Route 7, Fairfax, VA Pedestrian & Bicycle KSI Analysis

2017 – June 2026 (partial year)

Published 29 October 2026

Prepared by Nicole Brager

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NoVA Families for SAFE Streets

Understanding Safety Risk Along Route 7

Northern Virginia Families for Safe Streets works to prevent traffic deaths and serious injuries by elevating the experiences of people walking, biking, wheelchair, various e-Devices, driving, and using transit across the region. This Route 7 (aka Leesburg Pike) study focuses on the corridor between Seven Corners and Beauregard, which is the planned route of a new BRT as well as an area where community-reported near misses, roadway design conditions, transit access, and documented crash history all point to recurring vulnerable road user safety concerns.

What KSI Crash Data Means:

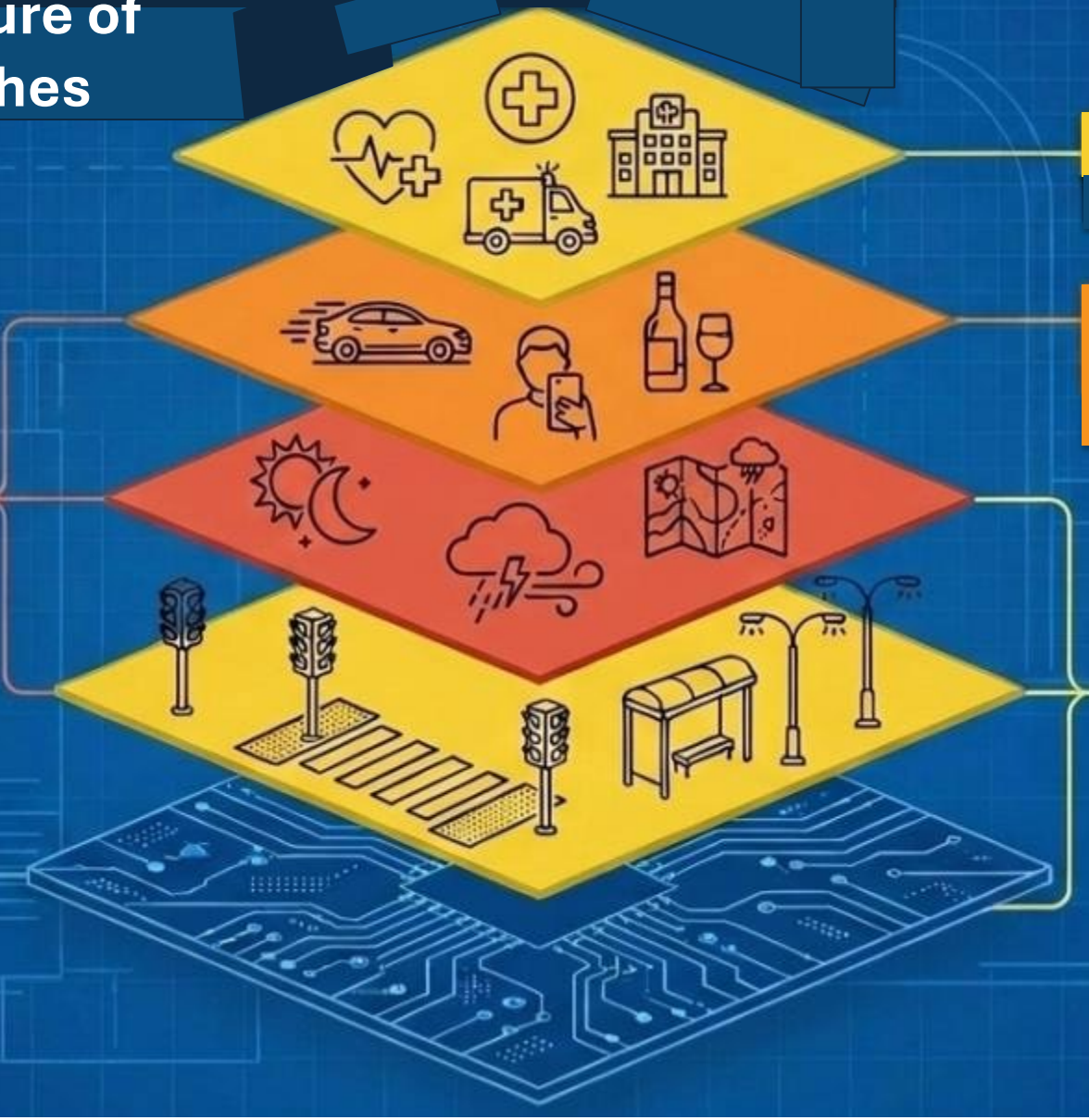
KSI stands for “Killed or Seriously Injured.” In this analysis, KSI crashes refer to crashes where a pedestrian or bicyclist was either fatally injured or suffered a serious injury. This is a narrower and more severe subset of crash data than total ped / bike crashes, which may also include minor injuries, possible injuries, or property-damage-only crashes.

The KSI data is sourced from TREDS, Virginia’s Traffic Records Electronic Data System, which compiles official police-reported crash records. For this Route 7 study, the KSI layer helps identify where the most severe pedestrian and bicycle crashes have already occurred along or near the corridor.

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- NoVA FSS is an all-volunteer nonprofit. We do not claim to be social scientist, street engineers, transportation planners or any other transportation related “experts”. Rather, we are a group of concerned citizens and data analytical undergraduate and graduate students who developed the information in this study based on VDOT and other referenced data sources.
- All inquiries should be directed to the individual at NoVA FSS listed below:
    - Mike Doyle, Executive Director, NoVA FSS; email – mike@novafss.org

Our approach in constructing a layered high-definition picture of pedestrian KSI crashes



Layer 5: Integrate Siloed Data

Aspirational — EMT, ER

Layer 4: Behavioral

Near Miss, speeding, distracted driving, impairment

Layer 3: Environment

Day/Night, weather, SVI

Layer 2: Road Design

Sidewalks, Distance between traffic signals, crosswalks, bus stop, overhead street-lighting

Layer 1: TREDS Backbone

What, Where, When

Takeaway:

Raw crash totals are insufficient. Only by stacking these layers can we reveal the hidden patterns of danger.

Executive Summary and Findings
Route 7 (aka Leesburg Pike)

KSI pedestrian / bike crashes from 2017 to June 2026

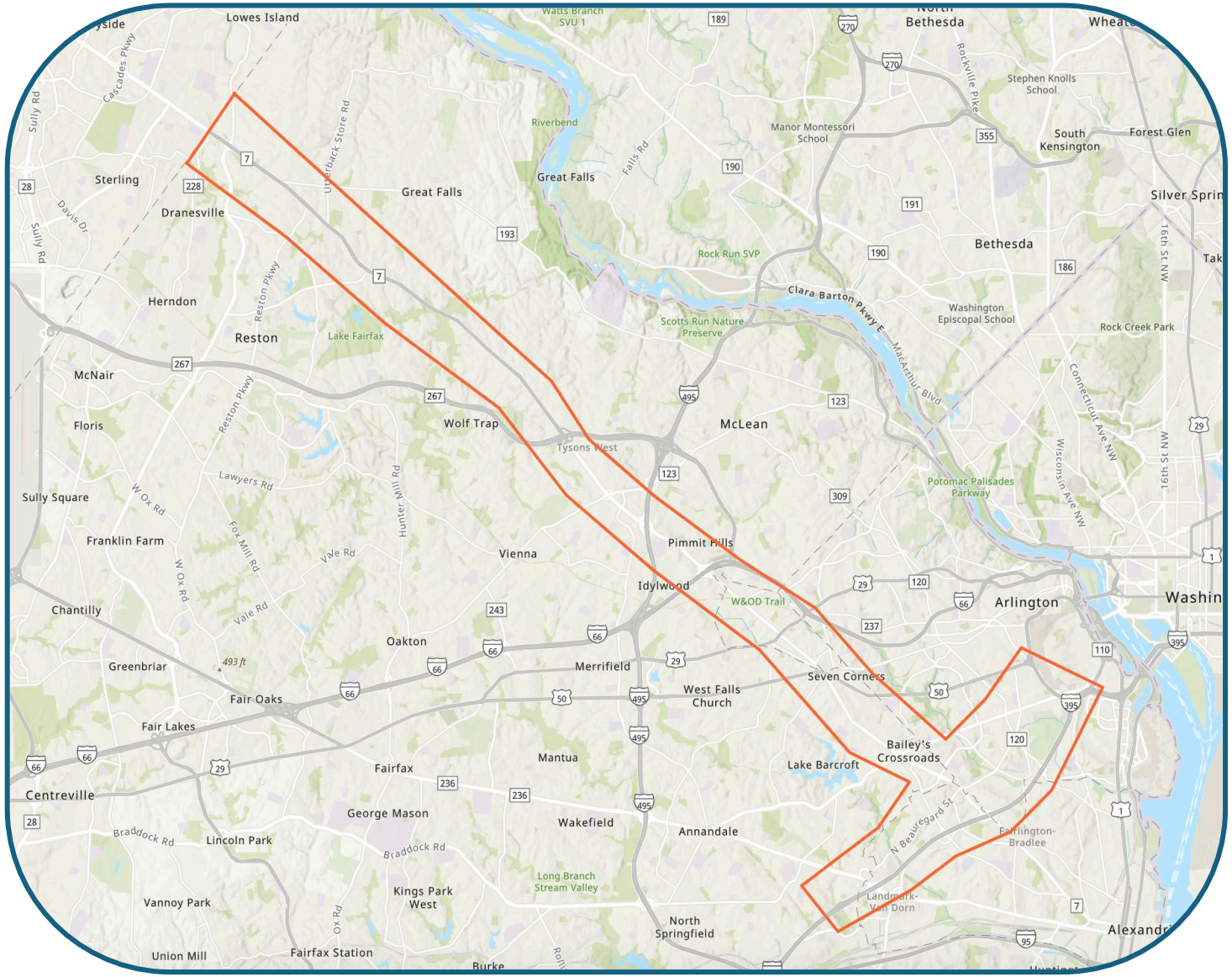
Executive Summary

The crash dataset covers Route 7 across multiple Northern Virginia jurisdictions and includes additional records on Beauregard Street and Walter Reed Drive.

We compared mapped crash locations with available inventories of bus stops, sidewalks, crossings, traffic signals, streetlights and nearby destinations.

The community-report analysis focuses on the smaller Seven Corners-to-Beauregard area. Infrastructure comparisons use different assessed subsets because inventory coverage varies.

Crash data period: 2017–2026, with as of June 2026 treated as partial-year data.



Key Statistics at a Glance

Counts describe the 59-record study extract, including the Beauregard Street and Walter Reed Drive extensions. The 2026 records are incomplete. Infrastructure comparisons use available inventories; proximity does not establish safe access, adequate lighting or conditions on the crash date. Percentages are rounded. One of the 11 fatal crashes involved a scooter rider and was pedestrian-coded in TREDS. No bicycle-coded fatal crashes were recorded.

Metric	Count	Interpretation
Metric	Count	Interpretation
Total KSI crashes	59	Fatal and serious-injury crashes included in the study extract
Fatal crashes	11	19% of study crashes
Serious-injury crashes	48	81% of study crashes
Pedestrian-coded crashes	51	86% of study crashes; includes one identified scooter crash
Bicycle-coded crashes	8	14% of study crashes; all resulted in serious injury
Fatal crashes occurring in darkness	10 of 11	91% of fatal crashes
Within 500 ft of a mapped bus stop	37 of 59	63% of study crash locations
Within 1,000 ft of a mapped retail destination	37 of 59	63% of study crash locations
Within 500 ft of a mapped signalized intersection	37 of 42 assessed	88% of locations assessed using the signal inventory

Findings Summary

Route 7 study-area KSI dataset, 2017– YTD June 2026.

91%
of fatalities occurred at night

86%
pedestrian KSI crashes

63%
within 500 ft of a bus stop

63%
within 1,000 ft of retail

Ten of the 11 recorded fatal crashes occurred in darkness. Pedestrian-coded crashes account for 51 of the 59 records. The remaining 8 are bicycle-coded.

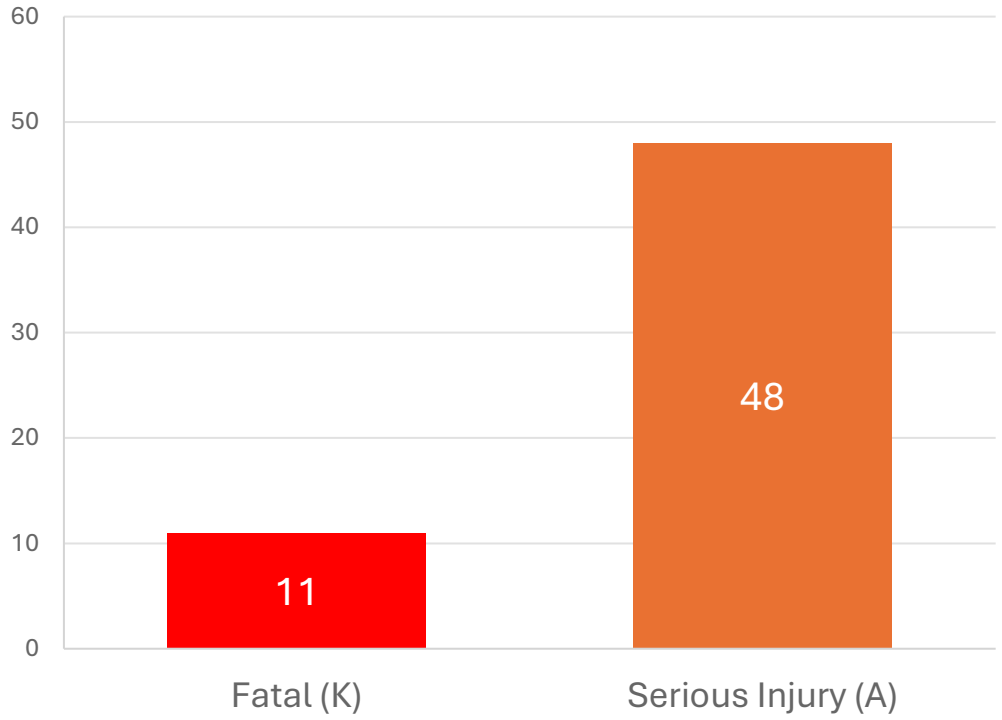
Route 7 shows an extremely high nighttime fatality pattern, even though total KSI crashes are split almost evenly between day and night.

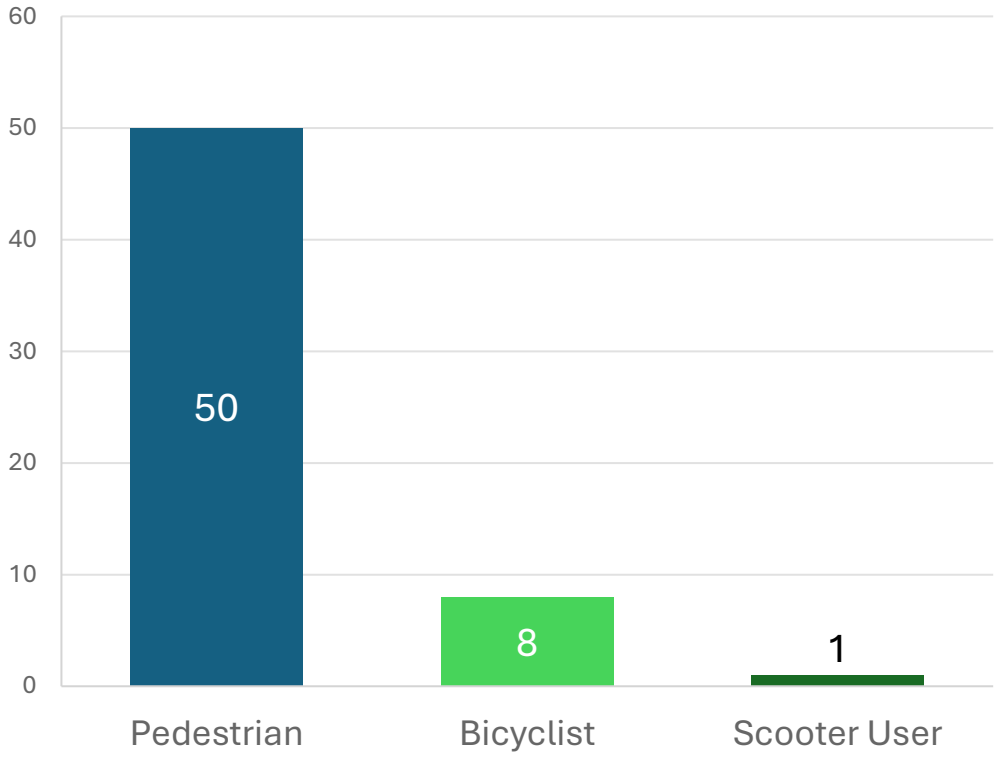
The crashes are overwhelmingly pedestrian crashes, with bicyclist KSIs forming a smaller but still important share.

Most crash points sit close to pedestrian destinations, especially bus stops and retail activity; Route 7 should be considered as a corridor with significant walking activity. These relationships support reviewing pedestrian access, crossing connections and nighttime visibility.

Majority of KSI Records Are Pedestrian-Coded

Severity is dominated by serious injuries, but the fatal share is still substantial.





86%
pedestrian

14%
bicyclist

Pedestrian-coded crashes account for 50 of 59 records, or 86%. Bicycle-coded crashes account for eight records, or 14%. The dataset includes 11 fatal and 48 serious-injury crashes.

KSI Crashes by Year(2017 – June 2026)

The Route 7 crash pattern is largely consistent across the 2017 – 2026 period, with peaks in 2019, 2021, and 2022.



9 of 11

fatal records from 2020–2026

45 of 59

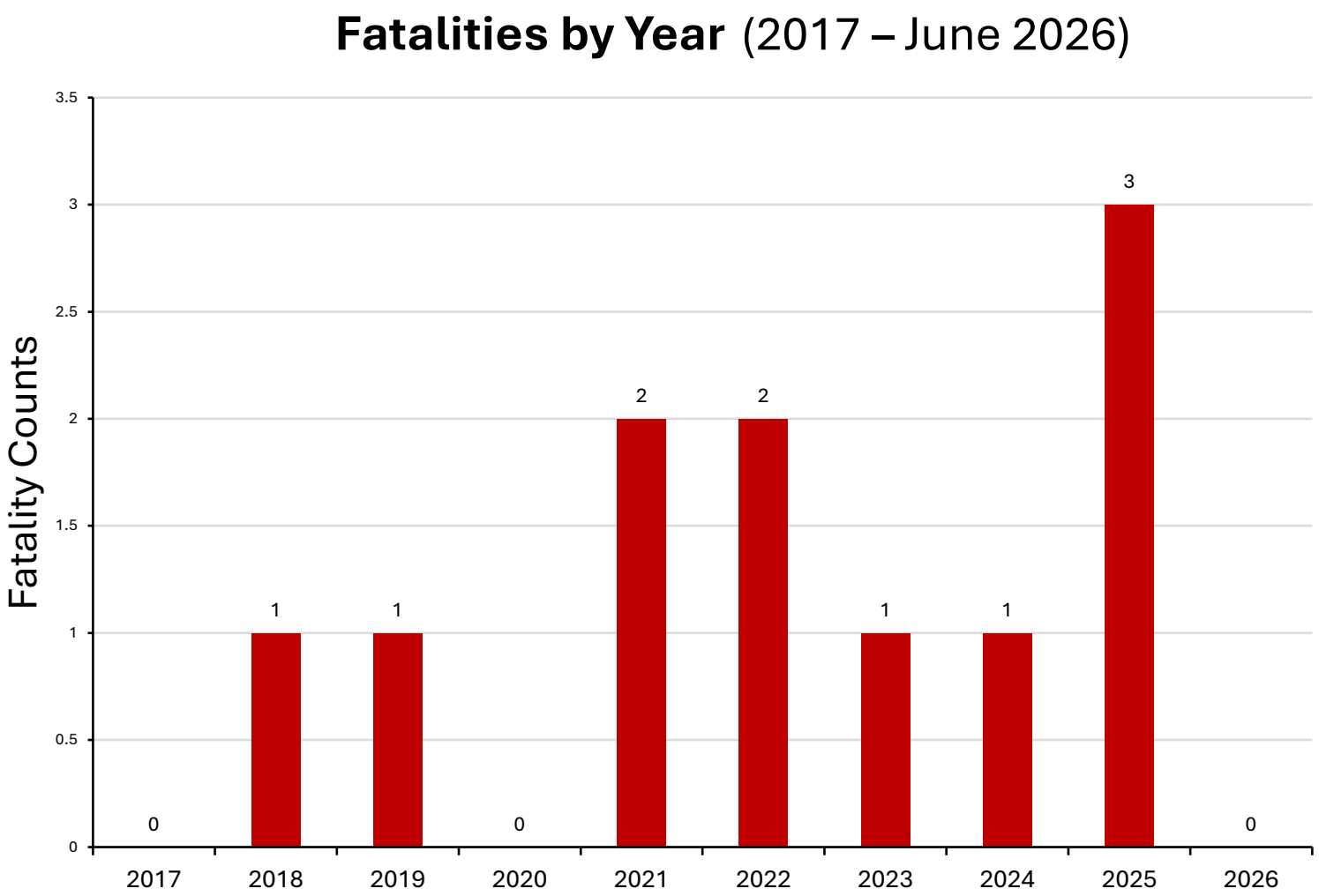
KSI records from 2020–2026

2021 and 2022 each show peak totals of 9 KSI crashes per year.

