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Brooklyn Park 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.

Brooklyn Park 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 8, 2022• Assessment of pedestrian and bicycling infrastructure within the current school walk zone and roads immediately adjacent (as connectivity allows) conducted December 8, 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

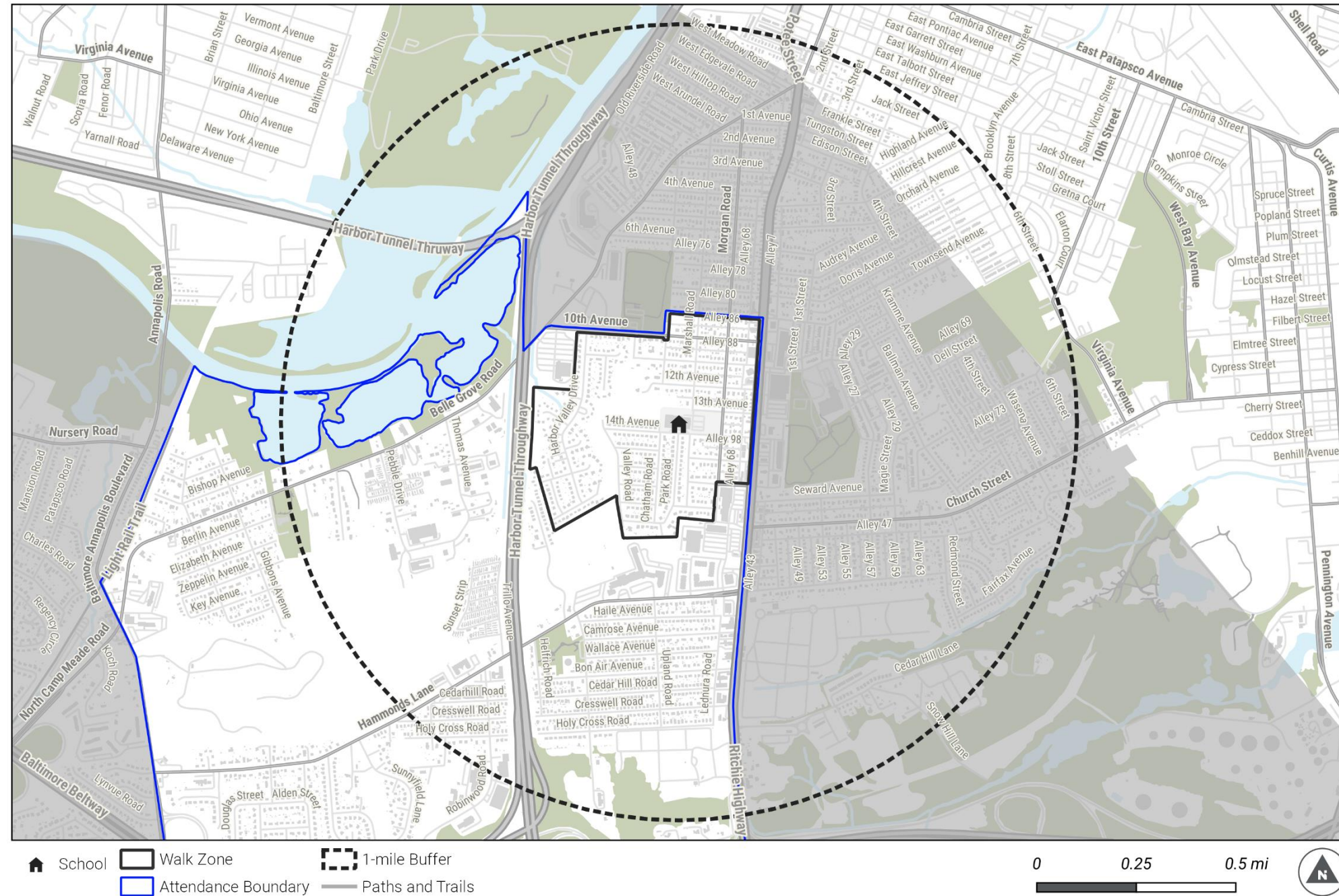
Recommendations were shared with the school community during a virtual open house in October 2023.

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 north and east.
 - The Harbor Tunnel Thruway runs parallel to the west end of the walk zone, creating a significant barrier.
 - Residential areas south of the school walk zone are separated by Hammonds Lane, the Brooklyn Park Middle School Campus, and wooded and commercial areas.

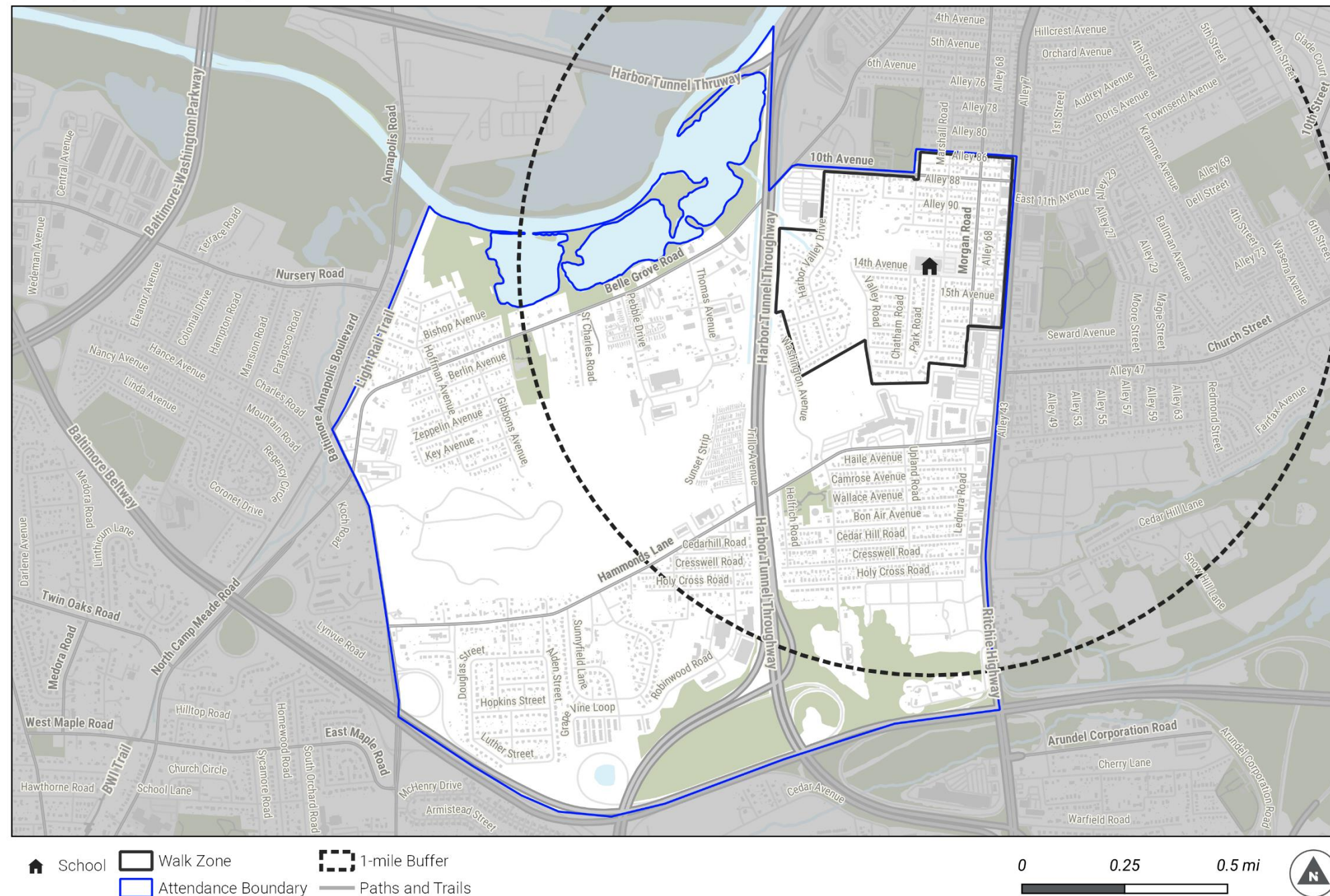
Brooklyn Park Elementary School - 1-mile Radius



