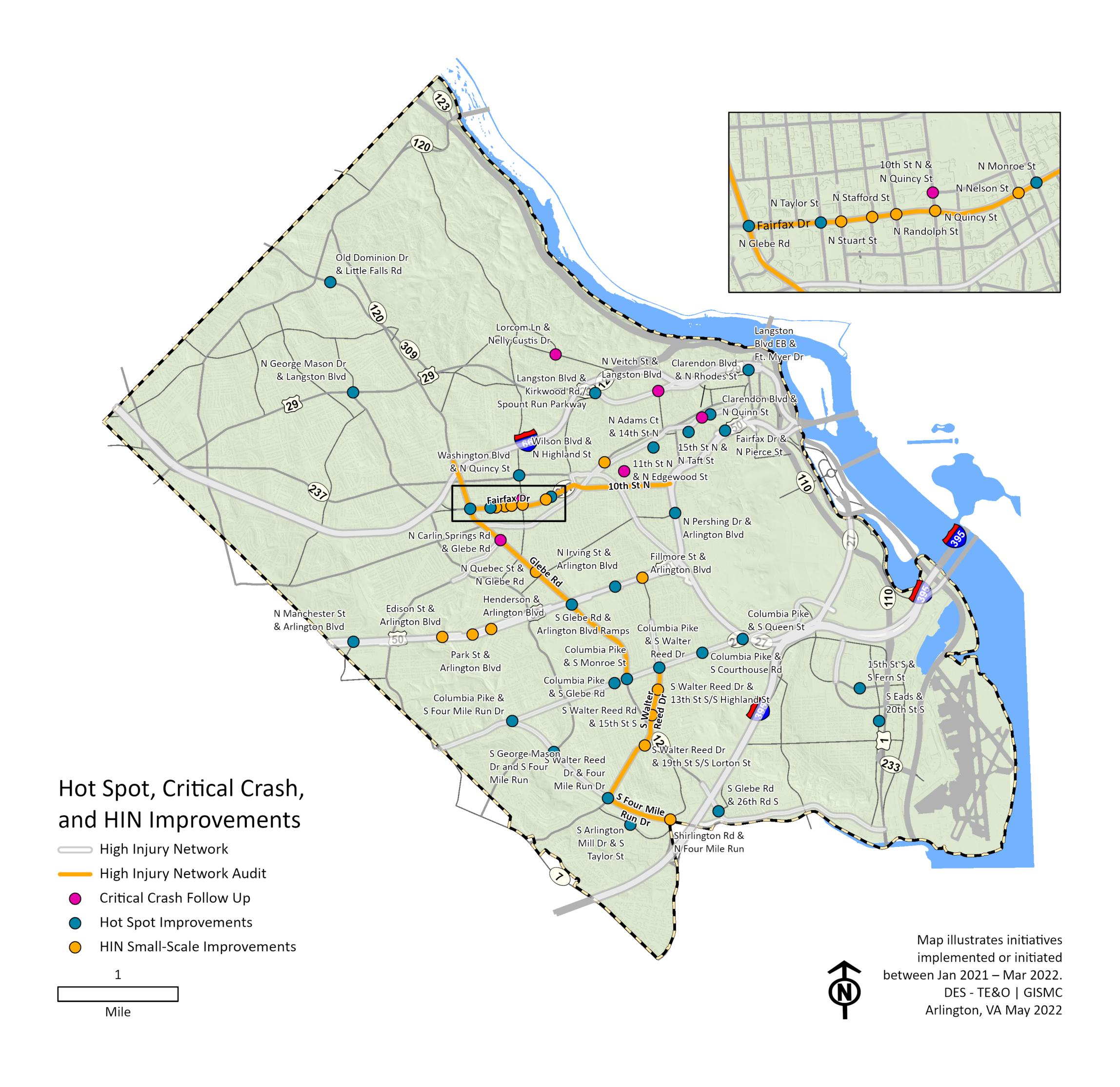
STATION 1: VISION ZERO IMPLEMENTATION MAPS

HOT SPOT, CRITICAL CRASH, & HIGH-INJURY NETWORK IMPROVEMENTS

This map illustrates Vision Zero programmatic work related to the Hot Spots program, High-Injury Network (HIN) corridor reviews and adjustments, and follow up actions from quarterly critical (fatal or serious injury) crash debriefs.

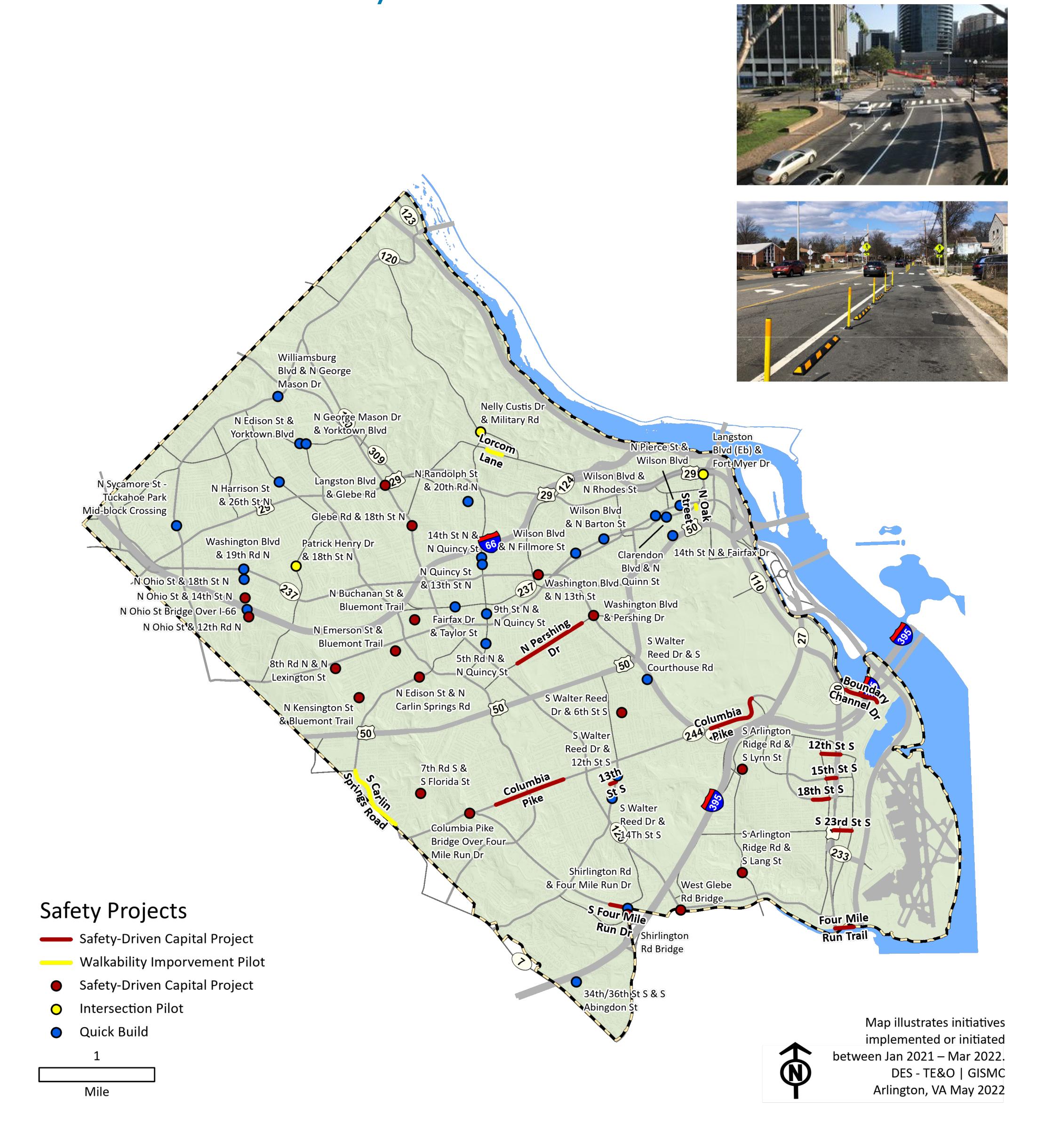






OTHER SAFETY-DRIVEN PROJECTS

This map illustrates Vision Zero safety pilot projects, safety-related quickbuild projects (small-scale, lower-budget improvements), and capital projects identified to address a safety need or needs.

