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Linthicum 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.

Linthicum Elementary Accessibility Study

Report findings are derived from:

School site visits	<ul style="list-style-type: none">• Observation of school arrival and dismissal conducted December 6, 2022• Assessment of pedestrian and bicycling infrastructure within the current school walk zone and roads immediately adjacent (as connectivity allows) conducted December 6, 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

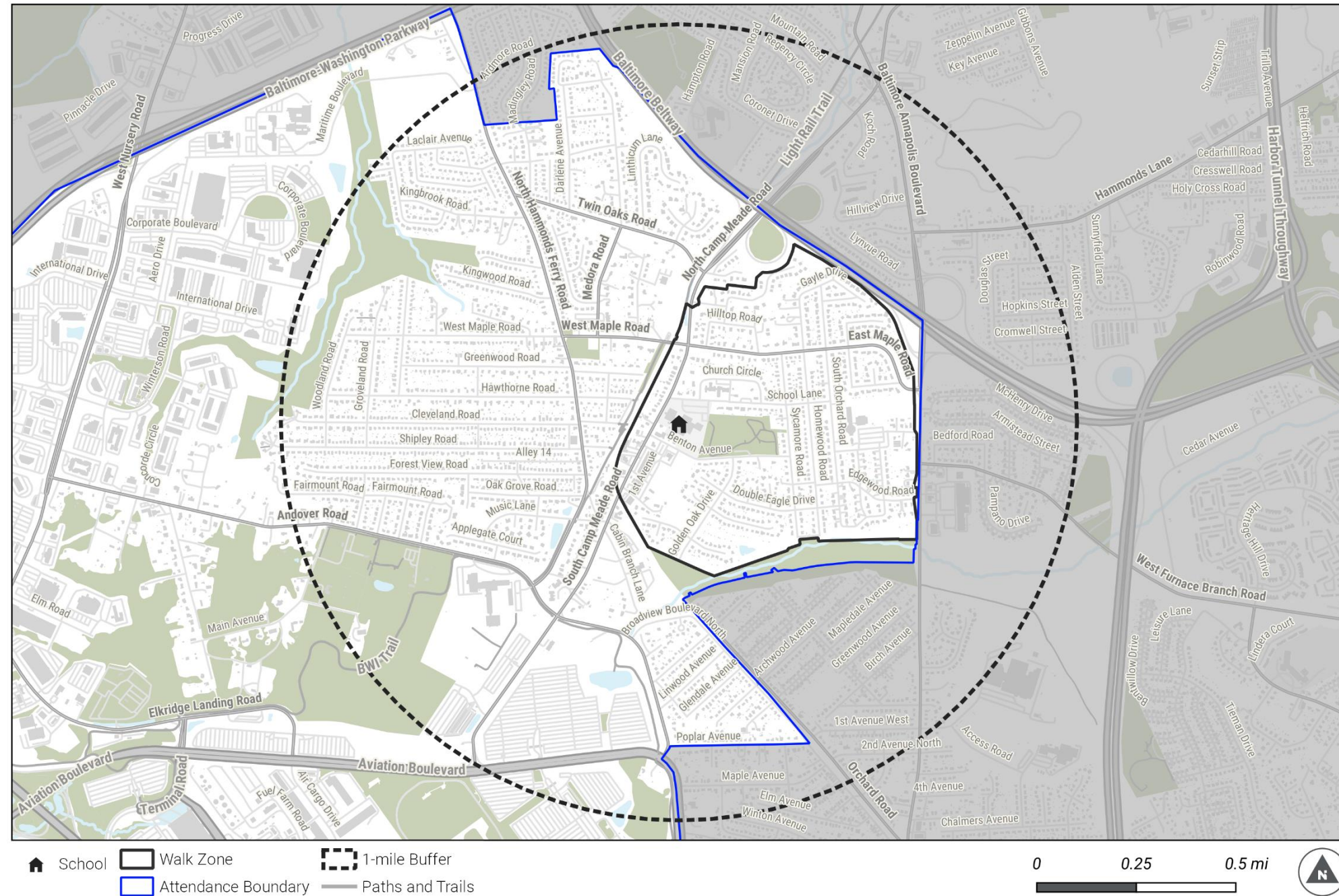
Recommendations were shared with the school community during a virtual open house in October 2023.

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 current walk zone extends to the limits of the school attendance area to the northeast and east.
 - A light-rail line runs parallel to South Camp Meade Road and crosses it just north of Cabin Branch Lane, presenting a significant barrier to student pedestrian access from attendance areas west and south of the current walk zone.

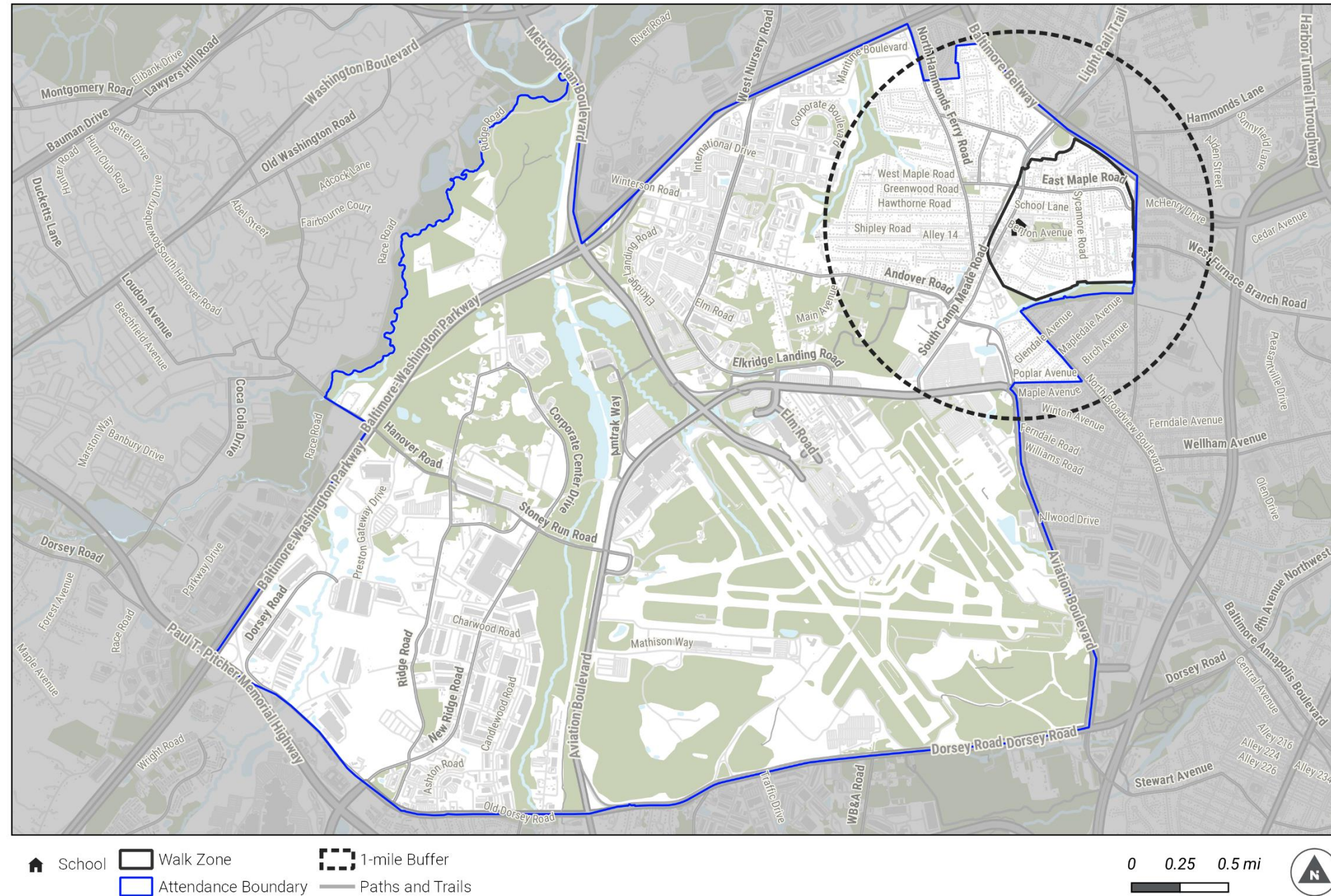
Linthicum Elementary School - 1-mile Radius



