



DPW & YOU

Making a difference, together



Four Seasons Elementary School Safe Routes to School Accessibility Study: Existing Conditions and Recommendations

August 17, 2023

Anne Arundel Safe Routes to School Accessibility Study

Anne Arundel County (AACO) and Anne Arundel County Public Schools (AACPS) recognize that schools are vital community resources. To improve safety and transportation choices for all residents, the County and school district partnered to conduct a Safe Routes to School Accessibility Study at 17 schools identified in *Move Anne Arundel!*, the County's Transportation Functional Master Plan.

The studies were overseen by a Project Management Team consisting of County, State and School District representatives. They focused on infrastructure within the school walk zone but also assessed opportunities within the school attendance area to expand active transportation to school.

Studies were conducted October 24, 2022 through February 8, 2023, and included one-day site visits to observe school arrival and dismissal and to assess existing walking and bicycling infrastructure. Surveys were also conducted to assess travel modes and barriers to walking or bicycling to and from school.

This report summarizes existing conditions and recommendations for added infrastructure, education, or encouragement programs to increase the number of children that could safely walk or ride bikes to school.

Four Seasons Elementary Accessibility Study

Report findings are derived from:

School site visits	<ul style="list-style-type: none">• Observation of school arrival and dismissal conducted January 10, 2023• Assessment of pedestrian and bicycling infrastructure within the current school walk zone and roads immediately adjacent (as connectivity allows) conducted October 25, 2022.
Parent Survey	<ul style="list-style-type: none">• Administered January 26 – February 19, 2023• Available online in English, Spanish, Chinese, and Korean• Survey link was provided via email

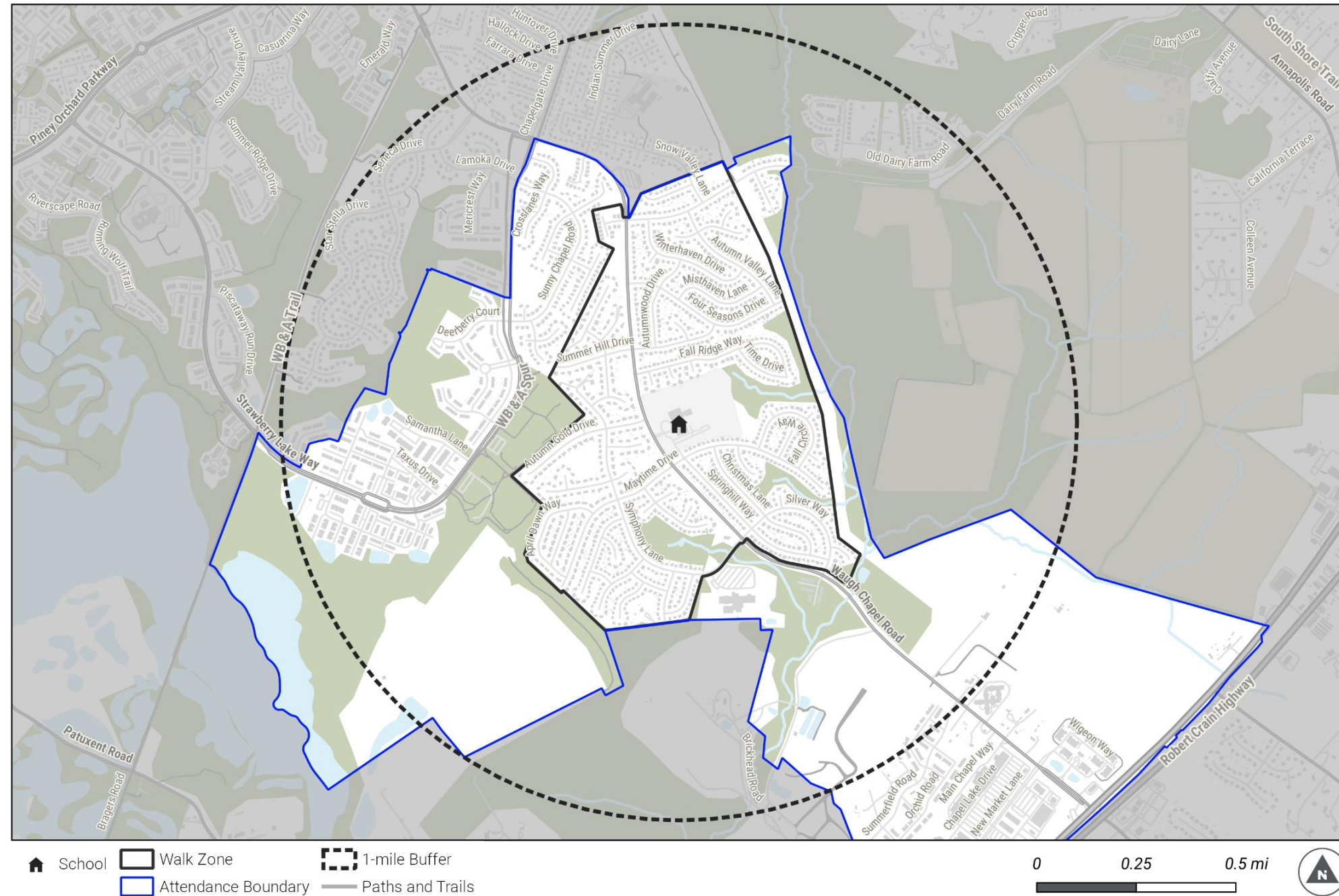
Recommendations were shared with the school community during a virtual open house in October 2023.

SCHOOL OVERVIEW

Study Area

- Field work was conducted on roads within a half mile of the school; desk-level review was conducted on roads within a one-mile radius of the school that fall within the school attendance area.
- Opportunities to expand school connectivity for pedestrians and bicyclists beyond the existing walk zone are limited.
 - The walk zone to the north, east and south extends to the limit of the attendance area.
 - Attendance areas to the west of the current walk zone north of GORC Park are separated by a lack of connection across private properties or are beyond a 1-mile walk distance.
 - Attendance areas to the west of GORC Park are approaching a 1-mile walk distance.
 - Attendance areas to the southeast and southwest of the current walk zone lack residential areas or are beyond a distance that is realistically walkable/bikeable by elementary school students.

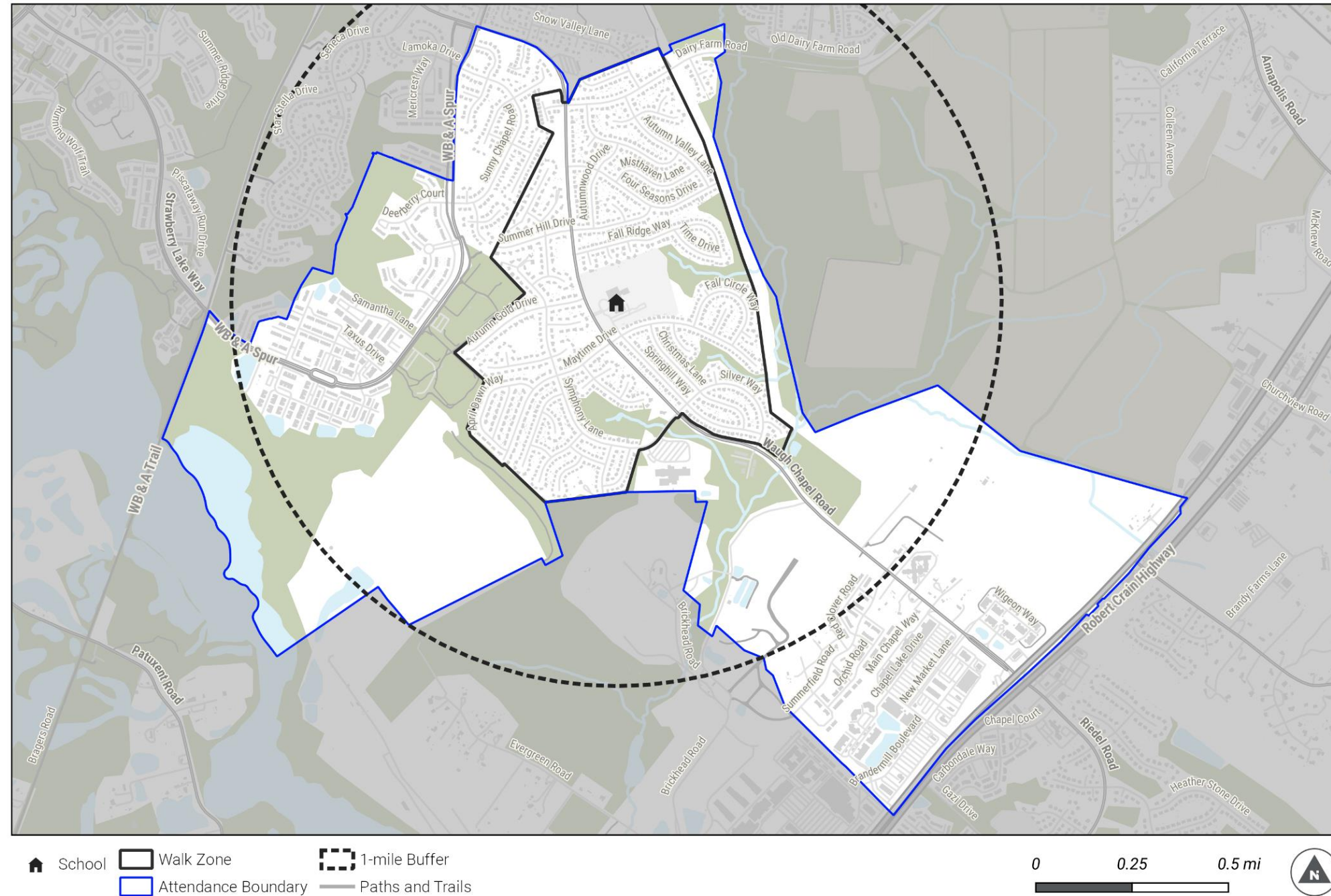
Four Seasons Elementary School - 1-mile Radius



Student Attendance Area and Enrollment

- Four Seasons Elementary School serves 664 students in grades PreK-5.
- 47% are registered for school bus service*

Four Seasons Elementary School - Attendance Boundary



*AACPS provides transportation from designated bus stops for students who reside within the school's attendance area. At elementary schools, transportation is provided for Pre-K students who live more than ½ mile from school, Kindergarten students who live more than ½ mile from school, and students of all other grades who live more than one mile from school.