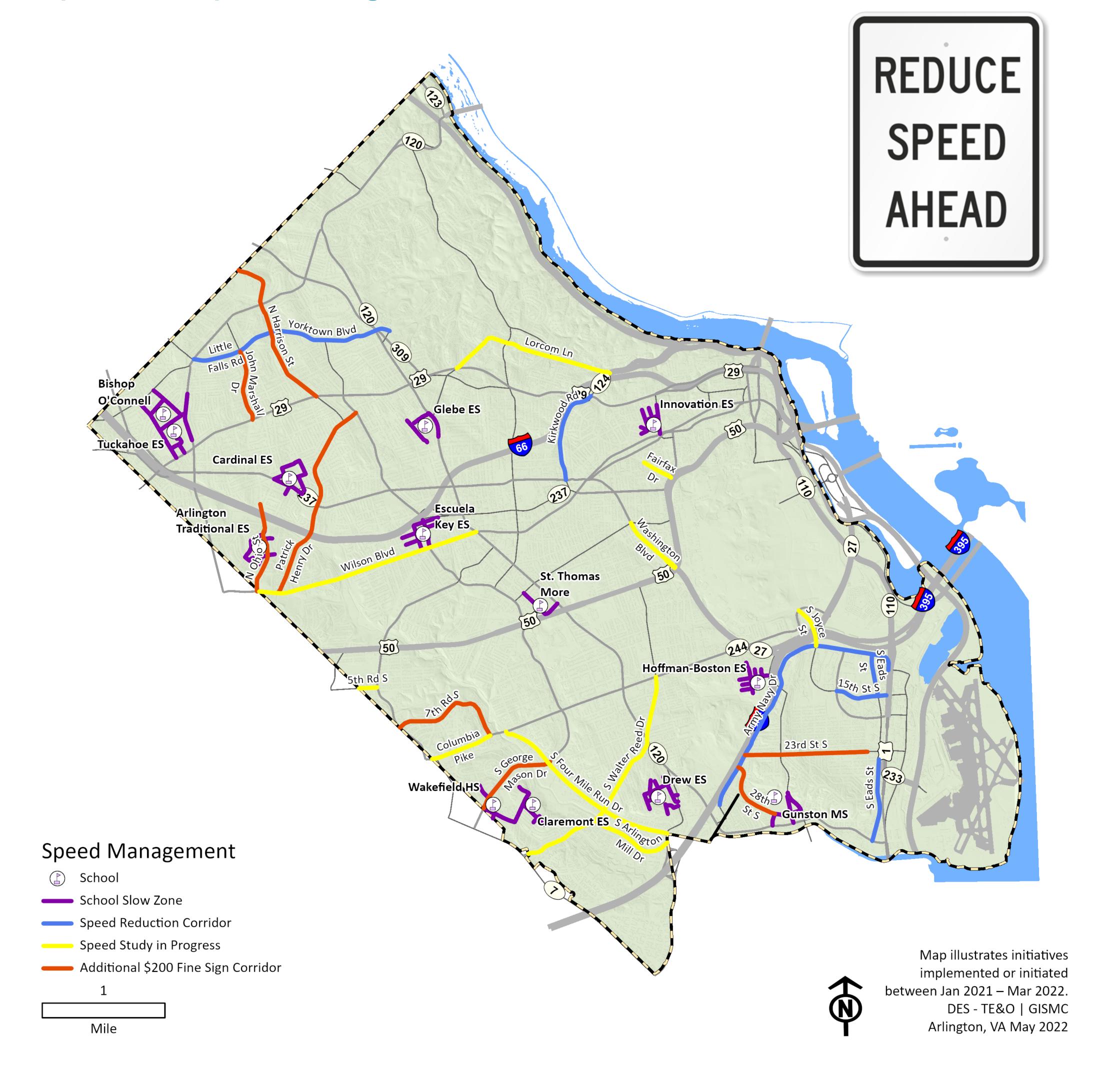






SPEED MANAGEMENT INITIATIVES

This map illustrates Vision Zero speed management initiatives including the corridors where speed limits were reduced and or speeding fines increased in Year 1. The map also shows the eleven (11) school slow zone demonstration projects implemented in Year 1, as well as ongoing corridor speed studies that may result in speed management initiatives in Year 2.



