGES FROM PRIOR YEARS TO 2020 AADTS

2011-2020	2012-2020	2013-2020	2014-2020	2015-2020	2016-2020	2017-2020	2018-2020	2019-2020	Avg Annual Growth Between 2012-2019
N/A	-2.77%	-3.18%	-3.65%	-4.85%	-6.47%	-9.28%	-8.60%	-16.48%	-6.91%
-2.40%	-2.60%	-2.99%	-3.19%	-4.31%	-5.80%	-4.81%	-6.70%	-16.50%	-5.48%

CHANGES FROM PRIOR YEARS TO 2019 AADTS

2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	Avg Annual Growth Between 2012-2019
N/A	-0.63%	-0.76%	-0.86%	-1.70%	-2.87%	-5.45%	0.02%		-1.75%
-0.47%	-0.43%	-0.53%	-0.28%	-0.99%	-1.94%	1.64%	4.24%		0.15%

F. Detailed Site Trip Generation Calculations

Trip Generation - Retail

52,000 SF Grocery

Step 1: Base trip generation using ITEs' *Trip Generation* 11th Edition

Land Use	Land Use Code	Quantity	AM Peak Hour			PM Peak Hour			Weekday	Sat Peak Hour*		
			In	Out	Total	In	Out	Total	Total	In	Out	Total
Retail (Grocery)	850	52,000 sf	88 veh/hr	61 veh/hr	149 veh/hr	233 veh/hr	232 veh/hr	465 veh/hr	4,876 veh	263 veh/hr	262 veh/hr	525 veh/hr
		Calculation Details:	*59%*	*41%*	*=2.86(X/1000)*	*50%*	*50%*	*=8.95(X/1000)*	*=83.39(X/1000)+539.33*	*50%*	*50%*	*=10.1(X/1000)*

**Peak Hour of Generator used for Saturday Trip Generation*

Trip Generation - Residential

29 townhomes

Step 1: Base trip generation using ITEs' *Trip Generation* 11th Edition

Land Use	Land Use Code	Quantity	AM Peak Hour			PM Peak Hour			Weekday	Sat Peak Hour*		
			In	Out	Total	In	Out	Total	Total	In	Out	Total
Residential	220	29 du	8 veh/hr	24 veh/hr	32 veh/hr	21 veh/hr	12 veh/hr	33 veh/hr	261 veh	6 veh/hr	6 veh/hr	12 veh/hr
		Calculation Details:	*24%*	*76%*	*=0.31X+22.85*	*63%*	*37%*	*=0.43X+ 20.55*	*=6.41X+75.31*	*50%*	*50%*	*=0.41X*

**Peak Hour of Generator used for Saturday Trip Generation*

Trip Generation - Residential

31 SFH

Step 1: Base trip generation using ITEs' *Trip Generation* 11th Edition

Land Use	Land Use Code	Quantity	AM Peak Hour			PM Peak Hour			Weekday	Sat Peak Hour*		
			In	Out	Total	In	Out	Total	Total	In	Out	Total
Residential	210	31 du	7 veh/hr	19 veh/hr	26 veh/hr	21 veh/hr	12 veh/hr	33 veh/hr	344 veh	19 veh/hr	17 veh/hr	36 veh/hr
		Calculation Details:	*26%*	*74%*	*Ln(T)=0.91Ln(X)+0.12*	*63%*	*37%*	*Ln(T)=0.94Ln(X)+0.27*	*Ln(T)=0.92Ln(X)+2.68*	*54%*	*46%*	*=0.86X+9.72*

**Peak Hour of Generator used for Saturday Trip Generation*

Trip Generation - Retail

5,500 SF Fast Casual Restaurant

Step 1: Base trip generation using ITEs' *Trip Generation* 11th Edition

Land Use	Land Use Code	Quantity	AM Peak Hour			PM Peak Hour			Weekday	Sat Peak Hour*		
			In	Out	Total	In	Out	Total	Total	In	Out	Total
Fast Casual Rest	930	5,500 sf	4 veh/hr	4 veh/hr	8 veh/hr	38 veh/hr	31 veh/hr	69 veh/hr	534 veh	99 veh/hr	81 veh/hr	180 veh/hr
		Calculation Details:	*50%*	*50%*	*=1.43(X/1000)*	*55%*	*45%*	*=12.55(X/1000)*	*=97.14(X/1000)*	*55%*	*45%*	*=32.64(X/1000)*

**Peak Hour of Generator used for Saturday Trip Generation*

G. Table 2-6 M-NCPPC LATR Guidelines

Preliminary Site Distributions

**Derived from Appendix Table 2-6 of the M-NCPPC LATR Guidelines*

Trip Assignment for Super District (Development Located in Super District 4--Rockville/North Bethesda)

Super District	Direction			Sum	Auto Driver Distribution-District 4 Residential
	Wootton Parkway (to/from the S, SE, SW)	Wootton Parkway (to/from the N, NE. NW)	Hurley Avenue (to/from the NE, E, SE)		
1 (Bethesda/Chevy Chase)	90%	0%	10%	100%	**7.4%**
2 (Silver Spring/Takoma Park)	90%	0%	10%	100%	**2.3%**
3 (Potomac/Darnestown/Travilah)	35%	65%	0%	100%	**5.4%**
4 (Rockville/North Bethesda)	45%	30%	25%	100%	**38.2%**
5 (Kensington/Wheaton)	60%	0%	40%	100%	**4.1%**
6 (White Oak/Fairland/Cloverly)	50%	30%	20%	100%	**1.6%**
7 (Gaithersburg/Shady Grove)	0%	50%	50%	100%	**13.4%**
8 (Aspen Hill/Olney)	40%	40%	20%	100%	**2.8%**
9 (Germantown/Clarksburg)	0%	30%	70%	100%	**1.7%**
10 (Rural West of I-270)	0%	50%	50%	100%	**0.1%**
11 (Rural East of I-270)	0%	75%	25%	100%	**0.3%**
12 (Washington, DC)	75%	0%	25%	100%	**11.0%**
13 (PG/AA/Cal/St. M/Chls Cos., MD)	85%	0%	15%	100%	**4.4%**
14 (VA/WV)	40%	40%	20%	100%	**6.5%**
15 (Frederick Co., MD)	0%	40%	60%	100%	**0.3%**
16 (Howard Co./Carroll Co., MD)	10%	40%	50%	100%	**0.5%**

Trip Assignment for Development Case

Super District	Direction				Auto Driver Distribution-District 4 Residential
	Shady Grove Rd (to/from the Southwest)	I-370/I-270 (to/from the South)	I-370/I-270 (to/from the Northwest)		
1 (Bethesda/Chevy Chase)	6.7%		0.7%	**7.4%**	**7.4%**
2 (Silver Spring/Takoma Park)	2.1%		0.2%	**2.3%**	**2.3%**
3 (Potomac/Darnestown/Travilah)	1.9%	3.5%		**5.4%**	**5.4%**
4 (Rockville/North Bethesda)	17.2%	11.5%	9.6%	**38.2%**	**38.2%**
5 (Kensington/Wheaton)	2.5%		1.6%	**4.1%**	**4.1%**
6 (White Oak/Fairland/Cloverly)	0.8%	0.5%	0.3%	**1.6%**	**1.6%**
7 (Gaithersburg/Shady Grove)		6.7%	6.7%	**13.4%**	**13.4%**
8 (Aspen Hill/Olney)	1.1%	1.1%	0.6%	**2.8%**	**2.8%**
9 (Germantown/Clarksburg)		0.5%	1.2%	**1.7%**	**1.7%**
10 (Rural West of I-270)		0.1%	0.1%	**0.1%**	**0.1%**
11 (Rural East of I-270)		0.2%	0.1%	**0.3%**	**0.3%**
12 (Washington, DC)	8.3%		2.8%	**11.0%**	**11.0%**
13 (PG/AA/Cal/St. M/Chls Cos., MD)	3.7%		0.7%	**4.4%**	**4.4%**
14 (VA/WV)	2.6%	2.6%	1.3%	**6.5%**	**6.5%**
15 (Frederick Co., MD)		0.1%	0.2%	**0.3%**	**0.3%**
16 (Howard Co./Carroll Co., MD)	0.1%	0.2%	0.3%	**0.5%**	**0.5%**
Distribution (Sum)	**46.8%**	**27.0%**	**26.2%**	**100.0%**	**100.0%**
Distribution (Assumed)	**47%**	**27%**	**26%**		**100.0%**

H. Speed Study Data

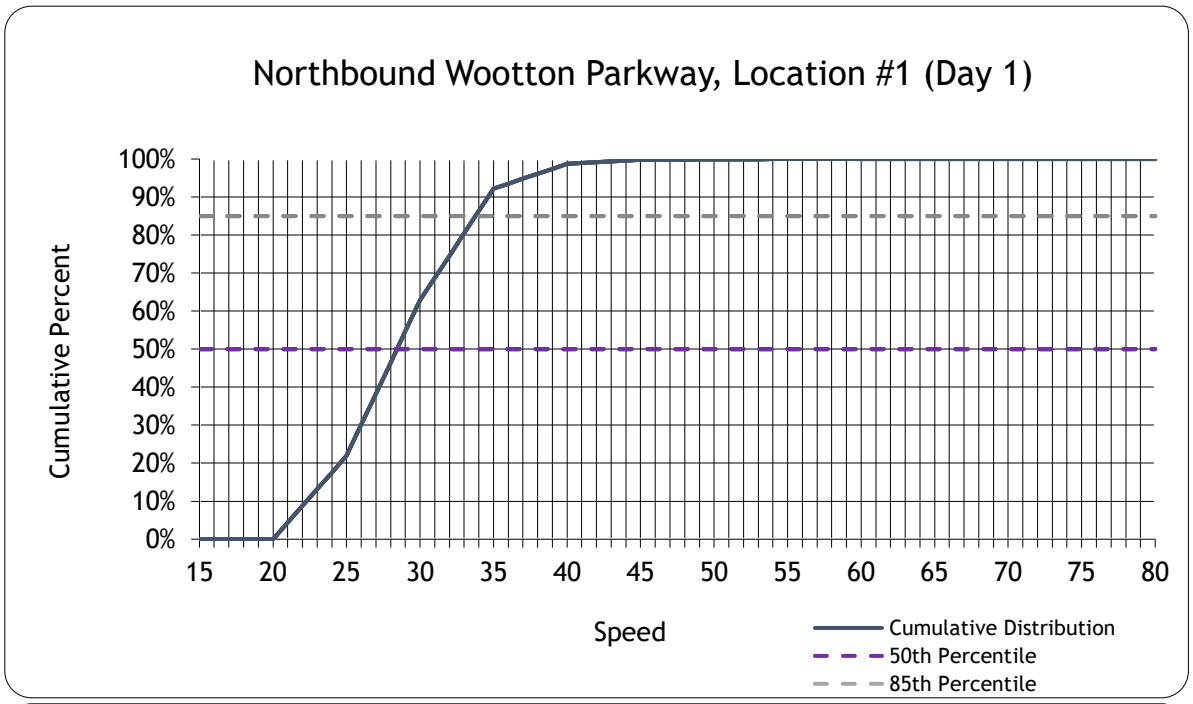
Speed Survey

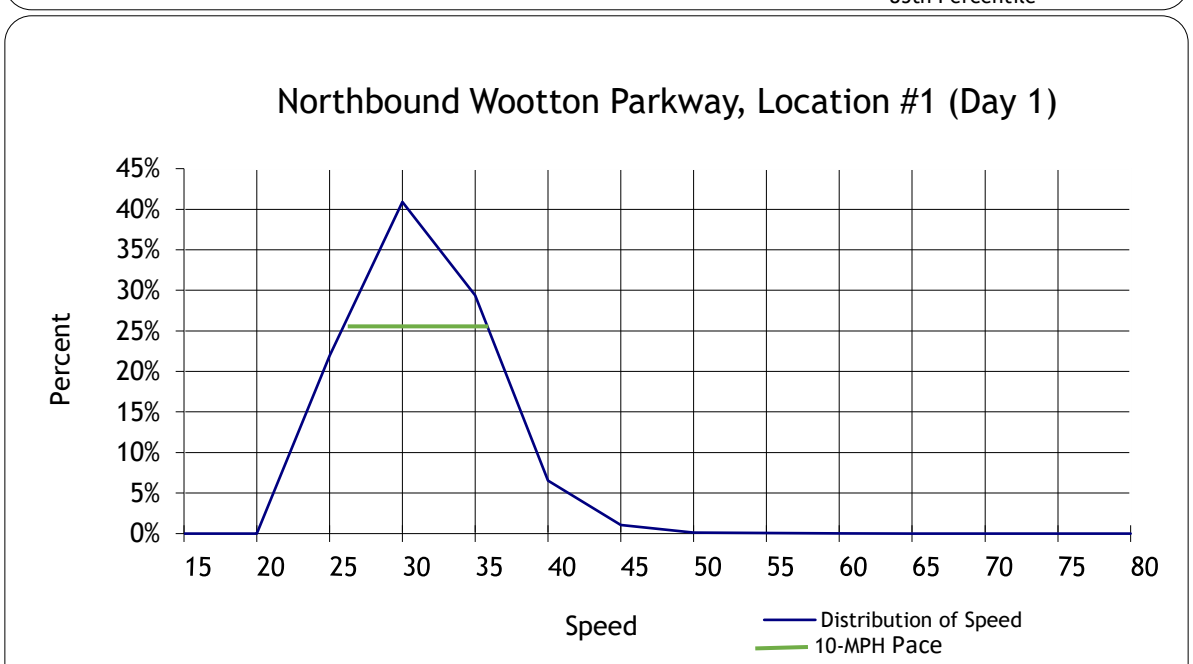
Street : Wootton Parkway s. of Hurley & site driveway
Capture Zone : Local

