



DPW & YOU

Making a difference, together



Piney Orchard Elementary School Safe Routes to School Accessibility Study: Existing Conditions and Recommendations

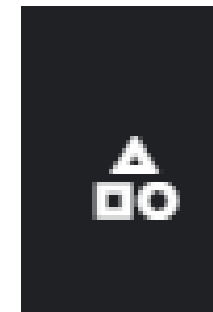
October 25, 2023

Introductions

The screenshot shows the Anne Arundel County website. At the top, there is a navigation bar with links for News, Events, Jobs, Maps, OpenArundel, and Translate. Below this is the county logo and a search bar. The main content area is titled 'Capital Projects' and includes a sub-header 'Safe Routes to Schools'. A 'Project Documents / Videos' section is highlighted, listing various accessibility study reports for different schools, such as 'Waugh Chapel ES.pdf', 'Tyler Heights ES.pdf', and 'Sunset ES.pdf'. A 'Project Description' section is also visible, mentioning a contract to study existing conditions and prioritize infrastructure improvements.

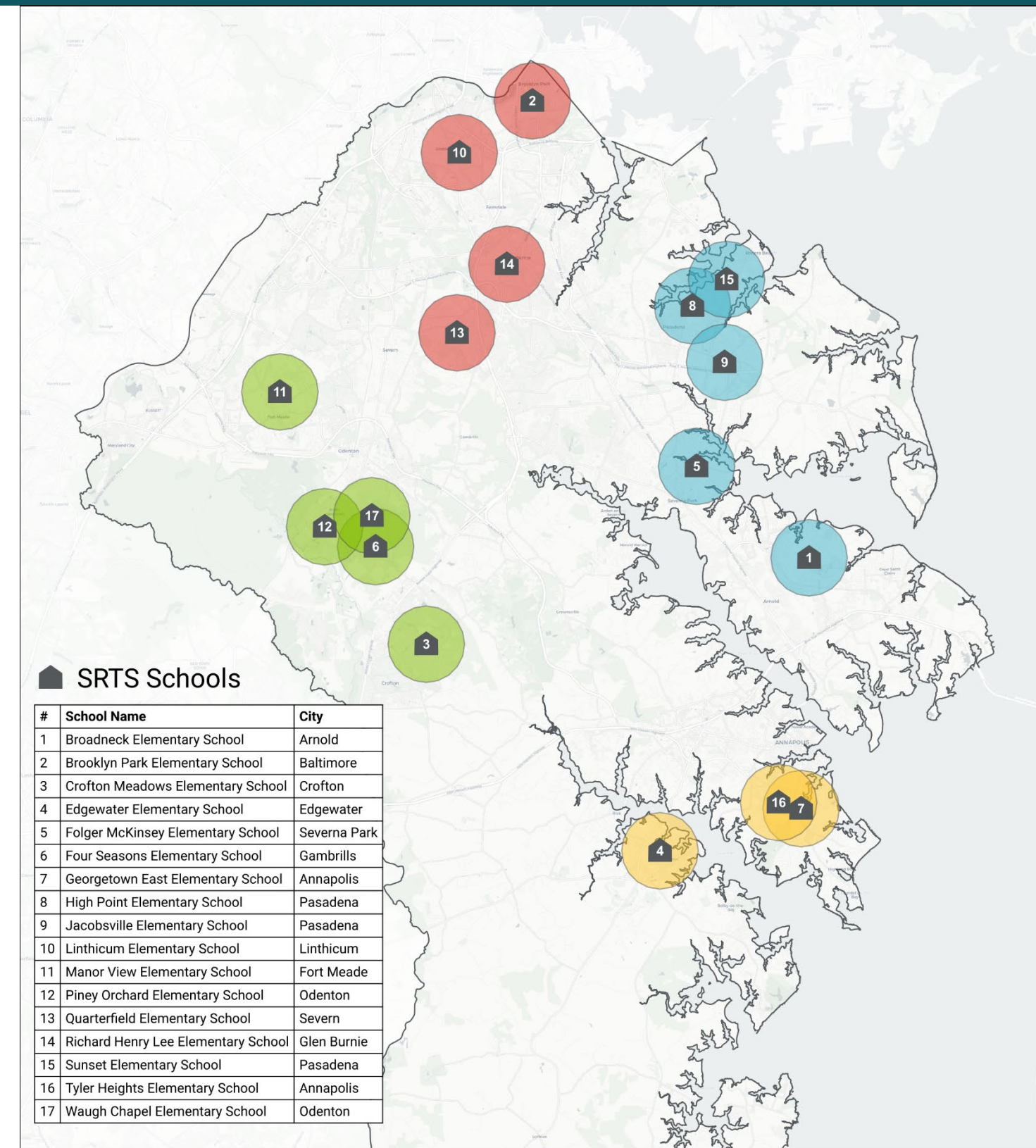
To view full report and provide input,
please visit
<https://tinyurl.com/srtsaacounty>

