

Learning to Live • Loving to Learn



# MAURY ELEMENTARY WALKABOUT: Existing Conditions, Findings and Recommendations

February 2017

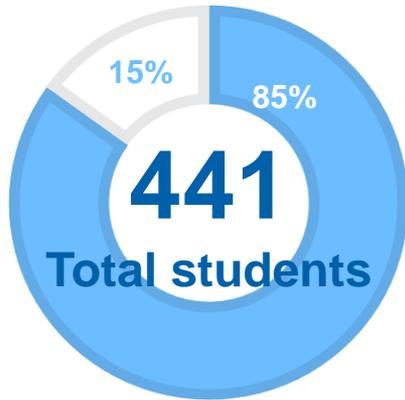
# MAURY ELEMENTARY WALKABOUT DETAILS

- **Date: November 22, 2016**
- **Observation: Arrival**
- **Participants:**
  - **Toole Design Group staff**
  - **City of Alexandria Transportation Planning staff**
  - **Alexandria Bicycle & Pedestrian Advisory Committee members**
  - **Maury ES Parent Teacher Association representatives**
  - **Maury ES parents**
- **Purpose:**
  - **Observe school arrival process**
  - **Evaluate school-zone infrastructure**
  - **Assess existing Safe Routes to School programming**

# OVERVIEW OF MAURY ELEMENTARY SCHOOL

## STUDENT DISTANCE FROM SCHOOL

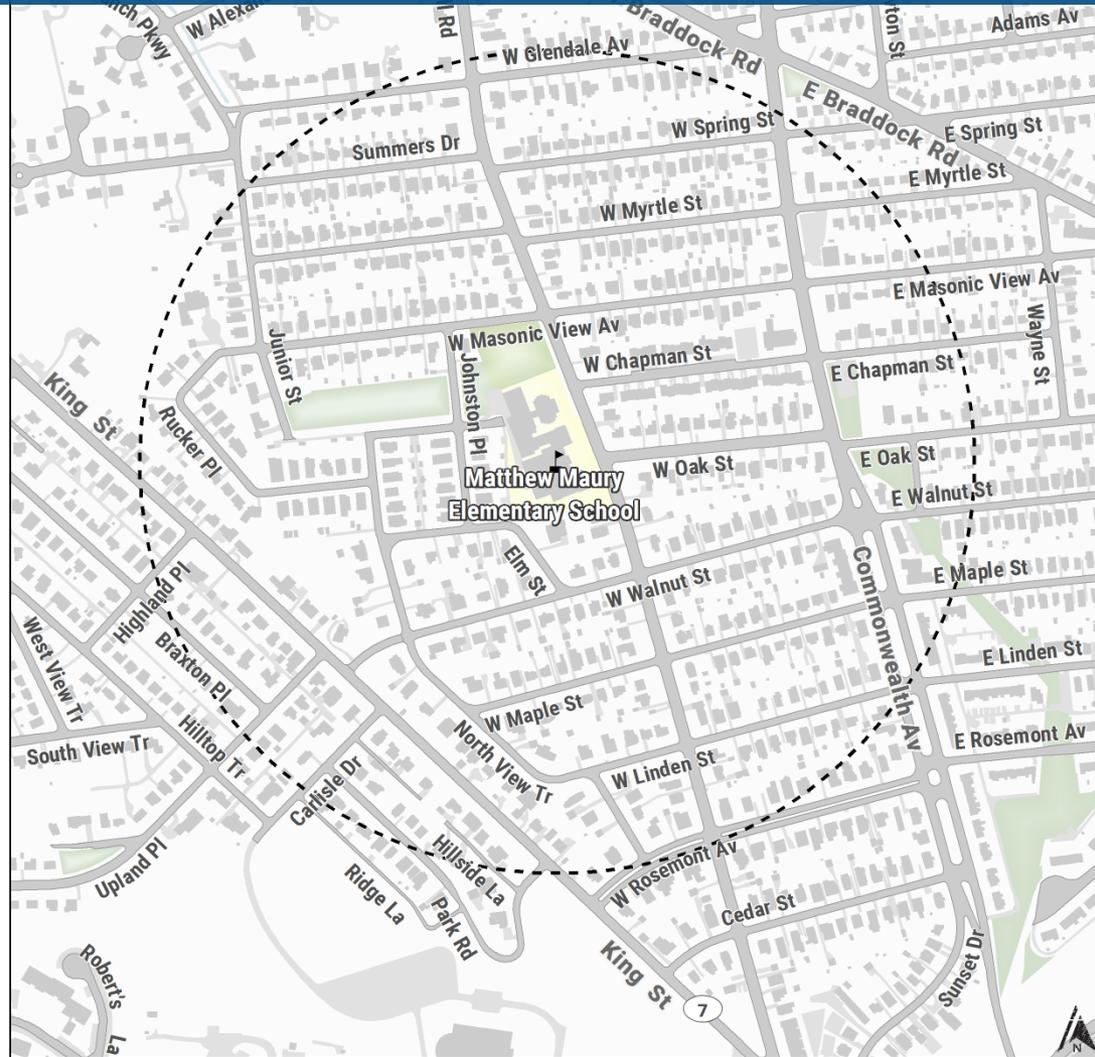
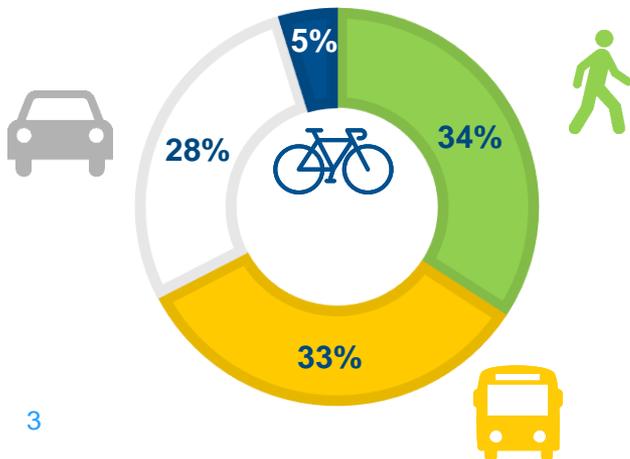
As reported in 2016 Parent Survey.



■ 1 mile ■ >1 mile

Average of "to school" and "from school" modes as reported in 2014 Student Travel Tallies.

