

# City of Gaithersburg Safe Routes to School

Walk Audit Report and Recommendations – January 2024





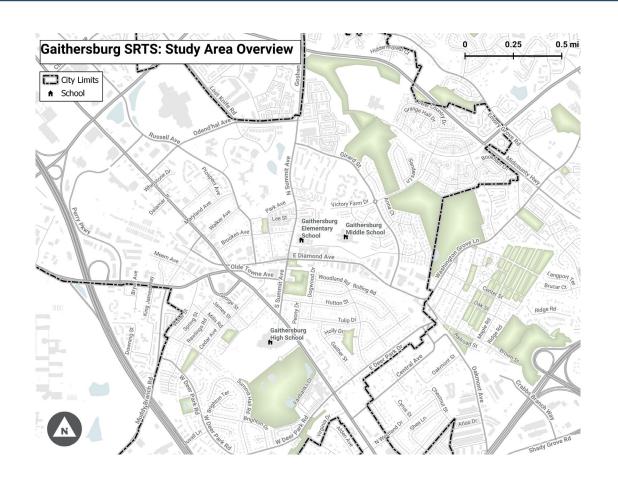
## Overview

## Project Overview

- The City of Gaithersburg is seeking to identify and implement priority Safe Routes to School (SRTS) improvements near Gaithersburg Elementary, Middle, and High School.
- These are Montgomery County Public Schools (MCPS) schools, but City of Gaithersburg is responsible for planning, design, and construction of streets around them (other than those which are Maryland State Highway Administration (MSHA) or Montgomery County responsibility). The City commissioned this study to serve as a blueprint to further the goal of increasing the safety of students walking and biking to school and help the City prioritize projects.
- This report includes individual summaries of school-specific procedures and operations and combined recommendations for infrastructure improvements within the study area.
- This study is funded by the Metropolitan Washington Council of Governments (MWCOG) as part of the FY 2024 <u>Transportation Land-Use Connections (TLC) Program</u>.

## Study Area Overview

- Gaithersburg Elementary School (GES) sits on North Summit Avenue between Brookes Avenue and Teachers Way.
- Gaithersburg Middle School (GMS) is immediately east of GES on Teachers Way.
- Gaithersburg High School (GHS) is approximately half a mile south of GES, on South Frederick Avenue (MD 355) between South Summit Avenue and Education Boulevard.



## School Overviews

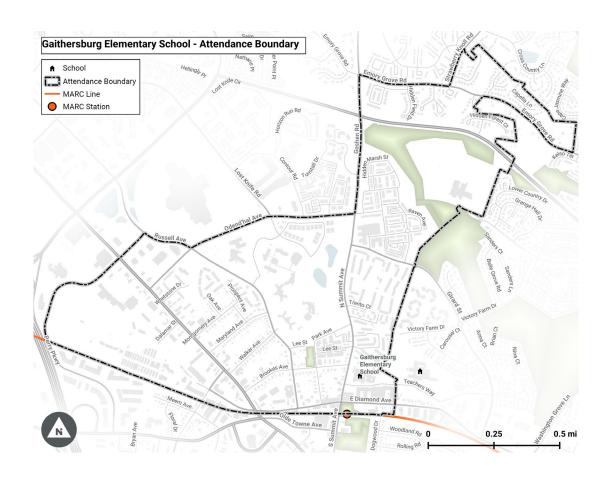
## School Overview: Gaithersburg Elementary

35 North Summit Avenue Gaithersburg, Montgomery County, MD

Enrollment: 700, Pre-K to Grade 5

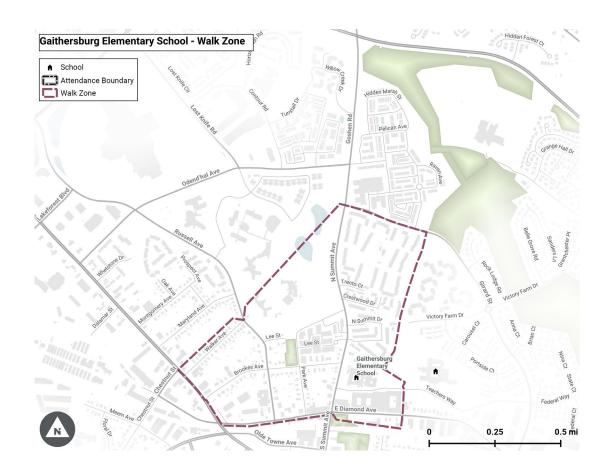
#### **School Reported Travel Modes:**

- Walkers: 300–400.
- Bikers: None reported.
- Bus riders: The school reported 6 total buses, including two for special education students.
- Car riders: Approximately 100.



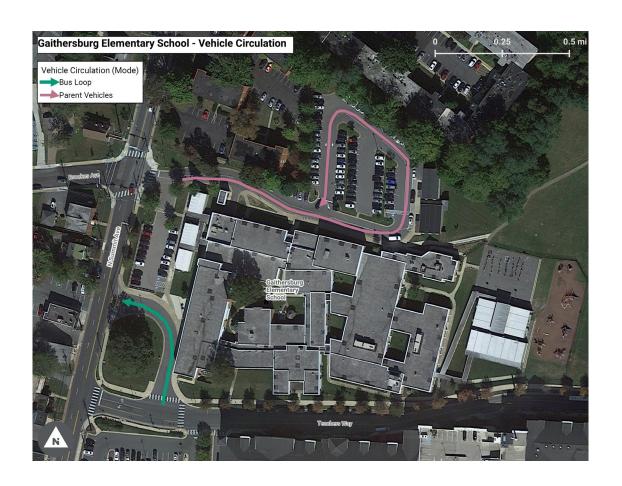
## Gaithersburg Elementary School Study Area

- Gaithersburg Elementary is located on North Summit Avenue between Teachers Way and Brookes Avenue, at the southeast corner of the school's attendance area.
- Several apartment complexes are located along Summit Avenue north of the school; another is across Teachers Way to the south. Most of the residential area west of the school consists of single-family detached houses.
- Summit Avenue has a posted speed limit of 25 mph. An automated enforcement camera is located several hundred feet north of the school.



## Arrival and Dismissal Operations

- **School Hours:** 8:55 am 3:25 pm
- Crossing guards: The school has two crossing guards; one on Teachers Way at the bus entrance, and one on Summit Avenue at Brookes Avenue and the parent/staff entrance. Both direct traffic as well as assist students to cross the street/driveway.
- Buses use a loop directly in front of the school, entering from Teachers Way and exiting onto Summit Avenue.
- Official vehicular drop off/pick up is in a double loop around the north parking lot. Due to limited space, car-rider students must be approved; about 80 passes were issued for the current year.
- Some parents drop off or pick up at parking lots across Teachers Way, or at the Middle School.
- Most walkers approach from the north along the east side of Summit Avenue. Fewer use the west side, or approach from the west along Brookes Avenue.



### **Arrival and Dismissal Observations**

- Observation times (Jan. 30):
   Arrival: 8:20 8:55; Dismissal: 3:20 3:50
- Sidewalks, particularly on Summit Avenue north of GES and on Brookes Avenue, are limited and narrow. Wheelchair users were observed having difficulty navigating between utility poles and other obstructions.
- School arrival, rush hour, MARC train service, and pre-opening deliveries to the businesses across Summit Avenue often coincide, causing congestion.
- One point of entry for pedestrians and vehicles creates conflict points between walkers and drivers, as well as between drivers and crossing guards.



The sidewalk on the west side of Summit Avenue is very narrow, forcing students to walk behind their parents.

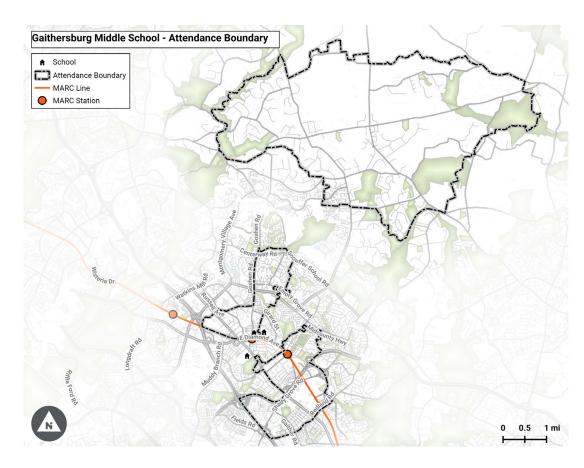
## School Overview: Gaithersburg Middle

2 Teachers Way
Gaithersburg, Montgomery County, MD

**Enrollment:** 900, Grade 6 – 8

#### **School Reported Travel Modes:**

- Walkers: Approximately 450.
- Bikers: None reported.
- Bus riders: Unknown. 26 buses serve the school, but at least half serve to bring students to specialized programs from outside the core attendance zone. Additionally, some students use Ride On public transit, but it is not known how many.
- Car riders: Unknown

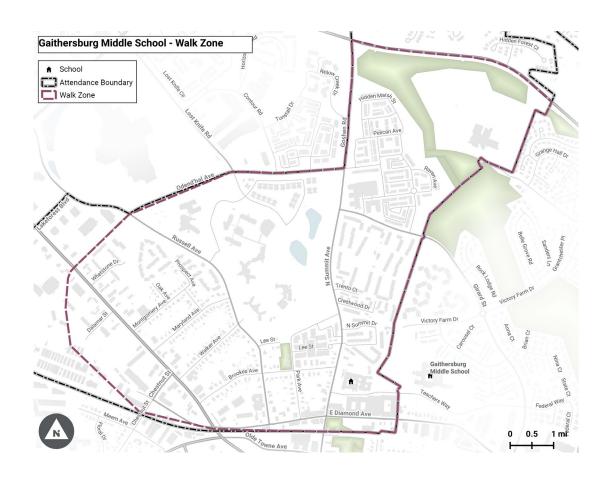


The disjointed attendance area expands well beyond the City limits.

For additional background, see context presentations in Appendix A.

## Gaithersburg Middle School Study Area

- GMS is located on Teachers Way between North Summit Avenue and Girard Street, just east of GES. Gaithersburg's Olde Towne Youth Center (OTYC) is just across Teachers Way to the east; many students go there after school.
- The closest residential area, along Girard Street and Victory Farm Drive, is not within the GMS attendance zone, though some students walk to Girard Street to take the Ride On bus.
- Most student walkers live north of GES along Summit Avenue, or in the residential area between Summit Avenue and MD 355.
- Teachers Way has a posted speed limit of 25 mph.



## Arrival and Dismissal Operations

- **School Hours:** 8:15 am 3:00 pm
- Crossing guards: The school has no crossing guards.
- Shortly before dismissal, staff at the Youth Center set cones out at the crosswalk on Teachers Way to slow drivers.
- School buses use a large drop-off area directly in front of the school. Ride On (public transit) buses stop on Girard Street, approximately ¼ mile east of GMS.
- Vehicular drop-off is via a loop around the east parking area.
- There is a staff parking area to the west of the school, but a member of school staff is stationed in the driveway to prevent use as an added drop off location.
- Walking students approach from and depart in all directions, including across the field from Victory Farm Drive, along Teachers Way from both Summit Avenue and Girard Street, and across an empty lot next to the Youth Center (from Diamond Avenue).



#### Arrival and Dismissal Observations

- Observation times (Jan. 30):
  Arrival: 7:50–8:15; Dismissal: 2:50–3:20
- Motor vehicle speeds were observed to exceed the speed limit on Teachers Way throughout both arrival and dismissal.
- A large proportion of walking students come from the north via Summit Avenue. Many cut across the GES property, through its driveways and lots.



Despite the Youth Center's cones along the Teachers Way crosswalk, parents waiting to enter the school obstruct the crosswalk or other drivers' visibility of students crossing. As a result, some students peer around waiting cars, then sprint across.

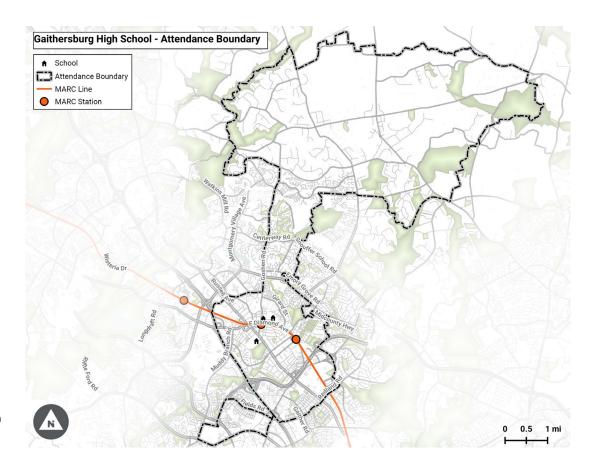
## School Overview: Gaithersburg High

101 Education Boulevard Gaithersburg, Montgomery County, MD

**Enrollment:** 2,400, Grade 9 – 12, including students in college and career programs from about half a dozen other schools' attendance zones

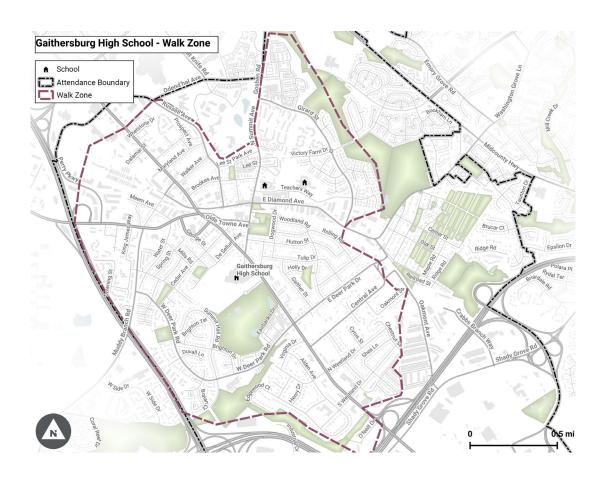
#### **School Reported Travel Modes:**

- Walkers: Unknown, possibly up to 1,000.
- Bikers: None reported by school. There were approximately 6-7 bikes and scooters at racks on observation day, which was cold and just days after a heavy snowfall.
- Bus riders: Unknown. 25–30 buses serve the school.
- Car riders or drivers: Unknown. Principal reported 60% "take some mode of travel home", including buses and cars.



