

# Safe Routes to School Assessment

Rock Creek Forest Elementary School  
Rosemary Hills Elementary School



June 2024

# Schools

- Rock Creek Forest Elementary School
  - 8330 Grubb Road, Chevy Chase, MD
- Rosemary Hills Elementary School
  - 2111 Porter Road, Silver Spring, MD







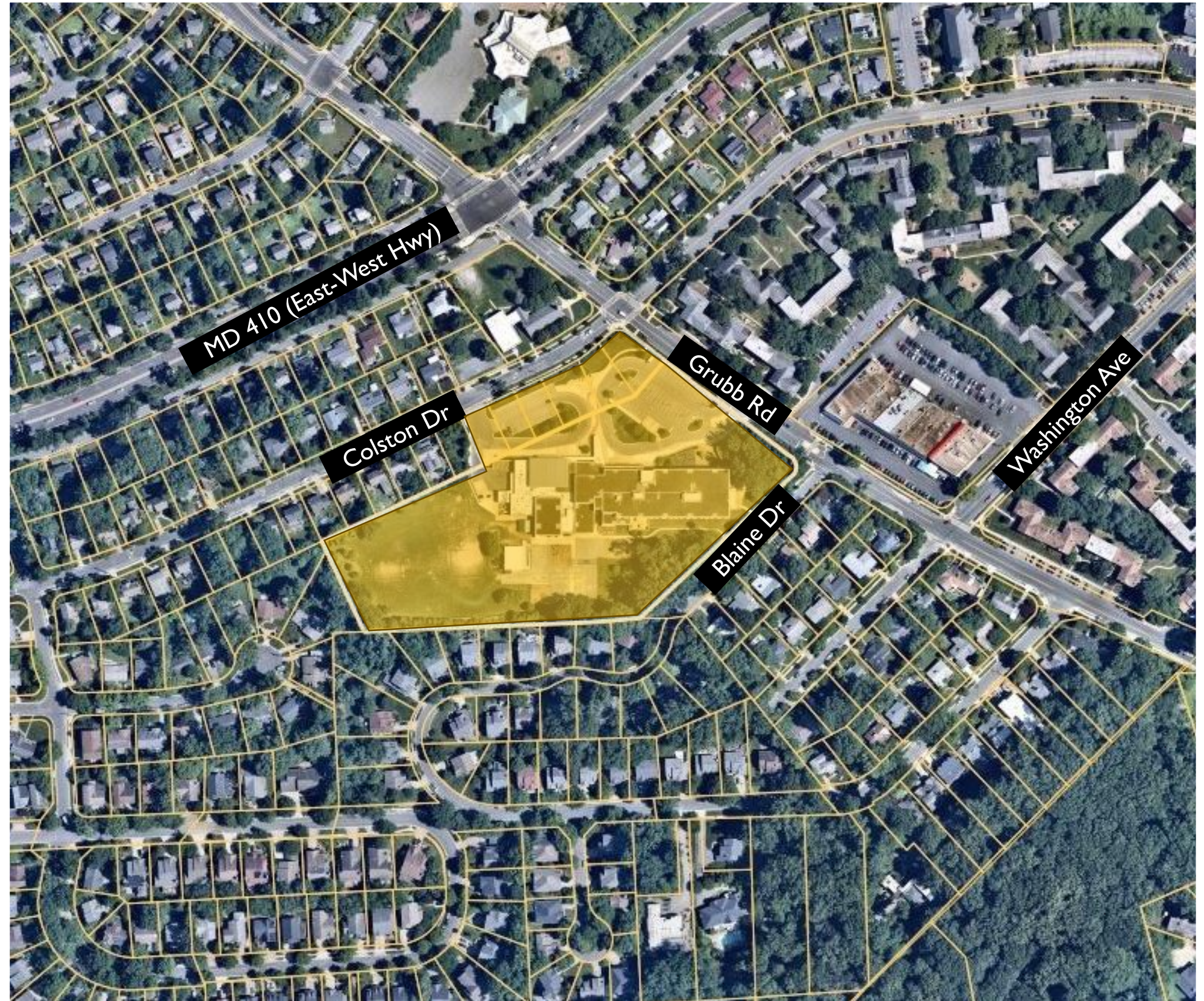
# Overview

Rock Creek Forest Elementary School



# School Site

- Rock Creek Forest Elementary School (RCFES) is located at the intersection of Grubb Road and Colston Drive in Chevy Chase, MD.
- Detached residential housing is located to the north, west, and south. To the east, there are condominiums and small shopping center. The posted speed limits along Grubb Road and Colston Drive are 25 mph.













# Location & Layout



## LEGEND

-  Private Vehicle Entrance
-  School Bus Entrance
-  School Building Entrance
-  Private Vehicle Loop
-  School Bus Loop
-  Pedestrian/Biker Route
-  Private Vehicle Drop Off
-  Crossing Guard

## Pedestrians

- Pedestrians access the school via the sidewalks along Colston Drive, Grubb Road, and Blaine Drive.

## Vehicles

- Drivers access the school via the parking lot entrances on Grubb Road and Colston Drive.

## Buses

- Buses access the school through the designated bus turnaround entrance Colston Drive. This is restricted to buses only except between the hours of 9:30AM-2:30PM.

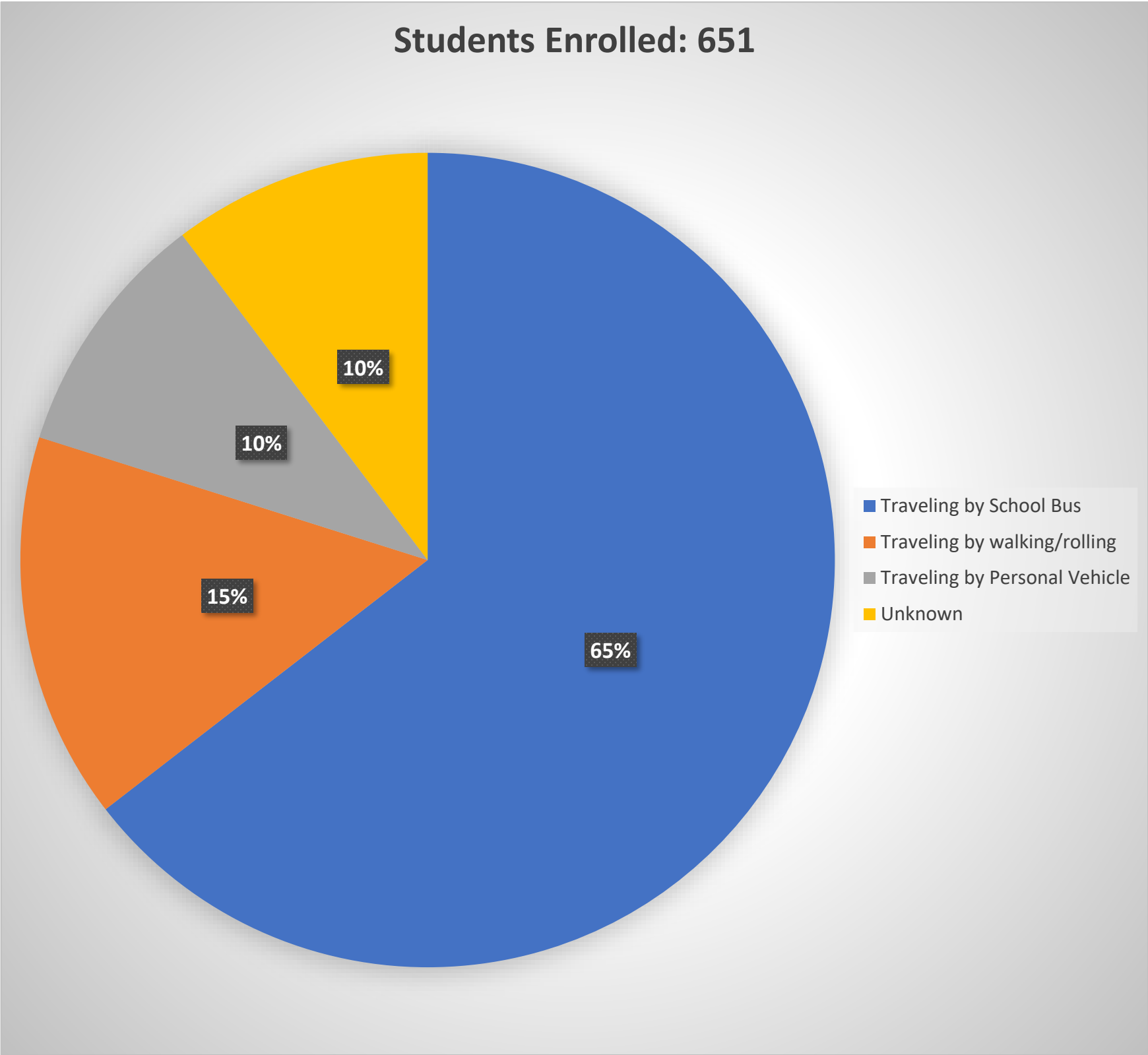
## Parent Drop-Off

- Parents drop off students in a designated area in the staff parking lot accessed from Grubb Road. This space is around 260 feet long and can accommodate approximately 13 vehicles.



# Enrollment / Walkers

- Approximately 15% of the student enrollment are walkers or rollers based on dismissal plan information provided by school staff.
- 420 students take the school bus
- 100 students walk or roll
- 64 students are dropped off and picked up by personal vehicles
- 67 students use on-site aftercare, and do not have formalized dismissal plans
- The Assistant Principal noted that aftercare is mostly picked up by car with some walkers





# Arrival & Dismissal Operations

## School Hours:

9:25 am – 3:50 pm

## Observation Times:

Arrival: 8:50 am – 9:30 am

Dismissal: 3:15 pm – 4:10 pm

## Crossing Guard:

(1) Located at the intersection of Grubb Road at Colston Drive

(4) Student safety officers also present at intersection

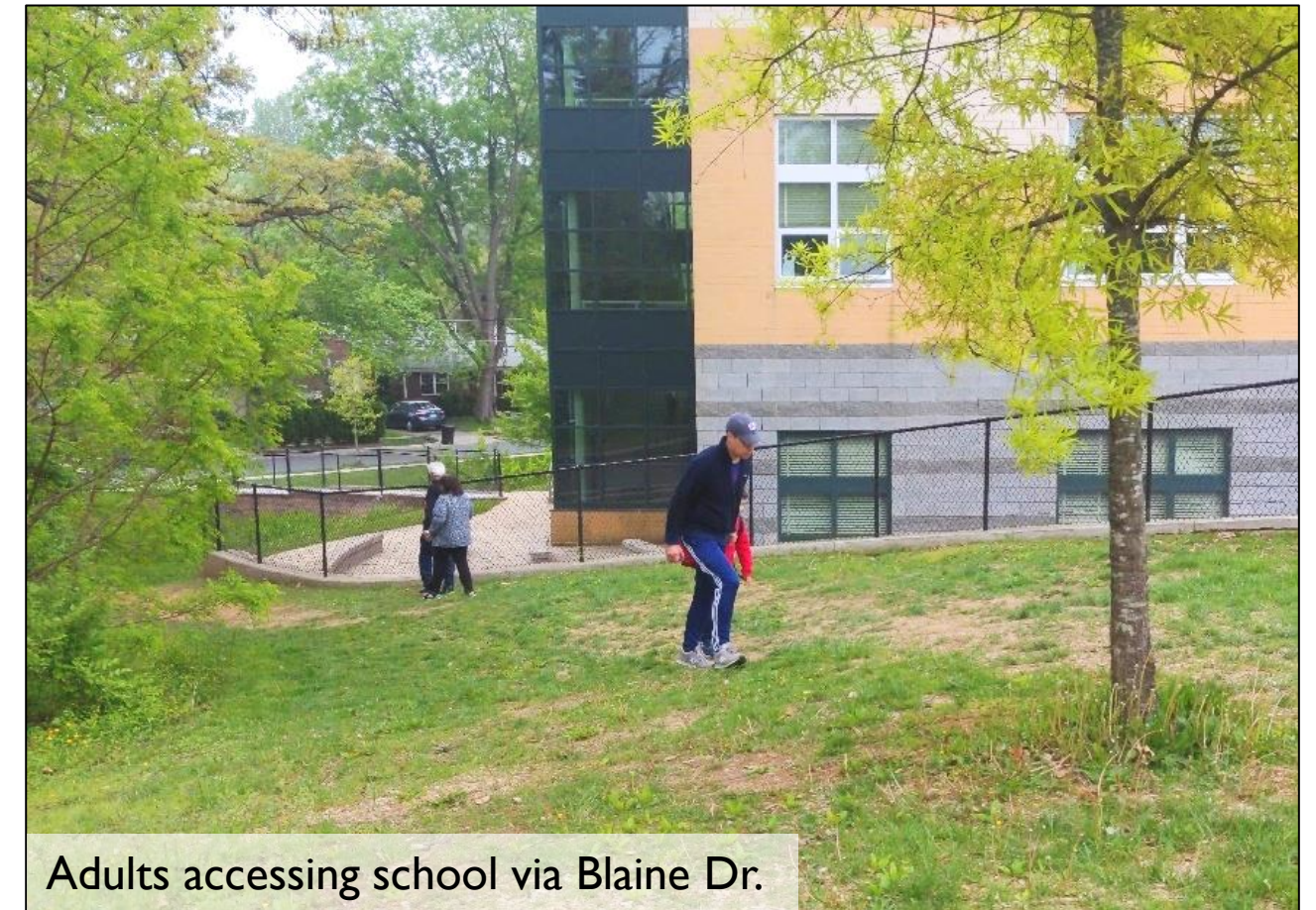


During morning arrival, crossing guard stops traffic at the intersection of Grubb Rd at Colston Dr to allow students and their adults to cross.



# General Observations

- Most students enter and exit through the front door.
- The marked crossing at Colston Drive and Grubb Road was heavily utilized during both arrival and dismissal.
- There is no sidewalk available along Colton Drive approaching the school from the west. Sidewalk begins past the bus turnaround driveway.
- Along Colton Drive to the east of Grubb Road, there is only sidewalk on one side of the road.
- For pedestrian accessing the school from Blaine Drive, there is a sidewalk gap on the side of the school.



Adults accessing school via Blaine Dr.



Sidewalk gap along Colston Dr, west of the school.