## STUDENT TRAVEL MODES



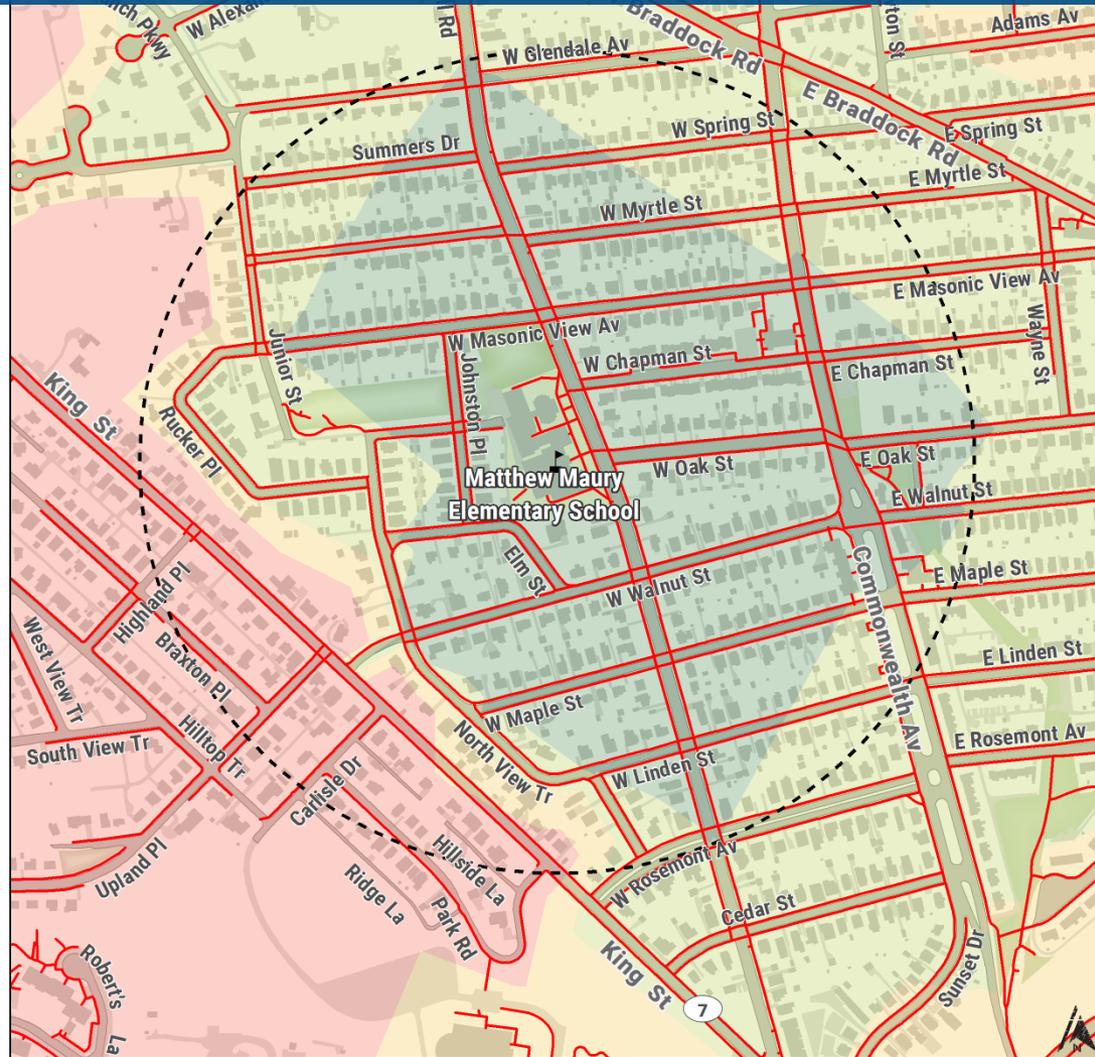
	<p>Overview Map</p> <p>Maury Elementary School Alexandria, Virginia</p>	<ul style="list-style-type: none"> <li> Schools</li> <li> 1/4 Mile Buffer</li> <li> Parks</li> <li> Roads</li> </ul>
	<p>Date: 2/13/2017</p>	

# STUDENT DISTANCE FROM SCHOOL DETAIL

Distance	Percentage of Students
¼ mile	45%
½ mile	27%
1 mile	13%
2 miles	11%
>2 miles	4%

As reported in 2016 Parent Survey

The hollow circle on the map represents the direct distance buffers from the school. The colored polygons show the distance along the road network.