Source: AACPS 2022-2023 Parent Handbook

School Location and Layout

- Four Seasons Elementary School is near Maytime Drive and Springhill Way, just off Waugh Chapel Road in Gambrills, MD.
- The school is located within a residential area, surrounded by housing on the North, West, and South. The east side of the school campus backs up to a utility ROW and the old Naval Dairy Farm.
- The walk zone contains single family housing, with many disconnected streets.
- Maytime Drive is a neighborhood street with a posted speed limit of 25 mph.
- Waugh Chapel Road has a posted speed limit of 35 mph.

Four Seasons Elementary School - Walk Zone



School Access

Walkers and Bicyclists:

- Walkers and bicyclists access the school via Maytime Drive, Springhill Way, Waugh Chapel Road and a path that leads to the school property from Christmas Court.

Buses:

- Buses access the school via Waugh Chapel Road and deboard/board in the driveway loop in front of the school's main entrance.

Parent/Guardian Drop-Off:

- Parents/guardians are to drop off students via a drop-off line that runs through the staff parking lot in the southern portion of the school property.

Staff Vehicles:

- Staff who drive access the school via Maytime Drive and park in a staff parking lot to the south of the school.



PARENT-REPORTED STUDENT TRAVEL MODES AND BARRIERS

Four Seasons Elementary - Parent Survey Response Overview

- 79 total survey responses received*
- 96% of respondents live in the area zoned to the school

Reported Distance from Home to School	
Distance	Number of Respondents
< ¼ mile	6
¼ mile – ½ mile	8
½ mile – 1 mile	20
1 mile – 1 ½ miles	16
>1 ½ miles	20

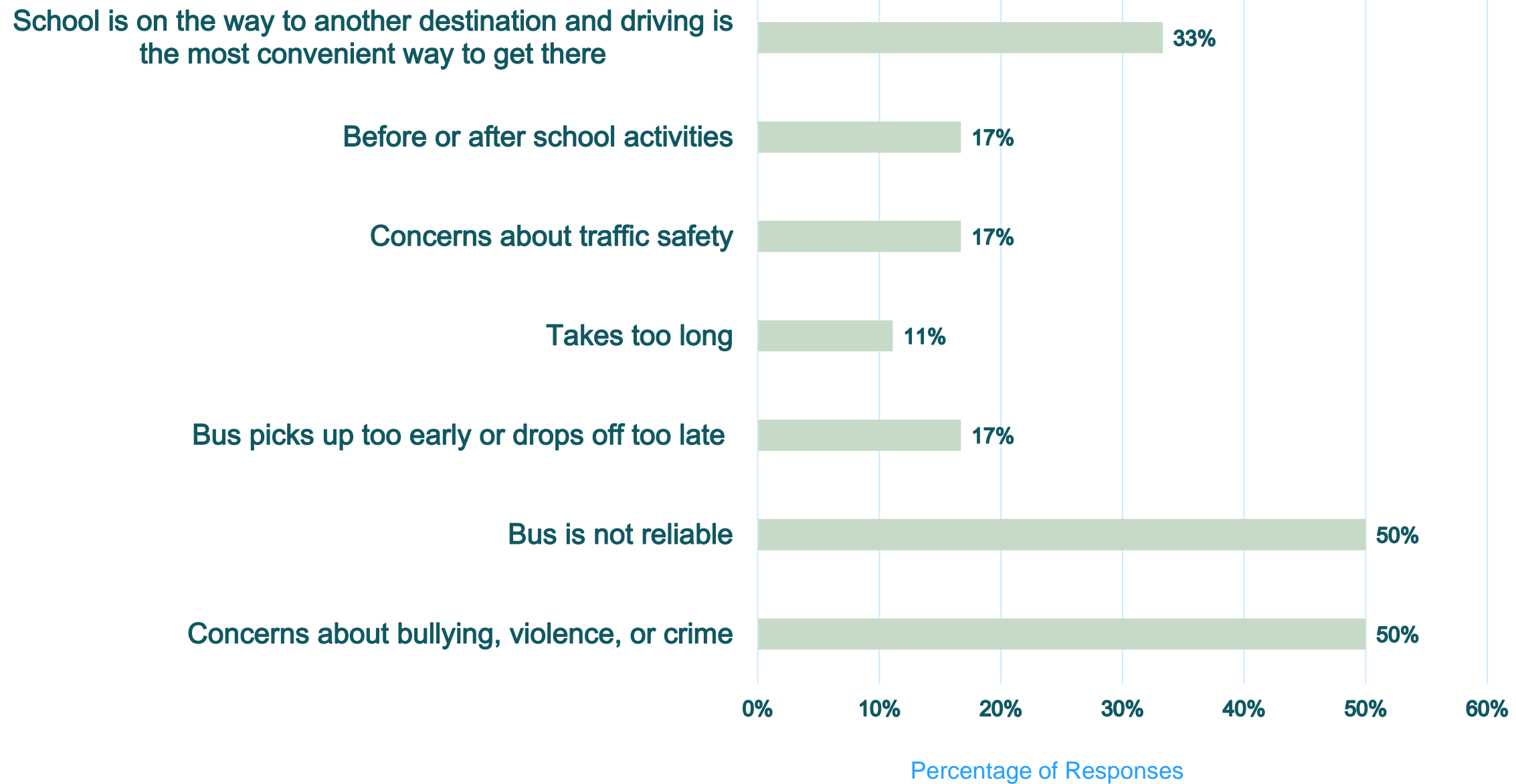
**Note that the survey response rate represents a fraction of the student population and may not reflect the experiences and perspectives of all families.*

Parent Survey Results

School Bus Eligibility and Use

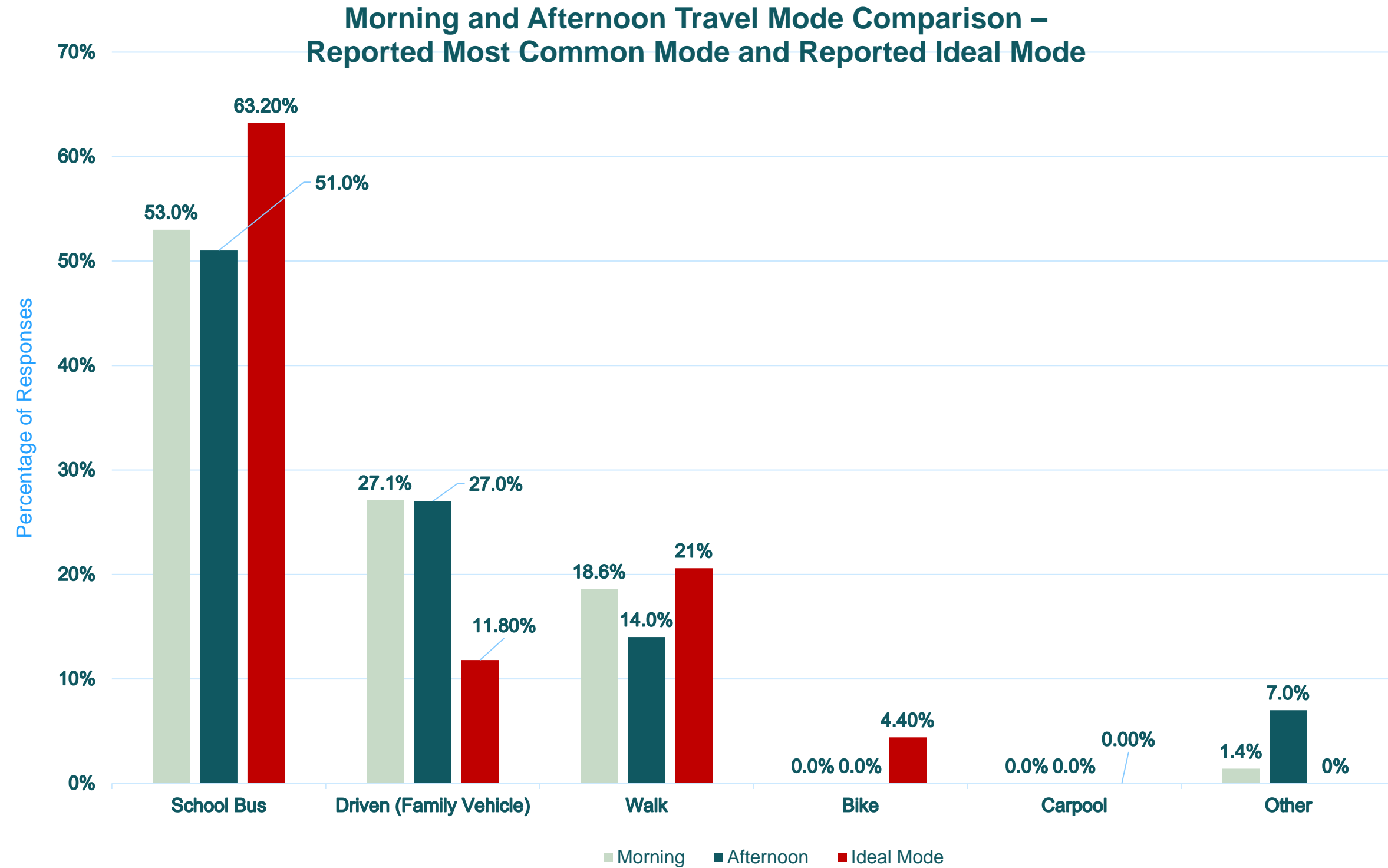
67% of respondents reported being eligible for school bus transportation;
53% reported riding the school bus to school.