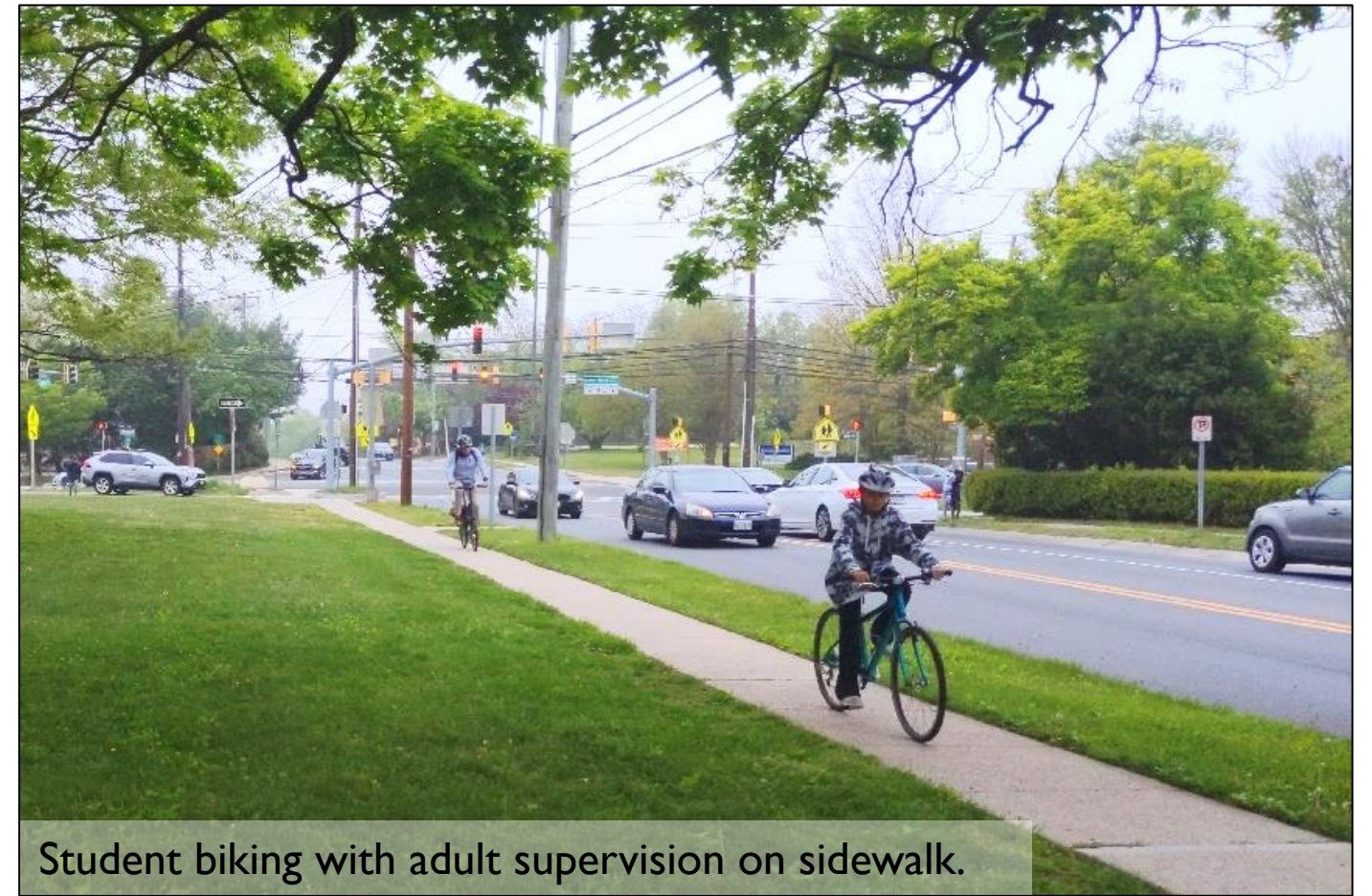


Bike rack used along west side of school.



# Arrival Observations

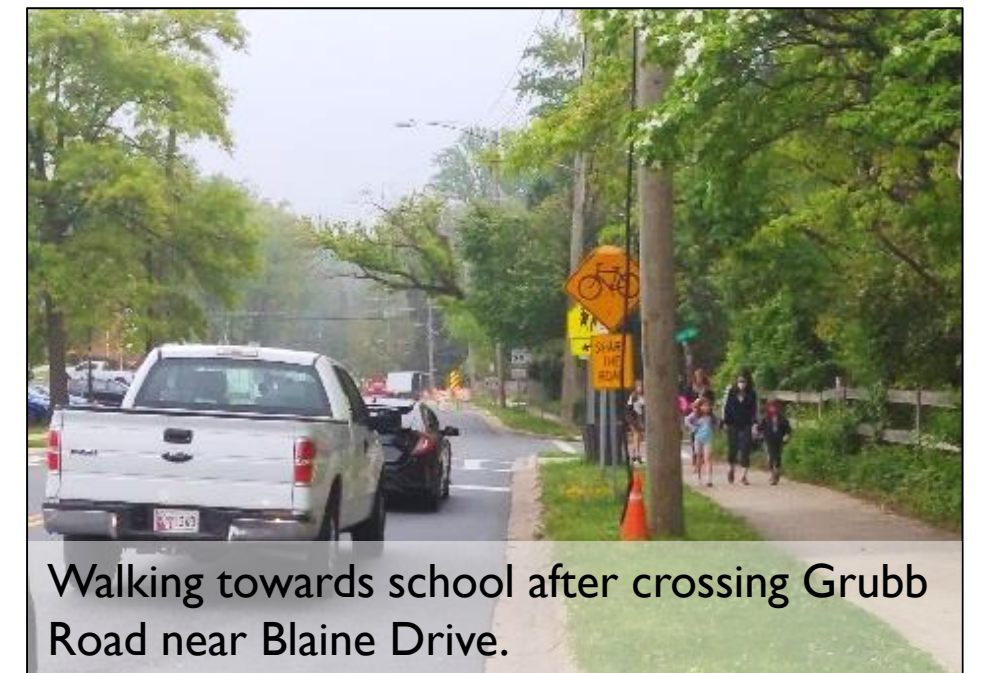
- Students approach the school from all directions along Grubb Road, Colston Drive, and Blaine Drive.
- Several students were observed biking (all on sidewalks).
- MD 410 bifurcates the walkshed. However, there was still a significant number of walkers from the other side of MD 410.
- All observed crossings of MD 410 occurred at the Grubb Road signal.



Student biking with adult supervision on sidewalk.



Walkers crossing MD 410 (East-West Highway).



Walking towards school after crossing Grubb Road near Blaine Drive.

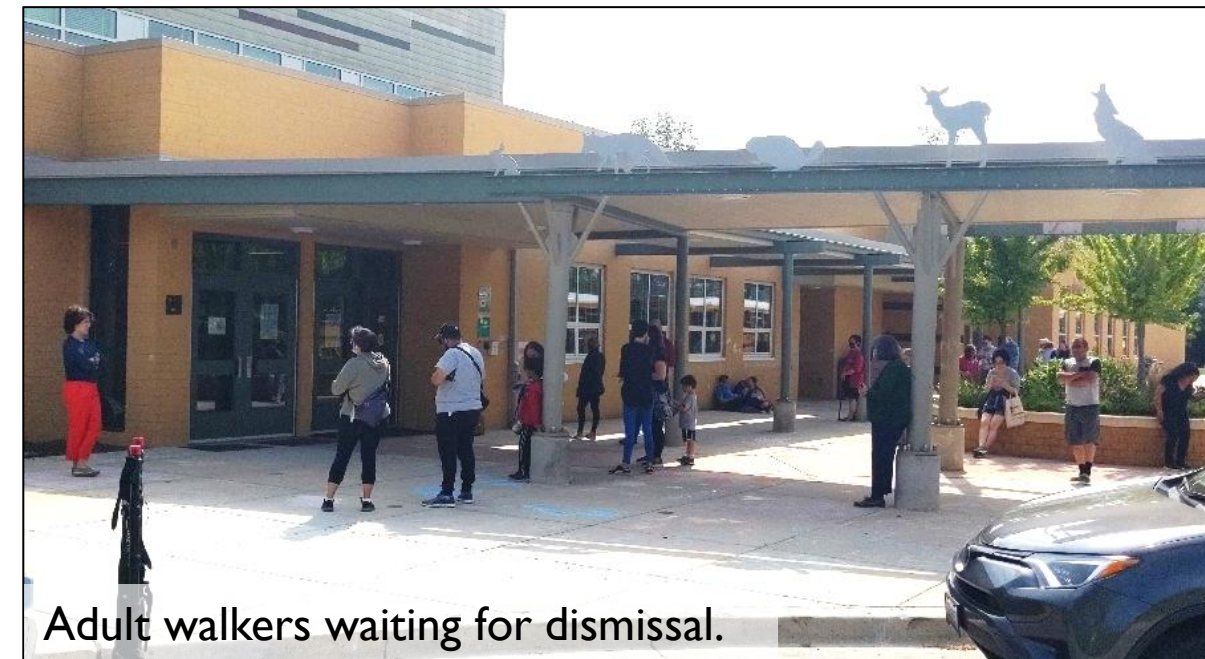


# Dismissal Observations

- Bus queue backs up onto Colston Drive.
- The car pick-up queue extends out the school driveway and onto Grubb Road, back through the intersection with Colston Drive.
- The crossing guard at the intersection of Grubb Road at Colston Drive often directs traffic to allow buses to egress onto Grubb Road.
- Fencing and curbed walkways within the school property channelizes walkers around the parking lot to limit vehicle-pedestrian conflicts internal to the school site.



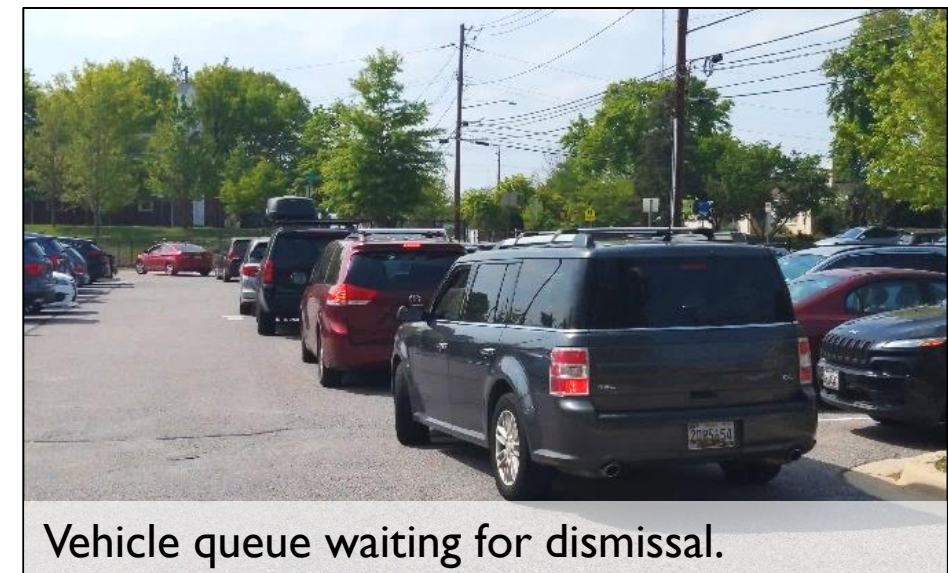
School buses queued on Colston Drive.



Adult walkers waiting for dismissal.



Vehicle queue on Grubb Road obstructs crosswalk.



Vehicle queue waiting for dismissal.





# Overview

Rosemary Hills Elementary School



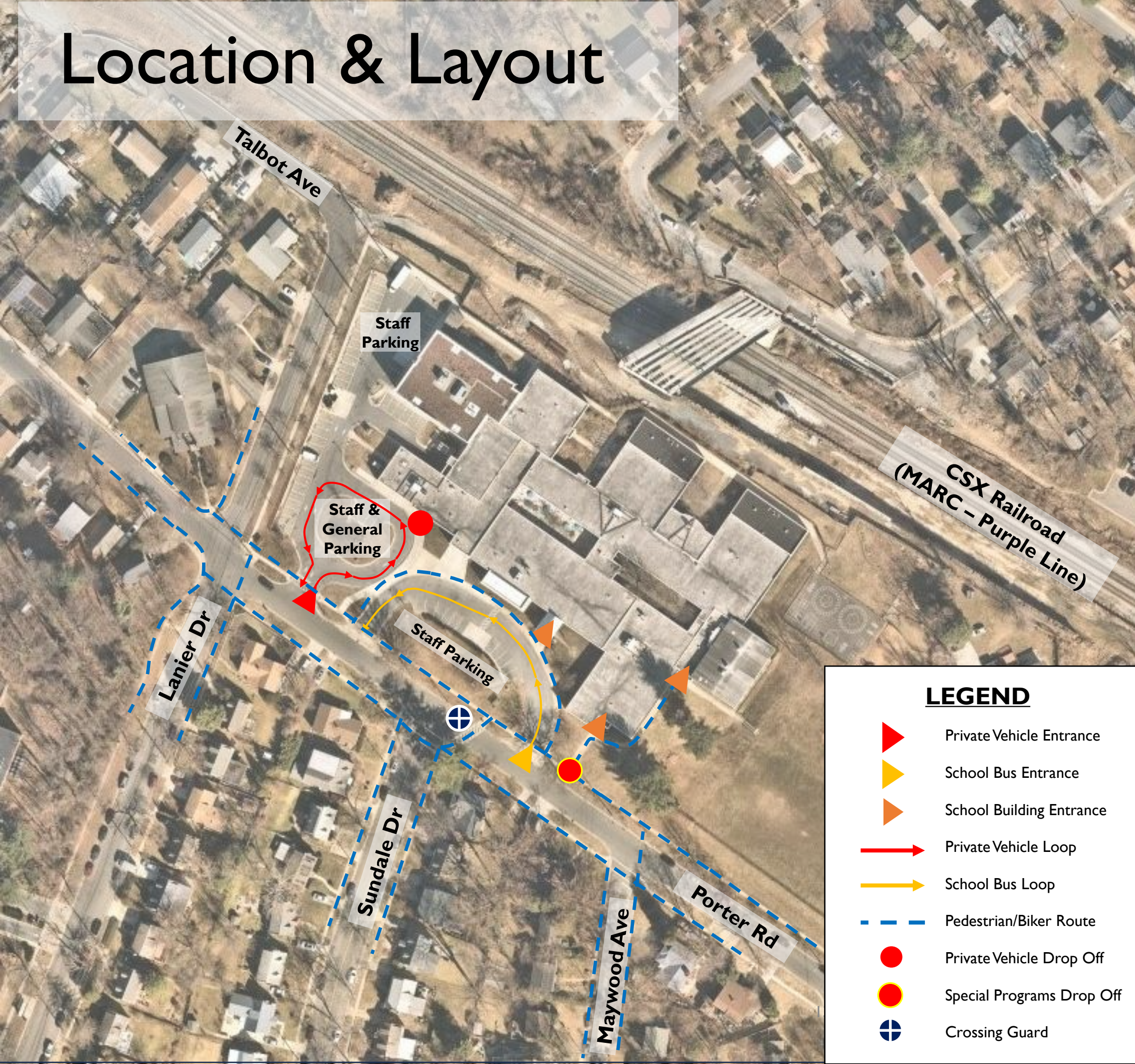
# School Site

- Rosemary Hills Elementary School (RHES) is located on Porter Road in Silver Spring, MD.
- The school is located in the Rosemary Hills and Lyttonsville communities, consisting of a mix of detached residential homes, mid-rise, and high-rise apartment and condominium buildings.
- The school property is bound by Talbot Avenue and the CSX railroad tracks to the north, Lanier Drive to the west, and Porter Rd to the south. The east boundary abuts detached residential housing to the east.
- The posted speed limit along Porter Road is 25 mph.