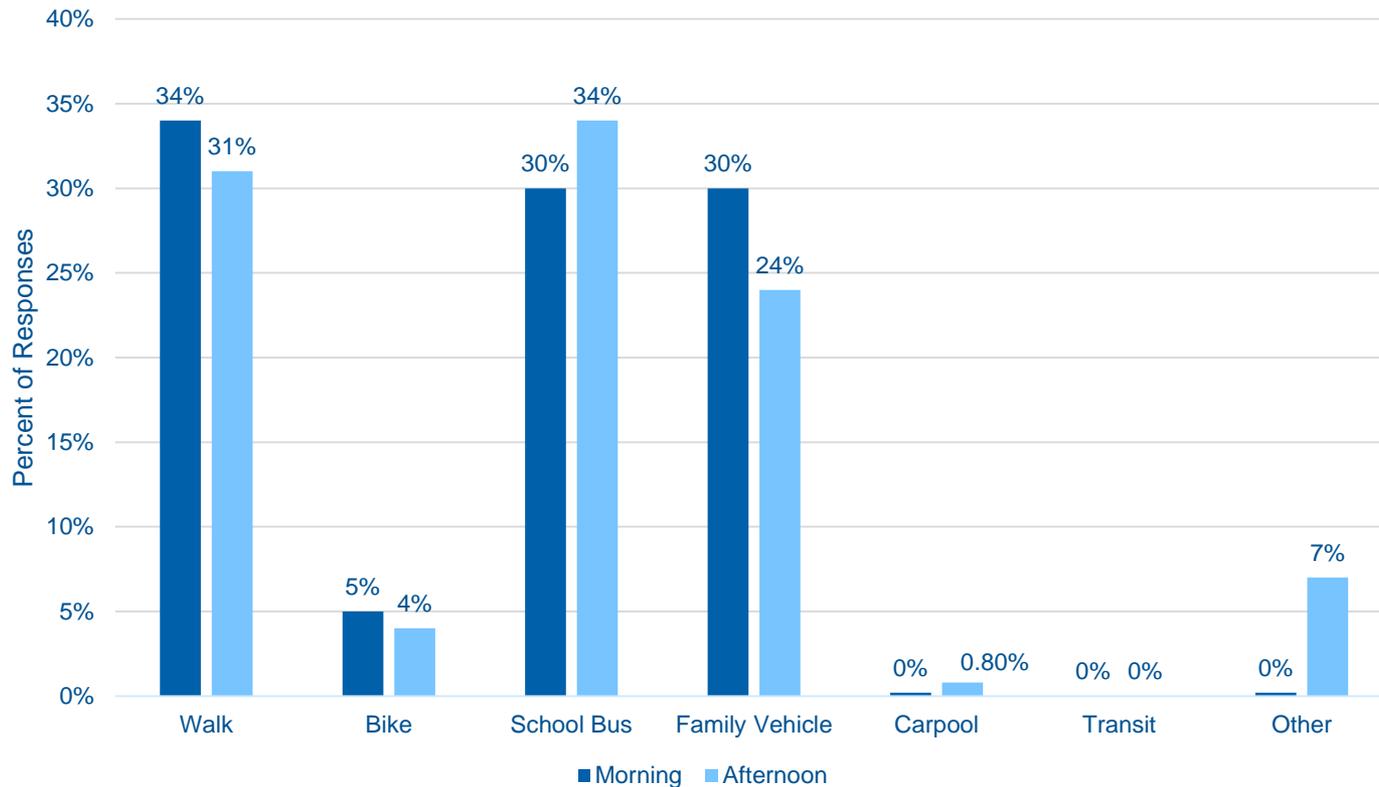


	<p><b>Existing Conditions</b></p> <ul style="list-style-type: none"> <li>Schools</li> <li>1/4 Mile Buffer</li> <li>Sidewalks</li> <li>Roads</li> <li>Parks</li> </ul>	<p><b>Network Buffers</b></p> <ul style="list-style-type: none"> <li>1/4 Mile</li> <li>1/2 Mile</li> <li>1 Mile</li> <li>2 Miles</li> </ul>
	<p>Maury Elementary School Alexandria, Virginia</p>	

# EXISTING CONDITIONS

# TRAVEL PATTERNS

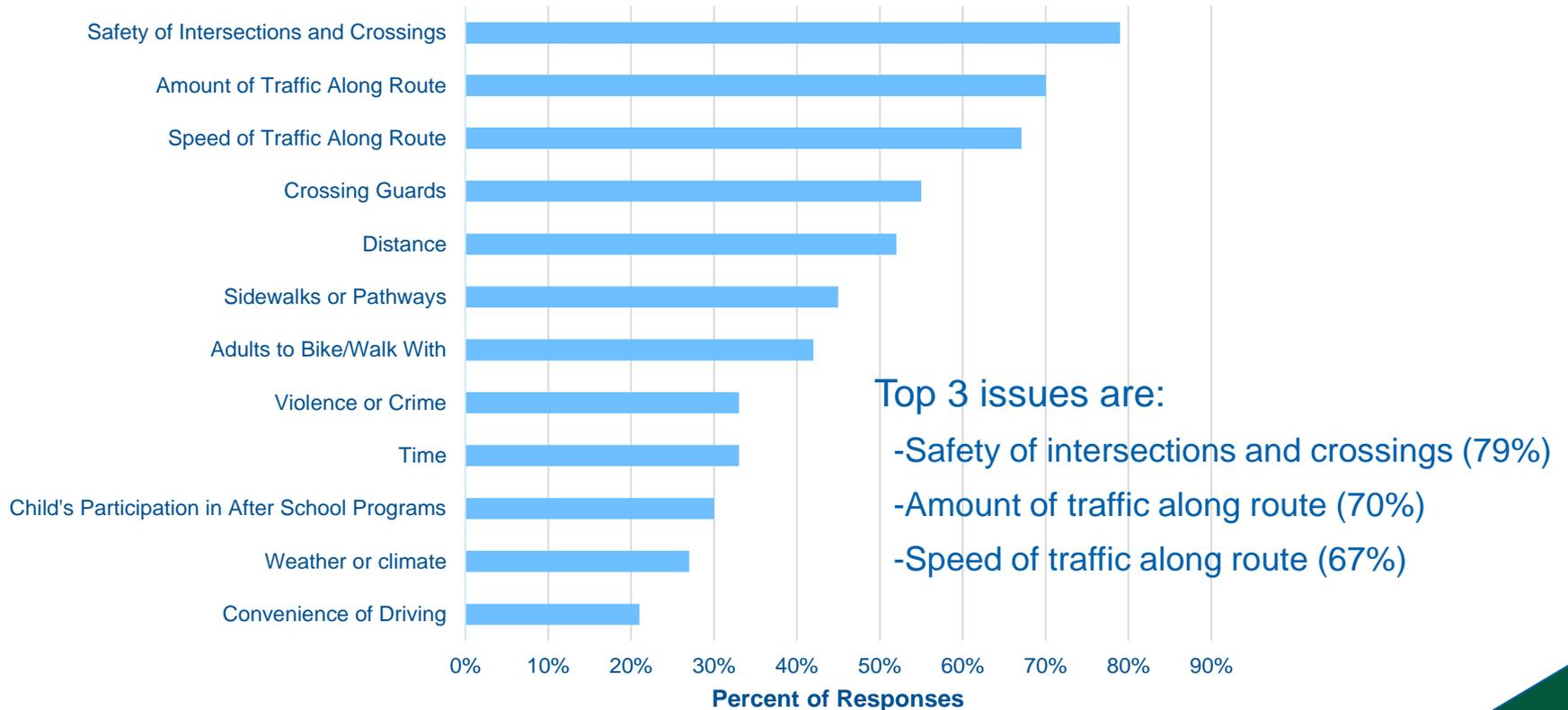
## Morning and Afternoon Travel Mode Comparison