Issues and Reasons Reported for Not Riding the Bus



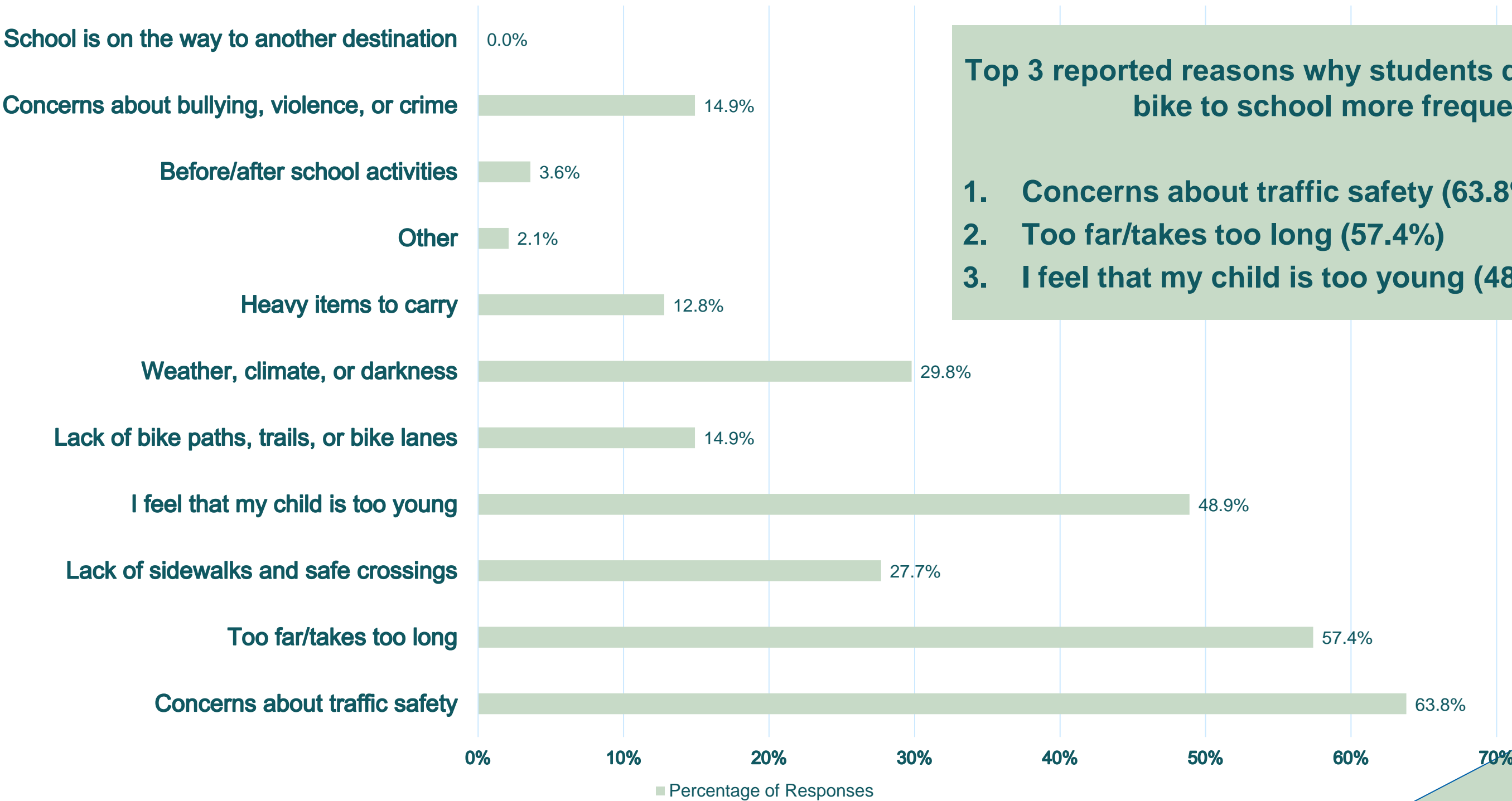
Parent Survey Results

Most Common Travel Mode versus Ideal Travel Mode



Parent Survey Results

Reported Barriers to Walking or Biking to School



Top 3 reported reasons why students don't walk or bike to school more frequently:

- 1. Concerns about traffic safety (63.8%)**
- 2. Too far/takes too long (57.4%)**
- 3. I feel that my child is too young (48.9%)**

Parent Survey Results

Reported Streets Used to Walk or Bike to School

- Waugh Chapel Road
- Summer Hill Drive
- Springhill Way
- Maytime Drive
- Snow Hill Lane
- Symphony Lane
- Fall Ridge Way
- Christmas Lane

ARRIVAL AND DISMISSAL OBSERVATIONS

Arrival and Dismissal Operations

School Hours:

- 8:00 am – 2:25 pm

Observation Times (October 25th):

- Arrival: 7:30 am – 8:10 am
- Dismissal: 2:10 pm – 2:40 pm

Crossing Guard:

- Per AACPS data, one crossing guard is assigned to Four Seasons Elementary School; two were observed during arrival and dismissal observations – one located at the intersection of Maytime Drive and Springhill Way, and one located at the intersection of Waugh Chapel Road and Maytime Drive.

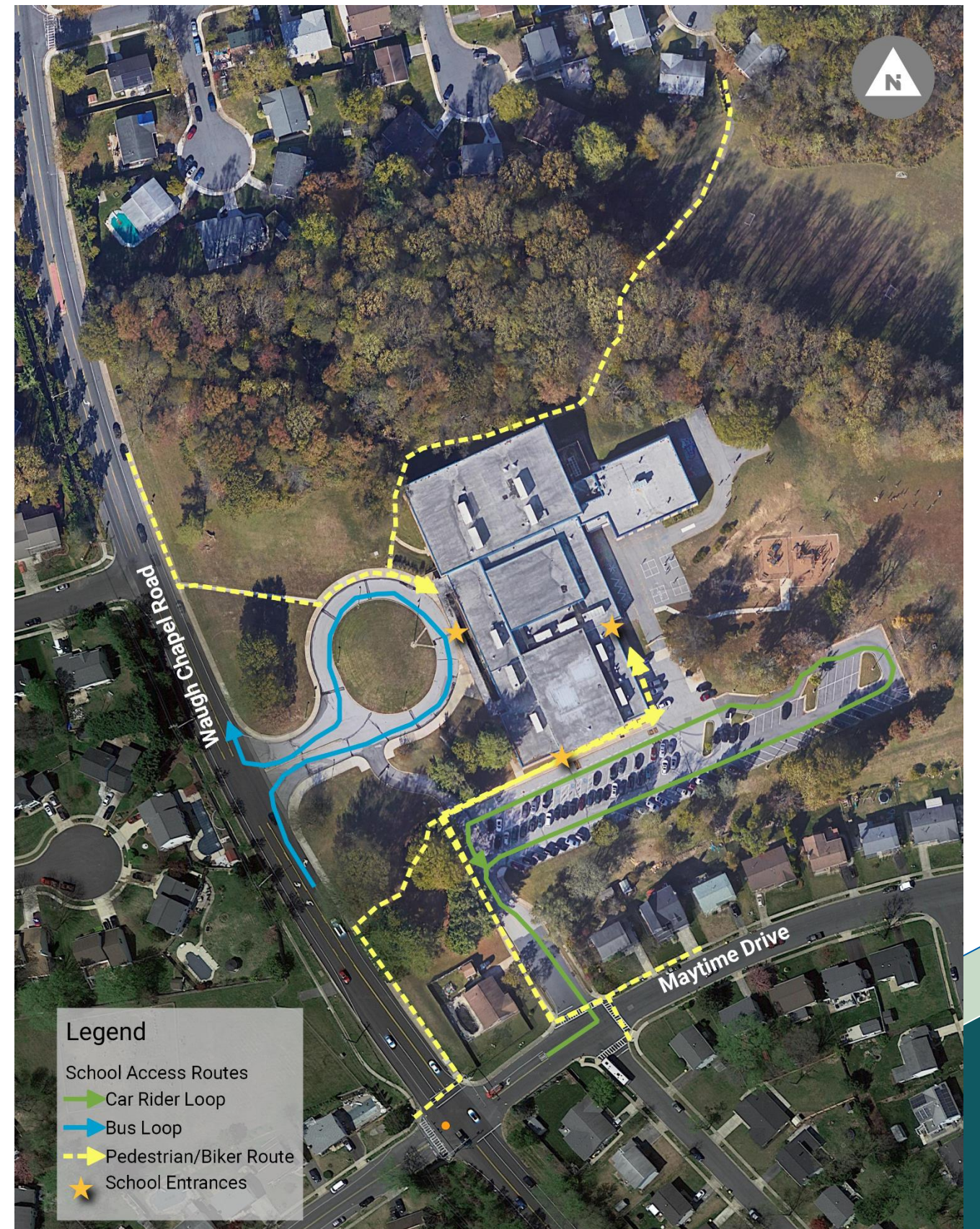


Entering and exiting parent drop-off at the intersection of Maytime Dr and Springhill Way

General Observations

General Observations:

- Vehicular student drop-off and pick-up was observed both in the school drop off loop and along Waugh Chapel Road.
- The driveway used by parents and staff is at the intersection of Maytime Drive and Springhill Way at the entrance to a residential cul-de-sac. Springhill Way is stop controlled but Maytime Drive is not.
- Bus riders accessed the school through the main entrance; car riders accessed the school via a side door on south side of the school building or the main entrance; walkers entered through a variety of doors depending on where they were coming from.
- High motor vehicle speeds were observed on Waugh Chapel Road.



