

## James K. Polk Elementary School Walkabout Report

### Introduction

On May 10, 2016 stakeholders at James K. Polk Elementary School in Alexandria, 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 bicycling environment and increasing the number of students safely walking and bicycling to school.

The stakeholders participating in the Walkabout included school administrators, school division personnel, crossing guards, parents, members of the Alexandria Bicycle and Pedestrian Advisory Committee, City of Alexandria Transportation and Environmental Services staff, and Virginia Safe Routes to School program staff. Names of the Walkabout team members are listed at the end of the report. The two-hour meeting included an observation of school dismissal and a brief walking tour of the streets around the school.



Figure 1 – James K. Polk Elementary School  
Image: Alexandria City Public Schools

### Existing Conditions

#### School location

James K. Polk Elementary School is located at 5000 Polk Avenue in Alexandria and is part of the Alexandria City Public School system. The school is bordered by Polk Avenue to the north, Richenbacher Avenue to the south, N. Pickett Street to the east, and N. Pegram Street to the west.

The majority of students that attend the school live south of Polk Avenue. The area south of Polk Avenue is primarily residential and has many of the basic features that support walking and biking such as a relatively well-connected, two-way street grid with buffered sidewalks. These neighborhood streets can feel comfortable to bicyclists and have a growing network of bicycle facilities. The area north of the school is also residential, but it is less conducive to walking and bicycling due to its less dense street network and steep topography on the major north-south roads, N. Pegram Street and N. Latham Street.



## **James K. Polk Elementary Student Travel Modes**

James K. Polk Elementary serves 764 students in grades K through 5. Of the families surveyed 62 percent of children live within one mile of the elementary school, and of those 46 percent arrive to school by walking and less than 1 percent arrive by bicycle.<sup>1</sup> This suggests the potential to increase the amount of children walking and, especially, bicycling to school.

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<sup>1</sup> Safe Routes to School Parent Surveys, conducted September 2014.  
James K. Polk Elementary Walkabout Report | June 2016



## Road Information Table

Street Name	Speed limit	Road Width <sup>1</sup>	No. of travel lanes in each direction	Road Classification and Network Connectivity	Sidewalk width and continuity <sup>3</sup>
<b>Polk Avenue</b> (N. Pelham Street to N. Latham Street)	25 mph	40 feet	1	Local <sup>2</sup> ; parallels Taney Avenue	Continuous 4-foot-wide sidewalks with grass buffer on south side of the street; missing sidewalks on the north side between Rapidan Court and N. Pegram Street and N. Pelham Street and Palmer Place
<b>N. Pegram Street</b> (Taney Avenue to Polk Avenue)	25 mph	30 feet	1	Residential collector <sup>3</sup> ; main north-south connection from Taney Avenue to Seminary Road	Continuous 4-foot-wide sidewalks with grass buffer on both sides of the street
<b>Richenbacher Avenue</b> (N. Pelham Street to N. Pickett Street)	25 mph	26 feet	1	Local; parallels Taney Avenue from N. Van Dorn Street to N. Pickett Street	Continuous 4-foot-wide sidewalks with grass buffer on both sides of the street
<b>N. Pickett Street</b> (Taney Avenue to Polk Avenue)	25 mph	40 feet	1	Local; parallels N. Pegram Street from Holmes Run to Polk Avenue	Continuous 4-foot-wide sidewalks with grass buffer on both sides of the street
<b>N. Latham Street</b> (Taney Avenue to Polk Avenue)	25 mph	28 feet	1	Local; parallels N. Pegram Street, but used in conjunction with Peacock Avenue to access N. Jordan Street	Continuous 4-foot-wide sidewalks with grass buffer on both sides of the street
<b>Taney Avenue</b> (N. Pegram Street to N. Latham Street)	25 mph	42 feet	1	Local; main east-west connection from N. Van Dorn Street to N. Jordan Street	Continuous 4-foot-wide sidewalks with grass buffer on both sides of the street

1. Road width measurements are approximate and represent a general cross section.
2. The primary purpose of Local streets is to provide direct access to individual homes, mixed use shopping and businesses areas, and similar traffic destinations that do not have direct access from higher classified facilities. Local traffic should be encouraged while cut through traffic should be limited and discouraged. These streets connect local properties to collector streets and, in turn, to higher classified facilities. (<https://www.alexandriava.gov/localmotion/info/default.aspx?id=14574>)
3. Residential Collectors provide direct service to residential areas, local parks, neighborhoods, businesses and schools by distributing traffic to and from local streets and routing it to higher classified facilities. (<https://www.alexandriava.gov/localmotion/info/default.aspx?id=14574>)
4. Sidewalk widths are approximate.

