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Sunset 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.

Sunset Elementary Accessibility Study

Report findings are derived from:

School site visits	• Observation of school arrival and dismissal conducted January 11, 2023 • Assessment of pedestrian and bicycling infrastructure within the current school walk zone and roads immediately adjacent (as connectivity allows) conducted January 11, 2023
Parent Survey	• Administered January 26 – February 19, 2023 • Available online in English, Spanish, Chinese, and Korean • Survey link was provided via email

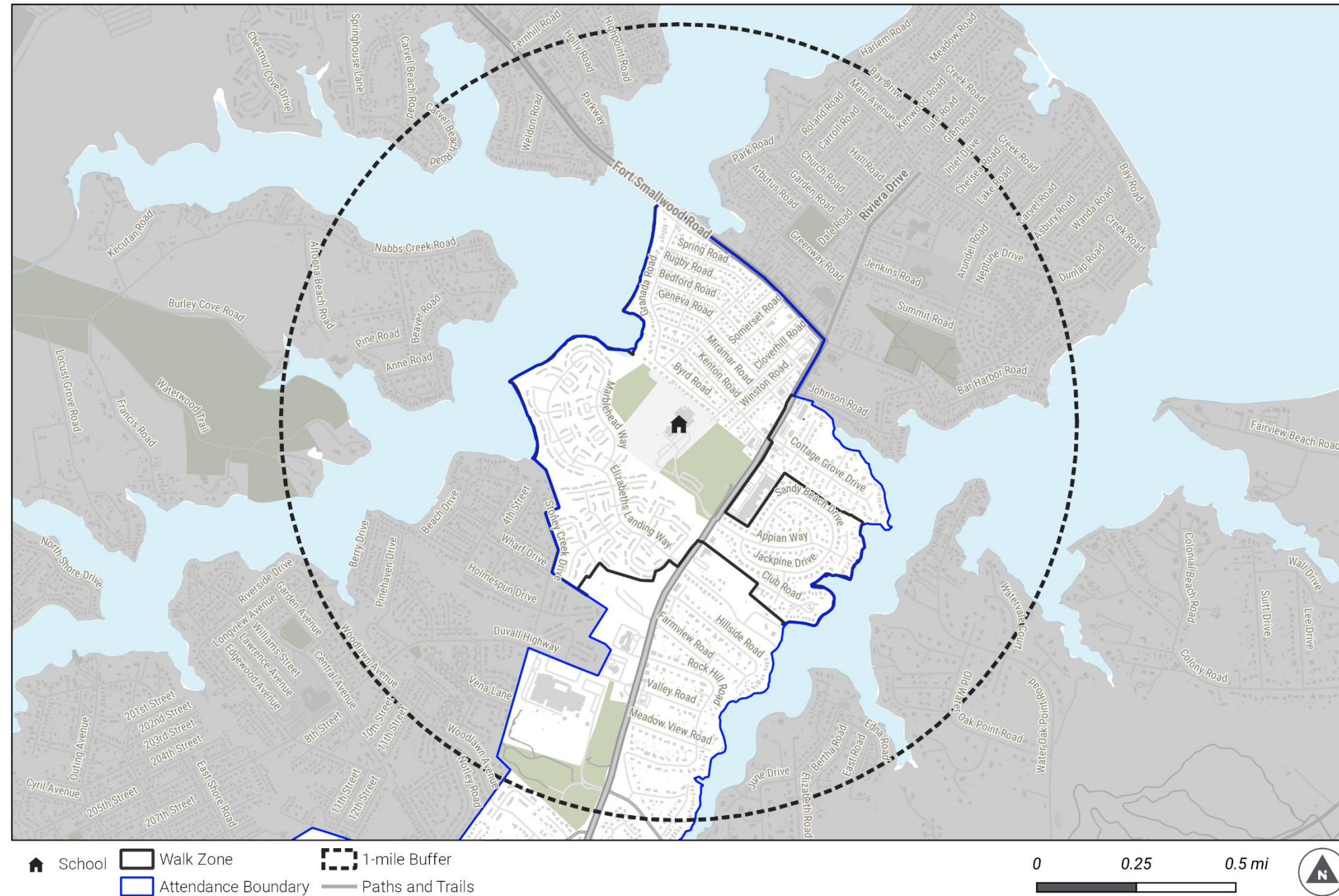
Recommendations were shared with the school community during a virtual open house in October 2023.

SCHOOL OVERVIEW

Study Area

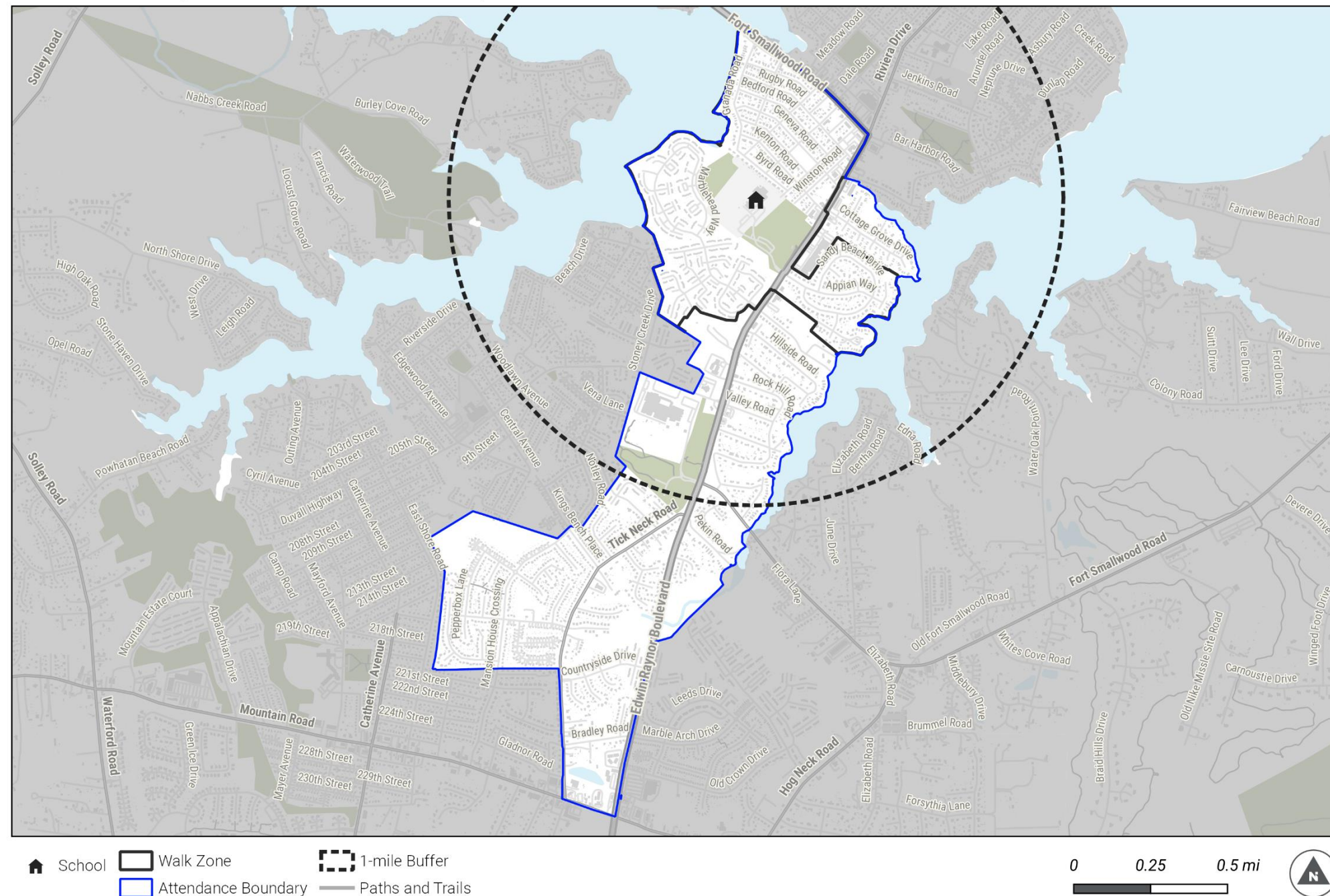
- Field work was conducted on roads within a half mile of the school; desk-level review was conducted on roads within a one-mile radius of the school that fall within the school attendance area.
- Opportunities to expand school connectivity for pedestrians and bicyclists beyond the existing walk zone are limited.
 - The school is located at the northern end of a long, narrow attendance zone; the current walk zone extends to the attendance zone border to the north, west, and southwest.
 - Residential areas along Cottage Grove Drive to the east and south of Appian Way may be accessible if safe crossings and pedestrian and bicycle infrastructure were added across and along Fort Smallwood Road.

Sunset Elementary School - 1-mile Radius



Student Attendance Area and Enrollment

- Sunset Elementary School serves 434 students in grades PreK–5.
- 48.4% of students are registered for bus transportation*



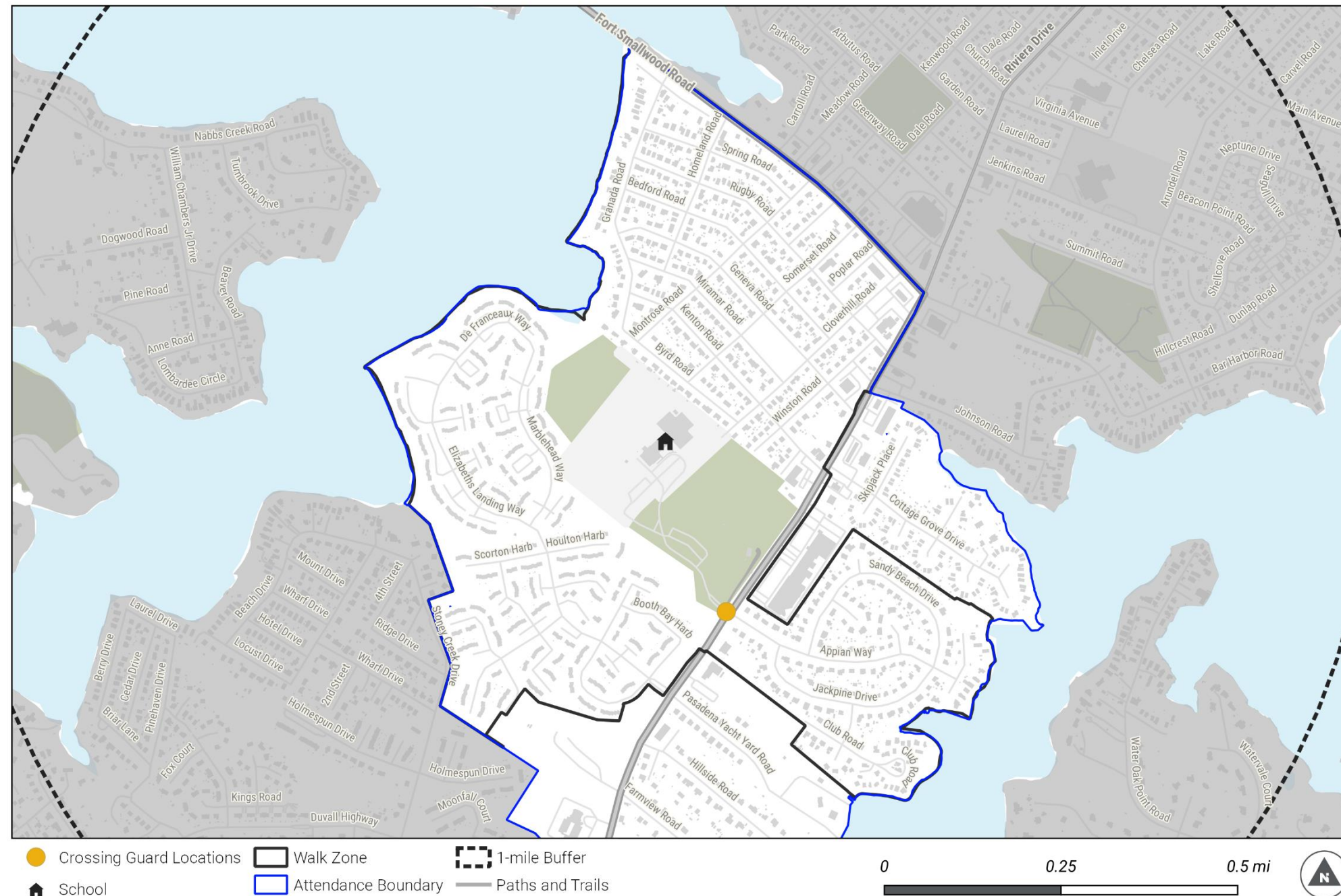
*AACPS provides transportation from designated bus stops for students who reside within the school's attendance area. At elementary schools, transportation is provided for Pre-K students who live more than ½ mile from school, Kindergarten students who live more than ½ mile from school, and students of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

Source: AACPS 2022-2023 Parent Handbook

School Location and Layout

- Sunset Elementary School is located off Fort Smallwood Road (MD-173) in Pasadena, MD. Fort Smallwood Road is a state-owned minor arterial with a 40mph speed limit.
- The school campus is immediately surrounded by residential neighborhoods to the north and southwest, and parkland to the southeast and west.
- The neighborhoods to the north and east (across Fort Smallwood) primarily contain single-family housing; the northern street network is gridded while the eastern areas consist of single cul-de-sacs or nested loops.
- The neighborhood to the west and southwest primarily consists of multi-family residential buildings and attached houses.

