

South Carlin Springs Road Safety Study

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Update to the Joint Committee on Transportation Choices

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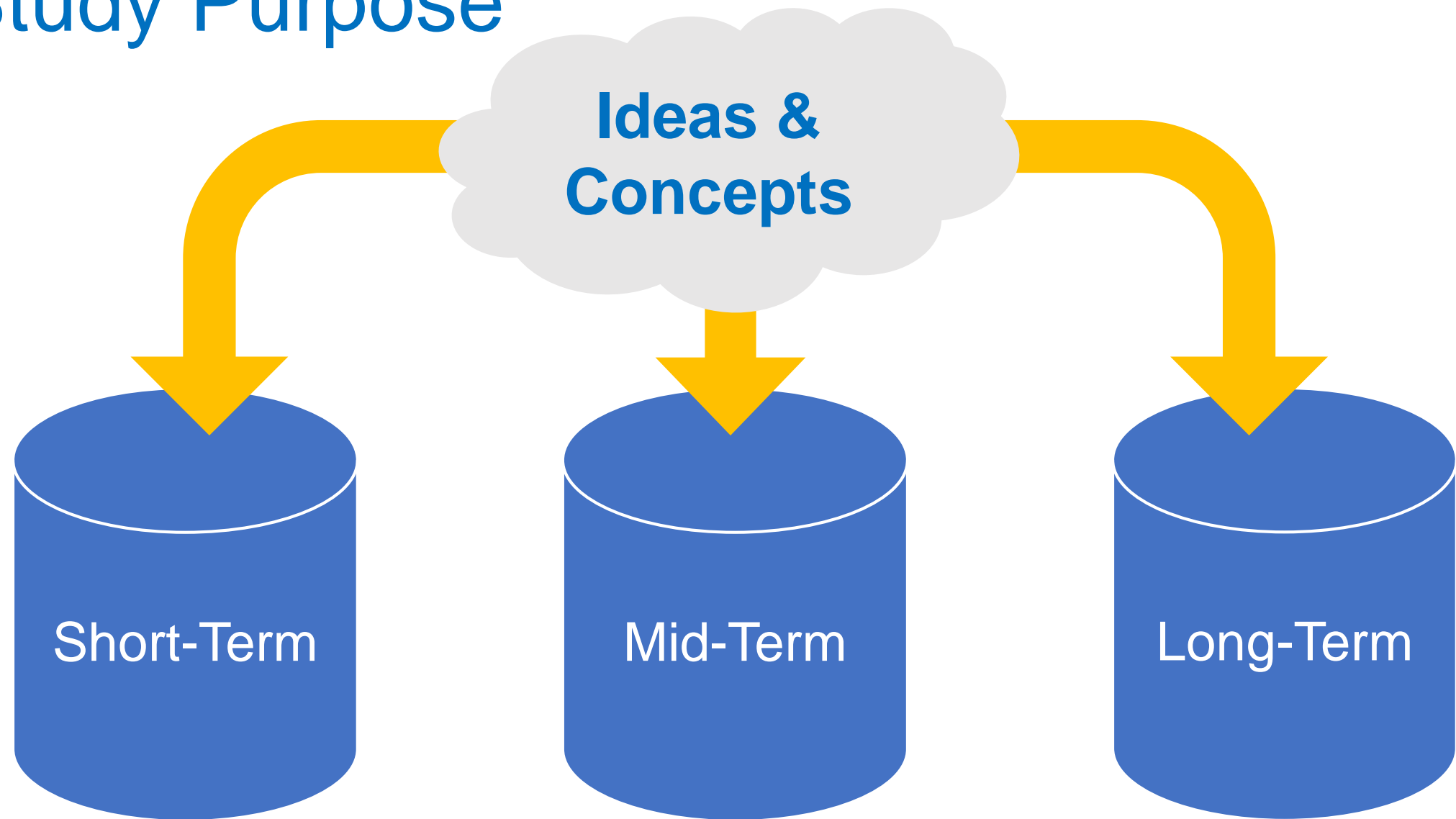
Agenda

- Introductions
- Study Purpose
- Corridor Conditions
- Data Analysis (Volumes, Speeds, Crashes)
- Identification of Key Safety Concerns
- Planned Signal Improvements
- Review of Long Branch Trail Alternative
- Q&A

Study Purpose

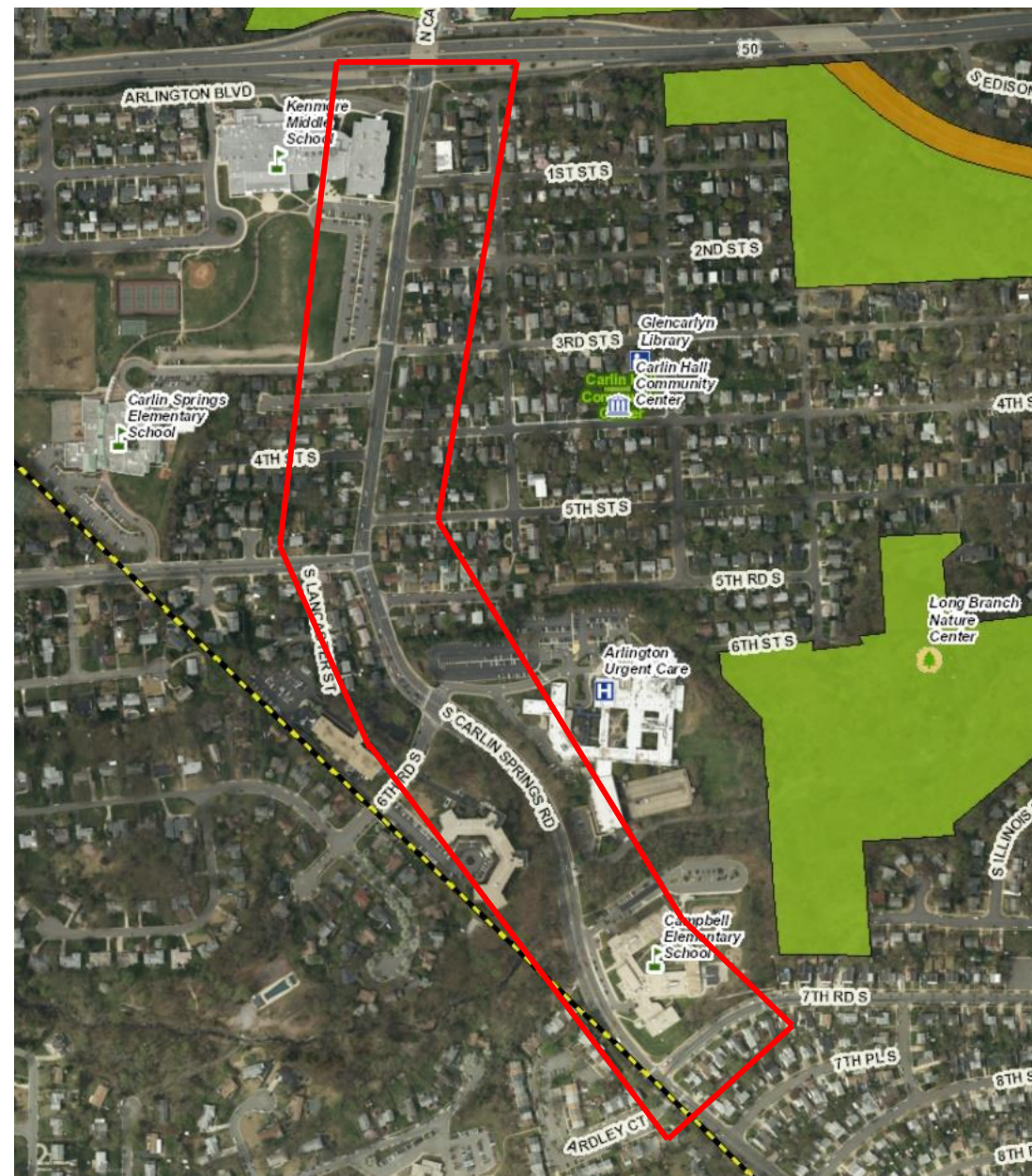
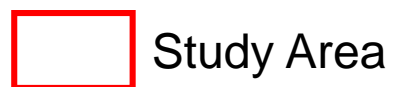
- Evaluate pedestrian safety issues along the S Carlin Springs Rd corridor
- Identify key safety concerns from a pedestrian point of view
- Develop solutions to address identified concerns
 - Create a safe environment for students/families of the three APS schools in the corridor

Study Purpose



Corridor Conditions

- Study Area from Arlington Blvd EB to 7th Rd S
- Another current safety study addresses N Carlin Springs Rd