## Pedestrian Infrastructure

The majority of the streets within a quarter mile of the school have continuous sidewalks of both sides with the notable exception of Polk Avenue, which only has continuous sidewalks on the south side. This avenue borders the north side of the school, where the main entrance is located. During arrival and dismissal, a significant number of parents park on the north side of the street and exit their vehicles with their children directly into the roadway. In addition, no marked crosswalk is provided to cross Polk Avenue at the front entrance of the school.

There are no signalized intersections within a half mile of the school. The majority of intersections near the school are 2-way stop controlled. The intersections of N. Pegram Street/Taney Avenue and N. Latham Street/Taney Avenue are both 4-way stop controlled. Most intersections have curb ramps, but the ramps do not meet current ADA guidelines, because they do not have the required slopes and landings, nor truncated dome detectable warnings.

Marked crosswalks are provided at the following intersections near the school, including:

- N. Pegram Avenue and Polk Avenue
- N. Pickett Street and Polk Avenue
- N. Pickett Street and Taney Avenue
- N. Pegram Street and Taney Avenue
- N. Pegram Street and Richenbacher Avenue
- N. Latham Street and Polk Avenue
- N. Latham Street and Taney Avenue

Additionally, pedestrian islands have been installed at the crossing of N. Pickett Street at Polk Avenue and the crossing of Rapidan Court at Polk Avenue. These provide a refuge for crossing and discourage U-turns on Polk Avenue near the school. There is also a curb extension on the southwest corner of Polk Avenue and N. Pegram Street that improves the visibility of and reduces the crossing distance for pedestrians. Speed cushions along N. Pegram Street between Richenbacher Avenue and N Pickett Street moderate vehicle speeds along the western edge the school property.

## Bicycle Infrastructure

James K. Polk Elementary provides bicycle and skateboard parking near the main entrance of the school. On-street bicycle lanes are provided on Taney Avenue between N. Jordan Street and N. Latham Street. This bicycle facility will be extended west to N. Pegram Street and Taney Avenue when Taney Avenue is resurfaced in the summer of 2016. Connections to the Holmes Run Trail are provided at the south end of N. Pickett Street, N. Latham Street, and N. Pegram Street, approximately a half mile from the school.



Figure 2 – Bicycle and skateboard racks in front of the school.

## Walkabout Summary

### Dismissal Observations

The Walkabout Team observed the 15-minute dismissal process in separate groups from three locations. Group 1 was stationed directly in front of the school at the intersection of Polk Avenue and Rapidan Court, Group 2 observed the intersection of Polk Avenue and N. Pegram Street, and Group 3 watched the intersection of Polk Avenue and N. Pickett Street. See Figure 3.

Students at James K. Polk Elementary School are dismissed at 2:35 p.m. Buses pick students up in the driveway in front of the main school entrance. Parents park on both sides of Polk Avenue to pick up their children, some several hundred feet down the block past the intersection with N. Pickett Street. Many of these parents exit their cars and walk to the school to meet their children. Most students walking home head west on Polk Avenue and cross at the intersection with N. Pegram Street to cross where the crossing guard is stationed. In the mornings, there is also a crossing guard at the intersection of Taney Ave and N. Pegram Street.

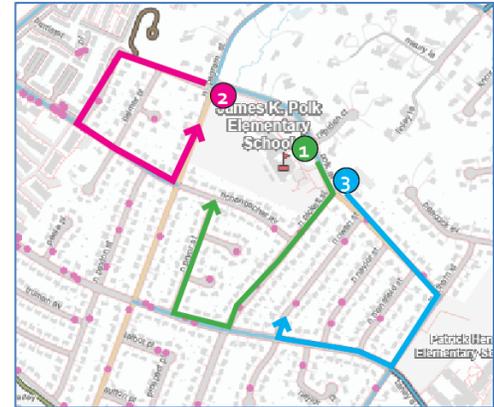


Figure 3 - Dismissal Observation Locations and Walkabout Routes

Members of the Walkabout Team observed several students and parents crossing Polk Avenue wherever it was most convenient for them, often between parked cars. Multiple vehicles made illegal U-turns on Polk Ave and appeared to be traveling faster than the 15 mph posted speed limit. At the intersection of Polk Avenue and N. Pickett Street, most drivers yielded to students and parents using the crosswalk, but the setback of the crosswalk and the wide approach angle meant that most drivers did not see pedestrians until after they began making their turn from Polk Avenue toward N. Pickett Street, thus stopping very close to the marked crosswalk.