Adam Greenstein
pwgree08@aacounty.org
410-222-7543



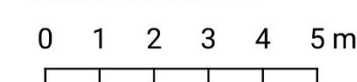
Anne Arundel Safe Routes to School Accessibility Study

- Partnership between County and AACPS
- 17 schools, per *Move Anne Arundel!* – County Transportation Functional Master Plan.
- Oversight by County, State, and AACPS representatives.
- Focus: infrastructure within school walk zone, also assessed opportunities to expand active transportation to school
- Goal: improve safety and transportation choices for all school families



Anne Arundel County 1-mile Buffer Zones

SRTS Schools



- East
- North
- South
- West

Piney Orchard Elementary Accessibility Study

Report findings are derived from:

School site visits	<ul style="list-style-type: none">• Observed school arrival and dismissal – October 26, 2022• Assessed pedestrian and bicycle infrastructure within school walk zone and roads immediately adjacent (as connectivity allows) – October 26, 2022
Parent Survey	<ul style="list-style-type: none">• January 26 - February 19, 2023• Available online: English, Spanish, Chinese, and Korean• Survey link was provided via email

Report Content

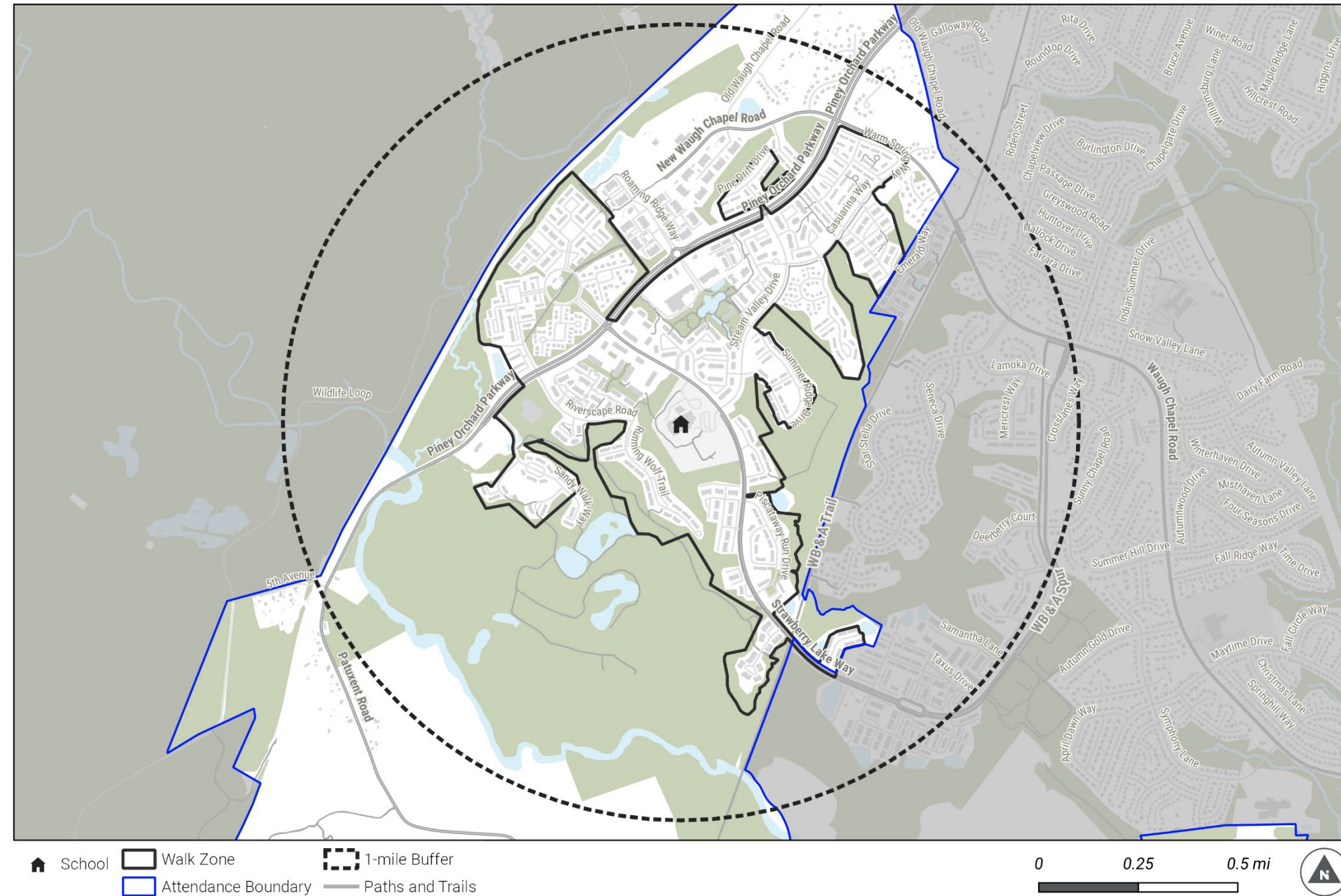
1. School overview
2. Parent-reported student travel modes and barriers
3. Arrival and dismissal observations
4. Existing infrastructure conditions
5. Crash data
6. Infrastructure recommendations
7. Programmatic recommendations
8. Appendix: Infrastructure recommendation photos