Arrival Observations

The study team observed arrival from the following locations:

- Waugh Chapel Road and Maytime Drive
- Maytime Drive and Springhill Way
- Waugh Chapel Road between bus driveway and Autumn Gold Drive

General Observations:

- School starts at 8:00 AM; most students arrived between 7:35 and 8:00 AM

Walkers and Bicyclists

- Approximately 80 student walkers were observed during arrival. Most walkers came from Maytime Drive and Springhill Way, with some coming from Waugh Chapel Road. Most students who walked were accompanied by adults.



Walkers are seen entering campus from Springhill Way.

Arrival Observations

Bus Lane

- Five buses dropped off students in the bus loop at the front of the school.

Parent Drop-off

- Teachers and teacher assistants help students exit cars in the drop-off loop.
- Car loop remained relatively steady until 8:00.
- Many parents were seen dropping their students off along Waugh Chapel Road in front of the school; some made U-turns to park on the east side of Waugh Chapel Road, some parked on the west side and crossed the road with their child mid-block.
- Observed vehicle volumes on Waugh Chapel Road were heavy and constant during peak arrival.



Vehicle drop-off of students occurring along Waugh Chapel Road at school arrival.

Dismissal Observations

The study team observed dismissal from the following locations:

- Waugh Chapel Road and Maytime Drive
- Back entrance (walker exit)

General Observations:

- School ends at 2:25, but bus dismissal process for younger students begins at 2:20.
- Students exit the school from three locations: front door, bus riders; side door, car riders; rear door, walkers.

Walkers and Bicyclists:

- K-1st grade walkers were dismissed first, at 2:25.
- 2nd-5th grade walkers were after bus riders, at about 2:27 pm.
- Parents wait outside the walker exit for their students to be dismissed, approximately 60 parents were seen waiting before dismissal.
- Approximately 100 walkers were observed exiting when walkers were dismissed.
- Walkers were observed leaving in multiple directions, but most were seen leaving toward Springhill Way and Maytime Drive.



Cars are seen parked along Waugh Chapel Road at dismissal time.

Dismissal Observations

Bus Lane

- Younger bus riders are dismissed first, with 1st grade bus riders dismissed at 2:20.
- 2nd-5th grade bus riders were dismissed at 2:25.
- Five buses were observed picking students up from the front bus loop.

Parent Pick-up

- By 2:05, about 20 cars were lined up in the loop and two dozen cars were parked along Waugh Chapel Road.
- Pick-up loop was busiest from 2:25-2:35
- Staff manage pick up by having students line up when their name is called.



Buses are seen in the bus loop waiting for dismissal.

EXISTING INFRASTRUCTURE CONDITIONS

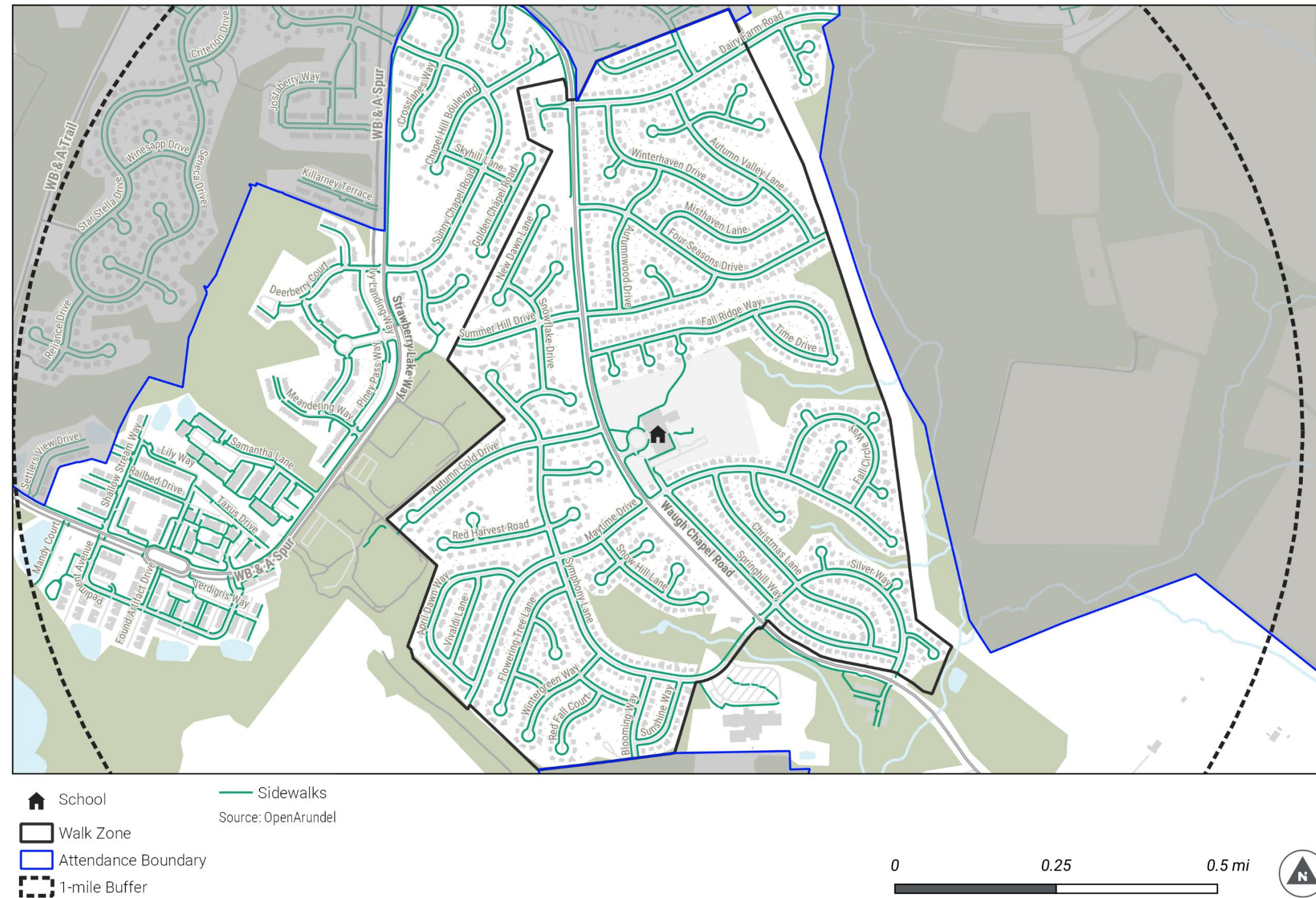
Existing Sidewalk Network

There is one gap in the sidewalk network, on Waugh Chapel Road from Symphony Lane to Maytime Drive.

Sidewalks are present on all other roads within the walk zone.

Note that the gap shown on Waugh Chapel Road across from Four Seasons Drive did not exist at the time of the study.