Following the dismissal observation, the groups conducted walking audits along three routes as shown in Figure 3. Their observations and recommendations are presented below. Referenced photographs (figures) are at the end of this report.

### Assessment of Barriers, Issues and Opportunities

James K. Polk Elementary School is located in an area with many of the basic components required to create a good walking and bicycling environment. These components include a relatively well-connected network of neighborhood streets, buffered sidewalks, some bicycling facilities, and street trees.

The following sections identifies specific issues and recommendations to address them by location, followed by suggestions of ways James K. Polk Elementary can encourage more students to walk and bicycle to school and help them develop the skills they need to do it safely.



## Key Barriers and Issues

The key barriers and issues identified by the Walkabout Team and Virginia SRTS Program staff include the following:

### Polk Avenue (between N. Pegram Street and N. Pickett Street)

- **Speeding and U-turns** – Members of the Walkabout Team observed people driving on Polk Avenue during dismissal at speeds that appear to exceed the posted speed limit for the school zone. Additionally, some drivers make U-turns on this roadway, despite posted No U-turn signs. This is dangerous due to the significant amount of children crossing the street to enter and exit cars parked on the north side of the road.
- **Gap in the sidewalk network** - There is no sidewalk on the north side of Polk Avenue across from the school. This means people who park on this side of the road must walk in the roadway as shown in Figure 5.
- **No marked crosswalk at school entrance** – There is no marked crosswalk from the school entrance to the north side of Polk Avenue. Without a designated path, people cross randomly in between the vehicles parked on Polk Avenue (see Figure 6). The distance between marked crosswalks along Polk Avenue is 1,200 feet.

### Intersection of Polk Avenue and N. Pickett Street

- **Poor visibility** – At this location people driving eastbound have difficulty seeing children in the crosswalk on the south leg of the intersection due to the parked cars and the angle of the approach (see Figure 7).
- **Curb ramps are not fully ADA accessible** – The ramps on the south side of this intersection do not have detectable warning pads.

### Intersection of Polk Avenue and N. Pegram Street

- **Intersection geometry** –The pedestrian network is only complete on the south and west sides of this offset intersection. The absence of marked crosswalks and wide curb radii on the north and east sides of the intersection creates a large area for motor vehicle travel.

### Intersection of Polk Avenue and N. Latham Street

- **Poor visibility** – There is a large shrub, utility pole and low hanging tree near the southwest corner of the intersection that restricts visibility.
- **Curb ramps** – There are no curb ramps on the east side of intersection. There is a single diagonal curb ramp on each corner of the west side of the intersection that do not meet ADA standards as shown in Figure 9.
- **Marked crosswalks** - There are crosswalks marked with faded, two parallel lines on each leg of the intersection.

### Polk Avenue (between N. Pelham Street and Palmer Place)

- **Gap in the sidewalk network** - There is no sidewalk on the north side of the road between these two cross streets to the west of the school.



## N. Pickett Street (between Polk Avenue and Taney Avenue)

- **Wide roadway** - The roadway is 42 feet wide with no pavement markings. Houses along the street have driveways, so on-street parking is not highly used which creates an environment that encourages drivers to speed to speed.
- **Richenbacher Avenue intersection** – Eastbound traffic on Richenbacher is controlled by a yield sign which does not require motorists to stop before turning onto N. Pickett Street as they travel across the crosswalk.

## Taney Avenue (between N. Latham Street and N. Pegram Street)

- **N. Latham Street intersection** - The Walkabout Team noted that drivers frequently make illegal U-turns at this intersection which is located next to Patrick Henry Elementary School (Figure 10).
- **Faded pavement markings** – The pavement markings including crosswalks are worn and faded on this section of the road as shown in Figure 11. The markings will be restored when street is resurfaced summer 2016.
- **Gap in bicycle facilities** – There are no bicycle lanes to connect to the bicycle facilities on the section of Taney Avenue further east. When this road is resurfaced in summer 2016 bicycle lanes will be added to this section of Taney Avenue.
- **Nearside bus stops** – The bus stops located on this stretch of road are located on the nearside of the intersection. Nearside stops can be dangerous on a road with one travel lane in each direction. Drivers may choose not to wait for the bus to depart the bus stop and instead go around the bus to continue through the intersection. In doing this, drivers may not see pedestrians (including those heading to or leaving the bus), in part because the stopped bus can obstruct the view.