## Fall 2014 Student Travel Tallies

# TRAVEL PATTERNS CONTINUED

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



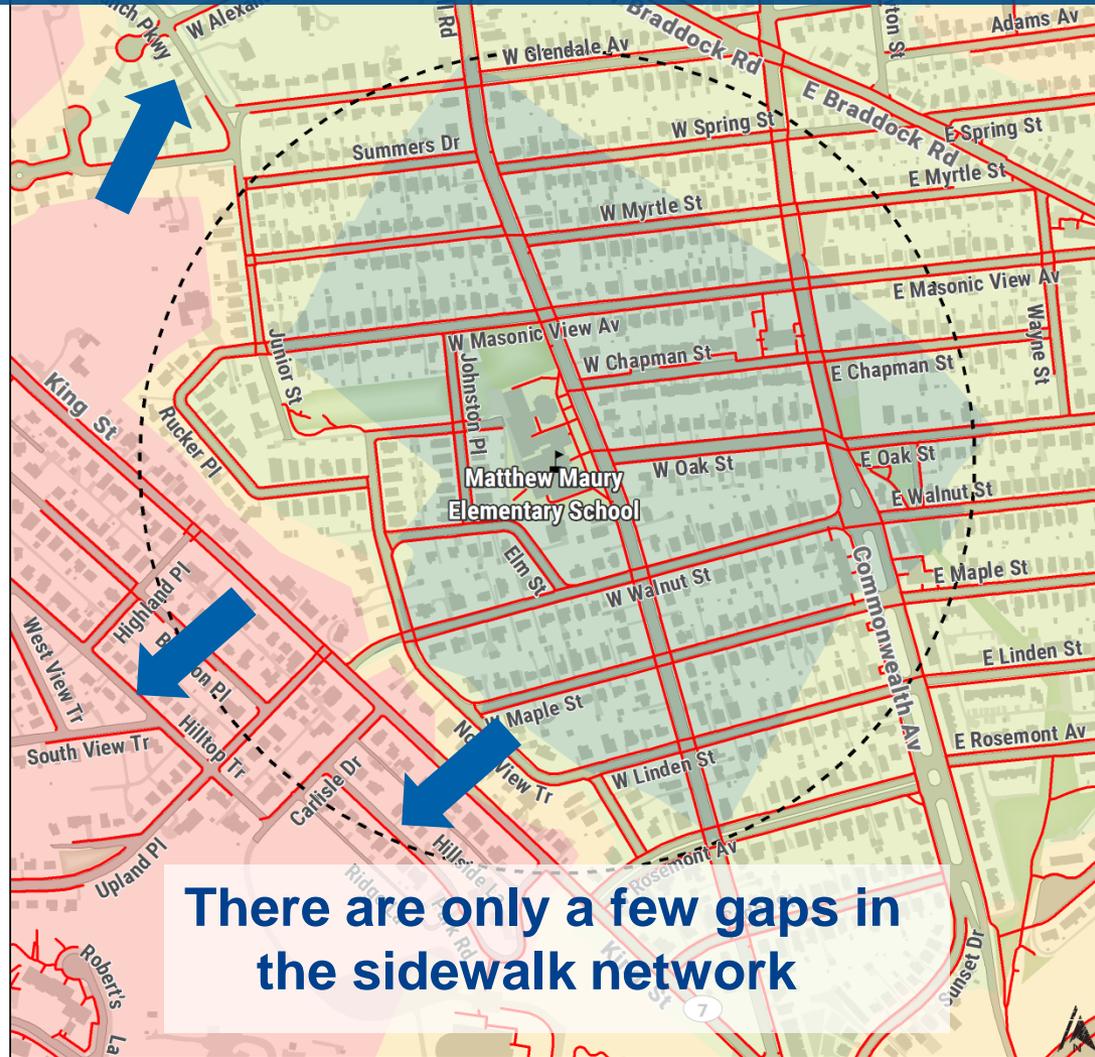
Fall 2016 Parent Survey

# PEDESTRIAN NETWORK

**Sidewalks** – Most sidewalks are at least 4 feet wide, and include a buffer from the roadway

**Crosswalks** – Intersections immediately adjacent to the school have marked crosswalks that have faded and inconsistent markings

**Curb ramps** – Curb ramps are present at all intersections but many are missing detectable warning surfaces



	<b>Existing Conditions</b> Maury Elementary School Alexandria, Virginia		Schools 1/4 Mile Buffer Sidewalks Roads Parks	<b>Network Buffers</b> 1/4 Mile 1/2 Mile 1 Mile 2 Miles
	Date: 2/13/2017			

