VISION ZERO

ARLINGTON COUNTY

Wilson Blvd Safety Audit

Department of Environmental Services
Transportation Engineering & Operations
N Arlington Ridge Rd to N Randolph St

Audit: July 2024

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Safety Audit Background

- **Safety audits are conducted on High-Injury Network corridors.**
  - Arlington's High-Injury Network identifies streets that have a relatively high number of serious injury and fatal crashes.
  - The Vision Zero approach is focused on reducing our most severe crashes first and foremost, and the HIN allows us to focus analysis and resources on these corridors.

- **The purpose of the safety audits is to review crash/operational data and visit each High Injury Network corridor to identify:**
  - Quick action projects that we can implement in the short term to improve safety (signs, markings, bollards, small-scale construction, other maintenance, etc.),
  - Existing/upcoming projects occurring on the corridor and how they will help address safety, and
  - Other longer-term opportunities or needs to enhance safety for consideration for future capital projects or plans.

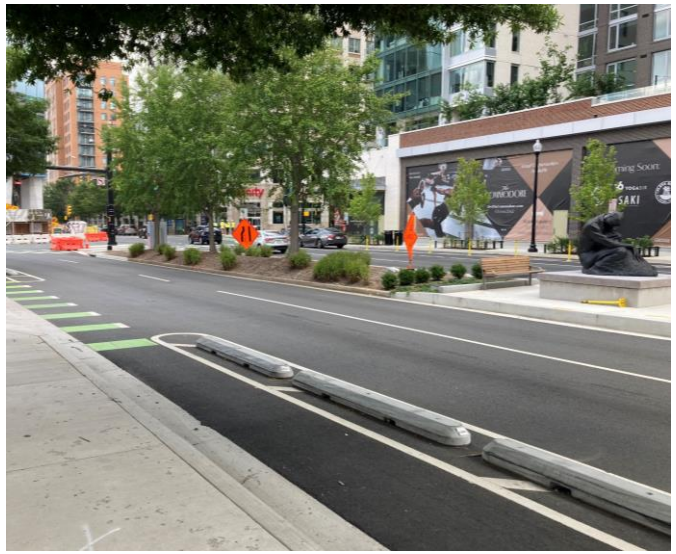
- **View the High-Injury Network Corridor Safety Audits page for more information about the audit process and follow up.**

HIN safety audits are not intended to fix *all* safety needs *immediately.*

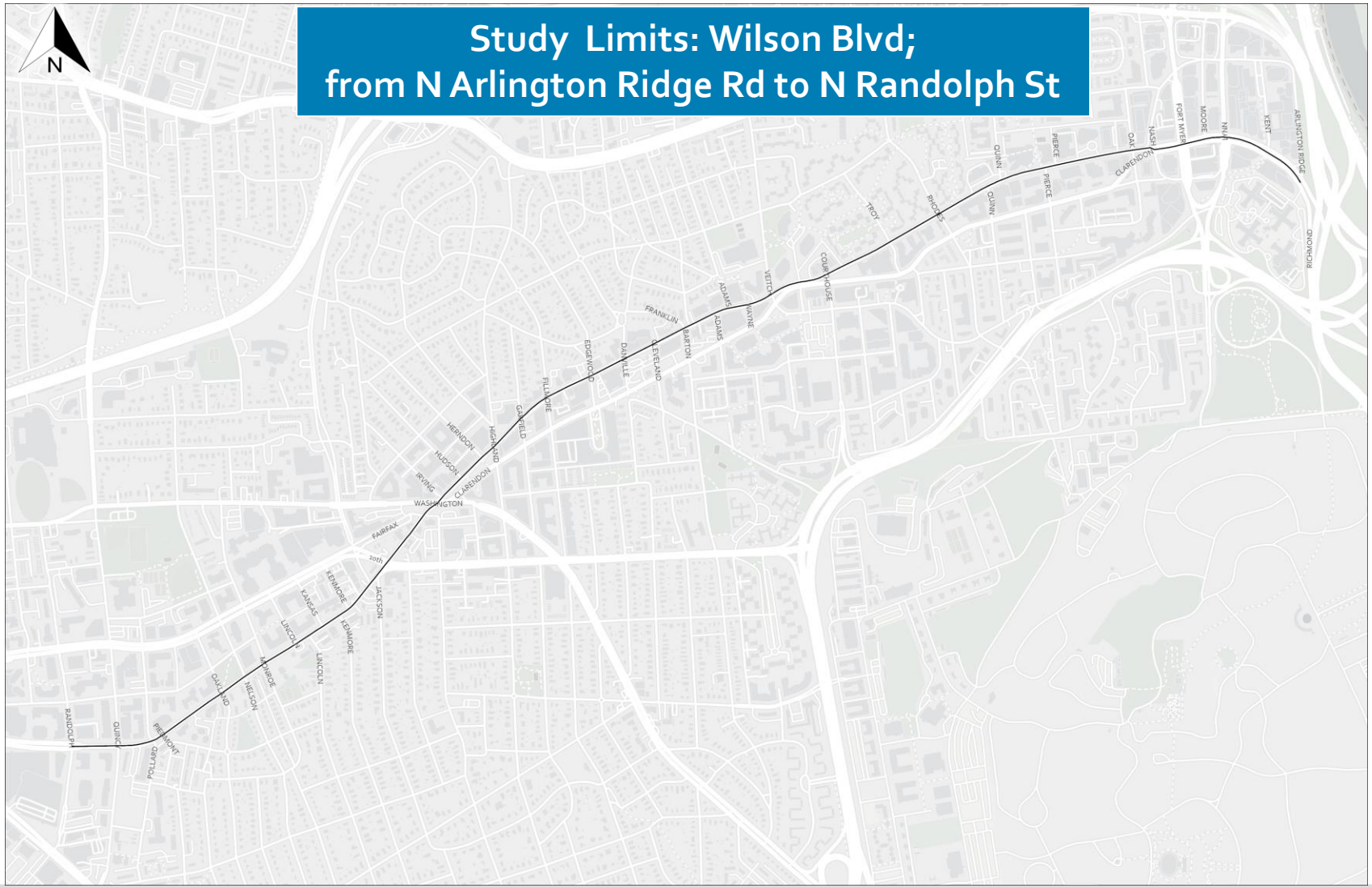
The purpose is to identify (1) safety needs that we can address quickly and (2) safety needs that we can begin to plan for on a larger-scale.

Safety Audit Contents

- Study Area
- Traffic Volumes & Speed Limits
- Land Use/Facilities
- Transit Stops
- Bike Routes
- Crossing Infrastructure
- Crash History
- Community Input
- Recent & Upcoming Developments
- Field Findings & Next Steps



Safety Audit Study Area



Traffic Volume & Speed Limits

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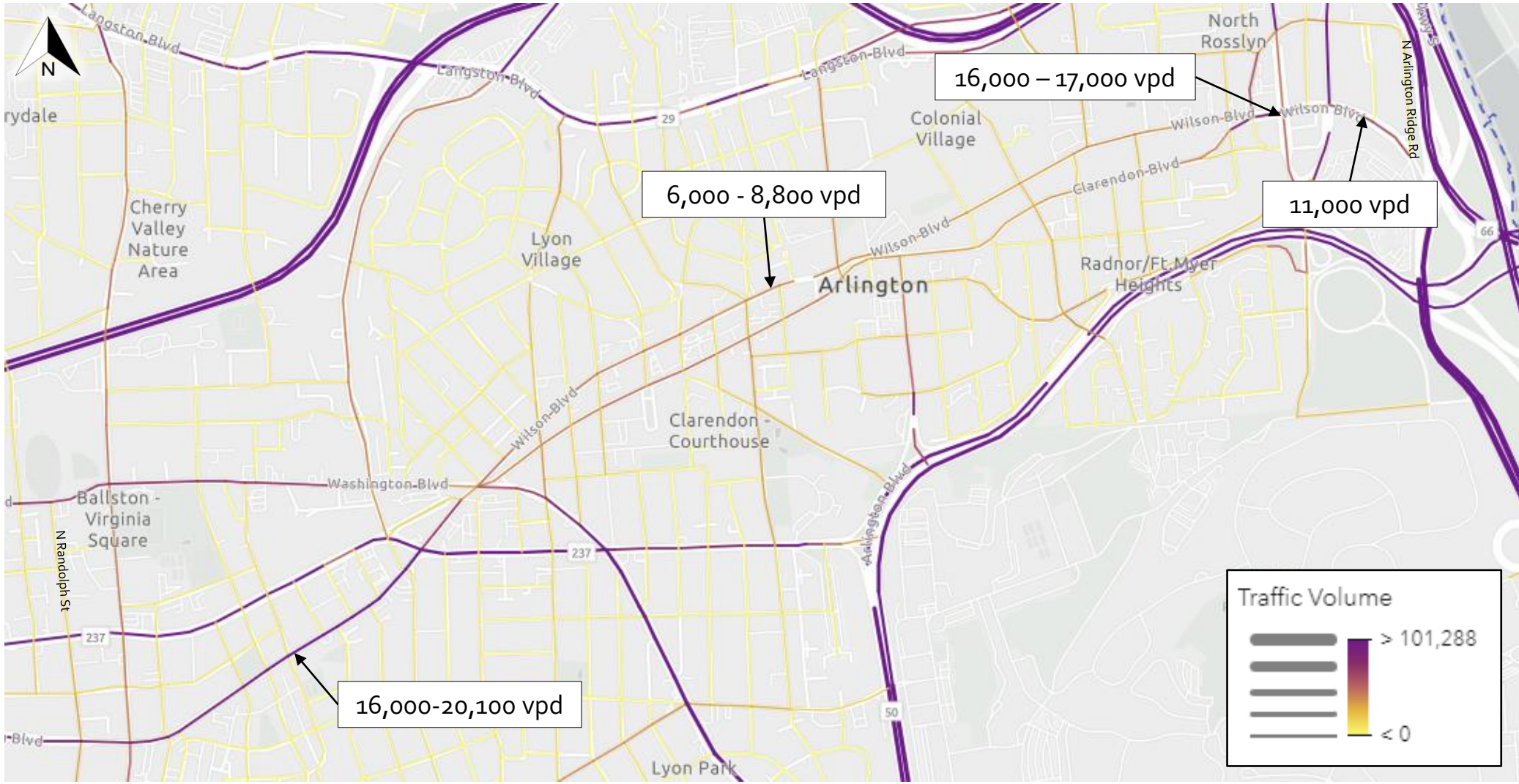
Posted Speed Limit:
25 mph