Student Attendance Area and Enrollment

- Brooklyn Park Elementary School serves 484 students in grades PreK–5.
- 65% of students are registered for bus transportation*

Brooklyn Park Elementary School - Attendance Boundary



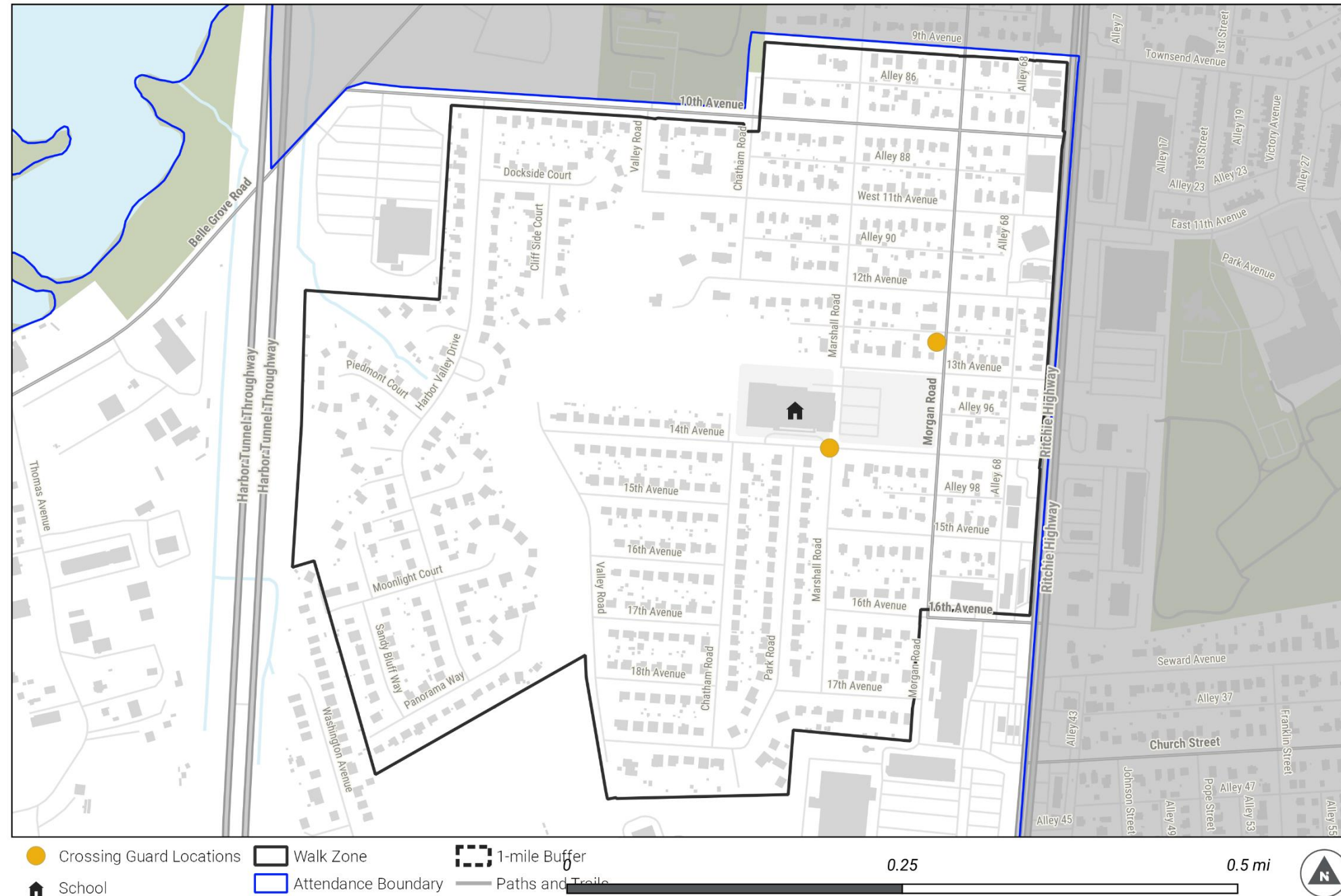
*AACPS provides transportation from designated bus stops for students who reside within the school's attendance area. At elementary schools, transportation is provided for Pre-K students who live more than ½ mile from school, Kindergarten students who live more than ½ mile from school, and students of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

Source: AACPS 2022-2023 Parent Handbook

School Location and Layout

- Brooklyn Park Elementary School is located on 14th Avenue just off Morgan Road in Brooklyn Park, Maryland.
- Neighboring areas largely consist of single-family homes.
- Most of the area within the walk zone consists of gridded streets with alleys that provide network connectivity.
- 14th Avenue is a neighborhood street that with a posted speed limit of 25 mph.

Brooklyn Park Elementary School - Walk Zone



School Access

Walkers and Bicyclists:

- Walkers and bicyclists access the school via Marshall Road at the back of the school and at a side entrance off 14th Avenue.

Buses:

- Buses use the main driveway off 14th Avenue and drop off in front of the main doors.

Parent/Guardian Drop-Off:

- Parents/guardians use the school's rear driveway from Marshall Road/13th Avenue to access a drop-off loop around the school parking lot and asphalt playground.
- 13th Avenue is one-way traveling east, so drivers access the drop-off loop by taking 12th Avenue to Marshall Road.
- Signage prohibits parent drop-off in the main driveway off 14th Avenue.

Staff Vehicles:

- Staff who drive access the school via the rear driveway from Marshall Road and park in the parking lot on the east side of the school building.



