



Berkeley Middle School Walkabout Summary Report

Introduction

On November 7, 2014, stakeholders at Berkeley Middle School in Williamsburg, Virginia met to examine the walking and bicycling network around the school and identify potential improvements to be included in a future Transportation Alternatives Program grant application. Their participation in a VDOT Safe Routes to School (SRTS) Walkabout shows their support for improving the walking and biking environment and increasing the number of students safely walking and bicycling to school. The stakeholders participating in the Walkabout included members of the school staff, Williamsburg-James City County School Division staff, the City of Williamsburg Police Department, and the City of Williamsburg Planning Department.

Walkabout Team

Name	Organization
Michelle Banks	Berkeley Middle School, Principal
Darlene Dockery	Williamsburg-James City County School Division, SRTS Coordinator
Reed Nester	City of Williamsburg, Planning Director
Adam Otstot	Williamsburg-James City County School Division, HPE Supervisor
Alan Robertson	Williamsburg-James City County School Division, Facilities Management
Tim Walker	City of Williamsburg Police Department, Berkeley MS SRO
Laura Barna	Toole Design Group, Civil Engineer
Jim Elliott	Virginia Safe Routes to School, Piedmont Local Technical Assistance Coordinator (LTAC)
Wendy Phelps	Virginia Safe Routes to School, Coastal Local Technical Assistance Coordinator (LTAC)

The two and a half hour meeting included an observation of school dismissal and brief walking tour of the pedestrian facilities in front of the school. The table below summarizes existing conditions along key streets in the area.

Existing Conditions

School location

Berkeley Middle School is located at 1118 Ironbound Road in Williamsburg, Virginia. The school campus is bordered to the north and east by forested land owned by the College of William and Mary. Ironbound Road and Strawberry Plains Road run along the western edge of the school campus, and there is a small office park located directly to the south. The school campus is right next to the intersection of Ironbound Road and Strawberry Plains Road, which has east-west bike lanes but does not have any pedestrian accommodations.



Berkeley Middle School, circled above, is located in the City of Williamsburg next to the boundary with James City County, and serves students living in the city and the county.



The school is part of the Williamsburg-James City County School Division, and is located in the City of Williamsburg immediately adjacent to the county line. As such, Berkeley Middle School draws students living in both the city and the county. Most of the students that currently walk to school live in the residential communities within a half-mile south of the school.

Road Information Table

Street	Speed limit	Road Width ¹	No. of lanes in each direction	Sidewalk width and continuity ²
Ironbound Road (Strawberry Plains Road to Monticello Avenue)	45 mph	76 ft	2	East side: 10 ft shared use path West side: N/A
Ironbound Road (SW of Strawberry Plains Road)	45 mph	24 ft	1	N/A
Monticello Avenue (East of Ironbound Road)	45 mph	24 ft	1	N/A
Monticello Avenue (West of Ironbound Road)	45 mph	96 ft	2	North side: 10 ft shared use path South side: 8 ft sidewalk
Strawberry Plains Road	40 mph	30 ft	1	East side: 6 ft sidewalk

1. Road width measurements are approximate and represent a general cross section. In this table, these cross sections generally include turn lanes due to Berkeley Middle School's proximity to major intersections with high volumes of turning vehicles.
2. Sidewalk widths are approximate.

Pedestrian Infrastructure

As shown in the Road Information Table above, sidewalks are present on portions of three of the five streets adjacent to or leading to the school. There is a sidewalk present on the east side of Ironbound Road between Strawberry Plains Road and the northern entrance to the Berkeley Middle School parking lot. From the parking lot entrance to the north, there is a 10 foot shared use pathway on the east side of the road. North of the intersection with Monticello Avenue, Ironbound Road has a 10 foot shared use pathway on both sides.

There is sidewalk present on the east side of Strawberry Plains Road from the intersection of Ironbound Road south to Watson Drive. This sidewalk has a wide grass buffer except along the portion directly in front of the school building, and is used by the majority of the students who walk to school. The school site currently lacks pedestrian pathways to connect from the street to the school building. Pedestrians must walk in the driveways or across the landscaping in front to reach the school building.