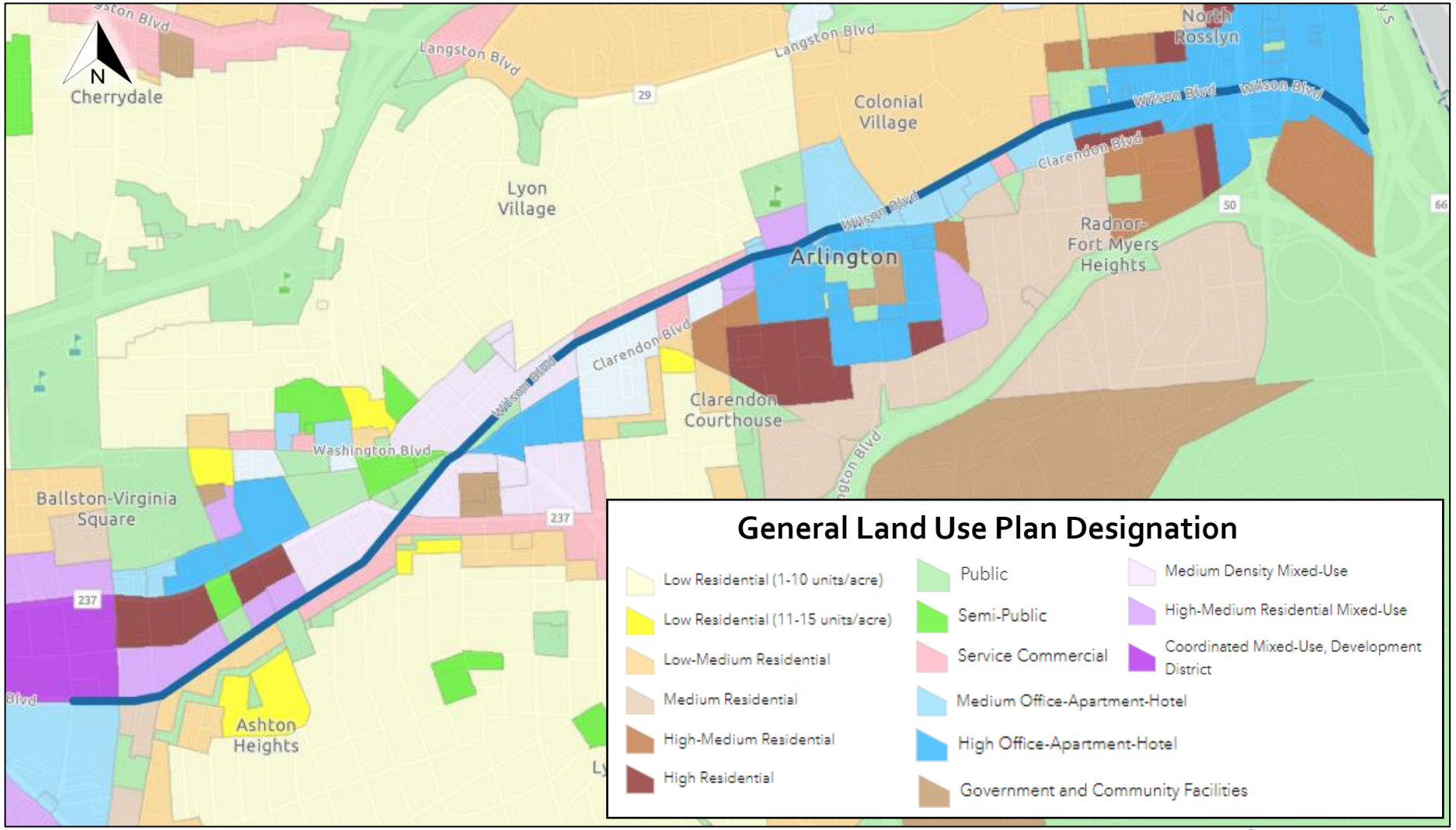


Note:
vpd = Vehicle Per Day

Average Annual Daily Traffic (AADT) data collected in 2022 by Street Light Data.

Land Use & Facilities

- Low to High Residential land use along the corridor.
- High Office Apartment and Hotel in the Rosslyn and Courthouse areas rendering high pedestrian traffic.
- The H-B Woodlawn Secondary and Eunice Kennedy Shriver Program near Rosslyn.
- Mixed-Use and Office-Apartment-Hotel land use along the entire corridor.
- Public parks along the entire corridor.
- Government offices / court / jail / library in Courthouse.
- Innovation Elementary and Washington Liberty Schools in Ballston



Transit

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Metro Station

- Metro Orange/Silver/Blue Station
- Metro Orange/Silver Line Station

ART Stop

- Bus stops include: 41, 42, 43, 45, 56, 75, 77

WMATA Bus Stop

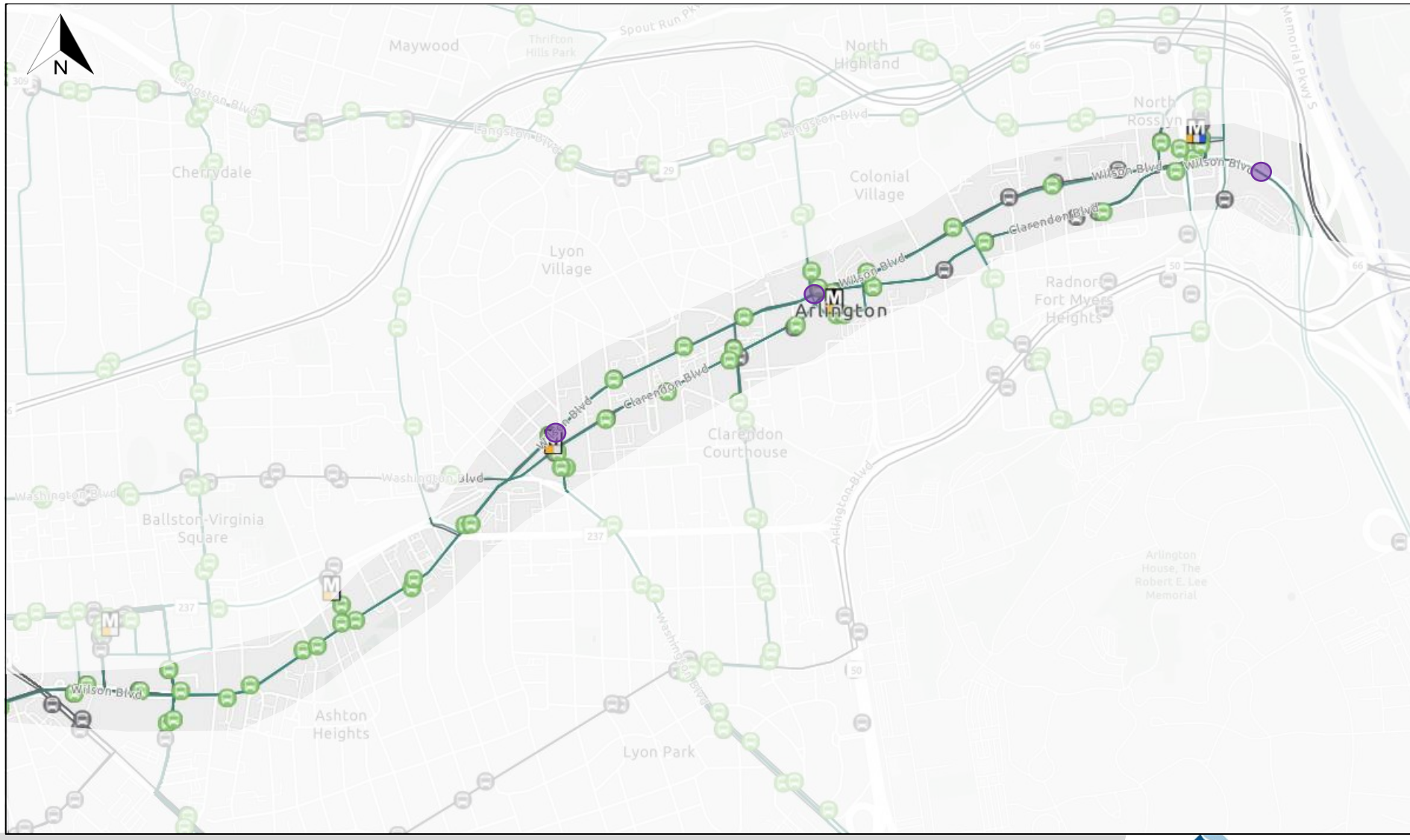
- Bus stops include: 4B, 38B

OmniRide

- 622, 932, 972-R

ART Bus Route

WMATA BUS ROUTE



Existing Bike Routes & Infrastructure

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Capital Bikeshare Station

Bike Racks / Corrals

Bike Facility

Facility Type

- Water Fountain
- Bike Repair
- Restroom/Water Fountain
- Restroom

Bike Route

Route Type

- Recommended Route
- Off Street Trail
- Bicycle Lane
- Sharrow
- Buffered Bike Lane
- Protected Bike Lane

