## Deadly Pedestrian Trends

Northern Virginia (NOVA) Region &

Alexandria, Arlington & Fairfax



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### Introduction

The following is an analysis of drivers crashing their vehicles into pedestrians / cyclists in the Northern Virginia jurisdictions of Alexandria, Arlington and Fairfax (as defined below)

The data in this report was provided by the Virginia Department of Transportation (VDOT) Traffic Engineering Division, in its Traffic Record Electronic Data System (TREDS) system, via the Full Crash GIS dataset.

With the VDOT dataset we use only include vehicle to pedestrian / bike crashes reported to police that resulted in an injury and/or an estimated \$1,500 of damage. All other crashes (e.g., vehicle to vehicle, crashes reported to police that resulted in less than \$1,500 in damage and/or crashes after which the police were not contacted) are not included here.

The VDOT dataset used for this analysis was last updated July 3, 2025 and includes full data set of injured, severely injured and fatalities through April 30, 2025. Additional information on the number of crashes that involved pedestrians or bikes and resulted in fatalities or suspected serious injuries from May – Jul 2025 was obtained from County & City officials. This additional data is included on the slides that list total killed or injured counts through July. However, we only know the number of KSIs and we do have the details such as location, street design, etc. on this set of data.

For the purpose of this analysis "NOVA" includes the City of Alexandria, and the Counties of Arlington, and Fairfax (Fairfax as shown here includes data for Fairfax County; including the incorporated towns of Clifton, Vienna and Herndon), City of Fairfax, and City of Falls Church.

# Northern Virginia "NOVA"

For the purpose of this analysis "NOVA" includes the City of Alexandria and Counties of Arlington and Fairfax. Fairfax includes data for Fairfax county (including towns of Clifton, Vienna and Herndon), Cities of Fairfax & Falls Church.

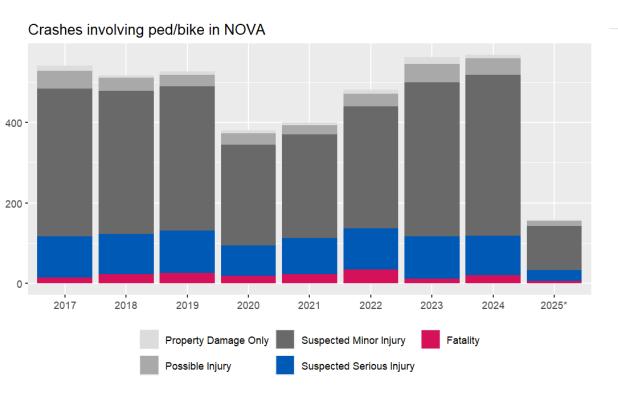


### Key Takeaways for Northern Virginia from Jan 2024 – Apr 2025

- 21% (150 out of 726) of crashes involving pedestrians / cyclists resulted in Killed or Serious Injury (KSI)
- Pedestrians or cyclists KSI crashes peak between 5pm 10pm and were more likely in late summer through the fall.
- Socioeconomically vulnerable communities with typically higher pedestrian activity & poor road infrastructure experienced more pedestrian / cyclist crashes compared to less vulnerable areas.
- Fairfax has the largest number of KSIs, and its Richmond Highway South corridor had the most pedestrians / cyclists KSIs in the entire Northern Virginia region.
- On a per population basis (per 100,000 residents, using population numbers from the 2020 census) KSI crashes involving pedestrians & cyclists is higher in Arlington and Alexandria than Fairfax



## 21% of the pedestrian or cyclist crashes in NOVA from Jan 2024 – Apr 2025 resulted in fatalities or suspected serious injuries (KSI).

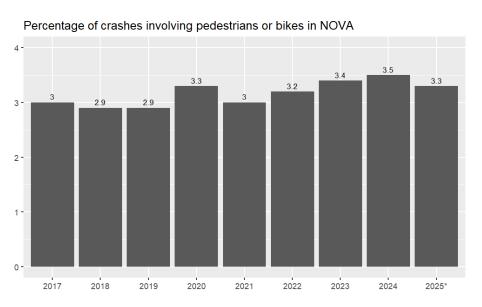


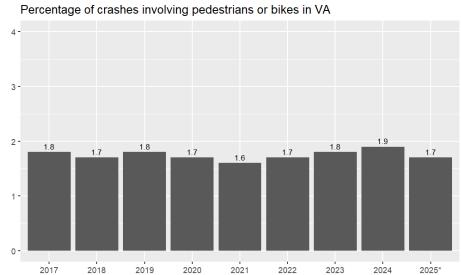


<sup>\* 2025</sup> includes data until 30 April, 2025

<sup>-</sup> source: VDOT TREDS data, last updated July 3, 2025.

## The percentage of crashes that involve pedestrians or cyclists in NOVA in 2024 (3.5%) is almost double the number of similar crashes in all of VA. (1.9%)

