



Enhanced Walkabout Summary Report

Introduction

On September 26, 2013, 10 stakeholders at Glebe Elementary School (Glebe ES) in Arlington, Virginia met to examine the walking and bicycling network around the school and identify potential improvements to include in a Transportation Alternatives Program grant. The stakeholders included:

1. Ingrid Clark, Assistant Principal, Glebe Elementary School
2. Jen Thompson, President, Glebe Elementary School PTA
3. Ginger Brown, President, Waverly Hills Civic Association
4. Scott Prisco, Director of Design and Construction, Arlington Public Schools
5. Debbie DeFranco, Supervisor, Health, Physical and Driver Education, Arlington Public Schools
6. Kyle Lukucs, SRTS Coordinator, Arlington Public Schools
7. David Goodman, Pedestrian and Bicycle Coordinator, Arlington County
8. Stephanie Taylor, Transportation Engineering and Operations, Arlington County
9. Sean Bryson, Officer, Arlington Police Department
10. Tom Tasselli, ARL/FFX Plan Coordinator, VDOT

The meeting lasted for approximately two hours and included observation of school arrival and a guided walk of the school campus and nearby streets. The table below summarizes existing conditions along key streets included in the guided walk.

Walking Routes

Map Key	Route	Speed limit	Road Width ¹	No lanes each direction	Sidewalk width and continuity, if present ²
1	School access drive	No posted limit	30 ft.	2	South side, 6 ft. wide
2	18th Street N. (N.. Wakefield Street. to N. Glebe Road.)	25 mph	26 ft.	1	North side, 4 ft. wide
3	N. Glebe Road (N. Woodstock Street to 17 th Street N.)	30 mph (25 mph in school zone when beacon flashing)	48 ft.	2	Both sides, 5 ft. wide

1. Street and sidewalk widths are approximate



Existing conditions

School location. Glebe ES is located at 1770 N. Glebe Road in Arlington, Virginia, approximately one mile north of the Ballston neighborhood. The school property does not actually connect with N. Glebe Road; however, a driveway providing access to the school has been constructed through the property of Capital Life Church, which borders N. Glebe Road and is adjacent to the school.

In October 2013, enrollment at Glebe ES was approximately 563 students. Three hundred eighty-eight (388) students live within one mile of the school and 128 students live between one and two miles of the school.

Student travel to school mode and processes. Approximately 70% (394) of Glebe ES students live within the effective walk zone, which is the area around the school where students are not eligible APS bus service. APS bus service is provided to student who live more than 1 mile from Glebe ES or must cross a busy road or other hazard on their route to school. ([Click here](#) for a map showing the walk zone for Glebe ES.) Of the students who live within the effective walk zone, approximately 40% (158) regularly walk or bike to school.

Approximately 30% (169) of Glebe ES students live outside the effective walk zone and are eligible for APS bus service. Of these, approximately 70% (118) regularly ride the school bus to/from school. Two school buses serve Glebe ES, entering the school campus from N. Glebe Rd. via the school access drive and a designated bus lane in the school parking lot, and then dropping students off near the front entrance of the school.

Crossing guards assist students walking and bicycling to school who cross streets at the following locations:

- N. Glebe Road and 18th Street. N.
- 1827 N. Culpepper Street (mid-block crossing)
- N. Abingdon Street and 16th Street

Members of the Glebe ES Student Safety Patrol also assist students crossing the school access drive (Figure 1).

SRTS program support. Glebe ES's SRTS program uses local and VDOT-provided resources for its activities and programs. To date, the school has received grants to support SRTS, has participated in Walk to School Day and Bike to School Day, and supports ongoing SRTS activities.

Grants to Support SRTS

- Fall 2013—VDOT awarded Arlington Public Schools funding for an SRTS Division Coordinator position.
- Fall 2013—VDOT awarded Glebe ES a QuickStart Mini-grant for the school's Walk, Ride & Roll Program.
- Fall 2013—Arlington County applied for a VDOT Revenue Sharing Program grant for pedestrian improvements near Glebe ES.



Walk/Bike to School Day Participation

Glebe Elementary School registered five walk and bike to school events on the Walk Bike to School Day website.