There are no marked crosswalks at any of the driveways or intersections along Strawberry Plains Road. The only marked crosswalks and pedestrian signal heads near Berkeley Middle School are at the intersection of Ironbound Road and Monticello Avenue.



Bicycle Infrastructure

The bicycle infrastructure near the school includes both on-street bike lanes and a 10 foot wide shared use path on some streets. There are bike lanes in both directions on Ironbound Road from approximately 300 feet west of the intersection with Strawberry Plains Road to one mile north of the Monticello Avenue intersection. Bicyclists on Ironbound Road may also use the shared use paths present on both sides north of the intersection with Monticello Avenue. There are bike lanes in both directions on Monticello Avenue east of the intersection with Ironbound Road. West of the intersection with Ironbound Road, bicyclists on Monticello Avenue may use the two-way shared use path on the north side of the street.

Berkeley Middle School has one bike rack located in front of the building. It was not being used during the Walkabout.

Berkeley Middle School Student Travel Modes

Berkeley Middle School serves 942 students in grades 6 through 8. Approximately 84 students (9 percent) live within one mile of the school, and school administrators believe approximately 30 students (3 percent) currently walk or bike to school. Most students travel to and from school by school bus (80 percent) or in a family vehicle (18 percent).¹

The school division provides bus service to all students, regardless of the distance between the student's home and the school. There are 23 buses that serve Berkeley Middle School, including several that serve special education students. Currently, all of the buses load and unload in the bus loop directly to the south of the school building.

Dismissal Procedures & Observation

The Walkabout Team split into three small groups to observe dismissal. One group observed students loading onto buses in the bus loop; another was stationed near the bus loop entrance to observe traffic and students walking, and the third group observed the Ironbound Road/Strawberry Plains Road intersection and parent drop-off loop in front of the school. The entire dismissal process was completed in approximately 15 minutes.

Students at Berkeley Middle School are dismissed by grade level and travel mode. While both the parent and bus loops are full of waiting vehicles, students who walk or bike are dismissed first. After the walkers and bikers, students who get picked up by their parents are dismissed to the drop-off loop in the front of the school building by grade level. Policy at Berkeley Middle School requires all parents picking up their students to enter the building to sign out their students at the end of the day. Students that ride the bus are dismissed last. The principal and other staff members supervise the bus loop every afternoon. When all of the buses are loaded, they exit onto Ironbound Road together, assisted by a staff member wearing a reflective vest who stops traffic to facilitate their exit.

¹ Berkeley Middle School Student Travel Tally Report, September 2013.

<https://www.dropbox.com/s/q9upzglyezw1x1/Berkeley%20MS%20Student%20Travel%20Tally%20092013.pdf?dl=0>



The Walkabout team did not observe any unsafe behavior by drivers or pedestrians in the parent pick-up loop. There was one parent observed walking south on Ironbound Road from the Monticello Avenue intersection to pick up her student, and the two of them were seen again walking back north on Ironbound Road and crossing at Monticello Avenue. Several students were seen walking south on Strawberry Plains Road. The majority of these students used the sidewalk on the east side of the street. However, at least two students crossed Strawberry Plains Road at an unmarked, mid-block location near the bus loop driveway and walked south on the west side of the street where there is no sidewalk.

Walkabout Summary

Prior to dismissal observation, the Walkabout Team met in the conference room at Berkeley Middle School for introductions and a discussion about current student travel patterns, dismissal procedures, and the existing bicycle and pedestrian infrastructure near the school. Following dismissal observation, the Walkabout Team reconvened outside to walk around the school site to identify potential infrastructure improvements for inclusion in this report.

During the initial discussion, administrators shared the observation that more parents drive their children to and from school today than 10 years ago. One result of this trend is a full pick-up queue in the front parking lot during afternoon dismissal as shown in Figure 1 at the end of this report. Several potential contributing factors were discussed by the Walkabout Team including the need to transport students to after school activities, student reluctance to bike or walk, and a concern for a student's well-being based on the perception that a high number of disciplinary issues take place on the bus. Strategies to address some of these issues are discussed further in the programmatic recommendations section below.

