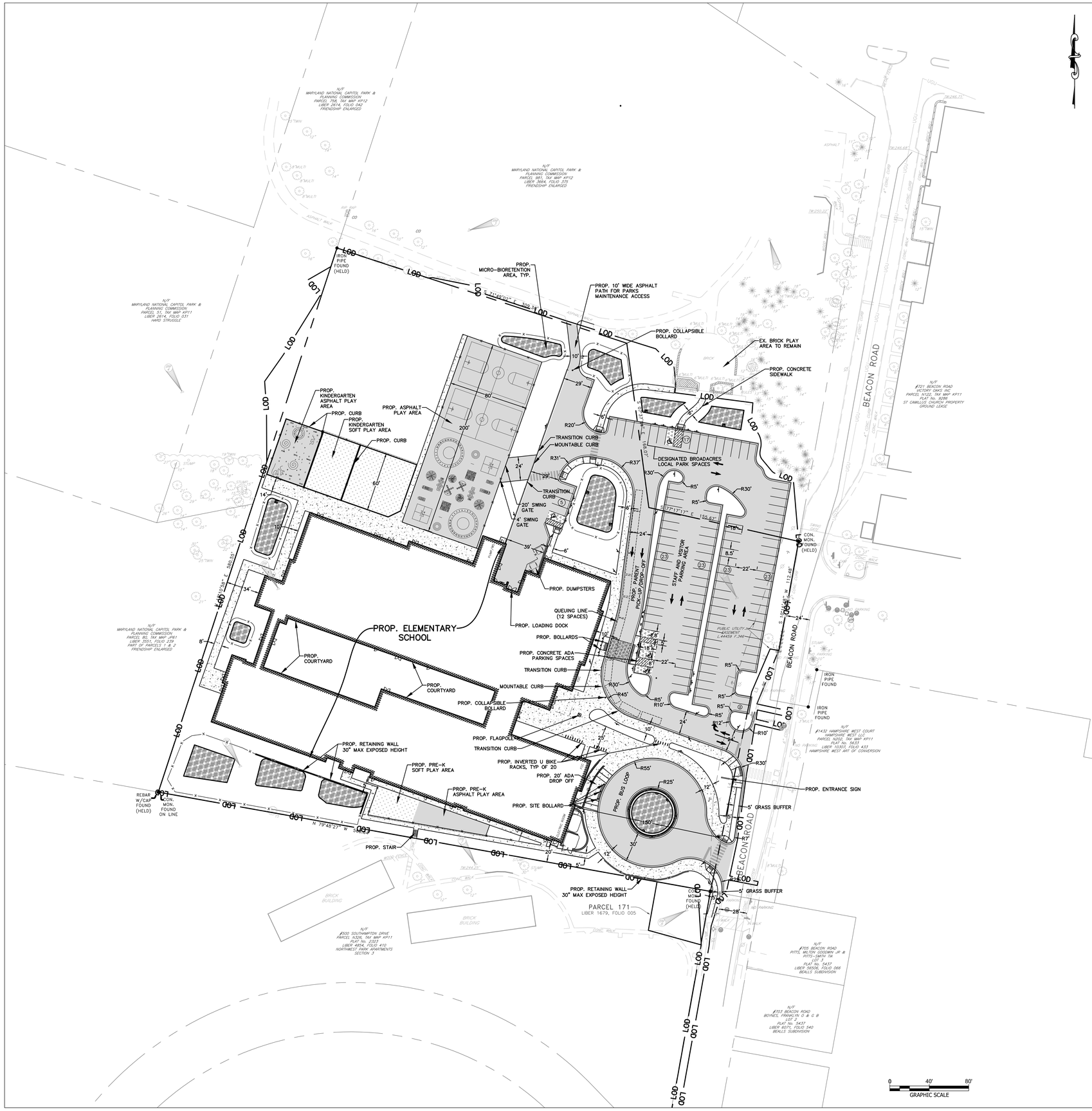


ZONING			
	REQUIRED	EXISTING	PROPOSED
LOT AND DENSITY			
LOT AREA	6,000 SF	267,972 SF	267,972 SF
LOT WIDTH AT FRONT BUILDING LINE	60'	460'	374'
LOT WIDTH AT FRONT LOT LINE	25'	360'	360'
MAX. DENSITY (UNITS/ACRE)	7.26	0.16	0.16
MAX. COVERAGE	35%	33%	29%
PRINCIPAL BUILDING PLACEMENT			
MIN. FRONT SETBACK	25'	207'	145'
MIN. SIDE SETBACK	8'	26'	21'
MIN. SUM OF SIDE SETBACKS	18'	69'	252'
MIN. REAR SETBACK	20'	46'	27'
PRINCIPAL BUILDING HEIGHT			
MAX. HIGHEST POINT OF ROOF SURFACE	35'	25'	47.75'
MAX. MEAN HEIGHT OF ROOF	30'	22'	47.75'

PARKING TABULATION		
	EXISTING	PROPOSED
STANDARD PARKING SPACES	65	110
ADA PARKING SPACES	4	6
TOTAL	69	116
SPACES DESIGNATED FOR BROADACRES LOCAL PARK PATRONS		5

PARKING LOT LANDSCAPING	
PARKING AREA	36,433 SF
LANDSCAPED AREA REQUIRED (5%)	1,822 SF
LANDSCAPED AREA PROVIDED	3,208 SF
LANDSCAPED AREA % PROVIDED	8.8%

LEGEND

- EXISTING SIDEWALK
- EXISTING FENCE
- EXISTING CURB
- EXISTING ROAD MARKING
- EXISTING PROPERTY LINE
- EXISTING EDGE OF PAVEMENT
- EXISTING BUILDING
- LOD — LIMITS OF DISTURBANCE
- EXISTING TREE LINE
- 248 — EXISTING GRADE ELEVATION
- EXISTING CURB INLET
- EXISTING GRATE INLET
- EXISTING MANHOLE
- EXISTING TREE
- EXISTING LIGHT POLE
- EXISTING FIRE HYDRANT
- EXISTING SIGN
- PROPOSED CURB
- PROPOSED CONCRETE PAVEMENT
- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE
- PROPOSED MICRO BIORETENTION AREA
- PROPOSED MULCH PLAY AREA

JOANN LELECK ES_detached.rvt
8/7/2023 8:54:39 AM

CRAIG GAULDEN DAVIS
Architecture
19 Washington Park
Greenville, SC 29601
Phone 864.242.0761
Fax 864.501.9945
E-mail cgd@cgdarch.com

PROFESSIONAL CERTIFICATION: I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 31168
EXPIRATION DATE: 01/12/2025
12/1/23

CONSULTANT

CLARK | AZAR & ASSOCIATES
20440 Century Blvd, Suite 220
Germantown, MD. 20874
T(301) 528-2010
www.clarkazar.com
A Woman Owned Small Business

Montgomery County Public Schools

Maryland's Largest School District
MONTGOMERY COUNTY PUBLIC SCHOOLS
Expanding Opportunity and Unleashing Potential

45 W. GUDE DRIVE
ROCKVILLE, MD 20850

Joann Leleck Elementary School at Broad Acres

710 BEACON RD, SILVER SPRING, MD 20903

DATE	MARK	DESCRIPTION

FOR REVIEW
NOT FOR CONSTRUCTION

MANDATORY REFERRAL: MR2024007
TAX MAP GRID: KP121
WSSC GRID: 211NE02

ISSUE:	MANDATORY REFERRAL
DATE:	2/12/2024
PROJECT NO:	21086
DRAWN BY:	LR
CHECKED BY:	JA

SITE PLAN

C-200

F E D C B A

7 6 5 4 3 2 1

Mandatory Referral Submission
MR2024007

Joann Leleck Elementary School Replacement

710 Beacon Road,
Silver Spring, MD 20903

The following items are in response to the Montgomery County Department of Park and Planning Uniform Standards for Mandatory Referral Review, January 2nd, 2008.

1) Narrative

Joann Leleck ES occupies a 6.15 acre site in Silver Spring, MD. Vehicular access to the school is currently from Beacon Road. The site is bordered by Broadacres Local Park to the north and west, Beacon Road to the east, and residential apartment buildings to the south.

The existing Joann Leleck ES is currently over capacity and the existing site layout does not accommodate the number of students or staff. The original school building was built in 1952, and there have been many expansions and additions to the building since then: the first addition was built in 1968 and included a gym; in 1974 and again in 1990, the building was enlarged and updated; in 1997, the school-health based health center and Linkages to Learning were added as portables; in 2005, the administrative offices, kitchen, and all-purpose room were modernized and 11 classrooms were added. The existing one-story building has a footprint of approximately 87,700 SF, and many portables are on site to increase the capacity of the school. However, even with the portables in use, the school's capacity is only 723 students and the current enrollment is over 800 students. The classroom portables have been placed at the rear of the school overtop the asphalt play area, reducing the limited available play space for students. The school does not have enough parking for staff, parents, or visitors. There are approximately 65 parking spaces, and more than 114 staff members. Many of the parking spaces on site belong to M-NCPPC for access to the Broadacres Local Park. There is no on-street parking. During student drop-off and pick-up, cars park in the fire lane. They also stop within the parking lot, resulting in students crossing traffic to get to the school or to their parent's car. In addition, the existing school site lacks formal stormwater management. There is one stormwater feature on the east side of the parking lot, but the rest of the site is unmanaged.

The entire site will be cleared to make way for the new elementary school. The new school will be a three-story building with a footprint of approximately 77,500 SF. The school will have a capacity of 925 students. The site will be comprised of a school building, bus loop, parent pick up/drop off loop, a staff and visitor parking lot east of the building, paved play space, soft surface play space, and a grass play field, as well as stormwater management facilities, a geothermal well field, and utility infrastructure.

The proposed site layout improves the parent drop-off loop, the bus loop, and the staff parking lot. The proposed parent drop-off loop will lengthen the parent queue in a designated aisle to keep vehicles from backing up into the parking lot. The proposed bus loop provides approximately 275 LF of student drop off area, which is enough space for 12 cars to drop off at once. The staff parking lot will also be optimized with new ADA parking and an increase in parking spaces. The parking will increase from 65 total spaces to 116, 5 of which will be dedicated spaces for the patrons of Broadacres Local Park.

All proposed sidewalks will be ADA accessible. The sidewalks on site will connect to the existing sidewalk along Beacon Road, as well as to Broadacres Local Park.

a. Conformance with the County's General Plan

The site will remain a school with this project. The Silver Spring East Master Plan does not call for this property to change from a school. Therefore, the proposed improvements and use are in conformance with the County's general plan.

b. Zoning Intent

The site is zoned R-60 (Residential-60 Zone). All improvements to the site will be consistent with the R-60 zoning requirements.

c. Pedestrian and Bicycle Safety Impact Statement

The existing sidewalks along Beacon Road will tie into the new sidewalks on the school property. The existing crosswalk that crosses Beacon Road will be kept and will provide safe access to the school. Bike racks will be provided on site for students who ride their bicycles to school.

All proposed sidewalks will be concrete. The sidewalks along Beacon Road will be 5-foot wide with a 5-foot grass buffer between the sidewalk and Beacon Road. To provide extra space for children to get on and off buses and in and out of cars, the sidewalks adjacent to the bus loop will be 12-foot wide and the sidewalks along the parent drop off aisle will be 10-foot wide. The sidewalks behind the building are a minimum of 8-feet wide to allow for maintenance and emergency response vehicles to service the back classrooms and stormwater management facilities. The sidewalks leading to Broadacres Local Park are 6-foot wide.

d. Roadway Construction

None anticipated.

e. Countywide Policy Consistency

The proposed improvements to the school site are consistent with countywide policies, including equity and resilience goals and the Climate Action Plan. The improvements to the school site will benefit the surrounding economically disadvantaged community. EV charging stations will be installed in the parking lot and a geothermal well field will supply energy to the school building.

f. Historic Work Permit

The project is not located within a historic district. Therefore, no historic work permit is required.

g. County Designated Historic Properties

This project does not involve or affect any County-designated historic properties.

h. Burial Site Inventory

The project will not impact any site on the Planning Board's Burial Sites Inventory.

i. Phasing Schedule or Plan

Work is to be completed from Summer 2024 to Summer 2026.

June – October 2024: Building demolition

October 2024 – July 2025: Site work and foundations

July 2025 – August 2025: Framing

August 2025 – July 2026: Interior Outfit

j. Land Common or Quasi-Public Use

Not applicable to this project.

k. Funding Source

This project is part of Montgomery County Public Schools Capital Improvements Projects as proposed by the Board of Education of Montgomery County.

l. Impact to Public Parkland or Land Owned by M-NCPPC

Improvements will be made to the parking lot, a portion of which is owned by M-NCPPC. Two stormwater facilities will be located on M-NCPPC property. A maintenance agreement between MCPS and M-NCPPC will be developed.

m. Building Environmental Certification

The project will pursue Green Globes version 2013 New Construction as well as 2018 IgCC requirements. Many green building features have been incorporated into the building design: materials and products will be sourced and manufactured locally, materials will be low-emitting to increase indoor environmental quality, low flow fixtures will be used to conserve water, a ground source geothermal system connected to water-cooled heat pump equipment will be used to provide heat and cooling to the school, and solar panels will be installed to provide additional energy to the building.

These green features that have been incorporated into the building design align with the goals of Thrive, the Climate Action Plan, and the East Silver Spring Master Plan:

- Thrive stresses a stronger focus on walking and biking, as well as compact form of development. The proposed site layout accommodates the large percentage of students who walk or bike to school by connecting existing neighborhood sidewalks with the new school sidewalks, providing ADA accessible sidewalks and ramps, and providing bike racks. The school site is as compact as possible while also providing after-school play space and a community-based Health Center.

- Montgomery County's Climate Action Plan aims to reduce greenhouse gas emissions by transitioning to decarbonized energy. The Joann Leleck Elementary School will use solar and geothermal systems to heat and cool the building. There will also be EV charging stations in the parking lot for electric vehicles.

- The East Silver Spring Master Plan recommends providing community facilities to meet the human service, recreational, and educational needs of the diverse Silver Spring community. By constructing a higher capacity, more efficient, more accessible school, the students and families who attend Joann Leleck Elementary School will benefit greatly. The community will have access to after-school play space and a community-based Health Center.

2) General Location Map – See C-0.2 Cover Sheet.

3) Site Plan – See C-200 Site Plan.

4) Utilities and Right-of-Way Map – See C-200 Site Plan and C-8.1 Color Utility Plan

5) Pedestrian and Vehicular Circulation Plan – See C-8.0 Circulation Plan.

6) Natural Resource Inventory/ Forest Stand Delineation (NRI/FSD) Plan – See L-0.1 Full NRI/FSD

7) Special Protection Area Map, Water Quality Plan or Letter of Exemption from Department of Permitting Services – Not applicable.

8) Preliminary Forest Conservation Plan – See L-1.1 & L-1.2 Forest Conservation Plan

9) Topographic Map – See SWM-1 SWM Concept Plan.

10) Preliminary Stormwater Management Concept Plan – See SWM-1 SWM Concept Plan

11) Landscape and Lighting Plans – See L-1.0 Landscape Plan & LC001 Electrical Site Lighting Photometric Plan

12) Overall Concept Development Plan – Not applicable.

13) Compliance with Montgomery County Noise Ordinance – This project will be in compliance with the Montgomery County Noise Ordinance, Section 31 (b) of the County Code and consistent with the Department of Park and Planning Noise Guidelines.

Per the Mongomery County Noise Ordinance, the maximum allowable noise level during the daytime for a residential area is 65 dBA and the maximum level for nighttime is 55 dBA. A 2016 study on the level of noise in pre-school settings found a group of 43 6-year olds generated a level of noise of 85 dBA. The proposed Pre-K playground space at Joann Leleck will accommodate fewer than 20 children at a time, so they will generate much less noise than 85 dBA. If the students are louder than 65 dBA during their play time, the nearest residential building is located more than 40-feet from the playground – the sound of children playing will decrease with distance from the playground. The level of sound 40-feet from a playground that generates 85 dBA of noise will be less than 53 dBA. In addition, the main play space will be located behind the building, sheltered by the building and the nearby forest, so that playground will not pose a sound problem for the adjacent residential properties.

14) **Architectural Schematics** – See A101-First Floor Overall Plan, A102-Second Floor Overall Plan, A103-Third Floor Overall Plan, A301- Exterior Elevations Overall

15) **Traffic Impact Statement** – See Traffic Impact Analysis.

16) **Crime Prevention Through Environmental Design** – The site has been designed with CPTED principles in mind. Natural surveillance in the form of large windows and lighting throughout the site discourage criminals from illegal behavior. Natural access control comes in the form of locked building doors, fences around the playgrounds, and a main lobby at the front of the building. Because the school is located within neighborhoods filled with Joann Leleck students, the surrounding community should naturally feel that the school is theirs to protect – a CPTED principle known as territorial reinforcement. Building finishes and landscaping material were chosen to provide simple maintenance and management, leading to a well-manicured site and a pridefulness from the surrounding community.

Attachments:

C-0.2 Cover Sheet
C-0.3 Local Area Drawing
C-200 Site Plan
C-300 Stormwater Management Plan
C-8.1 Color Coded Utility Plan
C-8.01 Circulation Plan
C-8.02 Turning Movements
L-0.1 Full Natural Resource Inventory/Forest Stand Delineation
Special Protection Area Exemption
L-1.1 Preliminary/Final Forest Conservation Plan
L-1.2 Preliminary/Final Forest Conservation Plan Notes & Details
SWM-1 – Stormwater Management Concept Plan
SWM-2 - Stormwater Management Concept Plan
SWM-3 - Stormwater Management Concept Plan
L-1.0 Landscape Plan
LC001 Electrical Site Lighting Photometric Plan
Statement of Compliance
A101 First Floor Overall Plan
A102 Second Floor Overall Plan
A103 Third Floor Overall Plan
A301 Exterior Elevations Overall
Traffic Impact Analysis

Local Area Transportation Report

JoAnn Leleck Elementary School

Mandatory Referral

Silver Spring, Maryland

August 2, 2023

GOROVE SLADE
Transportation Planners and Engineers

Prepared by:

GOROVE SLADE
Transportation Planners and Engineers

4550 Montgomery Avenue, Suite 400, Bethesda, MD 20814

4114 Legato Road, Suite 650, Fairfax, VA 22033

1140 Connecticut Ave NW, Suite 1010, Washington, DC 20036

225 Reinekers Lane, Suite 750, Alexandria, VA 22314

4951 Lake Brook Drive, Suite 250, Glen Allen, VA 23060

www.goroveslade.com

CONTENTS

LIST OF FIGURES

LIST OF TABLES

Executive Summary

The following report is a Local Area Transportation Review (LATR) submitted as part of a Mandatory Referral process for the replacement of the existing JoAnn Leleck Elementary School, a Montgomery County Public School, with a new school facility, (the "Project"). The Project is located at 710 Beacon Road in Silver Spring, Maryland within the Silver Spring/Takoma Park (Orange) Policy Area.

Proposed Project

The proposed school site is located in Silver Spring, Maryland and is bounded by a park to the north, Beacon Road to the east, residential buildings to the south, and open space to the west.

The project site is zoned residential (R-60) and improved with an existing elementary school. The project will replace the existing elementary school with a new elementary school facility.

Access to the site will be available via two (2) driveways from Beacon Road, one serving vehicles and one serving buses, consistent with existing conditions.

Adequacy Determination

A full LATR study is required to assess the impact of the project and assess adequacy of the nearby transportation facilities based on the project's trip generation of 242 new person trips during the AM peak hour, 119 new person trips during the school PM peak hour, and 35 new person trips during the commuter PM peak hour. The LATR includes a review of each of the applicable modes of transportation. However, it is noted that because this is a Mandatory Referral application, no mitigations are required to address any off-site deficiencies.

Motor Vehicle System Adequacy

A capacity analysis was completed to compare the future roadway conditions with and without the proposed school. Given the Project's location within an Orange policy area, both HCM and CLV analyses were required. The results of the HCM and CLV analysis indicate that the Project would not increase delays or CLVs beyond the relevant allowable congestion standards at any of the study intersections.

Based on the conducted analyses, the Project satisfies the motor vehicle adequacy test without the need for roadway improvements.

Pedestrian System Adequacy

A review of the existing pedestrian system was conducted in accordance with the LATR Guidelines. The review covered Pedestrian Level of Comfort (PLOC) adequacy, Americans with Disabilities Act (ADA) compliance, and street lighting adequacy.

This study has identified areas of deficiency for the PLOC, ADA and Street Lighting adequacy tests, the details of which are provided in a later section of this report. However, because this project's application is a Mandatory Referral, no mitigation of off-site deficiencies are required.

Bicycle System Adequacy

An evaluation of the existing bicycle system was conducted in accordance with the LATR Guidelines. This review was based on the County's Bicycle Level of Traffic Stress (BLTS) methodology and the Bicycle Master Plan.

Based on the conducted analyses, the Project satisfies the bicycle adequacy test without the need for roadway improvements.

Transit System Adequacy

The transit system adequacy test consisted of evaluating the amenities present at bus stops within a specified distance from the project site.

This study has identified transit system deficiencies based on the adequacy standards that require three (3) shelters with real time displays around the project site. Further details of deficiencies and proposed mitigation are included in this report. However, because this project's application is a Mandatory Referral, no mitigation of off-site deficiencies are required.

Vision Zero Statement

As part the project's Vision Zero Statement, conditions around the project site were evaluated to determine if safety measures are necessary to address safety issues. A later section of this report presents a detailed review of the High Injury Network near the project site, proximate safety issues, a traffic speed study, and a review of site access and circulation from a safety perspective.

Introduction

This report reviews the transportation elements of the JoAnn Leleck Elementary School project. The site, shown in Figure 1, is located within the Silver Spring/Takoma Park (Orange) Policy Area in Silver Spring, Maryland.

The purpose of this report is to:

1. Review the transportation elements of the school site plan and assess the adequacy of relevant transportation facilities, as outlined in the County's LATR guidelines.
2. Provide information to the Montgomery County Park and Planning Commission (Maryland-National Capital Park and Planning Commission/M-NCPPC), Montgomery County Department of Transportation (MCDOT), and Maryland Department of Transportation State Highway Administration (MDOT SHA) and other agencies on how the development of the site will influence the local transportation network. This report accomplishes this by identifying the potential trips generated by the site and where these trips will be distributed on the network.
3. Determine if development of the Project will lead to adverse impacts on the local transportation network. This report accomplishes this by projecting future conditions with and without the Project and performing analyses of study area intersections using Highway Capacity Manual (HCM) methodology, with Critical Lane Volume (CLV) analyses included in the Technical Attachments, as required by the LATR guidelines. HCM standards are compared to the acceptable levels set by Montgomery County LATR standards adopted to determine if any of the study intersections will exceed capacity under future buildout conditions. Because this is a Mandatory Referral application, no mitigations are identified to address deficiencies in the any mode of the transportation network.

Contents of Study

This report contains eight (8) sections as follows:

Section 1: Study Area Overview

This section reviews the area near and adjacent to the proposed project and includes an overview of the site location.

Section 2: Project Design

This section reviews the transportation components of the project, including the site plan and access, as well as school pick-up and drop-off operations.

Section 3: Trip Generation

This section outlines the travel demand assumptions for the proposed project and the proposed trip generation.

Section 4: Traffic Operations

This section provides an analysis of the existing and future roadway capacity in the study area and highlights the vehicular impacts of the Project.

Section 5: Pedestrian Facilities

This section summarizes existing and future pedestrian access to the site and outlines the impact of the project on the pedestrian network. The pedestrian system adequacy test is also presented in this section. The pedestrian system adequacy test includes a review of the following:

- Pedestrian Level of Comfort (PLOC) adequacy
- American with Disabilities Act (ADA) compliance
- Streetlight network

Section 6: Bicycle Facilities

This section summarizes existing and future bicycle access to the site, reviews the quality of cycling routes to and from the project site, and outlines the impact of the project on the bicycle network. The bicycle system adequacy test is also presented in this section, which includes a review of the Bicycle Level of Traffic Stress (BLTS) within the study area.

Section 7: Transit Facilities

This section summarizes the existing and future transit service adjacent to the site and reviews how the project's transit demand will be accommodated. The transit system adequacy test is also presented in this section.

Section 8: Vision Zero Statement

This section outlines the required Vision Zero Statement for the project. It includes a review of the High Injury Network, history of crashes around the site, traffic speeds around the site, and site access and circulation from a safety perspective.

Figure 1: Site Aerial

Section 1: Study Area Overview

This chapter reviews the existing conditions of the surrounding transportation network and includes an overview of the site location, including a summary of the major transportation characteristics of the area and of future regional projects. Detailed characteristics of each mode and their subsequent study areas will be defined in the following chapters.

The following conclusions are reached within this chapter:

- The site is surrounded by an regional and local transportation system that supports connectivity for the students, families, staff, and faculty of the proposed school with the surrounding areas.
- The project site has access to transit facilities and is located near both major and local bus routes.
- While there is no existing or planned bicycle infrastructure directly serving the site, there is a bike trail 0.7 miles south of the site, and the Montgomery County Bicycle Master Plan identifies a planned sidepath 0.3 miles from the site.

Major Transportation Features

Overview of Regional Access

Under existing conditions, the school site has ample access to regional vehicular and transit-based transportation options, as shown in Figure 2, that connect the site to destinations within Maryland, Virginia, and the District.

The site is located along Beacon Road, a local street which connects to New Hampshire Avenue (MD 650) via Northampton Drive, another local street. New Hampshire Avenue connects with the Capital Beltway (I-495) to the north, which provides connection to other regional highways and destinations within the Washington, DC metropolitan area

The site is located 3.7 miles from the Silver Spring Metro station on the Red Line, which connects Rockville, MD with Glenmont, MD via downtown Washington, DC. Connections can be made at the Metro Center and Gallery Place-Chinatown stations to access the five other Metro lines, allowing access to points in Virginia and Prince George's County, Maryland.

The site is also located 3.7 miles from the Silver Spring MARC station on the Brunswick Line, which connects Martinsburg, West Virginia and Frederick, Maryland with Washington Union Station.

Overall, the site has access to several regional roadways and transit options, making it convenient to travel between the site and destinations in Maryland, Virginia, and the District.

Overview of Local Access

There are several local transportation options near the site that serve vehicular, transit, walking, and bicycling trips under existing conditions. The site is directly served by Beacon Road, a local roadway which connects via other local roadways to New Hampshire Avenue (MD 650), a major arterial/boulevard that connects with the Capital Beltway (I-495) to the north and local Prince George's County, Maryland and Washington, DC neighborhoods to the south.

Table 1 provides a list of the local roadways in the project study area.

Table 1: Summary of Study Area Roadways

Roadway	Jurisdiction	Functional Classification			Rural vs Urban	# of Lanes	Speed Limit
		MDOT SHA	Montgomery County MPOHT	Prince George's County			
New Hampshire Avenue (MD 650) north of Northampton Drive	SHA	Principal Arterial	Boulevard	-	Urban	6 to 8	35 mph
New Hampshire Avenue (MD 650) south of Northampton Drive	SHA	Principal Arterial	-	Arterial	Urban	6 to 7	35 mph
Beacon Road	MCDOT	Local	Local	-	Urban	2	25 mph
Northampton Drive	MCDOT	Local	Local	-	Urban	2	25 mph
Southampton Drive	MCDOT	Local	Local	-	Urban	2	25 mph

Local transit service is available along Northampton Drive, less than 400 feet from the school site. The school has access to Metrobus routes K6, a major route with service approximately every 12 minutes or better, as well as Montgomery County Ride-On routes 20 and 24. These routes provide connections between the project site and the Silver Spring and Fort Totten Metro stations, the Takoma Langley Crossroads Transit Center, and other cultural, residential, employment, and commercial destinations throughout the region.

Existing bicycle facilities in the vicinity of the project site include the Northwest Branch Trail, located 0.7 miles south of the site, as well as directly adjacent roadways with a low level of bicycle level of traffic stress (BLTS) for a network that provides convenient access to destinations within Montgomery County.

In addition to the existing facilities, the Montgomery County *Bicycle Master Plan* identifies significant improvements to the surrounding bicycle network that include new sidepaths on both sides of New Hampshire Avenue between Elton Road and Northampton Drive (the Prince George's County boundary). Within Prince George's County, a combination of shared lanes and bicycle lanes are planned along New Hampshire Avenue south of Northampton Drive, which will connect with the existing Northwest Branch Trail and other destinations.

Pedestrian facilities are available along anticipated pedestrian routes, such as those to transit stops, nearby residential areas, and community amenities.

A detailed review of existing and proposed bicycle and pedestrian access and infrastructure is provided in later chapters of this report.

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

Background Developments

There are three (3) planned development projects in the vicinity of the project site. For the purpose of this analysis, approved developments within the study area were included and reviewed by Staff during the scoping process. The three (3) background developments included in the analysis are described below. Figure 3 shows the location of these developments in relation to the proposed project.

Hillandale Gateway

This mixed-use development is anticipated to include approximately 463 multi-family residential units and 16,039 square feet of retail space. The development will be located on the southwest corner of New Hampshire Avenue and Power Mill Road, approximately 1.3 miles north of the project site.

Park Montgomery

This residential development is anticipated to include approximately 217 multi-family residential units. The development will be located along Piney Branch Road, approximately 1.2 miles south of the project site.

Long Branch Corner

This mixed-use development is anticipated to include approximately eight (8) multi-family residential units and 7,123 square feet of retail space. The development will be located on the northwest corner of University Boulevard and Piney Branch Road, approximately 1.4 miles south of the project site.

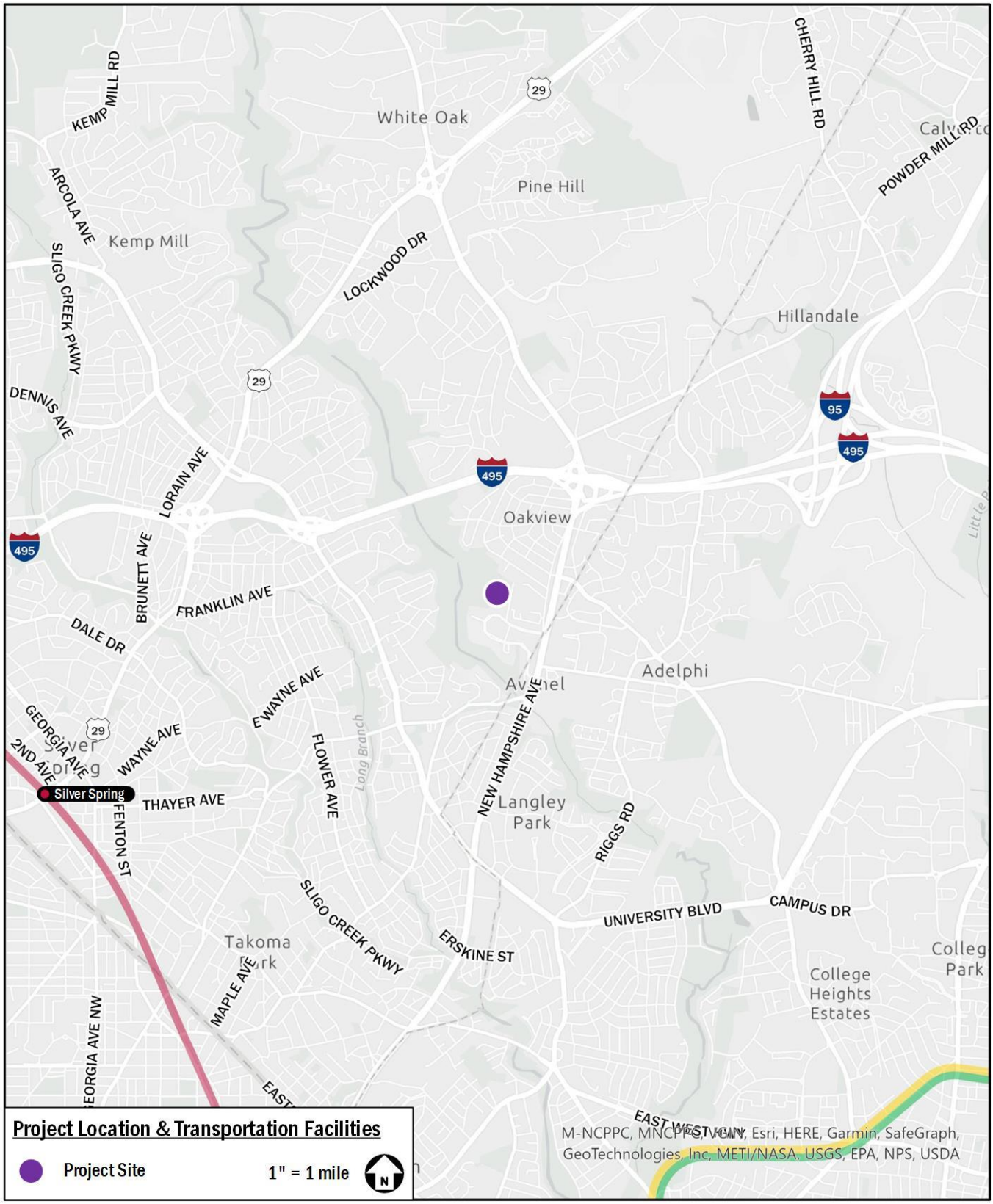


Figure 2: Project Location and Transportation Facilities

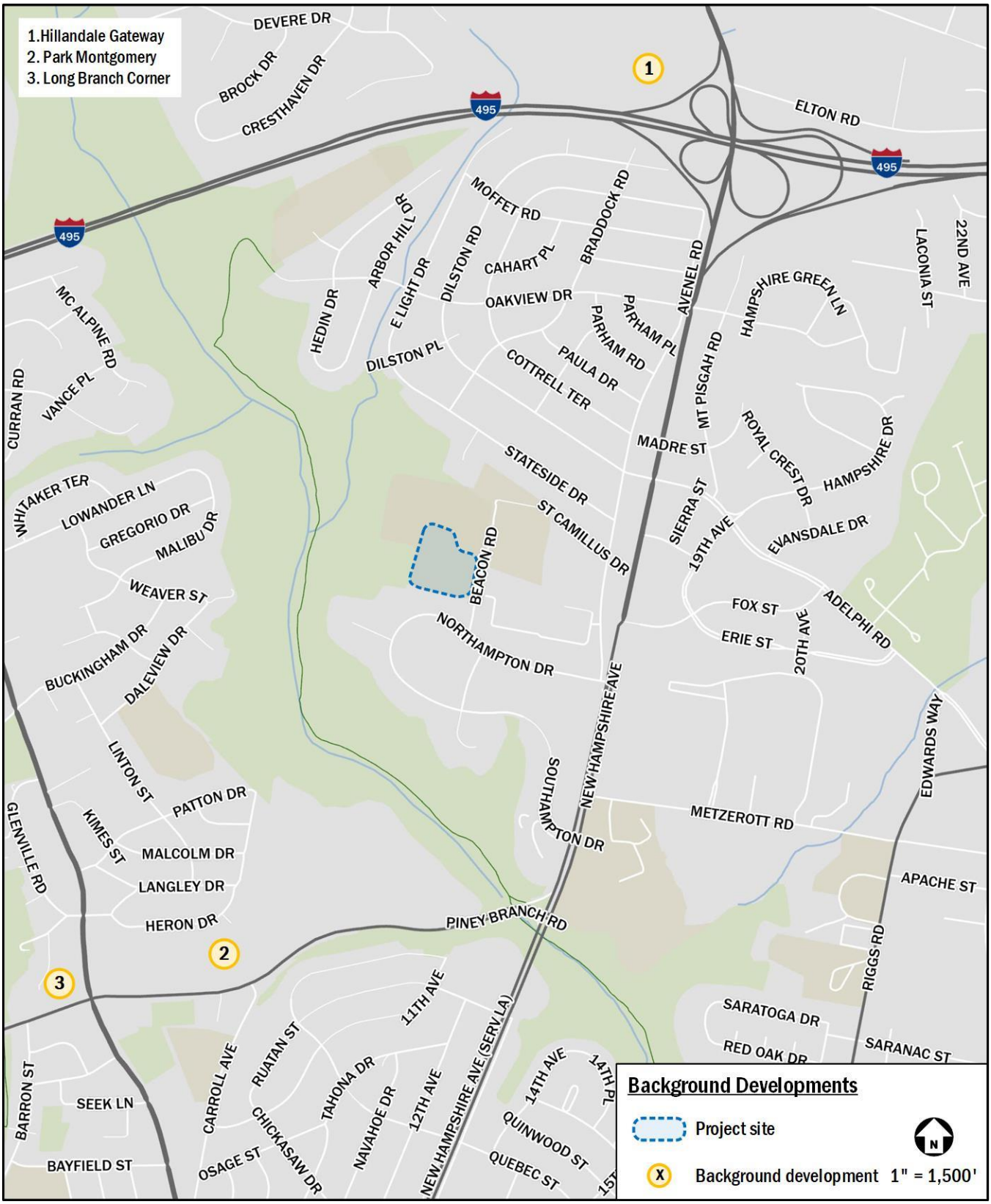


Figure 3: Background Developments

Section 2: Project Design

This section reviews the transportation components of the school, including the proposed site plan, access, and circulation. It includes descriptions of the school's loading, parking, bicycle, and pedestrian facilities, as well as pick-up and drop-off operations.

The school is located in Silver Spring, Maryland and is bounded by a park to the north, Beacon Road to the east, residential buildings to the south, and open space to the west.

The school site is zoned residential (R-60) and improved with an existing elementary school. The project will replace the existing elementary school with a new elementary school facility. The proposed site plan for the project is shown in Figure 4.

Site Access

Pedestrian Access

Pedestrian access to the site will occur via Beacon Road, consistent with existing conditions. Crossings and sidewalks will be provided internally to facilitate circulation and pedestrian access.

Bicycle Access

Bicycle access to the site will occur via Beacon Road, consistent with existing conditions.

Vehicle and School Bus Access

Vehicle and school bus access to the site will occur via two (2) driveways from Beacon Road, consistent with existing conditions.

The northern driveway will continue to serve the parking lot, pick-up/drop-off area, and loading area, while the southern driveway will continue to serve the bus pick-up/drop-off area. Under existing conditions, the southern driveway also serves a small parking area; this parking area will not be provided under proposed conditions. While the intersections of the two driveways with Beacon Road will remain in their current locations, the internal configuration of the driveways will be modified under proposed conditions.

Parking

Under Montgomery County Zoning Code 59-6.2.4.B, there are no off-street parking requirements for public educational institutions.

The proposed project includes approximately 100 surface parking spaces, to be located in the same approximate location as the existing parking lot.

Loading Facilities

Under Montgomery County Zoning Code 59-6.2.8.B, there are no off-street loading requirements for public educational institutions. However, loading facilities will be provided on the northern side of the proposed school building, accessed from the northern driveway from Beacon Road.

Site Pedestrian and Bicycle Facilities

Bicycle Facilities

Under Montgomery County Zoning Code 59-6.2.4.C, there are no bicycle parking requirements for public educational institutions. However, to meet the requirements of the 2018 International Green Construction Code, 55 spaces on bicycle racks will be provided.

Pedestrian Facilities

The project will be served by internal pedestrian pathways connecting to existing sidewalks and crossings on Beacon Road.

School Operations

During the 2022-2023 school year, JoAnn Leleck Elementary School enrolled 799 students with 138 faculty and staff members. The proposed project will increase the school's capacity to 925 students and 164 faculty and staff.

Hours of Operation

Teacher hours are between 8:20 AM and 3:50 PM. Student drop-off and pick-up take place mostly during approximately 30-minute windows around an 8:50 AM start and 3:25 PM dismissal.

After School Programming

The school offers after-school programs that include tutoring and other activities. These programs end at either 4:45 PM or 6:00 PM.

School Bus Operations

In the 2022-2023 school year, school bus service was available to approximately 150 students on three (3) bus routes. This arrangement will continue with the new school facility, with the number of available bus seats remaining at approximately 150.

Pick-Up/Drop-Off Operations

A review of existing and proposed pick-up/drop-off operations is provided below.

Circulation

Under existing conditions, pick-up and drop-off operations occur within the parking lot, which is served by the northern of the two (2) driveways from Beacon Road. There is a curbside area along the southwest corner of the parking lot that has access to a sidewalk where students enter and exit the building. Parents/caregivers enter the driveway, following a counterclockwise rotation through the parking lot's outer drive aisle to the curbside pick-up/drop-off zone, and then exit the driveway following the same counterclockwise rotation. Under existing conditions, there is approximately 630 linear feet (or room for approximately 31 vehicles) of off-street queueing/processing space in both the pick-up/drop-off zone and the parking lot drive aisles.

Under proposed conditions, pick-up and drop-off operations will occur with a similar circulation pattern, with parents/caregivers following a counterclockwise rotation through the parking lot. The only difference in proposed conditions is that the curbside pick-up/drop-off area will be within a separated drive aisle from the rest of the parking lot, as shown on Figure 4. The proposed parking lot and pick-up/drop-off area will also contain approximately 700 linear feet of queueing/processing space (or room for approximately 35 vehicles), compared with 630 feet (approximately 31 vehicles) in existing conditions.

Morning Drop-Off Operations

During morning arrival under existing conditions, vehicles enter the parking lot driveway, drop students off at the curbside pick-up/drop-off area, and depart the driveway.

Observations of morning drop-off operations were conducted on Thursday, June 8, 2023 to analyze the queuing and processing demand for drop-off vehicles. Per these observations, drop-off operations took place mostly during a 30-minute window around the 8:50am bell time, with a peak queuing of approximately five (5) to 11 vehicles between 8:45 and 8:55am. This queue was fully contained within the school driveway and did not spill back onto Beacon Road at any time.

Under proposed conditions, drop-off operations will occur in a similar fashion in the reconfigured parking lot and pick-up/drop-off zone. The design of the pick-up/drop-off zone, as well as enforcement as necessary, will encourage parents/caregivers to only perform pick-up and drop-off within the school site. Based on the number of drop-off trips by parents/caregivers under existing and proposed conditions in Table 2 and Table 3 (20 and 24 trips, respectively), and the observed maximum drop-off queue length of approximately 11 vehicles under existing conditions, the new school facility is expected generate an additional one to two vehicles of needed queuing space, which can be easily accommodated within the proposed site plan.

Afternoon Pick-up Operations

During afternoon dismissal under existing conditions, vehicles enter the parking lot driveway, queue in the parking lot drive aisle, pick students up at the curbside pick-up/drop-off area, and depart the driveway.

Observations of afternoon pick-up operations were conducted on Thursday, June 8, 2023 to analyze the timing of queuing and processing demand for pick-up vehicles. Per these observations, pick-up operations took place mostly during the 30-minute window around the 3:25pm bell time. The pick-up queue peaked between 3:25 and 3:30pm, occupying approximately 500 linear feet through the pick-up/drop-off zone and parking lot drive aisles, leaving approximately 130 linear feet of unused queuing space within the driveway, or room for approximately six (6) additional vehicles. The queue was fully contained within the school driveway and did not spill back onto Beacon Road at any time.

Under proposed conditions, drop-off operations will occur in a similar fashion in the reconfigured parking lot and pick-up/drop-off zone. Based on the proposed site plan, there is approximately 700 linear feet of queuing space in the pick-up/drop-off zone and parking lot drive aisles. Therefore, the proposed school will have approximately 200 feet of excess queuing space (or room for approximately 10 additional queued vehicles) above existing peak demand. As shown in Table 4, only one (1) net new parent/caregiver pick-up vehicle trip is expected during the PM school peak hour, and this trip is expected to be easily accommodated within the proposed pick-up/drop-off zone and parking lot drive aisles.

School Bus Pick-Up/Drop-Off

Under existing conditions, school buses use a separate driveway from Beacon Road, which has a circular bus pick-up/drop-off zone and small parking area.

Under proposed conditions, school buses will continue to perform pick-up and drop-off in the same location, but the bus

loop will be reconfigured to serve only buses and not have a parking area.

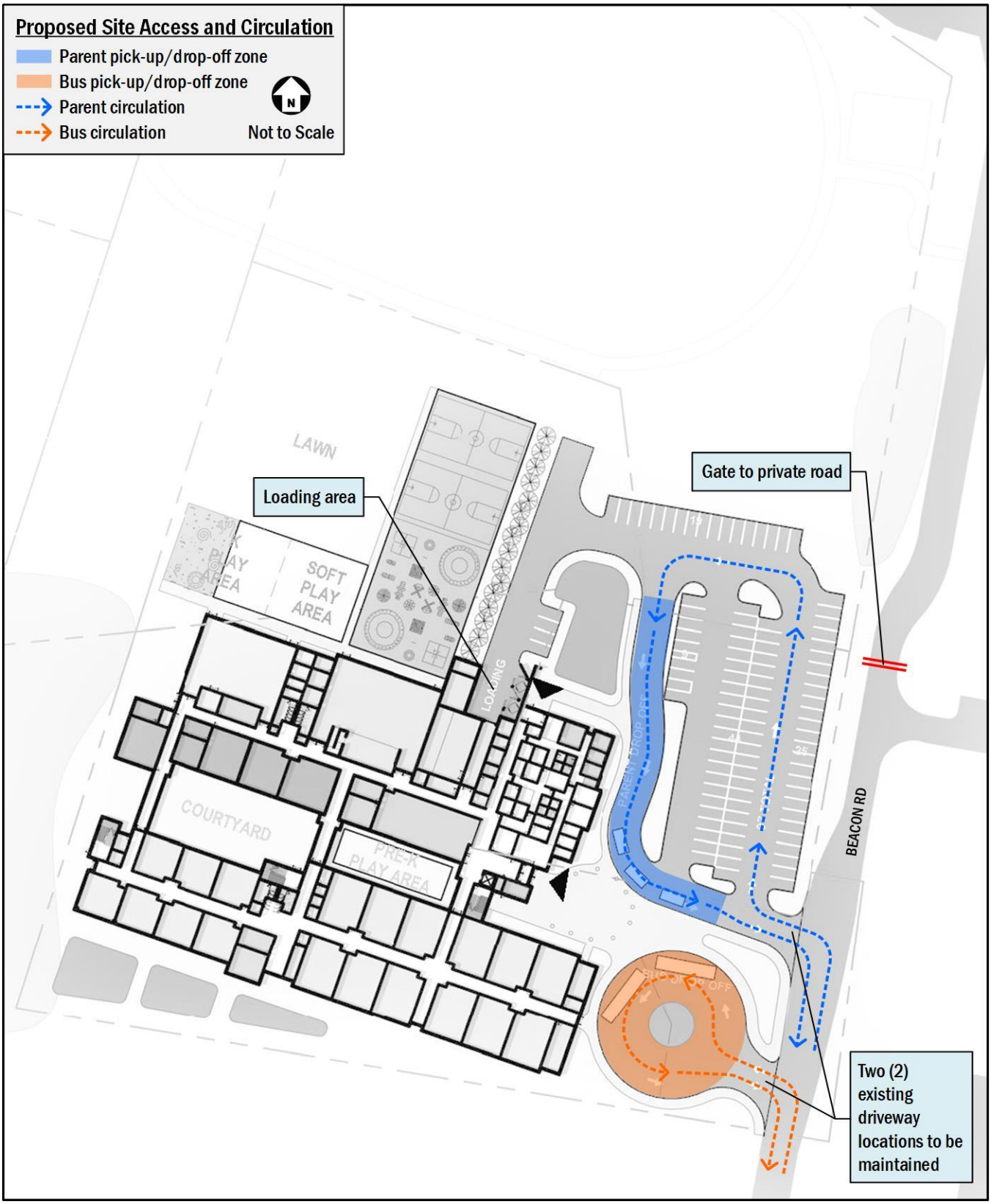


Figure 4: Proposed Site Access and Circulation

Section 3: Trip Generation

This section outlines the transportation demand of the Project. It summarizes the projected trip generation of the site, which forms the basis for the chapters that follow. The proposed Project includes the replacement of the existing JoAnn Leleck Elementary School facility with a new school facility, increasing student enrollment from 799 to 925 students, and increasing the staff population from 138 to approximately 164.

Existing School Trip Generation

Trip generation for the existing elementary school was estimated using a school demand assumptions model containing information obtained from the school relating to mode split estimates of students and staff, distribution of arrivals and departures relative to morning and afternoon bell times as well as after-school programming times, and average occupants per vehicle for students and staff.

As shown in Table 2, the existing approved elementary school generates approximately:

- 121 vehicles (20 by parents/caregivers and 101 by staff) in the AM commuter peak hour;
- 79 vehicles (10 by parents/caregivers and 69 by staff) in the PM school peak hour; and
- 23 vehicles (3 by parents/caregivers and 20 by staff) in the PM commuter peak hour.

Proposed School Trip Generation

Trip generation for the proposed elementary school was estimated using the same methodology as that of the existing school, but with overall trips increased proportionate to the expected student enrollment and staff population increases.

As shown in Table 3, the proposed elementary school is expected to generate approximately:

- 144 vehicles (24 by parents/caregivers and 120 by staff) in the AM commuter peak hour;
- 93 vehicles (11 by parents/caregivers and 82 by staff) in the PM school peak hour; and
- 26 vehicles (3 by parents/caregivers and 23 by staff) in the PM commuter peak hour.

Net New Trip Generation

As shown in Table 4, the net new vehicle trips generated by the new school facility is approximately:

- 23 net new vehicles (4 by parents/caregivers and 19 by staff) in the AM commuter peak hour;
- 14 net new vehicles (1 by parents/caregivers and 13 by staff) in the PM school peak hour; and
- 3 vehicles (0 by parents/caregivers and 3 by staff) in the PM commuter peak hour.

Detailed trip generation calculations for both the existing and proposed conditions are provided in the Technical Attachments.

Table 2: Existing School Trip Generation

Trip Type	Adjustments	AM Commuter Peak Hour			PM School Peak Hour			PM Commuter Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
778 students										
Existing Total Student Trips	**778 Students**	**661** *85% Arrive in AM Peak Hour*	**0**	**661**	**0** *40% Depart in School PM Peak Hour*	**311**	**311**	**0** *11% Depart in PM Peak Hour*	**86**	**86**
Existing Auto Driver Trips (Parents/Caregivers) [1]	4% mode split	20	0	20	0	10	10	0	3	3
Existing Auto Passenger Trips (Students)	1.3 students/vehicle	26	0	26	0	13	13	0	4	4
Existing Transit Trips	0% mode split	0	0	0	0	0	0	0	0	0
Existing Bicycling Trips	0% mode split	0	0	0	0	0	0	0	0	0
Existing School Bus Trips	Approx. 50 students/bus w/ 3 buses (23% mode split)	150 *23% mode split*	0	150	0 *23% mode split*	71	71	0 *0% mode split*	0	0
Existing Walking Trips		485 *73% mode split*	0	485	0 *73% mode split*	227	227	0 *96% mode split*	82	82
Parents/Caregivers Accompanying Walking Child	0.5 parents/caregivers per child	243	243	486	114	114	228	41	41	82
Existing Student + Parent/Caregiver Person Trips (All Modes)		**925**	**243**	**1,167**	**115**	**435**	**549**	**42**	**130**	**171**
138 staff										
Existing Total Staff Trips	**138 Staff**	**113** *82% Arrive in AM Peak Hour*	**0**	**113**	**0** *56% Depart in School PM Peak Hour*	**77**	**77**	**0** *16% Depart in PM Peak Hour*	**22**	**22**
Existing Auto Driver Trips	98% mode split	101	0	101	0	69	69	0	20	20
Existing Auto Passenger Trips	1.1 staff/vehicle	10	0	10	0	7	7	0	2	2
Existing Transit Trips	1% mode split	1	0	1	0	1	1	0	0	0
Existing Bicycling Trips	1% mode split	1	0	1	0	1	1	0	0	0
Existing Walking Trips	0% mode split	0	0	0	0	0	0	0	0	0
Existing Staff Person Trips (All Modes)		**113**	**0**	**113**	**0**	**78**	**78**	**0**	**22**	**22**
Existing Student + Parent/Caregiver + Staff Person Trips (All Modes)		**1,038**	**243**	**1,280**	**115**	**513**	**627**	**42**	**152**	**193**
Existing Total Vehicle Trips		**121**	**0**	**12**	**0**	**79**	**79**	**0**	**23**	**23**

[1] Per discussions with M-NCPPC staff during scoping, parent/caregiver pick-up/drop-off trips only need to be counted in one direction (inbound in the AM commuter peak hour, outbound in the PM school and PM commuter peak hours) when calculating person trips.

Table 3: Proposed School Trip Generation

Trip Type	Adjustments	AM Commuter Peak Hour			PM School Peak Hour			PM Commuter Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
925 students										
Proposed Total Student Trips	**925 Students**	**786**	**0**	**786**	**0**	**370**	**370**	**0**	**102**	**102**
		85% Arrive in AM Peak Hour			*40% Depart in School PM Peak Hour*			*11% Depart in PM Peak Hour*		
Proposed Auto Driver Trips (Parents/Caregivers) [1]	4% mode split	24	0	24	0	11	11	0	3	3
Existing Auto Passenger Trips (Students)	1.3 students/vehicle	31	0	31	0	14	14	0	4	4
Proposed Transit Trips	0% mode split	0	0	0	0	0	0	0	0	0
Proposed Bicycling Trips	0% mode split	0	0	0	0	0	0	0	0	0
Existing School Bus Trips	23% mode split	178	0	178	0	84	84	0	0	0
		23% mode split			*23% mode split*			*0% mode split*		
Existing Walking Trips		577	0	577	0	272	272	0	98	98
		73% mode split			*73% mode split*			*96% mode split*		
Parents/Caregivers Accompanying Walking Child	0.5 parents/caregivers per child	289	289	578	136	136	272	49	49	98
Proposed Student + Parent/Caregiver Person Trips (All Modes)		**1,100**	**289**	**1,388**	**137**	**517**	**653**	**50**	**154**	**203**
164 staff										
Proposed Total Staff Trips	**164 Staff**	**134**	**0**	**134**	**0**	**92**	**92**	**0**	**26**	**26**
		82% Arrive in AM Peak Hour			*56% Depart in School PM Peak Hour*			*16% Depart in PM Peak Hour*		
Proposed Auto Driver Trips	98% mode split	120	0	120	0	82	82	0	23	23
Proposed Auto Passenger Trips	1.1 staff/vehicle	12	0	12	0	8	8	0	2	2
Proposed Transit Trips	1% mode split	1	0	1	0	1	1	0	0	0
Proposed Bicycling Trips	1% mode split	1	0	1	0	1	1	0	0	0
Proposed Walking Trips	0% mode split	0	0	0	0	0	0	0	0	0
Proposed Staff Person Trips (All Modes)		**134**	**0**	**134**	**0**	**92**	**92**	**0**	**25**	**25**
Proposed Student + Parent/Caregiver + Staff Person Trips (All Modes)		**1,234**	**289**	**1,522**	**137**	**609**	**745**	**50**	**179**	**228**
Proposed Total Vehicle Trips		**144**	**0**	**144**	**0**	**93**	**93**	**0**	**26**	**26**

[1] Per discussions with M-NCPPC staff during scoping, parent/caregiver pick-up/drop-off trips only need to be counted in one direction (inbound in the AM commuter peak hour, outbound in the PM school and PM commuter peak hours) when calculating person trips.

Table 4: Net New Trip Generation

Trip Type	AM Commuter Peak Hour			PM School Peak Hour			PM Commuter Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
Net Auto Driver Trips	23	0	23	0	14	14	0	3	3
Net Auto Passenger Trips	7	0	7	0	2	2	0	0	0
Net Transit Trips	0	0	0	0	0	0	0	0	0
Net Bicycling Trips	0	0	0	0	0	0	0	0	0
Net School Bus Trips	28	0	28	0	13	13	0	0	0
Net Walking Trips	138	46	184	22	67	89	8	24	32
Net Student + Parent/Caregiver + Staff Person Trips (All Modes)	**196**	**46**	**242**	**22**	**96**	**118**	**8**	**27**	**35**

Section 4: Traffic Operations

This section provides a summary of an analysis of the existing and future roadway capacity in the study area. Included is an analysis of potential vehicular impacts of the JoAnn Leleck Elementary School project.

The purpose of the capacity analysis is to:

- Determine the existing capacity of the study area roadways; and
- Determine the overall impact of the project on the study area roadways.

Because this project's application is a Mandatory Referral, no mitigation of vehicular impacts or other off-site deficiencies are required.

The capacity analysis focuses on the AM commuter peak hour, PM school (dismissal) peak hour, and PM commuter peak hour, determined by the existing traffic volumes in the study area.

The following conclusions are reached within this chapter:

- All study area roadways operate at an acceptable level of service during all analysis scenarios for all peak hours.

Study Area, Scope, & Methodology

This section outlines the vehicular trips generated in the study area along the vehicular access routes and defines the analysis assumptions.

The scope of the analysis contained within this report was discussed with and agreed to with M-NCPPC, MCDOT, Prince George's County, and SHA staff as detailed in the approved scoping form included in the Technical Attachments. The general methodology of the analysis follows national and Montgomery County/LATR guidelines on the preparation of transportation impact evaluations of site development, unless stated otherwise.

Capacity Analysis Scenarios

The vehicular analyses are performed to determine if the proposed project will lead to adverse impacts on traffic operations. This is accomplished by comparing future scenarios: (1) without the new school facility (referred to as the Background condition) and (2) with the new school facility (referred to as the Total Future condition).

Specifically, the roadway capacity analysis examined the following scenarios:

1. Existing Conditions
2. Background Conditions without the new school facility (Background)
3. Future Conditions with new school facility (Total Future)

Study Area

The study area of the analysis is a set of intersections where detailed capacity analyses are performed for the scenarios listed above. The set of intersections decided upon during the study scoping process with M-NCPPC Staff are those intersections most likely to have potential impacts or require changes to traffic operations to accommodate the new school facility.

The studied intersections meet the LATR criteria, based on the maximum number of new weekday peak-hour vehicle trips generated by the proposed land uses. For the JoAnn Leleck Elementary School project, a minimum of one (1) intersection in each direction was required.

Based on the projected future trip generation and the location of the site access points, the following intersections were chosen for analysis:

1. Beacon Road and Northampton Drive
2. New Hampshire Avenue and Northampton Drive
3. New Hampshire Avenue and Southampton Drive
4. Beacon Road and School Parking Lot Driveway
5. Beacon Road and School Bus Loop

Figure 5 shows a map of the study area intersections.

Geometry and Operations Assumptions

The following section reviews the roadway geometry and operations assumptions made and the methodologies used in the roadway capacity analyses.

Existing Geometry and Operations Assumptions

The geometry and operations assumed in the existing conditions scenario are those present when the main data collection occurred. Gorove Slade made observations and confirmed the existing lane configurations and traffic controls at the intersections within the study area. Existing signal timings and offsets were obtained from Montgomery County and are included in the Technical Attachments.

The lane configurations and traffic controls for the Existing Conditions are shown on Figure 6.

Background Geometry and Operations Assumptions

Following national and Montgomery County/LATR methodologies, a background improvement must meet the following criteria to be incorporated into the analysis:

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

Based on these criteria, no background geometry and operation assumptions were included in the analysis.

The lane configurations and traffic control for the Background Conditions are consistent with the Existing Conditions and shown on Figure 6.

Total Future Geometry and Operations Assumptions

The new JoAnn Leleck Elementary School facility will continue to have one (1) parking lot curb cut and one (1) bus loop curb cut, consistent with existing conditions. Both driveways will be reconstructed and repositioned to accommodate the new site layout but will remain in the same approximate locations and will not fundamentally change existing roadway operations.

The lane configurations and traffic controls for the Total Future Conditions are consistent with the Existing Conditions and shown on Figure 6.

Traffic Volume Assumptions

The following section reviews the traffic volume assumptions and methodologies used in the roadway capacity analyses.

Existing Traffic Volumes

The existing traffic volumes are comprised of turning movement count data collected on Thursday, June 8, 2023, when school was in session.

As approved by Staff during scoping, the system peak hours were analyzed during the morning peak hour (7:15 to 8:15 AM), afternoon school peak hour (3:15 to 4:15 PM), and commuter peak hour (5:00 to 6:00 PM). The traffic count data are included in the Technical Attachments.

In order to capture the impact of the school's morning arrivals and present a conservative analysis, the AM commuter peak hour analysis includes the school's morning arrival peak hour trip generation (7:45 to 8:45 AM based on observations) and the roadway system peak hour volumes (7:15 to 8:15 AM).

It is also noted that certain roadway segments between study intersections (notably Northampton Drive between Beacon Road and New Hampshire Avenue) have a large number of parking spaces and driveways for multifamily residential buildings, which account for much of the traffic volume imbalance apparent on these segments. In order to accurately represent this existing condition, traffic volumes were not balanced on these segments.

Approach-based peak hour factors and movement-based heavy vehicle percentages consistent with the collected data were used in all three (3) analyzed scenarios.

The existing peak hour volumes are presented in Figure 7.

Background Traffic Volumes (without the project)

Traffic projections for the Background Conditions consist of the existing volumes presented in Figure 7 with the following additions:

- Traffic generated by developments expected to be approved prior to the project (known as background developments).

Following LATR guidelines, "background traffic from approved but unbuilt developments will be in the same geographic area as the intersections to be studied if that background development is estimated to contribute at least 5 CLV."

Based on these criteria and as discussed previously, three (3) developments were included in the Background scenario. These developments are:

1. Hillandale Gateway
2. Park Montgomery
3. Long Branch Corner

Existing transportation studies were available for the Park Montgomery and Long Branch Corner developments; however, neither of these studies showed vehicle trips within the study intersections of the JoAnn Leleck Elementary School project. Therefore, their impacts on the school project were determined to be negligible and volumes were not added for them.

For the Hillandale Gateway project, trip generation was established using ITE *Trip Generation* 11th Edition combined with the LATR trip adjustment rates factors in the LATR Guidelines Appendix Table 1a.

Trip distribution assumptions for the Hillandale Gateway developments were based on the White Oak/Fairland/Cloverly Super District distributions outlined in the LATR Guidelines Appendix Table 2-8.

Trip generation assumptions for the background developments are shown on Table 5. The peak hour volumes of the background developments assigned to study intersections are shown in Figure 8.

The traffic volumes analyzed for the Background Conditions are shown on Figure 9.

Total Future Traffic Volumes (with the project)

The Total Future traffic volumes consist of the Background volumes combined with:

- The removal of traffic volumes generated by the existing school; and
- The addition of traffic volumes generated by the proposed school.

Thus, the Total Future traffic volumes include traffic generated by the existing volumes, background developments, and net new site-generated trips.

Distributions for the proposed school's students (parents/caregivers) are based on the school enrollment boundary and the general distribution of residential units within the area.

Distributions for the proposed school's staff are based on Appendix Table 2-4 of the LATR Guidelines.

Distribution assumptions are provided in Figure 10 and Figure 11 for inbound and outbound student trips, respectively, and in Figure 12 and Figure 13 for inbound and outbound staff trips, respectively.

The total site-generated volumes for the school use are shown in Figure 14. The Total Future traffic volumes are shown on Figure 15.

Vehicular Analysis Results

Capacity Analysis

Corridor and intersection capacity analyses were performed for the three (3) scenarios outlined previously at the intersections contained within the study area for the morning, school afternoon, and commuter afternoon peak hours. The site is located in the Silver Spring/Takoma policy area, an Orange policy area. Per LATR guidelines, "For intersections located within Orange Policy areas, the Highway Capacity Manual operations (delay-based) level of service standard applies to all study intersections." Therefore, an HCM analysis was used. The HCM 2000 methodology was used at signalized study intersections due to traffic signal phasing that precludes the use of the HCM 2010. The HCM 2010 methodology was used at unsignalized study intersections unless otherwise noted. The HCM methodologies were used for each peak hour scenario, with results provided by Synchro 11. Under Montgomery County and LATR guidelines, the congestion standards set for the site Policy Area includes a corridor congestion standard of 80 seconds/vehicle.

The Critical Lane Volume (CLV) methodology was used as a supplement to analyze the study area intersections as outlined in LATR guidelines. CLV results are provided in the Technical Attachments.

Table 6 shows the results of the HCM capacity analyses for the Existing, Background, and Total Future Conditions. The analysis worksheets for all study intersections are provided in the Technical Attachments.

As shown in Table 6, the results of the analyses indicate that no study intersections exceed congestion standards during Existing, Background or Total Future conditions. Therefore, motor vehicle adequacy is achieved without improvements to accommodate the project. Additionally, because this project's application is a Mandatory Referral, no mitigations of vehicular impacts would be required regardless of the vehicular analysis results.

Table 5: Summary of Background Developments Trip Generation

Proposed Development	Trip Generation Methodology	AM Commuter Peak Hour			PM School Peak Hour [1]			PM Commuter Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
Hillandale Gateway	ITE 11th Edition and LATR Rates	49	94	143	85	84	169	129	98	227
Total Background Development Trips		**49**	**94**	**143**	**85**	**84**	**169**	**129**	**98**	**227**

[1] Calculated using ITE-based hourly distribution proportions between PM commuter peak hour and PM school dismissal peak hour.