## Intersection of N. Pegram Street and Richenbacher Avenue

- **Traffic control** – This is a busy intersection close to the school with only a two-way stop control for traffic on Richenbacher Avenue. As noted in the Road Information Table on page 3 drivers use N. Pegram Street for through travel between Seminary Road and Taney Avenue or Holmes Run Parkway, i.e., some travel is unrelated to the school.



## Infrastructure (Engineering) Recommendations

A glossary of engineering recommendations included below begins on page 16 of this report.

In general, the following issues were noted along all of the Walkabout routes, and should be addressed throughout the area around the school:

- **Curb ramps** – Few curb ramps at intersections around the school meet current ADA guidelines for accessibility. Most curb ramps lack adequate landing areas and detectable warning pads. While not required, two perpendicular curb ramps on each corner are preferred over the single diagonal curb ramp which is present at many corners. The two ramps orient pedestrians in the direction of the crosswalk, rather than the middle of the intersection.
- **Crosswalks** – Many crosswalks around the school are marked by two parallel lines. These crosswalks are not highly visible, particularly at night. High visibility crosswalks with bar markings are considered a best practice for crosswalks near schools and along known school walking routes.
- **Sidewalks** – The sidewalk network in the neighborhood around James K. Polk Elementary is generally in good condition, with 4 foot sidewalks and 2 foot buffers between the sidewalks and the roadway (see Figure 4). While 4 foot sidewalks meet the minimum guidelines, wider sidewalks allow for more sociable walking and for pedestrians to more easily pass each other when travelling in opposite directions. There are several areas where trees have caused the sidewalk to heave, and overgrown landscaping narrows the clear walk zone. A more thorough audit is recommended to identify the exact locations and course of action to address these issues in the short term. There are also a few locations where sidewalk is missing entirely, as noted below.
- **Traffic control** – Most of the intersections near the school are stop controlled, with the majority having two-way stop control rather than four-way stop control. A four-way stop benefits pedestrians by requiring drivers to stop and give the right of way to pedestrians at all marked and unmarked crossings at an intersection.<sup>2</sup> Where four-way stops are not warranted, other intersection treatments like curb extensions, raised crosswalks and mini-traffic circles should be considered to calm the traffic traveling through the intersection.

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<sup>2</sup> Crash Reductions Factors cite between 14.5% and 77% reduction in all crash types when converting from a 2-way to 4-way stop. See the CMF Clearinghouse at [http://www.cmfclearinghouse.org/study\\_detail.cfm?stid=222](http://www.cmfclearinghouse.org/study_detail.cfm?stid=222).



Polk Avenue (between N. Pegram Street and N. Pickett Street)		
Issue	Timeframe <sup>3</sup>	Map ID
<p><b>Recommendation</b></p> <p><b>Speeding and U-turns</b> –Explore the possibility of installing chicanes on Polk Avenue to moderate traffic speeds in front of the school. This would also further discourage people driving from making U-turns by narrowing the roadway at key points.</p>	Medium / Long	1
<p><b>Gaps in the pedestrian network</b> –While installing a sidewalk on the north side of Polk Avenue would be optimal, the grade of the land adjacent to the roadway and other factors preclude this option in the near term. Due to the topography, a short term painted sidewalk and long term sidewalk construction is recommended. This buffer could be linked to a marked crosswalk to enable safer crossings of Polk Avenue near the entrance to the school. This crosswalk would benefit from the addition of a pedestrian refuge island. The island would help calm traffic and make the crossing more visible to motorists. Installation of a midblock pedestrian crossing may require the removal of parking spaces.</p>	Medium	2
<p><b>Unclear school zone</b> – A gateway treatment may be appropriate at the intersections of Polk Avenue with N. Pegram Street and N. Pickett Street. This would announce to drivers they are entering a school zone and could be further supported by additional traffic calming treatments. Similar programs such as the London and New York City Neighborhood Slow Zone programs use gateway treatments to designate areas where only slow speeds are suitable. For more information, see the Alexandria School Zone Treatments document which provides a menu of design treatments.</p>	Medium / Long	3
<p><b>Impractical parking regulations</b> – Walkabout participants mentioned wanting to change the parking restrictions in front on the school. Members of the group felt the current restrictions were not enforced regularly, and that it would be beneficial to allow long term parking along the north side of Polk Avenue at all times. This would reduce the number of children and parents crossing Polk Avenue during arrival and dismissal.</p>	Short	4