Student Attendance Area and Enrollment

- Linthicum Elementary School serves 459 students in grades PreK–5.
- 58.4% of students are registered for bus transportation*

Linthicum Elementary School - Attendance Boundary



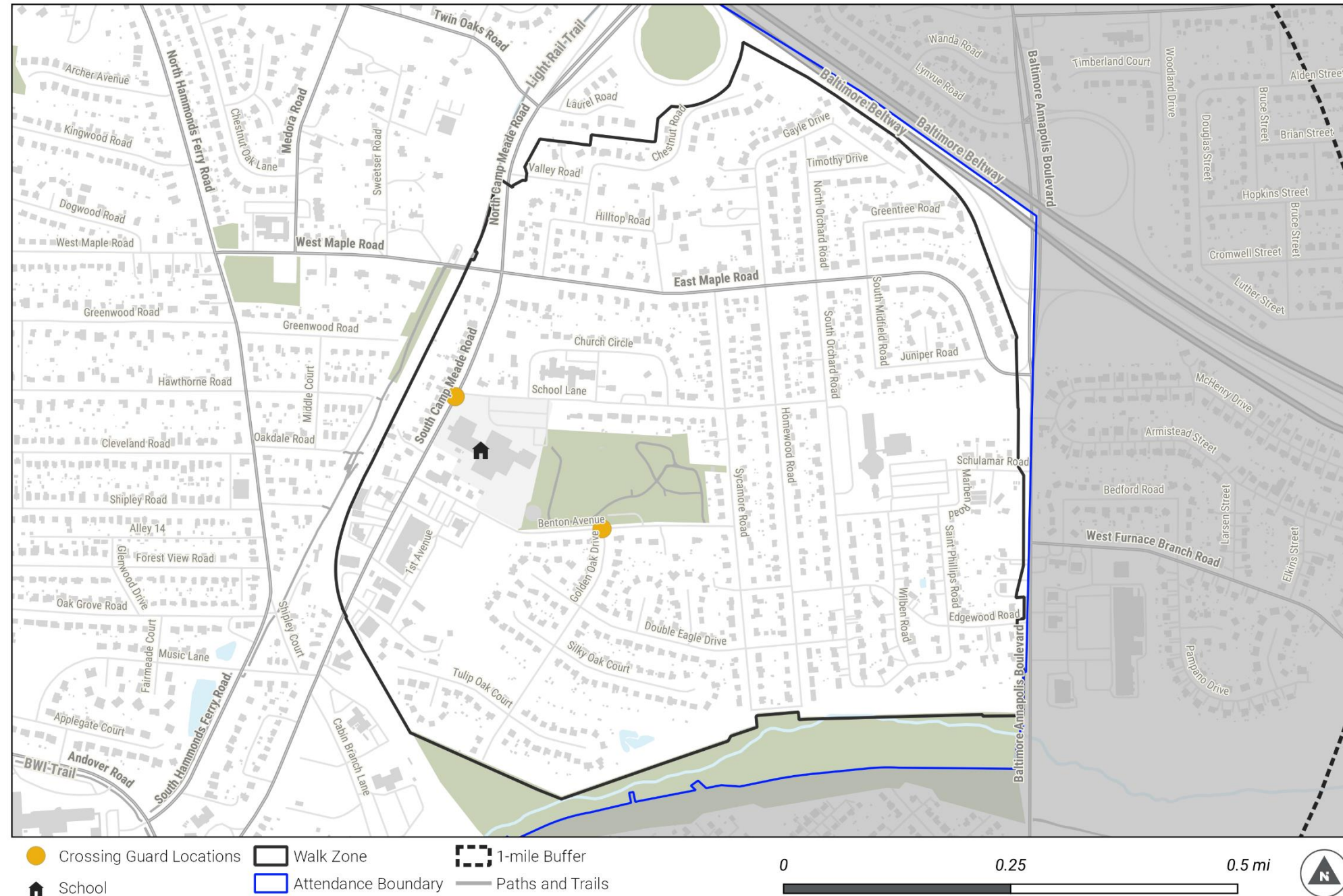
*AACPS provides transportation from designated bus stops for students who reside within the school's attendance area. At elementary schools, transportation is provided for Pre-K students who live more than ½ mile from school, Kindergarten students who live more than ½ mile from school, and students of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

Source: AACPS 2022-2023 Parent Handbook

School Location and Layout

- Linthicum Elementary School is located on School Lane just off South Camp Meade Road (MD-170) in Linthicum Heights.
- Neighboring areas largely consist of single-family homes.
- Most of the area within and outside of the walk zone consists of gridded streets that provide network connectivity.
- School Lane is a neighborhood street that with a posted speed limit of 25 mph.

Linthicum Elementary School - Walk Zone



School Access

Walkers and Bicyclists:

- All walkers and bicyclists access the school via School Lane as access at the rear of the school/off Benton Avenue is restricted.

Buses:

- Buses use the main driveway off School Lane and drop off in front of the main doors.

Parent/Guardian Drop-Off:

- Parents/guardians use the school's rear driveway from Benton Avenue to access a drop-off loop at the school's rear entrance.
- Signage prohibits making left turns off Benton Avenue into the drop-off loop.
- Signage prohibits entering parent drop-off in the main driveway off School Lane.

Staff Vehicles:

- Staff who drive access the school via the main driveway from School Lane and park in one of three lots on the north side of the school.