## Gaithersburg High School Study Area

- Gaithersburg High is located on Education Boulevard, with a rear entry from Summit Avenue, just southwest of Frederick Avenue.
- While the walk zone extends up to 2 miles in all directions, the largest concentrations of students are along Summit Avenue and along Deer Park Drive southeast of GHS.
- Education Boulevard is two lanes each direction with a relatively large median and posted speed limit of 25 mph. It ends in a twolane roundabout providing access to the school bus loop, student parking area, and parking area for an adjacent City park.
- Summit Avenue has a posted speed limit of 25 mph north of Frederick Avenue, and 10 mph just before entering the school grounds. It ranges from 1–2 lanes in each direction, with 3 left turn lanes southbound onto Frederick Avenue. Summit Avenue terminates in the parking area at the front of the school.
- Frederick Avenue (MD 355) is three lanes in each direction, with a posted speed limit of 35 mph south of the school and 30 mph north of it.



## Arrival and Dismissal Operations

- **School Hours:** 7:45 am 2:30 pm
- Crossing guards: No crossing guards are provided for MCPS high schools.
- Most buses enter a loop at the south end of the school.
   However, special-education buses enter and depart via South Summit Avenue.
- Most vehicular drop off/pick up is via a loop around the southeast parking lot in front of the school. Most enter and leave via Education Boulevard, but some use Summit Avenue.
- Some vehicular drop off/pick up occurs in the southwest parking lot, which is also where students who drive themselves mostly park. Some also use parking lots at the adjacent Bohrer Park or the shopping center across Frederick Avenue.
- Large numbers of walkers approach from the north via Summit Avenue and from southeast via Frederick Avenue.



#### **Arrival and Dismissal Observations**

- Observation times (Jan. 24):
   Arrival: 7:25 7:50; Dismissal: 2:20 2:50
- Large numbers of students cross MD 355 at Summit Avenue and Education Boulevard. Sidewalks are not wide enough to hold all those waiting. Plowed snow and short walk phases resulted in many students waiting and walking in the road.
- Many students cross MD 355 and immediately cross Summit Avenue, often against the light.
- Significant speeding and reckless driving were noted in the Education Boulevard roundabout.



A large group of students gathers on the median of MD 355 at Education Boulevard during dismissal to wait for the light to finish crossing.

## Recommendations

#### Recommendations Overview

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 across three recommendation categories – Key Safety Issues, Quick Win Projects, and Projects for Additional Consideration. Key student walking or bicycling routes were identified based on information received from school administration and school observations. Key routes are noted in the recommendation "Location" field.

Note that other projects or planning/feasibility studies may be planned or ongoing within the study area. The City of Gaithersburg will confirm the approach to implementing recommendations from this study to ensure they align with other projects as necessary.

Cost figures are planning level estimates and 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 (e.g., signing and marking improvements may be done through operations/maintenance efforts, which would not include construction cost estimating).



**Key Safety Issues** 

Map ID	Location (Location Significance)	Recommendation Type	Issue	Recommendation	Est. Cost
1	N Summit Ave & Brookes Ave (Along key student walking route, inside school zone)	Other Crossing Characteristics	<ul> <li>Concerns about left turn movements from cars traveling south on N Summit Ave.</li> <li>Concerns about right turn movements from cars traveling north on N Summit Ave.</li> </ul>	<ul> <li>Consider protected turn phase signal to allow for southbound left turns onto the school campus before northbound traffic gets green signal.</li> <li>Provide leading pedestrian interval for crosswalk across school driveway.</li> <li>Implement no turn on red for northbound traffic on N Summit Ave.</li> </ul>	\$ 102,600
2	N Summit Ave & Teachers Way (Along key student walking route, inside school zone)	Crossing (Markings/Surface) Curb Ramps Other Crossing Characteristics	Many students are currently crossing N Summit Ave at this location at dismissal to go to the restaurant and grocery store on the west side of N Summit Ave.  - Crossing of N Summit Ave is unmarked and lacks curb ramps - Concern about motor vehicle yielding to pedestrians and multiple threat condition - Pedestrians/bicyclists unable to find sufficient gaps in traffic	<ul> <li>Install new high-visibility crosswalk and curb ramps on the northern leg of the intersection for students to cross N Summit Ave. Locate slightly north of the intersection to better align with the restaurant and grocery.</li> <li>Install RRFB</li> </ul>	\$ 18,400

Map ID	Location (Location Significance)	Recommendation Type	Issue	Recommendation	Est. Cost
3	Teachers Way (Girard St to N Summit Ave) (Along key student walking route, inside school zone)	Speed Management	<ul> <li>Existing speed limit not appropriate to context</li> <li>Observed motor vehicle speeds appear to exceed speed limit</li> </ul>	- Reduce school zone speed limit to 20 mph - Install linear traffic calming, such as speed bumps. Improvements at the crossings across Teachers Way will contribute to traffic calming efforts Install speed feedback sign	\$ 97,700
4	Teachers Way & Melvin St (Along key student walking route, inside school zone, reported school concern)	Crossing (Markings/Surface) Curb Ramps Other Crossing Characteristics	<ul> <li>Crossing of Teachers Way is unmarked</li> <li>Concern about motor vehicle yielding to pedestrians</li> <li>Missing curb ramps</li> </ul>	<ul><li>Install pedestrian crossing signs with downward pointing arrows</li><li>Reconstruct or repair existing ramps</li></ul>	\$ 4,900

Map ID	Location (Location Significance)	Recommendation Type	Issue	Recommendation	Est. Cost
5	Education Blvd & Bus/Parking Lot Driveways (Along key student walking route, on school campus)	Crossing (Markings/Surface) Curb Ramps Other Crossing Characteristics	<ul> <li>Crosswalk markings are faded at all driveway crossings.</li> <li>Crossing at the entrance to the Bohrer Park parking lot is unmarked and curb ramps lack detectable warning surface.</li> <li>Crossing of the southern student parking lot (just off entrance to Bohrer Park) is unmarked and lacks curb ramps.</li> <li>Concern about motor vehicle yielding to pedestrians crossing Education Blvd.</li> <li>Marked crosswalk across Education Blvd lacks appropriate crossing signage</li> <li>Roundabout lanes are not correctly assigned or consistent with signage</li> </ul>	<ul> <li>Remark existing high-visibility crosswalk markings</li> <li>Install new high visibility crosswalk and reconstruct or repair existing curb ramps at entrance to Bohrer Park</li> <li>Install RRFB across both sides of Education Blvd.</li> <li>Install school crossing signs with downward pointing arrows across both sides of Education Blvd.</li> <li>Restripe Education Boulevard roadway through roundabout.</li> </ul>	\$ 45,300
6	S Summit Ave (MD 355 to E Diamond Ave) (Along key student walking route)	Speed Management Sidewalk	<ul> <li>Observed motor vehicle speeds appear to exceed speed limit</li> <li>Sidewalk narrow</li> </ul>	<ul> <li>Short term: Install linear traffic calming by installing speed bumps or posting signage, etc.</li> <li>Long Term: Consider a study for a potential road diet, leading to a widening of or increased buffer on sidewalks.</li> </ul>	\$ 41,900

Map ID	Location (Location Significance)	Recommendation Type	Issue	Recommendation	Est. Cost
7	Teachers Way (Crossing of Teachers Way between GMS bus loop and staff lot) (Along key student walking route, inside school zone, reported school concern)	Other Crossing Characteristics	- Concern about motor vehicle yielding	- Upon completion of Map ID #4, remove marked crosswalk.	\$ 200
8	Teachers Way & GES bus loop (Along key student walking route, inside school zone, reported school zone)	Curb Ramps Other Crossing Characteristics	<ul> <li>Concern about motor vehicle turning speeds</li> <li>Concern about motor vehicle yielding</li> <li>Concern about multiple threat condition</li> </ul>	<ul> <li>Install curb radius reduction on NW corner (might require study of school bus turning movements)</li> <li>Install in-street pedestrian crossing sign</li> <li>Install median crossing island before westbound left turn lane begins.</li> </ul>	\$ 8,500

Map ID	Location (Location Significance)	Recommendation Type	Issue	Recommendation	Est. Cost
9	S Summit Ave & E Diamond Ave	Curb Ramps Other Crossing Characteristics	<ul> <li>Southwest corner lacks a compliant curb ramp and sufficient waiting space for pedestrians.</li> <li>At southeast corner, concern about motor vehicle right turn speeds and yielding to pedestrians.</li> <li>Curb ramps at northwest and northeast corners do not align with crossing of E Diamond Ave and have insufficient level landing and detectable warning surface.</li> <li>Pedestrian signal not on auto recall</li> <li>South of the intersection, MARC train extends into the intersection, prohibiting pedestrians from crossing the train tracks.</li> </ul>	<ul> <li>Reconstruct curb at southwest corner to provide compliant curb ramp.</li> <li>Install curb radius reduction on southeast corner and Reconstruct curb ramps.</li> <li>Reconstruct or repair existing ramp at northeast corner.</li> <li>Install curb extension and compliant curb ramp at northwest corner (on E Diamond Ave) and restripe lane markings on Diamond Ave east of intersection to reduce width of turn lane and align through lane to account for curb extension/on-street parking</li> <li>Put pedestrian signal on auto recall</li> <li>Consider coordinating with appropriate agencies to discuss extension of the train platform.</li> </ul>	\$ 16,400

Map ID	Location (Location Significance)	Recommendation Type	Issue	Recommendation	Est. Cost
10	Summit Ave (Park Ave to E Diamond Ave) (Along key student walking route, inside school zone)	Sidewalk	<ul> <li>Sidewalk on both sides of N Summit Ave are narrow and lack sufficient buffer in some sections.</li> <li>Observed motor vehicle speeds appear to exceed speed limit.</li> <li>Speeding concern reported by school.</li> </ul>	- Short Term: Add edge lines to roadway to visually narrow the traffic lane and provide a buffer to the sidewalk. Install linear traffic calming. Install speed feedback sign. Reduce school zone speed limit to 20 mph.  - Long Term: Remove one	\$ 61,800 \$ 26,000*
				vehicular travel lane for sidewalk widening/buffer. This would require 11 ft travel lanes with 5-foot-wide sidewalks on both sides of the roadway. See Appendix B for image.	*per foot of new width added to each side
11	Teachers Way & Youth Center (Along key student walking route, inside school zone, reported school concern)	Other Crossing Characteristics	<ul> <li>Crossing may be difficult for drivers to see or anticipate due to roadway curvature or visual obstructions</li> <li>Stopped cars obstruct sight lines</li> </ul>	<ul><li>Install advance pedestrian warning signs.</li><li>Trim tree branches to increase visibility of pedestrians.</li></ul>	\$ 2,000

Map ID	Location (Location Significance)	Recommendation Type	Issue	Recommendation	Est. Cost
12	MD 355 (Summit Ave to E Deer Park Rd) (Along key student walking route, inside school zone)	School Zone Signs and Pavement Markings Speed Management	This is a key student walking route along a high-speed, high-volume road. There are multiple housing units and transit stops utilized by students along the corridor.  - Sidewalks on both sides lack sufficient buffer along most of the corridor, and the sidewalks are too narrow.  - Existing speed limit not appropriate to context  - Speeding concern reported by school  - School zone speed limit sign missing	<ul> <li>Widen sidewalk and install a minimum 2-foot buffer.</li> <li>Reduce school zone speed limit to 20 mph</li> <li>Install new school zone speed limit sign</li> </ul>	\$ 75,400
13	MD 355 & Education Boulevard (Along key student walking route, inside school zone)	Crossing (Marking/Surface) Other Crossing Characteristics	<ul> <li>Insufficient space for pedestrians waiting to cross in the median island. Many students utilize this crossing and do not have adequate space while waiting to cross.</li> <li>No pedestrian signal over north crossing (shopping center driveway)</li> </ul>	<ul> <li>Widen median crossing island to allow for adequate space for students waiting to cross.</li> <li>Install pedestrian signal over crossing of shopping center driveway.</li> </ul>	\$ 15,200

Map ID	Location (Location Significance)	Recommendation Type	Issue	Recommendation	Est. Cost
14	MD 355 & Summit Ave (Along key student walking route)	Other Crossing Characteristics	<ul> <li>Crosswalk long</li> <li>Inadequate crossing time</li> <li>Insufficient space for pedestrians waiting to cross</li> </ul>	<ul> <li>Increase pedestrian crossing time</li> <li>Install curb extensions</li> <li>Re-time signal to provide more frequent crossing opportunities</li> <li>Implement no right on red for all approaches.</li> </ul>	\$ 26,200