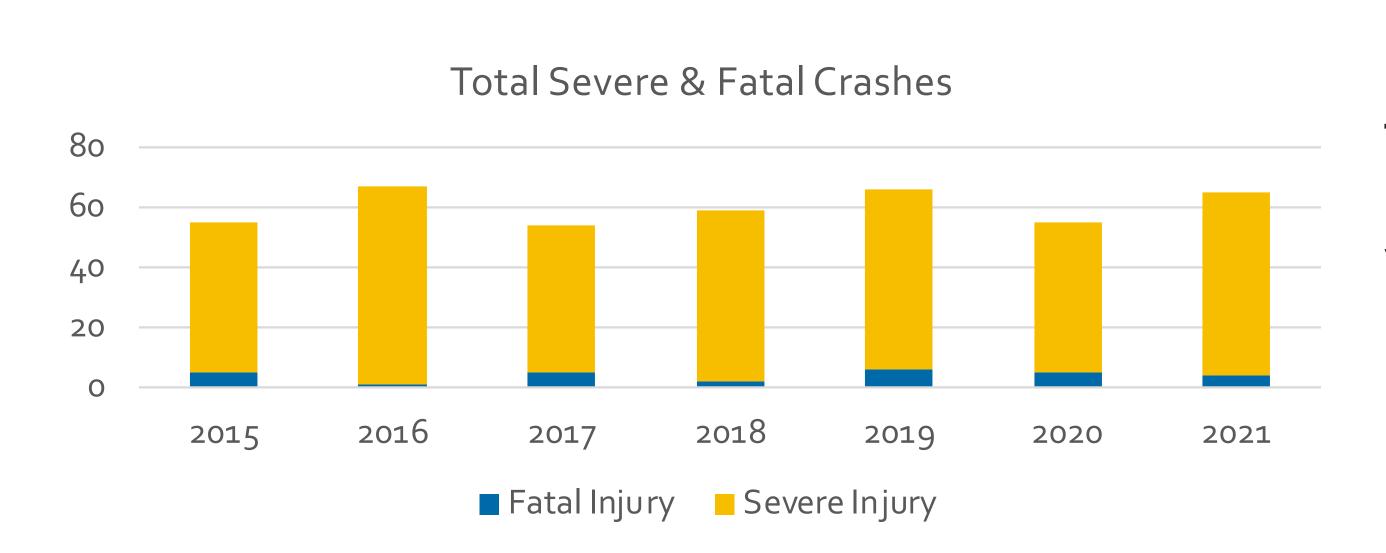




STATION 2: VISION ZERO DATA

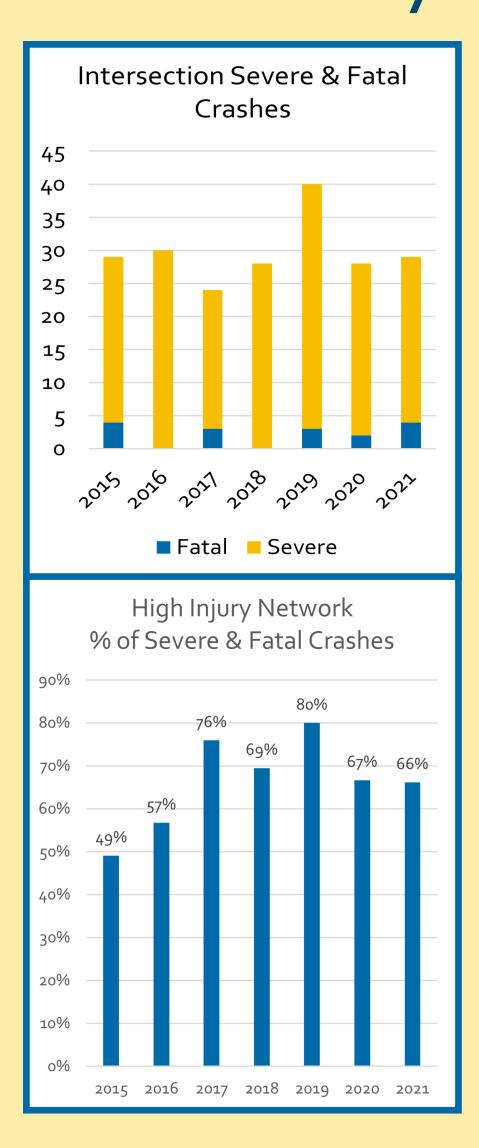
PROGRAM PERFORMANCE OVER TIME

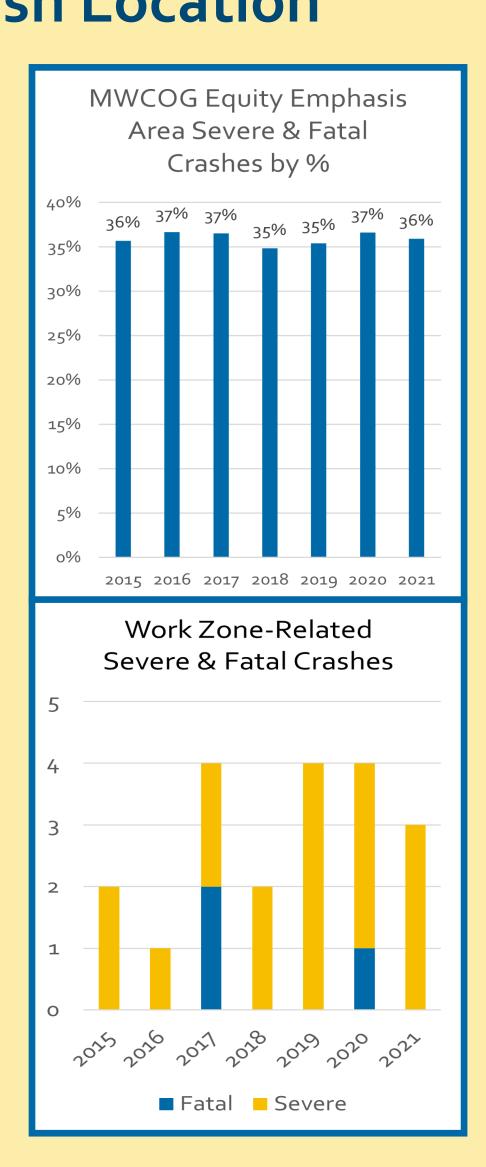
The following tables and charts provide a summary of the Vision Zero performance measures set forth in the Action Plan.



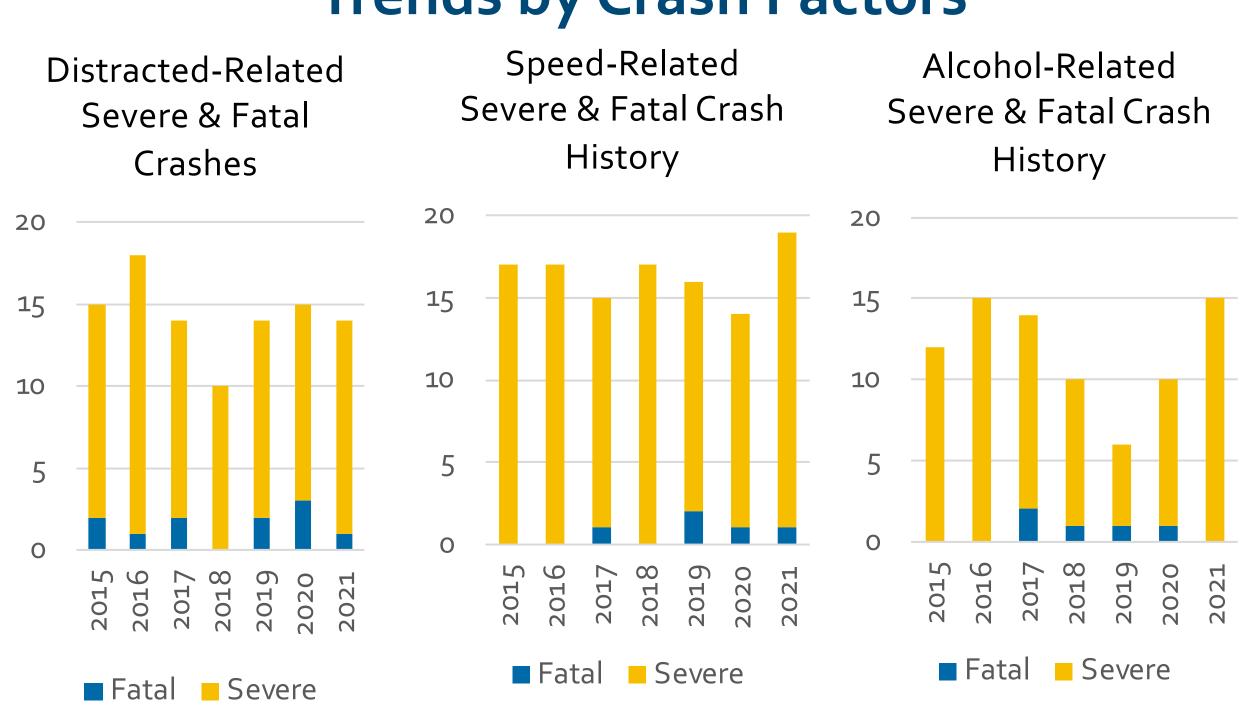
For comprehensive crash data by location, type and trends, visit the interactive Vision Zero Crash Dashboard by scanning the code with your smartphone:

Trends by Crash Location



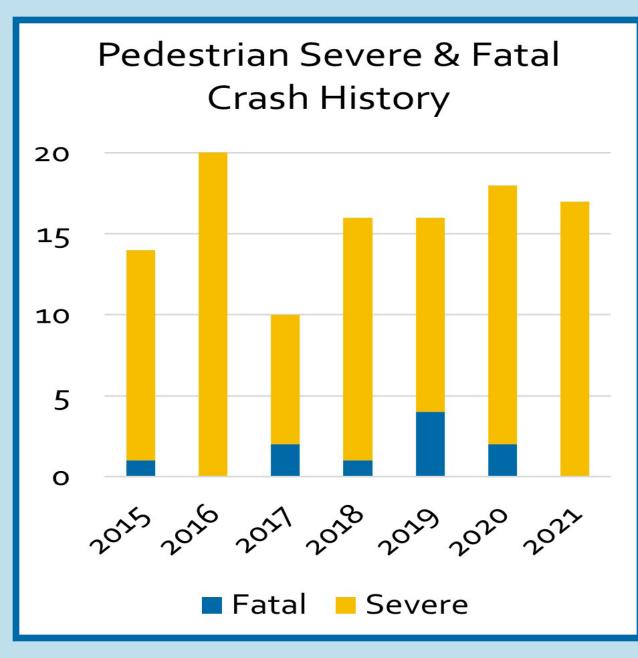


Trends by Crash Factors

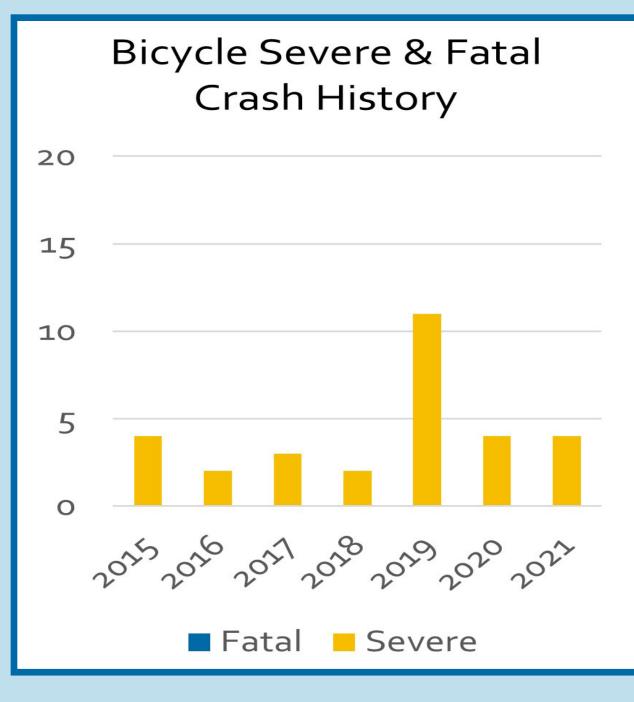
















Arlington County Crash Hot Spots 2016 - 2020 For more information on the 2022 Hot Spots Analysis Methodology, scan the code with your smartphone: WASHINGTON, DC FAIRFAX 50 CRASH TYPES NUMBER OF LOCATIONS ALEXANDRIA Signalized intersection Unsignalized intersection Non-Equity Emphasis Area Equity Emphasis Area **EQUITY EMPHASIS AREAS** Census block groups with 50%+ households with median income below \$50,000 or 38.5%+ BIPOC population ARLINGTON COUNTY N 1 INCH EQUALS 1 MILE

		Hot Spot from	Top Countywide Crash Locations			Top Equity Emphasis Area Crash Locations		
ID Type	Location	Previous 3 Years	All	*	00	All	*	00
01	23rd St S between S Clark St S & Crystal Dr		•					
02	7th Rd S between S Florida St & 8th Rd S							
03	S Hayes St between 12 St S & 15th St S N Courthouse Rd between 14th St N & 15th St N							
05	N Fairfax Dr between N Pierce St & Fort Myer Dr							
06	N Lynn St between Wilson Blvd & 19th St N							
07	Langston Blvd (Westbound) between N Nash St & Fort Myer Dr							
08 💠	Eastbound Arlington Blvd Ramp to Eastbound S Washington Blvd							
09 + 10 +	Eastbound Washington Blvd Ramp to Eastbound Arlington Blvd Westbound S Washington Blvd Ramp to Westbound Arlington Blvd	d						
10 \$	S Hayes St & Army Navy Dr	•	•					
12	Columbia Pike & S Dinwiddie St/S Columbus St	•						
13	Columbia Pike & S Four Mile Run Dr (West)	•						
14 🐉	Columbia Pike & S Four Mile Run (East)/S Buchanan St							
15 § 16 §	Columbia Pike & S George Mason Dr Columbia Pike & S Glebe Rd	•						
17	Columbia Pike & S Glebe Rd Columbia Pike & S Walter Reed Dr	•						
18	Columbia Pike & S Court House Rd	•						
19	Columbia Pike & S Joyce St							
20	Arlington Blvd & S George Mason Dr							
21 § 22 §	Wilson Blvd & Washington Blvd Wilson Blvd & N Fillmore St	•						
23	Wilson Blvd & N Rhodes St							
24 👪	Wilson Blvd & N Oak St							
25	Langston Blvd (Eastbound) & Fort Myer Dr	•	•	•				
26	Langston Blvd (Westbound) & N Lynn St	•			•			
27	Fairfax Dr & N Stuart St							
28 3 29 3	Washington Blvd & N Stafford St Washington Blvd & N Kirkwood Rd	•						
30	Langston Blvd & Fairfax Dr	•						
31	Langston Blvd (Westbound) & N Scott St	•			•			
32	Langston Blvd (Westbound) & N Oak St	•						
33	S Glebe Rd & S Arlington Ridge Rd	•						
34 3 35 3 35	N Glebe Rd & N Carlin Springs Rd S Walter Reed Dr & S Four Mile Run Dr							
36 \$	S George Mason Dr & S Four Mile Run Dr	•						
37 8	Langston Blvd & N Monroe St				•			
38	S Eads St & 23rd St S	•	•					
39	S Eads St & 20th St S	•						
40 \$	S Eads St & 15th St S							
41 3 42 3	S Eads St & 12th St S Army Navy Dr & Fashion Centre at Pentagon City Parking Garage							
43	S Hayes St & 15th St S							
44	S Arlington Mill Dr & Taylor St S	•						
45	N Barton St & 10th St N							
46	N Courthouse Rd & 14th St N							
47 3 48 3	Yorktown Blvd & Little Falls Rd Williamsburg Blvd & N Harrison St							
49	Wilson Blvd & N Oakland St							
50	S Four Mile Run Dr (West) & Barcroft Sports Center Driveway				•			
51	Columbia Pike and S Frederick St	•						
52	S Hayes St & Midblock Crosswalk South of 12th St S							
53 % 54 %	Arlington Blvd & Washington Blvd Langston Blvd (Fastbound) & N. Quinn St							
54 % 55 %	Langston Blvd (Eastbound) & N Quinn St Shirlington Rd & 27th St S				•			
56	S Four Mile Run Dr & S Nelson St							
57	S Eads St & Fort Scott Dr							
58	S Walter Reed Dr & S Kenmore St							
59	S Walter Bood Dr. & Courthouse Dd							
60 % 61 %	S Walter Reed Dr & S Courthouse Rd N Vermont St/N Park Dr & N Carlin Springs Rd							
62	N Frederick St & Washington Blvd	•						
63	Arlington Blvd & N Queen St	•		•				
64	Little Falls Rd & Old Dominion Dr		•					
65	19th St S & S Kenmore St							
66	Fairfax Dr & N Barton St							
67 % 68 %	N Adams Ct & 14th St N N Taft St & 15th St N							
69	Fairfax Dr & N Pierce St	•						
Hot spots	are not ranked or prioritized due to the varying characteristics of each location. The IL	D number is intend	ded for index p	urposes only.				

STATION 3: SAFETY TOOLS

MULTIMODAL TOOLBOX SUMMARY

The Multimodal Safety Engineering Toolbox was initiated in the five-year Vision Zero Action Plan under Action Item B7: Multimodal Safety Toolbox.