PARENT-REPORTED STUDENT TRAVEL MODES AND BARRIERS

Linthicum Elementary - Parent Survey Response Overview

- 33 total survey responses received*
- 94% 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	4
½ mile – 1 mile	11
1 mile – 1 ½ miles	8
>1 ½ miles	5

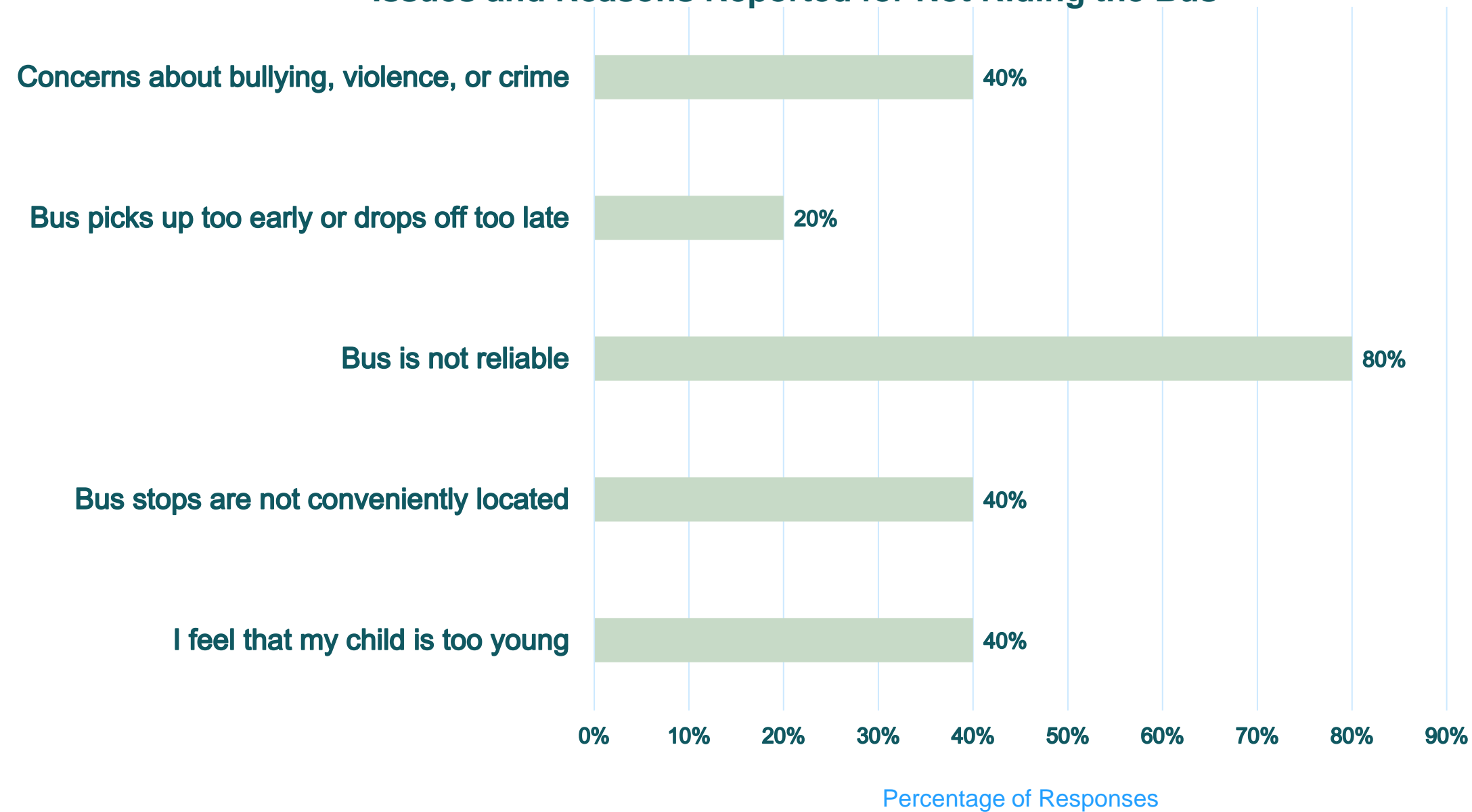
**Note that the survey response rate represents a fraction of the student population and may not reflect the experiences and perspectives of all families.*

Parent Survey Results

School Bus Eligibility and Use

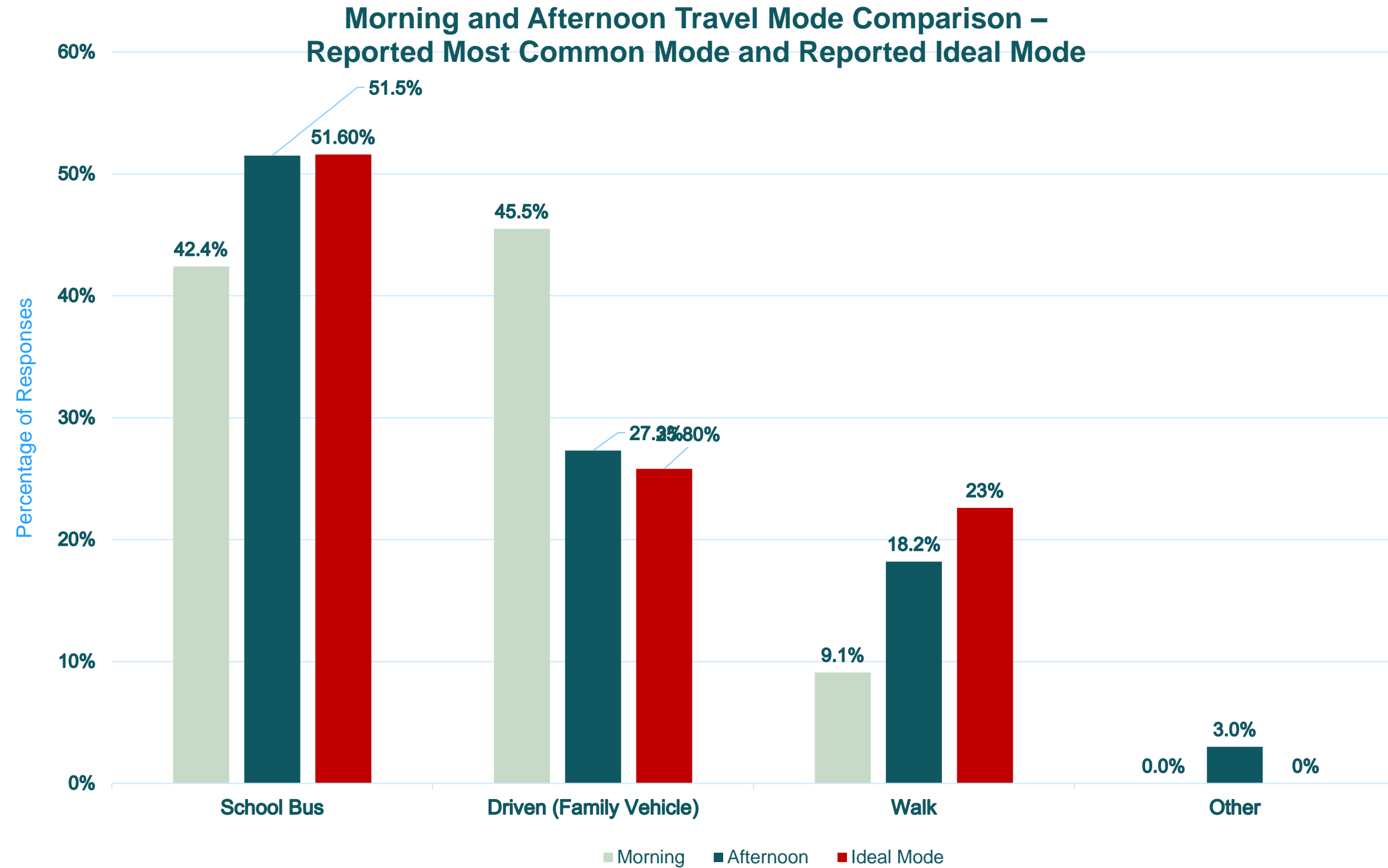
70% of respondents reported being eligible for school bus transportation;
42% reported riding the school bus to school.