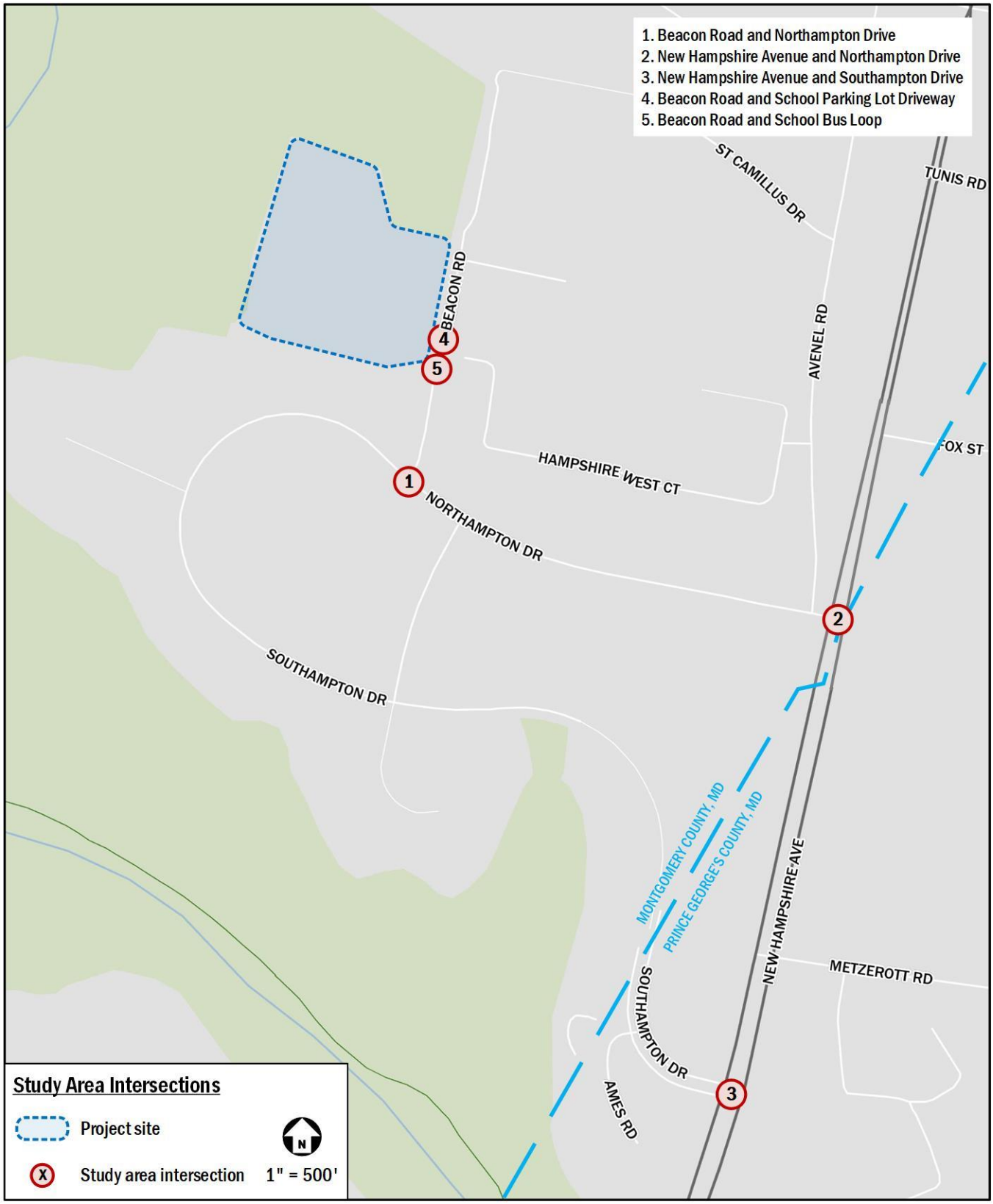


Figure 5: Study Area Intersections

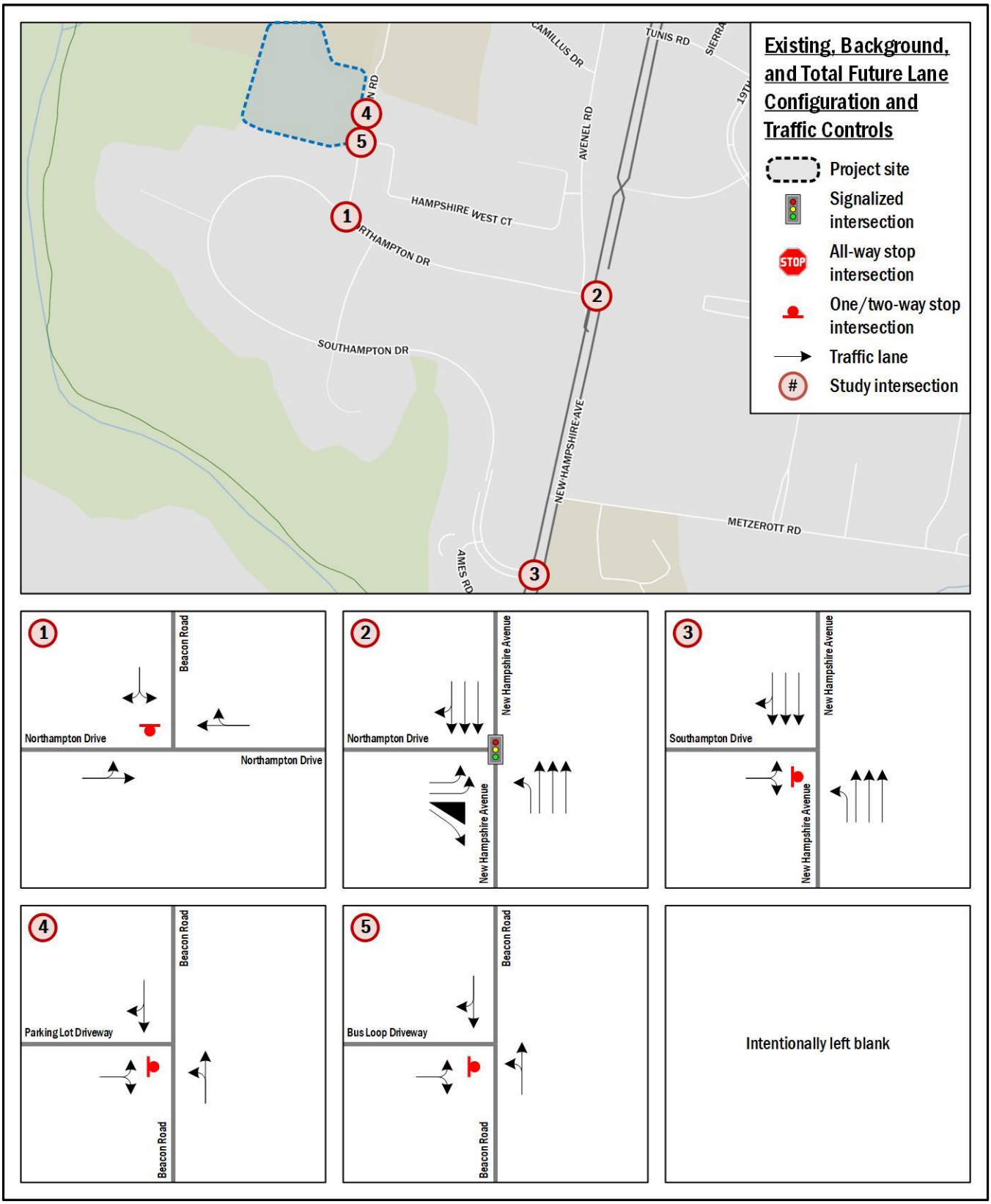


Figure 6: Existing, Background, and Total Future Lane Configurations and Traffic Controls

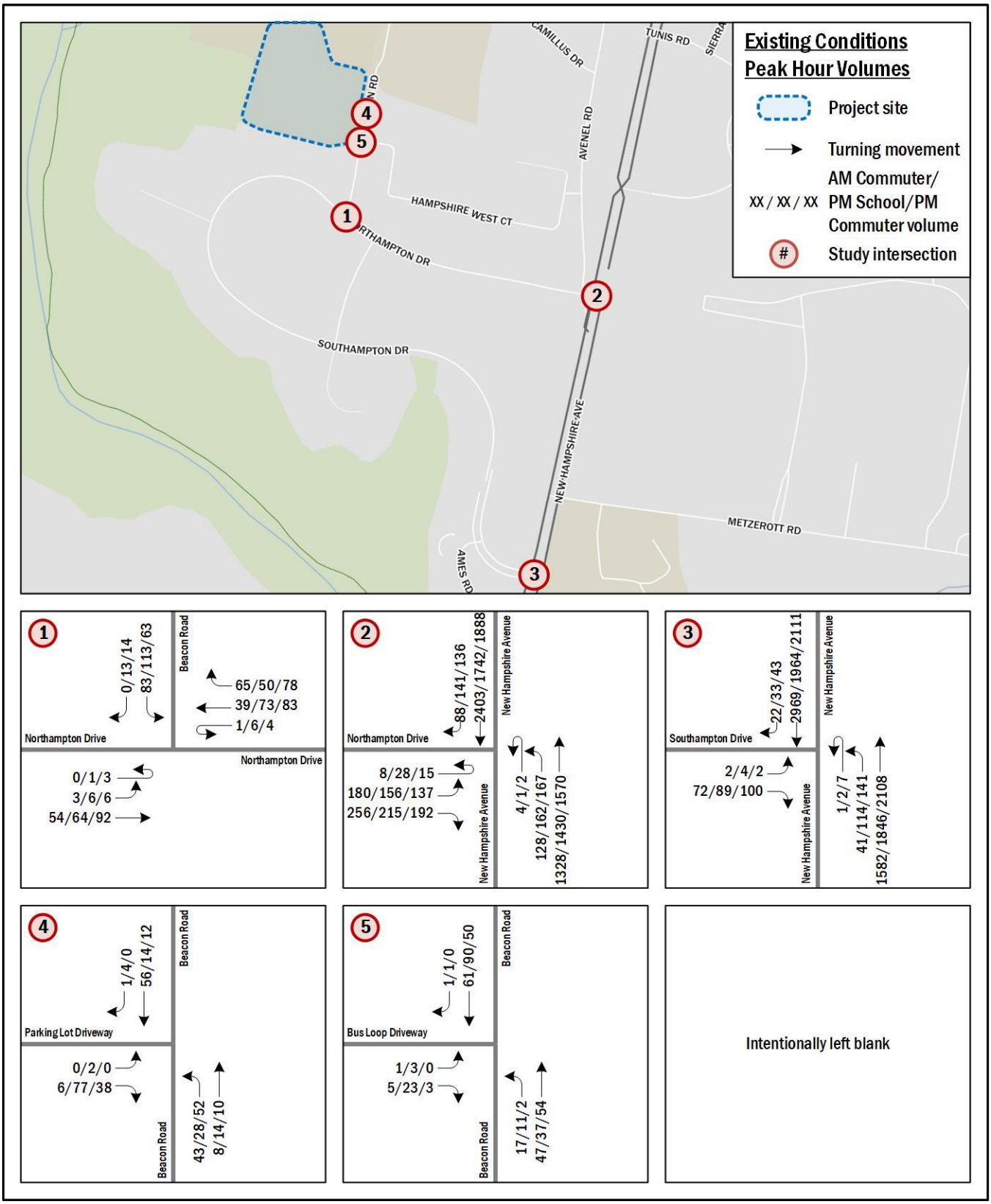


Figure 7: Existing Conditions Peak Hour Volumes

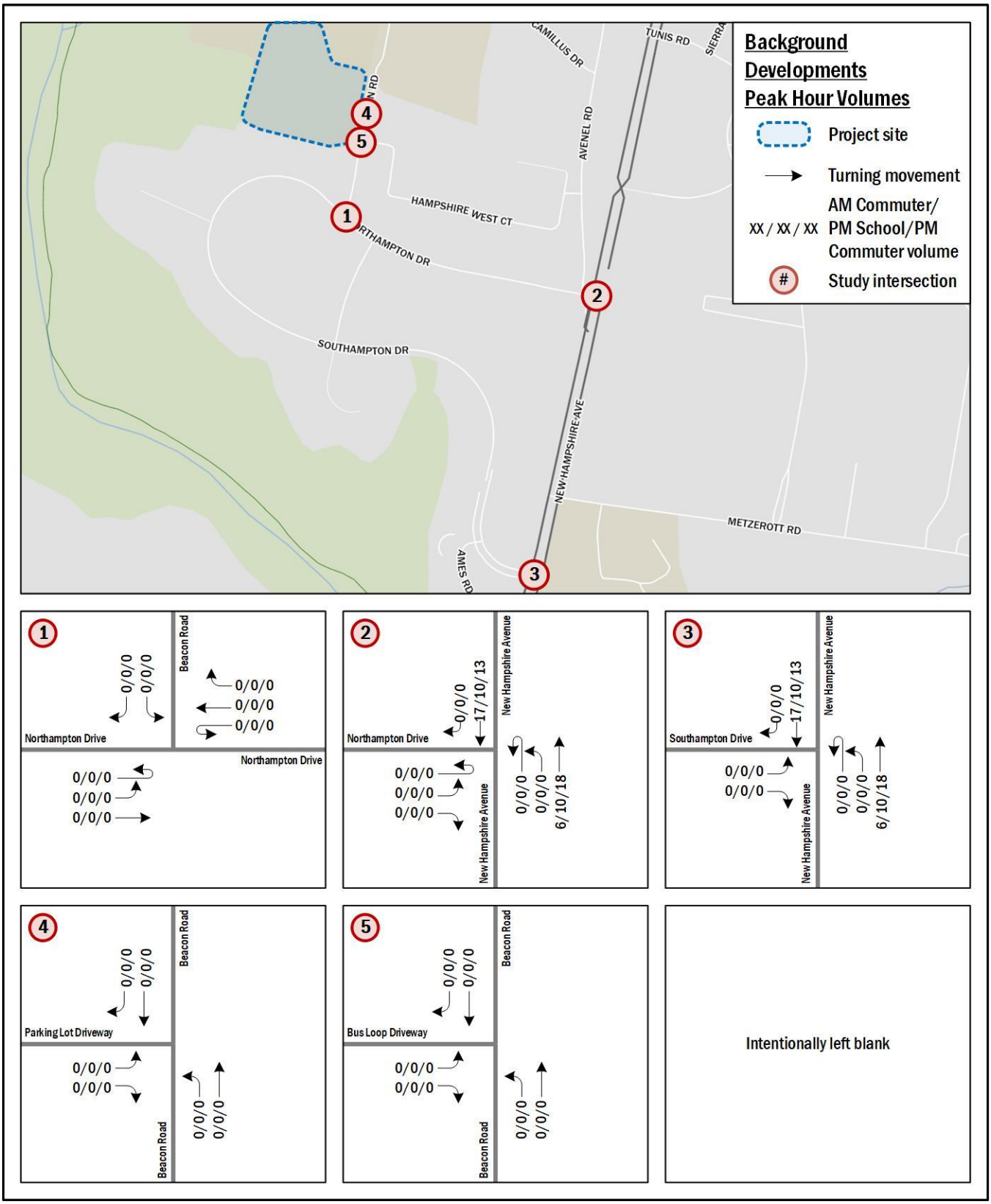


Figure 8: Background Developments Peak Hour Volumes

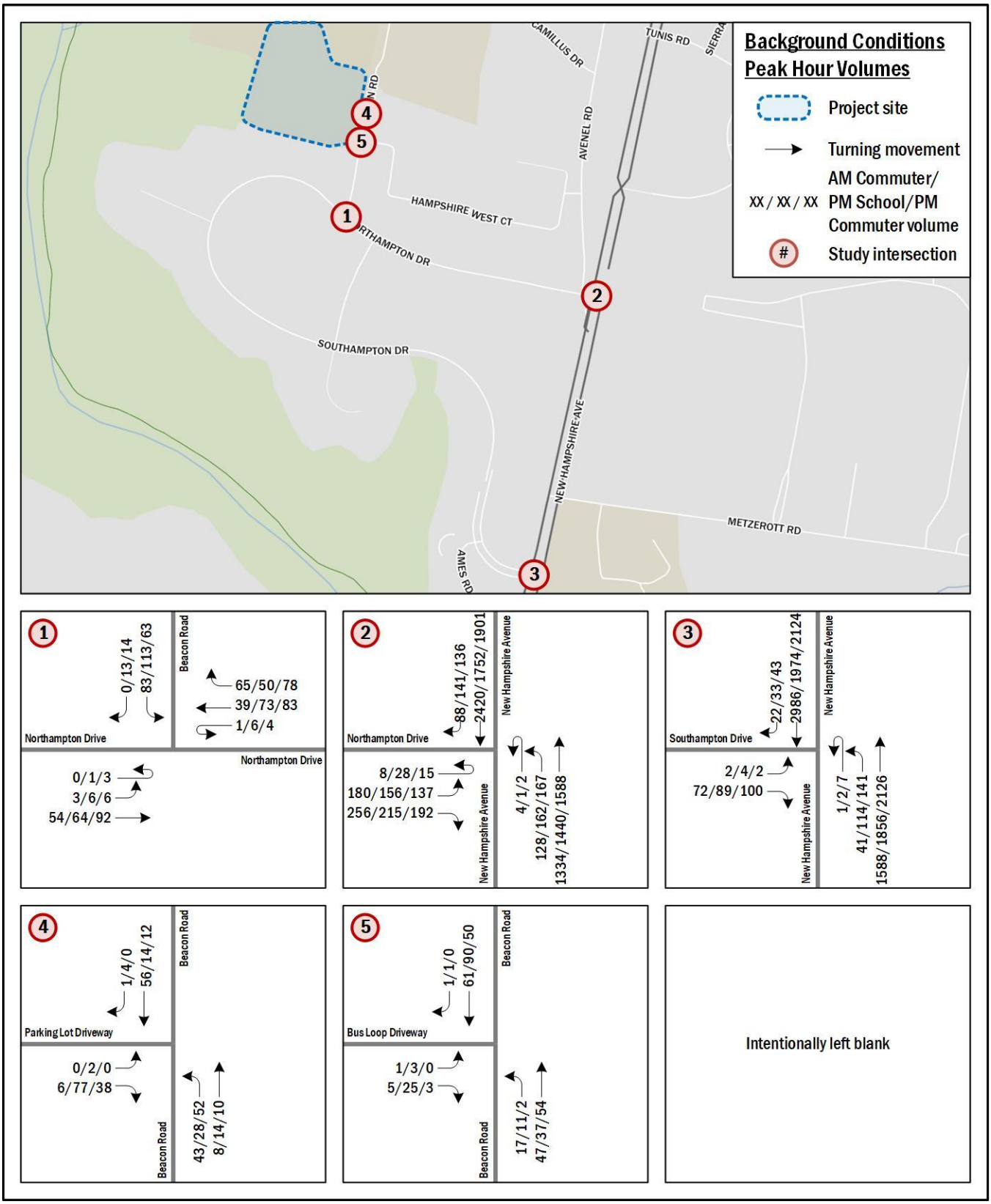


Figure 9: Background Conditions (Future Without New School Facility) Peak Hour Volumes

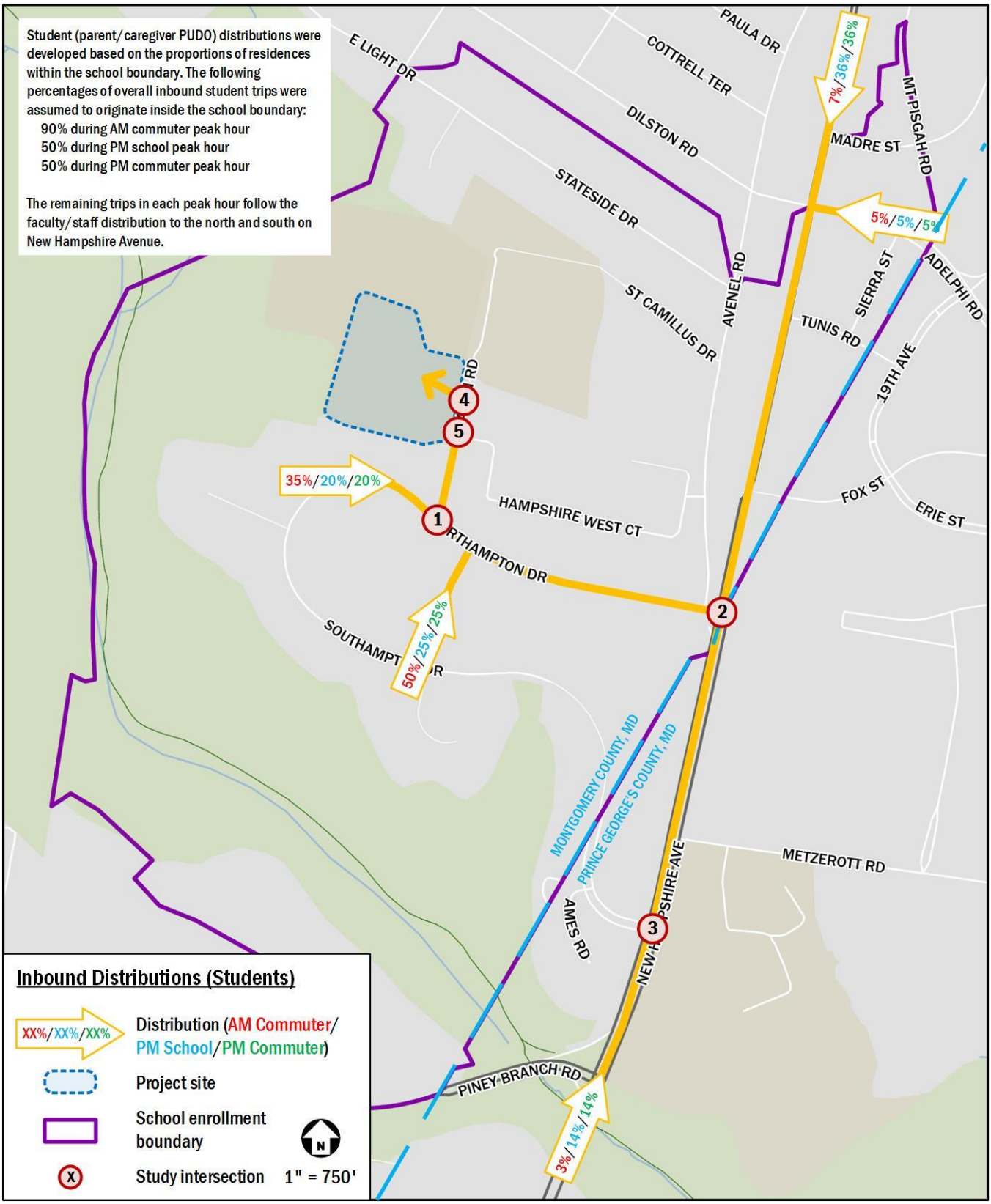


Figure 10: Proposed Inbound Distributions (Students)

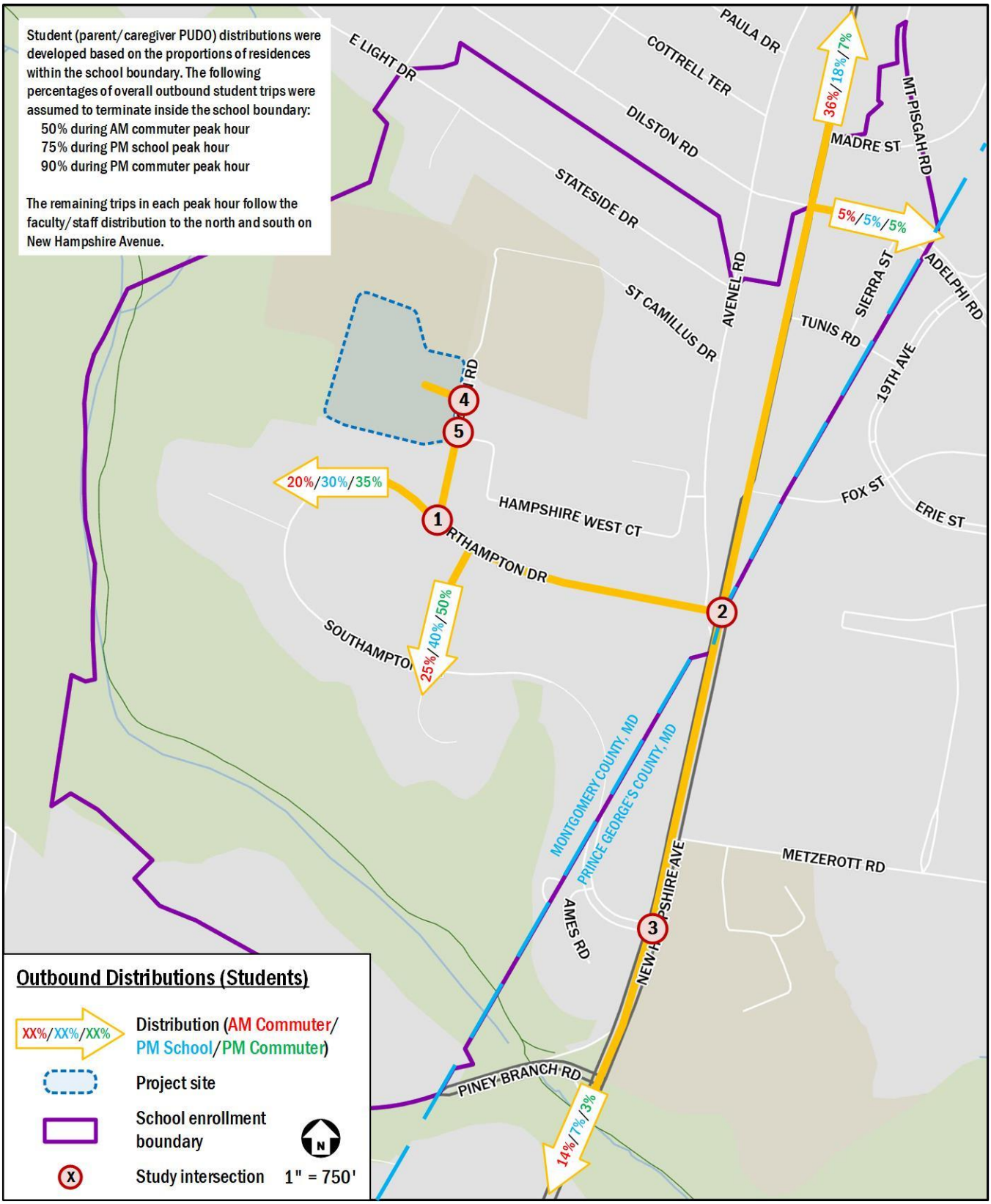


Figure 11: Proposed Outbound Distributions (Students)

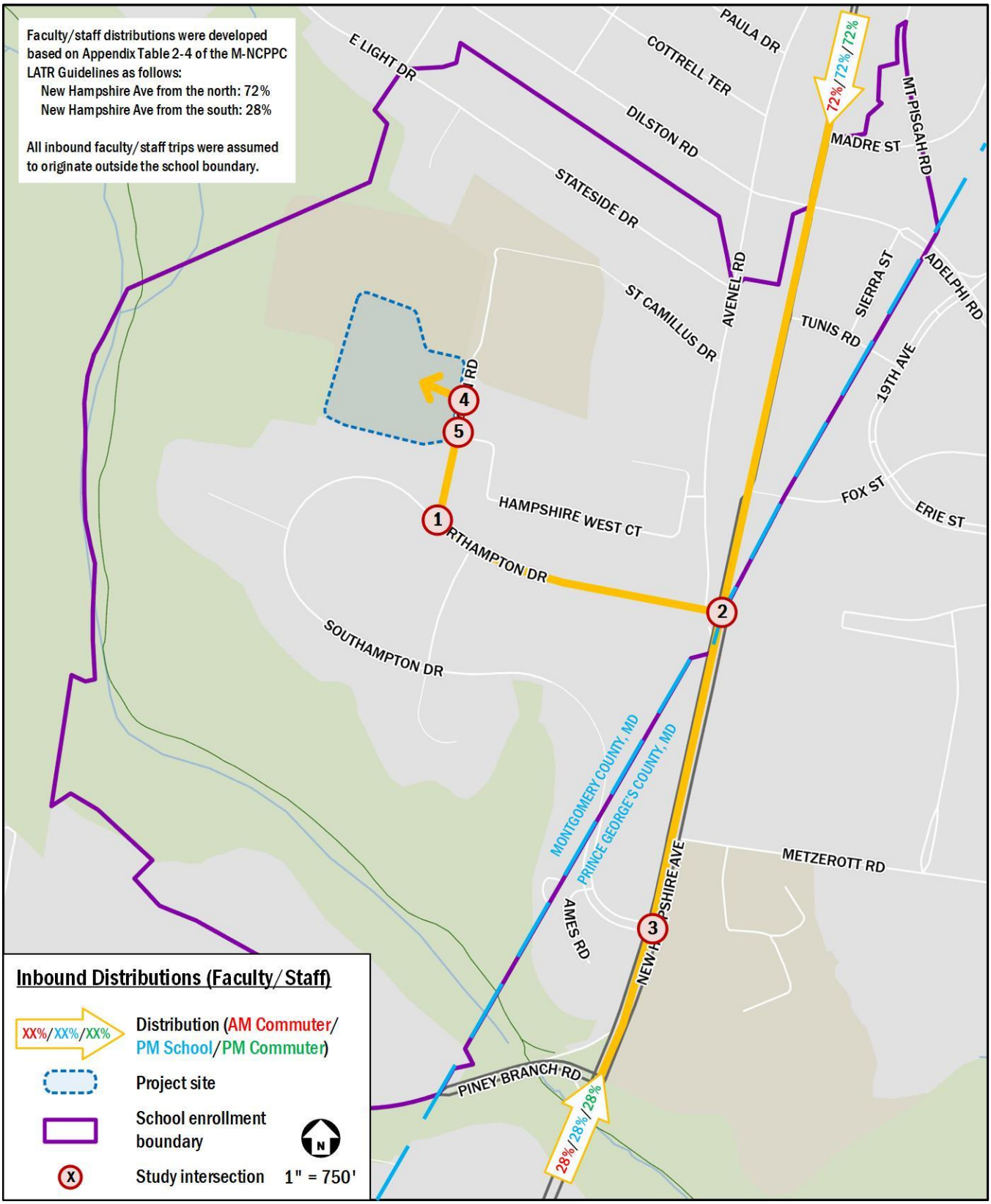


Figure 12: Proposed Inbound Distributions (Staff)

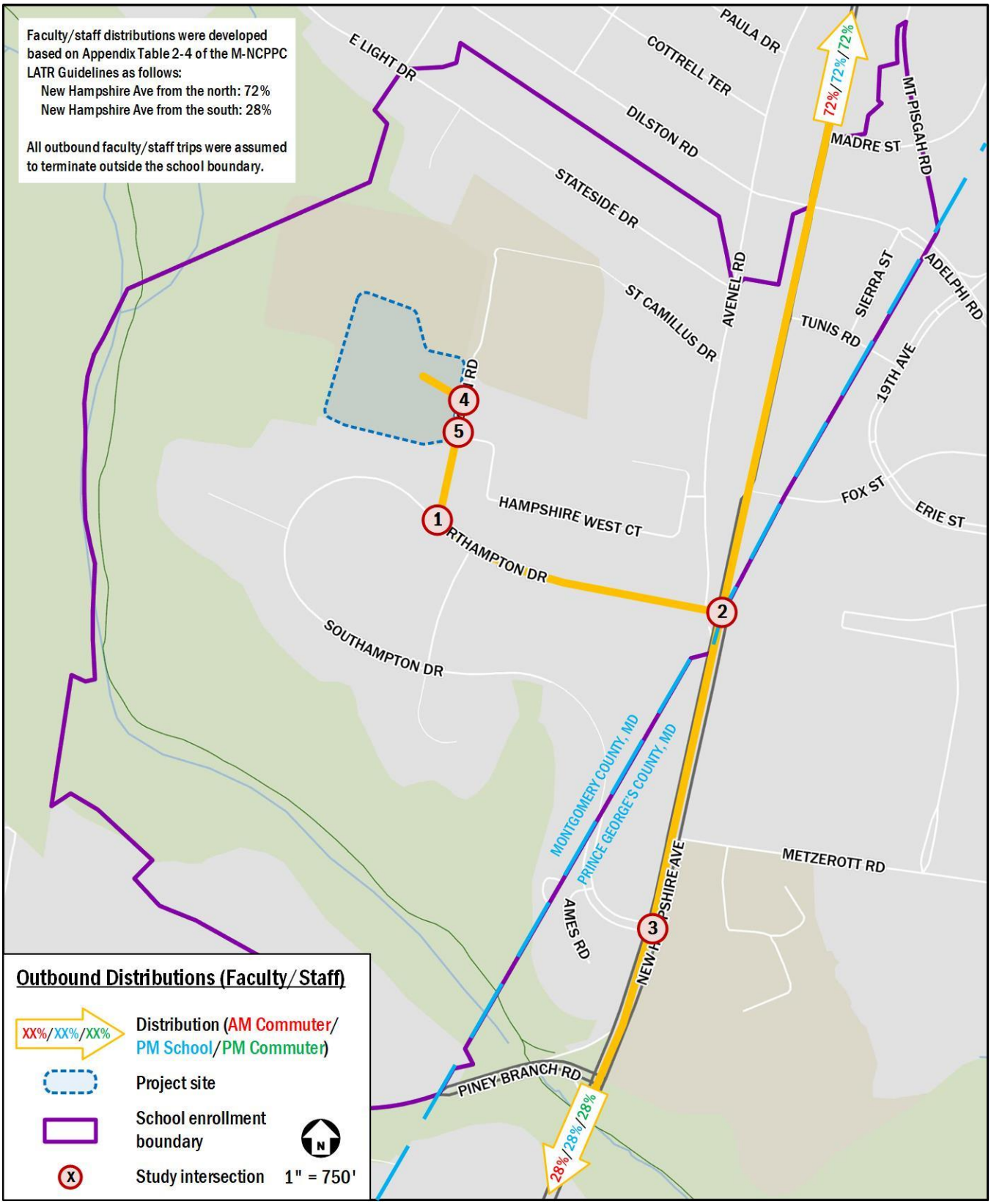


Figure 13: Proposed Outbound Distributions (Staff)

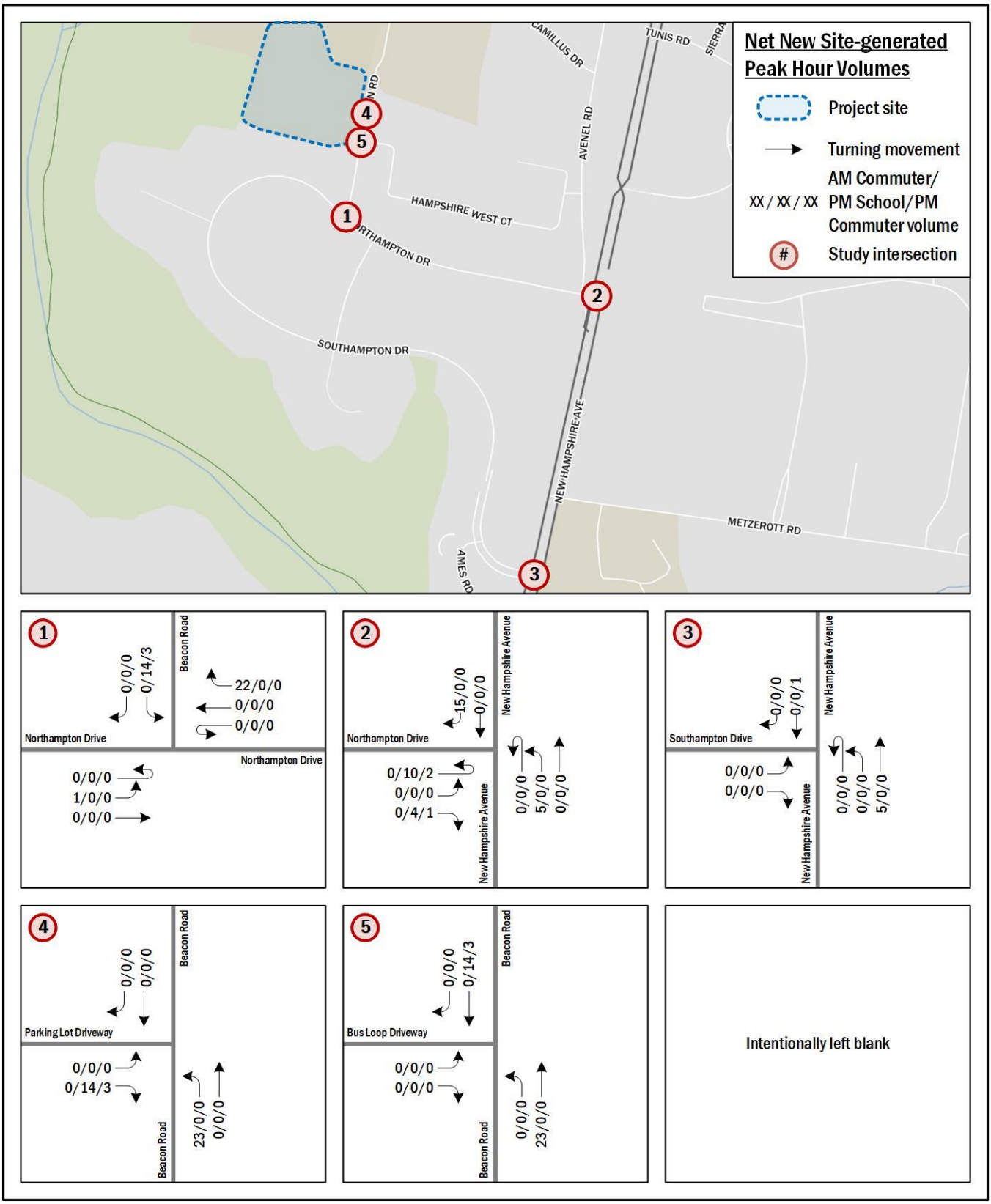


Figure 14: Net New Site-generated Peak Hour Volumes

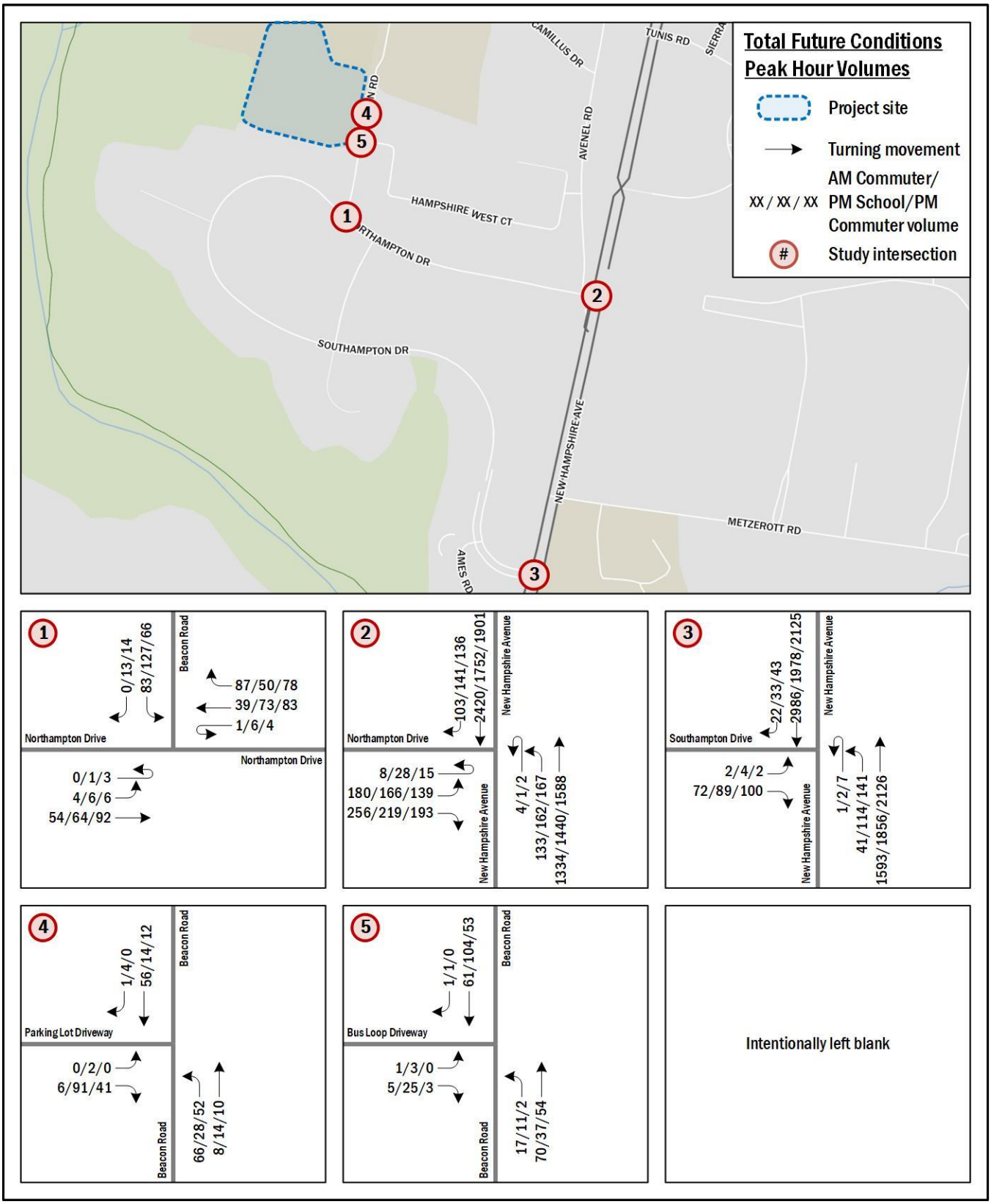


Figure 15: Total Future Conditions (Future with New School Facility) Peak Hour Volumes

Table 6: Intersection HCM Delay Results

Intersection	LATR Delay Stan-dard	Existing						Background						Total Future					
		AM Commuter		PM School		PM Commuter		AM Commuter		PM School		PM Commuter		AM Commuter		PM School		PM Commuter	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. Beacon Rd & Northampton Dr	80.0	3.4	A	4.1	A	2.3	A	3.4	A	4.1	A	2.4	A	3.2	A	4.4	A	2.4	A
2. New Hampshire Ave & Northampton Dr	80.0	20.8	C	18.3	B	17.0	B	20.9	C	18.4	B	17.0	B	21.3	C	18.8	B	17.1	B
3. New Hampshire Ave & Southampton Dr	80.0	7.0	A	9.9	A	22.3	C	12.2	B	10.1	B	23.1	C	12.2	B	10.1	B	23.1	C
4. Beacon Rd & School Parking Lot Dwy	80.0	3.2	A	6.4	A	6.3	A	3.2	A	6.4	A	6.3	A	3.9	A	6.7	A	6.4	A
5. Beacon Rd & School Bus Loop	80.0	1.4	A	2	A	0.4	A	1.4	A	2	A	0.4	A	1.1	A	1.8	A	0.4	A

Section 5: Pedestrian Facilities

This chapter reviews the existing and future pedestrian access to the site and reviews the pedestrian system adequacy test.

The following conclusions are reached within this chapter:

- The existing pedestrian infrastructure surrounding the site provides a mostly comfortable walking environment.
- There are gaps in the pedestrian network in the form of curb ramp deficiencies.

Existing Facilities Overview

A review of pedestrian facilities was conducted around the proposed project site as part of the pedestrian system adequacy review.

The pedestrian network around the project site generally consists of paved sidewalks with varying buffer widths.

Site Impacts

The project is expected to generate above 50 peak hour person trips. Based on the LATR guidelines, a pedestrian system adequacy analysis is therefore required. However, because this is a Mandatory Referral application, no mitigations are required for any deficiencies in the pedestrian network.

Pedestrian System Adequacy

For any project generating 50+ new peak-hour weekday person trips, quantitative pedestrian system adequacy analysis is required to assess the existing system's adequacy along with the project's trip generation.

The Pedestrian System Adequacy Test consists of three (3) components:

- Pedestrian Level of Comfort (PLOC),
- ADA Compliance, and
- Street Lighting.

PLOC Review and Methodology

The Pedestrian Level of Comfort (PLOC) Review is based on an analysis of how comfortable it is to navigate pedestrian pathways within the project study area. Pathways along streets in Montgomery County are ranked from PLOC-1 ("Very Comfortable") to PLOC-4 ("Undesirable"). These ratings are based on several factors, including pathway width, width of buffer between the pathway and the street, speed limit of the adjacent street, and the presence of on-street buffers such as parking lanes or separated bike lanes. PLOC ratings are also given to street crossings and are determined by the number of lanes in the street to be crossed, the speed limit of that street, and the existing conditions of the crossing (if there are marked crosswalks, medians, etc.).

The goal of the PLOC Review for a Mandatory Referral application is to identify any locations within the study area that are either a PLOC-3 ("Uncomfortable") or a PLOC-4 ("Undesirable"), but not to propose any mitigations as these are not required for this type of application.

PLOC Study Area

The study area is limited to roadways classified primary residential and higher and is based on the site's policy area and peak-hour trips.

Given the project site's location within an Orange Policy Area generating between 200 and 349 new trips during the peak hours, the required PLOC study area is a 900-foot walkshed beyond the site frontage. However, because none of the streets within a 900-foot walkshed are classified primary residential and higher, none of them are subject to being considered "deficient", even as there are minor instances of PLOC-3 or higher scores. The PLOC study area is shown in Figure 16.

PLOC Deficiencies

As part of the PLOC review, the score ratings available from the Montgomery County PLOC Database were reviewed and verified based on data collection within the study area that included verification of sidewalk and buffer widths, speed limits, and presence of on-street separation. A comparison between the two (2) sources can be seen in Figure 16, with changes verified during data collection noted in yellow and green highlights on the figure.

Based on the PLOC review, there are minor instances of pedestrian pathways and crossings within the study area with PLOC-3 or higher scores, but because they are not on streets classified primary residential or higher, they are not considered deficiencies per the Pedestrian System Adequacy Test.

ADA Compliance Review and Methodology

Per the LATR Guidelines, the project is required to conduct an American Disabilities Act (ADA) Compliance Review using the ADA Curb Ramps Survey form as available directly from the ADA website. The survey includes a detailed assessment of the

attributes of every curb ramp located within a specified walkshed. The list of reviewed attributes includes the following:

- Ramp width
- Ramp slopes
  - Cross-slope
  - Running-slope
  - Gutter slope
- Slopes of flared sides
- Landing width
- Sidewalk width
- Presence of a detectable warning surface
- Height of level changes
- Presence of parking lane
- Type of curb ramp

This study identified all locations where curb ramp attributes do not conform to ADA standards.

ADA Compliance Study Area

The study area is limited to roadways classified primary residential and higher and is based on the site's policy area and peak-hour trips.

The ADA Compliance Review Study Area is one-half the size of the PLOC Study Area described above. The ADA Compliance Review study area is a 450-foot walkshed beyond the site frontage. The ADA study area is presented in Figure 17.

ADA Compliance Deficiencies

Based on the ADA review, all 10 curb ramps within the study area have some type of ADA deficiency. More specifically:

- 10 curb ramps have deficient cross slopes;
- Nine (9) curb ramps have deficient gutter slopes;
- Two (2) curb ramps lack detectable warnings;
- One (1) curb ramp has a "top" sidewalk whose width is deficient; and
- One (1) curb ramp has deficient slopes on its flared side.

Figure 17 presents the location of the identified ADA deficiencies and Table 7 outlines the identified deficiencies. Because this is a Mandatory Referral application, no mitigations of off-site ADA issues are required and therefore no improvements are identified for the off-site curb ramps noted in Table 7. However, curb ramp "C" as shown in Table 7 and Figure 17 is located within the school site and will be rebuilt as part of the new school facility.

A detailed review of curb ramps and the within the ADA study area and the specific deficiencies of each is included in the Technical Attachments.

Streetlight Network Review, Methodology, & Study Area

Street lighting adequacy is based on MCDOT standards to ensure a sufficient level of street lighting is provided within the project's study area. Street lighting adequacy requires the applicant to identify deficiencies in the existing streetlight network within the PLOC study area (for this project, a 900-foot walkshed). Standards vary depending on roadway type and surroundings land uses. The street lighting study area is presented in Figure 18.

Streetlight Network Deficiencies

Based on the streetlight network review, approximately 2,400 linear feet do not meet streetlight network adequacy standards, which require longitudinal spacing of 150' in a multi-family land use area.

The segments of missing streetlights are identified in Figure 18, and generally have streetlight spacing of between 200' and 300'. Because this is a Mandatory Referral application, no mitigations of streetlight spacing issues are required.

An inventory of the reviewed streetlights that includes pole number, where available, and approximate GIS coordinates is included in the Technical Attachments.

Table 7: ADA Compliance Issues

Curb Ramp ID	Location	ADA Issue Category	ADA Issue				
			Cross slope > 2%	Gutter slope >5%	No detectable warning	Sidewalk at "top" of curb ramp <36" wide	Flared side slope >8.33%
A	NE corner of Beacon Road & Victory Oaks Driveway	Curb Ramp	●	●			
B	SE corner of Beacon Road & Victory Oaks Driveway	Curb Ramp	●	●		●	
C	SW corner of Beacon Road & School Parking Lot Driveway (within school site)	Curb Ramp	●	●			
D	SE corner of Beacon Road & School Parking Lot Driveway	Curb Ramp	●	●			
E	Midblock on Beacon Road, west side	Curb Ramp	●	●	●		●
F	Midblock on Beacon Road, east side	Curb Ramp	●		●		
G	NW corner of Beacon Road and Northampton Drive (north leg)	Curb Ramp	●	●			
H	NW corner of Beacon Road and Northampton Drive (west leg)	Curb Ramp	●	●			
I	NE corner of Beacon Road and Northampton Drive	Curb Ramp	●	●			
J	SW corner of Beacon Road and Northampton Drive	Curb Ramp	●	●			

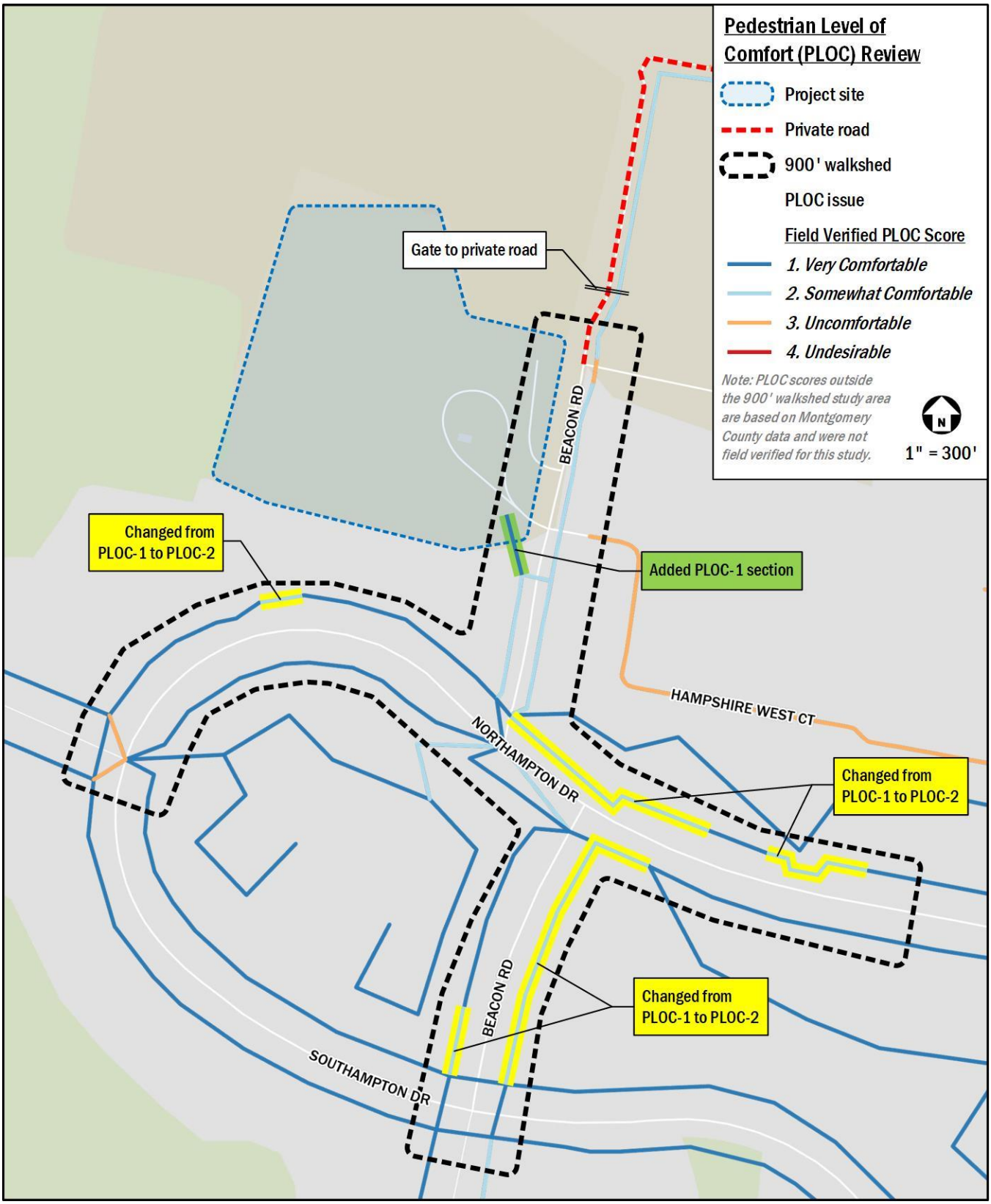


Figure 16: Pedestrian Level of Comfort Score Comparison: MCAtlas vs. Field Verification

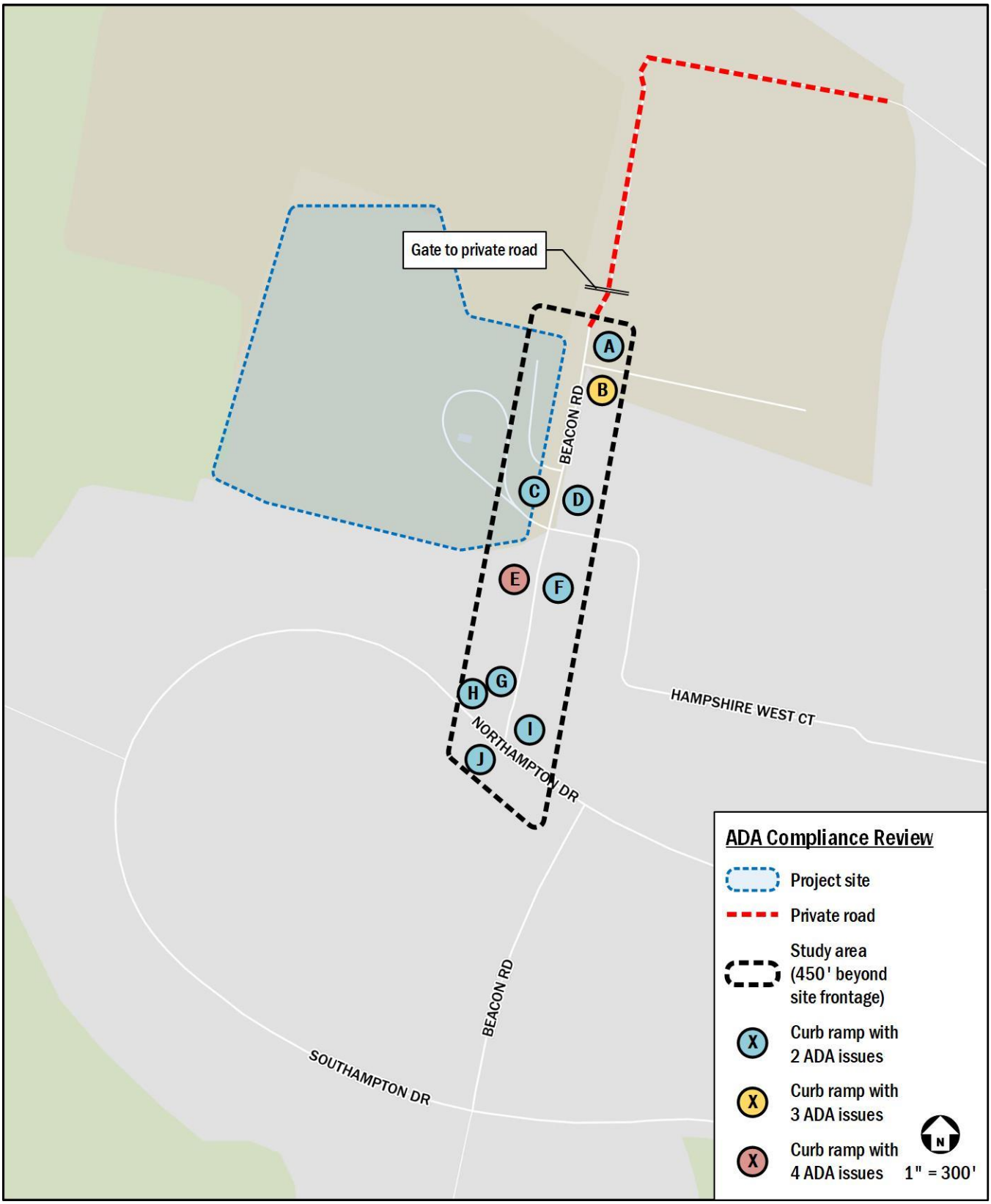


Figure 17: ADA Deficiencies

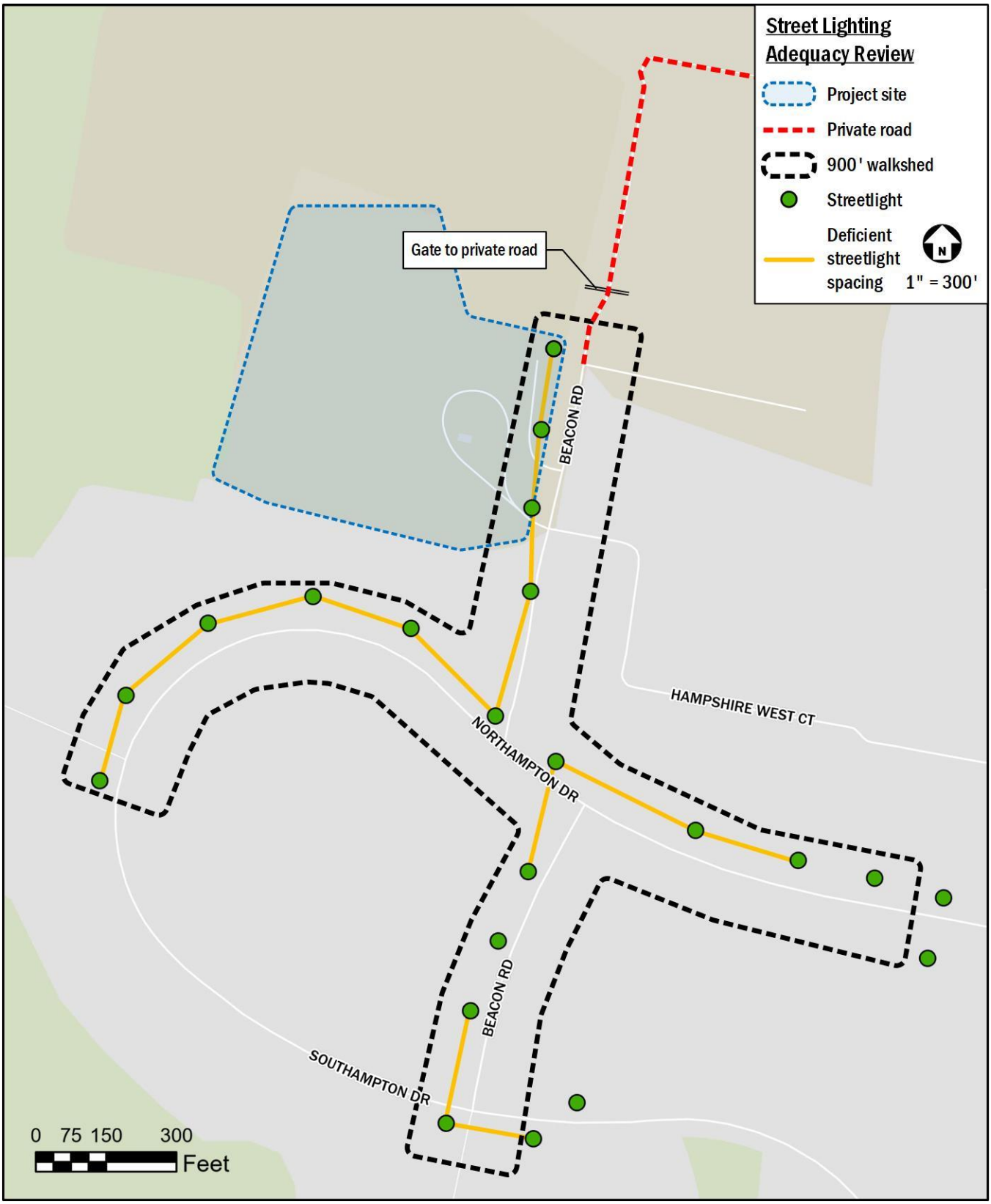


Figure 18: Street Lighting Adequacy Review

Section 6: Bicycle Facilities

This chapter summarizes existing and future bicycle access and reviews the quality of cycling routes to and from the site. A review of the adequacy of the existing bicycle system is also provided in this chapter.

The following conclusions are reached within this chapter:

- The future bicycle network as identified in the Bicycle Master Plan will includes sidepaths on both sides of New Hampshire Avenue north of Northampton Drive.
- Based on the Bicycle System Adequacy review, every roadway segment within the study area meets BLTS adequacy standards.

Existing Bicycle Facilities

The site is not located adjacent to any existing on-street bicycle facilities. However, it is located approximately 0.7 miles north of the Anacostia Tributary Trail System, which can be accessed via New Hampshire Avenue.

Planned Bicycle Facilities

According to the proposed bicycle network from the 2018 Montgomery County Bicycle Master Plan, sidepaths are planned on both sides of New Hampshire Avenue north of Northampton Drive.

The existing and planned bicycle facilities around the project site are shown in Figure 19.

Site Impacts

The project is expected to generate above 50 peak hour person trips. Based on the LATR guidelines, a bicycle system adequacy analysis is therefore required. However, because this is a Mandatory Referral application, no mitigations are required for any deficiencies in the bicycle network.

Bicycle System Adequacy

The bicycle system adequacy test requires that the Applicant identify any conditions where the Bicycle Level of Traffic Stress (BLTS) is above a BLTS score of two (2) “low stress”. The BLTS, like the PLOC, is a measure that quantifies the amount of discomfort that people feel due to vehicle traffic when they bicycle on different types of streets. The BLTS for a roadway segment is a number between zero (0) and five (5), where BLTS-0 represents no traffic stress present, such as on an off-street trail, and BLTS-5 represents a very high level of stress, such as on a high-speed road with no dedicated bicycle facilities. This score is determined through roadway characteristics such as the road’s speed limit, the presence of a center line, parking turnover, the presence of bike lanes and paths, and any physical separation between these lanes/paths and vehicular traffic. Wherever the BLTS is greater than two (2), improvements consistent with the Bicycle Master Plan were identified.

Bicycle System Adequacy Study Area

For any site generating 50+ net new peak-hour weekday person trips, a bicycle system adequacy test is required. The test requires that the applicant identify any conditions where the Bicycle Level of Traffic Stress (BLTS) is above a BLTS score of two (2) “low stress”. The BLTS, like the PLOC, is determined through roadway characteristics, such as the speed limit of the road, the presence of a center line, parking usage, and bike lanes/paths. The goal of the BLTS Review for a Mandatory Referral application is to identify any locations within the study area that are above a BLTS score of two (2) “low stress”, but not to propose any mitigations as these are not required for this type of application.

The Bicycle Adequacy study area is presented in Figure 20.

Bicycle System Adequacy Deficiencies

As part of the BLTS review, the score ratings available from the Montgomery County BLTS Database were confirmed through verification of sidewalk/sidepath widths and presence of on-street facilities. The resulting existing BLTS scores are shown in Figure 20.

Based on the Bicycle System Adequacy review, every roadway segment within the study area meets BLTS adequacy standards.

Figure 19: Existing and Proposed Bicycle Facilities

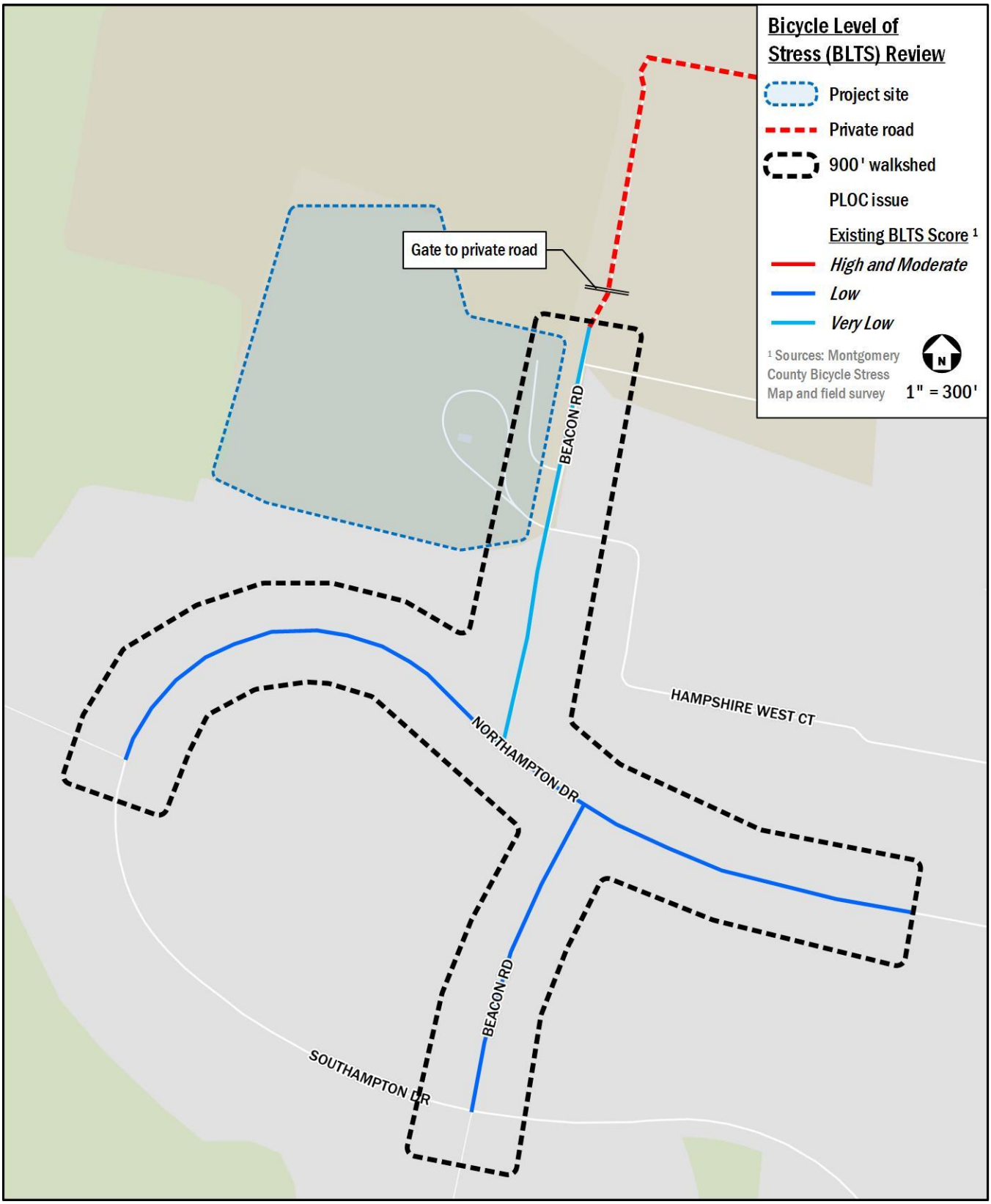


Figure 20: Bicycle Level of Stress (BLTS) Review

Section 7: Transit Facilities

This chapter discusses the existing transit facilities in the vicinity of the site, accessibility to transit, and evaluates the overall transit impacts of the project.

The following conclusions are reached within this chapter:

- The project site has access to regional and local transportation that will accommodate the school's existing and proposed student and staff populations.
- The project site has access to three (3) bus routes, including the Metrobus K6 route and Ride-On 20 and 24 routes.

Existing Transit Service

The project site has access to regional and local transit services such as Metrorail, Metrobus, and Montgomery County's Ride-On services. The site is located approximately 500 feet from a pair of bus stops on Northampton Drive servicing three (3) bus routes, including the Metrobus K6 route and /Ride-On 20 and 24 routes.

The Metrobus K6 route services the site-adjacent stops approximately five (5) times per hour in each direction during the school's AM commuter peak hour (7:45-8:45 AM), six (6) times per hour during the PM school peak hour (3:15-4:15 PM), and six (6) times per hour during the PM commuter peak hour (5:30-6:30 PM).

The Ride-On 20 route services the site-adjacent stops approximately two (2) to three (3) times per hour in each direction during the school's AM commuter peak hour (7:45-8:45 AM), three (3) to five (5) times per hour during the PM school peak hour (3:15-4:15 PM), and three (3) to four (4) times per hour during the PM commuter peak hour (5:30-6:30 PM).

The Ride-On 24 route is a weekday rush hours only route that services the site-adjacent stops approximately two (2) times per hour in the southbound direction during the school's AM commuter peak hour (7:45-8:45 AM), once per hour in the northbound direction during the PM school peak hour (3:15-4:15 PM), and twice per hour in the northbound direction during the PM commuter peak hour (5:30-6:30 PM).

Combined, these bus routes provide local and regional transit connections and link the site with major cultural, residential, employment, and commercial destinations throughout the region.

Figure 21 identifies the major transit routes and stops in the study area.

An inventory of the bus stop amenities within 1,300' of the site is provided in Table 8.

Site Impacts

The project is expected to generate above 50 peak hour person trips. Based on the LATR guidelines, a transit system adequacy analysis is therefore required. However, because this is a Mandatory Referral application, no mitigations are required for any deficiencies in the bicycle network

Bus Transit System Adequacy

The Bus Transit System Adequacy Test, required of only Red/Orange/Yellow policy areas, requires that the applicant identify the need for new bus shelters.

Bus Transit System Adequacy Study Area

The Bus Transit System Adequacy Study Area is determined by the site's policy area and peak-hour person trips generated. The study area is limited to the area just beyond a site's frontage. The number of shelters required also changes with these site characteristics.

Given the project site's location within an Orange Policy Area generating between 200 and 349 new trips during the peak hours, the Bus Transit System Adequacy study area is 1,300 feet beyond the site frontage, with three (3) shelters with Real-Time Transit Information (RTI) displays required. The Bus Transit Adequacy study area is shown on Figure 22.

Bus Transit System Adequacy Deficiencies and Improvement Priorities

Based on the Bus Transit System Adequacy review shown in Figure 22, adequate transit facilities are not available under existing conditions per the County standard of three (3) shelters with RTI displays within 1,300 feet beyond the site frontage. An inventory of the field verified bus stop amenities is provided in Table 8.

As shown in Table 8, there are three (3) bus stops with shelters within 1,300 feet beyond the site frontage, but none have RTI displays.

Table 8: Bus Stop Amenities Inventory

Location	Stop ID		Routes Served	Amenities								
	WMATA	Ride-On		Bus stop flag	Route map & sched-ule	Land-ing pad	Side-walk	Bench	Shel-ter	Real-time transit info	Light-ing	Trash Recp.
Northampton Dr & Avenel Rd (SB)	2000272	24612	K6, 20, 24	●			●				●	
Northampton Dr & Beacon Rd (NB)	2000271	24606	K6, 20, 24	●	●		●					
Northampton Dr & Beacon Rd (NB)	2000278	24604	K6, 20, 24	●		●	●				●	
Northampton Dr & Beacon Rd (SB)	2000274	24614	K6, 20, 24	●	●	●	●	●	●			●
Northampton Dr & Colony Rd (NB)	2000275	24602	K6, 20, 24	●	●	●	●				●	
Northampton Dr & Colony Rd (SB)	2000280	24616	K6, 20, 24	●		●	●	●	●		●	●
Southampton Dr & Beacon Rd (NB)	2000259	26130	K6, 20, 24	●	●	●	●					
Southampton Dr & Beacon Rd (SB)	2000258	26118	K6, 20, 24	●	●	●	●	●	●		●	●

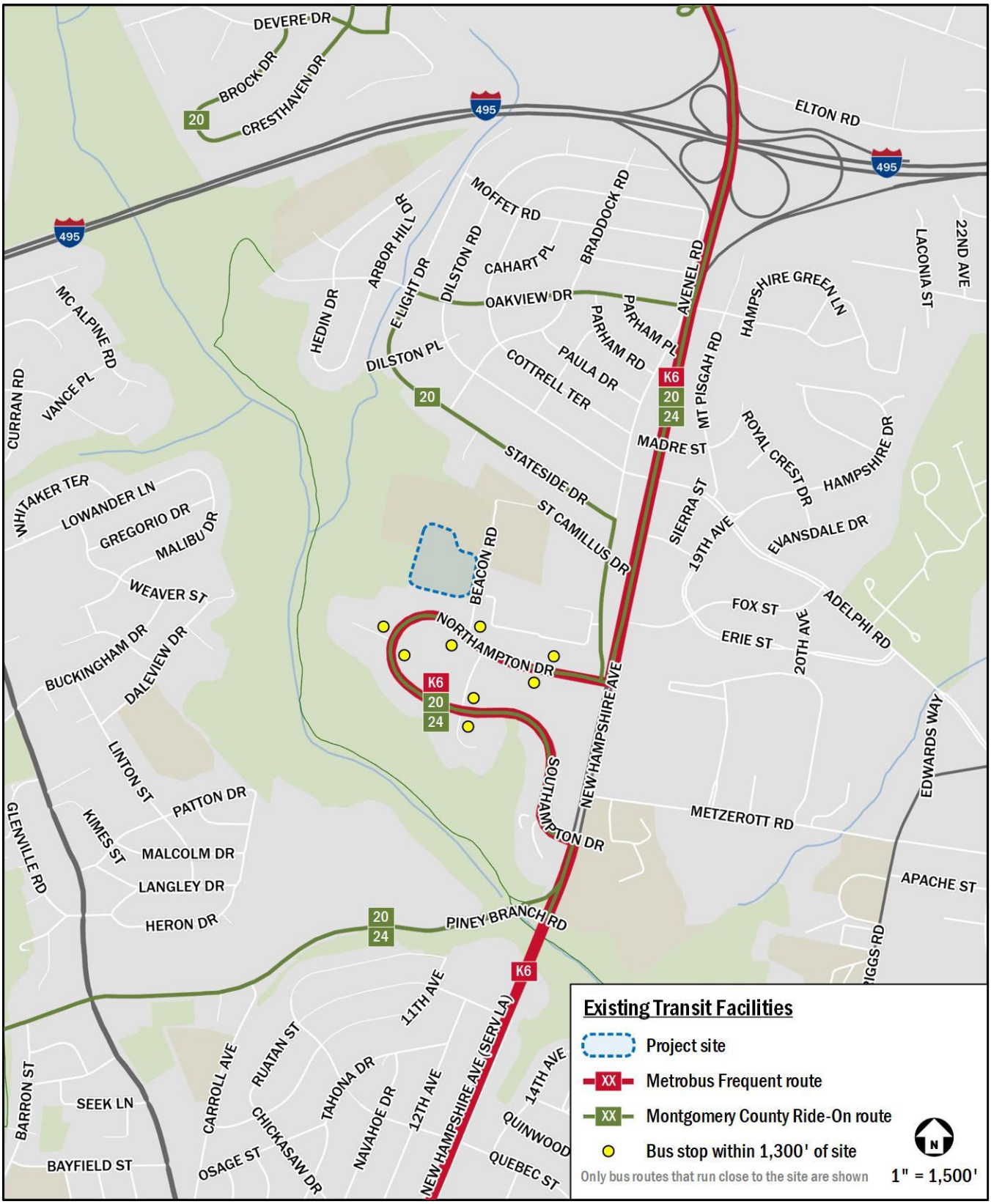


Figure 21: Existing Transit Facilities

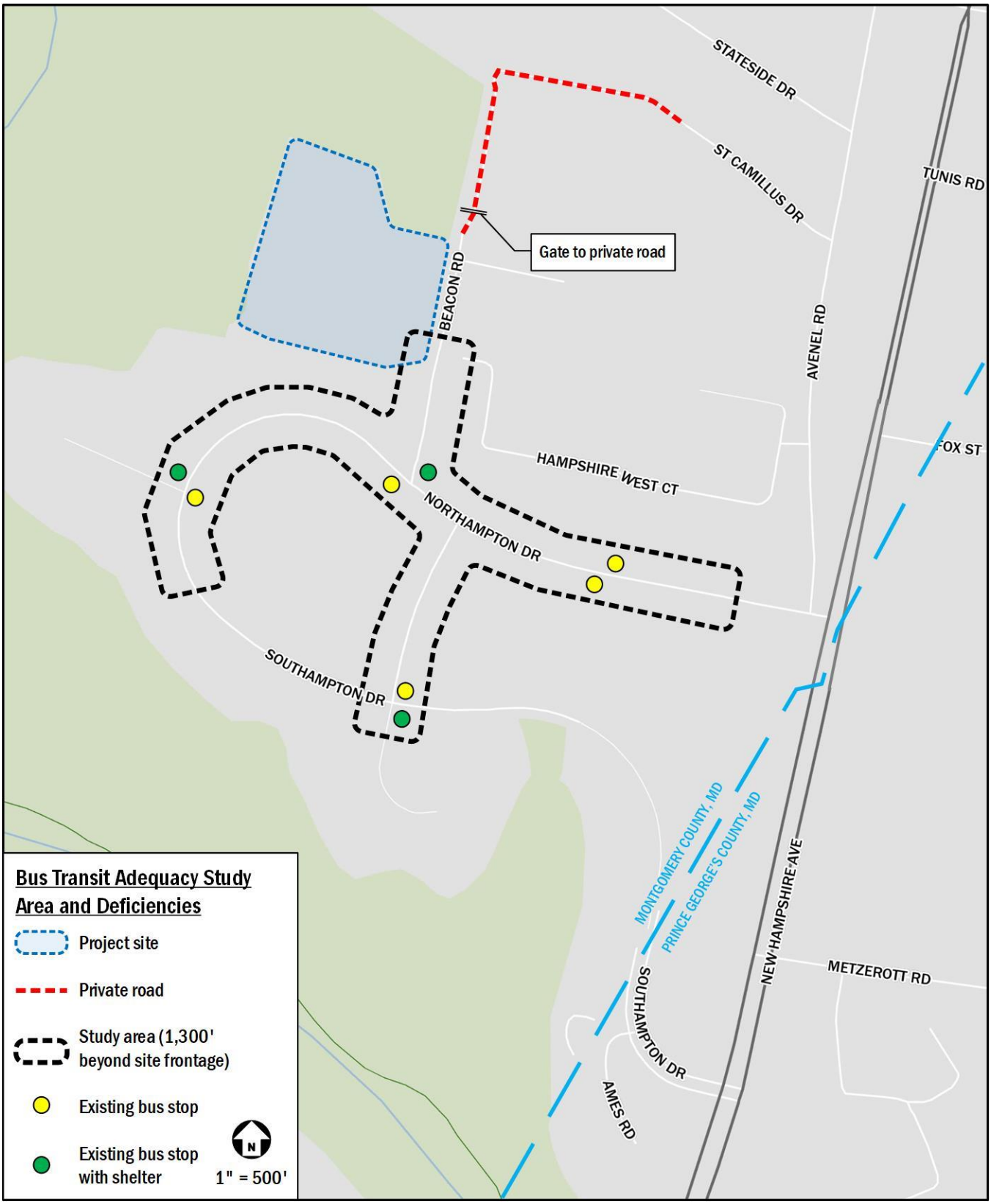


Figure 22: Bus Transit Adequacy Study Area & Deficiencies

Section 8: Vision Zero Statement

This chapter outlines the project's Vision Zero Statement. The purpose of this statement is to assess high-injury roadways and safety issues in the vicinity of the project site and propose solutions as needed. This chapter also reviews traffic speeds around the site and describes site access in relation to existing safety issues.

The following conclusions are reached within this chapter:

- The project site is not located within 900 feet of any roadway segments designated to be part of High Injury Network.
- The project site is not located within 900 feet of any Vision Zero Projects.
- Speed study findings show no study locations experiencing speeds exceeding the posted speed limit by 20 mph.

For any project generating 50+ net new peak-hour weekday person trips, a Vision Zero Statement must be developed with the project made of up the following:

- High Injury Network (HIN) Review to determine if the project is located within a specified proximity of any roadway segments with a designated HIN designation.
- Crash History Review to review crash data within a specified distance near the project site.
- Speed Studies within specified distance from the site frontage to document the average and 85th percentile speeds in the area along with the 10-mile per hour pace.
- Site Access and Circulation review to ensure the project access configuration promotes multimodal safety.

These are discussed in detail in the following sections.

High Injury Network Review

Given the project site's location within an Orange Policy Area and trip generation between 200 and 349 new trips during the peak hours, High Injury Network (HIN) segments within 900-foot walkshed beyond the site frontage must be documented and reviewed along with proposed solutions to identified issues.

The proposed project is not located within 900 feet of any designated HIN segments, but these segments are shown on Figure 23.

Vision Zero projects located within and outside the 900-foot walked are shown in Figure 23. There are no Vision Zero projects within the 900-foot walkshed.

Proximate Safety Issues

Using Montgomery County's Interactive Crash Map for crashes between January 2018 and December 2022, 18 crashes were reviewed within a 900-foot walkshed beyond the project site frontage, as well as within the school property itself. The reviewed crashes are shown in Figure 24. The reviewed collision data is summarized as follows:

- Every crash within the study area is classified as a "minor/no injury" crashes;
- No documented fatal crashes were recorded within the study area;
- None of the crashes involved a bicyclist; and
- One (1) of the crashes involved a pedestrian.

Speed Study

As part of the LATR Vision Zero Statement, speed studies were requested at the following locations:

- Beacon Road between Northampton Drive and the Leleck Elementary School driveway
- Northampton Drive between Beacon Road and New Hampshire Avenue
- Beacon Road between Northampton Drive and Southampton Drive
- Southampton Drive west of Beacon Road

The 48-hour speed data was collected on Wednesday, June 7 and Thursday, June 8, 2023. Schools were in session on the days data was collected. The collected speed data is included in the Technical Attachments.

Table 9 summarizes the observed speed data, including the 85th percentile speeds and the ADT for each observation day and each direction at the study location. Detailed speed data information is included in the Technical Attachments.

Based on the speed study results, none of the observed 85th percentile speed for any day or direction exceeds the posted speed by 20%. Therefore, per the 2023 LATR guidelines, further

investigation of speed management is not triggered at these study locations.

Site Access and Circulation

Access to the site is proposed to remain consistent with existing conditions. Pedestrian access to the site will continue to occur via Beacon Road. Crossings and sidewalks will be provided internally to facilitate circulation and pedestrian access. Vehicle and school bus access to the site will continue to occur via two (2) driveways from Beacon Road which will be reconstructed with the project, but remain in their current locations.

Sidewalks and crossings will provide accessible pathways for pedestrians and separate pedestrians from vehicular traffic within the school property. Striping and signage throughout the site will facilitate circulation.

A detailed plan of site access and circulation can be found in Figure 4.