Toolbox Objectives

- 1. Inform stakeholders about safety tools and their appropriate uses and contexts
- 2. Communicate tools to a community audience using easy-to-understand language
- 3. Create a shared understanding and realistic expectations around safety treatments
- 4. Provide a reference on safety tools/uses for use between staff, contractors, developers, and the community

How It Is Organized

The tools in this toolbox are organized into the following sections:

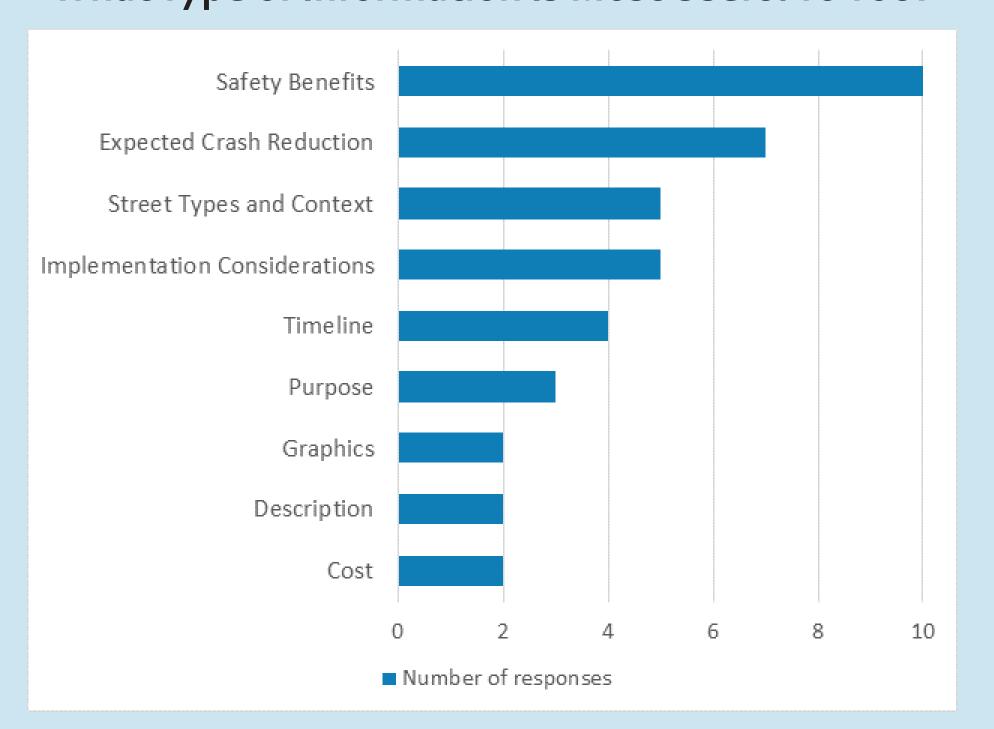
- 1. Crossings and Signals
- 2. Transit Facilities
- 3. Bicycle and Pedestrian Facilities
- 4. Speed and Traffic Management
- 5. Other Road Design Elements (for example: geometry, streetscapes, and lighting)

Key Findings from Engagement

We collected feedback about the Toolbox in Jan-Feb 2022 via public meeting, online form, and direct correspondence with staff (40+ engagements).

- Most people found the format clear.
- Respondents were split as to whether the content was useful.
 Some wanted to see more detail while others felt the Toolbox document was too long.
- Suggestions to enhance the tool summary chart so that readers could easily compare and contrast different tools.
- The majority of respondents felt better images or videos of how the tools work would make the content easier to understand.

What Type of Information Is Most Useful To You?

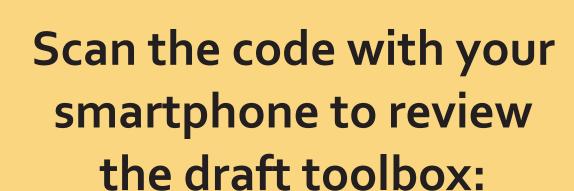


Upcoming Changes

The final version of the Toolbox for publication is expected in summer 2022. Based on feedback received, it will:

- Include more Arlington-specific images and user-friendly language.
- Have a revised summary table with selected information about each tool.
- Better explain the process for selecting and implementing the tools.
- Specify how the County plans to measure the efficacy of selected tools over time, with the possibility of incorporating a note on the cost-benefit analysis of tools.
- Feature additional tools and more details on tools that were previously grouped together.

The Toolbox will be a living document and updated as tools, strategies, and engineering standards evolve.









TOOL TRACKING

The Action Plan specifies that the County will track deployment of the tools in the Toolbox each year. The table below provides tallies (where applicable) for each tool: one tally of the tool countywide (built anytime) and one tally of the tool as deployed during Year 1 of the Vision Zero program (Jan 2021- March 2022).

Tool	Total in County (incl. Year 1 Additions)	Total Deployed in VZ Year 1 (Jan 21-Mar 22)
Refuge Islands	N/A	3 Tactical Refuge Islands
		12 Built Out Refuge Islands
Protected Intersections	2 Partial Intersections	½ Intersection (Wilson & Pierce)
		1/4 Tactical (Wilson & Quinn)
		(1 Planned — 15th & Eads)
Hardened Centerlines and Turn Wedges	34 Hardened Centerlines; 7 Turn Wedges	
Pedestrian Hybrid Beacons (PHB)	6 PHBs	o PHBs
Rectangular Rapid Flashing Beacons	32 Crossings	3 Crossings
(RRFBs)		
Leading Pedestrian Intervals (LPIs)	31 Intersections	6 Intersections
Signal Phasing Modifications	N/A	6 Signal Modifications for Safety
No Right Turn on Red Restrictions	147 Approaches	35 Approaches
Parking Restrictions at Crossings/	N/A	14 Locations
Daylighting		
Travel Lane Signs + Markings	N/A	1,472 Stop Bars
Crossing Signs + Markings	N/A	238 High Visibility Crosswalks
Stop Sign Control	3,275 Stop Signs	47 Stop Signs
Traffic Signal Backplates	16 Intersections	16 Intersections
Traffic Signals	294 Signalized Intersections	o New Signals; 10 Upgraded Signals
Red Light Cameras	9 Intersections	o Intersections; (6 Planned)
Conventional Bike Lane	31.7 Centerline Miles	.58 Centerline Miles
Contraflow Bike Lane	o.o7 Centerline Miles	o.o Centerline Miles
Buffered Bike Lanes	6.6 Centerline Miles	.38 Centerline Miles
Separated Bicycle Facilities	4.o Centerline Miles	.o8 Centerline Miles
Multi-Use Trails/Pathways	51.1 Centerline Miles	New: 0.12 centerline miles
		Improved: 2.14 centerline miles
Sidewalks	N/A	o.8 Miles New Sidewalk
		o.2 Miles Improved Sidewalk
Bike Boxes / Two Stage Turn Boxes	19 Bike or Turn Boxes	15 Bike or Turn Boxes
Curb Ramps	N/A	114 Ramps
Green Markings	115 Locations	32 Locations
Transit Priority Lanes	o.63 centerline miles	2 New Segments Planned
Transit Stops	1,010 Bus Stops	o New Bus Stops; 50 Improved Bus Stops
Floating Bus Stops/Bus Islands	1 Island	1 Island
Bus Queue Jump Signals / TSP	o Signals	o Signals; (TSP planned for Langston Blvd &
		Columbia Pike)
Slow Zones	13 School Slow Zones	13 School Slow Zones
Speed Humps & Similar Raised Areas	276 Raised Areas	1 Raised Crossing
Speed Cameras	o Locations	o Locations / (Ordinance Approved)
Speed Feedback Indicator Signs Speed Poloted Signs as Devemont	28 SFISs	1 SFISs; 11 Portable Applications
Speed-Related Signage or Pavement	11 Corridors with \$200 Fines	8 Corridors with \$200 Fines
Markings	91 Speed Sign Locations	58 Speed Sign Locations
Speed Limit Deduction and Delicies	31 Speed Limit Markings	28 Speed Limit Markings
Speed Limit Reduction and Policies Chicanes	N/A 1 Street Segment	7 Speed Limits Lowered o Street Segments: (2 Planed)
Traffic Circles	1 Street Segment	o Street Segments; (2 Planed) o Traffic Circles
Modern Roundabouts	34 Traffic Circles 1 Permanent; 1 Temporary	1 Temporary; 2 Planned
Curb Extensions & Modifications	N/A	10 Tactical Curb Extensions
COLD EXCENSIONS & MOUNICATIONS	1 N/ / \	35 Built Curb Extensions
Roadway Reconfigurations	N/A	2 Installed (Wilson Blvd; Four Mile Run Dr)
Lighting	7,117 County Lights	493 County Lights
Ligitariy	11,497 Dominion Lights	28 Dominion Lights (provided by Dominion –
	/+3/ - 3/1/1/10/1 Lights	unsure of accuracy)