Issues and Reasons Reported for Not Riding the Bus



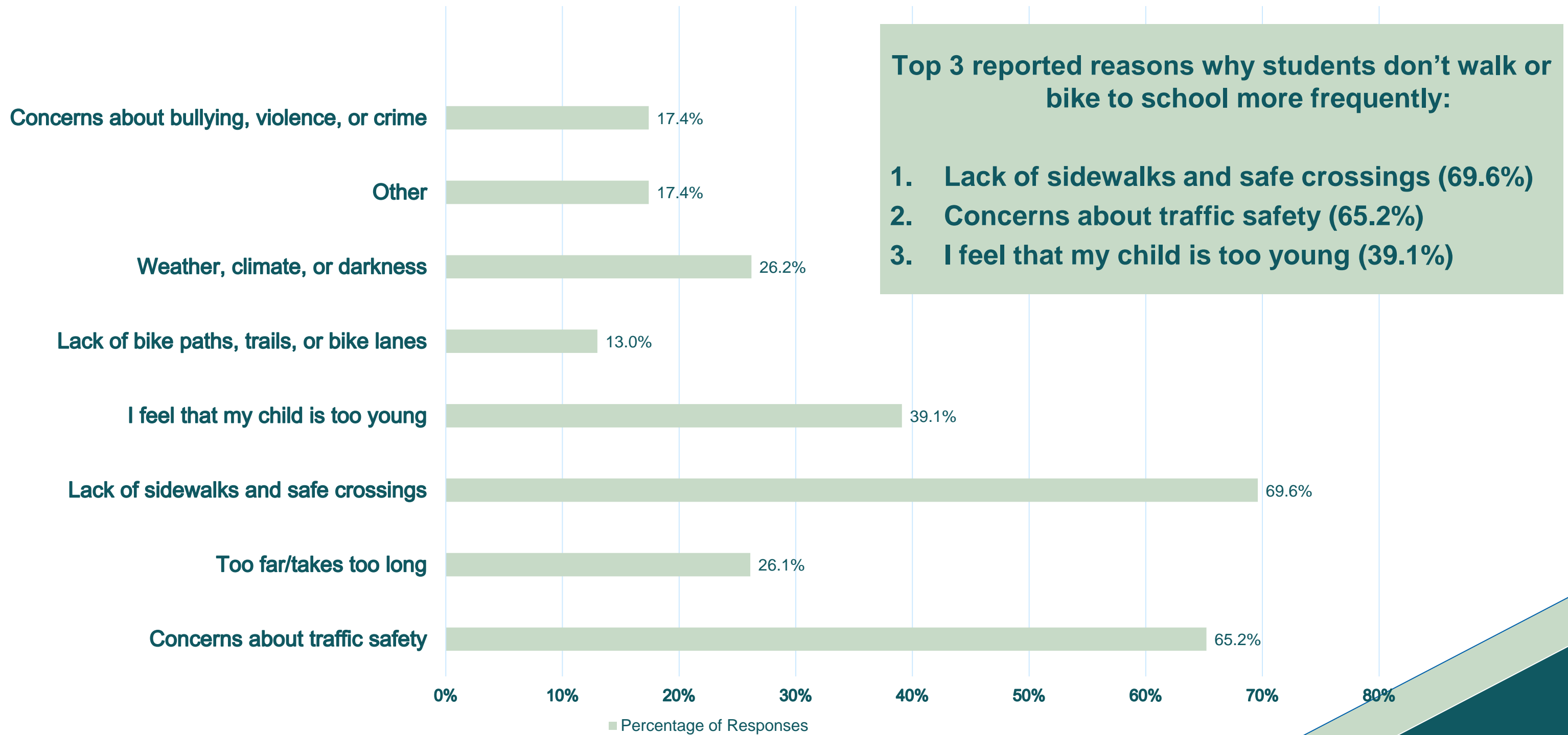
Parent Survey Results

Most Common Travel Mode versus Ideal Travel Mode



Parent Survey Results

Reported Barriers to Walking or Biking to School



Parent Survey Results

Reported Streets Used to Walk or Bike to School

- School Lane
- Benton Avenue
- Camp Meade Road
- Sycamore Street

ARRIVAL AND DISMISSAL OBSERVATIONS

Arrival and Dismissal Operations

School Hours:

- 8:00 am – 2:25 pm
- Doors open at 7:40 am

Observation Times (December 6th):

- Arrival: 7:25 am – 8:15 am
- Dismissal: 2:15 pm – 2:45 pm

Crossing Guards:

- Per AACPS data, two crossing guard locations are assigned to Linthicum Elementary School; one crossing guard was observed at the intersection of School Lane and South Camp Meade Road.
- The crossing guard managed traffic to assist drivers entering and exiting School Lane.



School Lane during school arrival.

General Observations

General Observations:

- Bus drop-off is intended to be separated from parent drop-off, but many parents drop off students on School Lane or park along the street and walk their kids to the door.
- Most student “walkers” exited and entered vehicles parked along School Lane during arrival and dismissal.
- Access to the school via the south driveway (off Benton Avenue) is restricted to car riders.



Arrival Observations

The study team observed arrival from the following locations:

- Benton Avenue between Benton Oak Court and Golden Oak Drive
- South Camp Meade Road at School Lane

General Observations:

- School starts at 8:00 AM
- Doors open at 7:40 AM; buses hold students until then.
- Walkers gather outside the north entrance until doors open
- Cars line up on Benton Avenue until the gate to the drop-off loop is opened at 7:40 AM.



Buses waiting to drop off students during arrival.

Arrival Observations

Walkers and Bicyclists

- One student crossed South Camp Meade Road at School Lane. The observation day was cold and rainy, so numbers may have been less than typical.
- An additional 1–2 students walked up South Camp Meade Road from the south (on the school side).

Bus Lane

- Approximately four buses were observed at arrival.



South Camp Meade Road at School Lane

Arrival Observations

Parent Drop-off

- Drivers were observed transporting students from houses across Benton Avenue.
- Many drivers were observed entering Benton Avenue from South Camp Meade Road, driving past the drop-off driveway, and making a U-turn on Benton Avenue at Golden Oak Drive to return to the driveway.
- Many parents dropped off students on School Lane or parked along the street and walked their kids to the door; double-parking, parking in crosswalks, U-turns, and several near-collisions were observed.



Parent drop-off loop at school arrival.

Dismissal Observations

The study team observed dismissal from the following locations:

- South Camp Meade Road at School Lane
- School Lane & Church Circle (east)

General Observations:

- Dismissal begins at 2:20pm; walkers and car riders are dismissed first, then bus riders after.

Walkers and Bicyclists:

- Approximately 30 students, including a group of about 20 students and 2 parents were observed walking east on School Lane toward Sycamore Street.
- Approximately 5 students with one parent were observed crossing South Camp Meade Road at School Lane and heading south.
- Most students getting dismissed as walkers appeared to be park-and-walk students.