2025 includes 8 KSI crashes, including 3 fatalities.

The single 2026 record should be treated as partial-year data.

Fatal Crashes By Year



2025 Had the Highest Recorded Fatal-Crash Count.

Three fatal crashes occurred in 2025, the highest annual count in this dataset.

3

fatal crashes in 2025

7

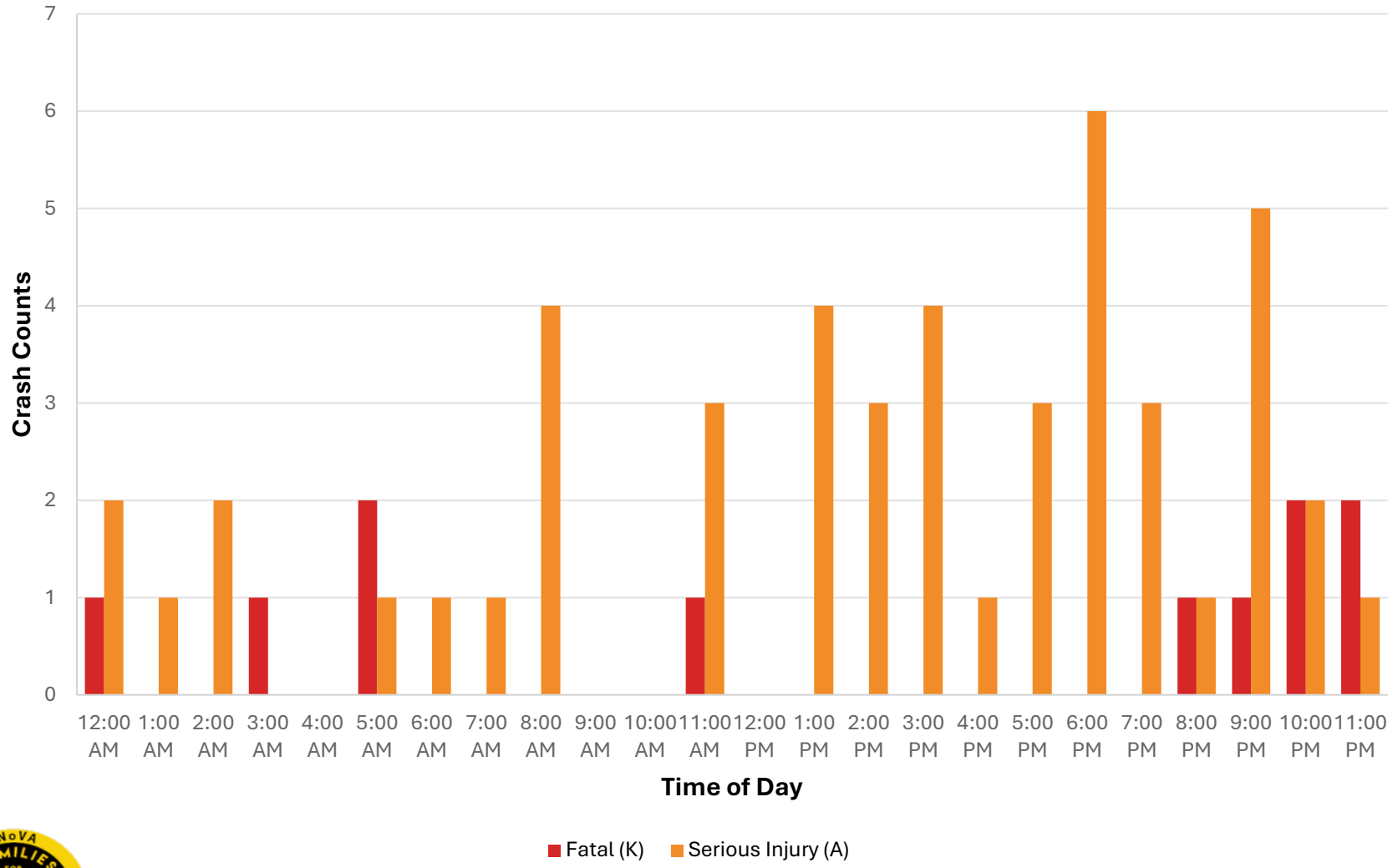
years with at least one fatality per year

Time of Day and Lighting Conditions



Crashes by Time of Day

Fatal crashes concentrate in late-night and early-morning hours.



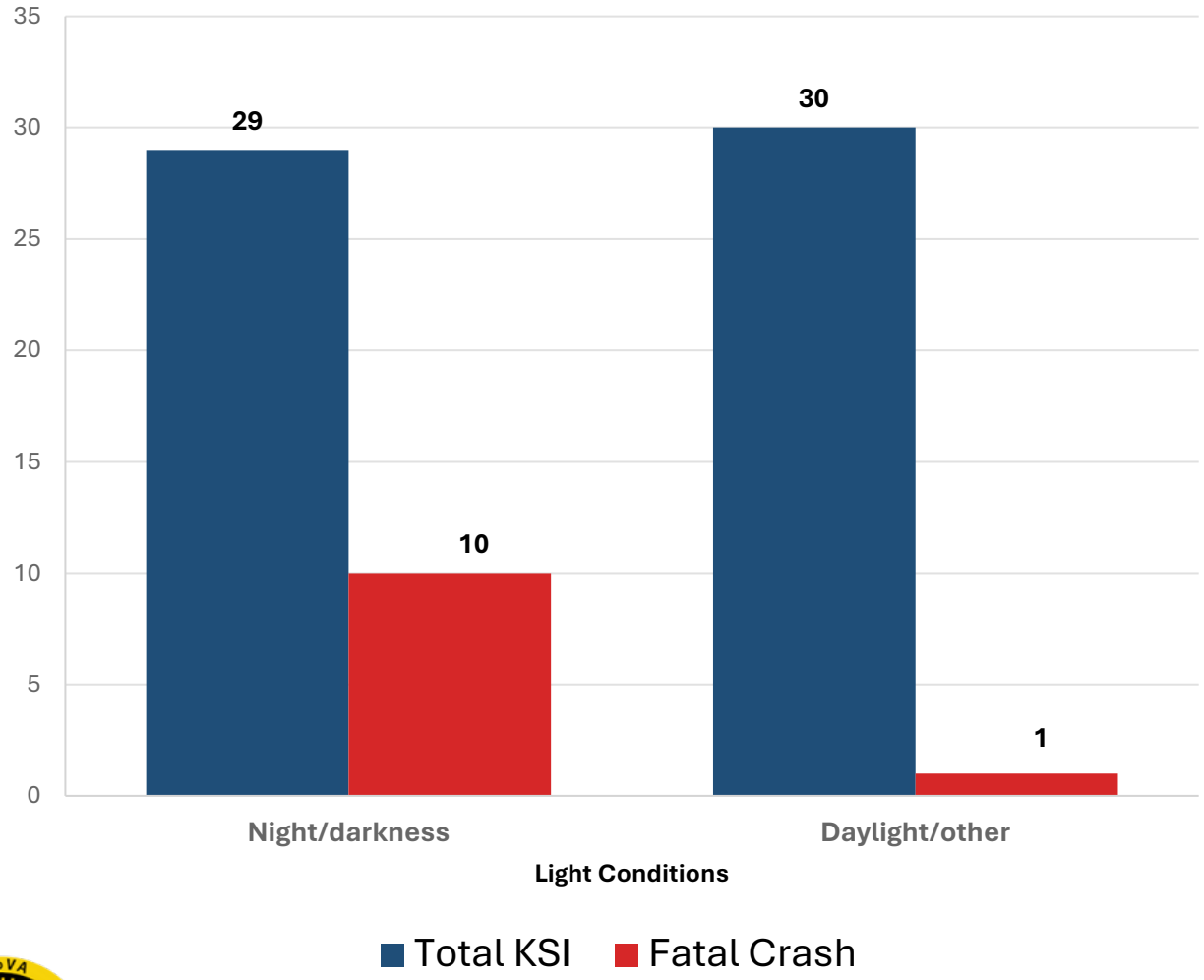
The highest total KSI hours are **6:00 PM and 9:00 PM**, each with 6 crashes.

Fatal crashes are concentrated after dark: 10 of 11 fatalities occurred in nighttime or darkness conditions.

The pattern points to visibility, speed management, and crossing behavior during evening and overnight travel periods.

Crash by Light Conditions (Darkness v Daylight)

Fatal outcomes are much more concentrated at night.



49%

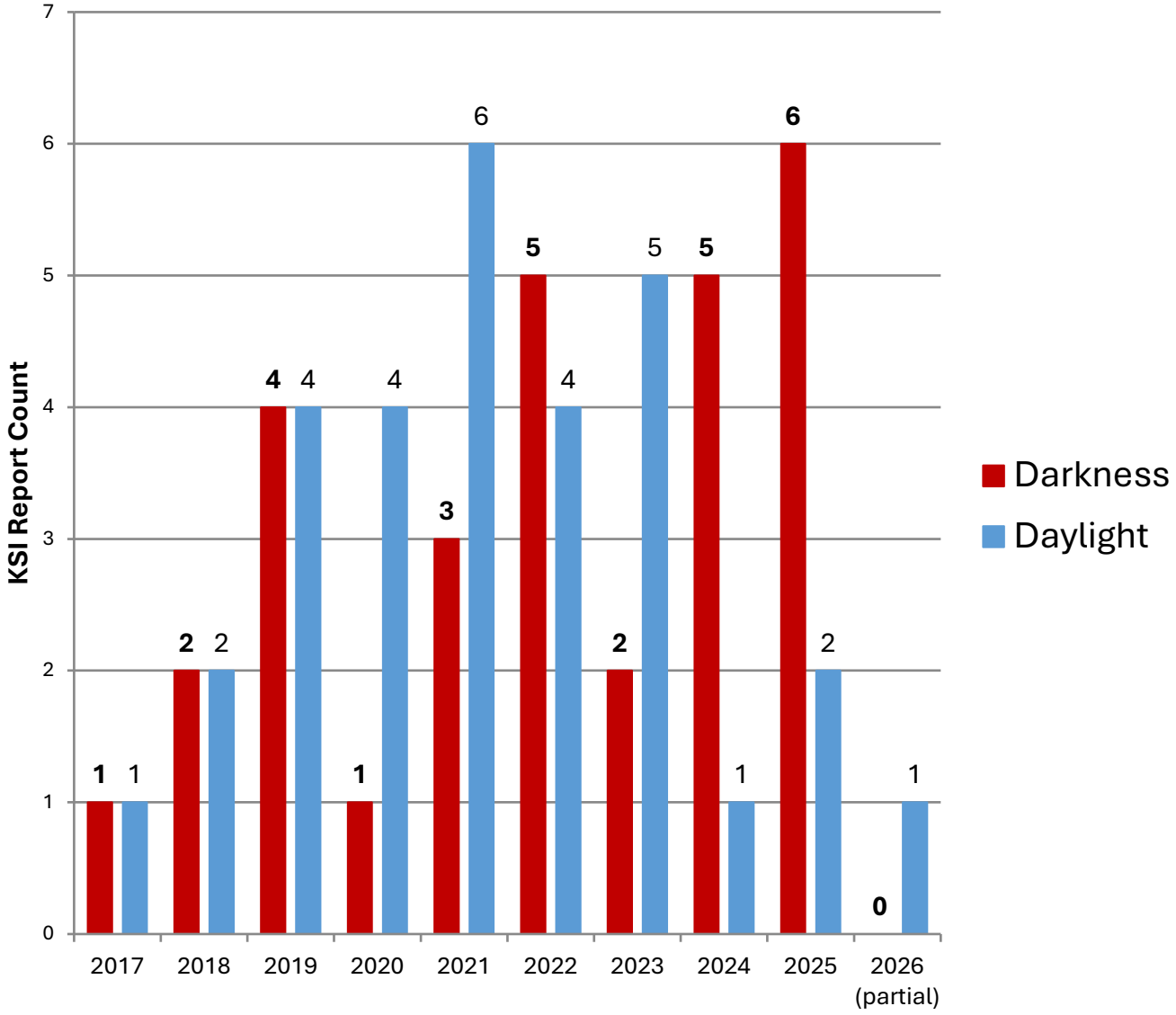
all KSI crashes at night

91%

fatal crashes at night

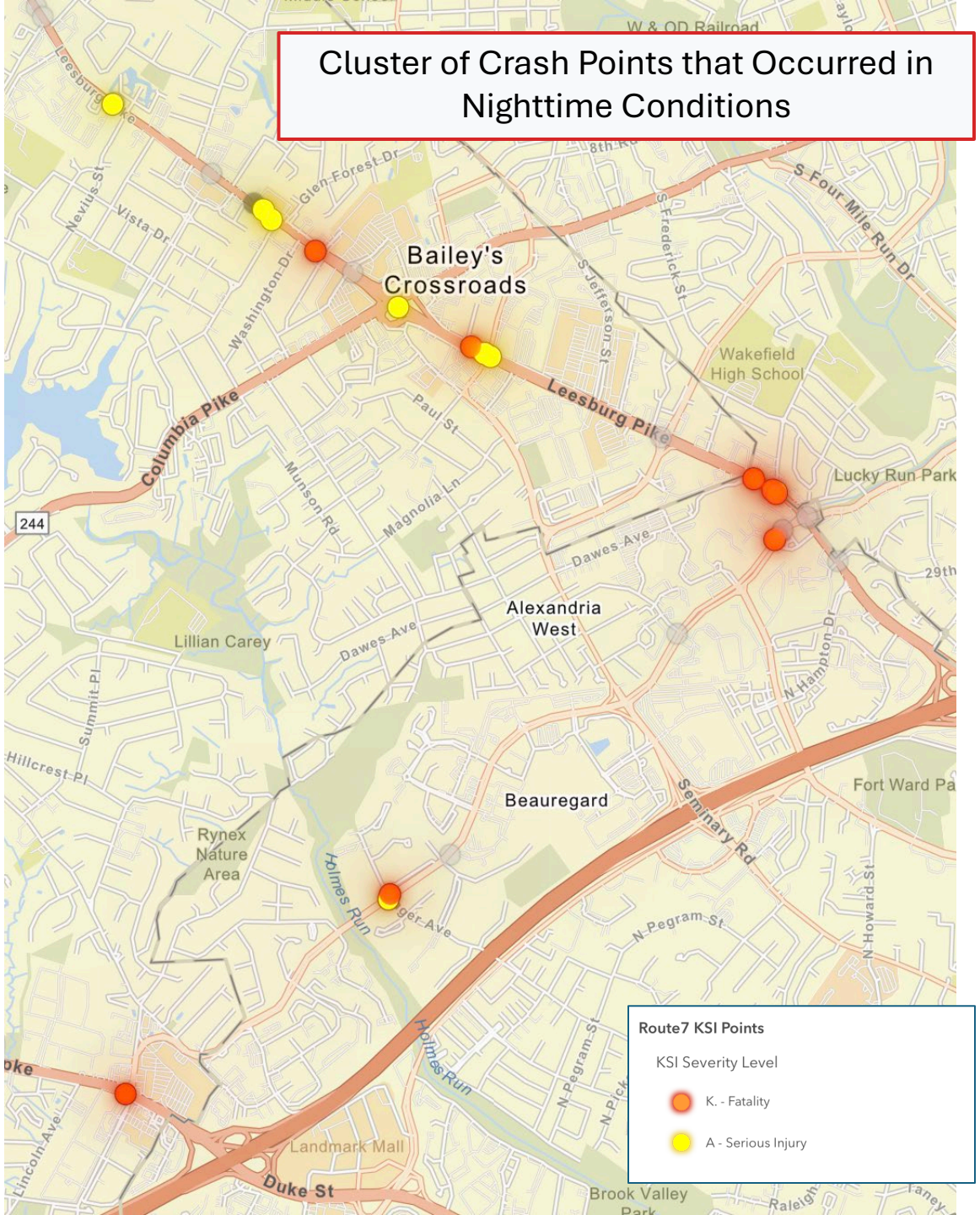
Ten of the 11 fatal crashes occurred in darkness, supporting targeted nighttime visibility reviews.

Route 7 KSI Crashes Night or Day by Year

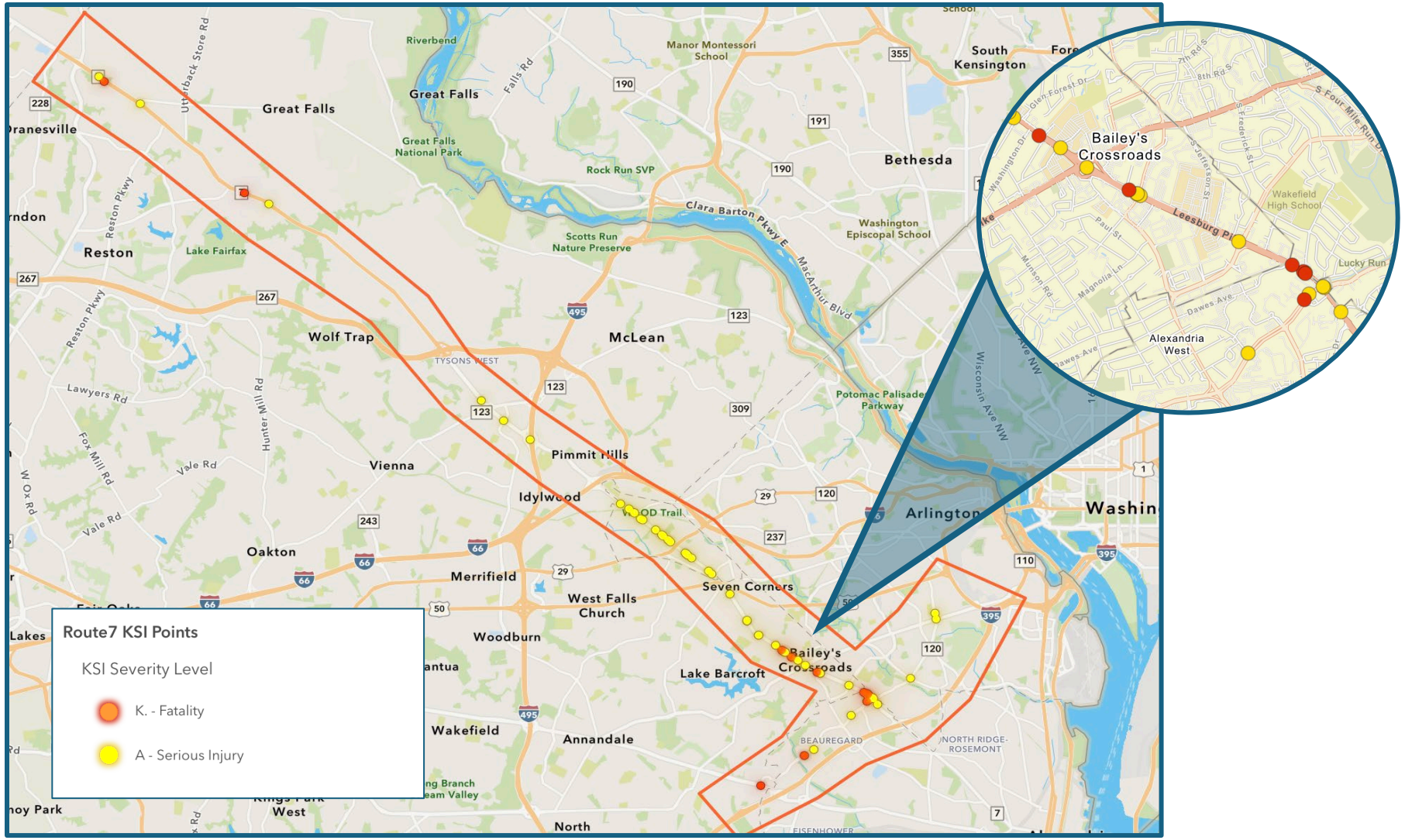


Nighttime records appear throughout the study period and account for nearly every fatal crash.

Cluster of Crash Points that Occurred in Nighttime Conditions



KSI Points Intensify Along the Urbanized Corridor



The map shows Route 7 crash points in relation to bus stops, signals, streetlamps, retail, and other points of interest.

The eastern portion carries a denser mix of crash points and pedestrian destinations.

This supports focusing discussion on corridor access, crossing demand, transit use, and nighttime visibility.