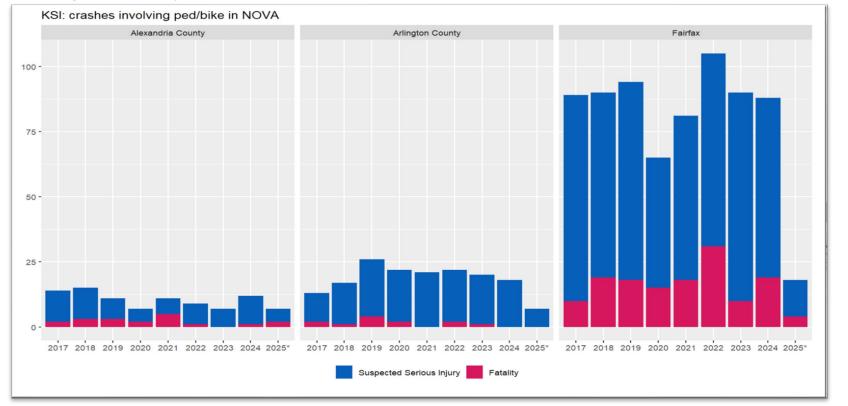




<sup>\* 2025</sup> includes data until 30 April, 2025

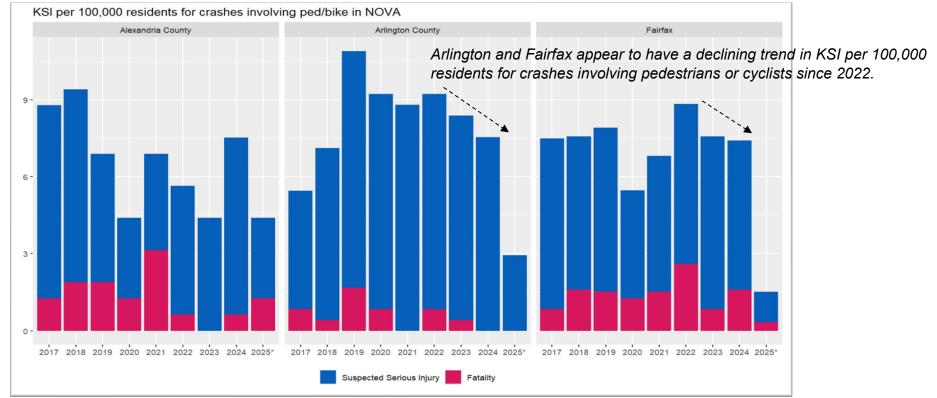
Fairfax had the highest number of crashes involving pedestrians or cyclists that resulted in fatalities or serious injuries (KSI) from Jan 2024 - Apr 2025.

Arlington County had no fatalities in this time period.



<sup>\* 2025</sup> includes data until 30 April, 2025

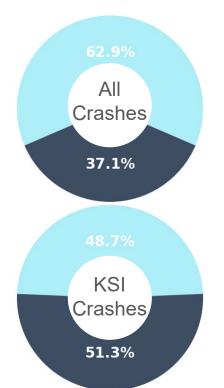
The population-adjusted KSI (KSI per 100,000 residents, using population numbers from the 2020 census) for crashes involving pedestrians or cyclists from Jan 2024 to Apr 2025 is higher for Arlington and Alexandria than for Fairfax.



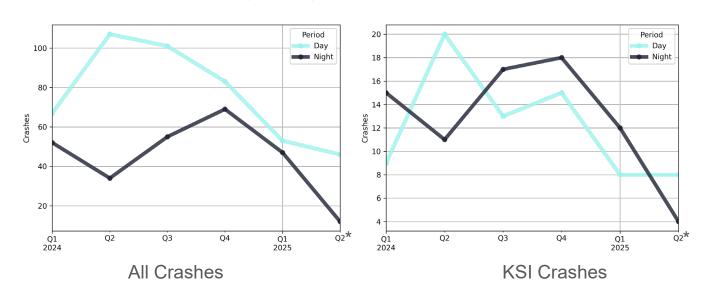
<sup>\* 2025</sup> includes data until 30 April, 2025

## Severe or fatal crashes involving pedestrians or cyclists in NOVA from Jan 2024 – Apr 2025 were more likely at night and in late summer through the fall.

% Day vs. Night Crashes



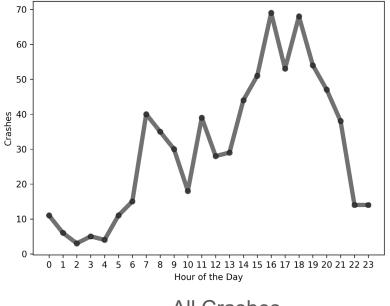
Day vs. Night Crashes by Quarter

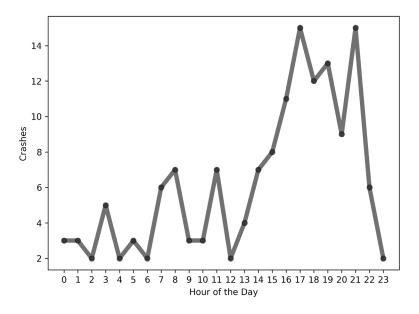


"Night" defined as light levels reported other than "daylight," and the hours of 6PM – 6AM when light levels were not reported.

<sup>\*</sup> Q2 data includes only Apr 2025.

### Severe or fatal crashes involving pedestrians or cyclists in NOVA from Jan 2024 Apr 2025 occurred most frequently between 5PM to 10PM.





All Crashes

**KSI Crashes** 

Total reports of crashes involving pedestrians/cyclists in Northern Virginia become more frequent as the day progresses, reaching a relative peak around late afternoon hours of 4PM – 7PM.

Crashes involving pedestrians/cyclists which result in severe injury or death see spikes in the morning rush hours and then significant increases reported around the evening hours of 5PM – 10PM.

### Calls to Action — reduce pedestrian / cyclist fatalities by 10% in 2026 vs 2025

- As of August 2025, NOVA recorded 10 pedestrian / cyclist fatalities on its roads
- A 15% reduction in serious injuries should also be set as a 2026 goal vs. 2025 results
- 1. Increase efforts to reduce vehicle speed on high crash corridors, such as Richmond Highway
  - a) e.g., create more < 25 mph speed limits on residential roads,
  - b) implement more vigorously the practice of "complete street" designs which protect pedestrians
  - c) support safe transit and bicycling alternatives, and
  - d) install truly "quick" build projects even more quickly on high-risk roads
- 2. Increase driver, pedestrian and cyclist safety campaigns during late summer through the fall
  - a) Elevate awareness campaigns for drivers, pedestrians and cyclists regarding increased vulnerable road user crashes on roadways between 5 -10 pm
- 3. Improve traffic enforcement via technology to supplement the police
  - Support legislation to broaden the use of speed safety cameras, stop sign cameras, etc. installed in residential communities based upon KSI crash data from VDOT.