South Carlin Springs Road Streetscape

- 27,000 Average Daily Traffic
- 2 Vehicle Lanes/Direction
- 3- to 8-Foot Sidewalks
- No On-Street Parking



Corridor Conditions

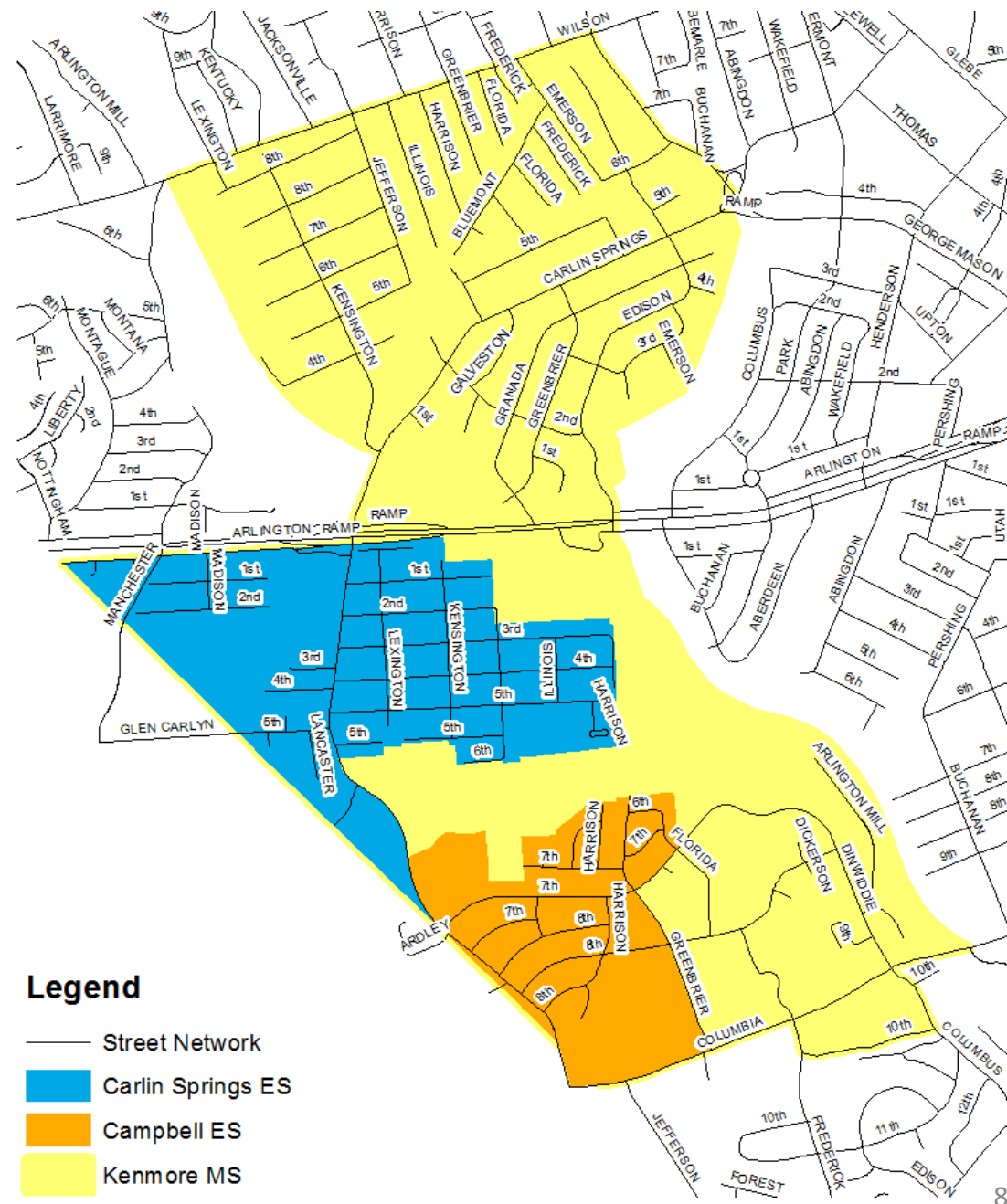
- Schools
 - Kenmore Middle
 - Carlin Springs Elementary
 - Campbell Elementary
- Other Facilities
 - Long Branch Nature Center & Park
 - Virginia Hospital Center
 - Residential Neighborhoods



Corridor Conditions

Walk Zones

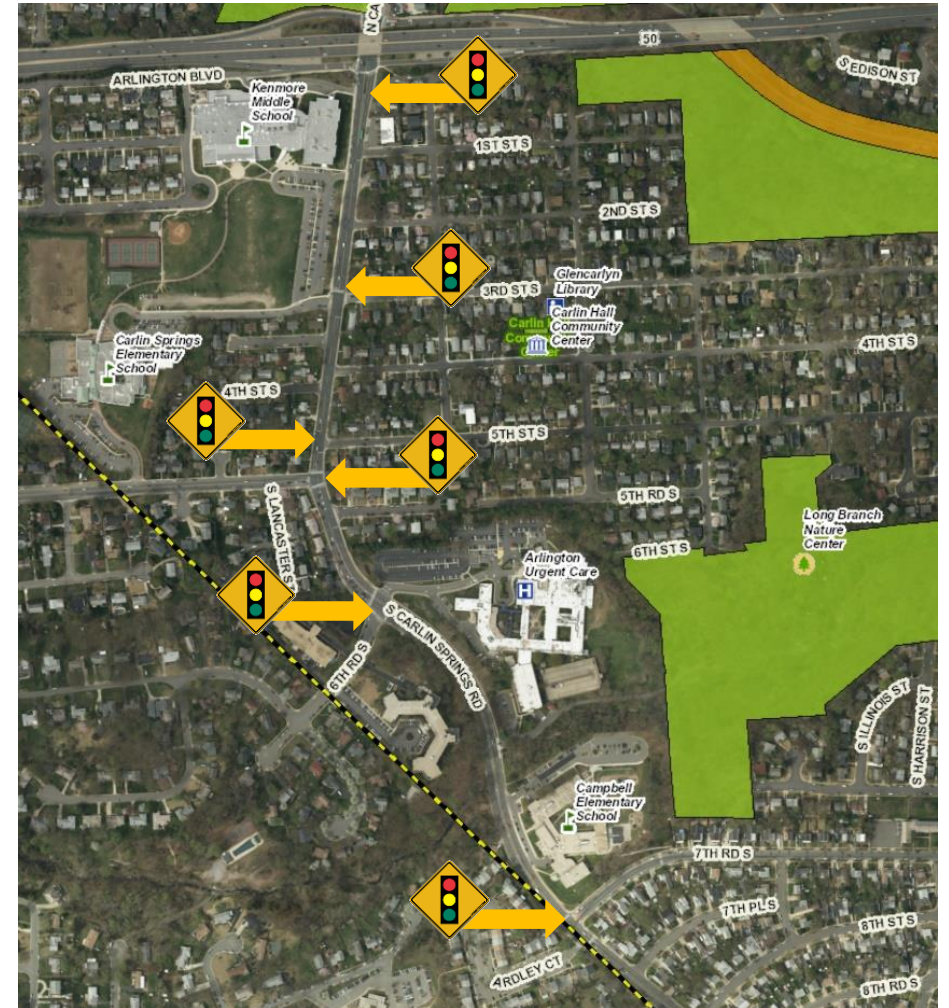
- Kenmore Middle
- Carlin Springs Elementary
- Campbell Elementary