Streetlight Inventory and Nighttime Visibility



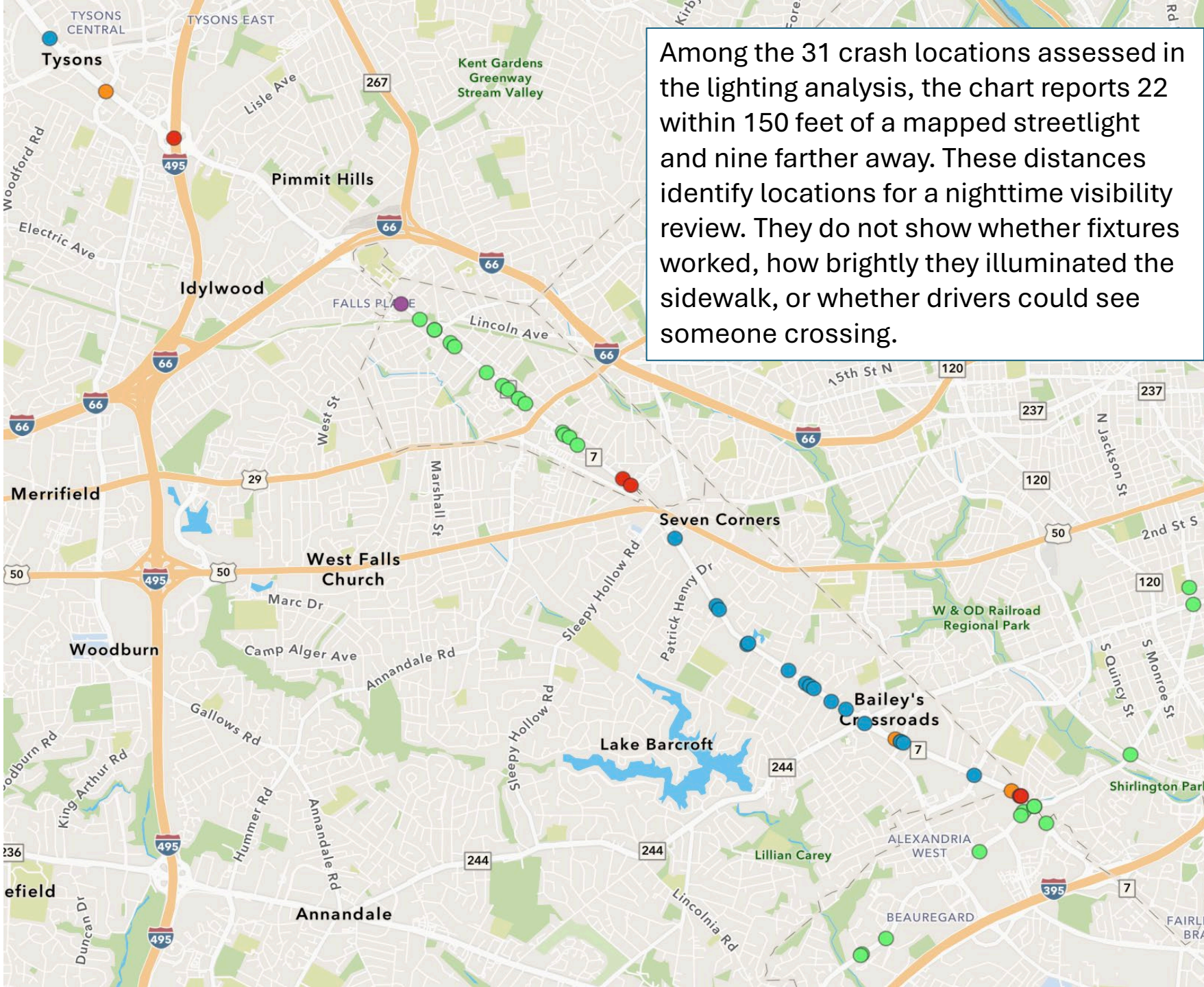
KSI Locations Colored by Distance to Mapped Street Lighting

Route 7 KSI Points - Distance to Street Lighting

KSI Crashes and Proximity to Street Lighting

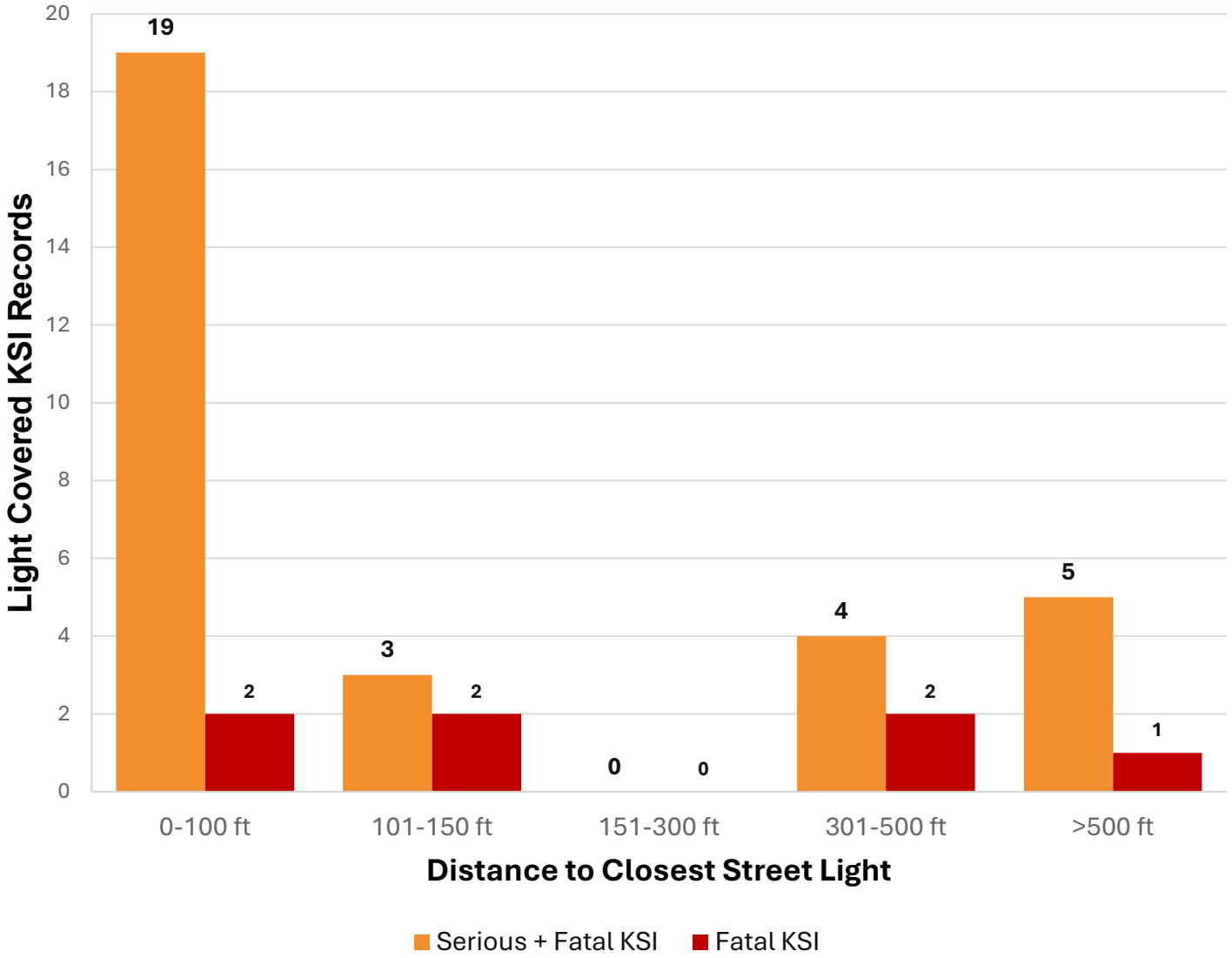
- No mapped streetlight within 500 ft
- 301-500 ft from mapped light
- 101-150 ft from mapped light
- 0-100 ft from mapped light
- Lighting inventory assessment unavailable.

Colors show distance to the nearest mapped streetlight for crash locations assessed using the lighting inventory. Green points identify locations not assessed with this inventory. Their lighting conditions remain undetermined in this analysis.



Among the 31 crash locations assessed in the lighting analysis, the chart reports 22 within 150 feet of a mapped streetlight and nine farther away. These distances identify locations for a nighttime visibility review. They do not show whether fixtures worked, how brightly they illuminated the sidewalk, or whether drivers could see someone crossing.

KSI Crashes by Distance to Nearest Mapped Streetlight



22/31

assessed KSI records are within 150 ft of a mapped light

9

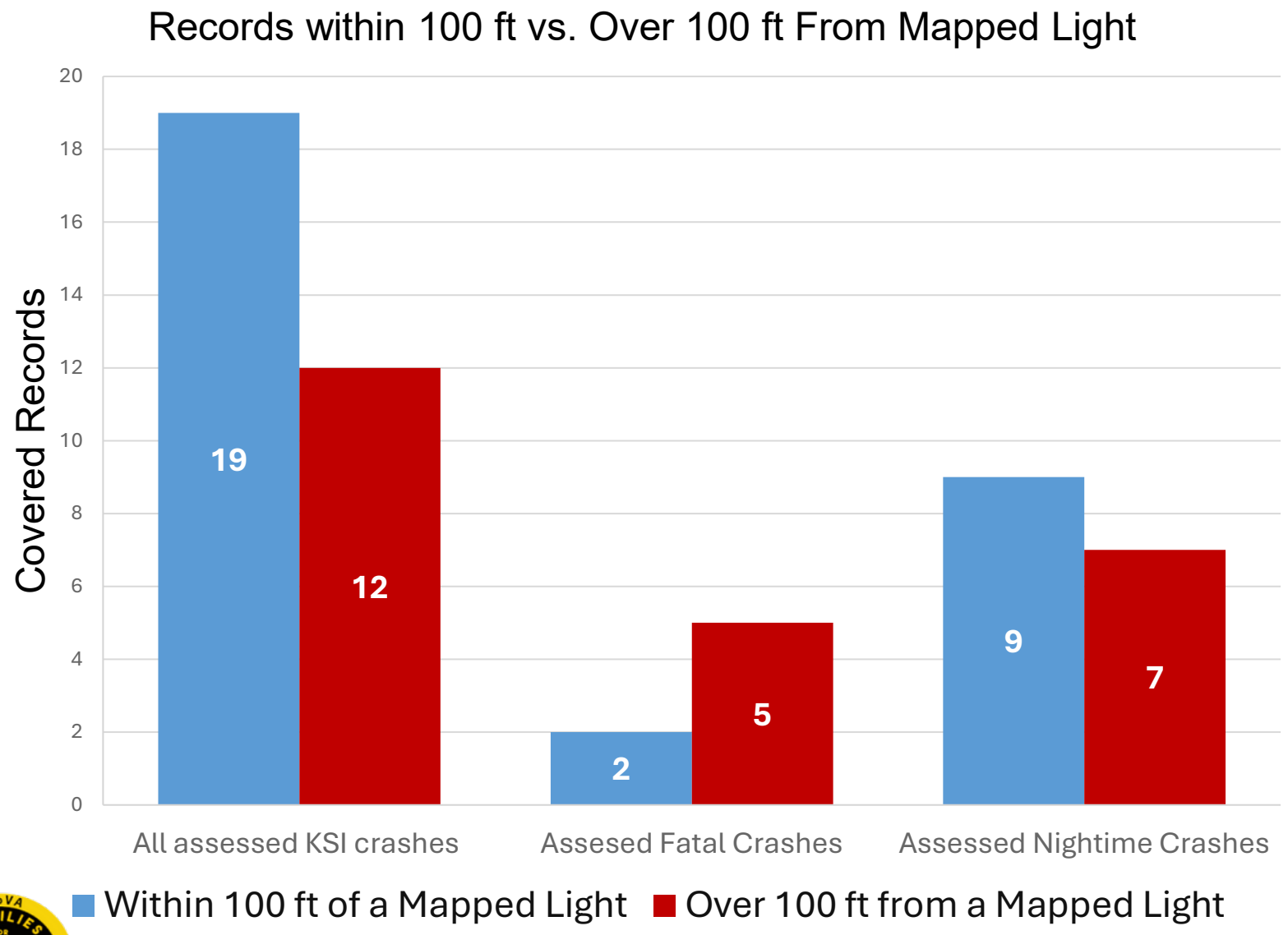
assessed records are more than 150 ft from a mapped light

The distribution is not simply a lack-of-lights. Most covered crashes are close to mapped streetlight locations; the sharper question is whether spacing, placement, brightness, or crossing location leaves pedestrians visible at the point of conflict.

KSI Locations With Limited or No Mapped Streetlight

Lighting indicator	KSI count	Fatal count	Why This Matters
Assessed using the Fairfax/Dominion inventory	31	7	These records can be directly analyzed for nearest mapped streetlight distance.
More than 100 ft from a mapped streetlight	7	4	These are likely lighting-gap locations and should be field checked first.
More than 500 ft from a mapped streetlight	5	1	These are the clearest “no nearby mapped streetlight” KSI locations in the available lighting data.

Distance to Mapped Streetlights Within the Assessed Subset



5/7 fatal records are more than 100 ft from mapped light

12/31 KSI records are more than 100 ft from mapped light

The lighting chart reports inventory comparisons for 31 of the 59 crash locations, including seven of the 11 fatal crash locations. Within this subset, five fatal crash locations and 12 total crash locations lie more than 100 feet from the nearest mapped streetlight. The 100-foot threshold serves as a screening distance for field review.

Lighting Hotspots by Route 7 Area

Area	All KSI Crashes	Assessed crashes occurring in darkness	Assessed crashes more than 150 ft from a mapped light	Assessed fatal crashes	Crashes not assessed in lighting inventory
Beauregard / King St / Glen Forest	6	4	3	3	1
Bailey's Crossroads / Skyline	13	8	0	3	0
Dranesville / Reston west end	3	2	1	1	0
Pimmit Hills / Seven Corners	3	2	1	0	0
Tysons / Idylwood	2	0	1	0	1

"Assessed" means a crash location was included in the streetlight-inventory comparison. It does not mean the location was adequately illuminated. Darkness and fatal-crash counts are subsets of the assessed total and should not be added together.

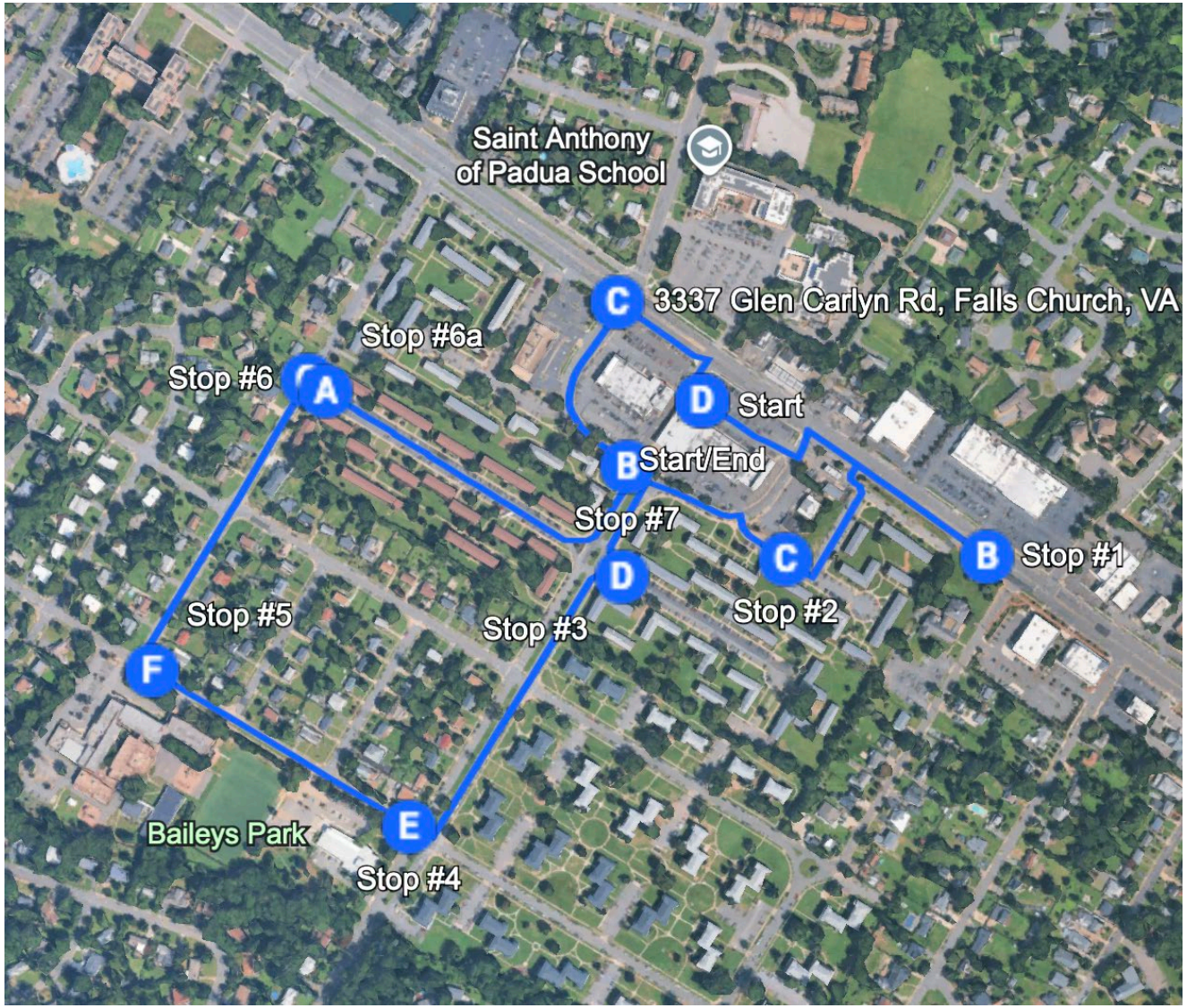
Culmore Community Lighting Audit

The Culmore Community Lighting Audit documented resident concerns about inadequate nighttime lighting and barriers to safe walking along Route 7, Leesburg Pike, and nearby neighborhood streets.

The Bailey's Crossroads & Culmore Place-Based Initiative Neighborhood Livability Committee conducted the walk on October 19, 2023, at 7 p.m.

The walk focused on four resident-identified areas:

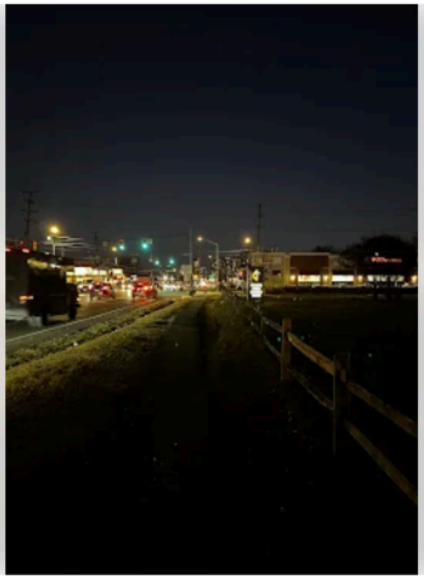
- Leesburg Pike between Glen Carlyn Drive and Charles Street.
- The area surrounding 7-Eleven, including Carlyn Court and Argyle Drive.
- Glen Carlyn Drive between Culmore Plaza and Knollwood Drive.
- Knollwood Drive between Woodrow Wilson Library and Bailey's Elementary School.



Map of the Culmore Community Lighting Walk route

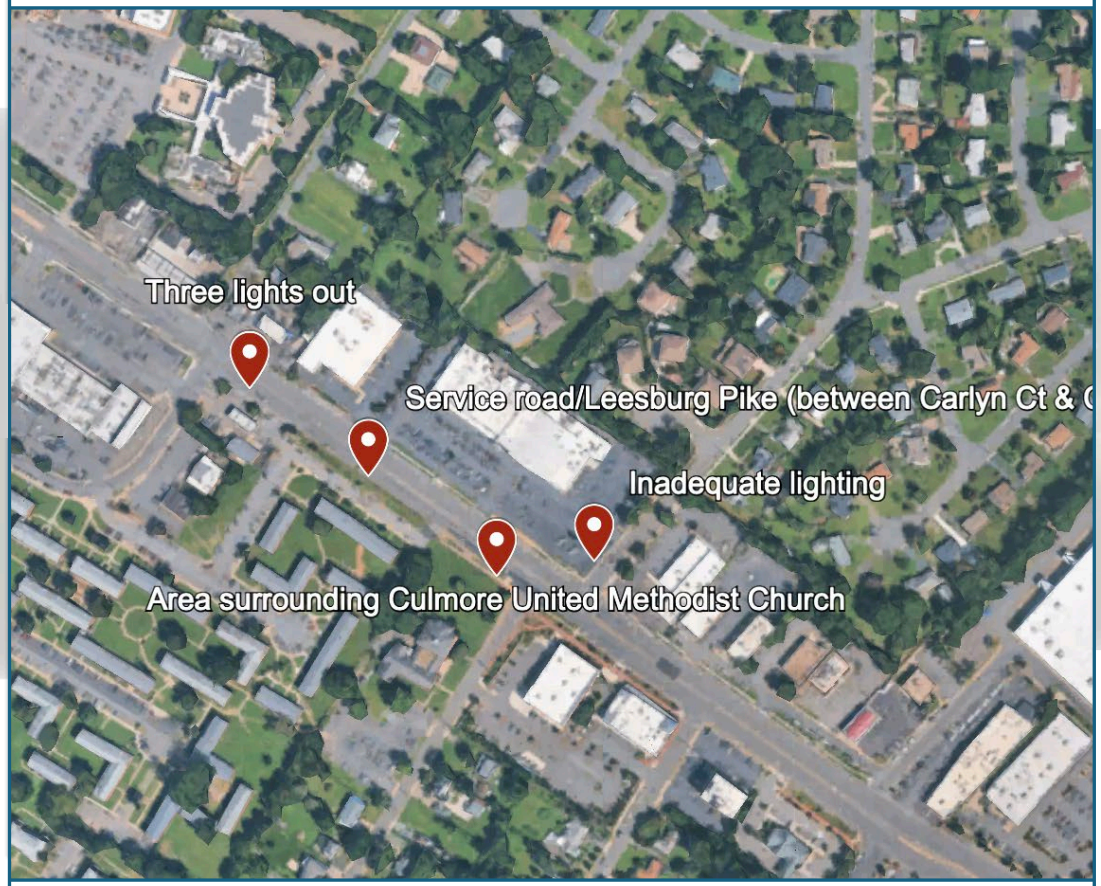
Culmore Lighting Audit: Route 7 Findings: Gaps on the South Side of Leesburg Pike

Area surrounding Culmore United Methodist Church



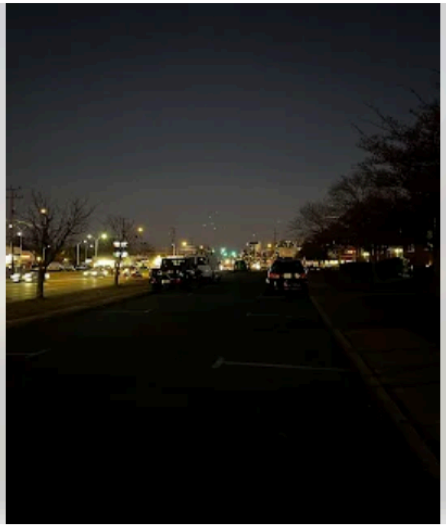
name: Area surrounding Culmore United Methodist Church
description: No lighting along path on south side of Leesburg PIke. Missing sidewalk and no lighting on east side of Charles St.