## City of ALEXANDRIA

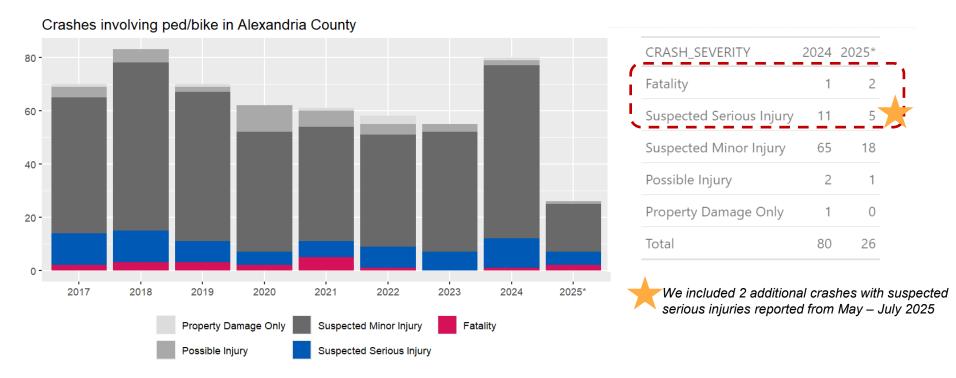
### Key Takeaways for Alexandria from Jan 2024 – Apr 2025

18% (19 out of 106) of crashes that involved pedestrians or cyclists have resulted in KSIs.

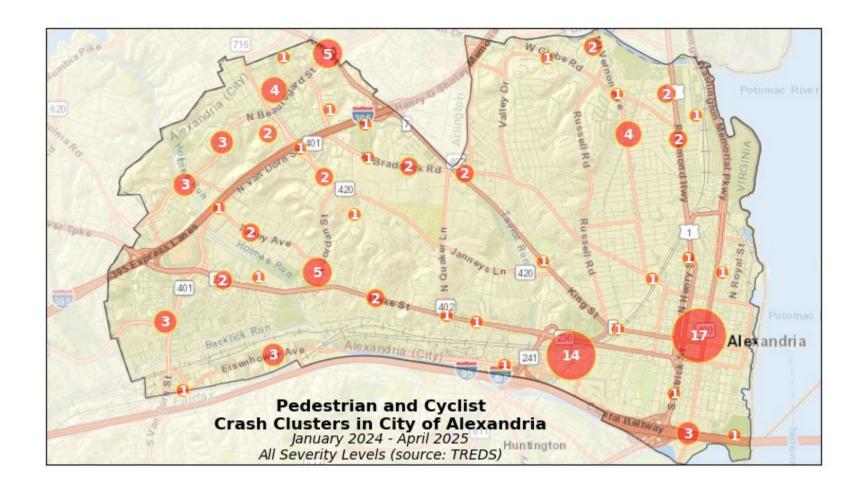
For crashes that involved pedestrians or cyclists and resulted in fatalities or serious injuries:

- 68% occurred on 8 roadways, with the western part of upper King Street being the most lethal.
- All KSI crashes were on roads with speed limits less than or equal to 35 mph.
- 73% were within or near intersections, typically around pedestrian crosswalks or traffic signals.
- Peak crash period between 5PM 7PM
- Clusters of crashes occurred in the Old Town and Eisenhower East areas because of high pedestrian activity but in other sections of the City, relatively inferior road design in underserved communities probably weighs in as a significant factor.

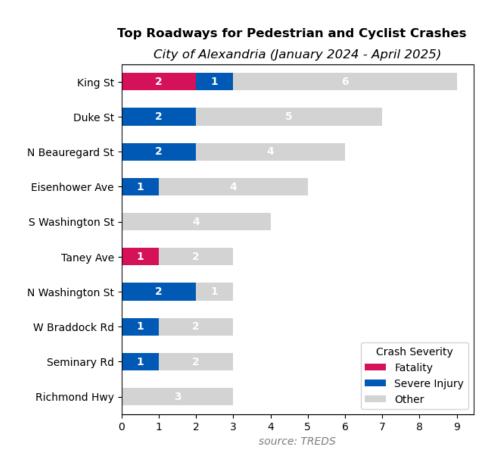
## 18% of crashes in Alexandria City from Jan 2024 – Apr 2025 that involved pedestrians or cyclists have resulted in fatalities or serious injuries.



<sup>\* 2025</sup> includes data until 30 April, 2025

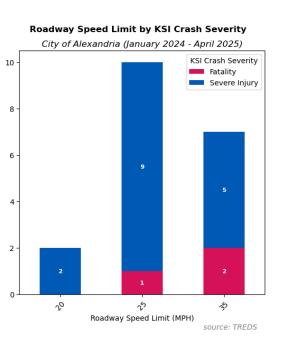


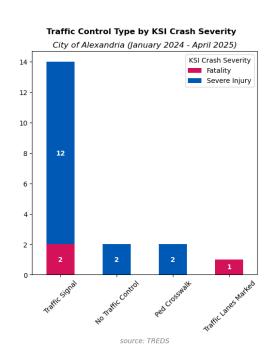
68% of crashes in the City of Alexandria from Jan 2024 – Apr 2025 that involved pedestrians or cyclists and resulted in fatalities or serious injuries occurred on 8 roadways.

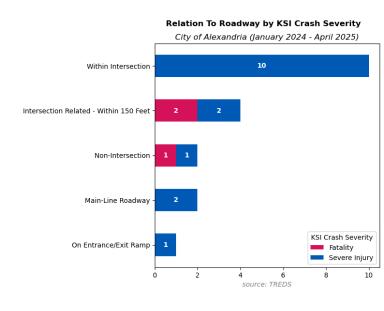


Of the crashes in the City of Alexandria from Jan 2024 – Apr 2025 that involved pedestrians or cyclists and resulted in fatalities or serious injuries:

- All were on roads with speed limits less than or equal 35 mph.
- 73% were within or near intersections, typically around pedestrian crosswalks or traffic signals.