Corridor Conditions

Signalized Intersections

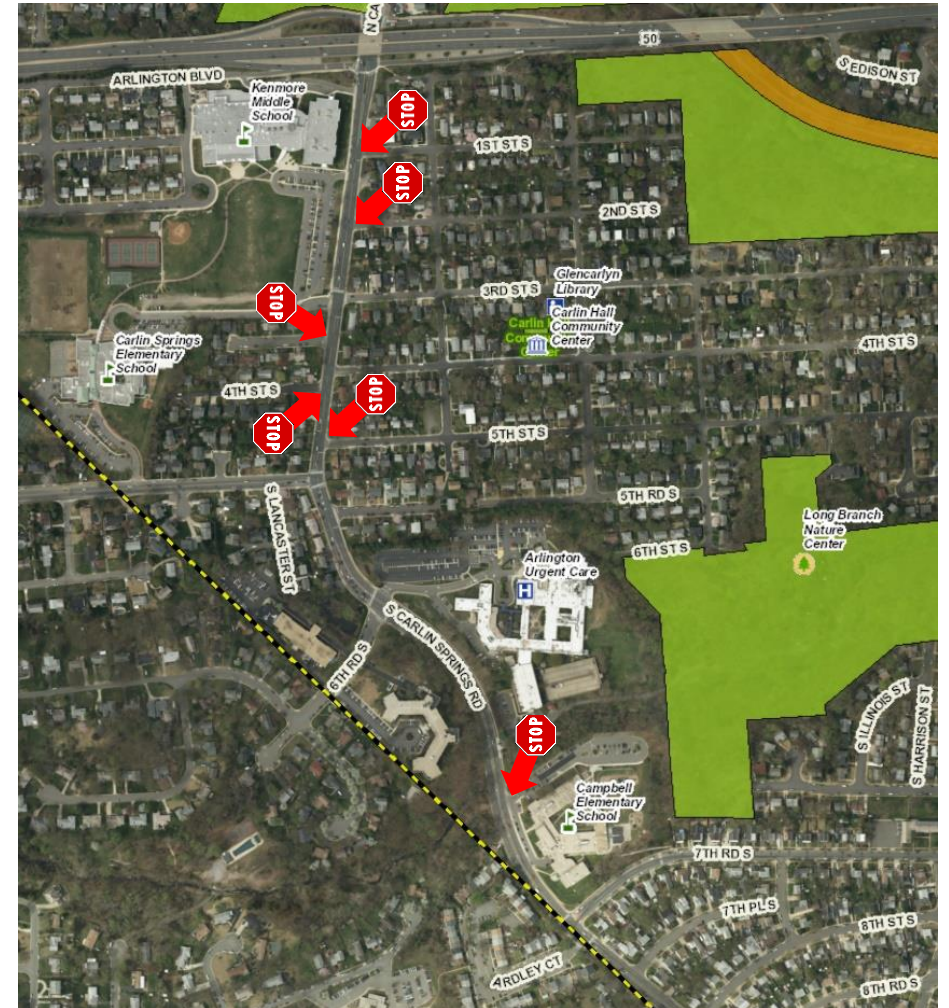
- S Carlin Springs Road @
 - Arlington Blvd
 - 3rd St S
 - 5th St S
 - Glen Carlyn Rd/5th Rd S
 - 6th Rd S
 - 7th Rd S



Corridor Conditions

Stop Sign Controlled Intersections

- S Carlin Springs Road @
 - 1st St S
 - 2nd St S
 - 3rd St S
 - 4th St S
 - 5th Rd S WB
 - Campbell Elementary School Access Road



Corridor Conditions

Crossing Guard Locations

- S. Carlin Springs Road @
 - Arlington Blvd (N & S Ramps)
 - 3rd St S
 - Glen Carlyn Rd/5th Rd S
- 7th Rd S
 - Crosswalk Across from 5624 7th Rd S



Corridor Conditions

- Sidewalks on S Carlin Springs Rd
 - Near Kenmore Middle
 - West Side: 8 feet
 - East Side: 5 feet
 - Near Carlin Springs Elementary
 - West Side: 4.5 feet
 - East Side: 4.5 feet
 - Near Campbell Elementary
 - West Side: 8 feet
 - East Side: 4 feet or less



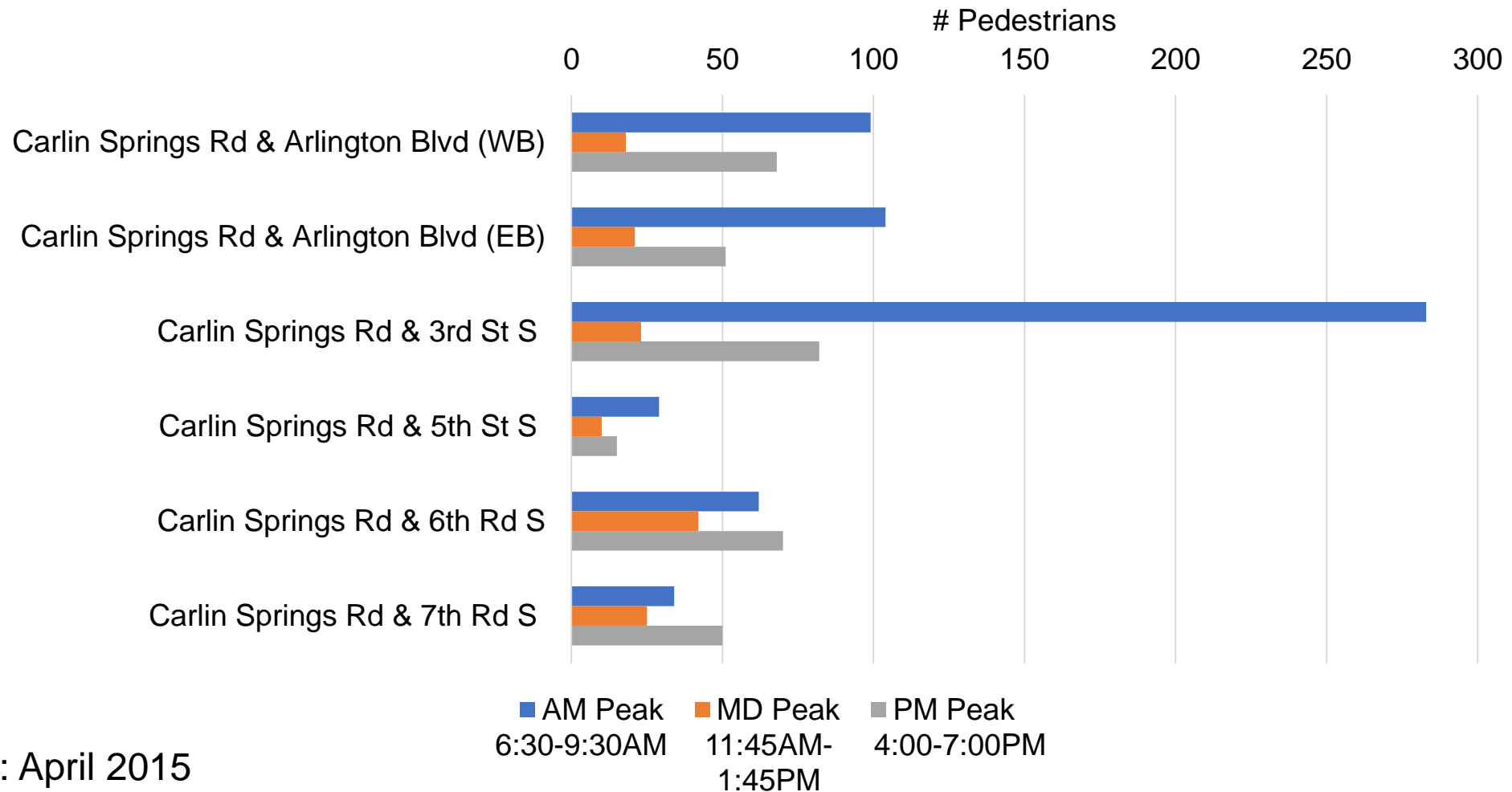
Data Analysis

Intersection Volumes

Volumes by Time of Day	AM Peak 6:30-9:30AM			MD Peak 11:45AM-1:45PM			PM Peak 4PM-7PM		
	Cars/ Trucks/ Buses	Peds	Bikes	Cars/ Trucks/ Buses	Peds	Bikes	Cars/ Trucks/ Buses	Peds	Bikes
Intersections									
Carlin Springs Rd & Arlington Blvd (WB)	6,080	99	0	2,749	18	0	7,156	68	2
Carlin Springs Rd & Arlington Blvd (EB)	7,281	104	0	3,266	21	0	8,086	51	5
Carlin Springs Rd & 3rd St S	6,345	283	0	2,958	23	0	7,355	82	5
Carlin Springs Rd & 5th St S	6,217	29	0	2,852	10	0	7,105	15	2
Carlin Springs Rd & 6th Rd S	6,520	62	3	3,074	42	2	7,418	70	2
Carlin Springs Rd & 7th Rd S	6,264	34	1	2,900	25	1	7,104	50	6