# Location & Layout



## Pedestrians

- Pedestrians access the school via the sidewalks along Porter Road.

## Drivers

- Drivers access the school via the two parking lot entrances on Porter Road.










## Buses

- Buses access the school through the main entrance on Porter Road. During the arrival and dismissal times, the loop in front of the school is dedicated for bus use only.

## Student Drop-Off

- Personal vehicles drop off students in a designated area in the staff parking lot entered from Porter Road. This space is about 100 feet long and can accommodate approximately 5 vehicles.

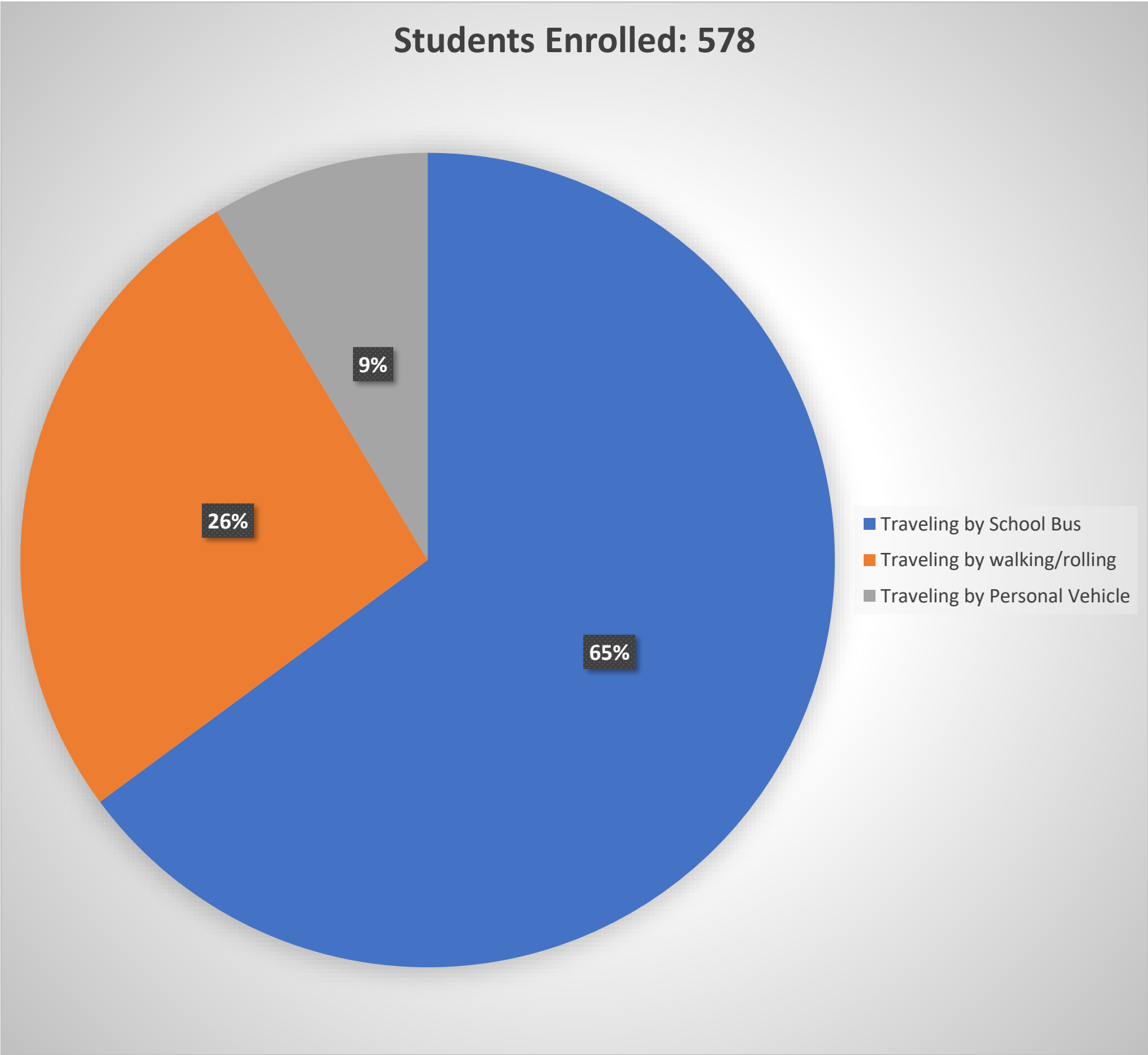
### LEGEND

-  Private Vehicle Entrance
-  School Bus Entrance
-  School Building Entrance
-  Private Vehicle Loop
-  School Bus Loop
-  Pedestrian/Biker Route
-  Private Vehicle Drop Off
-  Special Programs Drop Off
-  Crossing Guard



# Enrollment / Walkers

- RHES had 578 students enrolled for the 2023-2024 school year.
- Based on general feedback from school staff and field observations, most students travel to/from school by bus or walking.
- Most students travel by school bus. RHES has 10 school bus routes.





# Arrival & Dismissal Operations

## School Hours:

9:25 am – 3:50 pm

## Observation Times:

Arrival: 8:50 am – 9:30 am

Dismissal: 3:15 pm – 4:10 pm

## Crossing Guard:

(I) Located at the intersection of  
Porter Road with Sundale Drive





# General Observations

- Rosemary Hills ES only has enrollment for students in Pre-K through 2<sup>nd</sup> grade, including specialized programs for autistic students.
- Pre-K and Autism Programs access the school at separate doors located east of the bus loop.
- Access is provided by a direct pathway from the door to the sidewalk along Porter Road, where buses stop for separated boarding and alighting by Autism Program students.
- No walking students were unaccompanied by an adult.

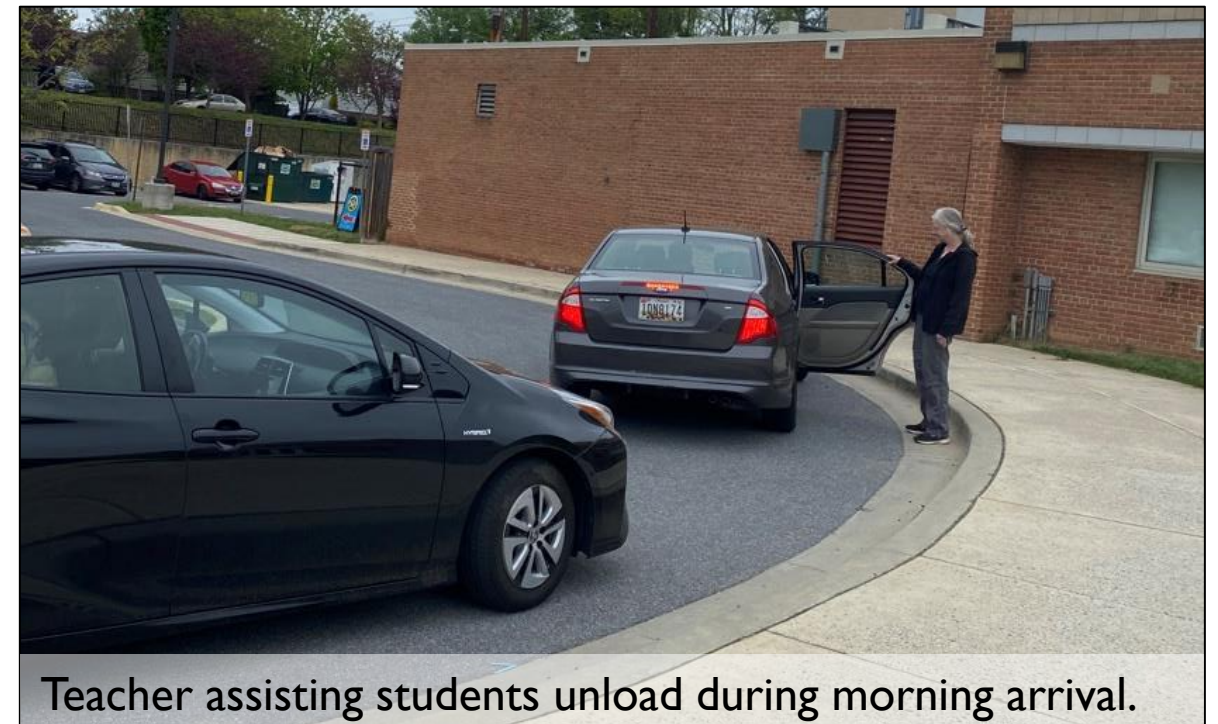


- Many pedestrians utilize the marked crosswalk in the front of the school where a crossing guard is present.
- Pedestrians were also observed crossing Porter Road observed at Lanier Drive, Sundale Drive, and Maywood Avenue.
- The intersection of Lanier Drive at Porter Road is all-way stop controlled.
- Sundale Drive and Maywood Avenue provide uncontrolled crossings of Porter Road, with a marked crosswalk only at the east leg at the Sundale Drive intersection. This is the crossing guard location.
- Drivers stop or park vehicles along side streets, within crossings, and in restricted curb space along Porter Road during arrival and dismissal to accompany their students to and from the building.
- The configuration of the street network, bus loop, and primary student access create pedestrian desire lines crossing Porter Road in several locations.



# Arrival Observations

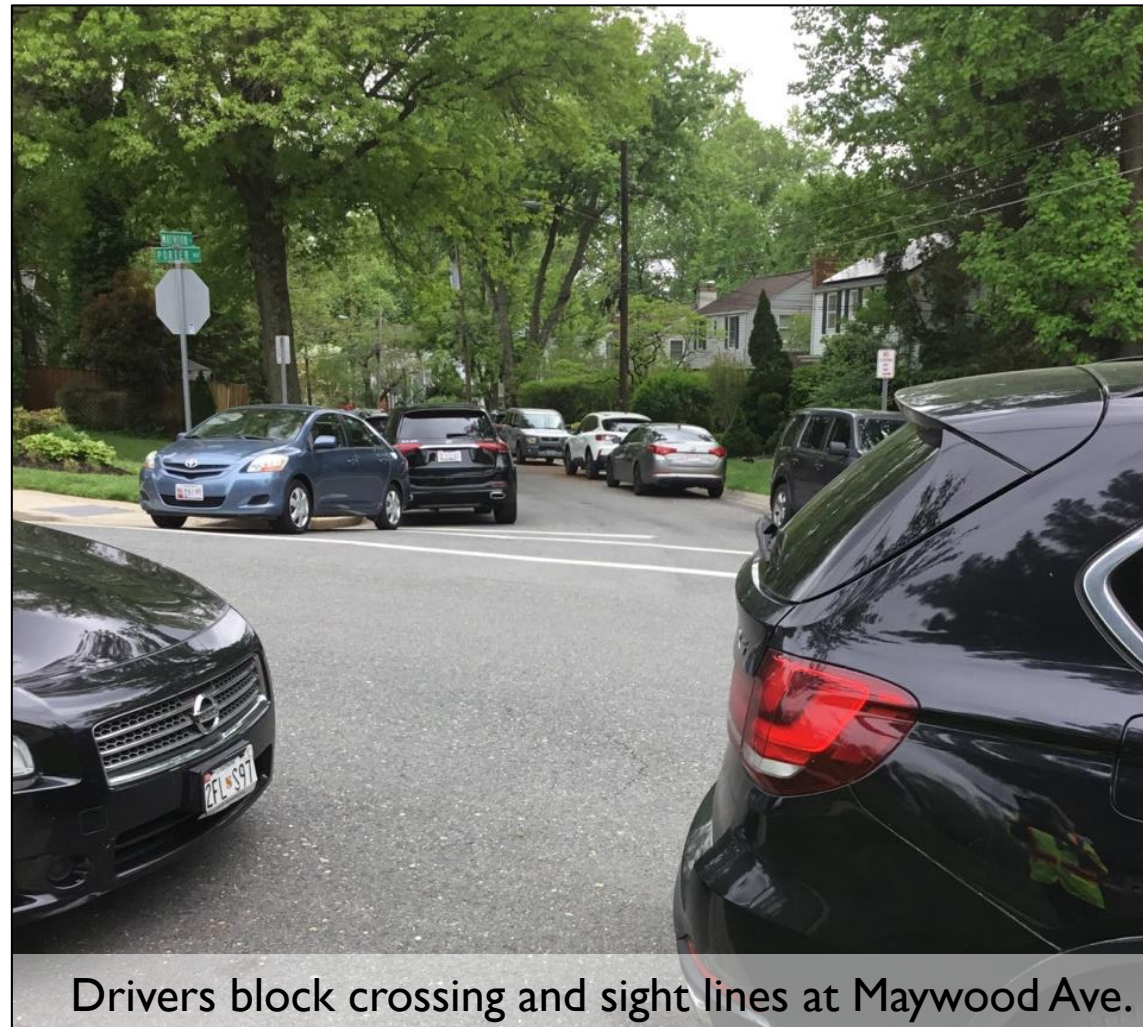
- There is a relatively short drop-off queue located in the staff parking lot. The study team did not observe the queue extending beyond the school property.
- Only one staff member was assisting students as they arrived, so some drivers were observed leaving their vehicle to walk the student to the building.
- The Autism Program students are dropped off at a separate entrance along Porter Road to the east of the main bus loop. This aligns with a pathway leading directly to the door.
- Continuing along the same pathway leads to the Pre-K access at the easternmost door.
- Drivers park along Lanier Drive, Sundale Drive, Maywood Avenue, and Porter Road to walk in students.
- Buses queue along westbound Porter Road waiting to turn into the bus loop.





