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LYLES CROUCH ELEMENTARY WALKABOUT: Existing Conditions, Findings and Recommendations

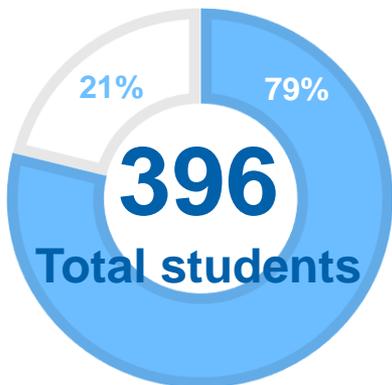
March 2017

LYLES-CROUCH WALKABOUT DETAILS

- **Date: November 21, 2016**
- **Observation: Arrival**
- **Participants:**
 - **Toole Design Group staff**
 - **City of Alexandria Transportation Planning staff**
 - **Alexandria Bicycle & Pedestrian Advisory Committee members**
 - **Lyles-Crouch administrators and staff**
 - **Lyles-Crouch parents**
- **Purpose:**
 - **Observe school arrival process**
 - **Evaluate school-zone infrastructure**
 - **Assess existing Safe Routes to School programming**

OVERVIEW OF LYLES-CROUCH ELEMENTARY SCHOOL

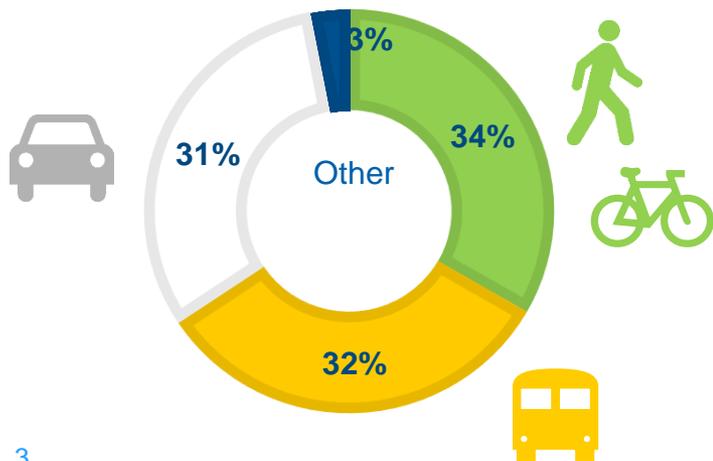
STUDENT DISTANCE FROM SCHOOL