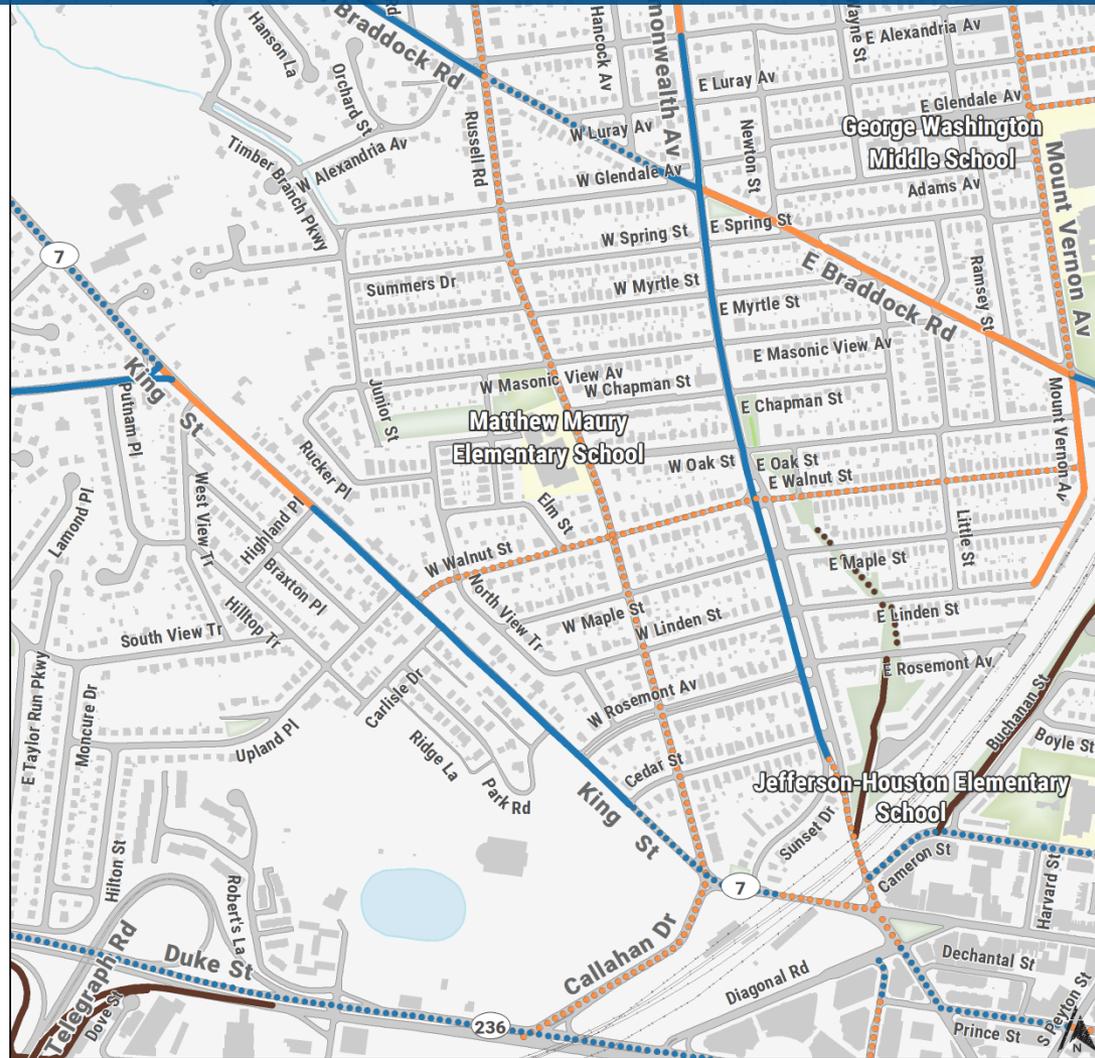
# BICYCLING NETWORK

**King Street** – East-west connection with bike lanes

**Commonwealth Ave** – North-south connection with bike lanes

**Braddock Road** – East-west connection with bike lanes

**Residential Side Streets** – East-west streets adjacent to school with low traffic volumes and low traffic speeds



Bicycling Infrastructure		Existing Facilities	Proposed Facilities
Alexandria, Virginia		Trail	Trail
		Advisory Bike Lane;	Shared Roadway
		Climbing Lane	Enhanced Bicycle Corridor
		Shared Lane Markings	
		Unpaved Nature Trail	

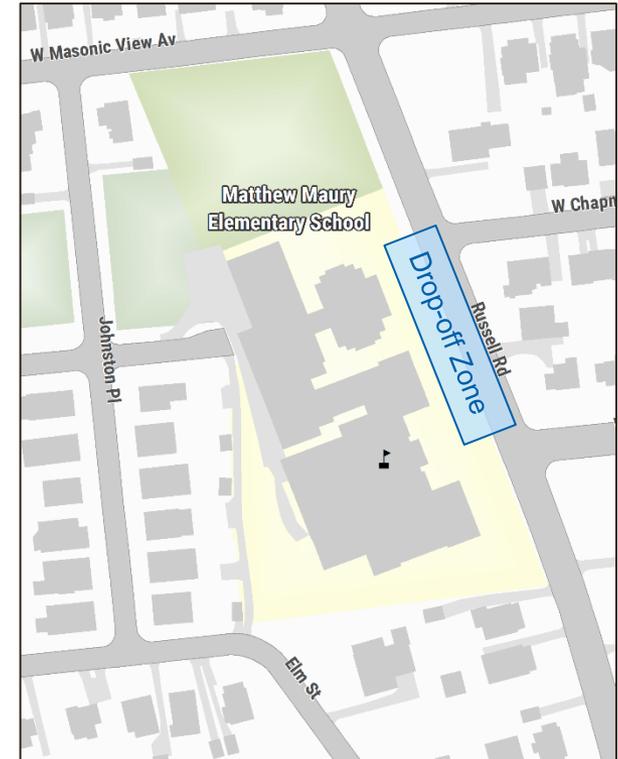
# ARRIVAL OBSERVATIONS

## Arrival

- All students enter the building through the front door on Russell Road

## Drop-off Zone

- The designated bus drop-off zone is on Russell Road between W Chapman St and W Oak St. Six buses drop-off at Maury ES.
- Vehicles drop-off at the same location once buses depart
  - Drop-offs were also observed at:
    - W Oak St
    - Northbound Russell Rd between W Walnut St and W Oak St



Vehicular Drop-Off



Bus Drop-Off

# ARRIVAL OBSERVATIONS

## Russell Rd and W Oak St

- The crossing guard at this intersection helps students and parents cross Russell Rd. However, a short pedestrian crossing phase and vehicular congestion that blocks the intersection are challenges.
- Heavy flow of pedestrians from W Oak St with a few bicyclists.



## School Zone Signage

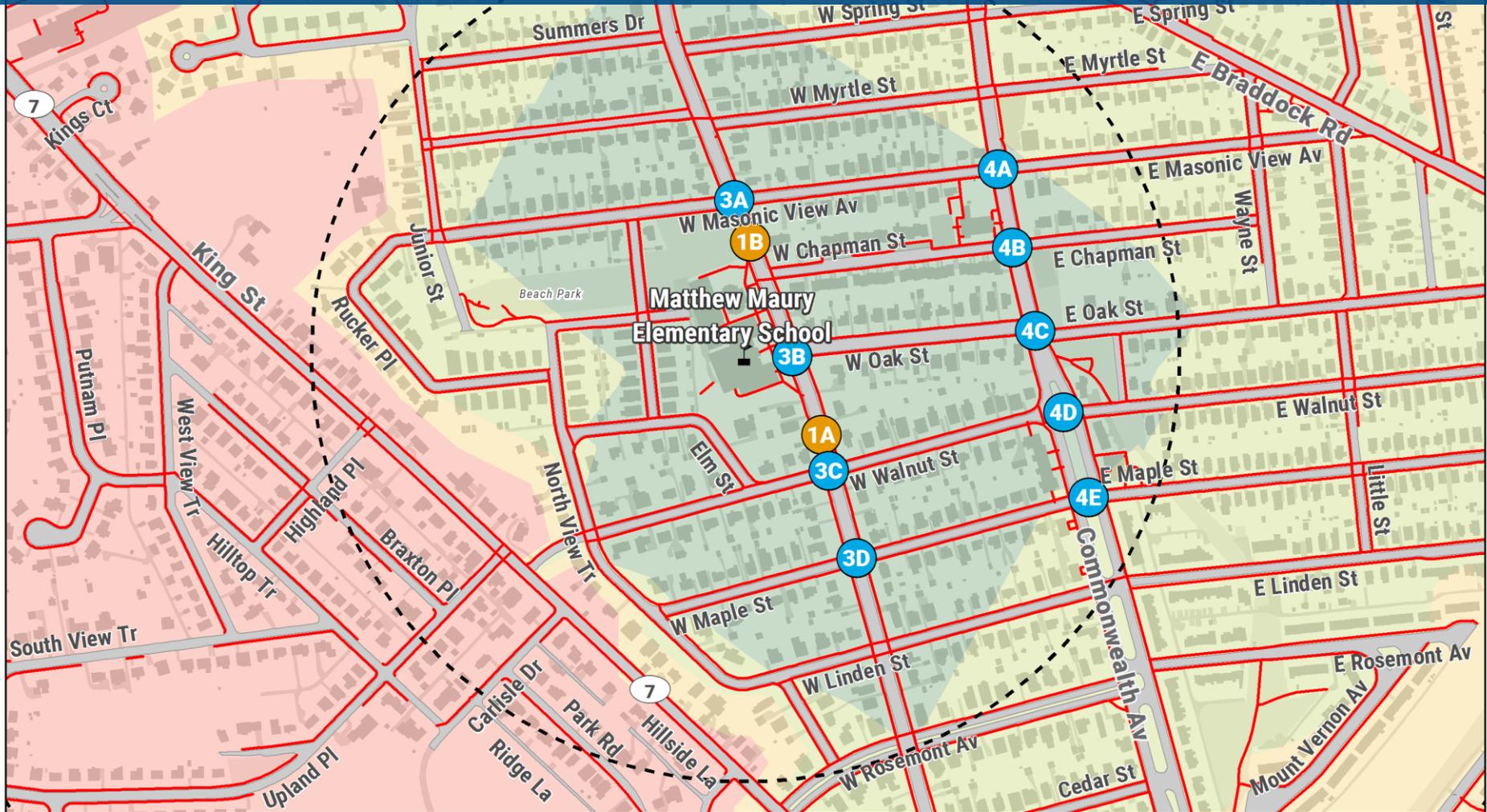
- School zone flashing beacon facing southbound traffic on Russell Rd not operating.
- School zone flashing beacon facing northbound traffic on Russell Rd not operating and obscured by vegetation.