Pedestrian/Bike Crossing Infrastructure

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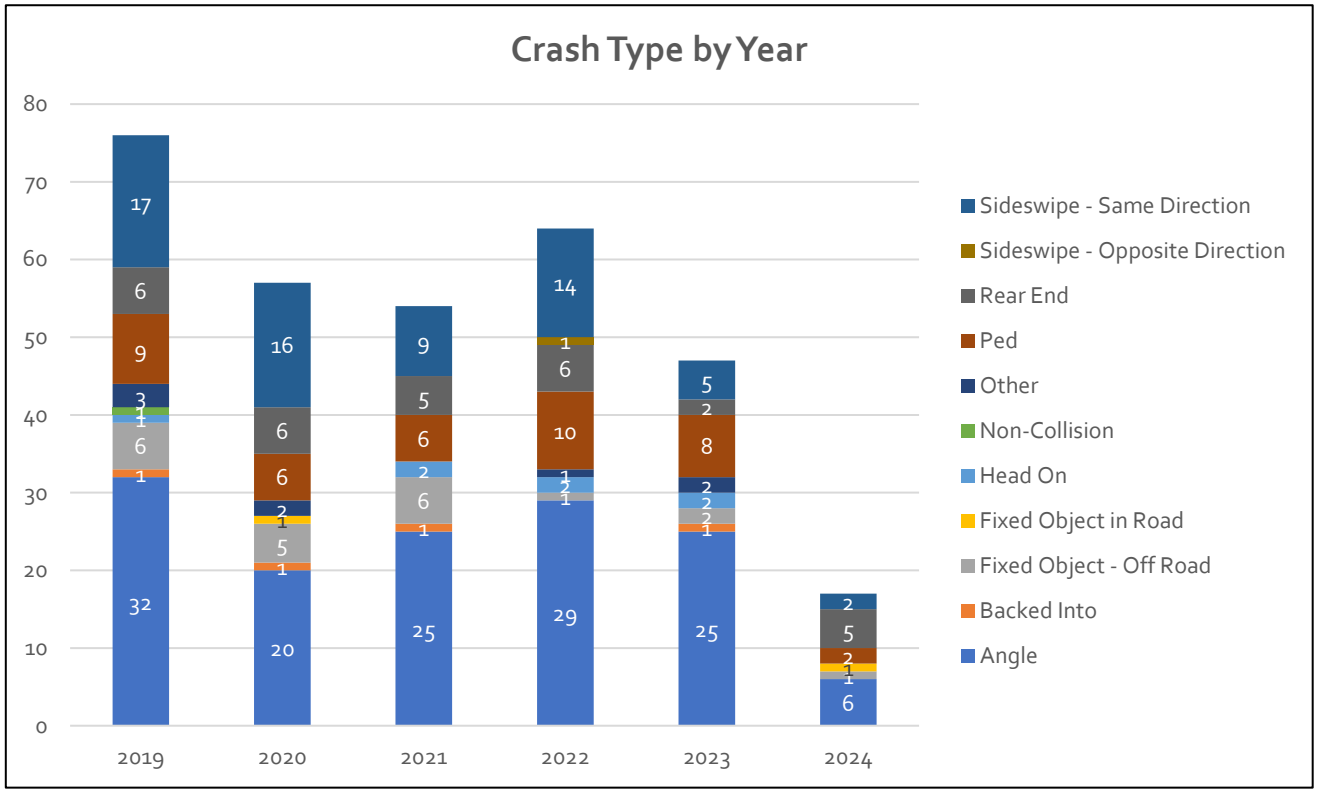
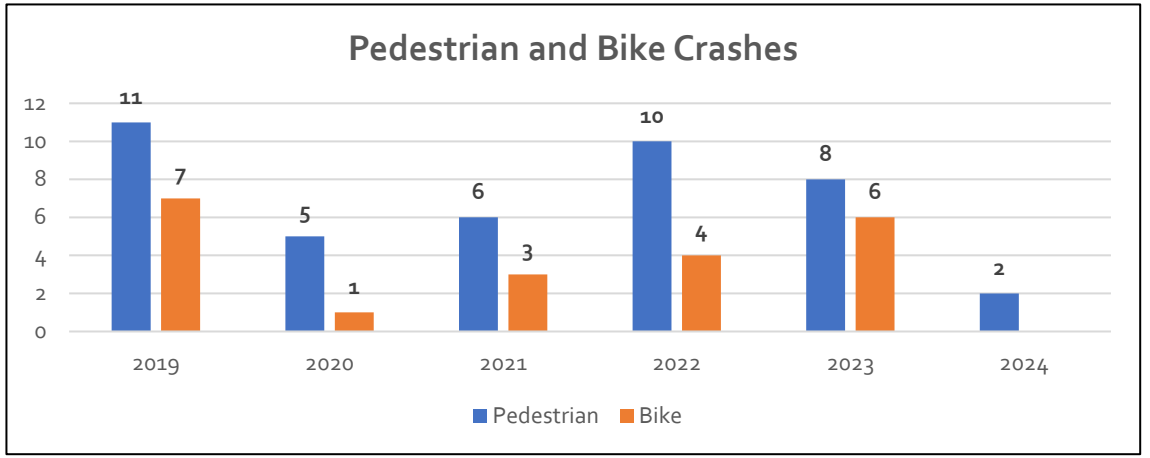
Intersection Traffic Control

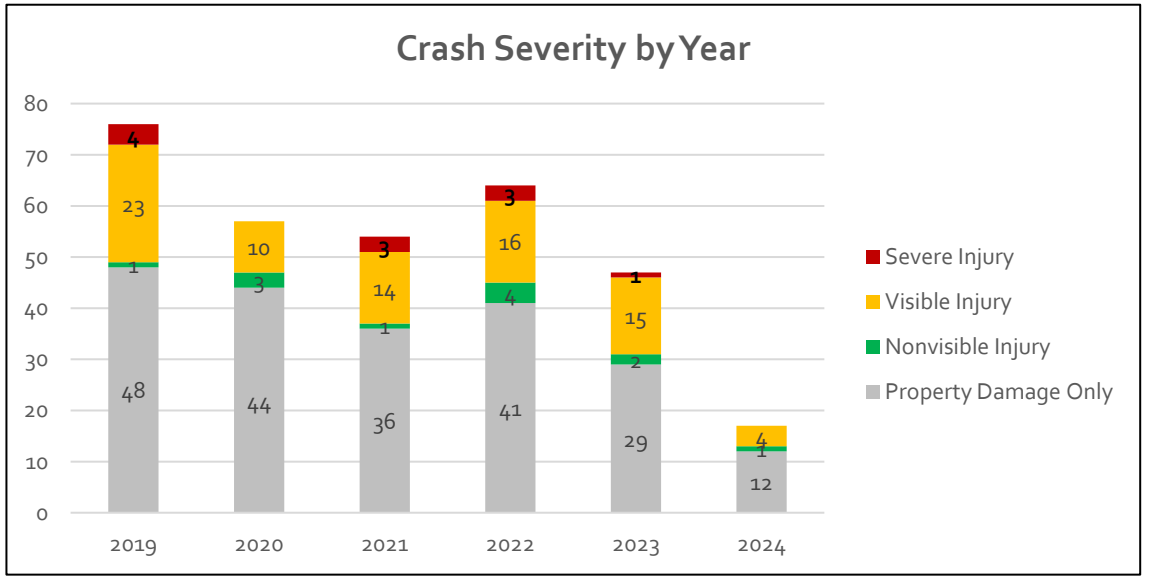
- Two-Way
- Uncontrolled
- Signalized
- HV Marked Crosswalk

Crash History 2019-2024 – Trends

- There have been zero fatal crashes on this HIN since 2019.
- Angle and sideswipe (same direction) are the most common crash types.
- 2019 saw the highest number of crashes, and overall, crashes have steadily declined. There was a slight increase in 2022, followed by a decrease in 2023.





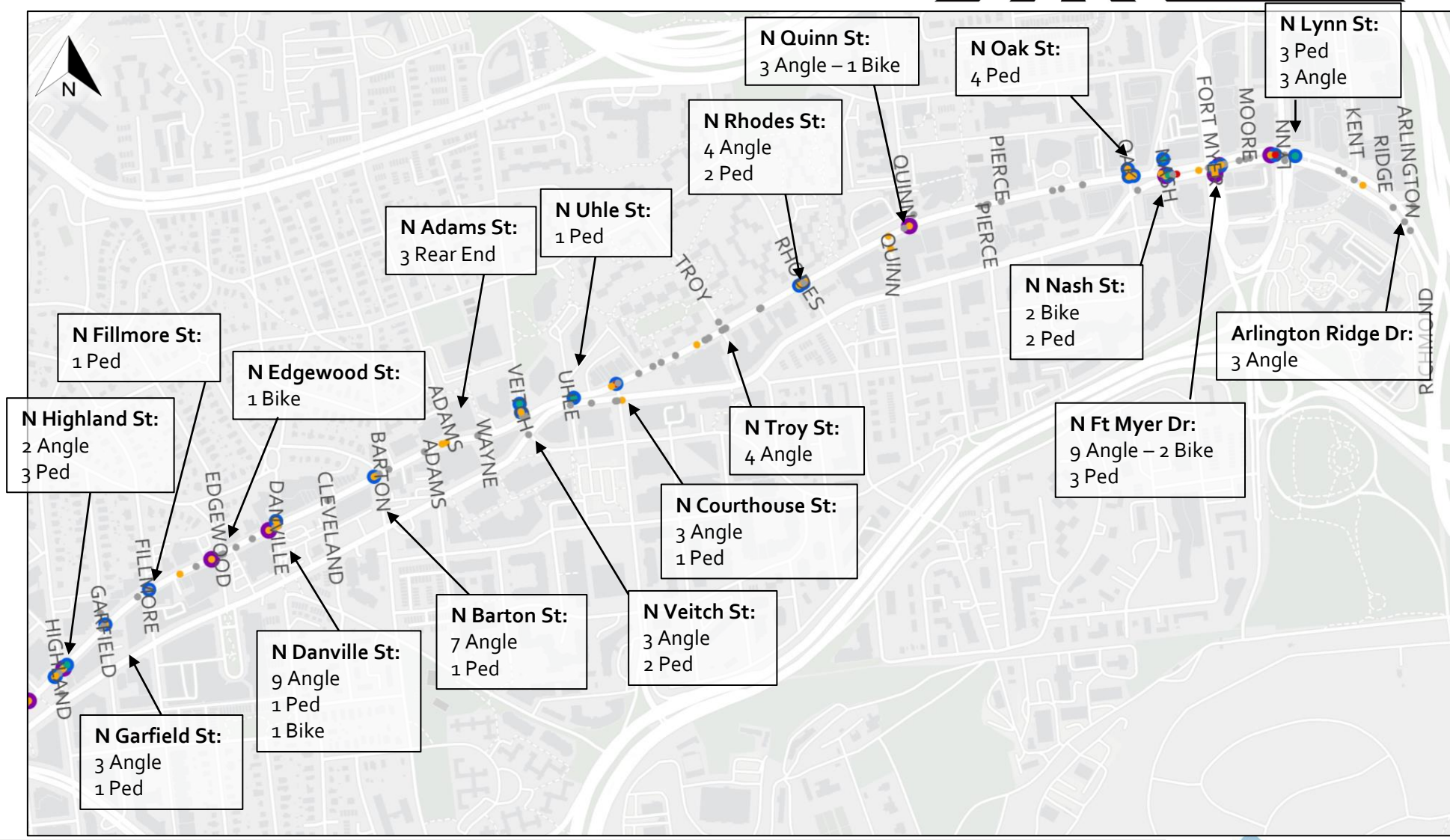


Note: This study used crash data from January 2019 – April 2024.