**Quick Wins** 

## Quick Win Projects

Map ID	Location (Location Significance)	Recommendation Type	Issue	Recommendation	Est. Cost
15	N Summit Ave & GES Bus Exit (Along key student walking route, inside school zone, on school campus)	Curb ramps	- Northeast and southeast curb ramps, as well as the ramps in the median crossing island, lack detectable warning surface	- Reconstruct or repair existing ramps	\$ 4,400
16	S Summit Ave & Wells Ave (Along key student walking route)	Curb ramps	- Northeast and southeast curb ramps lack detectable warning surface	- Reconstruct or repair existing ramps	\$ 2,200
17	S Summit Ave & Post Office entrance/Shell driveway (Along key student walking route)	Curb ramps	- Northeast and southeast curb ramps lack detectable warning surface	- Reconstruct or repair existing ramps	\$ 2,200
18	Brookes Ave & Park Ave (Along key student walking route, reported school concern)	Other Crossing Characteristics	<ul> <li>Concern about motor vehicle yielding.</li> <li>Existing crosswalk markings are not high visibility.</li> </ul>	<ul> <li>Install advance pedestrian warning sign.</li> <li>Replace existing crosswalk markings with high-visibility markings.</li> </ul>	\$ 9,200
19	Fulks Corner Ave & police parking lot	Curb ramps	- Northeast and southeast curb ramps lack detectable warning surface	- Reconstruct or repair existing ramps	\$ 2,200

## Quick Win Projects

Map ID	Location (Location Significance)	Recommendation Type	Issue	Recommendation	Est. Cost
20	S Summit Ave & City Hall (Along key student walking route)	Curb ramps	- Northeast and southeast curb ramps lack detectable warning surface	Reconstruct or repair existing ramps	\$ 2,200
21	Park Ave & Lee St	Curb ramps	- Northeast curb ramp lacks detectable warning surface	Reconstruct or repair existing ramp	\$ 1,100
22	Teachers Way & East Middle School Driveway (Inside school zone, on school campus)	Curb ramps	- North curb ramp and median island curb ramps lack detectable warning surface.	Reconstruct or repair existing ramps	\$ 3,300
23	Education Blvd & Car Loop Entrance (On school campus)	Other Crossing Characteristics	<ul><li>Crosswalk long</li><li>Concerns about motor vehicle turning speeds</li></ul>	Install curb radius reduction on the northeast and northwest corners of the school driveway.	\$ 10,000
24	Olde Towne Avenue (uncontrolled crosswalk at Fulks Corner Ave)	Other Crossing Characteristics	<ul><li>Concern about motor vehicle yielding.</li><li>Crossing lacks appropriate crossing signage</li></ul>	Install pedestrian crossing signs with downward pointing arrows	\$ 2,000



**Projects for Additional Consideration** 

## Projects for Additional Consideration

Map ID	Location (Location Significance)	Recommendation Type	Issue	Recommendation	Est. Cost
25	Lee St (N Summit Ave to circle)	Sidewalk	- Missing sidewalk on both sides of Lee St	- Install new sidewalk	\$ 11,900
26	Brookes Ave (N. Summit Ave to Russell Ave) (Along key student walking route)	Sidewalk Speed Management	<ul> <li>Sidewalk lacks sufficient buffer</li> <li>Observed motor vehicle speeds appear to exceed speed limit</li> </ul>	<ul> <li>Install linear traffic calming such as speed humps or more clearly defined on-street parking.</li> </ul>	\$ 30,100
27	Girard St & Teachers Way (Along key student walking route)	Other Crossing Characteristics	<ul><li>Concern about multiple threat condition</li><li>Crosswalk long</li></ul>	<ul><li>Install stop control on Girard St.</li><li>Install median crossing island.</li></ul>	\$ 4,300
28	Peony Dr (Tulip Dr to MD 355)	Sidewalk	- Sidewalk too narrow	- Widen sidewalk	\$ 6,400
29	Gaither St (Tulip Dr to E Deer Park Dr)	Sidewalk	- Missing sidewalk on both sides of Gaither St.	- Install new sidewalk	\$ 130,400
30	Between Teachers Way & Diamond Ave west of the Youth Center	Sidewalk	<ul> <li>Many students walk from Diamond Ave to Teachers Way near the Youth Center. There is currently no path between Teachers Way and Diamond Ave.</li> </ul>	- Install new path between Teachers Way and Diamond Ave.	\$ 22,500
31	Tulip Dr (Peony Dr to end)	Sidewalk	- Missing sidewalk on both sides of Tulip Dr.	- Install new sidewalk	\$ 198,600

## Projects for Additional Consideration

Map ID	Location (Location Significance)	Recommendatio n Type	Issue	Recommendation	Est. Cost
32	Hutton St (Dogwood Dr to Rolling Rd)	Sidewalk	- Missing sidewalk on both sides of Hutton St.	- Install new sidewalk	\$ 168,700
33	Rolling Rd (Dogwood Dr to Oakton Rd)	Sidewalk	- Missing sidewalk on both sides of Rolling Rd.	- Install new sidewalk	\$ 194,800
34	Paved path from Victory Farm Dr to GES (Along key student walking route)	Sidewalk	<ul><li>Path cracked</li><li>Path too narrow</li></ul>	<ul><li>Reconstruct or repair path</li><li>Widen path</li></ul>	\$ 62,000
35	Oakton Rd (Woodland Rd to end)	Sidewalk	- Missing sidewalk on both sides of Oakton Rd	- Install new sidewalk	\$ 118,400
36	MD 355 & Deer Park Dr	Crossing (Markings/Surface) Curb Ramps	<ul> <li>Crosswalk markings faded and not high visibility on northern crossing of MD 355 and both crossings of Deer Park Drive.</li> <li>Crosswalk markings not high visibility</li> <li>Ramp obstructed by utility pole.</li> </ul>	<ul><li>Remark existing crosswalks with high-visibility markings</li><li>Relocate or remove obstacle</li></ul>	\$ 8,100
37	Woodland Rd (Dogwood Dr to end)	Sidewalk	- Missing sidewalk on both sides of Woodland Rd.	- Install new sidewalk	\$ 229,200

# Potential Funding Opportunities

## Potential Funding Opportunities for SRTS Projects

Funding for SRTS infrastructure improvements may come from a variety of sources, including the City's Capital Improvement Program. 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 the following tables.

## Potential Funding Opportunities for SRTS Projects

Opportunity	Information	Eligible Projects	Amount
Transportation Alternatives Program (MDOT SHA)	Managed by MDOT SHA, this program provides funding for SRTS infrastructure and non-infrastructure (programmatic) projects	<ul> <li>SRTS infrastructure and non-infrastructure projects.</li> <li>Construction of bike/pedestrian facilities and safe routes for non-drivers.</li> </ul>	<ul> <li>Varies</li> <li>20 percent local match required</li> </ul>
Kim Lamphier Bikeways Network Program (MDOT)	Supports projects that maximize bicycle access and fill missing links in the state's bicycle system, focusing on connecting shared-use paths and roads and enhancing last-mile connections to work, school, shopping, and transit	<ul> <li>Feasibility assessments, design, and engineering</li> <li>Construction of shared use paths, cycletracks and bicycle lanes o</li> <li>Shared lane and other pavement markings</li> <li>Bicycle route signage and wayfinding</li> <li>Bicycle capital equipment (e.g., parking)</li> <li>Other minor retrofits to support bicycle routes</li> <li>Education materials to support bikeway projects</li> </ul>	<ul> <li>Varies</li> <li>20 percent local match required</li> </ul>

## Potential Funding Opportunities for SRTS Projects

Opportunity	Information	Eligible Projects	Amount
Recreational Trails Program (MDOT SHA)	A federally-funded program supporting the development and maintenance of motorized and non-motorized recreational trails and trail-related facilities.	<ul> <li>Construction of new trails o         Maintenance and         restoration of existing trails</li> <li>Development/rehabilitation         of trailside facilities and         linkages</li> <li>Purchase of trail         construction equipment         Acquisition of easement or         property for trails         Improvements to signage         and structures</li> </ul>	<ul> <li>Up to \$80,000 for new construction; \$30,000 for other projects</li> <li>20 percent local match required</li> </ul>
Maryland Highway Safety Office Grant (MDOT MVA)	Aim to reduce the number of motor vehicle-related crashes, deaths, and injuries on Maryland highways through education and enforcement actions that modify risky behaviors.	<ul> <li>Projects must match one         of the top safety priorities         (ped/bike safety is one of         them) and implement the         strategies identified in the         Strategic Highway Safety         Plan</li> </ul>	<ul> <li>Varies</li> <li>20 percent local match required</li> </ul>

## Potential Funding Opportunities for SRTS Projects

Opportunity	Information	Eligible Projects	Amount
Active Transportation Infrastructure Investment Program (ATIIP) (FHWA)	A federally-funded program supporting the improvement of safety, efficiency, and reliability of active transportation networks and communities.	<ul> <li>Public engagement activities</li> <li>Design and planning studies</li> <li>Conceptual and preliminary engineering</li> <li>Construction costs such as property acquisition, site preparation, studies, surveys, construction, and contractor fees.</li> </ul>	<ul> <li>Up to \$2,000,000 for planning and design</li> <li>Up to \$15,000,000 for construction</li> <li>20 percent local match required</li> </ul>

# Appendix A: Context Presentations



## Gaithersburg Elementary School

Existing Conditions – Fall 2023





## Overview

Funded in part by the Transportation Land-Use Connections (TLC) program of the National Capital Region Transportation Planning Board at the Metropolitan Washington Council of Governments. The TLC program supports local jurisdictions in promoting mixed-use, walkable communities and a variety of transportation alternatives.

#### School Overview

#### **Gaithersburg Elementary School**

35 North Summit Avenue Gaithersburg, Montgomery County, MD

Enrollment: 700, Pre-K to Grade 5

**School Hours:** 8:55 am – 3:25 pm

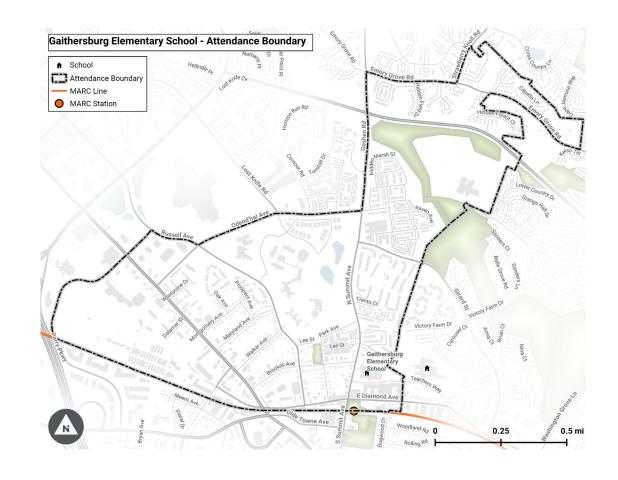
#### **School Reported Travel Modes:**

Walkers: 300–400

Bikers: None reported.

• Bus riders: The school reported 6 total buses, including two for special education students.

• Car riders: Approx. 100.



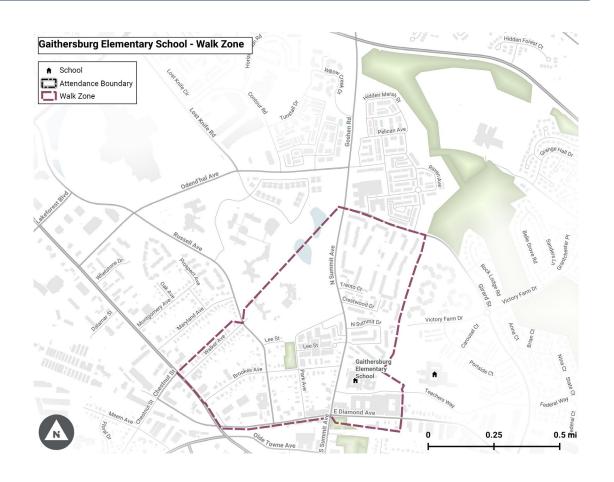


## School Walk Zone and Attendance Area

Gaithersburg Elementary School (GES) is located on the far southeast corner of its V-shaped attendance zone.

Much of the central part of the attendance zone, primarily the area between Russell Avenue and Summit Avenue north of Park Avenue, is occupied by the large gated Asbury Methodist Village retirement community.

Many of the students live to the north of the school along Summit Avenue, not to the west.





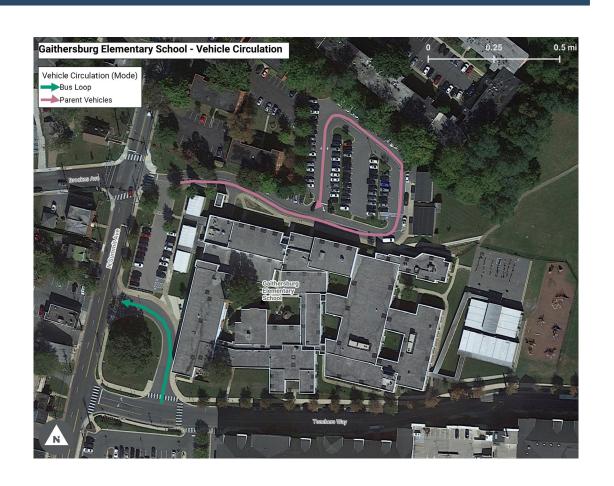
#### School Site and Procedures

**GES** is located on North Summit Avenue between Teachers Way and Brookes Avenue, in north Olde Towne Gaithersburg.

Buses drop off and pick up from a loop directly in front of the school, entering from Teachers Way and exiting onto Summit Avenue.

Vehicular drop off and pickup is via a double loop around the north parking lot. Due to limited space, students must be approved for a car rider pass; about 80 were issued for the current year.