Sunset Elementary School - Walk Zone



School Access

Walkers and Bicyclists:

- Walkers and bicyclists access the school via a sidewalk along the school driveway from Fort Smallwood Road, a path on the north side of the school property connecting to the Sunset Beach neighborhood, and paved and informal paths on the west side of the school property connecting to the Elizabeth's Landing subdivision.

Buses:

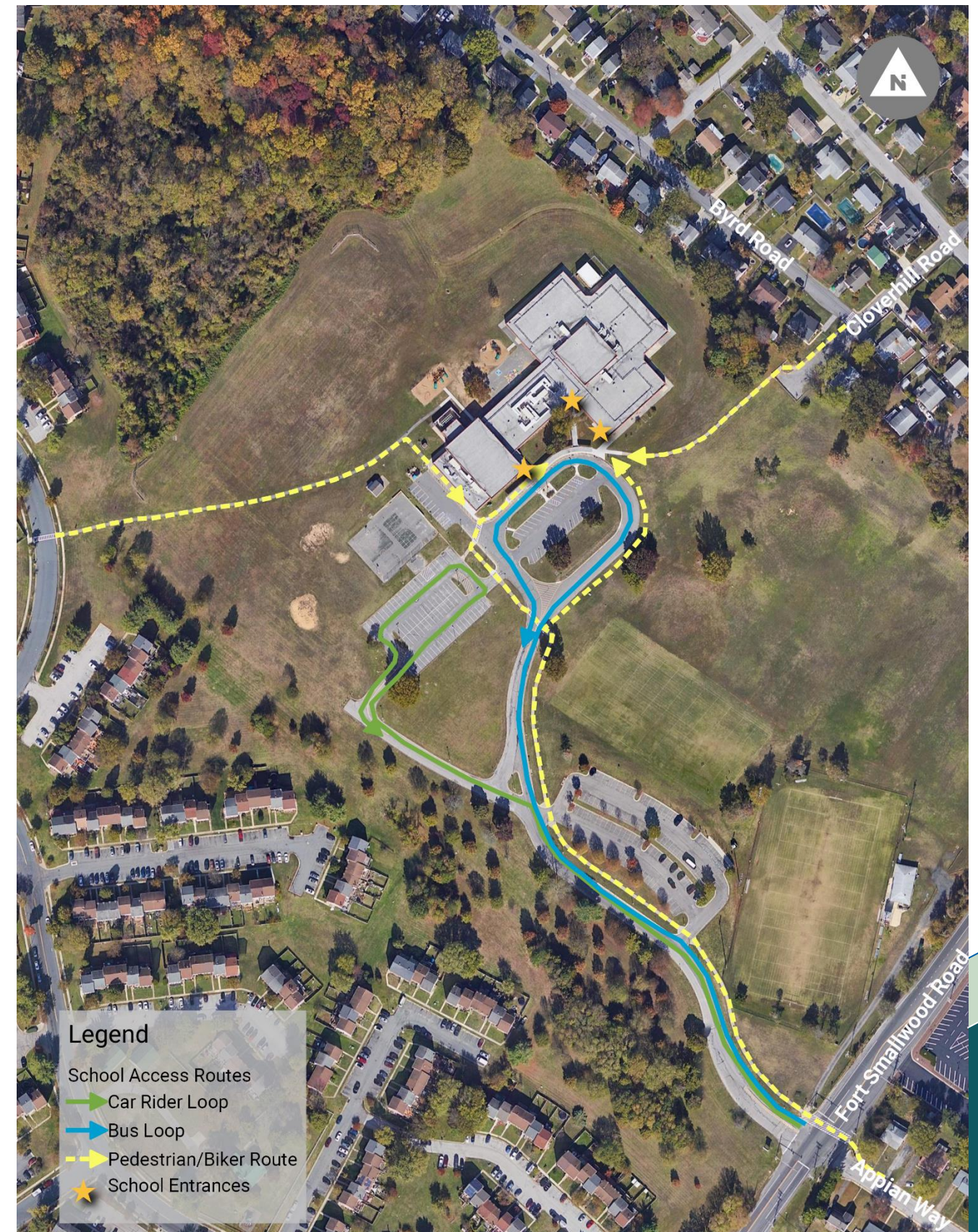
- Buses load/unload in the driveway loop in front of the school's main entrance.

Parent/Guardian Drop-Off:

- Parents/guardians drop-off students in a carpool line that loops in the staff parking lot to the south of the school's main entrance.
- Some parents/guardians drop off students at the corner of Byrd Road and Cloverhill Road north of the school campus.

Staff:

- Staff park in one of several lots south of the school building, and occasionally park in the Sunset Park parking lot along the school driveway.



PARENT-REPORTED STUDENT TRAVEL MODES & BARRIERS

Sunset Elementary - Parent Survey Response Overview

- 53 total survey responses received*
- 97% of respondents live in the area zoned to the school

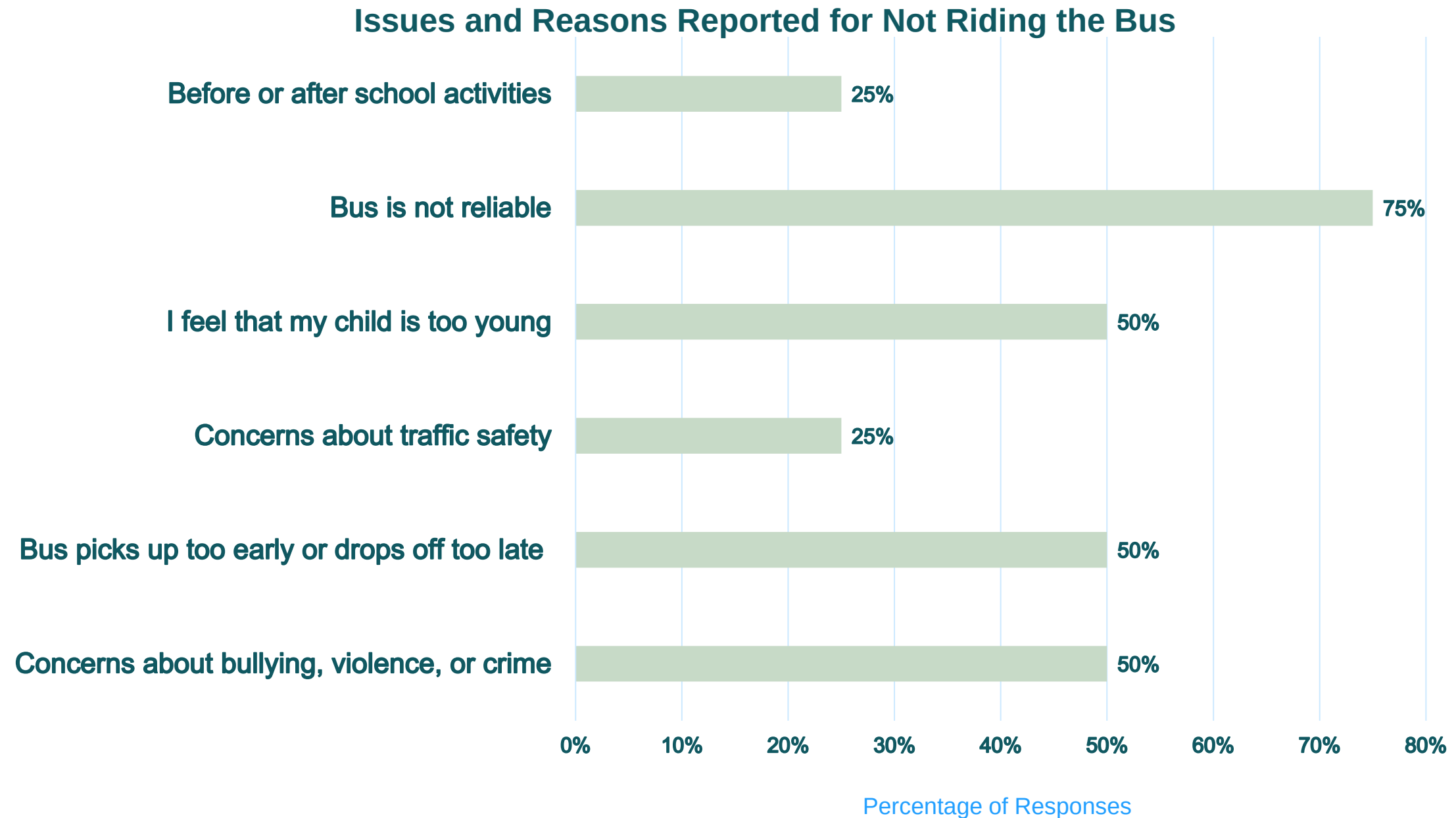
Reported Distance from Home to School	
Distance	Number of Respondents
< ¼ mile	5
¼ mile – ½ mile	7
½ mile – 1 mile	3
1 mile – 1 ½ miles	11
>1 ½ miles	10

**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

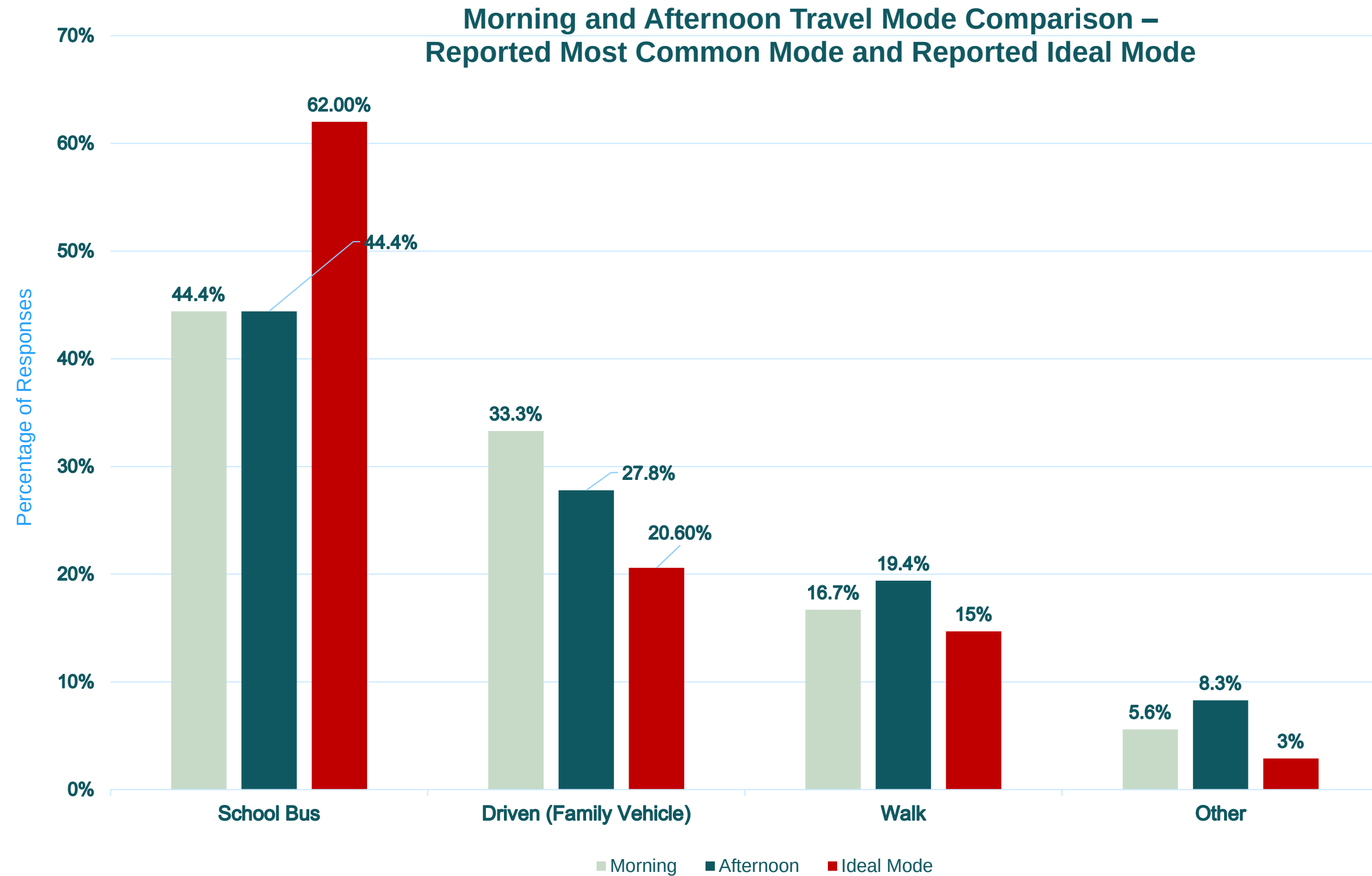
School Bus Eligibility and Use

64% of respondents reported being eligible for school bus transportation;
44% reported riding the school bus to school.