# Dismissal Observations

- The pick-up queue backs up onto Porter Road, generally to the east.
- Adults park along Lanier Drive, Sundale Drive, Maywood Ave, and Porter Road to pick students up at dismissal.
- Most students walk east along Porter Road after dismissal.
- Drivers stop and park along side streets obstructing crossings and along restricted curb space.



Drivers block crossing and sight lines at Maywood Ave.



Private vehicles queue before dismissal. Adults approaching from various points on foot.





# Walking Area Information

Rock Creek Forest and Rosemary Hills Elementary Schools



# Sidewalk Network

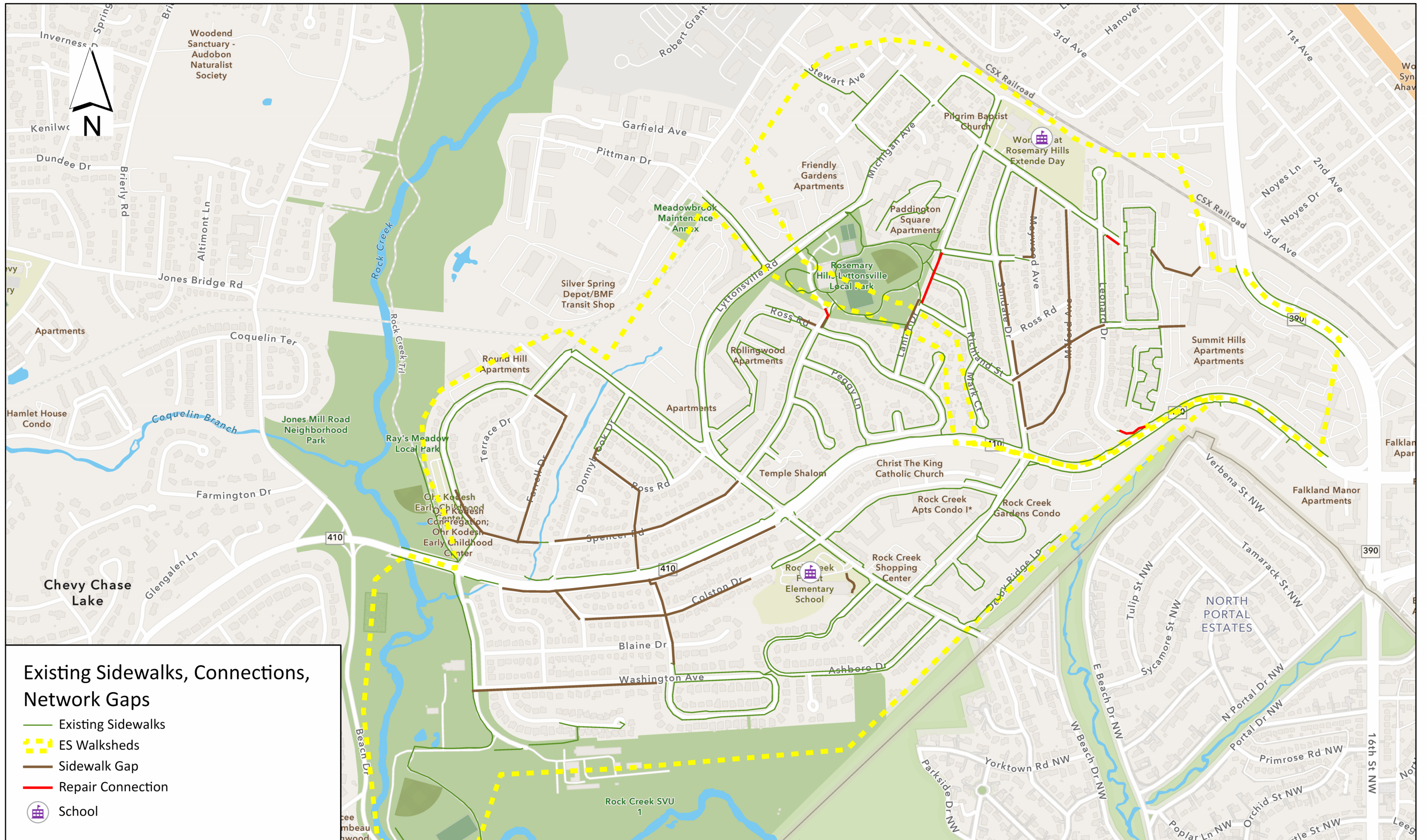
## Rock Creek Forest Walkshed

- Much of the street network in the RCFES walkshed has paved sidewalk on at least one side of the street.
- The streets providing access to apartment and condominium developments include pedestrian connections.
- Much of the neighborhood west of RCFES, which is predominately detached residential homes, are served by streets without paved sidewalks.
- Sidewalks were recently completed along Grubb Road, east of the school, and Colston Drive, west of the school.
- Most of the sidewalks along the public streets are a minimum of 4 feet in width and include comfortable grass buffers. However, segments along Grubb Road, Lyttonsville Road, and East-West Highway (MD 410) do not include buffers, resulting in an uncomfortable pedestrian level of comfort (PLOC)
- A shared use path (SUP) runs along the north side of East-West Hwy (MD 410), north of its intersection with Grubb Rd.
- A frequently used footpath connecting the school to Blaine Drive when not paved or accessible.

## Rosemary Hills Walkshed

- Much of the street network in the RHES walkshed has paved sidewalk on at least one side of the street.
- Most of the detached residential homes south of RHES do not have strong pedestrian connectivity. Maywood Avenue, Milford Avenue, and Ross Road have sidewalk gaps.
- Several apartment and condominium buildings are located along the eastern and western boundaries of the walkshed. Each property has a network of internal sidewalk pathways that tie into the public street network.
- Within the apartment complexes in the eastern portion of the walkshed, property boundaries form physical barriers. Specifically, the hedges and fencing between Summit Hills and Barrington Apartment complexes, add approximately 2,000 feet to a walking trip between RHES and Summit Hills Apartments.
- An asphalt path provides connection between East-West Highway (MD 410) at Leonard Drive – this treatment is sometimes referred to “live ending” a dead-end street.
- Portions of Sundale Drive and Michigan Avenue have an undesirable PLOC.





**Existing Sidewalks, Connections,  
Network Gaps**

- Existing Sidewalks
- - - ES Walksheds
- Sidewalk Gap
- Repair Connection
- School

**Silver Spring Walkshed - Active Zones**



# Curb Ramps, Driveways, and ADA Compliance

## Rock Creek Forest Walkshed

- Intersections along Grubb Road on the RCFES side of East-West Highway (MD 410) have ADA-compliant pedestrian ramps with contrasting detectable warning surfaces (DWS).
- Driveway aprons were observed to have non-compliant cross slopes or substandard walkable paths at locations along Grubb Road and Lyttonsville Road, west of East-West Highway (MD 410).
- Sidewalk locations internal to the RCFES school site were observed to be in good condition in the vicinity of the pick-up / drop-off area.
- Pedestrian access routes and driveway aprons along the western limits of Grubb Road were found to be non-compliant. They have since been reconstructed.
- Of note were inaccessible crossings at uncontrolled crossings of East-West Highway (MD 410) at Donnybrook Drive and Ellingson Drive. These are locations with transit stops.

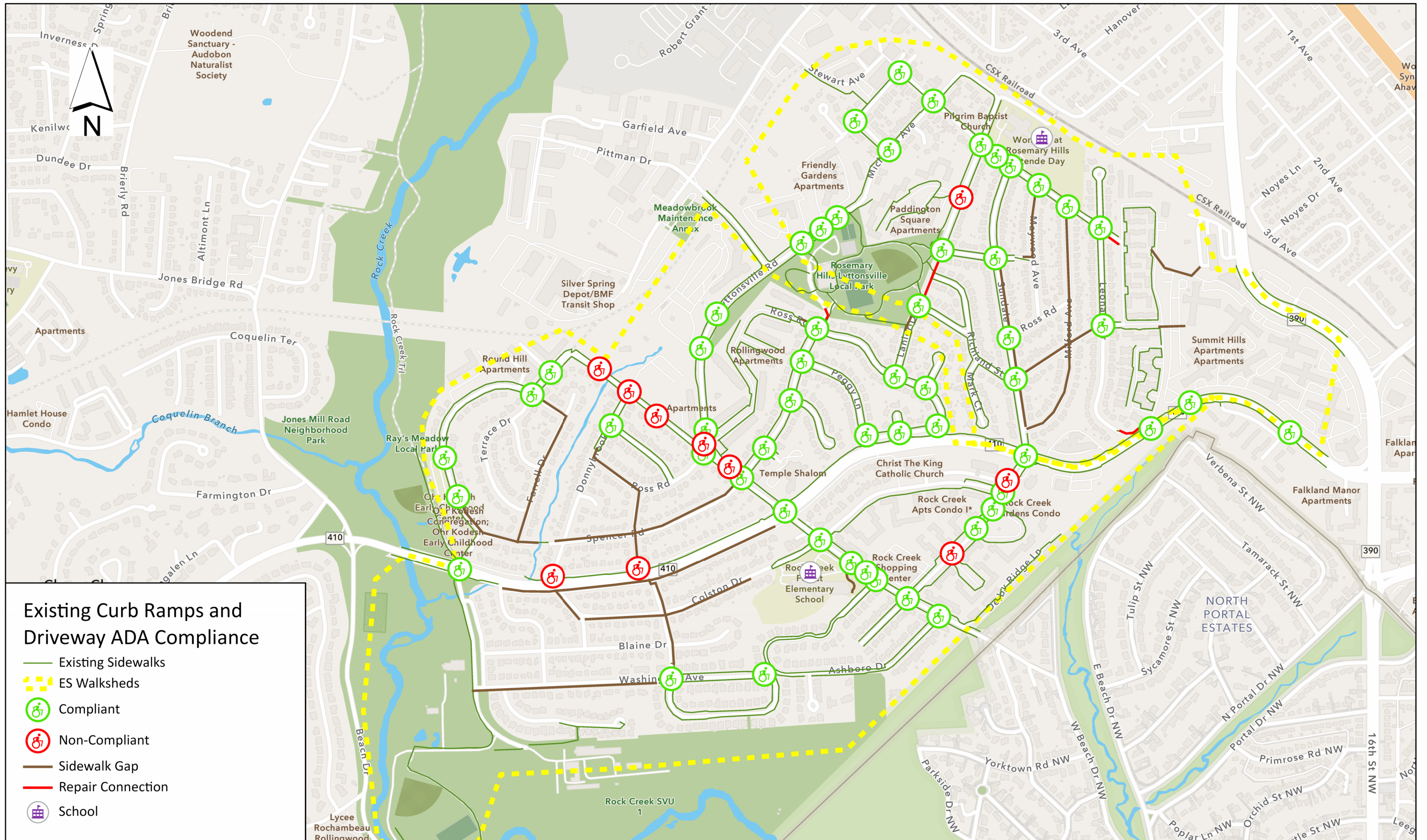
Note: Assessments of curb condition were based on visual inspection. Slope measurements were beyond the scope of this effort.

## Rosemary Hills Walkshed

- Most intersections and driveway aprons appear to be compliant with ADA requirements.
- The driveway crossing of the Paddington Square Apartments access along Lanier Drive was observed to need replacement to meet ADA requirements.
- The existing sidewalk segment along Porter Road between Leonard Drive and Rosemary Hills Drive need repair.
- Off-street pathways providing access between Leonard Drive and East-West Highway and Lanier Drive adjacent to Rosemary Hills-Lyttonsville Local Park were also found to be in poor condition requiring pavement repair.
- Facilities internal to the attached housing developments were not inspected because they are privately owned and maintained.







Silver Spring Walkshed - ADA Compliance



# Crosswalks

## Rock Creek Forest Walkshed

- Marked crosswalks are far less common than curb ramps, particularly at crossings of privately owned and maintained streets.
- Most marked crosswalks are not high-visibility or are in poor condition.
- No crosswalks directly adjacent to RCFES were high visibility continental style nor in good condition.

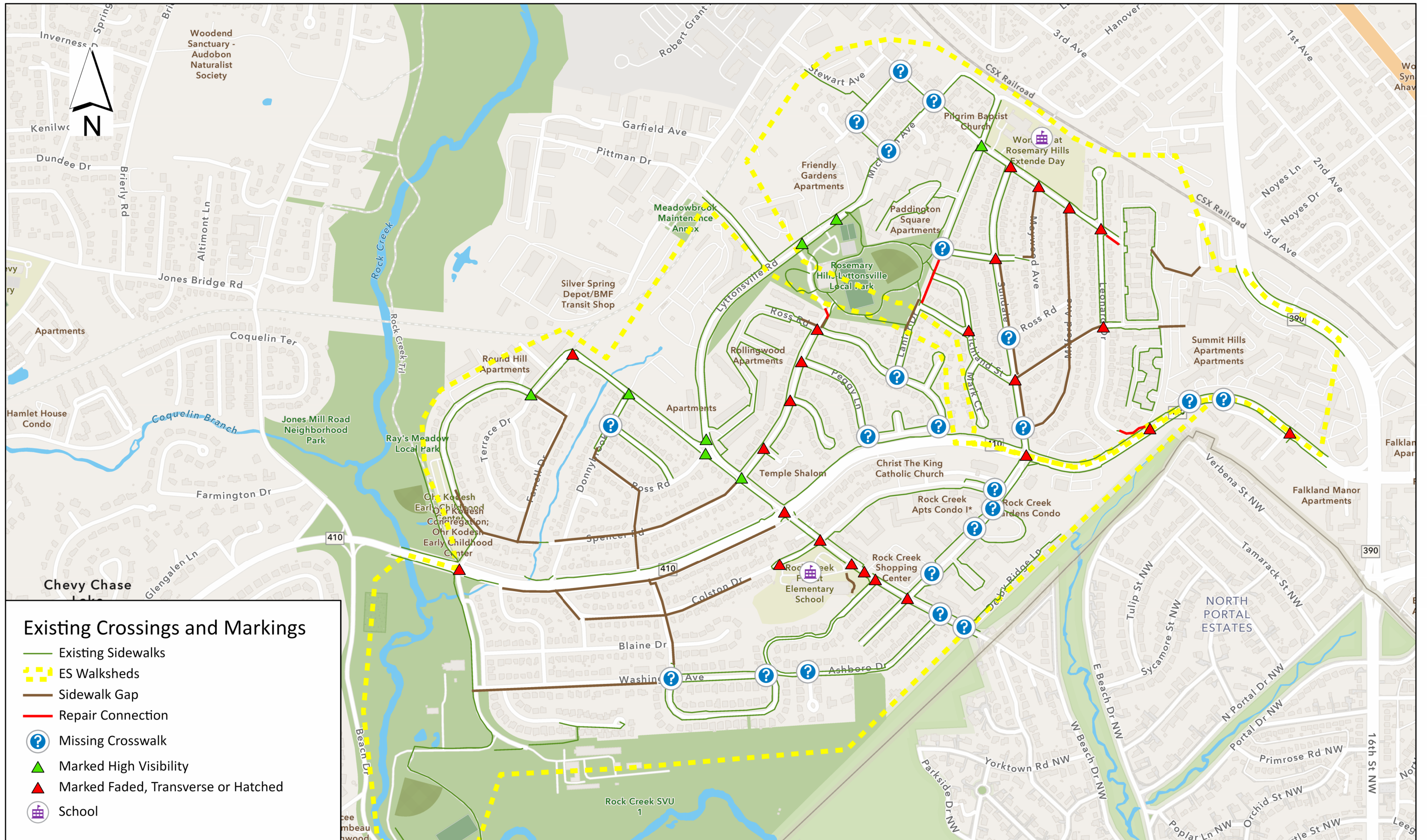
## Rosemary Hills Walkshed

- Continental style crosswalk markings in good condition were only found at 3 locations throughout the RHES walkshed.
- Only the intersection of Lanier Drive at Porter Road has current crosswalk markings adjacent to the school property.
- Primary walking routes along Sundale Drive, Porter Road, and Lenard Drive have crosswalk markings missing, or they are not high-visibility or in poor condition.