- October 2009—Walk to School Day
- October 2011—Walk to School Day
- May 2012—Bike to School Day
- October 2012—Walk and Roll to School Day
- May 2013—Bike to School Day
- October 2013—Walk, Ride and Roll to School!

Ongoing Activities

- Student Safety Patrol, grades 5-6.
- Walk, Ride & Roll Program—Glebe ES's Walk, Ride & Roll Program encourages students to walk or roll to school every Tuesday. The program is part of a PTA-sponsored campaign called "BFF" (Be Your Body's Best Friend Forever) that focuses on healthy living by encouraging good fitness habits and a healthy diet.

Walkabout Summary

Walkabout participants divided into two groups, each observing dismissal from one of these two locations: 1) the school parking lot entrance and 2) the N. Glebe Road and 18th Street N. intersection. Each group then walked separately along the same route. They crossed N. Glebe Road at the 18th Street N. intersection, walked up 18th Street N. to N. Wakefield Street, walked along the west side of N. Glebe Road to N. Woodstock Street, and returned to the school.

Participants met after the walkabout to exchange observations and discuss potential projects to include in a grant application. Afterward, a smaller group walked along a shared use path to N. Culpepper Street and through school property to 20th Street and again to N. Culpepper Street.

Key Barriers and Issues

18th Street N. and N. Glebe Road Intersection

The 18th Street N and N. Glebe Road intersection is the primary crossing point for students living in the Waverly Hills neighborhood east of the school. The intersection is also the only access point for motorists traveling to and from the school. Issues at the intersection include:

- *Concrete median.* The concrete median on N. Glebe Road extends into the crosswalk, forcing some pedestrians, such as those with strollers and mobility impairments, out of the crosswalk and into oncoming traffic to navigate around the median nose (Figure 2).



- *Curb ramps.* A single curb ramps serves each corner instead of the preferred one curb ramp per crossing. As a result, the curb ramps are oriented at a diagonal to the crosswalk, forcing pedestrians into motor vehicle travel lanes (i.e., oncoming traffic). The curb ramps also do not meet current ADA guidelines, which require truncated dome detectable warnings (Figure 3).
- *Signal timing.* The intersection is signalized; however, the signal does not provide enough time during school arrival and dismissal times for motor vehicles to exit the school access drive onto N. Glebe Road. Consequently, there are often significant back-ups along the school access drive (Figure 4). The signal is maintained and operated by Arlington County.

N. Glebe Road

Many students who live within the walk zone must travel along or across N. Glebe Road when using the most direct route to school; however, N. Glebe Road is perceived as dangerous for pedestrians and bicyclists. Issues include:

- *Traffic speeds.* The speed limit on N. Glebe Road near the school is 25 mph within the school zone when the school zone speed limit beacons are flashing (8:30 a.m. to 9:30 a.m., 3:30 p.m. to 4:30 p.m.) and 30 mph at other times; however, there is a perception that traffic regularly exceeds these limits, particularly southbound traffic, which travels down a relatively steep grade as it approaches the principal school crossing at 18th Street N. and N. Glebe Road.
- *Traffic volumes.* VDOT classifies N. Glebe Road (designated as State Routes 120) as a principal arterial. In 2012, the average annual daily traffic (AADT) on N. Glebe Road between Washington Blvd. and Lee Highway was 24,000.
- *Sidewalks.* The sidewalks on N. Glebe Road are approximately 5 ft. wide; however, utilities and vegetation narrow the clear width of the sidewalk to less than 5 ft. at multiple locations near the school.
- *Buffer between pedestrians and motor vehicle traffic.* N. Glebe Road lacks bicycle lanes, shoulder edge lines, and on-street parking to buffer pedestrians from traffic. A landscaped buffer is provided along much of the roadway in the vicinity of the school; however, it is relatively narrow (1-3 ft. wide), and motor vehicle traffic tends to drive close to the curb due to relatively narrow outside travel lanes (11 ft. wide) (Figure 5).
- *School zone speed limit sign and flashing beacon.* The school zone speed limit sign and flashing beacon for southbound traffic is located on a curve approximately 350 feet north of the 18th Street N. intersection. This location has limited visibility for motorists and may not provide motorists with sufficient warning of the upcoming school crossing (Figure 6).

