

# Project Overview | NV-23-06

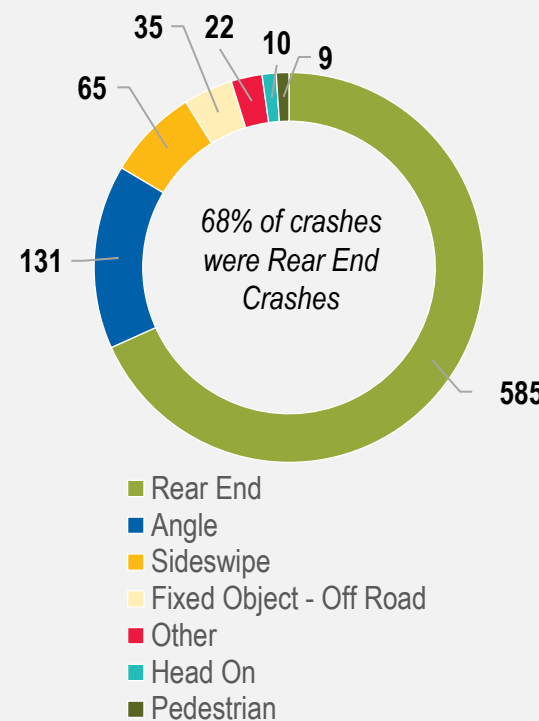
## Arlington Boulevard Interchange



Project Purpose, Goals, & Objectives

Analyze the operational and safety issues identified along Arlington Blvd & Washington Blvd, with a focus on providing enhanced pedestrian & bicycle access and transportation demand management.

Identify cost-effective preferred improvement alternatives that address the deficient conditions and prioritize safety and accessibility.



Project Fact Sheet	
VDOT District	Northern Virginia
Locality	Arlington County
Corridor Length	0.75 mile
Transit Routes	Arlington Transit Bus Routes (42, 45, & 77); WMATA Bus Route 16Y; WMATA Metro Stops nearby (Orange, Silver, Blue, & Yellow Lines)
Bikeways	Shared-Use-Path on the west side of Washington Blvd, south of Arlington Blvd & on the north side of Arlington Blvd
Functional Classification	Other Principal Arterial
Speed Limit	45 mph (south of Brookside Dr); 30 mph (north of Brookside Dr)

### Issues in the Study Area

- The existing Shared Use Path (SUP) is on the west side of Washington Blvd, south of Arlington Blvd & on the north side of Arlington Blvd (passing over the overpass); SUP conditions & markings are inconsistent. Capital Bikeshare at Washington Blvd & Walter Reed Dr.
- Sidewalks are continuous along Washington Blvd, north of Arlington Blvd. Sidewalk conditions are inconsistent along Arlington Blvd. Crosswalks are present in the vicinity of the interchange.
- The current existing bus stops along Washington Blvd serve ART Routes 42, 45, & 77 and WMATA Bus route 16Y. The WMATA Metro Orange/Silver Line is 1.5 miles NW, and the Blue/Yellow Line is 2 miles SE.
- Very long queues were observed along the ramp from NB Washington Blvd to WB Arlington Blvd, spilling onto mainline WB Washington Blvd, during the AM & PM peaks.
- 10 pedestrian incidents in the surrounding areas (2015-2022), all resulted in an injury.
- 127 rear end incidents (2015-2022) along the ramp from NB Washington Blvd to WB Arlington Blvd. 361 incidents associated with the interchange of Washington Blvd at Arlington Blvd.