Data Analysis

Intersection Volumes—Pedestrians Only

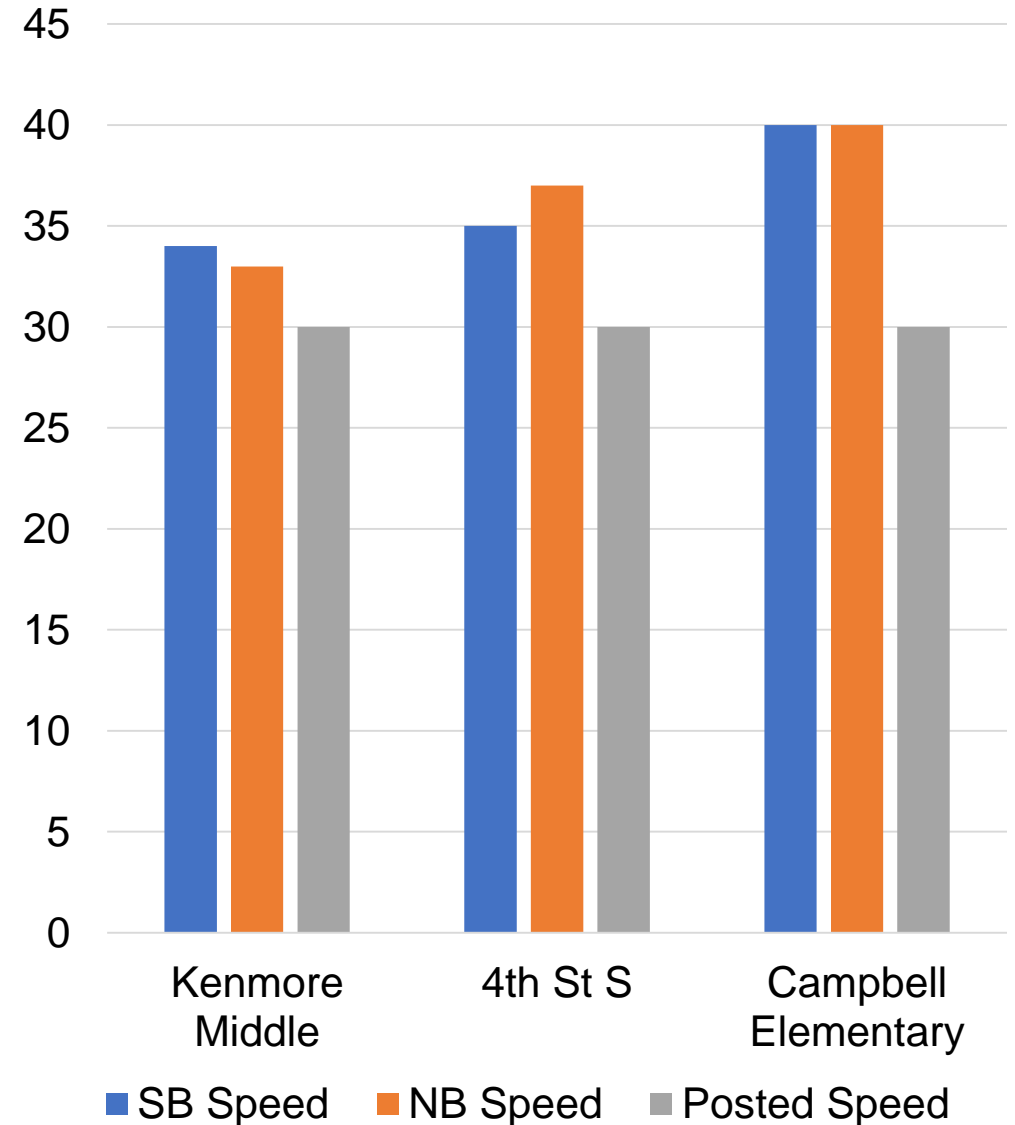


Data Analysis

Traffic Speeds*

Intersection with S Carlin Springs Rd	SB Speed	NB Speed	Posted Speed
Kenmore Middle	34 MPH	33 MPH	30 MPH
4 th St S (NB); 3 rd St S (SB)	35 MPH	37 MPH	30 MPH
Campbell Elementary	40 MPH	40 MPH	30 MPH

*Speeds reported are the 85th percentile speed value
Speed data collected between 12:30PM – 1:30PM



Data Analysis




Crashes—All Types

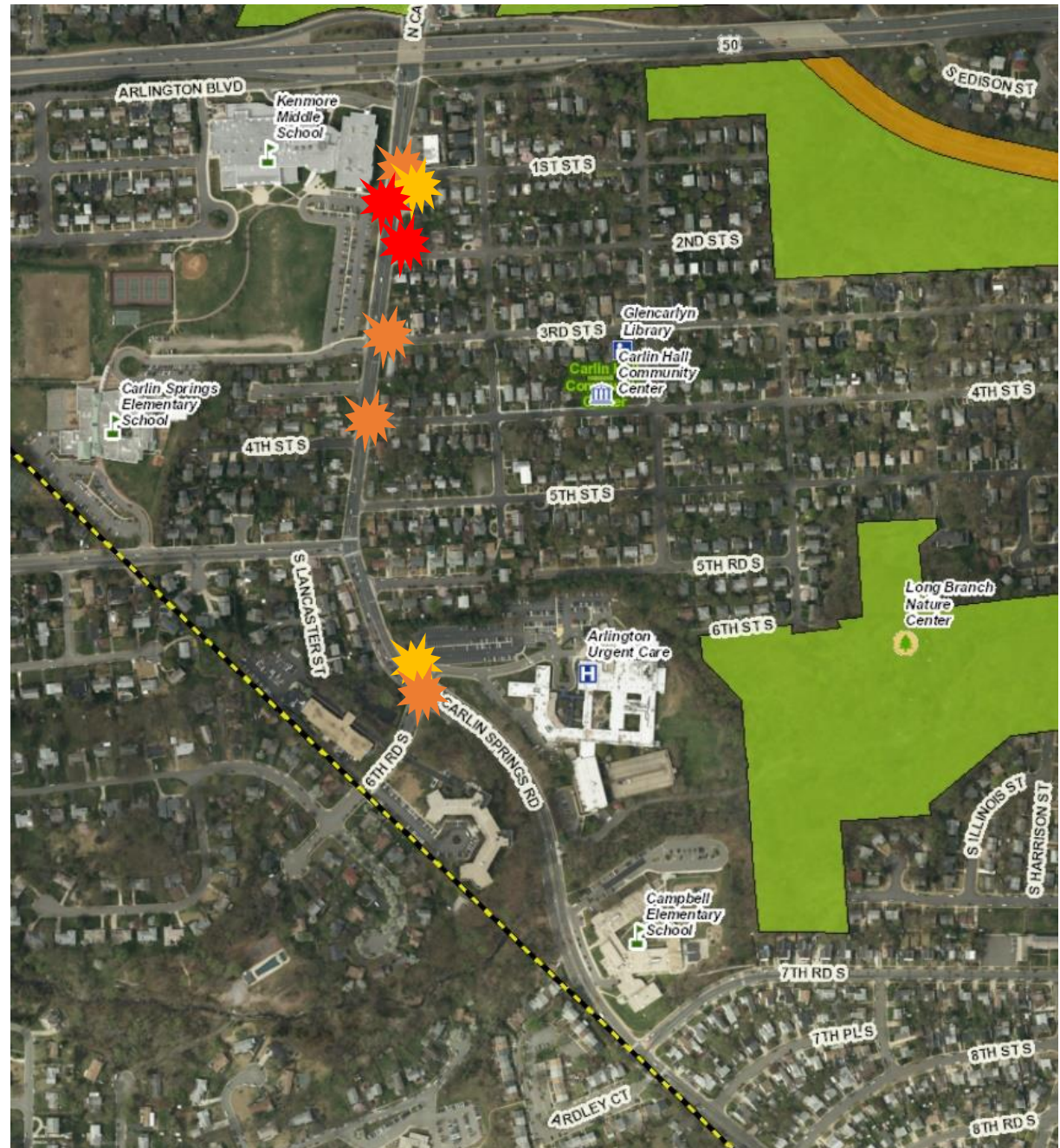
Crash Severity	#Crashes
5 = O = Property Damage Only	81
4 = C = Possible Injury	19
3 = B = Non-incapacitating Injury	36
2 = A = Incapacitating Injury	6
1 = K = Fatal	0
Total	142

Crash Type	#Crashes
Angle	51
Rear End	41
Sideswipe Same Direction	16
Fixed Object Off Road	13
Pedestrian	8
Head On	4
Backed Into	3
Non-Collision	3
Bicyclist	1
Deer	1
Other	1
Total	142