Four Seasons Elementary School - Existing Sidewalk Network



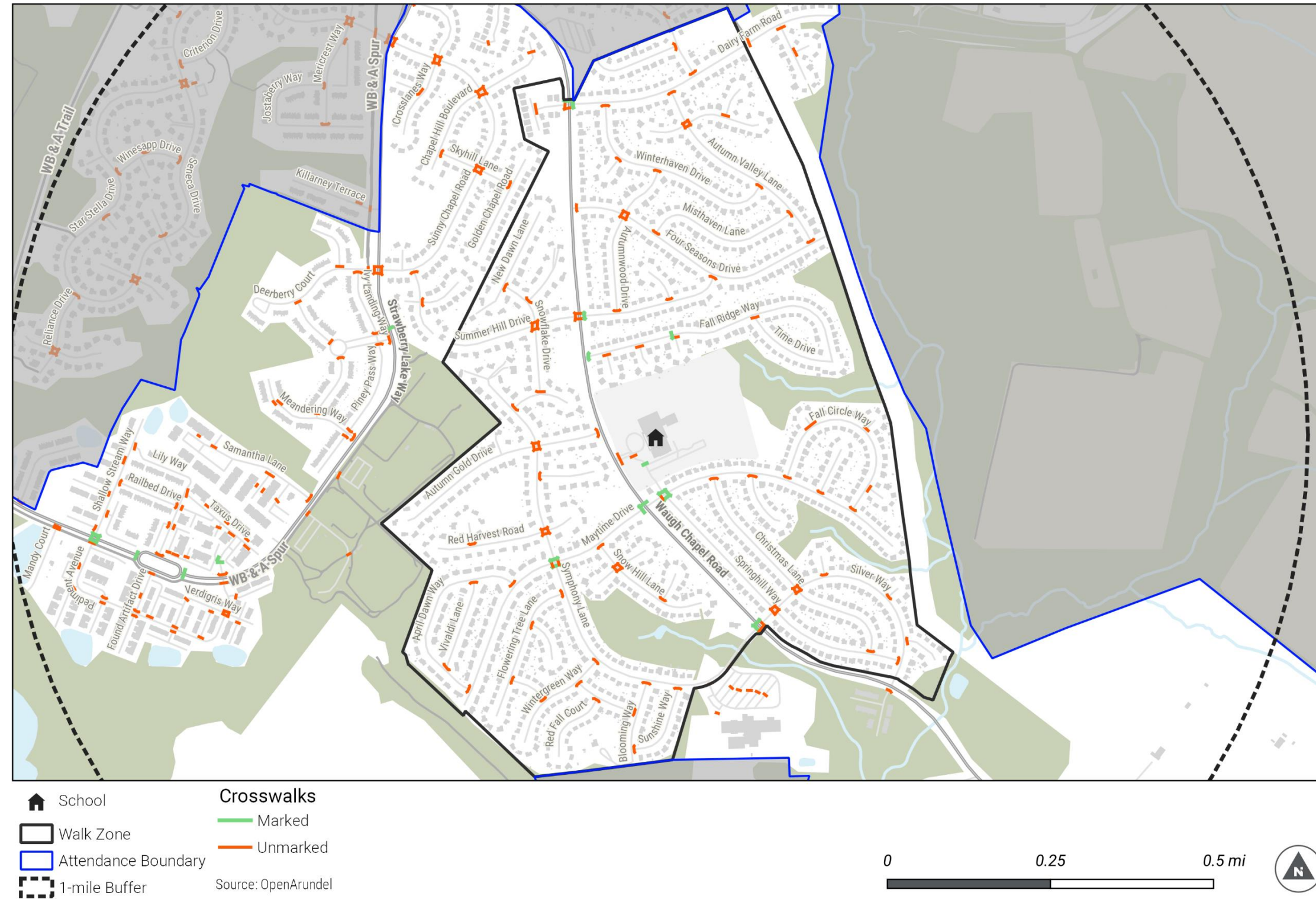
Existing Crosswalks

There is one marked crosswalk on the school campus that crosses a driveway connecting the bus loop and the staff parking lot.

There are marked crossings at the entrance to the staff parking lot/parent drop-off area (at the intersection of Maytime Drive and Springhill Way).

Many crossings at intersections within the walk zone are unmarked.

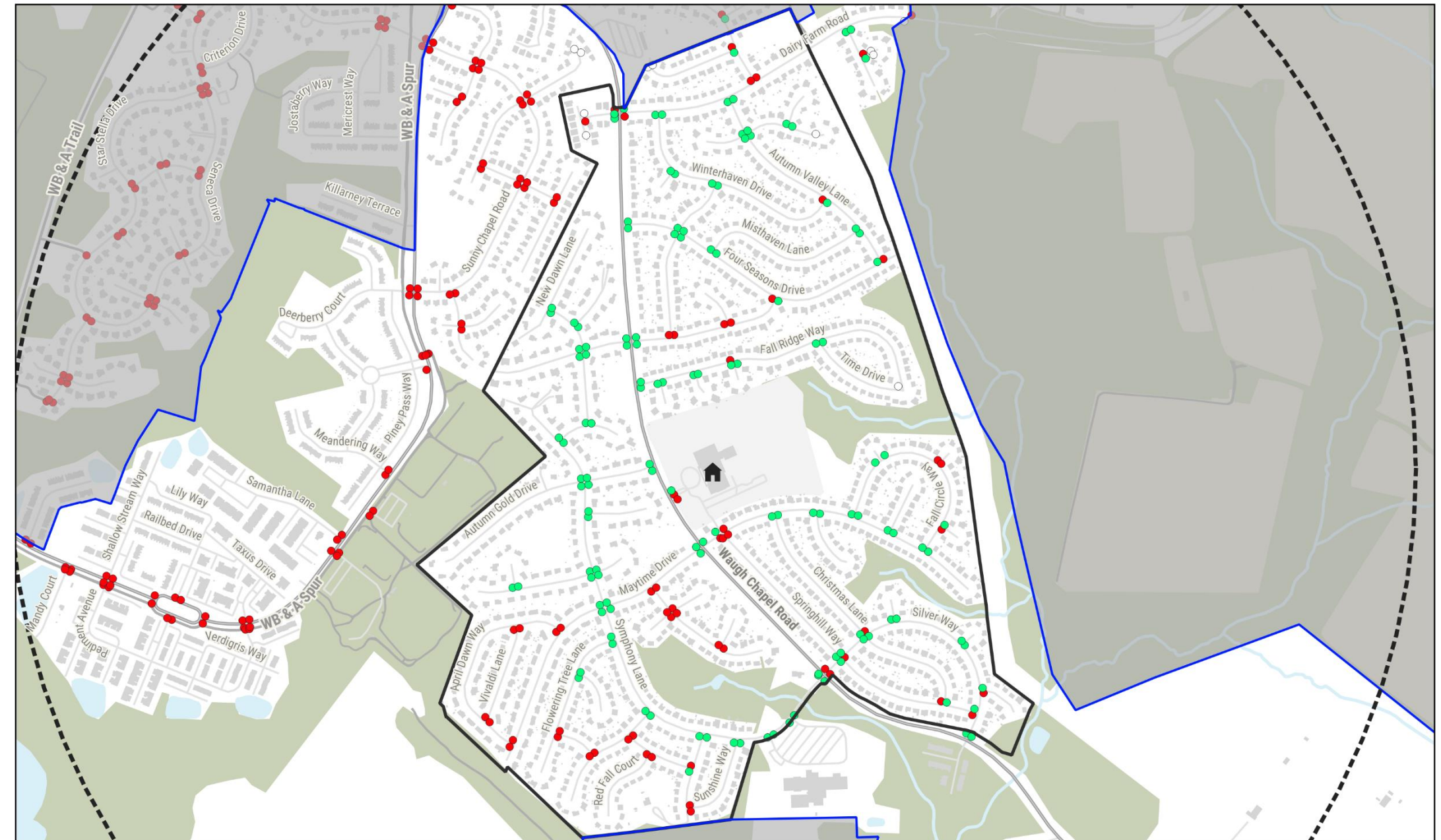
Four Seasons Elementary School - Existing Crosswalks



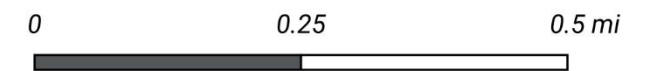
Existing Curb Ramps*

Curb ramps are located at all intersections that have sidewalks; most are ADA compliant.

Four Seasons Elementary School - Existing Curb Ramps



- School
 - Walk Zone
 - Attendance Boundary
 - 1-mile Buffer
 - Curb Ramp ADA Compliance**
 - Pass
 - Fail
 - Not Audited
- Source: Anne Arundel County