<sup>3</sup> Timeframe:

Short – within next 3-5 months

Medium – within next 6-12 months

Long – within 1-3 years

Ongoing – as appropriate based on other work



Intersection of Polk Avenue and N. Pickett Street		
Issue Recommendation	Timeframe <sup>4</sup>	Map ID
<b>Poor visibility</b> – Restrict parking on the south side for the eastbound approach near the intersection to improve sight lines.	Short	5
<b>Non-ADA compliant curb ramps</b> – All curb ramps at the intersection should be made ADA compliant with the appropriate slopes, landing areas and detectable warning surfaces.	Ongoing	5

Intersection of Polk Avenue and N. Latham Street		
Issue Recommendation	Timeframe	Map ID
<b>Poor visibility</b> – Work with the property owner with the low-hanging tree and shrub to develop a solution that would improve visibility. Constructing curb extensions in the parking lane on N Latham Street would also improve visibility, calm traffic and shorten the crossing distance for pedestrians.	Short / Medium	6
<b>Low visibility crosswalks</b> – Install high visibility crosswalk markings on all three legs of the intersection. These crosswalks will benefit community members walking to the park and community center at Patrick Henry Elementary as well as students and their families walking to James K. Polk Elementary.	Short	6
<b>Missing and non-ADA compliant curb ramps</b> – Install new ADA compliant curb ramps on the east side of the intersection and upgrade the curb ramps on the west side of the intersection to meet ADA guidelines.	Ongoing	6

<sup>4</sup> Timeframe:

Short – within next 3-5 months

Medium – within next 6-12 months

Long – within 1-3 years

Ongoing – as appropriate based on other work



Polk Avenue (between N. Pelham Street and Palmer Place)		
Issue Recommendation	Timeframe	Map ID
<b>Gap in the pedestrian network</b> - Investigate the feasibility of constructing sidewalk to fill in this gap in the sidewalk network and connect to the walking path and nearby multi-family housing complex.	Medium / Long	7

N. Pickett Street (between Polk Avenue and Taney Avenue)		
Issue Recommendation	Timeframe <sup>5</sup>	Map ID
<b>Roadway design encourages speeding</b> – Convert the relatively unused space for on-street parking to a bike lane on the uphill side of N. Pickett Street to calm traffic by visually narrowing the roadway. This would also create a bicycle route to the school by connecting to the bike lanes being striped on Taney Avenue in summer 2016. Adding wide parking lanes would be another option to narrow the travel lanes and traffic calm the street, but would not enhance the bicycle network.	Short / Medium	8
<b>Insufficient traffic control on Richenbacher Avenue intersection</b> – While this intersection does not meet MUTCD warrants for traffic volumes, it is near the southeast corner of the school property and as part of the overall plan to create a safer school zone, replacing the existing yield sign with a stop sign is recommended. <sup>6</sup>	Medium / Long	9

<sup>5</sup> Timeframe:

Short – within next 3-5 months

Medium – within next 6-12 months

Long – within 1-3 years

Ongoing – as appropriate based on other work

<sup>6</sup> "Section 2B.06 Stop Sign Applications," *Manual on Uniform Traffic Control Devices*.

<http://mutcd.fhwa.dot.gov/htm/2009r1r2/part2/part2b.htm>



Taney Avenue (between N. Latham Street and N. Pegram Street)		
Issue Recommendation	Timeframe	Map ID
<b>Faded pavement markings and gap in the bicycle network</b> – The faded markings will be addressed and bicycle lanes will be added when the street is resurfaced in the summer of 2016.	Short	10
<b>Lesser preferred bus stop placement</b> - Inquire with transit authorities about relocating bus stops to the farside of intersections. This would improve visibility of pedestrians and also benefit transit operations, as it's easier for buses to reenter traffic at midblock or farside stops.	Medium / Long	10
<b>Illegal driver behavior at N. Latham Street intersection</b> - A traffic circle would calm traffic and better regulate U-turn movements. Further study would be necessary to determine if adequate space is available and whether bus operations would preclude use of this traffic calming technique. Alternately, adding curb extensions would discourage U-turns and shorten pedestrian crossing distances.	Medium / Long	11