Tallying these tools helps County staff and the community to reflect on the type and frequency of tools deployed—and to identify areas for improvement.



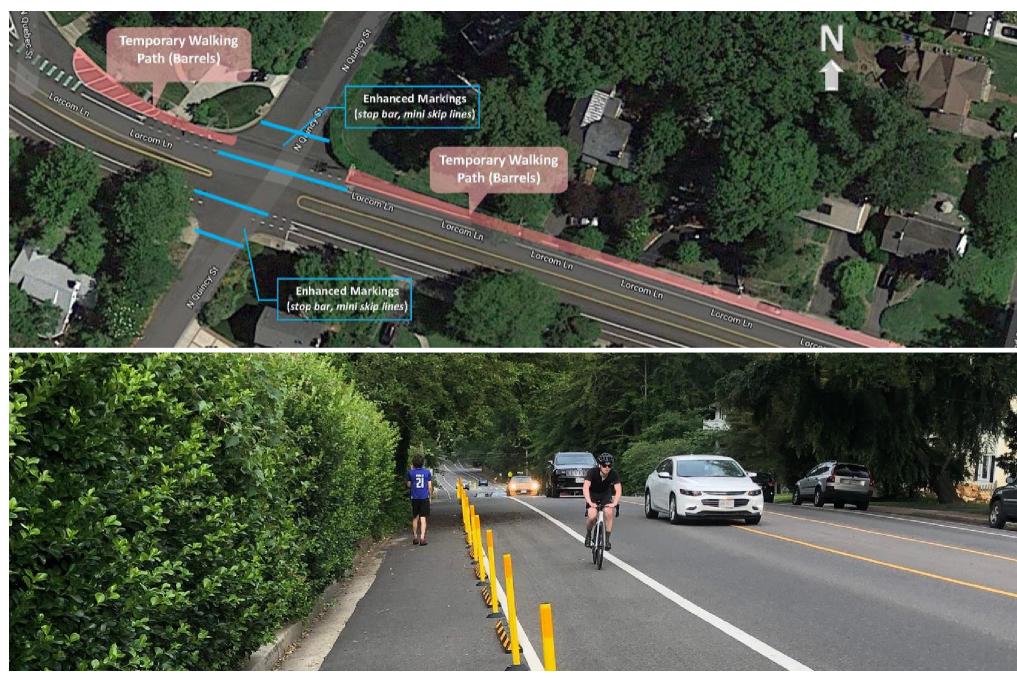


STATION 4: PILOT PROJECTS

PILOT SAFETY PROJECTS

PAST PROJECTS

Lorcom Lane Walkability Improvement Pilot (Mar 2021 - Dec 2021)



Temporary parking restrictions to provide a walking path for pedestrians and kids walking to and from Dorothy Hamm Middle School. Walking path maintained due to supporting data and feedback. The County is working to program a permanent sidewalk in the upcoming capital improvement program.

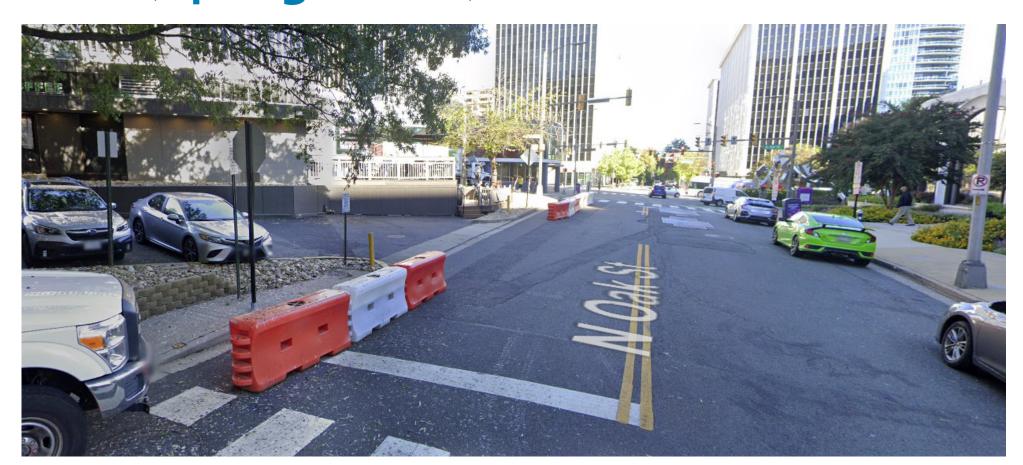
S Carlin Springs Road Walkability Improvements Pilot (Mar 2021 - July 2021)



Temporarily repurposed a section of the northbound right travel lane of S Carlin Springs Rd to improve walking and biking conditions on the corridor and create a walking path for students accessing Campbell Elementary School, Carlin Springs Elementary School, and Kenmore Middle School. Because the pilot caused adverse safety impacts, the County will continue to assess options for enhancing sidewalks and access along the corridor, including connectivity options when the County redevelops the Virginia Hospital Center site.

CURRENT PROJECTS

N Oak Street Walkability Improvement Pilot (Spring 2021 -)



Temporary barriers to create a walking path for pedestrians where no sidewalk currently exists. Community engagement coming spring 2022.

Patrick Henry Drive & 18th Street N. School Crossing Pilot (Apr 2022 -)



Additional crossing signage and pavement markings at an uncontrolled school crossing over an arterial street. Data collection is in progress.

Military Road and Nelly Custis Drive Roundabout Pilot (Oct 2021 -)



Temporary roundabout to reduce vehicle speeds, increase pedestrian visibility at the intersection, and increase driver yield rates. Community engagement coming spring 2022.

Fort Myer Drive & Eastbound Langston Blvd (former Lee Hwy) Pilot (Aug 2021 -)



Removal of a double left turn to reduce vehicle/pedestrian conflicts at an existing crash hot spot with high pedestrian activity adjacent to an active construction zone. Data collection is ongoing and supports improved crossing safety at the intersection with little to no impact on intersection operations.