Per the school, some parents use the parking lot across Teachers Way as a second pickup/drop-off loop.

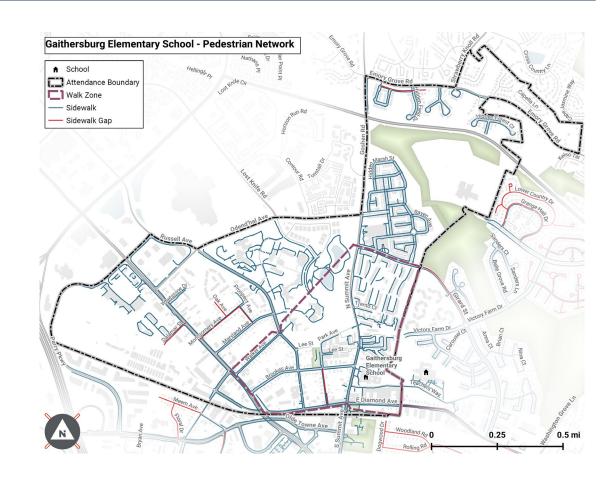




#### Existing Pedestrian Network — Sidewalks

- Most residential areas in the attendance zone have sidewalks, though there are also many segments of missing sidewalks, such as Park Avenue, a block west of the school.
- Some areas show as having neither sidewalks nor gaps — many have multiuse paths instead, which appear on the 'Existing Bicycle Network' map.

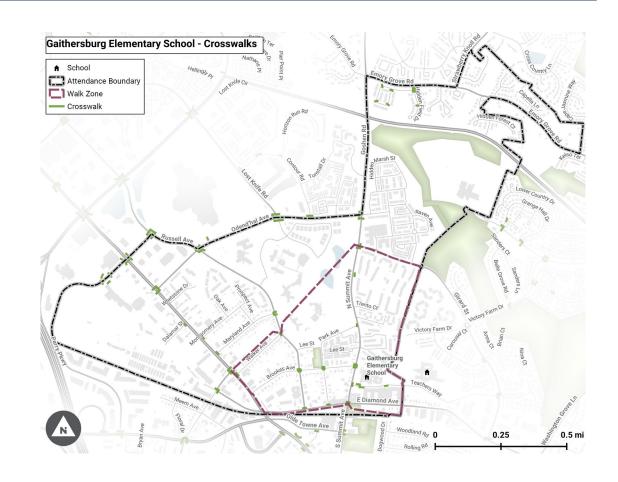
Note that this information only indicates the existence or absence of sidewalk at a given point, not its condition, width, accessibility, or other issues which may impede its actual usability.





#### Existing Pedestrian Network — Crosswalks

- Most larger intersections have high-visibility crosswalk markings
- Many intersections between minor and larger streets (e.g., Park Avenue or Teachers Way at Summit Avenue) have crosswalks marked only across the minor street, or none at all.

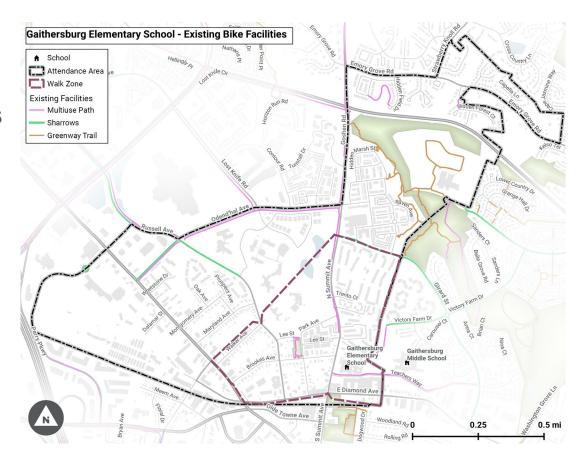




### Existing Bicycle Network

Most residences west of GES have at least a designated shared roadway bike facility connecting to the school. However, such facilities may not be comfortable for children, or their parents, to ride.

For those north of GES, a multiuse path does exist along the west side of Summit Avenue. The path ends several blocks north of the school, requiring bicyclists to ride either in the road or on a narrow sidewalk. There is no controlled crossing of Summit Avenue near the school to allow safe access to the sidewalk/multiuse path.

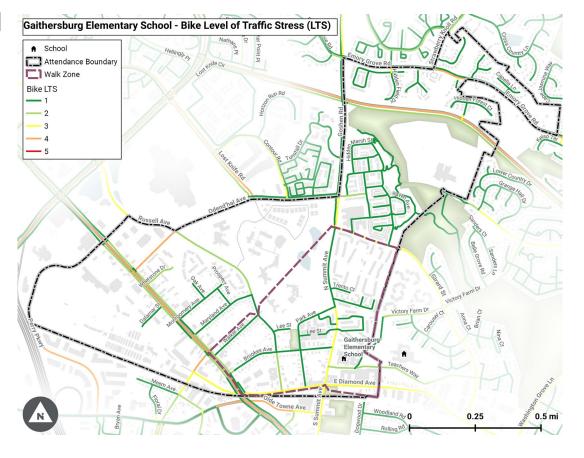




#### Existing Bicycle Network — Traffic Stress

Many of the east-west streets near GES are rated as low-stress, but getting to school from the north—where the majority of GES students live—requires using some higher-stress roads.

The northern portion of Summit Avenue is a lowstress route due to the multiuse path. The southern portion of Summit Avenue from Park Avenue to the school is a considered a moderately-high stress biking route due to the lack of bicycling infrastructure.

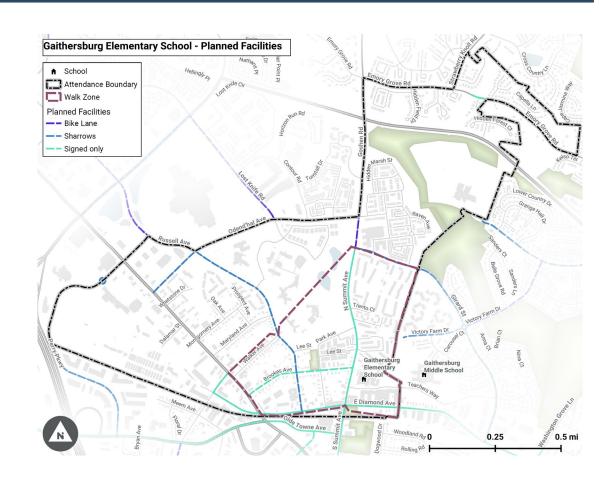




## Planned Bicycle and Pedestrian Network

According to provided data, there are existing plans to mark bike lanes on two roads in the school's attendance zone: Frederick Avenue (MD 355) on the west end and North Summit Avenue north of Girard Street to the north.

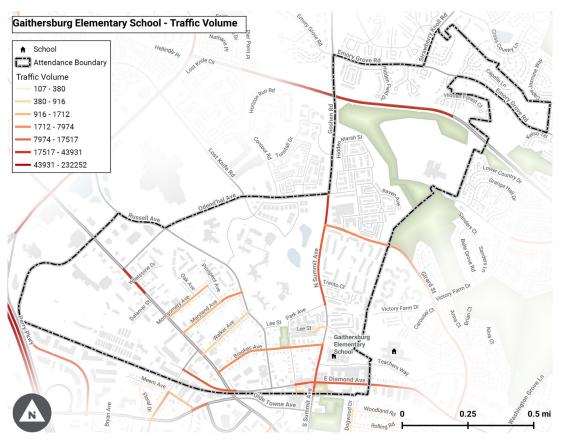
Sharrows are also intended to be added to Russell Avenue from East Diamond Avenue at least to the Asbury Village Apartments gate, a bit more than halfway to Odendhal Avenue.

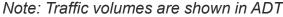




#### Traffic Volume and Conflicts

According to City of Gaithersburg and MDOT data, traffic volumes on Summit Avenue, Brookes Avenue, and East Diamond Avenue in the area immediately adjacent to the school are among the highest in the entire attendance area. However, it is not clear if this traffic volume coincides with school arrival and dismissal periods.







#### School-Reported Issues

Most walking students and many arriving by vehicle come down Summit Avenue from the north. Walking students must cross the parking lot entrance, and drivers must make a left turn into that parking lot. This both exposes walking students to additional conflict and causes congestion in the roadway.

Trains crossing or stopping on Summit Avenue (at the southern border of the attendance area) often cause traffic to back up to the school building and beyond, impacting student travel.

There is no left-turn lane at the school entrance; drivers have been seen driving on the sidewalk to get around those waiting to turn left into the school.





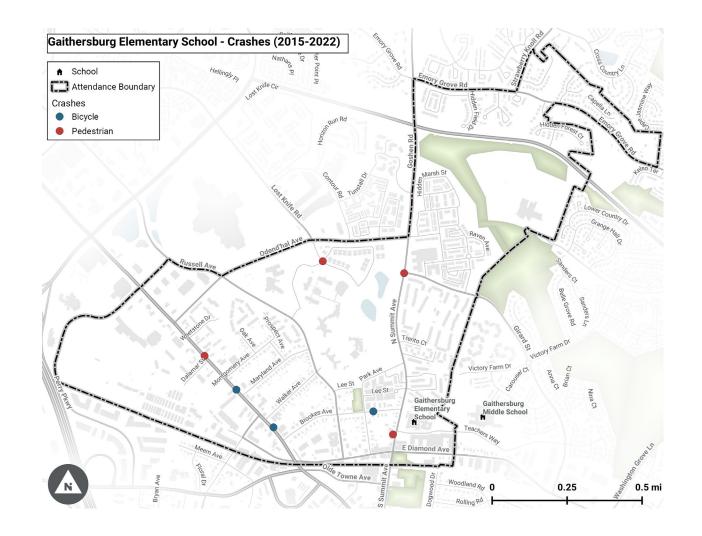
## Crash Data — Gaithersburg Elementary

#### During the eight years 2015–2022:

Total crashes in attendance area (including motor vehicles): 769

Crashes involving pedestrians: 41

Crashes involving bicyclists: 10





## Crash Data — Gaithersburg Elementary

#### During the eight years 2015–2022:

Total crashes in attendance area (including motor vehicles): 769

Crash fatalities: 1

Crashes causing serious injury: 7

#### **Crash fatalities:**

> Pedestrians: 1

➤ Bicyclists: 0

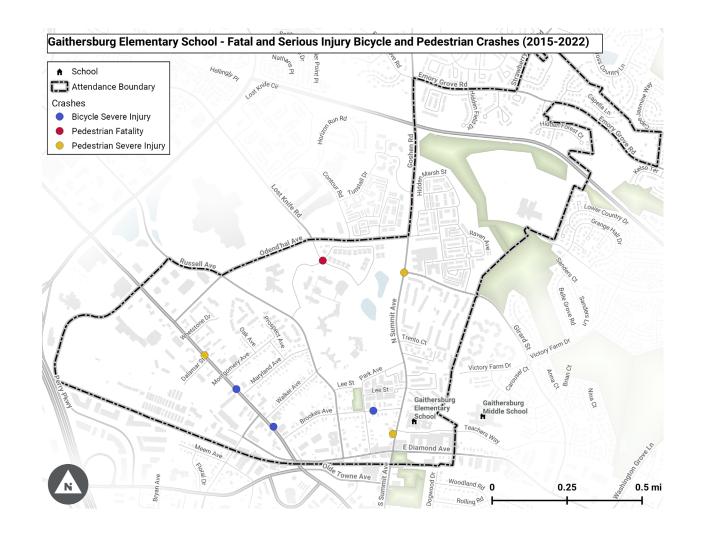
➤ Motor vehicle: 0

#### **Serious injuries:**

> Pedestrian: 3

➤ Bicycle: 3

➤ Motor vehicle: 1







# Planning and Project Context

## Planning and Project Context

This section reviews Gaithersburg transportation plans and projects in or applicable to the area around GES:

Policies, Plans, Studies, and Projects	Summary of Relevant Elements
2009 Master Plan Transportation Element (2010)	<ul> <li>Includes recommendation to "Encourage development of connective pedestrian and bicycle systems in all projects", especially links to schools.</li> <li>Requires all new streets to have sidewalks (at least 5 feet wide) on both sides.</li> <li>Continue City programs that educate and advocate bicycling to the City's youth.</li> </ul>
Bicycle Gaps (2023)	<ul> <li>The Olde Towne Bicycle Connection along East Diamond Avenue, which is to connect the MARC station in Olde Towne to the Washington Grove MARC just east of the City and a Montgomery County trail connecting in turn to the Shady Grove Metro.</li> </ul>



## Planning and Project Context, continued

Policies, Plans, Studies, and Projects	Summary of Relevant Elements
Sidewalk Gaps (2023)	<ul> <li>This map identifies where roads are missing sidewalks on one or both sides. At least two streets near GES have such gaps, Diamond Avenue and Park Avenue, between Brookes Avenue and East Diamond Avenue.</li> </ul>
Diamond-Summit Intersection Improvements (2021)	<ul> <li>This project will replace or add curb cuts, accessible pedestrian signals, and associated equipment at this intersection about 650 feet from the front door of GES and will backplate the traffic signals and repaint the crosswalks and stop bars.</li> </ul>
Russell Avenue Improvement Project (2023)	<ul> <li>Segment 1 of this project is to narrow travel lanes on Russell Avenue between Diamond Avenue and Odendhal Avenue, shift the curb line, and install a shared use path on one side, as well as improving pedestrian crossings. The entire 0.8-mile Segment 1 lies in the GES attendance zone, and the southernmost 0.3 miles is in the GES walk zone.</li> </ul>



#### Notes

#### TITLE VI NONDISCRIMINATION POLICY

The Metropolitan Washington Council of Governments (COG) operates its programs without regard to race, color, and national origin and fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations prohibiting discrimination in all programs and activities. For more information, to file a Title VI related complaint, or to obtain information in another language, visit <a href="https://www.mwcog.org/nondiscrimination">www.mwcog.org/nondiscrimination</a> or call (202) 962-3300.