Counted By: Gorove Slade
Posted Speed Limit : 35 MPH
Types of Vehicles : All Vehicles
Weather Conditions :
Date : 12/20/2022
Day : Tuesday
Time Range : 24 hours
Direction : NB

Lowest Recorded Speed	25	mph	**15th Percentile :**	23	mph
Highest Recorded Speed	45	mph	**50th Percentile :**	28	mph
Average Speed	31	mph	**85th Percentile :**	34	mph
Vehicles Observed	4421		**95th Percentile :**	37	mph

SPEED	COUNT	PERCENT
15	0	0%
20	0	0%
25	970	22%
30	1808	41%
35	1299	29%
40	288	7%
45	46	1%
50	5	0%
55	4	0%
60	1	0%
65	0	0%
70	0	0%
75	0	0%
80	0	0%





Total Vehicles 4421

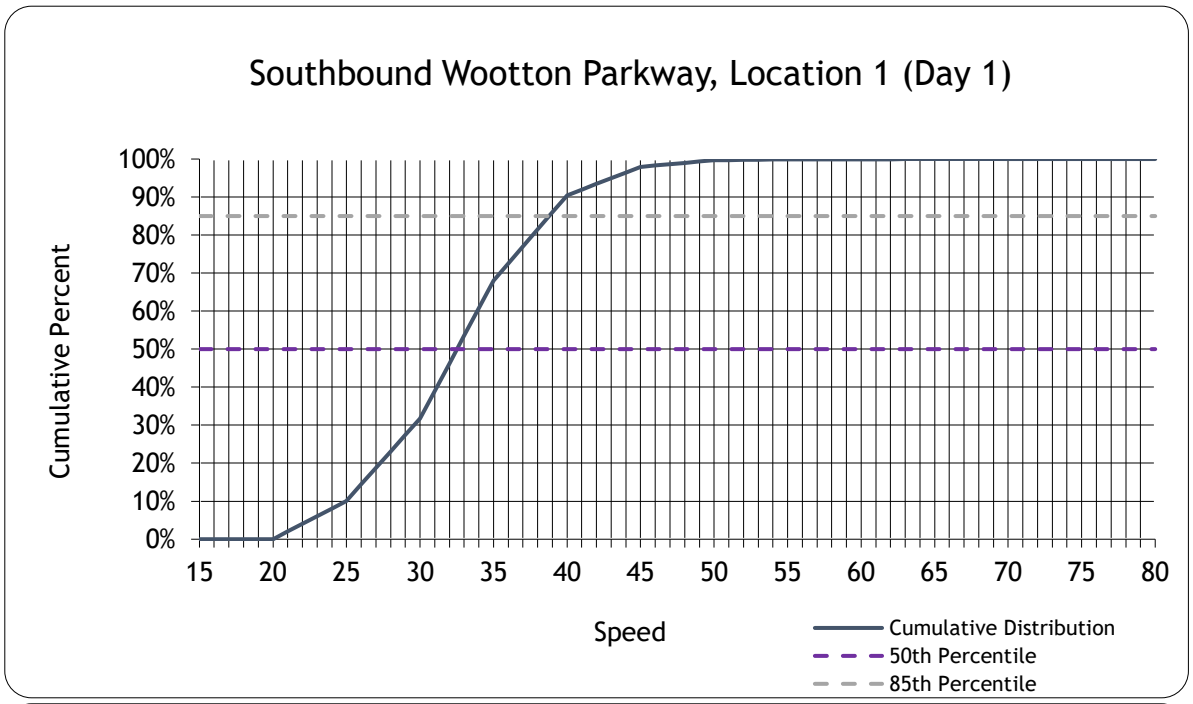
Speed Survey

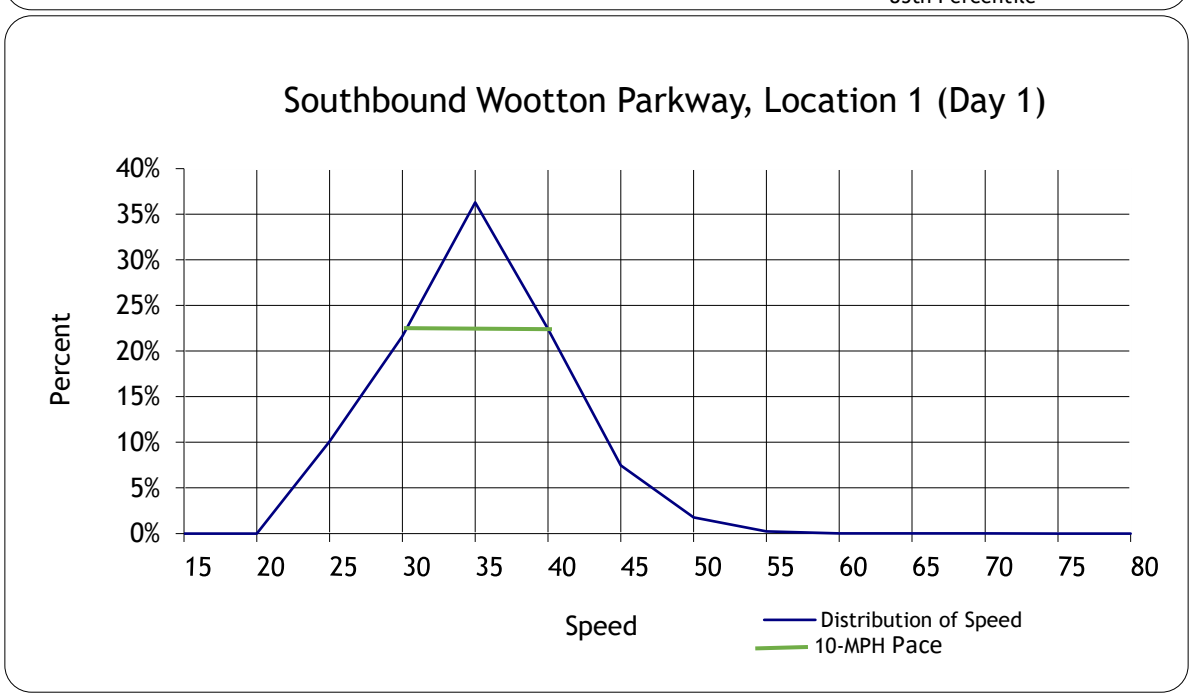
Street : Wootton Parkway s. of Hurley & site driveway
Capture Zone : Local

Counted By: Gorove Slade
Posted Speed Limit : 35 MPH
Types of Vehicles : All Vehicles
Weather Conditions :
Date : 12/20/2022
Day : Tuesday
Time Range : 24 hours
Direction : SB

Lowest Recorded Speed	25	mph	**15th Percentile :**	26	mph
Highest Recorded Speed	45	mph	**50th Percentile :**	33	mph
Average Speed	34	mph	**85th Percentile :**	39	mph
Vehicles Observed	3565		**95th Percentile :**	43	mph

SPEED	COUNT	PERCENT
15	0	0%
20	0	0%
25	360	10%
30	772	22%
35	1294	36%
40	799	22%
45	266	7%
50	63	2%
55	8	0%
60	1	0%
65	1	0%
70	1	0%
75	0	0%
80	0	0%





Total Vehicles 3565

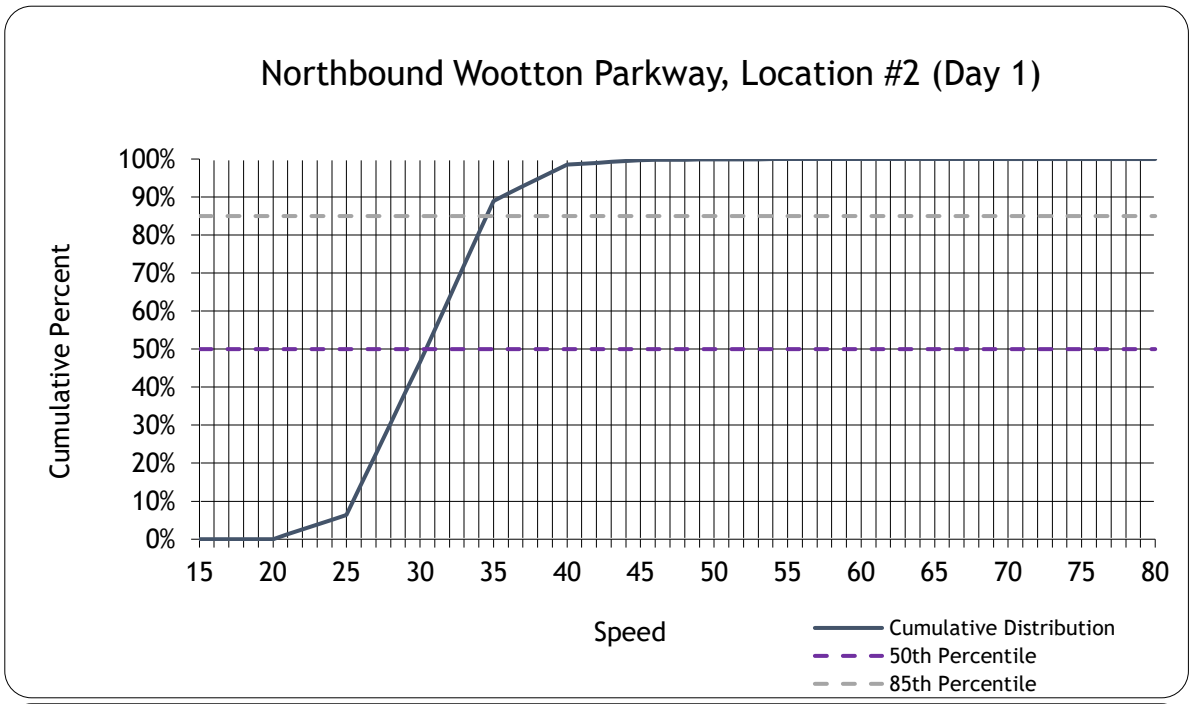
Speed Survey

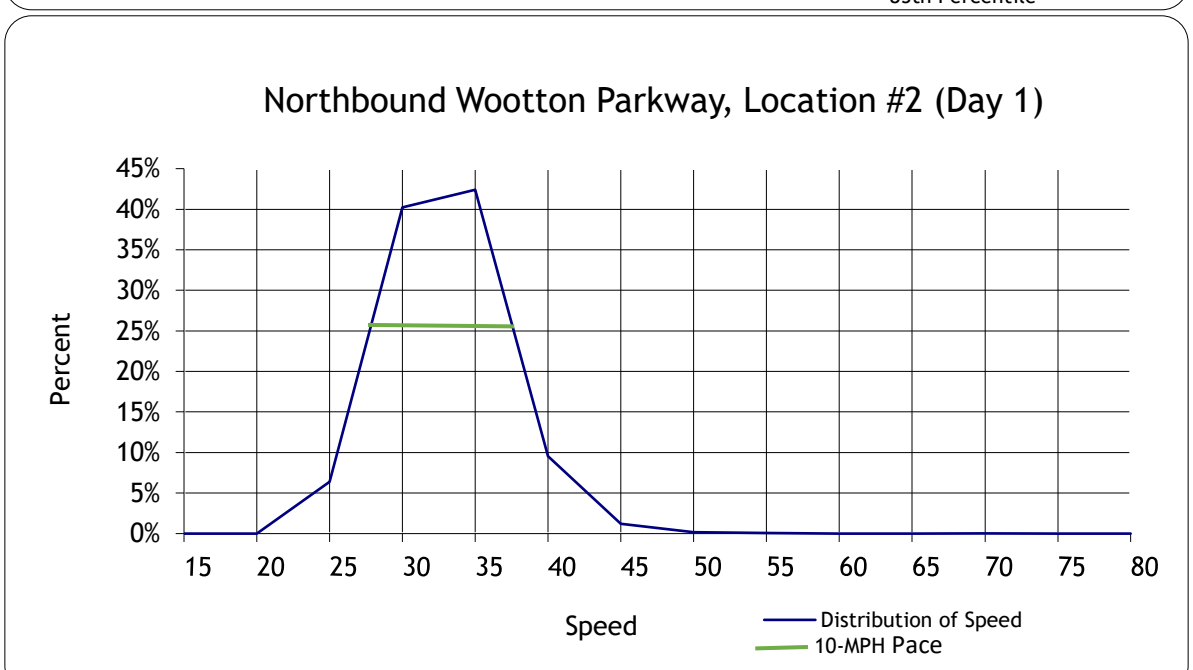
Street : Wootton Parkway n. of Hurley
Capture Zone : Local

Counted By: Gorove Slade
Posted Speed Limit : 35 MPH
Types of Vehicles : All Vehicles
Weather Conditions :
Date : 12/20/2022
Day : Tuesday
Time Range : 24 hours
Direction : NB

Lowest Recorded Speed	25	mph	**15th Percentile :**	26	mph
Highest Recorded Speed	45	mph	**50th Percentile :**	30	mph
Average Speed	33	mph	**85th Percentile :**	35	mph
Vehicles Observed	4295		**95th Percentile :**	38	mph

SPEED	COUNT	PERCENT
15	0	0%
20	0	0%
25	274	6%
30	1728	40%
35	1821	42%
40	409	10%
45	51	1%
50	8	0%
55	3	0%
60	0	0%
65	0	0%
70	1	0%
75	0	0%
80	0	0%