Key Barriers and Issues

The vast majority of students that attend Berkeley Middle School live more than a mile from campus, and most roads lack continuous sidewalks and other pedestrian accommodations. The pedestrian network is more complete to the north of the school, but most students within walking distance live to the south. The school campus has several sidewalk gaps as well. The roads surrounding the Berkeley campus have posted speed limits of 40 and 45 mph, which contribute to an unwelcoming pedestrian environment and increase the fatality rates of pedestrians involved in crashes.

School Campus

- *Driveway Crossings*—As shown in Figure 2 at the end of this report, there are no crosswalk markings across school driveway entrances.



- *Internal Sidewalks*—Figure 3 shows a missing sidewalk section between the sidewalk in front of the school building and the newly constructed sidewalks on Ironbound and Strawberry Plains Roads. Pedestrians must walk through the parking lot, the bus loop or across the landscaped area in front of the school to access the building.

Strawberry Plains Road

- *Sidewalks*—There is a sidewalk on the east side of Strawberry Plains Road for approximately 1/3 of a mile south of the intersection with Ironbound Road, shown in Figure 4. There are no sidewalks on either side of the road south of Watson Drive.
- *School Zone*—There is a single 'School Crossing' (S1-1) sign and white 'SCHOOL' pavement marking approximately 400 feet before the southern edge of the school campus. The sign does not meet current reflectivity standards, nor is there a sign noting a lower, school zone speed limit.
- *Crosswalks*—There are no marked crosswalks across any intersection on Strawberry Plains Road.

Ironbound Road

- *Sidewalks*—There is a short section of sidewalk on the east side of the street beginning at the intersection with Strawberry Plains Road that transitions to a shared use path extending north. Further to the west on Ironbound Road, there is a sidewalk on the south side of the street extending from Monticello Avenue to Brookhaven Drive. There is no sidewalk on either side of the street from Brookhaven Drive to Strawberry Plains Road as shown in Figure 5.
- *Crosswalks*—The only marked crosswalks on Ironbound Road are at the Monticello Avenue intersection.
- *School Zone*—There is a single 'School Crossing' (S1-1) sign and white 'SCHOOL' pavement marking approximately 1,000 feet before the western edge of the school campus. The sign does not meet current reflectivity standards, and there is no sign noting a lower, school zone speed limit.

Intersection of Ironbound Road and Strawberry Plains Road

- *Crosswalks*—There are no marked crosswalks on any leg of the intersection.
- *Curb Radius*—Figure 6 shows the wide curb radius on the southeast corner of the intersection. The wide curb radius enables higher speed motor vehicle turning movements and increases the pedestrian crossing distance.
- *Pedestrian Signals*—There are no pedestrian signals on any leg of the intersection.

Intersection of Ironbound Road and Monticello Avenue

- *Crossing distance*—The intersection of Ironbound Road and Monticello Avenue is wide, with a total pedestrian crossing distance of about 180 feet on the western side of the intersection. All four legs of the intersection have median refuge islands, which allow pedestrians to cross the street in two stages.



- *Signal timing*—As the traffic signal is currently programmed, pedestrians must wait for two cycles to completely cross Monticello Avenue. The pedestrian signals to cross Monticello Avenue indicate the walk symbol simultaneously while the vehicle phases are staggered. Figure 7 at the end of this report shows the southern Ironbound Road crosswalk.

Monticello Avenue

- *Sidewalks*—There are no sidewalks on either side of the road east of the intersection with Ironbound Road.

Assessment of barriers, issues and opportunities

The street network near Berkeley Middle School is characterized by motor vehicles traveling at relatively high speeds and limited pedestrian and bicycle facilities beyond the area immediately adjacent to the school. Streets designed with the primary goal of moving motor vehicles as quickly as possible and without sidewalks or crosswalks can signal to potential pedestrians and bicyclists that streets are for motor vehicle use only, and further discourage walking and bicycling.

The recommended infrastructure improvements in this report are designed to fill in the gaps between existing facilities near Berkeley Middle School and extend the pedestrian and bicycle network to more residential communities. These infrastructure improvements should be reinforced with programmatic efforts to encourage walking and biking through safety education and incentive programs.