El Consejo de Gobiernos del Área Metropolitana de Washington (COG) opera sus programas sin tener en cuenta la raza, el color, y el origen nacional y cumple con el Título VI de la Ley de Derechos Civiles de 1964 y los estatutos y reglamentos relacionados que prohíben la discriminación en todos los programas y actividades. Para más información, presentar una queja relacionada con el Título VI, u obtener información en otro idioma, visite <a href="https://www.mwcog.org/nondiscrimination">www.mwcog.org/nondiscrimination</a> o llame al (202) 962-3300.





# Gaithersburg Middle School

Existing Conditions – Fall 2023





## Overview

Funded in part by the Transportation Land-Use Connections (TLC) program of the National Capital Region Transportation Planning Board at the Metropolitan Washington Council of Governments. The TLC program supports local jurisdictions in promoting mixed-use, walkable communities and a variety of transportation alternatives.

#### School Overview

#### **Gaithersburg Middle School**

2 Teachers Way Gaithersburg, Montgomery County, MD

**Enrollment:** 900, Grade 6 - 8

**School Hours:** 8:15 am – 3:00 pm

#### **School Reported Travel Modes:**

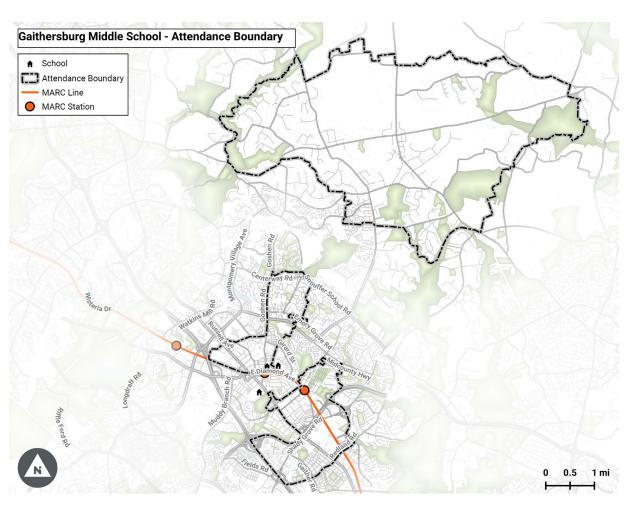
• Walkers: 350-450

• Bikers: None reported.

• Bus riders: Unknown. 26 buses serve the school, but about half bring students to magnet programs from outside the core attendance zone.

Car riders: Unknown.



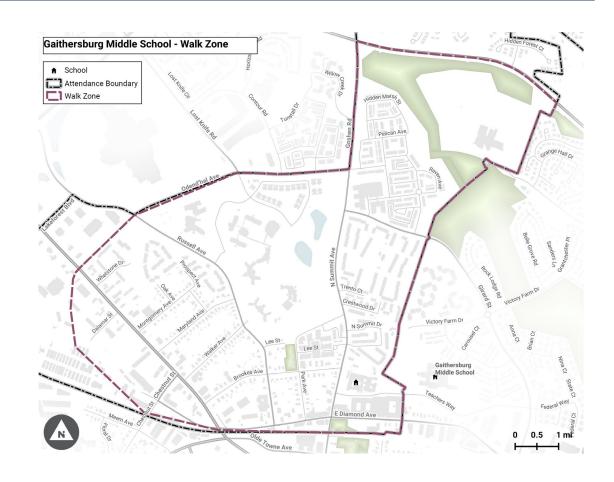


Note that a significant portion of the attendance area is outside the city limit.

## School Walk Zone and Attendance Area

Gaithersburg Middle School (GMS) mostly shares a V-shaped walk zone with the neighboring elementary school, though the school itself is not actually in the walk zone. As seen on the previous map, two disjointed parts of the attendance zone are further away to the southeast and north.

Per staff, most students who walk to school live to the north along Summit Avenue, not to the west. Much of the central part of the walk zone is occupied by the large gated Asbury Methodist Village retirement community.





#### School Site and Procedures

**GMS** is located on Teachers Way between North Summit Avenue and Girard Street, in northeast Olde Towne.

Buses drop off and pick up from a loop directly in front of the school on Teachers Way.

Parent vehicles drop off and pickup from a loop around the east parking lot, also accessed from Teachers Way. Some parents attempt to use the western parking lot as a second pickup/drop-off loop.

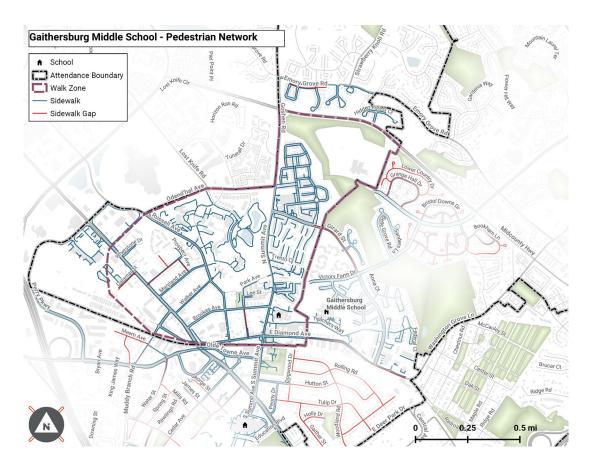
Per the school, most walking students approach from Summit Avenue, though many depart to the east toward Gaithersburg's Olde Towne Youth Center. Some students cut through the parking lots because sidewalks are indirect.





#### Existing Pedestrian Network — Sidewalks

- Most residential areas in the primary walk zone west and north of the school have sidewalks.
- Some areas show as having neither sidewalks nor gaps many have multiuse paths instead, which appear on the 'Existing Bicycle Network' map.

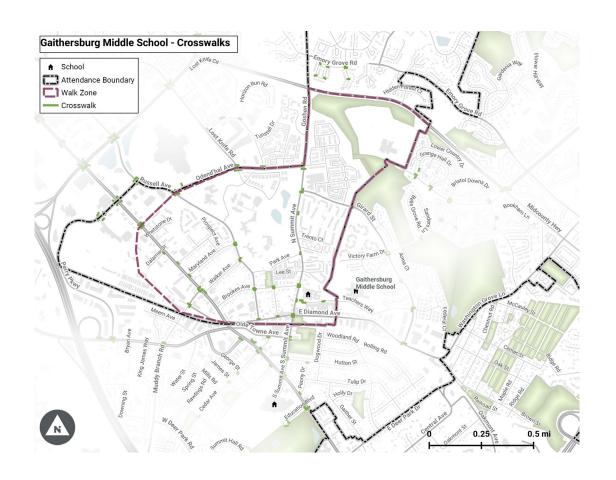


Note that this information only indicates the existence or absence of sidewalk at a given point, not its condition, width, accessibility, or other issues which may impede its actual usability.



#### Existing Pedestrian Network — Crosswalks

- Most larger intersections in the walk zone have highvisibility crosswalk markings
- Many intersections between minor and larger streets (e.g., Park Avenue or Teachers Way at Summit Avenue) have crosswalks marked only across the minor street, or none at all.

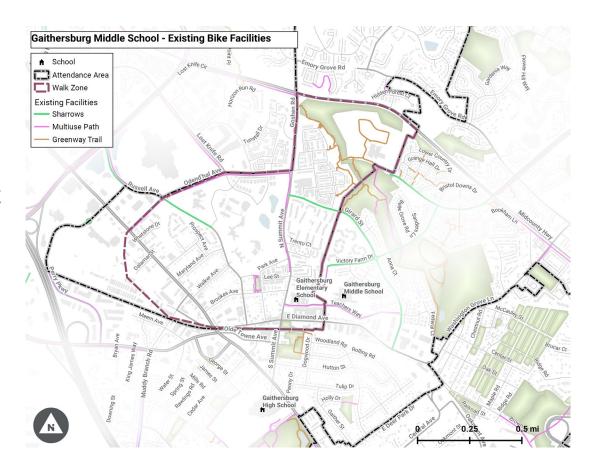




## Existing Bicycle Network

Most residential areas west of GMS have at least a designated shared roadway bike facility connecting to the school. However, such facilities may not be comfortable for children, or their parents, to ride.

For those north of GMS, a multiuse path does exist along the west side of Summit Avenue. The path ends several blocks north of the school, however, requiring bicyclists to either ride in the road or on a narrow sidewalk. There is no controlled crossing to allow safe access to the sidewalk/multiuse path — the only signal on Summit between GMS and the end of the path north of Park Avenue is at Brookes Avenue.

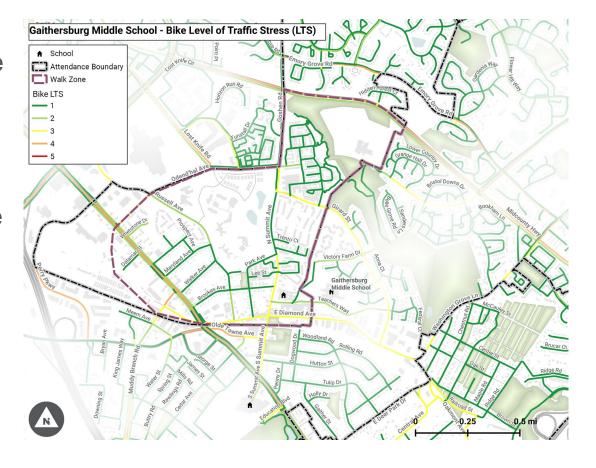




#### Existing Bicycle Network — Traffic Stress

Many of the east-west streets near GMS are rated as low-stress, but getting to school from the north—where most GMS students who walk live—requires using some higher-stress roads.

The northern portion of Summit Avenue is considered a low-stress route due to the multiuse path. The southern portion of Summit Avenue from Park Avenue to the school is considered a moderately high-stress biking route due to the lack of bicycling infrastructure.



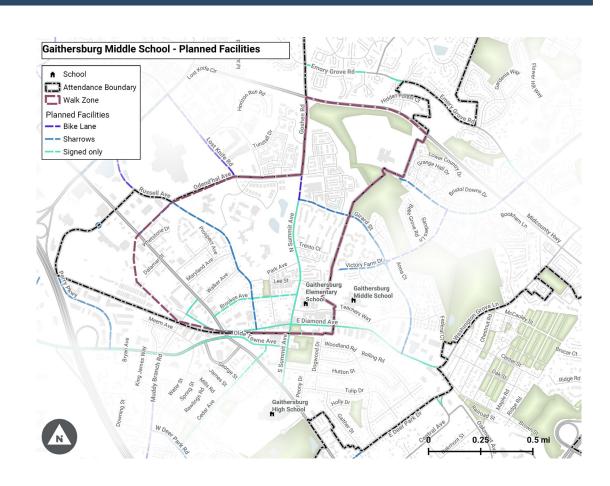


## Planned Bicycle and Pedestrian Network

According to provided data, there are existing plans to mark bike lanes on two roads in the school's walk zone: Frederick Avenue (MD 355) on the west end and North Summit Avenue north of Girard Street to the north.

Sharrows are also intended to be added to Russell Avenue from East Diamond Avenue at least to the Asbury Village Apartments gate, a bit more than halfway to Odendhal Avenue.

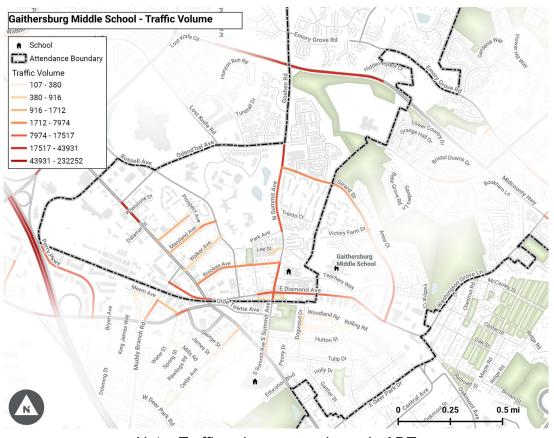
A study is underway which may eventually add a shared use path along East Diamond Avenue east of the school toward Washington Grove and the school's southeastern attendance zone.





#### Traffic Volume and Conflicts

According to City of Gaithersburg and MDOT data, traffic volumes on Summit Avenue, Brookes Avenue, and East Diamond Avenue in the area near the school are among the highest in the core attendance area. However, it is not clear if this traffic volume coincides with school arrival and dismissal periods.







#### School-Reported Issues

The sidewalk connections between the school door and the street are "not direct", which leads to many students walking through the staff parking lot—and many parents try to pick up there rather than the designated pickup loop.

Staff report there are several areas assigned to walk to school where parents try to get their kids on the bus because they feel walking is unsafe or the distance too great. Some are said to even "sneak" their kids onto the bus.

Though the school has 2 security guards, it has zero crossing guards.