PARENT-REPORTED STUDENT TRAVEL MODES & BARRIERS

Brooklyn Park Elementary - Parent Survey Response Overview

- 13 total survey responses received*
- 85% of respondents live in the area zoned to the school

Reported Distance from Home to School	
Distance	Number of Respondents
< ¼ mile	3
¼ mile – ½ mile	0
½ mile – 1 mile	1
1 mile – 1 ½ miles	2
>1 ½ miles	6

**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

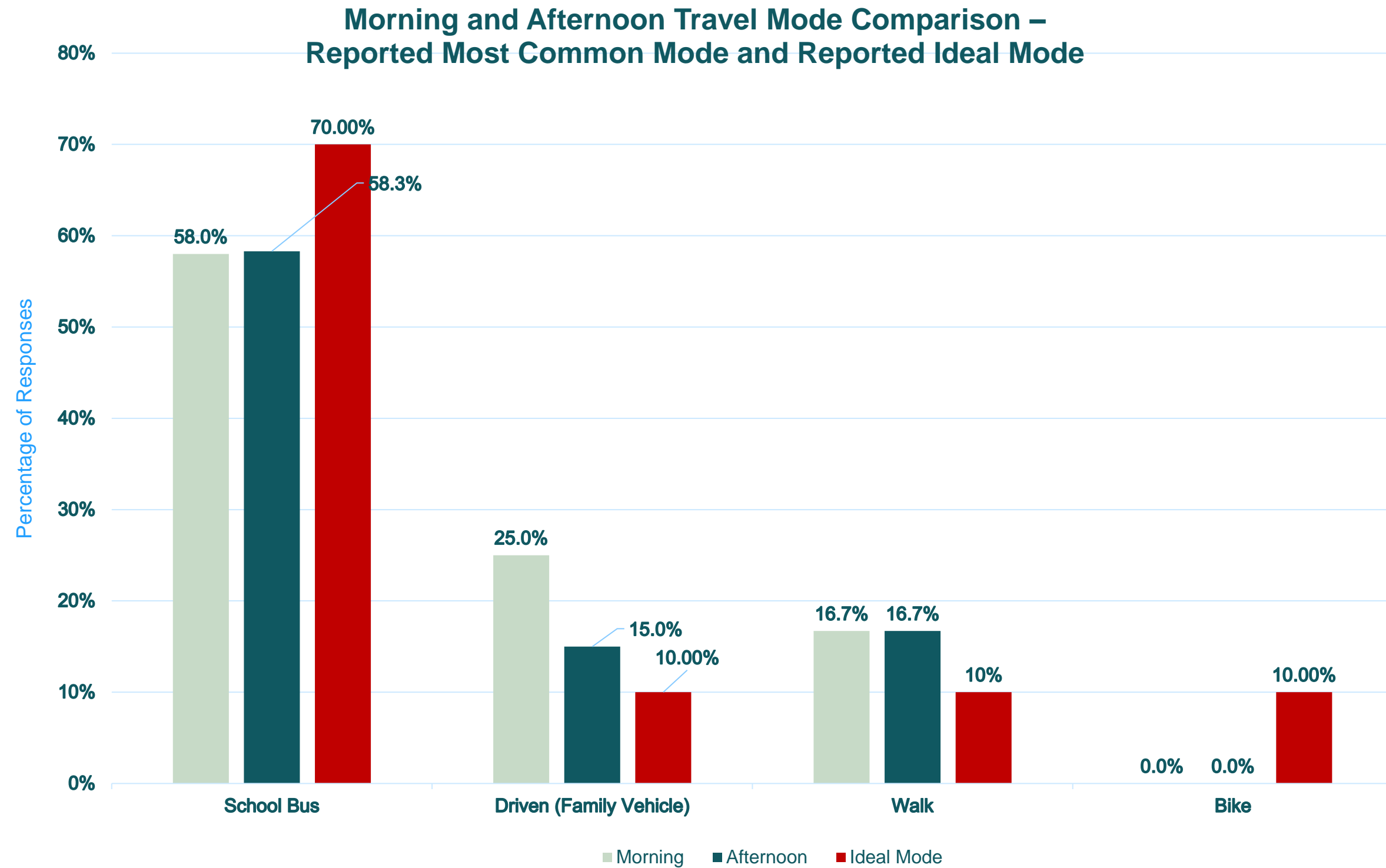
School Bus Eligibility and Use

69% of respondents reported being eligible for school bus transportation;
58% reported riding the school bus to school.

There were no responses reporting issues or barriers to riding the school bus.