Total Vehicles 4295

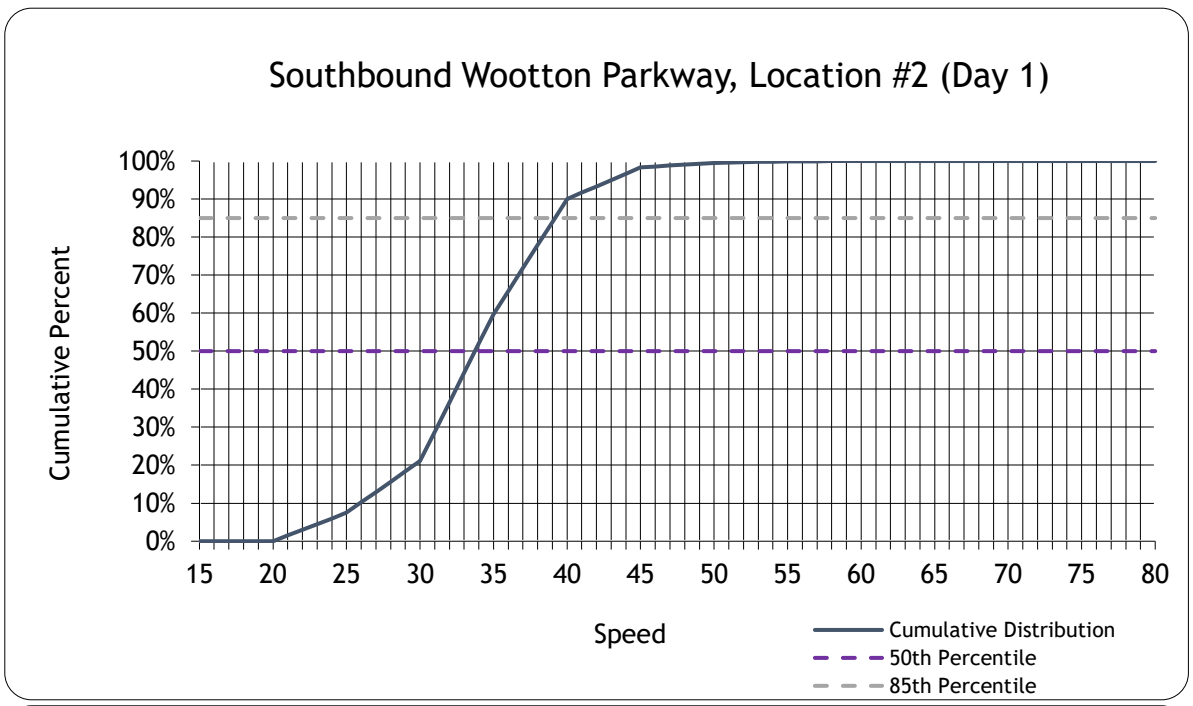
Speed Survey

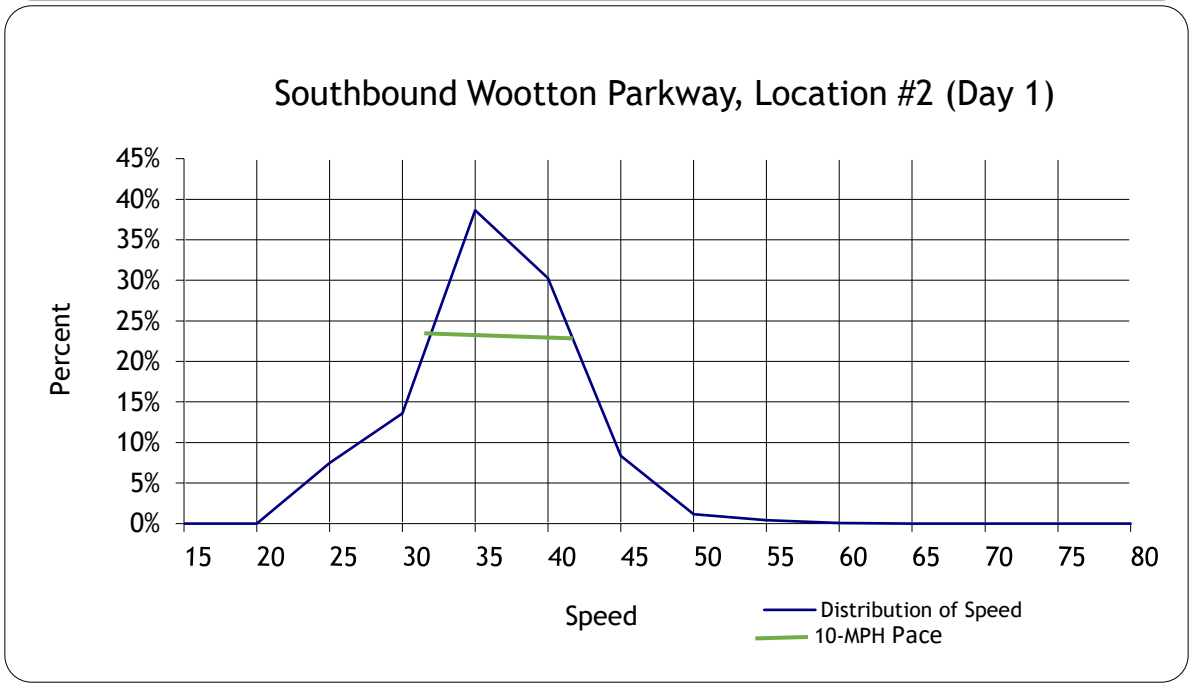
Street : Wootton Parkway n. of Hurley
Capture Zone : Local

Counted By: Gorove Slade
Posted Speed Limit : 35 MPH
Types of Vehicles : All Vehicles
Weather Conditions :
Date : 12/20/2022
Day : Tuesday
Time Range : 24 hours
Direction : SB

Lowest Recorded Speed	: 25	mph	**15th Percentile :**	28	mph
Highest Recorded Speed	: 45	mph	**50th Percentile :**	34	mph
Average Speed	: 35	mph	**85th Percentile :**	39	mph
Vehicles Observed	: 3282		**95th Percentile :**	43	mph

SPEED	COUNT	PERCENT
15	0	0%
20	0	0%
25	246	7%
30	446	14%
35	1268	39%
40	993	30%
45	275	8%
50	38	1%
55	13	0%
60	3	0%
65	0	0%
70	0	0%
75	0	0%
80	0	0%





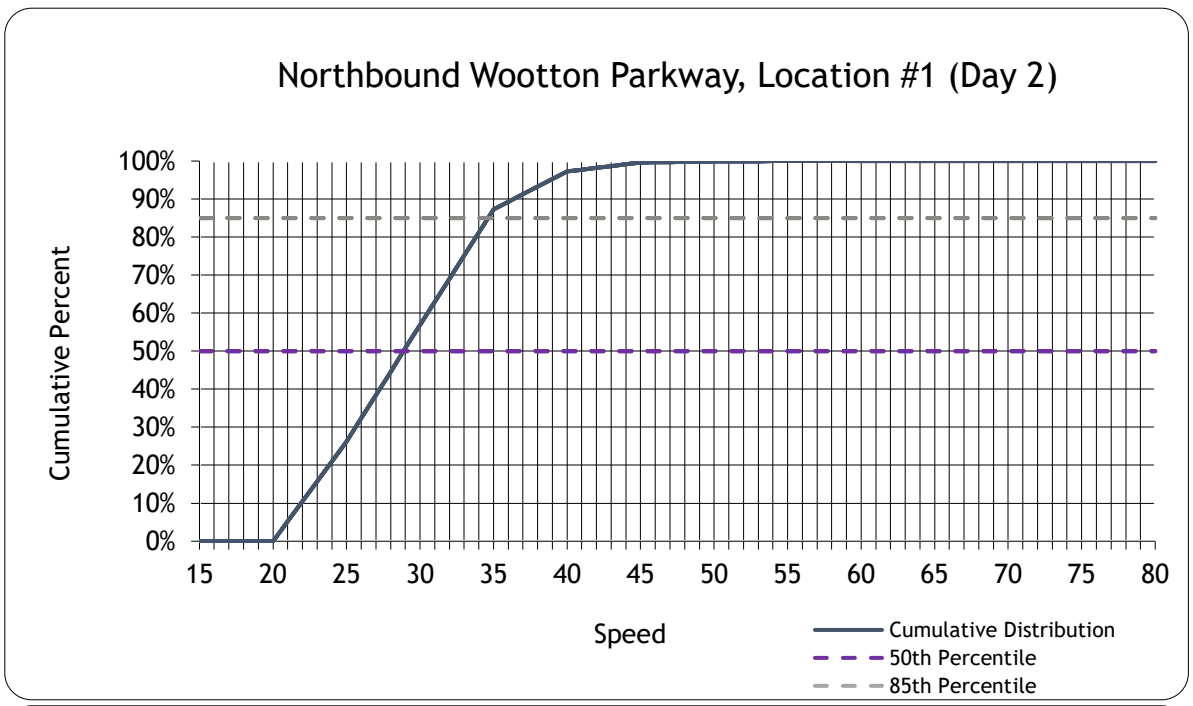
Total Vehicles 3282

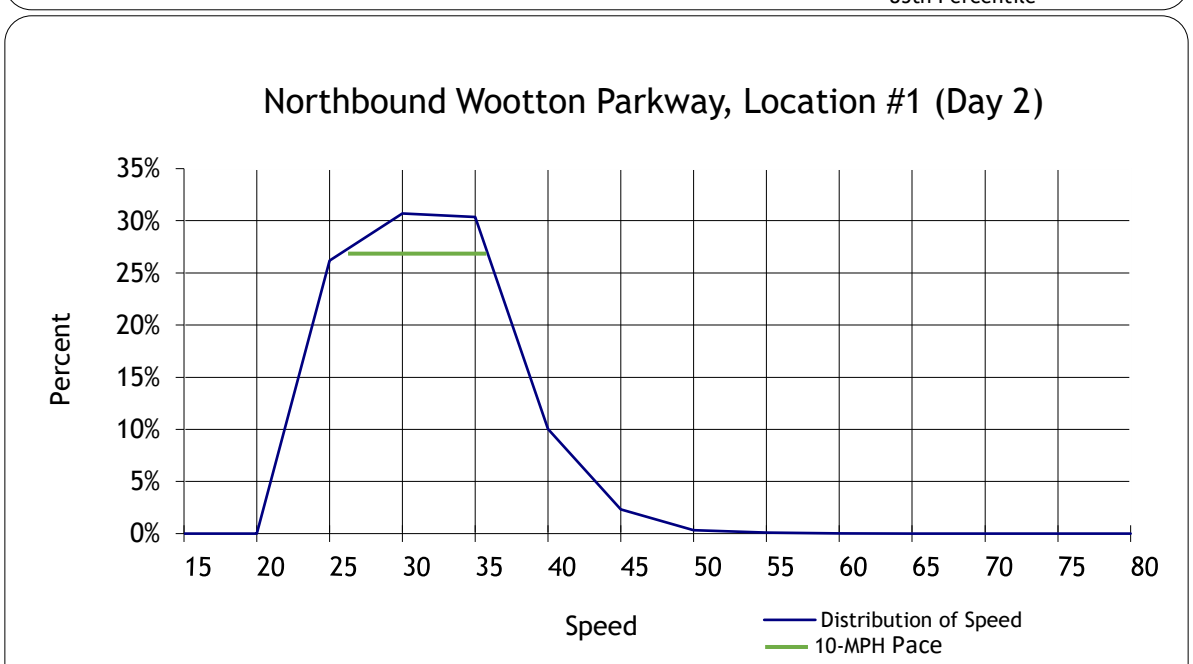
Speed Survey

Street :	Wootton Parkway s. of Hurley & site driveway
Capture Zone :	Local
Counted By:	Gorove Slade
Posted Speed Limit :	35 MPH
Types of Vehicles :	All Vehicles
Weather Conditions :	
Date :	1/10/2023
Day :	Tuesday
Time Range :	24 hours
Direction :	NB

Lowest Recorded Speed	: 25	mph	**15th Percentile :**	23	mph
Highest Recorded Speed	: 45	mph	**50th Percentile :**	29	mph
Average Speed	: 31	mph	**85th Percentile :**	35	mph
Vehicles Observed	: 3850		**95th Percentile :**	39	mph

SPEED	COUNT	PERCENT
15	0	0%
20	0	0%
25	1008	26%
30	1182	31%
35	1169	30%
40	386	10%
45	89	2%
50	12	0%
55	3	0%
60	1	0%
65	0	0%
70	0	0%
75	0	0%
80	0	0%