Glossary of Infrastructure (Engineering) Recommendations

The following infrastructure treatments can be used to improve the bicycle and pedestrian environment around Berkeley Middle School. Location-specific recommendations are included after the descriptions of the infrastructure treatments.

Crosswalks

Marked crosswalks highlight the portion of the right-of-way where motorists can expect pedestrians to cross and designate a stopping or yielding location. They also indicate to pedestrians the optimal or preferred locations to cross the street. At midblock or other uncontrolled locations, crosswalks should use a high-visibility pavement marking pattern and be accompanied with pedestrian crossing signs that meet current Manual on Uniform Traffic Control Devices (MUTCD) standards. In addition, crosswalks can be raised on a speed table to be level with the sidewalk. This design helps slow drivers, increase pedestrian visibility and make it easier for pedestrians with mobility limitations to cross the street.



Curb Ramps

Curb ramps provide access between the sidewalk and roadway for people using wheelchairs, strollers, and bicycles. Curb ramps must be installed at all intersections and midblock locations where pedestrian crossings exist, as mandated by the 1990 Americans with Disabilities Act. In most cases, a separate curb ramp for each crosswalk at an intersection should be provided rather than a single ramp at the corner for both crosswalks.

Pedestrian Lighting

Lighting should be provided near transit stops, commercial areas, or other locations where night-time or pre-dawn pedestrian activity is likely. Pedestrian-scale lighting such as street lamps helps illuminate the sidewalk and improves pedestrian safety and security.

Pedestrian Signals

Pedestrian signal heads indicate to pedestrians when they should cross a street. The use of WALK/DON'T WALK pedestrian indications at signal locations is particularly important when signal timing is complex (e.g., there is a dedicated left-turn signal for motorists) and at established school zone crossings. For wide streets, countdown signals that indicate the remaining amount of time pedestrians have to cross the street should be installed.

School Speed Limit Signs

School speed limit signs alert drivers that they are entering a school zone and need to prepare to yield to students that may be crossing the street. School speed limits vary based on local laws and typically range from 15 to 25 mph. School speed limit signs with lights that flash during arrival and dismissal times can be more effective on busy streets, however, all school speed limit zones require occasional police enforcement to ensure driver compliance. Refer to the Manual on Uniform Traffic Control Devices (MUTCD) for more guidance.

Shared Use Paths

Shared use paths are a valuable tool for building a comprehensive pedestrian and bicycling network. These paths are low-stress routes off of the street so pedestrians and bicyclists do not have to compete for space with motor vehicles. The paths and trails should have adequate lighting to support year-round use.

Sidewalks

Sidewalks provide pedestrians and younger bicyclists a safe place to travel that is separate from motor vehicles. It is important to provide a continuous sidewalk route, connected with high-visibility crosswalks so that pedestrians are not forced to share travel space with motor vehicles. All sidewalks should meet ADA guidelines for width and cross-slope, and include curb ramps that meet ADA guidelines at street crossings.



Berkeley Middle School Infrastructure (Engineering) Recommendations

The following section lists the recommended infrastructure improvements for Berkeley Middle School. Maps with the locations of these improvements and a table of planning level cost estimates are included at the end of this report.

School Campus

- Install *crosswalks* with high visibility markings at the following locations:
 - The north parking lot entrance/exit at Berkeley Middle School.
 - At the bus loop entrance/exit at Berkeley Middle School as shown in Figure 8.
- Install *raised crosswalks* with high visibility markings at the following locations:
 - Across the entrance and both exits to the parent drop-off loop at Berkeley Middle School.
- Construct *sidewalks* along the following vehicular access routes to provide pedestrians with separate, paved routes to the school building:
 - The south side of the north parking lot entrance at Berkeley Middle School from the existing sidewalk on Ironbound Road to the proposed raised crosswalk across the parent loop entrance and across the median to the proposed raised crosswalk across the parent loop exit.
 - The north side of the bus loop entrance/exit at Berkeley Middle School from the existing sidewalk on Strawberry Plains Road to the sidewalk in front of the school building.