# Bicycle and Pedestrian Safety and Accessibility Needs

## Bicycle and Pedestrian Safety Needs Identification Summary

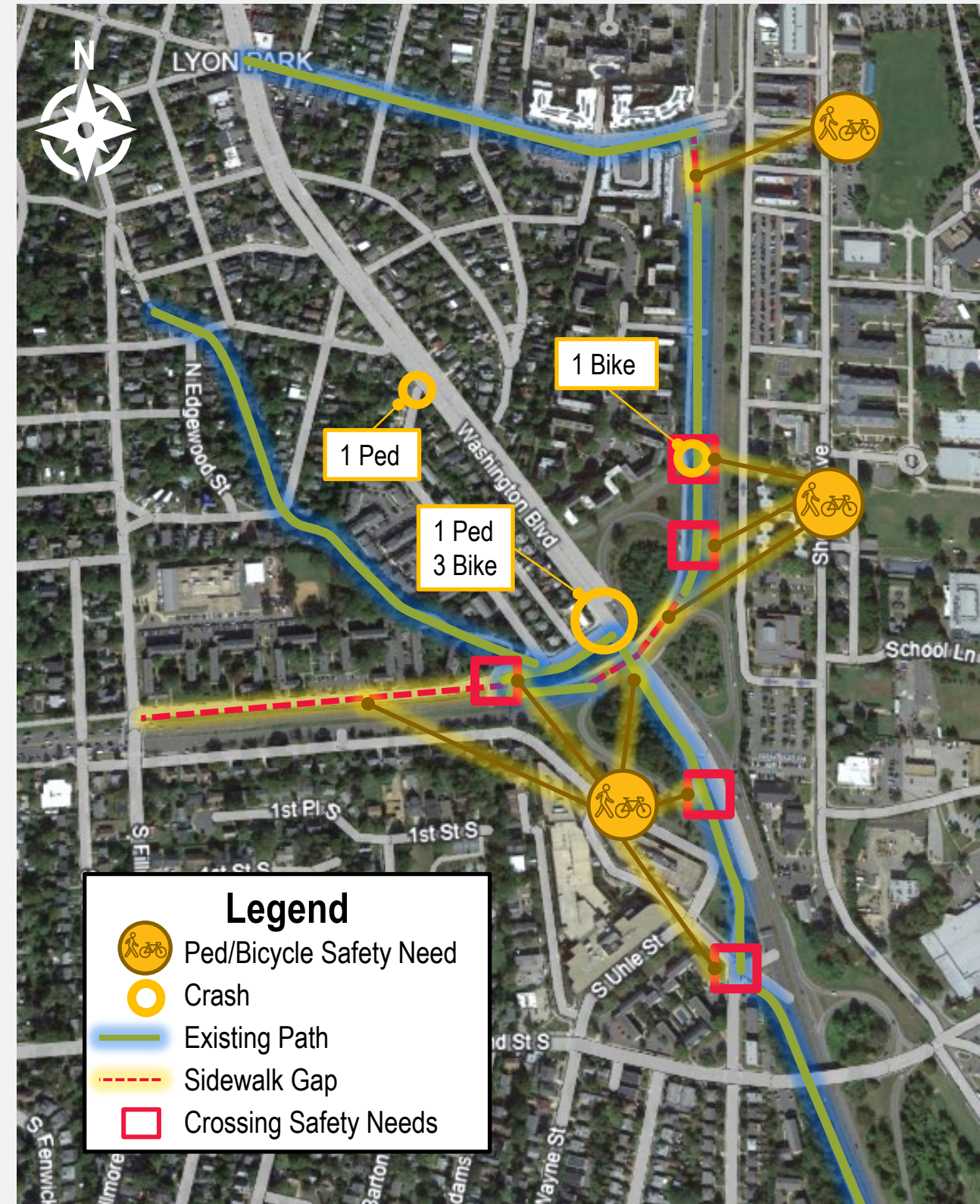


### Bicycle and Pedestrian Safety & Accessibility Summary

- VTrans identifies this corridor as 'Very High' for Bicycle Access and Pedestrian Access.
- 2 pedestrian and 4 bicycle crashes occurred within the study area.
- The Fillmore Park Trail/shared-use-path runs parallel to Arlington Blvd from Pershing Dr to Washington Blvd, then runs south to Columbia Pike.
- The shared-use-path along the Arlington Blvd Bridge over Washington Blvd is narrow on the north side and has gaps at both ends on the south side.
- The shared-use-path under the bridge, along Washington Blvd, is narrow on the west side and there are no bicycle/pedestrian facilities on the east side.
- Sidewalks:
  - There is a sidewalk gap along NB Arlington Blvd from Pershing Dr to Washington Blvd and along SB Arlington Blvd from Arlington Blvd Service Rd to Fillmore St.
  - Washington Blvd has consistent sidewalks on both sides with some gaps near the overpass bridge.