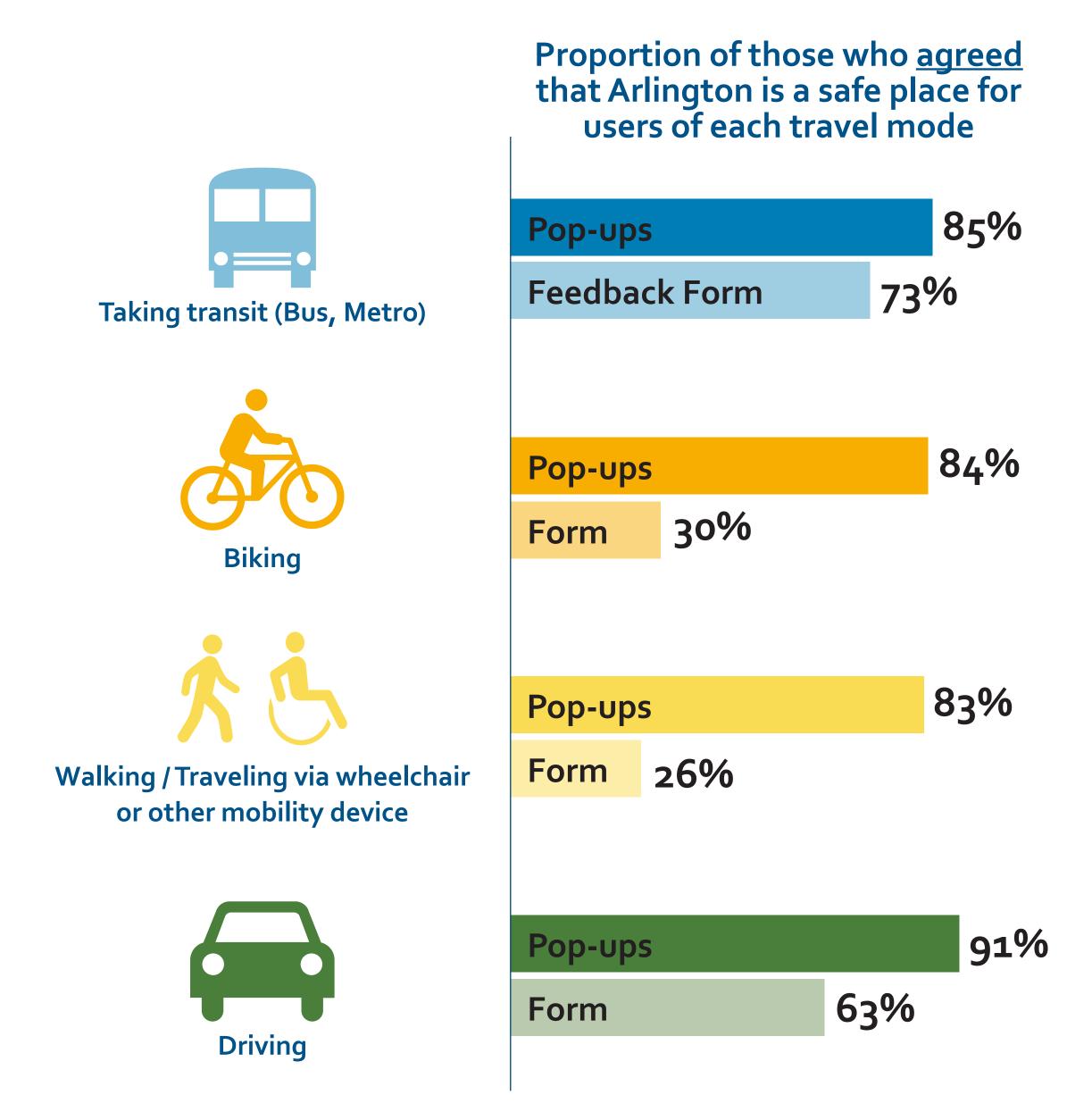


STATION 5: COMMUNITY ENGAGEMENT ON SAFETY

ANNUAL SAFETY FEEDBACK SUMMARY

In 2022, we collected feedback from Arlington County residents at five (5) popup events, four (4) focus groups, and 942 feedback forms. Here are some of the major themes we heard:

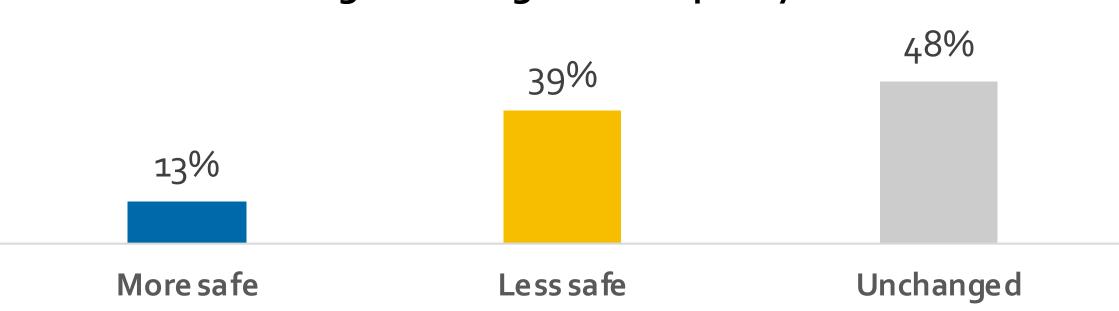
Do you agree that Arlington is a safe place for...



What else can the County do to make traveling in Arlington safer?

- Implement enforcement and education campaigns about the laws governing roads
- Create improved visibility at high traffic intersections, crosswalks, or other multimodal intersections.
- Allow for community-reported problem areas

How has your perception of transportation safety in Arlington changed in the past year?



What are the top reasons you feel unsafe traveling in Arlington?

- Speeding / aggressive driving
- Distracted travelers (using a cell phone, headphones, etc.)
- Drivers not following laws and signals

What safety advice would you give for individuals traveling in Arlington?

- Slow down
- Pay attention
- Stay alert
- Watch for others
- Stay off your phone
- Follow the laws

What We're Doing With Findings:

You spoke, we listened! Here is how we're incorporating the preliminary feedback received during the online, pop-up, and focus group engagement into Vision Zero Year 2 agenda:

- Continue prioritizing projects that elevate safety for people walking and biking
- Decrease vehicle speeds by reducing speed limits and adding roadway features to help slow drivers down
- Focus on safe crossing infrastructure, including signal timing and accessibility needs at roadway crossings
- Prioritize maintenance for sidewalks and roadways to ensure safe and accessible pathways for all modes of travel
- Ramp up communications and education about safe driving practices, like minimizing distractions and promoting the rules of the road
- Continue advancing new options for automated enforcement that encourage stopping at red lights and school bus arms and obeying speed limits
- Promote community engagement that increases awareness of safety projects and initiatives, as well as access to Request for Service tools so that people can seamlessly report safety issues





STATION 6: PLANNING FOR VISION ZERO YEAR 2

WHAT'S COMING THIS YEAR?

Over the next year, we expect to make progress on the following action items:

2022 Hot Spots Program Implementation

A multidisciplinary team will collaborate to assess and triage the 69 hot spots identified in the 2016-2020 Hot Spot Analysis.

High Injury Network (HIN) Safety Audits on 3 Corridors

The Vision Zero team identified the following three HIN corridors for safety audits to be initiated in summer 2022:

- S Four Mile Run Dr (Columbia Pike to S Walter Reed Dr)
- N Carlin Springs Rd (N Glebe Rd to N Edison St)
- S Glebe Rd (24th St S to Route 1/Richmond Hwy)

Systemic Crash Analysis Publication & Implementation

We will release the results of this systemic analysis in summer 2022, along with action items that may range from systemic engineering projects to targeted outreach campaigns.

Equity Analysis Results & Implementation Plan

The Vision Zero team plans to publish results and action steps to enhance equity issues related to transportation safety in winter 2022/23.