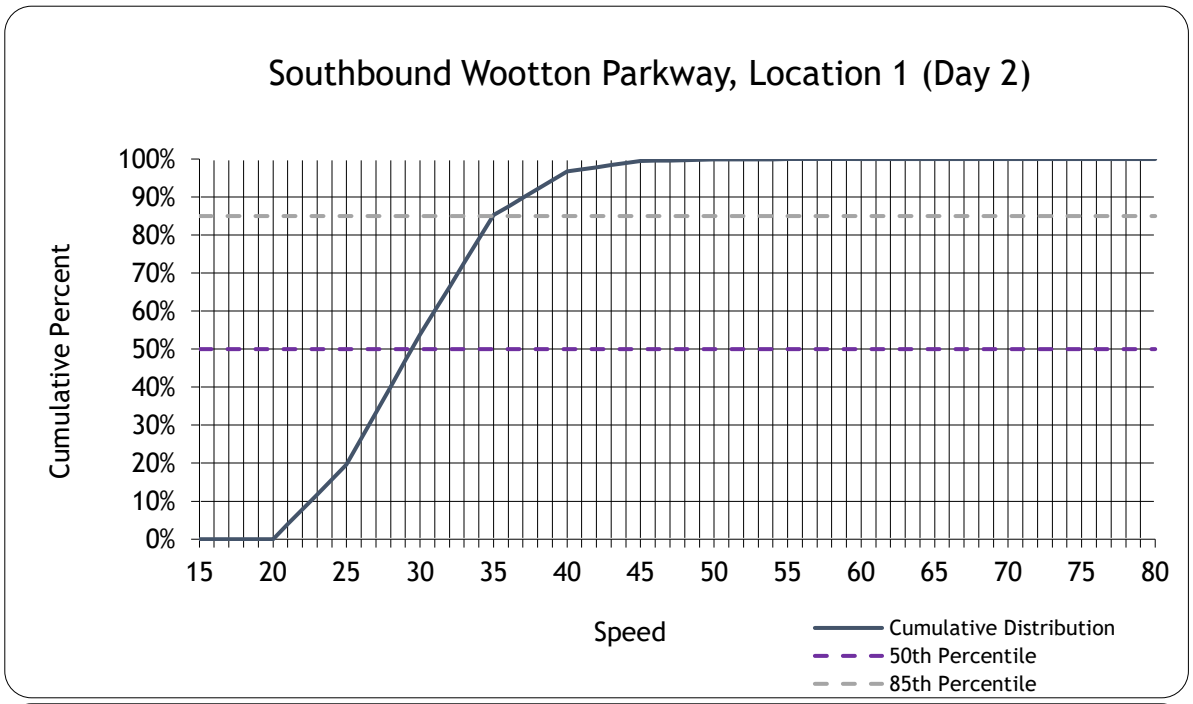
Total Vehicles 3850

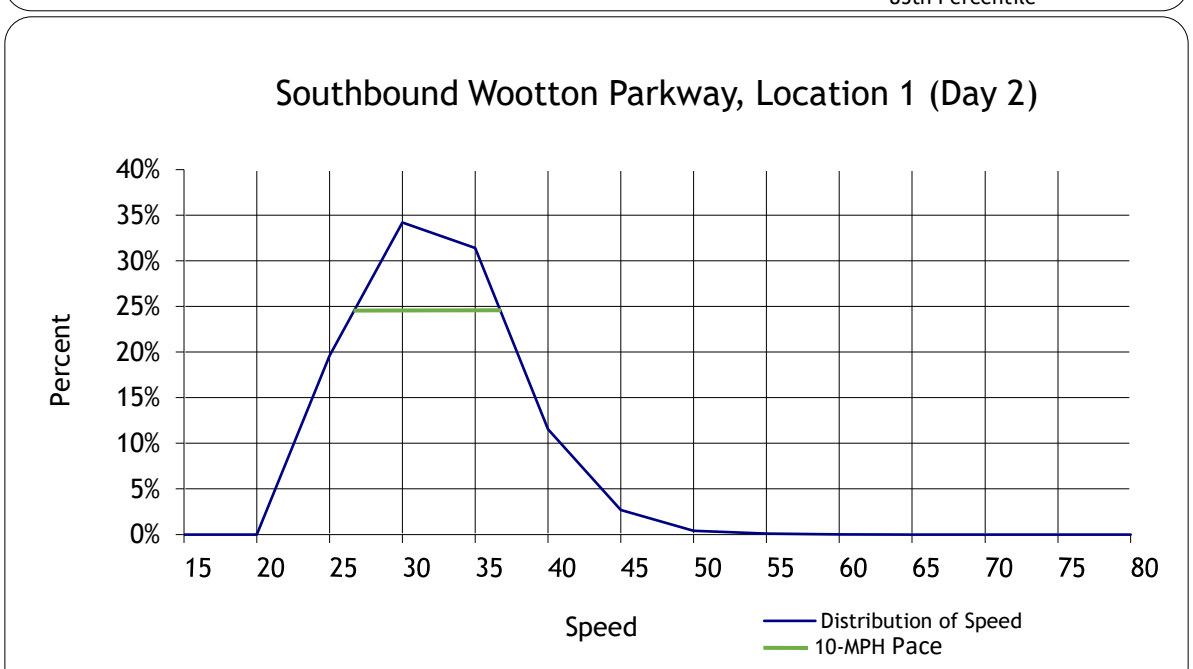
Speed Survey

Street :	Wootton Parkway s. of Hurley & site driveway
Capture Zone :	Local
Counted By:	Gorove Slade
Posted Speed Limit :	35 MPH
Types of Vehicles :	All Vehicles
Weather Conditions :	
Date :	1/10/2023
Day :	Tuesday
Time Range :	24 hours
Direction :	SB

Lowest Recorded Speed	25	mph	**15th Percentile :**	24	mph
Highest Recorded Speed	45	mph	**50th Percentile :**	29	mph
Average Speed	32	mph	**85th Percentile :**	35	mph
Vehicles Observed	3508		**95th Percentile :**	39	mph

SPEED	COUNT	PERCENT
15	0	0%
20	0	0%
25	688	20%
30	1200	34%
35	1102	31%
40	405	12%
45	94	3%
50	14	0%
55	4	0%
60	1	0%
65	0	0%
70	0	0%
75	0	0%
80	0	0%





Total Vehicles 3508

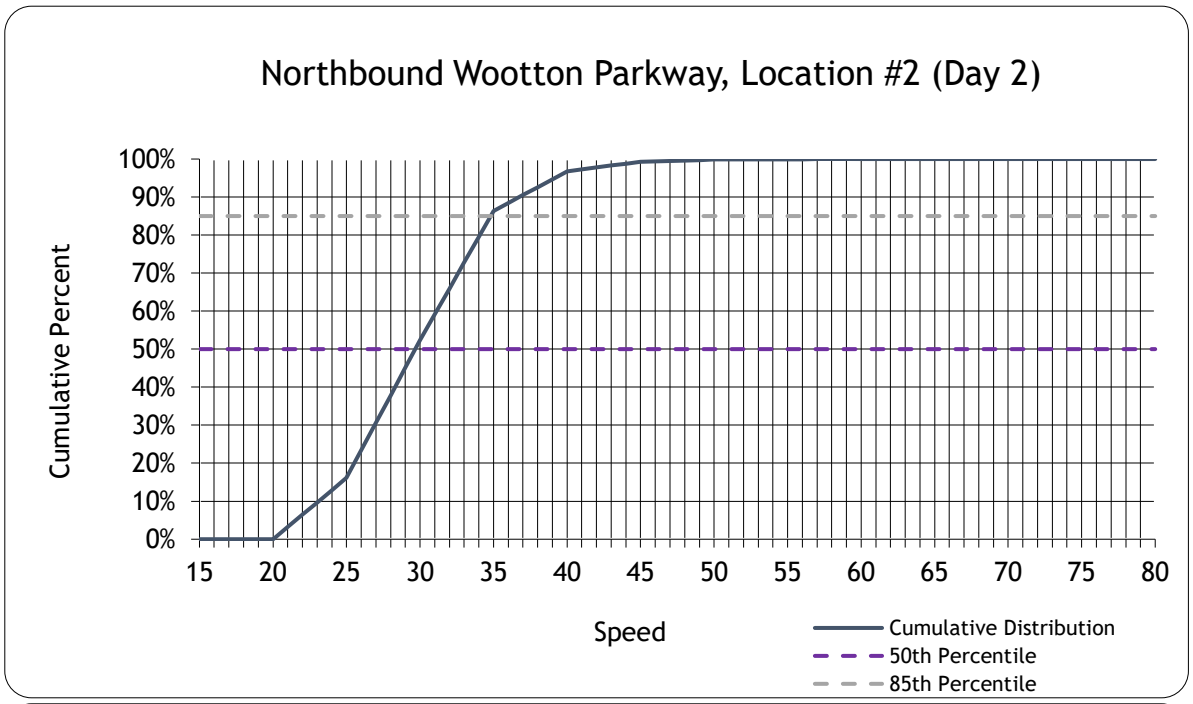
Speed Survey

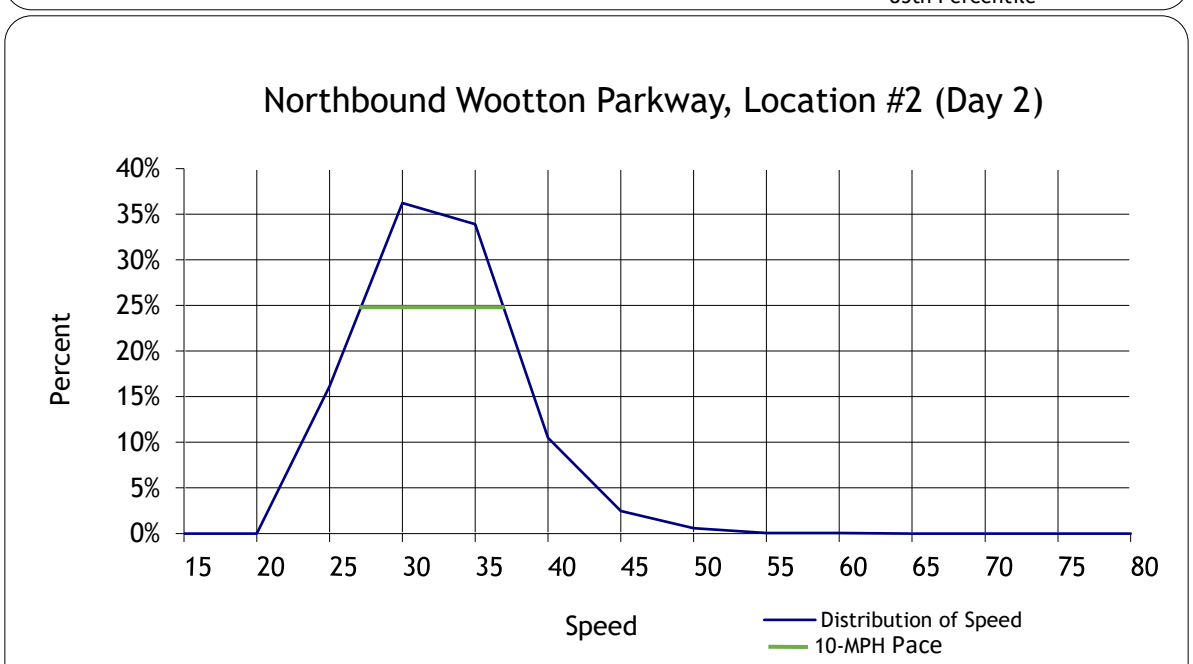
Street : Wootton Parkway n. of Hurley
Capture Zone : Local

Counted By: Gorove Slade
Posted Speed Limit : 35 MPH
Types of Vehicles : All Vehicles
Weather Conditions :
Date : 1/10/2023
Day : Tuesday
Time Range : 24 hours
Direction : NB

Lowest Recorded Speed	25	mph	**15th Percentile :**	25	mph
Highest Recorded Speed	45	mph	**50th Percentile :**	30	mph
Average Speed	32	mph	**85th Percentile :**	35	mph
Vehicles Observed	3712		**95th Percentile :**	39	mph

SPEED	COUNT	PERCENT
15	0	0%
20	0	0%
25	599	16%
30	1345	36%
35	1259	34%
40	390	11%
45	92	2%
50	22	1%
55	3	0%
60	2	0%
65	0	0%
70	0	0%
75	0	0%
80	0	0%