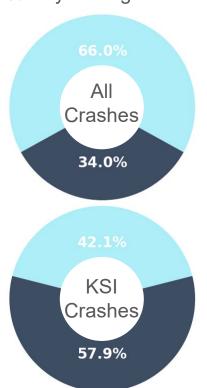




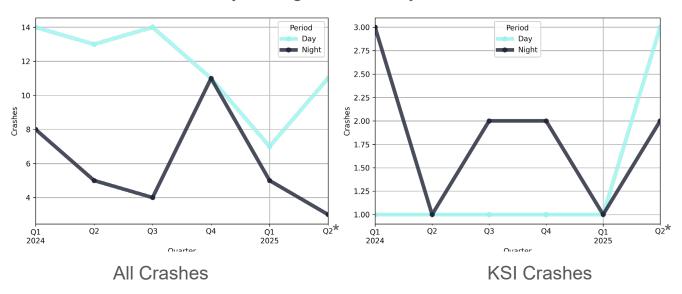


## Severe or fatal crashes involving pedestrians or cyclists in Alexandria from Jan 2024 – Apr 2025 were more likely at night than in NOVA as a whole.

% Day vs. Night Crashes



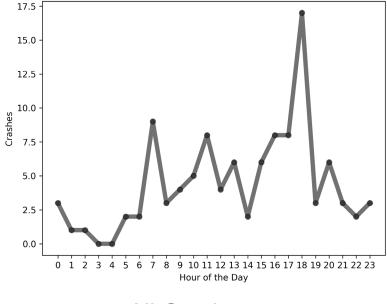
Day vs. Night Crashes by Quarter



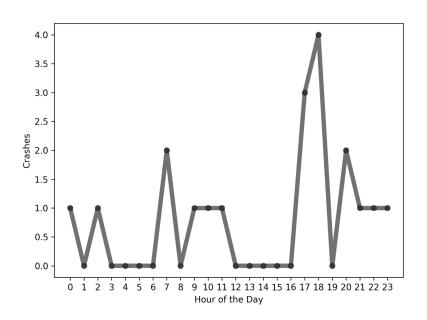
"Night" defined as light levels reported other than "daylight," and the hours of 6PM – 6AM when light levels were not reported.

<sup>\*</sup> Q2 data includes only Apr 2025.

Severe or fatal crashes involving pedestrians or cyclists in Alexandria occurred in a narrower and earlier window of time compared to the wider NOVA area, overwhelmingly occurring around 5PM – 7PM from Jan 2024 – Apr 2025.



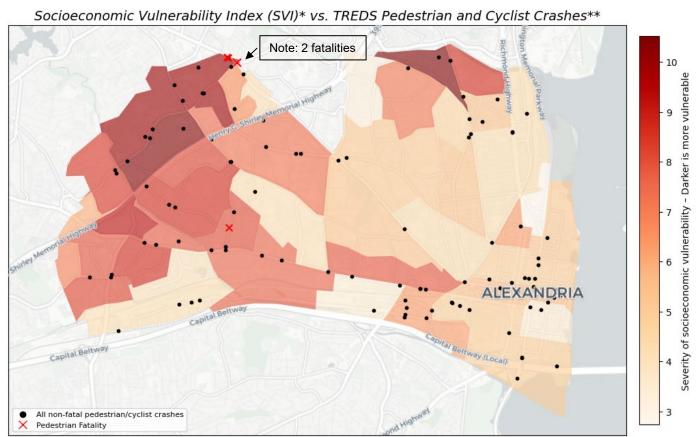
All Crashes



KSI Crashes

Clusters of crashes in the Old Town and Eisenhower East areas because of high pedestrian activity but relatively inferior road design probably weighs in as a factor for KSIs in underserved communities

#### City of Alexandria



\* as of 2022

### **ARLINGTON COUNTY**

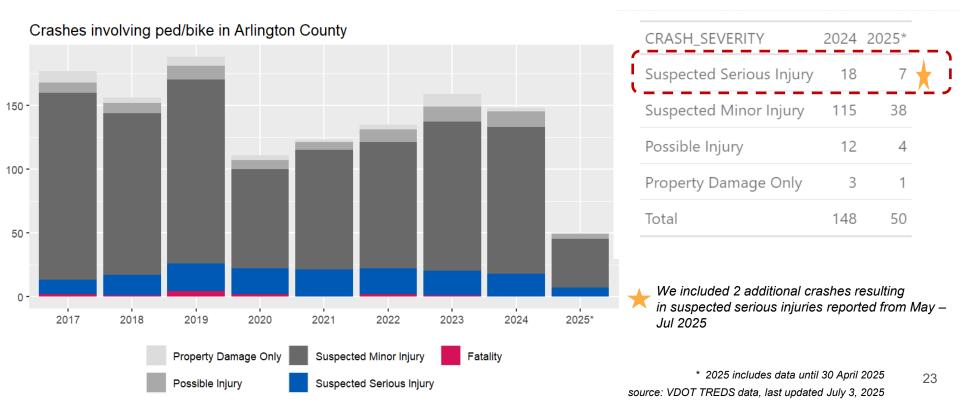
### Key Takeaways for Arlington from Jan 2024 – Apr 2025