Table 9: Speed Data Summary

Roadway	Approach	Posted Speed Limit	Day 1 (6/7/2023)		Day 2 (6/8/2023)	
			85th %	*ADT*	*85th %*	*ADT*
Beacon Road between Northampton Drive and Leleck ES driveway	NB	25 mph	20	716	21	746
	SB		21	774	21	754
Northampton Drive between Beacon Road and New Hampshire Avenue	EB	25 mph	27	2,918	27	3,008
	WB		26	2,409	26	2,451
Beacon Road between Northampton Drive and Southampton Drive	NB	25 mph	24	1,124	24	1,127
	SB		26	804	26	797
Southampton Drive west of Beacon Road	EB	25 mph	25	1,031	24	1,073
	WB		25	1,048	26	1,109

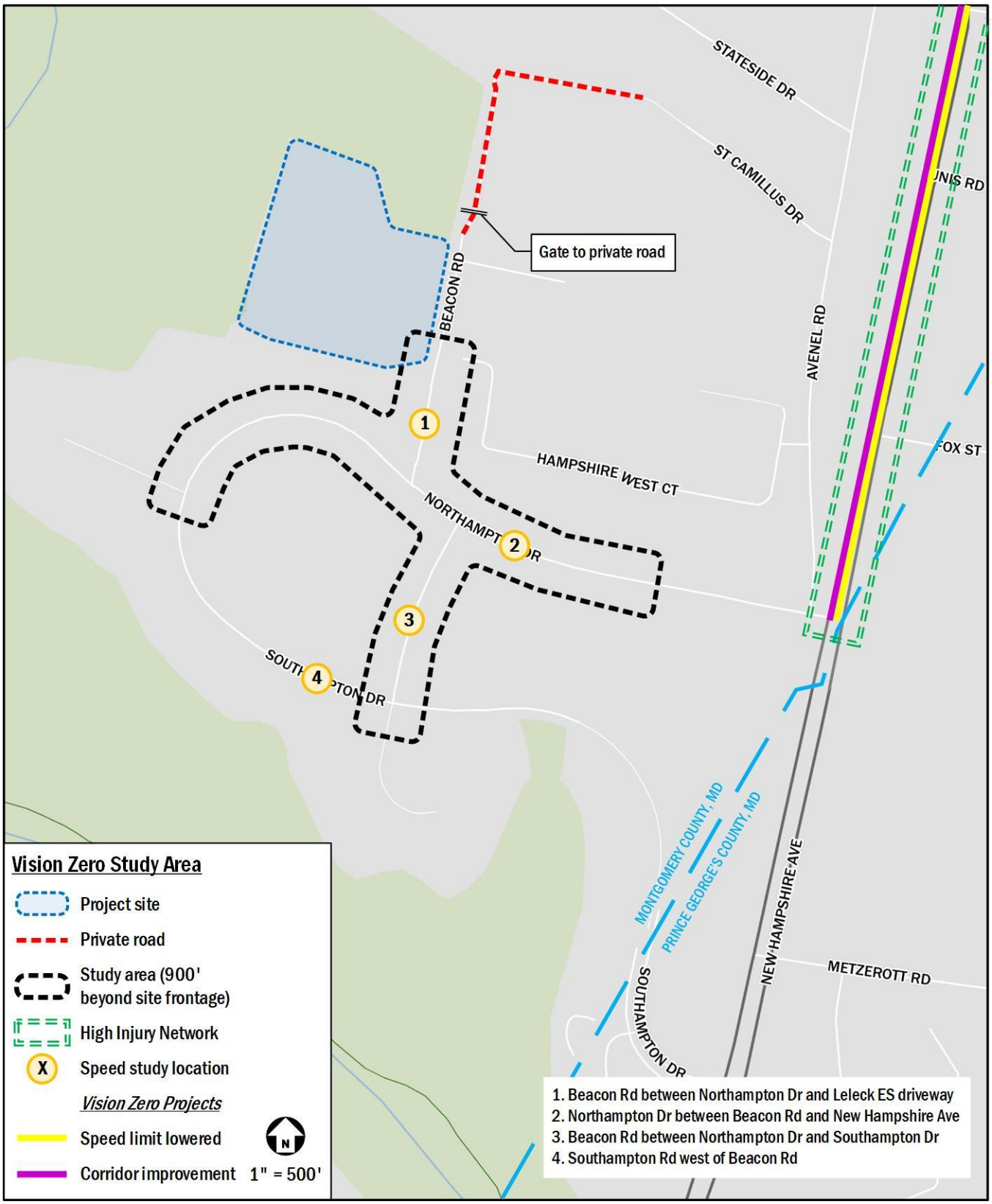


Figure 23: Vision Zero Study Area

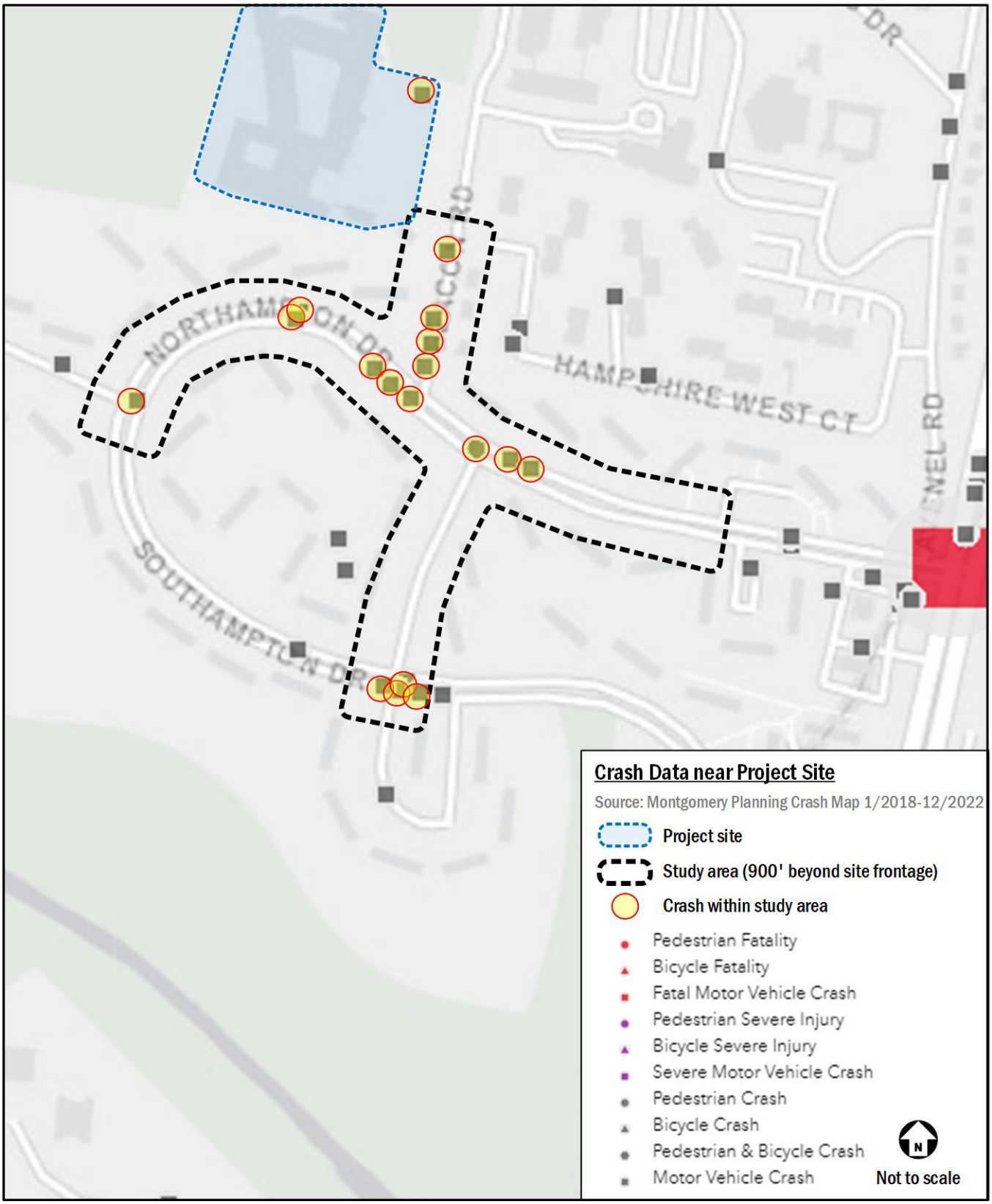


Figure 24: Crash Data near Project Site

Transportation Technical Attachments

JoAnn Leleck Elementary School

Montgomery County, Maryland

September 28, 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

MONTGOMERY COUNTY PLANNING DEPARTMENT
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

Local Area Transportation Review

TRANSPORTATION IMPACT STUDY SCOPE OF WORK AGREEMENT

September 2021

Scoping Approval - Prior to initiating a Local Area Transportation Review study or supplemental traffic study, scoping *must be approved* by relevant agencies, including the Planning Department, the Montgomery County Department of Transportation, and the State Highway Administration (where relevant). It is the responsibility of the Applicant to obtain approval, which is demonstrated below via signature or electronic signature of the relevant agency representatives. Generally, the Applicant should anticipate a turnaround time of ten (10) business days for form review. Substantially large projects may require additional time and/or may warrant a scoping meeting.

Montgomery County Planning Department
Name (print): Katie Mencarini Signature: Katherine Mencarini Date: 8/30/2023

Montgomery County Department of Transportation
Name (print): Rebecca Torma Signature: Rebecca Torma Date: 8/30/23

State Highway Administration (where relevant)
Name (print): Kwesi Woodroffe Signature: [signature] Date: 8/30/2023

Applicant Contact Information

Transportation Consultant (company, contact name, email, and phone number)	Will Zeid, PE Gorove/Slade Associates, Inc. william.zeid@goroveslade.com 571.466.6605
Name of Applicant / Developer	Montgomery County Public Schools (MCPS) Kenneth Futch, Division of Design and Construction

Project Information *Include Tables/Graphics, As Needed*

Project Name (include plan no. if known)	JoAnn Leleck Elementary School		
Project Location (include address if known)	710 Beacon Road Silver Spring, MD 20903		
Policy Area(s) (See Growth & Infrastructure Policy Area map T1[1])	Silver Spring/Takoma Park - Orange	Master Plan(s) / Sector Plan Area(s)	Silver Spring East 2020

[1] https://montgomeryplanning.org/wp-content/uploads/2020/11/20210101-Text-of-the-2020-2024-Growth-and-Infrastructure-Policy-with-Maps.pdf

Application Type(s)	☐ Preliminary Plan	☐ Site Plan	☐ Sketch/Concept/Pre-Preliminary (Optional)	☐ Amendment
	☐ Conditional Use (formerly special exception)	☐ Local Map Amendment	☐ APF at Building Permit	☑ Other: Mandatory Referral
Project Description & Previous Approvals (proposed land uses, zoning, no. of units, square footage, construction phasing, prior approvals and proposals, existing uses, site operations, year built, status of Adequate Public Facilities [APF], other relevant info)	The project includes expansion and renovations at the JoAnn Leleck Elementary School in Silver Spring. The project involves a Montgomery County Public School, which will be going through the Mandatory Referral process. The school's current enrollment is 799 students. The expansion will increase the school's capacity to approximately 925 students. The staff population is expected to increase from 138 to approximately 164 when the expansion is complete. The school's existing off-street parking supply is 65 spaces, which will remain after the expansion. The school has a relatively small boundary area and utilizes only three (3) buses, with most students reported as currently walking to the campus.			
1.Site Access (proposed access location(s), existing/adjacent/opposite curb cuts, interparcel connections, access configurations and restrictions, internal circulation, private roads, parking/loading areas, other relevant info)	Site access has existing access on Beacon Road with one (1) parking lot curb cut and one (1) bus loop curb cut. The reconfigured campus will continue to have one (1) parking lot curb cut and one (1) bus loop curb cut with both being reconstructed and repositioned to accommodate the new site layout. Parking and parent pick up and drop off will access via the parking lot curb cut and only bus traffic would use the bus loop.			
2.Transportation Analysis Requirement	☑ Transportation Impact Study Generates 50 or more total weekday peak hour person trips (vehicular, transit, bicycle, and/or pedestrian) with no reductions other than a credit for existing developments over 12 years old, *AND* is outside of the White Flint and White Oak Policy Areas. Fill out remainder of this form and include in transportation impact study appendix.		☐ Transportation Study Exemption Statement Generates 49 or fewer total weekday peak hour person trips (vehicular, transit, bicycle, and/or pedestrian) with no reductions other than a credit for existing developments over 12 years old, *OR* within White Flint and White Oak Policy Areas.	
3.Project-based Transportation Demand Management Plan Required (see Chapter 42, Articles I and II)	☑ No	☐ Yes (In Transportation Management District [TMD])	☐ Amend Existing TMAg	

4.Established Transportation Management District (TMD)?	☑ No	☐ Yes TMD Name:

Transportation Impact Study Assumptions	***Include Tables/Graphics, As Needed***	
5.Study Years / Phases	Existing Year: 2023	Phases / Build-out Year(s): 2026
6.Study Periods	☑ AM ☑ PM ☐ Mid-day ☐ Saturday ☐ Sunday ☑ Other: School Peak Hour (Dismissal) 3:00-4:00 PM	
7.Study Intersections (For projects generating 50 or more person trips, list all signalized & significant unsignalized intersections, and site driveways traffic counts **must be collected within 12- months of completed and accepted application**)	# of tiers of intersections to study (refer current LATR Guidelines): one in either direction (< 250 net weekday peak hour site vehicle trips) *For the purpose of determining the number of tiers of study intersections, trip calculation for the subject site should also include nearby unbuilt properties in common ownership. No trip reductions should be taken in this calculation other than a credit for existing developments over 12 years old.*	
	1. Beacon Road and Northampton Drive	2. New Hampshire Avenue and Northampton Drive
	3. New Hampshire Avenue and Southampton Drive	4. Beacon Road and School Bus Loop
	5. Beacon Road and School Parking Lot Driveway	
	6.	
	7.	
	8.	

8.Trip Generation	Total Person Trips Net New Person trips are based on vehicle trips detailed below Net New 242 AM/118 School PM/35 Commuter PM	Vehicle Trips* (Auto Driver) Net New 23 AM/14 School PM/3 Commuter PM	Transit Trips* Net New 0 AM/0 School PM/0 Commuter PM	Walking Trips* (non-motorized + transit) Net New 184 AM/89 School PM/32 Commuter PM	Bicycling Trips* (non-motorized) Net New 0 AM/0 School PM/0 Commuter PM

(Clearly cite sources and methodology including use of ITE average rates vs. equation; include trip generation for existing site, current approvals, proposed uses, and net changes. Show calculations in the cells to the right of this box.)

Trip generation was estimated using a school demand assumptions model, which creates an hourly multimodal demand model using the following information received from the school:

- Mode split estimates (students and staff)
- Distribution of arrivals and departures relative to bell times (students and staff)
    - These distributions account for school hours of approximately 8:45am-3:30pm, as well as various after-school activities ending at approximately 4:45pm and 6:00pm.
- Average persons per vehicle (students and staff)

The Attachments include the school demand assumptions, distribution of arrivals and departures relative to the three (3) peak hours, and a detailed peak hour trip generation summary for both the existing and proposed school.

9. Multi-modal Intersection Counts	Are new counts being collected in support of this study?* Yes, new multimodal intersection counts will be collected in May of 2023. Are historical counts being used in support of this study? No **Refer to the LATR Guidelines for the procedures pertaining to the collection of multi-modal (i.e., motor vehicle, bicycle and pedestrian) intersection counts. Generally, counts are acceptable when they are less than one year old at the time a transportation study is submitted.*
10.Trip Reductions	Mode split estimates have been provided by the existing school. These mode splits have been

(include justification and supporting documentation for internal capture, pass-by, diverted, Transportation Demand Management)	used to inform the trip generation methodology listed above. The school-provided mode split estimates are as follows: - Students: 4% drive, 0% transit, 73% walk, 0% bike, 23% school bus - Staff: 98% drive, 1% transit, 0% walk, 1% bike These mode splits reflect existing conditions at the school, in which: - There is a fairly small school enrollment boundary which does not require many students to cross a major roadway (New Hampshire Avenue); - Most students walk to school; and - There are 3 school buses, each carrying approximately 50 students, whose routes will be maintained after the expansion.
11.Trip Distribution % (include a map of the proposed project in addition to a list or table)	☑ A map is attached. Distributions for the proposed school's students (parents/caregivers) are based on the school enrollment boundary (which is shown in the Attachments) and general distribution of residential units within the area. The student distributions are as follows for the AM commuter, PM school, and PM commuter peak hours: Inbound: New Hampshire Avenue from the north: 7% / 36% / 36% New Hampshire Avenue from the south: 3% / 14% / 14% St. Camillus Drive from the east: 20% / 10% / 10% Northampton Drive from the west: 25% / 15% / 15% Northampton Drive/Beacon Road from the southeast: 40% / 20% / 20% Adelphi Road from the east: 5% / 5% / 5% Outbound: New Hampshire Avenue to the north: 36% / 7% / 7% New Hampshire Avenue to the south: 14% / 3% / 3% St. Camillus Drive to the east: 10% / 20% / 20% Northampton Drive to the west: 15% / 25% / 25% Northampton Drive/Beacon Road to the southeast: 20% / 40% / 40% Adelphi Road to the east: 5% / 5% / 5% Distributions for the proposed school's staff are based on Appendix Table 2-4 of the M-NCPPC LATR Guidelines. The staff distributions are as follows for the AM commuter, PM school, and PM commuter peak hours: Inbound: New Hampshire Avenue from the north: 72% / 72% / 72% New Hampshire Avenue from the south: 28% / 28% / 28% Outbound: New Hampshire Avenue to the north: 72% / 72% / 72% New Hampshire Avenue to the south: 28% / 28% / 28%
12.Pipeline Developments to be considered as background traffic (include name, plan #, land uses, and sizes for approved but unbuilt developments or concurrently pending applications; info can be	1. Hillandale Gateway (120190220): 463 multi-family DU, 16,039 SF retail 2. Park Montgomery (820220020): 217 multi-family DU 3. Long Branch Corner (120180090): 8 multi-family DU, 7,123 SF retail

obtained from the M-NCPPC Pipeline website: - website is updated quarterly)	
13.Pipeline Transportation Projects to be considered as background condition (fully funded for construction in County Capital Improvement Program, State Consolidated Transportation Program, developer projects, etc. within the next 6 years)	No programmed improvements were identified within the study area.
14. Vision Zero Statement (Include maps depicting the scope of the various Vision Zero Statement scoping requirements.)	• Trigger: All LATR studies for a site that generates 50 or more weekday peak hour person trips must develop a Vision Zero Statement. • Requirements: The Vision Zero Statement consists of four components: 1. **Review High Injury Network segments:** Document any segments on the High Injury Network (HIN) that are within a certain distance of the site frontage. 2. **Assess proximate safety issues:** Review the crash history for all segments and crossings within a certain distance of the site frontage. 3. **Review traffic speeds:** Conduct speed studies within a certain distance from the site frontage. 4. **Describe site access:** Address the safety issues identified in steps 1 through 3 and describe how site circulation promotes safety, outlining how safe access will be provided to the site. The applicant should refer to the *LATR Guidelines* to determine the applicable scoping distance pertaining to steps 1 through 3 and requirements pertaining to steps 1 through 4 above. ☑ Maps are attached. Per the updated GIP Vision Zero requirements, up to four (4) speed studies may be required within 750' of the site frontage. The location of any required speed studies will be coordinated with Staff. Speed studies are proposed at the following locations: • Beacon Road between Leleck ES and Northampton Drive • Northampton Drive between Beach Road and New Hampshire Avenue • Beacon Road between Northampton Drive and Southampton Drive • Southampton Drive west of Beacon Road

Preliminary Mitigation Analysis		***Refer to the LATR Guidelines for details on how to mitigate***
15.Vehicular Analysis	☑ Vehicular Analysis Anticipated (Vehicular mitigation to be	• TEST: The motor vehicle adequacy test will not be applied in "Red" policy areas and these areas will not be subject to LATR motor vehicle mitigation requirements. If the plan generates 50 or more weekday peak hour person trips, HCM Analysis is required to be provided for all

(Include a map depicting the location of the study area intersections.)	determined after study). ☑ A map is attached.	intersections analyzed in studies for: 1) "Orange" policy areas, and 2) intersections with a CLV of more than 1,350 in "Yellow & Green" policy areas. 3) **With the exception of intersections located within "Red" policy areas, CLV analysis required for all intersections regardless of policy area. CLV assessment and signal timing worksheets are to be included in the study appendix.** • MITIGATION: Because this is a Mandatory Referral application, no mitigations are required, regardless of the vehicular analysis results.
16.Pedestrian Analysis (Include a map depicting the scope of the applicable walkshed distance requirement.)	☐ Pedestrian Mitigation Anticipated ☑ A map is attached.	• TEST: If the plan generates 50 or more weekday peak hour person trips, analysis of surrounding pedestrian conditions is required. ANALYSIS: Analysis consists of three components: (1) **Pedestrian Level of Comfort (PLOC).** Pedestrian system adequacy is defined by providing a "Somewhat Comfortable" or "Very Comfortable PLOC score on streets and intersections for roads classified as Primary Residential or higher within a certain walkshed from the site. Because this is a Mandatory Referral application, no mitigations of PLOC deficiencies are required. (2) **Street Lighting.** The applicant must evaluate existing street lighting based on MCDOT standards along roadways and paths from the development within a certain walkshed from the site frontage. Because this is a Mandatory Referral application, no mitigations of street lighting are required. (3) **ADA Compliance.** The applicant must analyze ADA noncompliance issues within a certain walkshed from the site frontage equivalent to half the walkshed specified in the required scoping distance. Because this is a Mandatory Referral application, no mitigations of ADA deficiencies are required. The applicant should refer to the *LATR Guidelines* to determine the applicable scoping walkshed distance requirement for each component described above. Record walkshed distance here: 900 feet Per Montgomery County's Uniform Standards for Mandatory Referral Review, the study will include a Pedestrian and Bicycle Safety Impact Statement that includes an analysis of the effect of the project on pedestrian and bicyclist access and safety, specifically relating to the County's Vision Zero Initiative and the approved Complete Streets Design Guide, and the identification of any capital and/or operating modifications that may be required to promote and maximize safe pedestrian and bicyclist access on the project site and in the surrounding area.
17.Bicycle Analysis (Include a map depicting the scope of the applicable bicycle scoping requirement.)	☐ Bicycle Mitigation Anticipated ☑ A map is attached.	• TEST: If the plan generates 50 or more peak hour weekday person trips mitigation of surrounding bicycle conditions is required • ANALYSIS: An analysis of bicycle Level of Traffic Stress will be performed on all existing transportation rights-of-way within a certain distance of the site frontage. The applicant should refer to the *LATR Guidelines* to determine the applicable scoping distance requirement. Record scoping distance here: 900 feet Per Montgomery County's Uniform Standards for Mandatory Referral Review, the study will include a Pedestrian and Bicycle Safety Impact Statement that includes an analysis of the effect of the

		project on pedestrian and bicyclist access and safety, specifically relating to the County's Vision Zero Initiative and the approved Complete Streets Design Guide, and the identification of any capital and/or operating modifications that may be required to promote and maximize safe pedestrian and bicyclist access on the project site and in the surrounding area.
18.Bus Transit Analysis	☐ Transit Mitigation Anticipated ☑ A map is attached.	• TEST: If the plan generates 50 or more peak hour person trips mitigation of surrounding transit conditions is required. Projects located within "Green" policy areas are exempt from the bus transit adequacy test. • ANALYSIS: The report will determine whether there are bus shelters outfitted with realtime traveler information displays and other standard amenities, along with a safe, efficient, and accessible path between the site and a bus stop, at a certain number of bus stops within a certain distance from the site. The applicant should refer to the *LATR Guidelines* to determine the applicable number of bus stop and scoping distance requirement. Record scoping distance here: 1,300 feet Record the applicable number of bus shelters here: 3 Shelters
Additional Analysis or Software Required	☐ Queuing Analysis ☐ Signal Warrant Analysis ☐ Weaving/Merge Analysis	☐ Accident Analysis ☑ Synchro ☐ SIDRA ☐ VISSIM ☐ CORSIM ☐ Other _____

M-NCPPC Clarifications	**Additional Assumptions & Special Circumstances for Discussion**
• **Transportation impact study will comply** with all other requirements of the LATR Guidelines not listed on this form. • **If physical improvements are proposed as mitigation**, the transportation impact study will demonstrate feasibility with regards to right-of-way and utility relocation (at a minimum). • **If the development proposal significantly changes after this transportation impact study** scope has been agreed to, the Applicant will work with M-NCPPC staff to amend the scope to accurately reflect the new proposal. • **A receipt from MCDOT** showing that the transportation impact study review fee has been paid will be provided to M-NCPPC DARC at the time the development application is submitted. • **An electronic copy of the transportation impact study** and appendices will be provided to Planning Department and MCDOT in electronic format. * * At the time of this document's publication, the Planning Department is accepting plan applications electronically using the E-Plans platform: (https://montgomeryplanning.org/resources/eplans-applicant-user-guide/)	

B. Detailed Trip Generation Calculations

Travel Demand Assumptions: Existing School

Metrics	Existing Leleck ES
School Profile	
Jurisdiction	Montgomery County, MD
School Type	Elementary School
Student Population	
Total Students	778

Student Transportation Demand

Mode Split	% of Students	# of Students
Drive and Park	0%	0
Drive in Drop-Off	4%	31
Passenger in Car that Parks	0%	0
Public Transportation	0%	0
Walk	73%	568
Bike	0%	0
School Bus	23%	179
	100.0%	**778**

Average number of students in drop-off vehicle	1.3
Number of vehicles	24

School Day

Before Care Start Time	N/A
School Start Time	8:45 AM
School End time	3:30 PM
Excel Beyond the Bell after-school activity end time	4:45 PM
CARES tutoring after-school activity end time	6:00 PM

Distribution of Student Arrivals/Departures

Arrival Time		IB	OB	IB	OB
75 - 90 minutes before bell time	7:15 AM	0%	0%	0	0
60 - 75 minutes before bell time	7:30 AM	0%	0%	0	0
45 - 60 minues before bell time	7:45 AM	10%	10%	2	2
30 - 45 minutes before bell time	8:00 AM	15%	15%	4	4
15 - 30 minutes before bell time	8:15 AM	30%	30%	7	7
0 - 15 minutes before bell time	8:30 AM	30%	30%	7	7
0 - 15 minutes after bell time	8:45 AM	10%	10%	2	2
15 - 30 minutes after bell time	9:00 AM	5%	5%	1	1
30 - 45 minutes after bell time	9:15 AM	0%	0%	0	0
		100%	100%		
% arriving/departing during AM peak hour		**85%**	**85%**		

Departure Time		IB	OB	IB	OB
30 - 45 minutes before bell time	2:45 PM	0%	0%	0	0
15 - 30 minutes before bell time	3:00 PM	10%	10%	2	2
0 - 15 minutes before bell time	3:15 PM	15%	15%	4	4
0 - 15 minutes after bell time	3:30 PM	15%	15%	4	4
15 - 30 minutes after bell time	3:45 PM	15%	15%	4	4
30 - 45 minutes after bell time	4:00 PM	5%	5%	1	1
45 - 60 minutes after bell time	4:15 PM	5%	5%	1	1
60 - 75 minutes after bell time	4:30 PM	3%	3%	1	1
75 - 90 minutes after bell time	4:45 PM	5%	5%	1	1
90 - 105 minutes after bell time	5:00 PM	3%	3%	1	1
105 - 120 minutes after bell time	5:15 PM	2%	2%	0	0
120 - 135 minutes after bell time	5:30 PM	1%	1%	0	0
135 - 150 minutes after bell time	5:45 PM	5%	5%	1	1
150 - 165 minutes after bell time	6:00 PM	7%	7%	2	2
165 - 180 minutes after bell time	6:15 PM	4%	4%	1	1
180 - 195 minutes after bell time	6:30 PM	3%	3%	1	1
195 - 210 minutes after bell time	6:45 PM	2%	2%	0	0
210 - 225 minutes after bell time	7:00 PM	0%	0%	0	0
225 - 240 minutes after bell time	7:15 PM	0%	0%	0	0
240 - 255 minutes after bell time	7:30 PM	0%	0%	0	0
255 - 270 minutes after bell time	7:45 PM	0%	0%	0	0
		100%	100%		
		IB	OB		
% arriving/departing during PM school peak hour		**40%**	**40%**		
% arriving/departing during PM commuter peak hour		**11%**	**11%**		

Employee Population

Population Breakdown

Teachers	138
Staff	0
Other	0
Total	138

Employee Transportation Demand

Mode Split	% of Staff	# of Staff
Drive and Park	98.0%	135
Drop-off (Alone)	-	
Public Transportation	1.0%	1
Walk	0.0%	0
Bike	1.0%	1
Reside on campus	0.0%	0
	100.0%	138

Average number of staff in carpool 1.1

Number of vehicles 123

School Day

Before Care Start Time	-
School Start time	8:45 AM

School End time	3:30 PM
Excel Beyond the Bell after-school activity end time	4:45 PM
CARES tutoring after-school activity end time	6:00 PM

Distribution of Employee Arrivals/Departures

Arrival Time		IB	OB	IB	OB
75 - 90 minutes before bell time	7:15 AM	4%	0%	5	0
60 - 75 minutes before bell time	7:30 AM	8%	0%	10	0
45 - 60 minues before bell time	7:45 AM	15%	0%	18	0
30 - 45 minutes before bell time	8:00 AM	52%	0%	64	0
15 - 30 minutes before bell time	8:15 AM	8%	0%	10	0
0 - 15 minutes before bell time	8:30 AM	7%	0%	9	0
0 - 15 minutes after bell time	8:45 AM	6%	0%	7	0
15 - 30 minutes after bell time	9:00 AM	0%	0%	0	0
30 - 45 minutes after bell time	9:15 AM	0%	0%	0	0
		100%			
		IB	OB		
% arriving/departing during AM peak hour		**82%**	**0%**		

Distribution of Employee Arrivals/Departures (cont'd)

	Departure Time	IB	OB	IB	OB
30 - 45 minutes before bell time	2:45 PM	0%	0%	0	0
15 - 30 minutes before bell time	3:00 PM	0%	0%	0	0
0 - 15 minutes before bell time	3:15 PM	0%	0%	0	0
0 - 15 minutes after bell time	3:30 PM	0%	5%	0	6
15 - 30 minutes after bell time	3:45 PM	0%	11%	0	14
30 - 45 minutes after bell time	4:00 PM	0%	30%	0	37
45 - 60 minutes after bell time	4:15 PM	0%	10%	0	12
60 - 75 minutes after bell time	4:30 PM	0%	8%	0	10
75 - 90 minutes after bell time	4:45 PM	0%	8%	0	10
90 - 105 minutes after bell time	5:00 PM	0%	5%	0	6
105 - 120 minutes after bell time	5:15 PM	0%	5%	0	6
120 - 135 minutes after bell time	5:30 PM	0%	3%	0	4
135 - 150 minutes after bell time	5:45 PM	0%	3%	0	4
150 - 165 minutes after bell time	6:00 PM	0%	3%	0	4
165 - 180 minutes after bell time	6:15 PM	0%	9%	0	11
180 - 195 minutes after bell time	6:30 PM	0%	0%	0	0
195 - 210 minutes after bell time	6:45 PM	0%	0%	0	0
210 - 225 minutes after bell time	7:00 PM	0%	0%	0	0
225 - 240 minutes after bell time	7:15 PM	0%	0%	0	0
240 - 255 minutes after bell time	7:30 PM	0%	0%	0	0
255 - 270 minutes after bell time	7:45 PM	0%	0%	0	0
		100%			
		IB	OB		
% arriving/departing during PM school peak hour		**0%**	**56%**		
% arriving/departing during PM commuter peak hour		**0%**	**16%**		

Existing School Peak Hour Arrivals and Departures

	Students [1]	Staff
Population	**778**	**138**
% arriving during AM commuter peak hour	85%	82%
Total arriving during AM commuter peak hour	**661**	**113**
% departing during PM school peak hour	40%	56%
Total departing during PM school peak hour	**311**	**77**
% departing during PM commuter peak hour	11%	16%
Total departing during PM commuter peak hour	**86**	**22**

[1] This table accounts only for the number of students arriving and departing during peak hours. Trips taken by parents/caregivers are added based on student trips on the Trip Generation Summary Comparison table on the following page.

Travel Demand Assumptions: Proposed School

Metrics	Propsoed Leleck ES
School Profile	
Jurisdiction	Montgomery County, MD
School Type	Elementary School
Student Population	
Total Students	925

Student Transportation Demand

Mode Split	% of Students	# of Students
Drive and Park	0%	0
Drive in Drop-Off	4%	37
Passenger in Car that Parks	0%	0
Public Transportation	0%	0
Walk	73%	675
Bike	0%	0
School Bus	23%	213
	100.0%	**925**

Average number of students in drop-off vehicle	1.3
Number of vehicles	28

School Day

Before Care Start Time	N/A
School Start Time	8:45 AM
School End time	3:30 PM
Excel Beyond the Bell after-school activity end time	4:45 PM
CARES tutoring after-school activity end time	6:00 PM

Distribution of Student Arrivals/Departures

Arrival Time		IB	OB	IB	OB
75 - 90 minutes before bell time	7:15 AM	0%	0%	0	0
60 - 75 minutes before bell time	7:30 AM	0%	0%	0	0
45 - 60 minues before bell time	7:45 AM	10%	10%	3	3
30 - 45 minutes before bell time	8:00 AM	15%	15%	4	4
15 - 30 minutes before bell time	8:15 AM	30%	30%	9	9
0 - 15 minutes before bell time	8:30 AM	30%	30%	9	9
0 - 15 minutes after bell time	8:45 AM	10%	10%	3	3
15 - 30 minutes after bell time	9:00 AM	5%	5%	1	1
30 - 45 minutes after bell time	9:15 AM	0%	0%	0	0
		100%	100%		
% arriving/departing during during AM peak hour		**85%**	**85%**		

Departure Time		IB	OB	IB	OB
30 - 45 minutes before bell time	2:45 PM	0%	0%	0	0
15 - 30 minutes before bell time	3:00 PM	10%	10%	3	3
0 - 15 minutes before bell time	3:15 PM	15%	15%	4	4
0 - 15 minutes after bell time	3:30 PM	15%	15%	4	4
15 - 30 minutes after bell time	3:45 PM	15%	15%	4	4
30 - 45 minutes after bell time	4:00 PM	5%	5%	1	1
45 - 60 minutes after bell time	4:15 PM	5%	5%	1	1
60 - 75 minutes after bell time	4:30 PM	3%	3%	1	1
75 - 90 minutes after bell time	4:45 PM	5%	5%	1	1
90 - 105 minutes after bell time	5:00 PM	3%	3%	1	1
105 - 120 minutes after bell time	5:15 PM	2%	2%	1	1
120 - 135 minutes after bell time	5:30 PM	1%	1%	0	0
135 - 150 minutes after bell time	5:45 PM	5%	5%	1	1
150 - 165 minutes after bell time	6:00 PM	7%	7%	2	2
165 - 180 minutes after bell time	6:15 PM	4%	4%	1	1
180 - 195 minutes after bell time	6:30 PM	3%	3%	1	1
195 - 210 minutes after bell time	6:45 PM	2%	2%	1	1
210 - 225 minutes after bell time	7:00 PM	0%	0%	0	0
225 - 240 minutes after bell time	7:15 PM	0%	0%	0	0
240 - 255 minutes after bell time	7:30 PM	0%	0%	0	0
255 - 270 minutes after bell time	7:45 PM	0%	0%	0	0
		100%	100%		
		IB	OB		
% arriving/departing during PM school peak hour		**40%**	**40%**		
% arriving/departing during PM commuter peak hour		**11%**	**11%**		

Employee Population

Population Breakdown

Teachers	164
Staff	0
Other	0
Total	164

Employee Transportation Demand

Mode Split	% of Staff	# of Staff
Drive and Park	98.0%	161
Drop-off (Alone)	-	
Public Transportation	1.0%	2
Walk	0.0%	0
Bike	1.0%	2
Reside on campus	0.0%	0
	100.0%	164

Average number of staff in carpool 1.1

Number of vehicles 146

School Day

Before Care Start Time	-
School Start time	8:45 AM

School End time	3:30 PM
Excel Beyond the Bell after-school activity end time	4:45 PM
CARES tutoring after-school activity end time	6:00 PM

Distribution of Employee Arrivals/Departures

Arrival Time		IB	OB	IB	OB
75 - 90 minutes before bell time	7:15 AM	4%	0%	6	0
60 - 75 minutes before bell time	7:30 AM	8%	0%	12	0
45 - 60 minues before bell time	7:45 AM	15%	0%	22	0
30 - 45 minutes before bell time	8:00 AM	52%	0%	76	0
15 - 30 minutes before bell time	8:15 AM	8%	0%	12	0
0 - 15 minutes before bell time	8:30 AM	7%	0%	10	0
0 - 15 minutes after bell time	8:45 AM	6%	0%	9	0
15 - 30 minutes after bell time	9:00 AM	0%	0%	0	0
30 - 45 minutes after bell time	9:15 AM	0%	0%	0	0
		100%			
		IB	OB		
% arriving/departing during AM peak hour		**82%**	**0%**		

Distribution of Employee Arrivals/Departures (cont'd)

	Departure Time	IB	OB	IB	OB
30 - 45 minutes before bell time	2:45 PM	0%	0%	0	0
15 - 30 minutes before bell time	3:00 PM	0%	0%	0	0
0 - 15 minutes before bell time	3:15 PM	0%	0%	0	0
0 - 15 minutes after bell time	3:30 PM	0%	5%	0	7
15 - 30 minutes after bell time	3:45 PM	0%	11%	0	16
30 - 45 minutes after bell time	4:00 PM	0%	30%	0	44
45 - 60 minutes after bell time	4:15 PM	0%	10%	0	15
60 - 75 minutes after bell time	4:30 PM	0%	8%	0	12
75 - 90 minutes after bell time	4:45 PM	0%	8%	0	12
90 - 105 minutes after bell time	5:00 PM	0%	5%	0	7
105 - 120 minutes after bell time	5:15 PM	0%	5%	0	7
120 - 135 minutes after bell time	5:30 PM	0%	3%	0	4
135 - 150 minutes after bell time	5:45 PM	0%	3%	0	4
150 - 165 minutes after bell time	6:00 PM	0%	3%	0	4
165 - 180 minutes after bell time	6:15 PM	0%	9%	0	13
180 - 195 minutes after bell time	6:30 PM	0%	0%	0	0
195 - 210 minutes after bell time	6:45 PM	0%	0%	0	0
210 - 225 minutes after bell time	7:00 PM	0%	0%	0	0
225 - 240 minutes after bell time	7:15 PM	0%	0%	0	0
240 - 255 minutes after bell time	7:30 PM	0%	0%	0	0
255 - 270 minutes after bell time	7:45 PM	0%	0%	0	0
		100%			
		IB	OB		
% arriving/departing during PM school peak hour		**0%**	**56%**		
% arriving/departing during PM commuter peak hour		**0%**	**16%**		

Proposed School Peak Hour Arrivals and Departures

	Students [1]	Staff
Population	**925**	**164**
% arriving during AM commuter peak hour	85%	82%
Total arriving during AM commuter peak hour	**786**	**134**
% departing during PM school peak hour	40%	56%
Total departing during PM school peak hour	**370**	**92**
% departing during PM commuter peak hour	11%	16%
Total departing during PM commuter peak hour	**102**	**26**

[1] This table accounts only for the number of students arriving and departing during peak hours. Trips taken by parents/caregivers are added based on student trips on the Trip Generation Summary Comparison table on the following page.

Trip Generation Summary Comparison

Trip Type	Adjustments	AM Commuter Peak Hour			PM School Peak Hour			PM Commuter Peak Hour		
		In	Out	Total	In	Out	Total	In	Out	Total
Existing School										
778 students										
Existing Total Student Trips	**778 Students**	**661**	**0**	**661**	**0**	**311**	**311**	**0**	**86**	**86**
		85% Arrive in AM Peak Hour			*40% Depart in School PM Peak Hour*			*11% Depart in PM Peak Hour*		
Existing Auto Driver Trips (Parents/Caregivers) [1]	4% mode split	20	0	20	0	10	10	0	3	3
Existing Auto Passenger Trips (Students)	1.3 students/vehicle	26	0	26	0	13	13	0	4	4
Existing Transit Trips	0% mode split	0	0	0	0	0	0	0	0	0
Existing Bicycling Trips	0% mode split	0	0	0	0	0	0	0	0	0
Existing School Bus Trips	Approx. 50 students/bus w/ 3 buses (23% mode split)	150	0	150	0	71	71	0	0	0
			23% mode split			*23% mode split*			*0% mode split*	
Existing Walking Trips		485	0	485	0	227	227	0	82	82
			73% mode split			*73% mode split*			*96% mode split*	
Parents/Caregivers Accompanying Walking Child	0.5 parents/caregivers per child	243	243	486	114	114	228	41	41	82
Existing Student + Parent/Caregiver Person Trips (All Modes)		**925**	**243**	**1,167**	**115**	**435**	**549**	**42**	**130**	**171**
138 staff										
Existing Total Staff Trips	**138 Staff**	**113**	**0**	**113**	**0**	**77**	**77**	**0**	**22**	**22**
		82% Arrive in AM Peak Hour			*56% Depart in School PM Peak Hour*			*16% Depart in PM Peak Hour*		
Existing Auto Driver Trips	98% mode split	101	0	101	0	69	69	0	20	20
Existing Auto Passenger Trips	1.1 staff/vehicle	10	0	10	0	7	7	0	2	2
Existing Transit Trips	1% mode split	1	0	1	0	1	1	0	0	0
Existing Bicycling Trips	1% mode split	1	0	1	0	1	1	0	0	0
Existing Walking Trips	0% mode split	0	0	0	0	0	0	0	0	0
Existing Staff Person Trips (All Modes)		**113**	**0**	**113**	**0**	**78**	**78**	**0**	**22**	**22**
Existing Student + Parent/Caregiver + Staff Person Trips (All Modes)		**1,038**	**243**	**1,280**	**115**	**513**	**627**	**42**	**152**	**193**
Existing Total Vehicle Trips		**121**	**0**	**121**	**0**	**79**	**79**	**0**	**23**	**23**
Proposed School										
925 students										
Proposed Total Student Trips	**925 Students**	**786**	**0**	**786**	**0**	**370**	**370**	**0**	**102**	**102**
		85% Arrive in AM Peak Hour			*40% Depart in School PM Peak Hour*			*11% Depart in PM Peak Hour*		
Proposed Auto Driver Trips (Parents/Caregivers)	4% mode split	24	0	24	0	11	11	0	3	3
Existing Auto Passenger Trips (Students)	1.3 students/vehicle	31	0	31	0	14	14	0	4	4
Proposed Transit Trips	0% mode split	0	0	0	0	0	0	0	0	0
Proposed Bicycling Trips	0% mode split	0	0	0	0	0	0	0	0	0
Existing School Bus Trips	23% mode split	178	0	178	0	84	84	0	0	0
			23% mode split			*23% mode split*			*0% mode split*	
Existing Walking Trips		577	0	577	0	272	272	0	98	98
			73% mode split			*73% mode split*			*96% mode split*	
Parents/Caregivers Accompanying Walking Child	0.5 parents/caregivers per child	289	289	578	136	136	272	49	49	98
Proposed Student + Parent/Caregiver Person Trips (All Modes)		**1,100**	**289**	**1,388**	**137**	**517**	**653**	**50**	**154**	**203**
164 staff										
Proposed Total Staff Trips	**164 Staff**	**134**	**0**	**134**	**0**	**92**	**92**	**0**	**26**	**26**
		82% Arrive in AM Peak Hour			*56% Depart in School PM Peak Hour*			*16% Depart in PM Peak Hour*		
Proposed Auto Driver Trips	98% mode split	120	0	120	0	82	82	0	23	23
Proposed Auto Passenger Trips	1.1 staff/vehicle	12	0	12	0	8	8	0	2	2
Proposed Transit Trips	1% mode split	1	0	1	0	1	1	0	0	0
Proposed Bicycling Trips	1% mode split	1	0	1	0	1	1	0	0	0
Proposed Walking Trips	0% mode split	0	0	0	0	0	0	0	0	0
Proposed Staff Person Trips (All Modes)		**134**	**0**	**134**	**0**	**92**	**92**	**0**	**25**	**25**
Proposed Student + Parent/Caregiver + Staff Person Trips (All Modes)		**1,234**	**289**	**1,522**	**137**	**609**	**745**	**50**	**179**	**228**
Proposed Total Vehicle Trips		**144**	**0**	**144**	**0**	**93**	**93**	**0**	**26**	**26**
Net Trip Generation										
Net Auto Driver Trips		23	0	23	0	14	14	0	3	3
Net Auto Passenger Trips		7	0	7	0	2	2	0	0	0
Net Transit Trips		0	0	0	0	0	0	0	0	0
Net Bicycling Trips		0	0	0	0	0	0	0	0	0
Net School Bus Trips		28	0	28	0	13	13	0	0	0
Net Walking Trips		138	46	184	22	67	89	8	24	32
Net Student + Parent/Caregiver + Staff Person Trips (All Modes)		**196**	**46**	**242**	**22**	**96**	**118**	**8**	**27**	**35**

[1] Per previous conversations with County staff, parent/caregiver pick-up/drop-off trips only need to be counted in one direction (inbound in the AM commuter peak hour, outbound in the PM school and PM commuter peak hours) when calculating person trips.

C. Signal Timing Data

SIG#0367 Hub-FA

May 15, 2023

PHASE IN USE/PED

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
IN USE	X	X		X		X										
EXCLUSIVE PED																

PLAN 1

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
MIN GRN	5	10	0	5	0	10	0	0	0	0	0	0	0	0	0	0
BK MGRN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS MGRN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DLY GRN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WALK	0	7	0	7	0	7	0	0	0	0	0	0	0	0	0	0
WALK2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WLK MAX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PED CLR	0	13	0	18	0	13	0	0	0	0	0	0	0	0	0	0
PD CLR2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PC MAX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PED CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VEH EXT	4.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
VH EXT2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX1	20	60	0	15	0	60	0	0	0	0	0	0	0	0	0	0
MAX2	30	60	0	30	0	60	0	0	0	0	0	0	0	0	0	0
MAX3	40	0	0	60	0	0	0	0	0	0	0	0	0	0	0	0
DYM MAX	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM STP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
YELLOW	3.5	4.0	3.0	4.0	3.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
RED CLR	3.5	2.0	0.0	3.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RED MAX	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RED RVT	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
ACT B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SEC/ACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX INT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TIME B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CARS WT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDUC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTREDUC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MIN GAP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

PLAN 1

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
LOCK DET																
VE RCALL																
PD RCALL		X				X										
MX RCALL		X				X										
SF RCALL																
NO REST																
AI CALC																

NextEdit

SIG#0367 Hub-FA

May 15, 2023

COORDINATOR OPTIONS

MANUAL PATTERN	AUTO	ECPI COORD	X
SYSTEM SOURCE	SYS	SYSTEM FORMAT	STD
SPLITS IN	SECONDS	OFFSET IN	SECONDS
TRANSITION	SMOOTH	MAX SELECT	MAX2
DWELL/ADD TIME	255	FORCE OFF	FIXED
DLY COORD WK-LZ		CAL USE PED TM	X
OFFSET REF	LAG	PED RESERVE	
PED RECALL	X	FO ADD INI GRN	
LOCAL ZERO OVRD		MULTISYNC	
RE-SYNC COUNT	1		

COORDINATOR PATTERN 1

USE SPLIT PATTERN	1	TIMING PLAN	1
CYCLE	180	SEQUENCE	1
OFFSET VAL	163	ACTION PLAN	0
ACTUATED COORD		FORCE OFF	NONE
ACT WALK REST		VEH PERM 1	0
PHASE RESERVICE		VEH PERM 2	0
MAX SELECT	NONE	VEH PERM 2 - DISP	0
STD (COS)	111	XART PTRN.	0
DWELL/ADD TIME	0		

RING CONFIG

RING	1	2	3	4
SPLT EXT	0	0	0	0

RING	1	2	3	4
SPLIT DEMAND PTRN.	0	0		

RING	1	2	3	4
RING DISP		0	0	0

SPLIT PREF PHASES

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PREF 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PREF 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PHASE MODES

Phase	1	2	3	4	5	6	7	8
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

PHASE MODES

Phase	9	10	11	12	13	14	15	16
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

SF OUT

PHASE	1	2	3	4	5	6	7	8
SF OUT								

COORDINATOR PATTERN 2

USE SPLIT PATTERN	2	ACTUATED COORD	
CYCLE	150	ACT WALK REST	
OFFSET VAL	30	PHASE RESERVICE	

NextEdit

SIG#0367 Hub-FA

COORDINATOR PATTERN 2

MAX SELECT	NONE
STD (COS)	121
DWELL/ADD TIME	0
TIMING PLAN	1
SEQUENCE	1
ACTION PLAN	0

FORCE OFF	NONE
VEH PERM 1	0
VEH PERM 2	0
VEH PERM 2 - DISP	0
XART PTRN.	0

RING CONFIG

RING	1	2	3	4
SPLT EXT	0	0	0	0

RING	1	2	3	4
SPLIT DEMAND PTRN.	0	0		

RING	1	2	3	4
RING DISP		0	0	0

SPLIT PREF PHASES

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PREF 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PREF 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PHASE MODES

Phase	1	2	3	4	5	6	7	8
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

PHASE MODES

Phase	9	10	11	12	13	14	15	16
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

SF OUT

PHASE	1	2	3	4	5	6	7	8
SF OUT								

COORDINATOR PATTERN 3

USE SPLIT PATTERN	3
CYCLE	180
OFFSET VAL	148
ACTUATED COORD	
ACT WALK REST	
PHASE RESERVICE	
MAX SELECT	NONE
STD (COS)	131
DWELL/ADD TIME	0

TIMING PLAN	1
SEQUENCE	1
ACTION PLAN	0
FORCE OFF	NONE
VEH PERM 1	0
VEH PERM 2	0
VEH PERM 2 - DISP	0
XART PTRN.	0

RING CONFIG

RING	1	2	3	4
SPLT EXT	0	0	0	0

RING	1	2	3	4
SPLIT DEMAND PTRN.	0	0		

RING	1	2	3	4
RING DISP		0	0	0

SPLIT PREF PHASES

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PREF 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PREF 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NextEdit

SIG#0367 Hub-FA

PHASE MODES

Phase	1	2	3	4	5	6	7	8
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

PHASE MODES

Phase	9	10	11	12	13	14	15	16
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

SF OUT

PHASE	1	2	3	4	5	6	7	8
SF OUT								

COORDINATOR PATTERN 4

USE SPLIT PATTERN	4
CYCLE	150
OFFSET VAL	6
ACTUATED COORD	
ACT WALK REST	
PHASE RESERVICE	
MAX SELECT	NONE
STD (COS)	141
DWELL/ADD TIME	0

TIMING PLAN	1
SEQUENCE	1
ACTION PLAN	0
FORCE OFF	NONE
VEH PERM 1	0
VEH PERM 2	0
VEH PERM 2 - DISP	0
XART PTRN.	0

RING CONFIG

RING	1	2	3	4
SPLT EXT	0	0	0	0

RING	1	2	3	4
SPLIT DEMAND PTRN.	0	0		

RING	1	2	3	4
RING DISP		0	0	0

SPLIT PREF PHASES

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PREF 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PREF 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PHASE MODES

Phase	1	2	3	4	5	6	7	8
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

PHASE MODES

Phase	9	10	11	12	13	14	15	16
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

SF OUT

PHASE	1	2	3	4	5	6	7	8
SF OUT								

COORDINATOR PATTERN 5

USE SPLIT PATTERN	5
CYCLE	120
OFFSET VAL	103
ACTUATED COORD	
ACT WALK REST	

PHASE RESERVICE	
MAX SELECT	NONE
STD (COS)	151
DWELL/ADD TIME	0
TIMING PLAN	1

NextEdit

SIG#0367 Hub-FA

May 15, 2023

COORDINATOR PATTERN 5

SEQUENCE	1
ACTION PLAN	0
FORCE OFF	NONE
VEH PERM 1	0

VEH PERM 2	0
VEH PERM 2 - DISP	0
XART PTRN.	0

RING CONFIG

RING	1	2	3	4
SPLT EXT	0	0	0	0

RING	1	2	3	4
SPLIT DEMAND PTRN.	0	0		

RING	1	2	3	4
RING DISP		0	0	0

SPLIT PREF PHASES

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PREF 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PREF 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PHASE MODES

Phase	1	2	3	4	5	6	7	8
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

PHASE MODES

Phase	9	10	11	12	13	14	15	16
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

SF OUT

PHASE	1	2	3	4	5	6	7	8
SF OUT								

Split 1

PHASE	1	2	3	4	5	6	7	8
SPLIT	30	100	0	50	0	130	0	0
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 1

PHASE	9	10	11	12	13	14	15	16
SPLIT	0	0	0	0	0	0	0	0
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 2

PHASE	1	2	3	4	5	6	7	8
SPLIT	21	85	0	44	0	106	0	0
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 2

PHASE	9	10	11	12	13	14	15	16
SPLIT	0	0	0	0	0	0	0	0

PHASE	9	10	11	12	13	14	15	16
COORD								

NextEdit

SIG#0367 Hub-FA

Split 2

PHASE	9	10	11	12	13	14	15	16
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 3

PHASE	1	2	3	4	5	6	7	8
SPLIT	36	108	0	36	0	144	0	0
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 3

PHASE	9	10	11	12	13	14	15	16
SPLIT	0	0	0	0	0	0	0	0
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 4

PHASE	1	2	3	4	5	6	7	8
SPLIT	21	85	0	44	0	106	0	0
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 4

PHASE	9	10	11	12	13	14	15	16
SPLIT	0	0	0	0	0	0	0	0
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 5

PHASE	1	2	3	4	5	6	7	8
SPLIT	23	57	0	40	0	80	0	0
COORD		X				X		
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

Split 5

PHASE	9	10	11	12	13	14	15	16
SPLIT	0	0	0	0	0	0	0	0
COORD								
PHASE MODE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE

ACTION PLAN 1

PATTERN	1	DIMMING ENABLE		PED DET DIAG PLN	0
TIMING PLAN	1	SYS OVERRIDE		PRIORITY RETURN	
VEH DET PLAN	0	SEQUENCE	1	PED PR RETURN	
FLASH		DET LOG	0	QUEUE DELAY	
VEH DET DIAG PLN	0	RED REST		PMT COND DELAY	

NextEdit

SIG#0367 Hub-FA

PHASE TABLE

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PED RCL																
WALK 2																
VEX 2																
VEH RCL																
MAX RCL																
MAX 2																
MAX 3																
CS INH																
OMIT																
SPC FCT																
AUX FCT																

LP TABLE

LP Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

ACTION PLAN 2

PATTERN	2	SYS OVERRIDE		PED PR RETURN	
TIMING PLAN	1	SEQUENCE	1	QUEUE DELAY	
VEH DET PLAN	0	DET LOG	0	PMT COND DELAY	
FLASH		RED REST			
VEH DET DIAG PLN	0	PED DET DIAG PLN	0		
DIMMING ENABLE		PRIORITY RETURN			

PHASE TABLE

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PED RCL																
WALK 2																
VEX 2																
VEH RCL																
MAX RCL																
MAX 2																
MAX 3																
CS INH																
OMIT																
SPC FCT																
AUX FCT																

NextEdit

SIG#0367 Hub-FA

LP TABLE

LP Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

ACTION PLAN 3

PATTERN	3	SYS OVERRIDE		PED PR RETURN	
TIMING PLAN	1	SEQUENCE	1	QUEUE DELAY	
VEH DET PLAN	0	DET LOG	0	PMT COND DELAY	
FLASH		RED REST			
VEH DET DIAG PLN	0	PED DET DIAG PLN	0		
DIMMING ENABLE		PRIORITY RETURN			

PHASE TABLE

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PED RCL																
WALK 2																
VEX 2																
VEH RCL																
MAX RCL																
MAX 2																
MAX 3																
CS INH																
OMIT																
SPC FCT																
AUX FCT																

LP TABLE

LP Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

ACTION PLAN 4

PATTERN	4	VEH DET DIAG PLN	0	DET LOG	0	PED PR RETURN	
TIMING PLAN	1	DIMMING ENABLE		RED REST		QUEUE DELAY	
VEH DET PLAN	0	SYS OVERRIDE		PED DET DIAG PLN	0	PMT COND DELAY	
FLASH		SEQUENCE	1	PRIORITY RETURN			

NextEdit

SIG#0367 Hub-FA

PHASE TABLE

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PED RCL																
WALK 2																
VEX 2																
VEH RCL																
MAX RCL																
MAX 2																
MAX 3																
CS INH																
OMIT																
SPC FCT																
AUX FCT																

LP TABLE

LP Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

ACTION PLAN 5

PATTERN	5	SYS OVERRIDE		PED PR RETURN	
TIMING PLAN	1	SEQUENCE	1	QUEUE DELAY	
VEH DET PLAN	0	DET LOG	0	PMT COND DELAY	
FLASH		RED REST			
VEH DET DIAG PLN	0	PED DET DIAG PLN	0		
DIMMING ENABLE		PRIORITY RETURN			

PHASE TABLE

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PED RCL																
WALK 2																
VEX 2																
VEH RCL																
MAX RCL																
MAX 2																
MAX 3																
CS INH																
OMIT																
SPC FCT																
AUX FCT																

NextEdit

SIG#0367 Hub-FA

LP TABLE

LP Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

ACTION PLAN 100

PATTERN	FLSH	DIMMING ENABLE		PED DET DIAG PLN	0
TIMING PLAN	1	SYS OVERRIDE		PRIORITY RETURN	
VEH DET PLAN	0	SEQUENCE	1	PED PR RETURN	
FLASH	X	DET LOG	0	QUEUE DELAY	
VEH DET DIAG PLN	0	RED REST		PMT COND DELAY	

PHASE TABLE

PHASE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PED RCL																
WALK 2																
VEX 2																
VEH RCL																
MAX RCL																
MAX 2																
MAX 3																
CS INH																
OMIT																
SPC FCT																
AUX FCT																

LP TABLE

LP Statement	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
LP 1-15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 16-30	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 31-45	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 46-60	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 61-75	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 76-90	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
LP 91-100	.	.	.	.	.	.	.	.	.	.					

Day Plan 1

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
ACTION PLAN	5	100	5	1	2	3	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	5	6	9	15	19	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	30	30	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NextEdit

SIG#0367 Hub-FA

May 15, 2023

Day Plan 1

EVENT	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 2

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
ACTION PLAN	5	100	5	1	2	3	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	5	6	9	15	19	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	30	30	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 2

EVENT	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 3

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
ACTION PLAN	5	100	5	1	2	3	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	5	6	9	15	19	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	30	30	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 3

EVENT	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 4

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
ACTION PLAN	5	100	5	1	2	3	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	5	6	9	15	19	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	30	30	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 4

EVENT	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 5

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
ACTION PLAN	5	100	5	1	2	3	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	5	6	9	15	19	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NextEdit

SIG#0367 Hub-FA

Day Plan 5

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
START TIME - MM	0	30	30	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 5

EVENT	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 6

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
ACTION PLAN	5	100	5	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	5	10	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	30	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 6

EVENT	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 7

EVENT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
ACTION PLAN	5	100	5	30	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	5	8	17	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	30	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Day Plan 7

EVENT	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
ACTION PLAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - HH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
START TIME - MM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

NextEdit

D. Turning Movement Counts

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : JoAnn Leleck Elementary School
Project # : 3263-001
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, June 8, 2023
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 08:00 AM to 09:00 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. Beacon Road/ & Northampton Drive

ALL VEHICLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Beacon Road					Northampton Drive										Northampton Drive				
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	3	0	2	8	2	0	10	6	1	0	0	0	0	0	0	0	24	0	10
06:45 AM to 07:00 AM	0	3	0	0	4	3	0	10	3	0	0	0	0	0	0	0	1	11	0	1
07:00 AM to 07:15 AM	0	5	0	0	3	0	0	13	9	1	0	0	0	0	0	0	0	9	0	3
07:15 AM to 07:30 AM	0	8	0	0	17	0	0	13	8	8	0	0	0	0	0	0	0	22	0	7
07:30 AM to 07:45 AM	0	6	0	0	9	0	0	9	9	5	0	0	0	0	0	0	0	11	0	5
07:45 AM to 08:00 AM	0	20	0	0	1	1	0	13	19	0	0	0	0	0	0	0	1	16	0	9
08:00 AM to 08:15 AM	0	49	0	0	0	0	0	4	29	1	0	0	0	0	0	0	2	5	0	0
08:15 AM to 08:30 AM	0	19	0	1	3	1	0	6	30	1	0	0	0	0	0	0	2	10	0	6
08:30 AM to 08:45 AM	0	19	0	1	1	2	0	10	39	2	0	0	0	0	0	1	7	11	0	80
08:45 AM to 09:00 AM	0	57	0	5	2	0	0	19	46	0	0	0	0	0	0	0	9	11	0	141
09:00 AM to 09:15 AM	0	20	0	5	2	1	0	7	15	0	0	0	0	0	0	0	1	11	0	21
09:15 AM to 09:30 AM	0	3	0	0	4	0	0	11	2	0	0	0	0	0	0	0	1	10	0	1
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.)	83				27	105				14	0				0	57				21
07:15 AM to 08:15 AM	0	83	0	0		1	0	39	65		0	0	0	0		0	3	54	0	
Peak Hour Factor (PHF) Overall **0.69**	U	Left	Thru	Right	**SB**	U	Left	Thru	Right	**WB**	U	Left	Thru	Right	**NB**	U	Left	Thru	Right	**EB**
	n/a	0.42	n/a	n/a	**0.42**	0.25	n/a	0.75	0.56	**0.80**	n/a	n/a	n/a	n/a	**n/a**	n/a	0.38	0.61	n/a	**0.65**

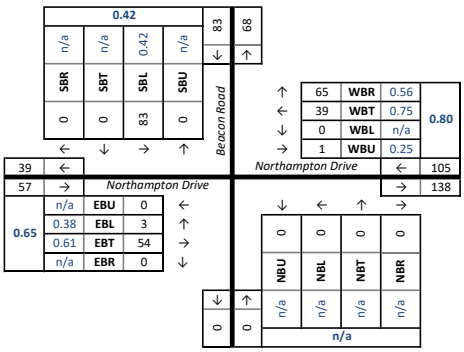
HEAVY VEHICLES (FHWA 4+)

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Beacon Road					Northampton Drive										Northampton Drive				
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	2	0	0		0	0	4	0		0	0	0	0		0	0	4	0	
06:45 AM to 07:00 AM	0	1	0	0		0	0	3	2		0	0	0	0		0	0	4	0	
07:00 AM to 07:15 AM	0	2	0	0		0	0	3	1		0	0	0	0		0	0	3	0	
07:15 AM to 07:30 AM	0	2	0	0		0	0	7	2		0	0	0	0		0	0	1	0	
07:30 AM to 07:45 AM	0	2	0	0		0	0	4	2		0	0	0	0		0	0	3	0	
07:45 AM to 08:00 AM	0	0	0	0		1	0	4	0		0	0	0	0		0	0	2	0	
08:00 AM to 08:15 AM	0	0	0	0		0	0	2	1		0	0	0	0		0	0	1	0	
08:15 AM to 08:30 AM	0	2	0	0		0	0	2	2		0	0	0	0		0	0	4	0	
08:30 AM to 08:45 AM	0	2	0	0		0	0	4	2		0	0	0	0		0	1	2	0	
08:45 AM to 09:00 AM	0	2	0	0		0	0	4	1		0	0	0	0		0	0	2	0	
09:00 AM to 09:15 AM	0	0	0	0		0	0	1	0		0	0	0	0		0	0	3	0	
09:15 AM to 09:30 AM	0	0	0	0		0	0	3	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.)	4					23					0					7				
07:15 AM to 08:15 AM	0	4	0	0		1	0	17	5		0	0	0	0		0	0	7	0	
Heavy Vehicle % (PHV):	0.0%	4.8%	0.0%	0.0%	**4.8%**	100.0%	0.0%	43.6%	7.7%	**21.9%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	13.0%	0.0%	**12.3%**
INT. PEAK HR (HV ONLY)	7					24					0					11				
06:45 AM to 07:45 AM	0	7	0	0		0	0	17	7		0	0	0	0		0	0	11	0	
Heavy Vehicle % (PHV):	0.0%	31.8%	0.0%	0.0%	**31.8%**	0.0%	0.0%	37.8%	24.1%	**31.2%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	20.8%	0.0%	**20.4%**

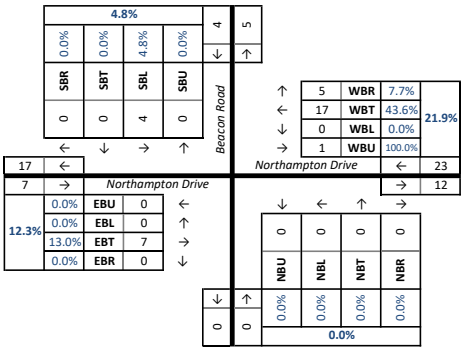
BICYCLES

Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	Beacon Road				Northampton Drive								Northampton Drive			
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	0	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	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	0	0
07:45 AM to 08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	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	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.)	0				0				0				0			
07:15 AM to 08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INT. PEAK HR (BIKES)	0				0				0				0			
06:30 AM to 07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

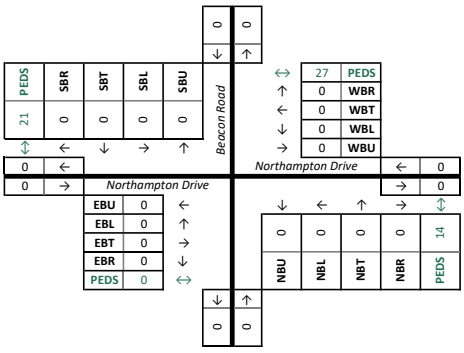
VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



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



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



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : JoAnn Leleck Elementary School
Project # : 3263-001
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, June 8, 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. New Hampshire Avenue & /Northampton Drive

ALL VEHICLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	New Hampshire Avenue										New Hampshire Avenue					Northampton Drive				
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	1	0	478	20	0	0	0	0	0	0	1	34	368	0	0	3	72	0	41	0
06:45 AM to 07:00 AM	0	0	471	23	1	0	0	0	0	0	0	23	269	0	2	1	34	0	49	1
07:00 AM to 07:15 AM	0	0	530	22	0	0	0	0	0	0	1	24	343	0	1	2	35	0	51	0
07:15 AM to 07:30 AM	0	0	651	23	0	0	0	0	0	0	2	30	393	0	0	0	48	0	61	0
07:30 AM to 07:45 AM	0	0	596	18	1	0	0	0	0	0	0	24	351	0	0	3	53	0	56	0
07:45 AM to 08:00 AM	0	0	611	21	0	0	0	0	0	0	2	49	271	0	0	1	30	0	72	1
08:00 AM to 08:15 AM	0	0	545	26	0	0	0	0	0	0	0	25	313	0	0	4	49	0	67	1
08:15 AM to 08:30 AM	0	0	545	34	0	0	0	0	0	0	0	16	296	0	1	4	34	0	30	0
08:30 AM to 08:45 AM	0	0	566	32	0	0	0	0	0	0	0	23	262	0	0	2	18	0	42	0
08:45 AM to 09:00 AM	0	0	574	29	0	0	0	0	0	0	1	28	279	0	1	4	33	0	55	0
09:00 AM to 09:15 AM	0	0	451	9	0	0	0	0	0	0	2	15	271	0	0	2	22	0	35	0
09:15 AM to 09:30 AM	0	0	456	10	2	0	0	0	0	0	1	16	210	0	0	2	22	0	19	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.)	2491				1	0				0	1460				0	444				2
07:15 AM to 08:15 AM	0	0	2403	88		0	0	0	0		4	128	1328	0		8	180	0	256	
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) **0.91**	n/a	n/a	0.92	0.85	**0.92**	n/a	n/a	n/a	n/a	**n/a**	0.50	0.65	0.84	n/a	**0.86**	0.50	0.85	n/a	0.89	**0.93**

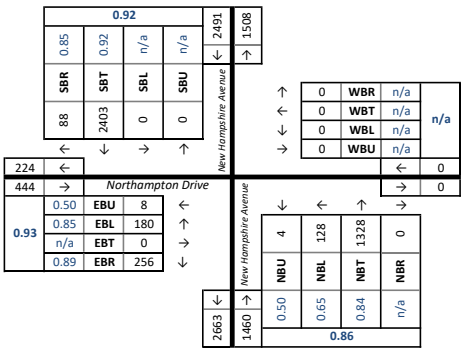
HEAVY VEHICLES (FHWA 4+)

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	New Hampshire Avenue										New Hampshire Avenue					Northampton Drive				
Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
06:30 AM to 06:45 AM	1	0	28	3		0	0	0	0		0	0	7	0		0	6	0	8	
06:45 AM to 07:00 AM	0	0	22	5		0	0	0	0		0	0	15	0		0	3	0	0	
07:00 AM to 07:15 AM	0	0	24	4		0	0	0	0		0	0	8	0		0	2	0	10	
07:15 AM to 07:30 AM	0	0	24	5		0	0	0	0		0	0	19	0		0	3	0	2	
07:30 AM to 07:45 AM	0	0	15	2		0	0	0	0		0	0	9	0		0	9	0	0	
07:45 AM to 08:00 AM	0	0	13	4		0	0	0	0		0	1	10	0		0	2	0	0	
08:00 AM to 08:15 AM	0	0	16	4		0	0	0	0		0	0	11	0		0	0	0	0	
08:15 AM to 08:30 AM	0	0	23	3		0	0	0	0		0	0	11	0		0	5	0	0	
08:30 AM to 08:45 AM	0	0	16	4		0	0	0	0		0	0	8	0		0	2	0	2	
08:45 AM to 09:00 AM	0	0	22	2		0	0	0	0		0	1	13	0		0	4	0	1	
09:00 AM to 09:15 AM	0	0	17	1		0	0	0	0		0	0	13	0		0	3	0	0	
09:15 AM to 09:30 AM	0	0	14	2		0	0	0	0		0	0	17	0		0	3	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.)	83					0					50					16				
07:15 AM to 08:15 AM	0	0	68	15		0	0	0	0		0	1	49	0		0	14	0	2	
Heavy Vehicle % (PHV):	0.0%	0.0%	2.8%	17.0%	**3.3%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.8%	3.7%	0.0%	**3.4%**	0.0%	7.8%	0.0%	0.8%	**3.6%**
INT. PEAK HR (HV ONLY)	116					0					49					34				
06:30 AM to 07:30 AM	1	0	98	17		0	0	0	0		0	0	49	0		0	14	0	20	
Heavy Vehicle % (PHV):	100.0%	0.0%	4.6%	19.3%	**5.2%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	3.6%	0.0%	**3.3%**	0.0%	7.4%	0.0%	9.9%	**8.6%**

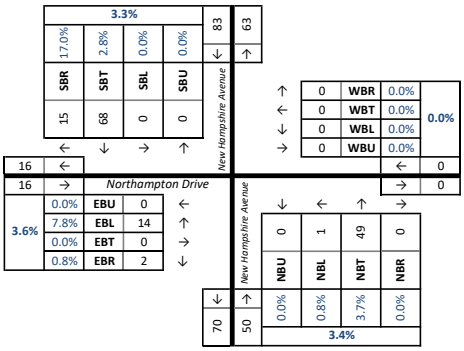
BICYCLES

Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	New Hampshire Avenue								New Hampshire Avenue				Northampton Drive			
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	1	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	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	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	0	0
07:45 AM to 08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	0	0	0	0	0	0
08:45 AM to 09:00 AM	0	0	0	1	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.)	0				0				0				0			
07:15 AM to 08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INT. PEAK HR (BIKES)	0				0				1				0			
06:30 AM to 07:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0

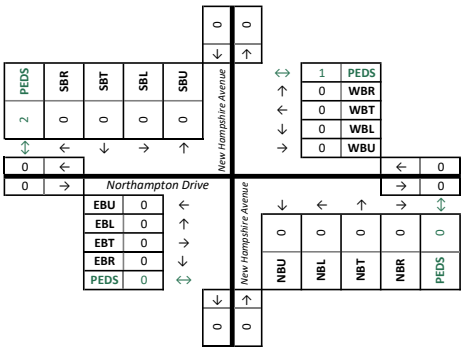
VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



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



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



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : JoAnn Leleck Elementary School
Project # : 3263-001
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, June 8, 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. New Hampshire Avenue & /Southampton Drive

ALL VEHICLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	New Hampshire Avenue										New Hampshire Avenue					Southampton Drive				
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	637	4	0	0	0	0	0	0	0	11	448	0	0	0	1	0	27	4
06:45 AM to 07:00 AM	0	0	556	7	0	0	0	0	0	0	1	8	282	0	0	0	0	0	24	0
07:00 AM to 07:15 AM	0	0	642	2	0	0	0	0	0	0	0	15	410	0	0	0	0	0	28	0
07:15 AM to 07:30 AM	0	0	780	8	0	0	0	0	0	0	0	12	391	0	0	0	1	0	21	0
07:30 AM to 07:45 AM	0	0	726	5	0	0	0	0	0	0	0	7	428	0	0	0	0	0	20	2
07:45 AM to 08:00 AM	0	0	697	4	0	0	0	0	0	0	0	15	381	0	0	0	1	0	16	0
08:00 AM to 08:15 AM	0	0	766	5	0	0	0	0	0	0	1	7	382	0	0	0	0	0	15	1
08:15 AM to 08:30 AM	1	0	613	5	0	0	0	0	0	0	0	5	354	0	0	0	2	0	11	1
08:30 AM to 08:45 AM	0	0	702	7	0	0	0	0	0	0	0	7	322	0	0	0	1	0	16	0
08:45 AM to 09:00 AM	0	0	696	5	0	0	0	0	0	0	0	9	307	0	0	0	3	0	20	0
09:00 AM to 09:15 AM	0	0	537	3	0	0	0	0	0	0	6	12	314	0	1	0	1	0	20	2
09:15 AM to 09:30 AM	1	0	513	3	0	0	0	0	0	0	2	9	251	0	0	0	3	0	18	5
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.)	2991				0	0				0	1624				0	74				3
07:15 AM to 08:15 AM	0	0	2969	22		0	0	0	0		1	41	1582	0		0	2	0	72	
Peak Hour Factor (PHF) Overall	0.97	U n/a	Left n/a	Thru 0.95	Right 0.69	SB 0.95	U n/a	Left n/a	Thru n/a	Right n/a	WB n/a	U 0.25	Left 0.68	Thru 0.92	Right n/a	NB 0.93	U n/a	Left 0.50	Thru n/a	Right 0.86	EB 0.84

HEAVY VEHICLES (FHWA 4+)