Intersection of N. Pegram Street and Richenbacher Avenue		
Issue Recommendation	Timeframe <sup>7</sup>	Map ID
<b>Insufficient traffic control on Richenbacher Avenue intersection</b> – A traffic study should be conducted to see if a four-way stop control would be appropriate. Section 2B.04.09 of the MUTCD considers school walking routes a condition that would warrant additional stop control in the direction in conflict with pedestrian crossings. <sup>8</sup> If a four-way stop sign is not installed, other intersection treatments such as curb extensions, a raised crosswalk or a mini-traffic circle should be used to calm traffic and improve pedestrian safety.	Medium	12

<sup>7</sup> Timeframe:

Short – within next 3-5 months

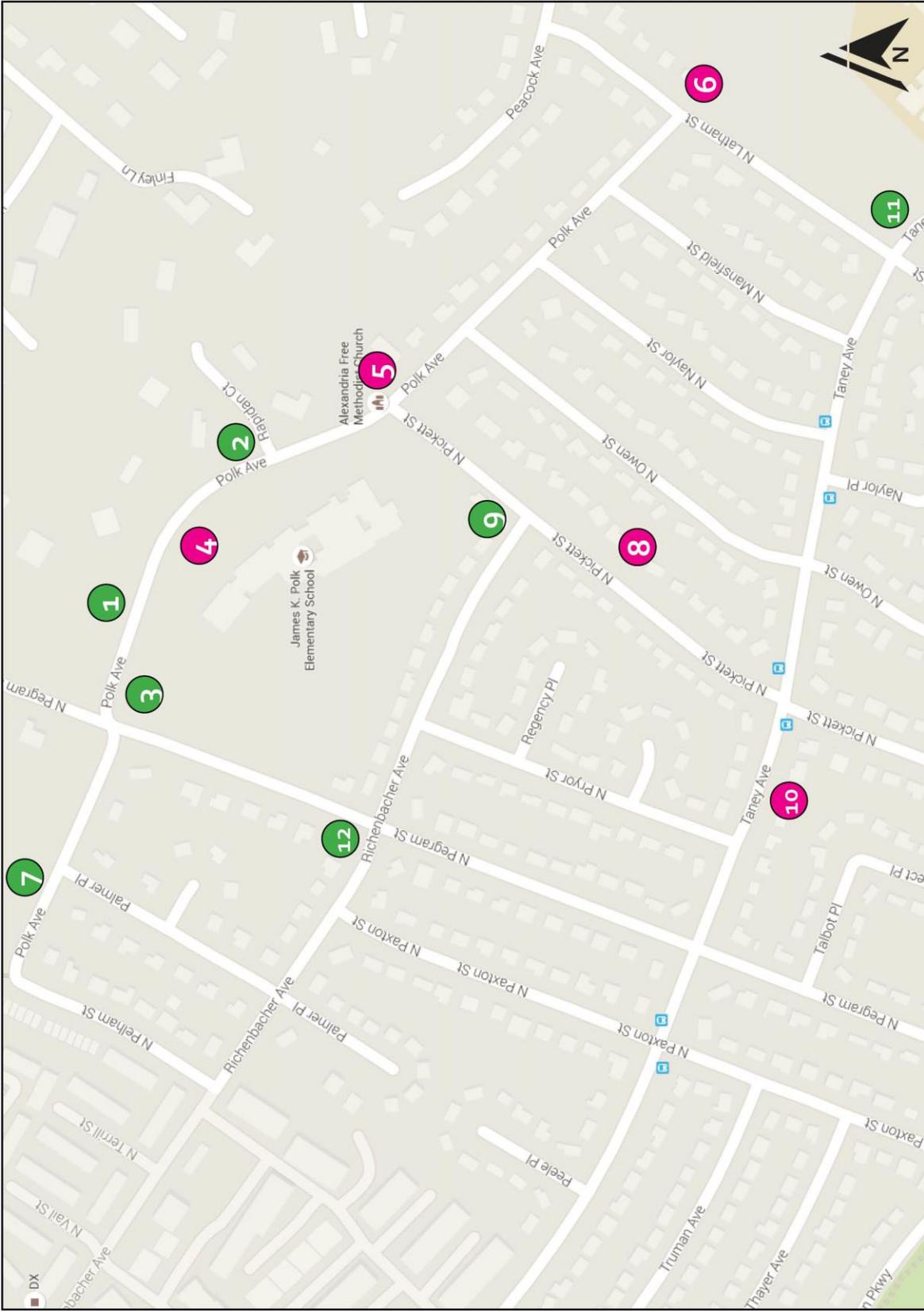
Medium – within next 6-12 months

Long – within 1-3 years

Ongoing – as appropriate based on other work

<sup>8</sup> "Section 2B.04 Right-of-Way at Intersections," *Manual on Uniform Traffic Control Devices*.