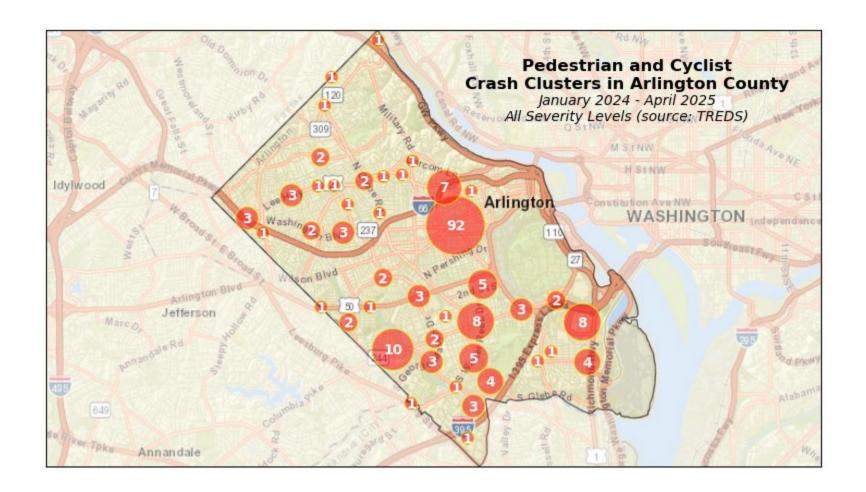
13% (25 out of 198) of crashes that involved pedestrians or cyclists have resulted in serious injuries: the lowest percentage of the three NoVA FSS jurisdictions. There have been no fatalities in Arlington during this time period.

For crashes that involved pedestrians or cyclists and resulted in serious injuries:

- 48% occurred on 6 roadways.
- 92% were on roads with speed limits less than or equal 30 mph.
- 76% were within or near intersections, typically around pedestrian crosswalks or traffic signals.
- Peak crashes occurred between 4PM 8PM
- Crashes were more prevalent in the Courthouse Ballston region because of high volumes of foot traffic and then pockets of socioeconomically vulnerable communities in South Arlington, which typically have inferior road designs.

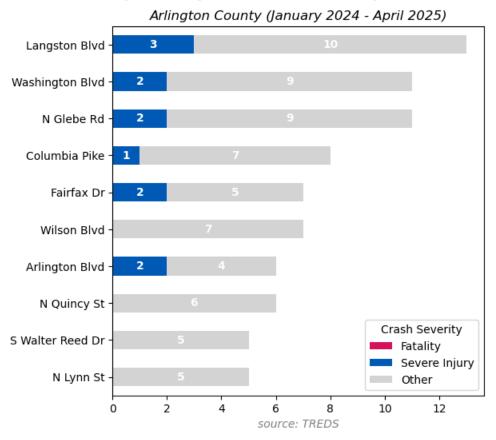
13% of ped / bike crashes in Arlington County from Jan 2024 – Apr 2025 resulted in Serious Injuries and no Fatalities: the lowest percentage of KSIs in the three NoVA FSS jurisdictions. Serious injuries for YTD 2025 could be on a pace equivalent to 2024 counts b/c of the historical trend of recording more crashes in the fall.





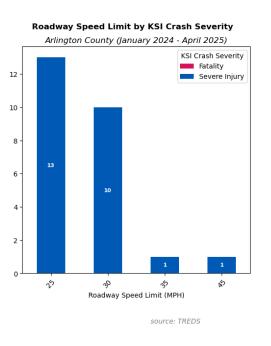
48% of crashes in Arlington County from Jan 2024 – Apr 2025 that involved pedestrians or cyclists and resulted in serious injuries occurred on 6 roadways.

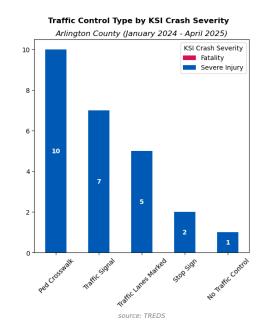
#### Top Roadways for Pedestrian and Cyclist Crashes

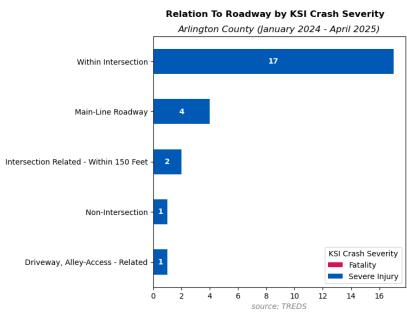


Of the crashes in Arlington County from Jan 2024 – Apr 2025 that involved pedestrians or cyclists and resulted in fatalities or serious injuries:

- 92% were on roads with speed limits less than or equal 30 mph.
- 76% were within or near intersections, typically around pedestrian crosswalks or traffic signals.

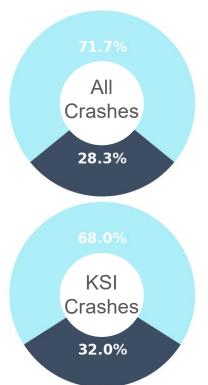




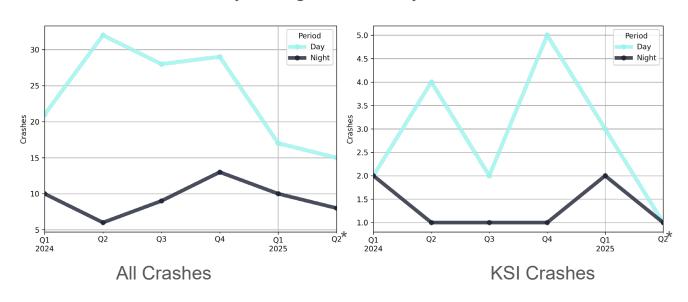


## Severe or fatal crashes involving pedestrians or cyclists in Arlington from Jan 2024 to Apr 2025 were less frequent at night than in the NOVA region as a whole.

% Day vs. Night Crashes



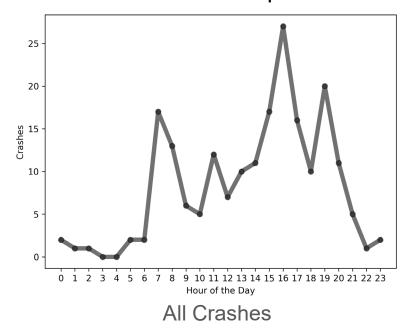
Day vs. Night Crashes by Quarter

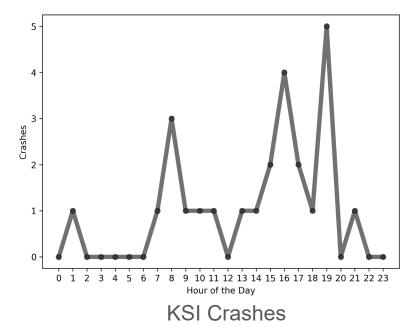


"Night" defined as light levels reported other than "daylight," and the hours of 6PM – 6AM when light levels were not reported.