Total Vehicles 3712

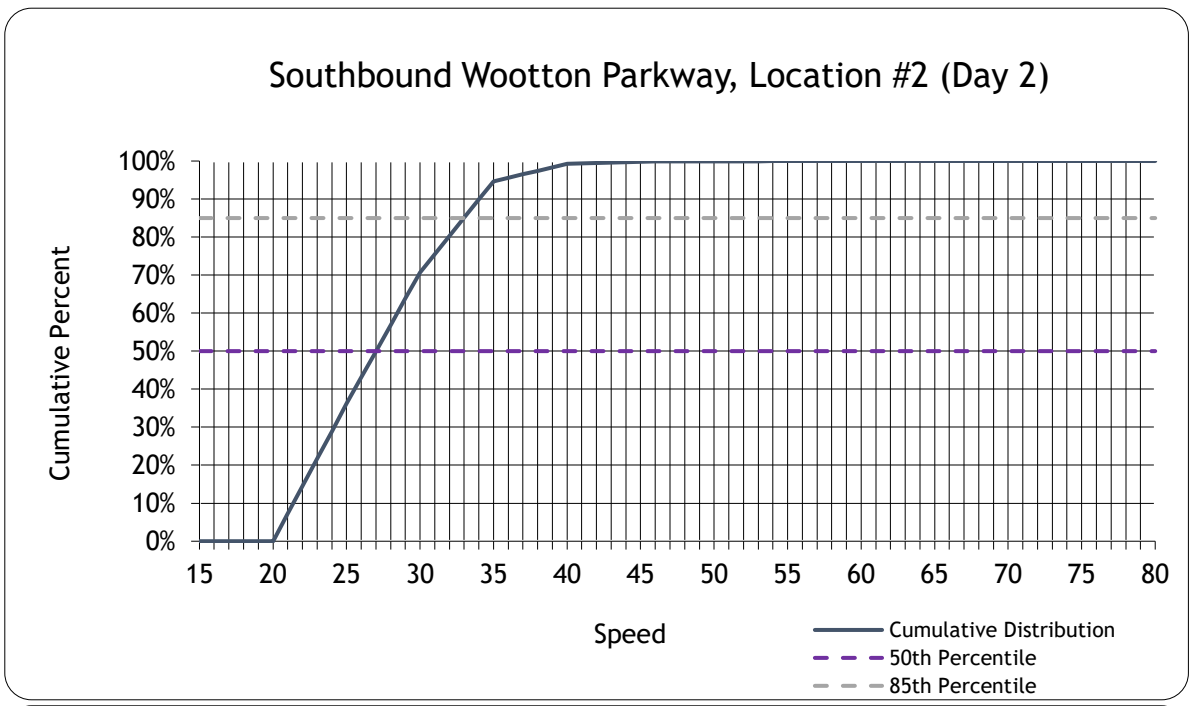
Speed Survey

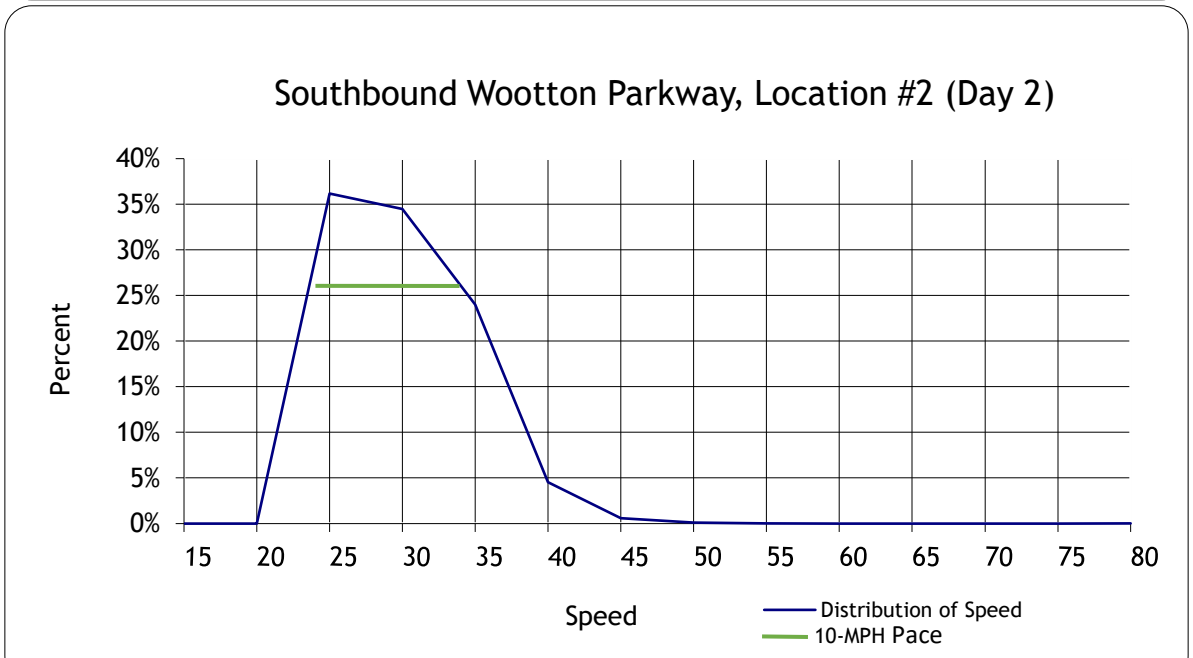
Street : Wootton Parkway n. of Hurley
Capture Zone : Local

Counted By: Gorove Slade
Posted Speed Limit : 35 MPH
Types of Vehicles : All Vehicles
Weather Conditions :
Date : 1/10/2023
Day : Tuesday
Time Range : 24 hours
Direction : SB

Lowest Recorded Speed	: 25	mph	**15th Percentile :**	22	mph
Highest Recorded Speed	: 45	mph	**50th Percentile :**	27	mph
Average Speed	: 30	mph	**85th Percentile :**	33	mph
Vehicles Observed	: 3168		**95th Percentile :**	35	mph

SPEED	COUNT	PERCENT
15	0	0%
20	0	0%
25	1146	36%
30	1093	35%
35	761	24%
40	144	5%
45	19	1%
50	3	0%
55	1	0%
60	0	0%
65	0	0%
70	0	0%
75	0	0%
80	1	0%





Total Vehicles 3168

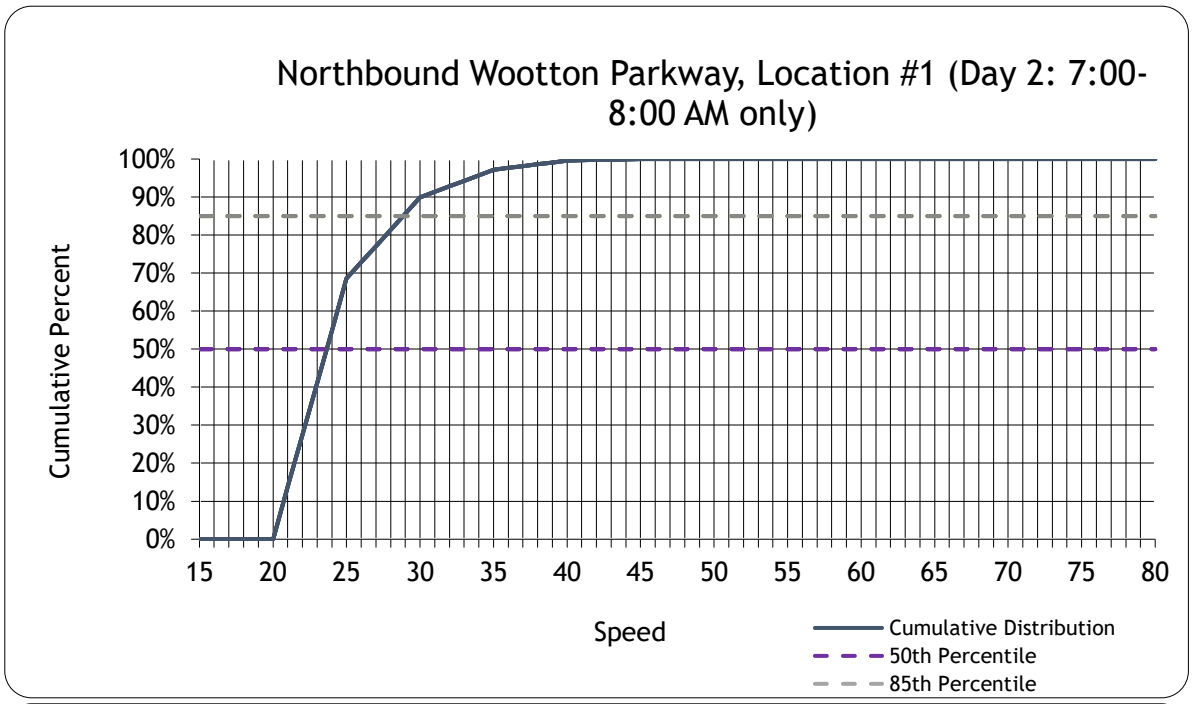
Speed Survey

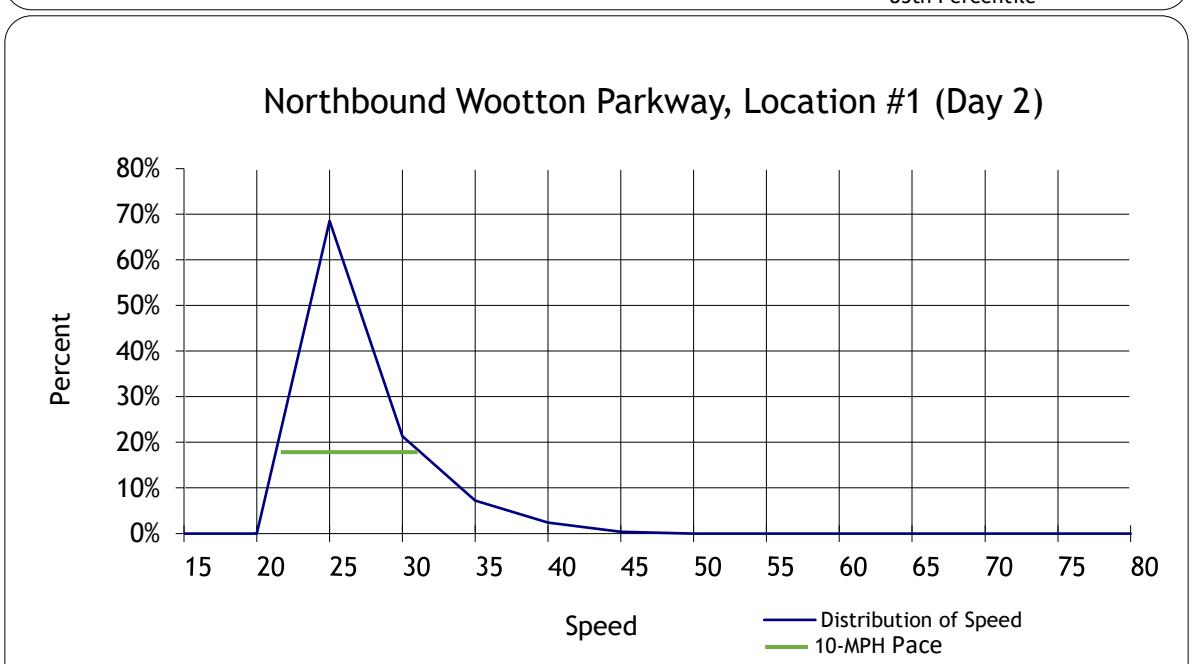
Street : Wootton Parkway s. of Hurley & site driveway
Capture Zone : Local

Counted By: Gorove Slade
Posted Speed Limit : 25 MPH
Types of Vehicles : All Vehicles
Weather Conditions :
Date : 12/20/2022
Day : Tuesday
Time Range : 1 Hour
Direction : NB

Lowest Recorded Speed	25	mph	**15th Percentile :**	21	mph
Highest Recorded Speed	45	mph	**50th Percentile :**	24	mph
Average Speed	27	mph	**85th Percentile :**	29	mph
Vehicles Observed	248		**95th Percentile :**	34	mph

SPEED	COUNT	PERCENT
15	0	0%
20	0	0%
25	170	69%
30	53	21%
35	18	7%
40	6	2%
45	1	0%
50	0	0%
55	0	0%
60	0	0%
65	0	0%
70	0	0%
75	0	0%
80	0	0%