## Russell Rd and W Walnut St

- Over 25 students observed walking from this intersection.

# ENGINEERING RECOMMENDATIONS

# INFRASTRUCTURE RECOMMENDATIONS MAP



## Infrastructure Recommendations

Maury Elementary School  
Alexandria, Virginia

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

# GENERAL RECOMMENDATIONS WITHIN ½ MILE OF SCHOOL

## Recommendations

Restripe existing crosswalks

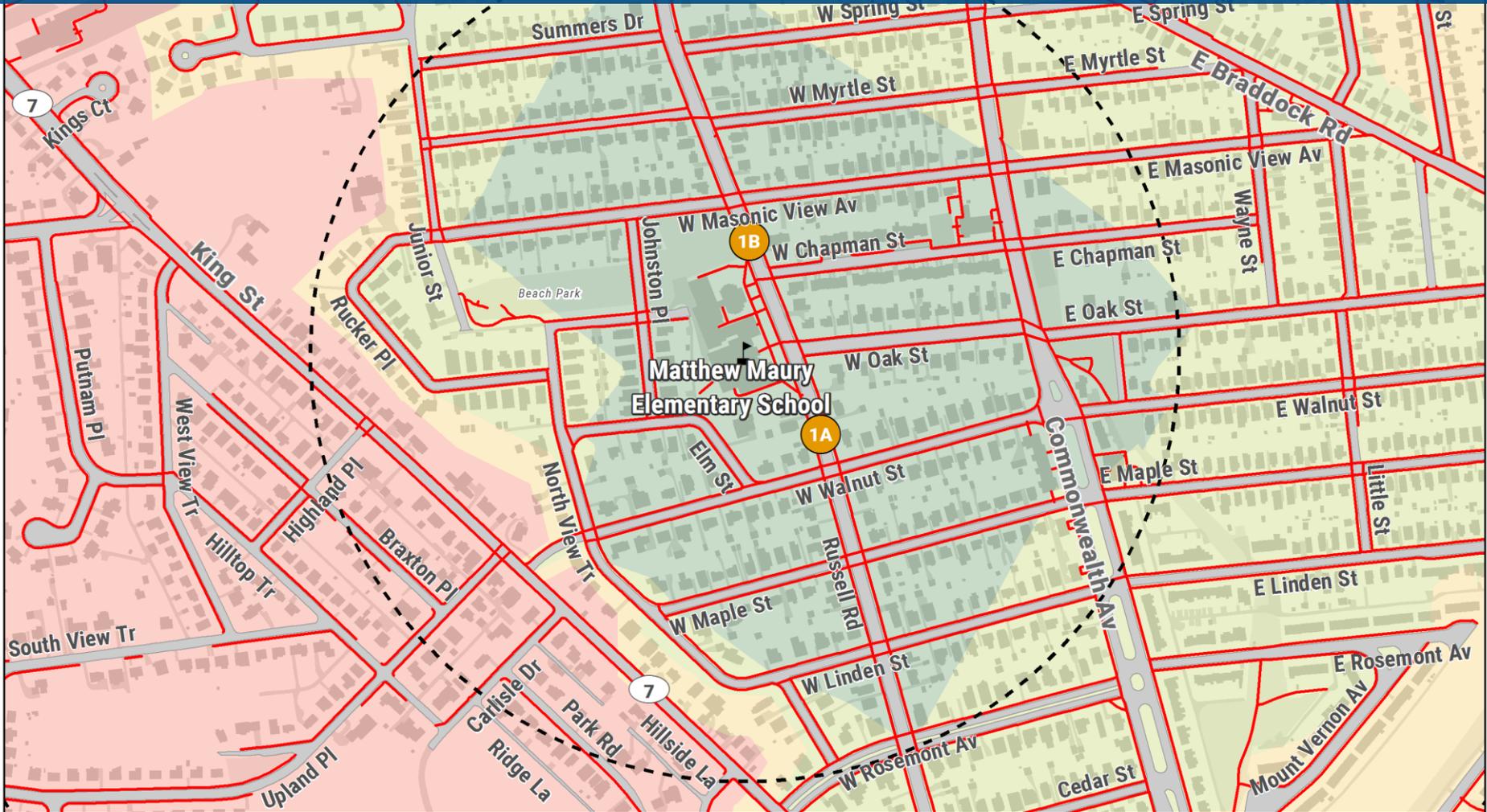
Update curb ramps to meet current ADA guidelines



ADA Accessible curb ramp at W Maple St & Russell Rd

# SCHOOL ZONE SIGNAGE

Additional Detail on Following Slide



## Infrastructure Recommendations

Maury Elementary School  
Alexandria, Virginia

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

# School Zone Signage

Map ID	Issue	Recommendation	Timeframe*
1A	School zone flashing beacons not operating during arrival and dismissal	Adjust/fix beacons so they operate during arrival and dismissal	Short
	School zone flashing beacons obscured by vegetation	Trim vegetation	Short
	Driver awareness of school zone	Add SCHOOL pavement marking	Short
1B	School zone flashing beacons not operating during arrival and dismissal	Adjust/fix beacons so they operate during arrival and dismissal	Short
	Driver awareness of school zone	Add SCHOOL pavement marking	Short