<sup>\*</sup> Q2 data includes only Apr 2025.

Severe or fatal crashes involving pedestrians or cyclists in Arlington occurred overall at earlier hours, peaking at 4PM – 8PM, compared to the wider NOVA area from Jan 2024 – Apr 2025.

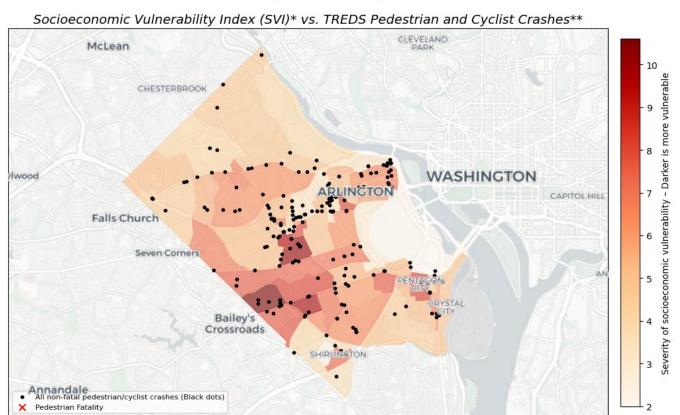




A reports of all crashes involving pedestrians/cyclists spike in the morning hours, and reach their peak at late afternoon/early evening hours of 4PM – 8PM, with a sharp drop off after 8 pm. Reports of crashes resulting in serious injury or death see a similar spike early in the day, with a more drastic spike in the evening hours.

The Courthouse Square to Ballston corridor and pockets of the underserved socioeconomically vulnerable communities in South Arlington have had more ped / bike crashes compared to North Arlington.

#### **Arlington County**



\* as of 2022

### FAIRFAX

Fairfax is defined as Fairfax County (including the incorporated towns of Clifton, Vienna and Herndon), City of Fairfax, and the City of Falls Church.



### Key Takeaways for Fairfax from Jan 2024 – Apr 2025

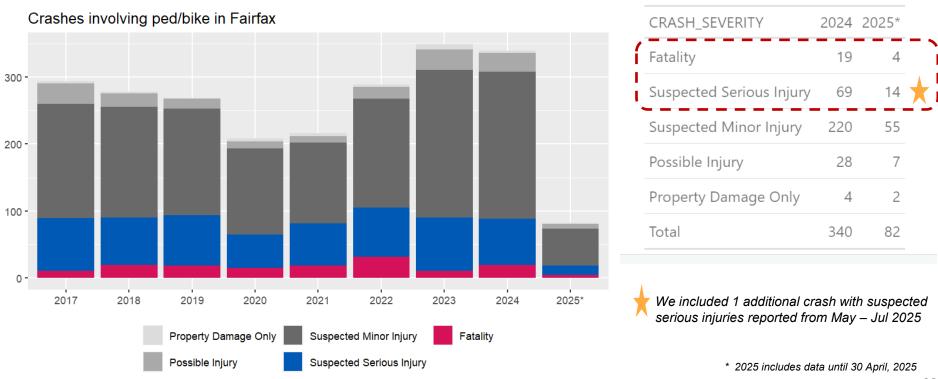
25% (106 out of 422) of crashes that involved pedestrians or cyclists resulted in fatalities or serious injuries: the highest percentage of the three NoVA FSS jurisdictions.

For crashes that involved pedestrians or cyclists and resulted in fatalities or serious injuries:

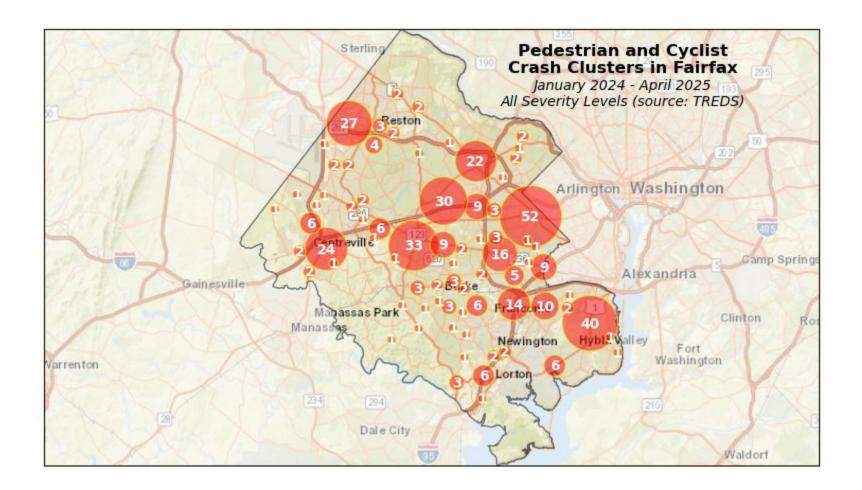
- 12% occurred on Richmond Highway alone.
- 73% were on roads with speed limits less than or equal 35mph.
- 34% were on main-line roadways (roads within an interchange area) and 45% were within or near intersections, typically around marked lanes, pedestrian crosswalks, or traffic signals.
- peak crash period was between 5PM 10PM
- socioeconomically vulnerable communities in the southeastern and central areas experienced more crashes involving pedestrians or cyclists compared to less vulnerable areas.