Many marked crossings were not high-visibility patterns and/or were in poor condition throughout both walksheds.







Silver Spring Walkshed - Crossings



# Additional Information

## [Master Plan of Highways and Transitways](#)

### Neighborhood Connectors

- Washington Avenue (north of Grubb Road)
- Sundale Drive
- Michigan Avenue
- Lyttonsville Road (Michigan Avenue to Lyttonsville Place)
- Grubb Road (west of Lyttonsville Road)
- Terrace Drive (east of Freyman Drive)
- Freyman Drive
- Meadowbrook Lane

### Town Center Streets

- Lyttonsville Road (Grubb Road to Lyttonsville Place)
- Grubb Road (east of Lyttonsville Road)

### Town Center Boulevard

- East-West Highway (east of Rosemary Hill Drive)

### Boulevard

- East-West Highway (west of Rosemary Hills Drive)

## [Bicycle Master Plan](#)

### Planned Neighborhood Greenway

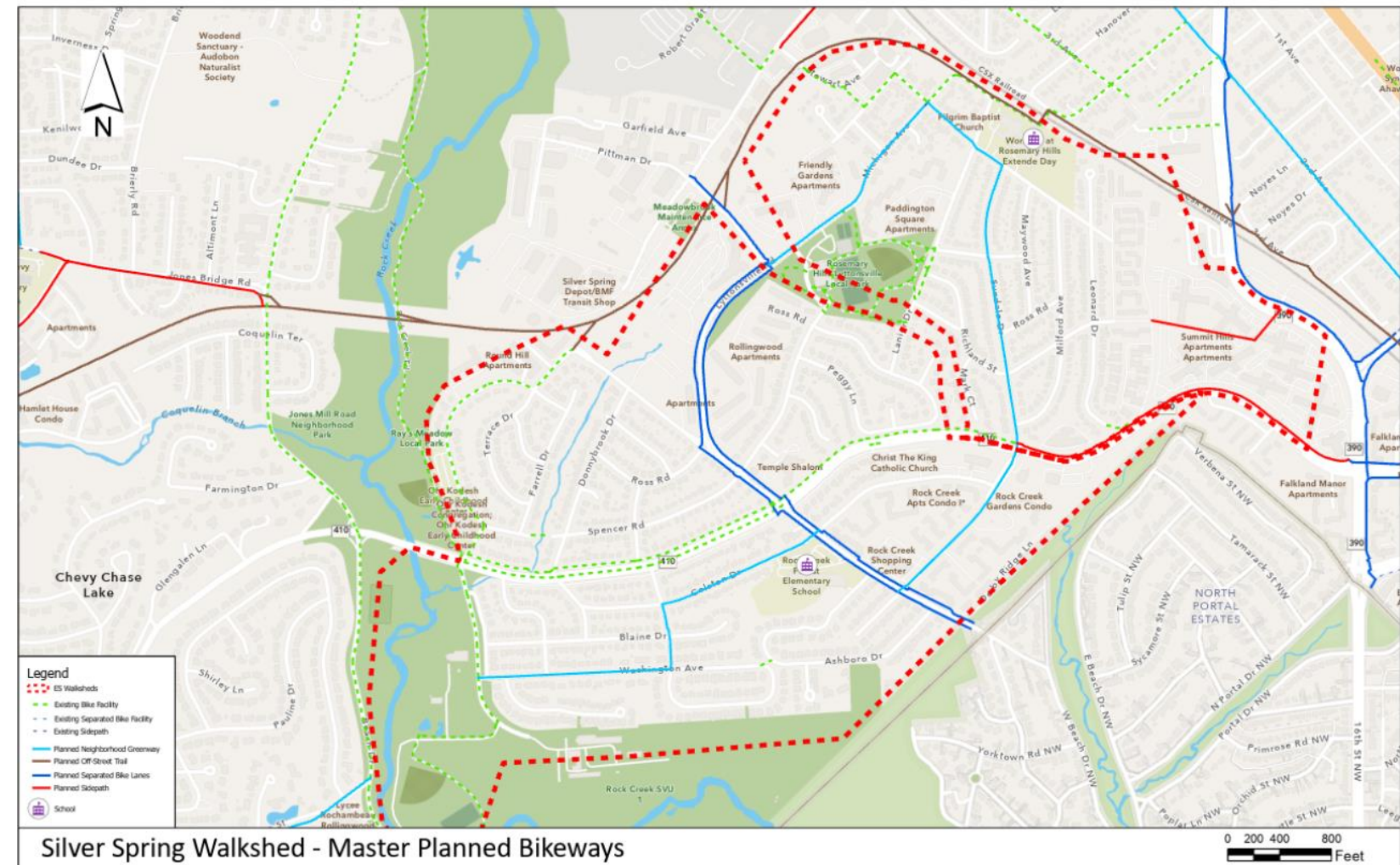
- Lyttonsville Road – Michigan Avenue – Pennsylvania Avenue – Porter Road – Sundale Drive – Washington Avenue
- Colston Drive – Ellingson Drive – Washington Avenue
- East-West Highway Access Road

### Planned Separated Bike Lanes

- Lyttonsville Place – Lyttonsville Road – Grubb Road

### Planned Sidepath

- East-West Highway (east of Rosemary Hill Drive)



## [Transit Service – Ride On](#)

### Route 1

- Silver Spring – Friendship Heights

### Route 2

- Silver Spring – Lyttonsville Ride On Operations Center

### Route 11

- Silver Spring – Friendship Heights

## [Transit Service – WMATA](#)

### Route J1

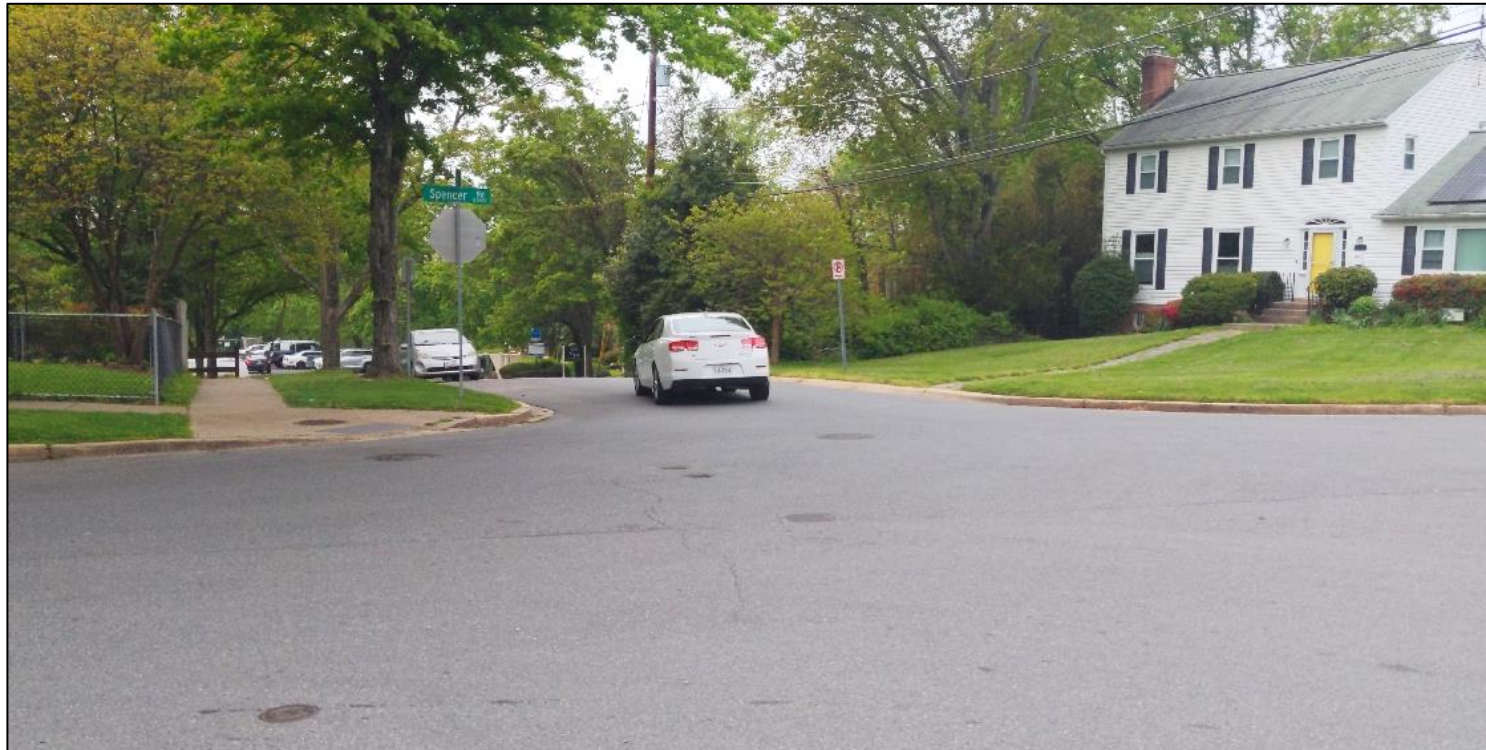
- Bethesda – Silver Spring

### Route J2

- Bethesda – Silver Spring



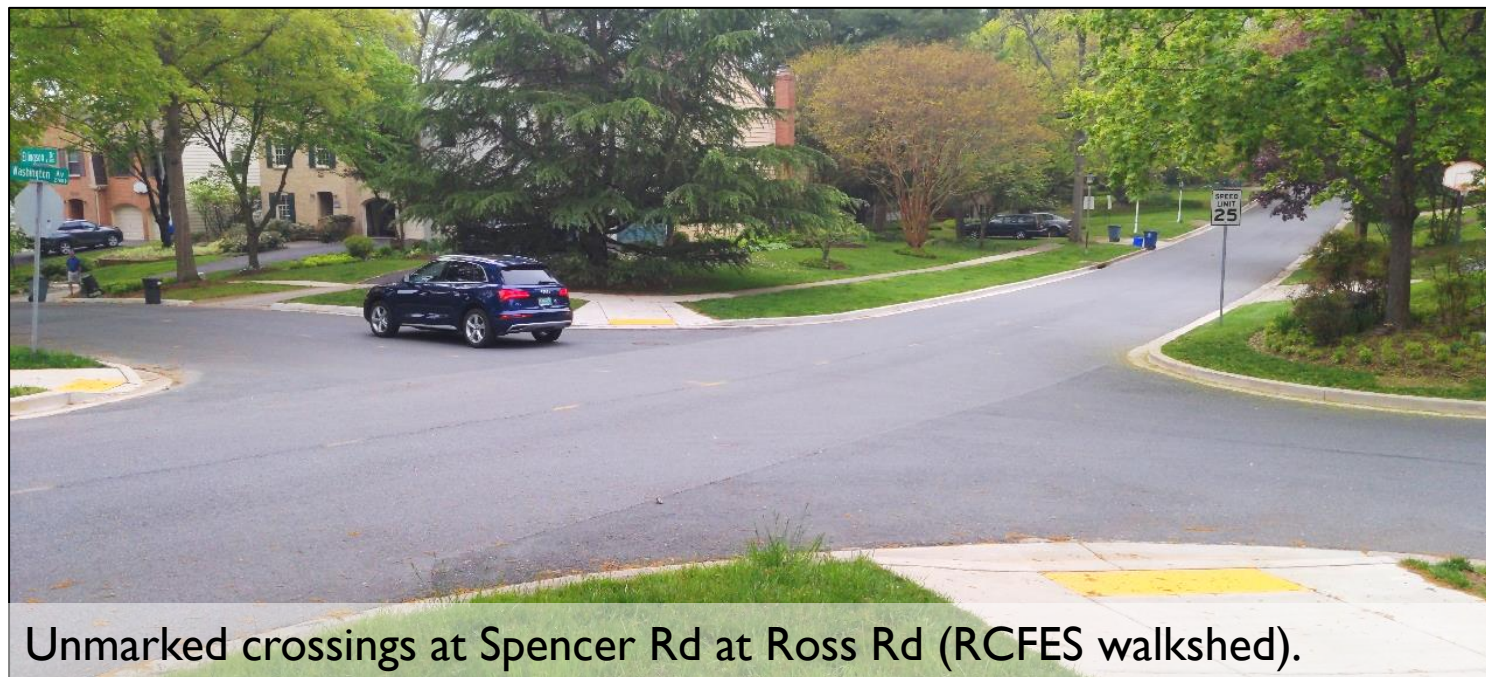
# Walking Area Observations – Unmarked Crossings



Unmarked crossings at Spencer Rd at Ross Rd (RCFES walkshed).



Midblock crossing on Peggy Ln (RCFES walkshed).