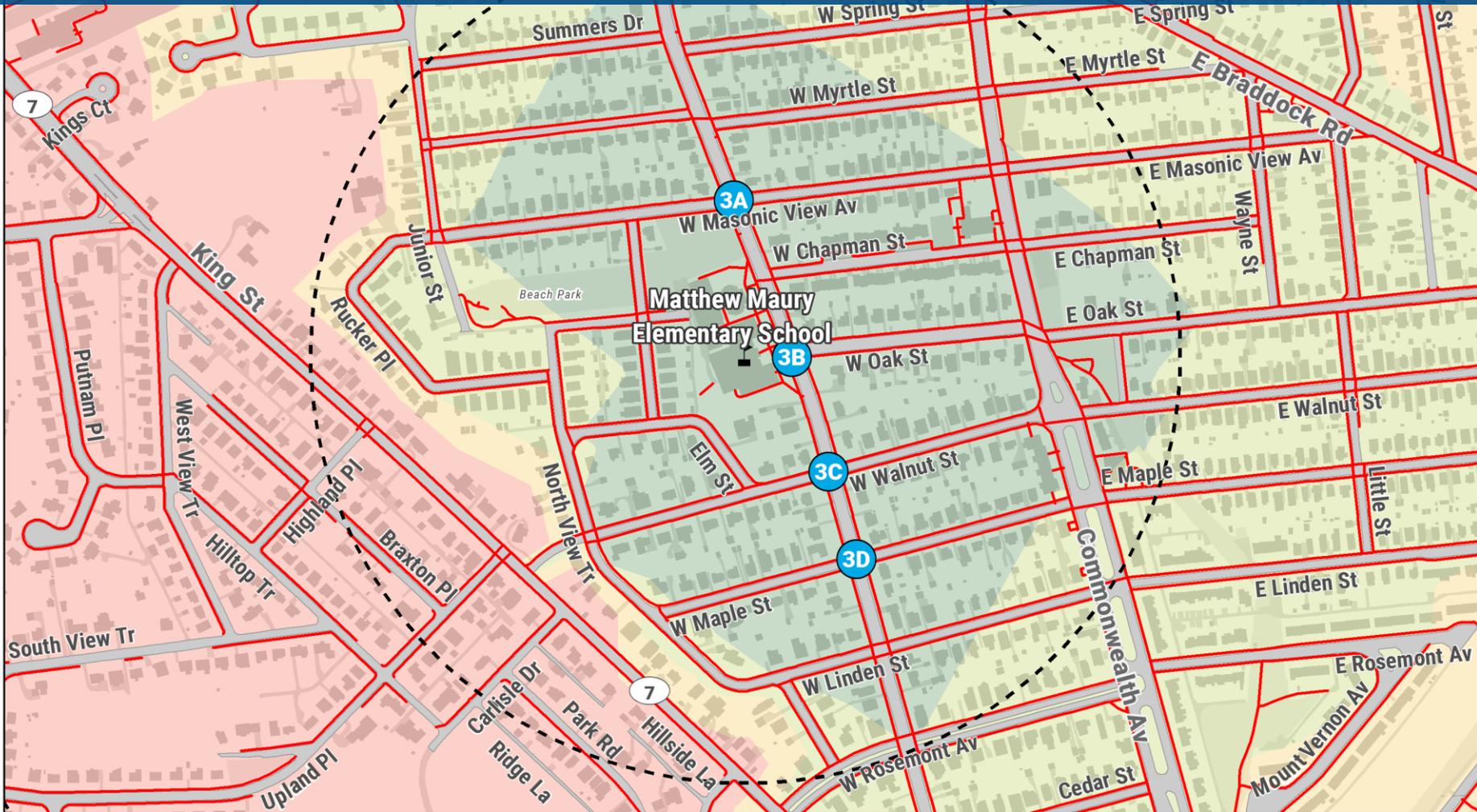
\* Short = within 1 year, Medium = within 3 years, Long = 3 or more years



School zone speed limit sign and flashing beacon on northbound Russell Rd between W Walnut St and W Oak St

# RUSSELL ROAD

Additional Detail on Following Slide



## Infrastructure Recommendations

Maury Elementary School  
Alexandria, Virginia

- Intersection Recommendations
- Mid-Block Recommendations
- School Zone Signange Recommendations
- Signalized Intersection Recommendations
- ▬▬▬▬ Sidewalk Recommendations
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- Schools
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- 1/4 Mile
- 1/2 Mile
- 1 Mile
- 2 Miles

# RUSSELL ROAD

Map ID	Issue	Recommendation	Timeframe*
3A	High pedestrian and motor volumes; concern about motor vehicle speeds and yielding	Modify southern crossing across Russell Rd by adding curb extensions and a raised crosswalk	Medium
3B	Insufficient pedestrian crossing time	Provide Leading Pedestrian Interval and extended walk phase when push button activated	Short
	Long crossing distance	Add curb extensions at existing marked crosswalk across Russell Rd	Medium
3C	Poor visibility	Restrict parking approaching Russell Road to improve sight lines	Short
	Crosswalks faded or insufficient	Mark high-visibility crosswalks across Russell Road	Short
	Long crossing distance	Add curb extensions at existing crosswalks to shorten crossing distance across Russell Rd	Medium
3D	Crosswalks faded or insufficient	Mark high-visibility crosswalks across Russell Road	Short
	Long crossing distance	Add curb extensions at existing crosswalks to shorten crossing distance across Russell Rd	Medium