To view full report and provide input,
please visit
<https://tinyurl.com/srtsaacounty>

School Overview Section

- Study area
- School attendance and enrollment
- School location and layout
- School access

Piney Orchard Elementary School - 1-mile Radius



Parent-Reported Student Travel Modes and Barriers Section

- Distance from home to school
- School bus eligibility and use
- Most common travel mode to school
- Ideal travel mode to school
- Barriers to walking or biking to school
- Streets used to walk or bike to school

Reported Distance from Home to School	
Distance	Number of Respondents
< ¼ mile	10
¼ mile – ½ mile	16
½ mile – 1 mile	17
1 mile – 1 ½ miles	9
>1 ½ miles	53

Piney Orchard Elementary - 107 total survey responses received

Arrival and Dismissal Observations Section

- Overview of operations
- General observations
- Arrival and dismissal observations by travel mode (walk, bike, school bus, parent drop-off)



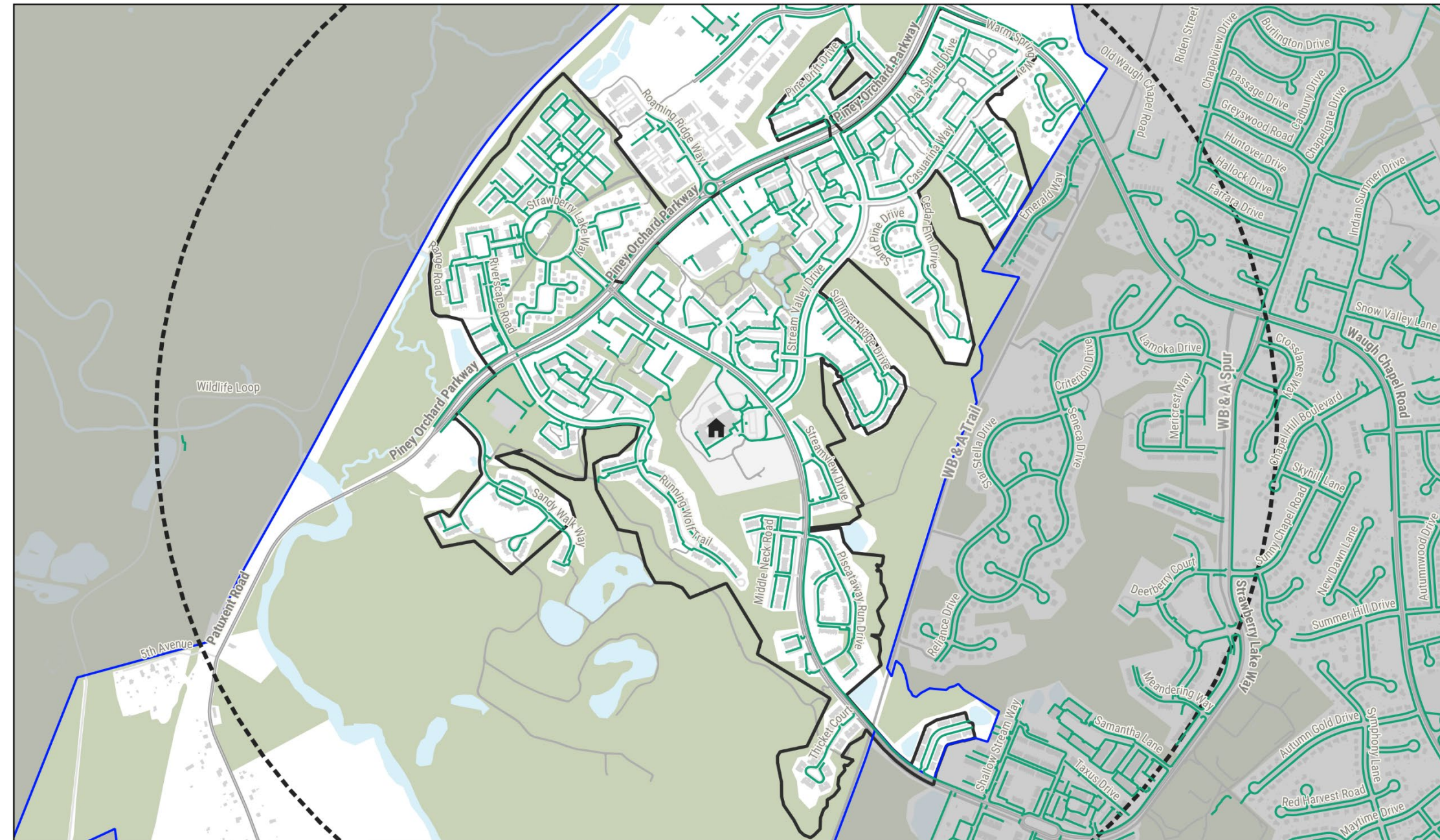
Adult and student walking along Strawberry Lake Way after exiting a parked car.