Location
38°51'13.46"N 77°08'08.76"W



Identified lighting gaps along Route 7

Service road/Leesburg Pike (between Carlyn Ct & Charles St)



name: Service road/Leesburg Pike (between Carlyn Ct & Charles St)
description: Lighting is only on north side of Leesburg Pike so no street lights on south side. On service road, lighting is on buildings so does not illuminate the sidewalk well.

Location
38°51'15.46"N 77°08'12.06"W

Culmore Lighting Audit

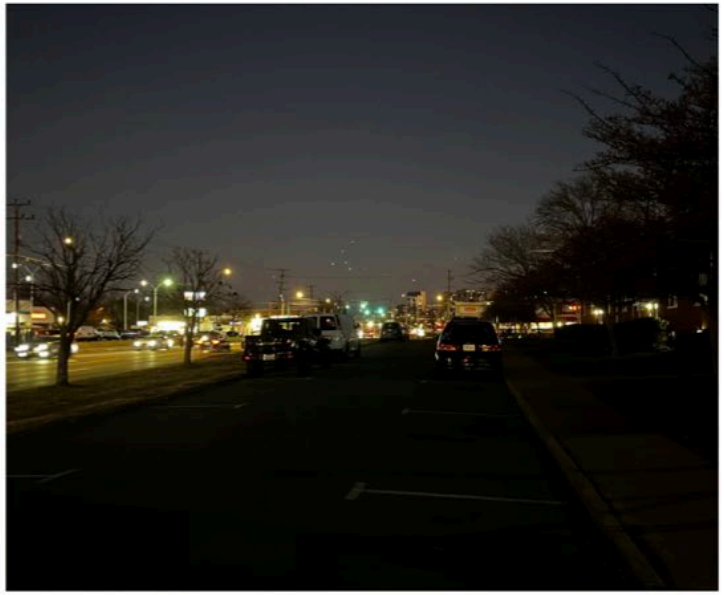
The report describes walking as essential for many Culmore residents. Lighting gaps affect access to homes, shopping, transit, education, healthcare, food distribution, and community activities.

The audit provides context for the mapped-streetlight /crash analysis: proximity to a mapped fixture does not establish that the light works or adequately illuminates pedestrians. The audit did not measure illumination levels or establish a causal relationship between lighting and crashes.

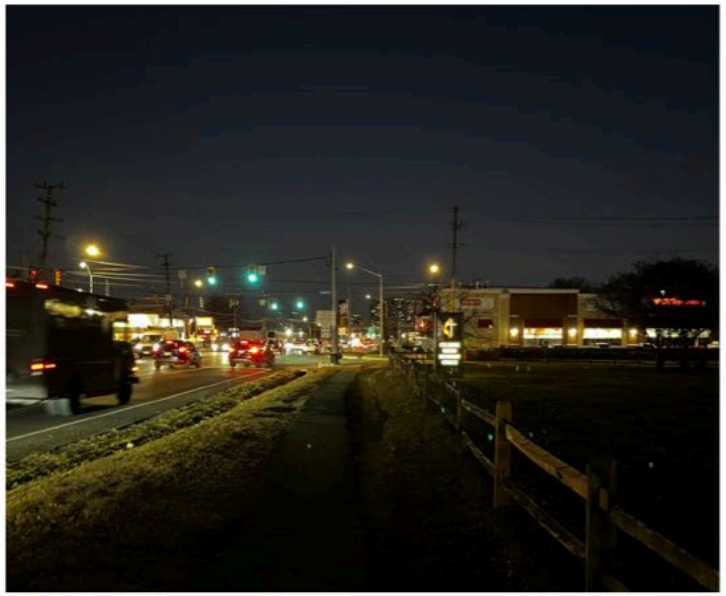
Key partnerships: Kaiser Permanente, George Mason University's College of Public Health, and Fairfax County Neighborhood and Community Services led the committee, with support from community and pedestrian-safety organizations.



One of several lights burnt out in front of Crown gas station



No lighting along service road parallel to Leesburg Pike



No lighting along Leesburg Pike toward Charles Street

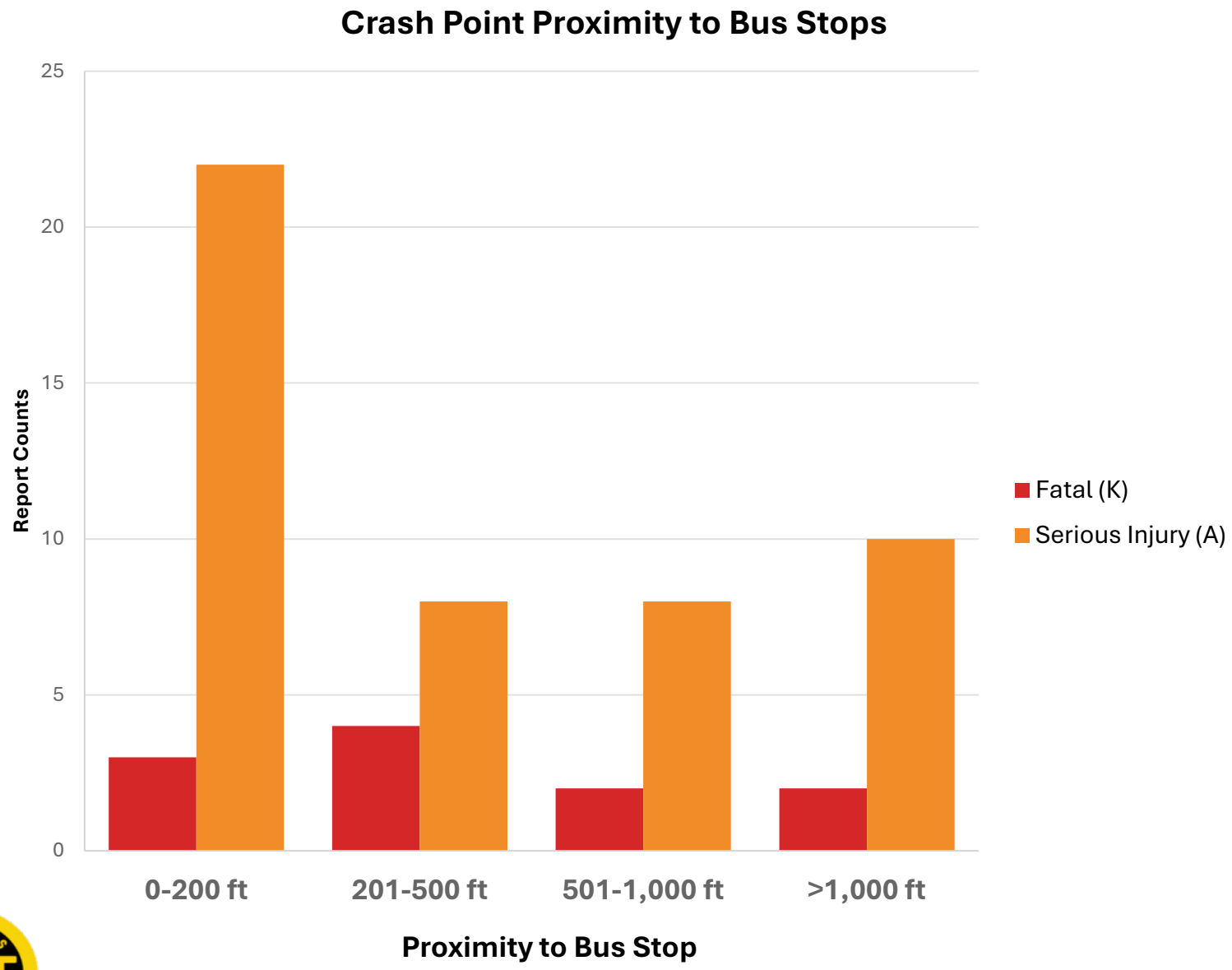


No lighting or sidewalk in front of the Culmore United Methodist Church

Bus Stops Along Route 7



Distance from KSI Crash Locations to Mapped Bus Stops



37 KSI points within 500 ft of a bus stop

25 KSI points within 200 ft of a bus stop

52 of 59 KSI crashes were within 1,500 ft of a bus stop

9 of 11 fatal crashes were within 1,000 ft of a bus stop

Crash Locations and Bus Stops in Culmore and Bailey's Crossroads

Transit access is one of the clearest exposure contexts in the dataset.



Examples of KSI Crash Clusters That Are Near Bus Stops

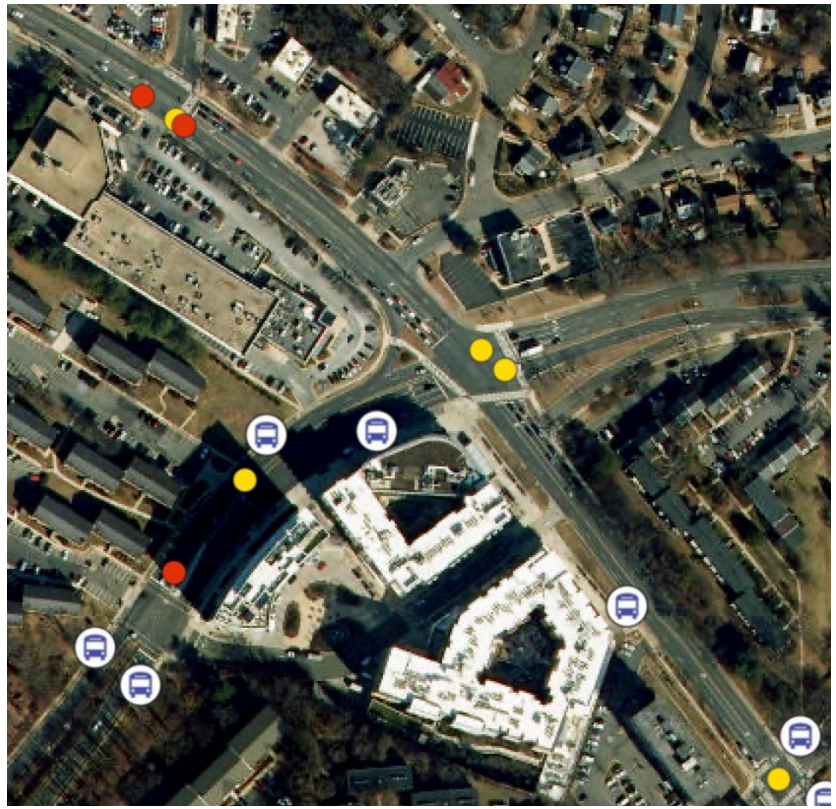
Route7 KSI Points

KSI Severity Level

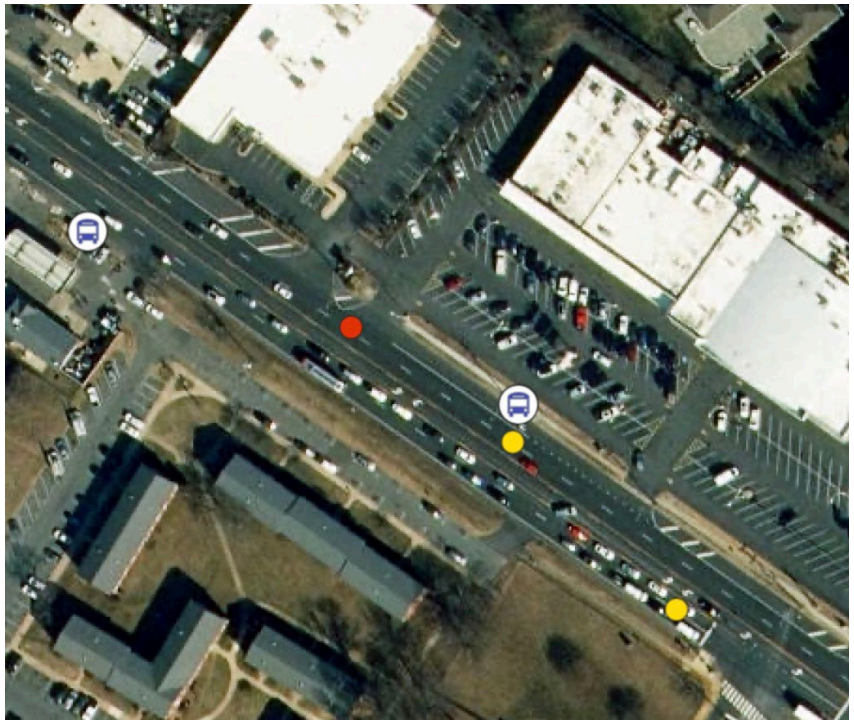
- K. - Fatality
- A - Serious Injury

Transportation

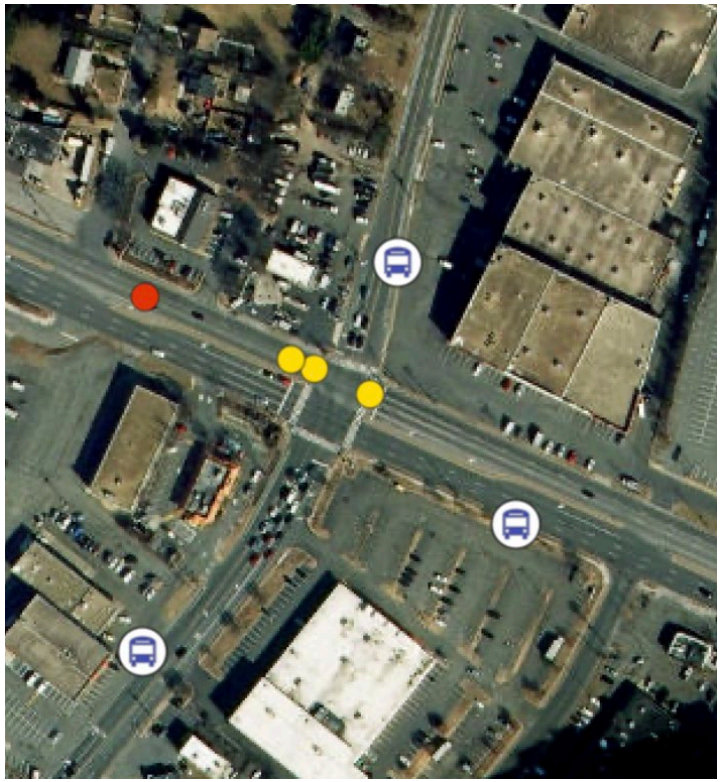
Bus Stops - NOVA



Intersection of Columbia Pike and Leesburg Pike

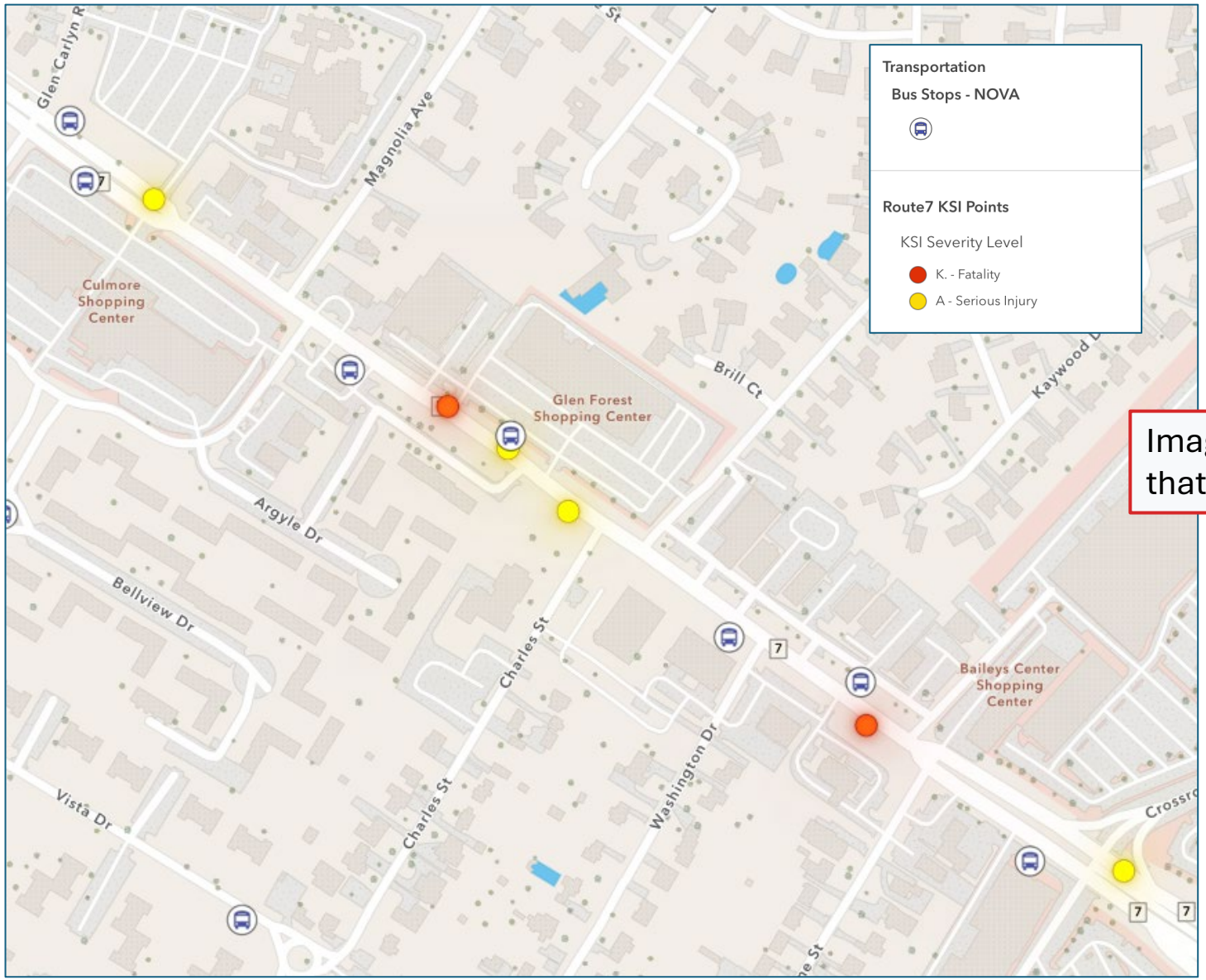


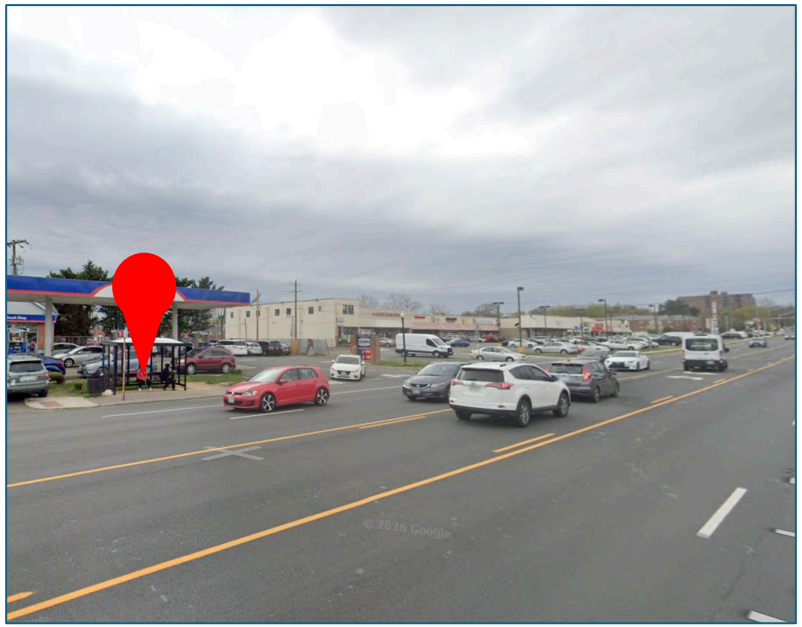
Glen Forest Shopping Center along Leesburg Pike



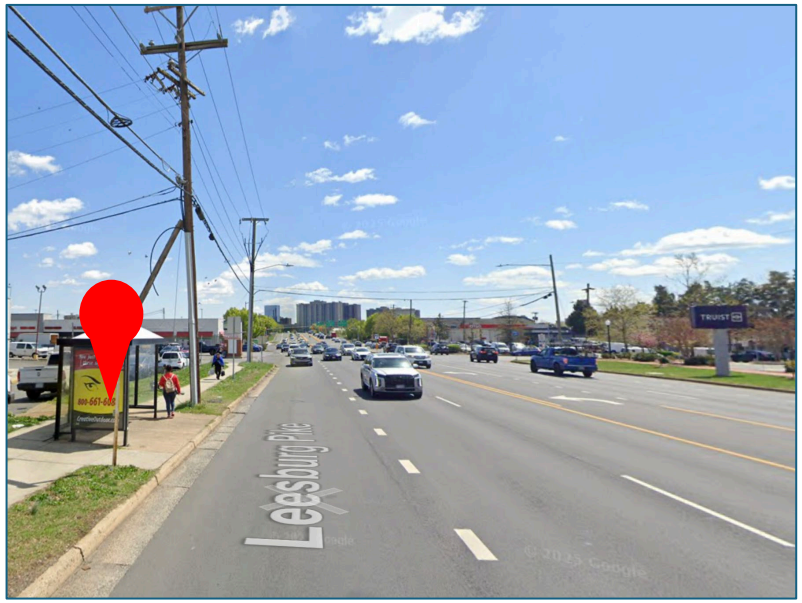
Intersection of Carlin Springs Rd and Leesburg Pike

Map of Bus Stops and Crash points along Leesburg Pike Corridor on Route 7





Images of two bus stops along Leesburg Pike on Route 7 that do not have clear traffic crossings within 1,000 ft.