Strawberry Plains Road

- Install *crosswalks* with high visibility markings at the following locations:
 - Across Watson Drive along Strawberry Plains Road.
 - Across Bailey Drive along Strawberry Plains Road.
 - Across Strawberry Plains Road on the south side of Midlands Road once the sidewalk on the east side of the road from Bailey Drive has been completed. Advance signage and a pedestrian activated signal would help make pedestrians crossing at this location more visible to drivers.
- Continue the *sidewalk* along the east side of Strawberry Plains Road from Watson Drive to Midlands Road. End the sidewalk with an ADA compliant curb ramp providing access to the proposed crosswalk at Midlands Road.
- Replace the painted median near the bus loop entrance/exit with an island with concrete curbs to calm traffic on Strawberry Plains Road.
- Add *school zone sign assemblies* with retro-reflective 'School Advance Crossing' (S1-1) signs and School Speed Limit (S5-1) signs that conform to MUTCD standards to the south of Berkeley Middle School to replace the existing sign.



Ironbound Road

- Add *school zone sign assemblies* with retro-reflective 'School Advance Crossing' (S1-1) signs and School Speed Limit (S5-1) signs that conform to MUTCD standards at the following locations:
 - To the west of Berkeley Middle School to replace the existing sign.
 - To the north of Berkeley Middle School near the Monticello Avenue intersection.
- Build *sidewalks* at the following locations to connect the gaps in the existing network:
 - The west side of Ironbound Road from Monticello Avenue south to the intersection with Strawberry Plains Road. Alternately, there is space in this location to continue the shared use path that exists to the north. Constructing this pedestrian facility and the following intersection improvements would provide pedestrians with an alternative to crossing Ironbound Road at Monticello Avenue where the total crossing distance is almost twice as wide.
 - The south side of Ironbound Road from Strawberry Plains Road to Brookhaven Drive to complete the network of existing and proposed sidewalks.

Intersection of Ironbound Road and Strawberry Plains Road

- Install *crosswalks* with high visibility markings on the eastern and southern legs of the intersection to connect existing and proposed sidewalks.
- Construct *curb ramps* that meet ADA standards on three corners of the intersection to connect the existing and proposed sidewalk network.
- Consider tightening the *curb radii* with the construction of the curb ramps. Tighter curb radii would enforce slower motor vehicle turning movements and shorten the pedestrian crossing distance.
- Add *pedestrian signals* with countdown timers to the existing traffic signals to help pedestrians navigate the intersection.

Intersection of Ironbound Road and Monticello Avenue

- Install *pedestrian scale lighting* to increase pedestrian visibility and sense of safety after dark. A good example of pedestrian scale lighting can be found in the New Town development on the northwest corner of the intersection.
- Reprogram the *pedestrian signal* timing at this intersection so pedestrians may cross during the leading left turn intervals. This will reduce the current pedestrian delay, which requires waiting through two cycles to cross Monticello Avenue.



Programmatic Recommendations

The programmatic recommendations are designed to work in conjunction with the infrastructure recommendations and each other to instill safe walking, bicycling and driving practices. The recommendations are organized according to the four “E’s” of Safe Routes to School: Education, Encouragement, Enforcement, and Evaluation.²