■ 1 mile ■ >1 mile

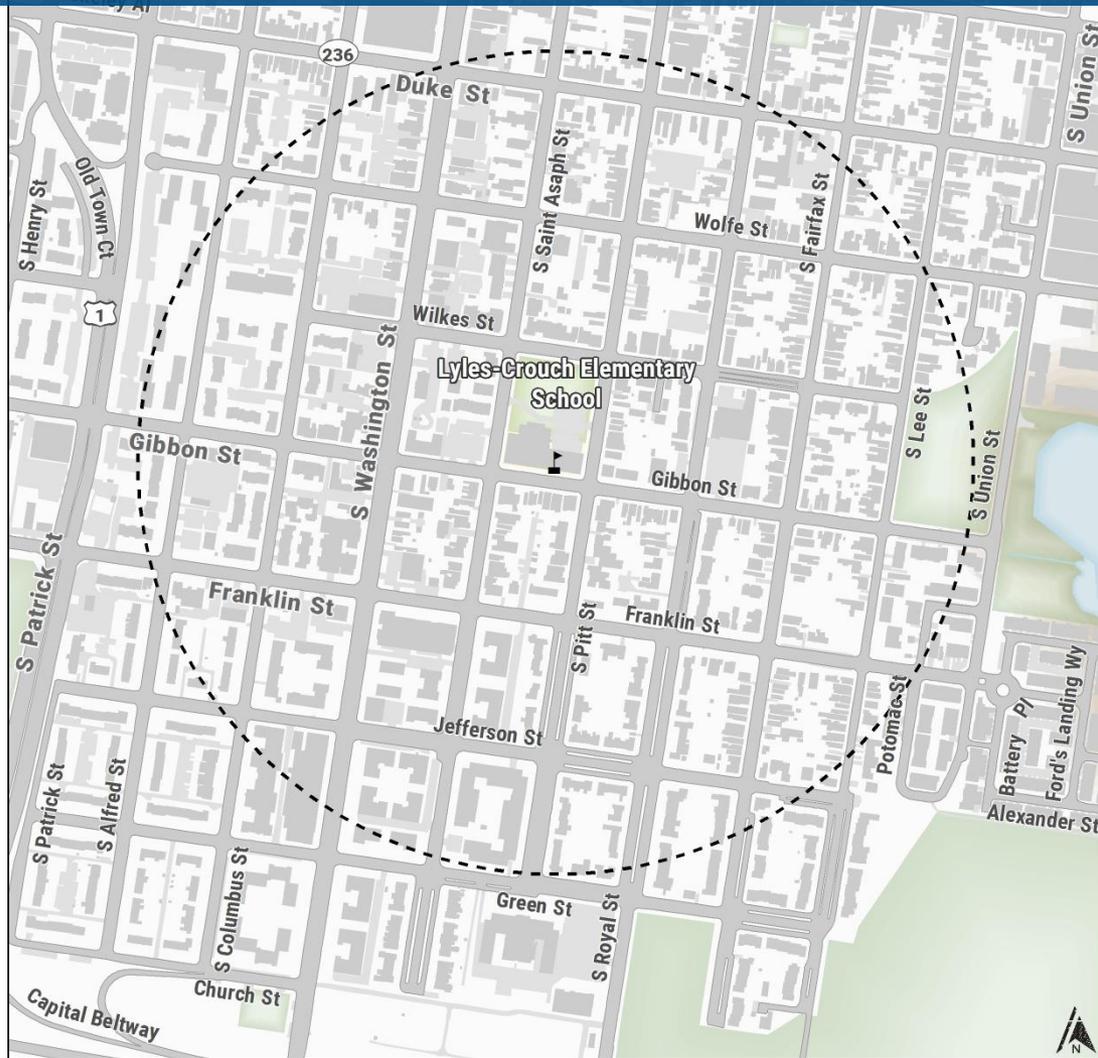
As reported in Fall 2014 Parent Surveys

STUDENT TRAVEL MODES TO SCHOOL



3

As reported during Fall 2014 Student Travel Tallies



Overview Map

Lyles-Crouch Elementary School
Alexandria, Virginia

- Schools
- 1/4 Mile Buffer
- Parks
- Roads

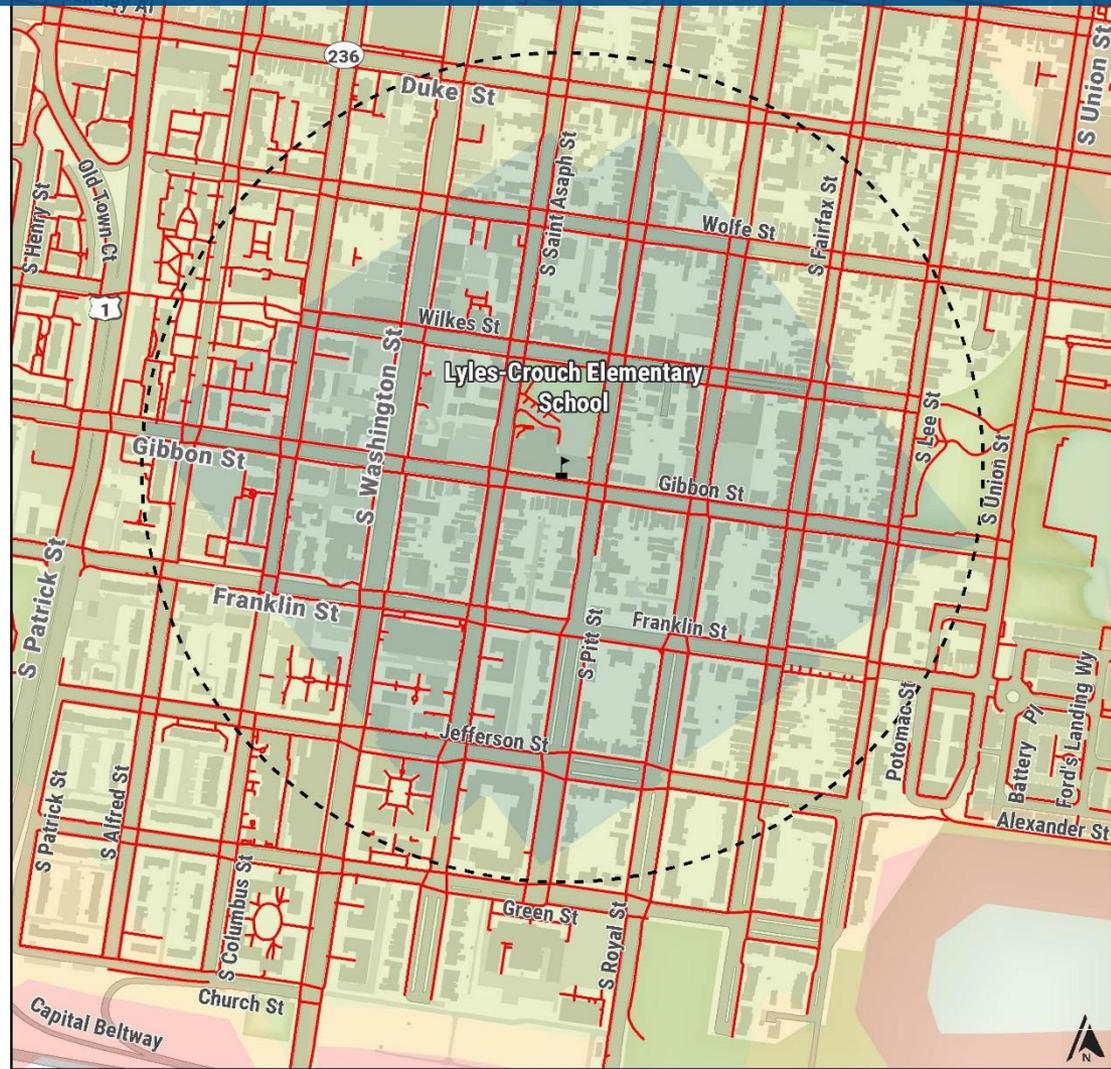
STUDENT DISTANCE FROM SCHOOL DETAIL

Direct Distance Percentage of Students

¼ mile	34%
½ mile	19%
1 mile	18%
2 miles	29%

As reported in Fall 2014 Parent Surveys.

The hollow circles on the map represent the direct distance buffers from the school. The polygons show the distance along the road network.



Existing Conditions

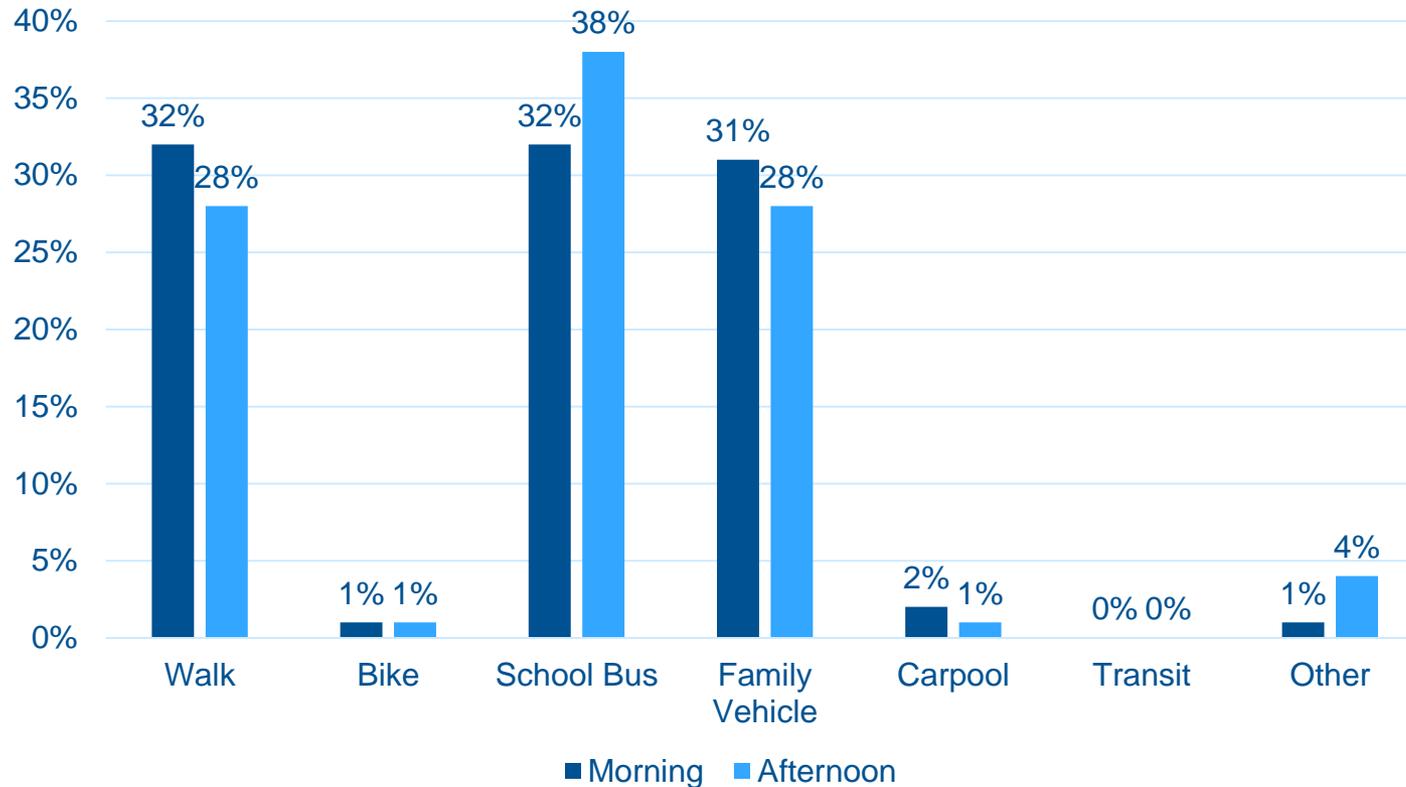
Lyles-Crouch Elementary School
Alexandria, Virginia