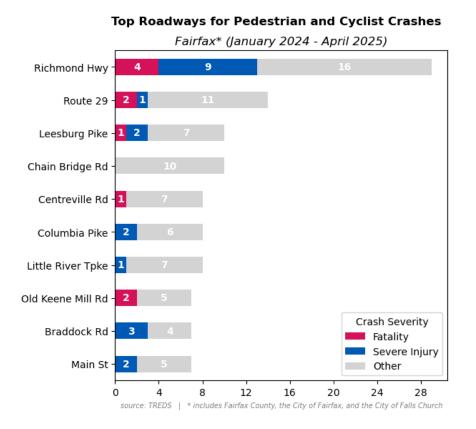
25% of crashes (106 out of 422) in Fairfax from Jan 2024 - Apr 2025 that involved pedestrians or cyclists resulted in fatalities or serious injuries; the highest % of all 3 NOVA jurisdictions



source: VDOT TREDS data, last updated July 3, 2025 32

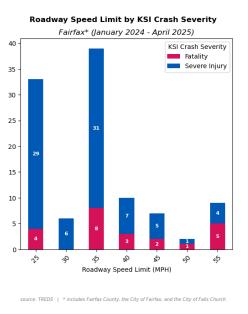


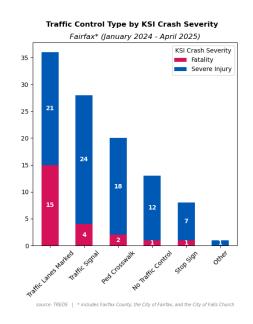
28% of crashes in Fairfax from Jan 2024 – Apr 2025 that involved pedestrians or cyclists and resulted in KSIs occurred on 9 roadways, with Richmond Hwy alone accounting for over 12% of crashes.

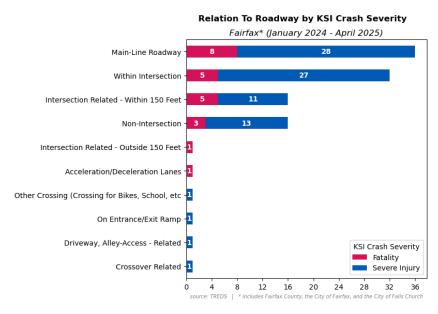


Of the KSI crashes in Fairfax from Jan 2024 – Apr 2025 involving pedestrians or cyclists:

- 73% were on roads with speed limits less than or equal 35mph.
- 34% were on main-line roadways (roads within an interchange area).
- 45% were within or near intersections, typically around marked lanes, pedestrian crosswalks, or traffic signals.

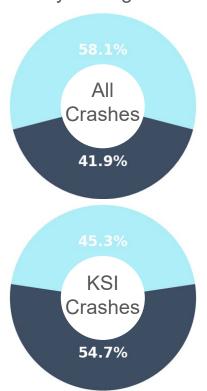




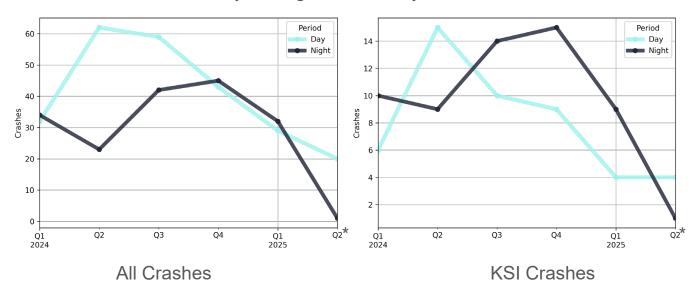


## Severe or fatal crashes involving pedestrians or cyclists in Fairfax from Jan 2024 – Apr 2025 occurred at night at a rate slightly more than with NOVA as a whole.

% Day vs. Night Crashes



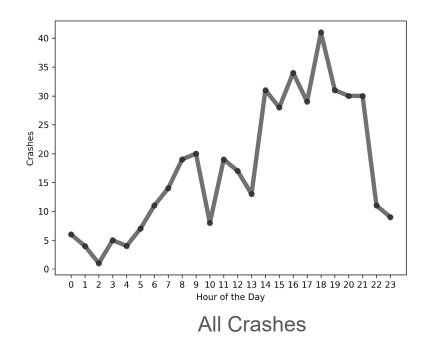
Day vs. Night Crashes by Quarter

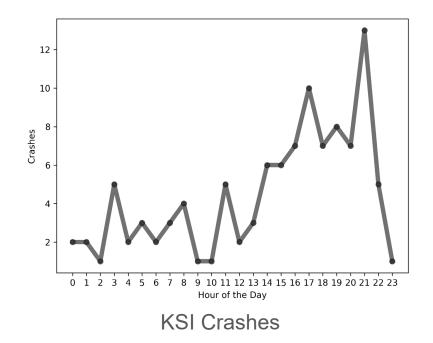


"Night" defined as light levels reported other than "daylight," and the hours of 6PM – 6AM when light levels were not reported.

<sup>\*</sup> Q2 data includes only Apr 2025.

KSI crashes involving pedestrians or cyclists in Fairfax occurred in a timeframe consistent with that of the wider NOVA area from Jan 2024 – Apr 2025, peaking between the hours of 5PM and 10PM.

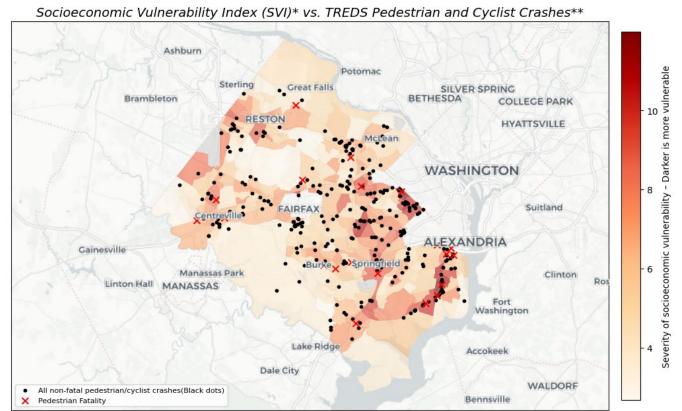




Total crash reports involving pedestrians/cyclists climb steadily throughout the day after 4AM until 7PM, at which point they steeply decline. Reports of crashes resulting in deaths or serious injuries don't see this steady climb until they spike in the late evening hours, reaching their peak around 9PM.