Existing Infrastructure Conditions Section

- Sidewalks
- Marked crosswalks
- Curb ramps
- On-road bike facilities*
- Regional trails, park trails, and paths*

**Existing, planned, or programmed*

Piney Orchard Elementary School - Existing Sidewalk Network



- 🏠 School
- ▭ Walk Zone
- ▭ Attendance Boundary
- ⋯ 1-mile Buffer
- Sidewalks
- Source: OpenArundel

0 0.25 0.5 mi



Crash Data (2017 – 2021)

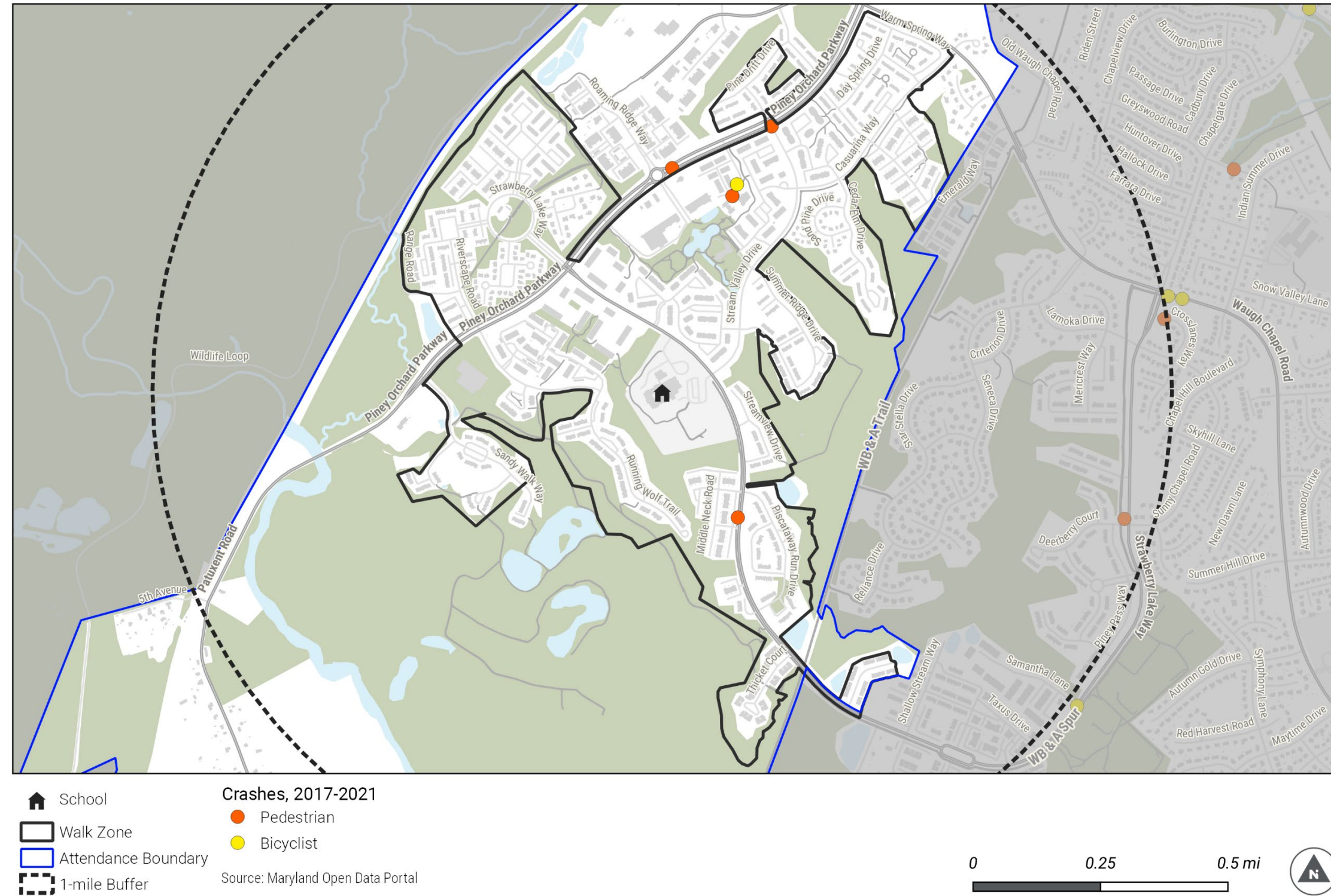
Crashes within 1-mile radius of the school:

- 172 total crashes (all modes)
- Six pedestrian-involved crashes, five resulting in injury
- Two bicyclist-involved crashes, both resulting in injury

Pedestrian and bicyclist crashes within the walk zone:

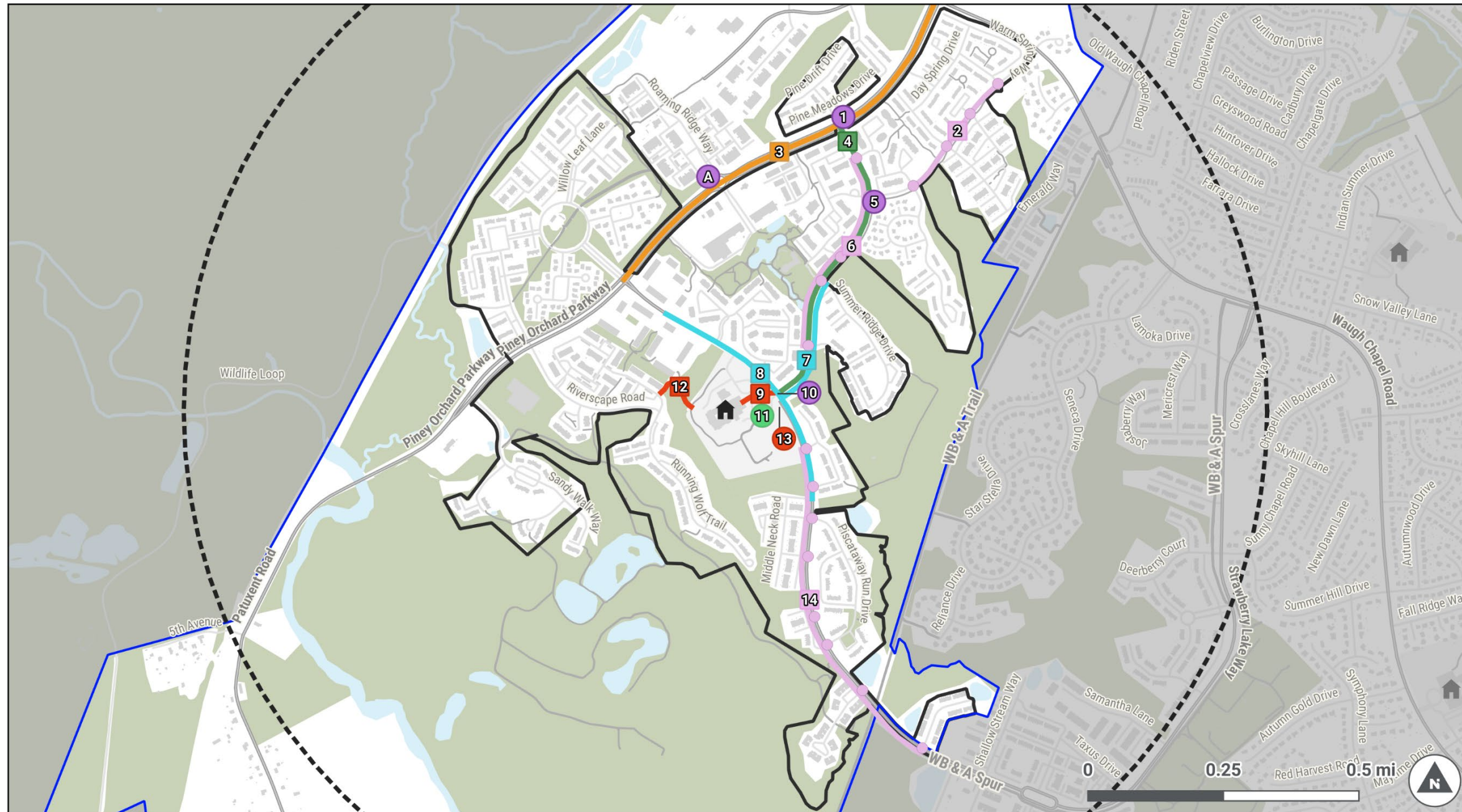
- Four pedestrian-involved crashes and one bicyclist-involved crash occurred in the walk zone.