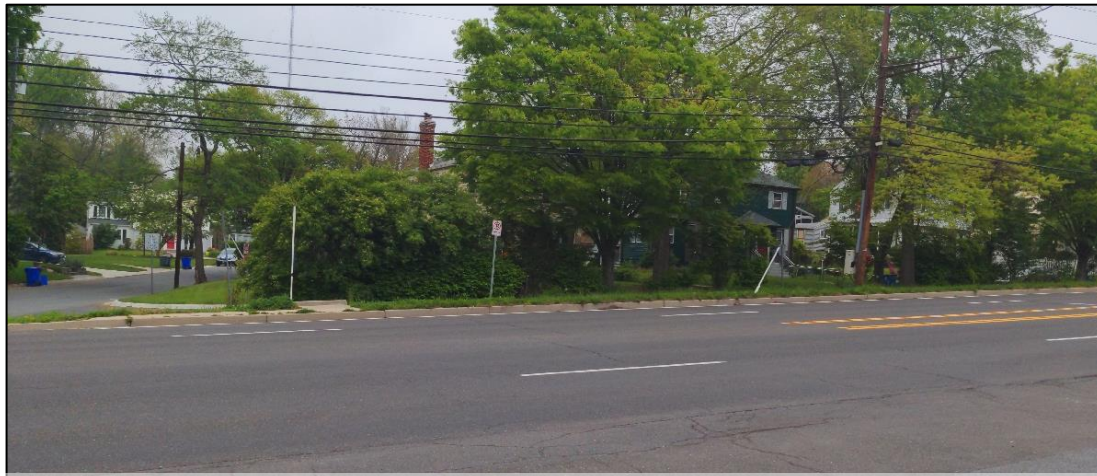
Unmarked crossings at Spencer Rd at Ross Rd (RCFES walkshed).



Michigan Ave at Pennsylvania Ave (RHES walkshed).



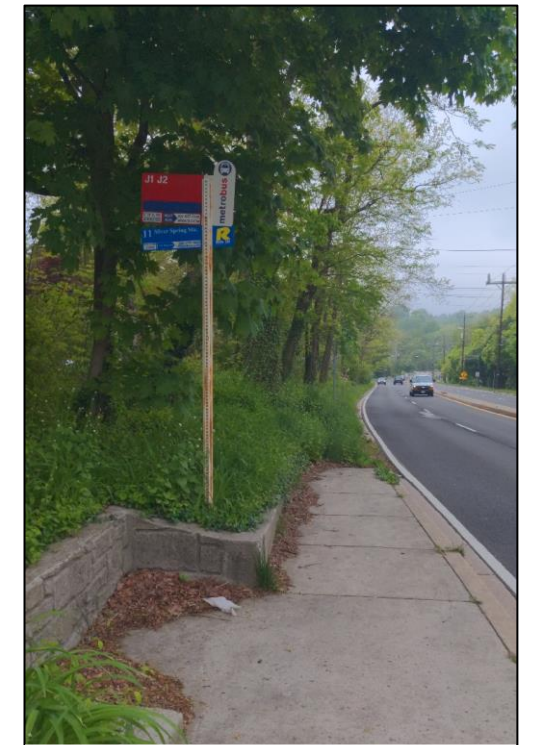
# Walking Area Observations – Safety Issues



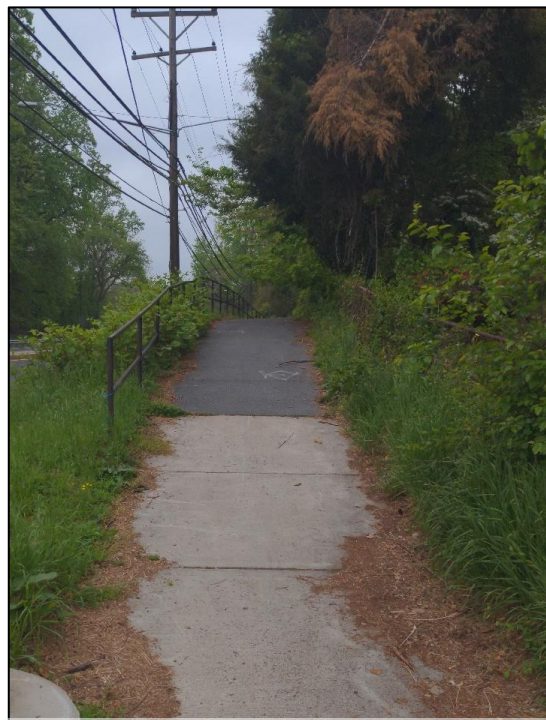
East-West Hwy (MD 410) inaccessible crossings at intersections with transit stops.



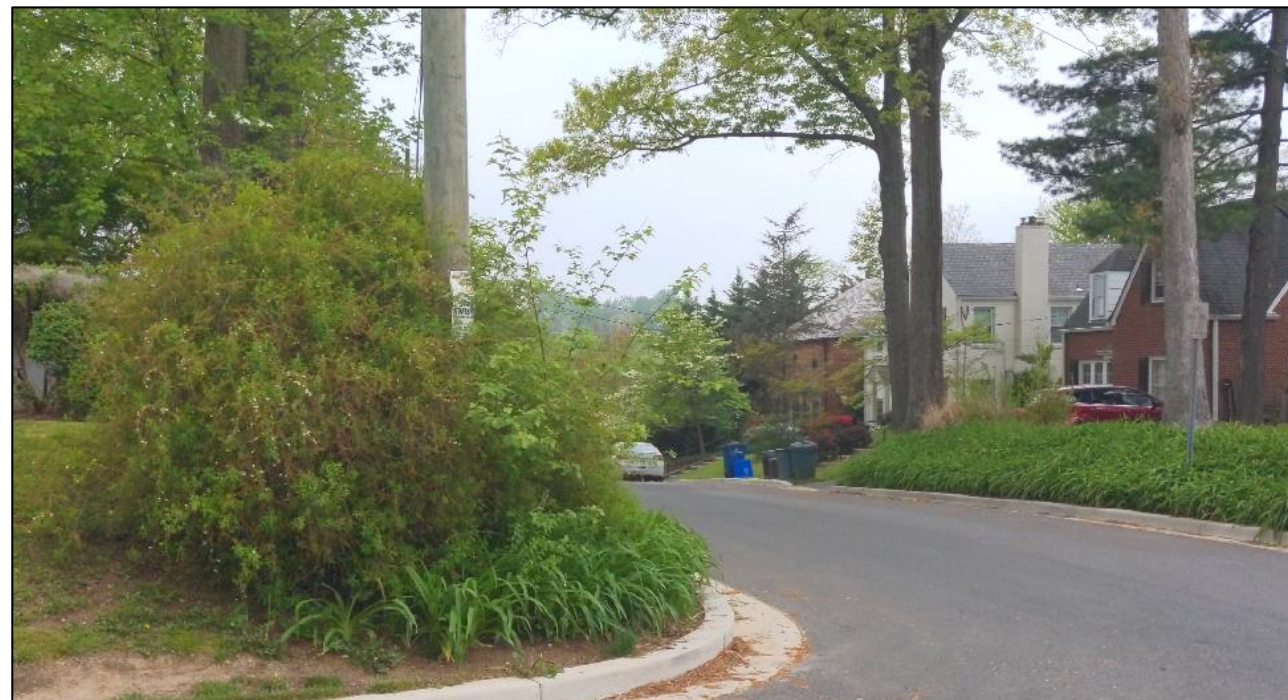
Washington Ave driveway with sight line limitations due to on-street parking (RCFES walkshed).



Constrained transit stop along MD 410.



Very steep slope for SUP at East-West Hwy at Sundale Dr / Washington Ave intersection.



Sight line obstruction from vegetation on corner at intersection of Blaine Dr at Larry Pl (RCFES walkshed).

- East-West Highway runs through or along the walkshed boundaries of RCFES and RHES.
- Over 7,000 feet, the median divided arterial creates a barrier to walking with only 5 controlled crossings (1,400-ft average spacing).
- Controlled crossings are provided at 5 of 8 transit stops along the segment.
- RCFES and RHES are provided 1 crossing guard each, but school sites create need to cross frontage roadway in several locations, leaving many students crossing without assistance.



# Walking Area Observations – Hazards / Obstacles



- Hazards throughout the walksheds were observed along pedestrian circulation paths.
- Some may require minor maintenance efforts, while others may require further investigation to identify and mitigate recurring issues.



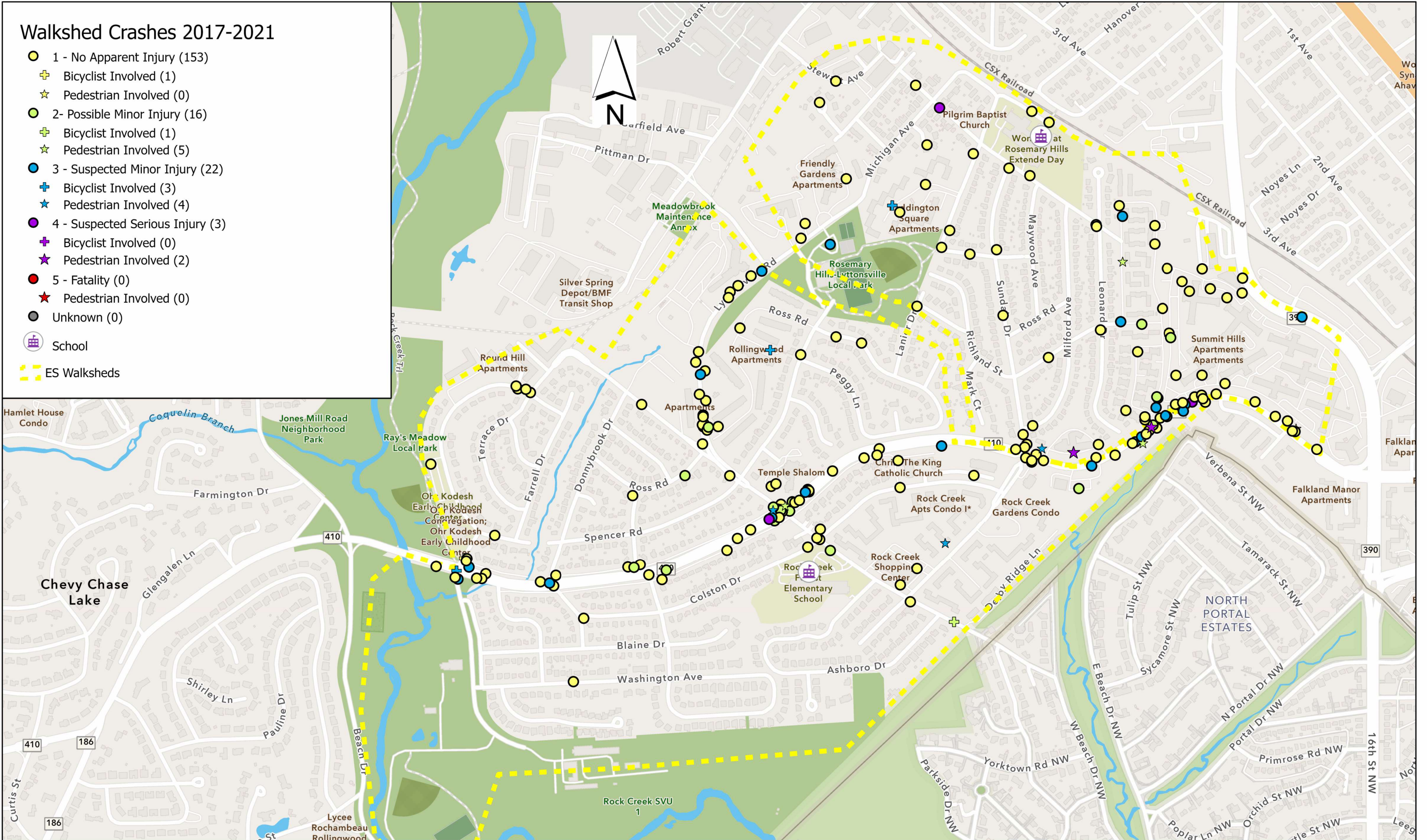
# Crash Data

Rock Creek Forest and Rosemary Hills Elementary Schools Walksheds Reported Crashes 2017 - 2021		
All Days and Times	Schools Days During Daylight Conditions	Vulnerable Road User (VRU) Involved Crashes
210 crashes (all modes)	111 crashes (all modes)	17 crashes - 1 bike-ped collision
17 crashes involved vulnerable road users (VRUs) – pedestrians, bicycles, other non-motorists	11 crashes involved vulnerable road users (VRUs) – pedestrians, bicycles, other non-motorists	10 crashes occurred along East-West Hwy
None of the crashes resulted in a fatality		
6 crashes directly along the perimeter of the RCFES property – all in the vicinity of the Grubb Rd at Colston Dr intersection	2 bicycle crashes along East-West Hwy near Rock Creek Trail 1 bicycle crash along Grubb Rd near DC line 2 bicycle crashes in residential parking lot	3 crashes occurred in parking lots
7 crashes directly along the perimeter of the RHES property – along Porter Rd and Talbot Ave	2 pedestrian crashes at the intersection of East-West Hwy at Grubb Rd 1 pedestrian crash along Ross Rd near Grubb Rd 1 pedestrian crash at the intersection of East-West Hwy at Rosemary Hill Dr 1 pedestrian crash in a medical office parking lot	1 of 13 crashes along school perimeters involved a pedestrian, though not a student and occurred at nighttime



# Walkshed Crashes 2017-2021

- 1 - No Apparent Injury (153)
- ⊕ Bicyclist Involved (1)
- ☆ Pedestrian Involved (0)
- 2- Possible Minor Injury (16)
- ⊕ Bicyclist Involved (1)
- ☆ Pedestrian Involved (5)
- 3 - Suspected Minor Injury (22)
- ⊕ Bicyclist Involved (3)
- ☆ Pedestrian Involved (4)
- 4 - Suspected Serious Injury (3)
- ⊕ Bicyclist Involved (0)
- ☆ Pedestrian Involved (2)
- 5 - Fatality (0)
- ☆ Pedestrian Involved (0)
- Unknown (0)
- 🏫 School
- ⚡ ES Walksheds



Silver Spring Cluster - Crashes by Severity (2017 - 2021)



# Recommendations

All recommendations are provided Map ID numbers on the next page. Those are cross referenced in the recommendation tables on subsequent pages. A sampling of walkshed recommendations are summarized after the tables to provide additional considerations and illustrate how several recommendations interact with one another.