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

# RUSSELL ROAD



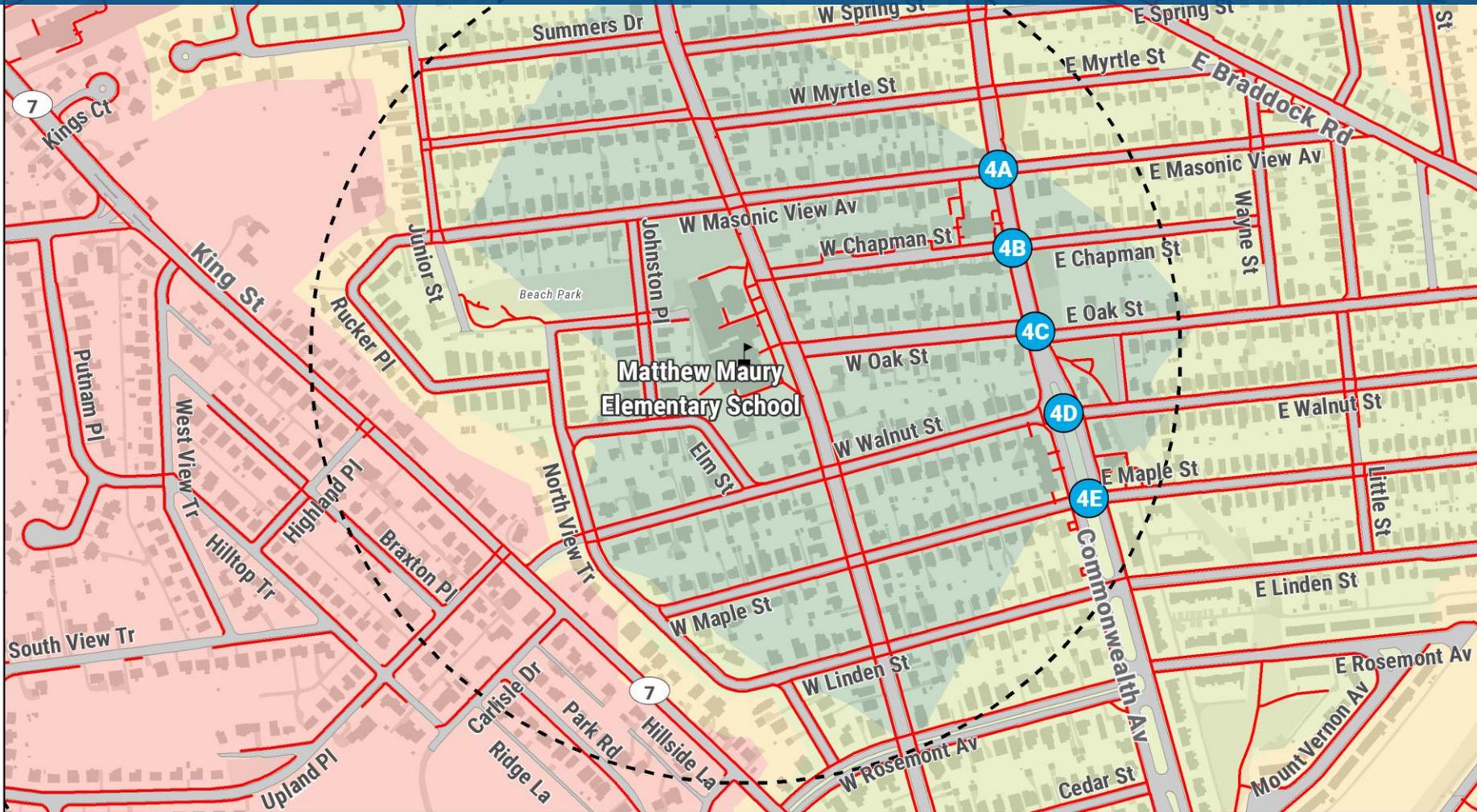
Existing crosswalk at Russell Rd and W Masonic View Ave



Faded crosswalks and poor sightlines due to parked cars at Russell Rd and W Walnut St

# COMMONWEALTH AVENUE

Additional Detail on Following Slide



**Infrastructure Recommendations**

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Maury Elementary School  
Alexandria, Virginia

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

# COMMONWEALTH AVENUE

Map ID	Issue	Recommendation	Timeframe*
4ABCDE	Long crossing distance	Add curb extensions at existing crosswalks to shorten crossing distance across Commonwealth Avenue	Medium
4A	Crosswalks faded or insufficient	Mark high-visibility crosswalks across Commonwealth Avenue and reconstruct speed table as a raised crosswalk	Medium
4B	Crosswalks faded or insufficient	Mark high-visibility crosswalks across Commonwealth Avenue	Medium
4C	Crosswalks faded or insufficient	Mark high-visibility crosswalks across Commonwealth Avenue	Medium
4D	Poor visibility	Trim bushes on NW corner to improve sightlines	Short
	Crosswalks faded or insufficient	Mark high-visibility crosswalks across Commonwealth Avenue	Medium
	Long crossing distance	For existing marked crosswalk across Commonwealth Ave, extend median to create pedestrian refuge island.	Medium
4E	Crosswalks faded or insufficient	Mark high-visibility crosswalks across Commonwealth Avenue	Medium
	Long crossing distance	For existing marked crosswalk across Commonwealth Ave, extend median to create pedestrian refuge island.	Medium

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

# COMMONWEALTH AVENUE



Long crosswalk across Commonwealth Ave.  
at W Walnut St.



Faded crosswalks at Commonwealth Ave.  
and W Masonic View Ave.

# PROGRAMMATIC RECOMMENDATIONS

# EDUCATION

Recommendation	Continue Existing	Start New
Integrate pedestrian and bicycle safety education into the school curriculum.		●
Conduct a bicycle rodeo to teach the skills and precautions to ride a bike safely.		●
Incorporate information about 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.		●



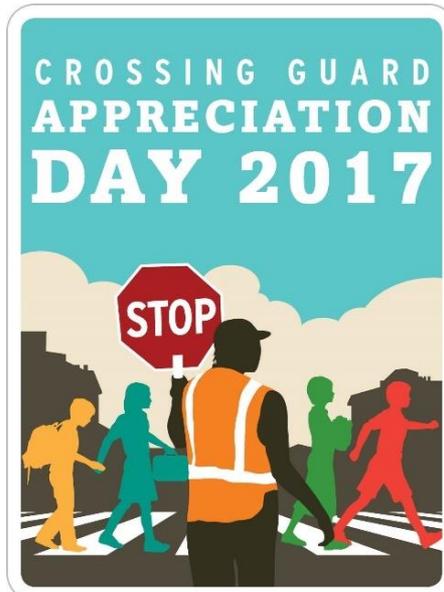
# ENCOURAGEMENT

Recommendation	Continue Existing	Start New
Participate in International Walk to School Day and Bike to School Day.		●
Help organize and support walking schools buses.		●
Help organize and support bike trains.		●
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 traffic enforcement near the school.	●	



# 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.	●	

*\*Travel Tallies were last collected in the fall of 2014 and Parent Surveys were conducted in the fall of 2016 at Maury Elementary School. Up to date information is required to monitor program success and apply for federal SRTS funding.*