Crash History 2019-2024 – Locations East Side

- Severe Injury
- Visible Injury
- Non-Visible Injury
- Property Damage Only

- Bike (halo)
- Pedestrian (halo)

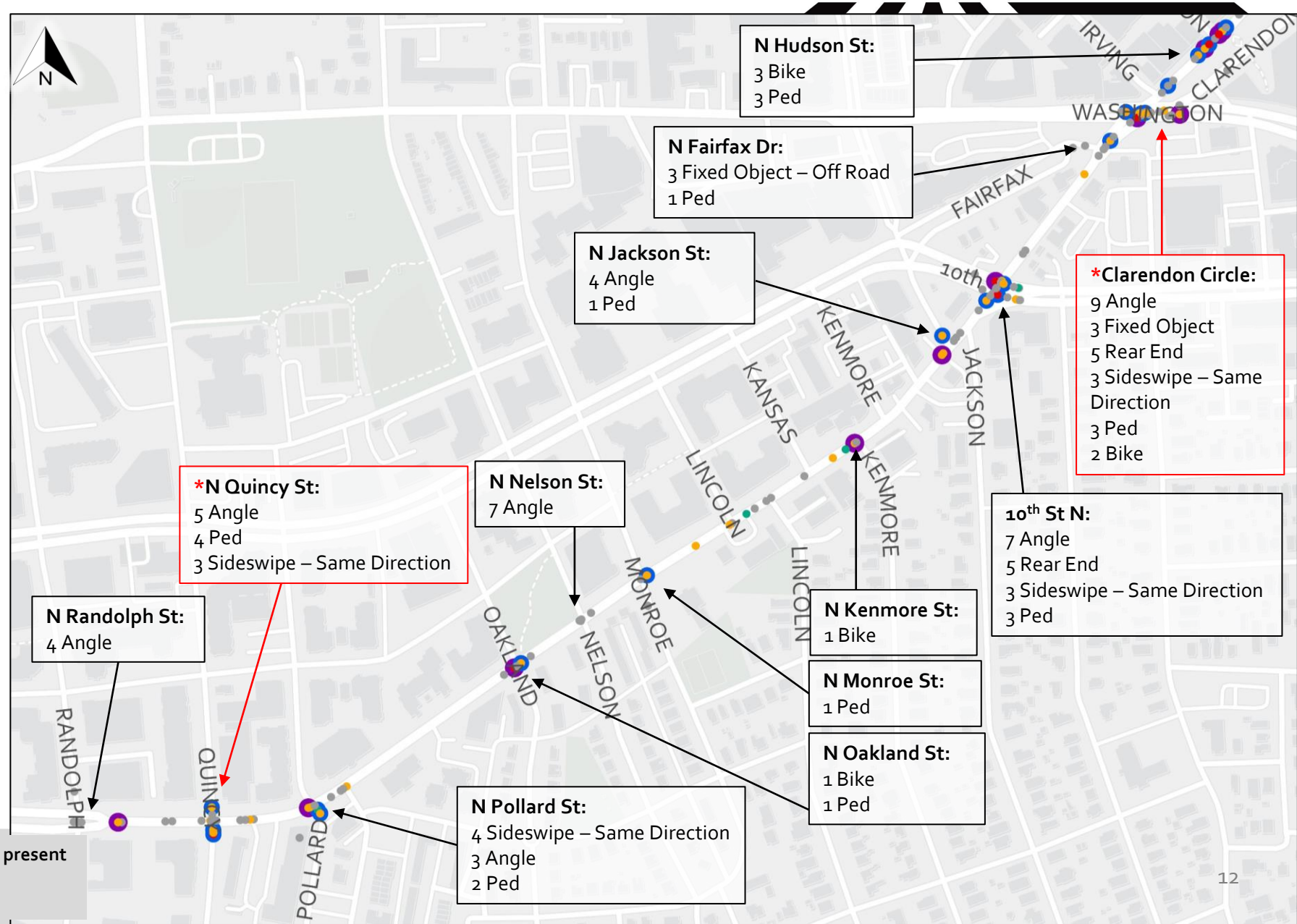


Specific crash type patterns are called out in the text boxes where present
***Previously Identified Vision Zero** Crash Hot Spot
Note: January 2019 – April 2024 crash data is included in the study.

Crash History 2019-2024 – Locations West Side

- Severe Injury
- Visible Injury
- Non-Visible Injury
- Property Damage Only

- Bike (halo)
- Pedestrian (halo)

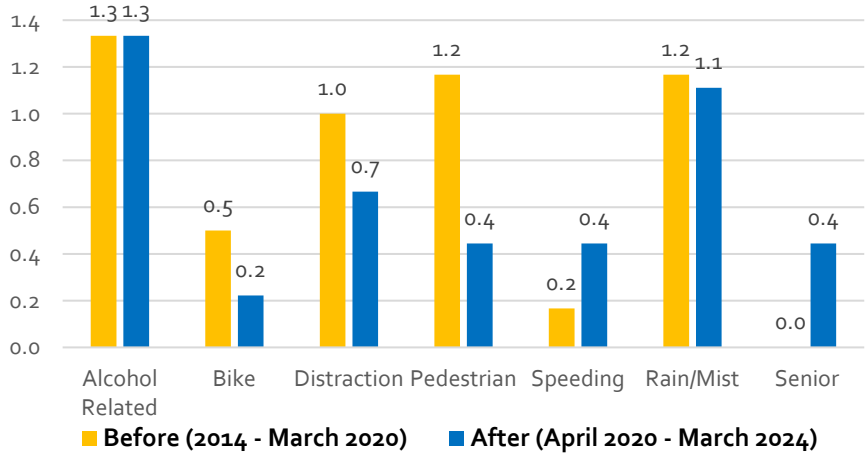


Specific crash type patterns are called out in the text boxes where present
***Previously Identified Vision Zero** Crash Hot Spot
Note: January 2019 – April 2024 crash data is included in the study.

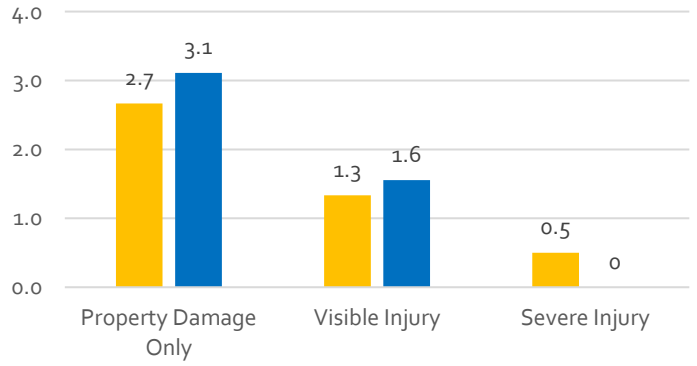
Collisions Before and After: Clarendon Circle

Intersection improvements at Clarendon Circle were completed in March 2020 as part of the Clarendon Sector Plan and the Clarendon Multimodal Transportation Study. Improvements include road realignments to reduce intersection size and shorten pedestrian crossing distances, upgrading traffic signals and lighting, closing N Irving St, and adding new curb extensions and bike lanes. **There have been zero severe or fatal crashes, and a decrease in pedestrian and bike crashes after the new updates.**

Collision Characteristics (annual average)

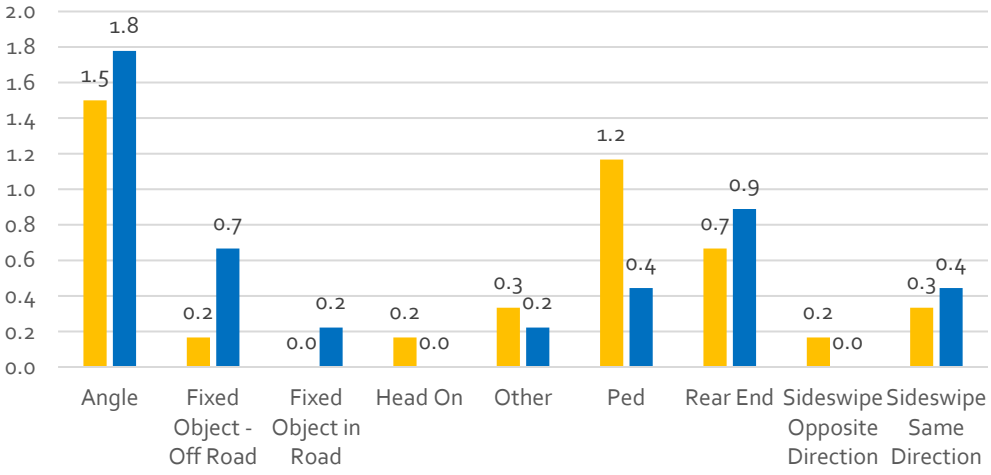


Collision Severity (annual average)



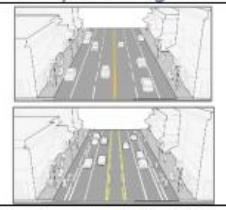
Average Collisions (Per Year)

Collision Type (annual average)



Tools Implemented

Roadway Reconfigurations



Reduce the speed of traffic, crossing distances, and/or provide additional space for other uses of the roadway.

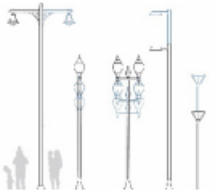
Conventional Bike Lanes

Provide dedicated, on-road space for bicycling.

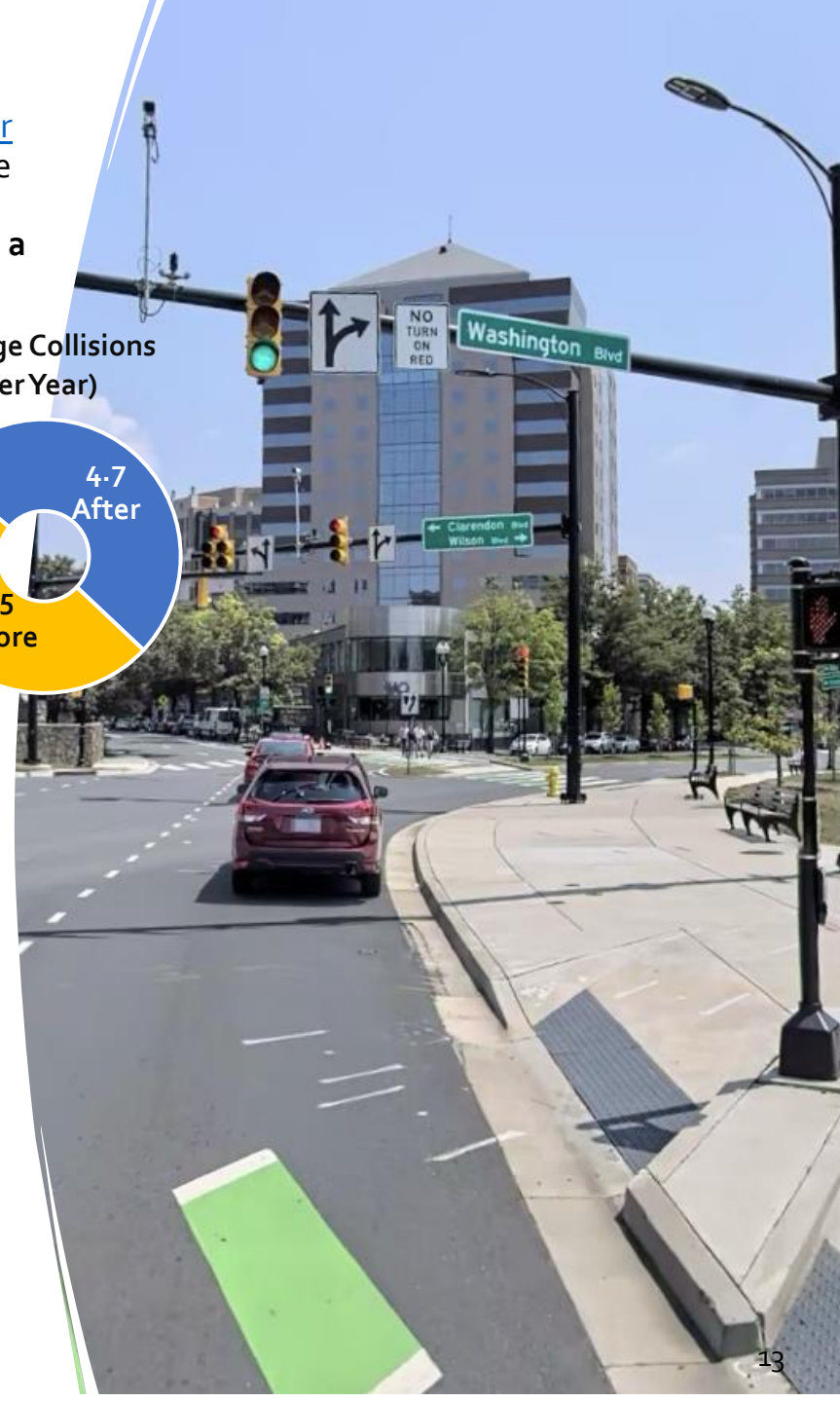
Traffic Signals

Controls pedestrian, bicyclist, and vehicle flow at intersections.