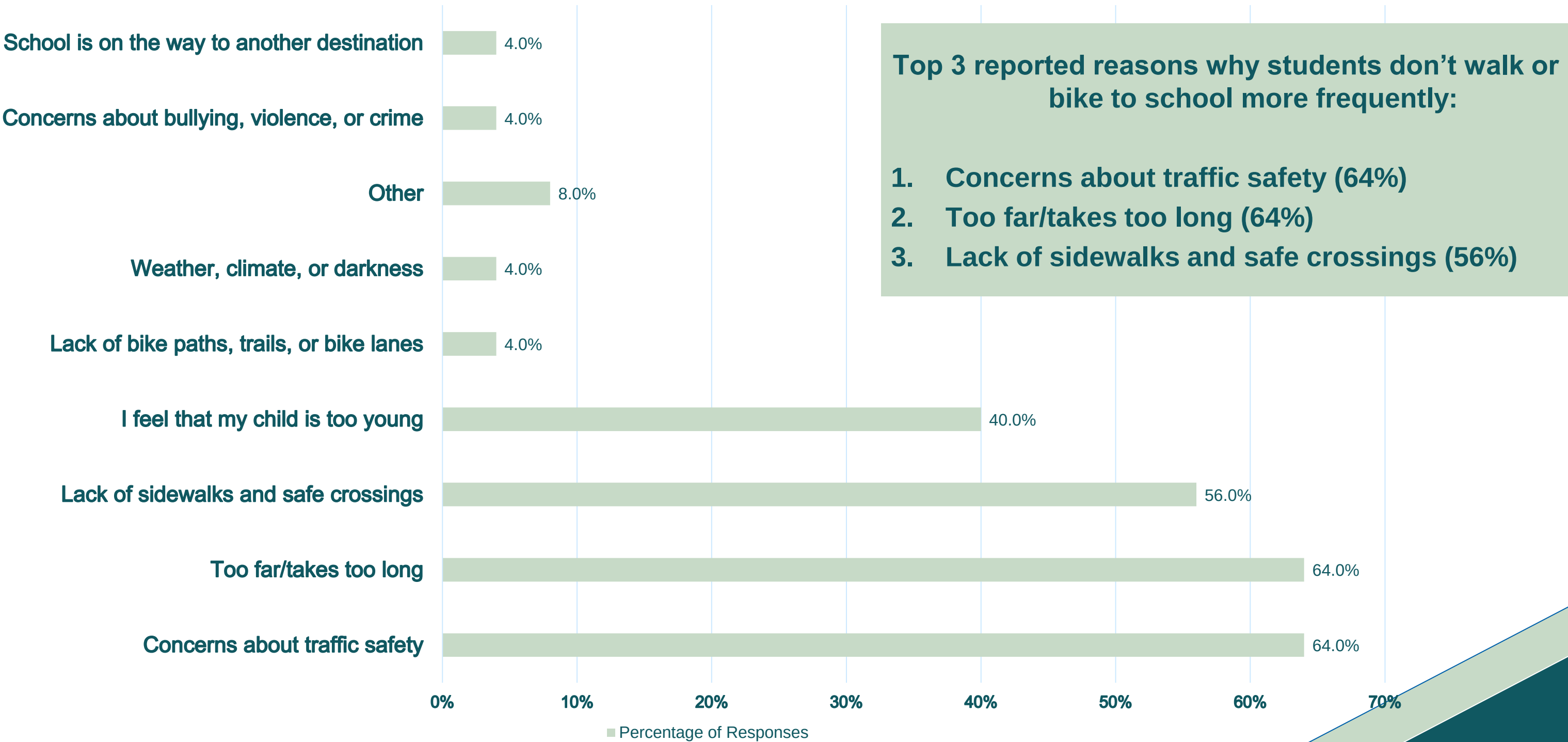
Parent Survey Results

Most Common Travel Mode versus Ideal Travel Mode



Parent Survey Results

Reported Barriers to Walking or Biking to School



Parent Survey Results

Reported Streets Used to Walk or Bike to School

- Granada Road
- Rugby Road
- Cloverhill Road
- Byrd Road
- Elizabeths Landing Way
- Marblehead Way
- Appian Way
- Fort Smallwood Road

ARRIVAL AND DISMISSAL OBSERVATIONS

Arrival and Dismissal Operations

School Hours:

- 8:00 am – 2:25 pm

Observation Times (January 11th):

- Arrival: 7:50 am – 8:15 am
- Dismissal: 2:15 pm – 2:45 pm

Crossing Guard:

- Sunset Elementary School is assigned one crossing guard, posted at the end of the school driveway at Fort Smallwood Road.
- When available, school staff act as crossing guards at the several crosswalks across school parking lot entrances/driveways from the parent drop-off line and main driveway.

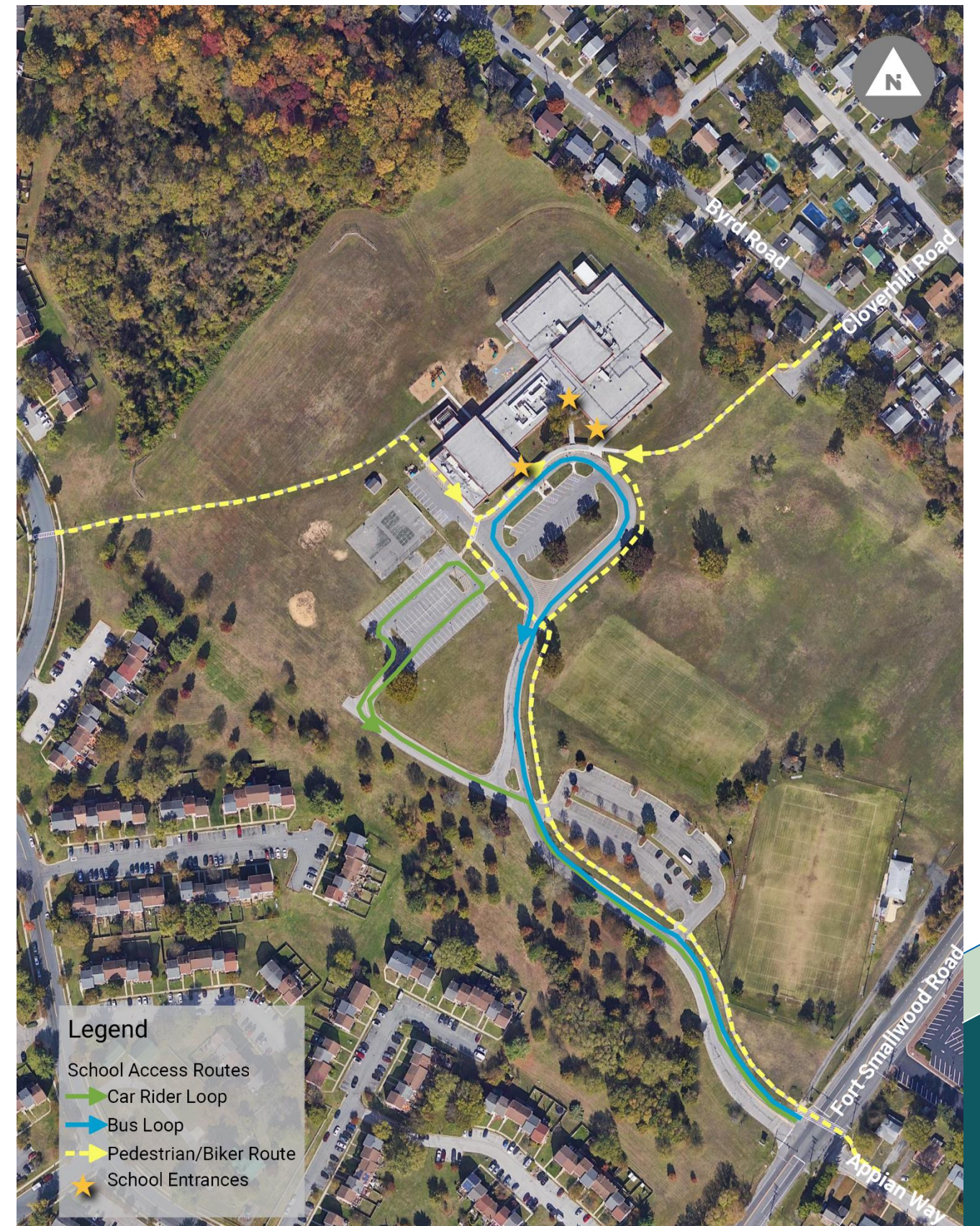


A police officer works as a crossing guard at the end of the school driveway at Fort Smallwood Road

General Observations

General Observations:

- There is a long, single school driveway that connects to Fort Smallwood Road opposite Appian Way. Vehicle access is confined to this one driveway for staff, buses, and vehicular parent drop off/pick up, as well as the parking lot for Sunset Park.
- Few signs are posted on the school campus to direct vehicular traffic for student drop off and pick up; most direction for drivers comes from staff.
- Most students enter through the media center at the southeast corner of the building; tardy arrivals enter through the main front door.



Arrival Observations

The study team observed arrival from the following locations:

- North campus path connecting to Sunset Beach neighborhood.
- School driveway

General Observations:

- School starts at 8:00 AM

Walkers and Bicyclists

- Few walkers were observed during arrival. Most came via the path from the Sunset Beach neighborhood to the north.



Most walkers enter through the Media Center (right side of image); some, including late arrivals, use the main entrance (left side of image).

Arrival Observations

Bus Lane

- Buses were observed dropping off students along the loop directly in front of the school.

Parent Drop-off

- Staff help students exit cars in the drop-off loop west of the school; other staff act as crossing guards to direct students across driveways from the drop-off loop to the school.
- Parents were also observed dropping off students near the intersection of Byrd Road and Cloverhill Road; students then used the path to access the school.



A student and parent head to the media center entrance

Dismissal Observations

The study team observed dismissal from the following locations:

- Fort Smallwood Road & Appian Way / School driveway
- North campus path connecting to Sunset Beach neighborhood

General Observations:

- School ends at 2:25 PM; Most students departed by 2:35.
- Nearly all activity had ceased by 2:40.

Walkers and Bicyclists:

- Student walkers were dismissed last, at approximately 2:30 pm.
- One bike rider and five walkers were observed crossing Fort Smallwood Road at Appian Way; all proceeded East on Appian Way.
- 14 students were observed walking north toward Sunset Beach neighborhood.

Bus Lane

- Four buses and 5 vans picked up students along the loop in front of the school.
- Most school buses turned right on red onto Fort Smallwood Road.