Schools	Network Buffers
Road Labels	1/4 Mile
1/4 Mile Buffer	1/2 Mile
Sidewalks	1 Mile
Parks	2 Miles

EXISTING CONDITIONS

TRAVEL PATTERNS

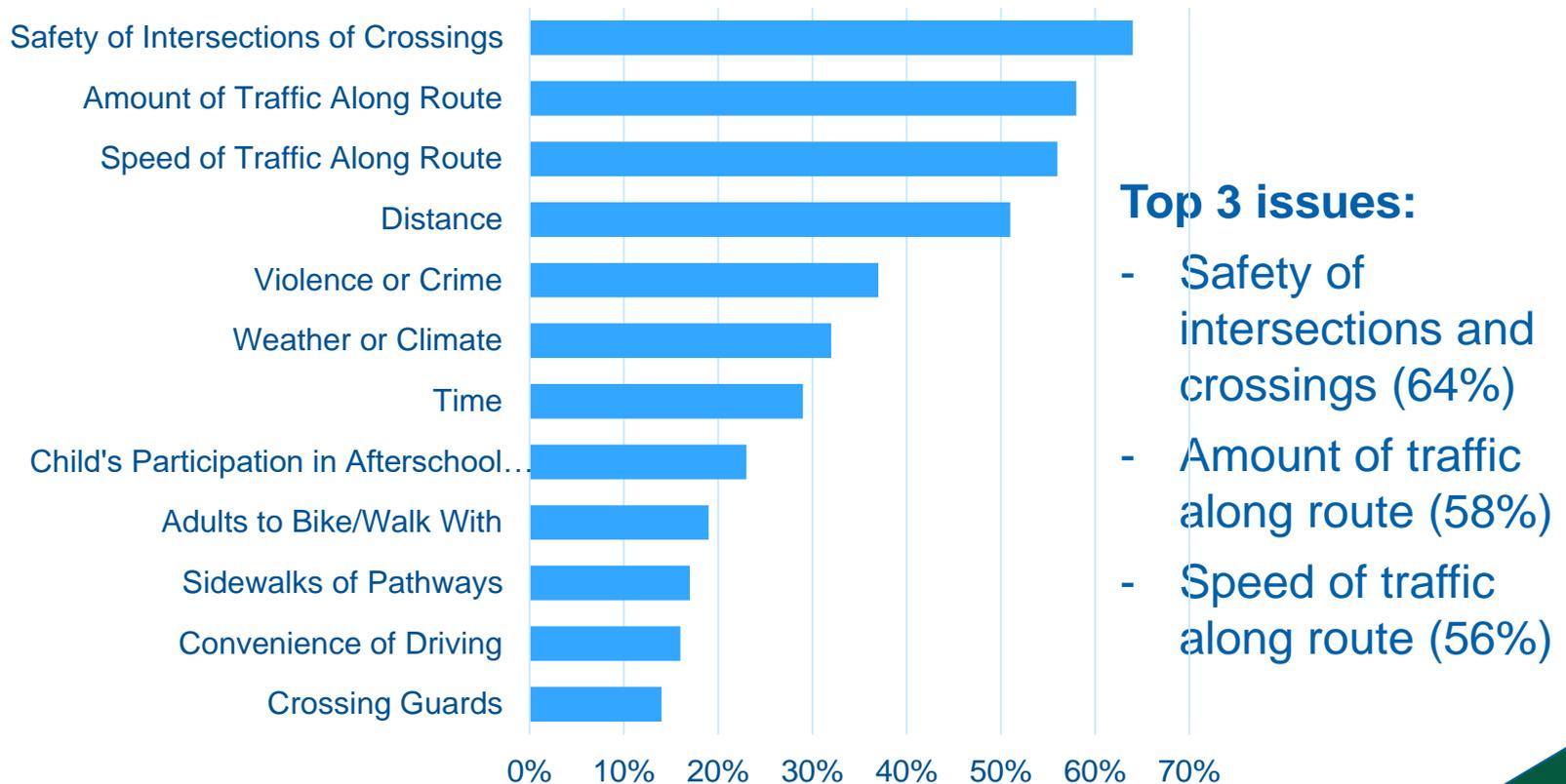
Morning and Afternoon Travel Mode Comparison



Fall 2014 Student Travel Tallies

TRAVEL PATTERNS (cont.)