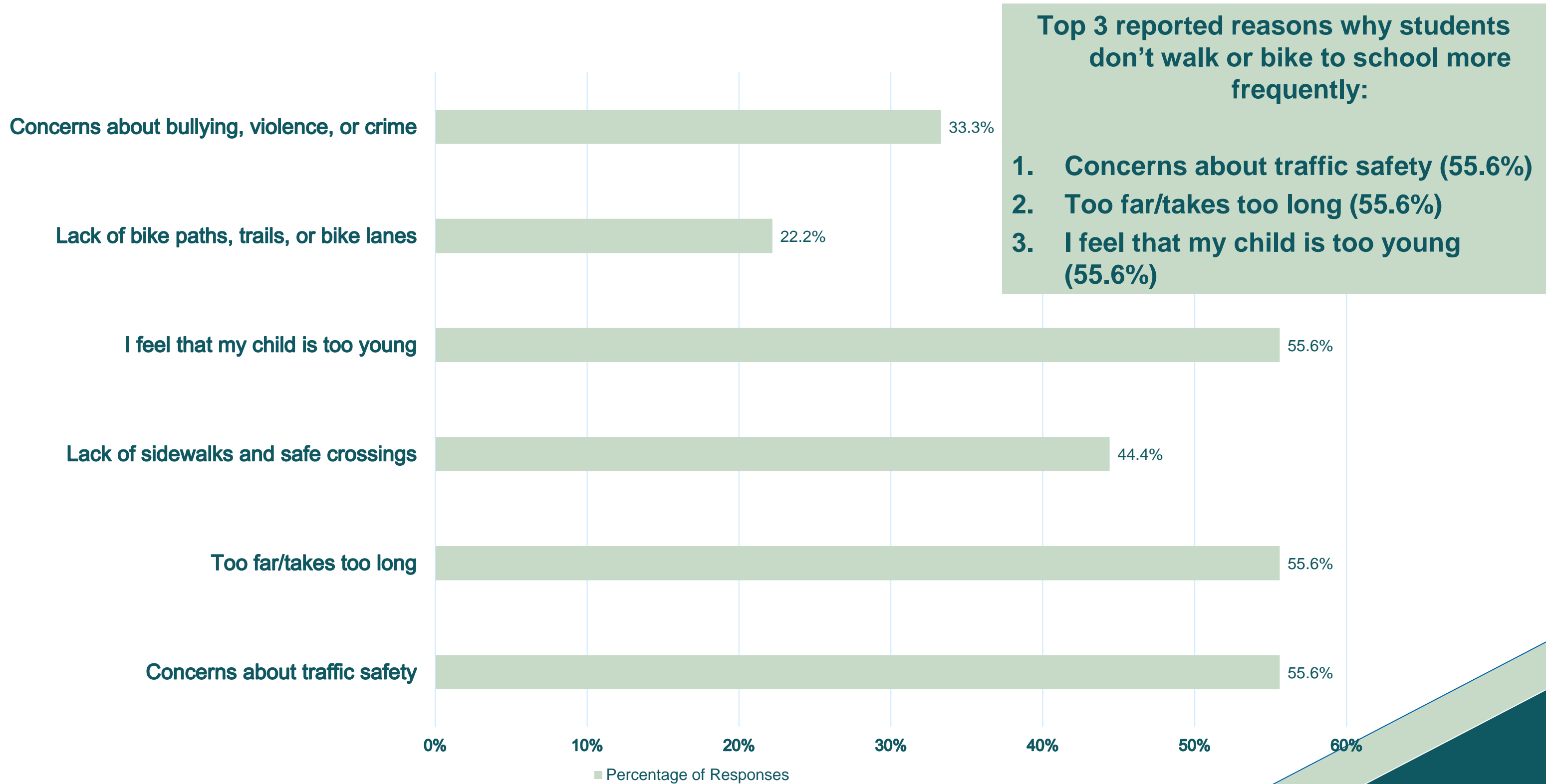
Parent Survey Results

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

- Marshall Road
- 14th Avenue
- Morgan Road
- Park Road
- Chatham Road

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 8th):

- 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 Brooklyn Park Elementary School; one was observed at the intersection of 14th Avenue & Marshall Road, and one was observed at the intersection of 13th Avenue & Morgan Road.



Parent drop-off line during arrival.

General Observations

General Observations:

- Bus drop-off is intended to be separated from parent drop-off, but many parents drop off students on 14th Avenue or park along the street and walk their kids to the door.
- Most student “walkers” exited and entered vehicles parked along 14th Avenue during arrival and dismissal.
- Parents were observed pulling out of the drop-off line and parking on 13th Avenue to drop off students as well.



Arrival Observations

The study team observed arrival from the following locations:

- Morgan Road & 13th Avenue
- Marshall Road & 14th Avenue

General Observations:

- School starts at 8:00 AM
- Doors open at 7:40 AM; buses hold students until then. Walkers gather outside the east entrance until doors open.
- Cars line up in the drop-off loop until doors are opened at 7:40 AM.



Students cross over 14th Avenue while buses drop off students.

Arrival Observations

Walkers and Bicyclists

- Five walkers were observed coming from homes along 13th Avenue, despite there being no sidewalks.
- Fourteen walkers were observed walking from the west side of 14th Avenue.
- Approximately 20 students were observed walking north to the school along Marshall Road, although they may have been dropped off by parents as multiple cars were observed dropping students in this location.
- No bicyclists were observed.

Bus Lane

- Approximately five buses were observed at arrival.



14th Ave during drop off.

Arrival Observations

Parent Drop-off

- Vehicle traffic for parent drop-off was observed accessing Marshall Road via 12th Avenue.
- Many parents dropped off students on 14th Avenue and Morgan Road or parked along the street and walked their kids to the door; double-parking and parking in crosswalks along 14th Avenue was observed.
- Many parents pulled into the main loop once buses left.



School bus drop off at arrival.

Dismissal Observations

The study team observed dismissal from the following locations:

- 13th Avenue & Morgan Road
- 14th Avenue & Marshall Road

General Observations:

- Dismissal begins at 2:20pm.
- Pre-K students are dismissed first, followed by walkers and car riders, then bus riders.

Walkers and Bicyclists:

- Approximately 15 students were observed traveling west on 14th Avenue.
- Approximately 15 students were observed traveling south on Marshall Road.
- Two students with adult were observed crossing Morgan Road at 13th Avenue despite there being no marked crossing.
- Most students getting dismissed as walkers appeared to be park-and-walk students.



Parent pick up line on Marshall Road during dismissal.

Dismissal Observations

Bus Lane

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

Parent Pick-up

- The parent pick-up line extended north along Marshall Road for approximately three blocks at school dismissal; the line was clear by 2:35.



The kiosk outside the school

EXISTING INFRASTRUCTURE CONDITIONS

Existing Sidewalk Network

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

Brooklyn Park 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 14th Avenue and across 14th Avenue to access the school entrance.

The crossings of most intersections within the walk zone are unmarked, including key crossings of Morgan Road.

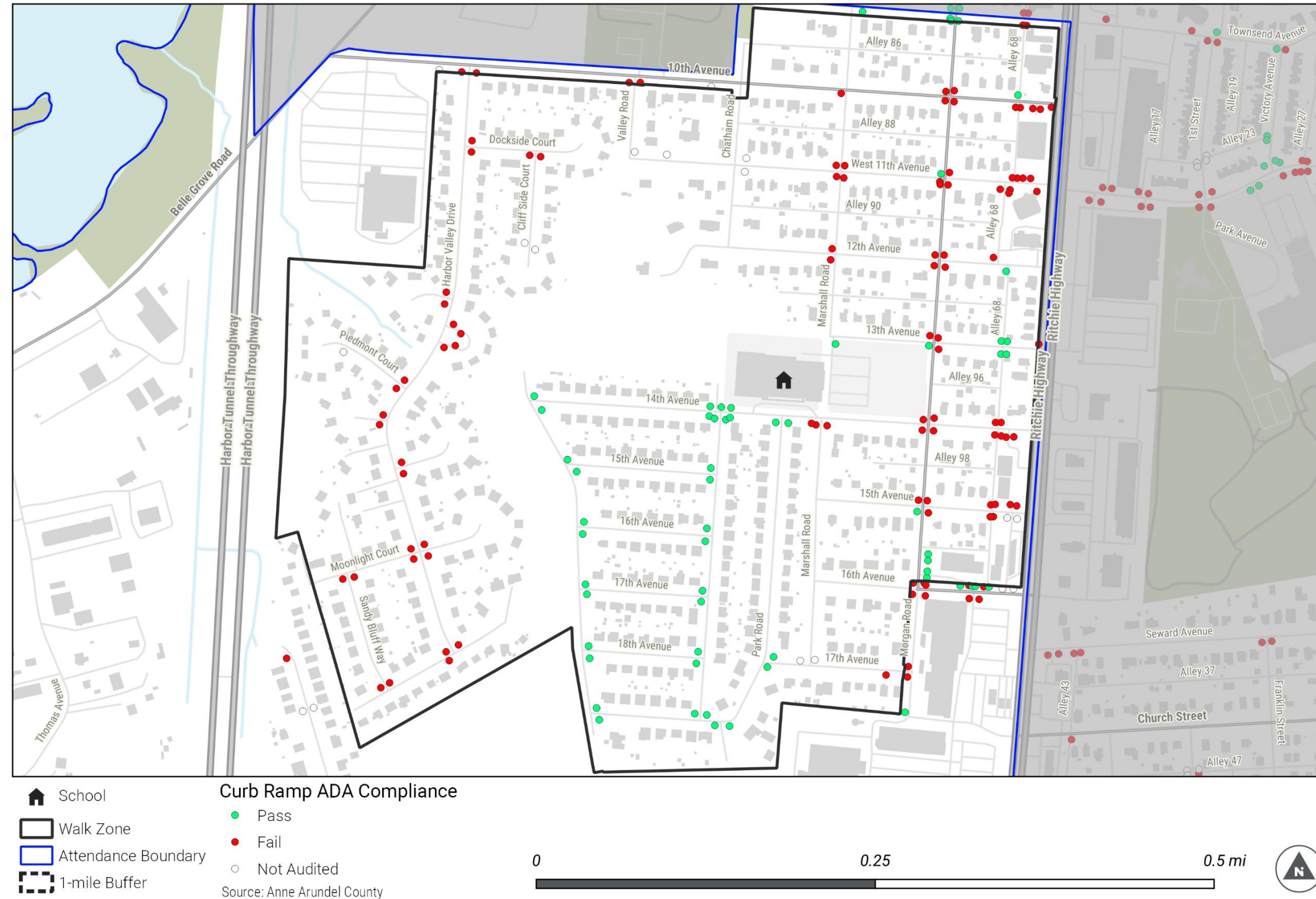
Brooklyn Park Elementary School - Existing Crosswalks