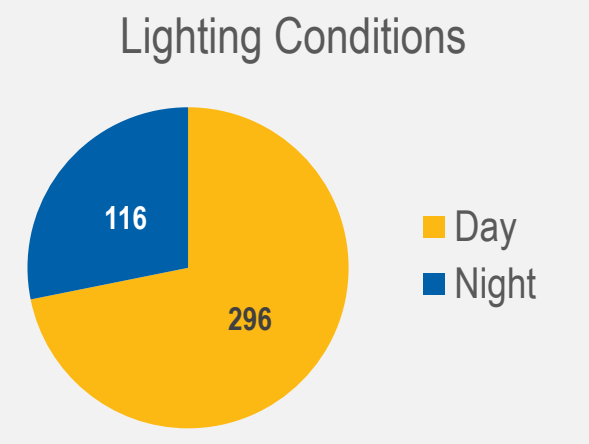
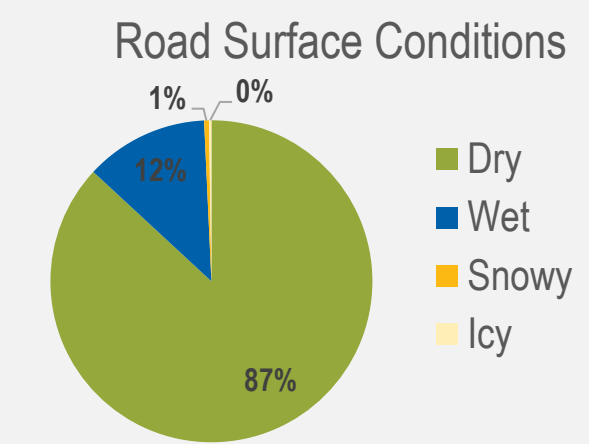