Data Analysis

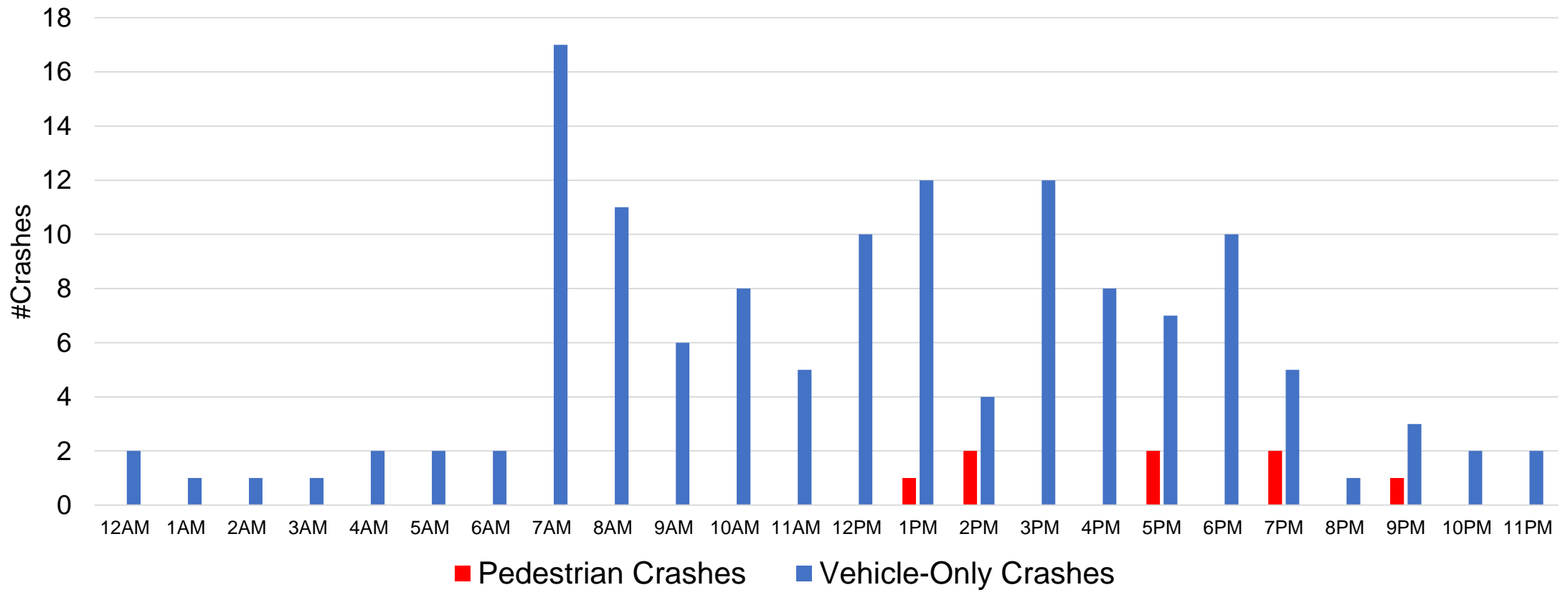
Pedestrian Crash Locations & Severity

-  Possible Injuries (C)
-  Non-incapacitating Injuries (B)
-  Incapacitating Injuries (A)



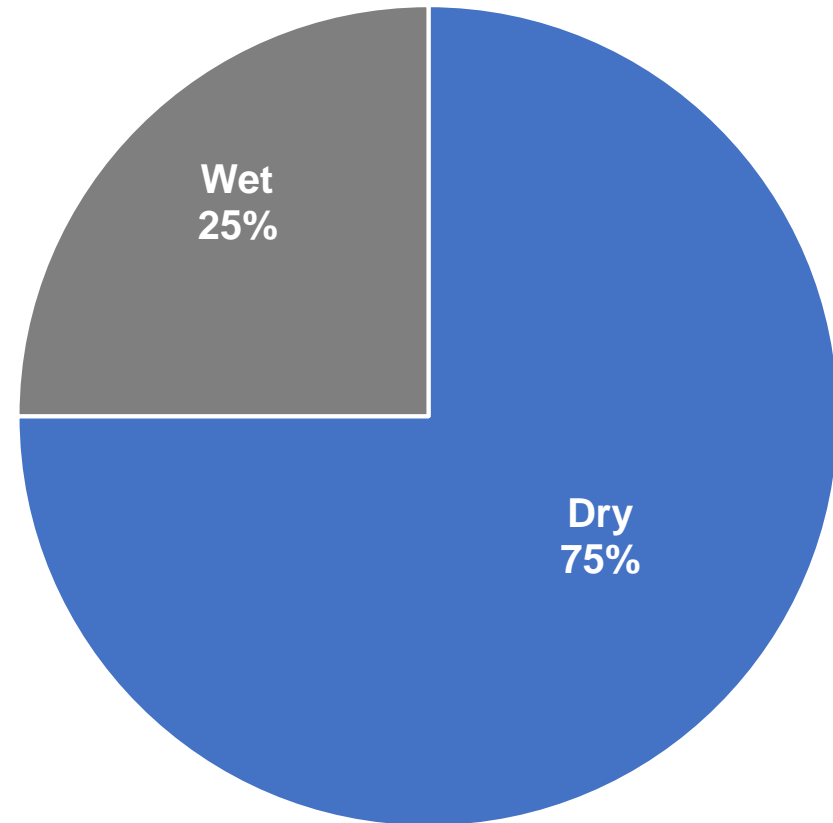
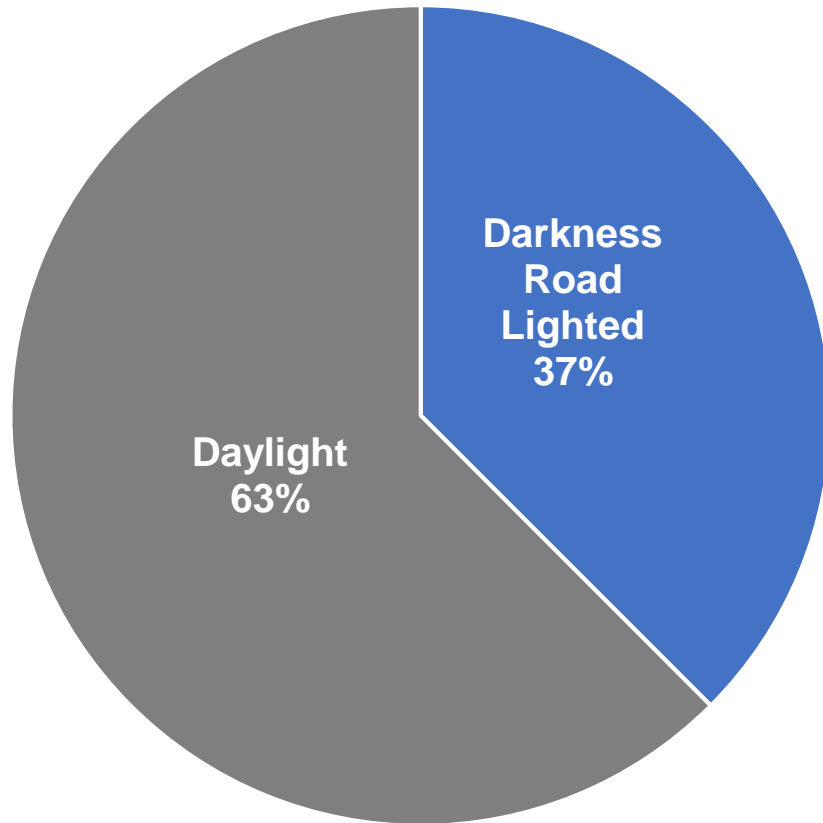
Data Analysis