Total Vehicles 248

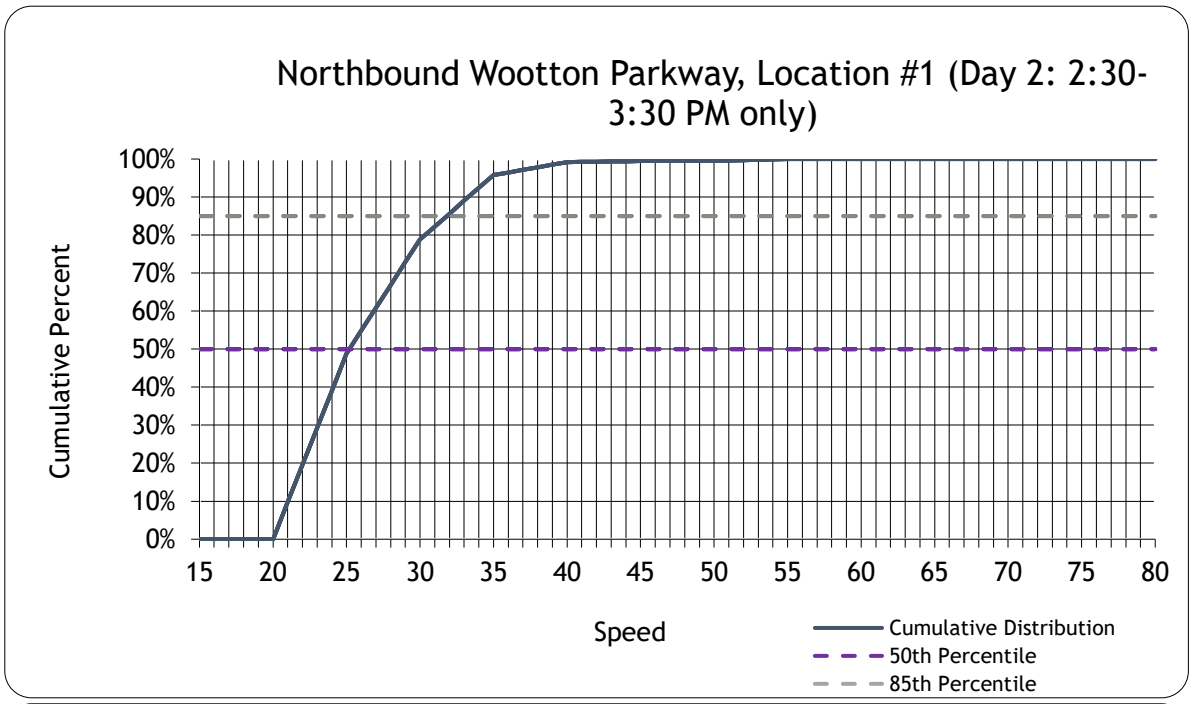
Speed Survey

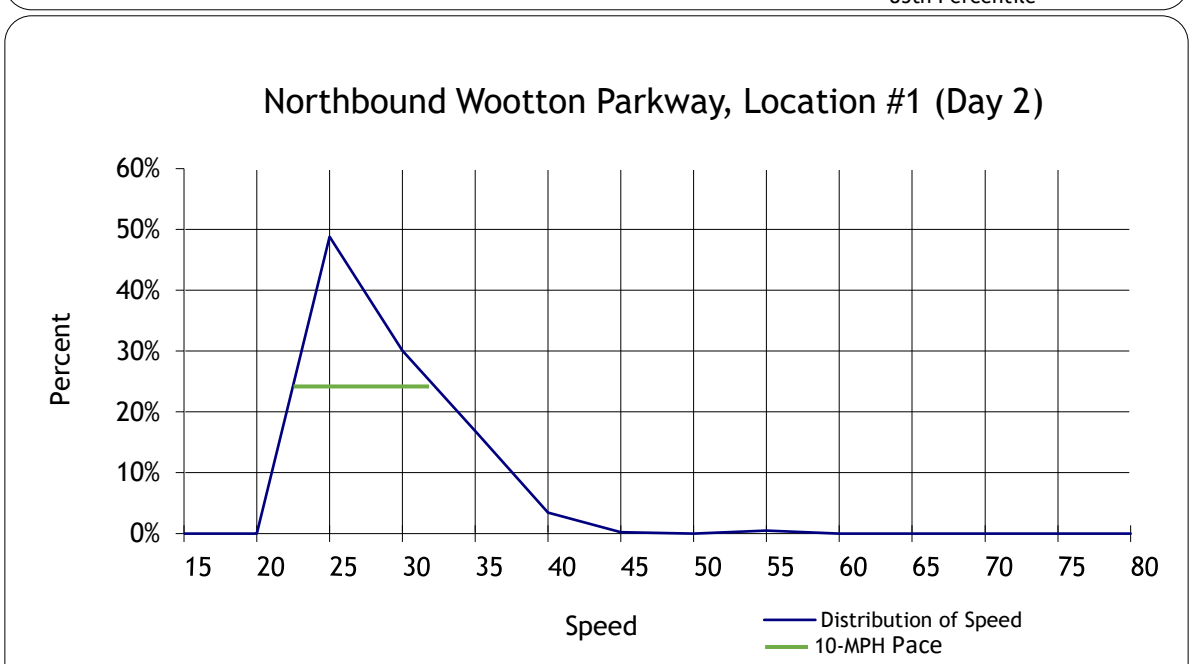
Street : Wootton Parkway s. of Hurley & site driveway
Capture Zone : Local

Counted By: Gorove Slade
Posted Speed Limit : 25 MPH
Types of Vehicles : All Vehicles
Weather Conditions :
Date : 1/10/2023
Day : Tuesday
Time Range : 1 Hour
Direction : NB

Lowest Recorded Speed	25	mph	**15th Percentile :**	22	mph
Highest Recorded Speed	45	mph	**50th Percentile :**	25	mph
Average Speed	29	mph	**85th Percentile :**	32	mph
Vehicles Observed	379		**95th Percentile :**	35	mph

SPEED	COUNT	PERCENT
15	0	0%
20	0	0%
25	185	49%
30	114	30%
35	64	17%
40	13	3%
45	1	0%
50	0	0%
55	2	1%
60	0	0%
65	0	0%
70	0	0%
75	0	0%
80	0	0%





Total Vehicles 379

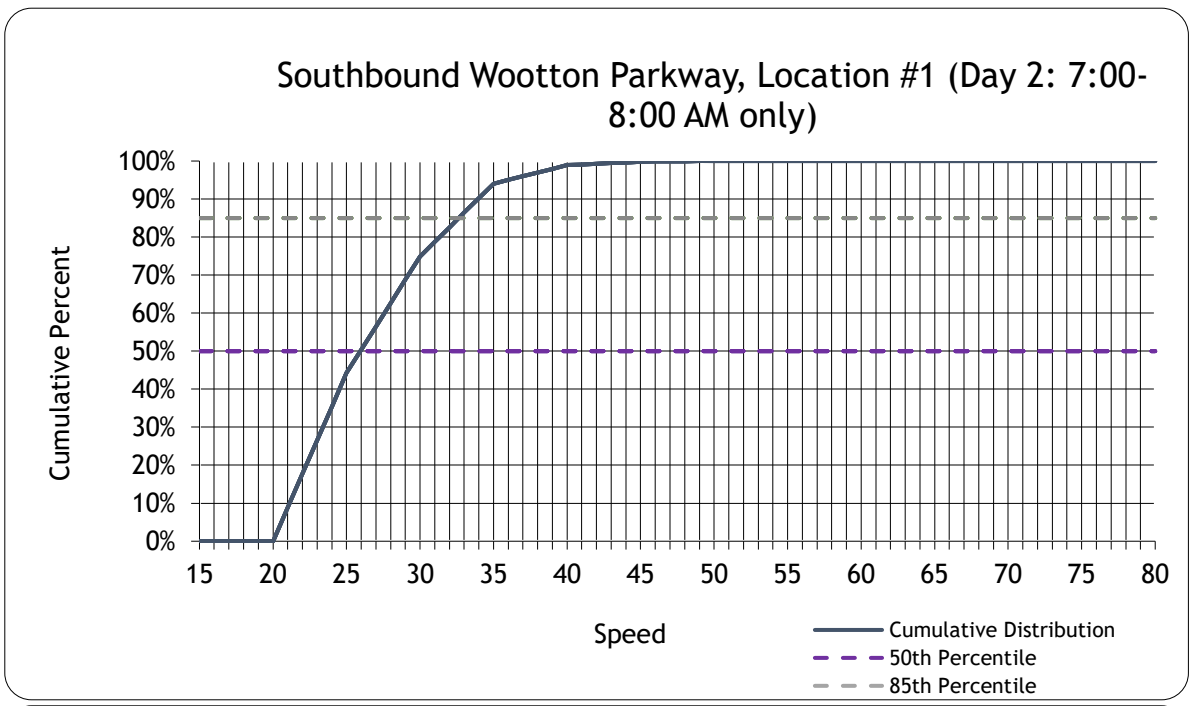
Speed Survey

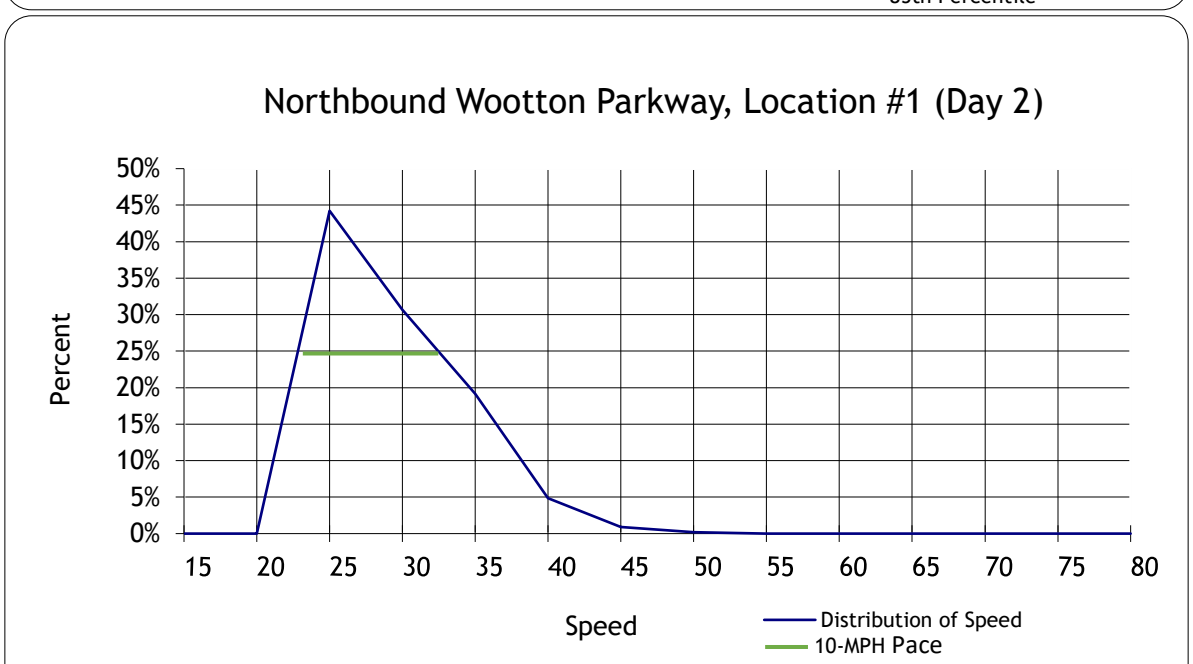
Street : Wootton Parkway s. of Hurley & site driveway
Capture Zone : Local

Counted By: Gorove Slade
Posted Speed Limit : 25 MPH
Types of Vehicles : All Vehicles
Weather Conditions :
Date : 1/10/2023
Day : Tuesday
Time Range : 1 Hour
Direction : SB

Lowest Recorded Speed	25	mph	**15th Percentile :**	22	mph
Highest Recorded Speed	45	mph	**50th Percentile :**	26	mph
Average Speed	29	mph	**85th Percentile :**	33	mph
Vehicles Observed	554		**95th Percentile :**	36	mph

SPEED	COUNT	PERCENT
15	0	0%
20	0	0%
25	245	44%
30	170	31%
35	106	19%
40	27	5%
45	5	1%
50	1	0%
55	0	0%
60	0	0%
65	0	0%
70	0	0%
75	0	0%
80	0	0%





Total Vehicles 554

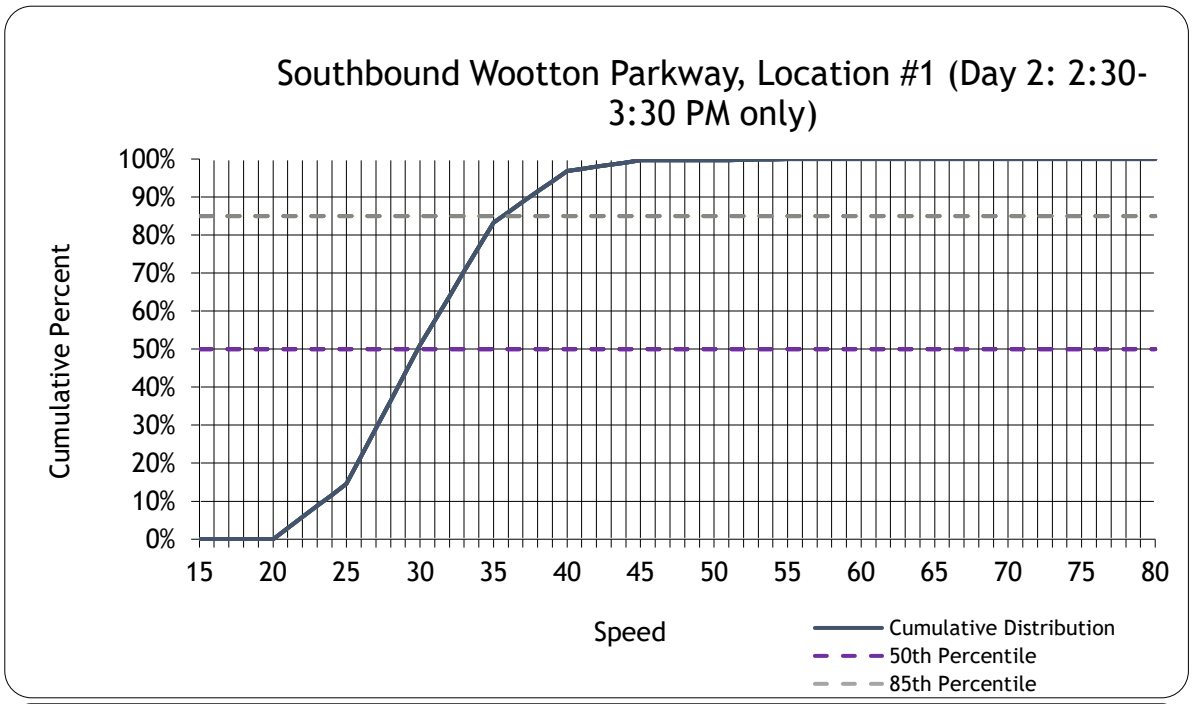
Speed Survey

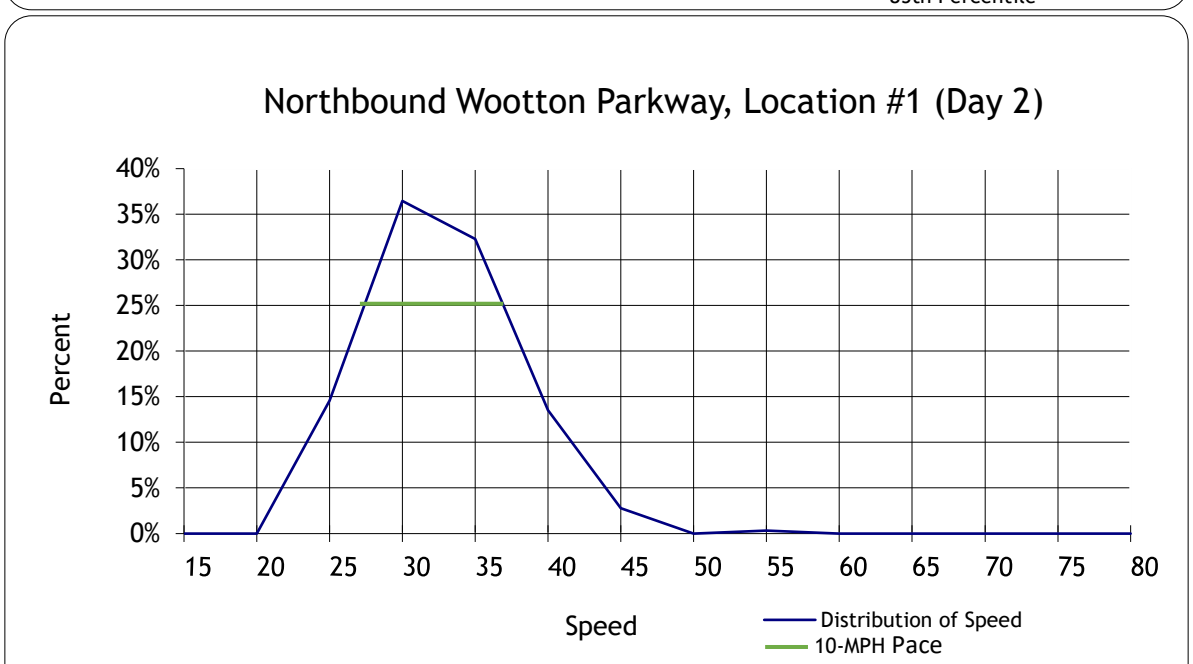
Street : Wootton Parkway s. of Hurley & site driveway
Capture Zone : Local