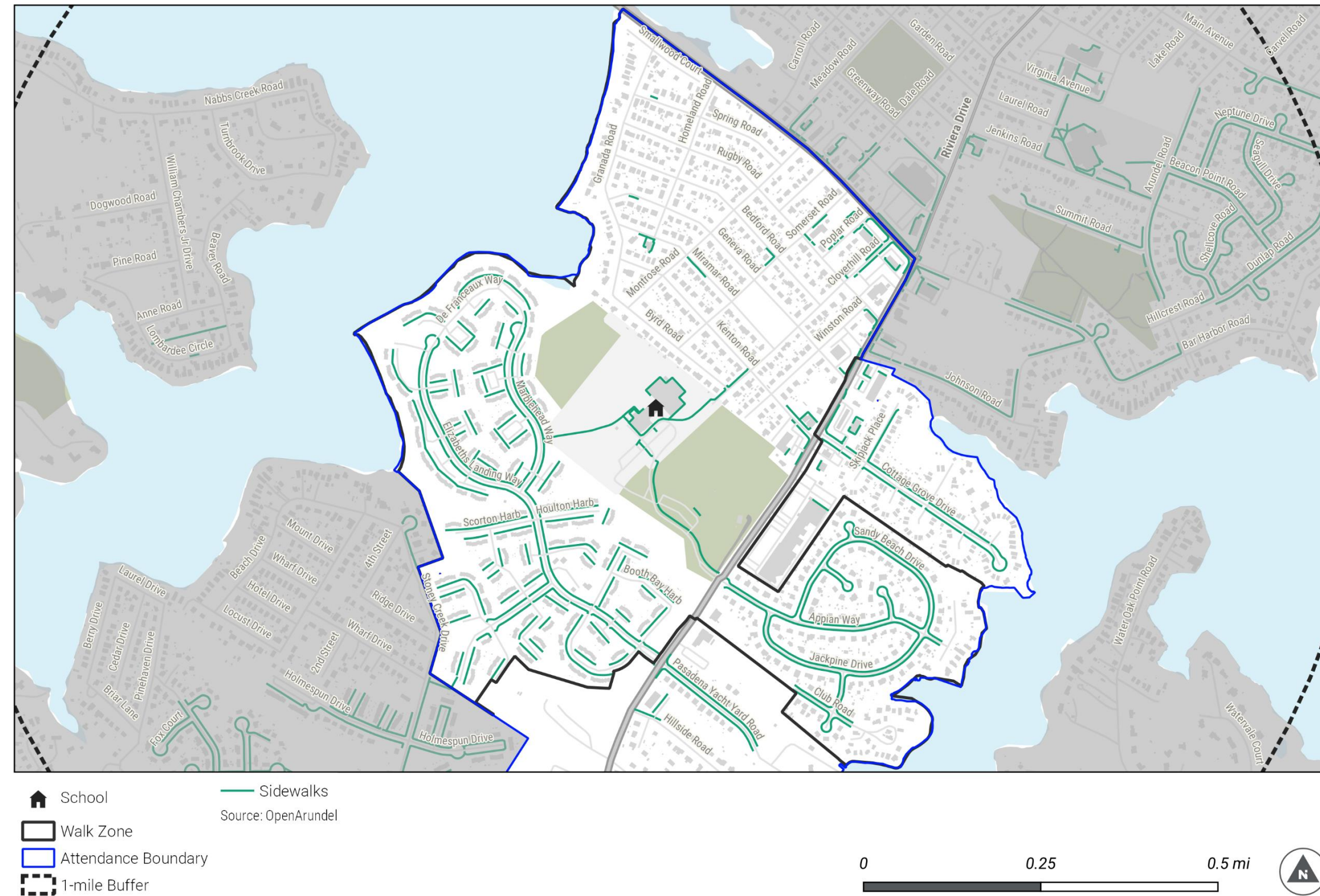
A school bus making a right turn on red from the school driveway onto Fort Smallwood Road.

EXISTING INFRASTRUCTURE CONDITIONS

Existing Sidewalk Network

The neighborhoods southwest and southeast of the school have sidewalks. This includes residences off Elizabeth Landing Way, Pasadena Yacht Road, Cottage Grove Drive, and Appian Way. The gridded area just north of the school does not have existing sidewalk.

Sunset Elementary School - Existing Sidewalk Network

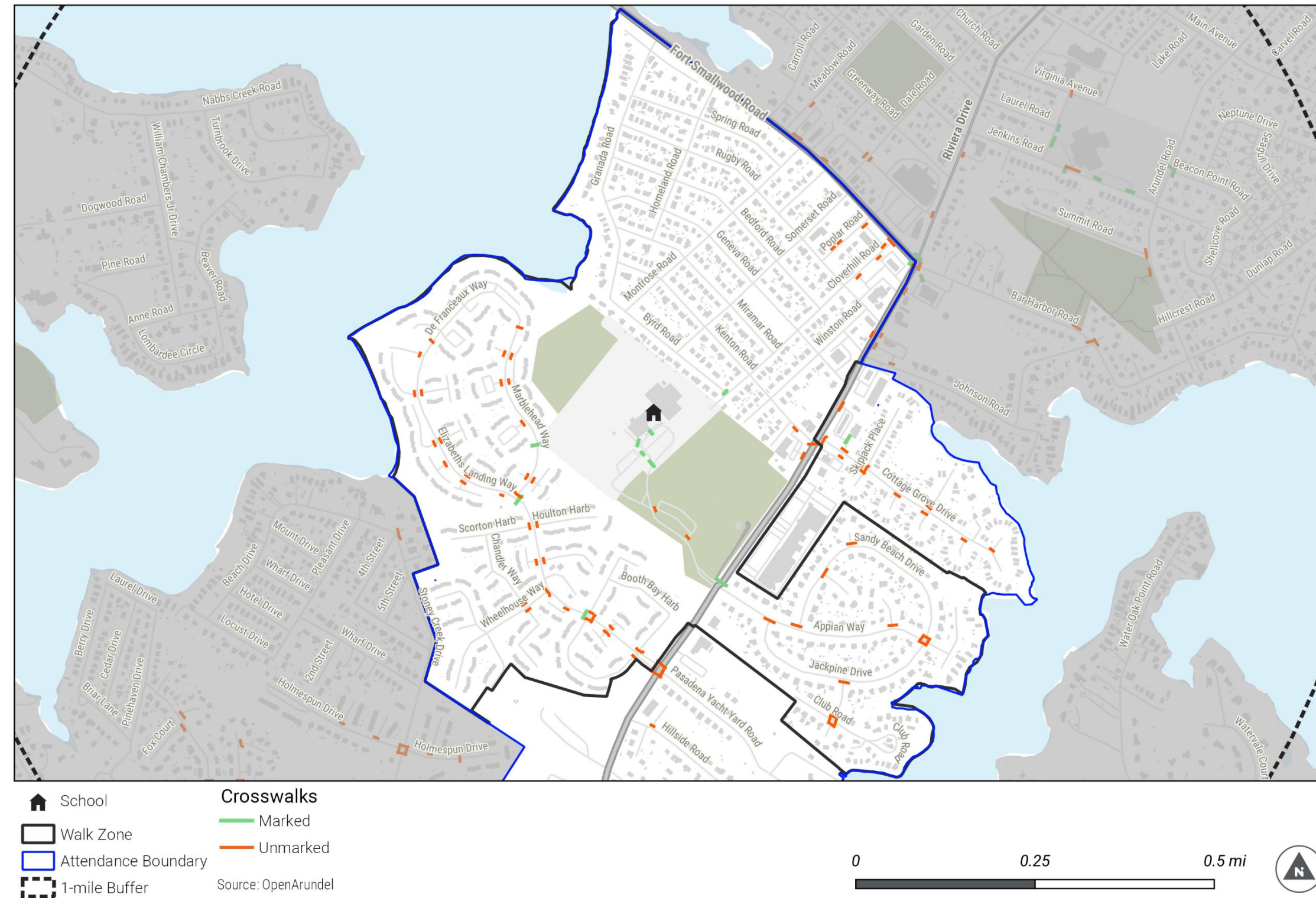


Existing Crosswalks

There are marked crosswalks on the school campus across parking lot entrances and connecting to the building entrance. There are additional marked crossings across Marblehead Way and Elizabeths Landing Way.

The remaining crossings of intersections within the school walk zone are unmarked.

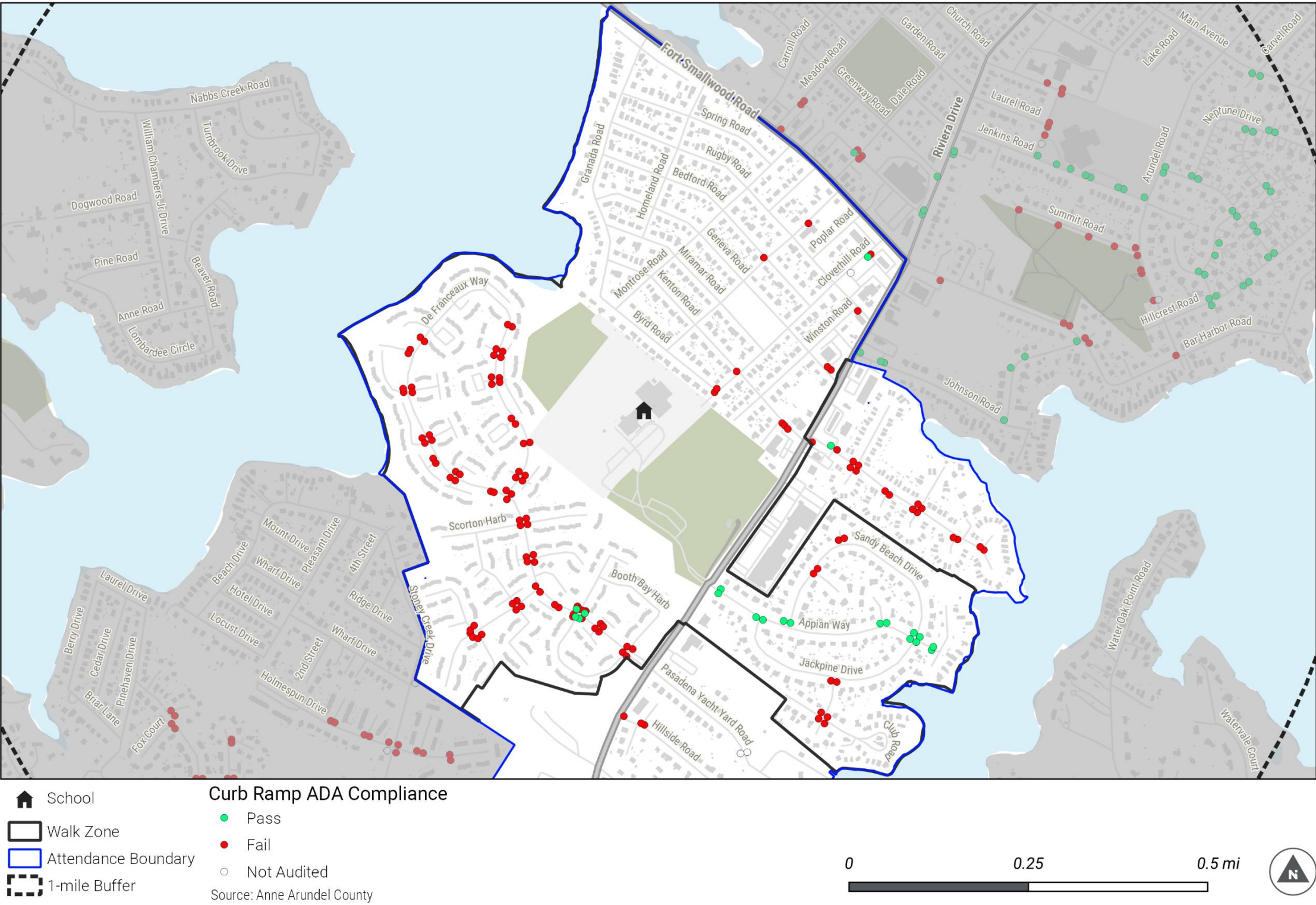
Sunset Elementary School - Existing Crosswalks



Existing Curb Ramps

Areas of the walk zone that have sidewalks also generally have curb ramps, although most do not have detectable warning surfaces.

Sunset Elementary School - Existing Curb Ramps



**Curb ramp data downloaded 9/14/22*

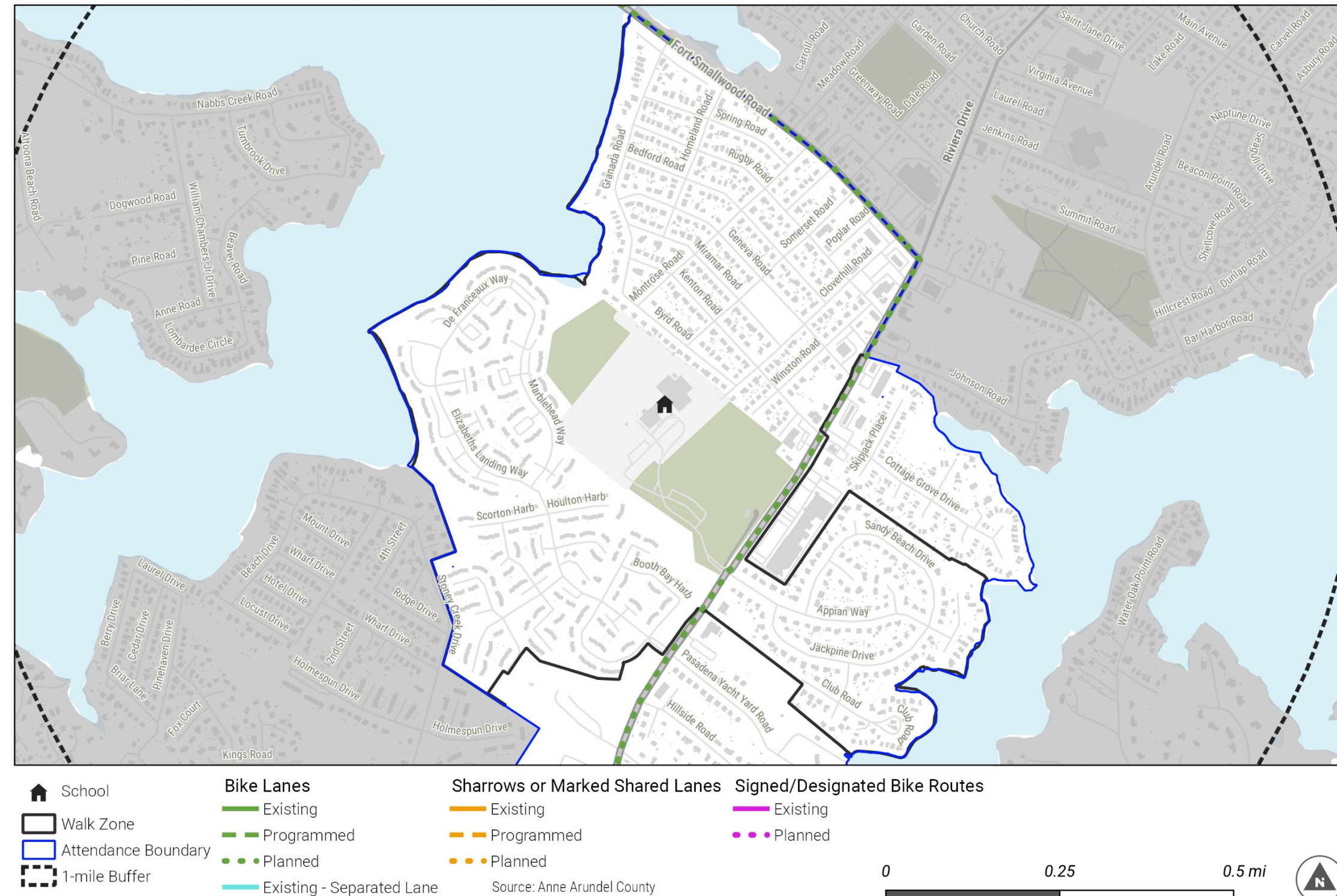
Existing On-Road Bike Facilities

No on-road bike facilities exist near the school.