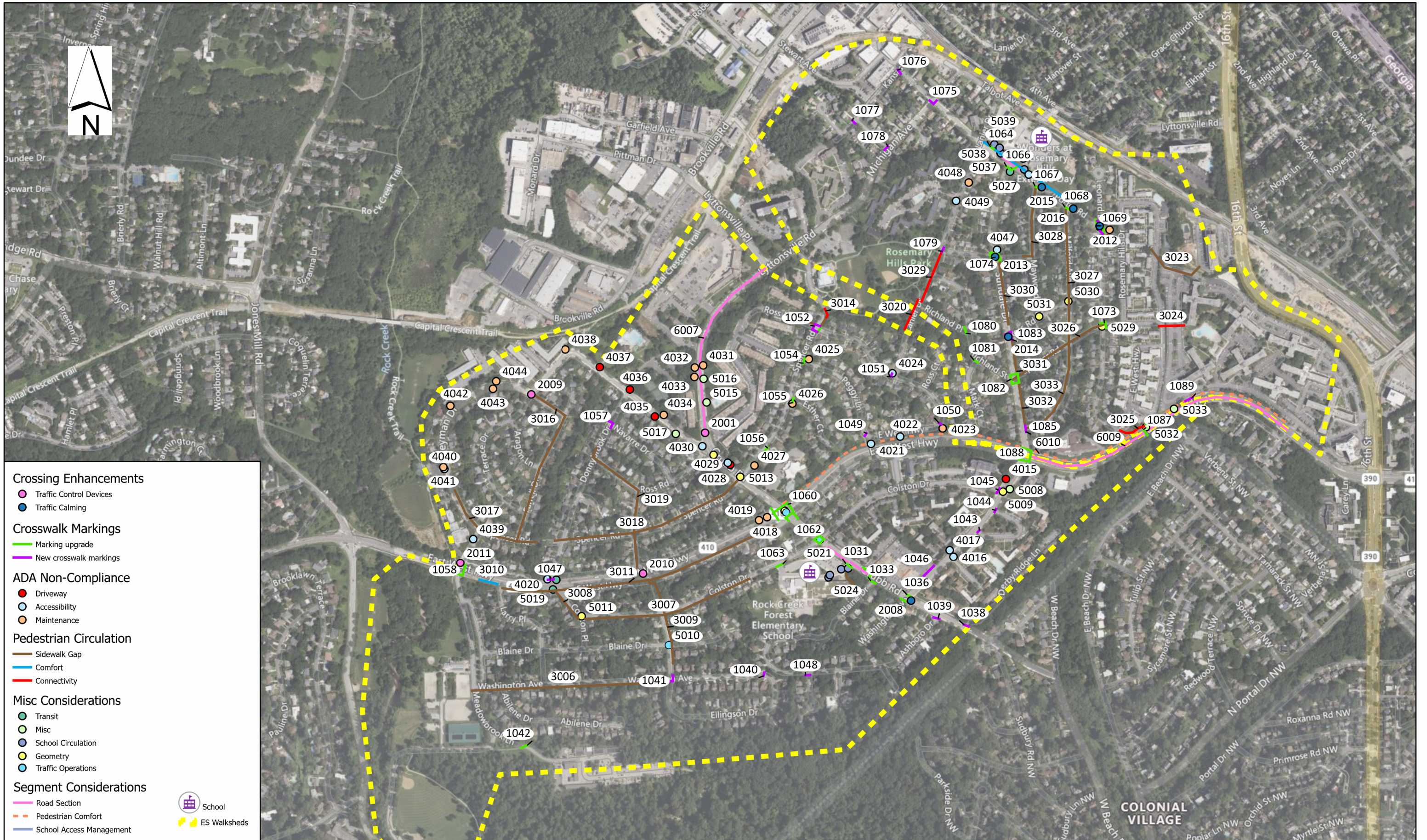
All recommendations are intended to provide planning-level guidance for implementation goals of the Safe Routes to School program. Subsequent efforts may involve feasibility evaluation, analysis, calculations, data collection, engineering, survey, utility and property research, permitting, interagency coordination, public engagement, and other needed processes that vary by activity.

Lower intensity construction projects may be implemented in the short-term with little additional coordination and process.

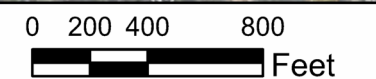
Higher intensity projects may require a formal public process or permitting for intermediate-term implementation.

The highest intensity efforts may require additional engineering, interagency coordination, verification of property lines, utility investigation, and special funding.





# Silver Spring Walkshed - Recommendations





# Crossing Recommendations

MAP ID	ISSUE	RECOMMENDATION	COST	TERM	JURISDICTION
1031	Crosswalk markings	Replace markings with continental style and reorient so both legs align crossing school driveway	\$	Short	MCDOT
1032	Crosswalk markings style	Replace markings with continental style	\$	Short	MCDOT
1033	Crosswalk markings style	Replace markings with continental style	\$	Short	MCDOT
1034	Crosswalk markings condition	Replace markings with continental style	\$	Short	MCDOT
1035	Crosswalk markings	Replace markings with continental style	\$	Short	MCDOT
1036	Crosswalk markings	Replace markings with continental style	\$	Short	MCDOT
1037	Unmarked crossing	Install new continental style markings for Grubb Rd crossing	\$	Short	MCDOT
1038	Unmarked crossing	Install new continental style markings for driveway crossing	\$	Short	MCDOT
1039	Unmarked crossing	Install new continental style markings for Ashboro Dr crossing	\$	Short	MCDOT
1040	Unmarked crossing	Install new continental style markings for existing midblock crossing of Washington Ave including the appropriate signing	\$	Short	MCDOT
1041	Unmarked crossing	Install new continental style markings connecting existing ramps	\$	Short	MCDOT
1042	Crosswalk markings style	Replace markings with continental style for Meadowbrook Ln midblock trail crossing	\$	Short	MCDOT
1043	Unmarked crossing	Install new continental style markings for driveway crossing	\$	Short	MCDOT
1044	Unmarked crossing	Install new continental style markings for driveway crossing	\$	Short	MCDOT
1045	Unmarked crossing	Install new continental style markings for Colston Dr crossing	\$	Short	MCDOT
1046	Unmarked crossing	Install new continental style markings for driveway crossing	\$	Short	MCDOT
1047	Unmarked crossing	Install new continental style markings for Donnybrook Dr crossing	\$	Short	MCDOT
1048	Unmarked crossing	Install new continental style markings for Ashboro Ct crossing	\$	Short	MCDOT
1049	Unmarked crossing	Install new continental style markings for existing midblock crossing of Peggy Ln including the appropriate signing	\$	Short	MCDOT
1050	Unmarked crossing	Install new continental style markings for existing midblock crossing of Ross Rd including the appropriate signing	\$	Short	MCDOT



# Crossing Recommendations

MAP ID	ISSUE	RECOMMENDATION	COST	TERM	JURISDICTION
1051	Unmarked crossing	Install new continental style markings for Ross Rd uncontrolled crossing	\$	Short	MCDOT
1052	Unmarked crossing	Install new continental style markings for Spencer Rd and Ross Rd crossings	\$	Short	MCDOT
1053	Crosswalk markings style	Replace markings with continental style	\$	Short	MCDOT
1054	Crosswalk markings style	Replace markings with continental style	\$	Short	MCDOT
1055	Crosswalk markings style	Replace markings with continental style	\$	Short	MCDOT
1056	Crosswalk markings style	Replace markings with continental style	\$	Short	MCDOT
1057	Unmarked crossing	Install new continental style markings for Navarre Dr and Donnybrook Dr crossings	\$	Short	MCDOT
1058	Crosswalk markings style	Replace markings with continental style markings for signalized crossings	\$	Short	MDOT SHA
1059	Crosswalk markings style	Replace markings with continental style markings for signalized crossings	\$	Short	MDOT SHA
1060	Crosswalk markings style	Replace markings with continental style markings for signalized crossings	\$	Short	MDOT SHA
1061	Crosswalk markings style	Replace markings with continental style markings for signalized crossings	\$	Short	MDOT SHA
1062	Crosswalk markings style	Replace markings with continental style	\$	Short	MDOT SHA
1063	Crosswalk markings style	Replace markings with continental style for school driveway crossing	\$	Short	MCDOT
1064	Crosswalk markings style	Replace markings with continental style for school driveway crossing	\$	Short	MCDOT
1065	Crosswalk markings style	Replace markings with continental style	\$	Short	MCDOT
1066	Crosswalk markings style	Replace markings with continental style	\$	Short	MCDOT
1067	Crosswalk markings style	Replace markings with continental style	\$	Short	MCDOT
1068	Crosswalk markings style	Replace markings with continental style	\$	Short	MCDOT
1069	Crosswalk markings style	Replace markings with continental style	\$	Short	MCDOT
1070	Crosswalk markings style	Replace markings with continental style	\$	Short	MCDOT



# Crossing Recommendations

MAP ID	ISSUE	RECOMMENDATION	COST	TERM	JURISDICTION
1071	Unmarked crossing	Install new continental style markings for Leonard Dr crossing	\$	Short	MCDOT
1072	Unmarked crossing	Install new continental style markings for Leonard Dr crossing	\$	Short	MCDOT
1073	Crosswalk markings style	Replace markings with continental style	\$	Short	MCDOT
1074	Crosswalk markings style	Replace markings with continental style	\$	Short	MCDOT
1075	Unmarked crossing	Install new continental style markings for Michigan Ave and Pennsylvania Ave crossings	\$	Short	MCDOT
1076	Unmarked crossing	Install new continental style markings for Kansas Ave uncontrolled crossing	\$	Short	MCDOT
1077	Unmarked crossing	Install new continental style markings for Kansas Ave uncontrolled crossing	\$	Short	MCDOT
1078	Unmarked crossing	Install new continental style markings for Maine Ave crossing	\$	Short	MCDOT
1079	Unmarked crossing	Install new continental style markings for Quinton Rd crossing	\$	Short	MCDOT
1080	Crosswalk markings style	Replace markings with continental style	\$	Short	MCDOT
1081	Crosswalk markings style	Replace markings with continental style	\$	Short	MCDOT
1082	Crosswalk markings style	Replace markings with continental style	\$	Short	MCDOT
1083	Unmarked crossing	Install new continental style markings for Ross Rd crossing	\$	Short	MCDOT
1084	Unmarked crossing	Install new continental style markings for Sundale Dr uncontrolled crossing	\$	Short	MCDOT
1085	Unmarked crossing	Install new continental style markings for Milford Ave crossing	\$	Short	MCDOT
1086	Crosswalk markings style	Replace markings with continental style for signalized crossing	\$	Short	MDOT SHA
1087	Crosswalk markings style	Replace markings with continental style for signalized crossing	\$	Short	MDOT SHA
1088	Crosswalk markings style	Replace markings with continental style for signalized crossings	\$	Short	MDOT SHA
1089	Unmarked crossing	Install new continental style markings for driveway crossing	\$	Short	MDOT SHA
1090	Unmarked crossing	Install new continental style markings for Porter Rd uncontrolled crossing	\$	Short	MDOT SHA



# Crossing Recommendations

MAP ID	ISSUE	RECOMMENDATION	COST	TERM	JURISDICTION
1091	Unmarked crossing	Install new continental style markings for Porter Rd uncontrolled crossing	\$	Short	MDOT SHA
2001	Pedestrian conflicts	Install pedestrian beacon - RRFB or PHB	\$\$	Mid	MCDOT
2008	Intersection geometry	Install curb extensions or crossing island with signing	\$\$	Mid	MCDOT
2009	Intersection control	Convert to AWSC	\$	Short	MCDOT
2010	Proected crossing spacing	Evaluate protected crossing	\$\$\$	Long	MDOT SHA
2011	Signal operations	Install CPS for north and south crossings	\$\$	Mid	MDOT SHA
2012	Intersection geometry	Install curb extensions and/or reduce curb radii	\$\$	Mid	MCDOT
2013	Intersection geometry	Install curb extensions and/or reduce curb radii	\$\$	Mid	MCDOT
2014	Intersection geometry	Install curb extensions, reduce curb radii, mini roundabout, and/or crossing island	\$\$	Mid	MCDOT
2015	Intersection control	Convert to AWSC	\$	Short	MCDOT
2016	Intersection geometry	Install curb extensions or crossing island with signing	\$\$	Mid	MCDOT



# Pedestrian Circulation Recommendations

MAP ID	ISSUE	RECOMMENDATION	COST	TERM	JURISDICTION
3006	Sidewalk gap	Install sidewalk along one side of Washington Ave between Meadowbrook Ln and Ellingson Dr	\$\$\$	Long	MCDOT
3007	Sidewalk gap	Install sidewalk along one side of Colston Ln between Colston Pl and RCFES	\$\$\$	Long	MCDOT
3008	Sidewalk gap	Install sidewalk along one side of street	\$\$	Long	MCDOT
3009	Sidewalk gap	Install sidewalk along one side of street	\$\$\$	Long	MCDOT
3010	Pedestrian comfort	Reconstruct sidewalk with buffer	\$\$\$	Long	MDOT SHA
3011	Sidewalk gap	Install sidewalk along frontage road to parallel East-West Hwy	\$\$\$	Long	MCDOT
3012	Sidewalk gap	Desire line between existing school pathways	\$\$	Mid	MCPS
3013	Sidewalk gap	Install sidewalk between intersection and apartment complex sidewalk	\$\$	Long	MCDOT
3014	Connectivity	Repair connection between Spencer Rd at Rosemary Hills Park	\$\$	Mid	MNCPPC
3015	Sidewalk gap	Install sidewalk along Sperncer Rd to pathway	\$\$	Mid	MCDOT
3016	Sidewalk gap	Install sidewalk along one side of Farrell Dr between Spencer Rd and Navarre Dr, and one side of Naverre Dr connecting to Terrace Dr	\$\$\$	Long	MCDOT
3017	Sidewalk gap	Install sidewalk along one side of Freyman Dr between parking lot and Meadowbrook Ln, and connect Freyman Dr to Farrell Dr with sidewalk along one side of Spencer Rd	\$\$\$	Long	MCDOT
3018	Sidewalk gap	Install sidewalk along one side of Spencer Rd between Donnybrook Dr and Grubb Rd	\$\$\$	Long	MCDOT
3019	Sidewalk gap	Provide connection between East-West Hwy and Donnybrook Dr installing sidewalk along one side of Ellingson Dr and Ross Rd	\$\$\$	Long	MCDOT
3020	Connectivity	Install sidepath connecting the neighborhood to the park along west side of Lanier Dr	\$\$	Mid	MNCPPC
3021	Connectivity	Repair connection between public sidewalk and Rosemary Hills Dr (private)	\$	Mid	MCDOT
3023	Connectivity	Coordinate with Barrington Apartments, 8600 Apartments, and Summit Hills Apartments to discuss pedestrian access routes between sites	\$\$	Long	Private
3024	Connectivity	Coordinate with Barrington Apartments and Summit Hills Apartments to discuss pedestrian access routes between sites	\$\$	Long	Private
3025	Connectivity	Repair asphalt path connection between East-West Hwy and Leonard Dr cul-de-sac	\$\$	Mid	MDOT SHA
3026	Sidewalk gap	Install sidewalk along one side Spencer Rd between Sundale Dr and Leonard Dr	\$\$\$	Long	MCDOT