Crash Time of Day



Data Analysis

Lighting & Road Conditions—Pedestrian Crashes Only

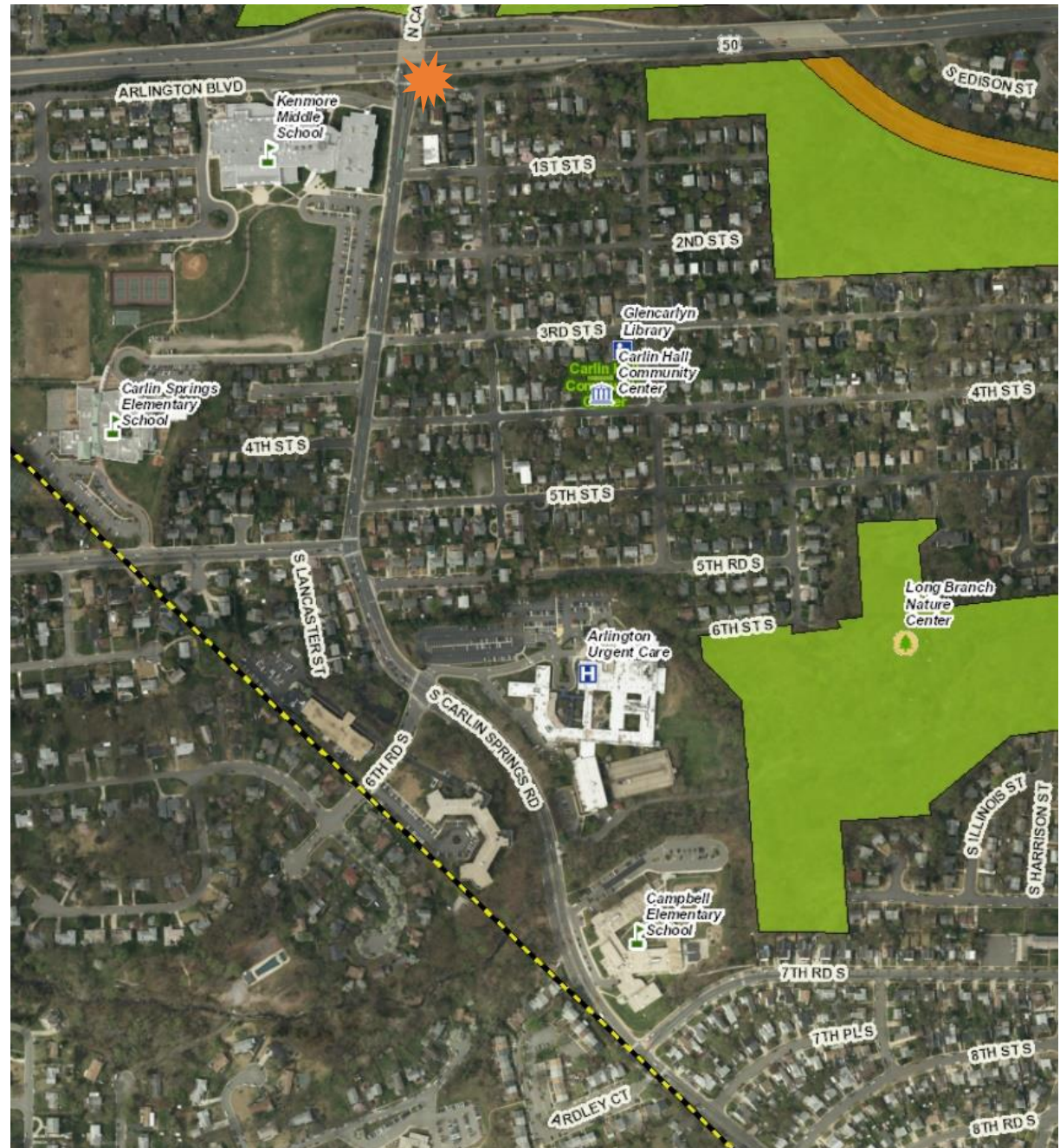


Data Analysis

Bicycle Crash Location & Conditions

- 1 Crash Location ('10-'17)
- 1:30PM - Daylight
- Dry Conditions
- Vehicle failed to give cyclist right of way

 Non-incapacitating Injuries (B)



Identification of Key Safety Concerns

- Pedestrian crash hot spots
 - S Carlin Springs Rd @ 1st St S
 - S Carlin Springs Rd @ 6th Rd S
- Most common reasons for pedestrian crashes
 - Vehicle did not see pedestrian
 - Pedestrian did not see vehicle
 - Vehicle hit pedestrian on left hand turn
- Most pedestrian crashes occurred in the afternoon
 - Over 1/3 of pedestrian crashes were after dark

Identification of Key Safety Concerns

- High vehicle speeds in southern portion of corridor
- Narrow sidewalks in segments of corridor
- Intersections with limited markings
 - 1st St S @ S Carlin Springs Rd
 - 2nd St S @ S Carlin Springs Rd
 - 3rd St S @ S Carlin Springs Rd
 - 4th St S @ S Carlin Springs Rd
 - 5th St S @ S Carlin Springs Rd
 - 5th Rd S @ S Carlin Springs Rd