Education

- Incorporate information on walking and bicycling to school in communications with parents. Inform parents that Berkeley Middle School supports walking and bicycling to school and educate parents about the academic and health benefits of walking and biking. The Williamsburg James City County School Division’s SRTS Coordinator can serve as a resource for these materials.
- Integrate pedestrian and bicycling safety education into the school curriculum. Pedestrian and bicycle safety education should occur in advance of major walk or bike to school events so students are adequately prepared and have an opportunity to practice the skills they have learned. For example, teaching pedestrian safety before students take standardized tests in the spring would allow students to apply what they have learned during their walking field trip to the movie theater in New Town after the standardized tests. The two resources below are available for free:
 - The *Pedestrian Safer Journey* resources were developed by the Federal Highway Administration and features videos, quizzes and additional resources for educators teaching pedestrian safety. http://www.pedbikeinfo.org/pedsaferjourney/mi_en.html
 - *Bikeology* is a complete curriculum for teaching bicycle skills developed through a partnership between the American Alliance for Health, Physical Education, Recreation and Dance (AAPHERD) and the National Highway Traffic Safety Administration (NHTSA). *Bikeology* is available for free online at <http://walkbiketoschool.org/sites/default/files/bikeology-curriculum-part-1-and-2.pdf>
- Collaborate with the School Resource Officer and City of Williamsburg Police Department to expand their bicycle safety education efforts with middle school students. This effort could build upon the existing bicycle unit in the Berkeley Middle School PE curriculum.
- Provide parents and guardians with safe driving information and materials that stress the importance of driving safely in school zones and being alert for pedestrians and bicyclists during arrival and dismissal. These materials can be provided during back-to-school nights, health and safety fairs, and Safe Routes to School events. There are several organizations that have free materials available on their websites:
 - The National Center for Safe Routes to School has a helpful list of “Driving Tips Around Schools: Keeping Children Safe.” http://apps.saferoutesinfo.org/lawenforcement/resources/driving_tips.cfm
 - The Federal Highway Administration has an entire website devoted to reducing distracted driving, including information and free downloadable materials. <http://www.distraction.gov/content/take-action/downloads.html>
 - The National Safety Council also has a page dedicated to distracted driving resources. Find it here <http://www.nsc.org/learn/NSC-Initiatives/Pages/distracted-driving-resources.aspx>

² The fifth E is Engineering, included in this report under Infrastructure Recommendations.



Encouragement

- Participate in statewide walking and biking to school events. International Walk to School Day in October and National Bike to School Day in May are two opportunities to celebrate walking and bicycling to school. These events provide an excellent opportunity to not only get students walking and bicycling, but also to teach the benefits of an active lifestyle.
- Recruit student leaders to help promote walking and biking to school. These students could be members of an existing school club with a connection to walking and biking (i.e. a running group or environmental club) or form a new organization. Involve students in the drama club by having them write and perform skits about pedestrian safety at a school assembly.
- Build on the existing health and wellness program at Berkeley Middle School to encourage more students to walk and bike to school. In addition to the annual Turkey Trot, consider hosting a mileage challenge among homeroom classes or implementing a frequent walker program with incentives for students that walk or bike to school at least once a week. The frequent walker program could be modeled after the City of Williamsburg's alternate commute program that rewards commuters who make an effort to increase their number of non-car trips.
- Initiate a program that rewards good behavior on the bus to encourage students to ride the bus to school.

Enforcement

- Consider placing mobile speed trailers along Strawberry Plains Road and Ironbound Road to provide real-time feedback to drivers traveling through the school zone. Reinforce the message through the presence of law enforcement officers.
- Periodically enforce local laws requiring bike helmets for bicyclists under 14 years old. Instead of fines for first time offenders, offer certificates for a free bike helmet from local law enforcement or a bike shop.

Evaluation

- Conduct Student Travel Tallies to get baseline data for student travel patterns. In Virginia, schools across the state record how students are getting to school during Student Travel Tally Week every September. This data can be used to identify trends and help guide the types of projects that a school's Safe Routes program should develop.
- Administer Parent Surveys to collect information on parents' attitudes towards walking and bicycling and reasons why they may or may not allow their children to walk or bike to school. Administering parent surveys at least once a year can help determine whether Safe Routes to School efforts are changing parents' attitudes towards walking and bicycling to school.

Walkabout Photographs

Walkabout participants took photographs to document the walkabout as well as supplement the walkabout project recommendations. The following photos are from the walkabout. All of the walkabout photographs are available at: <https://www.dropbox.com/sh/cmdeselnzkek17u/AABgDJUwaUo-XfPu5-whGz5Ja?dl=0>



Figure 1

Figure 1. Parent vehicles lined up in front of the school prior to dismissal.



Figure 2

Figure 2. School parking lot north entrance, looking north towards Monticello Avenue. The photo shows the newly constructed sidewalk with ADA accessible curb ramps and median refuge. The addition of a high visibility crosswalk at this location would visually remind drivers that they are crossing a pedestrian route.