18th Street N, and the intersection with N. Wakefield Street

18th Street N. lies along a primary route for students traveling to and from Glebe ES from the Waverly Hills neighborhood. Issues include:



- *No sidewalk on the south side between N. Wakefield St. and N. Glebe Rd.* Consequently, pedestrians who use this route and live south of 18th Street N. must either walk in the roadway or cross 18th Street N. twice--once at N. Wakefield Street and once at N. Glebe Road. The second crossing is necessary because the crossing guard stationed at 18th Street N. and N. Glebe Road only assists students crossing Glebe Road on the southern leg of the intersection (Figure 7).
- *Sightlines between motorists and pedestrians at intersection.* The poor sightlines at the intersection are a consequence of topography—the intersection is at the crest of a hill—and cars parked too closely to the intersection, blocking both motorists' and pedestrians' views.
- *Crossing treatment.* None of the crosswalks is striped. Consequently, motorists may be less likely to anticipate pedestrians at this crossing (Figure 8).

Campus Pedestrian Access

Pedestrians access the Glebe ES campus from three primary points: the school access driveway, an off-campus pathway between the Culpepper Street and the school property, and a pathway connection to 20th Street. Issues include:

- *No sidewalk on church side of school access drive.* As a result, pedestrian must use the sidewalk on the south side of the school access drive and then crossover to the north side using the crosswalk at the entrance to the school parking lot. (Figure 9)
- *No accessible route on north side of school access drive crosswalk.* There is an accessible route from the south side of the school access drive but it is considerably longer. (Figure 10).
- *Curb cuts in school access drive sidewalk.* Some drivers attempt to avoid the backups when exiting onto N. Glebe Road by taking a short cut through the vacant lot on the southwest corner of the intersection. This maneuver is feasible due to wide curb cuts on the school access drive (Figure 11) and N. Glebe Road. In both cases, motorists cross sidewalks that are heavily used by student pedestrians during arrival and dismissal.
- *Off-campus pathway maintenance.* The off-campus path connection between Culpepper Street and the school property is not regularly swept and vegetation encroaches on the pathway's clear-width (Figure 12).
- *The off-campus path connection between Culpepper Street and 20th Street is not an accessible route because a portion of it includes shallow steps leading down to the street* (Figure 13).
- *On-campus pathway maintenance.* On-campus walkways are not regularly swept (Figure 14).



Recommendations

Arlington Public Schools applied for a VDOT funding assistance through the Revenue Sharing Program. The application included:

- Constructing a sidewalk, curb, and retaining wall on the south side of 18th Street N. between N. Glebe Road and N. Wakefield Street.
- Reconstructing the curb ramps at the N. Glebe Road and 18th Street N. intersection.
- Adding an exclusive right-turn lane at the exit to the school access drive.
- Closing the curb cuts on the south side of the school access drive.
- Adding school crossing warning signage, marked crosswalks, and ADA compliant curb ramps at 18th Street N. and N. Wakefield Street intersection.

Additional Infrastructure. These additional infrastructure projects address concerns that were raised by the walkabout team but were not included in the Revenue Sharing Program application.

- N. Glebe Road between N. Woodstock Street and 17th Street N. To widen the buffer between pedestrians and moving vehicles, slow motor vehicle traffic, and increase awareness of the school zone.
 - Restripe the roadway with 10-ft-wide travel lanes and edge lines.
 - Move the school zone speed limit sign and flashing beacon on the west side of N. Glebe Road north to coincide with the advanced traffic control sign at 20th St.
- 18th Street N. and Wakefield Street intersection. To improve sightlines between pedestrians and motor vehicle drivers:
 - Expand the “no parking” zone on the intersection approaches.
- Glebe Campus Access. To improve campus pedestrian access:
 - Install a curb ramp on the north side of the school access drive crosswalk.
 - Investigate the potential to provide an accessible pedestrian pathway between Culpepper Street and 20th Street.