Walkers on School Lane at dismissal.

Dismissal Observations

Bus Lane

- Bus riders are dismissed last, after walkers and car riders depart.

Parent Pick-up

- Approximately 70 cars were parked along School Lane at dismissal, including in the parking area of the church across the street.
- Numerous vehicular conflicts were observed on School Lane, including drivers pulling out of parking spaces cutting off other drivers, drivers double-parking, and parking in areas posted no-parking and in intersections and crosswalks.
- Multiple cars observed blocking crosswalks at both ends of the school driveway on School Lane.



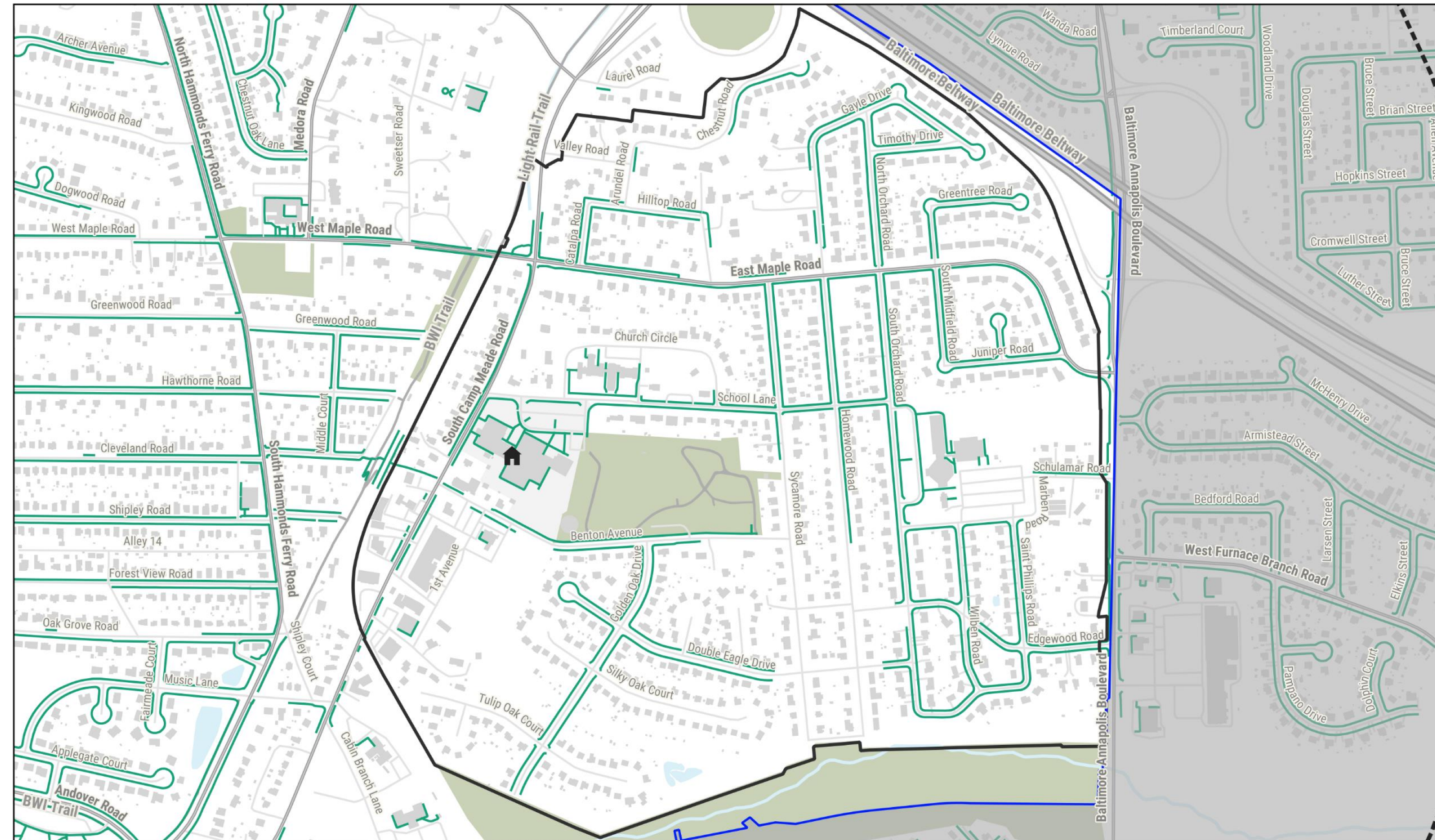
School Lane at dismissal

EXISTING INFRASTRUCTURE CONDITIONS

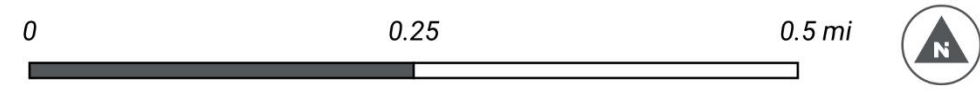
Existing Sidewalk Network

Most streets in the walk zone have sidewalks; several gaps exist, particularly south and east of the school.

Linthicum Elementary School - Existing Sidewalk Network



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



Existing Crosswalks

There are marked crosswalks across the school driveways on School Lane, and on the school campus for crossing the north parking lot to the school entrance.

Many crossings at intersections within the walk zone are unmarked.