Existing Curb Ramps

- Most intersections in the walk zone south of the school have curb ramps.
- Many existing curb ramps along Morgan Road and north and west of the school lack detectable warning surfaces.

Brooklyn Park Elementary School - Existing Curb Ramps



*Curb ramp data downloaded 9/14/22

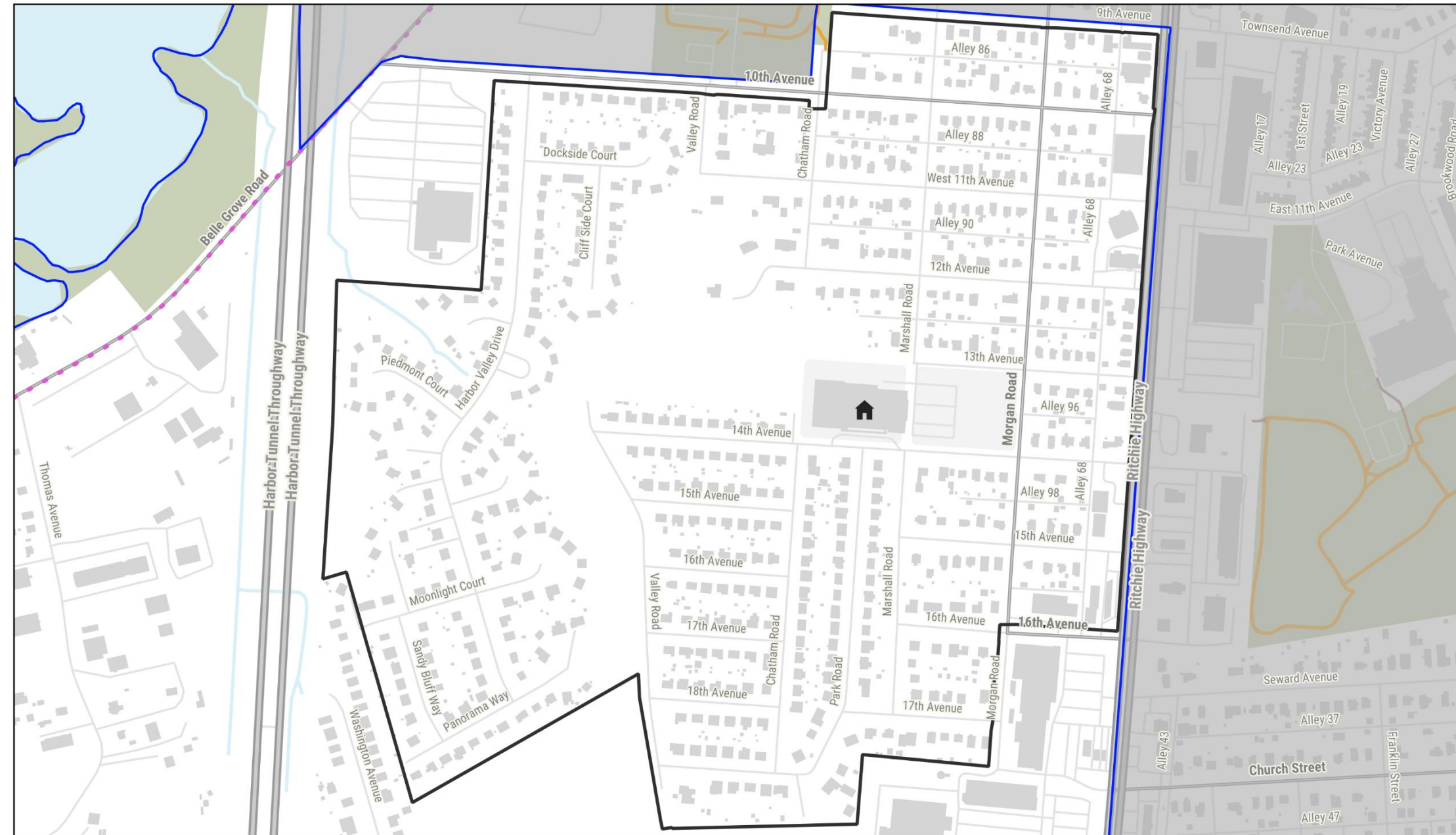
Existing Regional Trails, Park Trails, and Paths

No off-road bike facilities, shared-use paths, or trails are known to exist in or near the school walk zone.

There is a shared use path planned* along Belle Grove Road, west of the walk zone and across the Harbor Tunnel Throughway.