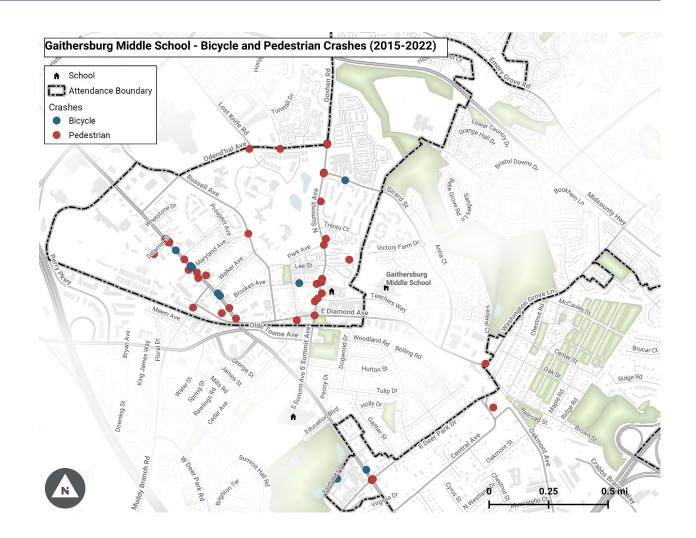
## Crash Data — Gaithersburg Middle

#### During the eight years 2015–2022:

Total crashes in attendance area (including motor vehicles): 1006

Crashes involving pedestrians: 49

Crashes involving bicyclists: 13





## Crash Data — Gaithersburg Middle

#### During the eight years 2015–2022:

Total crashes in attendance area (including motor vehicles): 1006

Crash fatalities: 2

Crashes causing serious injury: 7

#### **Crash fatalities:**

Pedestrians: 2

➤ Bicyclists: 0

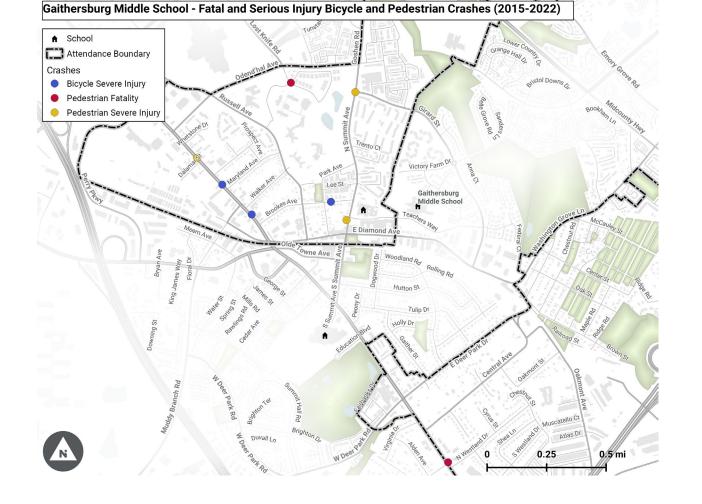
➤ Motor vehicle: 0

#### **Serious injuries:**

> Pedestrian: 3

➤ Bicycle: 3

➤ Motor vehicle: 1







# Planning and Project Context

# Planning and Project Context

This section reviews Gaithersburg transportation plans and projects in or applicable to the area around GMS:

Policies, Plans, Studies, and Projects	Summary of Relevant Elements					
2009 Master Plan Transportation Element (2010)	<ul> <li>Includes recommendation to "Encourage development of connective pedestrian and bicycle systems in all projects", especially links to schools.</li> <li>Requires all new streets have sidewalks (at least 5 ft wide) on both sides.</li> <li>Continue City programs that educate and advocate bicycling to the City's youth.</li> </ul>					
Bicycle Gaps (2023)	<ul> <li>The Olde Towne Bicycle Connection along East Diamond Avenue, which is to connect the MARC station in Olde Towne to the Washington Grove MARC just east of the city and a Montgomery County trail connecting in turn to the Shady Grove Metro.</li> </ul>					
South Summit Avenue from City Hall to East Diamond Avenue Safety Study (2023)	This study evaluated a two-block stretch of Summit Avenue from Diamond Avenue (about 1,800 feet from GMS) south to City Hall, including the railroad crossing, for signal and pedestrian safety improvements.					



Policies, Plans, Studies, and Projects	Summary of Relevant Elements
Sidewalk Gaps (2023)	<ul> <li>This map identifies where roads are missing sidewalks on one or both sides. At least two streets near GMS have such gaps, Diamond Avenue and Park Avenue, between Brookes Avenue and East Diamond Avenue.</li> </ul>
Diamond-Summit Intersection Improvements (2021)	<ul> <li>This project will replace or add curb cuts, accessible pedestrian signals, and associated equipment at this intersection about 650 feet from the front door of GMS and will backplate the traffic signals and repaint the crosswalks and stop bars.</li> </ul>
Russell Avenue Improvement Project (2023)	<ul> <li>Segment 1 of this project is to narrow travel lanes on Russell Avenue between Diamond Avenue and Odendhal Avenue, shift the curb line, and install a shared use path on one side, as well as improving pedestrian crossings. The entire 0.8-mile Segment 1 lies in the GMS attendance zone, and the southernmost 0.3 miles is in the GMS walk zone.</li> </ul>



Policies, Plans, Studies, and Projects	Impact on GES or Attendance Area
City of Gaithersburg Shared Use Path Feasibility Study (2023)	This MWCOG TLC study considered the feasibility of a shared-use path between Gaithersburg and Washington Grove MARC stations, where it would tie into a future County shared-use path to Shady Grove Metro station. It would also potentially be usable as a school commute route for students southeast of GMS.
	This is the Future "Olde Towne Bicycle Connection" on the Bicycle Gaps map and is also marked as a missing sidewalk on the Sidewalk Gaps map.



#### Notes

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# Gaithersburg High School

Existing Conditions – Fall 2023





# Overview

Funded in part by the Transportation Land-Use Connections (TLC) program of the National Capital Region Transportation Planning Board at the Metropolitan Washington Council of Governments. The TLC program supports local jurisdictions in promoting mixed-use, walkable communities and a variety of transportation alternatives.

#### School Overview

#### **Gaithersburg High School**

101 Education Boulevard Gaithersburg, Montgomery County, MD

**Enrollment:** 2,418, Grade 9 – 12

**School Hours:** 7:45 am – 2:30 pm

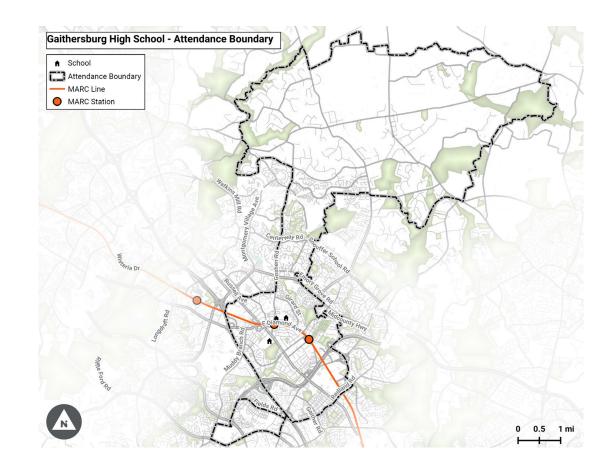
#### **School Reported Travel Modes:**

• Walkers: Unknown, possibly up to 1,000

Bikers: None reported.

• Bus riders: Unknown. 25-30 buses serve the school.

• Car riders or drivers: Unknown. School reported 60% take either the bus or cars home.

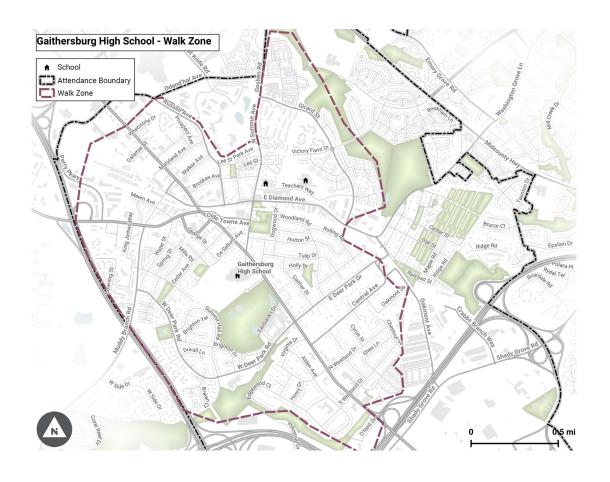




## School Walk Zone and Attendance Area

Gaithersburg High School's (GHS) walk zone is up to two miles from the school, which includes nearly all areas of the attendance zone south, east, and west of the school, though the attendance zone extends more than 10 miles to the north and northeast.

To the north, the walk zone reaches as far as the Mid-County Highway along Summit Avenue.





#### School Site and Procedures

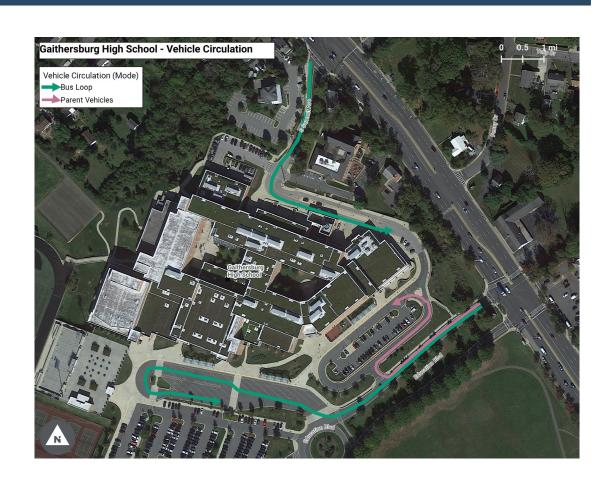
**Gaithersburg High School** (GHS) is located on Education Boulevard, off South Frederick Avenue (MD 355) just south of Olde Towne Gaithersburg.

Buses drop off and pick up from a loop on the southwest face of the school.

Parent vehicles drop off and pick up from a loop around the staff parking lot on the southeast side of the building, also accessed from Education Boulevard.

Special education buses and some drivers access the campus from South Summit Avenue on the north side of the building, which feeds into the staff lot and parent drop-off loop.

Walking students approach from all directions. The school reports that students cross Frederick Avenue at unmarked locations to access the school.

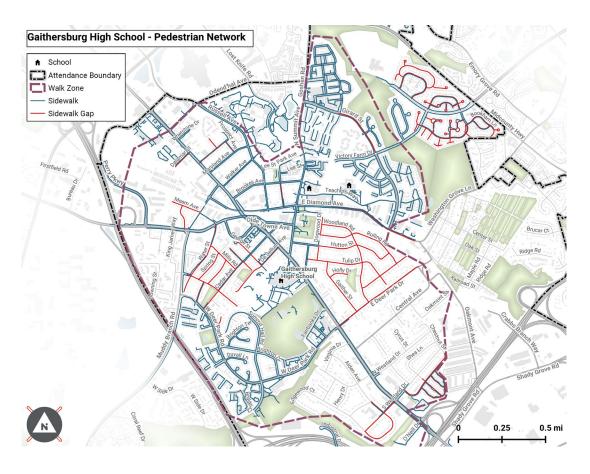




### Existing Pedestrian Network — Sidewalks

- Most residential areas in the attendance zone north and south of the school have sidewalks, though there are also many segments of missing sidewalks, such as Park Avenue north of Diamond Avenue and Girard Street north of Victory Farm Drive.
- There are several areas, particularly east and west of the school, where few or no streets have sidewalks.
- Some areas show as having neither sidewalks nor gaps — many have multiuse paths instead, which appear on the 'Existing Bicycle Network' map.

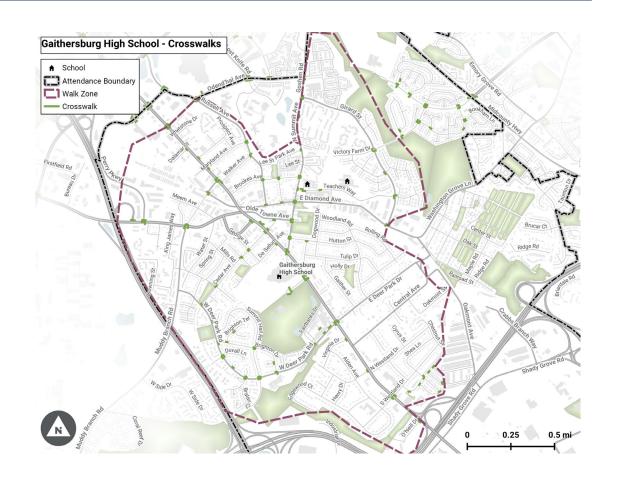




Note that this information only indicates the existence or absence of sidewalk at a given point, not its condition, width, accessibility, or other issues which may impede its actual usability.

### Existing Pedestrian Network — Crosswalks

- Most larger intersections have highvisibility crosswalk markings
- Many intersections between minor and larger streets (e.g., Park Avenue or Teachers Way at Summit Avenue) have crosswalks marked only across the minor street, or none at all.
- Most areas east and west of the school don't have sidewalks or crosswalks. However, some locations, such as Cedar Avenue at Harmony Hall Road, have marked crosswalks that do not connect to paved sidewalks.