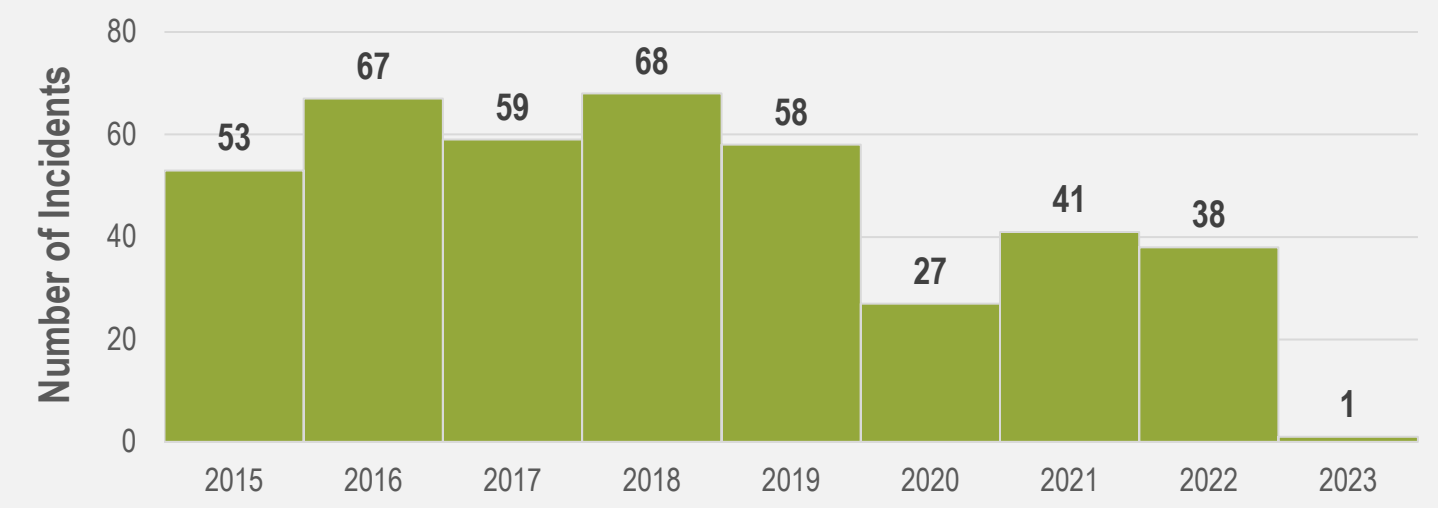
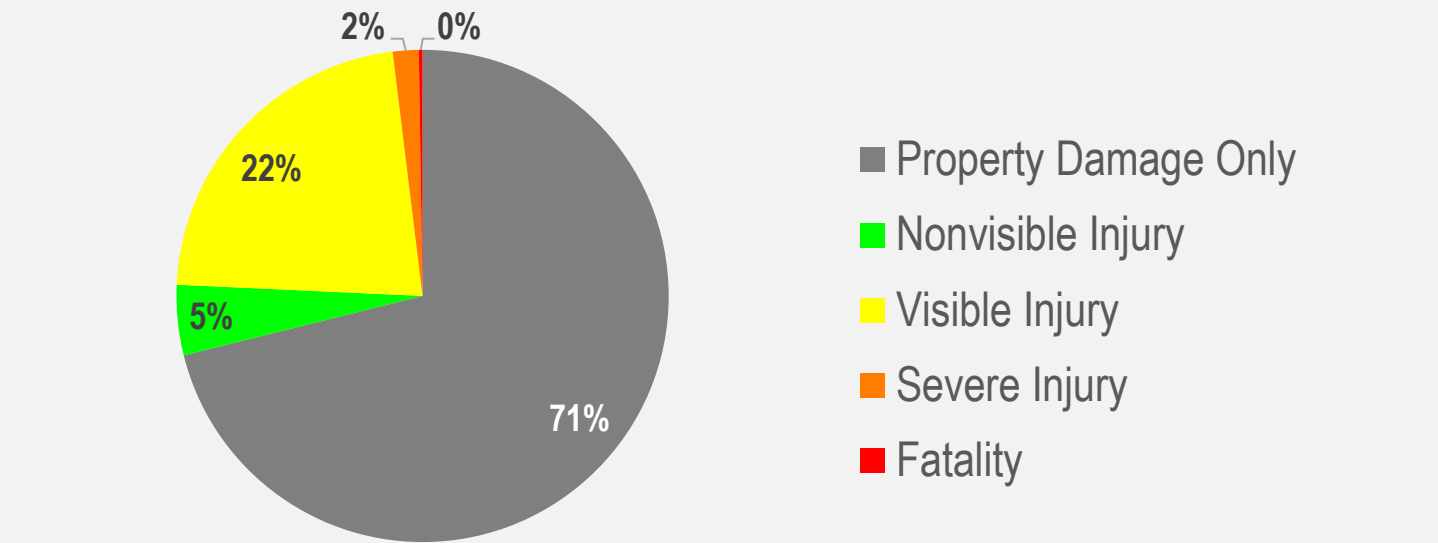