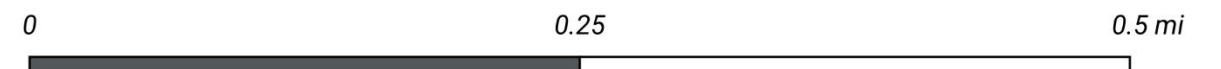
*“Planned” means included in the County’s Master Plan

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



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

Sources: Anne Arundel County, OpenArundel



CRASH DATA

Crash Data (2017 – 2021)

Crashes within 1-mile radius of the school*:

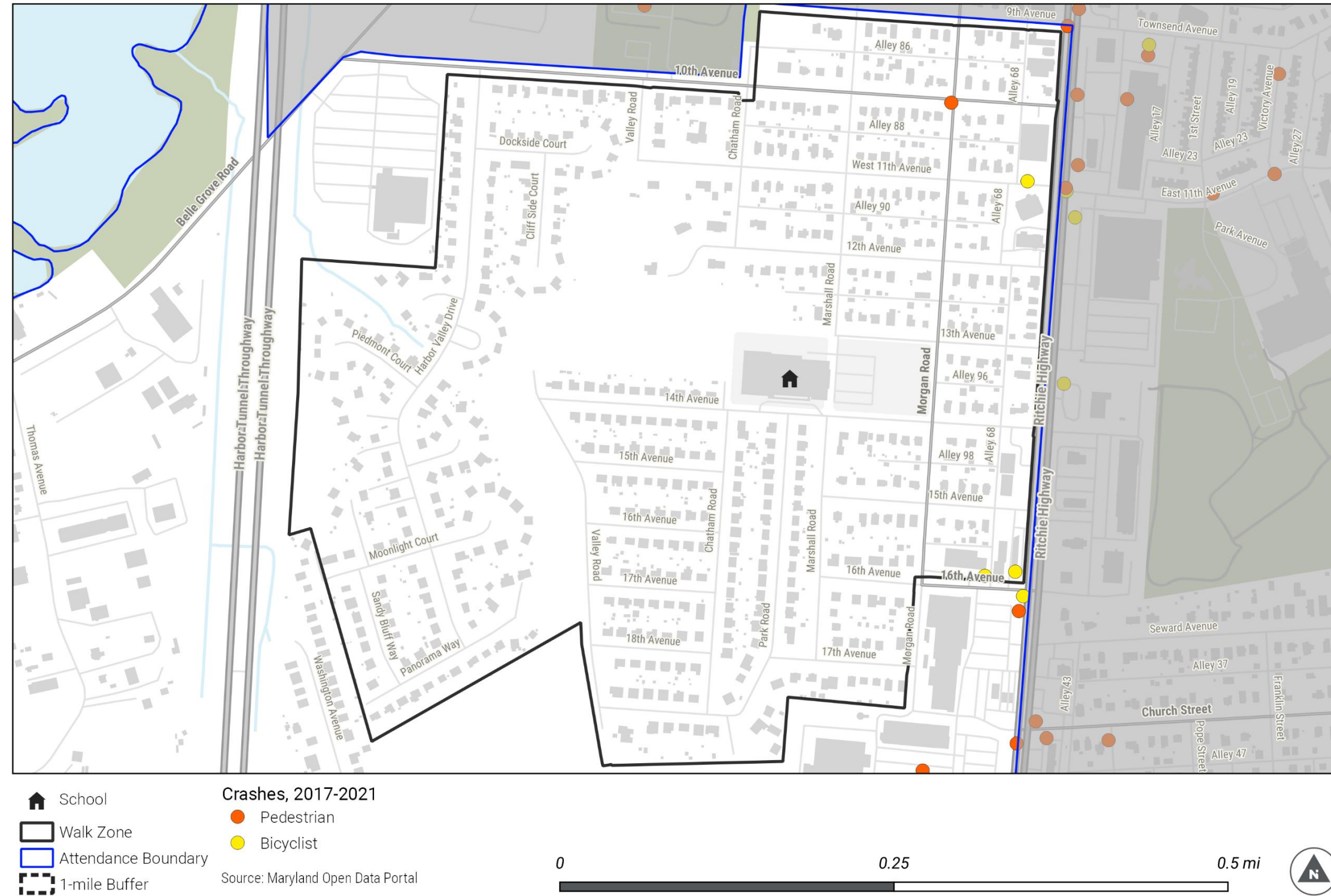
- 1,669 total crashes (all modes), 2 fatal
- 68 pedestrian-involved crashes, 66 resulting in injury, 0 fatal
- 16 bicyclist-involved crashes, 13 resulting in injury, 0 fatal

**Includes interstate crashes*

Pedestrian and bicyclist crashes within the walk zone:

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

Brooklyn Park 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 area were identified in the County’s Capital Improvement Projects web page at the time of this plan, including the **TFP – Brooklyn Park Mobility Audit**. 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

Brooklyn Park Elementary School - Recommendations



🏠 School

📏 Walk Zone

📏 Attendance Boundary

📏 1-mile Buffer

📏 Paths and Trails

Spot Recommendations

🟡 Access Management

🟢 Bicycle Rack

🟣 Intersection or Crossing

🟠 School Zone Signs and Pavement Markings

🟠 Sidewalk

🟡 Speed Management

🟢 Other Recommendations

Segment Recommendations

🟢 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	Marshall Rd (North of 10th Ave to 9th Ave) (Along key student walking route)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$20,634	Long
2	10th Ave & Valley Rd	2a. Curb ramp	Ramps lack detectable warning surfaces (southeast, southwest)	Reconstruct or repair existing ramps	\$4,000	Medium
		2b. Crosswalk	Crossing of Valley Road is unmarked, No stop bar	Install new standard crosswalk Mark new stop bar	\$500	Short
3	10th Ave (west of Chatham Rd to Morgan Rd)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$73,982	Long
4	Marshall Rd (just south of 10th Ave) (Along key student walking route)	Sidewalk	West sidewalk appears to exceed 2% maximum slope permitted by ADA Accessibility Guidelines Sidewalk cracked, Sidewalk uplifted	Reconstruct or repair sidewalk	\$600	Long
5	Valley Rd (10th Ave to W 11th Ave)	Sidewalk	Missing sidewalk (west)	Install new sidewalk**	\$25,728	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.

Infrastructure Recommendations within the School Walk Zone

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
6	Chatham Rd (10th Ave to 12th Ave)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$51,718	Long
7	W 11th Ave (Valley Rd to Chatham Rd)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$33,069	Long
8	W 11th Ave	Sidewalk	Missing sidewalk (south) There is an existing sidewalk segment coming off Chatham and ends before the 3rd house on W 11th Ave	Install new sidewalk**	\$8,400	Long
9	Marshall Rd (just south of 11th Ave) (Along key student walking route)	Sidewalk	Sidewalk obstructed by vegetation (west)	Relocate or remove obstacle (trim or remove vegetation)	\$1,000	Medium
10	12th Ave (from Morgan Rd to Chatham Rd)	Sidewalk	Missing sidewalk (both sides) There is existing sidewalk on 12th Ave extending west of Morgan Rd but stops mid block before Marshall and is very narrow.	Install new sidewalk**	\$66,019	Long