*Curb ramp data downloaded 9/14/22

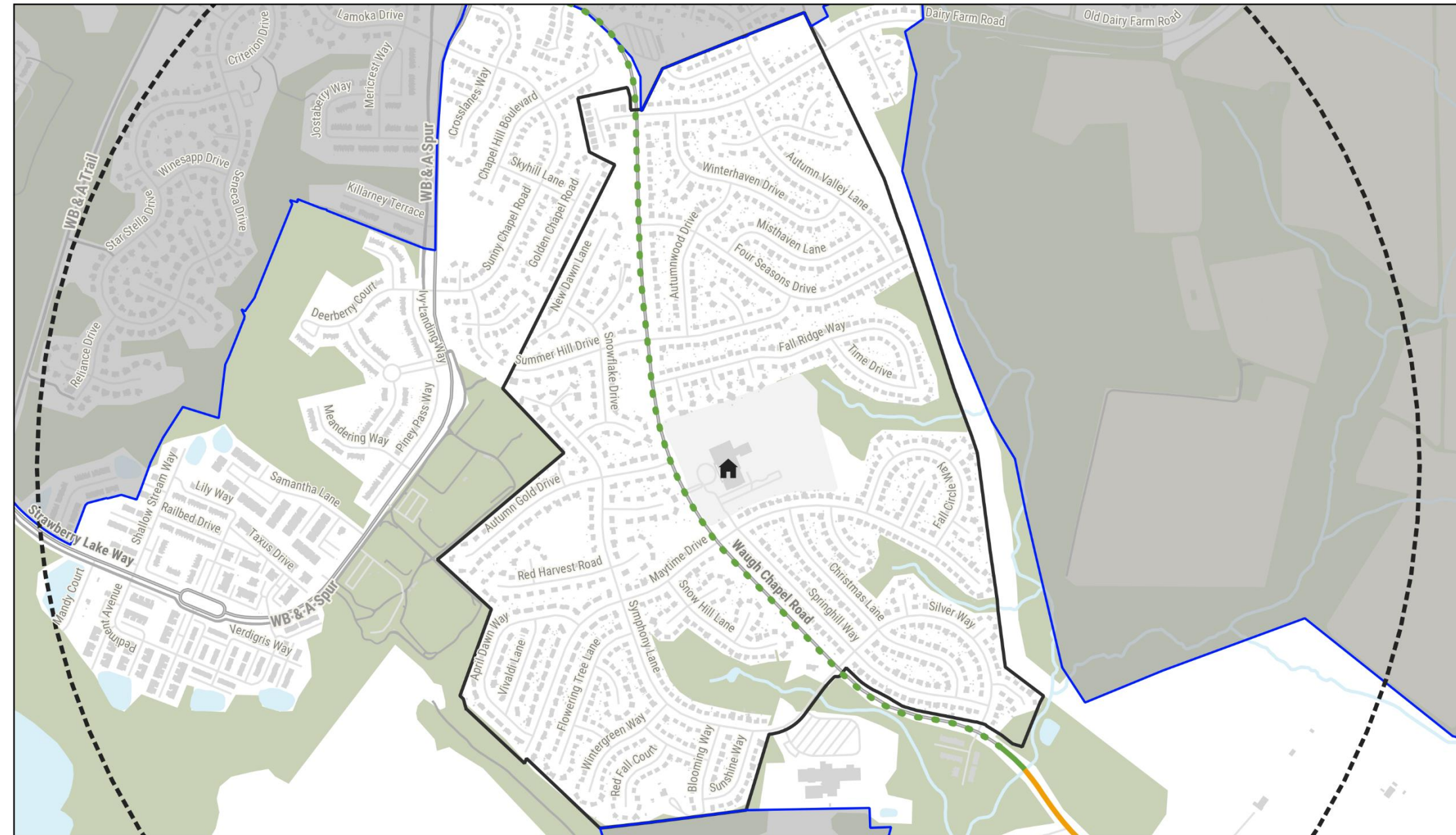
Existing On-Road Bike Facilities

Most residential streets near the school have low traffic volumes and speeds and may be suitable for older students to bicycle; however, roads connecting these neighborhoods to the school lack bicycle facilities or have heavy traffic volumes and/or speeds.

A bicycle lane is planned* along Waugh Chapel Road, all the way to Route 3.

*“Planned” means included in the County’s Master Plan

Four Seasons Elementary School - Existing On-Road Bicycle Facilities



- | | | | |
|---------------------|---------------------------|--|--------------------------------------|
| School | Bike Lanes | Sharrows or Marked Shared Lanes | Signed/Designated Bike Routes |
| Walk Zone | Existing | Existing | Existing |
| Attendance Boundary | Programmed | Programmed | Planned |
| 1-mile Buffer | Planned | Planned | |
| | Existing - Separated Lane | | |

Source: Anne Arundel County

0 0.25 0.5 mi



Existing Regional Trails, Park Trails, and Paths

The WB&A trail spur is adjacent to but disconnected from the study area.

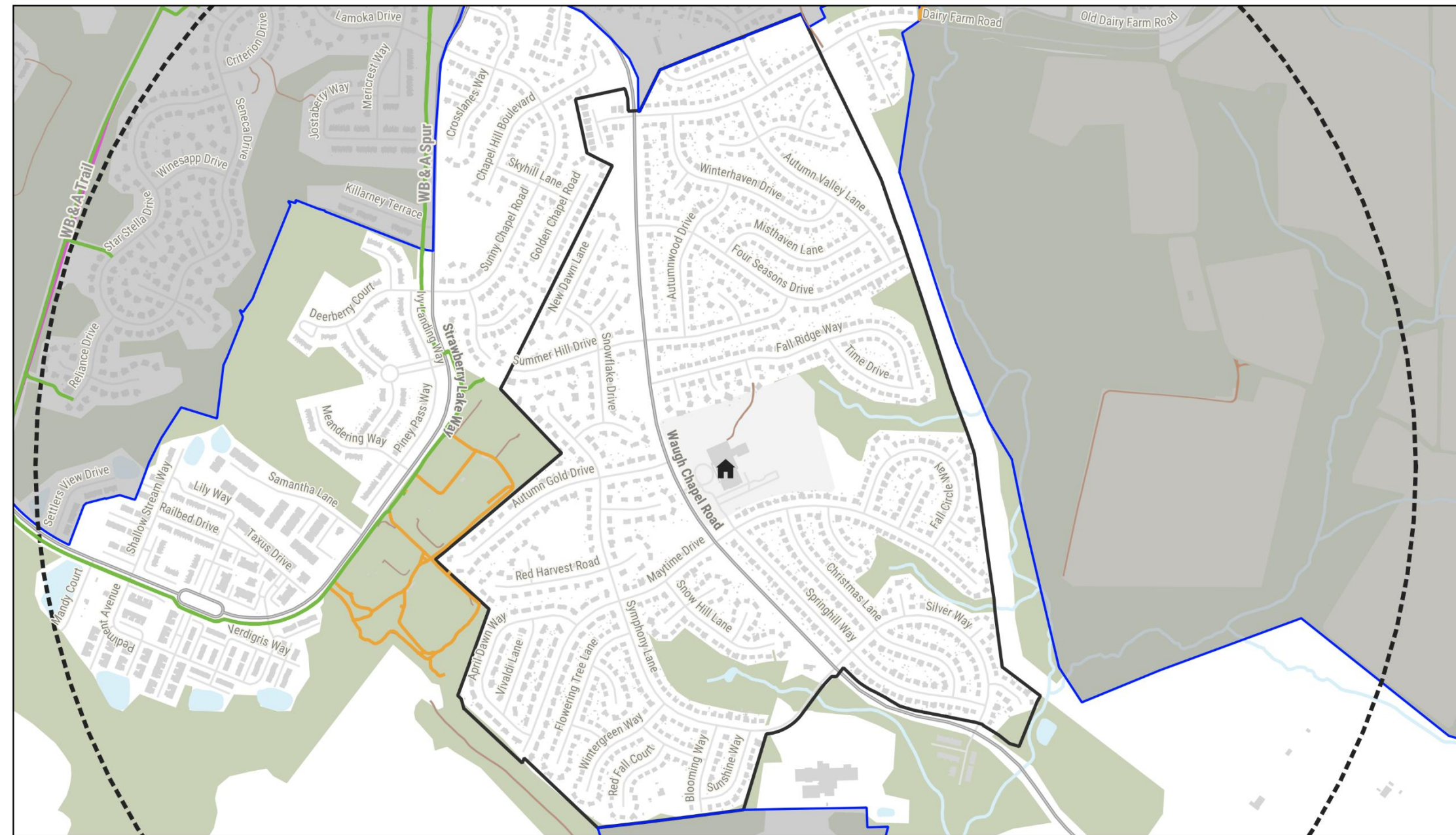
There are park trails in GORC Park located west of the school campus with connectivity from Autumn Gold Drive.

There is one paved path that leads to the school property from Christmas Court.

No additional trails or paths are currently planned* near the school.

*“Planned” means included in the County’s Master Plan

Four Seasons Elementary School - Existing Regional Trails, Park Trails, and Paths



- School
- Walk Zone
- Attendance Boundary
- 1-mile Buffer
- Regional Trails
- Park Trails
- Paths
- Shared Use Paths
 - Existing
 - Programmed
 - Planned

Sources: Anne Arundel County, OpenArundel



CRASH DATA

Crash Data (2017 – 2021)

Crashes within 1-mile radius of the school:

- 152 total crashes (all modes)
- Four pedestrian-involved crashes, three resulting in injury.
- Three bicyclist-involved crashes, all resulting in injury

Pedestrian and bicyclist crashes within the walk zone:

- None within the walk zone, but one pedestrian crash just outside the southeast boundary

Four Seasons Elementary School - Pedestrian and Bicycle Crashes



INFRASTRUCTURE RECOMMENDATIONS

Infrastructure Recommendations

Safe Routes to School infrastructure recommendations aim to improve safety and accessibility for students to walk and bicycle to school. This may include reducing vehicle speeds, addressing conflicts between pedestrians/bicyclists and drivers, and providing fully accessible sidewalks and crossings near schools.

The following tables summarize infrastructure recommendations within and outside of the current school walk zone as relevant. Key student walking or bicycling routes were identified based on information received from school administration, parent surveys, and school observations. Key routes are noted in the recommendation “Location” field.

Other projects within the study area were identified in the County’s Capital Improvement Projects web page at the time of this plan, including the **Waugh Chapel Road Improvement Phases 1 and 2 project**. Note that other projects or planning/feasibility studies may be planned or ongoing within the study area. Anne Arundel County will confirm the approach to implementing recommendations from this SRTS Accessibility Study to ensure they align with other projects as necessary.

Potential costs do not include items calculated based on percent of construction items, such as mobilization, MOT, surveying, ROW/easements, design, CMI and administrative costs, and contingencies. These cannot be determined since the method of implementation for proposed improvements has not yet been confirmed.

Infrastructure Recommendations Map

Four Seasons Elementary School - Recommendations



- | | | | |
|---------------------|---|---|--------------------------------|
| School | Spot Recommendations | Sidewalk | Segment Recommendations |
| Walk Zone | Access Management | Speed Management | Bicycle Facility |
| Attendance Boundary | Bicycle Rack | Other Recommendations | Corridor Intersection Upgrades |
| 1-mile Buffer | Intersection or Crossing | School Zone Signs and Pavement Markings | Speed Management |
| Paths and Trails | School Zone Signs and Pavement Markings | Sidewalk | |

Infrastructure Recommendations within the School Walk Zone

Information contained in this document is for planning purposes and should not be used for final design of any project. All results, recommendations, concept drawings, cost opinions, and commentary contained herein are based on limited data and information and on existing conditions that are subject to change. Further analysis and engineering design are necessary prior to implementing any of the recommendations contained herein.

Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
1	Dairy Farm Rd & Snow Valley Ln	1a. Crosswalk	Crossing is unmarked across Snow Valley Lane, No stop bar	Install new high-visibility crosswalk, Mark new stop bar	\$900	Short
		1b. Curb Ramp	Ramps lack detectable warning surface, Curb ramp not aligned with crossing	Reconstruct or repair existing ramps	\$8,000	Medium
		1c. Other Intersection or Crossing Issues	Concern about motor vehicle turning movements and speeds (onto Snow Valley Ln)	Install curb extensions or curb radius reduction on Snow Valley Ln	\$10,000	Long
2	Waugh Chapel Rd & Summer Hill Dr (Along key student walking route, Inside school zone)	2a. Crosswalk	Crossings are unmarked across Summer Hill Dr (east and west crossings), No stop bar	Install new standard crosswalk, Mark new stop bar.	\$1,000	Short
		2b. Other	Concern about motor vehicle turning speeds (cars turning off Waugh Chapel Rd)	Install curb extensions or curb radius reduction for Summer Hill Dr crossings	\$20,000	Long
		2c. Curb ramp	West ramps not aligned with crossing	Reconstruct or repair existing ramps	\$8,000	Medium

*Short (1 year), medium (2-3 years) or long term (3+ years)

Infrastructure Recommendations within the School Walk Zone

Information contained in this document is for planning purposes and should not be used for final design of any project. All results, recommendations, concept drawings, cost opinions, and commentary contained herein are based on limited data and information and on existing conditions that are subject to change. Further analysis and engineering design are necessary prior to implementing any of the recommendations contained herein.

Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
3	Summer Hill Dr & Snowflake Dr	3a. Curb Ramp	Ramps lacks detectable warning surface, Ramps not aligned with crossing	Reconstruct or repair existing ramps	\$16,000	Medium
		3b. Crosswalk	Crossings are unmarked across Snowflake Dr (both legs), No stop bar	Install new standard crosswalk, Mark new stop bar	\$1,000	Short
4	End of Summer Hill Dr	Sidewalk	Missing sidewalk/path connection	Explore potential for new path connection (length depends on geography and ROW). A sidewalk connection to the path between GORC Park Station House Ln may allow for expansion of the school walk zone.	N/A	Long
5	Waugh Chapel Rd (Fall Ridge Way to Summer Hill Dr) (Along key student walking route, Inside school zone)	Sidewalk	Sidewalk uplifted on west side of Waugh Chapel Rd	Reconstruct or repair sidewalk	\$13.440	Long
6	Waugh Chapel Rd & Fall Ridge Way (Along key student walking route, Inside school zone)	Crosswalk	Crossings are unmarked across Fall Ridge Way, No stop bar	Install new standard crosswalk, Mark new stop bar	\$500	Short

*Short (1 year), medium (2-3 years) or long term (3+ years)

34 **Note that at locations where installation of new sidewalks is recommended, high-visibility crosswalks, ADA compliant curb ramps, and stop bars should be installed at intersecting streets to facilitate crossings and encourage motor vehicle yielding.

Infrastructure Recommendations within the School Walk Zone

Information contained in this document is for planning purposes and should not be used for final design of any project. All results, recommendations, concept drawings, cost opinions, and commentary contained herein are based on limited data and information and on existing conditions that are subject to change. Further analysis and engineering design are necessary prior to implementing any of the recommendations contained herein.

Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
7	Waugh Chapel Rd (Summer Hill Dr to Symphony Ln) (Along key student walking route, Inside school zone)	7a. Speed Management	Observed motor vehicle speeds appear to exceed speed limit	Conduct a speed study to consider speed management measures or other modifications	N/A	Long
		7b. School Zone Signs and Pavement Markings	SCHOOL pavement marking missing School zone sign missing School zone speed limit sign missing	Enhance existing school zone signage per MdMUTCD part 7: - Install new SCHOOL pavement marking - Install new school zone signs (begin/end) - Install new school zone speed limit sign	\$1,000 \$1,000 \$500	Short
8	School path to Christmas Ct	Sidewalk	Sidewalk cracked and uplifted at various points along the path	Reconstruct or repair sidewalk	\$27,200	Long
9	Ice Crystal Ct & Symphony Ln	Curb ramp	Ramps not aligned with crossing	Reconstruct or repair existing ramps	\$8,000	Medium
10	Behind school	Bicycle rack	Existing rack does not allow locking of frame, New rack location needed	Replace existing rack with inverted U rack, place in more visible, accessible location	\$175/per (quantity TBD)	Short

*Short (1 year), medium (2-3 years) or long term (3+ years)

Infrastructure Recommendations within the School Walk Zone

Information contained in this document is for planning purposes and should not be used for final design of any project. All results, recommendations, concept drawings, cost opinions, and commentary contained herein are based on limited data and information and on existing conditions that are subject to change. Further analysis and engineering design are necessary prior to implementing any of the recommendations contained herein.

Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
11	School Parking Lot (Along key student walking route, On school campus)	11a. Crosswalk	Crossings are unmarked across school parking lot for the east sidewalk.	Install new high visibility crosswalk	\$800	Short
		11b. Curb ramp	Missing ramps	Install new ramps	\$8,000	Medium
12	Springhill Way & Maytime Dr (Along key student walking route, Inside school zone)	Other intersection or crossing issues	Concern about motor vehicle turning movements and speeds, Concern about motor vehicle yielding, Pedestrians unable to find sufficient gaps in traffic	Install curb radius reduction or curb extensions at north crossing of Springhill Way, south crossing of Springhill Way, and east crossing of Maytime Dr.	\$30,000	Long
				Install raised crosswalks and school crossing signs with downward pointing arrows (north across Springhill Way, east across Maytime Dr.	\$20,000 \$1,000	Medium
				Install school advance crossing assembly signs on Maytime Dr (both directions)	\$500	Short

*Short (1 year), medium (2-3 years) or long term (3+ years)

Infrastructure Recommendations within the School Walk Zone

Information contained in this document is for planning purposes and should not be used for final design of any project. All results, recommendations, concept drawings, cost opinions, and commentary contained herein are based on limited data and information and on existing conditions that are subject to change. Further analysis and engineering design are necessary prior to implementing any of the recommendations contained herein.

Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
13	Maytime Dr (Waugh Chapel Rd to Springhill Way) (Along key student walking route, Inside school zone)	Sidewalk	Sidewalk narrow on north side of Maytime Dr and has no buffer from the road.	Reconstruct or repair sidewalk	\$7,200	Long
14	Waugh Chapel Rd (north of Maytime Dr) (Along key student walking route, Inside school zone)	Sidewalk	Sidewalk appears to exceed 2% maximum cross slope permitted by ADA Accessibility Guidelines	Assess cross slope in this general location and reconstruct or repair sidewalk as needed	N/A	Long
15	Maytime Dr (Snow Hill Ln to Christmas Ln) (Along key student walking route, Inside school zone)	15a. Speed Management	Observed motor vehicle speeds appear to exceed speed limit	Speed study to consider speed management measures or other modifications	N/A	Long
		15b. School zone sign and pavement markings	SCHOOL pavement marking missing, School advance warning sign missing, School zone sign missing, School zone speed limit sign missing	Enhance existing school zone signage per MdMUTCD part 7: - Install new SCHOOL pavement markings - Install new school advance warning signs - Install new school zone signs - Install new school zone speed limit signs	\$1,000 \$500 \$500 \$500	Short

*Short (1 year), medium (2-3 years) or long term (3+ years)

Infrastructure Recommendations within the School Walk Zone

Information contained in this document is for planning purposes and should not be used for final design of any project. All results, recommendations, concept drawings, cost opinions, and commentary contained herein are based on limited data and information and on existing conditions that are subject to change. Further analysis and engineering design are necessary prior to implementing any of the recommendations contained herein.

Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
16	Waugh Chapel Rd & Maytime Dr (Along key student walking route, Inside school zone)	16a. Other intersection or crossing issues	Concern about motor vehicle turning movements exiting Maytime Dr.	Implement No Right Turn on Red	\$250	Short
			Vegetation obstructs sight lines	Trim vegetation south of intersections	\$1,000	
		16b. Crosswalk	Crosswalk markings faded, not high visibility	Remark high-visibility crosswalks	\$1,600	Short
			Stop bar located too close to crosswalks	Reposition stop bar to a minimum of 4ft in advance of the nearest crosswalk line	\$200	
17	Maytime Dr & Snow Hill Ln (Along key student walking route)	17a. Crosswalk	Crossings are unmarked across Snow Hill Ln, No stop bar	Install new standard crosswalk, Mark new stop bar	\$400	Short
			17b. Curb ramp	Ramps lack detectable warning surface	Reconstruct or repair existing ramps	

*Short (1 year), medium (2-3 years) or long term (3+ years)

Infrastructure Recommendations within the School Walk Zone

Information contained in this document is for planning purposes and should not be used for final design of any project. All results, recommendations, concept drawings, cost opinions, and commentary contained herein are based on limited data and information and on existing conditions that are subject to change. Further analysis and engineering design are necessary prior to implementing any of the recommendations contained herein.

Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
18	April Dawn Way (northeast) & Maytime Dr	Curb Ramp	Ramps lack detectable warning surface	Reconstruct or repair existing ramps for crossing of April Dawn Way	\$8,000	Medium
19	April Dawn Way (west) & Maytime Dr	Curb Ramp	Ramp lack detectable warning surface	Reconstruct or repair existing ramps for crossing of April Dawn Way	\$8,000	Medium

*Short (1 year), medium (2-3 years) or long term (3+ years)

Additional Considerations

Residential areas west of GORC Park fall within what may be a realistic bicycling distance from the school using trails within the park, but Strawberry Lake Way lacks marked and controlled pedestrian crossing facilities. For long-term planning, the County could explore adding a rectangular rapid flashing beacon at a key crossing location for access to GORC park.