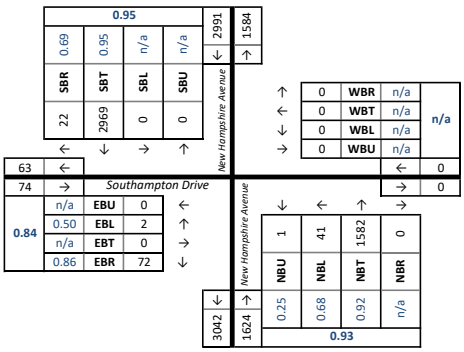
Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	New Hampshire Avenue										New Hampshire Avenue					Southampton Drive				
Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
06:30 AM to 06:45 AM	0	0	32	1		0	0	0	0		0	3	11	0		0	0	0	5	
06:45 AM to 07:00 AM	0	0	27	2		0	0	0	0		0	1	15	0		0	0	0	5	
07:00 AM to 07:15 AM	0	0	35	0		0	0	0	0		0	2	14	0		0	0	0	3	
07:15 AM to 07:30 AM	0	0	26	1		0	0	0	0		0	2	18	0		0	0	0	6	
07:30 AM to 07:45 AM	0	0	20	0		0	0	0	0		0	3	16	0		0	0	0	1	
07:45 AM to 08:00 AM	0	0	17	1		0	0	0	0		0	2	15	0		0	0	0	3	
08:00 AM to 08:15 AM	0	0	21	0		0	0	0	0		0	2	10	0		0	0	0	4	
08:15 AM to 08:30 AM	0	0	24	0		0	0	0	0		0	3	11	0		0	0	0	3	
08:30 AM to 08:45 AM	0	0	29	0		0	0	0	0		0	3	10	0		0	0	0	4	
08:45 AM to 09:00 AM	0	0	29	0		0	0	0	0		0	1	15	0		0	0	0	2	
09:00 AM to 09:15 AM	0	0	23	0		0	0	0	0		0	2	15	0		0	0	0	1	
09:15 AM to 09:30 AM	0	0	17	0		0	0	0	0		0	1	18	0		0	0	0	3	
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.)	86					0					68					14				
07:15 AM to 08:15 AM	0	0	84	2		0	0	0	0		0	9	59	0		0	0	0	14	
Heavy Vehicle % (PHV):	0.0%	0.0%	2.8%	9.1%	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	22.0%	3.7%	0.0%	4.2%	0.0%	0.0%	0.0%	19.4%	18.9%
INT. PEAK HR (HV ONLY)	124					0					66					19				
06:30 AM to 07:30 AM	0	0	120	4		0	0	0	0		0	8	58	0		0	0	0	19	
Heavy Vehicle % (PHV):	0.0%	0.0%	4.6%	19.0%	4.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	17.4%	3.8%	0.0%	4.2%	0.0%	0.0%	0.0%	19.0%	18.6%

BICYCLES

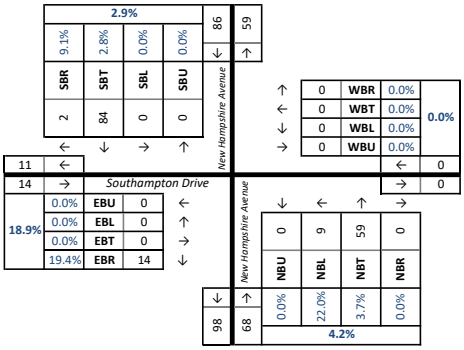
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	New Hampshire Avenue								New Hampshire Avenue				Southampton Drive			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
06:30 AM to 06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 AM to 07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00 AM to 07:15 AM	0	0	1	0	0	0	0	0	0	0	1	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM to 08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	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.)	1				0				0				0			
07:15 AM to 08:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
INT. PEAK HR (BIKES)	2				0				1				0			
06:45 AM to 07:45 AM	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0

DATA COLLECTION NOTES :

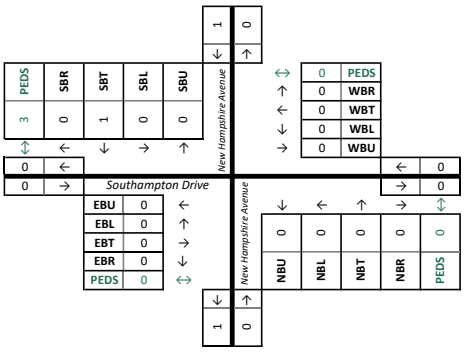
VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



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 : JoAnn Leleck Elementary School
Project # : 3263-001
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, June 8, 2023
Weather: Partly Cloudy

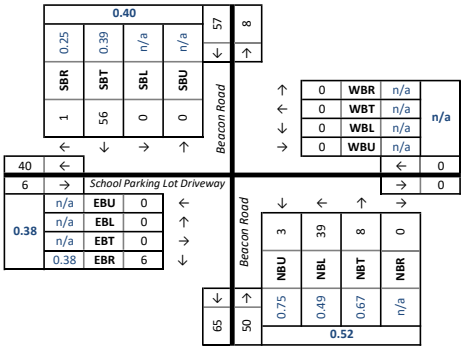
Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 08:15 AM to 09:15 AM
System Peak Hour (all vehicles): 07:15 AM to 08:15 AM
User-Defined Peak Hour: 07:30 AM to 08:30 AM

Intersection: 1. Beacon Road & /School Parking Lot Driveway

ALL VEHICLES

	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Beacon Road										Beacon Road					School Parking Lot 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	1	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	1	0
06:45 AM	to 07:00 AM	0	0	0	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0
07:00 AM	to 07:15 AM	0	0	5	0	0	0	0	0	0	0	2	6	1	0	1	1	0	0	2	0
07:15 AM	to 07:30 AM	0	0	1	0	0	0	0	0	0	0	1	3	2	0	0	0	0	0	1	0
07:30 AM	to 07:45 AM	0	0	19	0	0	0	0	0	0	0	1	14	3	0	1	0	0	0	0	0
07:45 AM	to 08:00 AM	0	0	36	0	0	0	0	0	0	0	1	20	3	0	0	0	0	0	4	0
08:00 AM	to 08:15 AM	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0
08:15 AM	to 08:30 AM	0	0	7	1	0	0	0	0	0	0	0	20	5	0	3	0	0	0	4	0
08:30 AM	to 08:45 AM	0	0	1	0	0	0	0	0	0	0	0	38	6	0	12	0	0	0	19	0
08:45 AM	to 09:00 AM	0	0	10	1	0	0	0	0	0	0	0	48	6	0	87	0	0	0	53	0
09:00 AM	to 09:15 AM	0	0	6	0	0	0	0	0	0	0	1	6	5	0	10	0	0	0	11	1
09:15 AM	to 09:30 AM	0	0	2	0	0	0	0	0	0	0	1	1	1	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.)		57				0	0				0	50				1	6				0
07:15 AM	to 08:15 AM	0	0	56	1		0	0	0	0		3	39	8	0		0	0	0	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**
	0.44	n/a	n/a	0.39	0.25	**0.40**	n/a	n/a	n/a	n/a	**n/a**	0.75	0.49	0.67	n/a	**0.52**	n/a	n/a	n/a	0.38	**0.38**

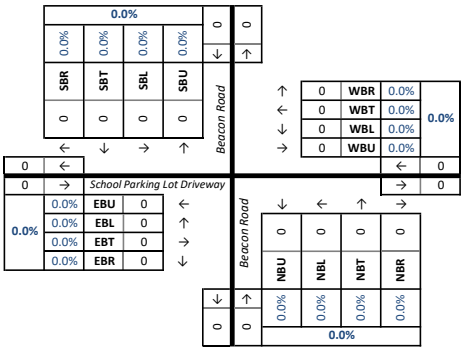
VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



HEAVY VEHICLES (FHWA 4+)

	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Beacon Road										Beacon Road					School Parking Lot 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	1	
06:45 AM	to 07:00 AM	0	0	0	0		0	0	0	0		0	1	0	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	1	
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	0	0	
07:45 AM	to 08:00 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	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	1	0		0	0	0	0		0	0	1	0		0	0	0	0	
08:30 AM	to 08:45 AM	0	0	0	0		0	0	0	0		0	1	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	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.)		0					0					0					0				
07:15 AM	to 08:15 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
Heavy Vehicle % (PHV):		0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**
INT. PEAK HR (HV ONLY)		0					0					1					2				
06:30 AM	to 07:30 AM	0	0	0	0		0	0	0	0		0	1	0	0		0	0	0	2	
Heavy Vehicle % (PHV):		0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	8.3%	0.0%	0.0%	**4.3%**	0.0%	0.0%	0.0%	50.0%	**40.0%**

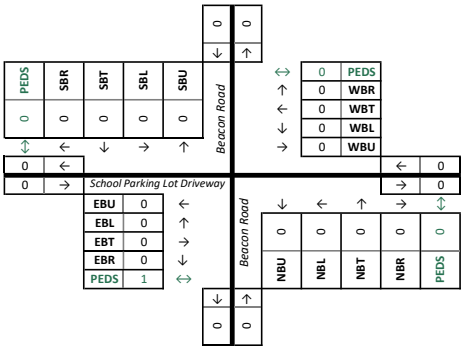
HEAVY VEH PEAK HOUR VOLS AND PHV: System Peak (vehicle)



BICYCLES

	Direction:	Southbound				Westbound				Northbound				Eastbound			
	Roadway:	Beacon Road								Beacon Road				School Parking Lot 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	0	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	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	0	0
07:45 AM	to 08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	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	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.)		0				0				0				0			
07:15 AM	to 08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
INT. PEAK HR (BIKES)		0				0				0				0			
06:30 AM	to 07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : JoAnn Leleck Elementary School
Project # : 3263-001
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, June 8, 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. Beacon Road & /School Bus Loop

ALL VEHICLES

	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Beacon Road										Beacon Road					School Bus Loop				
	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	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0
06:45 AM	to 07:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3	0	0	0	1	0
07:00 AM	to 07:15 AM	0	0	0	0	1	0	0	0	0	0	0	4	0	0	0	1	0	0	2	0
07:15 AM	to 07:30 AM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	2	0
07:30 AM	to 07:45 AM	0	0	0	0	1	0	0	0	0	0	0	4	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	1	0	0	0	0	0	0	0	2
08:00 AM	to 08:15 AM	0	0	0	1	0	0	0	0	0	0	0	8	0	0	0	1	0	0	1	0
08:15 AM	to 08:30 AM	0	0	0	0	3	0	0	0	0	0	0	2	0	0	0	0	0	0	1	1
08:30 AM	to 08:45 AM	0	0	0	0	12	0	0	0	0	0	0	3	0	0	0	0	0	0	2	19
08:45 AM	to 09:00 AM	0	0	0	0	87	0	0	0	0	0	0	3	0	0	0	0	0	0	1	23
09:00 AM	to 09:15 AM	0	0	0	0	10	0	0	0	0	0	0	1	0	0	5	0	0	0	3	0
09:15 AM	to 09:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	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.)		1				1	0				0	17				0	6				2
07:15 AM	to 08:15 AM	0	0	0	1		0	0	0	0		0	17	0	0		1	0	0	5	
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)	**0.55**	n/a	n/a	n/a	0.25	**0.25**	n/a	n/a	n/a	n/a	**n/a**	n/a	0.53	n/a	n/a	**0.53**	0.25	n/a	n/a	0.63	**0.75**

HEAVY VEHICLES (FHWA 4+)

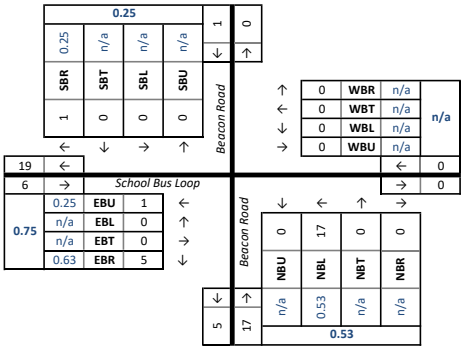
	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Beacon Road										Beacon Road					School Bus Loop				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
06:30 AM	to 06:45 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
06:45 AM	to 07:00 AM	0	0	0	0		0	0	0	0		0	0	0	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	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	0	0	
07:45 AM	to 08:00 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	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	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	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.)		0					0					0					0				
07:15 AM	to 08:15 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
Heavy Vehicle % (PHV):		0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**
INT. PEAK HR (HV ONLY)		0					0					0					0				
06:30 AM	to 07:30 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
Heavy Vehicle % (PHV):		0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**

BICYCLES

	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Beacon Road										Beacon Road					School Bus Loop				
	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	0	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	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	0	0	
07:45 AM	to 08:00 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	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	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	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.)		0					0					0					0				
07:15 AM	to 08:15 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
INT. PEAK HR (BIKES)		0					0					0					0				
06:30 AM	to 07:30 AM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	

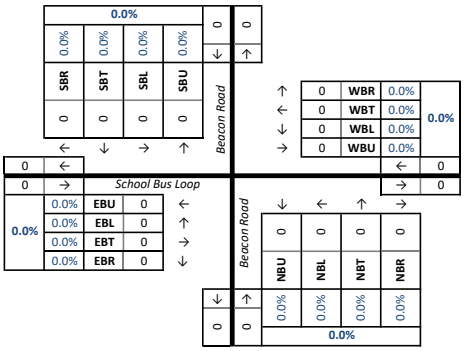
DATA COLLECTION NOTES :

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

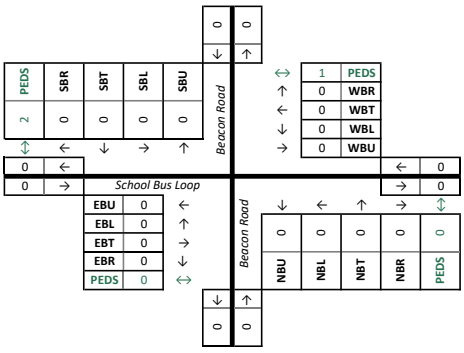


Gorove Slade note: Due to this intersection's proximity to Intersection 4, its through volumes were not recorded here. Additionally, volumes coded EBU's at this intersection are actually EBL's which ultimately turned left again into the parking lot driveway to the north (Intersection 4).

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 : JoAnn Leleck Elementary School
Project # : 3263-001
Location Montgomery County, MD
Data Source: Gorove/Slade Associates, Inc.

Analysis Period: STUDY_PERIOD 02:00 PM to 07:00 PM
Date of Counts: Thursday, June 8, 2023
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 03:00 PM to 04:00 PM
System Peak Hour (all vehicles): 05:00 PM to 06:00 PM
User-Defined Peak Hour: 03:00 PM to 04:00 PM

Intersection: 1. Beacon Road/ & Northampton Drive

ALL VEHICLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Beacon Road					Northampton Drive										Northampton Drive				
Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
02:00 PM to 02:15 PM	0	4	0	0	1	0	0	11	5	0	0	0	0	0	0	0	0	7	0	5
02:15 PM to 02:30 PM	0	5	0	0	0	0	0	7	3	0	0	0	0	0	0	0	1	12	0	1
02:30 PM to 02:45 PM	0	4	0	2	0	0	0	14	16	0	0	0	0	0	0	0	0	9	0	4
02:45 PM to 03:00 PM	0	10	0	0	13	1	0	18	13	0	0	0	0	0	0	1	2	13	0	9
03:00 PM to 03:15 PM	0	46	0	1	2	0	0	17	22	0	0	0	0	0	0	2	1	8	0	12
03:15 PM to 03:30 PM	0	18	0	6	38	2	0	23	26	0	0	0	0	0	0	0	5	8	0	105
03:30 PM to 03:45 PM	0	56	0	6	16	0	0	21	15	0	0	0	0	0	0	0	1	27	0	99
03:45 PM to 04:00 PM	0	27	0	0	6	2	0	12	5	0	0	0	0	0	0	0	0	15	0	7
04:00 PM to 04:15 PM	0	12	0	1	5	2	0	17	4	4	0	0	0	0	0	1	0	14	0	6
04:15 PM to 04:30 PM	0	5	0	1	5	0	0	16	3	1	0	0	0	0	0	0	0	11	0	2
04:30 PM to 04:45 PM	0	13	0	0	0	1	0	12	13	3	0	0	0	0	0	0	1	5	0	5
04:45 PM to 05:00 PM	0	24	0	2	3	0	0	14	9	1	0	0	0	0	0	0	3	14	0	13
05:00 PM to 05:15 PM	0	16	0	3	3	0	0	16	9	3	0	0	0	0	0	1	0	14	0	4
05:15 PM to 05:30 PM	0	22	0	5	5	4	0	29	39	0	0	0	0	0	0	1	2	38	0	25
05:30 PM to 05:45 PM	0	11	0	4	2	0	0	15	16	0	0	0	0	0	0	1	2	19	0	18
05:45 PM to 06:00 PM	0	14	0	2	3	0	0	23	14	0	0	0	0	0	0	0	2	21	0	2
06:00 PM to 06:15 PM	0	8	0	5	5	0	0	18	14	1	0	0	0	0	0	0	3	18	0	10
06:15 PM to 06:30 PM	0	7	0	1	2	1	0	30	10	0	0	0	0	0	0	0	2	10	0	3
06:30 PM to 06:45 PM	0	8	0	5	0	4	0	25	15	2	0	0	0	0	0	0	1	19	0	5
06:45 PM to 07:00 PM	0	9	0	1	6	0	0	13	12	0	0	0	0	0	0	1	4	17	0	9
SYSTEM PEAK HR (VEH.)	77				13	165				3	0				0	101				49
05:00 PM to 06:00 PM	0	63	0	14		4	0	83	78		0	0	0	0		3	6	92	0	
Peak Hour Factor (PHF) Overall	0.61	n/a	0.72	n/a	0.70	**0.71**	0.25	n/a	0.72	0.50	**0.57**	n/a	n/a	n/a	n/a	**n/a**	0.75	0.75	0.61	n/a	**0.62**

HEAVY VEHICLES (FHWA 4+)

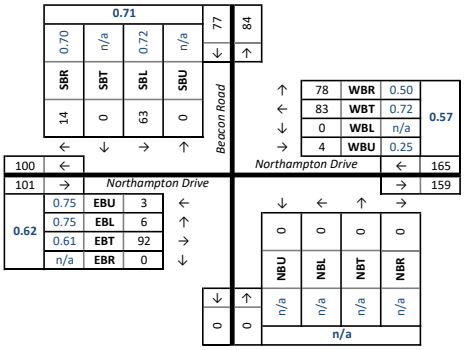
Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Beacon Road					Northampton Drive										Northampton Drive				
Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
02:00 PM to 02:15 PM	0	0	0	0		0	0	2	0		0	0	0	0		0	0	2	0	
02:15 PM to 02:30 PM	0	0	0	0		0	0	2	0		0	0	0	0		0	0	4	0	
02:30 PM to 02:45 PM	0	1	0	0		0	0	2	0		0	0	0	0		0	0	1	0	
02:45 PM to 03:00 PM	0	0	0	0		0	0	3	0		0	0	0	0		0	0	7	0	
03:00 PM to 03:15 PM	0	0	0	0		0	0	3	0		0	0	0	0		0	0	2	0	
03:15 PM to 03:30 PM	0	0	0	0		0	0	2	1		0	0	0	0		0	0	2	0	
03:30 PM to 03:45 PM	0	2	0	0		0	0	3	2		0	0	0	0		0	0	3	0	
03:45 PM to 04:00 PM	0	2	0	0		0	0	2	1		0	0	0	0		0	0	4	0	
04:00 PM to 04:15 PM	0	0	0	0		0	0	1	0		0	0	0	0		0	0	4	0	
04:15 PM to 04:30 PM	0	0	0	0		0	0	6	0		0	0	0	0		0	0	3	0	
04:30 PM to 04:45 PM	0	0	0	0		0	0	2	0		0	0	0	0		0	0	2	0	
04:45 PM to 05:00 PM	0	1	0	0		0	0	1	1		0	0	0	0		0	0	3	0	
05:00 PM to 05:15 PM	0	0	0	0		0	0	1	0		0	0	0	0		0	0	3	0	
05:15 PM to 05:30 PM	0	0	0	0		0	0	5	0		0	0	0	0		0	0	7	0	
05:30 PM to 05:45 PM	0	0	0	0		0	0	3	0		0	0	0	0		0	0	2	0	
05:45 PM to 06:00 PM	0	1	0	0		0	0	2	2		0	0	0	0		0	0	4	0	
06:00 PM to 06:15 PM	0	0	0	1		0	0	2	0		0	0	0	0		0	0	2	0	
06:15 PM to 06:30 PM	0	0	0	0		0	0	2	0		0	0	0	0		0	0	3	0	
06:30 PM to 06:45 PM	0	0	0	0		0	0	1	0		0	0	0	0		0	0	5	0	
06:45 PM to 07:00 PM	0	0	0	0		0	0	2	0		0	0	0	0		0	0	2	0	
SYSTEM PEAK HR (VEH.)	1					13					0					16				
05:00 PM to 06:00 PM	0	1	0	0		0	0	11	2		0	0	0	0		0	0	16	0	
Heavy Vehicle % (PHV):	0.0%	1.6%	0.0%	0.0%	**1.3%**	0.0%	0.0%	13.3%	2.6%	**7.9%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	17.4%	0.0%	**15.8%**
INT. PEAK HR (HV ONLY)	4					15					0					14				
03:30 PM to 04:30 PM	0	4	0	0		0	0	12	3		0	0	0	0		0	0	14	0	
Heavy Vehicle % (PHV):	0.0%	4.0%	0.0%	0.0%	**3.7%**	0.0%	0.0%	18.2%	11.1%	**15.5%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	20.9%	0.0%	**20.3%**

BICYCLES

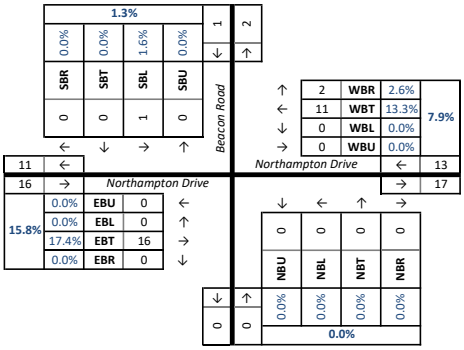
Direction:	Southbound				Westbound				Northbound				Eastbound			
Roadway:	Beacon Road				Northampton Drive								Northampton Drive			
Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
02:00 PM to 02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM to 02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM to 02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM to 03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM to 03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM to 03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM to 03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM to 04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	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
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)	0				0				0				0			
02:00 PM to 03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

DATA COLLECTION NOTES :

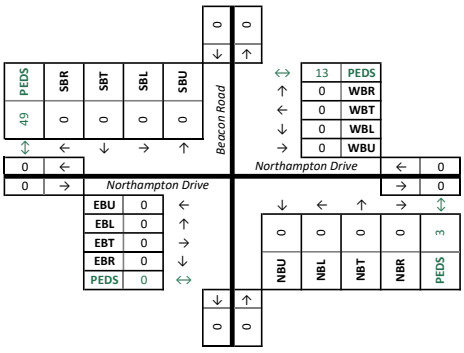
VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



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 : JoAnn Leleck Elementary School
Project # : 3263-001
Location Montgomery County, MD
Data Source: Gorove/Slade Associates, Inc.

Analysis Period: STUDY_PERIOD 02:00 PM to 07:00 PM
Date of Counts: Thursday, June 8, 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: 03:00 PM to 04:00 PM

Intersection: 1. New Hampshire Avenue & /Northampton Drive

ALL VEHICLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	New Hampshire Avenue										New Hampshire Avenue					Northampton Drive				
Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
02:00 PM to 02:15 PM	0	0	345	22	0	0	0	0	0	0	3	21	358	0	0	1	14	0	18	0
02:15 PM to 02:30 PM	0	0	391	16	0	0	0	0	0	0	1	20	297	0	0	2	22	0	26	0
02:30 PM to 02:45 PM	0	0	350	36	0	0	0	0	0	0	0	44	366	0	0	0	26	0	23	0
02:45 PM to 03:00 PM	0	0	369	28	0	0	0	0	0	0	2	47	365	0	0	1	23	0	38	0
03:00 PM to 03:15 PM	0	0	424	33	0	0	0	0	0	0	0	41	388	0	0	2	34	0	55	0
03:15 PM to 03:30 PM	0	0	423	46	0	0	0	0	0	0	0	41	346	0	1	5	35	0	34	0
03:30 PM to 03:45 PM	0	0	445	32	0	0	0	0	0	0	0	36	400	0	0	9	48	0	62	2
03:45 PM to 04:00 PM	0	0	458	31	1	0	0	0	0	0	1	45	358	0	2	7	40	0	57	0
04:00 PM to 04:15 PM	0	0	416	32	1	0	0	0	0	0	0	40	326	0	1	7	33	0	62	0
04:15 PM to 04:30 PM	0	0	421	20	0	0	0	0	0	0	3	52	389	0	4	9	29	0	36	0
04:30 PM to 04:45 PM	0	0	440	37	1	0	0	0	0	0	1	45	328	0	3	9	14	0	54	0
04:45 PM to 05:00 PM	0	0	470	38	0	0	0	0	0	0	0	53	427	0	1	6	27	0	56	0
05:00 PM to 05:15 PM	0	0	468	27	0	0	0	0	0	0	0	41	387	0	5	4	33	0	55	0
05:15 PM to 05:30 PM	0	0	464	30	0	0	0	0	0	0	1	46	364	0	0	4	41	0	38	0
05:30 PM to 05:45 PM	0	0	440	38	0	0	0	0	0	0	0	37	416	0	2	2	33	0	54	0
05:45 PM to 06:00 PM	0	0	516	41	4	0	0	0	0	0	1	43	403	0	1	5	30	0	45	0
06:00 PM to 06:15 PM	0	0	435	34	0	0	0	0	0	0	1	37	316	0	1	6	28	0	33	0
06:15 PM to 06:30 PM	0	0	502	49	1	0	0	0	0	0	4	38	303	0	4	5	29	0	23	0
06:30 PM to 06:45 PM	0	0	453	39	0	0	0	0	0	0	1	19	318	0	4	1	41	0	35	1
06:45 PM to 07:00 PM	0	0	461	35	0	0	0	0	0	0	1	36	268	0	1	6	36	0	58	1
SYSTEM PEAK HR (VEH.)	2024				4	0				0	1739				8	344				0
05:00 PM to 06:00 PM	0	0	1888	136		0	0	0	0		2	167	1570	0		15	137	0	192	
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) **0.95**	n/a	n/a	0.91	0.83	**0.91**	n/a	n/a	n/a	n/a	**n/a**	0.50	0.91	0.94	n/a	**0.96**	0.75	0.84	n/a	0.87	**0.93**

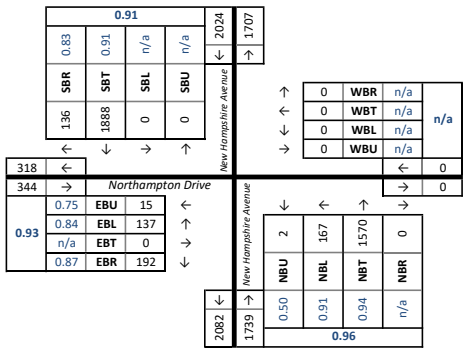
HEAVY VEHICLES (FHWA 4+)

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	New Hampshire Avenue										New Hampshire Avenue					Northampton Drive				
Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
02:00 PM to 02:15 PM	0	0	12	2		0	0	0	0		0	0	13	0		0	2	0	2	
02:15 PM to 02:30 PM	0	0	15	1		0	0	0	0		0	1	18	0		0	4	0	0	
02:30 PM to 02:45 PM	0	0	9	2		0	0	0	0		0	0	20	0		0	2	0	1	
02:45 PM to 03:00 PM	0	0	23	6		0	0	0	0		0	1	13	0		0	5	0	4	
03:00 PM to 03:15 PM	0	0	12	3		0	0	0	0		0	0	15	0		0	3	0	2	
03:15 PM to 03:30 PM	0	0	10	2		0	0	0	0		0	3	1	0		0	1	0	0	
03:30 PM to 03:45 PM	0	0	7	2		0	0	0	0		0	1	18	0		1	3	0	2	
03:45 PM to 04:00 PM	0	0	8	3		0	0	0	0		0	1	11	0		0	6	0	2	
04:00 PM to 04:15 PM	0	0	3	1		0	0	0	0		0	0	4	0		0	2	0	0	
04:15 PM to 04:30 PM	0	0	3	3		0	0	0	0		0	0	13	0		0	7	0	0	
04:30 PM to 04:45 PM	0	0	2	1		0	0	0	0		0	0	9	0		0	3	0	0	
04:45 PM to 05:00 PM	0	0	7	2		0	0	0	0		0	0	9	0		0	6	0	0	
05:00 PM to 05:15 PM	0	0	8	1		0	0	0	0		0	0	9	0		0	2	0	2	
05:15 PM to 05:30 PM	0	0	1	2		0	0	0	0		0	0	9	0		0	6	0	0	
05:30 PM to 05:45 PM	0	0	6	4		0	0	0	0		0	1	4	0		0	2	0	0	
05:45 PM to 06:00 PM	0	0	4	2		0	0	0	0		0	0	13	0		0	4	0	2	
06:00 PM to 06:15 PM	0	0	4	0		0	0	0	0		0	0	6	0		0	2	0	0	
06:15 PM to 06:30 PM	0	0	2	1		0	0	0	0		0	1	2	0		0	4	0	0	
06:30 PM to 06:45 PM	0	0	6	1		0	0	0	0		0	0	5	0		0	6	0	0	
06:45 PM to 07:00 PM	0	0	7	2		0	0	0	0		0	0	7	0		0	2	0	0	
SYSTEM PEAK HR (VEH.)	28					0					36					18				
05:00 PM to 06:00 PM	0	0	19	9		0	0	0	0		0	1	35	0		0	14	0	4	
Heavy Vehicle % (PHV):	0.0%	0.0%	1.0%	6.6%	**1.4%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.6%	2.2%	0.0%	**2.1%**	0.0%	10.2%	0.0%	2.1%	**5.2%**
INT. PEAK HR (HV ONLY)	71					0					68					21				
02:15 PM to 03:15 PM	0	0	59	12		0	0	0	0		0	2	66	0		0	14	0	7	
Heavy Vehicle % (PHV):	0.0%	0.0%	3.8%	10.6%	**4.3%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	1.3%	4.7%	0.0%	**4.3%**	0.0%	13.3%	0.0%	4.9%	**8.3%**

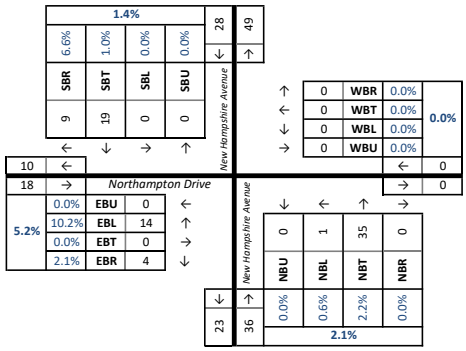
BICYCLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	New Hampshire Avenue										New Hampshire Avenue					Northampton Drive				
Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
02:00 PM to 02:15 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
02:15 PM to 02:30 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
02:30 PM to 02:45 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
02:45 PM to 03:00 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
03:00 PM to 03:15 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
03:15 PM to 03:30 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	1	
03:30 PM to 03:45 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
03:45 PM to 04:00 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
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	0	0		0	0	0	0		0	0	0	0	
04:45 PM to 05:00 PM	0	0	0	2		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	1		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	1	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	
SYSTEM PEAK HR (VEH.)	1					0					0					1				
05:00 PM to 06:00 PM	0	0	0	1		0	0	0	0		0	0	0	0		0	1	0	0	
INT. PEAK HR (BIKES)	3					0					0					1				
04:45 PM to 05:45 PM	0	0	0	3		0	0	0	0		0	0	0	0		0	1	0	0	

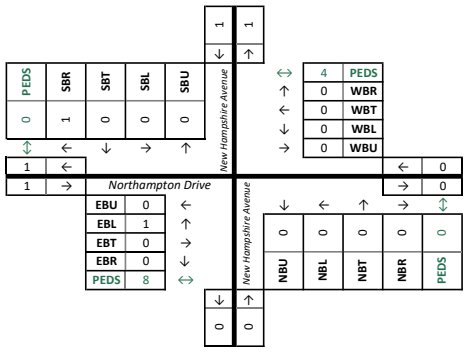
VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



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



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



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : JoAnn Leleck Elementary School
Project # : 3263-001
Location Montgomery County, MD
Data Source: Gorove/Slade Associates, Inc.

Analysis Period: STUDY_PERIOD 02:00 PM to 07:00 PM
Date of Counts: Thursday, June 8, 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: 03:00 PM to 04:00 PM

Intersection: 1. New Hampshire Avenue & /Southampton Drive

ALL VEHICLES

	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	New Hampshire Avenue										New Hampshire Avenue					Southampton Drive				
	Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
02:00 PM	to 02:15 PM	2	0	378	8	0	0	0	0	0	0	2	11	405	0	0	0	0	0	10	1
02:15 PM	to 02:30 PM	0	0	476	7	0	0	0	0	0	0	1	16	360	0	0	0	3	0	21	2
02:30 PM	to 02:45 PM	0	0	405	9	0	0	0	0	0	0	3	22	430	0	0	0	0	0	17	0
02:45 PM	to 03:00 PM	0	0	467	7	0	0	0	0	0	0	0	21	458	0	0	0	0	0	17	1
03:00 PM	to 03:15 PM	0	0	502	5	0	0	0	0	0	0	2	18	427	0	0	0	0	0	22	0
03:15 PM	to 03:30 PM	0	0	461	7	0	0	0	0	0	0	1	28	411	0	0	0	3	0	20	0
03:30 PM	to 03:45 PM	0	0	505	7	0	0	0	0	0	0	1	25	516	0	0	0	0	0	27	1
03:45 PM	to 04:00 PM	0	0	523	6	0	0	0	0	0	0	0	31	395	0	0	0	1	0	20	1
04:00 PM	to 04:15 PM	0	0	475	13	0	0	0	0	0	0	0	30	524	0	0	0	0	0	22	1
04:15 PM	to 04:30 PM	0	0	437	7	0	0	0	0	0	0	0	28	490	0	0	0	1	0	15	0
04:30 PM	to 04:45 PM	0	0	519	14	0	0	0	0	0	0	1	44	495	0	0	0	3	0	19	0
04:45 PM	to 05:00 PM	0	0	578	13	0	0	0	0	0	0	2	32	467	0	0	1	2	0	28	1
05:00 PM	to 05:15 PM	0	0	553	13	0	0	0	0	0	0	3	25	492	0	0	0	2	0	30	2
05:15 PM	to 05:30 PM	0	0	533	9	0	0	0	0	0	0	3	37	500	0	0	0	0	0	15	0
05:30 PM	to 05:45 PM	0	0	493	8	0	0	0	0	0	0	1	45	585	0	0	0	0	0	26	8
05:45 PM	to 06:00 PM	0	0	532	13	0	0	0	0	0	0	0	34	531	0	0	0	0	0	29	1
06:00 PM	to 06:15 PM	0	0	585	8	0	0	0	0	0	0	0	34	398	0	0	0	0	0	18	3
06:15 PM	to 06:30 PM	0	0	510	9	0	0	0	0	0	0	0	31	423	0	8	0	6	0	33	9
06:30 PM	to 06:45 PM	0	0	578	9	0	0	0	0	0	0	0	43	377	0	0	0	0	0	25	1
06:45 PM	to 07:00 PM	0	0	533	13	0	0	0	0	0	0	1	36	322	0	0	0	1	0	35	1
SYSTEM PEAK HR (VEH.)		2154				0	0				0	2256				0	102				11
05:00 PM	to 06:00 PM	0	0	2111	43		0	0	0	0		7	141	2108	0		0	2	0	100	
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)	**0.97**	n/a	n/a	0.95	0.83	**0.95**	n/a	n/a	n/a	n/a	**n/a**	0.58	0.78	0.90	n/a	**0.89**	n/a	0.25	n/a	0.83	**0.80**

HEAVY VEHICLES (FHWA 4+)

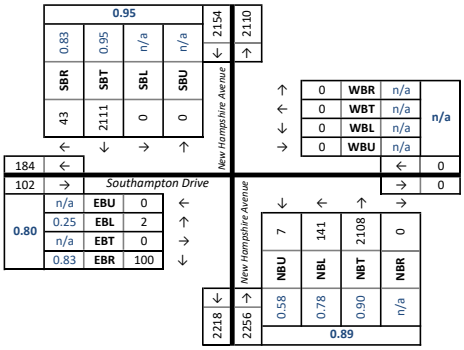
	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	New Hampshire Avenue										New Hampshire Avenue					Southampton Drive				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
02:00 PM	to 02:15 PM	0	0	11	1		0	0	0	0		0	2	22	0		0	0	0	1	
02:15 PM	to 02:30 PM	0	0	15	1		0	0	0	0		0	3	19	0		0	0	0	4	
02:30 PM	to 02:45 PM	0	0	9	0		0	0	0	0		0	2	21	0		0	0	0	1	
02:45 PM	to 03:00 PM	0	0	27	1		0	0	0	0		0	4	19	0		0	0	0	3	
03:00 PM	to 03:15 PM	0	0	11	0		0	0	0	0		0	3	23	0		0	0	0	7	
03:15 PM	to 03:30 PM	0	0	6	0		0	0	0	0		0	3	9	0		0	2	0	1	
03:30 PM	to 03:45 PM	0	0	11	0		0	0	0	0		0	4	24	0		0	0	0	4	
03:45 PM	to 04:00 PM	0	0	11	0		0	0	0	0		0	3	12	0		0	0	0	3	
04:00 PM	to 04:15 PM	0	0	8	0		0	0	0	0		0	3	10	0		0	0	0	2	
04:15 PM	to 04:30 PM	0	0	6	0		0	0	0	0		0	3	12	0		0	0	0	5	
04:30 PM	to 04:45 PM	0	0	3	0		0	0	0	0		0	3	14	0		0	0	0	3	
04:45 PM	to 05:00 PM	0	0	5	0		0	0	0	0		0	5	9	0		0	0	0	1	
05:00 PM	to 05:15 PM	0	0	9	0		0	0	0	0		0	3	16	0		0	0	0	3	
05:15 PM	to 05:30 PM	0	0	4	0		0	0	0	0		0	6	6	0		0	0	0	3	
05:30 PM	to 05:45 PM	0	0	3	0		0	0	0	0		0	3	4	0		0	0	0	3	
05:45 PM	to 06:00 PM	0	0	4	0		0	0	0	0		0	3	16	0		0	0	0	2	
06:00 PM	to 06:15 PM	0	0	3	0		0	0	0	0		0	2	8	0		0	0	0	2	
06:15 PM	to 06:30 PM	0	0	3	0		0	0	0	0		0	3	5	0		0	0	0	2	
06:30 PM	to 06:45 PM	0	0	4	0		0	0	0	0		0	4	7	0		0	0	0	2	
06:45 PM	to 07:00 PM	0	0	5	0		0	0	0	0		0	1	7	0		0	0	0	2	
SYSTEM PEAK HR (VEH.)		20					0					57					11				
05:00 PM	to 06:00 PM	0	0	20	0		0	0	0	0		0	15	42	0		0	0	0	11	
Heavy Vehicle % (PHV):		0.0%	0.0%	0.9%	0.0%	**0.9%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	10.6%	2.0%	0.0%	**2.5%**	0.0%	0.0%	0.0%	11.0%	**10.8%**
INT. PEAK HR (HV ONLY)		64					0					94					15				
02:15 PM	to 03:15 PM	0	0	62	2		0	0	0	0		0	12	82	0		0	0	0	15	
Heavy Vehicle % (PHV):		0.0%	0.0%	3.4%	7.1%	**3.4%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	15.6%	4.9%	0.0%	**5.3%**	0.0%	0.0%	0.0%	19.5%	**18.8%**

BICYCLES

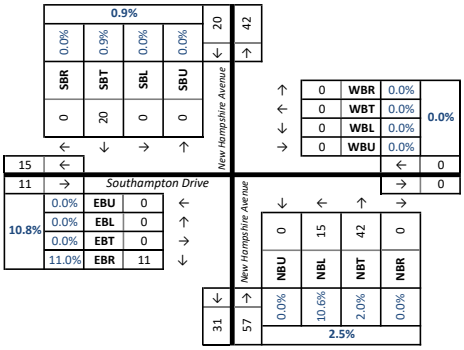
	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	New Hampshire Avenue										New Hampshire Avenue					Southampton Drive				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
02:00 PM	to 02:15 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
02:15 PM	to 02:30 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
02:30 PM	to 02:45 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
02:45 PM	to 03:00 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	1	0	0	
03:00 PM	to 03:15 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
03:15 PM	to 03:30 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
03:30 PM	to 03:45 PM	0	0	2	2		0	0	0	0		0	0	0	0		0	0	0	0	
03:45 PM	to 04:00 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
04:00 PM	to 04:15 PM	0	0	1	1		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	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	1	
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	0	0		0	0	0	0	
05:45 PM	to 06:00 PM	0	0	1	0		0	0	0	0		0	0	3	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	
SYSTEM PEAK HR (VEH.)		2					0					3					1				
05:00 PM	to 06:00 PM	0	0	2	0		0	0	0	0		0	0	3	0		0	0	0	1	
INT. PEAK HR (BIKES)		6					0					0					0				
03:15 PM	to 04:15 PM	0	0	3	3		0	0	0	0		0	0	0	0		0	0	0	0	

DATA COLLECTION NOTES :

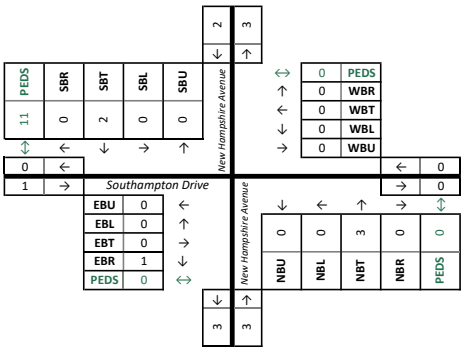
VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



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 : JoAnn Leleck Elementary School
Project # : 3263-001
Location Montgomery County, MD
Data Source: Gorove/Slade Associates, Inc.

Analysis Period: STUDY_PERIOD 02:00 PM to 07:00 PM
Date of Counts: Thursday, June 8, 2023
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 03:00 PM to 04:00 PM
System Peak Hour (all vehicles): 05:00 PM to 06:00 PM
User-Defined Peak Hour: 03:00 PM to 04:00 PM

Intersection: 1. Beacon Road & /School Parking Lot Driveway

ALL VEHICLES

	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Beacon Road										Beacon Road					School Parking Lot Driveway				
	Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
02:00 PM	to 02:15 PM	0	0	3	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	0
02:15 PM	to 02:30 PM	0	0	3	0	0	0	0	0	0	0	1	2	1	0	0	0	0	0	1	0
02:30 PM	to 02:45 PM	0	0	0	0	0	0	0	0	0	0	0	7	8	0	3	0	0	0	4	0
02:45 PM	to 03:00 PM	0	0	6	1	0	0	0	0	0	0	0	6	4	0	1	0	0	0	3	0
03:00 PM	to 03:15 PM	0	0	45	0	0	0	0	0	0	0	2	8	11	0	1	0	0	0	2	0
03:15 PM	to 03:30 PM	0	0	5	2	0	0	0	0	0	0	2	9	8	0	37	0	0	0	16	0
03:30 PM	to 03:45 PM	0	0	7	2	0	0	0	0	0	0	0	9	4	0	28	0	0	0	36	0
03:45 PM	to 04:00 PM	0	0	1	0	0	0	0	0	0	0	0	2	1	0	2	0	0	0	19	0
04:00 PM	to 04:15 PM	0	0	1	0	0	0	0	0	0	0	0	3	1	0	1	1	1	0	6	0
04:15 PM	to 04:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0
04:30 PM	to 04:45 PM	0	0	0	0	0	0	0	0	0	0	1	4	2	0	3	0	0	0	8	0
04:45 PM	to 05:00 PM	0	0	2	0	0	0	0	0	0	0	1	6	2	0	6	1	0	0	16	0
05:00 PM	to 05:15 PM	0	0	4	0	0	0	0	0	0	0	2	7	2	0	0	0	0	0	11	0
05:15 PM	to 05:30 PM	0	0	2	0	0	0	0	0	0	0	5	11	3	0	1	0	0	0	5	0
05:30 PM	to 05:45 PM	1	0	2	0	0	0	0	0	0	0	1	16	5	0	1	0	0	0	12	0
05:45 PM	to 06:00 PM	0	0	4	0	0	0	0	0	0	0	0	10	0	0	3	0	0	0	10	0
06:00 PM	to 06:15 PM	0	0	2	0	0	0	0	0	0	0	2	11	4	0	5	0	0	0	6	2
06:15 PM	to 06:30 PM	0	0	2	1	0	0	0	0	0	0	0	14	1	0	7	0	1	0	6	1
06:30 PM	to 06:45 PM	0	0	4	0	0	0	0	0	0	0	0	7	3	0	4	0	0	0	6	1
06:45 PM	to 07:00 PM	0	0	1	0	0	0	0	0	0	0	3	11	1	0	5	0	0	0	8	2
SYSTEM PEAK HR (VEH.)		13				0	0				0	62				5	38				0
05:00 PM	to 06:00 PM	1	0	12	0		0	0	0	0		8	44	10	0		0	0	0	38	
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)	**0.76**	0.25	n/a	0.75	n/a	**0.81**	n/a	n/a	n/a	n/a	**n/a**	0.40	0.69	0.50	n/a	**0.70**	n/a	n/a	n/a	0.79	**0.79**

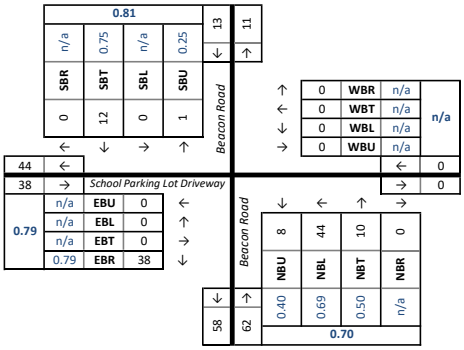
HEAVY VEHICLES (FHWA 4+)

	Direction:	Southbound					Westbound					Northbound					Eastbound				
	Roadway:	Beacon Road										Beacon Road					School Parking Lot Driveway				
	Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
02:00 PM	to 02:15 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
02:15 PM	to 02:30 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
02:30 PM	to 02:45 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
02:45 PM	to 03:00 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
03:00 PM	to 03:15 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
03:15 PM	to 03:30 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
03:30 PM	to 03:45 PM	0	0	0	0		0	0	0	0		0	0	1	0		0	0	0	0	
03:45 PM	to 04:00 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
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	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	1	0	0		0	0	0	1	
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	
SYSTEM PEAK HR (VEH.)		0					0					1					1				
05:00 PM	to 06:00 PM	0	0	0	0		0	0	0	0		0	1	0	0		0	0	0	1	
Heavy Vehicle % (PHV):		0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	2.3%	0.0%	0.0%	**1.6%**	0.0%	0.0%	0.0%	2.6%	**2.6%**
INT. PEAK HR (HV ONLY)		0					0					1					1				
04:30 PM	to 05:30 PM	0	0	0	0		0	0	0	0		0	1	0	0		0	0	0	1	
Heavy Vehicle % (PHV):		0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	3.6%	0.0%	0.0%	**2.2%**	0.0%	0.0%	0.0%	2.5%	**2.4%**

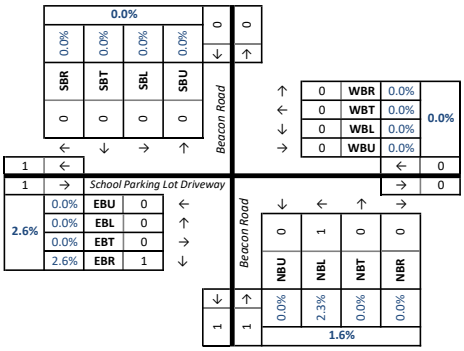
BICYCLES

	Direction:	Southbound				Westbound				Northbound				Eastbound			
	Roadway:	Beacon Road								Beacon Road				School Parking Lot Driveway			
	Movement:	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right
02:00 PM	to 02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM	to 02:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30 PM	to 02:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45 PM	to 03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00 PM	to 03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	to 03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	to 03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	to 04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	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
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)		0				0				0				0			
02:00 PM	to 03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

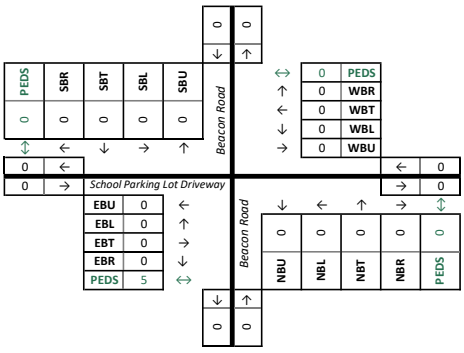
VEHICLE PEAK HOUR VOLS AND PHF: System Peak (vehicle)



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



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



DATA COLLECTION NOTES :

Gorove/Slade Associates - Multimodal Turning Movement Count Report

Project Name : JoAnn Leleck Elementary School
Project # : 3263-001
Location Montgomery County, MD
Data Source: Gorove/Slade Associates, Inc.

Analysis Period: STUDY_PERIOD 02:00 PM to 07:00 PM
Date of Counts: Thursday, June 8, 2023
Weather: Partly Cloudy

Volumes Displayed as: 2. System Peak (vehicle)
Intersection Peak Hour (all vehicles): 03:00 PM to 04:00 PM
System Peak Hour (all vehicles): 05:00 PM to 06:00 PM
User-Defined Peak Hour: 03:00 PM to 04:00 PM

Intersection: 1. Beacon Road & /School Bus Loop

ALL VEHICLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Beacon Road										Beacon Road					School Bus Loop				
Movement:	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds	U	Left	Thru	Right	Peds
02:00 PM to 02:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15 PM to 02:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
02:30 PM to 02:45 PM	0	0	0	1	3	0	0	0	0	0	0	2	0	0	3	0	0	0	2	0
02:45 PM to 03:00 PM	0	0	0	1	1	0	0	0	0	0	0	3	0	0	1	0	0	0	1	0
03:00 PM to 03:15 PM	0	0	0	0	1	0	0	0	0	0	0	8	0	0	1	0	0	0	4	0
03:15 PM to 03:30 PM	0	0	0	0	37	0	0	0	0	0	0	5	0	0	5	0	0	0	8	67
03:30 PM to 03:45 PM	0	0	0	1	28	0	0	0	0	0	0	4	0	0	6	0	0	0	8	5
03:45 PM to 04:00 PM	0	0	0	0	2	0	0	0	0	0	0	2	0	0	1	2	0	0	6	0
04:00 PM to 04:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	3	0
04:15 PM to 04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0
04:30 PM to 04:45 PM	0	0	0	0	3	0	0	0	0	0	0	7	0	0	5	0	0	0	6	0
04:45 PM to 05:00 PM	0	0	0	0	6	0	0	0	0	0	0	3	0	0	6	0	0	0	7	2
05:00 PM to 05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
05:15 PM to 05:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30 PM to 05:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
05:45 PM to 06:00 PM	0	0	0	0	3	0	0	0	0	0	0	2	0	0	0	0	0	0	3	4
06:00 PM to 06:15 PM	0	0	0	0	5	0	0	0	0	0	0	0	0	0	2	0	0	0	1	3
06:15 PM to 06:30 PM	0	0	0	0	7	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0
06:30 PM to 06:45 PM	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
06:45 PM to 07:00 PM	0	0	0	0	5	0	0	0	0	0	0	0	0	0	1	0	0	0	0	4
SYSTEM PEAK HR (VEH.)	0				5	0				0	2				1	3				15
05:00 PM to 06:00 PM	0	0	0	0		0	0	0	0		0	2	0	0		0	0	0	3	
Peak Hour Factor (PHF) Overall	0.25																			
	n/a	n/a	n/a	n/a	**SB n/a**	n/a	n/a	n/a	n/a	**WB n/a**	n/a	0.25	n/a	n/a	**NB 0.25**	n/a	n/a	n/a	0.25	**EB 0.25**

HEAVY VEHICLES (FHWA 4+)

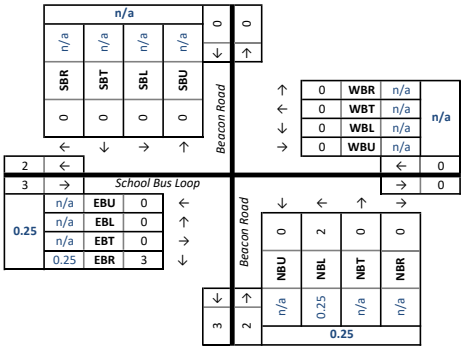
Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Beacon Road										Beacon Road					School Bus Loop				
Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
02:00 PM to 02:15 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
02:15 PM to 02:30 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
02:30 PM to 02:45 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
02:45 PM to 03:00 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
03:00 PM to 03:15 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
03:15 PM to 03:30 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
03:30 PM to 03:45 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
03:45 PM to 04:00 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
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	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	
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	
Heavy Vehicle % (PHV):	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**
INT. PEAK HR (HV ONLY)	0					0					0					0				
02:00 PM to 03:00 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
Heavy Vehicle % (PHV):	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	**0.0%**

BICYCLES

Direction:	Southbound					Westbound					Northbound					Eastbound				
Roadway:	Beacon Road										Beacon Road					School Bus Loop				
Movement:	U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right		U	Left	Thru	Right	
02:00 PM to 02:15 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
02:15 PM to 02:30 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
02:30 PM to 02:45 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
02:45 PM to 03:00 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
03:00 PM to 03:15 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
03:15 PM to 03:30 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
03:30 PM to 03:45 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
03:45 PM to 04:00 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	
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	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	
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)	0					0					0					0				
02:00 PM to 03:00 PM	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0	

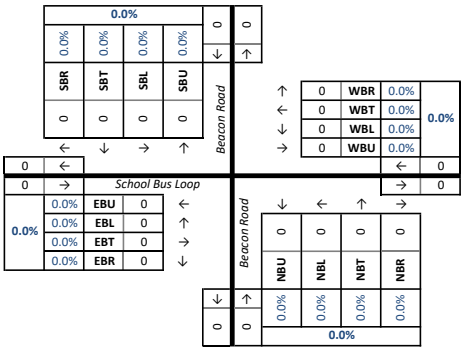
DATA COLLECTION NOTES :

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

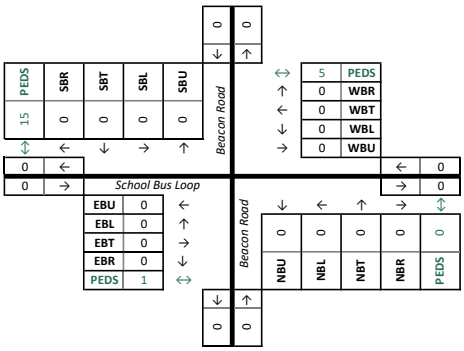


Gorove Slade note: Due to this intersection's proximity to Intersection 4, its through volumes were not recorded here. Additionally, volumes coded EBU's at this intersection are actually EBL's which ultimately turned left again into the parking lot driveway to the north (Intersection 4).

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



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



E. Background Development Trip Generation Calculations

Trip Generation - Background Residential

Background Development - Hillandale Gateway

Policy Area: 38. White Oak

Step 1: Base trip generation using ITEs' *Trip Generation* 10th Edition

Land Use	Land Use Code	Quantity	AM Peak Hour			PM Peak Hour			Weekday
			In	Out	Total	In	Out	Total	Total
High-rise Apt	222	463 du	31 veh/hr	90 veh/hr	121 veh/hr	89 veh/hr	55 veh/hr	144 veh/hr	2118 veh
		Calculation Details:	*26%*	*74%*	*=0.22X+18.85*	*62%*	*38%*	*=0.26X+23.12*	*FALSE*

Step 2: Convert to policy area vehicle trips

Land Use	ITE Vehicle-Trip generation Rate Adjustment Factor (Appendix Table 1a)	AM Peak Hour			PM Peak Hour			Weekday
		In	Out	Total	In	Out	Total	Total
High-rise Apt	89%	28 veh/hr	80 veh/hr	108 veh/hr	79 veh/hr	49 veh/hr	128 veh/hr	1885 veh/hr

Step 3: Convert to total person trips, before applying mode splits

Land Use	People/Car (Appendix Table 1b)	AM Peak Hour			PM Peak Hour			Weekday
		In	Out	Total	In	Out	Total	Total
High-rise Apt	57.9%	48 ppl/hr	139 ppl/hr	187 ppl/hr	136 ppl/hr	85 ppl/hr	221 ppl/hr	3256 ppl/hr

Step 4: Split between modes, per assumed Mode Splits by Policy Area

Land Use	Mode	Split	AM Peak Hour			PM Peak Hour			Weekday
			In	Out	Total	In	Out	Total	Total
High-rise Apt	Auto Driver	57.9%	28 ppl/hr	80 ppl/hr	108 ppl/hr	79 ppl/hr	49 ppl/hr	128 ppl/hr	1885 ppl/hr
High-rise Apt	Auto Passenger	25.8%	12 ppl/hr	36 ppl/hr	48 ppl/hr	35 ppl/hr	22 ppl/hr	57 ppl/hr	840 ppl/hr
High-rise Apt	Transit	7.8%	4 ppl/hr	11 ppl/hr	15 ppl/hr	11 ppl/hr	6 ppl/hr	17 ppl/hr	254 ppl/hr
High-rise Apt	Non-Motorized	8.5%	4 ppl/hr	12 ppl/hr	16 ppl/hr	11 ppl/hr	8 ppl/hr	19 ppl/hr	277 ppl/hr
	Total	100.0%							

Trip Gen Summary

Mode	AM Peak Hour			PM Peak Hour			Weekday
	In	Out	Total	In	Out	Total	Total
Auto Driver	28 veh/hr	80 veh/hr	108 veh/hr	79 veh/hr	49 veh/hr	128 veh/hr	1885 veh/hr
Auto Passenger	12 ppl/hr	36 ppl/hr	48 ppl/hr	35 ppl/hr	22 ppl/hr	57 ppl/hr	840 ppl/hr
Transit	4 ppl/hr	11 ppl/hr	15 ppl/hr	11 ppl/hr	6 ppl/hr	17 ppl/hr	254 ppl/hr
Bicycle (Non-motorized)	4 ppl/hr	12 ppl/hr	16 ppl/hr	11 ppl/hr	8 ppl/hr	19 ppl/hr	277 ppl/hr
Walk (Transit and other walk trips)	8 ppl/hr	23 ppl/hr	31 ppl/hr	22 ppl/hr	14 ppl/hr	36 ppl/hr	531 ppl/hr

Trip Generation - Retail

Background Development - Hillandale Gateway

Policy Area: 38. White Oak

Step 1: Base trip generation using ITEs' *Trip Generation* 10th Edition

Land Use	Land Use Code	Quantity	AM Peak Hour			PM Peak Hour			Weekday
			In	Out	Total	In	Out	Total	Total
Retail	822	16,039 sf	23 veh/hr	16 veh/hr	39 veh/hr	55 veh/hr	54 veh/hr	109 veh/hr	907 veh
		Calculation Details:	*60%*	*40%*	*Ln(T)=0.66Ln(X/1000)+1.84*	*50%*	*50%*	*Ln(T)=0.71Ln(X/1000)+2.72*	*=42.2(X/1000)+229.68*

Step 2: Convert to policy area vehicle trips

Land Use	ITE Vehicle-Trip generation Rate Adjustment Factor (Appendix Table 1a)	AM Peak Hour			PM Peak Hour			Weekday
		In	Out	Total	In	Out	Total	Total
Retail	91%	21 veh/hr	14 veh/hr	35 veh/hr	50 veh/hr	49 veh/hr	99 veh/hr	825 veh/hr

Step 3: Convert to total person trips, before applying mode splits

Land Use	People/Car (Appendix Table 1b)	AM Peak Hour			PM Peak Hour			Weekday
		In	Out	Total	In	Out	Total	Total
Retail	65.7%	32 ppl/hr	21 ppl/hr	53 ppl/hr	76 ppl/hr	75 ppl/hr	151 ppl/hr	1256 ppl/hr

Step 4: Split between modes, per assumed Mode Splits by Policy Area

Land Use	Mode	Split	AM Peak Hour			PM Peak Hour			Weekday
			In	Out	Total	In	Out	Total	Total
Retail	Auto Driver	65.7%	21 ppl/hr	14 ppl/hr	35 ppl/hr	50 ppl/hr	49 ppl/hr	99 ppl/hr	825 ppl/hr
Retail	Auto Passenger	28.0%	9 ppl/hr	6 ppl/hr	15 ppl/hr	21 ppl/hr	21 ppl/hr	42 ppl/hr	352 ppl/hr
Retail	Transit	2.0%	1 ppl/hr	0 ppl/hr	1 ppl/hr	2 ppl/hr	1 ppl/hr	3 ppl/hr	25 ppl/hr
Retail	Non-Motorized	4.3%	1 ppl/hr	1 ppl/hr	2 ppl/hr	3 ppl/hr	4 ppl/hr	7 ppl/hr	54 ppl/hr
	Total	100.0%							

Trip Gen Summary

Mode	AM Peak Hour			PM Peak Hour			Weekday
	In	Out	Total	In	Out	Total	Total
Auto Driver	21 veh/hr	14 veh/hr	35 veh/hr	50 veh/hr	49 veh/hr	99 veh/hr	825 veh/hr
Auto Passenger	9 ppl/hr	6 ppl/hr	15 ppl/hr	21 ppl/hr	21 ppl/hr	42 ppl/hr	352 ppl/hr
Transit	1 ppl/hr	0 ppl/hr	1 ppl/hr	2 ppl/hr	1 ppl/hr	3 ppl/hr	25 ppl/hr
Bicycle (Non-motorized)	1 ppl/hr	1 ppl/hr	2 ppl/hr	3 ppl/hr	4 ppl/hr	7 ppl/hr	54 ppl/hr
Walk (Transit and other walk trips)	2 ppl/hr	1 ppl/hr	3 ppl/hr	5 ppl/hr	5 ppl/hr	10 ppl/hr	79 ppl/hr

F. Existing Vehicular Capacity (HCM and CLV) Analysis Worksheets

HCM 2010 TWSC
1: Northampton Dr & Beacon Rd

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Vol, veh/h	3	54	1	39	65	83	0
Future Vol, veh/h	3	54	1	39	65	83	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	None
Storage Length	-	-	-	-	-	0	-
Veh in Median Storage, #	-	0	-	0	-	0	-
Grade, %	-	0	-	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85
Heavy Vehicles, %	0	13	100	44	8	5	0
Mvmt Flow	4	64	1	46	76	98	0

Major/Minor	Major1		Major2			Minor2	
Conflicting Flow All	122	0	-	-	0	156	84
Stage 1	-	-	-	-	-	84	-
Stage 2	-	-	-	-	-	72	-
Critical Hdwy	4.1	-	-	-	-	6.45	6.2
Critical Hdwy Stg 1	-	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	-	5.45	-
Follow-up Hdwy	2.2	-	-	-	-	3.545	3.3
Pot Cap-1 Maneuver	1478	-	-	-	-	828	981
Stage 1	-	-	-	-	-	932	-
Stage 2	-	-	-	-	-	943	-
Platoon blocked, %		-		-	-		
Mov Cap-1 Maneuver	1478	-	-	-	-	826	981
Mov Cap-2 Maneuver	-	-	-	-	-	826	-
Stage 1	-	-	-	-	-	929	-
Stage 2	-	-	-	-	-	943	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4		9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1478	-	-	-	826
HCM Lane V/C Ratio	0.002	-	-	-	0.118
HCM Control Delay (s)	7.4	0	-	-	9.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.4

Queues

2: New Hampshire Ave & Northampton Dr

JoAnn Leleck Elementary School
08/15/2023

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	203	275	154	1544	2708
v/c Ratio	0.57	0.76	0.69	0.37	0.77
Control Delay	81.5	34.1	57.2	4.2	20.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	81.5	34.1	57.2	4.2	20.1
Queue Length 50th (ft)	120	78	157	123	676
Queue Length 95th (ft)	157	184	239	207	992
Internal Link Dist (ft)	158			853	1636
Turn Bay Length (ft)		100	250		
Base Capacity (vph)	813	555	288	4188	3539
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.25	0.50	0.53	0.37	0.77

Intersection Summary

HCM Signalized Intersection Capacity Analysis
2: New Hampshire Ave & Northampton Dr

JoAnn Leleck Elementary School
08/15/2023

Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	8	180	256	4	128	1328	2403	88
Future Volume (vph)	8	180	256	4	128	1328	2403	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	4.0	4.0	
Lane Util. Factor		0.97	1.00		1.00	0.91	0.91	
Frt		1.00	0.85		1.00	1.00	0.99	
Flt Protected		0.95	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		3253	1599		1788	4988	4985	
Flt Permitted		0.95	1.00		0.03	1.00	1.00	
Satd. Flow (perm)		3253	1599		57	4988	4985	
Peak-hour factor, PHF	0.93	0.93	0.93	0.86	0.86	0.86	0.92	0.92
Adj. Flow (vph)	9	194	275	5	149	1544	2612	96
RTOR Reduction (vph)	0	0	184	0	0	0	1	0
Lane Group Flow (vph)	0	203	91	0	154	1544	2707	0
Heavy Vehicles (%)	0%	8%	1%	0%	1%	4%	3%	17%
Turn Type	Perm	Prot	Perm	custom	pm+pt	NA	NA	
Protected Phases		4			1	6	2	
Permitted Phases	4		4	1	6			
Actuated Green, G (s)		17.8	17.8		149.2	149.2	125.7	
Effective Green, g (s)		19.8	19.8		151.2	151.2	127.7	
Actuated g/C Ratio		0.11	0.11		0.84	0.84	0.71	
Clearance Time (s)		7.0	7.0		7.0	6.0	6.0	
Vehicle Extension (s)		3.0	3.0		4.0	0.2	0.2	
Lane Grp Cap (vph)		357	175		225	4189	3536	
v/s Ratio Prot					c0.07	0.31	c0.54	
v/s Ratio Perm		0.06	0.06		0.51			
v/c Ratio		0.57	0.52		0.68	0.37	0.77	
Uniform Delay, d1		76.0	75.6		58.8	3.3	16.6	
Progression Factor		1.00	1.00		0.90	1.10	1.00	
Incremental Delay, d2		2.1	2.6		7.1	0.0	1.6	
Delay (s)		78.1	78.2		59.8	3.7	18.3	
Level of Service		E	E		E	A	B	
Approach Delay (s)		78.2				8.8	18.3	
Approach LOS		E				A	B	

Intersection Summary			
HCM 2000 Control Delay	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	83.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM 2010 TWSC
3: New Hampshire Ave & Southampton Dr

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	2	72	1	41	1582	2969	22
Future Vol, veh/h	2	72	1	41	1582	2969	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	250	-	-	-
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	85	85	93	93	93	95	95
Heavy Vehicles, %	0	19	0	22	3	3	9
Mvmt Flow	2	85	1	44	1701	3125	23

Major/Minor	Minor2		Major1			Major2	
Conflicting Flow All	3907	1574	2298	3148	0	-	0
Stage 1	3137	-	-	-	-	-	-
Stage 2	770	-	-	-	-	-	-
Critical Hdwy	5.7	7.48	5.6	5.74	-	-	-
Critical Hdwy Stg 1	6.6	-	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-	-
Follow-up Hdwy	3.8	4.09	2.3	3.32	-	-	-
Pot Cap-1 Maneuver	8	~ 72	84	~ 22	-	-	-
Stage 1	10	-	-	-	-	-	-
Stage 2	384	-	-	-	-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	8	~ 72	0	0	-	-	-
Mov Cap-2 Maneuver	8	-	-	-	-	-	-
Stage 1	10	-	-	-	-	-	-
Stage 2	384	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 401		0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	59	-	-
HCM Lane V/C Ratio	-	-	1.476	-	-
HCM Control Delay (s)	-	-	$ 401	-	-
HCM Lane LOS	-	-	F	-	-
HCM 95th %tile Q(veh)	-	-	7.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 2010 TWSC
4: Beacon Rd & Parking Lot Dwy

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	6	43	8	56	1
Future Vol, veh/h	0	6	43	8	56	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	2
Mvmt Flow	0	7	51	9	66	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	178	67	67	0	-	0
Stage 1	67	-	-	-	-	-
Stage 2	111	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	816	1002	1547	-	-	-
Stage 1	961	-	-	-	-	-
Stage 2	919	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	789	1002	1547	-	-	-
Mov Cap-2 Maneuver	789	-	-	-	-	-
Stage 1	929	-	-	-	-	-
Stage 2	919	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	6.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1547	-	1002	-	-
HCM Lane V/C Ratio	0.033	-	0.007	-	-
HCM Control Delay (s)	7.4	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	-	-

HCM 2010 TWSC
5: Beacon Rd & Bus Loop Dwy

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	5	17	47	61	1
Future Vol, veh/h	1	5	17	47	61	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	2
Mvmt Flow	1	6	20	55	72	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	168	73	73	0	-	0
Stage 1	73	-	-	-	-	-
Stage 2	95	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	827	995	1540	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	934	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	816	995	1540	-	-	-
Mov Cap-2 Maneuver	816	-	-	-	-	-
Stage 1	943	-	-	-	-	-
Stage 2	934	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1540	-	960	-	-
HCM Lane V/C Ratio	0.013	-	0.007	-	-
HCM Control Delay (s)	7.4	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

HCM 2010 TWSC
1: Northampton Dr & Beacon Rd

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	4.1

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations			↰		↰		⋔	
Traffic Vol, veh/h	1	6	64	6	73	50	113	13
Future Vol, veh/h	1	6	64	6	73	50	113	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	None
Storage Length	-	-	-	-	-	-	0	-
Veh in Median Storage, #	-	-	0	-	0	-	0	-
Grade, %	-	-	0	-	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	20	0	11	8	4	0
Mvmt Flow	1	7	75	7	86	59	133	15

Major/Minor	Major1			Major2			Minor2	
Conflicting Flow All	-	145	0	-	-	0	205	116
Stage 1	-	-	-	-	-	-	116	-
Stage 2	-	-	-	-	-	-	89	-
Critical Hdwy	-	4.1	-	-	-	-	6.44	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.44	-
Follow-up Hdwy	-	2.2	-	-	-	-	3.536	3.3
Pot Cap-1 Maneuver	-	1450	-	-	-	-	779	942
Stage 1	-	-	-	-	-	-	904	-
Stage 2	-	-	-	-	-	-	929	-
Platoon blocked, %			-		-	-		
Mov Cap-1 Maneuver	~ -7	~ -7	-	-	-	-	779	942
Mov Cap-2 Maneuver	-	-	-	-	-	-	779	-
Stage 1	-	-	-	-	-	-	904	-
Stage 2	-	-	-	-	-	-	929	-

Approach	EB	WB	SB
HCM Control Delay, s			10.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	+	-	-	-	793
HCM Lane V/C Ratio	-	-	-	-	0.187
HCM Control Delay (s)	-	-	-	-	10.6
HCM Lane LOS	-	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	-	0.7

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Queues

2: New Hampshire Ave & Northampton Dr

JoAnn Leleck Elementary School
08/15/2023

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	217	253	179	1571	1962
v/c Ratio	0.62	0.64	0.63	0.37	0.55
Control Delay	84.5	15.3	39.8	4.5	14.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	84.5	15.3	39.8	4.5	14.1
Queue Length 50th (ft)	128	1	144	128	377
Queue Length 95th (ft)	161	69	242	254	524
Internal Link Dist (ft)	158			853	1636
Turn Bay Length (ft)		100	250		
Base Capacity (vph)	561	481	390	4285	3557
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.39	0.53	0.46	0.37	0.55

Intersection Summary

HCM Signalized Intersection Capacity Analysis
2: New Hampshire Ave & Northampton Dr

JoAnn Leleck Elementary School
08/15/2023

Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	28	156	215	1	162	1430	1742	141
Future Volume (vph)	28	156	215	1	162	1430	1742	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	4.0	4.0	
Lane Util. Factor		0.97	1.00		1.00	0.91	0.91	
Frt		1.00	0.85		1.00	1.00	0.99	
Flt Protected		0.95	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		3261	1583		1753	5085	5013	
Flt Permitted		0.95	1.00		0.07	1.00	1.00	
Satd. Flow (perm)		3261	1583		133	5085	5013	
Peak-hour factor, PHF	0.85	0.85	0.85	0.91	0.91	0.91	0.96	0.96
Adj. Flow (vph)	33	184	253	1	178	1571	1815	147
RTOR Reduction (vph)	0	0	225	0	0	0	4	0
Lane Group Flow (vph)	0	217	28	0	179	1571	1959	0
Heavy Vehicles (%)	4%	8%	2%	0%	3%	2%	2%	6%
Turn Type	Perm	Prot	Perm	custom	pm+pt	NA	NA	
Protected Phases		4			1	6	2	
Permitted Phases	4		4	1	6			
Actuated Green, G (s)		17.3	17.3		149.7	149.7	125.5	
Effective Green, g (s)		19.3	19.3		151.7	151.7	127.5	
Actuated g/C Ratio		0.11	0.11		0.84	0.84	0.71	
Clearance Time (s)		7.0	7.0		7.0	6.0	6.0	
Vehicle Extension (s)		3.0	3.0		4.0	0.2	0.2	
Lane Grp Cap (vph)		349	169		284	4285	3550	
v/s Ratio Prot					c0.07	0.31	0.39	
v/s Ratio Perm		0.07	0.02		c0.46			
v/c Ratio		0.62	0.17		0.63	0.37	0.55	
Uniform Delay, d1		76.9	73.0		31.2	3.2	12.6	
Progression Factor		1.00	1.00		1.36	1.28	1.00	
Incremental Delay, d2		3.4	0.5		3.8	0.0	0.6	
Delay (s)		80.3	73.5		46.4	4.1	13.2	
Level of Service		F	E		D	A	B	
Approach Delay (s)		76.6				8.5	13.2	
Approach LOS		E				A	B	

Intersection Summary			
HCM 2000 Control Delay	18.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM 2010 TWSC
3: New Hampshire Ave & Southampton Dr

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	9.9

Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	4	89	2	114	1846	1964	33
Future Vol, veh/h	4	89	2	114	1846	1964	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	250	-	-	-
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	86	86	89	89	89	94	94
Heavy Vehicles, %	50	11	0	11	3	2	0
Mvmt Flow	5	103	2	128	2074	2089	35

Major/Minor	Minor2		Major1			Major2	
Conflicting Flow All	3197	1062	1551	2124	0	-	0
Stage 1	2107	-	-	-	-	-	-
Stage 2	1090	-	-	-	-	-	-
Critical Hdwy	6.7	7.32	5.6	5.52	-	-	-
Critical Hdwy Stg 1	7.6	-	-	-	-	-	-
Critical Hdwy Stg 2	7	-	-	-	-	-	-
Follow-up Hdwy	4.3	4.01	2.3	3.21	-	-	-
Pot Cap-1 Maneuver	9	177	221	~ 96	-	-	-
Stage 1	27	-	-	-	-	-	-
Stage 2	180	-	-	-	-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	0	177	96	~ 96	-	-	-
Mov Cap-2 Maneuver	0	-	-	-	-	-	-
Stage 1	0	-	-	-	-	-	-
Stage 2	180	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	52.9	17.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	~ 96	-	177	-	-
HCM Lane V/C Ratio	1.358	-	0.611	-	-
HCM Control Delay (s)	293	-	52.9	-	-
HCM Lane LOS	F	-	F	-	-
HCM 95th %tile Q(veh)	9.5	-	3.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 2010 TWSC
4: Beacon Rd & Parking Lot Dwy