Before & After Studies

The Action Plan states that we will review the efficacy of transportation safety mitigation measures by assessing conditions before and after implementation, to inform future initiatives. The County will work on the following before/after studies during the next year:

- Demonstration School Slow Zones before/after comparison of speeds and community safety perception
- \$200 Additional Speeding Fine Signage before/after comparison of speeds
- Speed Limit Reductions before/after comparison of speeds
- Arterial School Crossing Improvements (Patrick Henry & 18th St N Pilot) before/after comparison of speeds and driver yielding
- Flashing Beacons at Crossings (RRFBs) before/after comparison of driver yielding rates

Quick Build Project Prioritization and Implementation

There are 11 quick-build safety projects tentatively slated for completion in the next year:

- Williamsburg Blvd & N George Mason Dr
- 26th St N & N. Harrison St
- Yorktown Blvd & George Mason Dr
- Yorktown Blvd & N Edison St
- N Rhodes St & Wilson Blvd Floating Bus Stop
- Wilson Blvd Mid-block Crossing in Rosslyn
- Clarendon Blvd & N. Quinn St
- N Quincy Street & 13th St N
- N Quincy Street & 14th St N
- Fairfax Dr & N Taylor St
- Washington Blvd & 19th St N

Safety-Driven Capital Projects

The Capital Project team plans to deliver safety-driven capital projects at 16 locations in the next year:

- Route 1 to Four Mile Run Trail Multi-use trail connection
- 18th St S; S Fern St to S Eads St Protected bike lane; Slip lane closure; Crossing improvements
- N Lexington St & 8th Rd N Sidewalk and curb ramps
- N Ohio St & 12th St N Trail crossing improvements
- Bluemont Trail & N Kensington St New ramps; Sightline improvements; Transit improvements
- Pershing Dr & Washington Blvd Signal upgrade;
 Crossing Improvements
- Arlington Ridge Rd & S Lynn St Slip lane closure;
 Crossing improvements
- Columbia Pike; S Orme St to S Joyce St Utility undergrounding; Streetscape improvements

- Columbia Pike; S Oakland to S Wakefield Utility undergrounding; Streetscape improvements
- 13th Street S; S Walter Reed to S Highland St Sidewalk and curb ramps
- Shirlington Rd Bridge over Four Mile Run New guardrail; Sidewalk widening
- West Glebe Bridge over Four Mile Run New bridge; New bike and pedestrian accommodations
- 12th St S; S Eads St to S Clark St Streetscape improvements
- 15th St S; Rt 1 to Eads St Sidewalk improvements
- Boundary Channel Drive Interchange Improvements
- Washington Blvd and 13th St Intersection Improvements





WHAT'S COMING THIS YEAR? (CONT'D)

Speed Study Results & Mitigation Efforts

DES is continuing investigation of speeds on all roadways with speed limits 30mph or higher throughout Arlington.

The 10 corridors that are currently under investigation include:

Currently 30 MPH:

- Fairfax Dr (Arlington Blvd to N Barton St)
- Four Mile Run Dr (Columbia Pike to Shirlington Rd)
- S Walter Reed Dr (Columbia Pike to Arlington County line)
- Wilson Blvd (N Glebe Rd to Arlington County line)
- S Arlington Mill Dr (S Walter Reed Dr to Arlington County line)
- Lorcom Lane (Spout Run Parkway to Langston Blvd)

Currently 35 MPH:

- 5th Rd S (S Carlin Springs Road to Fairfax County line)
- Washington Boulevard (Arlington Boulevard to North Pershing Drive)
- South Joyce Street (Columbia Pike to Army Navy Drive)
- Columbia Pike (South Dinwiddie Street to Fairfax County line)

Demonstration School Slow Zone Assessment, Guidelines & Future Projects

The County installed demonstration school slow zones in early 2022. In the spring of 2022, County staff will be monitoring the demonstration school slow zones, collecting "after" speed data to assess in comparison with "before" speed data, and engaging with the community to learn about people's experiences and feedback on the demonstrations.

- Staff from DES, APS, and ACPD will use this information to finalize school zone guidelines and will then apply the standards in the next round of retrofits and installations.
- Moving forward, the County anticipates adding approximately 10 Slow Zones around schools each year. This means that 40+ schools in the County could be updated within the next three to five years.

Speed Cameras Guidelines & Implementation

The County Board approved the use of speed cameras in January 2022.

Staff are currently working on:

- 1. School Zone Speed Camera Guidelines to determine when and where they should be deployed (guidelines are being developed with a team of subject matter experts through Technical Assistance awarded through the Metropolitan Washington Council of Governments' Regional Roadway Safety Program). The guidelines will be published in Summer 2022, at which point County staff will assess which school zones may be candidates for speed cameras.
- 2. Procurement of a third-party vendor who will manage and operate the speed camera system. This process will likely take until early-2023 to reach a final contract and speed camera deployment stages.

Publication of Arlington's Multimodal Engineering Safety Toolbox Version 1

The Vision Zero Team will publish a summary of the community's feedback on the Multimodal Engineering Safety Toolbox in spring 2022 and give presentations to various County Commissions to explain how we revised the Toolbox to address community input.

We expect to release the first official version of the Multimodal Engineering Safety Toolbox in summer 2022.





WHAT'S COMING THIS YEAR? (CONT'D)

Vision Zero Website Reorganization

The County transitioned to a completely new website platform during Year 1 of the Vision Zero program, which required an intensive transfer of content.

- The capabilities and set up of the new platform are very different from the original platform, which resulted in challenges to site layout and navigation.
- In Year 2, DES staff will reorganize the website to enhance the user experience and ensure that content and materials are easy for community members to access.

Critical Crash Communications Campaign

Based on crash data, the Vision Zero team identified five focus areas as high priority behavioral change needs: speeding, pedestrian awareness, drunk driving, left turning practices, and bicycle awareness.

To effectively target and promote safety in these five areas, the interdepartmental team collaborated to craft creative messaging, taglines, and graphics for a "Critical Crash Communications Campaign." See below for the final campaign graphics to be marketed throughout the next year. We will distribute these materials as flyers, posters, advertisements, and via newsletters/social media following a strategic campaign plan. Arlington County staff will also collaborate with community partners to increase the reach of the campaign.

Elements of the campaign include:

- Press release
- Monthly highlights by theme (see headers on graphics below) on website, social media, newsletter, and sponsored content in local publications
- Distribute targeted posters at businesses, CaBi stands with roadway visibility, high schools, public facilities, universities, driving schools, DMV, and other places within the community based on systemic data
- Exploring other potential venues for sharing the campaign

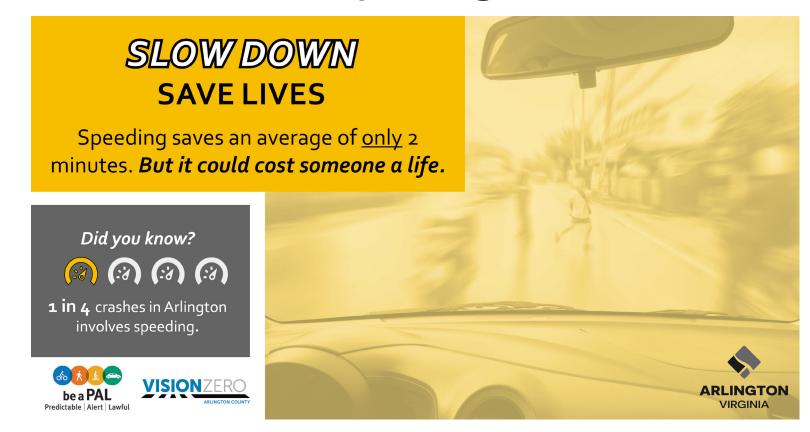
May: Bicycle Awareness



June, November & December: Driving Under the Influence



July & August: Speeding



September: Awareness While Turning Left



October:
Pedestrian Awareness







STICKY NOTE ACTIVITY

What else do you want to see this year? Tell us on a sticky note!