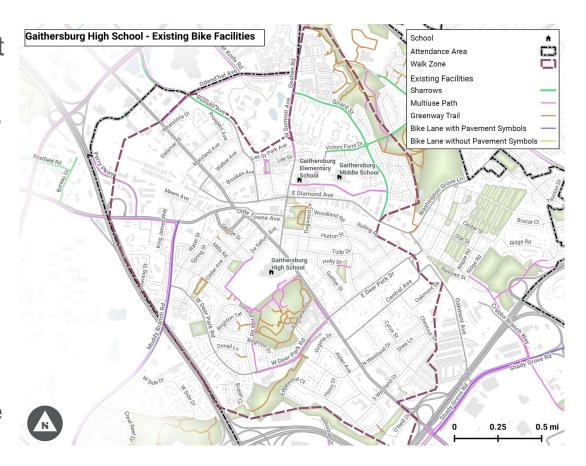




## Existing Bicycle Network

Most residential areas north of GHS have at least a designated shared roadway bike facility connecting to the school. However, such facilities may not be comfortable for children, or their parents, to ride, especially highly volume roads like North Summit Avenue.

A multiuse path does exist along the west side of Summit Avenue north of Park Avenue. The path ends several blocks north of the school, requiring bicyclists to ride either in the road or on a narrow sidewalk for the remainder of the trip across Olde Towne Gaithersburg.

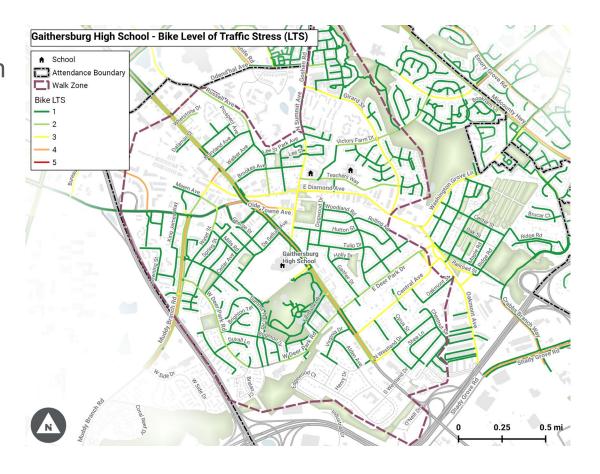




### Existing Bicycle Network — Traffic Stress

Many neighborhood streets near GHS are rated as low-stress, but getting to school from the north requires using some higher-stress roads, and most must cross MD 355.

The northern portion of Summit Avenue is a lowstress route due to the multiuse path. The southern portion of Summit Avenue from Park Avenue to the school is a considered a moderately-high stress biking route due to the lack of bicycling infrastructure.

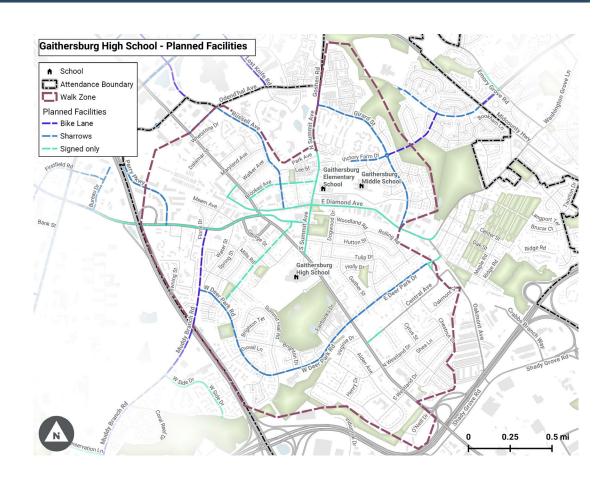




## Planned Bicycle and Pedestrian Network

According to provided data, there are existing plans to mark bike lanes on Frederick Avenue (MD 355) in front of the school, and to sign several streets in Olde Towne as shared roadway.

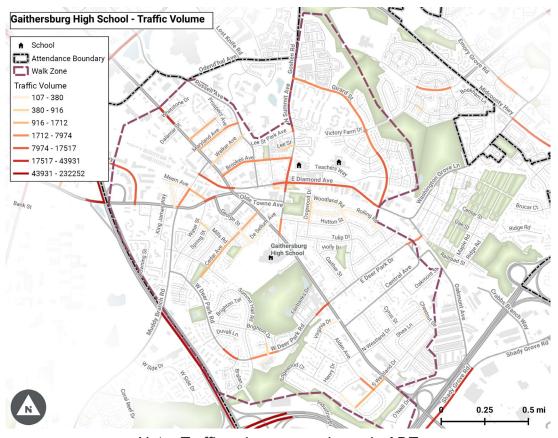
Sharrows are also intended to be added to parts of Russell Avenue, Girard Street and East and West Deer Park Road.

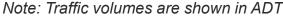




#### Traffic Volume and Conflicts

According to City of Gaithersburg and MDOT data, traffic volumes on Summit Avenue, Brookes Avenue, and Diamond Avenue in the area immediately adjacent to the school are among the highest in the entire attendance area. However, it is not clear if this traffic volume coincides with school arrival and dismissal periods.







### School-Reported Issues

The Principal reported that 200-300 students are regularly held up by traffic, including the railroad crossing at Summit Avenue, and arrive late nearly every day. This includes walkers, car riders, and bus riders.

The principal also reported significant concerns with students crossing Frederick Avenue (MD 355) between intersections, particularly between Summit Avenue and Education Boulevard. These signals are a bit over 800 feet apart, with one intersection between them, at Peony Drive, which lacks a crosswalk.



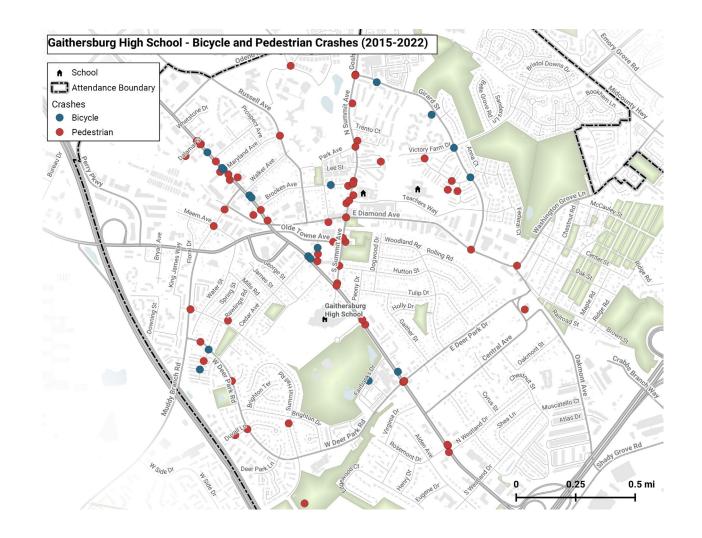
## Crash Data — Gaithersburg High

#### During the eight years 2015–2022:

Total crashes in attendance area (including motor vehicles): 1994

Crashes involving pedestrians: 81

Crashes involving bicyclists: 23





## Crash Data — Gaithersburg High

#### During the eight years 2015–2022:

Total crashes in attendance area (including motor vehicles): 1994

Crash fatalities: 6

Crashes causing serious injury: 18

#### **Crash fatalities:**

> Pedestrians: 4

➤ Bicyclists: 1

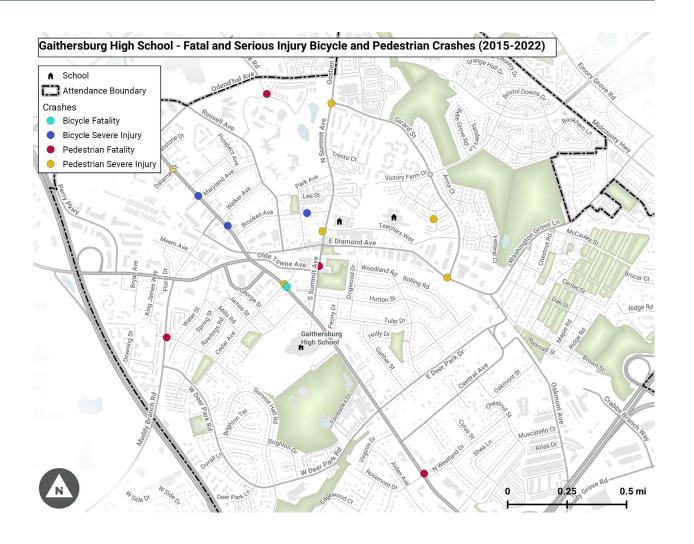
➤ Motor vehicle: 1

#### **Serious injuries:**

> Pedestrian: 6

➤ Bicycle: 3

➤ Motor vehicle: 9







# Planning and Project Context

# Planning and Project Context

Gaithersburg transportation plans and projects in or applicable to the area around GHS:

Policies, Plans, Studies, and Projects	Summary of Relevant Elements
2009 Master Plan Transportation Element (2010)	<ul> <li>Includes recommendation to "Encourage development of connective pedestrian and bicycle systems in all projects", especially links to schools.</li> <li>Requires all new streets have sidewalks (at least 5 ft wide) on both sides.</li> <li>Continue City programs that educate and advocate bicycling to the City's youth.</li> <li>Along Frederick Avenue (MD 355) northwest of GHS, recommends consolidating driveways and siting new construction further from roadway to allow for "improved sidewalks/paths and street tree planting".</li> <li>Along Frederick Avenue southeast of GHS, recommends "work to enhance the streetscapeand further improve bicycle and pedestrian facilities".</li> </ul>



Policies, Plans, Studies, and Projects	Summary of Relevant Elements
Bicycle Gaps (2023)	<ul> <li>This map depicting gaps in the City bike network and projects that will fill them designates two projects near GHS:</li> <li>The "Under design" West Deer Park Connection will connect several disconnected neighborhood areas along West Deer Park Road with the existing multiuse path along Summit Hall Road south of GHS.</li> <li>The "Future" Olde Towne Bicycle Connection will connect the Washington Grove MARC station just east of town to Olde Towne. See City of Gaithersburg Shared Use Path Feasibility Study (below) for more.</li> </ul>
Sidewalk Gaps (2023)	<ul> <li>This map identifies roads missing sidewalks on one or both sides, including these areas near GHS:</li> <li>Seven streets between Frederick Avenue (SR 355), East Deer Park Drive, and the railroad (less than ¾ mile from GHS) have no sidewalks (including East Deer Park Drive itself).</li> <li>Four streets immediately west of the high school to Muddy Branch Road</li> </ul>
JOOLE	are missing sidewalks on one side, and five more on both sides.

Policies, Plans, Studies, and Projects	Summary of Relevant Elements
Diamond-Summit Intersection Improvements (2021)	This project will replace or add curb cuts, accessible pedestrian signals, and associated equipment at this intersection about ½ mile from GHS and will backplate the traffic signals and repaint the crosswalks and stop bars.
MD 355 BRT Traffic Plans (2022)	This MDOT project will reconstruct MD 355 through Gaithersburg to install a center-running bus rapid transit (BRT) line, with a station stop at Education Boulevard in front of GHS. The project will also widen sidewalks on MD 355. MD 355 will continue to have three (narrower) through lanes and no bike accommodation, according to the provided plans.
South Summit Avenue from City Hall to East Diamond Avenue Safety Study (2023)	This study evaluated a two-block stretch of Summit Avenue from City Hall (about 2,000 feet from GHS) north to Diamond Avenue, including the railroad crossing, for signal and pedestrian safety improvements.
Russell Avenue Improvement Project (2023)  TOOLE DESIGN	Segment 1 of this project is to narrow travel lanes on Russell Avenue between Diamond Avenue and Odendhal Avenue, shift the curb, and install a shared use path on one side, as well as improving pedestrian crossings. The entirety of segment 1 lies in the GHS walk zone, with the furthest point approximately 1.5 miles from the school.

Policies, Plans, Studies, and Projects	Impact on GES or Attendance Area
City of Gaithersburg Shared Use Path Feasibility Study (2023)	This MWCOG TLC study considered the feasibility of a shared-use path between Gaithersburg and Washington Grove MARC stations, where it would tie into a future County shared-use path to Shady Grove Metro station. It could also potentially be usable as a school commute route for Washington Grove students attending GHS.
	This is the Future "Olde Towne Bicycle Connection" on the Bicycle Gaps map and is also marked as a missing sidewalk on the Sidewalk Gaps map.



#### Notes

#### TITLE VI NONDISCRIMINATION POLICY

The Metropolitan Washington Council of Governments (COG) operates its programs without regard to race, color, and national origin and fully complies with Title VI of the Civil Rights Act of 1964 and related statutes and regulations prohibiting discrimination in all programs and activities. For more information, to file a Title VI related complaint, or to obtain information in another language, visit <a href="https://www.mwcog.org/nondiscrimination">www.mwcog.org/nondiscrimination</a> or call (202) 962-3300.

El Consejo de Gobiernos del Área Metropolitana de Washington (COG) opera sus programas sin tener en cuenta la raza, el color, y el origen nacional y cumple con el Título VI de la Ley de Derechos Civiles de 1964 y los estatutos y reglamentos relacionados que prohíben la discriminación en todos los programas y actividades. Para más información, presentar una queja relacionada con el Título VI, u obtener información en otro idioma, visite <a href="https://www.mwcog.org/nondiscrimination">www.mwcog.org/nondiscrimination</a> o llame al (202) 962-3300.