View of Strawberry Lake Way near GORC Park via Google Maps

Potential Sources of Funding for Safe Routes to School Projects

Funding for SRTS infrastructure improvements may come from a variety of sources, including the County's Capital Improvement Program, Operations and Maintenance Funds, and Multimodal Improvement Fund. Funding is also available via grants from the State of Maryland or the federal government, or efforts by local jurisdictions and private developers through the required Bicycle, Pedestrian, and Transit Assessment. Details on potential sources of funding for pedestrian and bicycle projects are described in *Walk & Roll Anne Arundel!* (page 73).

PROGRAMMATIC RECOMMENDATIONS

Safe Routes to School (SRTS) Program Recommendations

Safe Routes to School program recommendations may include Education, Encouragement, Enforcement and Evaluation strategies to improve safety awareness and knowledge, reinforce safe behaviors, encourage travel mode changes, and establish a culture of walking and bicycling to school.



SRTS Education

SRTS education can foster life-long skills for safe walking and bicycling. Education messages directed at the broader school community can help create safety role models and encourage safe driving.

Recommendations

Provide pedestrian and bicycle safety education to students. Students should receive age-appropriate pedestrian and bicycle education that is regularly reinforced (e.g., annually) and provides opportunities for skills practice. School-based education works best when integrated into the PE or Health curriculum.

Conduct a bicycle rodeo. Bike rodeos teach children skills related to walking and bicycling safely, which can increase their and their parent's confidence for biking or walking to school.

Conduct parent and staff safety education campaign. Information packets should be prepared and distributed to parents and school staff at the beginning of the school year containing school arrival and dismissal maps, a written description of the rules and procedures for arrival and dismissal, and general safety information. Procedures should emphasize driving safely, being alert for pedestrians and bicyclists, and respecting the school crossing guard/s.

Provide walking and bicycling maps. Walking and bicycling route maps can show the location of pedestrian and bicycle infrastructure and estimated walk/bike times.

SRTS Encouragement

SRTS encouragement programs can establish a culture supportive of active transportation and foster life-long habits for active transportation.

Recommendations



Participate in International Walk to School Day and Bike to School Day. Walk and Bike to School Days encourage families to try out walking in a supportive environment. Consider incorporating competitions between schools in the same area or district-wide. Once established, they can lead to monthly walking/bicycling events to maintain momentum and enthusiasm.

Encourage and support walking school buses and bike trains. Walking school buses and bike trains are groups of children who walk or bicycle to school together with adult supervision. Organize parent or community volunteers to "pick up" students on their walk or bike ride to and from school.

Establish a frequent walker / bicyclist program. Frequent walker and biker programs provide small rewards or incentives to students who regularly walk and bicycle to school. Frequent walker and biker programs require a system for tracking student trips. For example, students can be assigned a punch card that volunteers or teachers can punch each time a trip is completed.

Give away bicycle helmets and bike locks. Schools might partner with another community organization to acquire and fit the helmets for students who do not have them. Helmet and bike lock giveaways should be coordinated with bicycle safety education or skills practice and should include instruction on helmet safety.

Reward and encourage active transportation by releasing walkers and bicyclists first. Staggering student dismissal times by travel mode reduces conflicts between the modes. Dismissing walkers and bicyclists first may be seen as a reward and encourage walking and bicycling to school.

SRTS Enforcement

SRTS enforcement efforts aim to increase the safety of children walking and bicycling to school by helping to change unsafe behaviors of all roadway users (drivers, pedestrians, bicyclists). While SRTS enforcement strategies may include law enforcement, it is important to discuss enforcement strategies with the school community and be sensitive to any concerns regarding their role.

Recommendations

Establish school drop off and pick up monitors to reinforce school procedures on and around the school campus.

Continue student safety patrols to provide on-going reinforcement of safe pedestrian and bicyclist behavior. Resources are available through [AAA School Safety Patrol](#).



SRTS Evaluation

SRTS evaluation efforts aim to identify issues and opportunities and monitor the impact of comprehensive SRTS activities over time, such as infrastructure improvements and encouragement activities.

Recommendations

Conduct annual Student Travel Tallies to monitor student travel patterns.

Administer biennial Parent Surveys to monitor parent attitudes towards walking and bicycling and reasons why they may or may not allow their children to walk or bike to school.

Conduct biennial infrastructure assessments and observation of school arrival and dismissal to track improvements, monitor the condition of key school crossings and signage, and identify needed education or enforcement measures. Assess more frequently if any changes to travel patterns (such as new school or road construction).



APPENDIX: INFRASTRUCTURE RECOMMENDATION PHOTOS

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Crossing of Snow Valley Lane.



Crossing of Summer Hill Drive.

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Stop sign and crossing on Snowflake Drive.



Missing sidewalk connecting Summer Hill Drive to GORC Park.

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Sidewalk along west side of Waugh Chapel Road.



Crossing of Fall Ridge Way.

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



View of Waugh Chapel Road within the school zone.



Path between Christmas Court and the school.

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Crossing of Ice Crystal Court.



Bicycle rack behind the school.

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



School parking lot with view of eastern sidewalk.



Intersection of Maytime Drive and Springhill Way.

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Sidewalk on the north side of Maytime Drive.

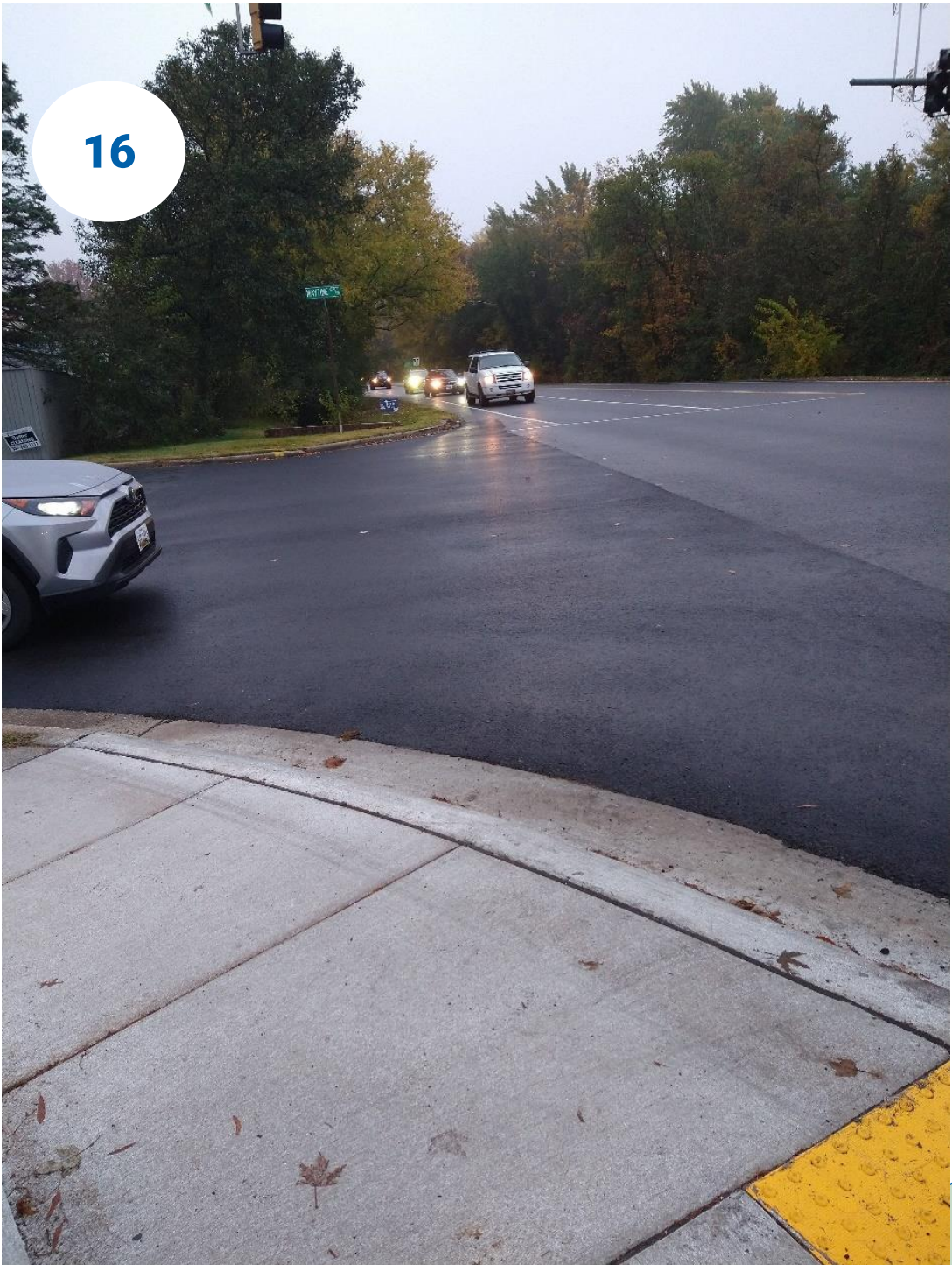


Steep cross slope along the sidewalk on Waugh Chapel Road.

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Maytime Drive looking West toward the intersection with Springhill Way.



Intersection of Maytime Drive and Waugh Chapel Road.

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Crossing of Snow Hill Lane



Crossing of April Dawn Way (northeast intersection with Maytime Drive).

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Crossing of April Dawn Way (western intersection with Maytime Drive)