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	77	28	14	14	4
Future Vol, veh/h	2	77	28	14	14	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	7	0	2
Mvmt Flow	2	91	33	16	16	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	101	19	21	0	-	0
Stage 1	19	-	-	-	-	-
Stage 2	82	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	902	1065	1608	-	-	-
Stage 1	1009	-	-	-	-	-
Stage 2	946	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	883	1065	1608	-	-	-
Mov Cap-2 Maneuver	883	-	-	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	946	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	4.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1608	-	1059	-	-
HCM Lane V/C Ratio	0.02	-	0.088	-	-
HCM Control Delay (s)	7.3	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

HCM 2010 TWSC
5: Beacon Rd & Bus Loop Dwy

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	25	11	37	90	1
Future Vol, veh/h	3	25	11	37	90	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	28	13	44	106	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	177	107	107	0	-	0
Stage 1	107	-	-	-	-	-
Stage 2	70	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	817	953	1497	-	-	-
Stage 1	922	-	-	-	-	-
Stage 2	958	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	810	953	1497	-	-	-
Mov Cap-2 Maneuver	810	-	-	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	958	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	1.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1497	-	935	-	-
HCM Lane V/C Ratio	0.009	-	0.034	-	-
HCM Control Delay (s)	7.4	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 2010 TWSC
1: Northampton Dr & Beacon Rd

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	2.3

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations			↰		↰		⋔	
Traffic Vol, veh/h	3	6	92	4	83	78	63	14
Future Vol, veh/h	3	6	92	4	83	78	63	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	None
Storage Length	-	-	-	-	-	-	0	-
Veh in Median Storage, #	-	-	0	-	0	-	0	-
Grade, %	-	-	0	-	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	90
Heavy Vehicles, %	0	17	0	0	13	0	2	0
Mvmt Flow	4	7	108	5	98	92	74	16

Major/Minor	Major1		Major2			Minor2		
Conflicting Flow All	-	190	0	-	-	0	266	144
Stage 1	-	-	-	-	-	-	144	-
Stage 2	-	-	-	-	-	-	122	-
Critical Hdwy	-	4.27	-	-	-	-	6.42	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	-
Follow-up Hdwy	-	2.353	-	-	-	-	3.518	3.3
Pot Cap-1 Maneuver	-	1299	-	-	-	-	723	909
Stage 1	-	-	-	-	-	-	883	-
Stage 2	-	-	-	-	-	-	903	-
Platoon blocked, %			-		-	-		
Mov Cap-1 Maneuver	~ -3	~ -3	-	-	-	-	723	909
Mov Cap-2 Maneuver	-	-	-	-	-	-	723	-
Stage 1	-	-	-	-	-	-	883	-
Stage 2	-	-	-	-	-	-	903	-

Approach	EB	WB	SB
HCM Control Delay, s			10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	+	-	-	-	750
HCM Lane V/C Ratio	-	-	-	-	0.12
HCM Control Delay (s)	-	-	-	-	10.5
HCM Lane LOS	-	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	-	0.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Queues
2: New Hampshire Ave & Northampton Dr

JoAnn Leleck Elementary School
08/15/2023

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	163	206	176	1635	2224
v/c Ratio	0.53	0.63	0.64	0.37	0.61
Control Delay	84.7	17.5	35.4	6.1	14.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	84.7	17.5	35.4	6.1	14.3
Queue Length 50th (ft)	96	0	150	202	443
Queue Length 95th (ft)	136	87	m221	389	604
Internal Link Dist (ft)	158			853	1636
Turn Bay Length (ft)		100	250		
Base Capacity (vph)	597	443	373	4383	3649
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.27	0.47	0.47	0.37	0.61

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
2: New Hampshire Ave & Northampton Dr

JoAnn Leleck Elementary School
08/15/2023

Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	15	137	192	2	167	1570	1888	136
Future Volume (vph)	15	137	192	2	167	1570	1888	136
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	4.0	4.0	
Lane Util. Factor		0.97	1.00		1.00	0.91	0.91	
Frt		1.00	0.85		1.00	1.00	0.99	
Flt Protected		0.95	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		3468	1583		1787	5085	5064	
Flt Permitted		0.95	1.00		0.05	1.00	1.00	
Satd. Flow (perm)		3468	1583		95	5085	5064	
Peak-hour factor, PHF	0.93	0.93	0.93	0.96	0.96	0.96	0.91	0.91
Adj. Flow (vph)	16	147	206	2	174	1635	2075	149
RTOR Reduction (vph)	0	0	188	0	0	0	3	0
Lane Group Flow (vph)	0	163	18	0	176	1635	2221	0
Heavy Vehicles (%)	10%	0%	2%	0%	1%	2%	1%	7%
Turn Type	Perm	Prot	Perm	custom	pm+pt	NA	NA	
Protected Phases		4			1	6	2	
Permitted Phases	4		4	1	6			
Actuated Green, G (s)		13.8	13.8		153.2	153.2	127.6	
Effective Green, g (s)		15.8	15.8		155.2	155.2	129.6	
Actuated g/C Ratio		0.09	0.09		0.86	0.86	0.72	
Clearance Time (s)		7.0	7.0		7.0	6.0	6.0	
Vehicle Extension (s)		3.0	3.0		4.0	0.2	0.2	
Lane Grp Cap (vph)		304	138		275	4384	3646	
v/s Ratio Prot					c0.07	0.32	0.44	
v/s Ratio Perm		0.05	0.01		c0.48			
v/c Ratio		0.54	0.13		0.64	0.37	0.61	
Uniform Delay, d1		78.6	75.8		44.2	2.5	12.6	
Progression Factor		1.00	1.00		0.83	2.24	1.00	
Incremental Delay, d2		1.8	0.4		3.4	0.0	0.8	
Delay (s)		80.4	76.2		39.9	5.7	13.3	
Level of Service		F	E		D	A	B	
Approach Delay (s)		78.1				9.0	13.3	
Approach LOS		E				A	B	

Intersection Summary			
HCM 2000 Control Delay	17.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	72.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM 2010 TWSC
3: New Hampshire Ave & Southampton Dr

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	22.3

Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	2	100	7	141	2108	2111	43
Future Vol, veh/h	2	100	7	141	2108	2111	43
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	250	-	-	-
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	85	85	89	89	89	95	95
Heavy Vehicles, %	0	11	0	11	2	1	0
Mvmt Flow	2	118	8	158	2369	2222	45

Major/Minor	Minor2		Major1			Major2	
Conflicting Flow All	3525	1134	1655	2267	0	-	0
Stage 1	2245	-	-	-	-	-	-
Stage 2	1280	-	-	-	-	-	-
Critical Hdwy	5.7	7.32	5.6	5.52	-	-	-
Critical Hdwy Stg 1	6.6	-	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-	-
Follow-up Hdwy	3.8	4.01	2.3	3.21	-	-	-
Pot Cap-1 Maneuver	14	158	193	~ 81	-	-	-
Stage 1	40	-	-	-	-	-	-
Stage 2	205	-	-	-	-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	0	158	80	~ 80	-	-	-
Mov Cap-2 Maneuver	0	-	-	-	-	-	-
Stage 1	0	-	-	-	-	-	-
Stage 2	205	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	77.2	39.7	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	~ 80	-	158	-	-
HCM Lane V/C Ratio	2.079	-	0.759	-	-
HCM Control Delay (s)	$ 604.7	-	77.2	-	-
HCM Lane LOS	F	-	F	-	-
HCM 95th %tile Q(veh)	15	-	4.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 2010 TWSC
4: Beacon Rd & Parking Lot Dwy

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	38	52	10	12	0
Future Vol, veh/h	0	38	52	10	12	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	3	2	0	0	0
Mvmt Flow	0	45	61	12	14	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	148	14	14	0	-	0
Stage 1	14	-	-	-	-	-
Stage 2	134	-	-	-	-	-
Critical Hdwy	6.4	6.23	4.12	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.327	2.218	-	-	-
Pot Cap-1 Maneuver	849	1063	1604	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	897	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	817	1063	1604	-	-	-
Mov Cap-2 Maneuver	817	-	-	-	-	-
Stage 1	975	-	-	-	-	-
Stage 2	897	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	6.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1604	-	1063	-	-
HCM Lane V/C Ratio	0.038	-	0.042	-	-
HCM Control Delay (s)	7.3	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

HCM 2010 TWSC
5: Beacon Rd & Bus Loop Dwy

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	3	2	54	50	0
Future Vol, veh/h	0	3	2	54	50	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	2
Mvmt Flow	0	4	2	64	59	0

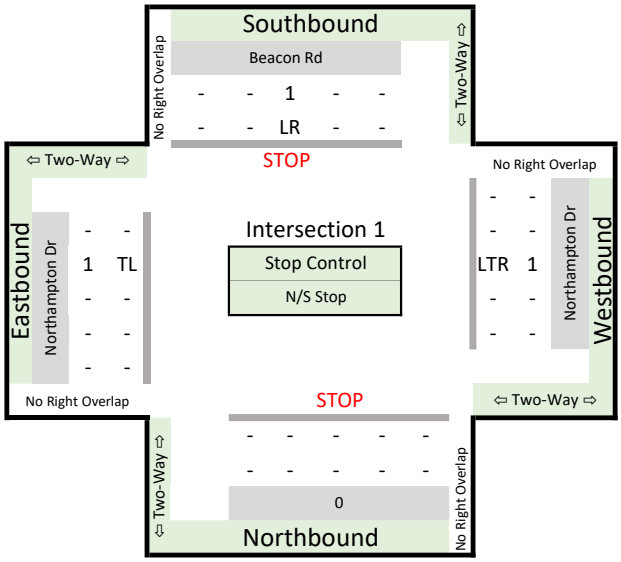
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	127	59	59	0	-	0
Stage 1	59	-	-	-	-	-
Stage 2	68	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	872	1012	1558	-	-	-
Stage 1	969	-	-	-	-	-
Stage 2	960	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	871	1012	1558	-	-	-
Mov Cap-2 Maneuver	871	-	-	-	-	-
Stage 1	968	-	-	-	-	-
Stage 2	960	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0.3	0
HCM LOS	A		

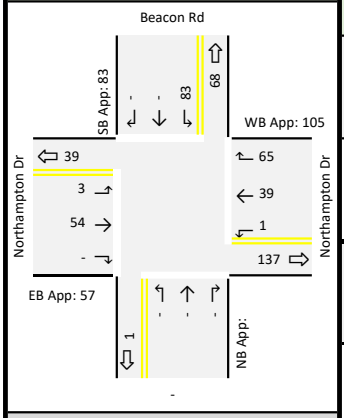
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1558	-	1012	-	-
HCM Lane V/C Ratio	0.002	-	0.003	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Project: JoAnn Leleck Elementary School
Intersection: 1. Beacon Rd & Northampton Dr
Scenario: Existing
Jurisdiction: Montgomery County Policy Area:

GOROVE SLADE
Transportation Planners and Engineers



AM Peak Hour CLV



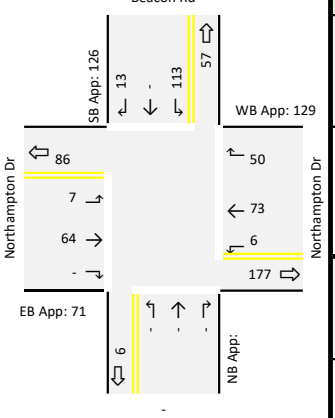
Total Intersection: 245 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LT	57		1.00	57				58	«	
					0	1	1.00	1	1		
		-	0		0				1		
Westbound	TR	104		1.00	104				107	«	✓
					0	3	1.00	3	3		
			0		0				3		
Northbound					0				83	«	✓
					0	83	1.00	83	83		
		-	0		0				83		
Southbound	LR	83		1.00	83				83	«	
					0	-	0.00	0	0		
		-	0		0				0		

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

CLV 190 A

Schl Peak Hour CLV



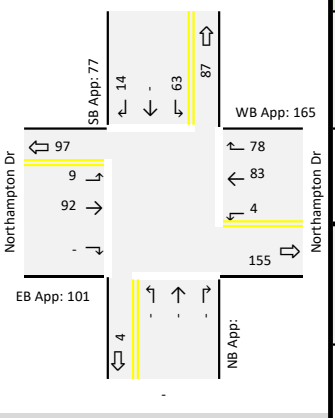
Total Intersection: 326 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LT	71		1.00	71				77	«	
					0	6	1.00	6	6		
		-	0		0				6		
Westbound	TR	123		1.00	123				130	«	✓
					0	7	1.00	7	7		
			0		0				7		
Northbound					0				113	«	
					0	113	1.00	113	113		
		-	0		0				113		
Southbound	LR	126		1.00	126				126	«	✓
					0	-	0.00	0	0		
			0		0				0		

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

CLV 256 A

PM Peak Hour CLV



Total Intersection: 343 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LT	101		1.00	101				105	«	
					0	4	1.00	4	4		
		-	0		0				4		
Westbound	TR	161		1.00	161				170	«	✓
					0	9	1.00	9	9		
			0		0				9		
Northbound					0				63	«	
					0	63	1.00	63	63		
		-	0		0				63		
Southbound	LR	77		1.00	77				77	«	✓
					0	-	0.00	0	0		
			0		0				0		

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

CLV 247 A

Right Turn Overlap Adjustments

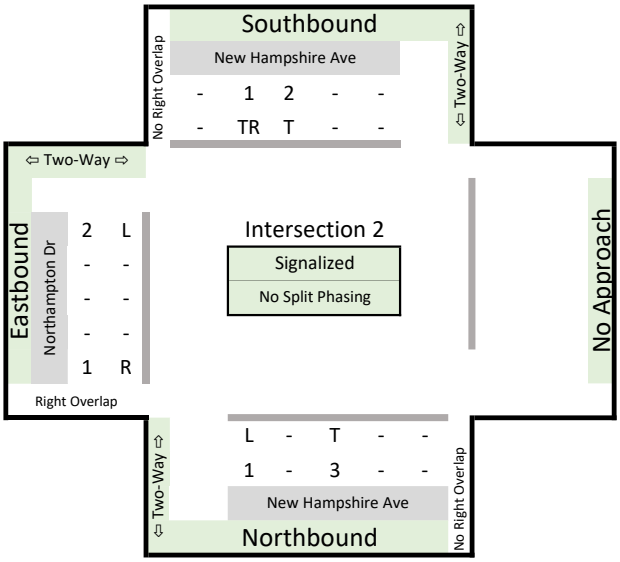
	Eastbound			Westbound			Northbound			Southbound		
	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM
Right Turns	-	-	-	65	50	78	-	-	-	-	13	14
RT LUF		n/a			n/a			n/a			n/a	
Adjusted Rights	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	-	-	-	83	113	63	1	6	4	3	7	9
Adj. LT LUF		0.00			1.00			1.00			1.00	
Adjusted Adj. Lefts	0	0	0	83	113	63	1	6	4	3	7	9
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Montgomery County Standards

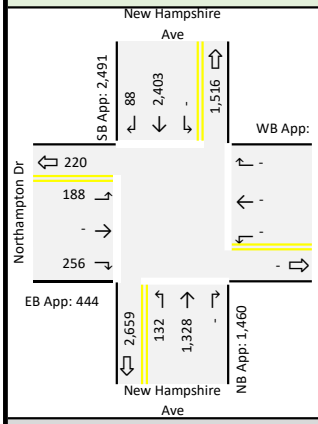
Lane Use Factors			LOS	CLV Range			
#	Th & R	L					
1	1.00	1.00	A	0	to	1,000	
2	0.53	0.53	B	1,001	to	1,150	
3	0.37	0.37	C	1,151	to	1,300	
4	0.30	0.30	D	1,301	to	1,450	
5	0.25	0.25	E	1,451	to	1,600	
			F	1,601	to	9,999	

Project: JoAnn Leleck Elementary School
Intersection: 2. New Hampshire Ave & Northampton Dr
Scenario: Existing
Jurisdiction: Montgomery County Policy Area:

GOROVE SLADE
Transportation Planners and Engineers



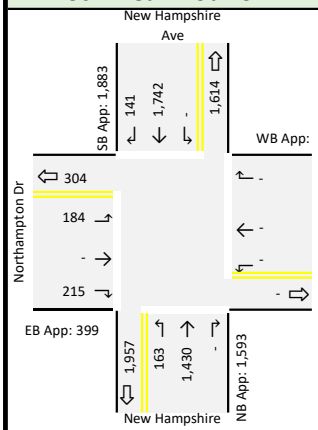
AM Peak Hour CLV



Total Intersection: 4,395 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	L+L	188		0.53	100				100		
					0	-	0.00	0	0		
	R	256	132	1.00	124				124	«	✓
Westbound					0				100	«	
					0	188	0.53	100	100		
		-	0		0				100		
Northbound	L	132		1.00	132				132		
	T+T+T	1,328		0.37	491	-	0.00	0	491	«	
		-	0		0				0		
Southbound	T+T+TR	2,491		0.37	922				1054	«	✓
					0	132	1.00	132	132		
	R	88	0	1.00	88				220		
Notes: * Defacto right-turn lane test, if applicable									CLV	1,178	C

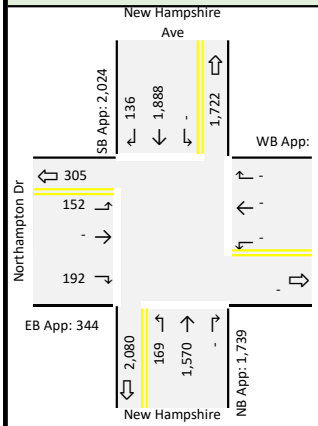
Schl Peak Hour CLV



Total Intersection: 3,875 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	L+L	184		0.53	98				98	«	✓
					0	-	0.00	0	0		
	R	215	163	1.00	52				52		
Westbound					0				98	«	
					0	184	0.53	98	98		
		-	0		0				98		
Northbound	L	163		1.00	163				163		
	T+T+T	1,430		0.37	529	-	0.00	0	529	«	
		-	0		0				0		
Southbound	T+T+TR	1,883		0.37	697				860	«	✓
					0	163	1.00	163	163		
	R	141	0	1.00	141				304		
Notes: * Defacto right-turn lane test, if applicable									CLV	958	A

PM Peak Hour CLV



Total Intersection: 4,107 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	L+L	152		0.53	81				81	«	✓
					0	-	0.00	0	0		
	R	192	169	1.00	23				23		
Westbound					0				81	«	
					0	152	0.53	81	81		
		-	0		0				81		
Northbound	L	169		1.00	169				169		
	T+T+T	1,570		0.37	581	-	0.00	0	581	«	
		-	0		0				0		
Southbound	T+T+TR	2,024		0.37	749				918	«	✓
					0	169	1.00	169	169		
	R	136	0	1.00	136				305		
Notes: * Defacto right-turn lane test, if applicable									CLV	999	A

Right Turn Overlap Adjustments

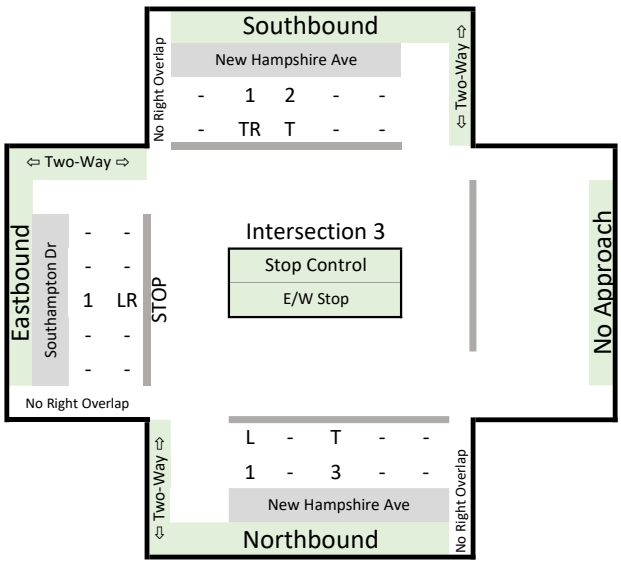
	Eastbound			Westbound			Northbound			Southbound		
	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM
Right Turns	256	215	192	-	-	-	-	-	-	88	141	136
RT LUF		1.00			n/a			n/a			n/a	
Adjusted Rights	256	215	192	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	132	163	169	-	-	-	-	-	-	188	184	152
Adj. LT LUF		1.00			0.00			0.00			0.53	
Adjusted Adj. Lefts	132	163	169	0	0	0	0	0	0	100	98	81
Right Turn Overlap	**132**	**163**	**169**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Montgomery County Standards

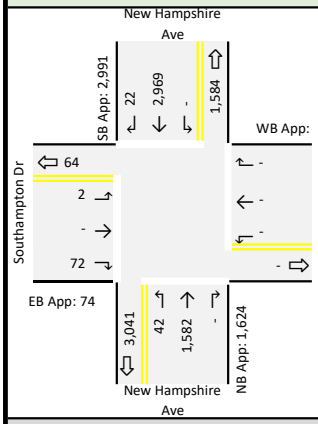
Lane Use Factors			LOS	CLV Range
#	Th & R	L		
1	1.00	1.00	A	0 to 1,000
2	0.53	0.53	B	1,001 to 1,150
3	0.37	0.37	C	1,151 to 1,300
4	0.30	0.30	D	1,301 to 1,450
5	0.25	0.25	E	1,451 to 1,600
			F	1,601 to 9,999

Project: JoAnn Leleck Elementary School
Intersection: 3. New Hampshire Ave & Southampton Dr
Scenario: Existing
Jurisdiction: Montgomery County Policy Area:

GOROVE SLADE
Transportation Planners and Engineers



AM Peak Hour CLV

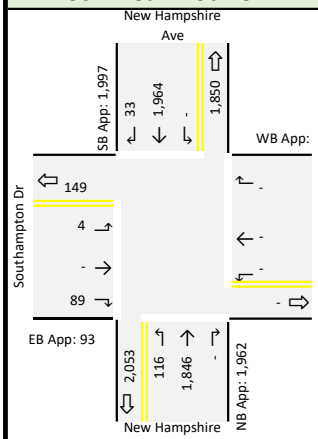


Total Intersection: 4,689 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	74		1.00	74				74	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				2	«	
					0	2	1.00	2	2		
		-	0		0				2		
Northbound	L	42		1.00	42				42		
	T+T+T	1,582		0.37	585	-	0.00	0	585	«	
		-	0		0				0		
Southbound	T+T+TR	2,991		0.37	1107				1149	«	✓
					0	42	1.00	42	42		
	R	22	0	1.00	22				64		
								CLV	1,223		C

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

Schl Peak Hour CLV

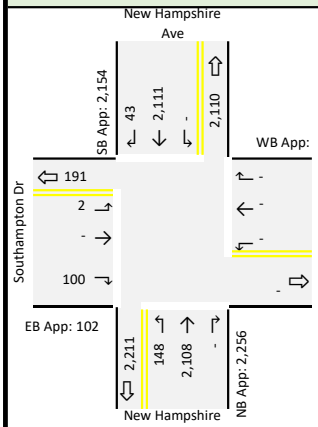


Total Intersection: 4,052 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	93		1.00	93				93	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				4	«	
					0	4	1.00	4	4		
		-	0		0				4		
Northbound	L	116		1.00	116				116		
	T+T+T	1,846		0.37	683	-	0.00	0	683	«	
		-	0		0				0		
Southbound	T+T+TR	1,997		0.37	739				855	«	✓
					0	116	1.00	116	116		
	R	33	0	1.00	33				149		
								CLV	948		A

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

PM Peak Hour CLV



Total Intersection: 4,512 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	102		1.00	102				102	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				2	«	
					0	2	1.00	2	2		
		-	0		0				2		
Northbound	L	148		1.00	148				148		
	T+T+T	2,108		0.37	780	-	0.00	0	780	«	
		-	0		0				0		
Southbound	T+T+TR	2,154		0.37	797				945	«	✓
					0	148	1.00	148	148		
	R	43	0	1.00	43				191		
								CLV	1,047		B

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

Right Turn Overlap Adjustments

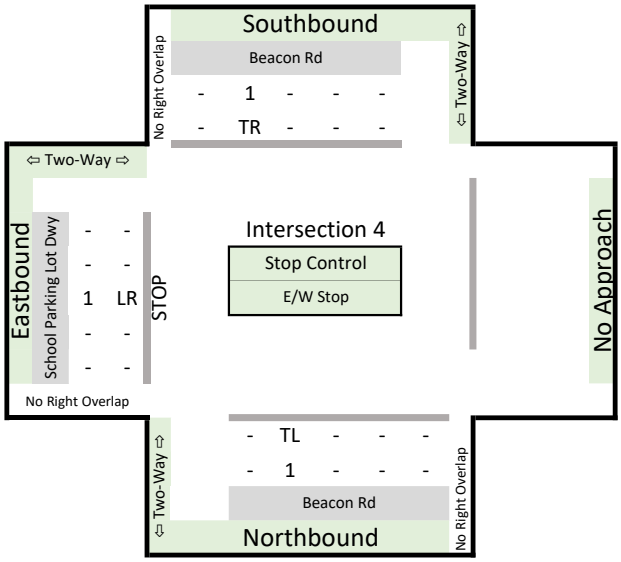
	Eastbound			Westbound			Northbound			Southbound		
	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM
Right Turns	72	89	100	-	-	-	-	-	-	22	33	43
RT LUF		n/a			n/a			n/a			n/a	
Adjusted Rights	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	42	116	148	-	-	-	-	-	-	2	4	2
Adj. LT LUF		1.00			0.00			0.00			1.00	
Adjusted Adj. Lefts	42	116	148	0	0	0	0	0	0	2	4	2
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Montgomery County Standards

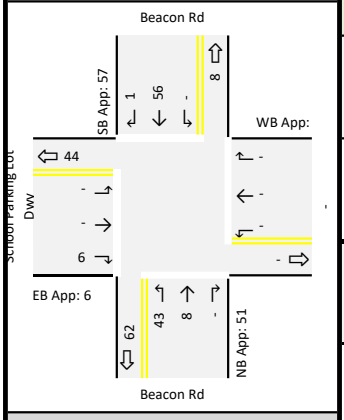
Lane Use Factors			LOS	CLV Range
#	Th & R	L		
1	1.00	1.00	A	0 to 1,000
2	0.53	0.53	B	1,001 to 1,150
3	0.37	0.37	C	1,151 to 1,300
4	0.30	0.30	D	1,301 to 1,450
5	0.25	0.25	E	1,451 to 1,600
			F	1,601 to 9,999

Project: JoAnn Leleck Elementary School
Intersection: 4. Beacon Rd & School Parking Lot Dwy
Scenario: Existing
Jurisdiction: Montgomery County Policy Area:

GOROVE SLADE
Transportation Planners and Engineers



AM Peak Hour CLV



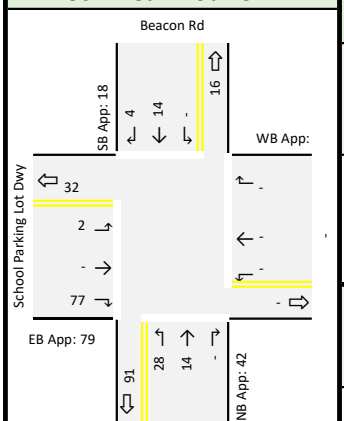
Total Intersection: 114 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	6		1.00	6				6	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				0	«	
					0	-	1.00	0	0		
		-	0		0				0		
Northbound	LT	51		1.00	51				51	«	
					0	-	0.00	0	0		
		-	0		0				0		
Southbound	TR	57		1.00	57				100	«	✓
					0	43	1.00	43	43		
			0		0				43		

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

CLV 106 A

Schl Peak Hour CLV



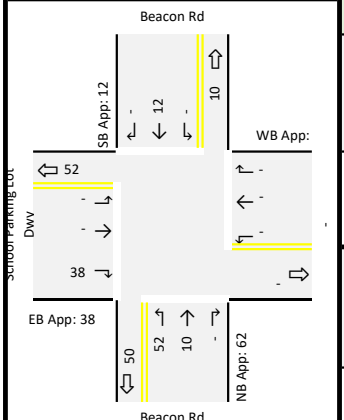
Total Intersection: 139 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	79		1.00	79				79	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				2	«	
					0	2	1.00	2	2		
		-	0		0				2		
Northbound	LT	42		1.00	42				42	«	
					0	-	0.00	0	0		
		-	0		0				0		
Southbound	TR	18		1.00	18				46	«	✓
					0	28	1.00	28	28		
			0		0				28		

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

CLV 125 A

PM Peak Hour CLV



Total Intersection: 112 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	38		1.00	38				38	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				0	«	
					0	-	1.00	0	0		
		-	0		0				0		
Northbound	LT	62		1.00	62				62	«	
					0	-	0.00	0	0		
		-	0		0				0		
Southbound	TR	12		1.00	12				64	«	✓
					0	52	1.00	52	52		
			0		0				52		

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

CLV 102 A

Right Turn Overlap Adjustments

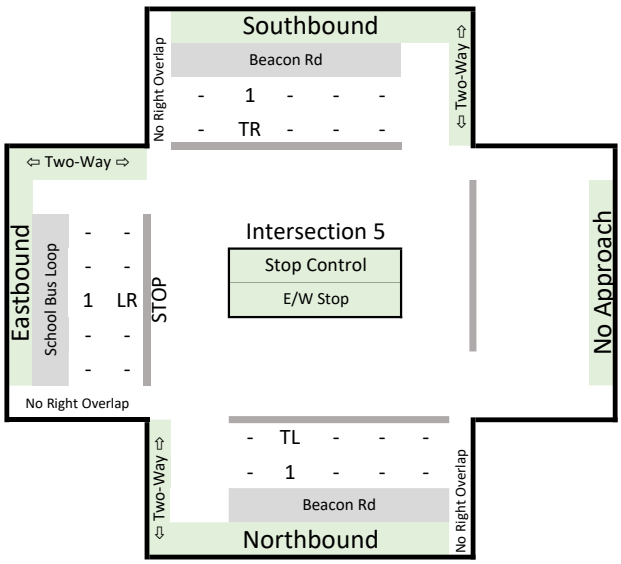
	Eastbound			Westbound			Northbound			Southbound		
	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM
Right Turns	6	77	38	-	-	-	-	-	-	1	4	-
RT LUF		n/a			n/a			n/a			n/a	
Adjusted Rights	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	43	28	52	-	-	-	-	-	-	-	2	-
Adj. LT LUF		1.00			0.00			0.00			1.00	
Adjusted Adj. Lefts	43	28	52	0	0	0	0	0	0	0	2	0
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Montgomery County Standards

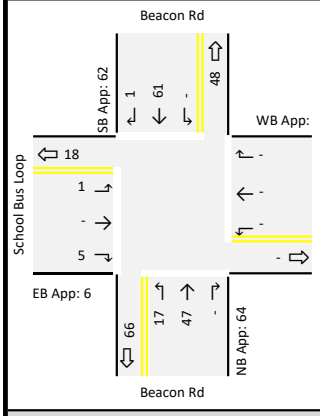
Lane Use Factors			LOS	CLV Range			
#	Th & R	L					
1	1.00	1.00	A	0	to	1,000	
2	0.53	0.53	B	1,001	to	1,150	
3	0.37	0.37	C	1,151	to	1,300	
4	0.30	0.30	D	1,301	to	1,450	
5	0.25	0.25	E	1,451	to	1,600	
			F	1,601	to	9,999	

Project: JoAnn Leleck Elementary School
Intersection: 5. Beacon Rd & School Bus Loop
Scenario: Existing
Jurisdiction: Montgomery County Policy Area:

GOROVE SLADE
Transportation Planners and Engineers



AM Peak Hour CLV



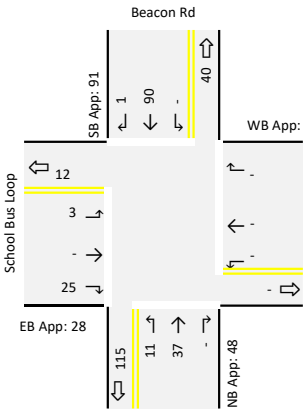
Total Intersection: 132 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	6		1.00	6				6	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				1	«	
					0	1	1.00	1	1		
		-	0		0				1		
Northbound	LT	64		1.00	64				64	«	
					0	-	0.00	0	0		
		-	0		0				0		
Southbound	TR	62		1.00	62				79	«	✓
					0	17	1.00	17	17		
			0		0				17		

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

CLV 85 A

Schl Peak Hour CLV



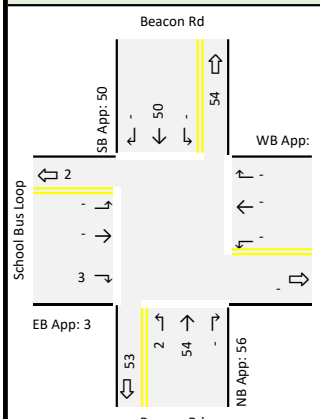
Total Intersection: 167 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	28		1.00	28				28	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				3	«	
					0	3	1.00	3	3		
		-	0		0				3		
Northbound	LT	48		1.00	48				48	«	
					0	-	0.00	0	0		
		-	0		0				0		
Southbound	TR	91		1.00	91				102	«	✓
					0	11	1.00	11	11		
			0		0				11		

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

CLV 130 A

PM Peak Hour CLV



Total Intersection: 109 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	3		1.00	3				3	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				0	«	
					0	-	1.00	0	0		
		-	0		0				0		
Northbound	LT	56		1.00	56				56	«	✓
					0	-	0.00	0	0		
		-	0		0				0		
Southbound	TR	50		1.00	50				52	«	
					0	2	1.00	2	2		
			0		0				2		

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

CLV 59 A

Right Turn Overlap Adjustments

	Eastbound			Westbound			Northbound			Southbound		
	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM
Right Turns	5	25	3	-	-	-	-	-	-	1	1	-
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	n/a	n/a	n/a	n/a
Adjacent Lefts	17	11	2	-	-	-	-	-	-	1	3	-
Adj. LT LUF		1.00			0.00			0.00			1.00	
Adjusted Adj. Lefts	17	11	2	0	0	0	0	0	0	1	3	0
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Montgomery County Standards

Lane Use Factors			LOS	CLV Range
#	Th & R	L		
1	1.00	1.00	A	0 to 1,000
2	0.53	0.53	B	1,001 to 1,150
3	0.37	0.37	C	1,151 to 1,300
4	0.30	0.30	D	1,301 to 1,450
5	0.25	0.25	E	1,451 to 1,600
			F	1,601 to 9,999

G. Background Vehicular Capacity (HCM and CLV) Analysis Worksheets

HCM 2010 TWSC
1: Northampton Dr & Beacon Rd

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Vol, veh/h	3	54	1	39	65	83	0
Future Vol, veh/h	3	54	1	39	65	83	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	None
Storage Length	-	-	-	-	-	0	-
Veh in Median Storage, #	-	0	-	0	-	0	-
Grade, %	-	0	-	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85
Heavy Vehicles, %	0	13	100	44	8	5	0
Mvmt Flow	4	64	1	46	76	98	0

Major/Minor	Major1		Major2			Minor2	
Conflicting Flow All	122	0	-	-	0	156	84
Stage 1	-	-	-	-	-	84	-
Stage 2	-	-	-	-	-	72	-
Critical Hdwy	4.1	-	-	-	-	6.45	6.2
Critical Hdwy Stg 1	-	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	-	5.45	-
Follow-up Hdwy	2.2	-	-	-	-	3.545	3.3
Pot Cap-1 Maneuver	1478	-	-	-	-	828	981
Stage 1	-	-	-	-	-	932	-
Stage 2	-	-	-	-	-	943	-
Platoon blocked, %		-		-	-		
Mov Cap-1 Maneuver	1478	-	-	-	-	826	981
Mov Cap-2 Maneuver	-	-	-	-	-	826	-
Stage 1	-	-	-	-	-	929	-
Stage 2	-	-	-	-	-	943	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4		9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1478	-	-	-	826
HCM Lane V/C Ratio	0.002	-	-	-	0.118
HCM Control Delay (s)	7.4	0	-	-	9.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.4

Queues

2: New Hampshire Ave & Northampton Dr

JoAnn Leleck Elementary School
08/15/2023

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	203	275	154	1551	2726
v/c Ratio	0.57	0.76	0.69	0.37	0.77
Control Delay	81.5	34.1	57.1	4.2	20.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	81.5	34.1	57.1	4.2	20.3
Queue Length 50th (ft)	120	78	157	123	687
Queue Length 95th (ft)	157	184	239	209	1006
Internal Link Dist (ft)	158			853	1636
Turn Bay Length (ft)		100	250		
Base Capacity (vph)	813	555	288	4188	3539
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.25	0.50	0.53	0.37	0.77

Intersection Summary

HCM Signalized Intersection Capacity Analysis
2: New Hampshire Ave & Northampton Dr

JoAnn Leleck Elementary School
08/15/2023

Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	8	180	256	4	128	1334	2420	88
Future Volume (vph)	8	180	256	4	128	1334	2420	88
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	4.0	4.0	
Lane Util. Factor		0.97	1.00		1.00	0.91	0.91	
Frt		1.00	0.85		1.00	1.00	0.99	
Flt Protected		0.95	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		3253	1599		1788	4988	4985	
Flt Permitted		0.95	1.00		0.03	1.00	1.00	
Satd. Flow (perm)		3253	1599		57	4988	4985	
Peak-hour factor, PHF	0.93	0.93	0.93	0.86	0.86	0.86	0.92	0.92
Adj. Flow (vph)	9	194	275	5	149	1551	2630	96
RTOR Reduction (vph)	0	0	184	0	0	0	1	0
Lane Group Flow (vph)	0	203	91	0	154	1551	2725	0
Heavy Vehicles (%)	0%	8%	1%	0%	1%	4%	3%	17%
Turn Type	Perm	Prot	Perm	custom	pm+pt	NA	NA	
Protected Phases		4			1	6	2	
Permitted Phases	4		4	1	6			
Actuated Green, G (s)		17.8	17.8		149.2	149.2	125.7	
Effective Green, g (s)		19.8	19.8		151.2	151.2	127.7	
Actuated g/C Ratio		0.11	0.11		0.84	0.84	0.71	
Clearance Time (s)		7.0	7.0		7.0	6.0	6.0	
Vehicle Extension (s)		3.0	3.0		4.0	0.2	0.2	
Lane Grp Cap (vph)		357	175		225	4189	3536	
v/s Ratio Prot					c0.07	0.31	c0.55	
v/s Ratio Perm		0.06	0.06		0.51			
v/c Ratio		0.57	0.52		0.68	0.37	0.77	
Uniform Delay, d1		76.0	75.6		58.9	3.3	16.8	
Progression Factor		1.00	1.00		0.89	1.11	1.00	
Incremental Delay, d2		2.1	2.6		7.1	0.0	1.7	
Delay (s)		78.1	78.2		59.8	3.7	18.4	
Level of Service		E	E		E	A	B	
Approach Delay (s)		78.2				8.8	18.4	
Approach LOS		E				A	B	

Intersection Summary			
HCM 2000 Control Delay	20.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM 2010 TWSC
3: New Hampshire Ave & Southampton Dr

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	12.2

Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	2	72	1	41	1588	2986	22
Future Vol, veh/h	2	72	1	41	1588	2986	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	250	-	-	-
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	85	85	93	93	93	95	95
Heavy Vehicles, %	0	19	0	22	3	3	9
Mvmt Flow	2	85	1	44	1708	3143	23

Major/Minor	Minor2		Major1			Major2	
Conflicting Flow All	3928	1583	2311	3166	0	-	0
Stage 1	3155	-	-	-	-	-	-
Stage 2	773	-	-	-	-	-	-
Critical Hdwy	5.7	7.48	5.6	5.74	-	-	-
Critical Hdwy Stg 1	6.6	-	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-	-
Follow-up Hdwy	3.8	4.09	2.3	3.32	-	-	-
Pot Cap-1 Maneuver	8	~ 71	82	~ 21	-	-	-
Stage 1	10	-	-	-	-	-	-
Stage 2	382	-	-	-	-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	8	~ 71	29	~ 29	-	-	-
Mov Cap-2 Maneuver	8	-	-	-	-	-	-
Stage 1	10	-	-	-	-	-	-
Stage 2	382	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 401	14.9	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	~ 29	-	59	-	-
HCM Lane V/C Ratio	1.557	-	1.476	-	-
HCM Control Delay (s)	$ 577.5	-	$ 401	-	-
HCM Lane LOS	F	-	F	-	-
HCM 95th %tile Q(veh)	5.2	-	7.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 2010 TWSC
4: Beacon Rd & Parking Lot Dwy

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	6	43	8	56	1
Future Vol, veh/h	0	6	43	8	56	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	2
Mvmt Flow	0	7	51	9	66	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	178	67	67	0	-	0
Stage 1	67	-	-	-	-	-
Stage 2	111	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	816	1002	1547	-	-	-
Stage 1	961	-	-	-	-	-
Stage 2	919	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	789	1002	1547	-	-	-
Mov Cap-2 Maneuver	789	-	-	-	-	-
Stage 1	929	-	-	-	-	-
Stage 2	919	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	6.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1547	-	1002	-	-
HCM Lane V/C Ratio	0.033	-	0.007	-	-
HCM Control Delay (s)	7.4	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	-	-

HCM 2010 TWSC
5: Beacon Rd & Bus Loop Dwy

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	5	17	47	61	1
Future Vol, veh/h	1	5	17	47	61	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	2
Mvmt Flow	1	6	20	55	72	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	168	73	73	0	-	0
Stage 1	73	-	-	-	-	-
Stage 2	95	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	827	995	1540	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	934	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	816	995	1540	-	-	-
Mov Cap-2 Maneuver	816	-	-	-	-	-
Stage 1	943	-	-	-	-	-
Stage 2	934	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1540	-	960	-	-
HCM Lane V/C Ratio	0.013	-	0.007	-	-
HCM Control Delay (s)	7.4	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

HCM 2010 TWSC
1: Northampton Dr & Beacon Rd

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	4.1

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations								
Traffic Vol, veh/h	1	6	64	6	73	50	113	13
Future Vol, veh/h	1	6	64	6	73	50	113	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	None
Storage Length	-	-	-	-	-	-	0	-
Veh in Median Storage, #	-	-	0	-	0	-	0	-
Grade, %	-	-	0	-	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	20	0	11	8	4	0
Mvmt Flow	1	7	75	7	86	59	133	15

Major/Minor	Major1			Major2			Minor2	
Conflicting Flow All	-	145	0	-	-	0	205	116
Stage 1	-	-	-	-	-	-	116	-
Stage 2	-	-	-	-	-	-	89	-
Critical Hdwy	-	4.1	-	-	-	-	6.44	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.44	-
Follow-up Hdwy	-	2.2	-	-	-	-	3.536	3.3
Pot Cap-1 Maneuver	-	1450	-	-	-	-	779	942
Stage 1	-	-	-	-	-	-	904	-
Stage 2	-	-	-	-	-	-	929	-
Platoon blocked, %			-		-	-		
Mov Cap-1 Maneuver	~ -7	~ -7	-	-	-	-	779	942
Mov Cap-2 Maneuver	-	-	-	-	-	-	779	-
Stage 1	-	-	-	-	-	-	904	-
Stage 2	-	-	-	-	-	-	929	-

Approach	EB	WB	SB
HCM Control Delay, s			10.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	+	-	-	-	793
HCM Lane V/C Ratio	-	-	-	-	0.187
HCM Control Delay (s)	-	-	-	-	10.6
HCM Lane LOS	-	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	-	0.7

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Queues

2: New Hampshire Ave & Northampton Dr

JoAnn Leleck Elementary School
08/15/2023

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	217	253	179	1582	1972
v/c Ratio	0.62	0.64	0.63	0.37	0.55
Control Delay	84.5	15.6	39.9	4.6	14.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	84.5	15.6	39.9	4.6	14.2
Queue Length 50th (ft)	128	2	145	130	380
Queue Length 95th (ft)	161	70	243	260	529
Internal Link Dist (ft)	158			853	1636
Turn Bay Length (ft)		100	250		
Base Capacity (vph)	561	480	389	4285	3562
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.39	0.53	0.46	0.37	0.55

Intersection Summary

HCM Signalized Intersection Capacity Analysis
2: New Hampshire Ave & Northampton Dr

JoAnn Leleck Elementary School
08/15/2023

Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	28	156	215	1	162	1440	1752	141
Future Volume (vph)	28	156	215	1	162	1440	1752	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	4.0	4.0	
Lane Util. Factor		0.97	1.00		1.00	0.91	0.91	
Frt		1.00	0.85		1.00	1.00	0.99	
Flt Protected		0.95	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		3261	1583		1753	5085	5028	
Flt Permitted		0.95	1.00		0.07	1.00	1.00	
Satd. Flow (perm)		3261	1583		131	5085	5028	
Peak-hour factor, PHF	0.85	0.85	0.85	0.91	0.91	0.91	0.96	0.96
Adj. Flow (vph)	33	184	253	1	178	1582	1825	147
RTOR Reduction (vph)	0	0	224	0	0	0	4	0
Lane Group Flow (vph)	0	217	29	0	179	1582	1968	0
Heavy Vehicles (%)	4%	8%	2%	0%	3%	2%	2%	2%
Turn Type	Perm	Prot	Perm	custom	pm+pt	NA	NA	
Protected Phases		4			1	6	2	
Permitted Phases	4		4	1	6			
Actuated Green, G (s)		17.3	17.3		149.7	149.7	125.4	
Effective Green, g (s)		19.3	19.3		151.7	151.7	127.4	
Actuated g/C Ratio		0.11	0.11		0.84	0.84	0.71	
Clearance Time (s)		7.0	7.0		7.0	6.0	6.0	
Vehicle Extension (s)		3.0	3.0		4.0	0.2	0.2	
Lane Grp Cap (vph)		349	169		284	4285	3558	
v/s Ratio Prot					c0.07	0.31	0.39	
v/s Ratio Perm		0.07	0.02		c0.46			
v/c Ratio		0.62	0.17		0.63	0.37	0.55	
Uniform Delay, d1		76.9	73.1		32.0	3.2	12.6	
Progression Factor		1.00	1.00		1.33	1.30	1.00	
Incremental Delay, d2		3.4	0.5		3.8	0.0	0.6	
Delay (s)		80.3	73.6		46.4	4.2	13.3	
Level of Service		F	E		D	A	B	
Approach Delay (s)		76.7				8.5	13.3	
Approach LOS		E				A	B	

Intersection Summary			
HCM 2000 Control Delay	18.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM 2010 TWSC
3: New Hampshire Ave & Southampton Dr

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	10.1

Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	4	89	2	114	1856	1974	33
Future Vol, veh/h	4	89	2	114	1856	1974	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	250	-	-	-
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	86	86	89	89	89	94	94
Heavy Vehicles, %	50	11	0	11	3	2	0
Mvmt Flow	5	103	2	128	2085	2100	35

Major/Minor	Minor2		Major1			Major2	
Conflicting Flow All	3212	1068	1559	2135	0	-	0
Stage 1	2118	-	-	-	-	-	-
Stage 2	1094	-	-	-	-	-	-
Critical Hdwy	6.7	7.32	5.6	5.52	-	-	-
Critical Hdwy Stg 1	7.6	-	-	-	-	-	-
Critical Hdwy Stg 2	7	-	-	-	-	-	-
Follow-up Hdwy	4.3	4.01	2.3	3.21	-	-	-
Pot Cap-1 Maneuver	8	175	219	~ 95	-	-	-
Stage 1	26	-	-	-	-	-	-
Stage 2	179	-	-	-	-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	0	175	95	~ 95	-	-	-
Mov Cap-2 Maneuver	0	-	-	-	-	-	-
Stage 1	0	-	-	-	-	-	-
Stage 2	179	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	54.1	17.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	~ 95	-	175	-	-
HCM Lane V/C Ratio	1.372	-	0.618	-	-
HCM Control Delay (s)	299.6	-	54.1	-	-
HCM Lane LOS	F	-	F	-	-
HCM 95th %tile Q(veh)	9.5	-	3.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 2010 TWSC
4: Beacon Rd & Parking Lot Dwy

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	77	28	14	14	4
Future Vol, veh/h	2	77	28	14	14	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	7	0	2
Mvmt Flow	2	91	33	16	16	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	101	19	21	0	-	0
Stage 1	19	-	-	-	-	-
Stage 2	82	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	902	1065	1608	-	-	-
Stage 1	1009	-	-	-	-	-
Stage 2	946	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	883	1065	1608	-	-	-
Mov Cap-2 Maneuver	883	-	-	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	946	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	4.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1608	-	1059	-	-
HCM Lane V/C Ratio	0.02	-	0.088	-	-
HCM Control Delay (s)	7.3	0	8.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

HCM 2010 TWSC
5: Beacon Rd & Bus Loop Dwy

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	25	11	37	90	1
Future Vol, veh/h	3	25	11	37	90	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	2
Mvmt Flow	3	28	13	44	106	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	177	107	107	0	-	0
Stage 1	107	-	-	-	-	-
Stage 2	70	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	817	953	1497	-	-	-
Stage 1	922	-	-	-	-	-
Stage 2	958	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	810	953	1497	-	-	-
Mov Cap-2 Maneuver	810	-	-	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	958	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	1.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1497	-	935	-	-
HCM Lane V/C Ratio	0.009	-	0.034	-	-
HCM Control Delay (s)	7.4	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 2010 TWSC
1: Northampton Dr & Beacon Rd

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	2.4

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations			↰		↰		⋔	
Traffic Vol, veh/h	3	6	92	4	83	78	63	14
Future Vol, veh/h	3	6	92	4	83	78	63	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	None
Storage Length	-	-	-	-	-	-	0	-
Veh in Median Storage, #	-	-	0	-	0	-	0	-
Grade, %	-	-	0	-	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	17	0	0	13	0	2	2
Mvmt Flow	4	7	108	5	98	92	74	16

Major/Minor	Major1		Major2			Minor2		
Conflicting Flow All	-	190	0	-	-	0	266	144
Stage 1	-	-	-	-	-	-	144	-
Stage 2	-	-	-	-	-	-	122	-
Critical Hdwy	-	4.27	-	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	-
Follow-up Hdwy	-	2.353	-	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	-	1299	-	-	-	-	723	903
Stage 1	-	-	-	-	-	-	883	-
Stage 2	-	-	-	-	-	-	903	-
Platoon blocked, %			-		-	-		
Mov Cap-1 Maneuver	~ -3	~ -3	-	-	-	-	723	903
Mov Cap-2 Maneuver	-	-	-	-	-	-	723	-
Stage 1	-	-	-	-	-	-	883	-
Stage 2	-	-	-	-	-	-	903	-

Approach	EB	WB	SB
HCM Control Delay, s			10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	+	-	-	-	750
HCM Lane V/C Ratio	-	-	-	-	0.121
HCM Control Delay (s)	-	-	-	-	10.5
HCM Lane LOS	-	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	-	0.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Queues
2: New Hampshire Ave & Northampton Dr

JoAnn Leleck Elementary School
08/15/2023

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	163	206	176	1654	2238
v/c Ratio	0.53	0.63	0.64	0.38	0.61
Control Delay	84.7	17.5	35.4	6.2	14.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	84.7	17.5	35.4	6.2	14.3
Queue Length 50th (ft)	96	0	151	211	447
Queue Length 95th (ft)	136	87	m218	400	608
Internal Link Dist (ft)	158			853	1636
Turn Bay Length (ft)		100	250		
Base Capacity (vph)	597	443	372	4383	3661
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.27	0.47	0.47	0.38	0.61

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
2: New Hampshire Ave & Northampton Dr

JoAnn Leleck Elementary School
08/15/2023

Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	15	137	192	2	167	1588	1901	136
Future Volume (vph)	15	137	192	2	167	1588	1901	136
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	4.0	4.0	
Lane Util. Factor		0.97	1.00		1.00	0.91	0.91	
Frt		1.00	0.85		1.00	1.00	0.99	
Flt Protected		0.95	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		3468	1583		1787	5085	5081	
Flt Permitted		0.95	1.00		0.05	1.00	1.00	
Satd. Flow (perm)		3468	1583		93	5085	5081	
Peak-hour factor, PHF	0.93	0.93	0.93	0.96	0.96	0.96	0.91	0.91
Adj. Flow (vph)	16	147	206	2	174	1654	2089	149
RTOR Reduction (vph)	0	0	188	0	0	0	3	0
Lane Group Flow (vph)	0	163	18	0	176	1654	2235	0
Heavy Vehicles (%)	10%	0%	2%	0%	1%	2%	1%	2%
Turn Type	Perm	Prot	Perm	custom	pm+pt	NA	NA	
Protected Phases		4			1	6	2	
Permitted Phases	4		4	1	6			
Actuated Green, G (s)		13.8	13.8		153.2	153.2	127.6	
Effective Green, g (s)		15.8	15.8		155.2	155.2	129.6	
Actuated g/C Ratio		0.09	0.09		0.86	0.86	0.72	
Clearance Time (s)		7.0	7.0		7.0	6.0	6.0	
Vehicle Extension (s)		3.0	3.0		4.0	0.2	0.2	
Lane Grp Cap (vph)		304	138		274	4384	3658	
v/s Ratio Prot					c0.07	0.33	0.44	
v/s Ratio Perm		0.05	0.01		c0.48			
v/c Ratio		0.54	0.13		0.64	0.38	0.61	
Uniform Delay, d1		78.6	75.8		44.9	2.5	12.6	
Progression Factor		1.00	1.00		0.81	2.28	1.00	
Incremental Delay, d2		1.8	0.4		3.4	0.0	0.8	
Delay (s)		80.4	76.2		39.6	5.8	13.4	
Level of Service		F	E		D	A	B	
Approach Delay (s)		78.1				9.0	13.4	
Approach LOS		E				A	B	

Intersection Summary			
HCM 2000 Control Delay	17.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM 2010 TWSC
3: New Hampshire Ave & Southampton Dr

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	23.1

Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	2	100	7	141	2126	2124	43
Future Vol, veh/h	2	100	7	141	2126	2124	43
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	250	-	-	-
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	85	85	89	89	89	95	95
Heavy Vehicles, %	0	11	0	11	2	1	2
Mvmt Flow	2	118	8	158	2389	2236	45

Major/Minor	Minor2		Major1			Major2	
Conflicting Flow All	3547	1141	1665	2281	0	-	0
Stage 1	2259	-	-	-	-	-	-
Stage 2	1288	-	-	-	-	-	-
Critical Hdwy	5.7	7.32	5.6	5.52	-	-	-
Critical Hdwy Stg 1	6.6	-	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-	-
Follow-up Hdwy	3.8	4.01	2.3	3.21	-	-	-
Pot Cap-1 Maneuver	13	156	191	~ 79	-	-	-
Stage 1	40	-	-	-	-	-	-
Stage 2	203	-	-	-	-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	0	156	78	~ 78	-	-	-
Mov Cap-2 Maneuver	0	-	-	-	-	-	-
Stage 1	0	-	-	-	-	-	-
Stage 2	203	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	79.5	41	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	~ 78	-	156	-	-
HCM Lane V/C Ratio	2.132	-	0.769	-	-
HCM Control Delay (s)	$ 630.1	-	79.5	-	-
HCM Lane LOS	F	-	F	-	-
HCM 95th %tile Q(veh)	15.2	-	4.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 2010 TWSC
4: Beacon Rd & Parking Lot Dwy

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	38	52	10	12	0
Future Vol, veh/h	0	38	52	10	12	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	3	2	0	0	2
Mvmt Flow	0	45	61	12	14	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	148	14	14	0	-	0
Stage 1	14	-	-	-	-	-
Stage 2	134	-	-	-	-	-
Critical Hdwy	6.4	6.23	4.12	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.327	2.218	-	-	-
Pot Cap-1 Maneuver	849	1063	1604	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	897	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	817	1063	1604	-	-	-
Mov Cap-2 Maneuver	817	-	-	-	-	-
Stage 1	975	-	-	-	-	-
Stage 2	897	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	6.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1604	-	1063	-	-
HCM Lane V/C Ratio	0.038	-	0.042	-	-
HCM Control Delay (s)	7.3	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

HCM 2010 TWSC
5: Beacon Rd & Bus Loop Dwy

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	3	2	54	50	0
Future Vol, veh/h	0	3	2	54	50	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	4	2	64	59	0

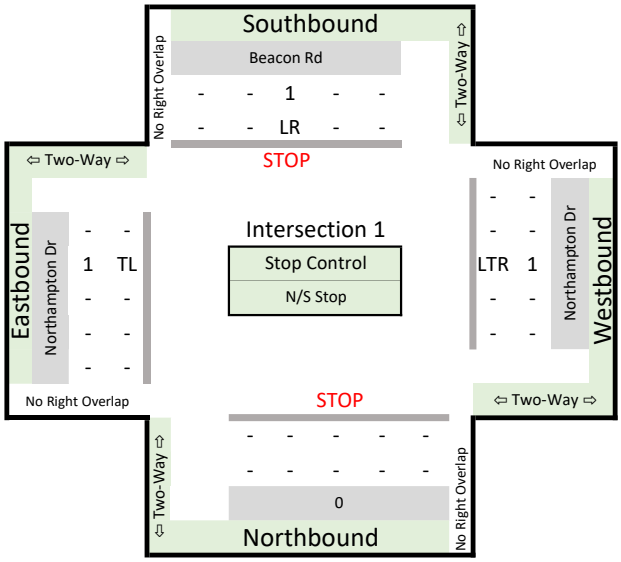
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	127	59	59	0	-	0
Stage 1	59	-	-	-	-	-
Stage 2	68	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	872	1012	1558	-	-	-
Stage 1	969	-	-	-	-	-
Stage 2	960	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	871	1012	1558	-	-	-
Mov Cap-2 Maneuver	871	-	-	-	-	-
Stage 1	968	-	-	-	-	-
Stage 2	960	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0.3	0
HCM LOS	A		

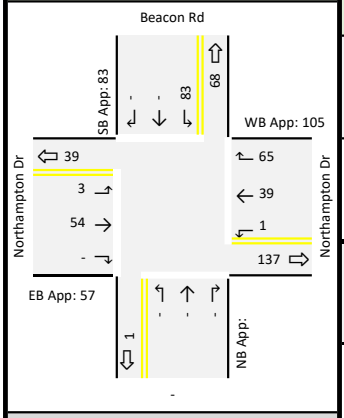
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1558	-	1012	-	-
HCM Lane V/C Ratio	0.002	-	0.003	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Project: JoAnn Leleck Elementary School
Intersection: 1. Beacon Rd & Northampton Dr
Scenario: Background
Jurisdiction: Montgomery County Policy Area:

GOROVE SLADE
Transportation Planners and Engineers



AM Peak Hour CLV



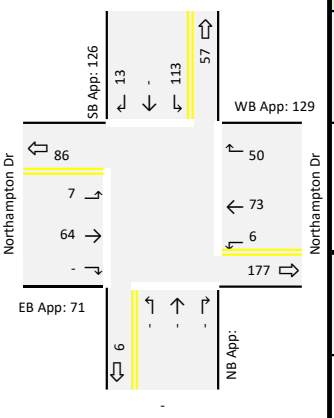
Total Intersection: 245 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LT	57		1.00	57				58	«	
					0	1	1.00	1	1		
		-	0		0				1		
Westbound	TR	104		1.00	104				107	«	✓
					0	3	1.00	3	3		
			0		0				3		
Northbound					0				83	«	✓
					0	83	1.00	83	83		
		-	0		0				83		
Southbound	LR	83		1.00	83				83	«	
					0	-	0.00	0	0		
		-	0		0				0		

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

CLV 190 A

Schl Peak Hour CLV



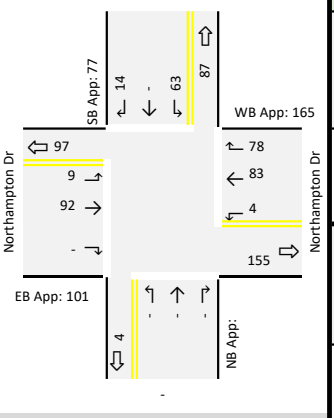
Total Intersection: 326 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LT	71		1.00	71				77	«	
					0	6	1.00	6	6		
		-	0		0				6		
Westbound	TR	123		1.00	123				130	«	✓
					0	7	1.00	7	7		
			0		0				7		
Northbound					0				113	«	
					0	113	1.00	113	113		
		-	0		0				113		
Southbound	LR	126		1.00	126				126	«	✓
					0	-	0.00	0	0		
			0		0				0		

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

CLV 256 A

PM Peak Hour CLV



Total Intersection: 343 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LT	101		1.00	101				105	«	
					0	4	1.00	4	4		
		-	0		0				4		
Westbound	TR	161		1.00	161				170	«	✓
					0	9	1.00	9	9		
			0		0				9		
Northbound					0				63	«	
					0	63	1.00	63	63		
		-	0		0				63		
Southbound	LR	77		1.00	77				77	«	✓
					0	-	0.00	0	0		
			0		0				0		

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

CLV 247 A

Right Turn Overlap Adjustments

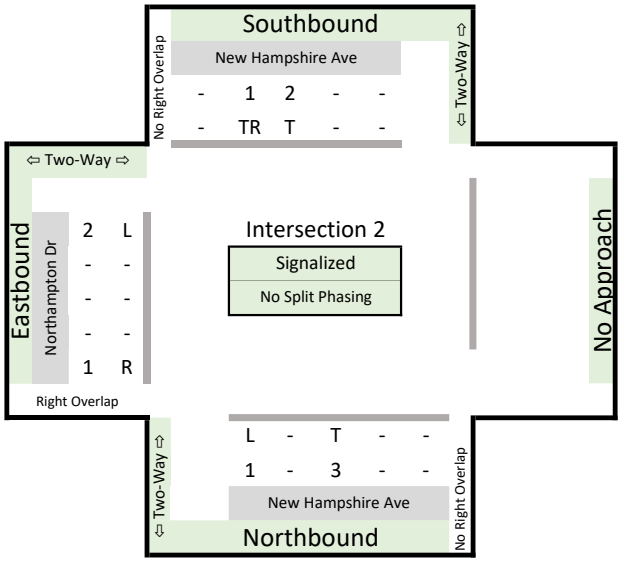
	Eastbound			Westbound			Northbound			Southbound		
	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM
Right Turns	-	-	-	65	50	78	-	-	-	-	13	14
RT LUF		n/a			n/a			n/a			n/a	
Adjusted Rights	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	-	-	-	83	113	63	1	6	4	3	7	9
Adj. LT LUF		0.00			1.00			1.00			1.00	
Adjusted Adj. Lefts	0	0	0	83	113	63	1	6	4	3	7	9
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Montgomery County Standards

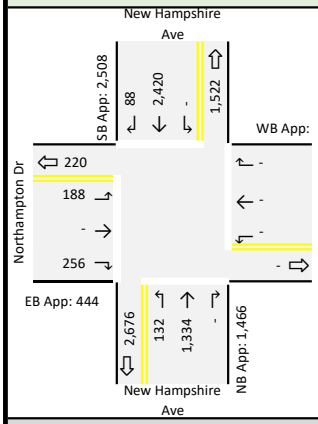
Lane Use Factors			LOS	CLV Range			
#	Th & R	L					
1	1.00	1.00	A	0	to	1,000	
2	0.53	0.53	B	1,001	to	1,150	
3	0.37	0.37	C	1,151	to	1,300	
4	0.30	0.30	D	1,301	to	1,450	
5	0.25	0.25	E	1,451	to	1,600	
			F	1,601	to	9,999	

Project: JoAnn Leleck Elementary School
Intersection: 2. New Hampshire Ave & Northampton Dr
Scenario: Background
Jurisdiction: Montgomery County Policy Area:

GOROVE SLADE
Transportation Planners and Engineers



AM Peak Hour CLV

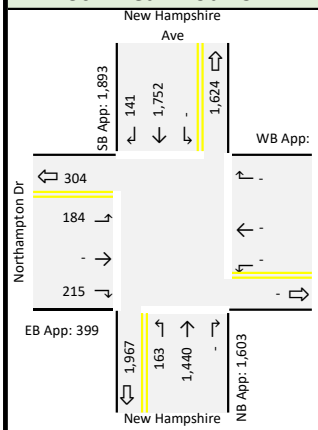


Total Intersection: 4,418 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	L+L	188		0.53	100				100		
					0	-	0.00	0	0		
	R	256	132	1.00	124				124	«	✓
Westbound					0				100	«	
					0	188	0.53	100	100		
		-	0		0				100		
Northbound	L	132		1.00	132				132		
	T+T+T	1,334		0.37	494	-	0.00	0	494	«	
		-	0		0				0		
Southbound	T+T+TR	2,508		0.37	928				1060	«	✓
					0	132	1.00	132	132		
	R	88	0	1.00	88				220		
								CLV	1,184		C

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

Schl Peak Hour CLV

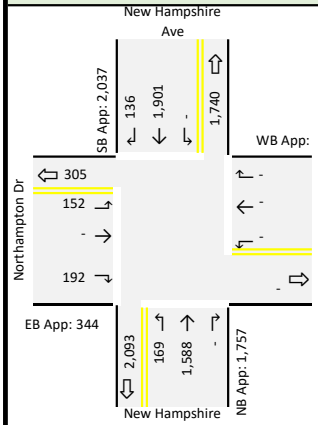


Total Intersection: 3,895 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	L+L	184		0.53	98				98	«	✓
					0	-	0.00	0	0		
	R	215	163	1.00	52				52		
Westbound					0				98	«	
					0	184	0.53	98	98		
		-	0		0				98		
Northbound	L	163		1.00	163				163		
	T+T+T	1,440		0.37	533	-	0.00	0	533	«	
		-	0		0				0		
Southbound	T+T+TR	1,893		0.37	700				863	«	✓
					0	163	1.00	163	163		
	R	141	0	1.00	141				304		
								CLV	961		A

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

PM Peak Hour CLV



Total Intersection: 4,138 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	L+L	152		0.53	81				81	«	✓
					0	-	0.00	0	0		
	R	192	169	1.00	23				23		
Westbound					0				81	«	
					0	152	0.53	81	81		
		-	0		0				81		
Northbound	L	169		1.00	169				169		
	T+T+T	1,588		0.37	588	-	0.00	0	588	«	
		-	0		0				0		
Southbound	T+T+TR	2,037		0.37	754				923	«	✓
					0	169	1.00	169	169		
	R	136	0	1.00	136				305		
								CLV	1,004		B

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

Right Turn Overlap Adjustments

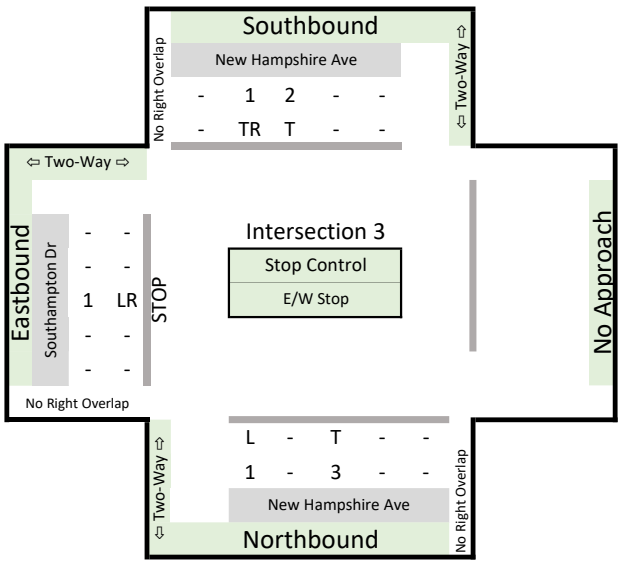
	Eastbound			Westbound			Northbound			Southbound		
	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM
Right Turns	256	215	192	-	-	-	-	-	-	88	141	136
RT LUF		1.00			n/a			n/a			n/a	
Adjusted Rights	256	215	192	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	132	163	169	-	-	-	-	-	-	188	184	152
Adj. LT LUF		1.00			0.00			0.00			0.53	
Adjusted Adj. Lefts	132	163	169	0	0	0	0	0	0	100	98	81
Right Turn Overlap	**132**	**163**	**169**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Montgomery County Standards

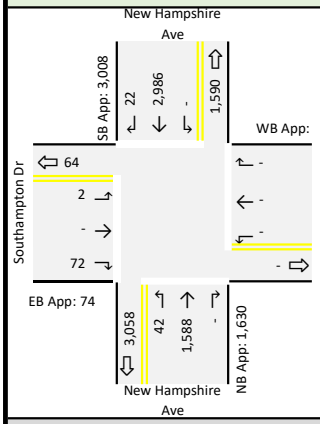
Lane Use Factors			LOS	CLV Range
#	Th & R	L		
1	1.00	1.00	A	0 to 1,000
2	0.53	0.53	B	1,001 to 1,150
3	0.37	0.37	C	1,151 to 1,300
4	0.30	0.30	D	1,301 to 1,450
5	0.25	0.25	E	1,451 to 1,600
			F	1,601 to 9,999

Project: JoAnn Leleck Elementary School
Intersection: 3. New Hampshire Ave & Southampton Dr
Scenario: Background
Jurisdiction: Montgomery County Policy Area:

GOROVE SLADE
Transportation Planners and Engineers



AM Peak Hour CLV

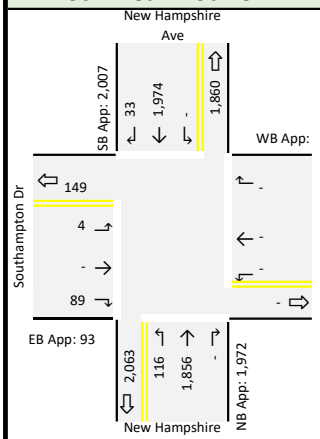


Total Intersection: 4,712 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	74		1.00	74				74	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				2	«	
					0	2	1.00	2	2		
		-	0		0				2		
Northbound	L	42		1.00	42				42		
	T+T+T	1,588		0.37	588	-	0.00	0	588	«	
		-	0		0				0		
Southbound	T+T+TR	3,008		0.37	1113				1155	«	✓
					0	42	1.00	42	42		
	R	22	0	1.00	22				64		
								CLV	1,229		C

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

Schl Peak Hour CLV

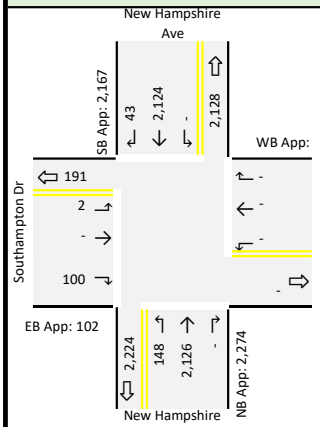


Total Intersection: 4,072 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	93		1.00	93				93	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				4	«	
					0	4	1.00	4	4		
		-	0		0				4		
Northbound	L	116		1.00	116				116		
	T+T+T	1,856		0.37	687	-	0.00	0	687	«	
		-	0		0				0		
Southbound	T+T+TR	2,007		0.37	743				859	«	✓
					0	116	1.00	116	116		
	R	33	0	1.00	33				149		
								CLV	952		A

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

PM Peak Hour CLV



Total Intersection: 4,543 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	102		1.00	102				102	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				2	«	
					0	2	1.00	2	2		
		-	0		0				2		
Northbound	L	148		1.00	148				148		
	T+T+T	2,126		0.37	787	-	0.00	0	787	«	
		-	0		0				0		
Southbound	T+T+TR	2,167		0.37	802				950	«	✓
					0	148	1.00	148	148		
	R	43	0	1.00	43				191		
								CLV	1,052		B

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

Right Turn Overlap Adjustments

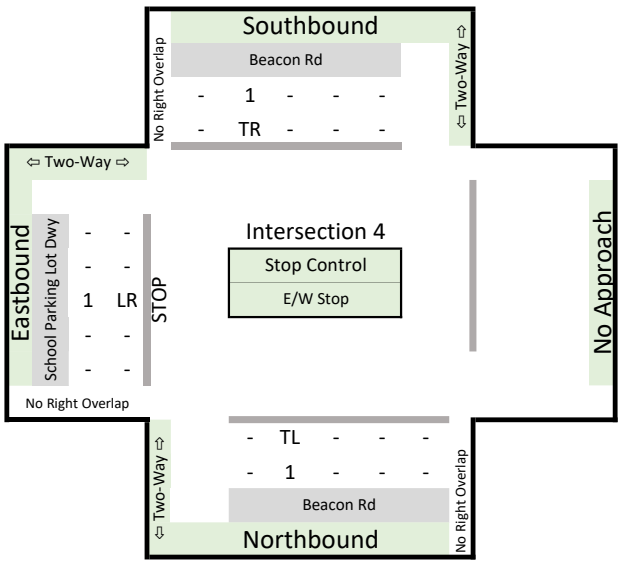
	Eastbound			Westbound			Northbound			Southbound		
	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM
Right Turns	72	89	100	-	-	-	-	-	-	22	33	43
RT LUF		n/a			n/a			n/a			n/a	
Adjusted Rights	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	42	116	148	-	-	-	-	-	-	2	4	2
Adj. LT LUF		1.00			0.00			0.00			1.00	
Adjusted Adj. Lefts	42	116	148	0	0	0	0	0	0	2	4	2
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Montgomery County Standards

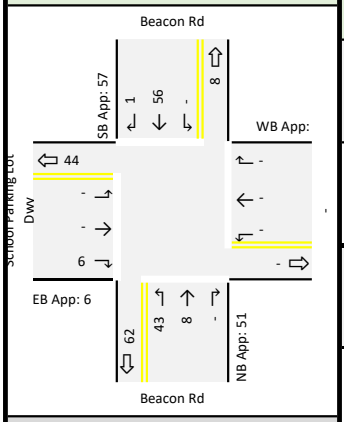
Lane Use Factors			LOS	CLV Range			
#	Th & R	L					
1	1.00	1.00	A	0	to	1,000	
2	0.53	0.53	B	1,001	to	1,150	
3	0.37	0.37	C	1,151	to	1,300	
4	0.30	0.30	D	1,301	to	1,450	
5	0.25	0.25	E	1,451	to	1,600	
			F	1,601	to	9,999	

Project: JoAnn Leleck Elementary School
Intersection: 4. Beacon Rd & School Parking Lot Dwy
Scenario: Background
Jurisdiction: Montgomery County Policy Area:

GOROVE SLADE
Transportation Planners and Engineers



AM Peak Hour CLV



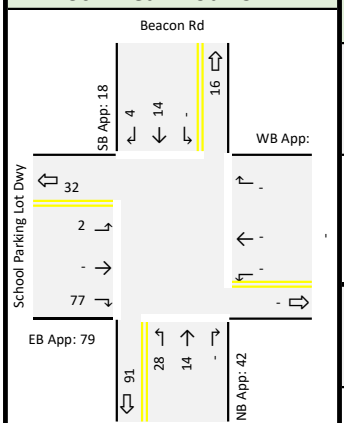
Total Intersection: 114 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	6		1.00	6				6	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				0	«	
					0	-	1.00	0	0		
		-	0		0				0		
Northbound	LT	51		1.00	51				51	«	
					0	-	0.00	0	0		
		-	0		0				0		
Southbound	TR	57		1.00	57				100	«	✓
					0	43	1.00	43	43		
			0		0				43		

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

CLV 106 A

Schl Peak Hour CLV



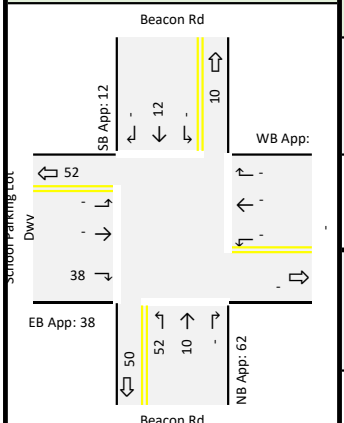
Total Intersection: 139 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	79		1.00	79				79	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				2	«	
					0	2	1.00	2	2		
		-	0		0				2		
Northbound	LT	42		1.00	42				42	«	
					0	-	0.00	0	0		
		-	0		0				0		
Southbound	TR	18		1.00	18				46	«	✓
					0	28	1.00	28	28		
			0		0				28		

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

CLV 125 A

PM Peak Hour CLV



Total Intersection: 112 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	38		1.00	38				38	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				0	«	
					0	-	1.00	0	0		
		-	0		0				0		
Northbound	LT	62		1.00	62				62	«	
					0	-	0.00	0	0		
		-	0		0				0		
Southbound	TR	12		1.00	12				64	«	✓
					0	52	1.00	52	52		
			0		0				52		

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

CLV 102 A

Right Turn Overlap Adjustments

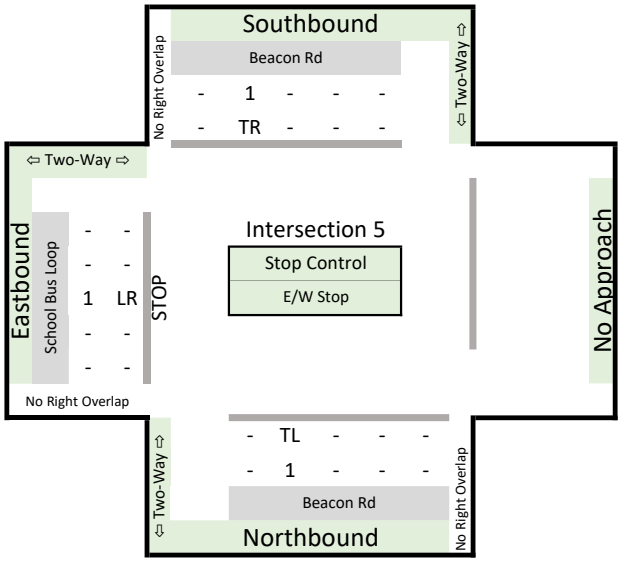
	Eastbound			Westbound			Northbound			Southbound		
	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM
Right Turns	6	77	38	-	-	-	-	-	-	1	4	-
RT LUF		n/a			n/a			n/a			n/a	
Adjusted Rights	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	43	28	52	-	-	-	-	-	-	-	2	-
Adj. LT LUF		1.00			0.00			0.00			1.00	
Adjusted Adj. Lefts	43	28	52	0	0	0	0	0	0	0	2	0
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Montgomery County Standards

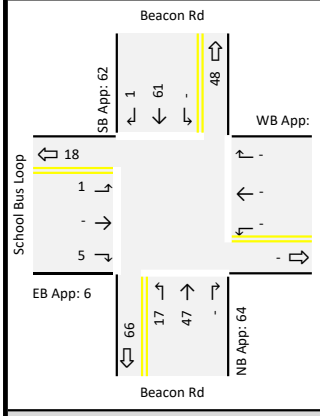
Lane Use Factors			LOS	CLV Range			
#	Th & R	L					
1	1.00	1.00	A	0	to	1,000	
2	0.53	0.53	B	1,001	to	1,150	
3	0.37	0.37	C	1,151	to	1,300	
4	0.30	0.30	D	1,301	to	1,450	
5	0.25	0.25	E	1,451	to	1,600	
			F	1,601	to	9,999	

Project: JoAnn Leleck Elementary School
Intersection: 5. Beacon Rd & School Bus Loop
Scenario: Background
Jurisdiction: Montgomery County Policy Area:

GOROVE SLADE
Transportation Planners and Engineers



AM Peak Hour CLV



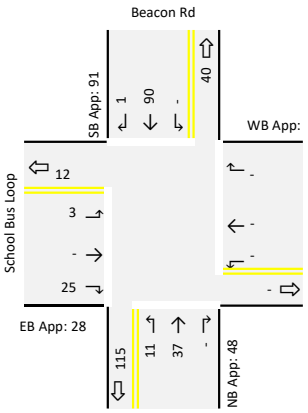
Total Intersection: 132 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	6		1.00	6				6	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				1	«	
					0	1	1.00	1	1		
		-	0		0				1		
Northbound	LT	64		1.00	64				64	«	
					0	-	0.00	0	0		
		-	0		0				0		
Southbound	TR	62		1.00	62				79	«	✓
					0	17	1.00	17	17		
			0		0				17		

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

CLV 85 A

Schl Peak Hour CLV



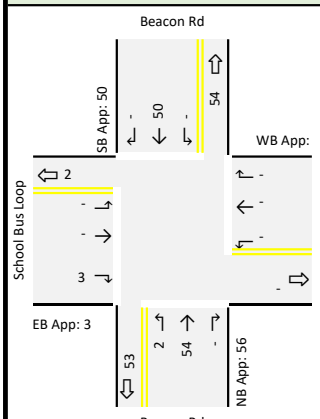
Total Intersection: 167 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	28		1.00	28				28	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				3	«	
					0	3	1.00	3	3		
		-	0		0				3		
Northbound	LT	48		1.00	48				48	«	
					0	-	0.00	0	0		
		-	0		0				0		
Southbound	TR	91		1.00	91				102	«	✓
					0	11	1.00	11	11		
			0		0				11		

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

CLV 130 A

PM Peak Hour CLV



Total Intersection: 109 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	3		1.00	3				3	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				0	«	
					0	-	1.00	0	0		
		-	0		0				0		
Northbound	LT	56		1.00	56				56	«	✓
					0	-	0.00	0	0		
		-	0		0				0		
Southbound	TR	50		1.00	50				52	«	
					0	2	1.00	2	2		
			0		0				2		

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

CLV 59 A

Right Turn Overlap Adjustments

	Eastbound			Westbound			Northbound			Southbound		
	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM
Right Turns	5	25	3	-	-	-	-	-	-	1	1	-
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	n/a	n/a	n/a	n/a
Adjacent Lefts	17	11	2	-	-	-	-	-	-	1	3	-
Adj. LT LUF		1.00			0.00			0.00			1.00	
Adjusted Adj. Lefts	17	11	2	0	0	0	0	0	0	1	3	0
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Montgomery County Standards

Lane Use Factors			LOS	CLV Range
#	Th & R	L		
1	1.00	1.00	A	0 to 1,000
2	0.53	0.53	B	1,001 to 1,150
3	0.37	0.37	C	1,151 to 1,300
4	0.30	0.30	D	1,301 to 1,450
5	0.25	0.25	E	1,451 to 1,600
			F	1,601 to 9,999

H. Total Future Vehicular Capacity (HCM and CLV) Analysis Worksheets

HCM 2010 TWSC
1: Northampton Dr & Beacon Rd

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Vol, veh/h	4	54	1	39	87	83	0
Future Vol, veh/h	4	54	1	39	87	83	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	None
Storage Length	-	-	-	-	-	0	-
Veh in Median Storage, #	-	0	-	0	-	0	-
Grade, %	-	0	-	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85
Heavy Vehicles, %	0	13	100	44	8	5	0
Mvmt Flow	5	64	1	46	102	98	0

Major/Minor	Major1		Major2			Minor2	
Conflicting Flow All	148	0	-	-	0	171	97
Stage 1	-	-	-	-	-	97	-
Stage 2	-	-	-	-	-	74	-
Critical Hdwy	4.1	-	-	-	-	6.45	6.2
Critical Hdwy Stg 1	-	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	-	5.45	-
Follow-up Hdwy	2.2	-	-	-	-	3.545	3.3
Pot Cap-1 Maneuver	1446	-	-	-	-	812	965
Stage 1	-	-	-	-	-	919	-
Stage 2	-	-	-	-	-	941	-
Platoon blocked, %		-		-	-		
Mov Cap-1 Maneuver	1446	-	-	-	-	809	965
Mov Cap-2 Maneuver	-	-	-	-	-	809	-
Stage 1	-	-	-	-	-	915	-
Stage 2	-	-	-	-	-	941	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5		10.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1446	-	-	-	809
HCM Lane V/C Ratio	0.003	-	-	-	0.121
HCM Control Delay (s)	7.5	0	-	-	10.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.4

Queues

2: New Hampshire Ave & Northampton Dr

JoAnn Leleck Elementary School
08/15/2023

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	203	275	160	1551	2742
v/c Ratio	0.57	0.76	0.70	0.37	0.78
Control Delay	81.5	34.1	57.7	4.2	21.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	81.5	34.1	57.7	4.2	21.0
Queue Length 50th (ft)	120	78	164	123	706
Queue Length 95th (ft)	157	184	247	211	1033
Internal Link Dist (ft)	158			853	1636
Turn Bay Length (ft)		100	250		
Base Capacity (vph)	813	555	290	4188	3516
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.25	0.50	0.55	0.37	0.78

Intersection Summary

HCM Signalized Intersection Capacity Analysis
2: New Hampshire Ave & Northampton Dr

JoAnn Leleck Elementary School
08/15/2023

Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	8	180	256	4	133	1334	2420	103
Future Volume (vph)	8	180	256	4	133	1334	2420	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	4.0	4.0	
Lane Util. Factor		0.97	1.00		1.00	0.91	0.91	
Frt		1.00	0.85		1.00	1.00	0.99	
Flt Protected		0.95	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		3253	1599		1788	4988	4977	
Flt Permitted		0.95	1.00		0.03	1.00	1.00	
Satd. Flow (perm)		3253	1599		57	4988	4977	
Peak-hour factor, PHF	0.93	0.93	0.93	0.86	0.86	0.86	0.92	0.92
Adj. Flow (vph)	9	194	275	5	155	1551	2630	112
RTOR Reduction (vph)	0	0	184	0	0	0	1	0
Lane Group Flow (vph)	0	203	91	0	160	1551	2741	0
Heavy Vehicles (%)	0%	8%	1%	0%	1%	4%	3%	17%
Turn Type	Perm	Prot	Perm	custom	pm+pt	NA	NA	
Protected Phases		4			1	6	2	
Permitted Phases	4		4	1	6			
Actuated Green, G (s)		17.8	17.8		149.2	149.2	125.1	
Effective Green, g (s)		19.8	19.8		151.2	151.2	127.1	
Actuated g/C Ratio		0.11	0.11		0.84	0.84	0.71	
Clearance Time (s)		7.0	7.0		7.0	6.0	6.0	
Vehicle Extension (s)		3.0	3.0		4.0	0.2	0.2	
Lane Grp Cap (vph)		357	175		231	4189	3514	
v/s Ratio Prot					c0.07	0.31	c0.55	
v/s Ratio Perm		0.06	0.06		0.51			
v/c Ratio		0.57	0.52		0.69	0.37	0.78	
Uniform Delay, d1		76.0	75.6		59.5	3.3	17.3	
Progression Factor		1.00	1.00		0.89	1.11	1.00	
Incremental Delay, d2		2.1	2.6		7.3	0.0	1.8	
Delay (s)		78.1	78.2		60.2	3.7	19.1	
Level of Service		E	E		E	A	B	
Approach Delay (s)		78.2				9.0	19.1	
Approach LOS		E				A	B	

Intersection Summary			
HCM 2000 Control Delay	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	84.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM 2010 TWSC
3: New Hampshire Ave & Southampton Dr

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	12.2

Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	2	72	1	41	1593	2986	22
Future Vol, veh/h	2	72	1	41	1593	2986	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	250	-	-	-
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	85	85	93	93	93	95	95
Heavy Vehicles, %	0	19	0	22	3	3	9
Mvmt Flow	2	85	1	44	1713	3143	23

Major/Minor	Minor2		Major1			Major2	
Conflicting Flow All	3930	1583	2311	3166	0	-	0
Stage 1	3155	-	-	-	-	-	-
Stage 2	775	-	-	-	-	-	-
Critical Hdwy	5.7	7.48	5.6	5.74	-	-	-
Critical Hdwy Stg 1	6.6	-	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-	-
Follow-up Hdwy	3.8	4.09	2.3	3.32	-	-	-
Pot Cap-1 Maneuver	8	~ 71	82	~ 21	-	-	-
Stage 1	10	-	-	-	-	-	-
Stage 2	381	-	-	-	-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	8	~ 71	29	~ 29	-	-	-
Mov Cap-2 Maneuver	8	-	-	-	-	-	-
Stage 1	10	-	-	-	-	-	-
Stage 2	381	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 401	14.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	~ 29	-	59	-	-
HCM Lane V/C Ratio	1.557	-	1.476	-	-
HCM Control Delay (s)	$ 577.5	-	$ 401	-	-
HCM Lane LOS	F	-	F	-	-
HCM 95th %tile Q(veh)	5.2	-	7.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 2010 TWSC
4: Beacon Rd & Parking Lot Dwy

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	6	66	8	56	1
Future Vol, veh/h	0	6	66	8	56	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	7	78	9	66	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	232	67	67	0	-	0
Stage 1	67	-	-	-	-	-
Stage 2	165	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	761	1002	1547	-	-	-
Stage 1	961	-	-	-	-	-
Stage 2	869	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	722	1002	1547	-	-	-
Mov Cap-2 Maneuver	722	-	-	-	-	-
Stage 1	912	-	-	-	-	-
Stage 2	869	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	6.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1547	-	1002	-	-
HCM Lane V/C Ratio	0.05	-	0.007	-	-
HCM Control Delay (s)	7.5	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0	-	-

HCM 2010 TWSC
5: Beacon Rd & Bus Loop Dwy

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	5	17	70	61	1
Future Vol, veh/h	1	5	17	70	61	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	6	20	82	72	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	195	73	73	0	-	0
Stage 1	73	-	-	-	-	-
Stage 2	122	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	798	995	1540	-	-	-
Stage 1	955	-	-	-	-	-
Stage 2	908	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	787	995	1540	-	-	-
Mov Cap-2 Maneuver	787	-	-	-	-	-
Stage 1	942	-	-	-	-	-
Stage 2	908	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	1.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1540	-	953	-	-
HCM Lane V/C Ratio	0.013	-	0.007	-	-
HCM Control Delay (s)	7.4	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

HCM 2010 TWSC
1: Northampton Dr & Beacon Rd

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	4.4

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations			↰		↰		⅄	
Traffic Vol, veh/h	1	6	64	6	73	50	127	13
Future Vol, veh/h	1	6	64	6	73	50	127	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	None
Storage Length	-	-	-	-	-	-	0	-
Veh in Median Storage, #	-	-	0	-	0	-	0	-
Grade, %	-	-	0	-	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	0	20	0	11	8	4	0
Mvmt Flow	1	7	75	7	86	59	149	15

Major/Minor	Major1			Major2			Minor2	
Conflicting Flow All	-	145	0	-	-	0	205	116
Stage 1	-	-	-	-	-	-	116	-
Stage 2	-	-	-	-	-	-	89	-
Critical Hdwy	-	4.1	-	-	-	-	6.44	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.44	-
Follow-up Hdwy	-	2.2	-	-	-	-	3.536	3.3
Pot Cap-1 Maneuver	-	1450	-	-	-	-	779	942
Stage 1	-	-	-	-	-	-	904	-
Stage 2	-	-	-	-	-	-	929	-
Platoon blocked, %			-		-	-		
Mov Cap-1 Maneuver	~ -7	~ -7	-	-	-	-	779	942
Mov Cap-2 Maneuver	-	-	-	-	-	-	779	-
Stage 1	-	-	-	-	-	-	904	-
Stage 2	-	-	-	-	-	-	929	-

Approach	EB	WB	SB
HCM Control Delay, s			10.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	+	-	-	-	792
HCM Lane V/C Ratio	-	-	-	-	0.208
HCM Control Delay (s)	-	-	-	-	10.7
HCM Lane LOS	-	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	-	0.8

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Queues

2: New Hampshire Ave & Northampton Dr

JoAnn Leleck Elementary School
08/15/2023

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	228	258	179	1582	1972
v/c Ratio	0.63	0.65	0.63	0.37	0.56
Control Delay	84.4	16.4	40.4	4.8	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	84.4	16.4	40.4	4.8	14.5
Queue Length 50th (ft)	135	8	146	134	386
Queue Length 95th (ft)	169	77	244	265	535
Internal Link Dist (ft)	158			853	1636
Turn Bay Length (ft)		100	250		
Base Capacity (vph)	561	480	388	4269	3545
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.41	0.54	0.46	0.37	0.56

Intersection Summary

HCM Signalized Intersection Capacity Analysis
2: New Hampshire Ave & Northampton Dr

JoAnn Leleck Elementary School
08/15/2023

Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	28	166	219	1	162	1440	1752	141
Future Volume (vph)	28	166	219	1	162	1440	1752	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	4.0	4.0	
Lane Util. Factor		0.97	1.00		1.00	0.91	0.91	
Frt		1.00	0.85		1.00	1.00	0.99	
Flt Protected		0.95	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		3260	1583		1753	5085	5028	
Flt Permitted		0.95	1.00		0.07	1.00	1.00	
Satd. Flow (perm)		3260	1583		130	5085	5028	
Peak-hour factor, PHF	0.85	0.85	0.85	0.91	0.91	0.91	0.96	0.96
Adj. Flow (vph)	33	195	258	1	178	1582	1825	147
RTOR Reduction (vph)	0	0	223	0	0	0	4	0
Lane Group Flow (vph)	0	228	35	0	179	1582	1968	0
Heavy Vehicles (%)	4%	8%	2%	0%	3%	2%	2%	2%
Turn Type	Perm	Prot	Perm	custom	pm+pt	NA	NA	
Protected Phases		4			1	6	2	
Permitted Phases	4		4	1	6			
Actuated Green, G (s)		17.9	17.9		149.1	149.1	124.8	
Effective Green, g (s)		19.9	19.9		151.1	151.1	126.8	
Actuated g/C Ratio		0.11	0.11		0.84	0.84	0.70	
Clearance Time (s)		7.0	7.0		7.0	6.0	6.0	
Vehicle Extension (s)		3.0	3.0		4.0	0.2	0.2	
Lane Grp Cap (vph)		360	175		283	4268	3541	
v/s Ratio Prot					c0.07	0.31	0.39	
v/s Ratio Perm		0.07	0.02		c0.46			
v/c Ratio		0.63	0.20		0.63	0.37	0.56	
Uniform Delay, d1		76.6	72.8		32.4	3.4	12.9	
Progression Factor		1.00	1.00		1.34	1.29	1.00	
Incremental Delay, d2		3.6	0.6		3.9	0.0	0.6	
Delay (s)		80.2	73.4		47.4	4.4	13.6	
Level of Service		F	E		D	A	B	
Approach Delay (s)		76.6				8.7	13.6	
Approach LOS		E				A	B	

Intersection Summary			
HCM 2000 Control Delay	18.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM 2010 TWSC
3: New Hampshire Ave & Southampton Dr

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	10.1

Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	4	89	2	114	1856	1978	33
Future Vol, veh/h	4	89	2	114	1856	1978	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	250	-	-	-
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	86	86	89	89	89	94	94
Heavy Vehicles, %	50	11	0	11	3	2	2
Mvmt Flow	5	103	2	128	2085	2104	35

Major/Minor	Minor2		Major1			Major2	
Conflicting Flow All	3216	1070	1562	2139	0	-	0
Stage 1	2122	-	-	-	-	-	-
Stage 2	1094	-	-	-	-	-	-
Critical Hdwy	6.7	7.32	5.6	5.52	-	-	-
Critical Hdwy Stg 1	7.6	-	-	-	-	-	-
Critical Hdwy Stg 2	7	-	-	-	-	-	-
Follow-up Hdwy	4.3	4.01	2.3	3.21	-	-	-
Pot Cap-1 Maneuver	8	174	218	~ 95	-	-	-
Stage 1	26	-	-	-	-	-	-
Stage 2	179	-	-	-	-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	0	174	95	~ 95	-	-	-
Mov Cap-2 Maneuver	0	-	-	-	-	-	-
Stage 1	0	-	-	-	-	-	-
Stage 2	179	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	54.7	17.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	~ 95	-	174	-	-
HCM Lane V/C Ratio	1.372	-	0.621	-	-
HCM Control Delay (s)	299.8	-	54.7	-	-
HCM Lane LOS	F	-	F	-	-
HCM 95th %tile Q(veh)	9.5	-	3.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 2010 TWSC
4: Beacon Rd & Parking Lot Dwy

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	91	28	14	14	4
Future Vol, veh/h	2	91	28	14	14	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	7	0	2
Mvmt Flow	2	107	33	16	16	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	101	19	21	0	-	0
Stage 1	19	-	-	-	-	-
Stage 2	82	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	902	1065	1608	-	-	-
Stage 1	1009	-	-	-	-	-
Stage 2	946	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	883	1065	1608	-	-	-
Mov Cap-2 Maneuver	883	-	-	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	946	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	4.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1608	-	1060	-	-
HCM Lane V/C Ratio	0.02	-	0.103	-	-
HCM Control Delay (s)	7.3	0	8.8	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

HCM 2010 TWSC
5: Beacon Rd & Bus Loop Dwy

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	25	11	37	104	1
Future Vol, veh/h	3	25	11	37	104	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	28	13	44	122	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	193	123	123	0	-	0
Stage 1	123	-	-	-	-	-
Stage 2	70	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	800	933	1477	-	-	-
Stage 1	907	-	-	-	-	-
Stage 2	958	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	793	933	1477	-	-	-
Mov Cap-2 Maneuver	793	-	-	-	-	-
Stage 1	899	-	-	-	-	-
Stage 2	958	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	1.7	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1477	-	916	-	-
HCM Lane V/C Ratio	0.009	-	0.035	-	-
HCM Control Delay (s)	7.5	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 2010 TWSC
1: Northampton Dr & Beacon Rd

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	2.4

Movement	EBU	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations								
Traffic Vol, veh/h	3	6	92	4	83	78	66	14
Future Vol, veh/h	3	6	92	4	83	78	66	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	None
Storage Length	-	-	-	-	-	-	0	-
Veh in Median Storage, #	-	-	0	-	0	-	0	-
Grade, %	-	-	0	-	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85
Heavy Vehicles, %	0	17	0	0	13	0	2	0
Mvmt Flow	4	7	108	5	98	92	78	16

Major/Minor	Major1			Major2			Minor2	
Conflicting Flow All	-	190	0	-	-	0	266	144
Stage 1	-	-	-	-	-	-	144	-
Stage 2	-	-	-	-	-	-	122	-
Critical Hdwy	-	4.27	-	-	-	-	6.42	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	-
Follow-up Hdwy	-	2.353	-	-	-	-	3.518	3.3
Pot Cap-1 Maneuver	-	1299	-	-	-	-	723	909
Stage 1	-	-	-	-	-	-	883	-
Stage 2	-	-	-	-	-	-	903	-
Platoon blocked, %			-		-	-		
Mov Cap-1 Maneuver	~ -3	~ -3	-	-	-	-	723	909
Mov Cap-2 Maneuver	-	-	-	-	-	-	723	-
Stage 1	-	-	-	-	-	-	883	-
Stage 2	-	-	-	-	-	-	903	-

Approach	EB	WB	SB
HCM Control Delay, s			10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	+	-	-	-	750
HCM Lane V/C Ratio	-	-	-	-	0.125
HCM Control Delay (s)	-	-	-	-	10.5
HCM Lane LOS	-	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	-	0.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Queues
2: New Hampshire Ave & Northampton Dr

JoAnn Leleck Elementary School
08/15/2023

Lane Group	EBL	EBR	NBL	NBT	SBT
Lane Group Flow (vph)	165	208	176	1654	2238
v/c Ratio	0.54	0.63	0.64	0.38	0.61
Control Delay	84.7	17.4	35.5	6.2	14.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	84.7	17.4	35.5	6.2	14.4
Queue Length 50th (ft)	97	0	152	212	449
Queue Length 95th (ft)	138	87	m218	401	611
Internal Link Dist (ft)	158			853	1636
Turn Bay Length (ft)		100	250		
Base Capacity (vph)	597	444	372	4380	3646
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.28	0.47	0.47	0.38	0.61

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

HCM Signalized Intersection Capacity Analysis
2: New Hampshire Ave & Northampton Dr

JoAnn Leleck Elementary School
08/15/2023

Movement	EBU	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations								
Traffic Volume (vph)	15	139	193	2	167	1588	1901	136
Future Volume (vph)	15	139	193	2	167	1588	1901	136
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	4.0	4.0	
Lane Util. Factor		0.97	1.00		1.00	0.91	0.91	
Frt		1.00	0.85		1.00	1.00	0.99	
Flt Protected		0.95	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		3468	1583		1787	5085	5064	
Flt Permitted		0.95	1.00		0.05	1.00	1.00	
Satd. Flow (perm)		3468	1583		93	5085	5064	
Peak-hour factor, PHF	0.93	0.93	0.93	0.96	0.96	0.96	0.91	0.91
Adj. Flow (vph)	16	149	208	2	174	1654	2089	149
RTOR Reduction (vph)	0	0	190	0	0	0	3	0
Lane Group Flow (vph)	0	165	18	0	176	1654	2235	0
Heavy Vehicles (%)	10%	0%	2%	0%	1%	2%	1%	7%
Turn Type	Perm	Prot	Perm	custom	pm+pt	NA	NA	
Protected Phases		4			1	6	2	
Permitted Phases	4		4	1	6			
Actuated Green, G (s)		13.9	13.9		153.1	153.1	127.5	
Effective Green, g (s)		15.9	15.9		155.1	155.1	129.5	
Actuated g/C Ratio		0.09	0.09		0.86	0.86	0.72	
Clearance Time (s)		7.0	7.0		7.0	6.0	6.0	
Vehicle Extension (s)		3.0	3.0		4.0	0.2	0.2	
Lane Grp Cap (vph)		306	139		274	4381	3643	
v/s Ratio Prot					c0.07	0.33	0.44	
v/s Ratio Perm		0.05	0.01		c0.48			
v/c Ratio		0.54	0.13		0.64	0.38	0.61	
Uniform Delay, d1		78.5	75.7		45.0	2.6	12.7	
Progression Factor		1.00	1.00		0.81	2.28	1.00	
Incremental Delay, d2		1.8	0.4		3.4	0.0	0.8	
Delay (s)		80.4	76.1		39.7	5.8	13.5	
Level of Service		F	E		D	A	B	
Approach Delay (s)		78.0				9.1	13.5	
Approach LOS		E				A	B	

Intersection Summary			
HCM 2000 Control Delay	17.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	180.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM 2010 TWSC
3: New Hampshire Ave & Southampton Dr

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	23.1

Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Vol, veh/h	2	100	7	141	2126	2125	43
Future Vol, veh/h	2	100	7	141	2126	2125	43
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	-	None	-	None
Storage Length	0	-	-	250	-	-	-
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	85	85	89	89	89	95	95
Heavy Vehicles, %	0	11	0	11	2	1	2
Mvmt Flow	2	118	8	158	2389	2237	45

Major/Minor	Minor2		Major1			Major2	
Conflicting Flow All	3548	1141	1666	2282	0	-	0
Stage 1	2260	-	-	-	-	-	-
Stage 2	1288	-	-	-	-	-	-
Critical Hdwy	5.7	7.32	5.6	5.52	-	-	-
Critical Hdwy Stg 1	6.6	-	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-	-
Follow-up Hdwy	3.8	4.01	2.3	3.21	-	-	-
Pot Cap-1 Maneuver	13	156	190	~ 79	-	-	-
Stage 1	40	-	-	-	-	-	-
Stage 2	203	-	-	-	-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	0	156	78	~ 78	-	-	-
Mov Cap-2 Maneuver	0	-	-	-	-	-	-
Stage 1	0	-	-	-	-	-	-
Stage 2	203	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	79.5	41.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	~ 78	-	156	-	-
HCM Lane V/C Ratio	2.132	-	0.769	-	-
HCM Control Delay (s)	$ 631	-	79.5	-	-
HCM Lane LOS	F	-	F	-	-
HCM 95th %tile Q(veh)	15.2	-	4.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

HCM 2010 TWSC
4: Beacon Rd & Parking Lot Dwy

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	41	52	10	12	0
Future Vol, veh/h	0	41	52	10	12	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	3	2	0	0	0
Mvmt Flow	0	48	61	12	14	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	148	14	14	0	-	0
Stage 1	14	-	-	-	-	-
Stage 2	134	-	-	-	-	-
Critical Hdwy	6.4	6.23	4.12	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.327	2.218	-	-	-
Pot Cap-1 Maneuver	849	1063	1604	-	-	-
Stage 1	1014	-	-	-	-	-
Stage 2	897	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	817	1063	1604	-	-	-
Mov Cap-2 Maneuver	817	-	-	-	-	-
Stage 1	975	-	-	-	-	-
Stage 2	897	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	6.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1604	-	1063	-	-
HCM Lane V/C Ratio	0.038	-	0.045	-	-
HCM Control Delay (s)	7.3	0	8.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

HCM 2010 TWSC
5: Beacon Rd & Bus Loop Dwy

JoAnn Leleck Elementary School
08/15/2023

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	3	2	54	53	0
Future Vol, veh/h	0	3	2	54	53	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	4	2	64	62	0

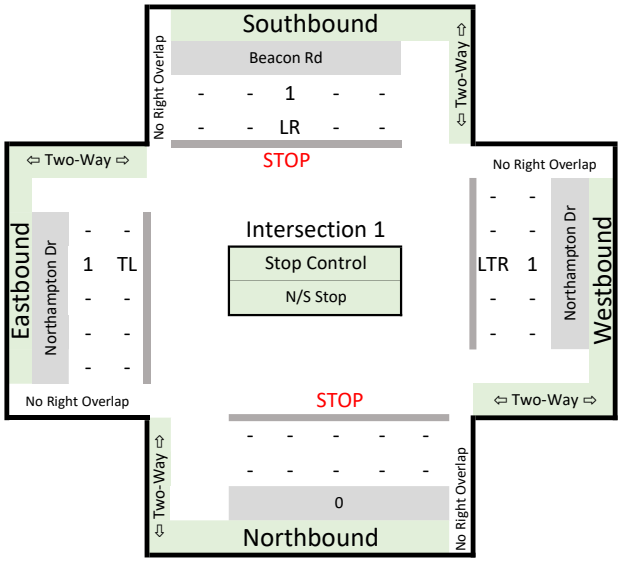
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	130	62	62	0	-	0
Stage 1	62	-	-	-	-	-
Stage 2	68	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	869	1009	1554	-	-	-
Stage 1	966	-	-	-	-	-
Stage 2	960	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	868	1009	1554	-	-	-
Mov Cap-2 Maneuver	868	-	-	-	-	-
Stage 1	965	-	-	-	-	-
Stage 2	960	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.6	0.3	0
HCM LOS	A		

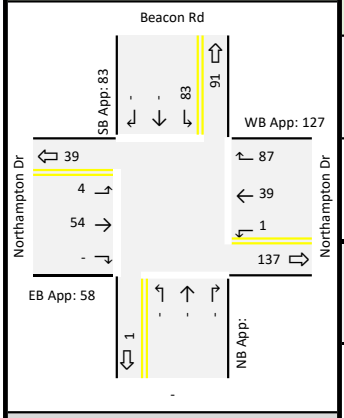
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1554	-	1009	-	-
HCM Lane V/C Ratio	0.002	-	0.003	-	-
HCM Control Delay (s)	7.3	0	8.6	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Project: JoAnn Leleck Elementary School
Intersection: 1. Beacon Rd & Northampton Dr
Scenario: Future
Jurisdiction: Montgomery County Policy Area:

GOROVE SLADE
Transportation Planners and Engineers



AM Peak Hour CLV



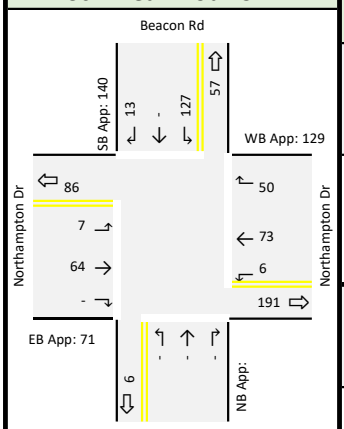
Total Intersection: 268 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LT	58		1.00	58				59	«	
					0	1	1.00	1	1		
		-	0		0				1		
Westbound	TR	126		1.00	126				130	«	✓
					0	4	1.00	4	4		
			0		0				4		
Northbound					0				83	«	✓
					0	83	1.00	83	83		
		-	0		0				83		
Southbound	LR	83		1.00	83				83	«	
					0	-	0.00	0	0		
		-	0		0				0		

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

CLV 213 A

Schl Peak Hour CLV



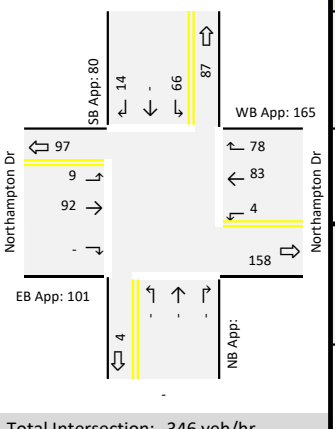
Total Intersection: 340 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LT	71		1.00	71				77	«	
					0	6	1.00	6	6		
		-	0		0				6		
Westbound	TR	123		1.00	123				130	«	✓
					0	7	1.00	7	7		
			0		0				7		
Northbound					0				127	«	
					0	127	1.00	127	127		
		-	0		0				127		
Southbound	LR	140		1.00	140				140	«	✓
					0	-	0.00	0	0		
			0		0				0		

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

CLV 270 A

PM Peak Hour CLV



Total Intersection: 346 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LT	101		1.00	101				105	«	
					0	4	1.00	4	4		
		-	0		0				4		
Westbound	TR	161		1.00	161				170	«	✓
					0	9	1.00	9	9		
			0		0				9		
Northbound					0				66	«	
					0	66	1.00	66	66		
		-	0		0				66		
Southbound	LR	80		1.00	80				80	«	✓
					0	-	0.00	0	0		
			0		0				0		

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

CLV 250 A

Right Turn Overlap Adjustments

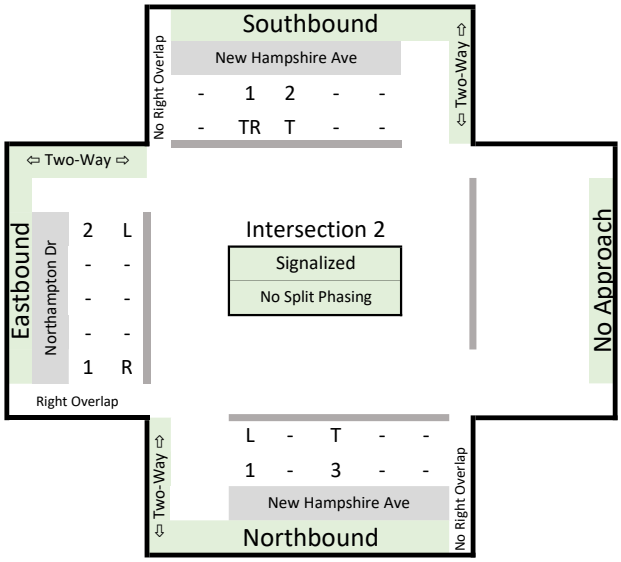
	Eastbound			Westbound			Northbound			Southbound		
	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM
Right Turns	-	-	-	87	50	78	-	-	-	-	13	14
RT LUF		n/a			n/a			n/a			n/a	
Adjusted Rights	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	-	-	-	83	127	66	1	6	4	4	7	9
Adj. LT LUF		0.00			1.00			1.00			1.00	
Adjusted Adj. Lefts	0	0	0	83	127	66	1	6	4	4	7	9
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Montgomery County Standards

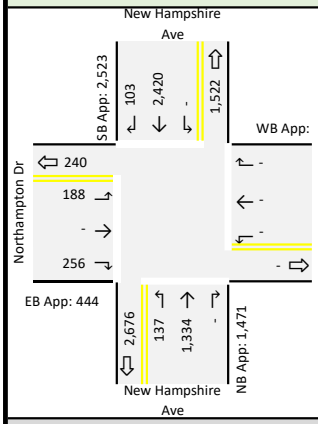
Lane Use Factors			LOS	CLV Range			
#	Th & R	L					
1	1.00	1.00	A	0	to	1,000	
2	0.53	0.53	B	1,001	to	1,150	
3	0.37	0.37	C	1,151	to	1,300	
4	0.30	0.30	D	1,301	to	1,450	
5	0.25	0.25	E	1,451	to	1,600	
			F	1,601	to	9,999	

Project: JoAnn Leleck Elementary School
Intersection: 2. New Hampshire Ave & Northampton Dr
Scenario: Future
Jurisdiction: Montgomery County Policy Area:

GOROVE SLADE
Transportation Planners and Engineers



AM Peak Hour CLV

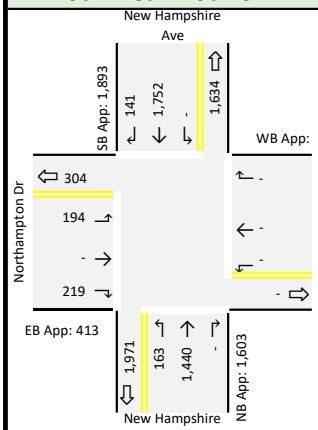


Total Intersection: 4,438 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	L+L	188		0.53	100				100		
					0	-	0.00	0	0		
	R	256	137	1.00	119				119	«	✓
Westbound					0				100	«	
					0	188	0.53	100	100		
		-	0		0				100		
Northbound	L	137		1.00	137				137		
	T+T+T	1,334		0.37	494	-	0.00	0	494	«	
		-	0		0				0		
Southbound	T+T+TR	2,523		0.37	934				1071	«	✓
					0	137	1.00	137	137		
	R	103	0	1.00	103				240		
								CLV	1,190		C

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

Schl Peak Hour CLV

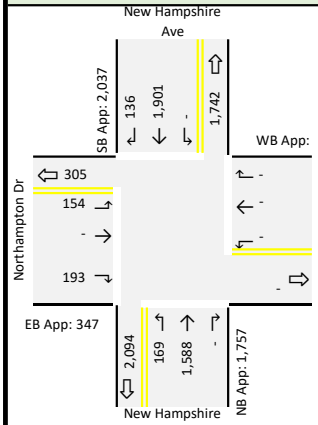


Total Intersection: 3,909 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	L+L	194		0.53	103				103	«	✓
					0	-	0.00	0	0		
	R	219	163	1.00	56				56		
Westbound					0				103	«	
					0	194	0.53	103	103		
		-	0		0				103		
Northbound	L	163		1.00	163				163		
	T+T+T	1,440		0.37	533	-	0.00	0	533	«	
		-	0		0				0		
Southbound	T+T+TR	1,893		0.37	700				863	«	✓
					0	163	1.00	163	163		
	R	141	0	1.00	141				304		
								CLV	966		A

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

PM Peak Hour CLV



Total Intersection: 4,141 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	L+L	154		0.53	82				82	«	✓
					0	-	0.00	0	0		
	R	193	169	1.00	24				24		
Westbound					0				82	«	
					0	154	0.53	82	82		
		-	0		0				82		
Northbound	L	169		1.00	169				169		
	T+T+T	1,588		0.37	588	-	0.00	0	588	«	
		-	0		0				0		
Southbound	T+T+TR	2,037		0.37	754				923	«	✓
					0	169	1.00	169	169		
	R	136	0	1.00	136				305		
								CLV	1,005		B

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

Right Turn Overlap Adjustments

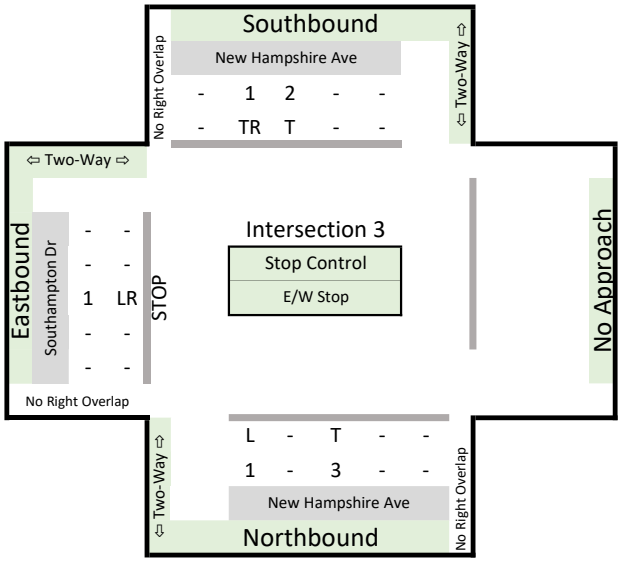
	Eastbound			Westbound			Northbound			Southbound		
	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM
Right Turns	256	219	193	-	-	-	-	-	-	103	141	136
RT LUF		1.00			n/a			n/a			n/a	
Adjusted Rights	256	219	193	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	137	163	169	-	-	-	-	-	-	188	194	154
Adj. LT LUF		1.00			0.00			0.00			0.53	
Adjusted Adj. Lefts	137	163	169	0	0	0	0	0	0	100	103	82
Right Turn Overlap	**137**	**163**	**169**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Montgomery County Standards

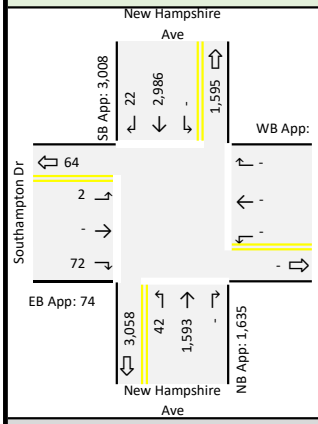
Lane Use Factors			LOS	CLV Range
#	Th & R	L		
1	1.00	1.00	A	0 to 1,000
2	0.53	0.53	B	1,001 to 1,150
3	0.37	0.37	C	1,151 to 1,300
4	0.30	0.30	D	1,301 to 1,450
5	0.25	0.25	E	1,451 to 1,600
			F	1,601 to 9,999

Project: JoAnn Leleck Elementary School
Intersection: 3. New Hampshire Ave & Southampton Dr
Scenario: Future
Jurisdiction: Montgomery County Policy Area:

GOROVE SLADE
Transportation Planners and Engineers



AM Peak Hour CLV

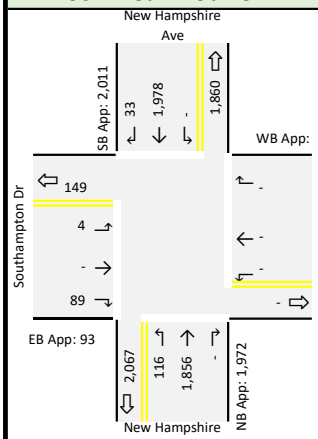


Total Intersection: 4,717 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	74		1.00	74				74	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				2	«	
					0	2	1.00	2	2		
		-	0		0				2		
Northbound	L	42		1.00	42				42		
	T+T+T	1,593		0.37	589	-	0.00	0	589	«	
		-	0		0				0		
Southbound	T+T+TR	3,008		0.37	1113				1155	«	✓
					0	42	1.00	42	42		
	R	22	0	1.00	22				64		
								CLV	1,229		C

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

Schl Peak Hour CLV

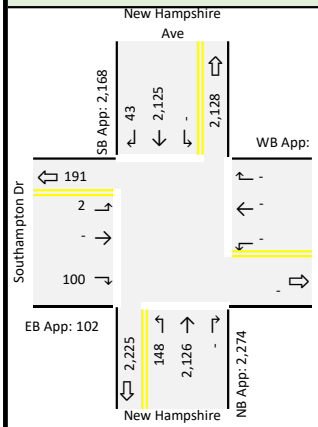


Total Intersection: 4,076 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	93		1.00	93				93	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				4	«	
					0	4	1.00	4	4		
		-	0		0				4		
Northbound	L	116		1.00	116				116		
	T+T+T	1,856		0.37	687	-	0.00	0	687	«	
		-	0		0				0		
Southbound	T+T+TR	2,011		0.37	744				860	«	✓
					0	116	1.00	116	116		
	R	33	0	1.00	33				149		
								CLV	953		A

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

PM Peak Hour CLV



Total Intersection: 4,544 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	102		1.00	102				102	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				2	«	
					0	2	1.00	2	2		
		-	0		0				2		
Northbound	L	148		1.00	148				148		
	T+T+T	2,126		0.37	787	-	0.00	0	787	«	
		-	0		0				0		
Southbound	T+T+TR	2,168		0.37	802				950	«	✓
					0	148	1.00	148	148		
	R	43	0	1.00	43				191		
								CLV	1,052		B

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

Right Turn Overlap Adjustments

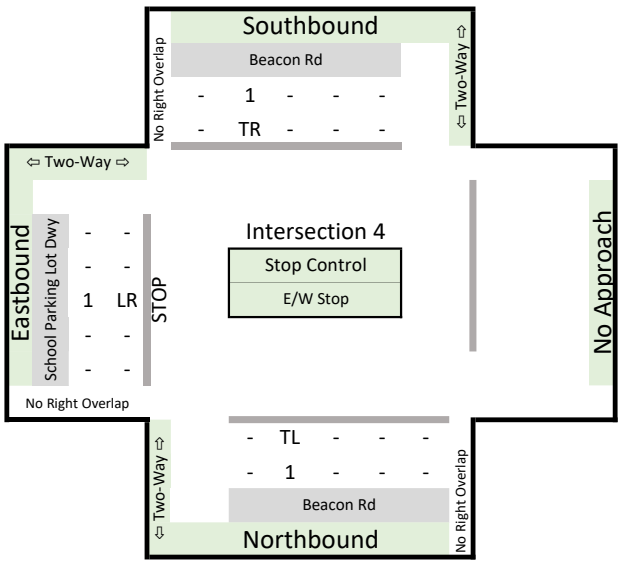
	Eastbound			Westbound			Northbound			Southbound		
	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM
Right Turns	72	89	100	-	-	-	-	-	-	22	33	43
RT LUF		n/a			n/a			n/a			n/a	
Adjusted Rights	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	42	116	148	-	-	-	-	-	-	2	4	2
Adj. LT LUF		1.00			0.00			0.00			1.00	
Adjusted Adj. Lefts	42	116	148	0	0	0	0	0	0	2	4	2
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Montgomery County Standards

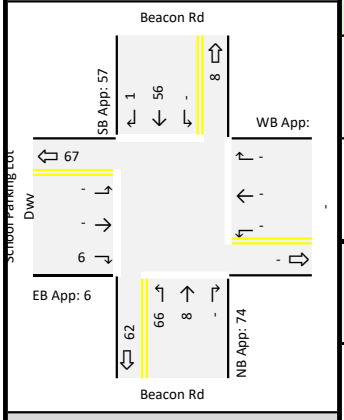
Lane Use Factors			LOS	CLV Range			
#	Th & R	L					
1	1.00	1.00	A	0	to	1,000	
2	0.53	0.53	B	1,001	to	1,150	
3	0.37	0.37	C	1,151	to	1,300	
4	0.30	0.30	D	1,301	to	1,450	
5	0.25	0.25	E	1,451	to	1,600	
			F	1,601	to	9,999	

Project: JoAnn Leleck Elementary School
Intersection: 4. Beacon Rd & School Parking Lot Dwy
Scenario: Future
Jurisdiction: Montgomery County Policy Area:

GOROVE SLADE
Transportation Planners and Engineers



AM Peak Hour CLV



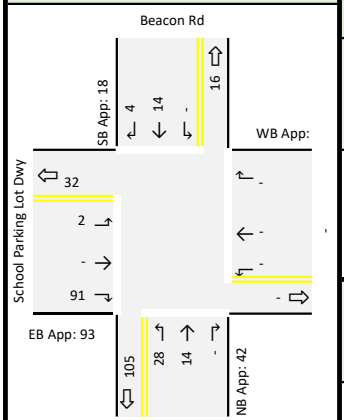
Total Intersection: 137 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	6		1.00	6				6	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				0	«	
					0	-	1.00	0	0		
		-	0		0				0		
Northbound	LT	74		1.00	74				74	«	
					0	-	0.00	0	0		
		-	0		0				0		
Southbound	TR	57		1.00	57				123	«	✓
					0	66	1.00	66	66		
			0		0				66		

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

CLV 129 A

Schl Peak Hour CLV



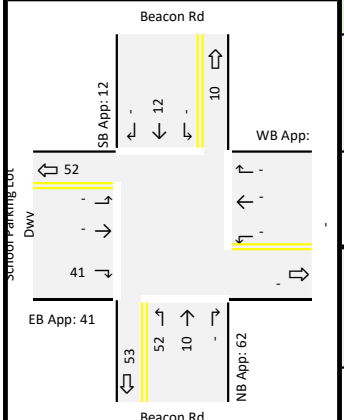
Total Intersection: 153 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	93		1.00	93				93	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				2	«	
					0	2	1.00	2	2		
		-	0		0				2		
Northbound	LT	42		1.00	42				42	«	
					0	-	0.00	0	0		
		-	0		0				0		
Southbound	TR	18		1.00	18				46	«	✓
					0	28	1.00	28	28		
			0		0				28		

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

CLV 139 A

PM Peak Hour CLV



Total Intersection: 115 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	41		1.00	41				41	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				0	«	
					0	-	1.00	0	0		
		-	0		0				0		
Northbound	LT	62		1.00	62				62	«	
					0	-	0.00	0	0		
		-	0		0				0		
Southbound	TR	12		1.00	12				64	«	✓
					0	52	1.00	52	52		
			0		0				52		

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

CLV 105 A

Right Turn Overlap Adjustments

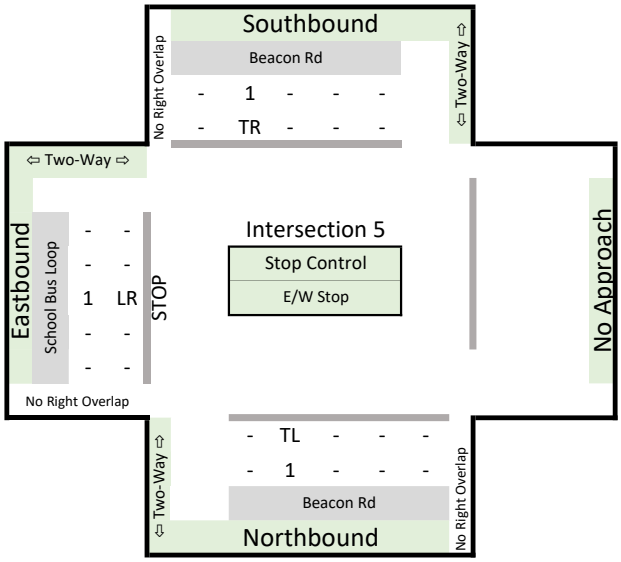
	Eastbound			Westbound			Northbound			Southbound		
	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM
Right Turns	6	91	41	-	-	-	-	-	-	1	4	-
RT LUF		n/a			n/a			n/a			n/a	
Adjusted Rights	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Adjacent Lefts	66	28	52	-	-	-	-	-	-	-	2	-
Adj. LT LUF		1.00			0.00			0.00			1.00	
Adjusted Adj. Lefts	66	28	52	0	0	0	0	0	0	0	2	0
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Montgomery County Standards

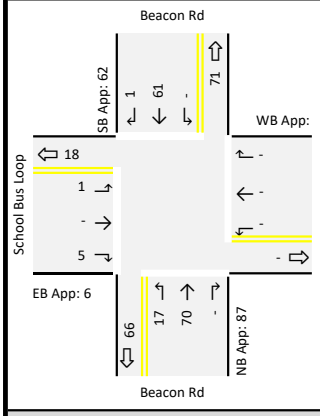
Lane Use Factors			LOS	CLV Range			
#	Th & R	L					
1	1.00	1.00	A	0	to	1,000	
2	0.53	0.53	B	1,001	to	1,150	
3	0.37	0.37	C	1,151	to	1,300	
4	0.30	0.30	D	1,301	to	1,450	
5	0.25	0.25	E	1,451	to	1,600	
			F	1,601	to	9,999	

Project: JoAnn Leleck Elementary School
Intersection: 5. Beacon Rd & School Bus Loop
Scenario: Future
Jurisdiction: Montgomery County Policy Area:

GOROVE SLADE
Transportation Planners and Engineers



AM Peak Hour CLV



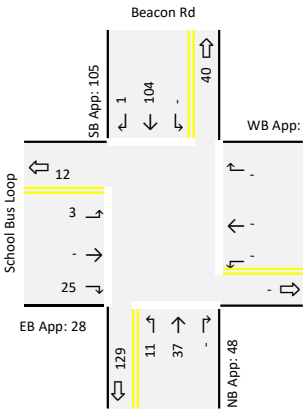
Total Intersection: 155 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	6		1.00	6				6	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				1	«	
					0	1	1.00	1	1		
		-	0		0				1		
Northbound	LT	87		1.00	87				87	«	✓
					0	-	0.00	0	0		
		-	0		0				0		
Southbound	TR	62		1.00	62				79	«	
					0	17	1.00	17	17		
			0		0				17		

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

CLV 93 A

Schl Peak Hour CLV



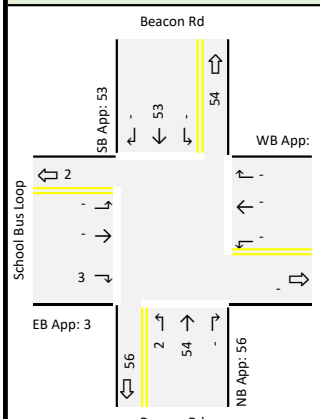
Total Intersection: 181 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	28		1.00	28				28	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				3	«	
					0	3	1.00	3	3		
		-	0		0				3		
Northbound	LT	48		1.00	48				48	«	
					0	-	0.00	0	0		
		-	0		0				0		
Southbound	TR	105		1.00	105				116	«	✓
					0	11	1.00	11	11		
			0		0				11		

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

CLV 144 A

PM Peak Hour CLV



Total Intersection: 112 veh/hr

Approach	Lane Group	Lane Group Volume	Overlap	LUF	Sum	Opp. Lefts	LT LUF	Opp. Volume	Summary Group	Max	CLV
Eastbound	LR	3		1.00	3				3	«	✓
					0	-	0.00	0	0		
			0		0				0		
Westbound					0				0	«	
					0	-	1.00	0	0		
		-	0		0				0		
Northbound	LT	56		1.00	56				56	«	✓
					0	-	0.00	0	0		
		-	0		0				0		
Southbound	TR	53		1.00	53				55	«	
					0	2	1.00	2	2		
			0		0				2		

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

CLV 59 A

Right Turn Overlap Adjustments

	Eastbound			Westbound			Northbound			Southbound		
	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM	AM	Schl	PM
Right Turns	5	25	3	-	-	-	-	-	-	1	1	-
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	n/a	n/a	n/a	n/a
Adjacent Lefts	17	11	2	-	-	-	-	-	-	1	3	-
Adj. LT LUF		1.00			0.00			0.00			1.00	
Adjusted Adj. Lefts	17	11	2	0	0	0	0	0	0	1	3	0
Right Turn Overlap	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Montgomery County Standards

Lane Use Factors			LOS	CLV Range
#	Th & R	L		
1	1.00	1.00	A	0 to 1,000
2	0.53	0.53	B	1,001 to 1,150
3	0.37	0.37	C	1,151 to 1,300
4	0.30	0.30	D	1,301 to 1,450
5	0.25	0.25	E	1,451 to 1,600
			F	1,601 to 9,999

I. ADA Compliance Curb Ramp Survey Data

Curb Ramp Survey Results

Refer to #	Curb Ramp (CR) Questions	Curb Ramp: A		Curb Ramp: B		Curb Ramp: C		Curb Ramp: D		Curb Ramp: E		Curb Ramp: F		Curb Ramp: I		Curb Ramp: G		Curb Ramp: H		Curb Ramp: J	
1	Is ramp of CR at least 36" wide (not including flared sides)?	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
		63"		60"		62"		60"		49"		51"		62"		59"		62"		60"	
2	Does CR have a running slope of 8.33% or less?	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
		5.90%		5.90%		6.80%		5.50%		3.60%		4.30%		4.80%		4.60%		4.80%		6.50%	
3	Does CR have a cross slope of 2% or less?	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
		5.50%		5.60%		5.60%		5.30%		6.50%		4.60%		5.50%		5.80%		5.50%		5.90%	
4	Does CR have a gutter slope of 5% or less?	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
		5.60%		6.00%		5.60%		5.60%		5.30%		4.80%		6.00%		5.40%		5.30%		5.70%	
5	Are transitions on and off CR flush and free of abrupt level changes? *Record the height of any level changes.*	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
6	Does CR have detectable warnings?	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
7	Can CR be blocked by legally parked cars?	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
8	Is the sidewalk at the "top" of CR at least 36" wide?	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
				21"																	
9	Does CR have flared sides? *If yes, answer **one** of the next two questions. If not, skip to question **10**.*	Y	n/a	Y	n/a	Y	n/a	Y	n/a	Y	n/a	Y	n/a	Y	n/a	Y	n/a	Y	n/a	Y	n/a
9.a	If the sidewalk at the "top" of CR is 48" wide, is the slope of the flared sides 8.33% or less?	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
						6.50%								7.30%		7.50%		6.60%		7.30%	
9.b	If the sidewalk at the "top" of CR is less than 48" wide, is the slope of the flared sides 8.33% or less?	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
		6.30%		6.50%				6.60%		8.80%		5.60%									
10	If no flared sides, is there an obstruction or grass on each side of CR that discourages pedestrians from traveling across ramp? *If the CR has flared sides, skip this question.*	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
11	If CR is built-up to the curb, is it ouside the path of cars? *If CR is not built-up to curb, skip this question.*	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
Answer the last two questions only if the CR is located at a marked crossing:																					
12	Is ramp of CR contained in markings?	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
13	If corner-type CR, is bottom landing at least 48" long and contained in crosswalk? *If not corner-type CR, skip this question.*	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N
		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A	

J. Streetlight Survey Data

Pole ID*	Roadway	Direction	Approximate Coordinates	Google Maps Link
803427-660620	Northampton Dr	WB	39.007675, -76.9867556	https://goo.gl/maps/qnMnLLdNZ1ygRYqWA
803427-700730	Northampton Dr	WB	39.0080639, -76.9866028	https://goo.gl/maps/dPeoySfLsPdeiKH3A
803427-800820	Northampton Dr	WB	39.0083917, -76.9861222	https://goo.gl/maps/ytJNyzFJJjgk4Y3J8
803427-960890	Northampton Dr	WB	39.0085111, -76.9855111	https://goo.gl/maps/z2TShybEikaYFeeaA
804427-120860	Northampton Dr	WB	39.0083667, -76.9849389	https://goo.gl/maps/yp8o7Pmcm4WGofbq8
804427-220040	Southampton Dr	EB	39.0061194, -76.9847333	https://goo.gl/maps/WhSZUbVmBv3qin2f9
804427-260200	Beacon Rd	SB	39.0066306, -76.9845889	https://goo.gl/maps/EmrLQQJmPDXmJLc26
804427-310330	Beacon Rd	SB	39.0069472, -76.9844278	https://goo.gl/maps/vpU9uTG1ga8jbjZb9
804427-360910	Beacon Rd	SB	39.0085361, -76.9842389	https://goo.gl/maps/SMmUT4oZU5RuSca66
804427-370460	Beacon Rd	SB	39.0072639, -76.9842528	https://goo.gl/maps/iQGuXoHrPEEenXjc6
804427-470610	Northampton Dr	WB	39.0077639, -76.9840917	https://goo.gl/maps/HcjuscC4WiRa7hNAA
804427-470680	Southampton Dr	WB	39.0062139, -76.9839694	https://goo.gl/maps/wgPvikjUdYjRPJBB7
804427-650520	Northampton Dr	WB	39.00745, -76.983275	https://goo.gl/maps/fnPHzFAc4EBFTHNP7
804427-940420	Northampton Dr	WB	39.0072333, -76.9822306	https://goo.gl/maps/hPipgU3KMBgmBzhd6
804428-390050	Beacon Rd	SB	39.0089139, -76.9842306	https://goo.gl/maps/eaVHV7GbdmYniELZ8
804428-420170	Beacon Rd	SB	39.0092694, -76.9841778	https://goo.gl/maps/JoTRUfq5K2dUmqFm7
805427-120390	Northampton Dr	WB	39.0071444, -76.9818278	https://goo.gl/maps/cioRJipnbwiHXLXn6
NoName1	Southampton Dr	EB	39.00605, -76.9842222	https://goo.gl/maps/MNa7AwNTkV8nBThm9
NoName2	Northampton Dr	EB	39.0068694, -76.9819194	https://goo.gl/maps/gK4mWm56dsfeV1zY9
NoName3	Northampton Dr	WB	39.0073139, -76.982675	https://goo.gl/maps/mPPdorxkPPvymC5DA
NoName4	Northampton Dr	WB	39.0079694, -76.9844444	https://goo.gl/maps/KiLLg6LS9F9M6bRz8

K. Speed Study Data

Speed by Lane

Name: Beacon Road between Northampton Drive and Leleck ES Driveway
Site: NB
Started: 6/7/2023 0:00 Ended: 6/7/2023 23:59

7-Jun-23 **NB**

Interval	25 mph	30 mph	35 mph	40 mph	45 mph	50 mph	55 mph	60 mph	65 mph	70 mph	75 mph	> 75 mph	Total
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	1	0	0	0	0	0	0	0	0	0	0	0	1
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	1	0	0	0	0	0	0	0	0	0	0	0	1
02:45	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	1	0	0	0	0	0	0	0	0	0	0	0	1
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	1	0	0	0	0	0	0	0	0	0	0	0	1
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	0	0	0	0	0	0	0	0	0	0	0	1
05:15	2	0	0	0	0	0	0	0	0	0	0	0	2
05:30	1	0	0	0	0	0	0	0	0	0	0	0	1
05:45	2	0	0	0	0	0	0	0	0	0	0	0	2
06:00	4	0	0	0	0	0	0	0	0	0	0	0	4
06:15	3	0	0	0	0	0	0	0	0	0	0	0	3
06:30	5	0	0	0	0	0	0	0	0	0	0	0	5
06:45	4	0	0	0	0	0	0	0	0	0	0	0	4
07:00	8	1	0	0	0	0	0	0	0	0	0	0	9
07:15	10	0	0	0	0	0	0	0	0	0	0	0	10
07:30	11	0	0	0	0	0	0	0	0	0	0	0	11
07:45	20	0	0	0	0	0	0	0	0	0	0	0	20
08:00	33	1	0	0	0	0	0	0	0	0	0	0	34
08:15	25	0	0	0	0	0	0	0	0	0	0	0	25
08:30	41	1	0	0	0	0	0	0	0	0	0	0	42
08:45	56	0	0	0	0	0	0	0	0	0	0	0	56
09:00	16	0	0	0	0	0	0	0	0	0	0	0	16
09:15	8	0	1	0	0	0	0	0	0	0	0	0	9
09:30	2	0	0	0	0	0	0	0	0	0	0	0	2

09:45	2	0	0	0	0	0	0	0	0	0	0	0	2
10:00	4	0	0	0	0	0	0	0	0	0	0	0	4
10:15	1	0	0	0	0	0	0	0	0	0	0	0	1
10:30	3	0	0	0	0	0	0	0	0	0	0	0	3
10:45	3	0	0	0	0	0	0	0	0	0	0	0	3
11:00	2	0	0	0	0	0	0	0	0	0	0	0	2
11:15	10	0	0	0	0	0	0	0	0	0	0	0	10
11:30	3	0	0	0	0	0	0	0	0	0	0	0	3
11:45	3	0	0	0	0	0	0	0	0	0	0	0	3
12:00	4	0	0	0	0	0	0	0	0	0	0	0	4
12:15	4	0	0	0	0	0	0	0	0	0	0	0	4
12:30	5	0	0	0	0	0	0	0	0	0	0	0	5
12:45	7	0	0	0	0	0	0	0	0	0	0	0	7
13:00	3	0	0	0	0	0	0	0	0	0	0	0	3
13:15	3	0	0	0	0	0	0	0	0	0	0	0	3
13:30	4	0	0	0	0	0	0	0	0	0	0	0	4
13:45	4	0	0	0	0	0	0	0	0	0	0	0	4
14:00	5	0	0	0	0	0	0	0	0	0	0	0	5
14:15	3	0	0	0	0	0	0	0	0	0	0	0	3
14:30	14	0	0	0	0	0	0	0	0	0	0	0	14
14:45	14	0	0	0	0	0	0	0	0	0	0	0	14
15:00	25	0	0	0	0	0	0	0	0	0	0	0	25
15:15	30	1	0	0	0	0	0	0	0	0	0	0	31
15:30	14	0	0	0	0	0	0	0	0	0	0	0	14
15:45	9	0	0	0	0	0	0	0	0	0	0	0	9
16:00	10	0	1	0	0	0	0	0	0	0	0	0	11
16:15	10	1	0	0	0	0	0	0	0	0	0	0	11
16:30	16	1	0	0	0	0	0	0	0	0	0	0	17
16:45	14	2	0	0	0	0	0	0	0	0	0	0	16
17:00	16	3	0	0	0	0	0	0	0	0	0	0	19
17:15	38	0	0	0	0	0	0	0	0	0	0	0	38
17:30	20	0	0	0	0	0	0	0	0	0	0	0	20
17:45	14	0	0	0	0	0	0	0	0	0	0	0	14
18:00	10	0	0	0	0	0	0	0	0	0	0	0	10
18:15	14	0	0	0	0	0	0	0	0	0	0	0	14
18:30	15	0	0	0	0	0	0	0	0	0	0	0	15
18:45	13	0	0	0	0	0	0	0	0	0	0	0	13
19:00	10	0	0	0	0	0	0	0	0	0	0	0	10
19:15	8	0	0	0	0	0	0	0	0	0	0	0	8
19:30	7	0	0	0	0	0	0	0	0	0	0	0	7
19:45	4	0	0	0	0	0	0	0	0	0	0	0	4
20:00	9	0	0	0	0	0	0	0	0	0	0	0	9
20:15	7	0	0	0	0	0	0	0	0	0	0	0	7
20:30	3	1	0	0	0	0	0	0	0	0	0	0	4
20:45	3	0	0	0	0	0	0	0	0	0	0	0	3
21:00	2	0	0	0	0	0	0	0	0	0	0	0	2

21:15	4	0	0	0	0	0	0	0	0	0	0	0	4
21:30	2	0	0	0	0	0	0	0	0	0	0	0	2
21:45	3	0	0	0	0	0	0	0	0	0	0	0	3
22:00	2	0	0	0	0	0	0	0	0	0	0	0	2
22:15	1	0	0	0	0	0	0	0	0	0	0	0	1
22:30	2	0	0	0	0	0	0	0	0	0	0	0	2
22:45	3	0	0	0	0	0	0	0	0	0	0	0	3
23:00	1	0	0	0	0	0	0	0	0	0	0	0	1
23:15	1	0	0	0	0	0	0	0	0	0	0	0	1
23:30	2	0	0	0	0	0	0	0	0	0	0	0	2
23:45	1	0	0	0	0	0	0	0	0	0	0	0	1
Daily Total	**702**	**12**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**716**

85th Speed Percentiles (entire report duration)

NB	20

Speed by Lane

Name: Beacon Road between Northampton Drive and Leleck ES Driveway
Site: NB
Started: 6/8/2023 0:00 Ended: 6/8/2023 23:59

8-Jun-23 **NB**

Interval	25 mph	30 mph	35 mph	40 mph	45 mph	50 mph	55 mph	60 mph	65 mph	70 mph	75 mph	> 75 mph	Total
00:00	0	0	0	0	0	0	0	0	0	0	0	0	0
00:15	1	0	0	0	0	0	0	0	0	0	0	0	1
00:30	1	0	0	0	0	0	0	0	0	0	0	0	1
00:45	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	0	0	0	0	0	0	0	0	0	0	0	1
05:15	1	0	0	0	0	0	0	0	0	0	0	0	1
05:30	1	0	0	0	0	0	0	0	0	0	0	0	1
05:45	3	0	0	0	0	0	0	0	0	0	0	0	3
06:00	5	0	0	0	0	0	0	0	0	0	0	0	5
06:15	3	0	0	0	0	0	0	0	0	0	0	0	3
06:30	6	0	0	0	0	0	0	0	0	0	0	0	6
06:45	5	0	0	0	0	0	0	0	0	0	0	0	5
07:00	9	0	0	0	0	0	0	0	0	0	0	0	9
07:15	10	0	0	0	0	0	0	0	0	0	0	0	10
07:30	9	0	0	0	0	0	0	0	0	0	0	0	9
07:45	22	0	0	0	0	0	0	0	0	0	0	0	22
08:00	33	0	0	0	0	0	0	0	0	0	0	0	33
08:15	30	0	0	0	0	0	0	0	0	0	0	0	30
08:30	45	0	0	0	0	0	0	0	0	0	0	0	45
08:45	57	0	0	0	0	0	0	0	0	0	0	0	57
09:00	19	0	0	0	0	0	0	0	0	0	0	0	19
09:15	3	0	0	0	0	0	0	0	0	0	0	0	3
09:30	5	0	0	0	0	0	0	0	0	0	0	0	5

09:45	1	1	0	0	0	0	0	0	0	0	0	0	2
10:00	3	0	0	0	0	0	0	0	0	0	0	0	3
10:15	5	0	0	0	0	0	0	0	0	0	0	0	5
10:30	5	0	0	0	0	0	0	0	0	0	0	0	5
10:45	2	0	0	0	0	0	0	0	0	0	0	0	2
11:00	3	0	0	0	0	0	0	0	0	0	0	0	3
11:15	8	0	0	0	0	0	0	0	0	0	0	0	8
11:30	3	0	0	0	0	0	0	0	0	0	0	0	3
11:45	4	0	0	0	0	0	0	0	0	0	0	0	4
12:00	5	0	0	0	0	0	0	0	0	0	0	0	5
12:15	5	0	0	0	0	0	0	0	0	0	0	0	5
12:30	7	0	0	0	0	0	0	0	0	0	0	0	7
12:45	6	0	0	0	0	0	0	0	0	0	0	0	6
13:00	4	0	0	0	0	0	0	0	0	0	0	0	4
13:15	5	0	0	0	0	0	0	0	0	0	0	0	5
13:30	4	0	0	0	0	0	0	0	0	0	0	0	4
13:45	4	0	0	0	0	0	0	0	0	0	0	0	4
14:00	5	0	0	0	0	0	0	0	0	0	0	0	5
14:15	4	0	0	0	0	0	0	0	0	0	0	0	4
14:30	16	0	0	0	0	0	0	0	0	0	0	0	16
14:45	15	0	0	0	0	0	0	0	0	0	0	0	15
15:00	26	6	2	0	0	0	0	0	0	0	0	0	34
15:15	33	3	0	0	0	0	0	0	0	0	0	0	36
15:30	14	0	0	0	0	0	0	0	0	0	0	0	14
15:45	6	0	0	0	0	0	0	0	0	0	0	0	6
16:00	4	0	0	0	0	0	0	0	0	0	0	0	4
16:15	5	0	0	0	0	0	0	0	0	0	0	0	5
16:30	14	0	0	0	0	0	0	0	0	0	0	0	14
16:45	13	0	0	0	0	0	0	0	0	0	0	0	13
17:00	8	0	0	0	0	0	0	0	0	0	0	0	8
17:15	41	0	1	0	0	0	0	0	0	0	0	0	42
17:30	22	0	0	0	0	0	0	0	0	0	0	0	22
17:45	19	2	0	0	0	0	0	0	0	0	0	0	21
18:00	16	1	0	0	0	0	0	0	0	0	0	0	17
18:15	17	0	0	0	0	0	0	0	0	0	0	0	17
18:30	15	1	0	0	0	0	0	0	0	0	0	0	16
18:45	14	0	1	0	0	0	0	0	0	0	0	0	15
19:00	12	0	0	0	0	0	0	0	0	0	0	0	12
19:15	8	0	0	0	0	0	0	0	0	0	0	0	8
19:30	6	0	0	0	0	0	0	0	0	0	0	0	6
19:45	6	0	0	0	0	0	0	0	0	0	0	0	6
20:00	5	0	0	0	0	0	0	0	0	0	0	0	5
20:15	5	0	0	0	0	0	0	0	0	0	0	0	5
20:30	4	0	0	0	0	0	0	0	0	0	0	0	4
20:45	2	0	1	0	0	0	0	0	0	0	0	0	3
21:00	3	0	0	0	0	0	0	0	0	0	0	0	3

21:15	2	0	0	0	0	0	0	0	0	0	0	0	2
21:30	2	0	0	0	0	0	0	0	0	0	0	0	2
21:45	4	0	0	0	0	0	0	0	0	0	0	0	4
22:00	2	1	0	0	0	0	0	0	0	0	0	0	3
22:15	2	0	0	0	0	0	0	0	0	0	0	0	2
22:30	2	0	0	0	0	0	0	0	0	0	0	0	2
22:45	3	0	0	0	0	0	0	0	0	0	0	0	3
23:00	2	0	0	0	0	0	0	0	0	0	0	0	2
23:15	1	0	0	0	0	0	0	0	0	0	0	0	1
23:30	2	0	0	0	0	0	0	0	0	0	0	0	2
23:45	1	0	0	0	0	0	0	0	0	0	0	0	1
Daily Total	**726**	**15**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**746**

85th Speed Percentiles (entire report duration)

NB	21	

Speed by Lane

Name: Beacon Road between Northampton Drive and Leleck ES Driveway
Site: SB
Started: 6/7/2023 0:00 Ended: 6/7/2023 23:59