Non-infrastructure. Non-infrastructure recommendations support Glebe ES’s overall SRTS program and complement infrastructure recommendations. Some of these non-infrastructure recommendations may be funded through local resources, such as the school’s PTA, or through VDOT resources such as the QuickStart Mini-grant program or a VDOT non-infrastructure grant.

- Request that Arlington Police Department conduct additional speed enforcement on N. Glebe Road in the vicinity of the school.
- Regularly maintain on-campus pathways, including sweeping away debris.
- Regularly maintain off-campus pathways, including trimming foliage and sweeping away debris.
- Track participation in the Walk, Bike and Roll Program (and the BFF campaign) to determine the program’s impact on students.

- Conduct Student Travel Tallies once a year to determine the effect of planned programs.
- Administer the Parent Survey once a year to determine changes in parent attitudes about walking and bicycling to school and any other areas where action is needed.
- Continue participation ongoing SRTS programs and participation in International Walk to School Day and National Bike to School Day.

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/bah3p1zlg9z8cq/ro_jqQKaoK.



Figure 1 Members of the Glebe ES Student Safety Patrol also assist students crossing the school access drive.



Figure 2 The concrete median on N. Glebe Road extends into the crosswalk, forcing some pedestrians, such as those with strollers and mobility impairments, out of the crosswalk and into oncoming traffic to navigate around the median nose.



Figure 3 A single curb ramps serves each corner instead of the preferred one curb ramp per crossing. As a result, the curb ramps are oriented at a diagonal to the crosswalk, forcing pedestrians into motor vehicle travel lanes (i.e., oncoming traffic). The curb ramps also do not meet current ADA guidelines, which require truncated dome detectable warnings.



Figure 4 There are often significant back-ups along the school access drive due, in part, to the way the signal is timed at the N. Glebe Road intersection.



Figure 5 The sidewalks on N. Glebe Road are approximately 5 ft. wide; however, utilities and vegetation narrow the clear width of the sidewalk to less than 5 ft. at multiple locations near the school. N. Glebe Road lacks bicycle lanes, shoulder edge lines, and on-street parking to buffer pedestrians from traffic. A landscaped buffer is provided along much of the roadway in the vicinity of the school; however, it is relatively narrow (1-3 ft. wide), and motor vehicle traffic tends to drive close to the curb due to relatively narrow outside travel lanes (11 ft. wide)



Figure 6 The school zone speed limit sign and flashing beacon for southbound traffic is located on a curve approximately 350 feet north of the 18th Street N. intersection. This location has limited visibility for motorists and may not provide motorists with sufficient warning of the upcoming school crossing.



Figure 7 There is no sidewalk on the north side of the school access drive. Consequently, pedestrians who use this route and live south of 18th Street N. must either walk in the roadway or cross 18th Street N. twice--once at N. Wakefield Street and once at N. Glebe Road. The second crossing is necessary because the crossing guard stationed at 18th Street N. and N. Glebe Road only assists students crossing Glebe Road on the southern leg of the intersection



Figure 8 At the intersection of 18th Street N. and N. Wakefield Street, none of the crosswalks is striped. Consequently, motorists may be less likely to anticipate pedestrians at this crossing. Also, vehicles sometimes park too close to the intersection, making it more difficult for pedestrians and motorists to see each other.



Figure 9 There is no sidewalk on the school side of the school access drive. As a result, pedestrian must use the sidewalk on the south side of the school access drive and then crossover to the north side using the crosswalk at the entrance to the school parking lot



Figure 10 There is no curb ramp on the north side of the school access drive.



Figure 11 Curb cuts provide access to abandoned property, which drivers exiting Glebe ES sometimes use as a shortcut.



Figure 12 The pathway connection between Culpepper Street and the school property is covered with debris, and bushes narrow the path's clear width.



Figure 13 The pathway connection between Culpepper Street and 20th Street is not accessible.



Figure 14 Debris on a campus pathway.

Glebe ES - Existing Conditions



Glebe ES - Walkabout Route



Glebe ES - Walkabout Recommendations

Legend

- Construct/Improve Sidewalk
- Stripe Crosswalk
- Narrow Lanes
- Construct/Reconstruct Curb Ramp
- Add/Relocate Signage