Issues reported to affect the decision to not allow a child to walk or bike to/from school by parents of children who do not walk or bike to/from school



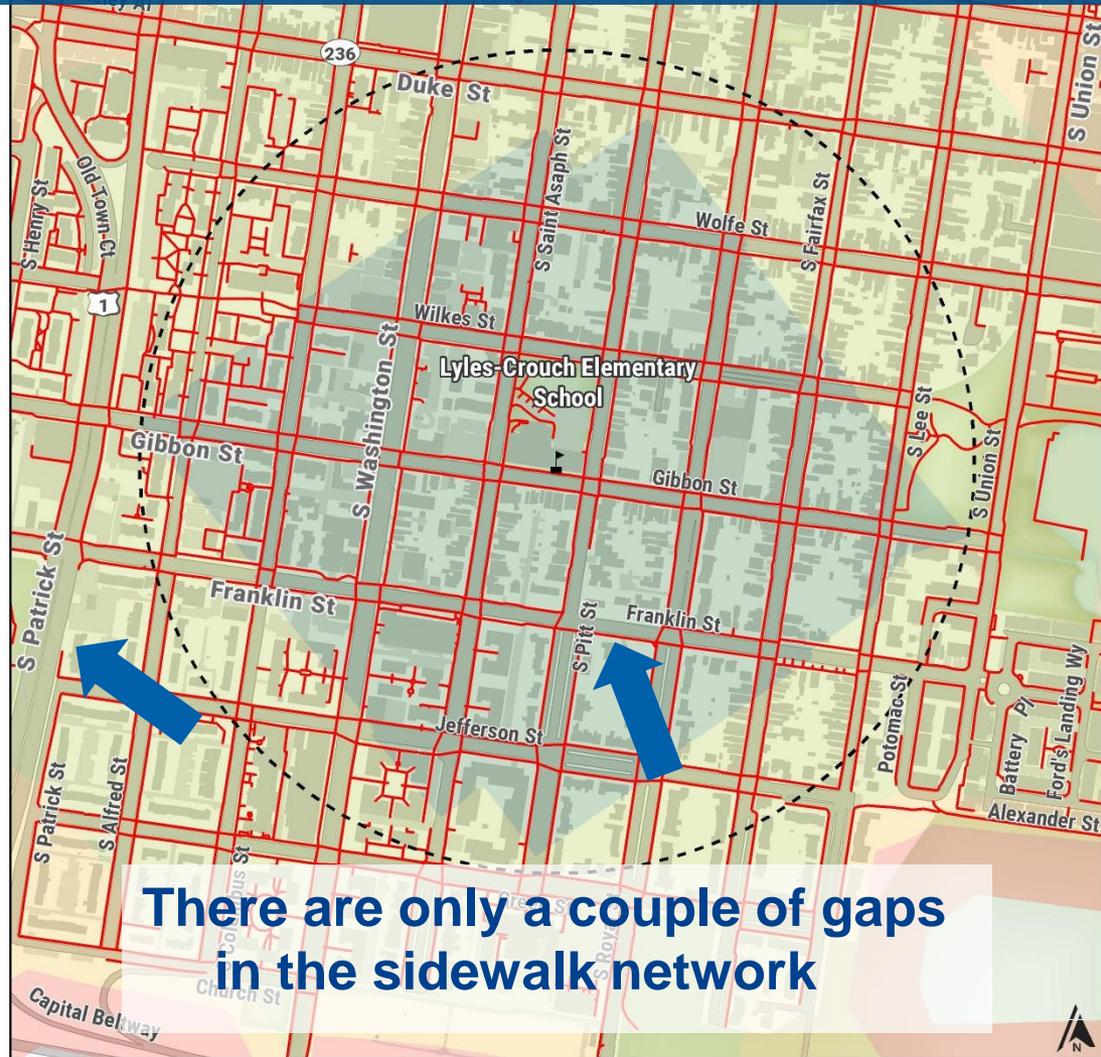
Fall 2014 Parent Survey

PEDESTRIAN NETWORK

Sidewalks – very few gaps, most sidewalks are at least 4 feet wide

Crosswalks – intersections immediately adjacent to the school have marked crosswalks on all legs but inconsistent marking style

Curb ramps – Most corners have a single, diagonal ramp; many do not have detectable warning surfaces.



	Existing Conditions Lyles-Crouch Elementary School Alexandria, Virginia	 Schools	Network Buffers
		 Road Labels	 1/4 Mile
		 1/4 Mile Buffer	 1/2 Mile
		 Sidewalks	 1 Mile
		 Parks	 2 Miles

BICYCLING NETWORK

Wilkes Street – East-west connection with on-street segments marked with with sharrows combined with off-street pathways

Prince Street – Existing sharrows, proposed bike lane



	<p align="center">Bicycling Infrastructure</p> <p align="center">Lyles-Crouch Elementary School Alexandria, Virginia</p>	<table border="0"> <tr> <td>Existing Facilities</td> <td>Proposed Facilities</td> </tr> <tr> <td> <ul style="list-style-type: none"> Trail Advisory Bike Lane; Bike lane Climbing Lane Shared Lane Markings Unpaved Nature Trail </td> <td> <ul style="list-style-type: none"> Trail Shared Roadway Enhanced Bicycle Corridor </td> </tr> </table>	Existing Facilities	Proposed Facilities	<ul style="list-style-type: none"> Trail Advisory Bike Lane; Bike lane Climbing Lane Shared Lane Markings Unpaved Nature Trail 	<ul style="list-style-type: none"> Trail Shared Roadway Enhanced Bicycle Corridor
Existing Facilities	Proposed Facilities					
<ul style="list-style-type: none"> Trail Advisory Bike Lane; Bike lane Climbing Lane Shared Lane Markings Unpaved Nature Trail 	<ul style="list-style-type: none"> Trail Shared Roadway Enhanced Bicycle Corridor 					

ARRIVAL OBSERVATIONS

Drop-off Zone

- The designated drop-off zone along the school building on the east side of St. Asaph St cannot accommodate the volume of vehicles dropping off students between 7:45 and 8:00 AM.
- To avoid delays in the drop-off zone, parents park across St. Asaph St in the Domaine Funeral Home parking lot and cross mid-block with their students.
- Drivers were observed making illegal u-turns across the double center line.
- The flashing 15 mph school zone sign is located directly adjacent to the school, and is followed closely by a 25 mph speed limit sign, which creates confusion about the speed limit and extents of the school zone.



ARRIVAL OBSERVATIONS (cont.)

Bus Loop

- There are 6 buses that serve Lyles-Crouch Elementary School.
- The first buses arrive at 7:20 AM.
- The buses enter the driveway behind the school from S St. Asaph St and exit onto S Pitt St.
- Bus riders enter the cafeteria for breakfast starting at 7:30 AM.