Figure 3

Figure 3. School bus loop, looking northeast. Continuing the sidewalk along the yellow curb would provide a dedicated pedestrian route from the school building to the existing sidewalk on Strawberry Plains Road.

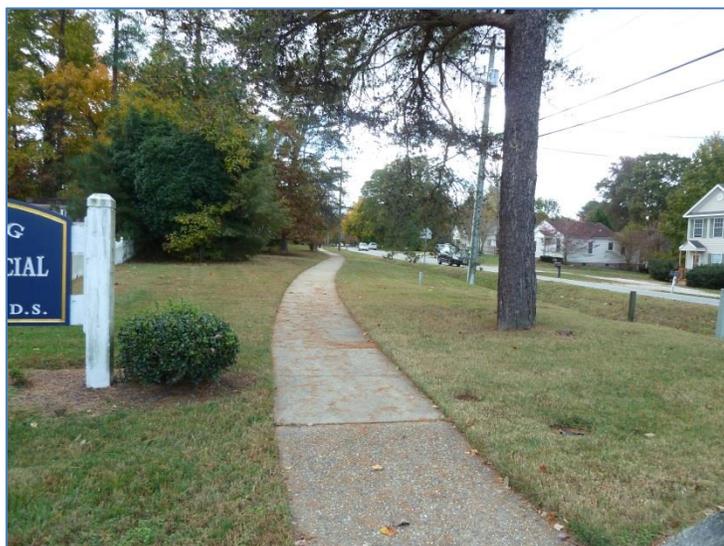


Figure 4

Figure 4. Sidewalk on Strawberry Plains Road, looking south from the office park to the south of Berkeley Middle School. The sidewalk is in good condition and has a wide buffer from the travel lanes.



Figure 5

Figure 5. Looking east on Ironbound Road from Governor's Square Apartments. There are no pedestrian accommodations on this stretch, although there are bike lanes that begin just beyond the driveway in the foreground.



Figure 6

Figure 6. Intersection of Strawberry Plains Road and Ironbound Road to the northwest of the school property. This intersection does not currently have any pedestrian features (curb cuts, crosswalks or pedestrian signal heads). In the future, this intersection could provide an alternative to crossing Ironbound Road at Monticello Avenue.