Linthicum Elementary School - Existing Crosswalks

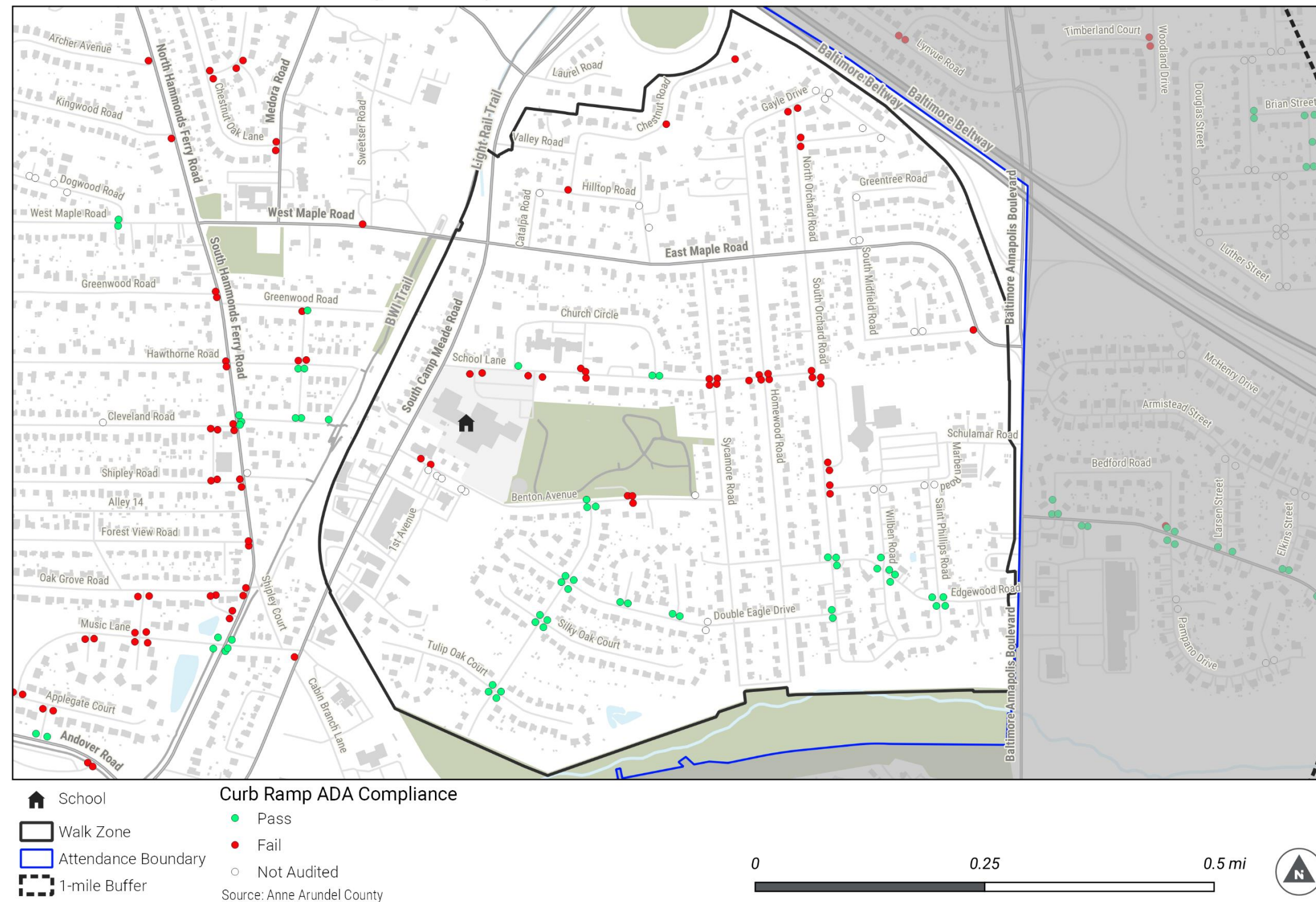


Existing Curb Ramps

- Most intersections in the walk zone south of the school have curb ramps.
- Many existing curb ramps along School Lane lack detectable warning surfaces.
- Most intersections in the walk zone north of the school do not have curb ramps.

*Curb ramp data downloaded 9/14/22

Linthicum Elementary School - Existing Curb Ramps



Existing On-Road Bike Facilities

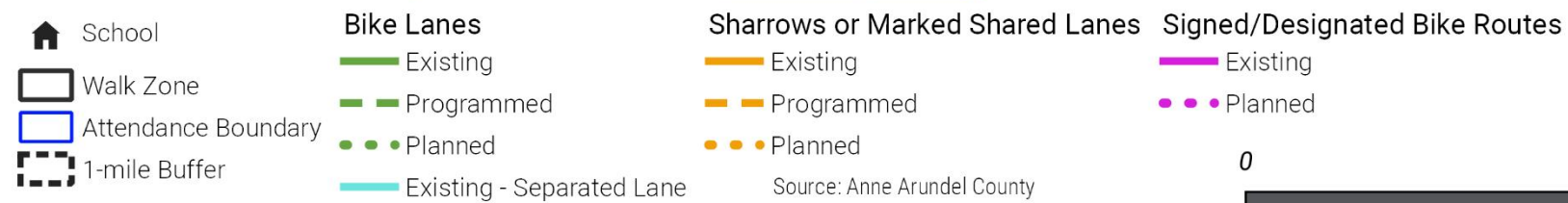
Parts of South Camp Meade Road south of School Lane and north of Valley Road have painted bike lanes on one or both sides.

Bike lanes are planned* for South Camp Meade Road between School Lane and Maple Road, and on Baltimore Annapolis Boulevard to the east of the walk zone.

No other on-road bike facilities were observed within the school walk zone.

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

Linthicum Elementary School - Existing On-Road Bicycle Facilities



Source: Anne Arundel County



Existing Regional Trails, Park Trails, and Paths

The BWI trail runs just west of the current school walk zone, to the left of the light rail line.

No additional trails are currently planned* for areas near the school.

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

Linthicum 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*:

- 1,126 total crashes (all modes), 3 fatal
- 21 pedestrian-involved crashes, 19 resulting in injury, 1 fatal
- 7 bicyclist-involved crashes, all resulting in injury, 0 fatal

*Includes interstate crashes

Pedestrian and bicyclist crashes within the walk zone:

- 3 pedestrian-involved and 1 bicyclist-involved crashes occurred in the walk zone.

Linthicum 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.

Other projects within the study are were identified in the County’s Capital Improvement Projects web page at the time of this plan, including the **SW/BW - BWI/Nursery Spur Trail 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

Linthicum 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

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
1	Hilltop Rd (Arundel Rd to E Maple Rd)	Sidewalk	Missing sidewalk/gaps in existing sidewalk (both sides)	Install new sidewalk.**	\$61,592	Long
2	E/W Maple Rd & N/S Camp Meade Rd (Inside school zone, Along key student walking route)	Crosswalk	North, south, and west crosswalk markings not high visibility	Remark existing crosswalks with high-visibility markings (east leg is already high visibility).	\$2,400	Short
3	Orchard Rd & E Maple Rd	3a. Crosswalk	North crosswalk markings faded	Remark existing crosswalk with existing marking style (high visibility)	\$800	Short
			South crossing is unmarked	Install new standard crosswalk	\$400	
		3b. Curb ramp	North ramps lack detectable warning surfaces	Reconstruct or repair existing ramps	\$8,000	Medium
			South ramps missing	Install new ramps	\$8,000	
4	E Maple Rd (Catalpa Rd to Baltimore-Annapolis Blvd)	Sidewalk	Missing sidewalk on north side	Install new sidewalk**	\$127,911	Long
5	Homewood Rd & E Maple Rd	5a. Crosswalk	North, South crossing is unmarked Stop bars missing	Install new standard crosswalks Mark new stop bars	\$1,000	Short
		5b. Curb ramps	Northeast, Northwest ramps missing	Install new ramps	\$8,000	Medium

*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 within the School Walk Zone

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
6	S Camp Meade Rd (E/W Maple Rd to Benton Ave) (Along key student walking route, Inside school zone)	School Zone Signs and Pavement Markings	Existing school zone signs deficient.	Expand school zone and enhance signage per MdMUTCD part 7:		
			Existing (southbound) SCHOOL pavement marking faded	Remark existing SCHOOL pavement marking	\$500	Short
			Northbound SCHOOL pavement marking missing	Install new SCHOOL pavement marking.	\$500	Short
			Southbound school zone sign obscured by vegetation	Trim vegetation	\$1,000	Medium
			School zone flasher mistimed or nonfunctional	Retime, repair or replace flasher	\$15,000	Short
7	Hilltop Rd & E Maple Rd	7a. Crosswalk	North crossing is unmarked Stop bar missing	Install new standard crosswalk, Mark new stop bar	\$500	Short
		7b. Curb ramp	North ramps missing	Install new ramps	\$8,000	Medium

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Infrastructure Recommendations within the School Walk Zone