Bike lanes are planned* for Fort Smallwood Road.

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

Sunset Elementary School - Existing On-Road Bicycle Facilities



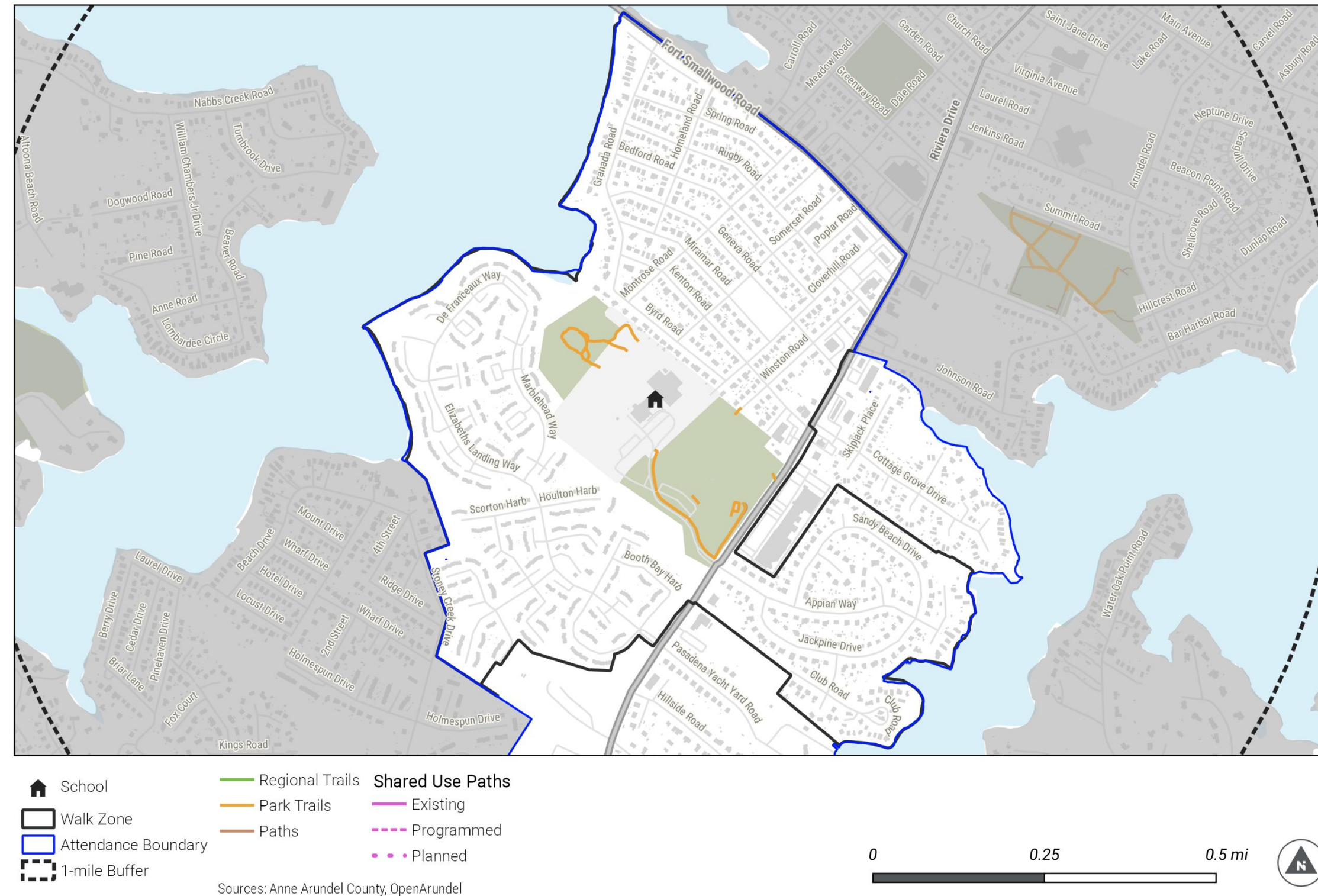
Existing Regional Trails, Park Trails, and Paths

There are a handful of short park trails in the woods northwest of the school, and one connecting the school campus to the neighboring Sunset Park.

No additional trails are planned* near the school.

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

Sunset Elementary School - Existing Regional Trails, Park Trails, and Paths



CRASH DATA

Crash Data (2017 – 2021)

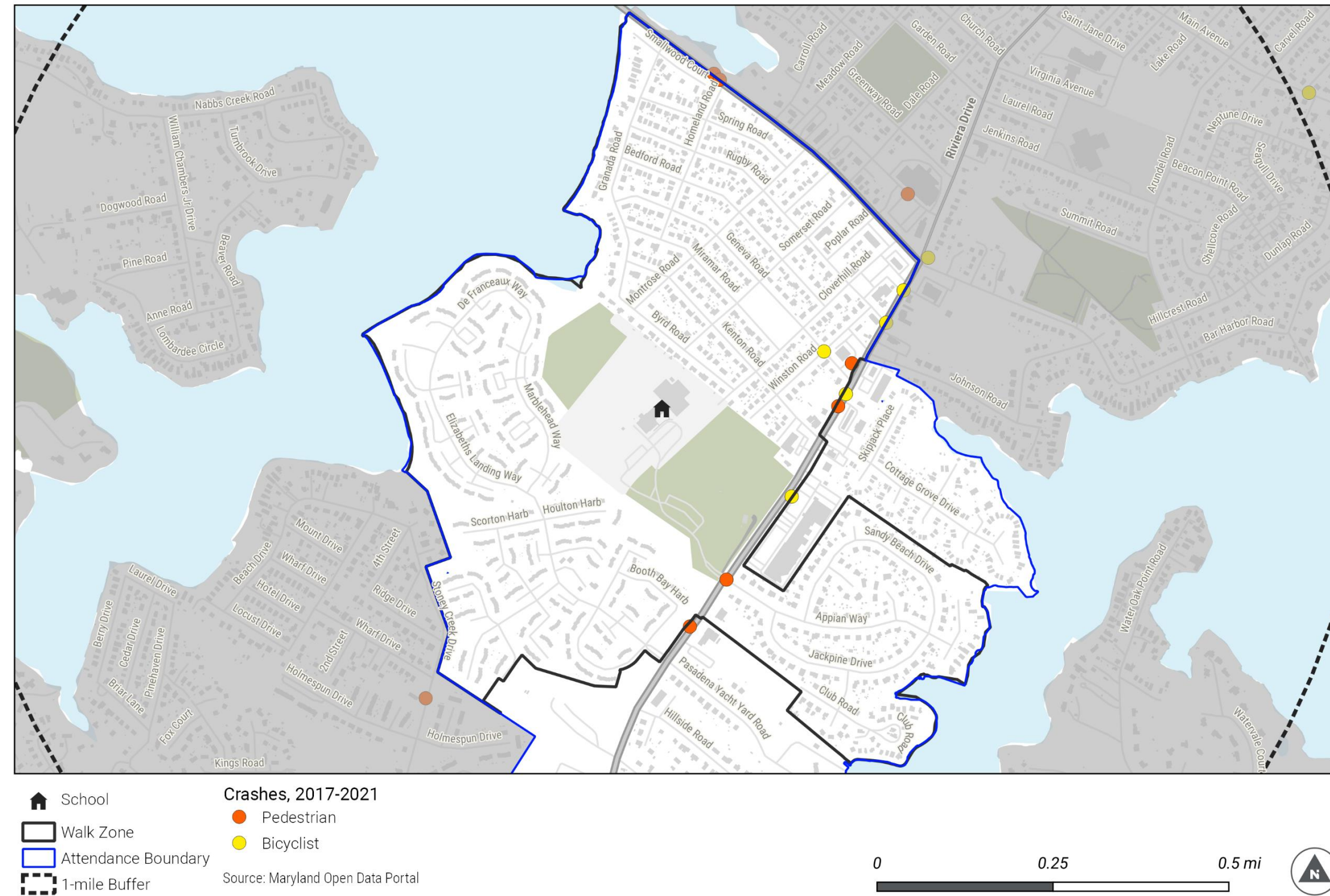
Crashes within 1-mile radius of the school:

- 464 total crashes (all modes), 3 fatal
- 12 pedestrian-involved crashes, 10 resulting in injury, 2 fatal
- 7 bicyclist-involved crashes, 5 resulting in injury, 0 fatal

Pedestrian and bicyclist crashes within the walk zone:

- 6 pedestrian-involved crashes and 3 bicyclist-involved crashes occurred in the walk zone, all but one along Fort Smallwood Road (MD 173).

Sunset Elementary School - Pedestrian and Bicycle Crashes



INFRASTRUCTURE RECOMMENDATIONS

Infrastructure Recommendations

Safe Routes to School (SRTS) 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.

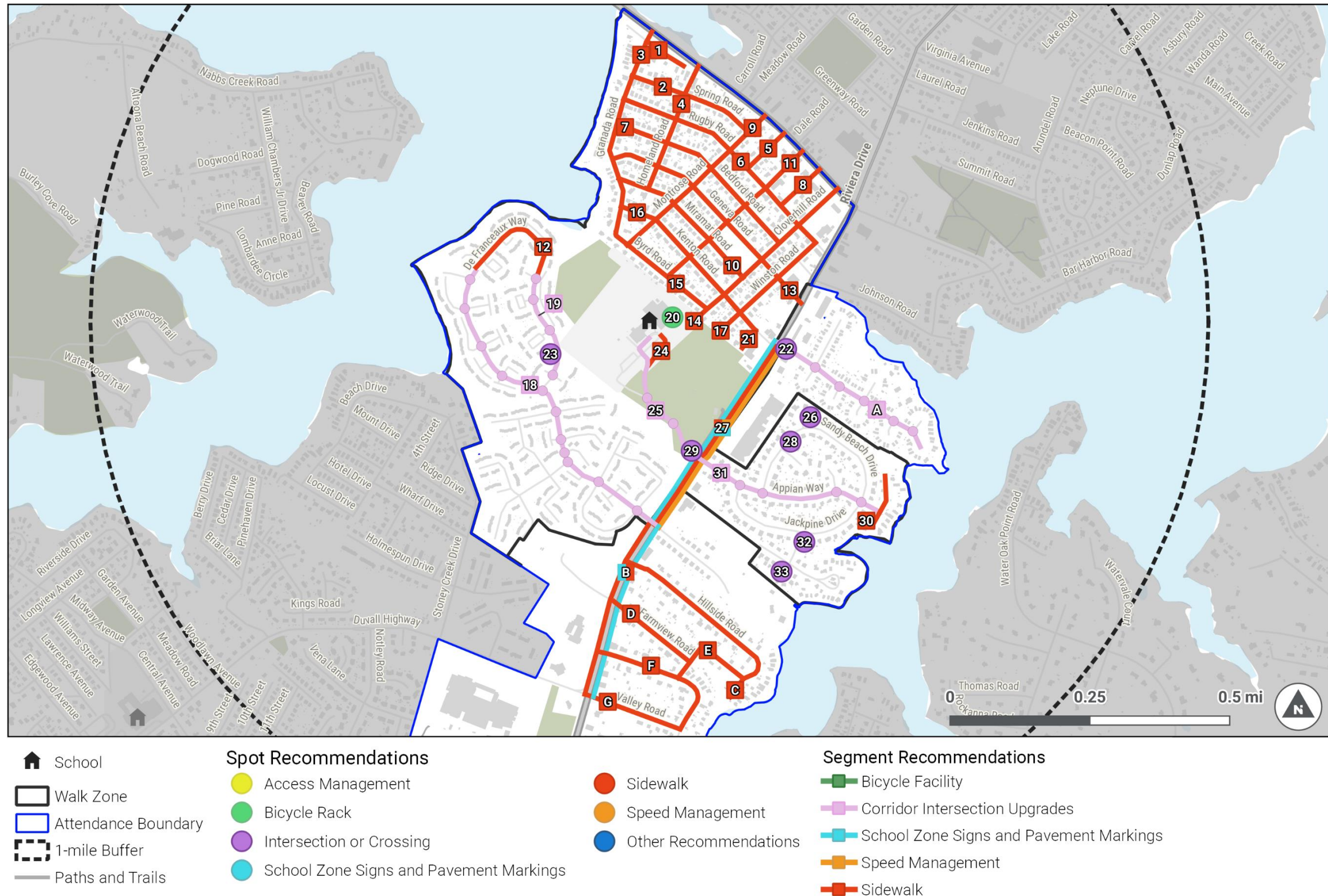
The following tables summarize infrastructure recommendations within and outside of the current school walk zone as relevant. Key student walking or bicycling routes were identified based on information received from school administration, parent surveys, and school observations. Key routes are noted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