Planned Signal Improvements

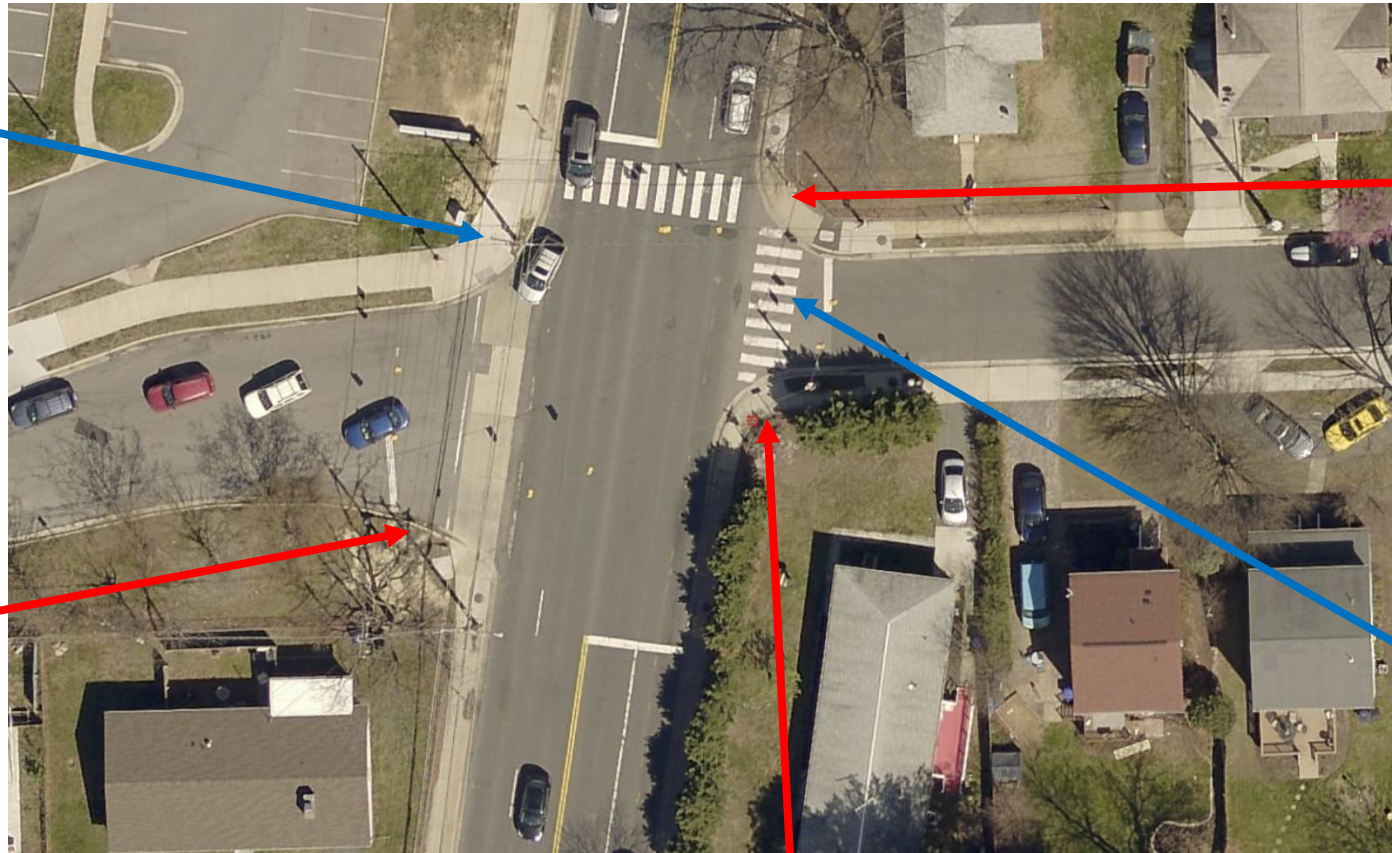
3rd St S / Kenmore Middle Intersection

New Crosswalk

New Curb

New Curb with
Bump Out

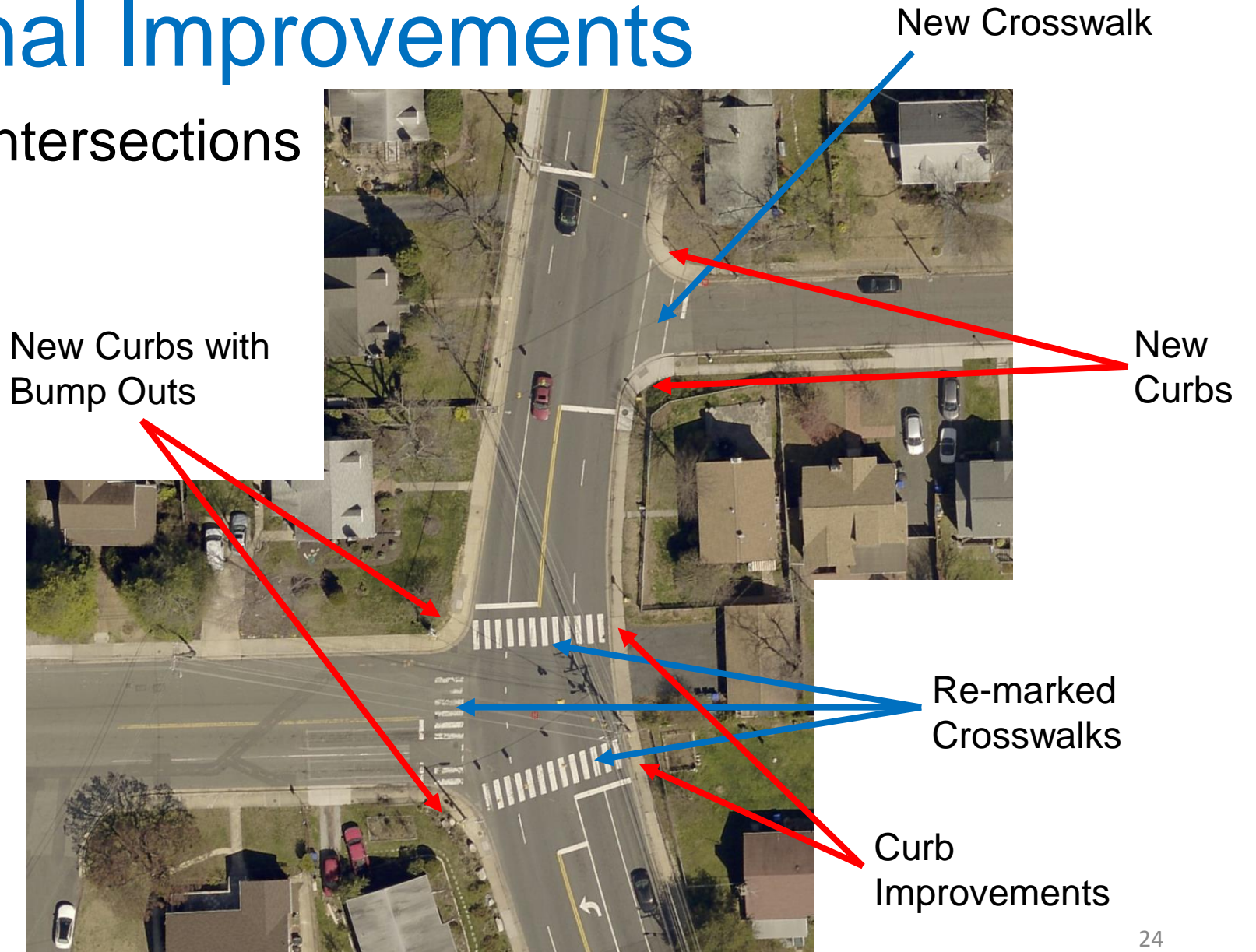
Re-marked
Crosswalk



New Curb

Planned Signal Improvements

5th St S / 5th Rd S Intersections



Planned Signal Improvements

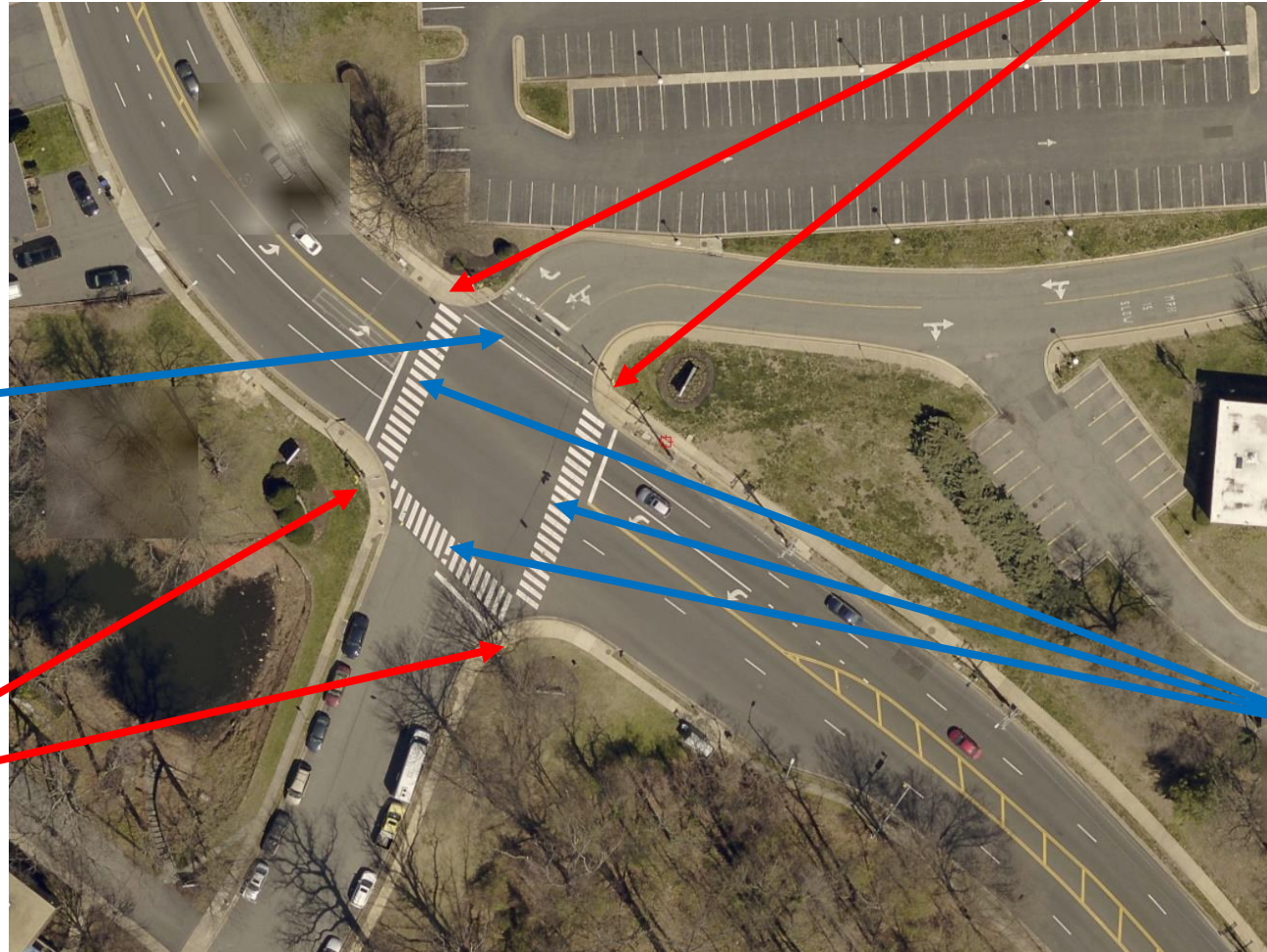
6th Rd S Intersection

Curb Improvements

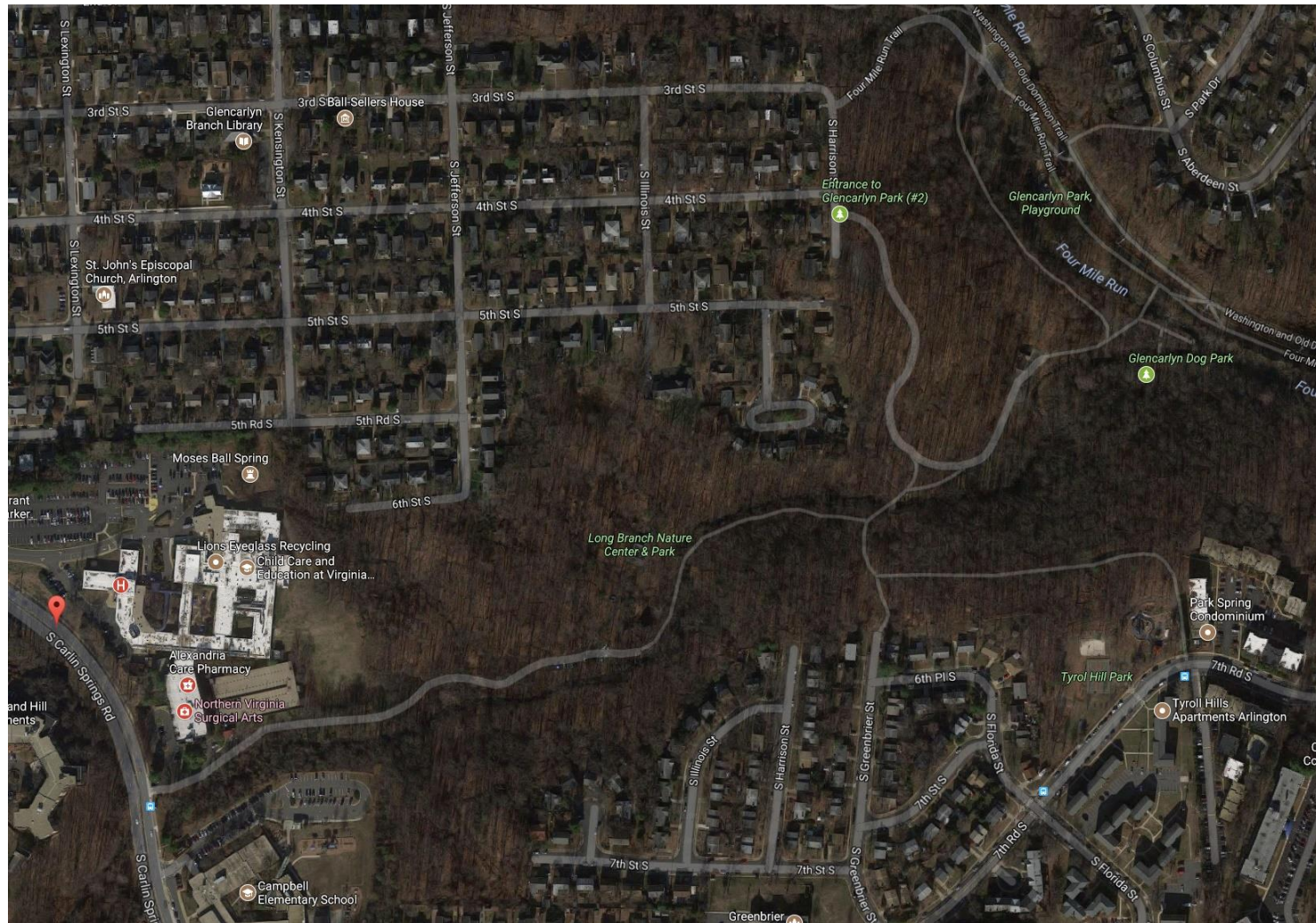
New Crosswalk

Re-marked Crosswalks