<http://mutcd.fhwa.dot.gov/hm/2009r1r2/part2/part2b.htm>



 Short term recommendation  
 Medium/long term recommendation

## James K. Polk Elementary School Walkabout Engineering Recommendations






## Programmatic Recommendations

SRTS 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.<sup>9</sup>

### Education

- Integrate pedestrian and bicycle 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. Two pedestrian safety resources are listed below. Both are free:
  - The *Child Pedestrian Safety Curriculum* was developed by the National High Traffic Safety Administration. The curriculum emphasizes skills practice and includes take home tip sheets for parents in English and Spanish. <http://www.nhtsa.gov/ChildPedestrianSafetyCurriculum>
  - The *Pedestrian Safer Journey* curriculum was developed by the Federal Highway Administration and features videos, quizzes and additional resources for educators teaching pedestrian safety. [http://www.pedbikeinfo.org/pedsaferjourney/el\\_en.html](http://www.pedbikeinfo.org/pedsaferjourney/el_en.html)
- Conduct a bicycle rodeo. Bicycle rodeos include activities designed to develop bicycle safety skills. Bicycle safety education is particularly important in advance of activities that encourage biking to school, such as National Bike to School Day held in early May each year. Potential partners for this event include Local Motion and the Alexandria Bicycle and Pedestrian Advisory Committee.
- Incorporate information on walking and bicycling to school in communications with parents. Inform parents that James K. Polk Elementary School supports walking and bicycling to school and educate parents about the academic and health benefits of walking and biking.
- 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. Several organizations offer free materials 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](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>

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<sup>9</sup> The fifth E is Engineering, included in this report under Infrastructure Recommendations.



## Encouragement

- Continue participation in International Walk to School Day. Walk to School Day is an excellent opportunity to get students walking, teach the benefits of an active lifestyle, and highlight walking and biking issues. Resources to help plan Walk to School Day are available on the Virginia SRTS Program website. [http://www.virginiadot.org/programs/srsm\\_srts\\_all\\_website\\_resources.asp](http://www.virginiadot.org/programs/srsm_srts_all_website_resources.asp).
- Help organize and support walking schools buses. A walking school bus is a group of children walking to school with one or more adults. It can be as informal as two families taking turns walking their children to school or as structured as a planned route with meeting points, a timetable and a schedule of trained volunteers. See the Virginia SRTS Program's webinar on walking school buses and bicycle trains. <https://www.dropbox.com/s/7kzoqoyxc6o3ggk/VDOT%2oSRTS%2o-%2oWalking%2oSchool%2oBus%2oand%2oBike%2oTrain%2oWebinar.pdf?dl=0>
- Establish a frequent walker program. Frequent walker programs encourage students to walk by offering incentives to students who walk frequently or by establishing a competition between classes. A simple record keep system must be created to track student walking. The Virginia SRTS Program provides a punch card template that can be used for this purpose. [http://www.virginiadot.org/programs/srsm\\_marketing\\_toolkit.asp](http://www.virginiadot.org/programs/srsm_marketing_toolkit.asp)

## Enforcement

- Establish a driver pledge program. Encourage parents and community members to sign a pledge that they will abide by traffic laws, avoid distracted driving, drive at a safe speed, and safely share the road with pedestrians and bicyclists.
- Celebrate Virginia Crossing Guard Appreciation Day. Virginia Crossing Guard Appreciation Day takes place every year in February. Crossing Guard Appreciation Day is an opportunity to thank and recognize the school crossing guard, and remind parents and students of the important work crossing guards do every day. See the Virginia SRTS Program website for more information. [http://www.virginiadot.org/programs/srsm\\_crossing\\_guard\\_appreciation\\_day.asp](http://www.virginiadot.org/programs/srsm_crossing_guard_appreciation_day.asp)
- Work with the City of Alexandria Police Department to provide periodic speed enforcement on Polk Avenue and N. Pegram Street during arrival and dismissal times.