There is currently a project in design from the County CIP to install sidewalks on MD 173. 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

Sunset Elementary School - Recommendations



Infrastructure Recommendations within the School Walk Zone

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
1	Smallwood Ct (end to Granada Rd)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$33,425.35	Long
2	Spring Rd (Montrose Rd to Granada Rd)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$98,749	Long
3	Granada Rd (Fort Smallwood Rd to Byrd Rd) (Along key student walking route)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$159,709	Long
4	Homeland Rd (Fort Smallwood Rd to Miramar Rd)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$100,587	Long
5	Manchester Rd (Rugby Rd to Fort Smallwood Rd)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$38,258	Long
6	Rugby Rd (Winston Rd to Granada Rd) (Along key student walking route)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$185,428	Long
7	Bedford Rd (Cloverhill Rd to Granada Rd)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$156,091	Long

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

**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.

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
8	Poplar Rd (Fort Smallwood Rd to Rugby Rd)	Sidewalk	Missing sidewalk (both sides) (There is a short existing sidewalk segment just south of the intersection with Fort Smallwood Rd.)	Install new sidewalk**	\$40,060	Long
9	Montrose Rd (Byrd Rd to Fort Smallwood Rd)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$142,750	Long
10	Miramar Rd (Cloverhill Rd to Granada Rd)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$123,403	Long
11	Somerset Rd (Byrd Rd to Fort Smallwood Rd)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$139,015	Long
12	De Franceaux Way (south of New London Harbour to north of Spy Harb)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$92,565	Long
13	Geneva Rd (Fort Smallwood Rd to Granada Rd)	Sidewalk	Missing sidewalk (both sides) (There is a short existing sidewalk segment just west of the intersection with Fort Smallwood Rd.)	Install new sidewalk**	\$187,320	Long

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
14	Cloverhill Rd (Fort Smallwood Rd to end) (Along key student walking route, Inside school zone)	Sidewalk	Missing sidewalk and gaps (both sides) (There is an existing sidewalk segment on both sides of Cloverhill Rd just south of the intersection with Fort Smallwood Rd, and on the east side from Kenton Rd to the end.)	Install new sidewalk**	\$147,569	Long
15	Byrd Rd (Cloverhill Rd to end) (Along key student walking route, Inside school zone)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$90,324	Long
16	Kenton Rd (Penn Rd to Granada Rd)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$141,108	Long
17	Winston Rd (Rugby Rd to end) (Inside school zone)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$97,538	Long

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
18	Elizabeths Landing Way (Fort Smallwood Rd to De Franceaux Way) (Along key student walking route)	18a. Crosswalk	Crossings of side streets are unmarked, No stop bar	Install standard crosswalk, Mark new stop bars for side street crossings of Brady Rec Way, Beyda Harbour/Penobscot Harbour, Tenant Harbour/Cutler Harbour, Bulman Harbour, Englishman Harbour/Saybrook Harbour, Marblehead Way (crosswalk only), Scorton Harbour/Houlton Harbour, Halifax Harbour/Gambier Harbour, Cobscook Harbour, Wheelhouse Way, Annis Squam Harbour/Black Rock Harbour, Egmont Harbour/Convey Harbour, Annis Squam Harbour/Booth Bay Harbour.	\$8,000	Short
		18b. Curb ramp	Ramps lack detectable warning surface	Reconstruct or repair existing ramps at location of new crosswalks (except Marblehead Way)	\$104,000	Medium
		18c. Other intersection or crossing issues	Concern about motor vehicle yielding (all currently have Yield signs)	Consider evaluating for STOP control at all side streets	\$5,250	Medium

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
19	Marblehead Way (Salem Harbour to De Franceaux Way) (Along key student walking and bicycling route)	19a. Crosswalk	Crossings of side streets are unmarked, No stop bar	Install new standard crosswalks, Mark new stop bars for side street crossings of Salem Harbour/Keppel Harbour, Scituate Harbour, Mt Desert Harbour/Passamaquody Harbour, Spry Harbour/ Hingham Harbour)	\$3,500	Short
		19b. Curb ramp	Ramps lack detectable warning surface	Reconstruct or repair existing ramps at location of new crosswalks	\$56,000	Medium
		19c. Other intersection or crossing issues	Concern about motor vehicle yielding. Currently no stop control.	Consider evaluating for STOP control at all side streets	\$1,750	Medium
20	Media Center Entrance of School (On school campus)	Bicycle rack	Two of three existing racks do not allow locking of frame	Replace existing racks with inverted-U rack	\$350	Short
21	Penn Rd (Kenton Rd to end) (Inside school zone)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$16,813	Long

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
22	Cottage Grove Dr/Kenton Rd & Fort Smallwood Rd (Along key student walking route)	22a. Curb Ramp	Ramps lack detectable warning surfaces	Reconstruct or repair existing ramp	\$8,000	Medium
		22b. Other intersection or crossing issues	Concern about motor vehicle yielding, Concern about motor vehicle turning movements	Install curb extensions for crossing of Cottage Grove	\$10,000	Long
			Pedestrians/bicyclists unable to find sufficient gaps in traffic	Consider evaluating for HAWK signal, median crossing island, and crossing guard placement	\$150,000	Long
23	Marblehead Way & school trail (Along key student walking route, Inside school zone)	Other intersection or crossing issues	High motor vehicle speeds and volumes.	Install raised crosswalk	\$10,000	Medium
24	School driveway loop (On school campus)	Sidewalk	Missing sidewalk	Install new sidewalk** Continue east sidewalk around the school driveway to create a path that minimizes conflicts with motor vehicles. Existing path crosses school driveway and two parking lot entrances.	\$13,889	Long

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
25	School/Sunset Park driveway to Fort Smallwood Rd (Along key student walking route, On school campus)	25a. Crosswalk	Crossings of parking lot driveways are unmarked	Install new high-visibility crosswalks	\$1,600	Short
		25b. Curb ramps	Ramps at existing crossings on the school campus lack detectable warning surface Ramps not aligned with crossing from the parking lot to the school main entrance	Reconstruct or repair existing ramps	\$40,000	Medium
26	Sandy Beach Dr & Silver Cir	26a. Crosswalk	Crossing of Silver Circle is unmarked, No stop bar	Install new standard crosswalk, Mark new stop bar	\$500	Short
		26b. Other intersection or crossing issues	Concern about motor vehicle yielding. Currently no stop control.	Consider evaluating for STOP control	\$250	Medium

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
27	Fort Smallwood Rd (Cottage Grove Dr to Pasadena Yacht Yard Rd) (Inside school zone)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$166,265	Long
		School Zone Signs and Pavement Markings	SCHOOL pavement marking missing Existing school zone signage deficient	Expand school zone and enhance signage per MdMUTCD part 7: - Install new SCHOOL pavement marking - Install new school zone signage. Consider reducing school zone speed limit to 20mph.	\$1,000 \$1,000	Short
28	Sandy Beach Dr & Sunset Ct	28a. Crosswalk	Crossing of Sunset Circle is unmarked, No stop bar	Install new standard crosswalk, Mark new stop bar	\$500	Short
		28b. Other intersection or crossing issues	Concern about motor vehicle yielding. Currently no stop control.	Consider evaluating for STOP control	\$250	Medium
29	Appian Way & Fort Smallwood Rd (Along key student walking route, Inside school zone)	29a. Other intersection or crossing issues	Inadequate crossing time	Implement LPI Increase pedestrian crossing time	\$2,000 \$2,000	Medium Medium
		29b. Crosswalk	Crossing of Appian Way is unmarked	Install new high-visibility crosswalk (note that existing curb ramps lie approximately 15 yards from the intersection)	\$800	Short

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

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
30	Norman Rd (end to end)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$37,781	Long
31	Appian Way (Fort Smallwood Rd to Norman Rd) (Along key student walking route)	31a. Crosswalk	Crossings of side streets are unmarked, No stop bar	Install new standard crosswalk, Mark new stop bar for side street crossings of Jackpine Dr, Sandy Beach Dr, Cedar Cir, Jackpine Dr/ Sandy Beach Dr	\$2,500	Short
		31b. Other intersection or crossing issues	Concern about motor vehicle yielding. Currently has yield sign.	Consider evaluating for STOP control at Cedar Cir	\$250	Medium
32	Jackpine Dr & Southview Ln	Crosswalk	Crossing of Southview Lane is unmarked, No stop bar	Install new standard crosswalk, Mark new stop bar	\$500	Short
33	Southview Ln & Club Rd	Crosswalk	Crossings of Club Road are unmarked, No stop bars	Install new standard crosswalks across Club Rd, Mark new stop bars	\$1,000	Short

**Short (1 year), medium (2-3 years) or long term (3+ years)*
***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 outside 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*
A	Cottage Grove Dr (Fort Smallwood Rd to cul-de-sac)	A1. Crosswalk	Crossings of side streets are unmarked, No stop bar	Install new standard crosswalk, Mark new stop bar for side street crossings of Skipjack Pl, Tides Ct, Kim Marie Ct, Chris Ct, Brad Ct	\$4,000	Short
		A2. Curb ramps	Ramps lack detectable warning surface	Reconstruct or repair existing ramp	\$56,000	Medium
		A3. Other intersection or crossing issues	Concern about motor vehicle yielding (all currently have Yield signs)	Consider evaluating for traffic signal or stop control	\$1,250	Medium
B	Fort Smallwood Rd (Pasadena Yacht Yard Rd to Valley Rd)	B1. Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$139,869	Long
		B2. School Zone Signs and Pavement Markings	SCHOOL pavement marking missing, School zone speed limit sign missing	Expand school zone and enhance signage per MdMUTCD part 7: - Install new SCHOOL pavement marking - Install new school zone speed limit sign. Consider reducing school zone speed limit to 20mph.	\$1,000 \$500	Short Short

**Short (1 year), medium (2-3 years) or long term (3+ years)*
***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 outside the School Walk Zone

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
C	Hillside Rd (Fort Smallwood Rd to cul-de-sac)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$159,834	Long
D	Farmview Rd (Fort Smallwood Rd to Farmview Rd)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$73,273	Long
E	Farmview Rd (Hillside Rd to Rock Hill Rd)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$68,888	Long
F	Rock Hill Rd (Fort Smallwood Rd to Valley Rd)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$111,935	Long
G	Valley Rd (Rock Hill Rd to Fort Smallwood Rd)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$73,649	Long

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

**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.

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.