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
8	S Camp Meade Rd (E/W Maple Rd to Benton Ave) (Along key student walking route, Inside school zone)	Sidewalk	East sidewalk is missing.	Install new east sidewalk**	\$51,959	Long
			West sidewalk exists to just north of Benton Ave but is narrow and obstructed by approximately 11 telephone poles. S Camp Meade Rd has high motor vehicle speeds and volumes	Relocate or remove obstacles	\$11,000	Long
				Widen west sidewalk	\$10,391	Long
9	S Camp Meade Rd (E/W Maple Rd to Benton Ave) (Along key student walking route, Inside school zone)	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
			Speeding concern reported by crossing guard	Consider reducing the school zone speed limit to 20 mph	\$500	Short
10	S Camp Meade Rd & School Ln (Along key student walking route, Inside school zone)	Curb ramp	Southeast, Southwest ramps missing	Install new ramps	\$8,000	Medium

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

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Infrastructure Recommendations within the School Walk Zone

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
11	School Ln & Church Cir (west) (Along key student walking route, Inside school zone)	11a. Curb ramp	Northeast, Southeast ramps missing	Install new ramps	\$8,000	Medium
		11b. Other intersection or crossing issues	Parked cars obstruct sight lines for east crosswalk	Install curb extensions	\$10,000	Long
				Install raised crosswalk	\$10,000	Medium
				Install school crossing signs with downward pointing arrows	\$500	Short
				Consider restricting parking on south side of School Ln	\$500	Short
12	School Ln & church driveway (Along key student walking route, Inside school zone)	12a. Crosswalk	East crosswalk markings faded	Install new high-visibility crosswalk	\$800	Short
		12b. Curb ramp	Northeast, Southeast ramps lack detectable warning surface	Reconstruct or repair existing ramps	\$8,000	Medium

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Infrastructure Recommendations within the School Walk Zone

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
13	School Ln & school driveway entrance (Along key student walking route, Inside school zone)	13a. Curb ramp	Ramps lack detectable warning surface	Reconstruct or repair existing ramps	\$8,000	Medium
		13b. Other intersection or crossing issues	Crosswalk across school driveway long	Install curb extensions	\$10,000	Long
			Parked cars obstruct crossing	Restrict parking in advance of crosswalk	\$500	Short
14	School Ln & Church Cir (east) (Along key student walking route, Inside school zone)	Crosswalk	Crossing across Church Cir is unmarked No stop bar	Install new high-visibility crosswalk Mark new stop bar	\$900	Short

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Infrastructure Recommendations within the School Walk Zone

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
15	School Ln at school driveway exit (Along key student walking route, Inside school zone)	15a. Crosswalk	Crosswalk markings faded	Remark existing crosswalk with high-visibility markings	\$800	Short
		15b. Curb ramp	Ramps lacks detectable warning surface	Reconstruct or repair existing ramps	\$8,000	Medium
		15c. Other intersection or crossing issues	Crosswalk long	Install curb extensions	\$10,000	Long
			Parked cars obstruct crossing and sight lines	Restrict parking in advance of crosswalk	\$500	Short
16	School Ln & Sycamore Rd (Along key student walking route)	Curb ramp	All ramps lack detectable warning surface	Reconstruct or repair existing ramps	\$16,000	Medium
17	Benton Ave & south vehicle drop off loop (from Benton Ave to school door) (On school campus)	Sidewalk	Missing sidewalk. Car dropoff entrance is provided on the south side of campus, but there are no pedestrian facilities to accommodate the student population in the walk zone to the east and south of the school.	Install new sidewalk on the outer loop of existing school driveway to allow for pedestrian to access school campus from the south**	\$9,363	Long

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

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Infrastructure Recommendations within the School Walk Zone

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
18	Benton Ave & Benton Oak Ct (Inside school zone)	18a. Crosswalk	Crossing across Benton Ave is unmarked	Install new high-visibility crosswalk	\$800	Short
		18b. Curb ramp	Missing ramps	Install new ramps	\$8,000	Medium
		18c. Other intersection or crossing issues	Crossing pedestrians may be difficult for drivers to see or anticipate due to roadway curvature or visual obstructions.	Install school advance crossing assembly signs	\$250	Short
				Install RRFB	\$15,000	Long
19	Homewood Rd (School Ln to Meadow Rd)	Sidewalk	Missing sidewalk on west and much of east side (Existing partial sidewalk on east side of Homewood Rd from School Ln to Edgewood Rd.)	Install new sidewalk**	\$100,000	Long
20	Benton Ave (Golden Oak Dr to Sycamore Rd)	Sidewalk	Missing sidewalk. (Existing partial sidewalk on north side ends short of Sycamore Rd. Existing partial sidewalk on south side ends approximately two houses east of Golden Oak Dr.)	Install new sidewalk**	\$50,000	Long

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
21	Benton Ave & Golden Oak Dr (Inside school zone)	Crosswalk	South crosswalk markings faded West crosswalk markings faded	Remark existing crosswalks with existing marking style (standard)	\$800	Short
22	Sycamore Rd (School Ln to Meadow Rd) (Along key student walking route)	Sidewalk	Missing sidewalks (Note partial sidewalk on the west side between School Ln & Benton Ave)	Install new sidewalk**	\$120,000	Long
23	Edgewood Rd (Sycamore Rd to S Orchard Rd)	Sidewalk	Missing sidewalk on both sides	Install new sidewalk**	\$50,000	Long
24	Edgewood Rd & Wilben Rd	24a. Crosswalk	Crossings are unmarked Stop bars located too close to crossing	Install new standard crosswalks Mark new stop bars	\$2,000	Short
		24b. Other intersection or crossing issues	Crossing pedestrians may be difficult for drivers to see or anticipate due to roadway curvature or visual obstructions	Install curb extensions or curb radius reduction	\$10,000	Long
25	Double Eagle Dr (from west of Sycamore Rd to S. Orchard Rd)	Sidewalk	Missing sidewalks on both sides	Install new sidewalk**	\$60,000	Long

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Infrastructure Recommendations outside the School Walk Zone