ARRIVAL OBSERVATIONS (cont.)

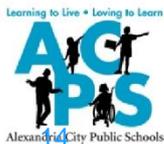
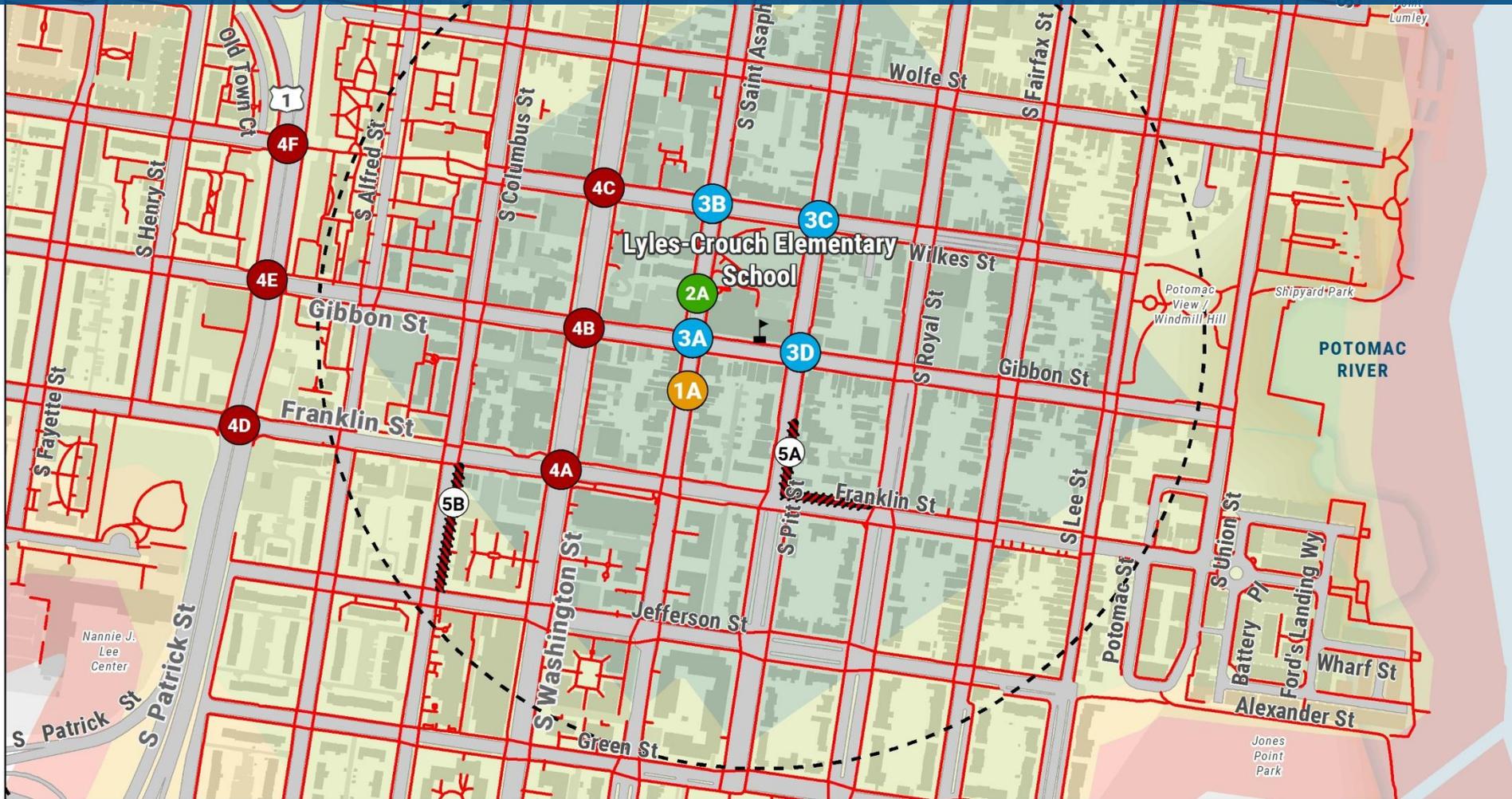
Intersection of S St Asaph St and Gibbon St

- Drivers do not always yield to pedestrians in the crosswalks.
- Obstructions in the departure sight triangle cause drivers to encroach on the crosswalk in order to see approaching traffic.
- There is one crossing guard at this intersection. Her presence helps make drivers aware of students crossing at the intersection. However, the traffic volume and poor sight distance make her job challenging.



ENGINEERING RECOMMENDATIONS

INFRASTRUCTURE RECOMMENDATIONS MAP



Infrastructure Recommendations

Lyles-Crouch Elementary School
Alexandria, Virginia

- | | |
|--|------------------------|
| ● Intersection Recommendations | Sidewalks |
| ● Mid-Block Recommendations | 1/4 Mile Buffer |
| ● School Zone Signage Recommendations | Network Buffers |
| ● Signalized Intersection Recommendations | 1/4 Mile |
| Sidewalk Recommendations | 1/2 Mile |
| Schools | 1 Mile |
| | 2 Miles |