Establish 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



Smallwood Court



Spring Road

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone

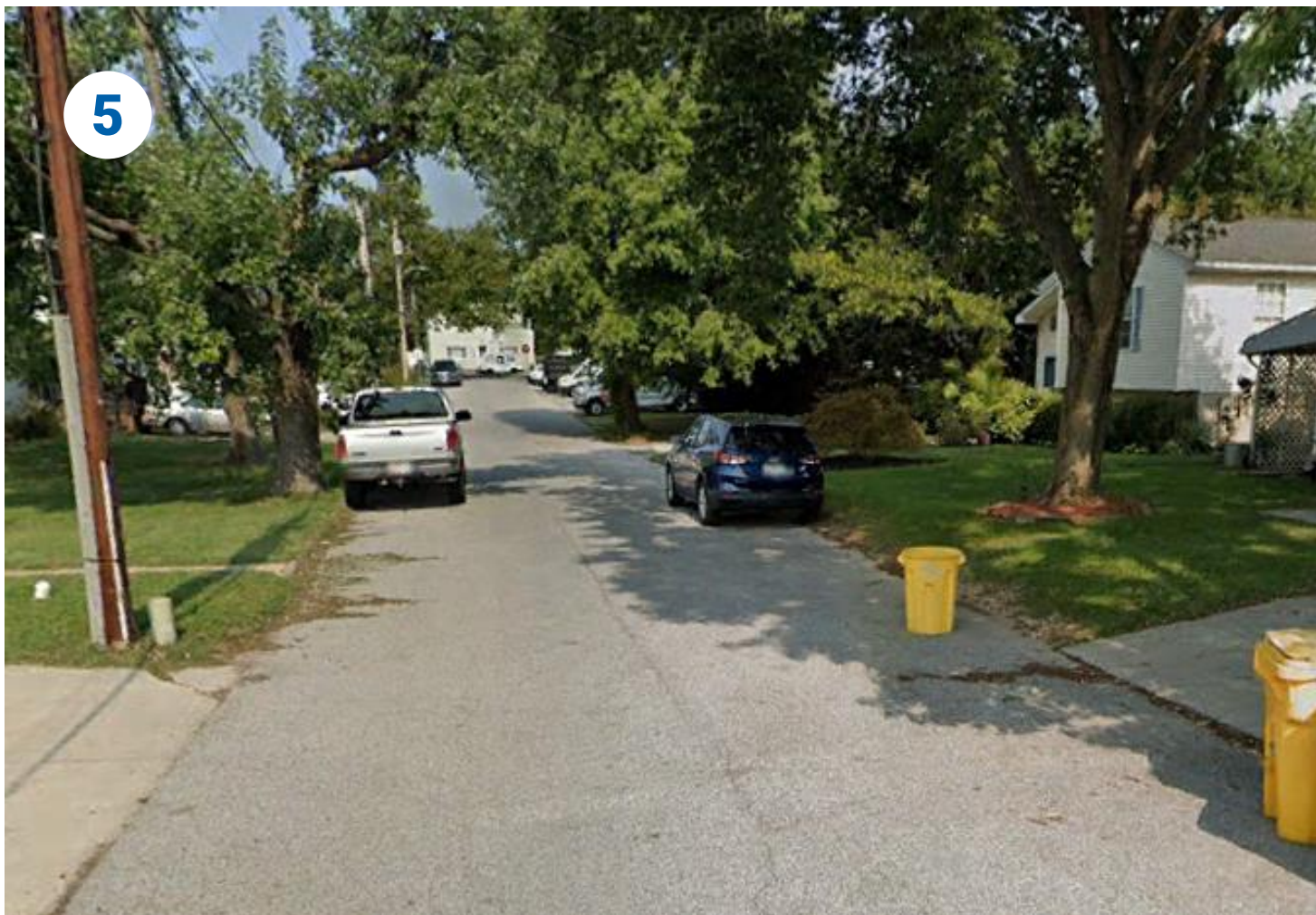


Granada Road



Homeland Road

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Manchester Road



Rugby Road

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Bedford Road



Poplar Road

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Montrose Road

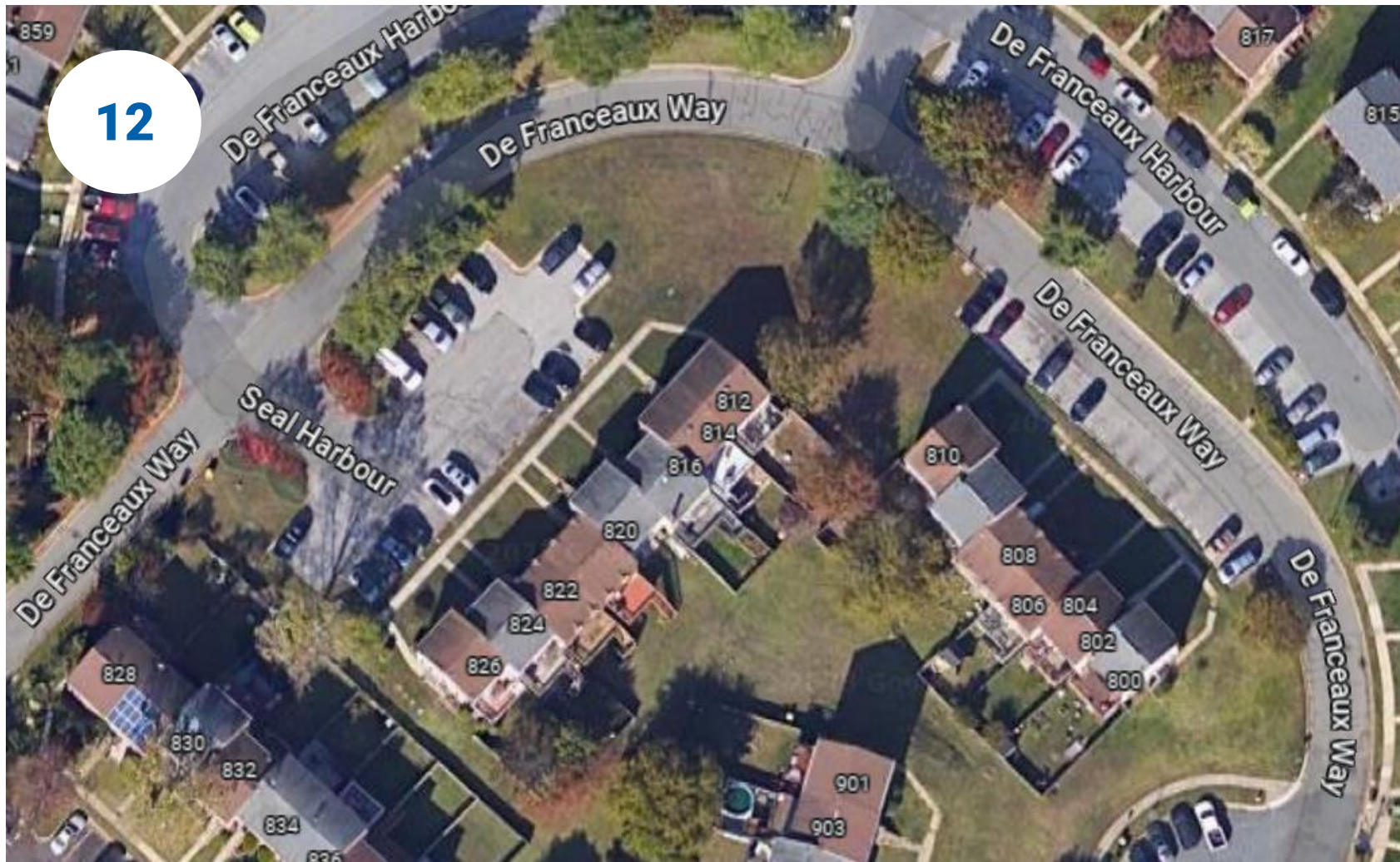


Miramar Road

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Somerset Road



De Franceaux Way

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Geneva Road

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Cloverhill Road



Byrd Road

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Kenton Road



Winston Road

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Elizabeths Landing Way

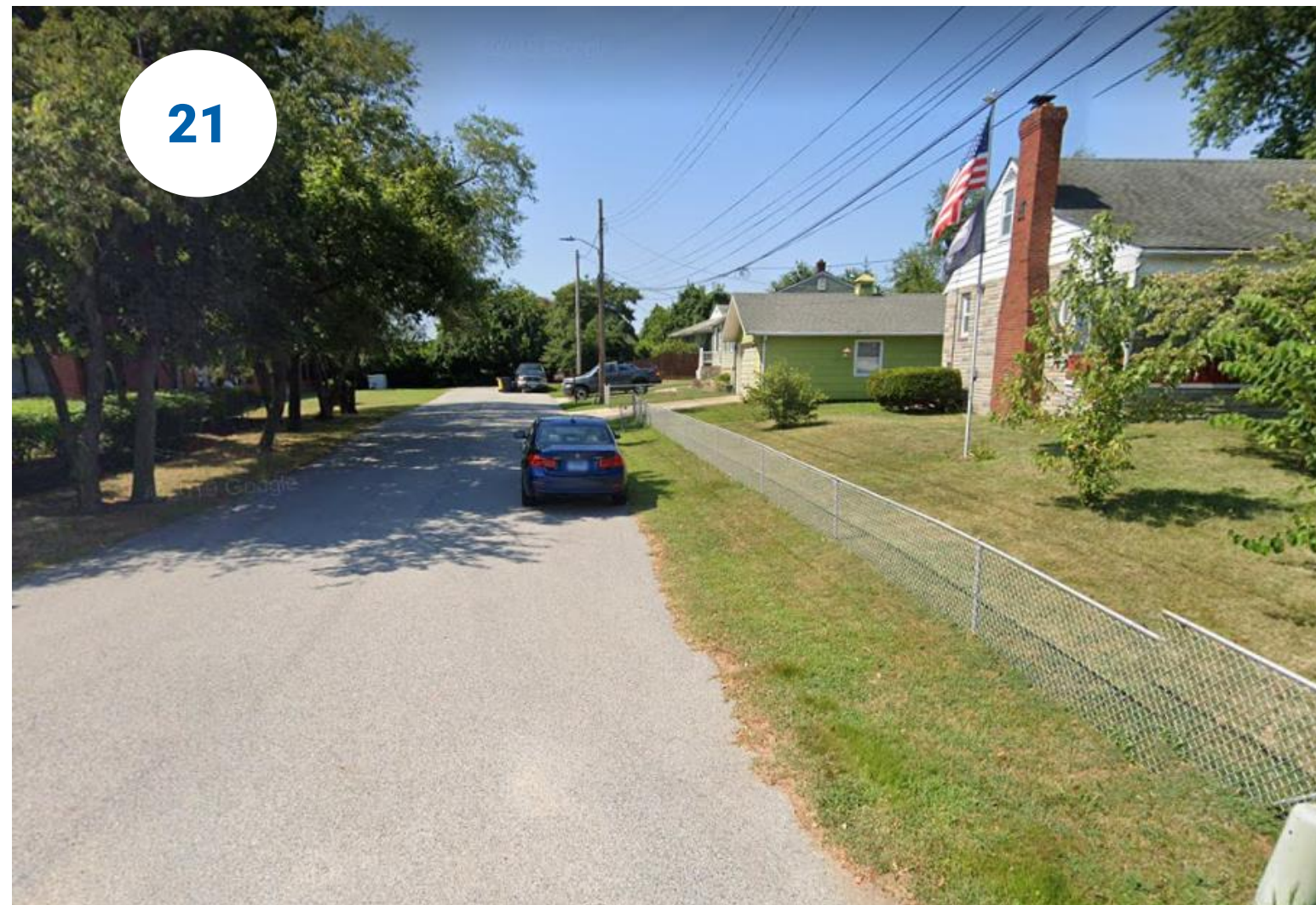


Marblehead Way

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Bike racks outside the Media Center entrance

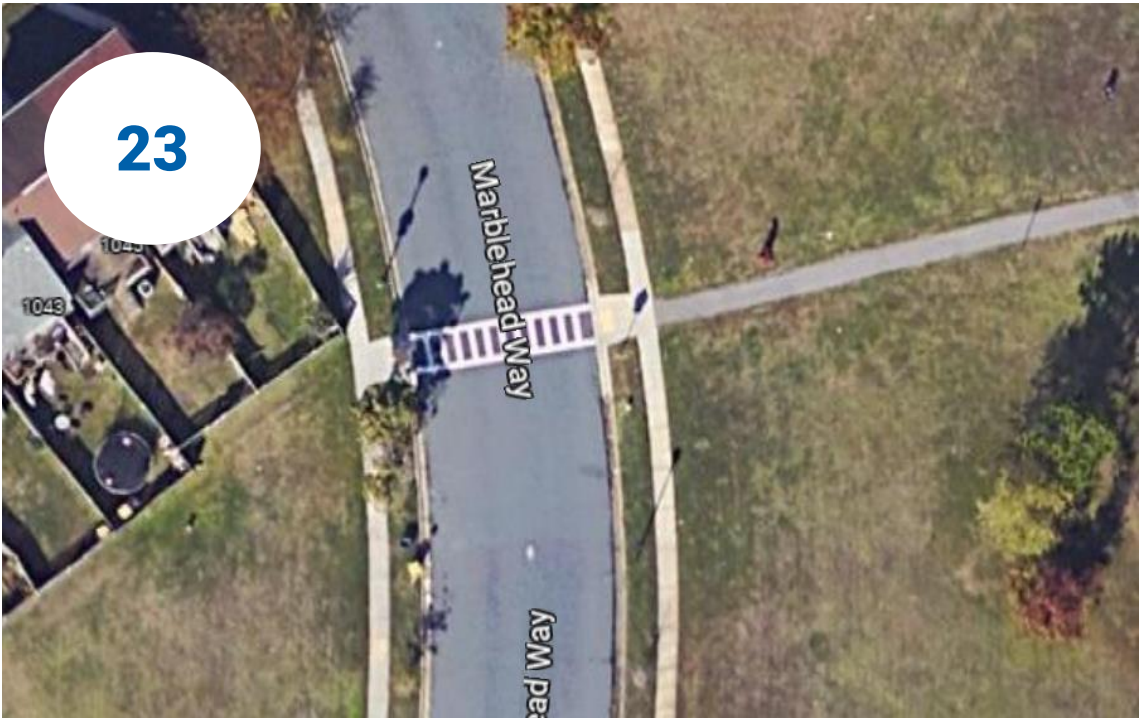


Penn Road

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Cottage Grove Dr/Kenton Rd & Fort Smallwood Rd//Marblehead Way