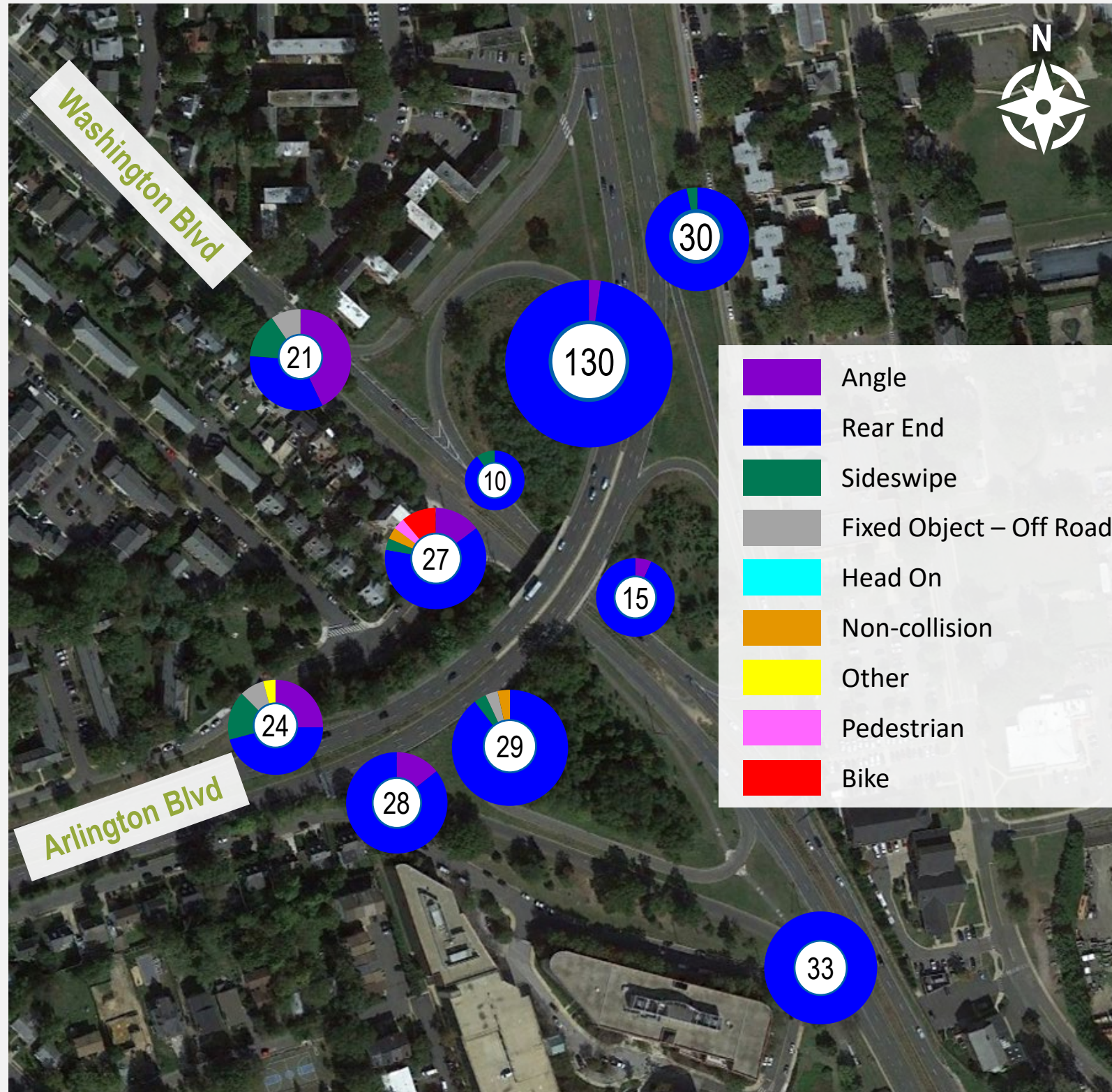
### Bicycle and Pedestrian Improvements