Lighting



Increase visibility for all road users, especially at crossings.



Community Input on Corridor - East

- Location-specific community feedback was collected in spring 2023 and 2024 using an online clickable map
- The common recurring comments on the corridor pertained to:
  - Conflicts between vehicles and peds
  - Pedestrian walking infrastructure

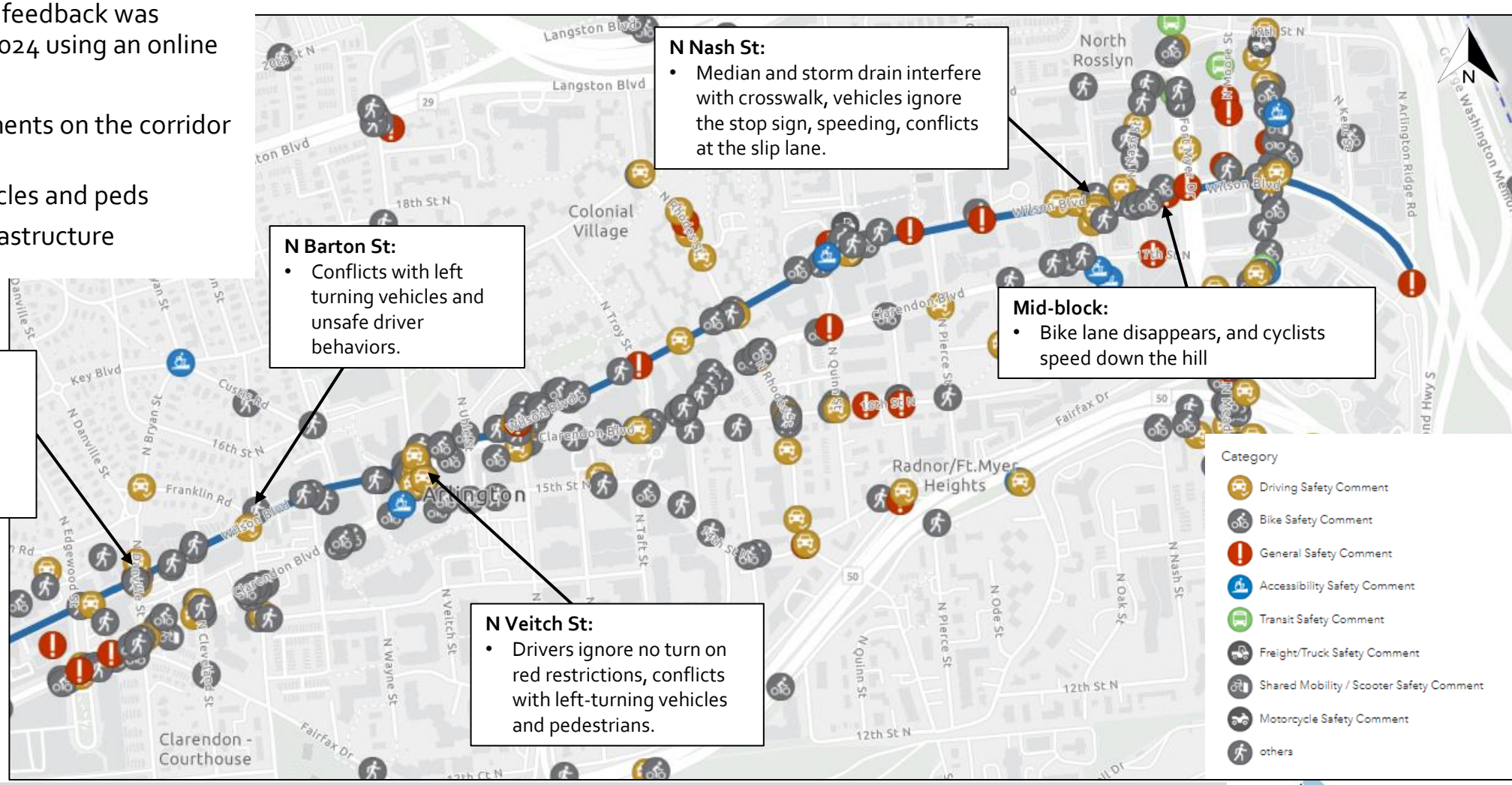
N Danville St:
- Conflicts with left turning vehicles, high pedestrian activity, vehicles driving fast, request for better pedestrian infrastructure, sight-line issues with parked vehicles.

N Barton St:
- Conflicts with left turning vehicles and unsafe driver behaviors.

N Nash St:
- Median and storm drain interfere with crosswalk, vehicles ignore the stop sign, speeding, conflicts at the slip lane.

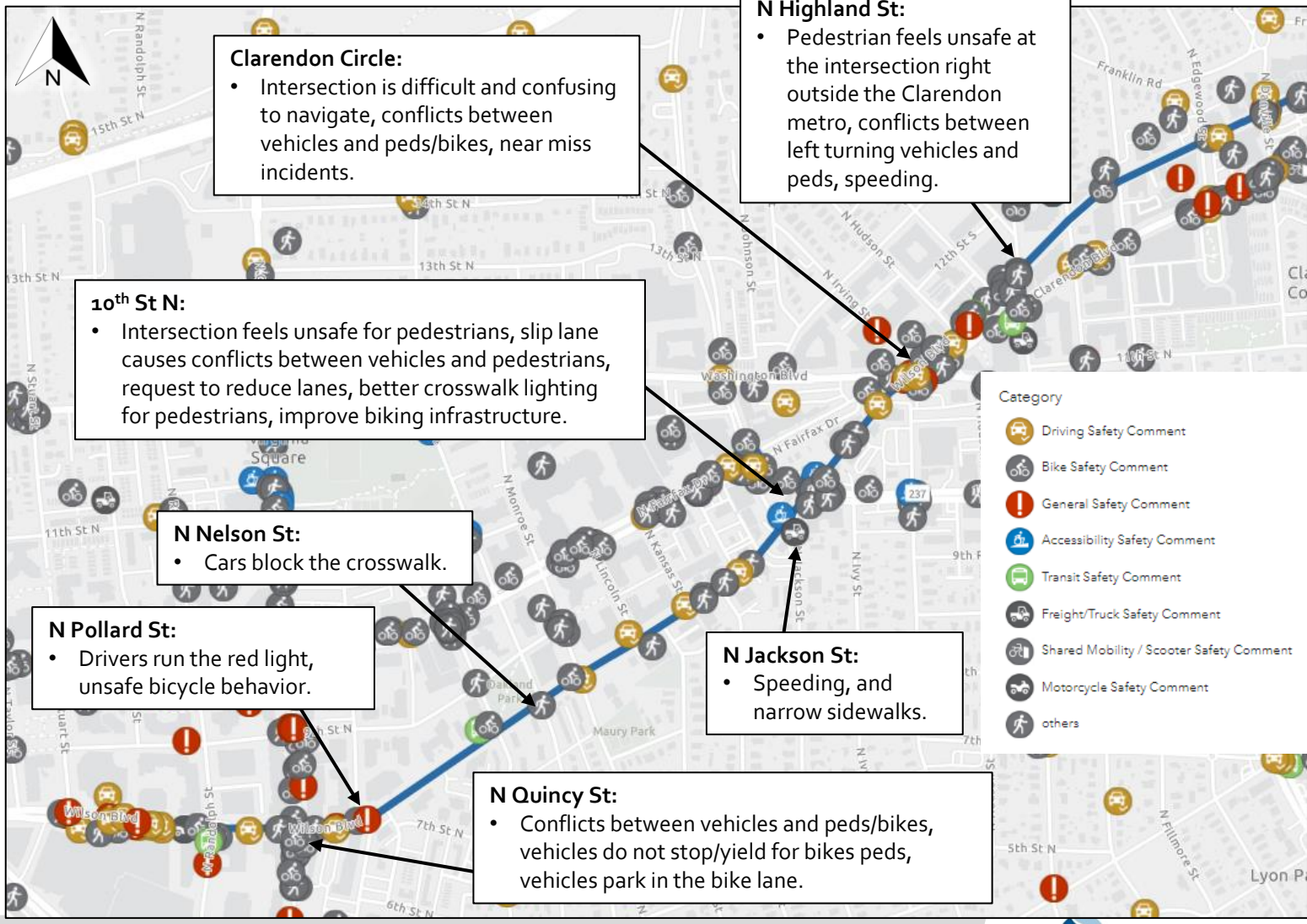
Mid-block:
- Bike lane disappears, and cyclists speed down the hill

N Veitch St:
- Drivers ignore no turn on red restrictions, conflicts with left-turning vehicles and pedestrians.