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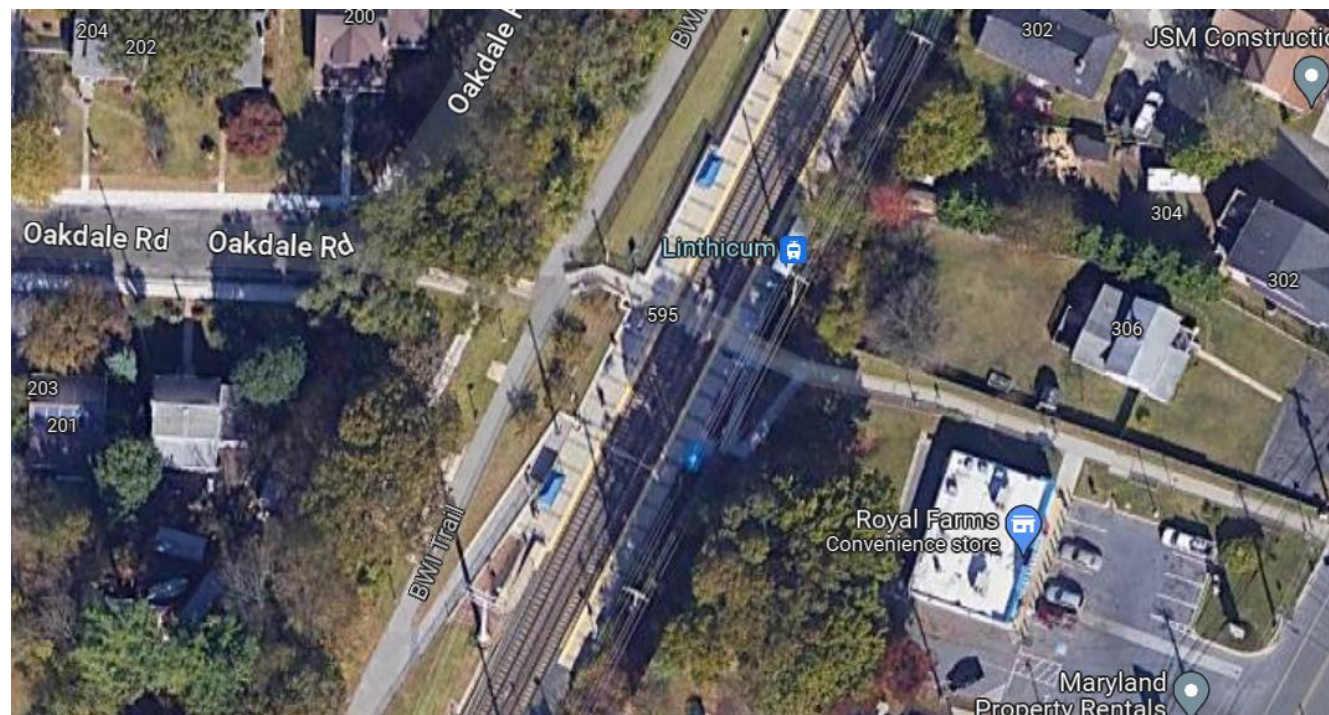
Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
A	N Camp Meade Rd (Laurel Rd to south of Valley Rd)	Sidewalk	Missing sidewalk on both sides	Install new sidewalk** Existing sidewalk ends just north of Maple Rd. Laurel Rd would be a half mile walk to school and could expand the walk zone if safe access were provided.	\$54,000	Long

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

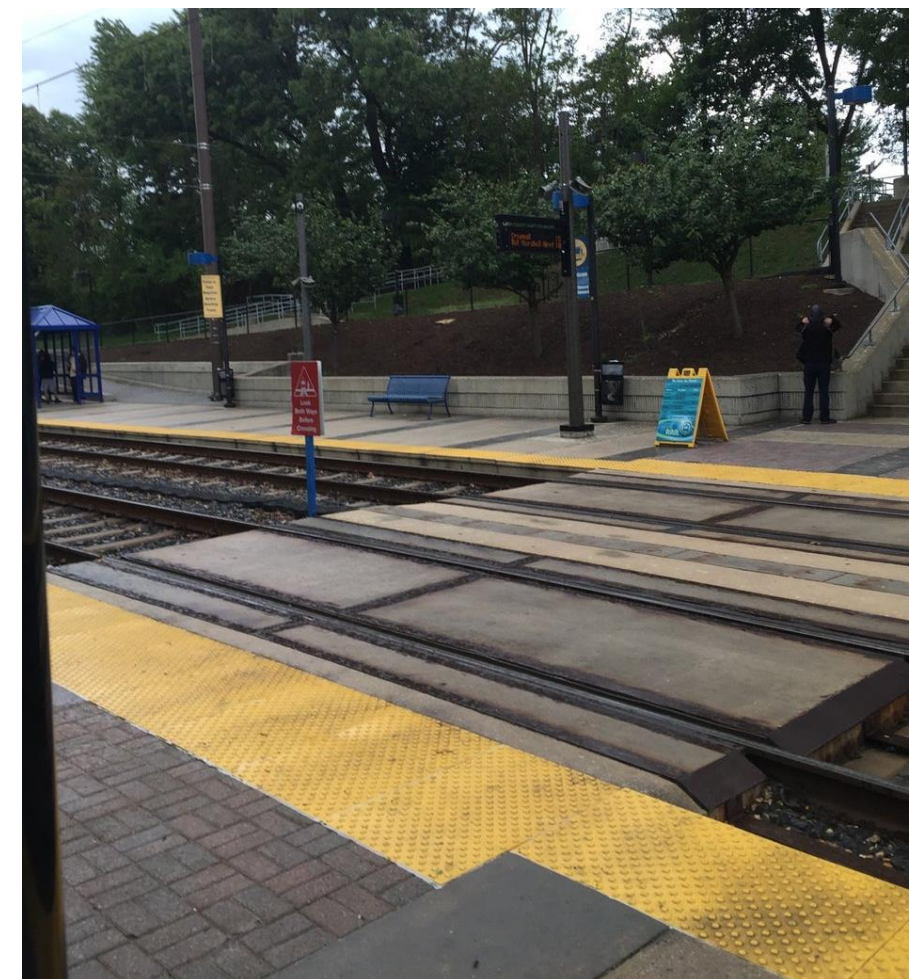
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Additional Considerations

A light-rail line runs parallel to South Camp Meade Road, creating a significant barrier to expanding the walk zone to the west. Although a connection/pedestrian crossing exists at Linthicum Station near Benton Avenue, it requires an unsupervised, non-stop controlled crossing of the tracks. For long-term planning, the County could explore building a pedestrian bridge over the tracks to connect Benton Avenue and Oakdale road and provide a safe connection for Linthicum students and residents of both neighborhoods.



Aerial view of Linthicum Station using Google Maps



View of pedestrian crossing of rail tracks
Source: foursquare.com

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.

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.

Encourage walking by providing direct building access. Many students that live on Benton Ave, just beyond the car rider entrance, are forced to walk all the way around the building on S Camp Meade Road to enter the building. This discourages students from walking. By providing direct building access, students that live off Benton Ave are encouraged to walk 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



Hilltop Road north of East Maple Road

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



N/S Camp Meade Road & E/W Maple Road, south crossing (top); north and west crossings (bottom)



Orchard Road & East Maple Road

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



East Maple Road north side between Homewood Road and Orchard Road, looking east



East Maple Road and Homewood Road, south leg

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



South Camp Meade Road, south of E/W Maple Road



Hilltop Road and East Maple Road

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



South Camp Meade Road between E/W Maple Road and School Lane



South Camp Meade Road between School Lane and Benton Avenue

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



South Camp Meade Road crossing at School Lane



Crossing School Lane at Church Circle (west)

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Crossing School Lane at Linthicum Heights United Methodist Church driveway



Crosswalk at school bus loop/staff lot entrance

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Crossing School Lane at Church Circle (east)



Crosswalk at school bus loop/staff lot exit

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



School Lane and Sycamore Road



South (car drop off loop) driveway exit

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Benton Avenue & Benton Oak Court



Homewood Road

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Benton Avenue west of Sycamore Road



Benton Avenue and Golden Oak Drive

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Sycamore Road



Edgewood Road

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Edgewood Road and Wilben Road, from the south



Double Eagle Drive

INFRASTRUCTURE RECOMMENDATIONS – outside the School Walk Zone



North Camp Meade Road looking north of Valley Road