GENERAL RECOMMENDATIONS WITHIN ½ MILE OF SCHOOL

Recommendations

Restripe crosswalks with high visibility markings

Reconstruct curb ramps to meet current ADA guidelines

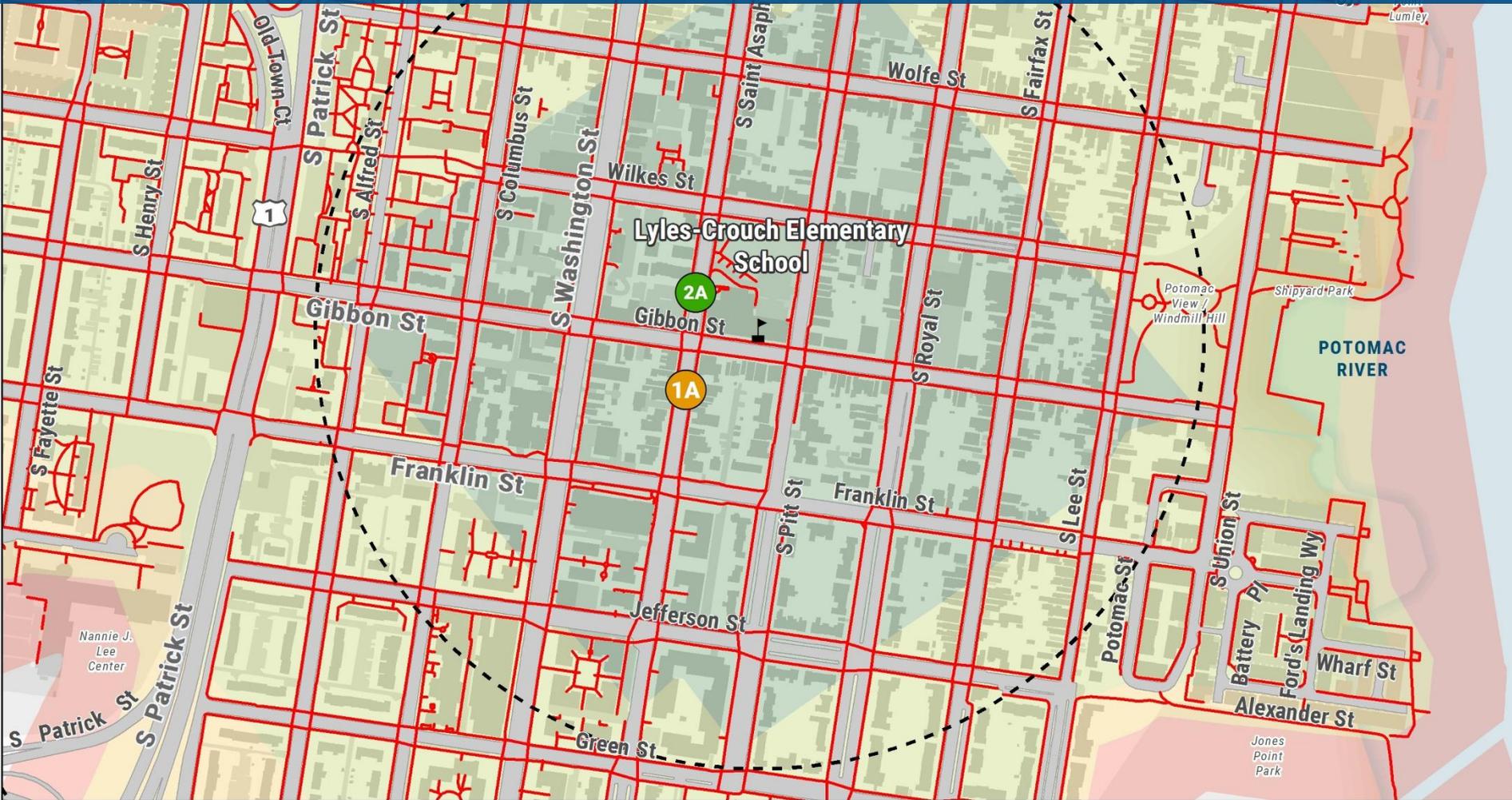
Restrict parking within 20 feet of an intersection through signage, striping or curb extensions

Ensure signalized intersections provide enough time for pedestrians to comfortably cross the street



Cars parked too close to the intersection block sight lines for both drivers and pedestrians, and the crosswalk markings do not meet current high visibility standards.

MIDBLOCK CROSSING / DROP-OFF ZONE



Infrastructure Recommendations

Lyles-Crouch Elementary School
Alexandria, Virginia

- | | |
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MIDBLOCK CROSSING / DROP-OFF ZONE

Map ID	Issue	Recommendation	Timeframe
1A	Confusing signage	Relocate school zone sign south of Gibbon St; remove 25 mph speed limit sign	Short
2A	Double parking in drop off zone	Consider using bus loop for parent drop-off after buses have dropped off students	Short
	Pedestrians crossing at unmarked, mid block location	Install curb extensions, a raised mid-block crossing and advance pedestrian crossing signs	Medium

* Short = within 1 year, Medium = within 3 years, Long = 3 or more years



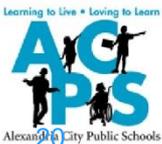
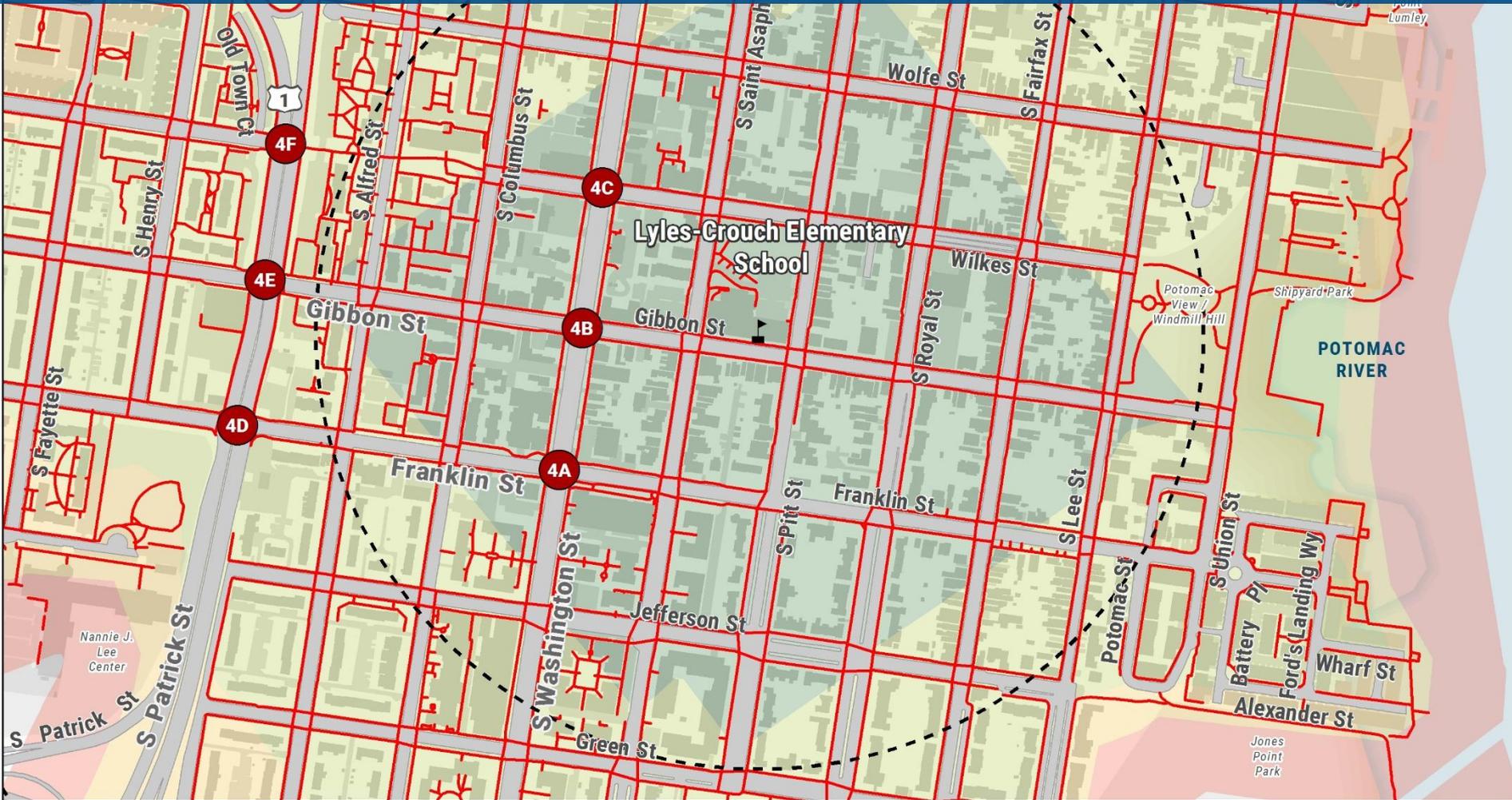
Parents and students cross at the mid-block speed hump on S St. Asaph Street.