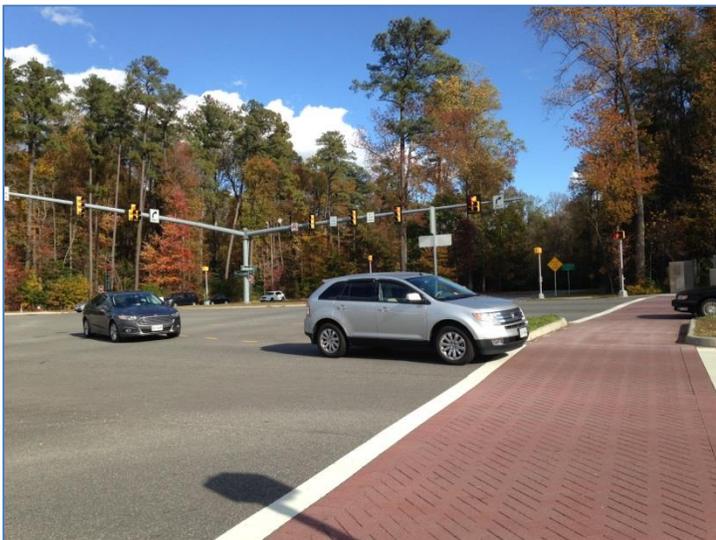


Figure 7

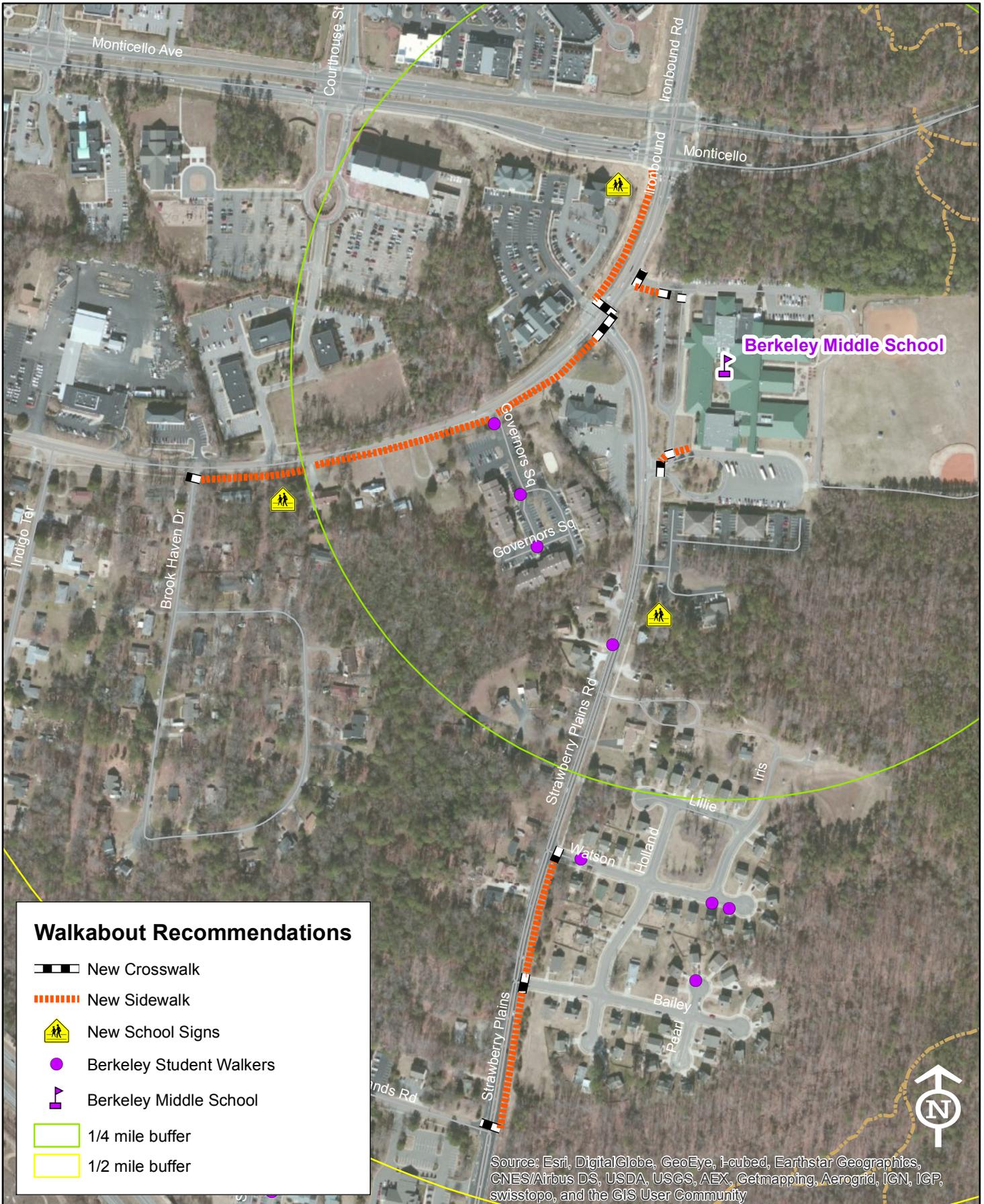
Figure 7. Intersection of Monticello Avenue and Ironbound Road, looking east. This wide, auto-oriented intersection has pedestrian signal heads with countdown timers, brick-stamped crosswalks and median refuge islands on all approaches. Changing the signal times may decrease pedestrian delay.



Figure 8

Figure 8. Bus loop entrance and exit. This report recommends adding a high visibility crosswalk between the curb ramps to complete the pedestrian network and remind drivers to yield to pedestrians.

Berkeley Middle School



Walkabout Recommendations

-  New Crosswalk
-  New Sidewalk
-  New School Signs
-  Berkeley Student Walkers
-  Berkeley Middle School
-  1/4 mile buffer
-  1/2 mile buffer

Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Note: The aerial photo in this map was taken before the most recent sidewalk improvements in front of Berkeley Middle School.