Route 7 Crash Data in Relation to Bus Stops

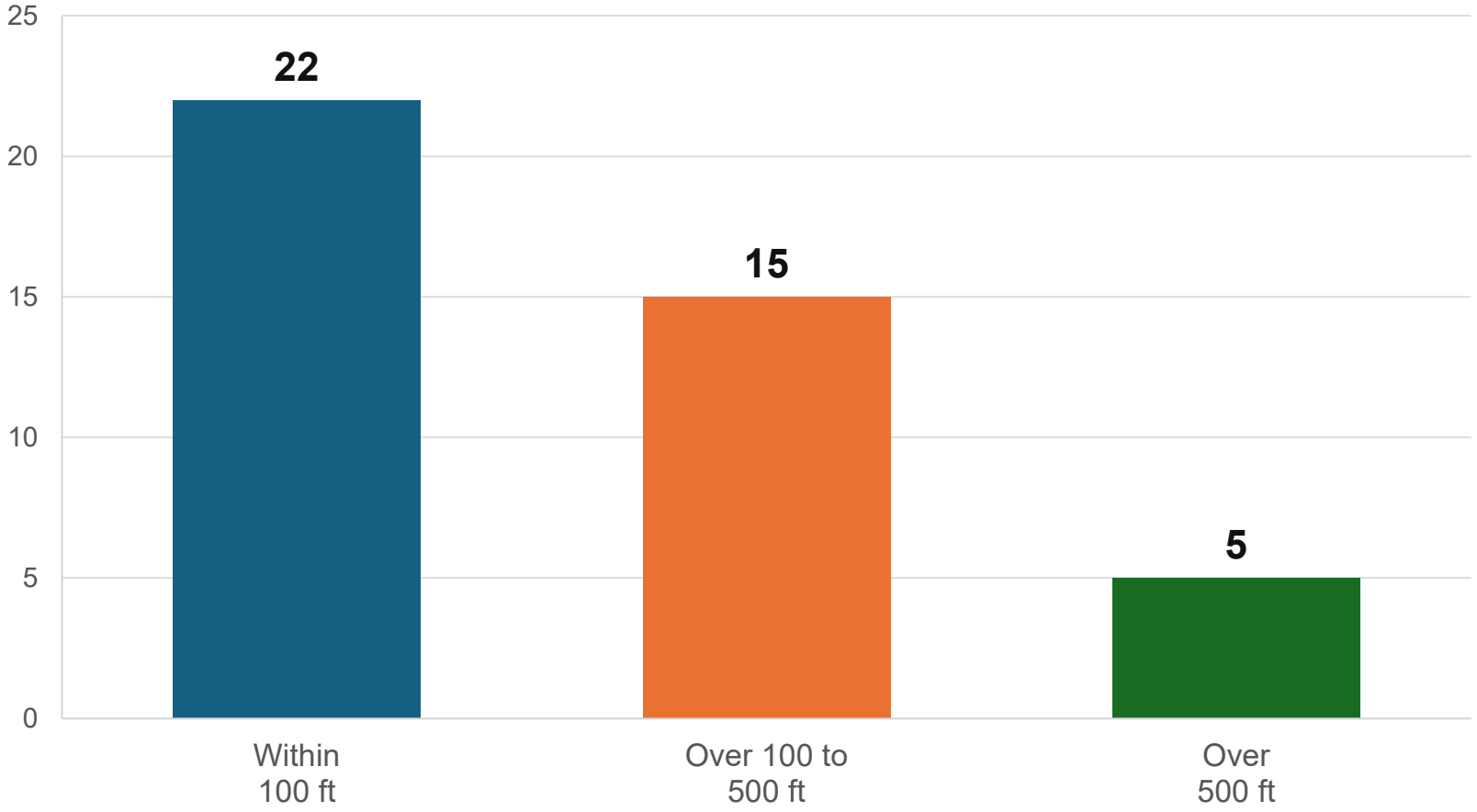
Bus stop access is central to Route 7 safety. The issue is where people can safely cross after arriving at or leaving transit, not simply whether a stop exists nearby.

Distance to Nearest Bus Stop	Serious Injury KSI	Fatal KSI	Total KSI	Night/Darkness KSI
0-200 ft	22	3	25	13
201-500 ft	8	4	12	5
501-1,000 ft	8	2	10	5
1,001-1,500 ft	5	0	5	3
>1,500 ft	5	2	7	3

Mapped Sidewalk and Crossing Inventory Along Route 7



KSI Crash Proximity to Mapped Traffic Signals

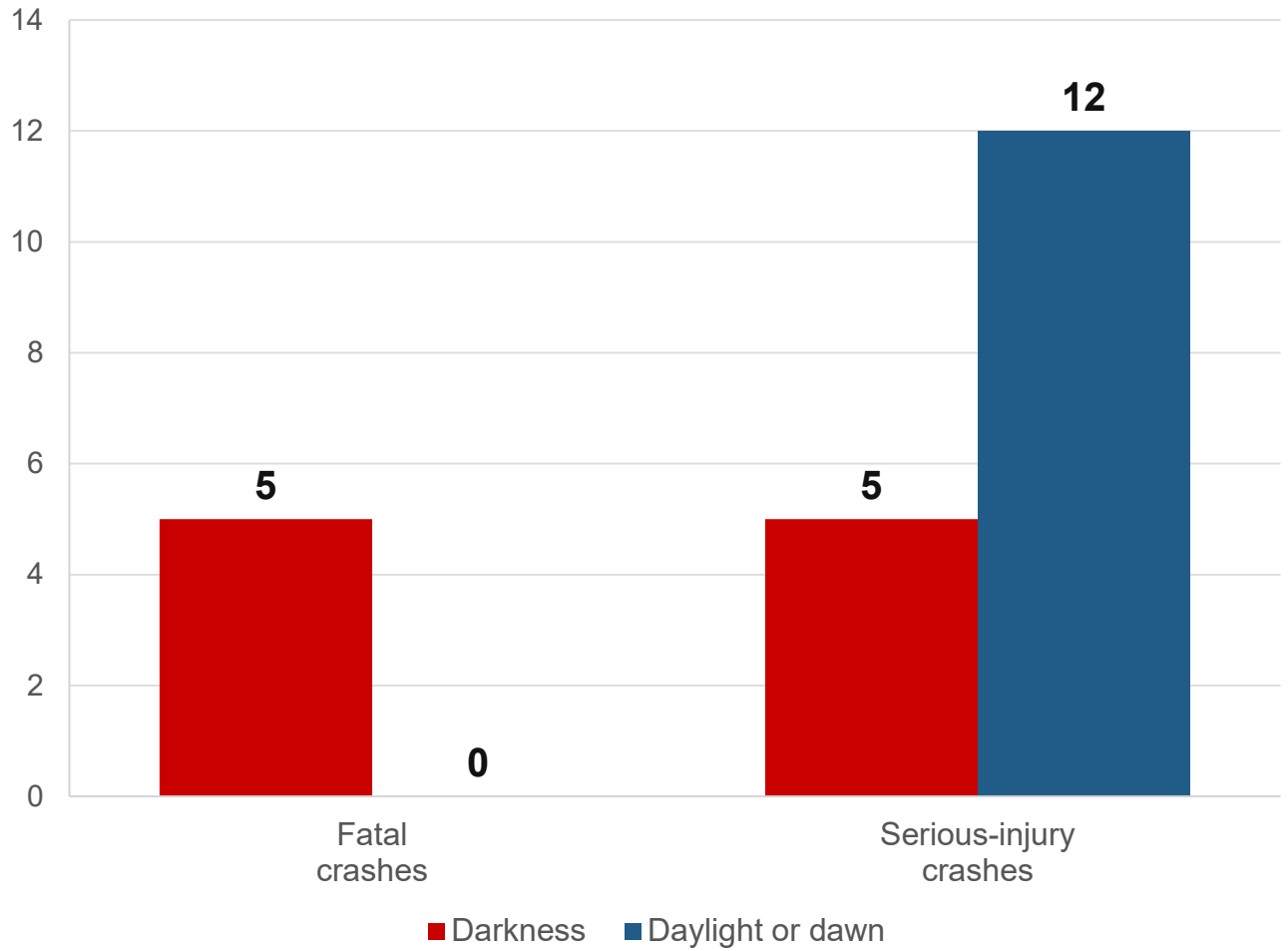


88%

assessed KSI points lie within 500 feet of a mapped signal.

37 of 42 assessed KSI crash locations were within 500 feet of a mapped signalized intersection. Seventeen Falls Church records were excluded because signal-inventory coverage was unresolved. This measures proximity to current mapped signals—not whether the crash occurred at a signal, whether a usable pedestrian crossing existed, or whether the signal was present on the crash date.

Lighting Conditions in Crashes Recorded with Traffic-Signal Control



22 signal-coded crashes: 5 fatal and 17 serious injury.

Signals and nighttime conditions overlap

All five fatal records listing a traffic signal also record darkness. Five serious-injury records in the same control category occurred in darkness.

What to examine at those locations

Check whether drivers can see someone entering the crossing from each approach. Review pedestrian timing and the vehicle movements permitted during WALK.

Twenty-two crash records list a traffic signal as the traffic-control category: five fatal crashes and 17 serious-injury crashes. All five fatal crashes occurred in darkness. Among the serious-injury crashes, five occurred in darkness and 12 in daylight or dawn.

Crash Locations and Nearby Pedestrian Connections



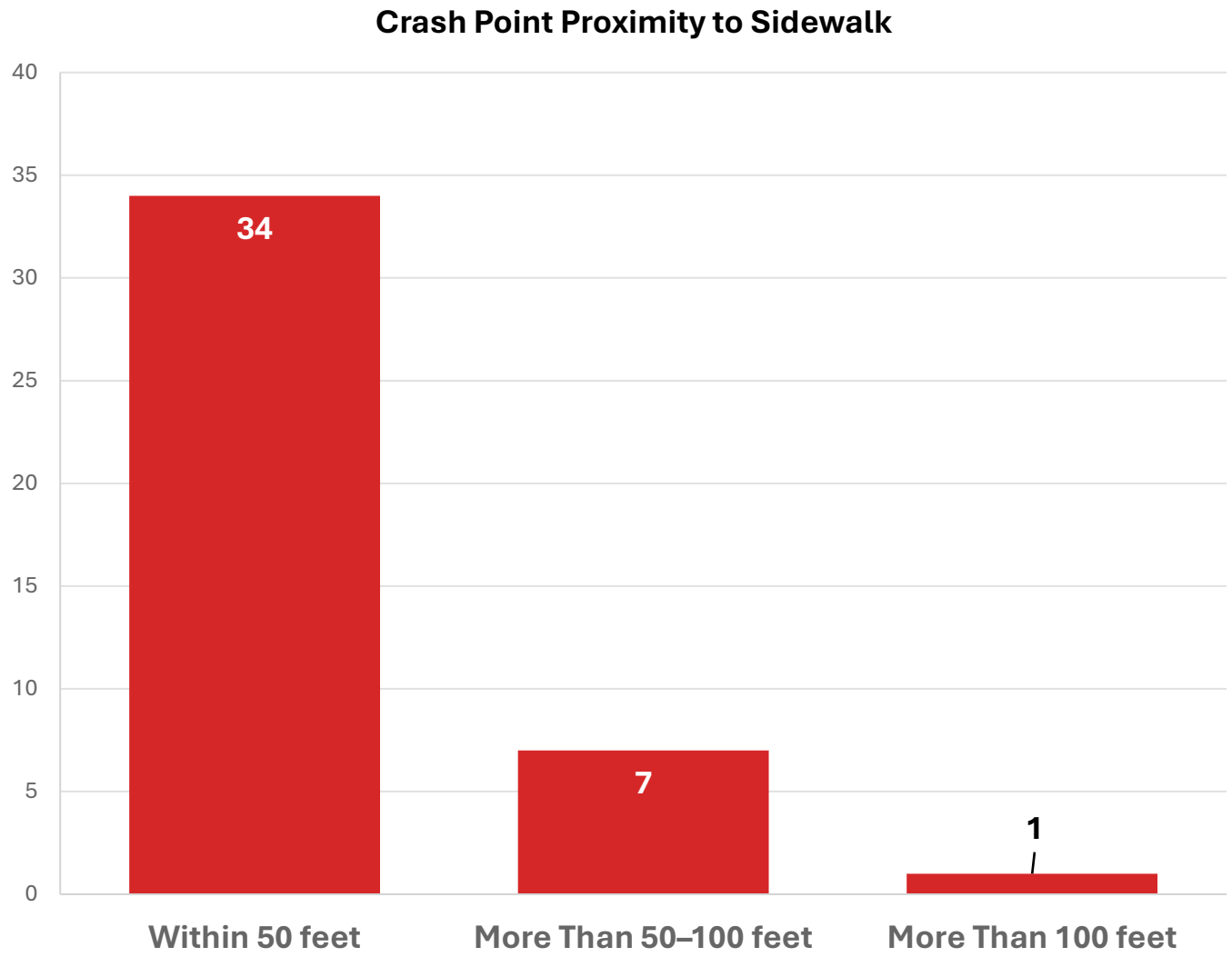


Leesburg Pike parallels busy retail centers, specifically Bailey's Crossroads. Pedestrians consistently cross the road to access these places, putting them in danger of high speeding vehicles.



Multiple Fatalities and KSI's have occurred while pedestrians have attempted to cross King's St on Route 7, which is a notoriously busy road that is limited in pedestrian crossings.

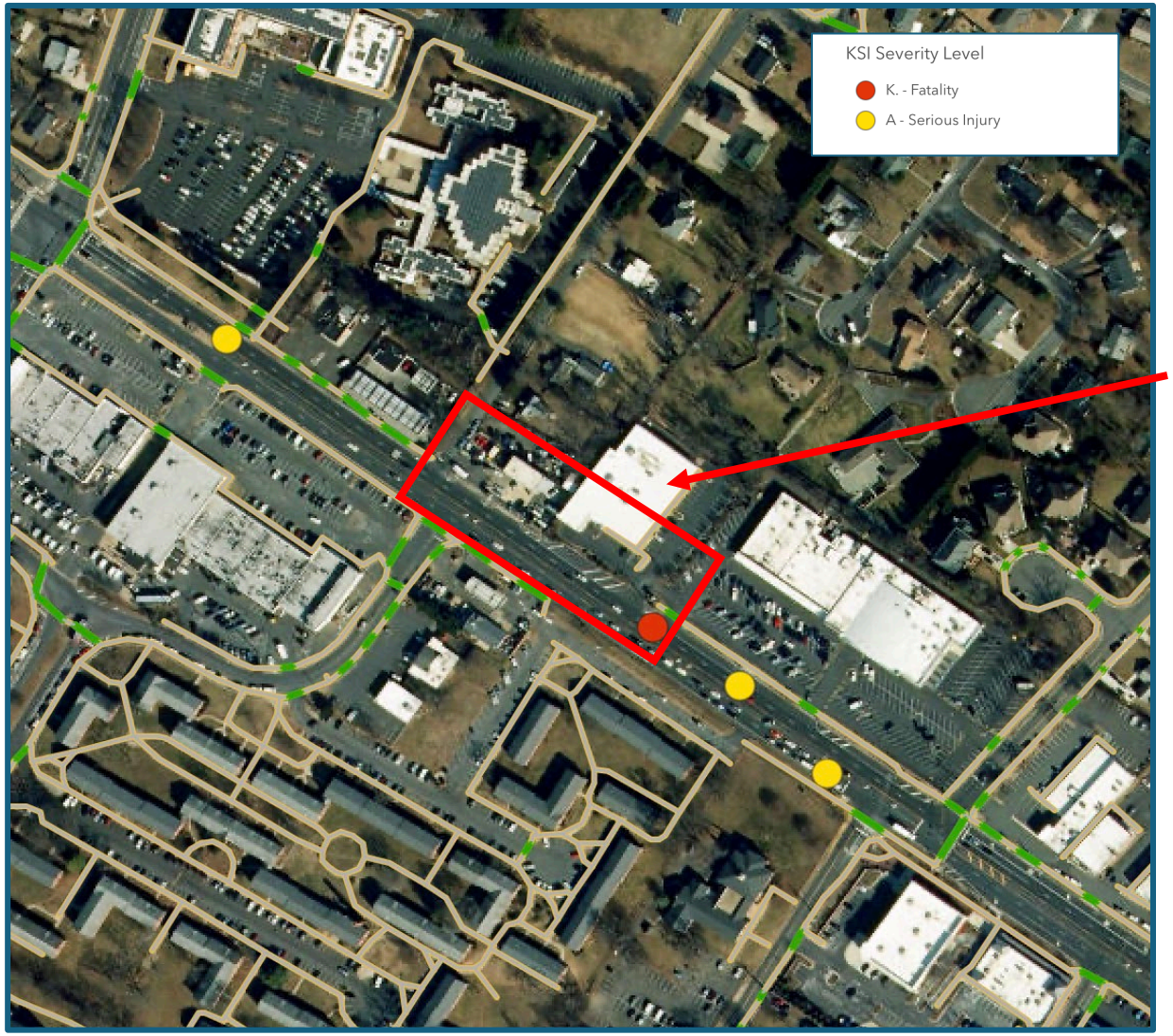
KSI Crash Distance to Sidewalk



98% of assessed KSI crash locations were within 100 feet of a mapped sidewalk.

The pattern shifts attention from sidewalk presence to how sidewalks connect people to safe crossings. Most assessed crash locations are close to a mapped sidewalk, but proximity does not show whether someone can reach a destination without encountering a gap or inaccessible street crossing.

Culmore Sidewalk Gap: Fatal Crash and Planned Improvements



Fairfax County and VDOT are advancing a new sidewalk along the north side of Leesburg Pike in Culmore, from Magnolia Avenue to just east of the Liberty gas station at 5930 Leesburg Pike.

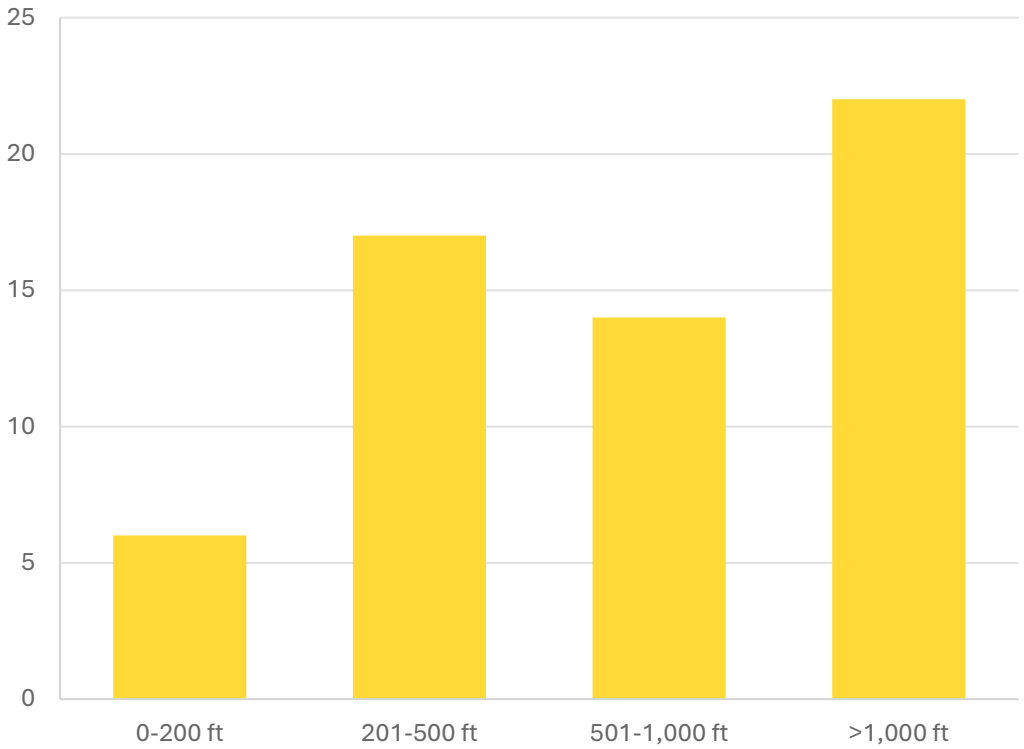
The project will close a critical sidewalk gap where 68-year-old Nguyet Ly was struck and killed in December 2021 while walking along the roadway.