LOCAL INTERSECTIONS

Map ID	Issue	Recommendation	Timeframe
3A	On street parking interferes with sight lines	Restrict parking within 20 feet of the intersection and consider striping or constructing curb extensions to improve visibility for pedestrians and drivers and shorten crossing distance	Medium
3B	On street parking interferes with sight lines	Restrict parking within 20 feet of the intersection and consider striping or constructing curb extensions to improve visibility for pedestrians and drivers and shorten crossing distance	Medium
3C	On street parking interferes with sight lines	Restrict parking within 20 feet of the intersection and consider striping or constructing curb extensions to improve visibility for pedestrians and drivers and shorten crossing distance	Medium
3D	Drivers do not always yield to pedestrians in crosswalks	Restrict parking within 20 feet of the intersection and consider striping or constructing curb extensions to improve visibility for pedestrians and drivers and shorten crossing distance	Short
	On street parking interferes with sight lines	Restrict parking within 20 feet of the intersection and consider striping or constructing curb extensions to improve visibility for pedestrians and drivers and shorten crossing distance	Medium

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SIGNALIZED INTERSECTIONS



Infrastructure Recommendations

Lyles-Crouch Elementary School
Alexandria, Virginia

- Intersection Recommendations
- Mid-Block Recommendations
- School Zone Signage Recommendations
- Signalized Intersection Recommendations
- //// Sidewalk Recommendations
- Schools
- Sidewalks
- 1/4 Mile Buffer
- Network Buffers**
- 1/4 Mile
- 1/2 Mile
- 1 Mile
- 2 Miles

SIGNALIZED INTERSECTIONS – WASHINGTON STREET

Map ID	Issue	Recommendation	Timeframe
4A	Long pedestrian delay and insufficient time to cross Washington St	Add a leading pedestrian interval to the signal when pedestrian push buttons are activated to extend crossing time	Short
4B	Long pedestrian delay and insufficient time to cross Washington St	Add a leading pedestrian interval to the signal when pedestrian push buttons are activated to extend crossing time	Short
4C	Long pedestrian delay and insufficient time to cross Washington St	Add a leading pedestrian interval to the signal when pedestrian push buttons are activated to extend crossing time	Short

* Short = within 1 year, Medium = within 3 years, Long = 3 or more years

SIGNALIZED INTERSECTIONS – ROUTE 1

Map ID	Issue	Recommendation	Timeframe
4D	Curb ramps do not meet ADA	Upgrade ramps to meet ADA	Ongoing
	Long pedestrian delay and insufficient time to cross Route 1	Add a leading pedestrian interval to the signal when pedestrian push buttons are activated to extend crossing time	Short
	Drivers may not expect pedestrians crossing Route 1	Install high visibility marked crosswalks across Route 1	Medium
	Six lanes of traffic on Route 1 are challenging to cross	Widen and extend median islands into crosswalks to create a pedestrian refuges	Long

* Short = within 1 year, Medium = within 3 years, Long = 3 or more years

SIGNALIZED INTERSECTIONS – ROUTE 1

Map ID	Issue	Recommendation	Timeframe
4E	Curb ramps do not meet ADA	Upgrade ramps to meet ADA	Ongoing
	Long pedestrian delay and insufficient time to cross Route 1	Add a leading pedestrian interval to the signal when pedestrian push buttons are activated to extend crossing time	Short
	Drivers may not expect pedestrians crossing Route 1	Install high visibility marked crosswalks across Route 1	Medium
	Six lanes of traffic on Route 1 are challenging to cross	Widen and extend median islands into crosswalks to create a pedestrian refuges	Long

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SIGNALIZED INTERSECTIONS – ROUTE 1