Marblehead Way & School Trail

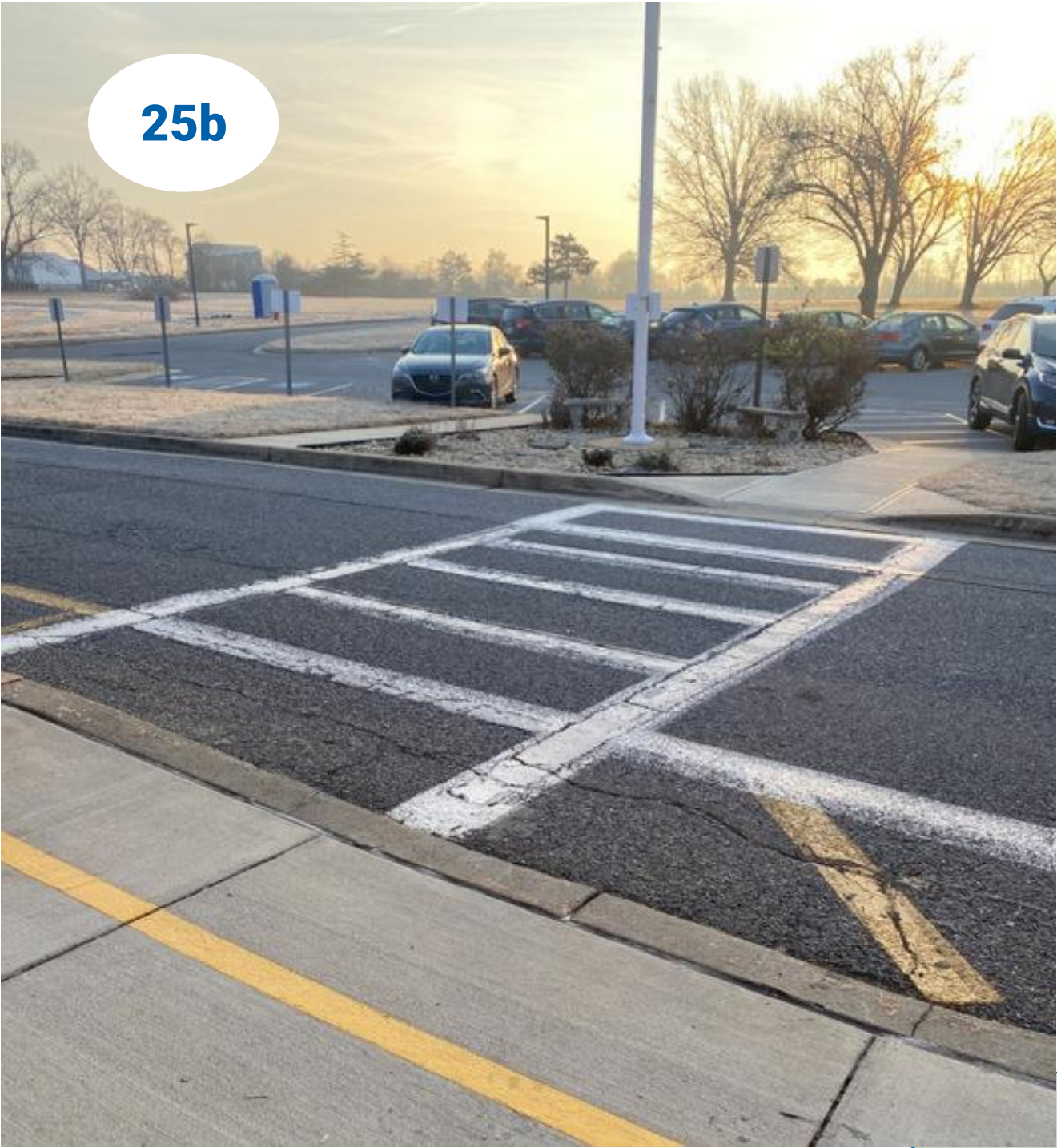


School driveway loop near walkers' entrance

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Crossing Sunset Park parking lot entrance



Main entrance crosswalk

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone

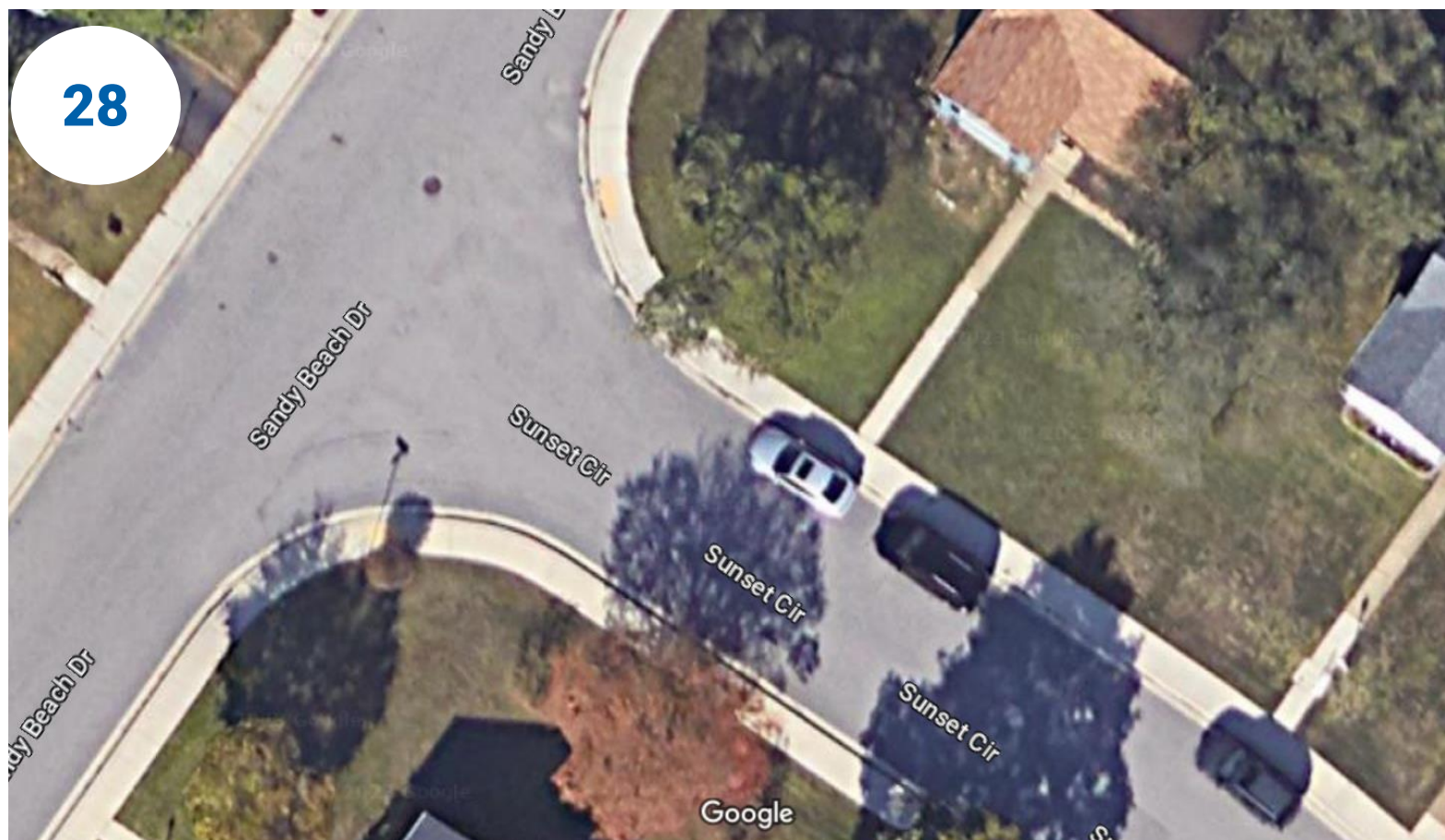


Sandy Beach Drive & Silver Circle



Fort Smallwood Rd

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Sandy Beach Dr & Sunset Court



Appian Way and Fort Smallwood Road (MD-173)

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Norman Road



Appian Way

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Jackpine Drive and Southview Lane



Southview Lane and Club Road

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone

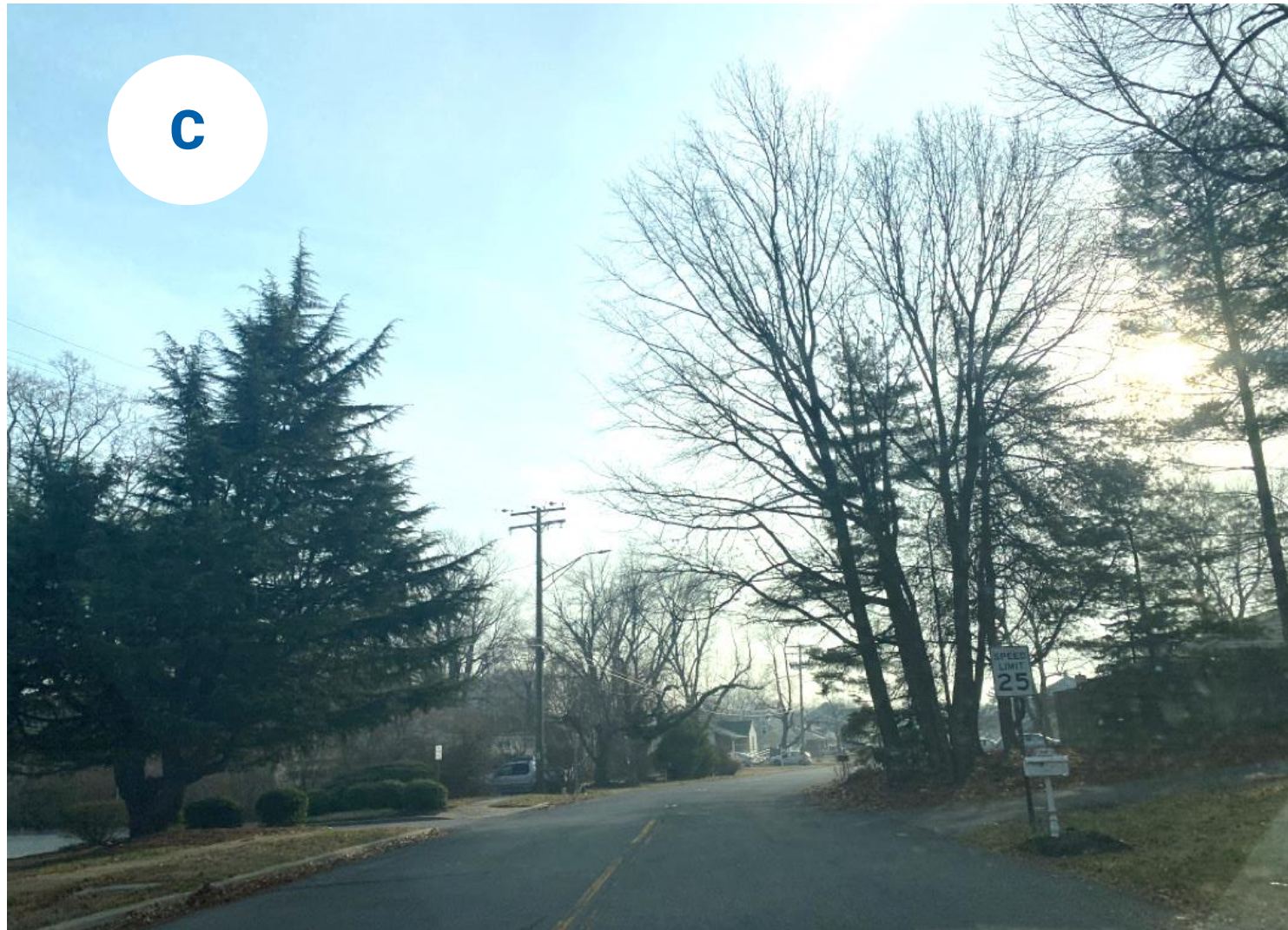


Cottage Grove Drive crossing Tides Court



Fort Smallwood Road (MD-173), approaching the school campus

INFRASTRUCTURE RECOMMENDATIONS – outside the School Walk Zone



Hillside Road



Farmview Road (southeast)

INFRASTRUCTURE RECOMMENDATIONS – outside the School Walk Zone



Rock Hill Road



Valley Road