*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*
11	Morgan Rd (9th Ave to 16th Ave) (Along key student walking route)	11a. Crosswalk	Crossings of side streets are unmarked, No stop bar	Install or upgrade standard crosswalks at west side crossings of 9th Ave, 10th Ave, 11th Ave, 12th Ave, 13th Ave, 14th Ave, 15th Ave, 16th Ave (where existing sidewalk is present).	\$4,000	Short
		11b. Curb ramps	Ramp lacks detectable warning surface	Reconstruct or repair existing ramps at side street crossings of 11 th Ave, 12 th Ave, 13 th Ave, 14 th Ave)	\$28,000	Medium
		11c. Other intersection or crossing issues	Crossing long. Students walking from the East must cross Morgan Rd at uncontrolled crossings to access the west-side sidewalk.	Consider evaluating for median crossing islands, high visibility crosswalks and signage at key crossings	N/A	Long
12	Marshall Rd (9th Ave to 13th Ave) (Along key student walking route, Inside school zone)	School Zone Signs and Pavement Markings	SCHOOL pavement marking missing	Expand school zone and enhance signage per MdMUTCD part 7: <ul style="list-style-type: none"> - Install new SCHOOL pavement markings \$1,000 - Install new school advance warning signs \$500 - Install new school zone signs (begin/end) \$1,000 - Install new school zone speed limit signs \$500 		Short
			School advance warning sign missing			
			School zone sign missing			
			School zone speed limit sign missing			

*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*
13	13th Ave & Marshall Rd (Along key student walking route, Inside school zone)	13a. Crosswalk	Crossing of Marshall Road is unmarked	Install new high visibility crosswalk	\$800	Short
		13b. Curb ramp	Missing ramp (southwest)	Install new ramp	\$4,000	Medium
14	13th Ave (Marshall Rd to Morgan Rd) (Inside school zone)	Sidewalk	Missing sidewalk Existing sidewalk on the south side is too narrow and has multiple cracks and uplifting along the corridor.	Install new sidewalk** Reconstruct or repair sidewalk	\$32,110	Long
15	Crossing of School Parking Lot to Walker Entrance (Along key student walking route, On school campus)	15a. Crosswalk	Crosswalk markings not high visibility	Remark existing crosswalk with high-visibility markings	\$800	Short
		15b. Curb ramp	Ramps lack detectable warning surface	Reconstruct or repair existing ramps	\$8,000	Medium

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
16	Morgan Rd & Alley 96	Speed Management	Existing speed hump marked as school crossing but mid-block crossing not recommended (see Map ID 13 for recommended crossing)	Remove crosswalk markings or reconstruct speed hump	N/A	Medium
17	Bus drop off door (On school campus)	Curb ramp	Ramp lacks detectable warning surface	Reconstruct or repair existing ramp	\$4,000	Medium
18	Marshall Rd & 14th Ave (Along key student walking route, On school campus)	18a. Curb ramp	Ramps lack detectable warning surface (north, south)	Reconstruct or repair existing ramp	\$8,000	Medium
		18b. Crosswalk	Crosswalk bisects school bus driveway loop and is not aligned with the intersection of 14th and Marshall	Remove existing west leg crosswalk and remark high-visibility crosswalk closer to Marshall Rd, connecting at the east side of the bus driveway entrance. Relocate existing school crossing signs with downward pointing arrows to location of remarked crosswalk.	\$800 \$500	Short

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Map ID	Location	Facility Type	Issue	Recommendation	Potential Cost	Timeframe*
19	14th Ave & Chatham Rd (Along key student walking route, Inside school zone)	19a. Other intersection or crossing issues	Concern about motor vehicle turning movements	Install curb extensions on southern corners	\$10,000	Long
			Parked cars obstruct sight lines (east)	Restrict parking in advance of crosswalk	\$500	Short
		19b. Crosswalk	Crossing of 14 th Avenue is faded	Remark existing crosswalk with high-visibility markings	\$1,800	Short
			Crossings of Chatham Road are unmarked, no stop bars	Install new standard crosswalks and mark new stop bar		
20	14th Ave (Morgan Rd to west of Chatham Rd) (Along key student walking route)	School Zone Signs and Pavement Markings	SCHOOL pavement marking missing	Expand school zone and enhance signage per MdMUTCD part 7: - Install new SCHOOL pavement markings - Install new school zone signs - Install new school zone speed limit signs <i>Note that Chatham Road, Park Road, and Marshall Road may also benefit from school zone signage</i>	\$1,000	Short
			School zone sign missing		\$1,000	
			School zone speed limit sign missing		\$500	

*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*
21	15th Ave (Marshall Rd to Morgan Rd)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$33,175	Long
22	Green space west of Valley Dr (Panorama Way to 16th Ave)	Bicycle Facility	Missing facility	Install shared use path County owned green space separates Valley Rd from walk zone to the west. Providing this connection between Panorama Way and 16th Avenue would provide more direct access to the school for the west end of the walk zone.	\$131,495	Long
23	Park Rd (14th Ave to Chatham Rd) (Along key student walking route)	Sidewalk	Sidewalk too narrow (both sides), No buffer on either side of the sidewalk	Widen sidewalk	\$21,637	Long
24	16th Ave & Valley Rd (Along future key student bicycling and walking route, see note at right)	24a. Crosswalk	Crossing of Valley Road is unmarked	Install new high-visibility crosswalk <i>This crossing needed upon installation of a shared use path connecting Panorama Way & 16th Ave</i>	\$800	Short
		24b. Curb ramp	Missing ramps (southeast, southwest)	Install new ramp	\$4,000	Medium

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25	Marshall Rd (14th Ave to 17th Ave) (Along key student walking route)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$76,968	Long
26	Morgan Rd (16th Ave to 9th Ave) (Along key student walking route)	26a. Sidewalk	Sidewalk too narrow (west)	Widen sidewalk	\$179,954	Long
			Missing sidewalk (east)	Install new sidewalk**		
		26b. School Zone Signs and Pavement Markings	Existing school zone sign deficient	Expand school zone and enhance signage per MdMUTCD part 7: - Repair or replace existing school zone signs (begin/end) - Repair or replace existing school zone speed limit signs - Install new SCHOOL pavement markings - Install new school advance warning signs	\$1,000 \$500 \$1,000 \$500	Short
		Existing school zone speed limit sign deficient				
		SCHOOL pavement marking missing				
		School advance warning sign missing				
		26c. 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

*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*
27	Chatham Rd (15th Ave to 18th Ave) (Along key student walking route)	Crosswalk	Crossings of side streets are unmarked, No stop bars	Install new standard crosswalks, Mark new stop bars for side street crossings of 15th, 16th, 17th, and 18th Ave	\$2,000	Short
28	16th Ave (Morgan Rd to Marshall Rd)	Sidewalk	Missing sidewalk (both sides)	Install new sidewalk**	\$32,343	Long
29	Park Rd & 17th Ave (Along key student walking route)	29a. Other intersection or crossing issues	Concern about motor vehicle turning speeds Concern about motor vehicle turning movements	Install curb extensions on northeast and southeast corners	\$10,000	Long
		29b. Crosswalk	Crossing of 17 th Avenue is unmarked, No stop bar	Install new standard crosswalk, Mark new stop bar	\$500	Short
30	17th Ave between Park Rd & Marshall Rd	Sidewalk	Sidewalk cracked (south), Sidewalk obstructed Sidewalk too narrow (both)	Reconstruct or repair sidewalk Widen sidewalk	\$13,272	Long