Fairfax County endorsed the design for the Leesburg Pike/Culmore Segment 1 sidewalk on September 15. Right-of-way acquisition is scheduled for mid-2027, followed by utility relocation in early 2028 and construction beginning in early 2029.

This investment addresses one of the corridor's most urgent pedestrian-access gaps.

Sources: VDOT Route 7/Culmore Sidewalk Project and Fairfax County Board Summary.

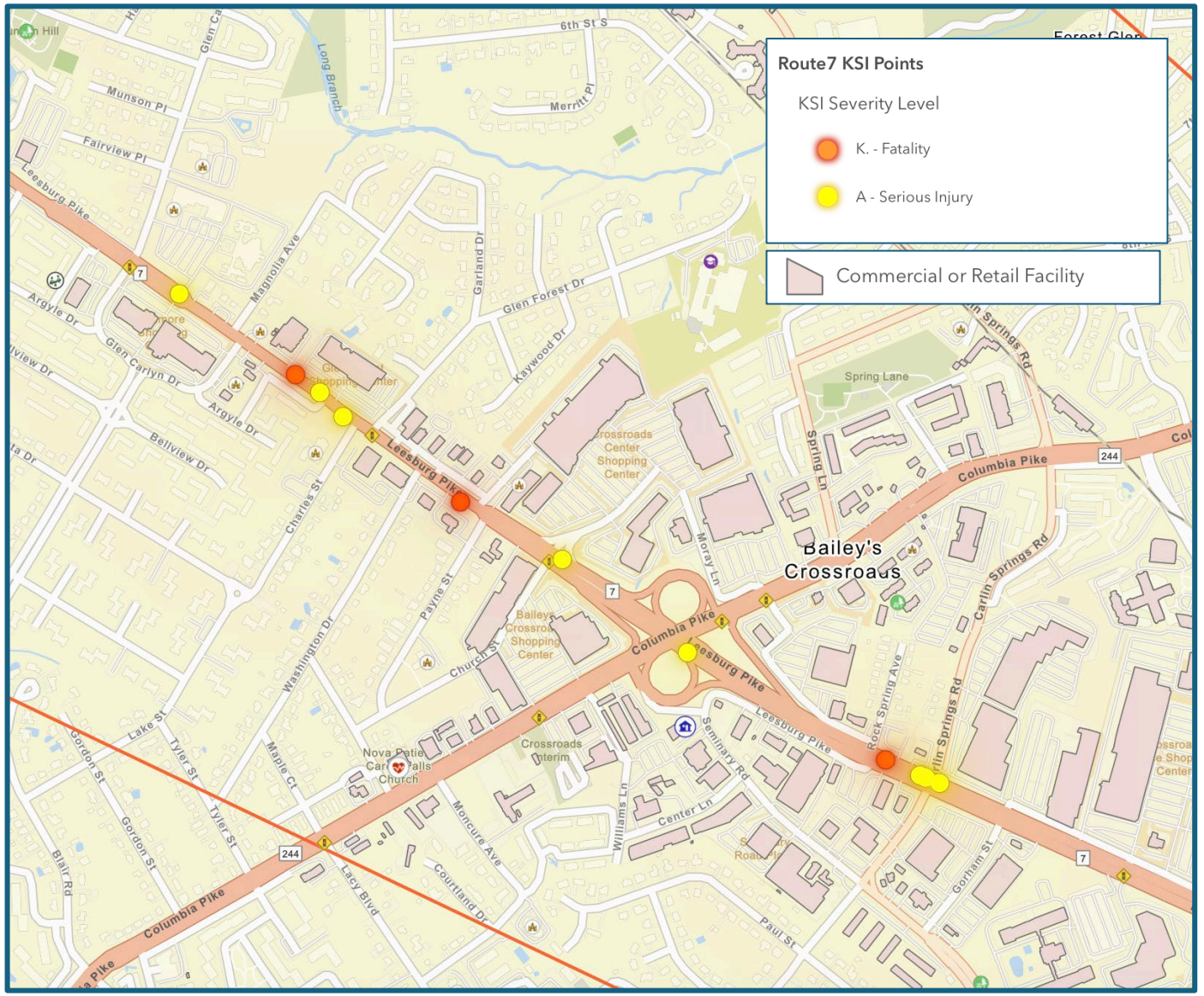
KSI Crashes and Retail Destinations



37 of 59 KSI points are within 1,000 ft of a mapped retail destination.

37
KSI within 1,000 ft of retail

8/11
fatal KSI within 1,000 ft



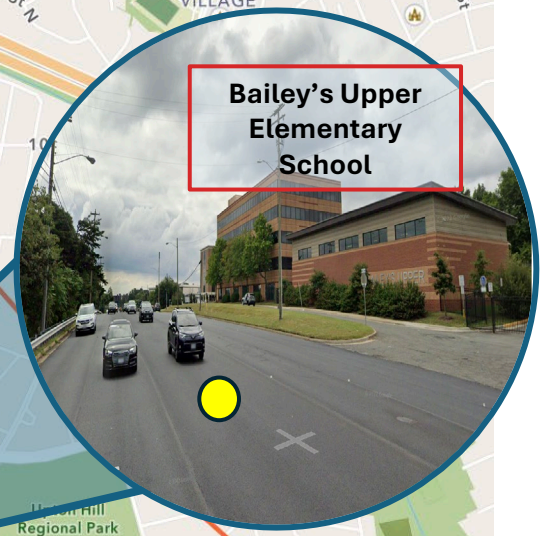
Zoom in of crash points along Leesburg Pike across from Bailey's Crossroads, which is a busy shopping center along Route 7.

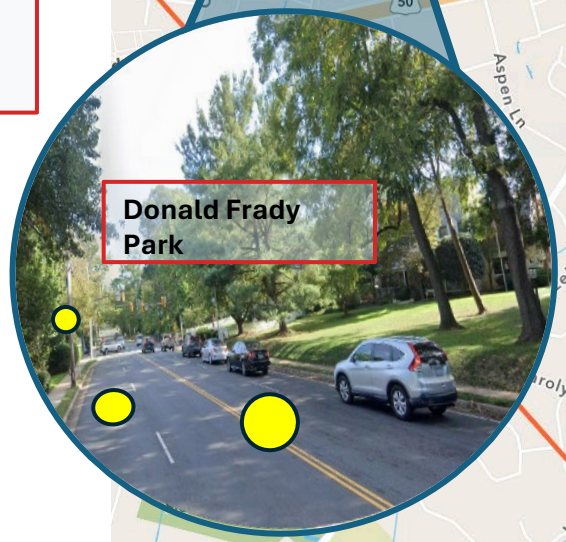
Pedestrian Access Around Community Destinations

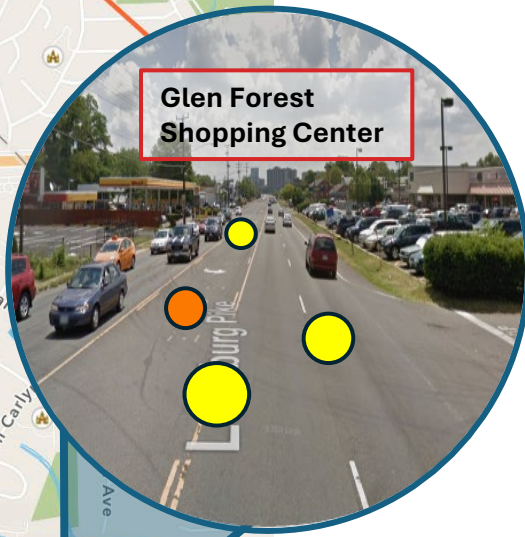
The zooms show areas where key public resources or assets exist, however, limited signalized crossings are available, suggesting why consistent KSIs are occurring in these zones.

Points of Interest

- Homeless Shelters NOVA
- Hospitals and Urgent Care NOVA
- Libraries NOVA
- Community Centers NOVA
- Public Schools NOVA
- Local Parks NOVA
- Religious Facilities NOVA







NoVA Families for Safe Streets

Priority Signal Gaps Along Route 7

This is the same December 2021 crash discussed on slide 38. Slide 38 addresses sidewalk continuity; this slide examines surrounding crossing access and signal spacing.

December 13, 2021: Magnolia Avenue Fatality

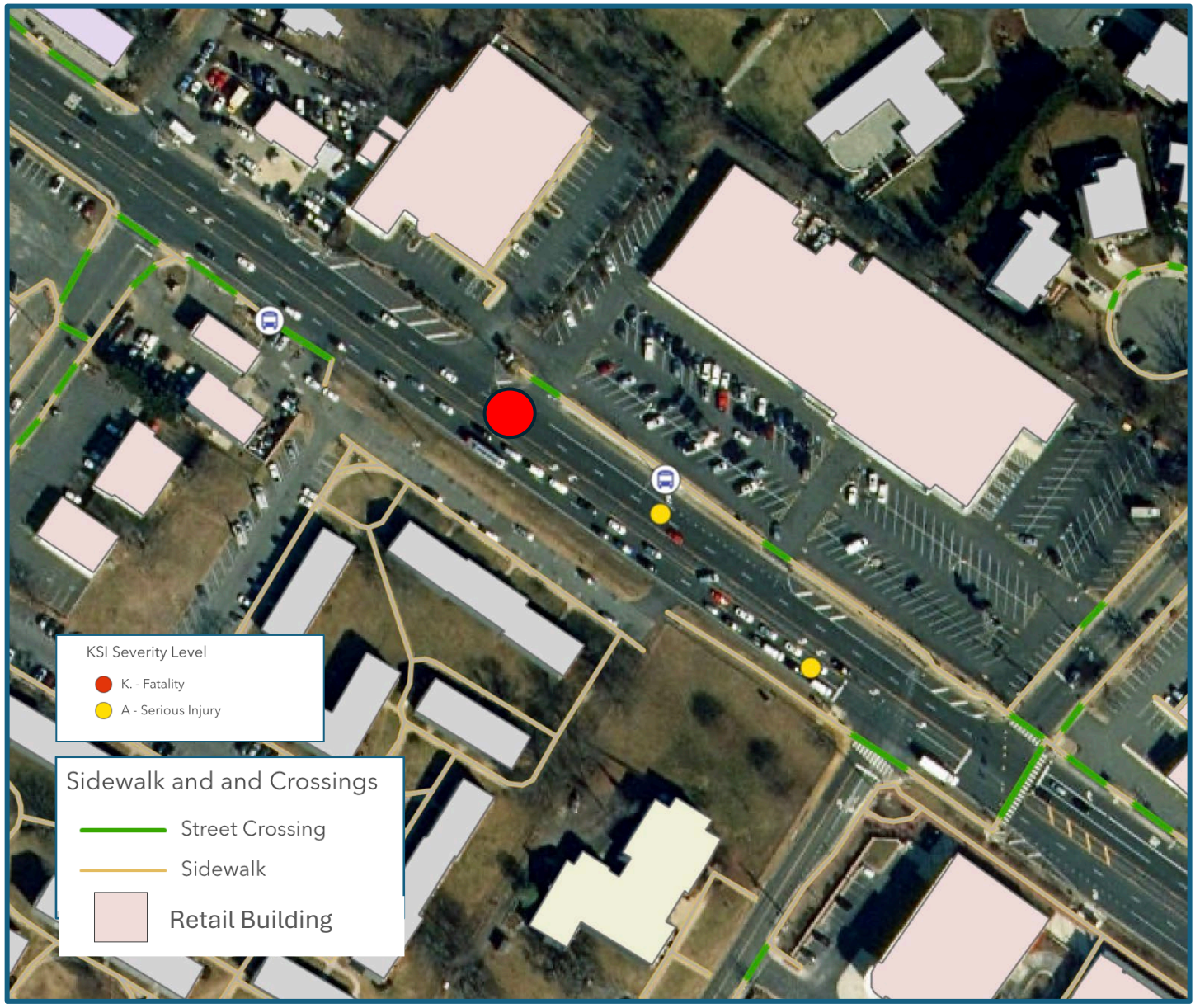
Fatal crossing along a missing-sidewalk segment

- A pedestrian died while walking along Leesburg Pike near the shoulder, where a sidewalk was missing. A driver turning out of a business struck her.
- **Pedestrian infrastructure:**
  - A bus stop is approximately **150 feet away**.
  - The Glen Forest Drive/Charles Street signal is approximately **529 feet away**.

Distance to nearby mapped signalized intersections:

- Glen Carlyn Road/Drive: 1,102 ft
- Glen Forest Drive/Charles Street: 529 ft

Recommendation: Review sidewalk continuity and driveway conflicts and evaluate whether an additional signalized pedestrian crossing is warranted near Magnolia Avenue.



Priority Signal Gaps Along Route 7

July 11, 2019: Payne Street Fatality

Fatal crossing outside a crosswalk

- A pedestrian died crossing Leesburg Pike near Payne Street
- **Pedestrian infrastructure:**
  - mapped bus stop is approximately 95 feet away
  - sidewalk is approximately 43 feet away
  - Shopping centers sit on both sides of the road.

Distance to nearby mapped signalized intersections:

- Glen Forest Drive/Charles Street: 617 ft
- Crossroads Center Way: 593 ft

Recommendation: Prioritize this segment for a study of an additional signalized pedestrian crossing.



Priority Signal Gaps Along Route 7

October 26, 2022: Carlin Springs Road Fatality

Fatal crossing outside a crosswalk

- A pedestrian died crossing Leesburg Pike near Carlin Springs Road, outside the crosswalk.
- **Pedestrian infrastructure**
  - A mapped bus stop is approximately **336 feet away**.
  - A mapped sidewalk is approximately **33 feet away**.
  - The Carlin Springs Road signal is approximately **282 feet away**.

Distance to nearby mapped signalized intersections:

- Columbia Pike ramps: 1,329 ft
- Carlin Springs Road: 282 ft

Recommendation: Prioritize this segment for a review of crossing access. Evaluate whether an additional signalized pedestrian crossing would better serve pedestrian routes, alongside improvements to the existing Carlin Springs crossing.



Bus Stop Access and Signalized Crossings Along Route 7

Many fatal and serious-injury crashes in the study occurred near bus stops.

Reaching a stop on the opposite side of Route 7 may require walking to a signalized intersection, crossing, and doubling back to the stop.

This added distance can make designated crossings less convenient and may encourage more direct crossings outside marked crosswalks.



Potential Pedestrian Route to Access Bus Stop on Leesburg Pk

Distance from Fatal-Crash Locations to Nearby Signalized Intersections

Fatal-crash location	Intersection on one side	Distance to nearby mapped signalized intersections:	Intersection on the other side	Distance to nearby mapped signalized intersections:
Payne Street — July 11, 2019	Glen Forest Drive/Charles Street	617 ft	Crossroads Center Way	593 ft
Carlin Springs Road — October 26, 2022	Columbia Pike ramps	1,329 ft	Carlin Springs Road	282 ft
Magnolia Avenue — December 13, 2021	Glen Carlyn Road/Drive	1,102 ft	Glen Forest Drive/Charles Street	529 ft

Crash Locations, Transit Proximity and Mapped Crossing Distances by Area

The most consistent Route 7 pattern is the repeated overlap of crash points, which surround public destinations, bus access, and long crossing distances.

Analysis area	KSI Count	Fatal Crashes	KSI crashes more than 1,000 ft from a mapped crossing	KSI crashes within 500 ft of a mapped bus stop
Sleepy Hollow / West Route 7	30	2	19	14
Bailey's Crossroads	12	4	5	7
Skyline / Lower Bailey's	10	3	2	10
Seven Corners	7	2	7	6

Recorded Road-User Behavior and Vehicle-Behavior Measures



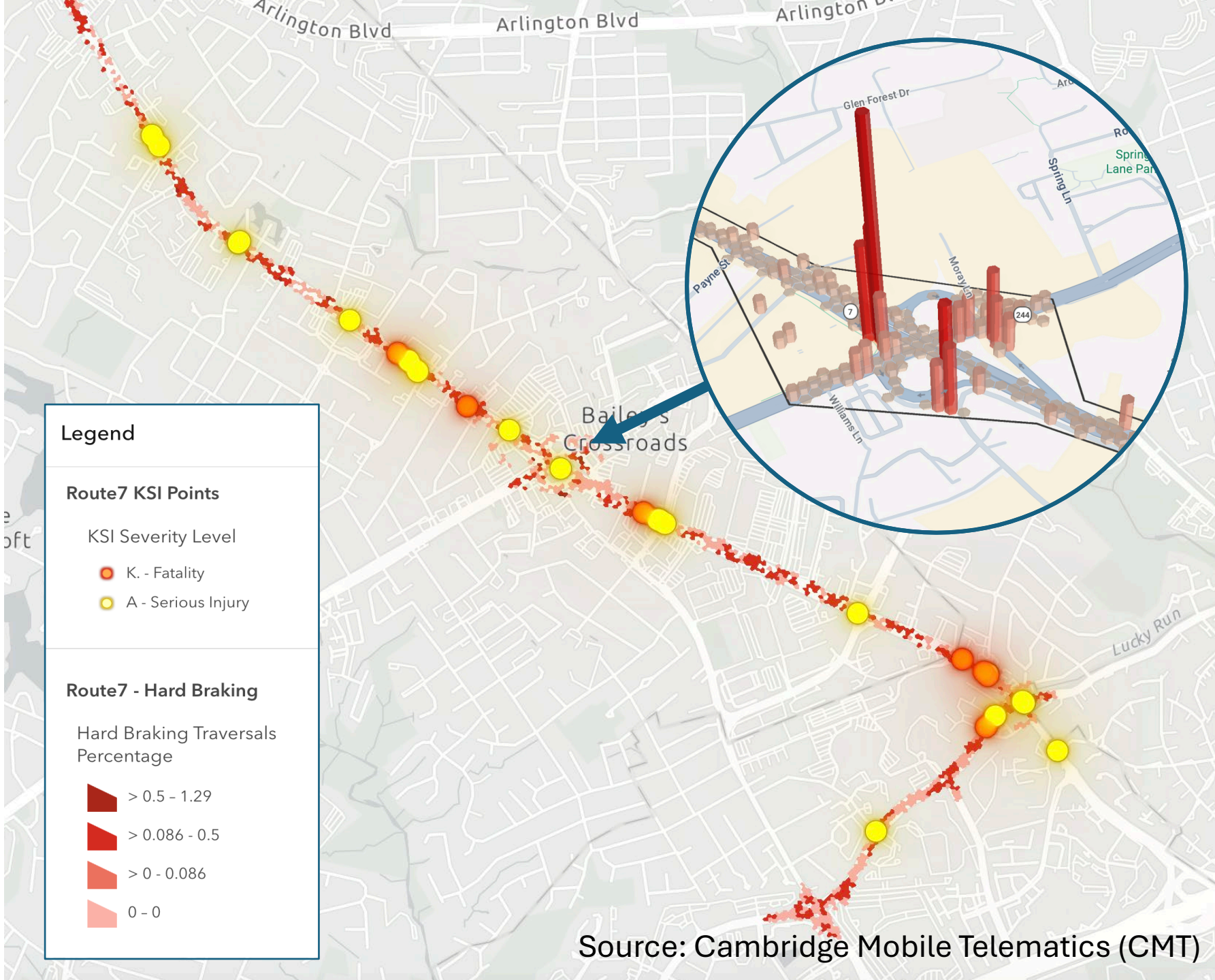
Road User Behavior

Hard Braking

The hard-braking layer identifies locations where observed vehicle traversal cells included hard-braking behavior.