7-Jun-23													SB
Interval	**25 mph**	**30 mph**	**35 mph**	**40 mph**	**45 mph**	**50 mph**	**55 mph**	**60 mph**	**65 mph**	**70 mph**	**75 mph**	**> 75 mph**	**Total**
00:00	1	0	1	0	0	0	0	0	0	0	0	0	2
00:15	1	0	0	0	0	0	0	0	0	0	0	0	1
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	2	0	0	0	0	0	0	0	0	0	0	0	2
02:45	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	2	0	0	0	0	0	0	0	0	0	0	0	2
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	0	0	0	0	0	0	0	0	0	0	0	1
05:15	2	1	0	0	0	0	0	0	0	0	0	0	3
05:30	2	0	0	0	0	0	0	0	0	0	0	0	2
05:45	4	1	0	0	0	0	0	0	0	0	0	0	5
06:00	6	0	0	0	0	0	0	0	0	0	0	0	6
06:15	5	0	0	0	0	0	0	0	0	0	0	0	5
06:30	3	0	0	0	0	0	0	0	0	0	0	0	3
06:45	3	0	1	0	0	0	0	0	0	0	0	0	4
07:00	8	0	0	0	0	0	0	0	0	0	0	0	8
07:15	6	1	0	0	0	0	0	0	0	0	0	0	7
07:30	5	0	0	0	0	0	0	0	0	0	0	0	5
07:45	19	1	0	0	0	0	0	0	0	0	0	0	20
08:00	45	1	3	0	0	0	0	0	0	0	0	0	49
08:15	20	2	0	0	0	0	0	0	0	0	0	0	22
08:30	17	1	0	0	0	0	0	0	0	0	0	0	18
08:45	57	0	0	0	0	0	0	0	0	0	0	0	57
09:00	28	0	0	0	0	0	0	0	0	0	0	0	28
09:15	7	0	0	0	0	0	0	0	0	0	0	0	7
09:30	5	0	0	0	0	0	0	0	0	0	0	0	5

09:45	2	0	0	0	0	0	0	0	0	0	0	0	2
10:00	3	1	0	0	0	0	0	0	0	0	0	0	4
10:15	4	0	0	0	0	0	0	0	0	0	0	0	4
10:30	4	1	0	0	0	0	0	0	0	0	0	0	5
10:45	4	0	1	0	0	0	0	0	0	0	0	0	5
11:00	5	2	0	0	0	0	0	0	0	0	0	0	7
11:15	4	0	1	0	0	0	0	0	0	0	0	0	5
11:30	4	1	0	0	0	0	0	0	0	0	0	0	5
11:45	3	0	0	0	0	0	0	0	0	0	0	0	3
12:00	5	0	0	0	0	0	0	0	0	0	0	0	5
12:15	4	0	0	0	0	0	0	0	0	0	0	0	4
12:30	3	0	0	0	0	0	0	0	0	0	0	0	3
12:45	5	1	1	0	0	0	0	0	0	0	0	0	7
13:00	2	0	1	0	0	0	0	0	0	0	0	0	3
13:15	6	0	0	0	0	0	0	0	0	0	0	0	6
13:30	3	1	0	0	0	0	0	0	0	0	0	0	4
13:45	4	0	0	0	0	0	0	0	0	0	0	0	4
14:00	4	0	0	0	0	0	0	0	0	0	0	0	4
14:15	3	0	1	0	0	0	0	0	0	0	0	0	4
14:30	5	0	0	0	0	0	0	0	0	0	0	0	5
14:45	6	3	1	0	0	0	0	0	0	0	0	0	10
15:00	45	1	1	0	0	0	0	0	0	0	0	0	47
15:15	40	1	0	0	0	0	0	0	0	0	0	0	41
15:30	41	0	0	0	0	0	0	0	0	0	0	0	41
15:45	27	1	1	0	0	0	0	0	0	0	0	0	29
16:00	15	0	0	0	0	0	0	0	0	0	0	0	15
16:15	11	0	1	0	0	0	0	0	0	0	0	0	12
16:30	14	0	1	0	0	0	0	0	0	0	0	0	15
16:45	12	0	0	0	0	0	0	0	0	0	0	0	12
17:00	13	0	0	0	0	0	0	0	0	0	0	0	13
17:15	13	0	0	0	0	0	0	0	0	0	0	0	13
17:30	15	0	0	0	0	0	0	0	0	0	0	0	15
17:45	14	0	0	0	2	0	0	0	0	0	0	0	16
18:00	12	1	0	0	0	0	0	0	0	0	0	0	13
18:15	10	1	1	1	0	0	0	0	0	0	0	0	13
18:30	10	1	0	0	0	0	0	0	0	0	0	0	11
18:45	9	0	0	0	0	0	0	0	0	0	0	0	9
19:00	11	0	0	0	0	0	0	0	0	0	0	0	11
19:15	8	0	0	0	0	0	0	0	0	0	0	0	8
19:30	10	0	0	0	0	0	0	0	0	0	0	0	10
19:45	10	1	0	0	0	0	0	0	0	0	0	0	11
20:00	12	1	0	0	0	0	0	0	0	0	0	0	13
20:15	10	1	0	0	0	0	0	0	0	0	0	0	11
20:30	6	1	0	0	0	0	0	0	0	0	0	0	7
20:45	3	0	0	0	0	0	0	0	0	0	0	0	3
21:00	3	0	0	0	0	0	0	0	0	0	0	0	3

21:15	1	0	1	0	0	0	0	0	0	0	0	0	2
21:30	2	0	0	1	0	0	0	0	0	0	0	0	3
21:45	3	0	0	0	0	0	0	0	0	0	0	0	3
22:00	4	0	0	0	0	0	0	0	0	0	0	0	4
22:15	1	0	0	0	0	0	0	0	0	0	0	0	1
22:30	1	0	0	0	0	0	0	0	0	0	0	0	1
22:45	1	1	0	0	0	0	0	0	0	0	0	0	2
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	1	0	0	0	0	0	0	0	0	0	0	0	1
23:30	0	0	0	0	0	0	0	0	0	0	0	0	0
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily Total	**724**	**29**	**17**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**774**

85th Speed Percentiles (entire report duration)

SB	21

Speed by Lane

Name: Beacon Road between Northampton Drive and Leleck ES Driveway
Site: SB
Started: 6/8/2023 0:00 Ended: 6/8/2023 23:59

8-Jun-23 **SB**

Interval	25 mph	30 mph	35 mph	40 mph	45 mph	50 mph	55 mph	60 mph	65 mph	70 mph	75 mph	> 75 mph	Total
00:00	1	0	0	0	0	0	0	0	0	0	0	0	1
00:15	1	0	0	0	0	0	0	0	0	0	0	0	1
00:30	2	0	0	0	0	0	0	0	0	0	0	0	2
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	1	0	0	0	0	0	0	0	0	0	0	0	1
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	1	0	0	0	0	0	0	0	0	0	0	0	1
05:15	2	0	0	0	0	0	0	0	0	0	0	0	2
05:30	2	0	1	0	0	0	0	0	0	0	0	0	3
05:45	3	0	0	0	0	0	0	0	0	0	0	0	3
06:00	3	0	0	0	0	0	0	0	0	0	0	0	3
06:15	4	0	0	0	0	0	0	0	0	0	0	0	4
06:30	4	1	0	0	0	0	0	0	0	0	0	0	5
06:45	3	0	0	0	0	0	0	0	0	0	0	0	3
07:00	2	0	1	0	0	0	0	0	0	0	0	0	3
07:15	8	0	0	0	0	0	0	0	0	0	0	0	8
07:30	5	1	0	0	0	0	0	0	0	0	0	0	6
07:45	18	1	0	0	0	0	0	0	0	0	0	0	19
08:00	47	1	0	0	0	0	0	0	0	0	0	0	48
08:15	18	0	0	0	0	0	0	0	0	0	0	0	18
08:30	18	1	0	0	0	0	0	0	0	0	0	0	19
08:45	61	1	0	0	0	0	0	0	0	0	0	0	62
09:00	24	0	1	0	0	0	0	0	0	0	0	0	25
09:15	3	0	0	0	0	0	0	0	0	0	0	0	3
09:30	5	1	0	0	0	0	0	0	0	0	0	0	6

09:45	3	0	0	0	0	0	0	0	0	0	0	0	3
10:00	2	0	0	0	0	0	0	0	0	0	0	0	2
10:15	2	1	0	0	0	0	0	0	0	0	0	0	3
10:30	6	0	0	0	0	0	0	0	0	0	0	0	6
10:45	1	1	0	0	0	0	0	0	0	0	0	0	2
11:00	3	0	0	0	0	0	0	0	0	0	0	0	3
11:15	4	0	0	0	0	0	0	0	0	0	0	0	4
11:30	5	0	0	0	0	0	0	0	0	0	0	0	5
11:45	5	0	0	0	0	0	0	0	0	0	0	0	5
12:00	6	0	0	0	0	0	0	0	0	0	0	0	6
12:15	5	0	0	0	0	0	0	0	0	0	0	0	5
12:30	6	0	0	0	0	0	0	0	0	0	0	0	6
12:45	5	0	0	0	0	0	0	0	0	0	0	0	5
13:00	2	0	0	0	0	0	0	0	0	0	0	0	2
13:15	4	0	0	0	0	0	0	0	0	0	0	0	4
13:30	4	0	0	0	0	0	0	0	0	0	0	0	4
13:45	3	1	0	0	0	0	0	0	0	0	0	0	4
14:00	3	1	0	0	0	0	0	0	0	0	0	0	4
14:15	4	1	0	0	0	0	0	0	0	0	0	0	5
14:30	3	2	0	0	0	0	0	0	0	0	0	0	5
14:45	9	0	1	0	0	0	0	0	0	0	0	0	10
15:00	45	1	0	0	0	0	0	0	0	0	0	0	46
15:15	24	0	0	0	0	0	0	0	0	0	0	0	24
15:30	62	0	0	0	0	0	0	0	0	0	0	0	62
15:45	26	1	0	0	0	0	0	0	0	0	0	0	27
16:00	12	1	0	0	0	0	0	0	0	0	0	0	13
16:15	3	1	1	0	0	0	0	0	0	0	0	0	5
16:30	10	0	0	1	0	0	0	0	0	0	0	0	11
16:45	20	0	0	0	0	0	0	0	0	0	0	0	20
17:00	16	1	0	0	0	0	0	0	0	0	0	0	17
17:15	25	1	1	0	0	0	0	0	0	0	0	0	27
17:30	13	0	2	0	0	0	0	0	0	0	0	0	15
17:45	16	0	0	0	0	0	0	0	0	0	0	0	16
18:00	12	1	0	0	0	0	0	0	0	0	0	0	13
18:15	6	1	1	0	0	0	0	0	0	0	0	0	8
18:30	11	0	0	0	0	0	0	0	0	0	0	0	11
18:45	9	1	0	0	0	0	0	0	0	0	0	0	10
19:00	11	0	0	0	0	0	0	0	0	0	0	0	11
19:15	7	1	0	0	0	0	0	0	0	0	0	0	8
19:30	7	1	0	0	0	0	0	0	0	0	0	0	8
19:45	5	1	0	0	0	0	0	0	0	0	0	0	6
20:00	8	0	0	0	0	0	0	0	0	0	0	0	8
20:15	7	0	0	0	0	0	0	0	0	0	0	0	7
20:30	9	1	1	0	0	0	0	0	0	0	0	0	11
20:45	8	0	0	1	0	0	0	0	0	0	0	0	9
21:00	4	0	0	0	0	0	0	0	0	0	0	0	4

21:15	4	1	0	0	0	0	0	0	0	0	0	0	5
21:30	1	0	0	0	0	0	0	0	0	0	0	0	1
21:45	2	1	0	0	0	0	0	0	0	0	0	0	3
22:00	1	0	0	0	0	0	0	0	0	0	0	0	1
22:15	2	0	0	0	0	0	0	0	0	0	0	0	2
22:30	2	0	0	0	0	0	0	0	0	0	0	0	2
22:45	1	0	0	0	0	0	0	0	0	0	0	0	1
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0
23:15	1	0	0	0	0	0	0	0	0	0	0	0	1
23:30	2	0	0	0	0	0	0	0	0	0	0	0	2
23:45	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily Total	**713**	**29**	**10**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**754**

85th Speed Percentiles (entire report duration)

	SB	21

Speed by Lane

Name: Beacon Road between Northampton Drive and Southampton Drive
Site: NB
Started: 6/7/2023 0:15 Ended: 6/7/2023 23:59

7-Jun-23 **NB**

Interval	25 mph	30 mph	35 mph	40 mph	45 mph	50 mph	55 mph	60 mph	65 mph	70 mph	75 mph	> 75 mph	Total
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	4	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	2	0	0	0	0	0	0	0	0	0	0	0	2
02:30	1	0	0	0	0	0	0	0	0	0	0	0	1
02:45	1	2	0	0	0	0	0	0	0	0	0	0	3
03:00	1	2	0	0	0	0	0	0	0	0	0	0	3
03:15	0	3	0	0	0	0	0	0	0	0	0	0	3
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	3	1	0	0	0	0	0	0	0	0	0	0	4
04:00	3	1	3	0	0	0	0	0	0	0	0	0	7
04:15	2	1	0	0	0	0	0	0	0	0	0	0	3
04:30	5	2	0	0	0	0	0	0	0	0	0	0	7
04:45	5	3	0	0	0	0	0	0	0	0	0	0	8
05:00	3	3	1	0	0	0	0	0	0	0	0	0	7
05:15	10	5	0	0	0	0	0	0	0	0	0	0	15
05:30	19	2	1	0	0	0	0	0	0	0	0	0	22
05:45	17	7	1	0	0	0	0	0	0	0	0	0	25
06:00	23	7	2	0	0	0	0	0	0	0	0	0	32
06:15	8	3	0	0	0	0	0	0	0	0	0	0	11
06:30	24	7	1	0	0	0	0	0	0	0	0	0	32
06:45	15	3	1	0	0	0	0	0	0	0	0	0	19
07:00	24	5	1	0	0	0	0	0	0	0	0	0	30
07:15	28	3	1	0	0	0	0	0	0	0	0	0	32
07:30	23	7	0	0	0	0	0	0	0	0	0	0	30
07:45	9	3	2	0	0	0	0	0	0	0	0	0	14
08:00	8	6	0	0	0	0	0	0	0	0	0	0	14
08:15	18	4	0	0	0	0	0	0	0	0	0	0	22
08:30	13	6	0	0	0	0	0	0	0	0	0	0	19
08:45	25	4	0	0	0	0	0	0	0	0	0	0	29
09:00	5	4	0	0	0	0	0	0	0	0	0	0	9
09:15	5	4	0	0	0	0	0	0	0	0	0	0	9
09:30	7	2	0	0	0	0	0	0	0	0	0	0	9
09:45	5	2	0	0	0	0	0	0	0	0	0	0	7

10:00	5	5	0	0	0	0	0	0	0	0	0	0	10
10:15	5	6	0	0	0	0	0	0	0	0	0	0	11
10:30	10	2	0	0	0	0	0	0	0	0	0	0	12
10:45	6	2	0	0	0	0	0	0	0	0	0	0	8
11:00	6	0	0	0	0	0	0	0	0	0	0	0	6
11:15	8	2	1	0	0	0	0	0	0	0	0	0	11
11:30	6	1	1	0	0	0	0	0	0	0	0	0	8
11:45	7	2	0	0	0	0	0	0	0	0	0	0	9
12:00	5	3	0	0	0	0	0	0	0	0	0	0	8
12:15	6	3	0	0	0	0	0	0	0	0	0	0	9
12:30	8	1	0	0	0	0	0	0	0	0	0	0	9
12:45	12	4	1	0	0	0	0	0	0	0	0	0	17
13:00	10	1	0	0	0	0	0	0	0	0	0	0	11
13:15	12	1	0	0	0	0	0	0	0	0	0	0	13
13:30	4	2	1	0	0	0	0	0	0	0	0	0	7
13:45	11	2	0	0	0	0	0	0	0	0	0	0	13
14:00	5	1	0	0	0	0	0	0	0	0	0	0	6
14:15	8	0	0	0	0	0	0	0	0	0	0	0	8
14:30	15	0	0	0	0	0	0	0	0	0	0	0	15
14:45	15	2	0	0	0	0	0	0	0	0	0	0	17
15:00	19	1	0	0	0	0	0	0	0	0	0	0	20
15:15	23	1	0	0	0	0	0	0	0	0	0	0	24
15:30	14	2	0	0	0	0	0	0	0	0	0	0	16
15:45	19	2	0	0	0	0	0	0	0	0	0	0	21
16:00	21	0	0	0	0	0	0	0	0	0	0	0	21
16:15	27	0	0	0	0	0	0	0	0	0	0	0	27
16:30	19	0	0	0	0	0	0	0	0	0	0	0	19
16:45	14	0	0	0	0	0	0	0	0	0	0	0	14
17:00	18	0	0	0	0	0	0	0	0	0	0	0	18
17:15	14	2	0	0	0	0	0	0	0	0	0	0	16
17:30	20	0	0	0	0	0	0	0	0	0	0	0	20
17:45	19	1	0	0	0	0	0	0	0	0	0	0	20
18:00	17	0	0	0	0	0	0	0	0	0	0	0	17
18:15	19	0	0	0	0	0	0	0	0	0	0	0	19
18:30	17	0	0	0	0	0	0	0	0	0	0	0	17
18:45	15	2	0	0	0	0	0	0	0	0	0	0	17
19:00	14	0	0	0	0	0	0	0	0	0	0	0	14
19:15	21	0	0	0	0	0	0	0	0	0	0	0	21
19:30	15	0	0	0	0	0	0	0	0	0	0	0	15
19:45	17	2	0	0	0	0	0	0	0	0	0	0	19
20:00	11	1	0	0	0	0	0	0	0	0	0	0	12
20:15	9	3	0	0	0	0	0	0	0	0	0	0	12
20:30	3	6	0	0	0	0	0	0	0	0	0	0	9
20:45	1	6	0	0	0	0	0	0	0	0	0	0	7
21:00	8	5	0	0	0	0	0	0	0	0	0	0	13
21:15	8	2	0	0	0	0	0	0	0	0	0	0	10

21:30	4	1	0	0	0	0	0	0	0	0	0	0	5
21:45	9	0	0	0	0	0	0	0	0	0	0	0	9
22:00	7	0	1	0	0	0	0	0	0	0	0	0	8
22:15	5	1	0	0	0	0	0	0	0	0	0	0	6
22:30	4	0	0	0	0	0	0	0	0	0	0	0	4
22:45	5	0	0	0	0	0	0	0	0	0	0	0	5
23:00	2	0	0	0	0	0	0	0	0	0	0	0	2
23:15	2	0	0	0	0	0	0	0	0	0	0	0	2
23:30	4	0	0	0	0	0	0	0	0	0	0	0	4
23:45	1	0	0	0	0	0	0	0	0	0	0	0	1
Daily Total	**925**	**180**	**19**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1124**
85th Speed Percentiles (entire report duration)													
		NB	24										

Speed by Lane

Name: Beacon Road between Northampton Drive and Southampton Drive
Site: NB
Started: 6/8/2023 0:00 Ended: 6/8/2023 23:59

8-Jun-23 **NB**

Interval	25 mph	30 mph	35 mph	40 mph	45 mph	50 mph	55 mph	60 mph	65 mph	70 mph	75 mph	> 75 mph	Total
00:00	3	0	0	0	0	0	0	0	0	0	0	0	3
00:15	2	0	0	0	0	0	0	0	0	0	0	0	2
00:30	3	0	0	0	0	0	0	0	0	0	0	0	3
00:45	0	2	0	0	0	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	1	0	0	0	0	0	0	0	0	0	0	0	1
01:30	0	1	0	0	0	0	0	0	0	0	0	0	1
01:45	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	1	1	0	0	0	0	0	0	0	0	0	0	2
02:45	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	1	0	0	0	0	0	0	0	0	0	0	1
03:15	1	0	0	0	0	0	0	0	0	0	0	0	1
03:30	1	0	0	0	0	0	0	0	0	0	0	0	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	7	1	0	0	0	0	0	0	0	0	0	0	8
04:15	2	0	0	0	0	0	0	0	0	0	0	0	2
04:30	1	3	0	0	0	0	0	0	0	0	0	0	4
04:45	6	2	0	0	0	0	0	0	0	0	0	0	8
05:00	6	5	0	1	0	0	0	0	0	0	0	0	12
05:15	8	5	0	0	0	0	0	0	0	0	0	0	13
05:30	17	4	1	0	0	0	0	0	0	0	0	0	22
05:45	17	6	0	0	0	0	0	0	0	0	0	0	23
06:00	29	2	0	0	0	0	0	0	0	0	0	0	31
06:15	11	2	0	0	0	0	0	0	0	0	0	0	13
06:30	18	6	0	0	0	0	0	0	0	0	0	0	24
06:45	18	5	0	0	0	0	0	0	0	0	0	0	23
07:00	15	4	0	0	0	0	0	0	0	0	0	0	19
07:15	20	4	0	0	0	0	0	0	0	0	0	0	24
07:30	17	5	1	0	0	0	0	0	0	0	0	0	23
07:45	13	3	1	0	0	0	0	0	0	0	0	0	17
08:00	8	2	0	0	0	0	0	0	0	0	0	0	10
08:15	7	2	2	0	0	0	0	0	0	0	0	0	11
08:30	12	3	0	0	0	0	0	0	0	0	0	0	15
08:45	14	5	0	0	0	0	0	0	0	0	0	0	19
09:00	10	2	0	0	0	0	0	0	0	0	0	0	12
09:15	8	2	0	0	0	0	0	0	0	0	0	0	10
09:30	5	2	0	0	0	0	0	0	0	0	0	0	7

09:45	9	3	0	0	0	0	0	0	0	0	0	0	12
10:00	7	2	0	0	0	0	0	0	0	0	0	0	9
10:15	9	1	1	0	0	0	0	0	0	0	0	0	11
10:30	6	2	0	0	0	0	0	0	0	0	0	0	8
10:45	8	2	0	0	0	0	0	0	0	0	0	0	10
11:00	3	1	0	0	0	0	0	0	0	0	0	0	4
11:15	7	1	0	0	0	0	0	0	0	0	0	0	8
11:30	7	1	0	0	0	0	0	0	0	0	0	0	8
11:45	6	0	1	0	0	0	0	0	0	0	0	0	7
12:00	11	0	0	0	0	0	0	0	0	0	0	0	11
12:15	12	2	0	0	0	0	0	0	0	0	0	0	14
12:30	8	0	0	0	0	0	0	0	0	0	0	0	8
12:45	9	1	0	0	0	0	0	0	0	0	0	0	10
13:00	8	0	0	0	0	0	0	0	0	0	0	0	8
13:15	12	2	0	0	0	0	0	0	0	0	0	0	14
13:30	5	1	0	0	0	0	0	0	0	0	0	0	6
13:45	9	2	0	0	0	0	0	0	0	0	0	0	11
14:00	7	0	0	0	0	0	0	0	0	0	0	0	7
14:15	12	2	0	0	0	0	0	0	0	0	0	0	14
14:30	18	6	0	0	0	0	0	0	0	0	0	0	24
14:45	7	2	0	0	0	0	0	0	0	0	0	0	9
15:00	11	2	0	0	0	0	0	0	0	0	0	0	13
15:15	23	1	1	0	0	0	0	0	0	0	0	0	25
15:30	17	2	0	0	0	0	0	0	0	0	0	0	19
15:45	15	2	0	0	0	0	0	0	0	0	0	0	17
16:00	26	5	1	0	0	0	0	0	0	0	0	0	32
16:15	12	3	0	0	0	0	0	0	0	0	0	0	15
16:30	18	2	0	0	0	0	0	0	0	0	0	0	20
16:45	19	1	2	0	0	0	0	0	0	0	0	0	22
17:00	20	2	0	0	0	0	0	0	0	0	0	0	22
17:15	16	1	0	0	0	0	0	0	0	0	0	0	17
17:30	28	2	1	0	0	0	0	0	0	0	0	0	31
17:45	15	2	0	0	0	0	0	0	0	0	0	0	17
18:00	25	1	0	0	0	0	0	0	0	0	0	0	26
18:15	22	1	0	0	0	0	0	0	0	0	0	0	23
18:30	26	0	0	0	0	0	0	0	0	0	0	0	26
18:45	14	4	1	0	0	0	0	0	0	0	0	0	19
19:00	18	5	0	0	0	0	0	0	0	0	0	0	23
19:15	14	4	0	0	0	0	0	0	0	0	0	0	18
19:30	13	3	0	0	0	0	0	0	0	0	0	0	16
19:45	16	2	0	0	0	0	0	0	0	0	0	0	18
20:00	11	3	0	0	0	0	0	0	0	0	0	0	14
20:15	12	2	1	0	0	0	0	0	0	0	0	0	15
20:30	7	1	0	0	0	0	0	0	0	0	0	0	8
20:45	13	0	0	0	0	0	0	0	0	0	0	0	13
21:00	11	2	0	0	0	0	0	0	0	0	0	0	13

21:15	10	0	1	0	0	0	0	0	0	0	0	0	11
21:30	8	0	0	0	0	0	0	0	0	0	0	0	8
21:45	4	1	0	0	0	0	0	0	0	0	0	0	5
22:00	3	1	0	0	0	0	0	0	0	0	0	0	4
22:15	9	1	0	0	0	0	0	0	0	0	0	0	10
22:30	7	0	0	0	0	0	0	0	0	0	0	0	7
22:45	5	1	1	0	0	0	0	0	0	0	0	0	7
23:00	3	1	0	0	0	0	0	0	0	0	0	0	4
23:15	2	0	0	0	0	0	0	0	0	0	0	0	2
23:30	1	1	0	0	0	0	0	0	0	0	0	0	2
23:45	1	1	0	0	0	0	0	0	0	0	0	0	2
Daily Total	**939**	**171**	**16**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1127**

85th Speed Percentiles (entire report duration)

NB	24

Speed by Lane

Name: Beacon Road between Northampton Drive and Southampton Drive
Site: SB
Started: 6/7/2023 0:15 Ended: 6/7/2023 23:59

7-Jun-23 **SB**

Interval	25 mph	30 mph	35 mph	40 mph	45 mph	50 mph	55 mph	60 mph	65 mph	70 mph	75 mph	> 75 mph	Total
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	4	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	1	0	0	0	0	0	0	0	0	0	0	0	1
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	3	0	0	0	0	0	0	0	0	0	0	0	3
03:00	1	0	0	0	0	0	0	0	0	0	0	0	1
03:15	0	1	2	0	0	0	0	0	0	0	0	0	3
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	1	0	0	0	0	0	0	0	0	0	0	1
04:00	0	1	0	0	0	0	0	0	0	0	0	0	1
04:15	2	0	0	0	0	0	0	0	0	0	0	0	2
04:30	1	1	0	0	0	0	0	0	0	0	0	0	2
04:45	3	0	0	0	0	0	0	0	0	0	0	0	3
05:00	1	2	1	0	0	0	0	0	0	0	0	0	4
05:15	5	2	0	0	0	0	0	0	0	0	0	0	7
05:30	4	4	0	0	0	0	0	0	0	0	0	0	8
05:45	6	3	1	0	0	0	0	0	0	0	0	0	10
06:00	7	0	0	0	0	0	0	0	0	0	0	0	7
06:15	5	3	0	0	0	0	0	0	0	0	0	0	8
06:30	6	3	1	0	0	1	0	0	0	0	0	0	11
06:45	6	1	0	0	0	0	0	0	0	0	0	0	7
07:00	3	4	1	0	0	0	0	0	0	0	0	0	8
07:15	6	2	0	0	0	0	0	0	0	0	0	0	8
07:30	4	4	0	1	0	0	0	0	0	0	0	0	9
07:45	4	4	1	0	0	0	0	0	0	0	0	0	9
08:00	5	4	2	0	0	0	0	0	0	0	0	0	11
08:15	7	5	0	0	0	0	0	0	0	0	0	0	12
08:30	7	1	1	0	0	0	0	0	0	0	0	0	9
08:45	9	5	1	0	0	0	0	0	0	0	0	0	15
09:00	7	5	0	0	0	0	0	0	0	0	0	0	12
09:15	2	1	0	0	0	0	0	0	0	0	0	0	3
09:30	4	0	0	0	0	0	0	0	0	0	0	0	4
09:45	2	3	0	0	0	0	0	0	0	0	0	0	5

10:00	4	2	1	0	0	0	0	0	0	0	0	0	7
10:15	0	1	0	0	0	0	0	0	0	0	0	0	1
10:30	1	1	0	1	0	0	0	0	0	0	0	0	3
10:45	1	2	1	0	0	0	0	0	0	0	0	0	4
11:00	3	1	0	0	0	0	0	0	0	0	0	0	4
11:15	6	3	0	0	0	0	0	0	0	0	0	0	9
11:30	2	0	1	0	0	0	0	0	0	0	0	0	3
11:45	7	2	0	0	0	0	0	0	0	0	0	0	9
12:00	3	4	2	0	0	0	0	0	0	0	0	0	9
12:15	1	1	0	0	0	0	0	0	0	0	0	0	2
12:30	3	3	3	0	0	0	0	0	0	0	0	0	9
12:45	3	1	0	0	0	0	0	0	0	0	0	0	4
13:00	2	1	0	2	0	0	0	0	0	0	0	0	5
13:15	6	4	1	0	0	0	0	0	0	0	0	0	11
13:30	4	5	1	0	0	0	0	0	0	0	0	0	10
13:45	6	2	0	0	0	0	0	0	0	0	0	0	8
14:00	7	1	0	0	0	0	0	0	0	0	0	0	8
14:15	5	5	2	0	0	0	0	0	0	0	0	0	12
14:30	5	2	2	0	0	0	0	0	0	0	0	0	9
14:45	7	3	0	0	0	0	0	0	0	0	0	0	10
15:00	11	5	0	0	0	0	0	0	0	0	0	0	16
15:15	19	7	1	0	0	0	0	0	0	0	0	0	27
15:30	24	9	0	0	0	0	0	0	0	0	0	0	33
15:45	10	3	1	0	0	0	0	0	0	0	0	0	14
16:00	11	3	3	0	0	0	0	0	0	0	0	0	17
16:15	8	8	1	1	0	0	0	0	0	0	0	0	18
16:30	8	13	2	0	0	0	0	0	0	0	0	0	23
16:45	10	8	0	0	0	0	0	0	0	0	0	0	18
17:00	8	4	1	1	0	0	0	0	0	0	0	0	14
17:15	11	6	1	0	0	1	0	0	0	0	0	0	19
17:30	11	4	2	0	0	0	0	0	0	0	0	0	17
17:45	14	4	1	0	0	0	0	0	0	0	0	0	19
18:00	5	6	0	0	0	0	0	0	0	0	0	0	11
18:15	7	6	1	0	0	0	0	0	0	0	0	0	14
18:30	9	0	1	0	0	0	0	0	0	0	0	0	10
18:45	9	4	1	0	0	0	0	0	1	0	0	0	15
19:00	16	2	1	0	0	0	0	0	0	0	0	0	19
19:15	12	3	2	0	0	0	0	0	0	0	0	0	17
19:30	11	2	0	0	0	0	0	0	0	0	0	0	13
19:45	9	3	3	0	0	0	0	0	0	0	0	0	15
20:00	12	3	0	0	0	0	0	0	0	0	0	0	15
20:15	8	1	0	0	1	1	0	0	0	0	0	0	11
20:30	4	3	1	0	0	0	0	0	0	0	0	0	8
20:45	9	2	1	1	0	0	0	0	0	0	0	0	13
21:00	11	2	0	0	0	0	0	0	0	0	0	0	13
21:15	12	3	0	0	1	0	0	0	0	0	0	0	16

21:30	4	3	0	0	0	1	0	0	0	0	0	0	8
21:45	4	3	1	0	0	0	0	0	0	0	0	0	8
22:00	1	1	1	0	0	0	0	0	0	0	0	0	3
22:15	3	0	0	0	0	0	0	0	0	0	0	0	3
22:30	7	2	0	0	0	0	0	0	0	0	0	0	9
22:45	6	1	0	0	0	0	0	0	0	0	0	0	7
23:00	3	0	0	0	0	0	0	0	0	0	0	0	3
23:15	3	1	0	0	0	0	0	0	0	0	0	0	4
23:30	7	0	0	0	0	0	0	0	0	0	0	0	7
23:45	2	0	0	0	0	0	0	0	0	0	0	0	2
Daily Total	**510**	**229**	**51**	**7**	**2**	**4**	**0**	**0**	**1**	**0**	**0**	**0**	**804**
85th Speed Percentiles (entire report duration)													
		SB	26										

Speed by Lane

Name: Beacon Road between Northampton Drive and Southampton Drive
Site: SB
Started: 6/8/2023 0:00 Ended: 6/8/2023 23:59

8-Jun-23 **SB**

Interval	25 mph	30 mph	35 mph	40 mph	45 mph	50 mph	55 mph	60 mph	65 mph	70 mph	75 mph	> 75 mph	Total
00:00	3	0	0	0	0	0	0	0	0	0	0	0	3
00:15	4	0	1	0	0	0	0	0	0	0	0	0	5
00:30	3	1	1	0	0	0	0	0	0	0	0	0	5
00:45	3	0	0	0	0	0	0	0	0	0	0	0	3
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	1	0	0	0	0	0	0	0	0	0	0	0	1
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	1	0	0	0	0	0	0	0	0	0	0	0	1
04:15	3	0	0	0	0	0	0	0	0	0	0	0	3
04:30	0	0	0	1	0	0	0	0	0	0	0	0	1
04:45	3	0	0	0	0	0	0	0	0	0	0	0	3
05:00	4	2	0	0	0	0	0	0	0	0	0	0	6
05:15	5	4	1	0	0	0	0	0	0	0	0	0	10
05:30	1	4	0	0	0	0	0	0	0	0	0	0	5
05:45	6	2	0	0	0	0	0	0	0	0	0	0	8
06:00	3	1	1	0	0	0	0	0	0	0	0	0	5
06:15	0	6	1	0	0	0	0	0	0	0	0	0	7
06:30	7	4	0	0	0	0	0	0	0	0	0	0	11
06:45	4	2	1	0	0	0	0	0	0	0	0	0	7
07:00	4	2	0	1	0	0	0	0	0	0	0	0	7
07:15	6	2	2	0	0	0	0	0	0	0	0	0	10
07:30	2	2	2	0	0	0	0	0	0	0	0	0	6
07:45	3	2	0	0	0	0	0	0	0	0	0	0	5
08:00	5	4	0	0	0	0	0	0	0	0	0	0	9
08:15	8	1	2	0	0	0	0	0	0	0	0	0	11
08:30	7	2	2	0	0	0	0	0	0	0	0	0	11
08:45	14	5	0	0	0	0	0	0	0	0	0	0	19
09:00	5	5	1	0	0	0	0	0	0	0	0	0	11
09:15	5	2	0	0	0	0	0	0	0	0	0	0	7
09:30	1	0	0	0	0	0	0	0	0	0	0	0	1

09:45	4	1	0	0	0	0	0	0	0	0	0	0	5
10:00	2	2	0	0	0	0	0	0	0	0	0	0	4
10:15	3	2	1	1	0	0	0	0	0	0	0	0	7
10:30	2	1	0	0	0	0	0	0	0	0	0	0	3
10:45	2	3	0	0	0	0	0	0	0	0	0	0	5
11:00	7	3	0	0	0	0	0	0	0	0	0	0	10
11:15	8	0	0	0	0	0	0	0	0	0	0	0	8
11:30	8	2	0	0	0	0	0	0	0	0	0	0	10
11:45	10	0	1	0	0	0	0	0	0	0	0	0	11
12:00	3	2	1	0	0	0	0	0	0	0	0	0	6
12:15	6	1	0	0	0	0	0	0	0	0	0	0	7
12:30	3	3	1	0	0	0	0	0	0	0	0	0	7
12:45	5	1	3	0	0	0	0	0	0	0	0	0	9
13:00	3	3	0	0	0	0	0	0	0	0	0	0	6
13:15	3	5	0	0	0	0	0	0	0	0	0	0	8
13:30	3	4	0	1	0	0	0	0	0	0	0	0	8
13:45	2	1	1	0	0	0	0	0	0	0	0	0	4
14:00	4	3	1	0	0	0	0	0	0	0	0	0	8
14:15	6	1	2	1	0	0	0	0	0	0	0	0	10
14:30	9	2	0	0	0	0	0	0	0	0	0	0	11
14:45	10	2	0	0	0	0	0	0	0	0	0	0	12
15:00	16	5	0	1	0	0	0	0	0	0	0	0	22
15:15	10	11	3	0	0	0	0	0	0	0	0	0	24
15:30	29	5	0	0	0	0	0	0	0	0	0	0	34
15:45	10	10	3	0	0	0	0	0	0	0	0	0	23
16:00	9	6	1	0	0	0	0	0	0	0	0	0	16
16:15	8	1	0	0	0	0	0	0	0	0	0	0	9
16:30	7	6	4	0	0	0	0	0	0	0	0	0	17
16:45	13	6	1	0	0	0	0	0	0	0	0	0	20
17:00	6	7	1	1	0	0	0	0	0	0	0	0	15
17:15	5	2	1	0	0	0	0	0	0	0	0	0	8
17:30	9	7	3	0	0	0	0	0	0	0	0	0	19
17:45	3	6	2	0	0	0	0	0	0	0	0	0	11
18:00	11	4	2	1	0	0	0	0	0	0	0	0	18
18:15	13	4	2	0	0	0	0	0	0	0	0	0	19
18:30	16	4	0	0	0	0	0	0	0	0	0	0	20
18:45	13	5	1	0	0	0	0	0	0	0	0	0	19
19:00	12	3	1	0	0	0	0	0	0	0	0	0	16
19:15	10	3	0	1	0	0	0	0	0	0	0	0	14
19:30	1	3	1	0	0	0	0	0	0	0	0	0	5
19:45	8	6	3	0	0	0	0	0	0	0	0	0	17
20:00	4	6	0	0	0	0	0	0	0	0	0	0	10
20:15	10	2	0	0	0	0	0	0	0	0	0	0	12
20:30	4	4	2	0	0	0	0	0	0	0	0	0	10
20:45	6	1	1	0	0	0	0	0	0	0	0	0	8
21:00	3	2	1	0	0	0	0	0	0	0	0	0	6

21:15	5	5	0	0	0	0	0	0	0	0	0	0	10
21:30	6	2	0	0	0	0	0	0	0	0	0	0	8
21:45	5	2	1	0	0	0	0	0	0	0	0	0	8
22:00	3	0	3	0	0	0	0	0	0	0	0	0	6
22:15	4	2	0	1	0	0	0	0	0	0	0	0	7
22:30	5	1	1	0	0	0	0	0	0	0	0	0	7
22:45	2	0	0	0	0	0	0	0	0	0	0	0	2
23:00	4	0	0	0	0	0	0	0	0	0	0	0	4
23:15	4	1	1	0	0	0	0	0	0	0	0	0	6
23:30	1	0	1	0	0	0	0	0	0	0	0	0	2
23:45	2	0	1	1	0	0	0	0	0	0	0	0	4
Daily Total	**492**	**227**	**67**	**11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**797**

85th Speed Percentiles (entire report duration)

	SB	26

Speed by Lane

Name: Northampton Drive between Beacon Road and New Hampshire Aveneu
Site: EB
Started: 6/7/2023 0:00 Ended: 6/7/2023 23:59

7-Jun-23 **EB**

Interval	25 mph	30 mph	35 mph	40 mph	45 mph	50 mph	55 mph	60 mph	65 mph	70 mph	75 mph	> 75 mph	Total
00:00	4	2	0	0	0	0	0	0	0	0	0	0	6
00:15	1	2	1	0	0	0	0	0	0	0	0	0	4
00:30	1	2	0	0	0	0	0	0	0	0	0	0	3
00:45	0	4	0	1	0	0	0	0	0	0	0	0	5
01:00	4	2	0	0	0	0	0	0	0	0	0	0	6
01:15	5	0	1	0	0	0	0	0	0	0	0	0	6
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	5	0	0	0	0	0	0	0	0	0	0	0	5
02:00	1	0	0	0	0	0	0	0	0	0	0	0	1
02:15	3	2	0	0	0	0	0	0	0	0	0	0	5
02:30	2	1	0	0	0	0	0	0	0	0	0	0	3
02:45	3	2	1	0	0	0	0	0	0	0	0	0	6
03:00	4	1	0	0	0	0	0	0	0	0	0	0	5
03:15	2	1	1	0	0	0	0	0	0	0	0	0	4
03:30	1	2	0	0	0	0	0	0	0	0	0	0	3
03:45	3	2	2	0	0	0	0	0	0	0	0	0	7
04:00	4	7	1	0	0	0	0	0	0	0	0	0	12
04:15	10	4	1	0	0	0	0	0	0	0	0	0	15
04:30	13	4	2	0	0	0	0	0	0	0	0	0	19
04:45	8	8	0	1	0	0	0	0	0	0	0	0	17
05:00	15	7	5	0	0	0	0	0	0	0	0	0	27
05:15	24	14	4	0	1	0	0	0	0	0	0	0	43
05:30	26	16	1	0	0	0	0	0	0	0	0	0	43
05:45	27	16	6	0	0	0	0	0	0	0	0	0	49
06:00	50	11	3	0	0	0	0	0	0	0	0	0	64
06:15	29	11	3	0	0	0	0	0	0	0	0	0	43
06:30	57	13	1	0	0	0	0	0	0	0	0	0	71
06:45	42	6	3	0	0	0	0	0	0	0	0	0	51
07:00	74	5	0	0	0	0	0	0	0	0	0	0	79
07:15	49	5	1	0	0	0	0	0	0	0	0	0	55
07:30	45	6	2	0	0	0	0	0	0	0	0	0	53
07:45	34	20	6	0	0	0	0	0	0	0	0	0	60
08:00	45	28	2	1	0	0	0	0	0	0	0	0	76
08:15	45	13	1	0	1	0	0	0	0	0	0	0	60
08:30	18	9	6	1	0	0	0	0	0	0	0	0	34
08:45	39	15	3	0	0	0	0	0	0	0	0	0	57
09:00	41	10	2	0	0	0	0	0	0	0	0	0	53
09:15	16	7	0	0	0	0	0	0	0	0	0	0	23
09:30	20	3	1	1	0	0	0	0	0	0	0	0	25

09:45	9	2	1	0	0	0	0	0	0	0	0	0	12
10:00	11	5	0	0	0	0	0	0	0	0	0	0	16
10:15	14	1	0	0	0	0	0	0	0	0	0	0	15
10:30	22	2	0	1	0	0	0	0	0	0	0	0	25
10:45	14	9	1	0	0	0	0	0	0	0	0	0	24
11:00	12	2	2	0	0	0	0	0	0	0	0	0	16
11:15	14	6	1	0	0	0	0	0	0	0	0	0	21
11:30	16	11	2	0	0	0	0	0	0	0	0	0	29
11:45	18	5	3	0	1	0	0	0	0	0	0	0	27
12:00	14	6	2	0	0	0	0	0	0	0	0	0	22
12:15	12	3	0	0	0	0	0	0	0	0	0	0	15
12:30	24	4	2	0	0	0	0	0	0	0	0	0	30
12:45	23	4	0	0	0	0	0	0	0	0	0	0	27
13:00	11	6	1	0	0	0	0	0	0	0	0	0	18
13:15	12	6	0	0	0	0	0	0	0	0	0	0	18
13:30	10	5	0	0	0	0	0	0	0	0	0	0	15
13:45	14	9	3	2	0	0	0	0	0	0	0	0	28
14:00	16	3	2	2	0	0	0	0	0	0	0	0	23
14:15	17	5	4	0	0	0	0	0	0	0	0	0	26
14:30	15	13	1	0	0	0	0	0	0	0	0	0	29
14:45	17	6	3	0	0	0	0	0	0	0	0	0	26
15:00	54	17	0	0	0	0	0	0	0	0	0	0	71
15:15	44	10	2	0	0	0	0	0	0	0	0	0	56
15:30	68	16	3	0	0	0	0	0	0	0	0	0	87
15:45	56	14	2	0	0	0	0	0	0	0	0	0	72
16:00	32	16	5	0	0	0	0	0	0	0	0	0	53
16:15	33	12	1	0	0	0	0	0	0	0	0	0	46
16:30	30	15	2	0	0	0	0	0	0	0	0	0	47
16:45	49	6	3	0	0	0	0	0	0	0	0	0	58
17:00	42	8	1	0	0	0	0	0	0	0	0	0	51
17:15	36	9	5	0	0	0	0	0	0	0	0	0	50
17:30	30	6	3	1	0	0	0	0	0	0	0	0	40
17:45	25	17	3	0	0	0	0	0	0	0	0	0	45
18:00	37	6	1	0	0	0	0	0	0	0	0	0	44
18:15	44	5	1	0	0	0	0	0	0	0	0	0	50
18:30	31	9	1	0	0	0	0	0	0	0	0	0	41
18:45	34	7	0	0	0	0	0	0	0	0	0	0	41
19:00	27	7	4	0	0	0	0	0	0	0	0	0	38
19:15	38	10	2	0	0	0	0	0	0	0	0	0	50
19:30	31	5	2	0	0	0	0	0	0	0	0	0	38
19:45	37	11	3	0	0	0	0	0	0	0	0	0	51
20:00	34	13	1	0	0	0	0	0	0	0	0	0	48
20:15	29	5	1	1	0	0	0	0	0	0	0	0	36
20:30	28	4	0	0	1	0	0	0	0	0	0	0	33
20:45	17	6	2	0	0	0	0	0	0	0	0	0	25
21:00	21	9	4	0	0	0	0	0	0	0	0	0	34

21:15	18	5	0	0	0	0	0	0	0	0	0	0	23
21:30	16	1	0	0	0	0	0	0	0	0	0	0	17
21:45	14	5	2	0	0	0	0	0	0	0	0	0	21
22:00	22	4	2	0	0	0	0	0	0	0	0	0	28
22:15	10	2	0	0	0	0	0	0	0	0	0	0	12
22:30	14	3	1	0	0	0	0	0	0	0	0	0	18
22:45	6	2	1	2	0	0	0	0	0	0	0	0	11
23:00	2	3	0	0	0	0	0	0	0	0	0	0	5
23:15	0	5	0	1	0	0	0	0	0	0	0	0	6
23:30	7	3	0	0	0	0	0	0	0	0	0	0	10
23:45	0	1	1	0	0	0	0	0	0	0	0	0	2
Daily Total	**2101**	**651**	**147**	**15**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2918**

85th Speed Percentiles (entire report duration)

EB	27

Speed by Lane

Name: Northampton Drive between Beacon Road and New Hampshire Aveneu
Site: EB
Started: 6/8/2023 0:00 Ended: 6/8/2023 23:59

8-Jun-23 **EB**

Interval	25 mph	30 mph	35 mph	40 mph	45 mph	50 mph	55 mph	60 mph	65 mph	70 mph	75 mph	> 75 mph	Total
00:00	6	2	0	0	0	0	0	0	0	0	0	0	8
00:15	5	3	0	0	0	0	0	0	0	0	0	0	8
00:30	2	2	0	0	0	0	0	0	0	0	0	0	4
00:45	3	2	1	0	0	0	0	0	0	0	0	0	6
01:00	1	1	0	0	0	0	0	0	0	0	0	0	2
01:15	2	0	0	0	0	0	0	0	0	0	0	0	2
01:30	1	0	1	0	0	0	0	0	0	0	0	0	2
01:45	1	1	1	0	0	0	0	0	0	0	0	0	3
02:00	0	0	1	0	0	0	0	0	0	0	0	0	1
02:15	1	1	0	0	0	0	0	0	0	0	0	0	2
02:30	1	1	0	0	0	0	0	0	0	0	0	0	2
02:45	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	7	2	0	0	0	0	0	0	0	0	0	0	9
03:15	2	1	1	0	0	0	0	0	0	0	0	0	4
03:30	2	1	2	0	0	0	0	0	0	0	0	0	5
03:45	3	4	1	0	0	0	0	0	0	0	0	0	8
04:00	6	9	1	0	0	0	0	0	0	0	0	0	16
04:15	2	4	0	0	0	0	0	0	0	0	0	0	6
04:30	5	6	1	2	0	0	0	0	0	0	0	0	14
04:45	11	5	2	1	0	0	0	0	0	0	0	0	19
05:00	11	12	3	2	0	0	0	0	0	0	0	0	28
05:15	27	8	3	0	0	0	0	0	0	0	0	0	38
05:30	23	17	8	1	0	0	0	0	0	0	0	0	49
05:45	36	14	2	0	0	0	0	0	0	0	0	0	52
06:00	48	19	1	0	0	0	0	0	0	0	0	0	68
06:15	36	6	0	0	0	0	0	0	0	0	0	0	42
06:30	61	8	3	0	0	0	0	0	0	0	0	0	72
06:45	40	7	0	0	0	0	0	0	0	0	0	0	47
07:00	28	17	1	1	0	0	0	0	0	0	0	0	47
07:15	50	11	0	0	0	0	0	0	0	0	0	0	61
07:30	58	4	0	0	0	0	0	0	0	0	0	0	62
07:45	45	8	5	0	0	0	0	0	0	0	0	0	58
08:00	49	18	2	0	0	0	0	0	0	0	0	0	69
08:15	26	16	3	0	0	0	0	0	0	0	0	0	45
08:30	26	5	1	0	0	0	0	0	0	0	0	0	32
08:45	52	10	2	0	0	0	0	0	0	0	0	0	64
09:00	28	9	3	1	0	0	0	0	0	0	0	0	41
09:15	13	9	3	0	0	0	0	0	0	0	0	0	25
09:30	25	4	2	0	0	0	0	0	0	0	0	0	31

09:45	16	9	0	1	0	0	0	0	0	0	0	0	26
10:00	10	7	2	0	0	0	0	0	0	0	0	0	19
10:15	10	5	3	1	0	0	0	0	0	0	0	0	19
10:30	19	8	1	0	0	0	0	0	0	0	0	0	28
10:45	16	4	1	0	0	0	0	0	0	0	0	0	21
11:00	8	5	2	1	0	0	0	0	0	0	0	0	16
11:15	15	3	2	0	0	0	0	0	0	0	0	0	20
11:30	15	5	1	0	0	0	0	0	0	0	0	0	21
11:45	15	3	1	0	0	0	0	0	0	0	0	0	19
12:00	20	8	1	0	0	0	0	0	0	0	0	0	29
12:15	21	8	1	1	0	0	0	0	0	0	0	0	31
12:30	15	9	1	1	0	0	0	0	0	0	0	0	26
12:45	20	8	1	0	0	0	0	0	0	0	0	0	29
13:00	10	4	3	0	0	0	0	0	0	0	0	0	17
13:15	10	11	1	2	0	0	0	0	0	0	0	0	24
13:30	15	9	1	0	0	0	0	0	0	0	0	0	25
13:45	20	7	1	0	0	0	0	0	0	0	0	0	28
14:00	10	11	1	0	0	0	0	0	0	0	0	0	22
14:15	15	8	6	2	0	0	0	0	0	0	0	0	31
14:30	21	7	3	1	0	0	0	0	0	0	0	0	32
14:45	22	10	2	0	0	0	0	0	0	0	0	0	34
15:00	49	18	2	0	0	0	0	0	0	0	0	0	69
15:15	37	8	2	0	0	0	0	0	0	0	0	0	47
15:30	56	26	1	0	0	0	0	0	0	0	0	0	83
15:45	45	28	3	0	1	0	0	0	0	0	0	0	77
16:00	48	5	3	0	0	0	0	0	0	0	0	0	56
16:15	38	6	0	0	0	0	0	0	0	0	0	0	44
16:30	26	5	4	1	0	0	0	0	0	0	0	0	36
16:45	50	7	0	0	0	0	0	0	0	0	0	0	57
17:00	52	3	0	0	0	0	0	0	0	0	0	0	55
17:15	43	11	3	0	0	0	0	0	0	0	0	0	57
17:30	42	11	3	0	0	0	0	0	0	0	0	0	56
17:45	35	18	1	1	0	0	0	0	0	0	0	0	55
18:00	42	10	2	0	0	0	0	0	0	0	0	0	54
18:15	27	10	1	0	0	0	0	0	0	0	0	0	38
18:30	52	6	1	0	0	0	0	0	0	0	0	0	59
18:45	41	11	1	1	0	0	0	0	0	0	0	0	54
19:00	44	6	3	0	0	0	0	0	0	0	0	0	53
19:15	29	10	1	1	0	0	0	0	0	0	0	0	41
19:30	37	0	1	0	0	0	0	0	0	0	0	0	38
19:45	29	13	1	0	0	0	0	0	0	0	0	0	43
20:00	31	5	2	0	0	0	0	0	0	0	0	0	38
20:15	33	7	1	0	0	0	0	0	0	0	0	0	41
20:30	36	3	0	0	0	0	0	0	0	0	0	0	39
20:45	27	9	0	0	0	0	0	0	0	0	0	0	36
21:00	21	9	1	0	1	0	0	0	0	0	0	0	32

21:15	17	5	2	0	0	0	0	0	0	0	0	0	24
21:30	16	3	2	0	2	0	0	0	0	0	0	0	23
21:45	21	5	2	1	0	0	0	0	0	0	0	0	29
22:00	8	5	1	0	0	0	0	0	0	0	0	0	14
22:15	18	3	1	0	0	0	0	0	0	0	0	0	22
22:30	12	3	3	1	0	0	0	0	0	0	0	0	19
22:45	6	5	2	1	0	0	0	0	0	0	0	0	14
23:00	7	3	0	0	0	0	0	0	0	0	0	0	10
23:15	4	2	2	1	0	0	0	0	0	0	0	0	9
23:30	4	2	2	0	0	0	0	0	0	0	0	0	8
23:45	5	1	2	0	0	0	0	0	0	0	0	0	8
Daily Total	**2154**	**679**	**145**	**26**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3008**

85th Speed Percentiles (entire report duration)

EB	27

Speed by Lane

Name: Northampton Drive between Beacon Road and New Hampshire Aveneu
Site: WB
Started: 6/7/2023 0:00 Ended: 6/7/2023 23:59

7-Jun-23 **WB**

Interval	25 mph	30 mph	35 mph	40 mph	45 mph	50 mph	55 mph	60 mph	65 mph	70 mph	75 mph	> 75 mph	Total
00:00	4	0	1	0	0	0	0	0	0	0	0	0	5
00:15	2	3	1	0	0	0	0	0	0	0	0	0	6
00:30	8	0	0	0	0	0	0	0	0	0	0	0	8
00:45	1	0	1	0	0	0	0	0	0	0	0	0	2
01:00	3	1	0	0	0	0	0	0	0	0	0	0	4
01:15	5	0	0	0	0	0	0	0	0	0	0	0	5
01:30	1	0	0	0	0	0	0	0	0	0	0	0	1
01:45	6	0	0	0	0	0	0	0	0	0	0	0	6
02:00	1	0	0	0	0	0	0	0	0	0	0	0	1
02:15	4	0	0	0	0	0	0	0	0	0	0	0	4
02:30	2	0	0	0	0	0	0	0	0	0	0	0	2
02:45	2	2	0	0	0	0	0	0	0	0	0	0	4
03:00	1	0	0	0	0	0	0	0	0	0	0	0	1
03:15	1	1	2	0	0	0	0	0	0	0	0	0	4
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	3	0	0	0	0	0	0	0	0	0	0	0	3
04:15	4	0	0	0	0	0	0	0	0	0	0	0	4
04:30	5	1	2	0	0	0	0	0	0	0	0	0	8
04:45	4	0	1	0	0	0	0	0	0	0	0	0	5
05:00	10	2	2	0	0	0	0	0	0	0	0	0	14
05:15	18	7	0	1	0	0	0	0	0	0	0	0	26
05:30	14	6	1	1	0	0	0	0	0	0	0	0	22
05:45	17	8	0	0	0	0	0	0	0	0	0	0	25
06:00	33	2	1	0	0	0	0	0	0	0	0	0	36
06:15	18	2	2	0	0	0	0	0	0	0	0	0	22
06:30	29	4	1	0	0	0	0	0	0	0	0	0	34
06:45	24	2	0	1	0	0	0	0	0	0	0	0	27
07:00	31	6	2	0	0	0	0	0	0	0	0	0	39
07:15	35	2	1	0	0	0	0	0	0	0	0	0	38
07:30	21	7	1	0	0	0	0	0	0	0	0	0	29
07:45	36	5	1	0	0	0	0	0	0	0	0	0	42
08:00	34	21	3	1	0	0	0	0	0	0	0	0	59
08:15	40	18	6	0	0	0	0	0	0	0	0	0	64
08:30	30	11	3	0	0	0	0	0	0	0	0	0	44
08:45	26	19	1	0	0	0	0	0	0	0	0	0	46
09:00	12	14	1	0	0	0	0	0	0	0	0	0	27
09:15	7	10	1	0	0	0	0	0	0	0	0	0	18
09:30	9	0	0	0	0	0	0	0	0	0	0	0	9

09:45	12	2	0	0	0	0	0	0	0	0	0	0	14
10:00	15	1	0	0	0	0	0	0	0	0	0	0	16
10:15	10	2	0	0	0	0	0	0	0	0	0	0	12
10:30	10	3	0	0	0	0	0	0	0	0	0	0	13
10:45	8	4	0	0	0	0	0	0	0	0	0	0	12
11:00	10	0	0	0	0	0	0	0	0	0	0	0	10
11:15	20	6	1	0	0	0	0	0	0	0	0	0	27
11:30	10	3	0	1	0	0	0	0	0	0	0	0	14
11:45	19	7	2	0	0	0	0	0	0	0	0	0	28
12:00	16	4	0	0	0	0	0	0	0	0	0	0	20
12:15	7	4	0	0	0	0	0	0	0	0	0	0	11
12:30	24	6	1	0	0	0	0	0	0	0	0	0	31
12:45	5	5	2	0	0	0	0	0	0	0	0	0	12
13:00	9	5	2	1	0	0	0	0	0	0	0	0	17
13:15	20	0	5	0	0	0	0	0	0	0	0	0	25
13:30	11	10	1	0	0	0	0	0	0	0	0	0	22
13:45	17	7	2	0	0	0	0	0	0	0	0	0	26
14:00	16	4	0	0	0	0	0	0	0	0	0	0	20
14:15	17	9	3	0	0	0	0	0	0	0	0	0	29
14:30	15	12	4	0	0	0	0	0	0	0	0	0	31
14:45	24	8	3	0	0	0	0	0	0	0	0	0	35
15:00	36	10	3	0	0	0	0	0	0	0	0	0	49
15:15	58	9	1	0	0	0	0	0	0	0	0	0	68
15:30	38	11	2	1	0	0	0	0	0	0	0	0	52
15:45	37	7	1	1	0	0	0	0	0	0	0	0	46
16:00	38	10	3	0	0	0	0	0	0	0	0	0	51
16:15	21	5	2	0	0	0	0	0	0	0	0	0	28
16:30	41	12	1	1	0	0	0	0	0	0	0	0	55
16:45	51	3	1	0	0	0	0	0	0	0	0	0	55
17:00	39	7	1	0	0	0	0	0	0	0	0	0	47
17:15	35	5	2	0	0	0	0	0	0	0	0	0	42
17:30	39	6	1	1	0	0	0	0	0	0	0	0	47
17:45	35	9	6	0	0	0	0	0	0	0	0	0	50
18:00	35	7	3	1	0	0	0	0	0	0	0	0	46
18:15	39	10	1	1	0	0	0	0	0	0	0	0	51
18:30	32	5	1	1	0	0	0	0	0	0	0	0	39
18:45	45	1	0	0	0	0	0	0	0	0	0	0	46
19:00	37	6	0	0	0	0	0	0	0	0	0	0	43
19:15	40	6	0	0	0	0	0	0	0	0	0	0	46
19:30	35	5	3	1	0	0	0	0	0	0	0	0	44
19:45	35	8	0	0	0	0	0	0	0	0	0	0	43
20:00	26	7	1	0	0	0	0	0	0	0	0	0	34
20:15	28	7	1	1	0	0	0	0	0	0	0	0	37
20:30	23	5	0	0	0	0	0	0	0	0	0	0	28
20:45	23	6	1	0	0	0	0	0	0	0	0	0	30
21:00	21	5	0	1	0	0	0	0	0	0	0	0	27

21:15	26	3	0	0	0	0	0	0	0	0	0	0	29
21:30	18	3	2	0	0	0	0	0	0	0	0	0	23
21:45	14	4	1	0	0	0	0	0	0	0	0	0	19
22:00	20	2	1	0	0	0	0	0	0	0	0	0	23
22:15	12	4	0	1	0	0	0	0	0	0	0	0	17
22:30	20	2	0	0	0	0	0	0	0	0	0	0	22
22:45	6	2	2	0	0	0	0	0	0	0	0	0	10
23:00	6	1	1	0	0	0	0	0	0	0	0	0	8
23:15	9	2	0	0	0	0	0	0	0	0	0	0	11
23:30	15	0	0	0	0	0	0	0	0	0	0	0	15
23:45	5	2	0	0	0	0	0	0	0	0	0	0	7
Daily Total	**1836**	**453**	**103**	**17**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2409**

85th Speed Percentiles (entire report duration)

WB	26

Speed by Lane

Name: Northampton Drive between Beacon Road and New Hampshire Aveneu
Site: WB
Started: 6/8/2023 0:00 Ended: 6/8/2023 23:59

8-Jun-23													WB
Interval	**25 mph**	**30 mph**	**35 mph**	**40 mph**	**45 mph**	**50 mph**	**55 mph**	**60 mph**	**65 mph**	**70 mph**	**75 mph**	**> 75 mph**	**Total**
00:00	8	0	2	0	0	0	0	0	0	0	0	0	10
00:15	5	1	0	0	0	0	0	0	0	0	0	0	6
00:30	4	3	1	0	0	0	0	0	0	0	0	0	8
00:45	3	1	0	0	0	0	0	0	0	0	0	0	4
01:00	0	1	0	1	0	0	0	0	0	0	0	0	2
01:15	3	0	0	0	0	0	0	0	0	0	0	0	3
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	3	0	0	0	0	0	0	0	0	0	0	0	3
02:00	1	0	0	0	0	0	0	0	0	0	0	0	1
02:15	1	0	0	0	0	0	0	0	0	0	0	0	1
02:30	1	0	0	0	0	0	0	0	0	0	0	0	1
02:45	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	1	2	0	0	0	0	0	0	0	0	0	0	3
03:15	1	0	0	0	0	0	0	0	0	0	0	0	1
03:30	2	0	0	0	0	0	0	0	0	0	0	0	2
03:45	3	0	0	0	0	0	0	0	0	0	0	0	3
04:00	4	0	0	0	0	0	0	0	0	0	0	0	4
04:15	2	1	0	0	0	0	0	0	0	0	0	0	3
04:30	3	0	0	1	0	0	0	0	0	0	0	0	4
04:45	7	1	1	0	0	0	0	0	0	0	0	0	9
05:00	8	3	0	1	0	0	0	0	0	0	0	0	12
05:15	19	4	2	0	0	0	0	0	0	0	0	0	25
05:30	15	5	3	0	0	0	0	0	0	0	0	0	23
05:45	17	5	0	0	0	0	0	0	0	0	0	0	22
06:00	23	4	2	0	0	0	0	0	0	0	0	0	29
06:15	22	4	2	0	0	0	0	0	0	0	0	0	28
06:30	22	9	1	0	0	0	0	0	0	0	0	0	32
06:45	21	6	1	1	0	0	0	0	0	0	0	0	29
07:00	28	2	0	0	0	0	0	0	0	0	0	0	30
07:15	32	12	2	0	0	0	0	0	0	0	0	0	46
07:30	17	6	1	2	0	0	0	0	0	0	0	0	26
07:45	33	6	0	0	0	0	0	0	0	0	0	0	39
08:00	34	13	1	0	0	0	0	0	0	0	0	0	48
08:15	33	11	2	0	0	0	0	0	0	0	0	0	46
08:30	35	12	6	0	0	0	0	0	0	0	0	0	53
08:45	41	15	1	0	0	0	0	0	0	0	0	0	57
09:00	18	11	1	0	0	0	0	0	0	0	0	0	30
09:15	13	6	0	0	0	0	0	0	0	0	0	0	19
09:30	13	3	0	0	0	0	0	0	0	0	0	0	16

09:45	11	5	0	0	0	0	0	0	0	0	0	0	16
10:00	13	2	1	0	0	0	0	0	0	0	0	0	16
10:15	18	4	0	0	0	0	0	0	0	0	0	0	22
10:30	7	4	1	0	0	0	0	0	0	0	0	0	12
10:45	7	4	1	0	0	0	0	0	0	0	0	0	12
11:00	13	3	0	0	0	0	0	0	0	0	0	0	16
11:15	17	6	2	0	0	0	0	0	0	0	0	0	25
11:30	19	2	1	0	0	0	0	0	0	0	0	0	22
11:45	25	1	0	0	0	0	0	0	0	0	0	0	26
12:00	15	3	2	0	0	0	0	0	0	0	0	0	20
12:15	13	3	0	0	0	0	0	0	0	0	0	0	16
12:30	21	4	3	0	0	0	0	0	0	0	0	0	28
12:45	19	3	1	0	0	0	0	0	0	0	0	0	23
13:00	12	3	1	0	0	0	0	0	0	0	0	0	16
13:15	15	4	2	2	0	0	0	0	0	0	0	0	23
13:30	16	6	0	1	0	0	0	0	0	0	0	0	23
13:45	20	2	1	0	0	0	0	0	0	0	0	0	23
14:00	10	9	1	2	0	0	0	0	0	0	0	0	22
14:15	16	4	1	0	0	0	0	0	0	0	0	0	21
14:30	24	11	2	0	0	0	0	0	0	0	0	0	37
14:45	26	15	2	0	0	0	0	0	0	0	0	0	43
15:00	54	5	2	0	0	0	0	0	0	0	0	0	61
15:15	57	15	2	0	0	0	0	0	0	0	0	0	74
15:30	49	7	2	0	0	0	0	0	0	0	0	0	58
15:45	33	12	1	1	0	0	0	0	0	0	0	0	47
16:00	34	7	0	0	1	0	0	0	0	0	0	0	42
16:15	33	1	1	0	0	0	0	0	0	0	0	0	35
16:30	43	6	1	0	0	0	0	0	0	0	0	0	50
16:45	29	9	3	0	0	0	0	0	0	0	0	0	41
17:00	42	4	1	0	0	0	0	0	0	0	0	0	47
17:15	42	8	1	0	0	0	0	0	0	0	0	0	51
17:30	33	14	0	1	0	0	0	0	0	0	0	0	48
17:45	32	19	2	3	0	0	0	0	0	0	0	0	56
18:00	36	9	2	0	0	0	0	0	0	0	0	0	47
18:15	54	9	1	0	0	0	0	0	0	0	0	0	64
18:30	48	9	2	0	0	0	0	0	0	0	0	0	59
18:45	32	8	3	0	0	0	0	0	0	0	0	0	43
19:00	32	9	0	0	0	0	0	0	0	0	0	0	41
19:15	28	8	2	1	0	0	0	0	0	0	0	0	39
19:30	30	8	1	2	0	0	0	0	0	0	0	0	41
19:45	31	4	2	0	0	0	0	0	0	0	0	0	37
20:00	18	14	2	0	0	0	0	0	0	0	0	0	34
20:15	30	4	1	1	0	0	0	0	0	0	0	0	36
20:30	23	7	1	0	0	0	0	0	0	0	0	0	31
20:45	21	7	1	0	0	0	0	0	0	0	0	0	29
21:00	15	6	0	0	0	0	0	0	0	0	0	0	21

21:15	22	3	0	0	0	0	0	0	0	0	0	0	25
21:30	24	1	1	0	0	0	0	0	0	0	0	0	26
21:45	20	5	2	0	0	0	0	0	0	0	0	0	27
22:00	13	3	1	0	1	0	0	0	0	0	0	0	18
22:15	18	6	0	0	0	0	0	0	0	0	0	0	24
22:30	10	4	1	0	0	0	0	0	0	0	0	0	15
22:45	5	2	0	0	0	0	0	0	0	0	0	0	7
23:00	5	1	0	0	0	0	0	0	0	0	0	0	6
23:15	8	1	1	0	0	0	0	0	0	0	0	0	10
23:30	8	2	1	0	0	0	0	0	0	0	0	0	11
23:45	6	0	1	1	0	0	0	0	0	0	0	0	8
Daily Total	**1853**	**482**	**93**	**21**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2451**

85th Speed Percentiles (entire report duration)

WB	26

Speed by Lane

Name: Southampton Drive West of Beacon Road
Site: EB
Started: 6/7/2023 0:15 Ended: 6/7/2023 23:59

7-Jun-23 **EB**

Interval	25 mph	30 mph	35 mph	40 mph	45 mph	50 mph	55 mph	60 mph	65 mph	70 mph	75 mph	> 75 mph	Total
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	5	0	0	0	0	0	0	0	0	0	0	0	5
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	1	1	0	0	0	0	0	0	0	0	0	0	2
02:30	1	0	0	0	0	0	0	0	0	0	0	0	1
02:45	0	1	0	0	0	0	0	0	0	0	0	0	1
03:00	3	1	0	0	0	0	0	0	0	0	0	0	4
03:15	0	3	0	0	0	0	0	0	0	0	0	0	3
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	6	1	0	0	0	0	0	0	0	0	0	0	7
04:15	4	2	0	0	0	0	0	0	0	0	0	0	6
04:30	8	3	0	0	0	0	0	0	0	0	0	0	11
04:45	6	1	0	0	0	0	0	0	0	0	0	0	7
05:00	8	2	0	0	0	0	0	0	0	0	0	0	10
05:15	11	1	1	0	0	0	0	0	0	0	0	0	13
05:30	11	2	2	0	0	0	0	0	0	0	0	0	15
05:45	13	3	1	0	0	0	0	0	0	0	0	0	17
06:00	15	2	1	0	0	0	0	0	0	0	0	0	18
06:15	13	7	0	0	0	0	0	0	0	0	0	0	20
06:30	24	5	1	0	0	0	0	0	0	0	0	0	30
06:45	15	0	1	0	0	0	0	0	0	0	0	0	16
07:00	17	2	0	0	0	0	0	0	0	0	0	0	19
07:15	20	3	3	0	0	0	0	0	0	0	0	0	26
07:30	13	3	0	0	0	0	0	0	0	0	0	0	16
07:45	11	5	0	0	0	0	0	0	0	0	0	0	16
08:00	8	5	0	0	0	0	0	0	0	0	0	0	13
08:15	9	4	0	0	0	0	0	0	0	0	0	0	13
08:30	11	4	0	0	0	0	0	0	0	0	0	0	15
08:45	10	4	0	0	0	0	0	0	0	0	0	0	14
09:00	13	1	0	0	0	0	0	0	0	0	0	0	14
09:15	4	7	0	0	0	0	0	0	0	0	0	0	11
09:30	7	3	0	0	0	0	0	0	0	0	0	0	10
09:45	7	1	2	0	0	0	0	0	0	0	0	0	10

10:00	8	2	0	0	0	0	0	0	0	0	0	0	10
10:15	12	2	0	0	0	0	0	0	0	0	0	0	14
10:30	8	1	0	0	0	0	0	0	0	0	0	0	9
10:45	5	2	0	0	0	0	0	0	0	0	0	0	7
11:00	6	0	0	0	0	0	0	0	0	0	0	0	6
11:15	9	3	0	0	0	0	0	0	0	0	0	0	12
11:30	9	1	0	0	0	0	0	0	0	0	0	0	10
11:45	9	2	0	0	0	0	0	0	0	0	0	0	11
12:00	13	1	0	0	0	0	0	0	0	0	0	0	14
12:15	6	1	0	0	0	0	0	0	0	0	0	0	7
12:30	8	3	0	0	0	0	0	0	0	0	0	0	11
12:45	7	3	0	0	0	0	0	0	0	0	0	0	10
13:00	6	3	0	0	0	0	0	0	0	0	0	0	9
13:15	3	3	0	0	0	0	0	0	0	0	0	0	6
13:30	5	2	0	0	0	0	0	0	0	0	0	0	7
13:45	9	2	0	0	0	0	0	0	0	0	0	0	11
14:00	11	2	1	0	0	0	0	0	0	0	0	0	14
14:15	12	5	0	0	0	0	0	0	0	0	0	0	17
14:30	2	4	0	0	0	0	0	0	0	0	0	0	6
14:45	5	5	1	0	0	0	0	0	0	0	0	0	11
15:00	11	5	0	0	0	0	0	0	0	0	0	0	16
15:15	7	1	2	0	0	0	0	0	0	0	0	0	10
15:30	12	6	2	0	0	0	0	0	0	0	0	0	20
15:45	14	3	0	0	0	0	0	0	0	0	0	0	17
16:00	16	5	0	0	0	0	0	0	0	0	0	0	21
16:15	19	3	1	0	0	0	0	0	0	0	0	0	23
16:30	17	4	0	0	0	0	0	0	0	0	0	0	21
16:45	8	5	0	0	0	0	0	0	0	0	0	0	13
17:00	20	0	0	0	0	0	0	0	0	0	0	0	20
17:15	17	3	1	0	0	0	0	0	0	0	0	0	21
17:30	13	3	1	0	0	0	0	0	0	0	0	0	17
17:45	10	3	0	0	0	0	0	0	0	0	0	0	13
18:00	15	0	1	0	0	0	0	0	0	0	0	0	16
18:15	14	4	0	0	0	0	0	0	0	0	0	0	18
18:30	12	1	1	0	0	0	0	0	0	0	0	0	14
18:45	13	3	1	0	0	0	0	0	0	0	0	0	17
19:00	15	0	0	0	0	0	0	0	0	0	0	0	15
19:15	21	3	1	0	0	0	0	0	0	0	0	0	25
19:30	14	1	0	0	0	0	0	0	0	0	0	0	15
19:45	16	3	0	0	0	0	0	0	0	0	0	0	19
20:00	9	0	0	0	0	0	0	0	0	0	0	0	9
20:15	13	0	0	0	0	0	0	0	0	0	0	0	13
20:30	8	1	1	0	0	0	0	0	0	0	0	0	10
20:45	5	2	0	0	0	0	0	0	0	0	0	0	7
21:00	16	0	1	0	0	0	0	0	0	0	0	0	17
21:15	4	0	0	0	0	0	0	0	0	0	0	0	4

21:30	10	0	0	0	0	0	0	0	0	0	0	0	10
21:45	6	1	0	0	0	0	0	0	0	0	0	0	7
22:00	6	1	2	1	0	0	0	0	0	0	0	0	10
22:15	1	3	0	0	0	0	0	0	0	0	0	0	4
22:30	6	2	0	0	0	0	0	0	0	0	0	0	8
22:45	3	1	0	0	0	0	0	0	0	0	0	0	4
23:00	2	0	0	0	0	0	0	0	0	0	0	0	2
23:15	2	1	0	0	0	0	0	0	0	0	0	0	3
23:30	2	1	0	0	0	0	0	0	0	0	0	0	3
23:45	3	0	0	0	0	0	0	0	0	0	0	0	3
Daily Total	**808**	**193**	**29**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1031**