# Pedestrian Circulation Recommendations

MAP ID	ISSUE	RECOMMENDATION	COST	TERM	JURISDICTION
3027	Sidewalk gap	Install sidewalk along one side Milford Ave between Porter Rd and Spencer Rd	\$\$\$	Long	MCDOT
3028	Sidewalk gap	Install sidewalk along one side of Maywood Ave to connect to Quinton Rd pedestrian cut thru	\$\$\$	Long	MCDOT
3029	Connection	Repair pathway between Richland Pl and Quinton Rd (trim vegetation and assess other ADA issues)	\$\$\$	Mid	MCDOT
3030	Sidewalk gap	Install missing sidewalk segment along east side of Sundale Dr	\$\$\$	Long	MCDOT
3031	Sidewalk gap	Install missing sidewalk segment along east side of Sundale Dr	\$\$\$	Long	MCDOT
3032	Sidewalk gap	Install missing sidewalk segment along east side of Sundale Dr	\$\$\$	Long	MCDOT
3033	Sidewalk gap	Install sidewalk along one side Milford Ave between Sundale Dr and Spencer Rd	\$\$\$	Long	MCDOT
4015	Driveway	Reconstruct driveway apron with proper cross slope	\$\$	Mid	MCDOT
4016	Access	Install curb extensions for providing ADA bus boarding area for Washington Ave bus stops	\$\$	Mid	MCDOT
4017	Access	Install curb extensions for providing ADA bus boarding area for Washington Ave bus stops	\$\$	Mid	MCDOT
4018	Maintenance	Trim vegetation obstructing pedestrian access route	\$	Short	MDOT SHA
4019	Maintenance	Reconstruct sidewalk to ensure positive drainage to reduce sediment on sidewalk	\$\$	Mid	MDOT SHA
4020	Access	Reconstruct curb ramp with DWS	\$	Short	MDOT SHA
4021	Maintenance	Repair root damage in SUP	\$	Short	MDOT SHA
4022	Access	Provide accessible connection to SUP from East-West Hwy frontage road	\$\$	Mid	MCDOT
4023	Maintenance	Trim vegetation on staircase	\$	Short	MCDOT
4024	Access	Install curb ramps for Ross Rd uncontrolled crossing	\$	Short	MCDOT
4025	Maintenance	Bevel existing changes in sidewalk pavement level	\$	Short	MCDOT
4026	Maintenance	Bevel existing changes in sidewalk pavement level	\$	Short	MCDOT
4027	Maintenance	Repair erosion and drainage issue from 8409 Grubb Rd property	\$\$	Mid	MCDOT



# Pedestrian Circulation Recommendations

MAP ID	ISSUE	RECOMMENDATION	COST	TERM	JURISDICTION
4028	Driveway	Reconstruct driveway apron with proper cross slope	\$\$	Mid	MCDOT
4029	Access	Reconstruct curb and sidewalk to eliminate pinch point	\$\$	Mid	MCDOT
4030	Access	Reconstruct curb ramp and sidewalk with proper cross slope	\$	Short	MCDOT
4031	Maintenance	Trim vegetation obstructing pedestrian access route	\$	Short	MCDOT
4033	Access	Evaluate critical slope along west side of Lyttonsville Rd for hand railing needs	\$\$	Mid	MCDOT
4032	Access	Relocate PEPCO guy wire to have proper vertical clearance	\$	Mid	PEPCO
4034	Maintenance	Trim vegetation obstructing pedestrian access route	\$	Short	MCDOT
4035	Driveway	Reconstruct driveway apron with proper cross slope	\$\$	Mid	MCDOT
4036	Driveway	Reconstruct driveway apron with proper cross slope	\$\$	Mid	MCDOT
4037	Driveway	Reconstruct driveway apron with proper cross slope	\$\$	Mid	MCDOT
4038	Maintenance	Trim vegetation obstructing pedestrian access route	\$	Short	MCDOT
4039	Access	Remove curb cut along Meadowbrook Ln	\$	Short	MCDOT
4040	Access	Reconstruct bus boarding area along Freyman Dr	\$	Short	MCDOT
4041	Maintenance	Repair sidewalk damaged by tree roots	\$\$	Mid	MCDOT
4042	Maintenance	Bevel existing changes in sidewalk pavement level	\$	Short	MCDOT
4043	Maintenance	Bevel existing changes in sidewalk pavement level	\$	Short	MCDOT
4044	Maintenance	Repair sidewalk damaged by tree roots	\$\$	Mid	MCDOT
4045	Access	Install bus boarding area where school buses pick up and drop off students at RHES access	\$	Short	MCDOT
4046	Maintenance	Trim vegetation obstructing pedestrian access route	\$	Short	MCDOT
4047	Access	Reconstruct bus board area along Sundale Dr	\$	Short	MCDOT
4048	Maintenance	Trim vegetation obstructing pedestrian access route	\$	Short	MCDOT
4049	Access	Remove curb cut along Lanier Dr	\$	Short	MCDOT



# Misc Recommendations

MAP ID	ISSUE	RECOMMENDATION	COST	TERM	JURISDICTION
5008	Maintenance	Reconstruct curb line to prevent stormwater runoff	\$	Short	MCDOT
5009	Intersection Geometry	Reduce intersection geometry using curb extensions and/or median nose extensions	\$\$	Short	MCDOT
5010	Intersection Control	Convert to AWSC due to sight lines	\$	Mid	MCDOT
5011	Intersection Geometry	Reduce intersection geometry with curb extensions or mini roundabout configuration	\$\$	Mid	MCDOT
5012	Intersection Geometry	Restrict frontage road access reducing conflict points at signalized intersection	\$\$\$	Long	MDOT SHA
5013	Intersection Geometry	Reduce intersection geometry using curb extensions and/or median nose extensions	\$\$	Mid	MCDOT
5014	Intersection Geometry	Reduce intersection geometry, narrow travel ways	\$	Short	MCDOT
5015	Property Issues	Coordinate with property owner to address structural pool concerns	\$	Long	Private
5016	Property Issues	Coordinate with property owner to address site drainage	\$\$	Long	Private
5017	Misc	Outreach effort to keep trash and recycling clear of sidewalk	\$	Short	MCDOT
5018	Transit	Consider consolidating with bus stop at Elingston Dr	\$	Mid	WMATA
5019	Transit	Consider consolidating with bus stop at Elingston Dr	\$	Mid	WMATA
5020	Traffic Operations	Consider providing split phasing for traffic signal during school arrival and dismissal to limit queue spillback	\$	Mid	MDOT SHA
5021	Intersection Control	Consider intersection alternatives - tabled/raised or stop control similar to shopper center internal circulation	\$\$\$	Long	MCDOT
5022	School Circulation	Install DO NOT ENTER sign to deter wrong way movements in parking lot	\$	Short	MCPS
5023	School Circulation	Restrict outbound left turns to reduce impacts to internal school circulation and turning movement conflicts	\$	Short	MCPS
5024	School Circulation	Encourage drivers to pull up to internal crosswalk for pick up and drop off to better accommodate vehicle queues	\$	Short	MCPS
5025	School Circulation	Consider raised crossing for circulation aisle	\$\$	Mid	MCPS
5026	Intersection Control	Consider DON'T BLOCK THE INTERSECTION treatment	\$	Short	MCDOT
5027	Transit	Install bus boarding bulb and revise curb ramp configuration	\$\$	Mid	MCDOT

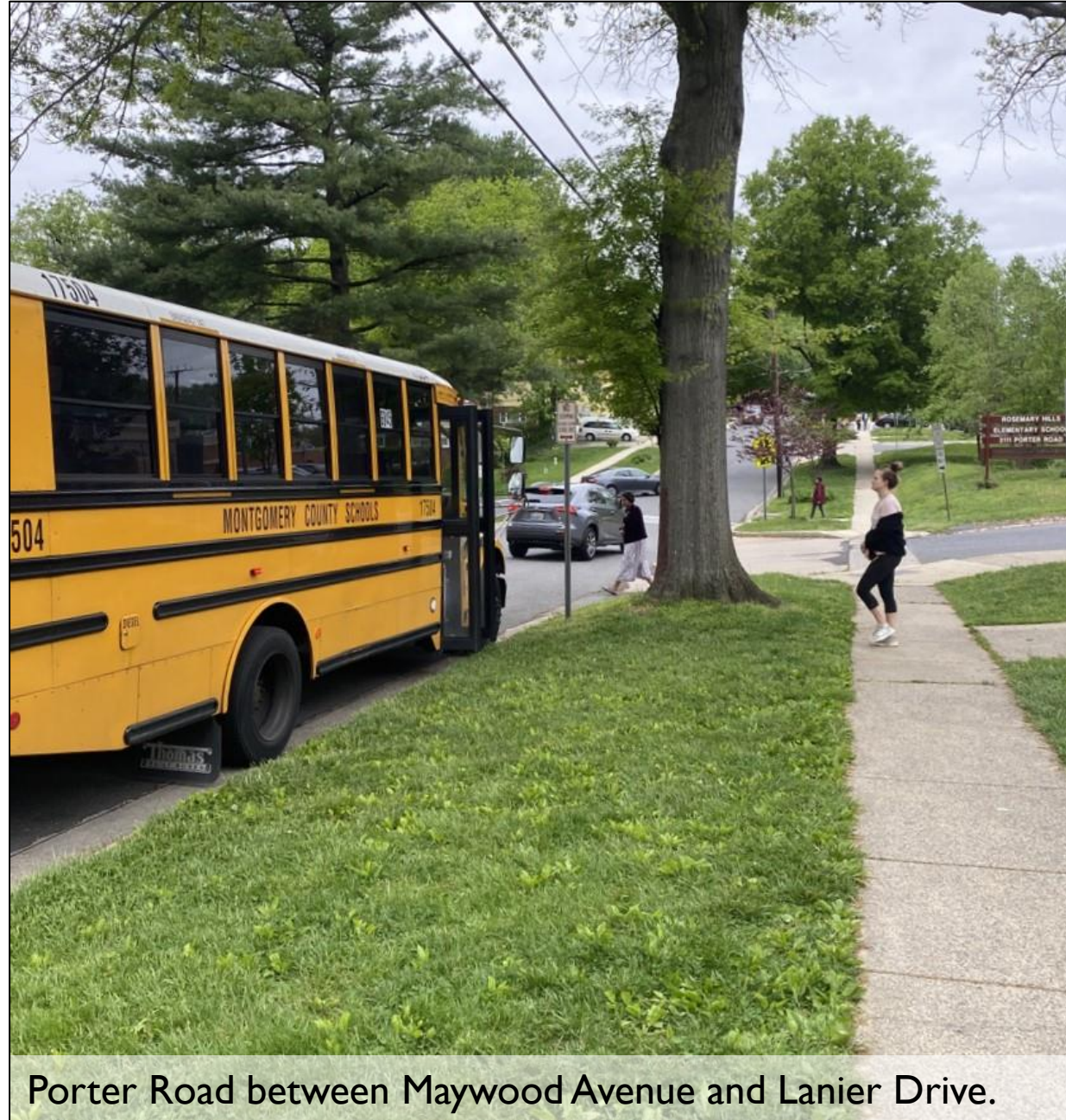


# Misc Recommendations

MAP ID	ISSUE	RECOMMENDATION	COST	TERM	JURISDICTION
5028	Intersection Control	Convert to AWSC due to skewed approaches	\$	Short	MCDOT
5029	Intersection Geometry	Reduce intersection geometry with curb extensions or mini roundabout configuration	\$\$	Mid	MCDOT
5030	Intersection Geometry	Reduce intersection geometry with curb extensions or mini roundabout configuration	\$\$	Mid	MCDOT
5031	Intersection Geometry	Reduce intersection geometry with curb extensions or mini roundabout configuration	\$\$	Mid	MCDOT
5032	Maintenance	Repair drainage and pavement damage	\$\$	Mid	MDOT SHA
5033	Hazard	Install rub rail on backside of W-beam posts to reduce snag risk for sidepath users	\$	Short	MDOT SHA
5034	School Circulation	Consolidate and upgrade driveway restriction signing for buses only	\$	Short	MCPS
5035	School Circulation	Install pavement marking arrows to reinforce one way condition	\$	Short	MCPS
5036	School Circulation	Install stop line	\$	Short	MCPS
5037	School Circulation	Upgrade signing. Separate STOP signs and DO NOT ENTER SIGNS. Add ONE WAY signs atop DO NOT ENTER signs	\$	Short	MCPS
5038	School Circulation	Provide striping to clarify lane use and circulation near driveway	\$	Short	MCPS
5039	School Circulation	Upgrade DO NOT ENTER and ONE WAY signing	\$	Short	MCPS
5040	School Circulation	Consider railing to discourage drop off / pick up in undesirable locations	\$\$	Mid	MCPS
6006	Access Management	Stripe right turn lane for school ingress	\$	Short	MCDOT
6007	Traffic Calming	Implement road diet typical section along Lyttonsville Rd between Grubb Rd and Lyttonsville Pl	\$\$	Mid	MCDOT
6008	Access Management	Stripe left turn lane for school ingress	\$	Short	MCDOT
6009	Traffic Calming	Consider narrowing lanes and installing median	\$\$\$	Mid	MDOT SHA
6010	Pedestrian Comfort	Consider path lighting along East-West Hwy sidepath	\$\$\$	Mid	MDOT SHA
6011	Access Management	Repurpose shoulder to deter stopping, standing, and parking during arrival and dismissal	\$\$	Mid	MCDOT



# Recommendations



Porter Road between Maywood Avenue and Lanier Drive.

## General

Increase accessibility along school frontages.

## ADA

Provide boarding space along Porter Road where students board and alight school buses. *(Map ID 4045)*

## Active Zone

Reconstruct sidewalks along school property frontage to 6-foot minimum width to the extent practical to minimize mature street tree impacts and other ecological disturbance. *(Map ID 3103)*

Clarify lane assignment and pedestrian access routes with pavement markings and signing at school driveways. *(Map IDs 5034 - 5038)*

## Street Zone

“Daylight” intersections with Porter Road at Sundale Drive and Maywood Avenue by providing curb extensions. Impacts to drainage patterns and storm water management opportunities should be considered when modifying curbs. *(Map IDs 1065 – 1067, 1090, 2015, and 2016)*

## Plans

Implement neighborhood greenway design elements within the segment of Porter Road designated as a shared road in the County Bicycle Master Plan.

## Transit

Any street modification should consider the routes of school buses and the Ride On Route 2.