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

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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*
31	Marshall Rd & 17th Ave (Along key student walking route)	31a. Curb ramp	Missing ramps (southeast, southwest)	Install new ramps	\$8,000	Medium
		31b. Crosswalk	Crossings of 17 th Avenue are unmarked, No stop bar (north)	Install new high-visibility crosswalks Mark new stop bar	\$1,700	Short
		31c. Other intersection or crossing issues	Concern about motor vehicle yielding	Install school crossing signs with downward pointing arrows (east, west)	\$1,000	Short
Concern about pedestrian visibility	Restrict parking in advance of crosswalk					
32	Chatham Rd & Park Rd (Along key student walking route)	32a. Other intersection or crossing issues	Concern about motor vehicle yielding at Chatham Rd (currently has yield sign)	Consider evaluating for stop control on Chatham Road.	N/A	Long
			Concern about pedestrian visibility	Restrict parking in advance of crosswalk	\$500	Short
		32b. Crosswalk	Crossing of Chatham Road is unmarked, No stop bar	Install new standard crosswalk, Mark new stop bar	\$500	Short
			Crossing of Park Road is unmarked	Install new high visibility crosswalk	\$800	
	32c. Curb ramp	Missing ramp (southwest)	Install new ramp	\$4,000	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.

Additional Considerations

A path along the east side of Brooklyn Park Middle School would connect students who live off Hammonds Lane to Park Road, providing access to the school. This would require an improved crossing of Hammonds Lane, as well as sidewalks on the southside of Hammonds Lane.



Aerial of Hammonds Lane and the middle school campus, leading to Park Road

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, respecting the school crossing guard/s, and point parents to the proper drop off and pick up locations.

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. Organizing parent or community volunteers to "pick up" students living east of Morgan Road may encourage increased walking/bicycling from those neighborhoods.

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.

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



Marshall Road, north of 10th Avenue



10th Avenue and Valley Road

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone

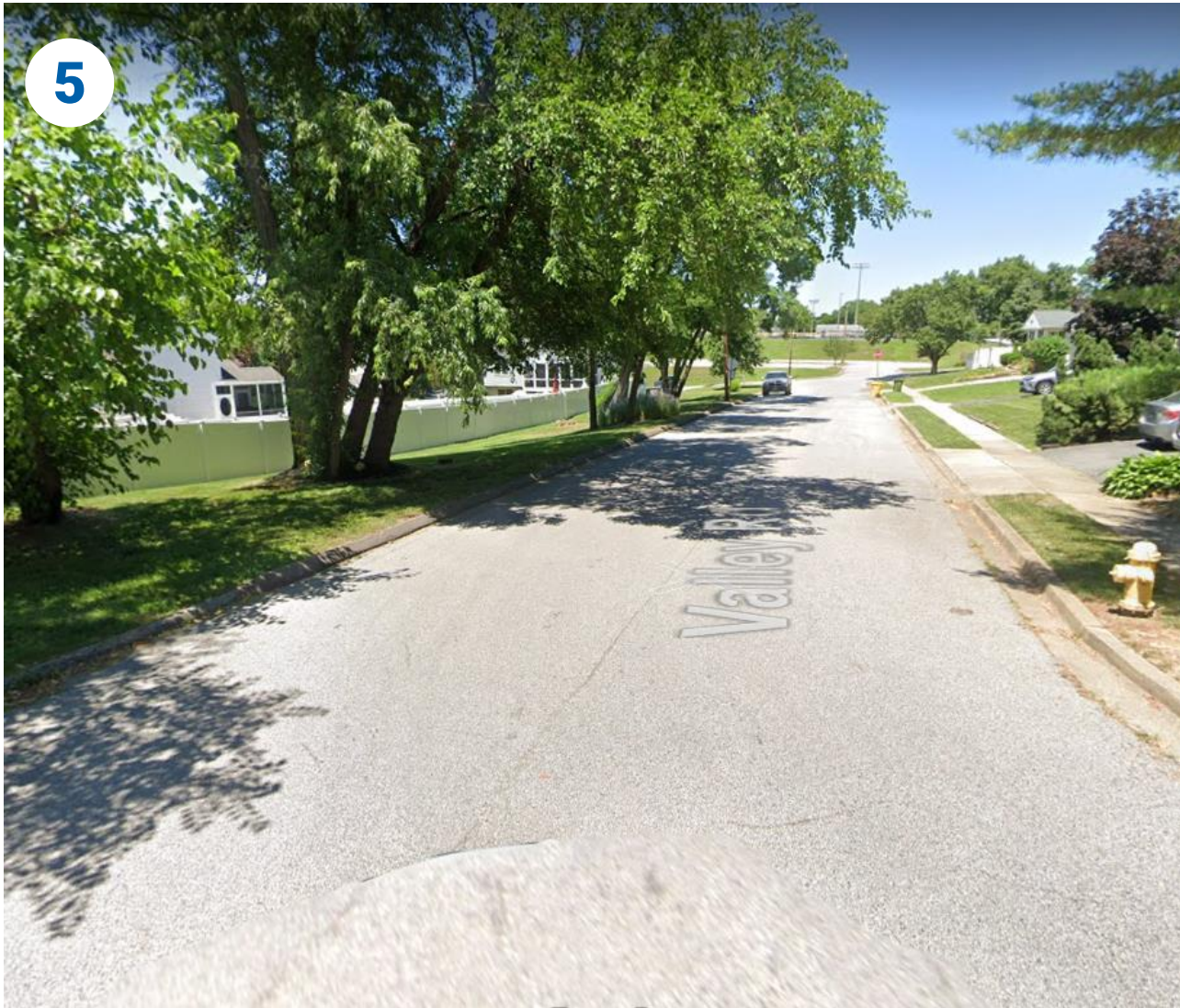


10th Avenue, west of Morgan Road



West sidewalk on Marshall, just south of 10th Avenue

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Valley Rd (10th Ave to W 11th Ave)



Chatham Road looking south

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



W 11th Avenue, looking east



W 11th Avenue

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Sidewalk obstruction on Marshall Road, south of 11th Avenue



12th Avenue

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Morgan Road and 12th Avenue



Marshall Road looking south

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



13th Avenue and Marshall Road at entrance to school driveway

The existing sidewalk on 13th Avenue

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



The crossing over the parking lot to the walker entrance



The existing speed hump on Morgan Road

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



The curb ramp at bus drop off



Marshall Road and 14th Avenue

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



14th Avenue and Chatham Road



14th Avenue, looking east

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



15h Avenue where the existing sidewalk begins



The County green space west of Valley Road

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone

23



Park Road

24



16th Ave & Valley Rd

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Marshall Road



Morgan Road

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Chatham Road and 17th Avenue



16th Avenue

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Park Road and 17th Avenue



Existing sidewalk segment on 17th Avenue

INFRASTRUCTURE RECOMMENDATIONS within the School Walk Zone



Marshall Road and 17th Avenue



Chatham Road and Park Road