85th Speed Percentiles (entire report duration)

EB	25	

Speed by Lane

Name: Southampton Drive West of Beacon Road
Site: EB
Started: 6/8/2023 0:00 Ended: 6/8/2023 23:59

8-Jun-23 **EB**

Interval	25 mph	30 mph	35 mph	40 mph	45 mph	50 mph	55 mph	60 mph	65 mph	70 mph	75 mph	> 75 mph	Total
00:00	2	0	0	0	0	0	0	0	0	0	0	0	2
00:15	1	0	0	0	0	0	0	0	0	0	0	0	1
00:30	3	0	0	0	0	0	0	0	0	0	0	0	3
00:45	1	1	0	0	0	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	3	0	0	0	0	0	0	0	0	0	0	0	3
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	1	1	0	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	2	0	1	0	0	0	0	0	0	0	0	0	3
03:15	1	1	0	0	0	0	0	0	0	0	0	0	2
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	6	1	0	1	0	0	0	0	0	0	0	0	8
04:15	2	1	0	0	0	0	0	0	0	0	0	0	3
04:30	4	1	0	0	0	0	0	0	0	0	0	0	5
04:45	9	5	0	0	0	0	0	0	0	0	0	0	14
05:00	11	1	1	0	0	0	0	0	0	0	0	0	13
05:15	12	6	0	0	1	0	0	0	0	0	0	0	19
05:30	11	2	0	0	0	0	0	0	0	0	0	0	13
05:45	16	0	1	0	0	0	0	0	0	0	0	0	17
06:00	19	4	1	0	0	0	0	0	0	0	0	0	24
06:15	14	3	1	0	0	0	0	0	0	0	0	0	18
06:30	19	2	1	0	0	0	0	0	0	0	0	0	22
06:45	16	0	0	0	0	0	0	0	0	0	0	0	16
07:00	15	1	1	0	0	0	0	0	0	0	0	0	17
07:15	17	3	1	1	0	0	0	0	0	0	0	0	22
07:30	7	3	0	0	0	0	0	0	0	0	0	0	10
07:45	13	2	0	0	0	0	0	0	0	0	0	0	15
08:00	6	5	0	0	0	0	0	0	0	0	0	0	11
08:15	9	0	0	0	0	0	0	0	0	0	0	0	9
08:30	7	3	2	0	0	0	0	0	0	0	0	0	12
08:45	11	3	0	0	0	0	0	0	0	0	0	0	14
09:00	12	4	0	0	0	0	0	0	0	0	0	0	16
09:15	11	5	0	0	0	0	0	0	0	0	0	0	16
09:30	13	1	0	0	0	0	0	0	0	0	0	0	14

09:45	7	3	0	0	0	0	0	0	0	0	0	0	10
10:00	8	2	0	0	0	0	0	0	0	0	0	0	10
10:15	7	2	0	0	0	0	0	0	0	0	0	0	9
10:30	3	1	3	0	0	0	0	0	0	0	0	0	7
10:45	4	2	0	0	0	0	0	0	0	0	0	0	6
11:00	13	1	0	0	0	0	0	0	0	0	0	0	14
11:15	5	2	0	0	0	0	0	0	0	0	0	0	7
11:30	8	2	0	0	0	0	0	0	0	0	0	0	10
11:45	15	1	1	0	0	0	0	0	0	0	0	0	17
12:00	11	2	0	0	0	0	0	0	0	0	0	0	13
12:15	9	0	0	0	0	0	0	0	0	0	0	0	9
12:30	9	0	0	0	0	0	0	0	0	0	0	0	9
12:45	8	2	1	0	0	0	0	0	0	0	0	0	11
13:00	3	0	1	0	0	0	0	0	0	0	0	0	4
13:15	10	4	0	0	0	0	0	0	0	0	0	0	14
13:30	7	0	0	0	0	0	0	0	0	0	0	0	7
13:45	17	2	0	0	0	0	0	0	0	0	0	0	19
14:00	8	3	1	0	0	0	0	0	0	0	0	0	12
14:15	15	1	0	0	0	0	0	0	0	0	0	0	16
14:30	10	2	1	0	0	0	0	0	0	0	0	0	13
14:45	9	3	0	0	0	0	0	0	0	0	0	0	12
15:00	13	2	2	0	0	0	0	0	0	0	0	0	17
15:15	17	1	0	0	0	0	0	0	0	0	0	0	18
15:30	11	2	0	1	0	0	0	0	0	0	0	0	14
15:45	17	2	0	0	0	0	0	0	0	0	0	0	19
16:00	13	5	0	0	0	0	0	0	0	0	0	0	18
16:15	15	4	0	0	0	0	0	0	0	0	0	0	19
16:30	11	4	0	0	0	0	0	0	0	0	0	0	15
16:45	19	0	1	0	0	0	0	0	0	0	0	0	20
17:00	16	1	0	0	0	0	0	0	0	0	0	0	17
17:15	13	2	0	0	0	0	0	0	0	0	0	0	15
17:30	17	2	1	0	0	0	0	0	0	0	0	0	20
17:45	13	4	0	0	0	0	0	0	0	0	0	0	17
18:00	20	2	0	0	0	0	0	0	0	0	0	0	22
18:15	14	3	0	0	0	0	0	0	0	0	0	0	17
18:30	15	3	0	0	0	0	0	0	0	0	0	0	18
18:45	17	6	1	0	0	0	0	0	0	0	0	0	24
19:00	14	1	2	1	0	0	0	0	0	0	0	0	18
19:15	13	1	0	0	0	0	0	0	0	0	0	0	14
19:30	12	2	0	0	0	0	0	0	0	0	0	0	14
19:45	18	3	0	0	0	0	0	0	0	0	0	0	21
20:00	21	1	0	0	0	0	0	0	0	0	0	0	22
20:15	6	1	0	0	0	0	0	0	0	0	0	0	7
20:30	11	2	1	1	0	0	0	0	0	0	0	0	15
20:45	15	3	0	0	0	0	0	0	0	0	0	0	18
21:00	10	1	1	0	0	0	0	0	0	0	0	0	12

21:15	10	1	0	0	0	0	0	0	0	0	0	0	11
21:30	8	1	0	0	0	0	0	0	0	0	0	0	9
21:45	8	0	1	0	0	0	0	0	0	0	0	0	9
22:00	5	0	0	0	0	0	0	0	0	0	0	0	5
22:15	4	2	0	0	0	0	0	0	0	0	0	0	6
22:30	7	1	0	0	0	0	0	0	0	0	0	0	8
22:45	6	0	0	0	0	0	0	0	0	0	0	0	6
23:00	4	0	0	0	0	0	0	0	0	0	0	0	4
23:15	1	1	0	0	0	0	0	0	0	0	0	0	2
23:30	5	0	0	0	0	0	0	0	0	0	0	0	5
23:45	0	1	0	0	0	0	0	0	0	0	0	0	1
Daily Total	**880**	**159**	**28**	**5**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1073**

85th Speed Percentiles (entire report duration)

	EB	24

Speed by Lane

Name: Southampton Drive West of Beacon Road
Site: WB
Started: 6/7/2023 0:15 Ended: 6/7/2023 23:59

7-Jun-23 **WB**

Interval	25 mph	30 mph	35 mph	40 mph	45 mph	50 mph	55 mph	60 mph	65 mph	70 mph	75 mph	> 75 mph	Total
00:15	0	0	0	0	0	0	0	0	0	0	0	0	0
00:30	0	0	0	0	0	0	0	0	0	0	0	0	0
00:45	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0
01:15	0	0	0	0	0	0	0	0	0	0	0	0	0
01:30	0	0	0	0	0	0	0	0	0	0	0	0	0
01:45	3	0	0	0	0	0	0	0	0	0	0	0	3
02:00	1	1	0	0	0	0	0	0	0	0	0	0	2
02:15	0	0	0	0	0	0	0	0	0	0	0	0	0
02:30	1	2	0	0	0	0	0	0	0	0	0	0	3
02:45	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	1	0	0	0	0	0	0	0	0	0	0	0	1
03:15	1	0	0	0	0	0	0	0	0	0	0	0	1
03:30	1	0	0	0	0	0	0	0	0	0	0	0	1
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	1	0	0	0	0	0	0	0	0	0	0	0	1
04:15	2	1	0	0	0	0	0	0	0	0	0	0	3
04:30	2	1	0	1	0	0	0	0	0	0	0	0	4
04:45	0	1	0	0	0	0	0	0	0	0	0	0	1
05:00	1	2	0	0	0	0	0	0	0	0	0	0	3
05:15	2	2	1	0	0	0	0	0	0	0	0	0	5
05:30	6	2	1	0	0	0	0	0	0	0	0	0	9
05:45	7	3	0	0	0	0	0	0	0	0	0	0	10
06:00	8	4	1	0	0	0	0	0	0	0	0	0	13
06:15	6	4	1	0	0	0	0	0	0	0	0	0	11
06:30	10	1	2	0	0	0	0	0	0	0	0	0	13
06:45	7	2	1	0	0	0	0	0	0	0	0	0	10
07:00	12	1	0	0	0	0	0	0	0	0	0	0	13
07:15	5	1	1	0	0	0	0	0	0	0	0	0	7
07:30	10	3	0	0	0	0	0	0	0	0	0	0	13
07:45	4	4	0	0	0	0	0	0	0	0	0	0	8
08:00	8	1	0	0	0	0	0	0	0	0	0	0	9
08:15	5	0	1	0	0	0	0	0	0	0	0	0	6
08:30	11	1	0	0	0	0	0	0	0	0	0	0	12
08:45	5	3	0	0	0	0	0	0	0	0	0	0	8
09:00	12	4	0	0	1	0	0	0	0	0	0	0	17
09:15	12	0	1	0	0	0	0	0	0	0	0	0	13
09:30	3	0	1	0	0	0	0	0	0	0	0	0	4
09:45	3	2	1	0	0	0	0	0	0	0	0	0	6

10:00	4	1	0	0	0	0	0	0	0	0	0	0	5
10:15	4	1	0	0	0	0	0	0	0	0	0	0	5
10:30	5	2	0	0	0	0	0	0	0	0	0	0	7
10:45	4	4	1	1	0	0	0	0	0	0	0	0	10
11:00	6	1	0	0	0	0	0	0	0	0	0	0	7
11:15	12	3	0	0	0	0	0	0	0	0	0	0	15
11:30	11	1	1	0	0	0	0	0	0	0	0	0	13
11:45	8	2	0	0	0	0	0	0	0	0	0	0	10
12:00	5	2	1	0	0	0	0	0	0	0	0	0	8
12:15	6	2	0	0	0	0	0	0	0	0	0	0	8
12:30	7	5	1	0	0	0	0	0	0	0	0	0	13
12:45	7	1	0	0	0	0	0	0	0	0	0	0	8
13:00	5	3	1	0	0	0	0	0	0	0	0	0	9
13:15	6	3	1	0	0	0	0	0	0	0	0	0	10
13:30	5	4	0	0	0	0	0	0	0	0	0	0	9
13:45	11	3	0	0	0	0	0	0	0	0	0	0	14
14:00	4	1	1	0	0	0	0	0	0	0	0	0	6
14:15	8	1	1	0	0	0	0	0	0	0	0	0	10
14:30	9	3	0	0	0	0	0	0	0	0	0	0	12
14:45	13	3	1	0	0	0	0	0	0	0	0	0	17
15:00	9	4	0	0	0	0	0	0	0	0	0	0	13
15:15	17	4	0	0	0	0	0	0	0	0	0	0	21
15:30	17	3	0	0	0	0	0	0	0	0	0	0	20
15:45	25	5	0	1	0	0	0	0	0	0	0	0	31
16:00	19	6	1	0	0	0	0	0	0	0	0	0	26
16:15	18	2	0	0	0	0	0	0	0	0	0	0	20
16:30	19	3	0	0	0	0	0	0	0	0	0	0	22
16:45	20	1	0	0	0	0	0	0	0	0	0	0	21
17:00	24	2	1	0	0	0	0	0	0	0	0	0	27
17:15	23	7	0	0	0	0	0	0	0	0	0	0	30
17:30	19	4	0	0	0	0	0	0	0	0	0	0	23
17:45	11	4	1	0	0	0	0	0	0	0	0	0	16
18:00	22	2	1	0	0	0	0	0	0	0	0	0	25
18:15	16	2	0	0	0	0	0	0	0	0	0	0	18
18:30	21	4	0	0	0	0	0	0	0	0	0	0	25
18:45	18	1	1	0	0	0	0	0	0	0	0	0	20
19:00	17	4	0	0	0	0	0	0	0	0	0	0	21
19:15	10	4	0	0	0	0	0	0	0	0	0	0	14
19:30	18	2	1	0	0	0	0	0	0	0	0	0	21
19:45	19	2	0	0	1	0	0	0	0	0	0	0	22
20:00	16	3	0	0	0	0	0	0	0	0	0	0	19
20:15	12	5	0	0	0	0	0	0	0	0	0	0	17
20:30	12	3	2	0	0	0	0	0	0	0	0	0	17
20:45	9	3	0	0	0	0	0	0	0	0	0	0	12
21:00	12	1	0	0	0	0	0	0	0	0	0	0	13
21:15	20	1	1	0	0	0	0	0	0	0	0	0	22

21:30	21	4	0	0	0	0	0	0	0	0	0	0	25
21:45	15	1	0	0	0	0	0	0	0	0	0	0	16
22:00	14	2	0	0	0	0	0	0	0	0	0	0	16
22:15	10	1	0	0	0	0	0	0	0	0	0	0	11
22:30	6	1	1	0	0	0	0	0	0	0	0	0	8
22:45	10	1	0	0	0	0	0	0	0	0	0	0	11
23:00	6	0	0	0	0	0	0	0	0	0	0	0	6
23:15	2	0	0	0	0	0	0	0	0	0	0	0	2
23:30	3	0	0	0	0	0	0	0	0	0	0	0	3
23:45	6	1	0	0	0	0	0	0	0	0	0	0	7
Daily Total	**827**	**185**	**31**	**3**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1048**

85th Speed Percentiles (entire report duration)

WB	25	

Speed by Lane

Name: Southampton Drive West of Beacon Road
Site: WB
Started: 6/8/2023 0:00 Ended: 6/8/2023 23:59

8-Jun-23 **WB**

Interval	25 mph	30 mph	35 mph	40 mph	45 mph	50 mph	55 mph	60 mph	65 mph	70 mph	75 mph	> 75 mph	Total
00:00	0	1	1	0	0	0	0	0	0	0	0	0	2
00:15	4	0	2	0	0	0	0	0	0	0	0	0	6
00:30	3	2	0	0	0	0	0	0	0	0	0	0	5
00:45	3	0	0	0	0	0	0	0	0	0	0	0	3
01:00	5	2	0	0	0	0	0	0	0	0	0	0	7
01:15	1	0	0	0	0	0	0	0	0	0	0	0	1
01:30	1	0	0	0	0	0	0	0	0	0	0	0	1
01:45	2	0	1	0	0	0	0	0	0	0	0	0	3
02:00	1	0	0	0	0	0	0	0	0	0	0	0	1
02:15	1	1	0	0	0	0	0	0	0	0	0	0	2
02:30	0	0	0	0	0	0	0	0	0	0	0	0	0
02:45	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15	1	1	0	0	1	0	0	0	0	0	0	0	3
03:30	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	2	0	0	0	0	0	0	0	0	0	0	0	2
04:15	2	0	0	0	0	0	0	0	0	0	0	0	2
04:30	2	0	0	0	0	0	0	0	0	0	0	0	2
04:45	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	3	0	1	0	0	0	0	0	0	0	0	0	4
05:15	5	2	0	0	0	0	0	0	0	0	0	0	7
05:30	7	6	0	0	0	0	0	0	0	0	0	0	13
05:45	10	2	0	0	0	0	0	0	0	0	0	0	12
06:00	8	1	1	0	0	0	0	0	0	0	0	0	10
06:15	3	3	2	0	0	0	0	0	0	0	0	0	8
06:30	11	3	0	0	0	0	0	0	0	0	0	0	14
06:45	5	0	0	0	0	0	0	0	0	0	0	0	5
07:00	4	3	1	0	0	0	0	0	0	0	0	0	8
07:15	8	2	0	0	0	0	0	0	0	0	0	0	10
07:30	10	0	0	0	0	0	0	0	0	0	0	0	10
07:45	3	0	1	0	0	0	0	0	0	0	0	0	4
08:00	7	0	1	0	0	0	0	0	0	0	0	0	8
08:15	8	2	0	0	0	0	0	0	0	0	0	0	10
08:30	4	0	0	0	0	0	0	0	0	0	0	0	4
08:45	12	4	0	0	0	0	0	0	0	0	0	0	16
09:00	11	2	1	0	0	0	0	0	0	0	0	0	14
09:15	8	1	0	0	0	0	0	0	0	0	0	0	9
09:30	8	0	1	0	0	0	0	0	0	0	0	0	9

09:45	4	1	0	0	0	0	0	0	0	0	0	0	5
10:00	8	3	1	0	0	0	0	0	0	0	0	0	12
10:15	5	0	0	0	0	0	0	0	0	0	0	0	5
10:30	3	2	0	0	0	0	0	0	0	0	0	0	5
10:45	5	2	0	0	0	0	0	0	0	0	0	0	7
11:00	3	4	0	0	0	0	0	0	0	0	0	0	7
11:15	11	2	0	1	0	0	0	0	0	0	0	0	14
11:30	5	3	1	0	0	0	0	0	0	0	0	0	9
11:45	16	1	0	0	0	0	0	0	0	0	0	0	17
12:00	6	0	0	0	0	0	0	0	0	0	0	0	6
12:15	4	3	0	0	0	0	0	0	0	0	0	0	7
12:30	9	4	0	0	0	0	0	0	0	0	0	0	13
12:45	7	2	1	0	0	0	0	0	0	0	0	0	10
13:00	5	3	0	0	0	0	0	0	0	0	0	0	8
13:15	8	2	0	2	0	0	0	0	0	0	0	0	12
13:30	8	3	1	0	0	0	0	0	0	0	0	0	12
13:45	11	2	2	0	0	0	0	0	0	0	0	0	15
14:00	8	3	2	0	0	0	0	0	0	0	0	0	13
14:15	5	4	0	0	0	0	0	0	0	0	0	0	9
14:30	12	4	1	0	0	0	0	0	0	0	0	0	17
14:45	11	6	0	0	0	0	0	0	0	0	0	0	17
15:00	15	8	0	0	0	0	0	0	0	0	0	0	23
15:15	15	5	1	0	0	0	0	0	0	0	0	0	21
15:30	19	3	0	0	0	0	0	0	0	0	0	0	22
15:45	19	5	0	0	0	0	0	0	0	0	0	0	24
16:00	18	6	0	0	0	0	0	0	0	0	0	0	24
16:15	20	3	0	0	0	0	0	0	0	0	0	0	23
16:30	18	2	0	0	0	0	0	0	0	0	0	0	20
16:45	17	3	0	0	0	0	0	0	0	0	0	0	20
17:00	16	3	0	0	0	0	0	0	0	0	0	0	19
17:15	19	6	0	1	0	0	0	0	0	0	0	0	26
17:30	24	4	0	0	0	0	0	0	0	0	0	0	28
17:45	21	4	1	0	0	0	0	0	0	0	0	0	26
18:00	20	4	3	0	0	0	0	0	0	0	0	0	27
18:15	16	3	1	0	0	0	0	0	0	0	0	0	20
18:30	15	3	0	0	0	0	0	0	0	0	0	0	18
18:45	25	7	1	0	0	0	0	0	0	0	0	0	33
19:00	24	8	1	0	0	0	0	0	0	0	0	0	33
19:15	19	6	0	0	0	0	0	0	0	0	0	0	25
19:30	16	5	2	0	0	0	0	0	0	0	0	0	23
19:45	14	1	2	0	0	0	0	0	0	0	0	0	17
20:00	18	2	0	0	0	0	0	0	0	0	0	0	20
20:15	11	1	0	0	0	0	0	0	0	0	0	0	12
20:30	16	2	0	0	0	0	0	0	0	0	0	0	18
20:45	10	4	0	0	0	0	0	0	0	0	0	0	14
21:00	14	3	0	0	0	0	0	0	0	0	0	0	17

21:15	14	1	0	0	0	0	0	0	0	0	0	0	15
21:30	19	0	0	0	0	0	0	0	0	0	0	0	19
21:45	15	0	0	0	0	0	0	0	0	0	0	0	15
22:00	10	2	0	0	0	0	0	0	0	0	0	0	12
22:15	9	1	0	0	0	0	0	0	0	0	0	0	10
22:30	9	3	1	0	0	0	0	0	0	0	0	0	13
22:45	12	2	0	0	0	0	0	0	0	0	0	0	14
23:00	9	0	2	0	0	0	0	0	0	0	0	0	11
23:15	1	1	0	0	0	0	0	0	0	0	0	0	2
23:30	4	2	0	0	0	0	0	0	0	0	0	0	6
23:45	2	1	0	0	0	0	0	0	0	0	0	0	3
Daily Total	**861**	**206**	**37**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1109**

85th Speed Percentiles (entire report duration)

WB	26	

PROJECT: Joann Leleck Elementary School Replacement

REVIEW TYPE: Mandatory Referral No. MR2024007

APPLICANT: Montgomery County Public Schools

APPLYING FOR: Plan Approval

RECOMMENDATION: Approve parkland impacts associated with the demolition and reconstruction of the Joann Leleck Elementary School property.

Description

Mandatory Referral approval is requested for the Montgomery County Public Schools (MCPS) project to demolish and rebuild the Joann Leleck Elementary School property. This project borders and overlaps Broadacres Local Park in Silver Spring, Maryland. The elementary school is currently over capacity and cannot accommodate the number of students or staff. This project will demolish and rebuild the entire school, including the school building; vehicular loops; play spaces; and the staff and visitor parking lot, part of which is owned by M-NCPPC and on Broadacres Local Park property. This project will improve the parent drop-off loop; the bus loop; and the staff parking lot, increasing the total number of spaces from 65 to 116 and optimizing ADA parking. Additionally, all proposed sidewalks will be also ADA accessible, and there will be increased stormwater management treatment.

Conditions

We recommend that the Board approve this project with the following conditions to MCDOT:

1. Construction plans must be submitted to the M-NCPPC Department of Parks for review as part of the Park Construction Permit process to ensure that all work is performed in accordance with M-NCPPC standard details, specifications, and policies. No work on parkland may occur until an approved Park Construction Permit is issued for the project.
2. Broadacres Local Park must remain open throughout demolition and construction of the elementary school. Maintenance access and public amenities are to remain available to the surrounding community during demolition and construction.
3. MCPS will provide Montgomery Parks with a designated maintenance access into Broadacres Local Park via a curb cut with a 10’ width and a collapsible bollard to regulate vehicular access into the park.
4. Five designated parking spaces must be reserved adjacent to the park entry plaza for access into Broadacres Local Park. There shall be signage installed by MCPS indicating the designation.
5. An agreement shall be finalized to formally codify that MCPS will be responsible for structural and non-structural maintenance for the two stormwater facilities proposed to be constructed on park property.

Parkland Impacts

Parkland and Resource Description

The proposed project impacts parkland as a portion of the elementary school parking lot falls within the Broadacres Local Park property. The elementary school also borders Broadacres Local Park as well as Northwest Branch Stream Valley Unit (SVU) 3; no impacts to Northwest Branch SVU 3 will occur. Land use to the North and West of the project area is parkland, and land use to the East and South is primarily residential, with the project area being zoned Residential-60 (R-60). There is also a private school east of the project area, across Beacon Road.

The project will result in temporary and permanent impacts within the project area. Broadacres Local Park is approximately 10.8 acres and features a variety of recreational amenities, including a hard surface loop trail, playground, two softball fields, one soccer field, and a half-court basketball court.

The Community Equity Index (CEI) is a composite measure of equity-related indicators such as income, economic insecurity, housing stability and wealth building, earning potential, and barriers to inclusivity. The CEI labels the project area as being “highly disproportionate – disadvantaged”. It is imperative for the park to remain open throughout all phases of the project so that all amenities are available to the community. There are limited fields in this highly populated area, and the ones at Broadacres Local Park get heavily used by the community and surrounding schools.

Throughout 2022 and 2023, the two softball fields had a combined permitted usage of 1,207.5 hours; the soccer field had a permitted usage of 628 hours. It is important to note that these numbers only reflect official permitted use, and the fields are utilized much more heavily as a general play space.

Figures 1, 2, and 3: Broadacres Local Park

Parkland Impacts

Parking access to Broadacres Local Park will be impacted throughout the length of the project, as the shared parking lot currently used for park access will be demolished and rebuilt as part of this project. However, Broadacres Local Park will remain open to the public throughout project demolition and construction. This includes access to the playing fields, hard surface trail, and playground.

There are no anticipated tree impacts or removals as part of this project.

Improvements to access at Broadacres Local Park will be made. The newly constructed parking lot will include five parking spaces, designated with signage, specifically for access to Broadacres Local Park; one of the spaces will be ADA-accessible. Having designated parking spaces will increase accessibility and safe access into the park. Additionally, maintenance access will be provided between the parking lot and park to allow for ease of vehicular access. A collapsible bollard will also be installed along the path to ensure only Parks vehicles can utilize the access.

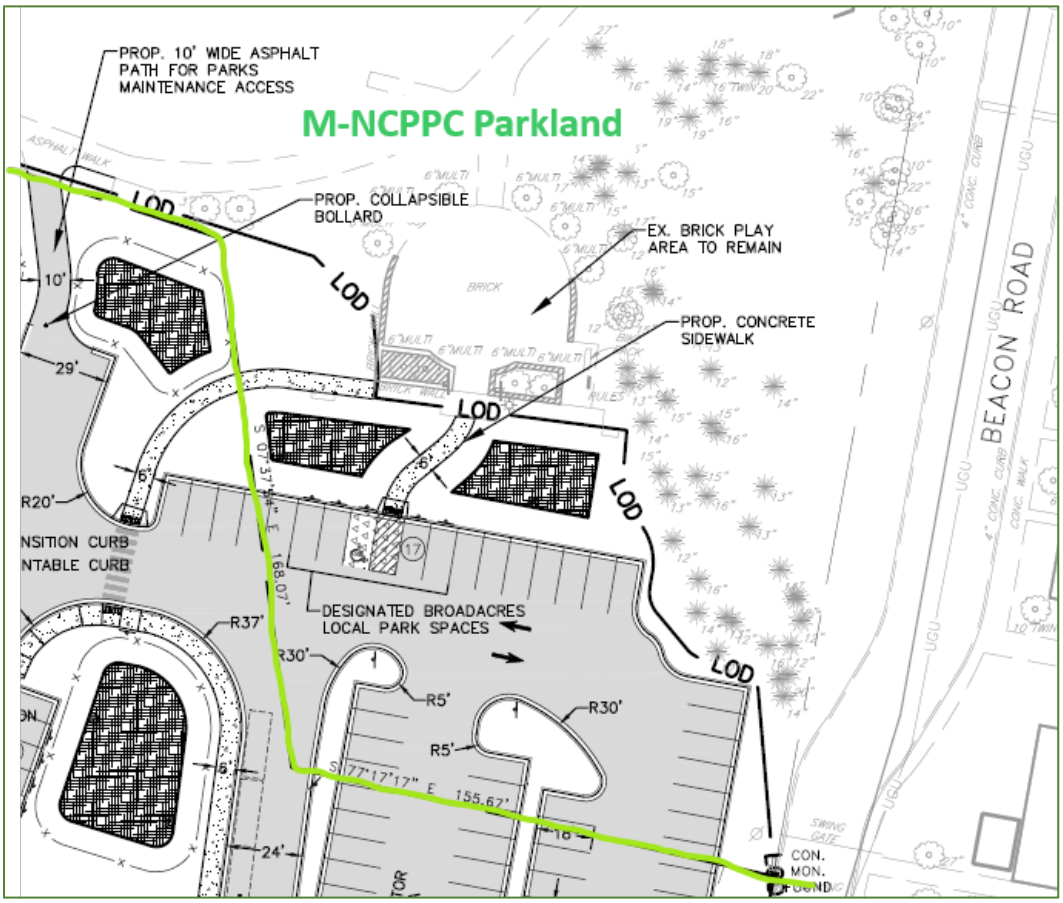


Figure 4: Extent of Project on M-NCPPC Parkland; property boundary shown in green

Park Construction Permit

MCPS will be required to obtain a Park Construction Permit from Montgomery Parks prior to commencement of any construction activities on parkland. Plans submitted for Park Construction Permit review must include existing topography, utilities, and identify and locate all trees (with size and species) larger than 6" DBH and greater within 100 feet of the proposed Limit of Disturbance on park property. During the Park Construction Permit Review, park staff will work with MCPS to minimize impacts to parkland to the greatest extent possible and avoid all critical resources identified.

While no trees are currently proposed to be removed, mitigation will be required if impacts change. Mitigation for impacts to Park trees (with a 6" DBH or greater) damaged or removed, shall either be (1) replacement planting on parkland at a rate of one inch to one inch diameter or (2) a monetary per inch caliper basis at the rate of $100/diameter inch, to be paid to Montgomery Parks prior to the completion of construction.

DEPARTMENT OF TRANSPORTATION

Marc Elrich
County Executive

Christopher R. Conklin
Director

February 23, 2024

Mr. Adam Bossi, Planner III
DownCounty Planning Division
The Maryland-National Capital
Park & Planning Commission (M-NCPPC)
2425 Reedie Drive
Wheaton, Maryland 20902

RE: Mandatory Referral Plan &
Traffic Impact Study Letter
Mandatory Referral No. MR2024007
Joann Leleck Elementary School

Dear Mr. Bossi:

We have completed our review of the Mandatory Referral Plan uploaded to eplans on February 12, 2024, and the Traffic Impact Study (TIS) dated August 2, 2023. Based upon our review, we have the following comments:

Mandatory Referral Plan Comments

1. All Planning Board Opinions relating to this plan or any subsequent revision, project plans or site plans should be submitted to the Montgomery County Department of Permitting Services (MCDPS) in the package for record plats, storm drain, grading or paving plans, or application for access permit. Include this letter and all other correspondence from this department.
2. The existing 15" RCP storm drain, extending along Beacon Road from the southeast corner of the site to the northwest corner of the Beacon Road/Northampton Drive intersection, is undersized. The applicant will be required to replace the existing 15" RCP with 21" RCP from Proposed MH-A1 to Existing Inlet-4, as shown on Sheet 16-Downstream-MR2024007-001. The right-of-way permit needs to include these improvements.
3. At or before the permit stage, submit a completed, executed MCDOT Sight Distances Evaluation certification form, for all existing and proposed site entrances onto County-maintained roads, for MCDPS review and approval.

Traffic Impact Study Comments

General Comment:

1. The study is based upon the 2020-2024 Growth and Infrastructure Policy adopted on November 16, 2020 (Council Resolution #19-655).

Adequacy Determination:

1. The study indicates that the subject development will generate between 242 AM, 119 school PM and 35 PM total peak-hour person trips; therefore, all Adequacy tests are required. The project is located in the Silver Spring/Takoma Park "Orange" Policy Area. The pedestrian and bicycle adequacies are to be evaluated within a 900-foot walkshed, and a minimum of 3 bus shelters with Realtime Information (RTI) display within 1300 feet of the site.

Motor Vehicle System Adequacy

1. The subject development is required to meet the Local Area Transportation Review (LATR) test for motor vehicle system adequacy. The LATR test for the Silver Spring/Takoma Park policy area uses the Highway Capacity Manual (HCM) congestion standard with an average vehicle delay standard of 80 seconds per vehicle.

2. The consultant studied five (5) intersections, including the two site entrances on Beacon Road. The consultant concluded that the total future conditions for these intersections will not exceed the delay standards for Silver Spring/Takoma Park policy area. We concur with the consultant's findings.

3. We defer to MDSHA for any comments on the study intersections maintained by MDSHA.

Pedestrian System Adequacy

1. Pedestrian System Adequacy Test is required since the project will generate 50 or more peak hour person trips. This test consists of pedestrian level of comfort, street lighting and ADA compliance. The site is located in the Orange Policy area and will generate between 200 and 349 peak hour person trips. Therefore, pedestrian adequacy was evaluated within a 900-foot walkshed.

2. Pedestrian Level of Comfort (PLOC): Sidewalks and pathways were evaluated within a 900-foot walkshed. For a site to achieve adequacy, roads classified as primary residential or higher must score either PLOC-2 (somewhat comfortable) or PLOC-1 (very comfortable). The consultant identified deficient PLOC items. However, none of the deficiencies are on roads classified as primary residential or higher.

3. Streetlight Evaluation: The consultant evaluated streetlights within the 900-foot study area and identified segments of deficient spacing between lights.

4. ADA Compliance: The consultant identified non-compliant ramps within the study area in Table 7 and Figure 17.

Bicycle System Adequacy

1. A low Level of Stress (LTS-2) is required to achieve bicycle system adequacy. The consultant identified all existing and planned bike facilities as well as the deficiencies. The applicant presented the Bicycle System Adequacy in Figure 20, and the stress level of all segments are maximum LTS-2.

Transit System Adequacy

1. Based on trip generation, three bus shelters with Realtime Information (RTI) displays are required to be installed within 1300 feet of the project. The consultant identified all existing bus stops within the study area, including three stops with shelters but none with Realtime Information (RTI) display.

Summary

1. We concur with the consultant's conclusion that the motor vehicle delay will not exceed the Silver Spring/Takoma Park "Orange" policy area threshold.

If you have any questions or comments regarding this letter, please contact Mr. William Whelan, our Development Review Team Engineer for this project, at (240) 507-8504 or at william.whelan@montgomerycountymd.gov.

Sincerely,

William Whelan

William Whelan, Engineer III
Development Review
Office of Transportation Policy

SharePoint\teams\DOT\Director's Office\Development Review\WhelanW\MR2024007 Joann Leleck E.S. - MCDOT Plan & TIS Letter 022324.docx

cc: Sharepoint Correspondence folder FY 24

cce:

Kenneth Futch	MCPS
Michael Sanchez	MCPS
Sean Lindaman	Clark Azar
Lexie Refosco	Clark Azar
Katie Mencarini	M-NCPPC
Atiq Panjshiri	MCDPS RWPR
Sam Farhadi	MCDPS RWPR
Mark Terry	MCDOT DTEO
Kadidjatou Ayeva	MCDOT DTEO
Kamal Hamud	MCDOT DTEO
Rebecca Torma	MCDOT OTP

March 8, 2024

Mr. Will Zeid
Gorove Slade Associates, Inc.
4550 Montgomery Avenue, Suite 400
Bethesda, MD, 20814

Dear Mr. Zeid:

Thank you for the opportunity to review the traffic impact study prepared by Gorove Slade, for JoAnn Leleck Elementary School – SHA Tracking #24-ap-mo-002-xx in Montgomery County, Maryland. The State Highway Administration (SHA) review is complete, and we are pleased to respond.

- Increase school size to a 925-student capacity and increasing the staff from 138 to 164.
- The following roads were analyzed under existing, background and future conditions:
    - New Hampshire Avenue (MD 650)
    - Beacon Road
    - Northhampton Drive
    - Southhampton Drive
- The report concludes that the study intersections will continue to operate at acceptable levels of service under future conditions.

Based on the information provided, please address the following comments in a point-by-point response:

Traffic Development and Support Division (TDSD) Comments (By: Obianuju Ani):
We have no further comments to offer, but the applicant should follow through on the programs as stated in the responses.

District 3 Traffic Comments (By: Alvin Powell):
SHA District Traffic 3 note that the existing delays at MD 650 and Southampton Drive are unacceptable during the AM commuter peak, PM school peak, and PM commuter peak. SHA District Traffic 3 also note that the additional trips generated by the proposed development

during the Commuter and School PM peak add to the delays along the eastbound Southampton Drive intersection approach. However, the overall operational impact of the additional trips generated by the proposed development at the intersection is minimal. We therefore offer no further comment at this time.

The SHA concurs with the report findings for this project as currently proposed and will not require the submission of any additional traffic analyses. However, an access permit will be required for all construction within the SHA right of way. Please submit one (1) set of the proposed improvement plans (including a set of hydraulic plans and computations) and all supporting documentation to our online submission page https://mdotsha.force.com/accesspermit. Please reference the SHA tracking number on any future submissions. Please keep in mind that you can view the reviewer and project status via SHA Access Management Division web page at http://www.roads.maryland.gov/pages/amd.aspx. Please note, if this project has not obtained an SHA access permit and begun construction of the required improvements within five (5) years of this approval, extension of the permit shall be subject to the submission of an updated traffic impact analysis in order for SHA to determine whether the proposed improvements remain valid or if additional improvements will be required of the development. If you have any questions, or require additional information, please contact Mr. Kwesi Woodroffe at 301-513-7347, by using our toll free number (in Maryland only) at 1-800-749-0737 (x7347), or via email at KWoodroffe@mdot.maryland.gov.

Sincerely,

3/8/24

for Derek Gunn,
District Engineer, District 3, SHA

DG/ts

cc: Alvin Powell, SHA – District 3 Traffic
Obianuju Ani, SHA – TDSD
Katie Mencarini, katherine.mencarini@montgomeryplanning.org

From: Farhadi, Sam <Sam.Farhadi@montgomerycountymd.gov>
Sent: Tuesday, February 13, 2024 1:03 PM
To: Bossi, Adam <Adam.Bossi@montgomeryplanning.org>
Cc: Somarajan, Deepak <Deepak.Somarajan@montgomerycountymd.gov>
Subject: RE: Joann Leleck Elementary School MR - final review cycle

Hi Adam,

As mentioned in our meeting I defer to MCDOT on this.

Sam

Sam Farhadi, P.E.
Right of Way Plan Review Section
Land Development Division
2425 Reedie Drive, 7th Floor
Wheaton, Maryland 20902
Tel: 240 777-6333

DEPARTMENT OF PERMITTING SERVICES

Marc Elrich
County Executive

Rabbiah Sabbakhan
Director

March 5, 2024

Mr. Jason Azar, P.E
Clark Azar & Associates
20440 Century Blvd, Suite 220
Germantown, MD 20874

Re: **COMBINED STORMWATER MANAGEMENT CONCEPT/*SITE DEVELOPMENT STORMWATER MANAGEMENT PLAN*** for
Joann Leleck Elementary School
Preliminary Plan #: N/A
SM File #: 290010
Tract Size/Zone: 6.15 ac.
Total Concept Area: 6.72 ac.
Lots/Block: N/A
Parcel(s): P115, P047, P100
Watershed: NWB
Redevelopment (Yes/No): Yes

Dear Mr. Azar:

Based on a review by the Department of Permitting Services Review Staff, the stormwater management concept for the above-mentioned site is **acceptable**. The plan proposes to meet Environmental Site Design (ESD) to the Maximum Extent Practicable (MEP) via the use of micro-bioretention and proposes structural treatment via modular wetland system with upstream storage. Full stormwater management compliance for the project could not be provided due to micro-bioretention areas "A", "B", and "C" being removed from the design in accordance with the Montgomery County Planning Department's desire to create a Forest Conservation Easement to preserve priority trees and to provide the required vegetative screening from the neighboring residential community. The removal of these facilities results in a request for a partial stormwater management waiver. A partial stormwater management waiver is hereby granted.

The following items will need to be addressed during the detailed sediment control/stormwater management plan stage:

1. A detailed review of the stormwater management computations will occur at the time of detailed plan review.

2. An engineered sediment control plan must be submitted for this project.

3. All filtration media for manufactured best management practices, whether for new development or redevelopment, must consist of MDE approved material.

4. Because the existing public storm drain system has inadequate capacity to convey the developed runoff from this project, the applicant must install improvements to the existing public storm drain

system in order to provide adequate conveyance of storm flow. These improvements must be constructed prior to commencement of work on the subject property.

This list may not be all-inclusive and may change based on available information at the time.

Payment of a stormwater management contribution in accordance with Section 2 of the Stormwater Management Regulation 4-90 **is required**.

This letter must appear on the sediment control/stormwater management plan at its initial submittal. The concept approval is based on all stormwater management structures being located outside of the Public Utility Easement, the Public Improvement Easement, and the Public Right of Way unless specifically approved on the concept plan. Any divergence from the information provided to this office; or additional information received during the development process; or a change in an applicable Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to reevaluate the site for additional or amended stormwater management requirements. If there are subsequent additions or modifications to the development, a separate concept request shall be required.

If you have any questions regarding these actions, please feel free to contact Pat Fitzgerald at 240-777-6362.

Sincerely,

Mark Etheridge

Mark Etheridge, Manager
Water Resources Section
Division of Land Development Services

cc: Neil Braunstein
SM File # 290010

ESD: Required/Provided 34,887 cf / 16,149 cf
PE: Target/Achieved: 2.20"/1.02"
STRUCTURAL: 10,378 cf
WAIVED: 8,360 cf.

From: Brian Jordan <bjordan@stcamilluschurch.org>
Sent: Saturday, February 24, 2024 9:31 AM
To: Bossi, Adam <Adam.Bossi@montgomeryplanning.org>; Futch, Kenneth R <Kenneth_R_Futch@mcpsmd.org>
Subject: Re: Joann Leleck - St. Camillus site meeting follow up

Thank you Adam and Ken,

Ken, can you (or a representative of MCPS) please join us for a Town Hall meeting on Tuesday, March 5 at 7 pm?
The meeting will be held in the school building adjacent to JoAnn Leleck Elementary School.
It is the St. Camillus Parish Auditorium on 1500 St. Camillus Drive, Silver Spring, Md. 20903.

The purpose is to inform parishioners and nearby residents about the impact of the demolition of the school and its impact on the local community while constructing a new school building and property. MCPS' participation in this Town Hall meeting would be most welcome and informative.

Thank you for your consideration of this invitation.

All the best,

Father Brian Jordan, OFM, Pastor
St. Camillus Church
Canonical Administrator, St. Francis International School

On Fri, Feb 23, 2024 at 3:42 PM Bossi, Adam <Adam.Bossi@montgomeryplanning.org> wrote:
Hi Father Brian,

Thank you for the invitation but my planning colleagues and I will have to decline. I suggest reaching out to MCPS to request a representative from their team attend the meeting at St. Camillus. MCPS can speak to their proposal holistically and is the organization that can best answer the spectrum of questions and concerns likely to be posed.

Ken Futch is MCPS' manager for the Joann Leleck Elementary School redevelopment project and is my point of contact on the Mandatory Referral application. He may be able to assist with the community meeting and is copied on this message. Ken's phone number is below as well.

Kenneth Futch

Project Manager
MCPS – Division of Design and Construction
Office: (240) 314 – 1000
Direct: (240) 740 – 7734

Best,

Adam

Adam Bossi
Planner III, Downcounty Planning Division
Montgomery County Planning Department
2425 Reedie Drive, Wheaton, MD 20902
adam.bossi@montgomeryplanning.org
o: 301 495 4529

WE'VE MOVED!
THE NEW PARK AND PLANNING HEADQUARTERS IS NOW LOCATED AT
2425 REEDIE DRIVE, WHEATON, MD 20902

From: Brian Jordan <bjordan@stcamilluschurch.org>
Sent: Friday, February 23, 2024 1:35 PM
To: Bossi, Adam <Adam.Bossi@montgomeryplanning.org>
Cc: Dickel, Stephanie <Stephanie.Dickel@montgomeryplanning.org>; Zelaya, Ariel <Ariel.Zelaya@montgomeryplanning.org>
Subject: Re: Joann Leleck - St. Camillus site meeting follow up

Thank you Adam, Stephanie and Ariel,

Greetings!
Our parish and local residents are having a Town Hall meeting about this elementary school and its impact on our local community.
I would love me to invite all of you (or at least one of you) to join us and see how we can partner together towards this school construction project.
The date is Tuesday, March 5 at 7 pm in the Camillia Room which is part of our school building on 1500 St. Camillus Drive, Silver Spring.
You are invited to address the community and answer some questions if you like.
This is a fact finding meeting not an adversarial gathering. We all want the best of our children.
The majority of our parishioners' children attend public school and others attend our local parochial school.

Thank you so much for including us in these discussions!

Father Brian

On Fri, Feb 23, 2024 at 1:25 PM Bossi, Adam <Adam.Bossi@montgomeryplanning.org> wrote:
Father Brian,

My apologies. I found my message that was to be sent to you about a month ago stuck in my email outbox. The message was in follow up to our meeting on Beacon Road on January 31 regarding the Joann Leleck Elementary School Mandatory Referral application. While I'm disappointed this message is delayed in getting to you, I am pleased to have been able to update my response based on MCPS final application materials submitted since we last spoke. Thank you again for taking the time to meet with Ariel and I, and in follow up:

Application materials and plans:

- All the application materials for the Mandatory Referral are available online through the Planning Department's Development Activity Information Center (DAIC). The link below will take you directly to the list of application files.
  MR 2024007 – Joann Leleck Elementary School at Broad Acres

- We are also concurrently reviewing the Forest Conservation Plan for the school redevelopment proposal. Those files are linked here:
  F20240370 - Joann Leleck Elementary School

Mandatory Referral process:

- The Mandatory Referral Review standards document, linked here, is a 9-page document that outlines the process we're now working through with MCPS and their project team. This application will be reviewed by the Planning Board and is following a 60-day review timeline. It is currently scheduled to be discussed at a public hearing of the Planning Board on Thursday, March 21. Our staff report, which provides analysis about the proposal's conformance with the Zoning Ordinance will be available online on March 11. Also starting on March 11, you can sign up to testify (in person, by phone, or virtual meeting) at the Planning Board hearing on the matter, and/or submit written testimony directly to the Board members. The hearing agenda and more information on how to sign up as a speaker or submit written testimony is available on the Planning Board's website, linked here.

Construction schedule:

- The application provides the following construction schedule:

Work is to be completed from Summer 2024 to Summer 2026.

  - June – October 2024: Building demolition.
  - October 2024 – July 2025: Site work and foundations
  - July 2025 – August 2025: Framing
  - August 2025 – July 2026: Interior Outfit

Environmental concerns during construction:

- Potentially hazardous materials and control of dust, debris, fumes, etc., during construction – these matters are generally regulated by Maryland Department of the Environment and County Department of Permitting Services. Those agencies should be able to provide further information.

Parking at the new school and parent pickup/drop off queuing:

- The new school parking lot will have spaces for 116 cars. The existing lot has about 69 spaces, so the new lot will have 47 more spaces than the existing one. The new parking arrangement includes space for about a dozen cars to queue curbside near the new school building. There's enough space for about another 23 cars to queue in the drive isle of the parking lot. So, there will be enough space for about 35 cars to queue in the parking lot for pick up/drop off. The existing parking lot has total queuing space for about 31 cars. The overall circulation pattern of the parking lot will be improved as well, so in theory pickup/drop off should be more efficient from a car being able to move around more easily standpoint.

Project funding & labor sourcing

- Other than disclosing the general funding source for the project, in this case MCPS' capital improvement budget, no additional information is provided on these topics.

Existing drainage issue adjacent to Broad Acres Local Park basketball court

- Under separate emails, I connected you with Henry Coppola at the Parks Department and hope he has connected you with whomever at Parks may be able to assist with the drainage concern you pointed out at the corner of Broadacres Local Park and St. Camillus property.

I hope this information is still helpful and again, if I can be of further assistance, please don't hesitate to reach out again.

Adam

Montgomery Planning

Adam Bossi
Planner III, Downcounty Planning Division
Montgomery County Planning Department
2425 Reedie Drive, Wheaton, MD 20902
adam.bossi@montgomeryplanning.org
o: 301 495 4529

WE'VE MOVED!
THE NEW PARK AND PLANNING HEADQUARTERS IS NOW LOCATED AT
2425 REEDIE DRIVE, WHEATON, MD 20902

From: Brian Jordan <bjordan@stcamilluschurch.org>
Sent: Friday, February 2, 2024 11:32 AM
To: Coppola, Henry <henry.coppola@montgomeryparks.org>
Cc: Bossi, Adam <Adam.Bossi@montgomeryplanning.org>; Dickel, Stephanie <Stephanie.Dickel@montgomeryplanning.org>; McLane, Magdelyn <Magdelyn.McLane@montgomeryparks.org>; Zelaya, Ariel <Ariel.Zelaya@montgomeryplanning.org>
Subject: Re: JoAnn Leleck Elementary School Building Project - Parks drains

Dear Adam, Stephanie and Henry.
First of all, I am extremely grateful to Stephanie for sending Adam and Ariel for an on-site visit to our parish on Wednesday. Both gentlemen were courteous, professional, knowledgeable, pleasant and very helpful.

Second, I really appreciate your kind offer Henry to help us tegarding the drainage pipes that go from the park property of the soccer field into our parish parking lot and Beacon Road property.

Overall, I am quite pleased and impressed with Adam and Ariel's visit and their offer to follow through with Henry. You all deliver better than Domino's!

Thank you ever so much!

Father Brian

On Fri, Feb 2, 2024 at 8:37 AM Coppola, Henry <henry.coppola@montgomeryparks.org> wrote:
Hi Father Brian (Thanks Adam),

As Adam mentioned Maggie and I are going to make sure the right folks here at Parks are aware of the drainage issues and should be in touch soon to follow up.

Thanks!
henry

Henry Coppola
Long Range Planning Supervisor, Park Planning & Stewardship Division
Montgomery Parks | The Maryland-National Capital Park and Planning Commission
Cell: 240.753.4496
2425 Reedie Drive | Wheaton, MD 20902
MontgomeryParks.org

@MontgomeryParks

From: Bossi, Adam <Adam.Bossi@montgomeryplanning.org>
Sent: Thursday, February 1, 2024 4:48 PM
To: Brian Jordan <bjordan@stcamilluschurch.org>
Cc: Coppola, Henry <henry.coppola@montgomeryparks.org>; McLane, Magdelyn <Magdelyn.McLane@montgomeryparks.org>; Dickel, Stephanie <Stephanie.Dickel@montgomeryplanning.org>; Zelaya, Ariel <Ariel.Zelaya@montgomeryplanning.org>
Subject: RE: JoAnn Leleck Elementary School Building Project - Parks drains

Hi Father Brain,

Thanks again for taking the time to meet with Ariel and I yesterday to talk through concerns you have with the Joan Leleck Elementary School redevelopment proposal/Mandatory Referral application. I'm gathering some additional information to respond to your questions and plan to have that to you tomorrow.

This email is to follow up on the drainage issue you pointed out associated with what appears to be two drain outlet pipes that are flowing into the parking lot adjacent to the St. Francis school building. This issue appears unrelated to the school building proposal but I'm glad you pointed it out to us.

I had the opportunity to speak with Henry and Maggie at Montgomery Parks about the drainage issue today in some detail and shared a couple pictures of the area. They are my contacts with Parks on zoning/development review cases and are copied on this message. They don't work on fixing pipes or the like, but kindly agreed to track down the appropriate person at Parks to put you in contact with to continue that discussion.

Adam

Montgomery Planning

Adam Bossi
Planner III, Downcounty Planning Division
Montgomery County Planning Department
2425 Reedie Drive, Wheaton, MD 20902
adam.bossi@montgomeryplanning.org
o: 301 495 4529

WE'VE MOVED!
THE NEW PARK AND PLANNING HEADQUARTERS IS NOW LOCATED AT
2425 REEDIE DRIVE, WHEATON, MD 20902

From: Brian Jordan <bjordan@stcamilluschurch.org>
Sent: Monday, January 29, 2024 7:55 PM
To: Bossi, Adam <Adam.Bossi@montgomeryplanning.org>
Cc: Dickel, Stephanie <Stephanie.Dickel@montgomeryplanning.org>; Zelaya, Ariel <Ariel.Zelaya@montgomeryplanning.org>
Subject: Re: JoAnn Leleck Elementary School Building Project

Thank you Adam, Stephanie and Ariel!

I would be happy to meet with you on Wednesday, January 31 at 1:30 pm here at St. Camillus Church. As you know, the majority of our parishioners' children attend public school and a certain number attend our St. Francis International Regional School.

My office phone is attached to my cellphone and that number is 1-301-434-8400 ext. 501.

Looking forward in seeing you all!

Father Brian Jordan, OFM, Pastor

On Mon, Jan 29, 2024 at 3:10 PM Bossi, Adam <Adam.Bossi@montgomeryplanning.org> wrote:
Good afternoon Brian,

Stephanie forwarded me your message below. The Joann Leleck Elementary School Mandatory Referral application was accepted for review by the Planning Department late last week. I'll be coordinating the review for the Department and wanted to take the opportunity to reach out and (virtually) introduce myself and provide you with links to application files. Our overall review timeline for the application is 60 days, and we're targeting bringing a recommendation to the Planning Board for their March 21st public hearing.

You can find the plans and application documents on the Department's Development Activity Information Center (DAIC) online here:

Link to the mandatory referral application files.

Link to the associated forest conservation plan files.

I'd appreciate the opportunity to speak with you about questions or concerns you, or members of the St. Camillus church / St. Francis school community may have. I'd be happy to set up a time to do so in person or virtually, whatever is most convenient for you. This week I currently have availability tomorrow between 10am – 2pm, Wednesday 10am-4pm, Thursday 12-4pm, or Friday 10am-2pm. Is there a time or two during these windows that may work for a meeting/call with you? If not, how about next week?

I've copied Stephanie on this message to keep her in the loop, and included another teammate, Ariel, on the message as well. He's leading the review of the associated forest conservation plan.
I look forward to discussing the proposal with you and talking through any questions you have soon.
Thanks.

Adam

Montgomery Planning

Adam Bossi
Planner III, Downcounty Planning Division
Montgomery County Planning Department
2425 Reedie Drive, Wheaton, MD 20902
adam.bossi@montgomeryplanning.org
o: 301 495 4529

From: Brian Jordan <bjordan@stcamilluschurch.org>
Sent: Monday, December 4, 2023 4:59 PM
To: Dickel, Stephanie <Stephanie.Dickel@montgomeryplanning.org>
Subject: JoAnn Leleck Elementary School Building Project

Good afternoon Ms. Dickel,

May I introduce myself as Father Brian Jordan, OFM, the pastor of both St. Camillus Church and St. Francis International School which are both directly across JoAnn Leleck Elementary School in Silver Spring.

I have been informed by key county officials
that JoAnn Leleck Elementary School is scheduled for demolition in August, 2024 and to be completely rebuilt by August, 2026.
Since most of my parishioner's children attend public school, I am glad for all who will benefit from the new school building that will be attended by nearly 900 children. That is wonderful news.

However, I am concerned how this building project will impact our St. Francis International School and our senior-assisted community called Victory Crossing which is across from JoAnn Leleck Elemetary School.

I a wondering if we could meet sometime soon in person and discuss this two year building project.

Thank you kindly,

Father Brian Jordan, OFM.
St. Camillus Church and St. Francis International
School, Silver Spring, Md.

My cell number is 917-566-5214

The Maryland-National Capital Park and Planning Commission
PRINCE GEORGE'S COUNTY
Planning Department
1616 McCormick Drive, Largo, MD 20774 • pgplanning.org • Maryland Relay 7-1-1

March 5, 2024

Ms. Katherine Mencarini, Planner III
Montgomery County Planning Department
2425 Reedie Drive, 13th floor,
Wheaton, MD 20902

RE: Local Area Transportation Review (LATR)
JoAnn Leleck Elementary School Mandatory Referral
Review of Transportation Impact Study (TIS)

Dear Ms. Mencarini,

Thank you for including the Transportation Planning Section (TPS) in the review of the Mandatory Referral for the JoAnn Leleck Elementary School. The project proposes to replace the existing elementary school with a new elementary school facility.

As requested, TPS participated in the Local Area Transportation Review (LATR) process by participating in the scoping of the project as well as reviewing the Transportation Impact Study (TIS) submitted for the JoAnn Leleck Elementary School. The school is located at 710 Beacon Road in Silver Spring, Maryland. While all of the intersections examined for the study are within Montgomery County, TPS staff still reviewed the materials and did not have comments on the submitted study.

Thank you again for the opportunity for staff to collaborate on this project and we look forward to working with you again.

Sincerely,

CSHancock

Crystal Saunders Hancock
Acting Transportation Supervisor

Department of Permitting Services
Fire Department Access and Water Supply Comments

DATE: 02-Jan-24

TO: Sean Lindaman - slindaman@clarkazar.com
Clark | Azar & Ass

FROM: Marie LaBaw

RE: Joann Leleck
710 Beacon Road

PLAN APPROVED

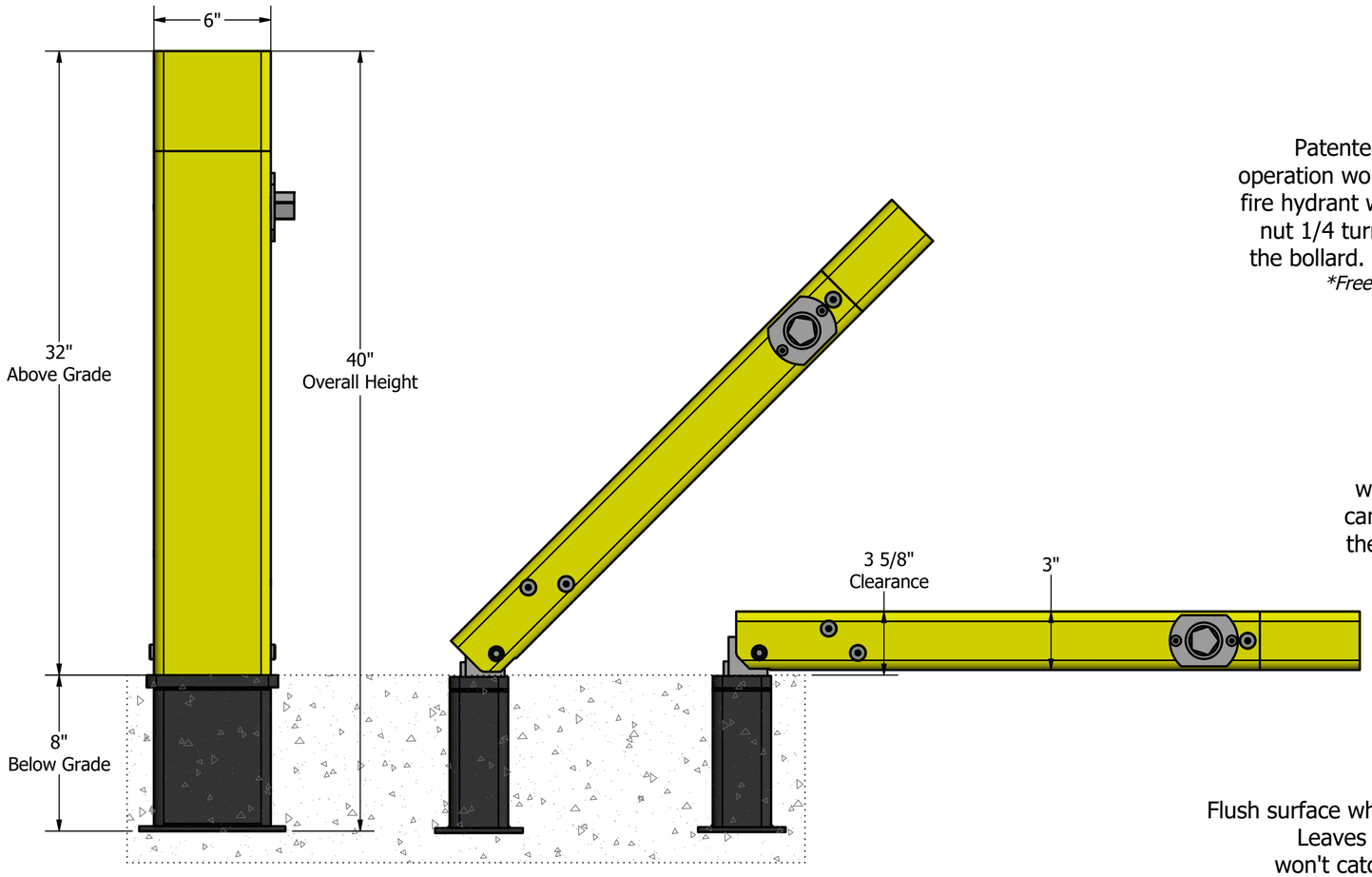
1. Review based only upon information contained on the plan submitted **26-Dec-23** .Review and approval does not cover unsatisfactory installation resulting from errors, omissions, or failure to clearly indicate conditions on this plan.

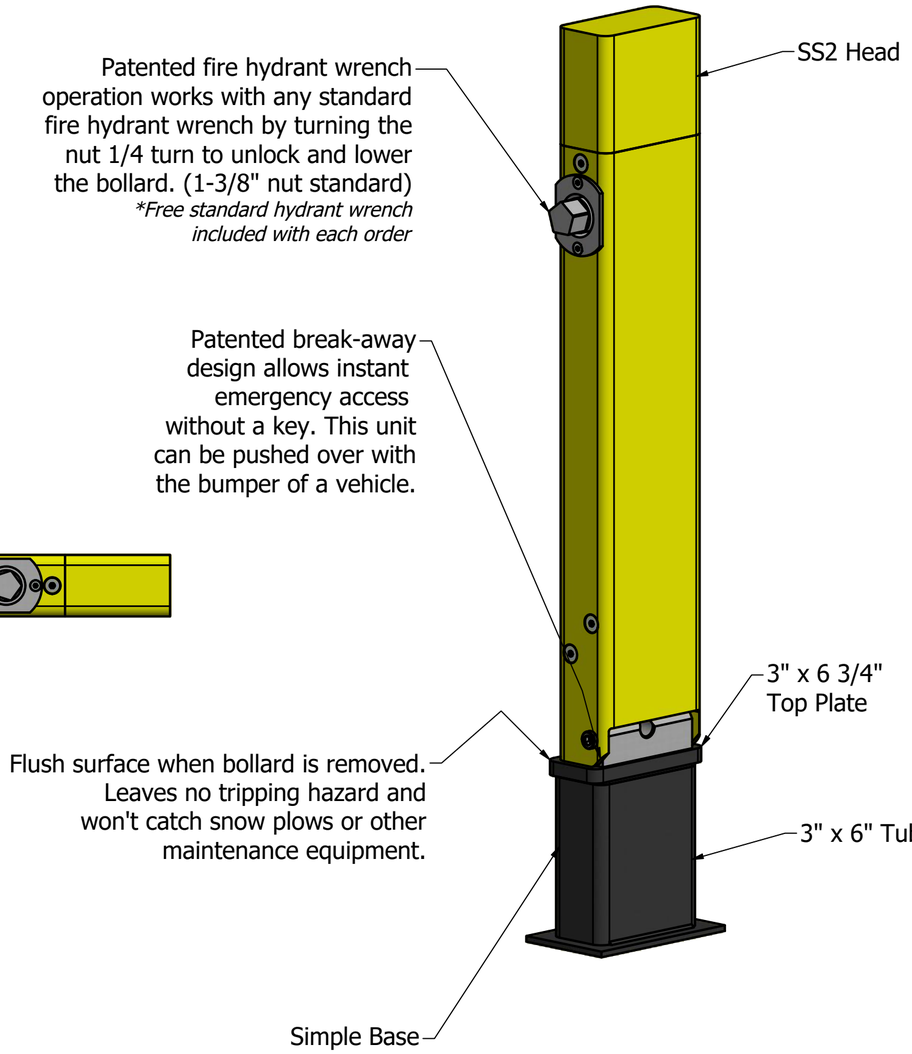
2. Correction of unsatisfactory installation will be required upon inspection and service of notice of violation to a party responsible for the property.

MaxiForce Collapsible Bollard

Standard Body, Wrench Operated, Standard Style 2 Head, Simple Base

AHJ approved in many cities / counties / campuses for use in fire lanes per International Fire Code (IFC) 503





- Low Maintenance / Durable steel construction
- One year warranty / Protected by $1,000,000 in liability insurance
- No complex assembly required in the field
- Custom sizes, options, colors and finishes available upon request
- Finish options available (add code to the end of the model number)
  - Powder coated (PC)
  - Powder coated with DRYZINC primer (PCZ)
  - Hot dip galvanized (G)
  - Hot dip galvanized & powder coated (GPC)
- Reflective tape available upon request

Bollard Assy. Weight	Base Weight
55 lbs	14 lbs
Drawing Rev.	Created
2	11/27/2020

MaxiForce
7560 Main Street
Sykesville, MD 21784
tel: +1 (410) 552 9888
sales@maxiforcebollards.com
www.maxiforcebollards.com

MCSW-SS2-S

C	DO NOT SCALE DRAWING	SHEET 1 OF 1

MaxiForce

Collapsible Bollards

GUIDE SPECIFICATIONS IN PDF FORMAT • SECTION 129301 (02871)
MAXIFORCEBOLLARDS.COM • BLUE EMBER TECHNOLOGIES, LLC.

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Collapsible bollards and base (ground sleeve) units for traffic control.

1.2 SUBMITTALS

A. Product Data: Submit manufacturer's product literature, including color charts and installation details.
B. USGBC LEED Materials and Resources Credit MR 4 - Recycled Content: For projects seeking LEED certification, submit manufacturer's documentation of recycled content for steel for products provided under this specification section.
C. Buy American Requirements: For projects subject to Buy American 49 CFR Part 661 requirements, submit manufacturer's documentation that iron, steel, and manufactured products provided under this specification section are produced in the United States.
D. ARRA Requirements: For projects subject to the US American Recovery and Reinvestment Act (ARRA), submit manufacturer's documentation that products provided under this specification section are produced in the United States.

1.3 QUALITY ASSURANCE

A. Performance: Bollard shall collapse down to not more than 3-5/8 inches above finished ground surface.
B. Manufacturer: Bollard units of all types must be supplied by a single manufacturer having the resources to provide consistent quality in appearance and physical properties.
C. Materials: Steel shall be US domestic mill certified steel. The main body of the product must be constructed from ASTM A500 steel and be accompanied with steel mill certifications/test reports for the steel being used to ensure the durability and performance of the product. Secondary and non-ASTM steel may not be substituted.

1.4 DELIVERY, STORAGE AND HANDLING

A. Package units appropriately to protect finish. Inspect materials to ensure that specified materials have been received.
B. Store units to avoid damage from moisture, abrasion, and other construction activities.

PART 2 - PRODUCTS

2.1 MANUFACTURER

A. Acceptable Manufacturer: Blue Ember Technologies, LLC MaxiForce Bollards line of products, Sykesville, MD 21784, Tel 410-552-9888, Fax 410-552-9939, Website: http://www.maxiforcebollards.com

2.2 COLLAPSIBLE BOLLARDS

A. Collapsible Bollards: Provide MaxiForce Collapsible Bollards by Blue Ember Technologies.
    1. Head Style: Removable and interchangeable.
        a. SS1 - Standard Style 1 Head.
        b. SS2 - Standard Style 2 Head.
        c. SS3 - Standard Style 3 Head.
    2. Base Type: As required for installation.
        a. U - Universal Base.
        b. S - Simple Base.
        c. EZ - Easy Base, with rebar.
    3. Wrench Operated Unit (without padlock operation): Unit released by applying torque to a fire hydrant type nut releasing the locking mechanism allowing the bollard unit to be removed. Bollard may be returned to its original locked position without the use of any tools or other devices.

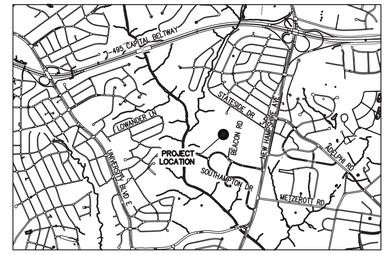
a. Hydrant Nut Type: P-180 Standard 5-sided AWWA Hydrant Nut with a 1-3/8 inch face (standard).
b. Hydrant Nut Type: P-181 Standard 5-sided AWWA Hydrant Nut with a 1-1/8 inch face.
c. Hydrant Nut Type: P-182 3-sided Philadelphia Style triangular Hydrant Nut.
d. Hydrant Nut Type: P-183 4-sided Kennedy Square Hydrant Nut.

4. Padlock Operated Unit (without wrench operation): Unlock and remove the padlock then remove the locking bolt/pin to allow the bollard to pivot and lie down. Reverse the sequence to return bollard to its original and locked position.
   a. P-185 Standard 1-sided Locking Bolt for use with 1 padlock (standard).
   b. P-186 2-sided Locking Pin for use with 2 padlocks.
5. Breakaway Feature (Standard): Bollard unit will shear off from the base when pushed on by a vehicle at low speeds. Bollard may be reused by replacing the inserts and re-bolting to the base. The bollard unit will break away when impacted at any angle without causing operational damage to the bollard body, head, or base.
   a. P-145 Standard Aluminum (standard).
   b. P-150 Heavy Duty Aluminum (medium resistance).
   c. P-151 Steel (high resistance).
6. Non Breakaway Feature (Option): When impacted, the Bollard unit will not shear off without damage occurring to the unit due to use of a non-breakaway insert.
   a. P-152 Non Breakaway.
7. Emergency Operation: The collapsible units that contain break-away inserts may be pushed over by a vehicle during circumstances that require emergency access. A unit is pushed over by slowly easing a vehicle's bumper to contact the bollard body and then slowly and steadily easing the vehicle through the bollard until the unit breaks away from the base and collapses to the ground. The unit is set back into place by replacing two release inserts.
8. Materials: Free from surface blemishes and defects where exposed to view in the finished installation.
   a. Steel Plate: A36; ASTM A36/A36M.
   b. Steel Tube: A500; ASTM A500.
   c. Fasteners: Series 300 Stainless Steel.
9. Finish: Factory applied after surface imperfections removed and exposed faces of welded joints dressed smooth.
   a. Powder Coat Finish (Standard): Factory applied TIGER Drylac Powder Coatings Essentials Chart color or equivalent.
   b. Powder Coat Finish (Option): DRYZINC zinc rich undercoated primer and factory applied TIGER Drylac Powder Coatings Essentials Chart color or equivalent.
   c. Galvanizing (Option): Hot Dipped galvanized.
   d. Galvanizing and Powder Coat Finish (Option): Hot Dipped galvanized and powder coated.
   e. Base (Ground Sleeve) Units: Powder coated with a black textured powder coating to help reduce slippery surfaces when the bollard units are removed.
   f. Factory Applied Reflective Tape (Option): Manufacturer's standard tape, color, size and configuration unless custom application is required.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Comply with manufacturer's recommendations for installation and approved submittals and the following:
   1. Install bollards level and true and in proper relation to adjacent surfaces.
   2. Install base units with top plate flush with the finished surface to avoid tripping hazard. This method does not apply to epoxy-installed EZ base.
   3. Secure bollard to base unit after the base is leveled and cured.
   4. Test for proper operation and adjust if necessary.
B. Protect bollards from damage during construction operations.



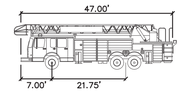
VICINITY MAP
SCALE: 1" = 2000'

GENERAL NOTES:

1. SIGNS TO BE CONSISTENT WITH THE MONTGOMERY COUNTY FIRE AND RESCUE (MCFR) GUIDELINES.
2. FIRE LANE SIGNS TO BE 12" WIDE BY 18" HIGH
3. ZONING: R-60
4. TAX MAP: KP-121
5. PARCEL: P115, P100, P47
6. TOTAL PROPERTY AREA: 6.15 A
7. WSSC 200' SHEET: 211NE02
8. BOUNDARY AND TOPOGRAPHIC SURVEY INFORMATION PROVIDED BY POTOMAC VALLEY SURVEYORS DATED APRIL 2023.

FIRE ACCESS LEGEND

- 150' — FIRE ACCESS PATH
- 150' — FIRE HYDRANT ACCESS PATH
- FDC — FIRE DEPARTMENT CONNECTION
- FH — FIRE HYDRANT
- FIRE LANE SIGN
- DIRECTION OF TRAFFIC
- FIRE TRUCK DRIVE PATH



AT729 – MCFR FIRE TRUCK

WIDTH	: 8.00 FEET
TRACK	: 8.00 FEET
LOCK TO LOCK TIME	: 6.0 SECONDS
STEERING ANGLE	: 33.2 DEGREES

TURNING TEMPLATE NOTE:
TRUCK IS DRIVEN AT SPEED

FORWARD SPEED: 5 MPH
REVERSE SPEED: 2.5 MPH

FIRE CODE ENFORCEMENT

Fire Department Access Review

Review based only upon information contained on this plan. Does not cover unsatisfactory layout resulting from ommissions, errors or failure to clearly indicate conditions on this plan. Correction of such unsatisfactory layout to afford required access will be required if found upon inspection after installation

BY: SJAC FM: 43 DATE: 1/2/2024

Product Kit		Specifications	
Line:	Collapsibles	Height:	32" (81.28 cm)
Model:	MCSW-SS2-S	Ground Clearance:	3.625" (9.2075 cm)
		Bollard Weight:	55 lbs (25 kg)
Operation:	Wrench	Base Weight:	14 lbs (6.35 kg)
		Assembly Weight:	69 lbs (31.37 kg)
Head Style:	Std. Style 2	Body Pipe Size:	3"x6"
Body Style:	Std. Rectangular		
Base Style:	Simple		

NOTE:
1. MAXIFORCE'S COLLAPSIBLE STANDARD STYLE WRENCH OPERATED BOLLARD (MODEL MCSW-SS2-S) (OR APPROVED ALTERNATIVE)

1 COLLAPSIBLE WRENCH OPERATED BOLLARD
NOT TO SCALE

CRAIG GAULDEN DAVIS
Architecture
19 Washington Park
Greenville, SC 29601
Phone 864.242.0761
Fax 864.501.9945
E-mail cgd@cgdarch.com

STATE OF MARYLAND JASON A. CLARK 21677 REGISTERED PROFESSIONAL ENGINEER
12/1/23

PROFESSIONAL CERTIFICATION: I CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 31168
EXPIRATION DATE: 01/12/2025

CONSULTANT

CLARK | AZAR & ASSOCIATES
20440 Century Blvd, Suite 220
Germantown, MD. 20874
T(301) 528-2010
www.clarkazar.com
A Woman Owned Small Business

Montgomery County Public Schools

Maryland's Largest School District
MONTGOMERY COUNTY PUBLIC SCHOOLS
Expanding Opportunity and Unleashing Potential

45 W. GUDE DRIVE
ROCKVILLE, MD 20850

Joann Leleck Elementary School at Broad Acres

710 BEACON RD, SILVER SPRING, MD 20903

DATE	MARK	DESCRIPTION

FOR REVIEW
NOT FOR CONSTRUCTION

MANDATORY REFERRAL: MR2024007
TAX MAP GRID: KP121
WSSC GRID: 211NE02

ISSUE:	MANDATORY REFERRAL
DATE:	12/1/2023
PROJECT NO:	21086
DRAWN BY:	LR
CHECKED BY:	JA

FIRE ACCESS PLAN

C-700

JOANN LELECK ES_detached.rvt
8/7/2023 8:54:39 AM

F E D C B A
7 6 5 4 3 2 1