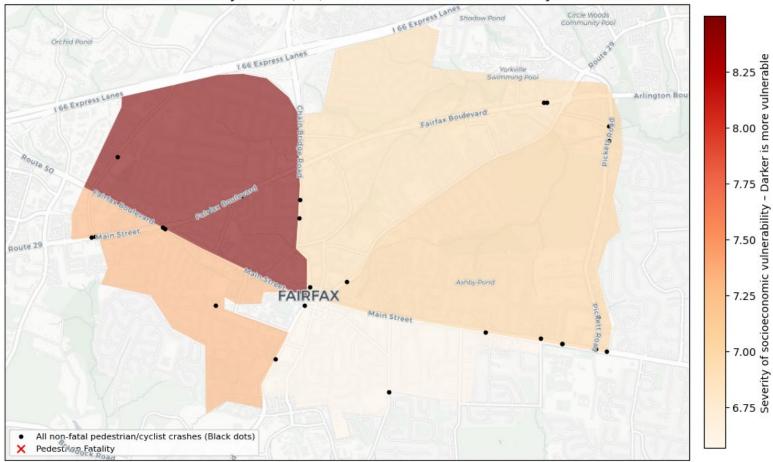
In Fairfax County, socioeconomically vulnerable communities in the southeastern and central areas have experienced more crashes involving pedestrians or cyclists compared to less vulnerable areas.

#### **Fairfax County**



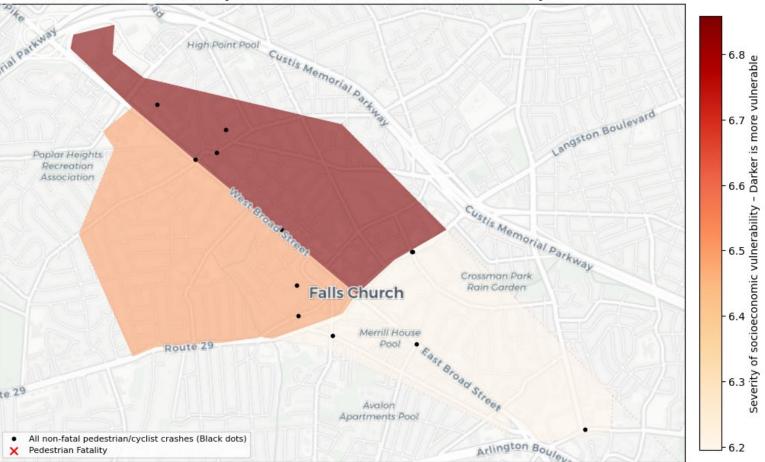
#### City of Fairfax

Socioeconomic Vulnerability Index (SVI)\* vs. TREDS Pedestrian and Cyclist Crashes\*\*



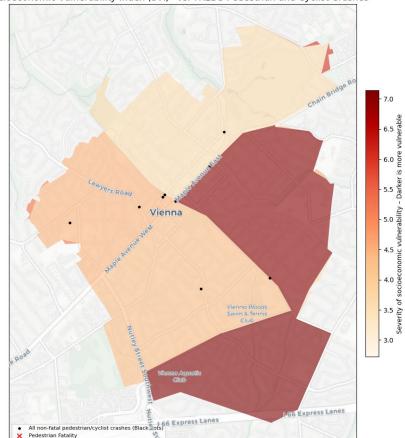
#### City of Falls Church

Socioeconomic Vulnerability Index (SVI)\* vs. TREDS Pedestrian and Cyclist Crashes\*\*



#### Town of Vienna

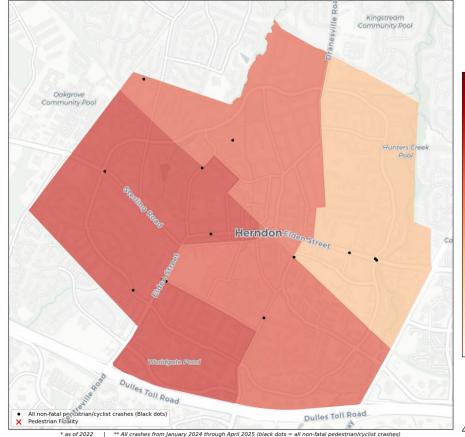
 ${\it Socio} \underline{\it economic Vulnerability Index (SVI)* vs. TREDS Pedestrian and Cyclist Crashes**}$ 



\*\* All crashes from January 2024 through April 2025 (black dots = all non-fatal pedestrian/cyclist crashes)

#### Town of Herndon

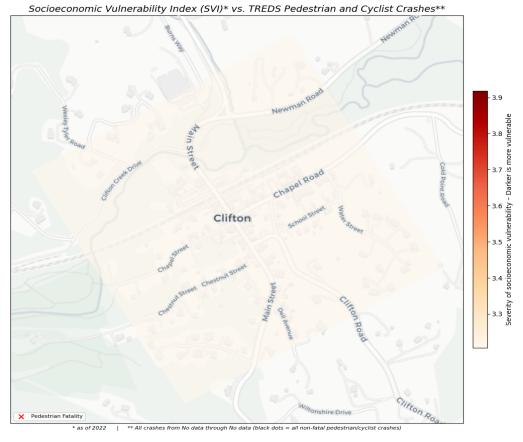
Socioeconomic Vulnerability Index (SVI)\* vs. TREDS Pedestrian and Cyclist Crashes\*\*



2 - Darker is more vulnerable

Severity of socioeconomic vulnerability

#### Town of Clifton



<sup>\*</sup>No discernible SVI or TREDS crash records were available for the Town of Clifton during the selected date range.