Counted By: Gorove Slade
Posted Speed Limit : 25 MPH
Types of Vehicles : All Vehicles
Weather Conditions :
Date : 1/10/2023
Day : Tuesday
Time Range : 1 Hour
Direction : SB

Lowest Recorded Speed	25	mph	**15th Percentile :**	25	mph
Highest Recorded Speed	45	mph	**50th Percentile :**	30	mph
Average Speed	33	mph	**85th Percentile :**	36	mph
Vehicles Observed	288		**95th Percentile :**	39	mph

SPEED	COUNT	PERCENT
15	0	0%
20	0	0%
25	42	15%
30	105	36%
35	93	32%
40	39	14%
45	8	3%
50	0	0%
55	1	0%
60	0	0%
65	0	0%
70	0	0%
75	0	0%
80	0	0%





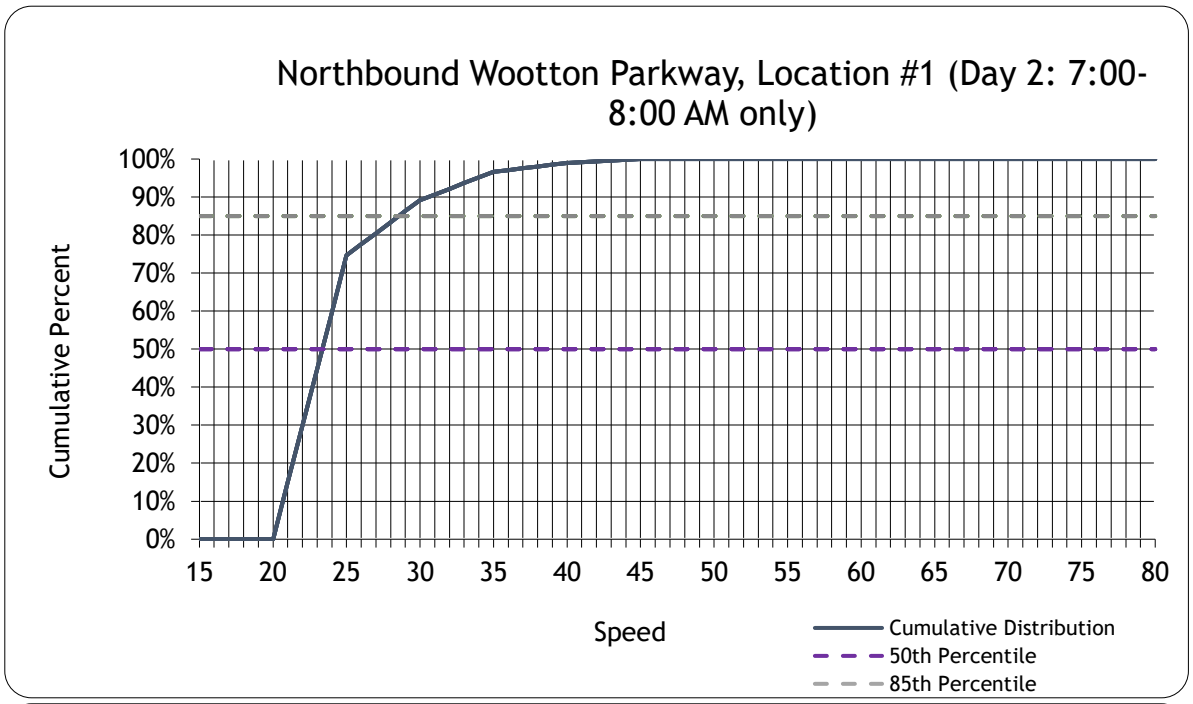
Total Vehicles 288

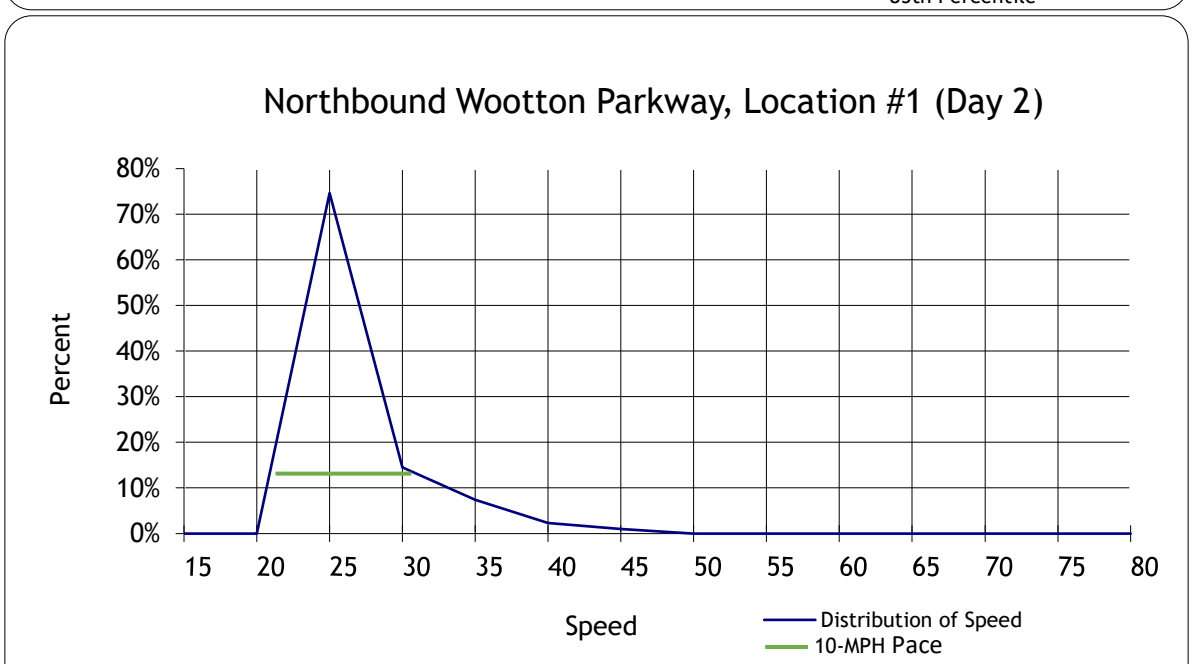
Speed Survey

Street :	Wootton Parkway s. of Hurley & site driveway
Capture Zone :	Local
Counted By:	Gorove Slade
Posted Speed Limit :	25 MPH
Types of Vehicles :	All Vehicles
Weather Conditions :	
Date :	1/10/2023
Day :	Tuesday
Time Range :	1 Hour
Direction :	NB

Lowest Recorded Speed	: 25	mph	**15th Percentile :**	21	mph
Highest Recorded Speed	: 45	mph	**50th Percentile :**	23	mph
Average Speed	: 27	mph	**85th Percentile :**	29	mph
Vehicles Observed	: 296		**95th Percentile :**	34	mph

SPEED	COUNT	PERCENT
15	0	0%
20	0	0%
25	221	75%
30	43	15%
35	22	7%
40	7	2%
45	3	1%
50	0	0%
55	0	0%
60	0	0%
65	0	0%
70	0	0%
75	0	0%
80	0	0%





Total Vehicles 296

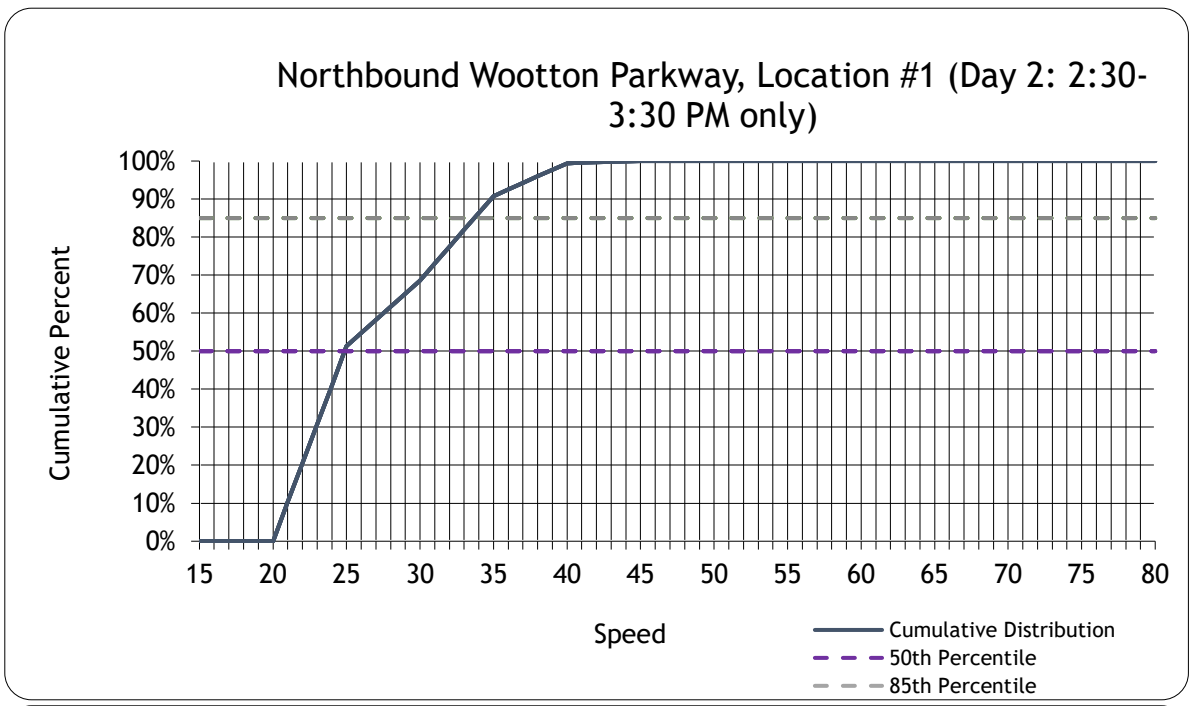
Speed Survey

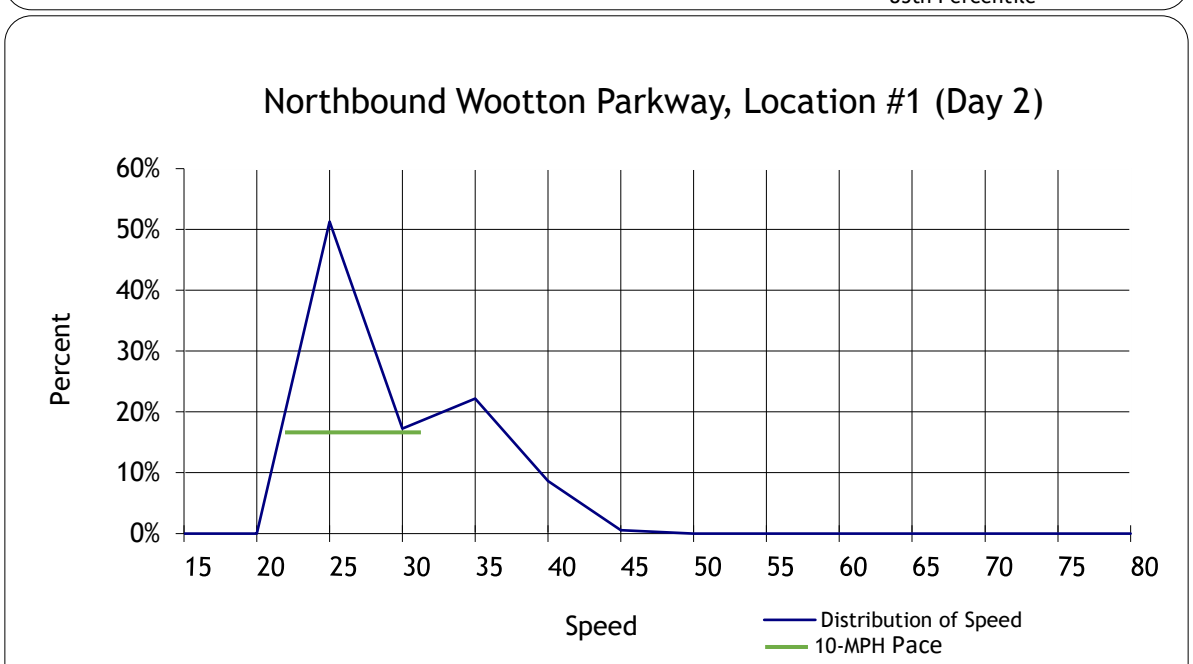
Street : Wootton Parkway s. of Hurley & site driveway
Capture Zone : Local