# Appendix B: Concept Visualization

## Map ID 10: N Summit Ave



#### Notes

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Map II	D Recommendation Category	<u>Location</u>	<u>Location</u> Significant	Recommendation Type	<u>Issue(s)</u>	Recommendation(s)	Esti	mated Cost
	1 Key Safety Issue	N Summit Ave & Brookes Ave	Along key student walking route Inside school zone		<ul> <li>Concerns about left turn movements from cars traveling south on N Summit Ave.</li> <li>Concerns about right turn movements from cars traveling north on N Summit Ave.</li> </ul>	Consider protected turn phase signal to allow for southbound left turns onto the school campus before northbound traffic gets green signal.  - Provide leading pedestrian interval for crosswalk across school driveway.  - Implement no turn on red for northbound traffic on N Summit Ave.	\$	102,600.00
	2 Key Safety Issue	N Summit Ave & Teachers Way	Along key student walking route High motor vehicle volumes Inside school zone	(Markings/Surface) Curb Ramps Other Other Crossing	Many students are currently crossing N Summit Ave at this location at dismissal to go to the restaurant and grocery store on the west side of N Summit Ave.  - Crossing of N Summit Ave is unmarked and lacks curb ramps - Concern about motor vehicle yielding to pedestrians and multiple threat condition - Pedestrians/bicyclists unable to find sufficient gaps in traffic	Install new high-visibility crosswalk and curb ramps on the northern leg of the intersection for students to cross N Summit Ave. Locate slightly north of the intersection to better align with the restaurant and grocery.  - Install RRFB	\$	18,400.00
	3 Key Safety Issue	Teachers Way (Girard St to N Summit Ave)	Along key student walking route Inside school zone	Speed Management	Existing speed limit not appropriate to context - Observed motor vehicle speeds appear to exceed speed limit	Reduce school zone speed limit to 20 mph - Install linear traffic calming, such as speed bumps. Improvements at the crossings across Teachers Way will contribute to traffic calming efforts Install speed feedback sign	\$	97,700.00
	4 Key Safety Issue	Teachers Way & Melvin St	Along key student walking route Inside school zone Reported school concern	•	Crossing of Teachers Way is unmarked Concern about motor vehicle yielding to pedestrians Missing curb ramps	Install pedestrian crossing signs with downward pointing arrows - Reconstruct or repair existing ramps	\$	4,900.00

Map II	<u>Recommendation</u> Category	Location	<u>Location</u> Significant	Recommendation Type	<u>Issue(s)</u>	Recommendation(s)	Est	imated Cost
	5 Key Safety Issue	Education Blvd & Bus/Parking Lot Driveways	Along key student walking route On school campus	Crossing (Markings/Surface)	crosswalk markings are faded at all driveway crossings.  - the crossing at the entrance to the Bohrer Park parking lot is unmarked and curb ramps lack detectable warning surface.  - the crossing of the southern student parking lot (just off entrance to Bohrer Park) is unmarked and lacks curb ramps.  - Concern about motor vehicle yielding to pedestrians crossing Education Blvd.  - Marked crosswalk across Education Blvd lacks appropriate crossing signage	Remark existing high-visibility crosswalk markings - Install new high visibility crosswalk and reconstruct or repair existing curb ramps at entrance to Bohrer Park - Install RRFB across both sides of Education Blvd Install school crossing signs with downward pointing arrows across both sides of Education Blvd Restripe Education Blvd roadway through roundabout	\$	45,300.00
	6 Key Safety Issue	S Summit Ave (MD 355 to E Diamond Ave)	Along key student walking route	Speed Management	observed motor vehicle speeds appear to exceed speed limit	Short term: Install linear traffic calming by installing speed bumps or posting signage, etcLong term: Consider a study for a potential road diet.	\$	41,900.00
	7 Key Safety Issue	(Crossing of Teachers Way between GMS bus	Along key student walking route High motor vehicle volumes Inside school zone Reported school concern	Other Crossing Characteristics	Concern about motor vehicle yielding	Upon completion of Map ID #4, remove marked crosswalk	\$	200.00
	8 Key Safety Issue	Teachers Way & GES bus loop	Along key student walking route High motor vehicle volumes Inside school zone Reported school concern	Curb Ramps Other Crossing Characteristics	Concern about motor vehicle turning speeds - Concern about motor vehicle yielding - Concern about multiple threat condition	Install curb radius reduction on NW corner (might require study of school bus turning movements) - Install in-street pedestrian crossing sign Install median crossing island before westbound left turn lane begins.	\$	8,500.00

M	Recommendation Category	<u>Location</u>	<u>Location</u> Significant	Recommendation Type	<u>lssue(s)</u>	Recommendation(s)	Est	imated Cost
	9 Key Safety Issue	S Summit Ave & E Diamond Ave	ŭ	Curb Ramps Other Crossing Characteristics	Southwest corner lacks a compliant curb ramp and sufficient waiting space for pedestrians. At southeast corner, concern about motor vehicle right turn speeds and yielding to pedestrians. Curb ramps at northwest and northeast corners do not align with crossing of E Diamond Ave and have insufficient level landing and detectable warning surface. Pedestrian signal not on auto recall South of the intersection, MARC train extends into the intersection, prohibiting pedestrians from crossing the train tracks.	Reconstruct curb at southwest corner to provide compliant curb ramp.  - Install curb radius reduction on southeast corner and Reconstruct curb ramps.  - Reconstruct or repair existing ramp at northeast corner.  - Install curb extension and compliant curb ramp at northwest corner (on E Diamond Ave) and restripe lane markings on Diamond Ave east of intersection to reduce width of turn lane and align through lane to account for curb extension/on-street parking  - Put pedestrian signal on auto recall  - Consider coordinating with appropriate agencies to discuss extension of the train platform.	\$	16,400.00
	10 Key Safety Issue	Summit Ave (from Park Ave to E Diamond Ave)	Along key student walking route High motor vehicle volumes Inside school zone		Sidewalk on both sides of N Summit Ave are narrow and lack sufficient buffer in some sections.  Observed motor vehicle speeds appear to exceed speed limit.  Speeding concern reported by school.	Short Term: Add edge lines to roadway to visually narrow the traffic lane and provide a buffer to the sidewalk. Install linear traffic calming. Install speed feedback sign. Reduce school zone speed limit to 20 mph.  - Long Term: Remove one vehicular travel lane for sidewalk widening/buffer. This would require 11 ft travel lanes with 5-footwide sidewalks on both sides of the roadway. See Appendix B for image.	\$	61,800.00
	11 Key Safety Issue	Teachers Way & Youth Center	Along key student walking route High motor vehicle volumes Inside school zone Reported school concern	Other Crossing Characteristics	Crossing may be difficult for drivers to see or anticipate due to roadway curvature or visual obstructions - Stopped cars obstruct sight lines	Install advance pedestrian warning signs. Trim tree branches to increase visibility of pedestrians.	\$	2,000.00

p ID Recommendation Category	Location	<u>Location</u> Significant	Recommendation Type	<u>lssue(s)</u>	Recommendation(s)	Est	imated Cos
12 Key Safety Issue	MD 355 (Summit Ave to E Deer Park Rd)	Along key student walking route High motor vehicle speeds High motor vehicle volumes Inside school zone	and Pavement	This is a key student walking route along a high-speed, high-volume road. There are multiple housing units and transit stops utilized by students along the corridor.  - Sidewalks on both sides lack sufficient buffer along most of the corridor, and the sidewalks are too narrow.  - Existing speed limit not appropriate to context  - Speeding concern reported by school  - School zone speed limit sign missing	Widen sidewalk and install a minimum 2-foot buffer.  - Reduce school zone speed limit to 20 mph - Install new school zone speed limit sign	\$	75,400.00
13 Key Safety Issue	MD 355 & Education Blvd	- Along key student walking route - High motor vehicle speeds -High motor vehicle volumes - Inside school zone - Reported school	Crossing (Markings/Surface) Other Crossing Characteristics	Insufficient space for pedestrians waiting to cross in the median island. Many students utilize this crossing and do not have adequate space while waiting to cross.  - No pedestrian signal over north crossing (shopping center driveway)	Widen median crossing island to allow for adequate space for students waiting to cross. Install pedestrian signal over crossing of shopping center driveway	\$	15,200.00
14 Key Safety Issue	MD 355 & Summit	t Along key student walking route High motor vehicle volumes	Other Crossing Characteristics	- Crosswalk long - Inadequate crossing time - Insufficient space for pedestrians waiting to cross	- Increase pedestrian crossing time - Install curb extensions - Re-time signal to provide more frequent crossing opportunities -Implement no right on red for all approaches.	\$	26,200.00
15 Quick Win	N Summit Ave & GES bus exit	Along key student walking route Inside school zone On school campus	Curb Ramps	Northeast and southeast curb ramps, as well as the ramps in the median crossing island, lack detectable warning surface	Reconstruct or repair existing ramps	\$	4,400.00
16 Quick Win	S Summit Ave & Wells Ave	Along key student walking route	Curb Ramps	Northeast and southeast curb ramps lack detectable warning surface	Reconstruct or repair existing ramps	\$	2,200.0

Map II	Recommendation	Location	<u>Location</u>	Recommendation	<u>lssue(s)</u>	Recommendation(s)	Esti	mated Cost
:	<u>Category</u> 17 Quick Win	Summit & Post Office entrance/Shell Driveway	Significant Along key student walking route	<u>Type</u> Curb Ramps	Northeast and southeast curb ramps lack detectable warning surface	Reconstruct or repair existing ramps	\$	2,200.00
2	18 Quick Win	Brookes Ave & Park Ave	Along key student walking route High motor vehicle speeds Reported school	Other Crossing Characteristics	Concern about motor vehicle yielding Existing crosswalk markings are not high visibility.	Install advance pedestrian warning sign Replace existing crosswalk markings with high-visibility markings.	\$	9,200.00
-	19 Quick Win	Fulks Corner Ave & police parking lot	771111 2111	Curb Ramps	Northeast and southeast curb ramps lack detectable warning surface	Reconstruct or repair existing ramps	\$	2,200.00
2	20 Quick Win		Along key student walking route	Curb Ramps	Northeast and southeast curb ramps lack detectable warning surface	Reconstruct or repair existing ramps	\$	2,200.00
2	21 Quick Win	Park Ave & Lee St		Curb Ramps	Northeast curb ramp lacks detectable warning surface	Reconstruct or repair existing ramp	\$	1,100.00
2	22 Quick Win	Teachers Way & East Middle School Driveway	Inside school zone On school campus	Curb Ramps	North curb ramp and median island curb ramps lack detectable warning surface	Reconstruct or repair existing ramps	\$	3,300.00
Ž	23 Quick Win		On school campus	Other Crossing Characteristics	Crosswalk long Concerns about motor vehicle turning speeds	Install curb radius reduction on the northeast and northwest corners of the school driveway.	\$	10,000.00
	24 Quick Win	Old Towne Avenue (uncontrolled crosswalk at Folks Corner Ave)		Other Crossing Characteristics	Concern about motor vehicle yielding Crossing lacks appropriate crossing signage	Install pedestrian crossing signs with downward pointing arrows	\$	2,000.00
2	25 For Consideration	Lee St (N Summit Ave to circle)		Sidewalk	Missing sidewalk on both sides of Lee St	Install new sidewalk	\$	11,900.00
2	26 For Consideration	Brookes Ave	Along key student walking route	Sidewalk Speed Management	Sidewalk lacks sufficient buffer  Observed motor vehicle speeds appear to exceed speed limit	Install linear traffic calming such as speed humps or more clearly defined on-street parking.	\$	30,100.00
2	27 For Consideration	Girard St & Teachers Way	Along key student walking route	Other Crossing Characteristics		Install stop control on Girard Street. Install median crossing island.	\$	4,300.00
2	28 For Consideration	Peony Dr (Tulip Dr to MD 355)		Sidewalk	Sidewalk too narrow	Widen sidewalk	\$	6,400.00

Map ID	Recommendation Category	<u>Location</u>	<u>Location</u> Significant	Recommendation Type	<u>Issue(s)</u>	Recommendation(s)	Es	timated Cost
29	For Consideration	Gaither St (Tulip Dr to E Deer Park Dr)	<u>Jig.iiiieaiie</u>	Sidewalk	Missing sidewalk on both sides of Gaither St.	Install new sidewalk	\$	130,400.00
30	For Consideration	Between Teachers and Diamond West of Youth Center		Sidewalk	Many students walk from Diamond Avenue to Teachers Way near the Youth Center. There is currently no path between Teahers Way and Diamond Avenue.	Install new path between Teachers Way and Diamond Avenue.	\$	22,500.00
31	For Consideration	Tulip Dr (Peony Dr to end)		Sidewalk	Missing sidewalk on both sides of Tulip Dr.	Install new sidewalk	\$	198,600.00
32	For Consideration	Hutton St (Dogwood Dr to Rolling Rd)		Sidewalk	Missing sidewalk on both sides of Hutton St.	Install new sidewalk	\$	168,700.00
33	For Consideration	Rolling Rd (Dogwood Dr to Oakton Rd)		Sidewalk	Missing sidewalk on both sides of Rolling Rd.	Install new sidewalk	\$	194,800.00
34	For Consideration	•	Along key student walking route Reported school concern	Sidewalk	Path cracked Path too narrow	Reconstruct or repair path Widen path	\$	62,000.00
35	For Consideration	Oakton Rd (Woodland Rd to end)		Sidewalk	Missing sidewalk on both sides of Oakton Rd.	Install new sidewalk	\$	118,400.00
36	For Consideration		High motor vehicle speeds High motor vehicle volumes	Crossing (Markings\/Surface ) Curb Ramps	Crosswalk markings faded and not high visibility on northern crossing of MD 355 and both crossings of Deer Park Drive. Crosswalk markings not high visibility Ramp obstructed by utility pole.	Remark existing crosswalks with high- visibility markings Relocate or remove obstacle	\$	8,100.00
37	For Consideration	Woodland Rd (Dogwood Dr to end)		Sidewalk	Missing sidewalk on both sides of Woodland Rd.	Install new sidewalk	\$	229,200.00