## 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 assess progress toward increasing the number of students who walk and bike to school. For more information about Student Tally Week go to the Virginia SRTS Program website. [http://www.virginiadot.org/programs/srsm\\_student\\_travel\\_tally\\_week.asp](http://www.virginiadot.org/programs/srsm_student_travel_tally_week.asp)
- 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. For tips on administering Parent Surveys, see the Virginia SRTS Program's Learn it! Do it! Live it! tip sheet. [https://www.dropbox.com/s/nl274zoliqegw5t/Parent%2oSurvey\\_LDLv2.pdf?dl=0](https://www.dropbox.com/s/nl274zoliqegw5t/Parent%2oSurvey_LDLv2.pdf?dl=0)



## Appendices

### A. Walkabout Participants

Name	Organization
PreeAnn Johnson	Principal, James K. Polk Elementary School
Carla Carter	Assistant Principal, James K. Polk Elementary School
Nicole Radshaw	Parent, James K. Polk Elementary School
Mike Humphreys	Instructional Health and PE Specialist, Alexandria City Public Schools
Rose MacKall	School Crossing Guard Supervisor, City of Alexandria
Eric Nieman	School Crossing Guard, City of Alexandria
Jim Durham	Alexandria Bicycle and Pedestrian Advisory Committee (BPAC)
Jerry King	Alexandria Bicycle and Pedestrian Advisory Committee (BPAC)
Hillary Orr	Complete Streets Program Manager, City of Alexandria
Ray Hayhurst	Complete Streets Project Coordinator, City of Alexandria
Carol Kachadoorian	Virginia SRTS Program Manager, Toole Design Group
Wendy Phelps	Virginia SRTS Local Technical Assistance Coordinator, Toole Design Group
Scott Johnson	Engineer, Toole Design Group

### B. Glossary of Infrastructure (Engineering) Recommendations

The following infrastructure treatments can be used to improve the bicycle and pedestrian environment around James K. Polk Elementary School. Location-specific recommendations are referenced under the section, Infrastructure (Engineering) Recommendations

#### 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. Current guidelines for curb ramp designs are included in the Public Right-of-Way Accessibility Guidelines, Chapter R3: Technical Requirements. (<http://www.access-boaRoadgov/guidelines-and-standards/streets-sidewalks/public-rights-of-way/proposed-rights-of-way-guidelines/chapter-r3-technical-requirements>)



## Crossing Islands

Crossing islands are raised median islands placed in the center of the street at intersection approaches or midblock. They allow pedestrians to cross one direction of traffic at a time by enabling them to stop partway across the street and wait for an adequate gap in traffic before crossing the second half of the street. They can reduce crashes between vehicles and pedestrians at uncontrolled crossing locations on higher volume multi-lane roadways where gaps are difficult to find, particularly for slower pedestrians, e.g. disabled, older pedestrians, and children. The application would need to be studied before implementing crossing islands on state roads.

## Curb Extensions

Curb extensions extend the curb line into the roadway. They can improve the ability of pedestrians and motorists to see each other, reduce crossing distances (and thus exposure to traffic), provide additional pedestrian queuing space, and slow motor vehicle turning speeds.

## In-Street Pedestrian Crossing Signs

In-street pedestrian crossing signs placed in the roadway at pedestrian crossing locations warn drivers and encourage yielding.

## 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.

## 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 (flashing beacons) 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.

## 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.

## C. Walkabout Photographs

The following photos were taken by Walkabout participants to document the Walkabout as well as supplement the report recommendations.



Figure 4

This image shows a typical sidewalk in the neighborhood around James K. Polk Elementary School. There are buffers between the sidewalk and the roadway, but in some places the surface of the sidewalk has become uneven.



Figure 5

Looking east on Polk Avenue with the kiss and ride entrance on the right and gap in sidewalk network visible on the left.



Figure 6

Parents and students cross Polk Avenue at multiple unmarked locations during dismissal.



Figure 7

Looking west from the intersection of Polk Avenue and N. Pickett Street. Note the wide angle of approach for drivers traveling eastbound on Polk Avenue.



Figure 8

A crossing guard helps students across N. Pegram Street at Polk Avenue (south leg) during dismissal. There are no crosswalks on the north or east legs.



Figure 9

Looking west at the intersection of Polk Avenue and N. Latham Street. The shrub and utility pole interfere with visibility, the crosswalk needs to be remarked, and there are no ADA compliant curb cuts.



Figure 10

Looking west at the intersection of Taney Avenue and N. Latham Street. Bike lanes are visible on Taney Avenue, but do not continue through the intersection at this time.



Figure 11

Taney Avenue is scheduled to be repaved in summer 2016. High visibility crosswalk markings should be installed on all four legs of the intersections of the following through streets: N Latham St, N Owen St, N Pickett St and N Pegram St.