Counted By: Gorove Slade
Posted Speed Limit : 25 MPH
Types of Vehicles : All Vehicles
Weather Conditions :
Date : 1/10/2023
Day : Tuesday
Time Range : 1 Hour
Direction : NB

Lowest Recorded Speed	25	mph	**15th Percentile :**	21	mph
Highest Recorded Speed	45	mph	**50th Percentile :**	25	mph
Average Speed	29	mph	**85th Percentile :**	34	mph
Vehicles Observed	347		**95th Percentile :**	37	mph

SPEED	COUNT	PERCENT
15	0	0%
20	0	0%
25	178	51%
30	60	17%
35	77	22%
40	30	9%
45	2	1%
50	0	0%
55	0	0%
60	0	0%
65	0	0%
70	0	0%
75	0	0%
80	0	0%





Total Vehicles 347

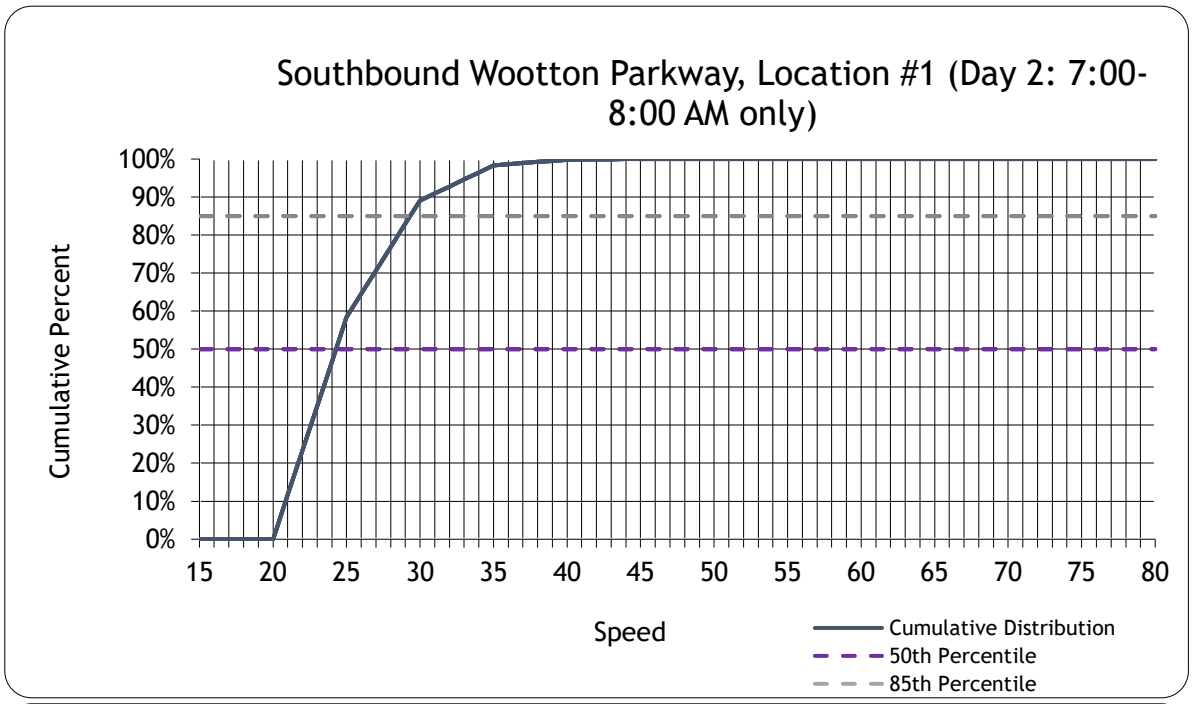
Speed Survey

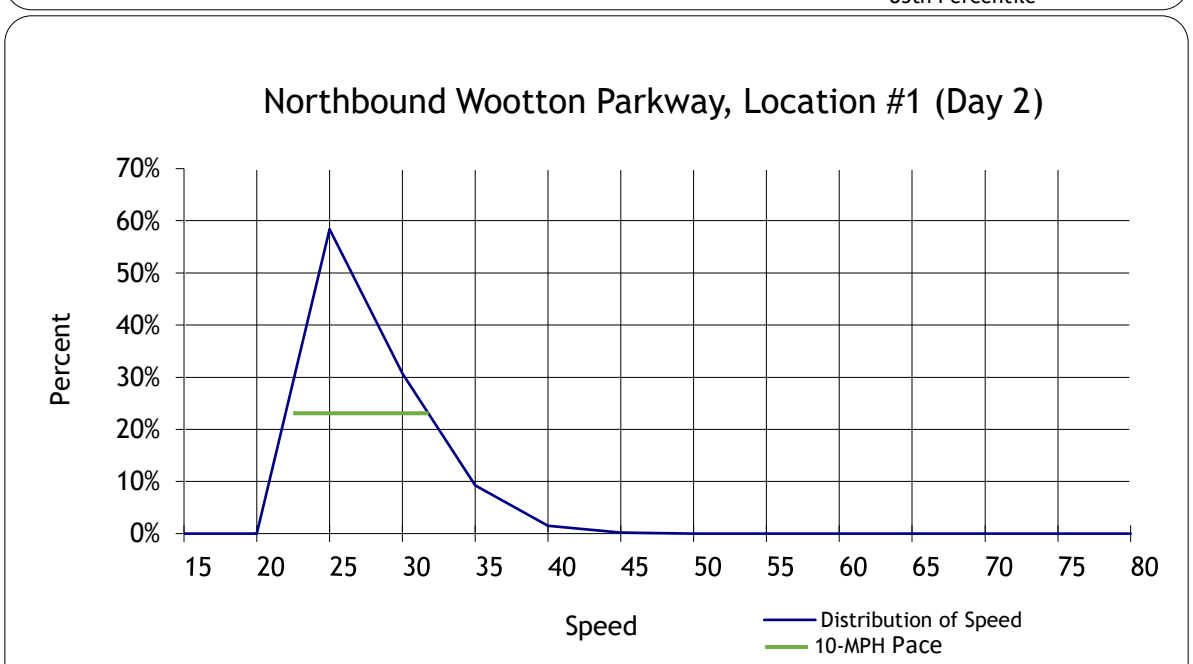
Street : Wootton Parkway s. of Hurley & site driveway
Capture Zone : Local

Counted By: Gorove Slade
Posted Speed Limit : 25 MPH
Types of Vehicles : All Vehicles
Weather Conditions :
Date : 1/10/2023
Day : Tuesday
Time Range : 1 Hour
Direction : SB

Lowest Recorded Speed	25	mph	**15th Percentile :**	21	mph
Highest Recorded Speed	45	mph	**50th Percentile :**	24	mph
Average Speed	28	mph	**85th Percentile :**	29	mph
Vehicles Observed	596		**95th Percentile :**	33	mph

SPEED	COUNT	PERCENT
15	0	0%
20	0	0%
25	348	58%
30	183	31%
35	55	9%
40	9	2%
45	1	0%
50	0	0%
55	0	0%
60	0	0%
65	0	0%
70	0	0%
75	0	0%
80	0	0%





Total Vehicles 596

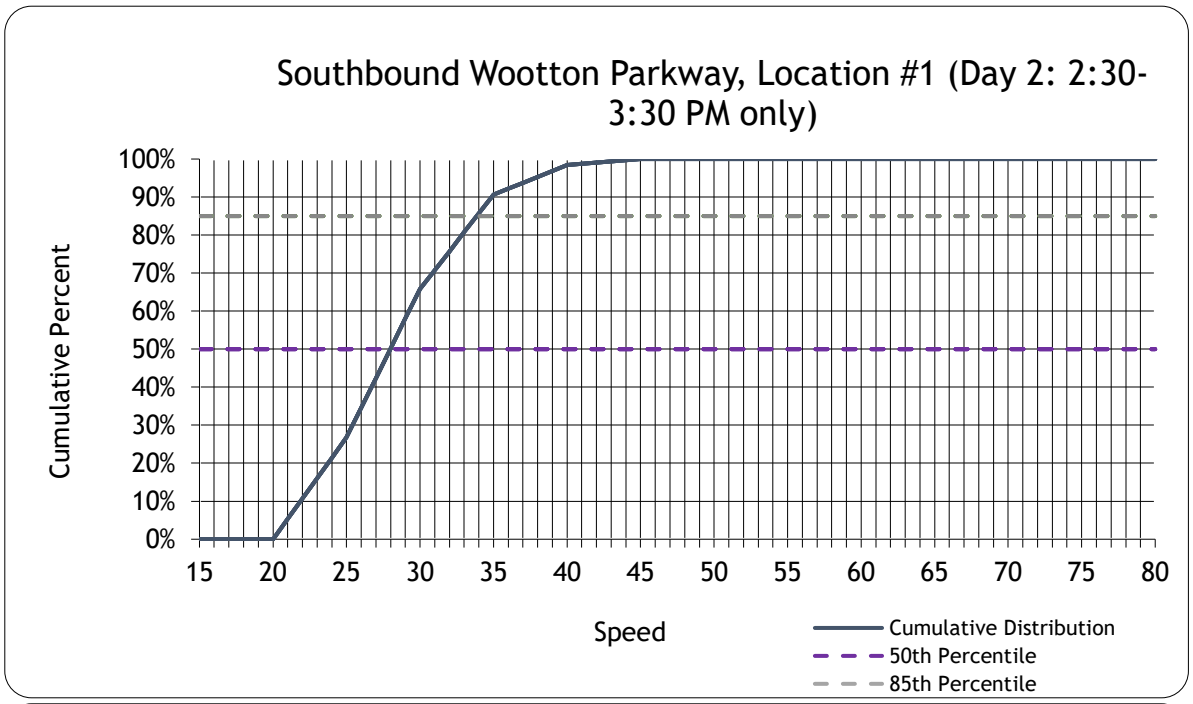
Speed Survey

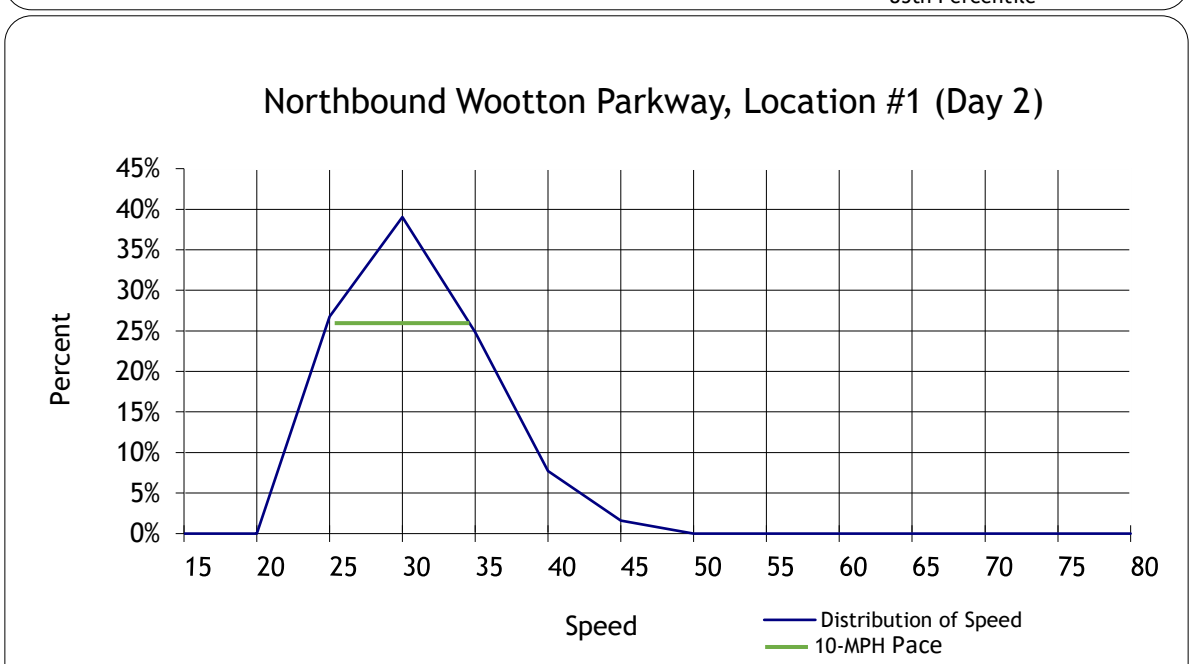
Street : Wootton Parkway s. of Hurley & site driveway
Capture Zone : Local

Counted By: Gorove Slade
Posted Speed Limit : 25 MPH
Types of Vehicles : All Vehicles
Weather Conditions :
Date : 1/10/2023
Day : Tuesday
Time Range : 1 Hour
Direction : SB

Lowest Recorded Speed	25	mph	**15th Percentile :**	23	mph
Highest Recorded Speed	45	mph	**50th Percentile :**	28	mph
Average Speed	31	mph	**85th Percentile :**	34	mph
Vehicles Observed	310		**95th Percentile :**	38	mph

SPEED	COUNT	PERCENT
15	0	0%
20	0	0%
25	83	27%
30	121	39%
35	77	25%
40	24	8%
45	5	2%
50	0	0%
55	0	0%
60	0	0%
65	0	0%
70	0	0%
75	0	0%
80	0	0%





Total Vehicles 310