The maximum H3 cell reached 1.3% of traversals, the mean was 0.07%. This suggests that hard braking is relatively uncommon, but it becomes most prominent where vehicles approach pedestrian crossing signals. Locations with elevated hard-braking rates warrant review of approach speeds, queues, turning movements, and crossing conflicts

121 cells exceeded 0.1%
22 exceeded 0.3%
9 exceeded 0.6%
1 exceeded 1.0%



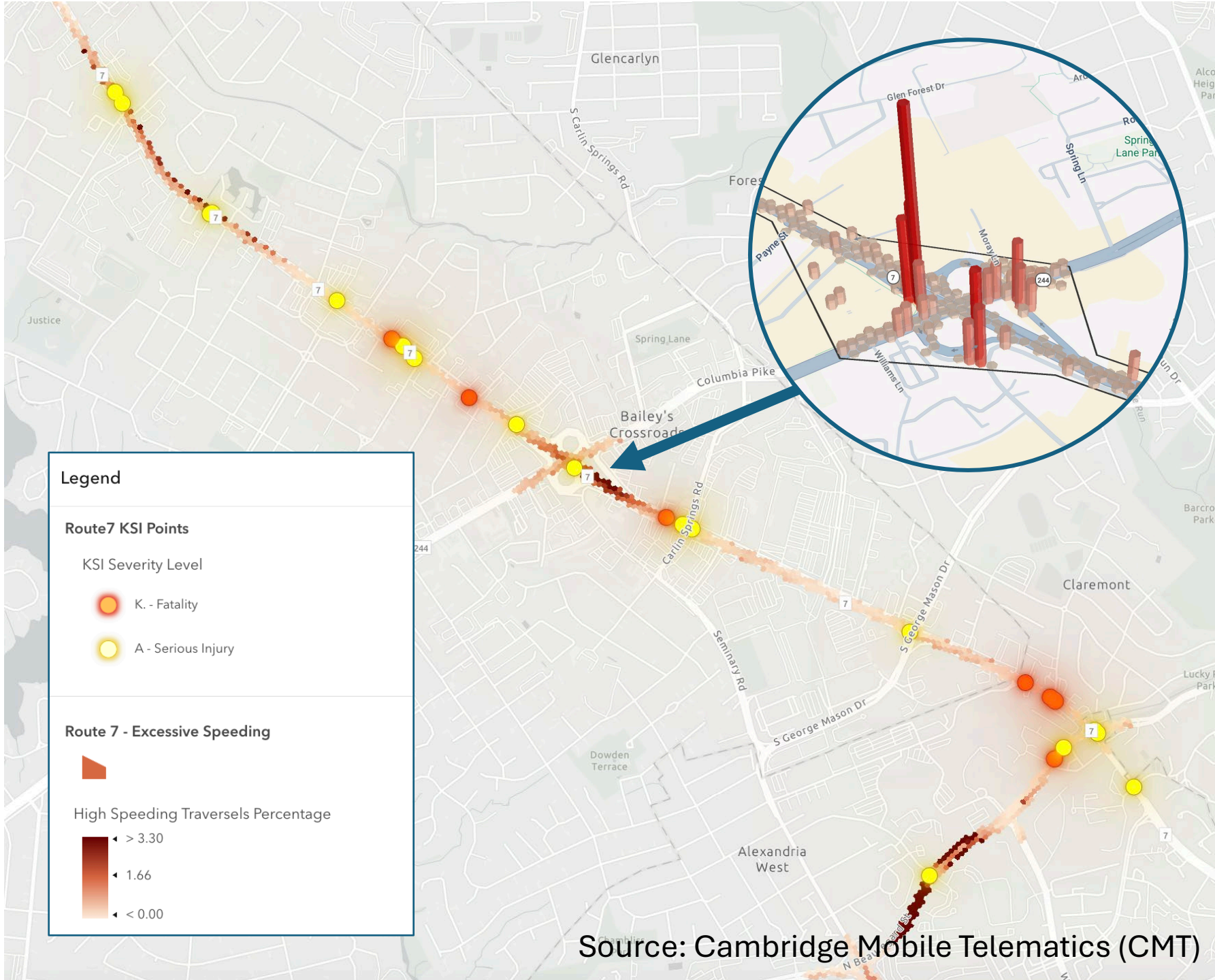
Source: Cambridge Mobile Telematics (CMT)

Road User Behavior

Excessive Speeding

The excessive-speeding layer shows the share of observed vehicle traversals in each cell. The darkest cells show locations where a larger share of observed trips involved excessive speeding.

The strongest speeding pattern is in the Bailey's Crossroads, where Route 7 runs through dense retail, apartments, and frequent driveway access. The highest speeding cells are near the lower Leesburg Pike commercial stretch, especially around Glenmore Drive, Payne Street, and South George Mason Drive.



Source: Cambridge Mobile Telematics (CMT)

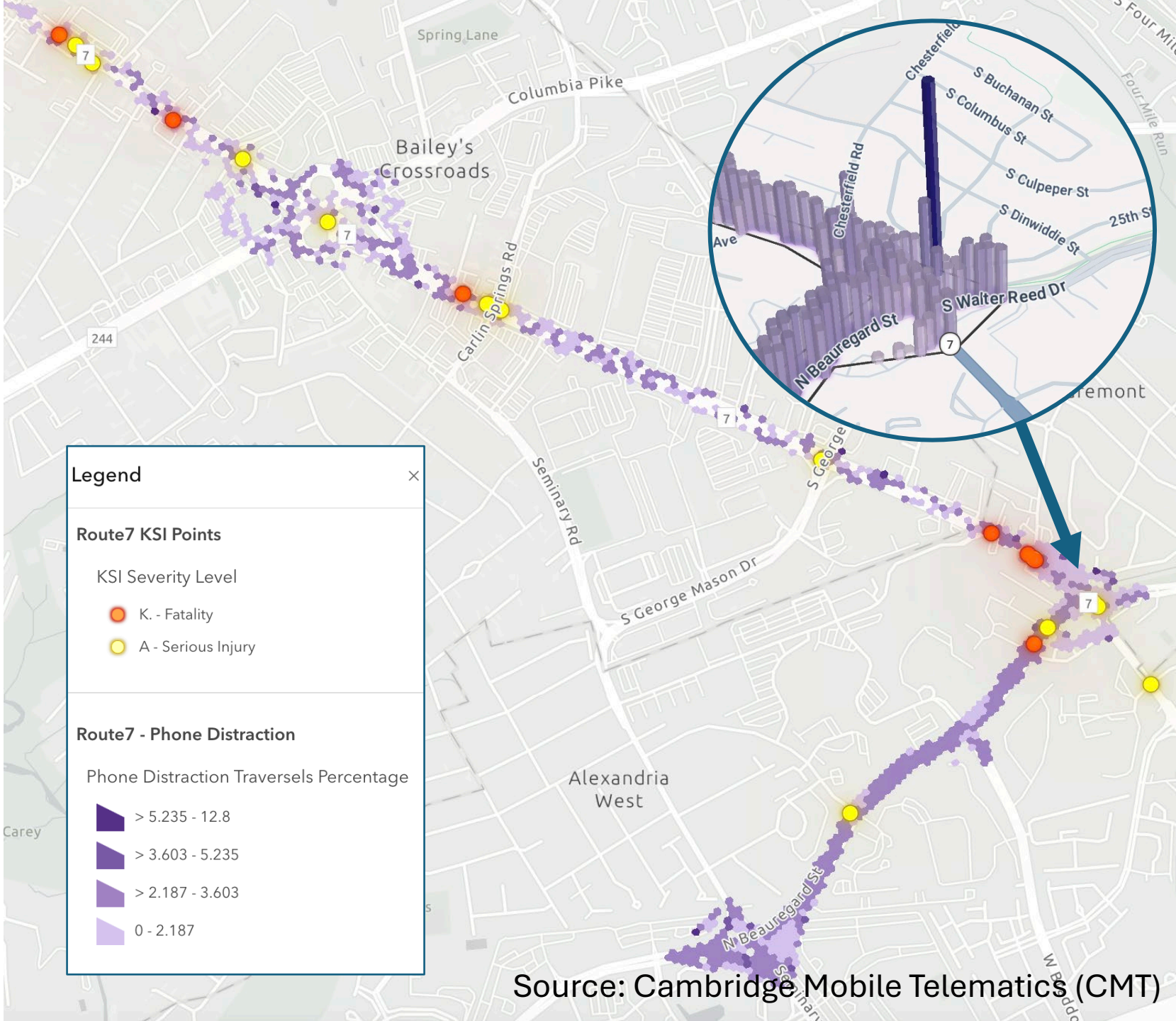
Road User Behavior

Phone Usage

The phone-distraction layer brings together three related measures: phone tapping, handheld phone calls, and phone motion.

Across the combined Route 7, phone motion produced the highest individual rate, reaching 12.8% of traversals, compared with 4.0% for phone tapping and 4.1% for handheld calls.

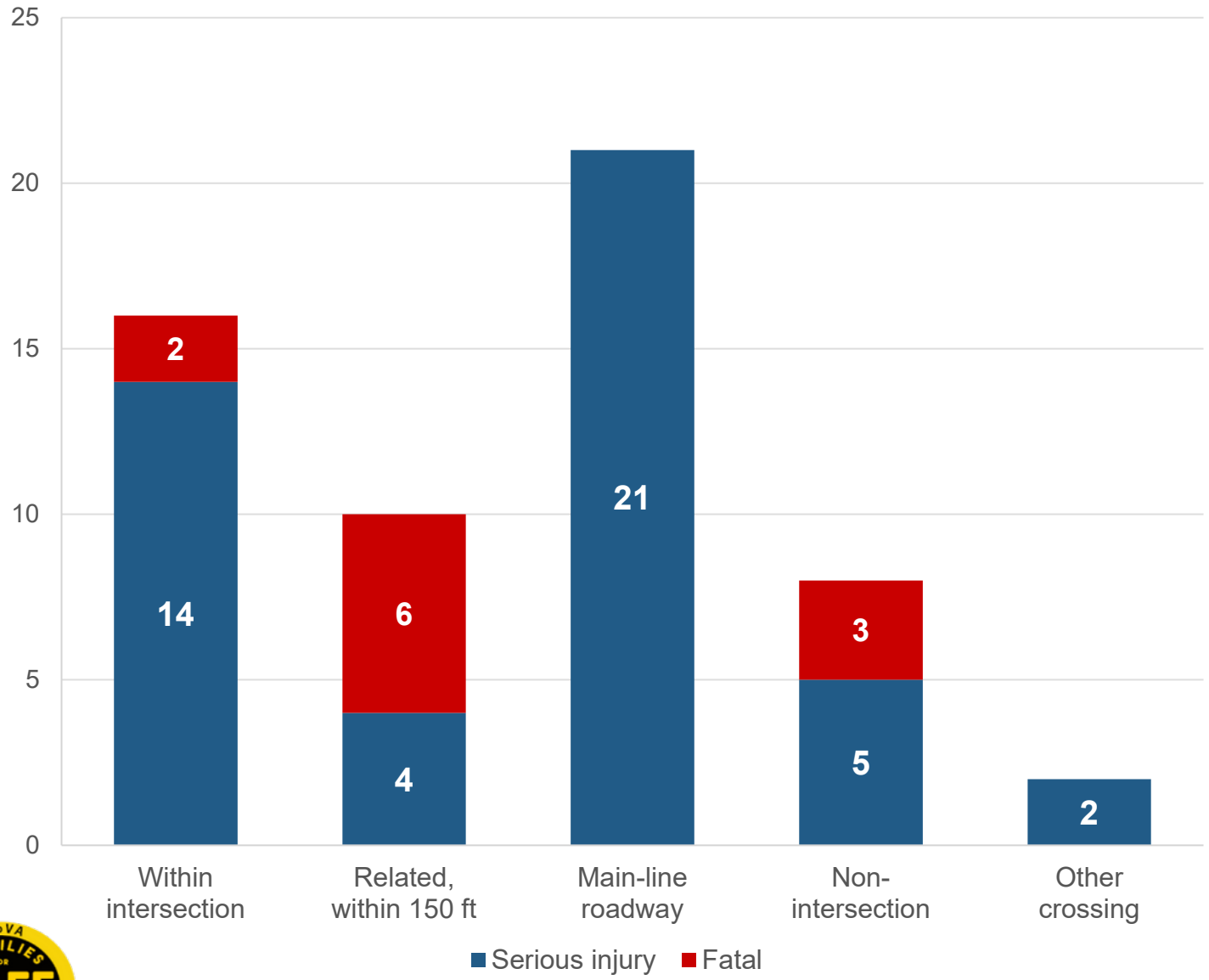
The data suggests that phone-related driver behavior is more broadly visible across the corridor, with a smaller number of stronger hot spots that are concentrated at traffic lights.



Source: Cambridge Mobile Telematics (CMT)

Road User Behavior

KSI Crashes and Roadway Position



Six fatal records fall in the “intersection-related, within 150 feet” category, compared with two inside the intersection. Three are coded non-intersection.

The separate intersection-analysis field classifies 42 records as intersection-related. That does not place 42 crashes physically inside an intersection.

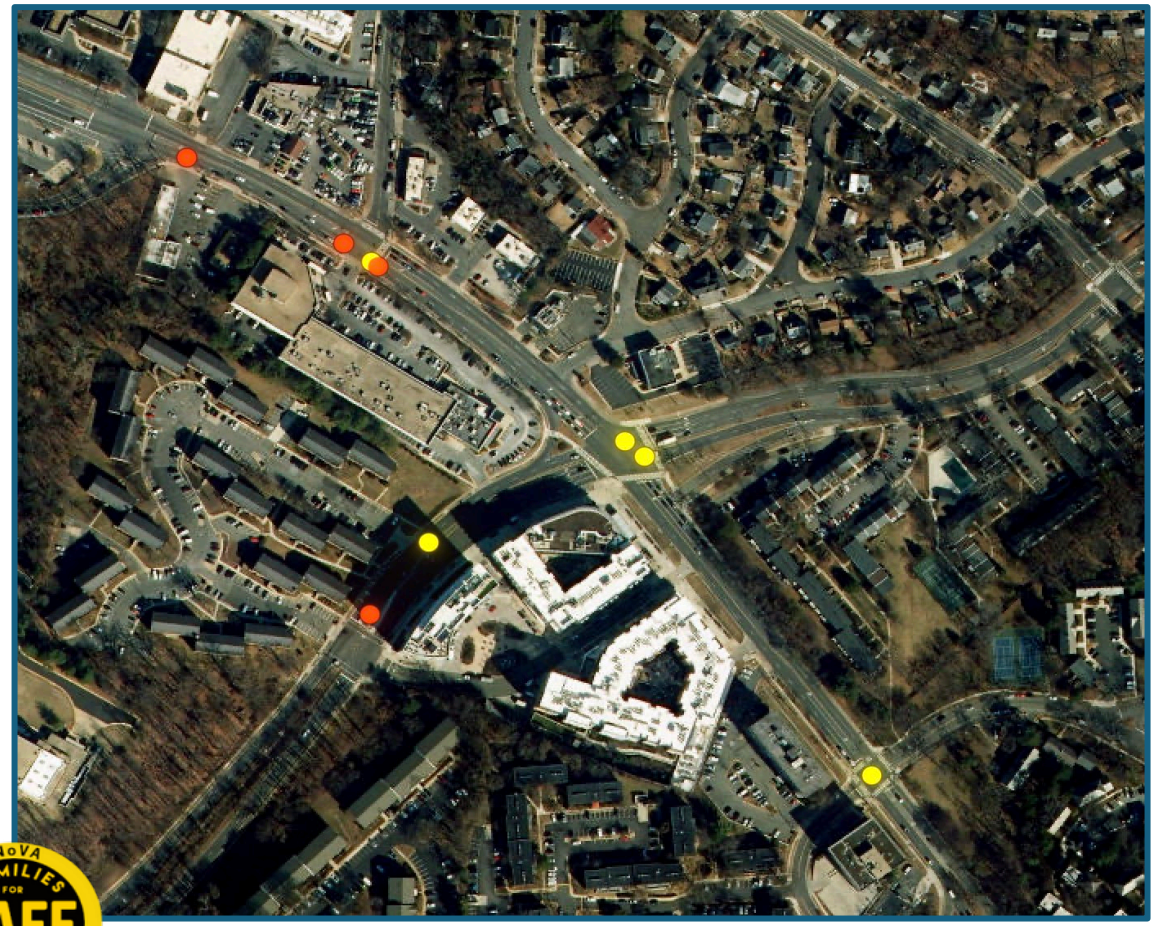
8/11

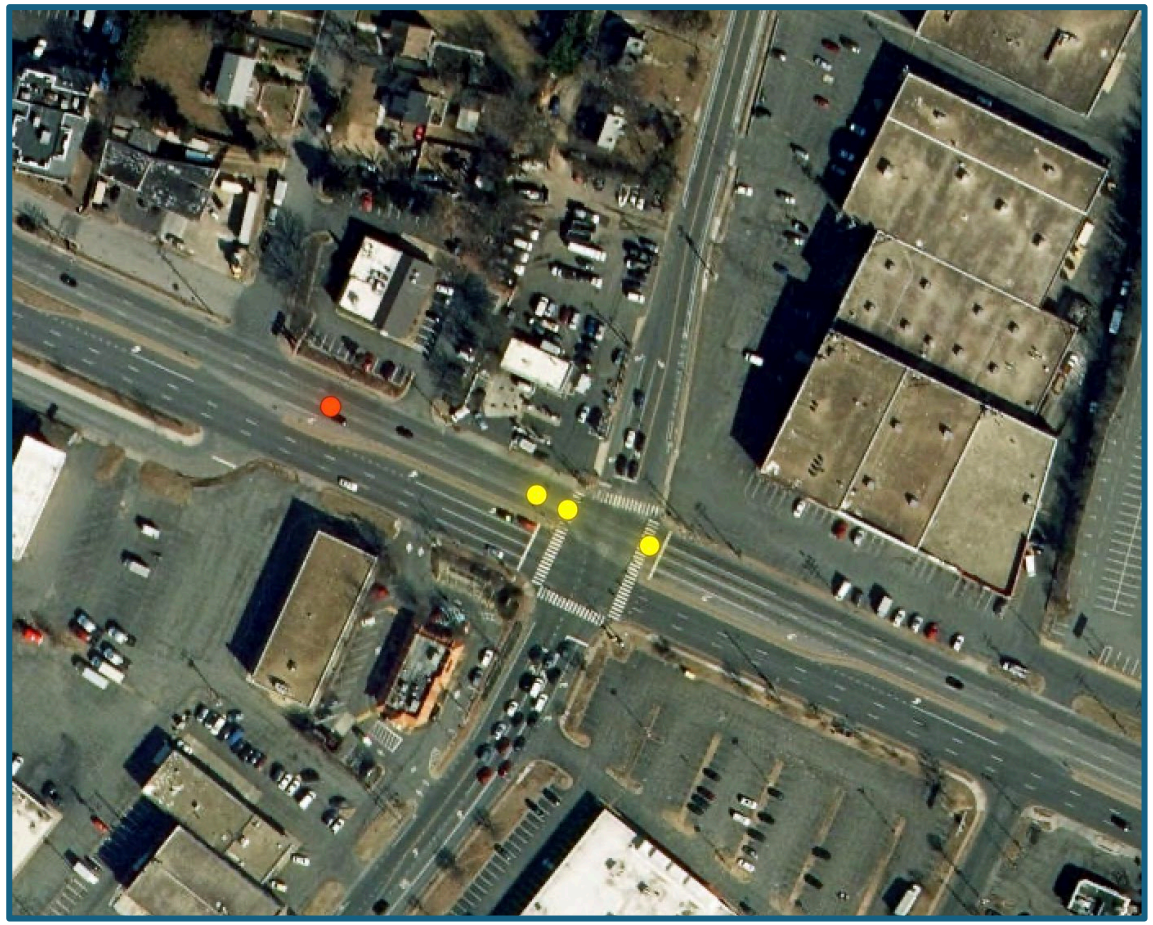
fatal crashes are within or related to an intersection within 150 feet.

KSI Crashes and Intersection Proximity

73% of fatal crashes occurred within an intersection or were coded as intersection-related within 150 feet.