Community Input on Corridor - West

- Location-specific community feedback was collected in spring 2023 and 2024 using an online clickable map
- The common recurring comments on the corridor pertained to:
  - Unsafe driver behavior
  - Conflicts between vehicles and peds/bikes



Recent and Upcoming Projects & Developments - East

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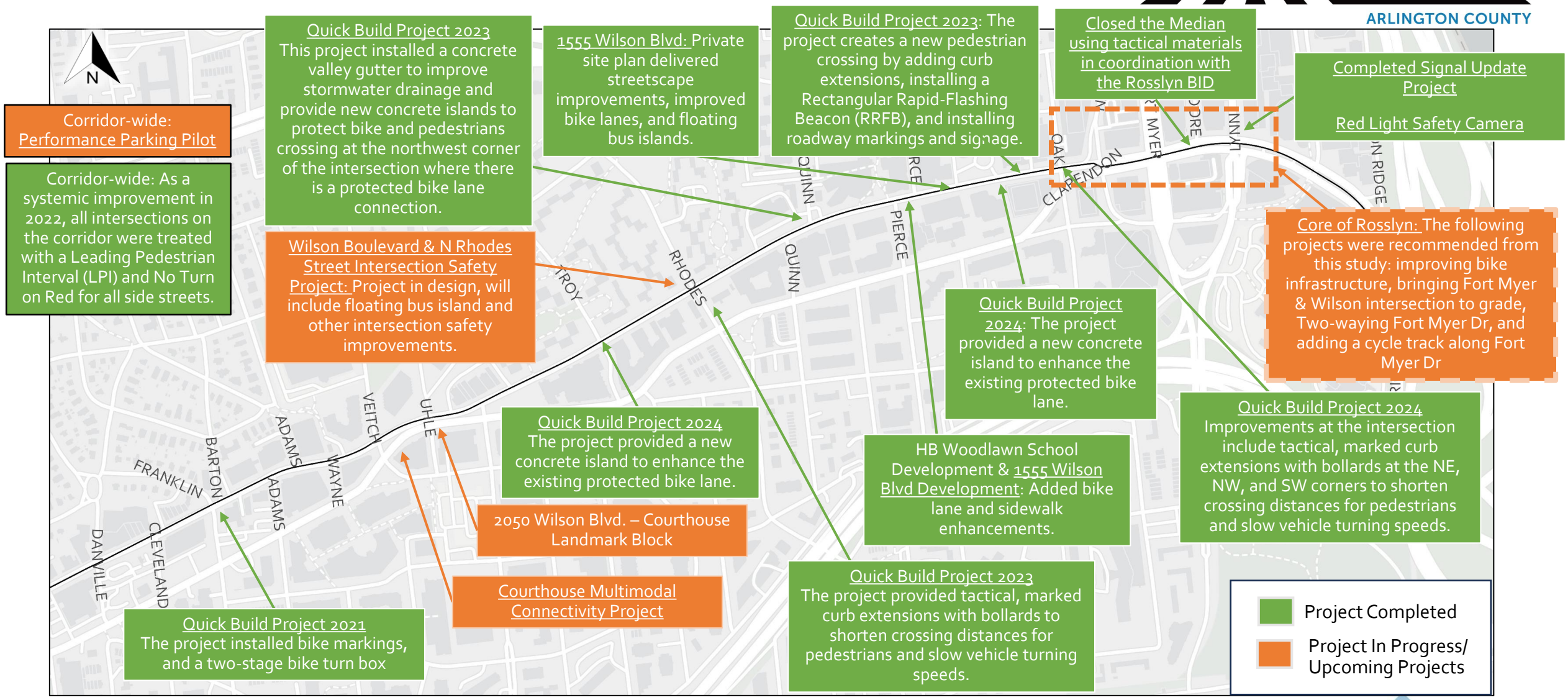

Recent and Upcoming Projects & Developments - West

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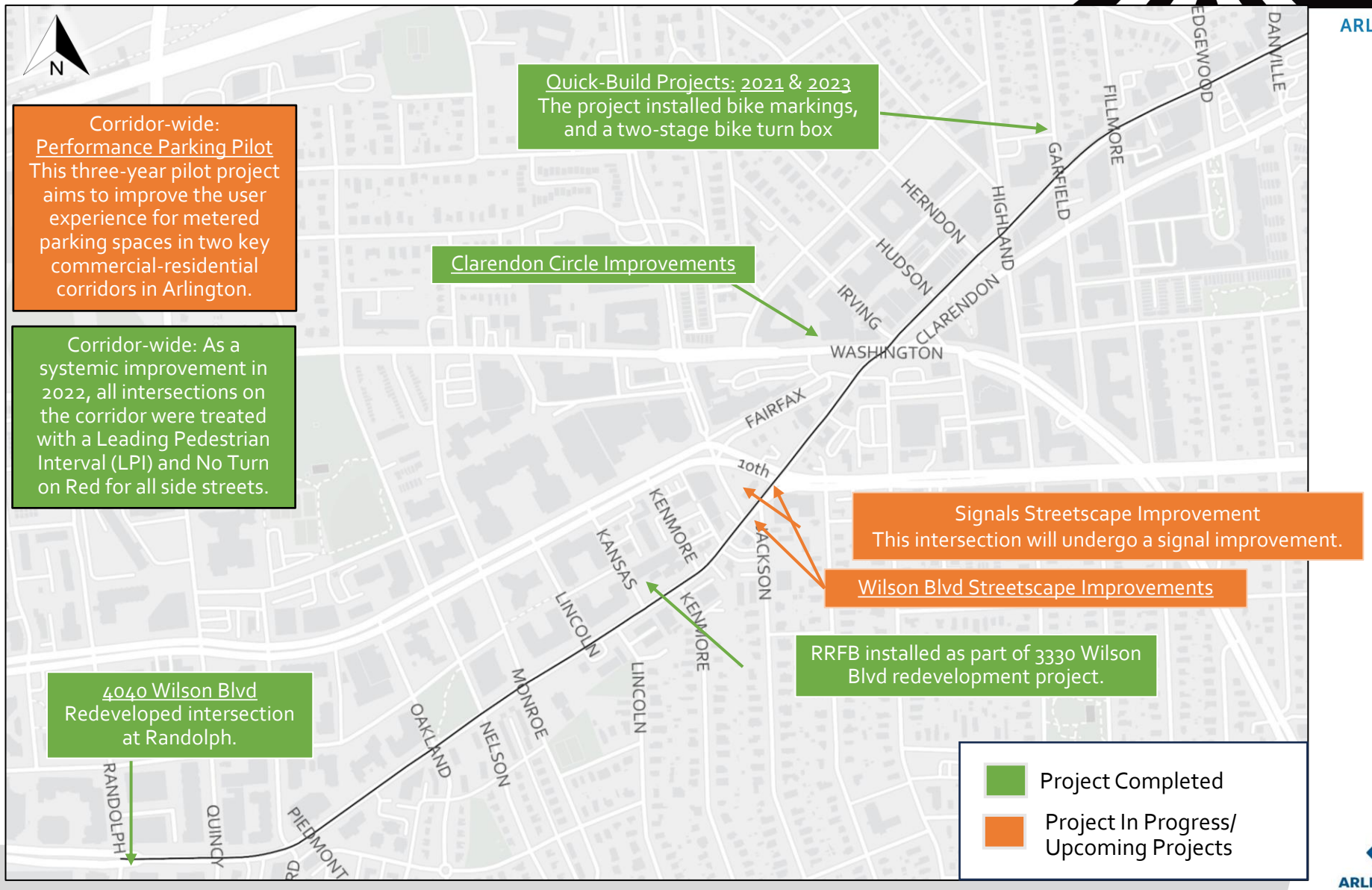

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Field Findings

The following slides include maps starting from the north end of the corridor working south. The maps identify key findings and next steps from the safety audit.

Each pinpoint lists the key safety need that was identified during the safety audit and the next step for action with a general timeline.

Each "next step" takes into consideration the background information shown in previous slides (crash history, corridor characteristics, and community input). Next steps are summarized at the end of this document.

Field Observations: Key Findings & Next Steps

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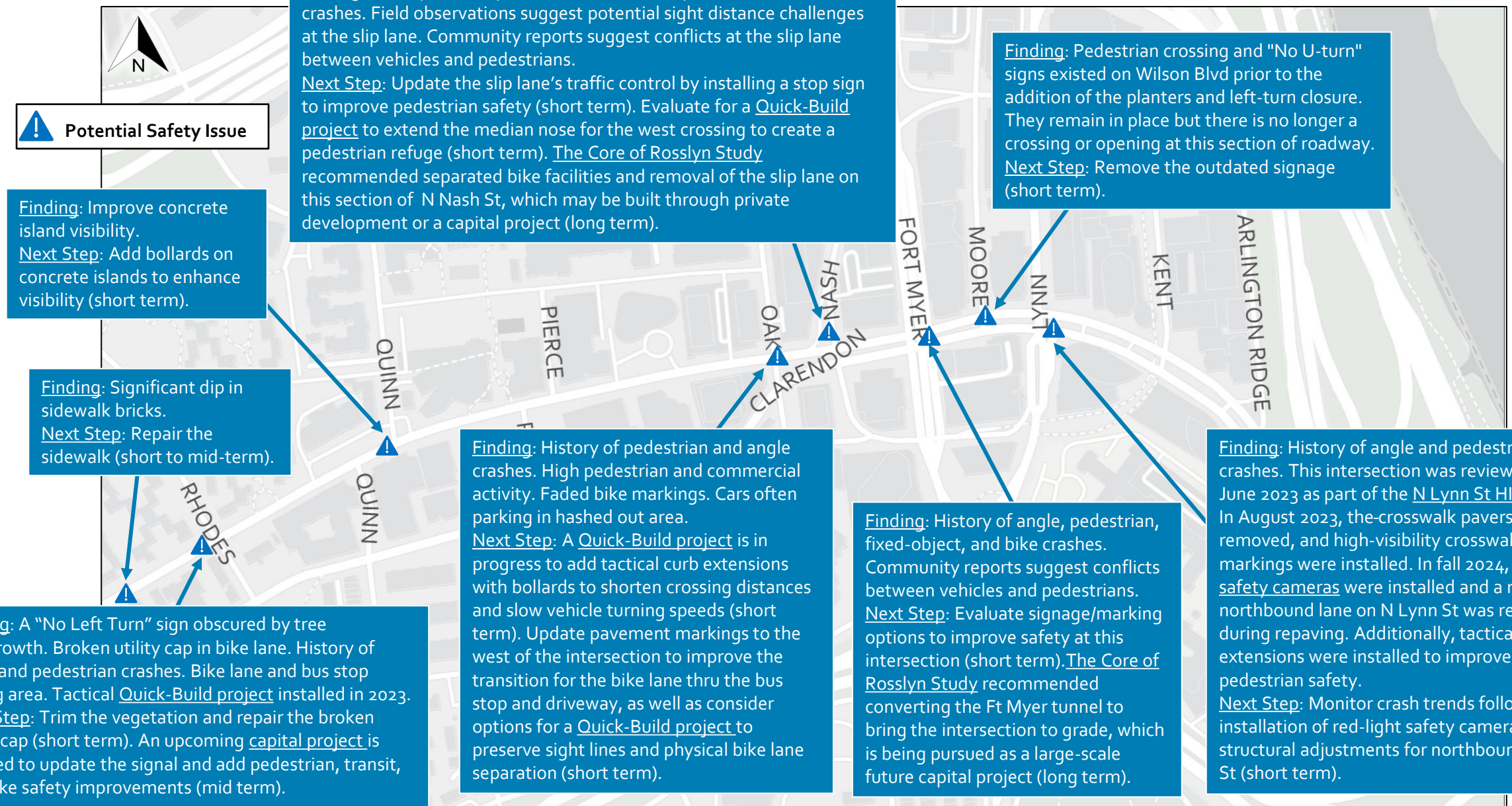


Finding: History of bike, pedestrian, and sideswipe-same direction crashes. Field observations suggest potential sight distance challenges at the slip lane. Community reports suggest conflicts at the slip lane between vehicles and pedestrians.
Next Step: Update the slip lane's traffic control by installing a stop sign to improve pedestrian safety (short term). Evaluate for a Quick-Build project to extend the median nose for the west crossing to create a pedestrian refuge (short term). The Core of Rosslyn Study recommended separated bike facilities and removal of the slip lane on this section of N Nash St, which may be built through private development or a capital project (long term).