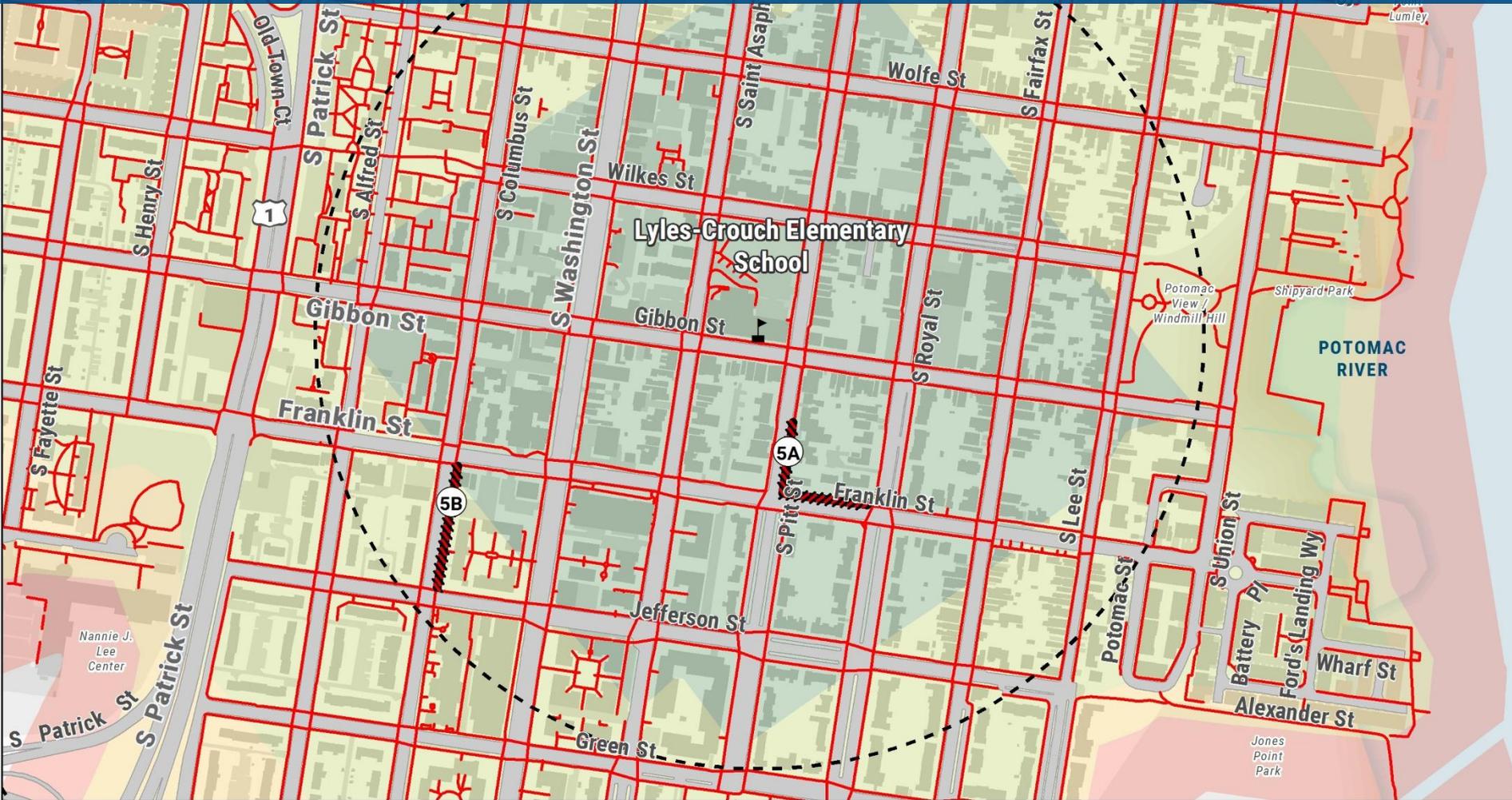
Map ID	Issue	Recommendation	Timeframe
4F	Long pedestrian delay and insufficient time to cross Route 1	Add a leading pedestrian interval to the signal when pedestrian push buttons are activated to extend crossing time	Short
	Six lanes of traffic on Route 1 are challenging to cross	Widen and extend median islands into crosswalks to create a pedestrian refuges	Long

* Short = within 1 year, Medium = within 3 years, Long = 3 or more years



Looking west across Route 1 at Wilkes Street. Note the median does not extend into the crosswalk to provide a refuge for pedestrians unable to cross 6 lanes of traffic at once.

SIDEWALK RECOMMENDATIONS



Infrastructure Recommendations

Lyles-Crouch Elementary School
Alexandria, Virginia

- | | | | |
|---|---|---|-----------------|
|  | Intersection Recommendations |  | Sidewalks |
|  | Mid-Block Recommendations |  | 1/4 Mile Buffer |
|  | School Zone Signange Recommendations | Network Buffers | |
|  | Signalized Intersection Recommendations |  | 1/4 Mile |
|  | Sidewalk Recommendations |  | 1/2 Mile |
|  | Schools |  | 1 Mile |
| | |  | 2 Miles |

SIDEWALK RECOMMENDATIONS

Map ID	Issue	Recommendation	Timeframe
5A	Gaps in pedestrian network	Install sidewalks and ADA compliant curb ramps where missing	Medium
5B	Gaps in pedestrian network	Install sidewalks and ADA compliant curb ramps where missing	Medium

* Short = within 1 year, Medium = within 3 years, Long = 3 or more years



Segments with missing sidewalk on S Pitt Street and Franklin Street.

PROGRAMMATIC RECOMMENDATIONS

EDUCATION

Recommendation	Continue Existing	Start New
Integrate pedestrian and bicycle safety education into the school curriculum.	●	
Conduct a bicycle rodeo.		●
Incorporate information on walking and bicycling to school in communications with parents.	●	
Provide parents and guardians with safe driving information that stresses the importance of driving safely in school zones and being alert for pedestrians and bicyclists during arrival and dismissal.		●



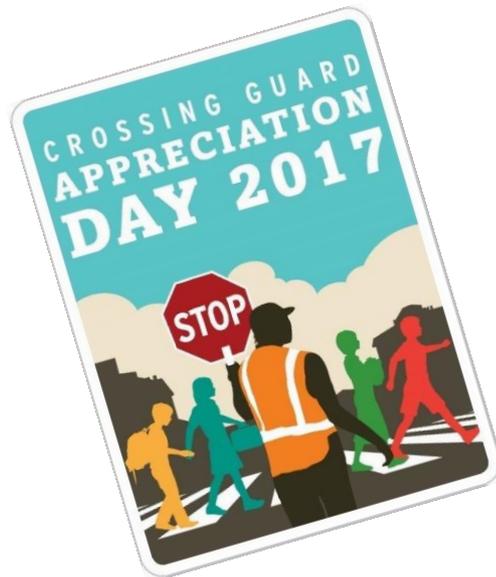
ENCOURAGEMENT

Recommendation	Continue Existing	Start New
Continue participation in International Walk to School Day and Bike to School Day.	•	
Help organize and support walking schools buses.		•
Establish a frequent walker / bicyclist program.		•



ENFORCEMENT

Recommendation	Continue Existing	Start New
Establish a driver pledge program.		●
Celebrate Virginia Crossing Guard Appreciation Day.		●
Work with the police department to provide periodic parking and yielding enforcement.	●	



EVALUATION

Recommendation	Continue Existing	Start New*
Conduct Student Travel Tallies to get baseline data for student travel patterns.		●
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.		●



** The last Travel Tallies and Parent Surveys at Lyles-Crouch Traditional Academy were collected in the fall of 2014. Up to date information is required to monitor program success and apply for federal SRTS funding.*