Piney Orchard Elementary School - Pedestrian and Bicycle Crashes



Infrastructure Recommendations Section

Piney Orchard Elementary School - Recommendations



- | | | | |
|--|---|--|--|
| <ul style="list-style-type: none"> School Walk Zone Attendance Boundary 1-mile Buffer Paths and Trails | <p>Spot Recommendations</p> <ul style="list-style-type: none"> Access Management Bicycle Rack Intersection or Crossing School Zone Signs and Pavement Markings | <ul style="list-style-type: none"> Sidewalk Speed Management Other Recommendations | <p>Segment Recommendations</p> <ul style="list-style-type: none"> Bicycle Facility Corridor Intersection Upgrades School Zone Signs and Pavement Markings Speed Management 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	Piney Orchard Pkwy & Stream Valley Dr / Orchard Knoll Way (Along key student walking route, Reported school concern, Inside school zone)	1a. Crosswalk	Existing crosswalks on north, west, and south legs are narrow	Remark existing crosswalks to 10ft wide with high-visibility markings.	\$2,400	Short
			Crossing of Piney Orchard Pkwy is long	Install median crossing islands	\$3,000	Long
			Crossing on east leg is unmarked	Install new high-visibility crosswalk (contingent upon traffic signal)	\$800	Short
			No stop bar on south leg	Mark new stop bar	\$100	Short
		1b. Curb ramp	East and west leg curb ramps missing	Install new ramps	\$8,000	Medium
			Existing curb ramps lack detectable warning surfaces	Reconstruct or repair existing ramps	\$8,000	
		1c. Other intersection or crossing issues	Neighborhood to the north of Piney Orchard Pkwy is within the school walk zone but busing has been provided due to parent concerns over unsignalized crossing. Stream Valley Dr / Orchard Knoll Way are currently stop controlled.	Consider evaluating for traffic signal or stop control	N/A	Long

Safe Routes to School (SRTS) Program Recommendations

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. Conduct age-appropriate education regularly (e.g., annually). Provides opportunities for skills practice. This works best integrated into PE or Health curriculum.

Conduct a bicycle rodeo. Teach children skills related to walking and bicycling safely, which can increase student and parent confidence.

Conduct parent and staff safety education campaign. Distribute information packets to parents and school staff at the beginning of the school year with arrival/dismissal maps, rules and procedures for arrival/dismissal, and general safety info. Emphasize driving safely, being alert for pedestrians and bicyclists, and respecting school crossing guards.

Provide walking and bicycling maps. Show locations of pedestrian/bicycle infrastructure and estimated walk/bike times.

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Piney Orchard Pkwy & Stream Valley Drive / Orchard Knoll Way, west leg.



The intersections of Casuarina Way with Spring Meadow Drive (left) and Meadow Wood Drive (right) – part of recommendation corridor

Next Steps



DPW & YOU

Making a difference, together

- County will finalize prioritized list of recommendations.
- Implementation timeline and funding source will be based on the type of recommendation.
- Schedule yet to be determined.

To view full report and provide input,
please visit
<https://tinyurl.com/srtsaaccounty>

Adam Greenstein
pwgree08@aacounty.org
410-222-7543

QUESTIONS OR COMMENTS?

SUBMIT USING