Finding: Pedestrian crossing and "No U-turn" signs existed on Wilson Blvd prior to the addition of the planters and left-turn closure. They remain in place but there is no longer a crossing or opening at this section of roadway.
Next Step: Remove the outdated signage (short term).

Finding: Improve concrete island visibility.
Next Step: Add bollards on concrete islands to enhance visibility (short term).

Finding: Significant dip in sidewalk bricks.
Next Step: Repair the sidewalk (short to mid-term).

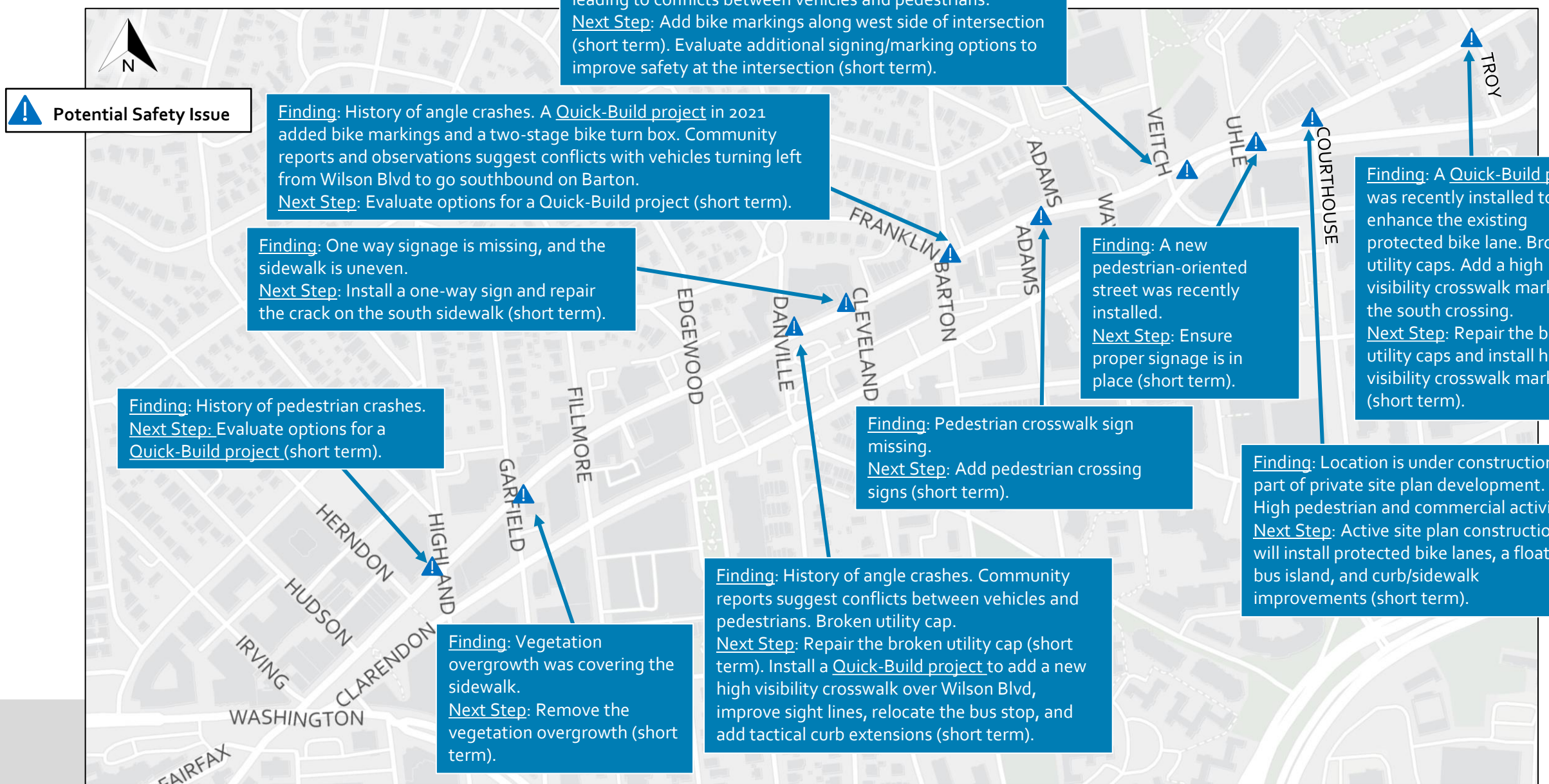
Finding: A "No Left Turn" sign obscured by tree overgrowth. Broken utility cap in bike lane. History of angle and pedestrian crashes. Bike lane and bus stop mixing area. Tactical Quick-Build project installed in 2023.
Next Step: Trim the vegetation and repair the broken utility cap (short term). An upcoming capital project is planned to update the signal and add pedestrian, transit, and bike safety improvements (mid term).

Finding: History of pedestrian and angle crashes. High pedestrian and commercial activity. Faded bike markings. Cars often parking in hashed out area.
Next Step: A Quick-Build project is in progress to add tactical curb extensions with bollards to shorten crossing distances and slow vehicle turning speeds (short term). Update pavement markings to the west of the intersection to improve the transition for the bike lane thru the bus stop and driveway, as well as consider options for a Quick-Build project to preserve sight lines and physical bike lane separation (short term).

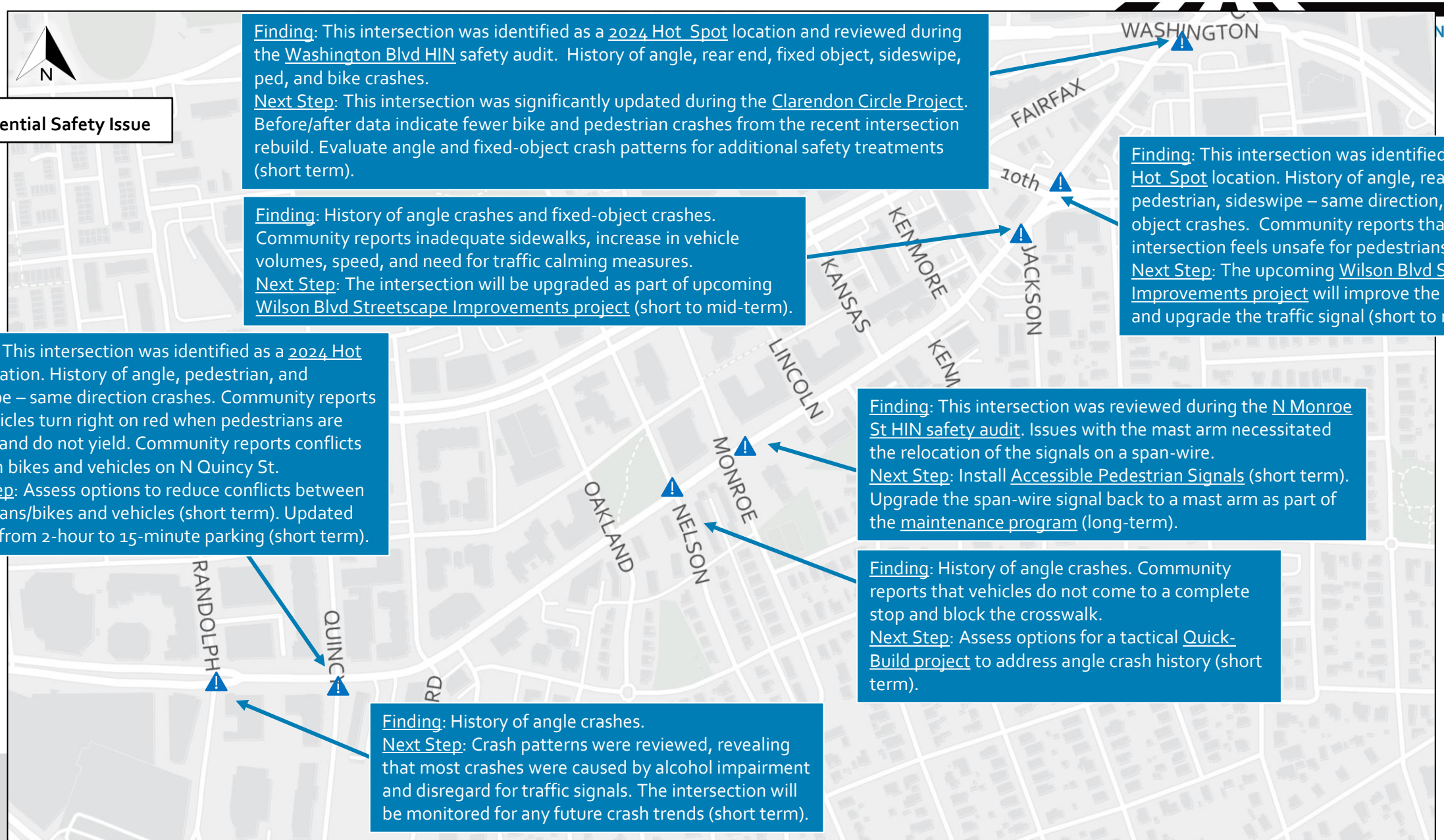
Finding: History of angle, pedestrian, fixed-object, and bike crashes. Community reports suggest conflicts between vehicles and pedestrians.
Next Step: Evaluate signage/marking options to improve safety at this intersection (short term).The Core of Rosslyn Study recommended converting the Ft Myer tunnel to bring the intersection to grade, which is being pursued as a large-scale future capital project (long term).

Finding: History of angle and pedestrian crashes. This intersection was reviewed in June 2023 as part of the N Lynn St HIN audit. In August 2023, the-crosswalk pavers were removed, and high-visibility crosswalk markings were installed. In fall 2024, red-light safety cameras were installed and a redundant northbound lane on N Lynn St was removed during repaving. Additionally, tactical curb extensions were installed to improve pedestrian safety.
Next Step: Monitor crash trends following installation of red-light safety cameras and structural adjustments for northbound N Lynn St (short term).