New Curbs with Bump Outs

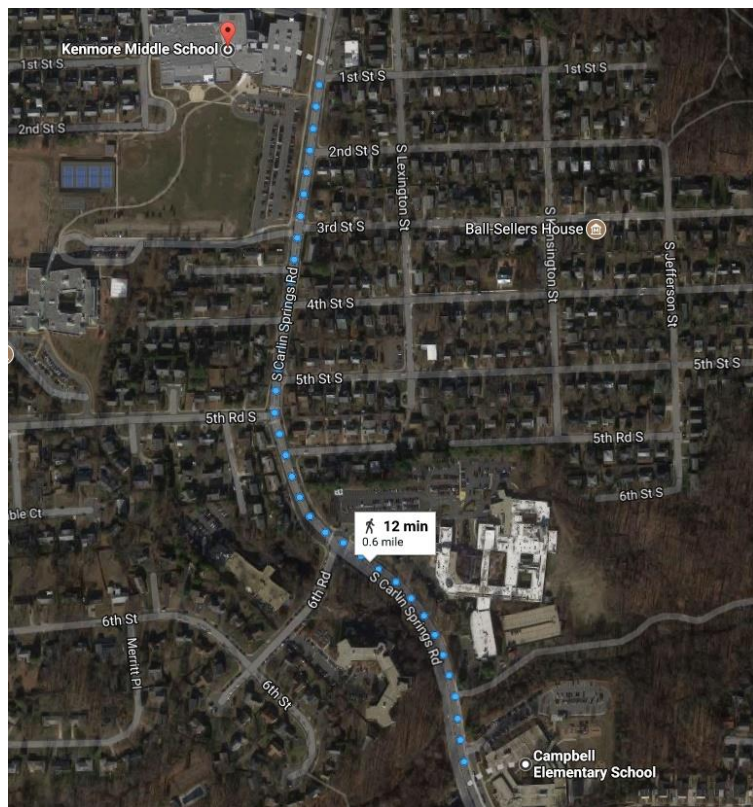


Review of Long Branch Trail Alternative

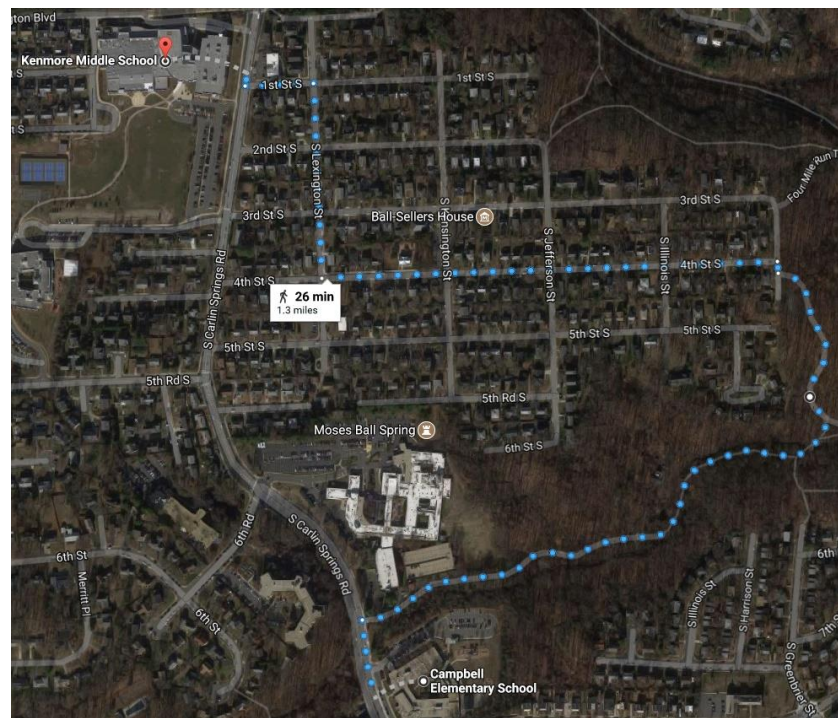


Review of Long Branch Trail Alternative

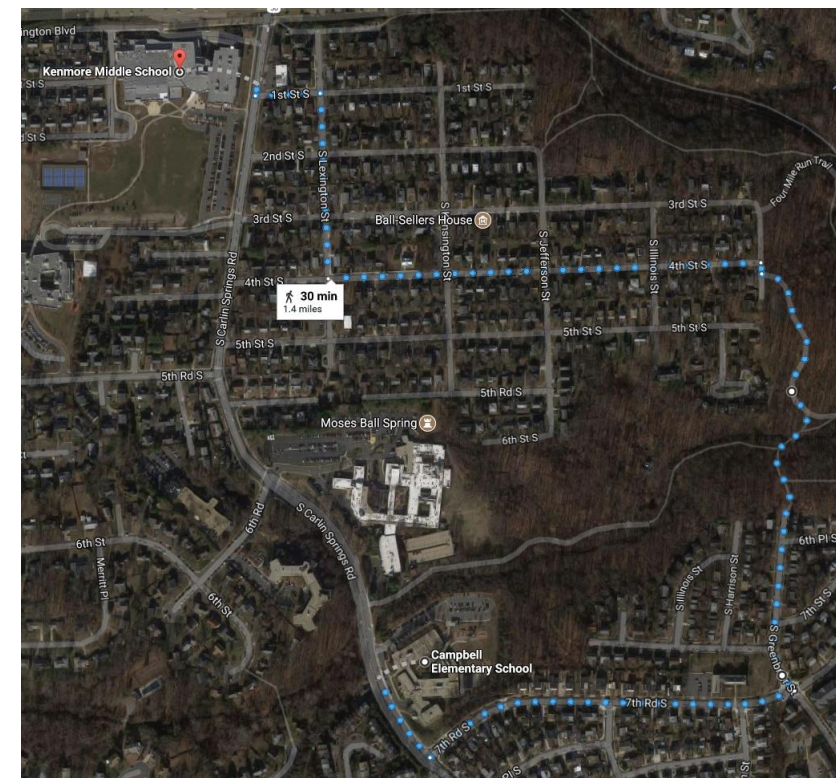
Kenmore Middle to Campbell Elementary



12 Minutes, 0.6 Miles via Carlin Springs



26 Minutes, 1.3 Miles via Neighborhood/Trail



30 Minutes, 1.4 Miles via Neighborhood/Trail/Neighborhood

Q&A

- Questions/Comments/Concerns?
- Preliminary Solutions & Next Steps