- Improve Pedestrian Access in the vicinity of the Headquarters of Arlington County Public Schools and the Department of Human Services.
- Improve pedestrian crossings at the Arlington Blvd & Washington Blvd interchange ramps to increase safety and minimize interaction with vehicles.
- Address sidewalk gaps.
- Consider improvements for bicycle & pedestrians crossing along the Arlington Blvd bridge over Washington Blvd.
- Prioritize trail connections within the corridor.

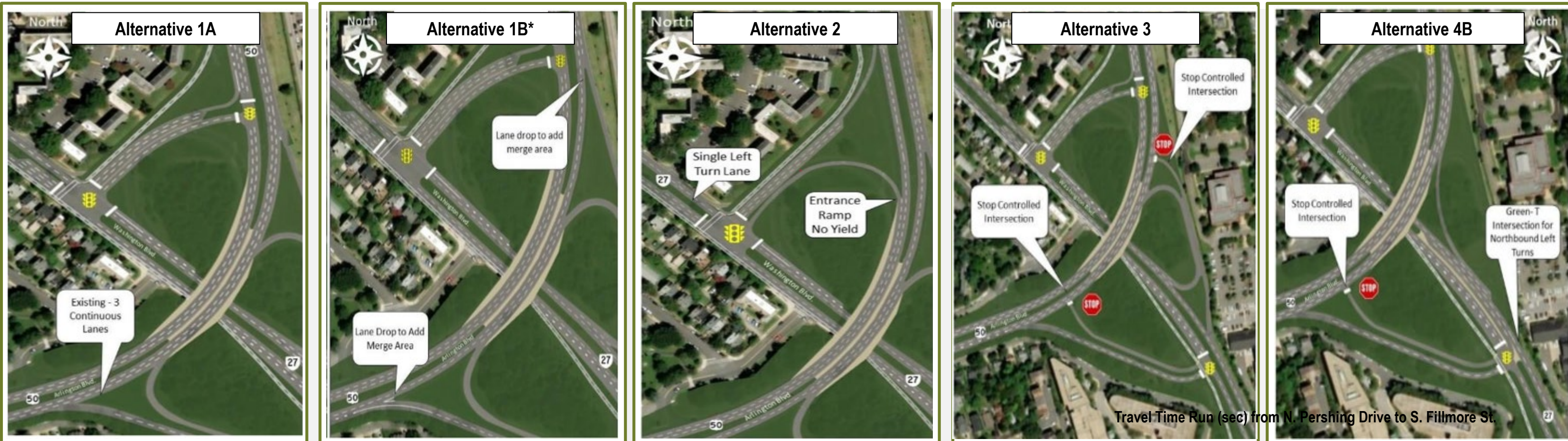


# Safety Needs

## Needs Identification Summary



# Alternative Analysis & Assessment



## Alternative Comparison/Description

\* Selected Alternative

Alternative	Advantages	Disadvantages
1A & 1B*	<ul style="list-style-type: none"> <li>-Reduces weaving on VA-27 SB, east of US 50</li> <li>-Reduces conflicts on US 50 WB, south of VA-27</li> <li>-Enhances safety and mobility for VA-27 to US 50 WB traffic</li> <li>-Enhances bicycle/pedestrian safety</li> </ul>	<ul style="list-style-type: none"> <li>-Introduces signal control on US 50 WB with an expected increase in delay</li> </ul>
2	<ul style="list-style-type: none"> <li>-No half signal for US 50 WB compared to Alternative 1A &amp; 1B</li> </ul>	<ul style="list-style-type: none"> <li>-Lane drop introduces on US 50 WB at exist for ramp to VA-27 compared to Alternative 1A</li> </ul>
3	<ul style="list-style-type: none"> <li>-Maintains 6 lanes on US 50</li> </ul>	<ul style="list-style-type: none"> <li>-Forces traffic on ramps from VA-27 NB and SB to stop before turning onto US 50 EB</li> </ul>
4B	<ul style="list-style-type: none"> <li>-Maintains 3 lanes on US 50 EB</li> <li>-Improves ramp and merge of ramp from VA-27 NB to US 50 EB</li> <li>-Continuous Green T- Intersection</li> </ul>	<ul style="list-style-type: none"> <li>-Removes a ramp for a low volume movement</li> </ul>

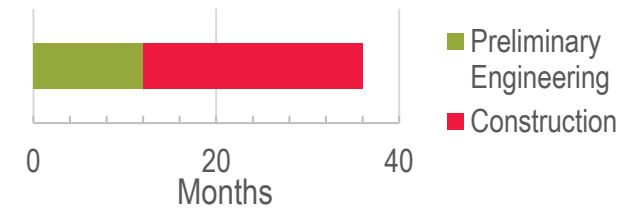
## Measures of Effectiveness

Travel Time Run (sec) from N. Pershing Drive to S. Fillmore St.

Alternative	2035 AM	2035 PM	2050 AM	2050 PM
No-Build	167.9	216.3	170.7	226.0
1A	192.7	295.6	196.0	371.1
1B	191.4	283.4	193.2	367.8
2	169.3	255.6	169.7	337.1
3	192.2	290.3	194.2	368.2
4	191.3	267.1	194.0	355.9

## Anticipated Schedule & Preliminary Cost

Project schedules and cost estimates were developed based on information available at the time of study and should be reassessed prior to submitting funding applications.



Phase	Cost Estimate (2024 Dollars)
Preliminary Engineering	\$3,307,500
Construction	\$26,388,270
<b>Total Cost</b>	<b>\$29,695,770</b>