Field Observations: Key Findings & Next Steps



Field Observations: Key Findings & Next Steps



Finding: This intersection was identified as a 2024 Hot Spot location and reviewed during the Washington Blvd HIN safety audit. History of angle, rear end, fixed object, sideswipe, ped, and bike crashes.
Next Step: This intersection was significantly updated during the Clarendon Circle Project. Before/after data indicate fewer bike and pedestrian crashes from the recent intersection rebuild. Evaluate angle and fixed-object crash patterns for additional safety treatments (short term).

Finding: This intersection was identified as a 2024 Hot Spot location. History of angle, rear end, pedestrian, sideswipe – same direction, and fixed object crashes. Community reports that the intersection feels unsafe for pedestrians.
Next Step: The upcoming Wilson Blvd Streetscape Improvements project will improve the intersection and upgrade the traffic signal (short to mid-term).

Finding: History of angle crashes and fixed-object crashes. Community reports inadequate sidewalks, increase in vehicle volumes, speed, and need for traffic calming measures.
Next Step: The intersection will be upgraded as part of upcoming Wilson Blvd Streetscape Improvements project (short to mid-term).

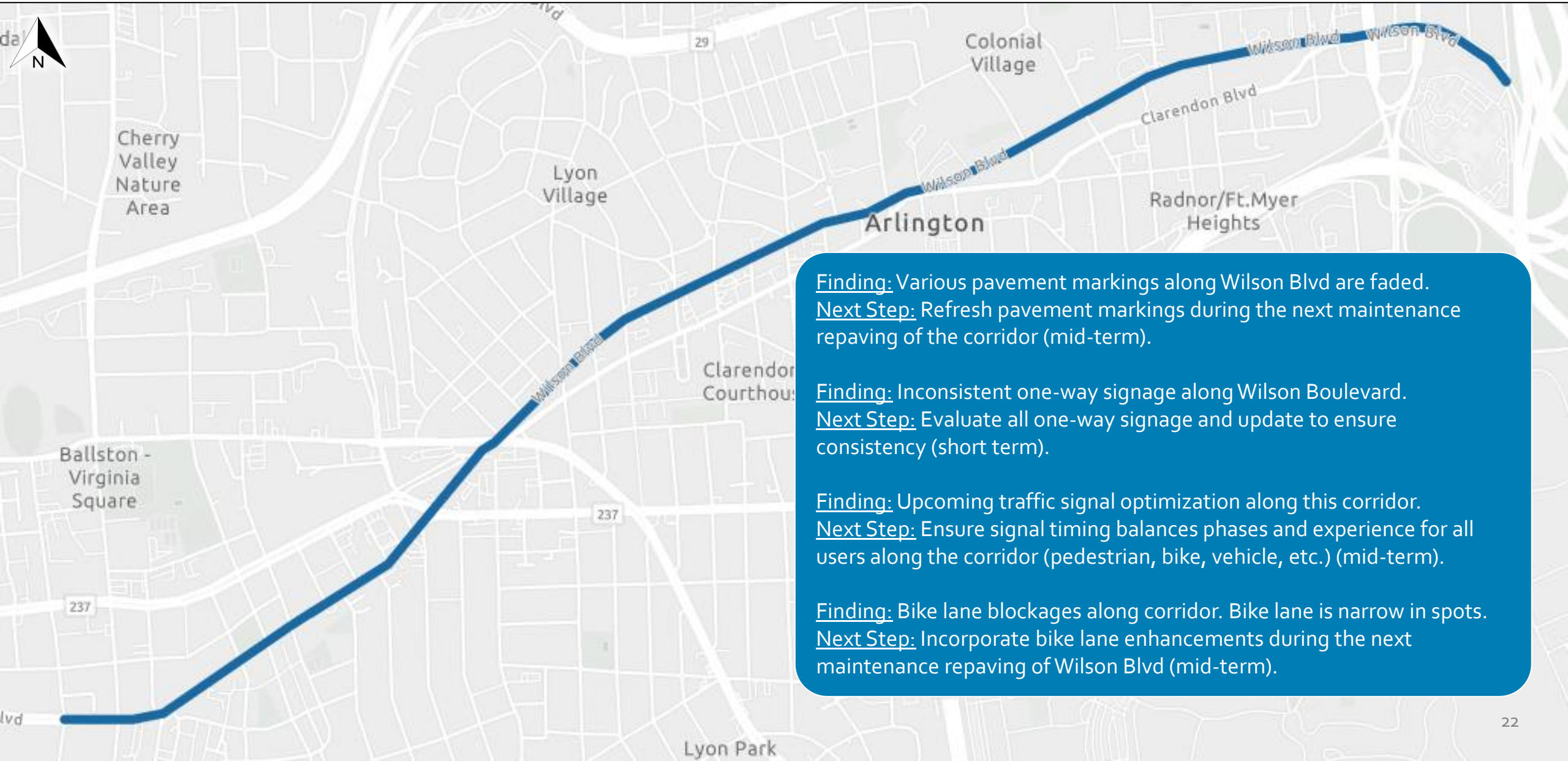
Finding: This intersection was identified as a 2024 Hot Spot location. History of angle, pedestrian, and sideswipe – same direction crashes. Community reports that vehicles turn right on red when pedestrians are present and do not yield. Community reports conflicts between bikes and vehicles on N Quincy St.
Next Step: Assess options to reduce conflicts between pedestrians/bikes and vehicles (short term). Updated parking from 2-hour to 15-minute parking (short term).

Finding: This intersection was reviewed during the N Monroe St HIN safety audit. Issues with the mast arm necessitated the relocation of the signals on a span-wire.
Next Step: Install Accessible Pedestrian Signals (short term). Upgrade the span-wire signal back to a mast arm as part of the maintenance program (long-term).

Finding: History of angle crashes. Community reports that vehicles do not come to a complete stop and block the crosswalk.
Next Step: Assess options for a tactical Quick-Build project to address angle crash history (short term).

Finding: History of angle crashes.
Next Step: Crash patterns were reviewed, revealing that most crashes were caused by alcohol impairment and disregard for traffic signals. The intersection will be monitored for any future crash trends (short term).

Corridor-wide Field Observations: Key Findings & Next Steps



Finding: Various pavement markings along Wilson Blvd are faded.
Next Step: Refresh pavement markings during the next maintenance repaving of the corridor (mid-term).

Finding: Inconsistent one-way signage along Wilson Boulevard.
Next Step: Evaluate all one-way signage and update to ensure consistency (short term).

Finding: Upcoming traffic signal optimization along this corridor.
Next Step: Ensure signal timing balances phases and experience for all users along the corridor (pedestrian, bike, vehicle, etc.) (mid-term).

Finding: Bike lane blockages along corridor. Bike lane is narrow in spots.
Next Step: Incorporate bike lane enhancements during the next maintenance repaving of Wilson Blvd (mid-term).

Summary of Next Steps

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Short Term (within 1 year)

- N Lynn St – Monitor crash trends following installation of red-light safety cameras and structural adjustments for northbound N Lynn St.
- N Moore St – Remove the outdated signage.
- N Ft Myer Dr – Evaluate signage/marking options to improve safety at this intersection.
- N Nash St – Update the slip lane's traffic control by installing a stop sign to improve pedestrian safety. Evaluate for a Quick-Build project to extend the median nose for the west crossing to create a pedestrian refuge.
- N Oak St – A Quick-Build project is in progress to add tactical curb extensions with bollards to shorten crossing distances and slow vehicle turning speeds. Update pavement markings to the west of the intersection to improve the transition for the bike lane thru the bus stop and driveway, as well as consider options for a Quick-Build project to preserve sight lines and physical bike lane separation.
- N Quinn St – Add bollards on concrete islands to enhance visibility.
- N Rhodes St – Trim the vegetation and repair the broken utility cap.

Short Term (within 1 year)

- N Troy St – Repair the broken utility caps and install high-visibility crosswalk marking.
- N Courthouse Rd – Active site plan construction will install protected bike lanes, a floating bus island, and curb/sidewalk improvements.
- N Uhle St – Ensure proper signage is in place.
- N Veitch St – Add bike markings along west side of intersection. Evaluate additional signing/marking options to improve safety at the intersection.
- N Adams St – Add pedestrian crossing signs.
- N Barton St /N Franklin St – Evaluate options for a Quick-Build project.
- N Cleveland St – Install a one-way sign and repair the crack on the south sidewalk.
- N Danville St – Repair the broken utility cap. Install a Quick-Build project to add a new high visibility crosswalk over Wilson Blvd, improve sight lines, relocate the bus stop, and add tactical curb extensions.
- N Garfield St – Remove the vegetation overgrowth.

Short Term (within 1 year)

- N Highland St – Evaluate options for a Quick-Build project.
- Clarendon Circle – This intersection was significantly updated during the Clarendon Circle Project. Before/after data indicate fewer bike and pedestrian crashes from the recent intersection rebuild. Evaluate angle and fixed-object crash patterns for additional safety treatments.
- N Monroe St – Install Accessible Pedestrian Signals.
- N Nelson St – Assess options for a tactical Quick-Build project to address angle crash history.
- N Quincy St – Assess options to reduce conflicts between pedestrians/bikes and vehicles. Updated parking from 2-hour to 15-minute parking.
- N Randolph St – Crash patterns were reviewed, revealing that most crashes were caused by alcohol impairment and disregard for traffic signals. The intersection will be monitored for any future crash trends.

➢Corridorwide:

- Evaluate all one-way signage and update to ensure consistency.

Click here to view safety audit reports and follow up.

Summary of Next Steps

Mid Term (1-3 years)

- N Rhodes St – An upcoming capital project is planned to update the signal and add pedestrian, transit, and bike safety improvements.
- Past N Rhodes St – Repair the sidewalk.
- 10th St N – The upcoming Wilson Blvd Streetscape Improvements project will improve the intersection and upgrade the traffic signal (short to mid-term).
- N Jackson St – The intersection will be upgraded as part of upcoming Wilson Blvd Streetscape Improvements project (short to mid-term).

➢ Corridorwide:

- Refresh pavement markings during the next maintenance repaving of the corridor.
- Ensure signal timing balances phases and experience for all users along the corridor (pedestrian, bike, vehicle, etc.).
- Incorporate bike lane enhancements during the next maintenance repaving of Wilson Blvd.

Long Term (3+ Years)

- Ft Myer Dr – The Core of Rosslyn Study recommended converting the Ft Myer tunnel to bring the intersection to grade, which is being pursued as a large-scale future capital project.
- N Nash St – The Core of Rosslyn Study recommended separated bike facilities and removal of the slip lane on this section of N Nash St, which may be built through private development or a capital project.
- N Monroe St – Upgrade the span-wire signal back to a mast arm as part of the maintenance program.

Click here to view safety audit reports and follow up.