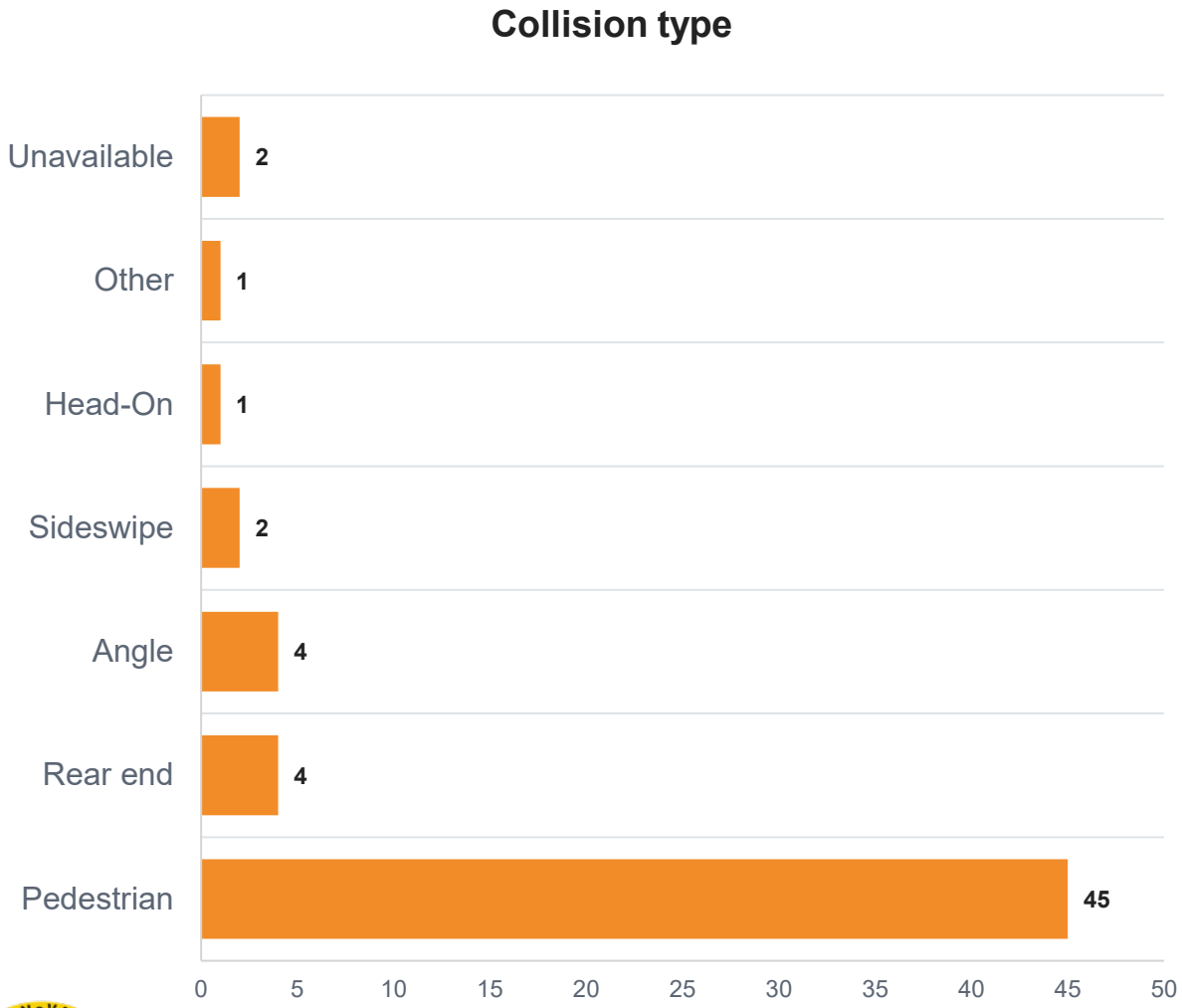
37 of 42 assessed KSI locations (88%) were within 500 feet of a mapped signalized intersection.

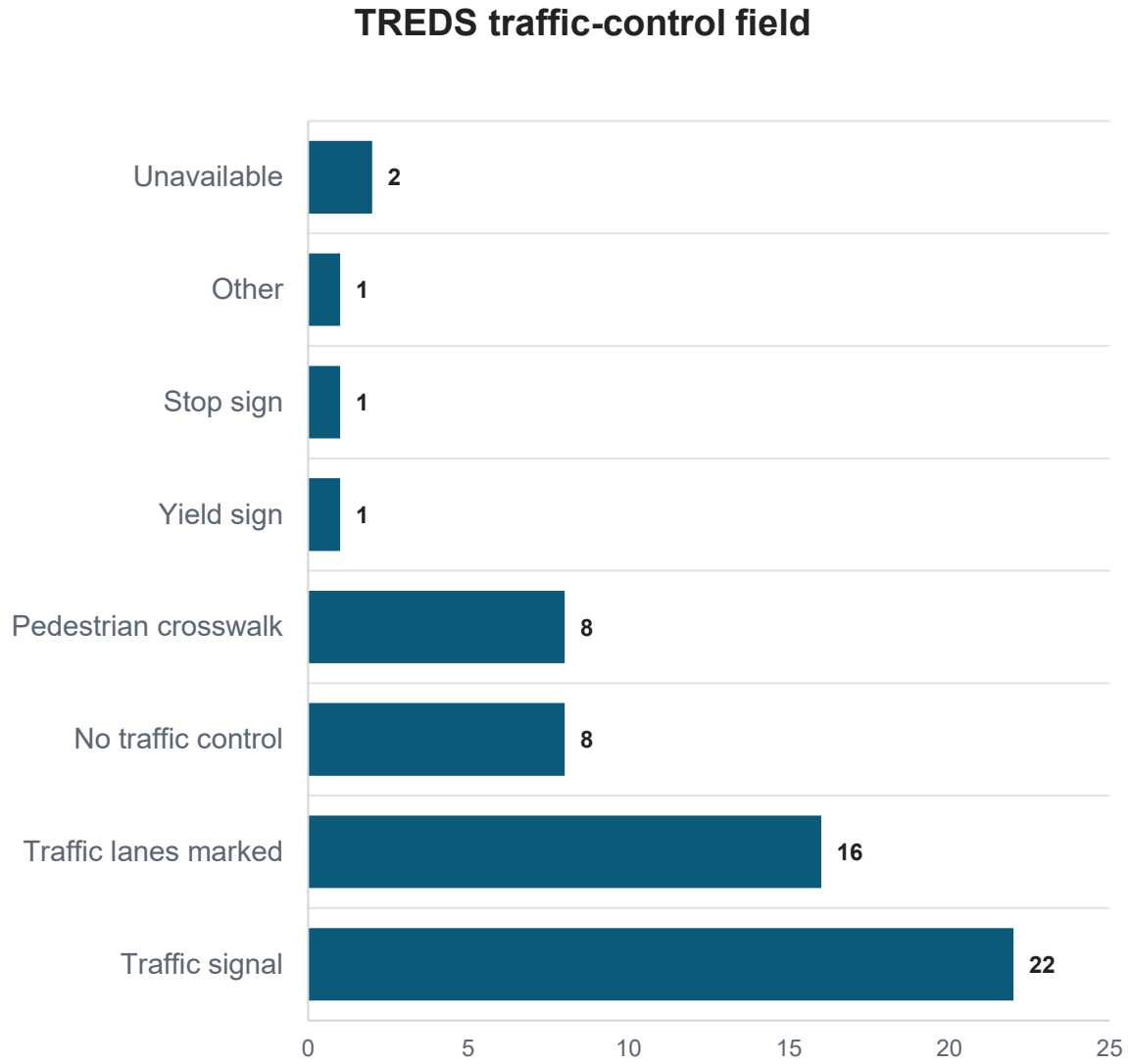




Collision Type and Recorded Traffic Control

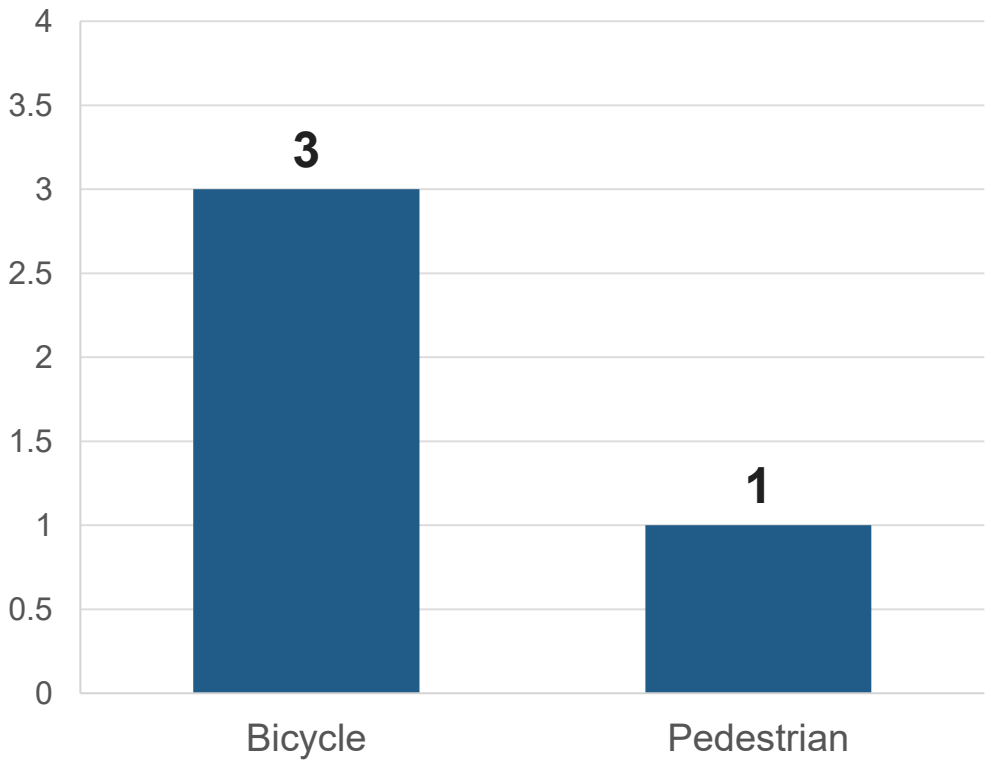
The records identify collision categories and reported controls. Explaining how the crashes happened requires vehicle movements, crash diagrams, and the conditions at each crossing.





Four Separate Angle-Coded Crashes, All With Serious Injuries

Angle Crashes by Road-user Category



4 of 59 KSI records (6.8%)

May 22, 2018: North Beauregard St

Bicycle | Daylight, dry pavement
Within intersection; traffic lanes marked

May 10, 2019: South Walter Reed Dr

Bicycle | Darkness, road lighted, wet pavement
Crossing-related; pedestrian crosswalk recorded

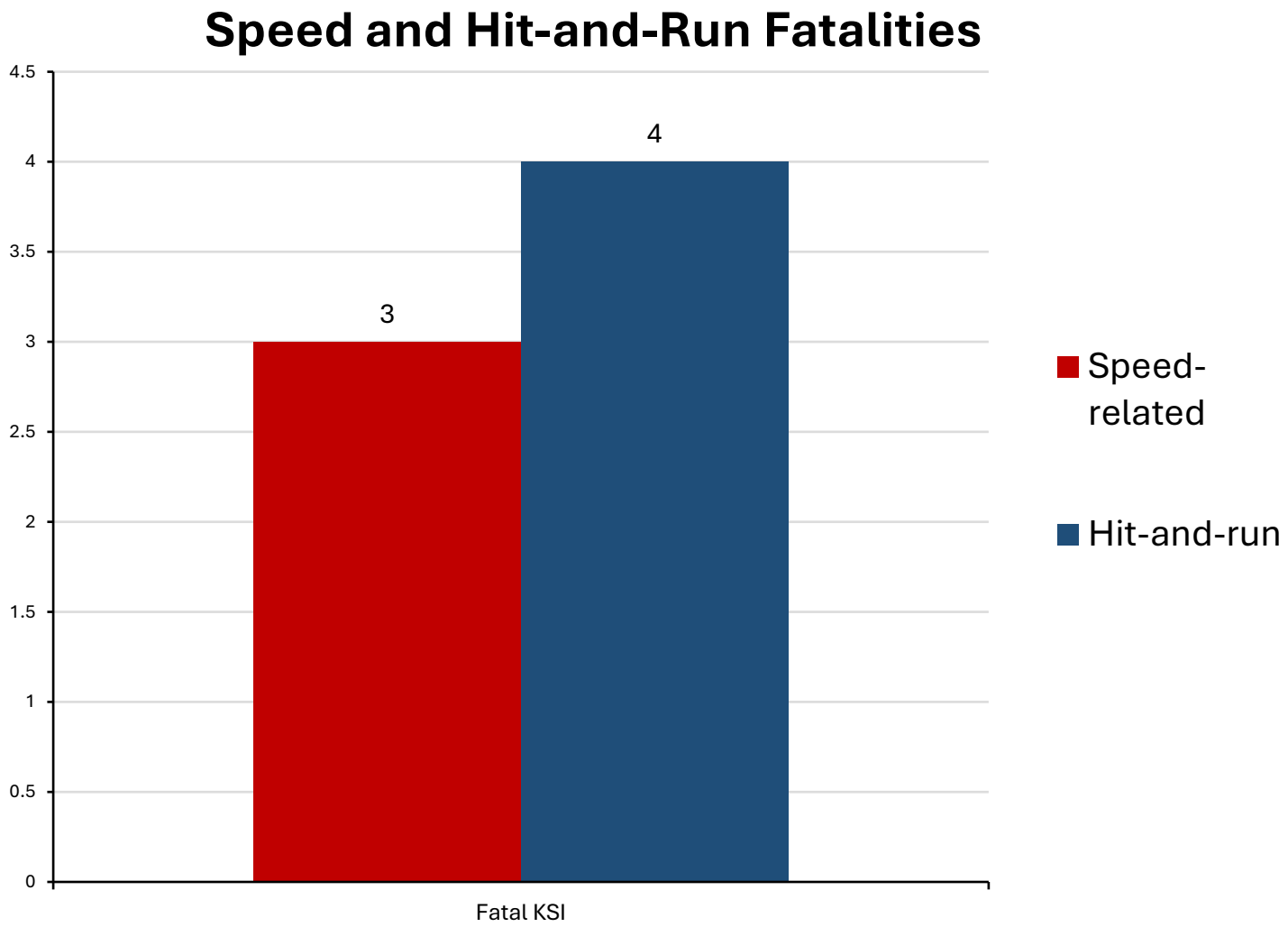
July 3, 2022: Route 7, Fairfax County

Pedestrian | Darkness, road not lighted, rain
Wet pavement; traffic signal recorded

Jan. 31, 2025: Route 7, Falls Church

Bicycle | Darkness, road lighted, rain, wet pavement
Distraction and hit-and-run recorded

Route 7 Crashes by Vehicle Behavior



27%

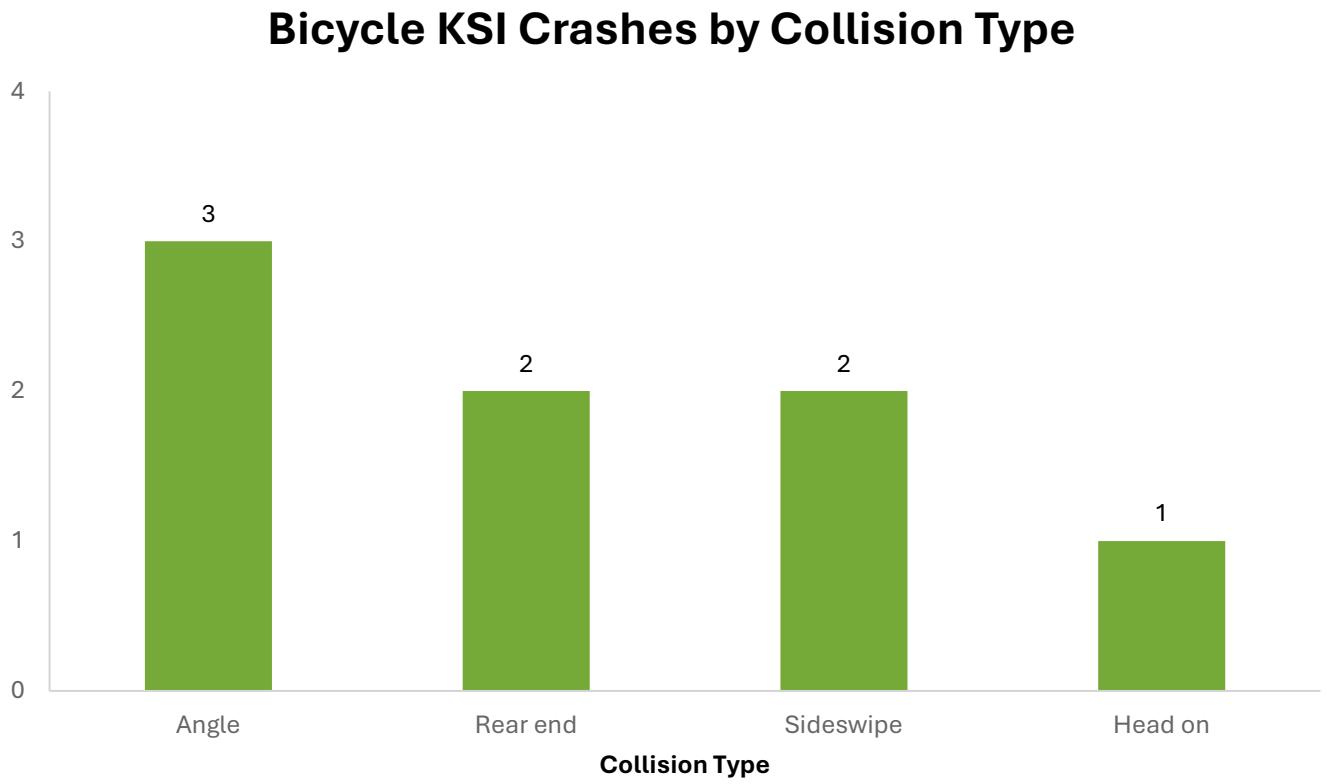
speed-related fatalities

36%

hit-and-run fatalities

Bicycle KSI Crashes Across the Route 7 Study Area

Eight of the study's 59 fatal and serious-injury crashes involved bicycles, representing approximately 14% of the dataset. All eight were serious-injury crashes; no bicycle-coded fatal crashes were recorded.



Three of eight were angle-coded (38%).

8/59

Recorded crashes were bicycle related

0/11

Recorded fatalities were bicycle related

63%

Recorded bike KSIs occurred in Falls Church

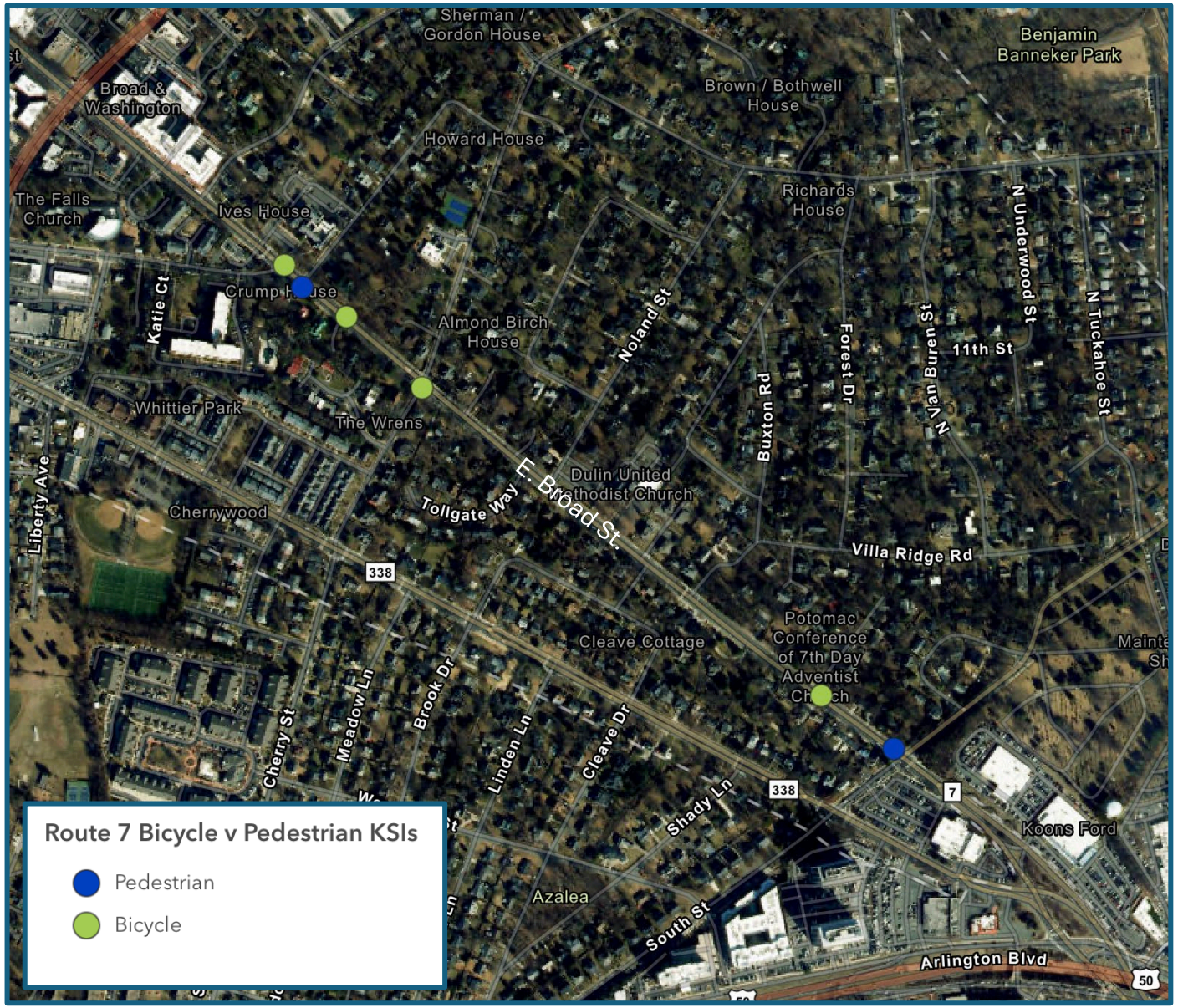
Bicycle KSI Crashes Cluster Area: East Broad Street

50% of recorded bicycle KSI crashes along Route 7 occurred in this segment of East Broad St.

Falls Church accounts for 5 of 8 bicycle crashes (63%).

The four green points shown on this East Broad Street segment represent half of the eight bicycle KSI crashes in the full study dataset. All four were serious-injury crashes, occurring in four separate years: 2018, 2019, 2021 and 2022.

Three crash locations appear close together toward the northwestern portion of the map, with a fourth farther southeast. This geographic concentration supports reviewing the segment as a connected bicycle route.



Road User Behavior

Alcohol Involvement

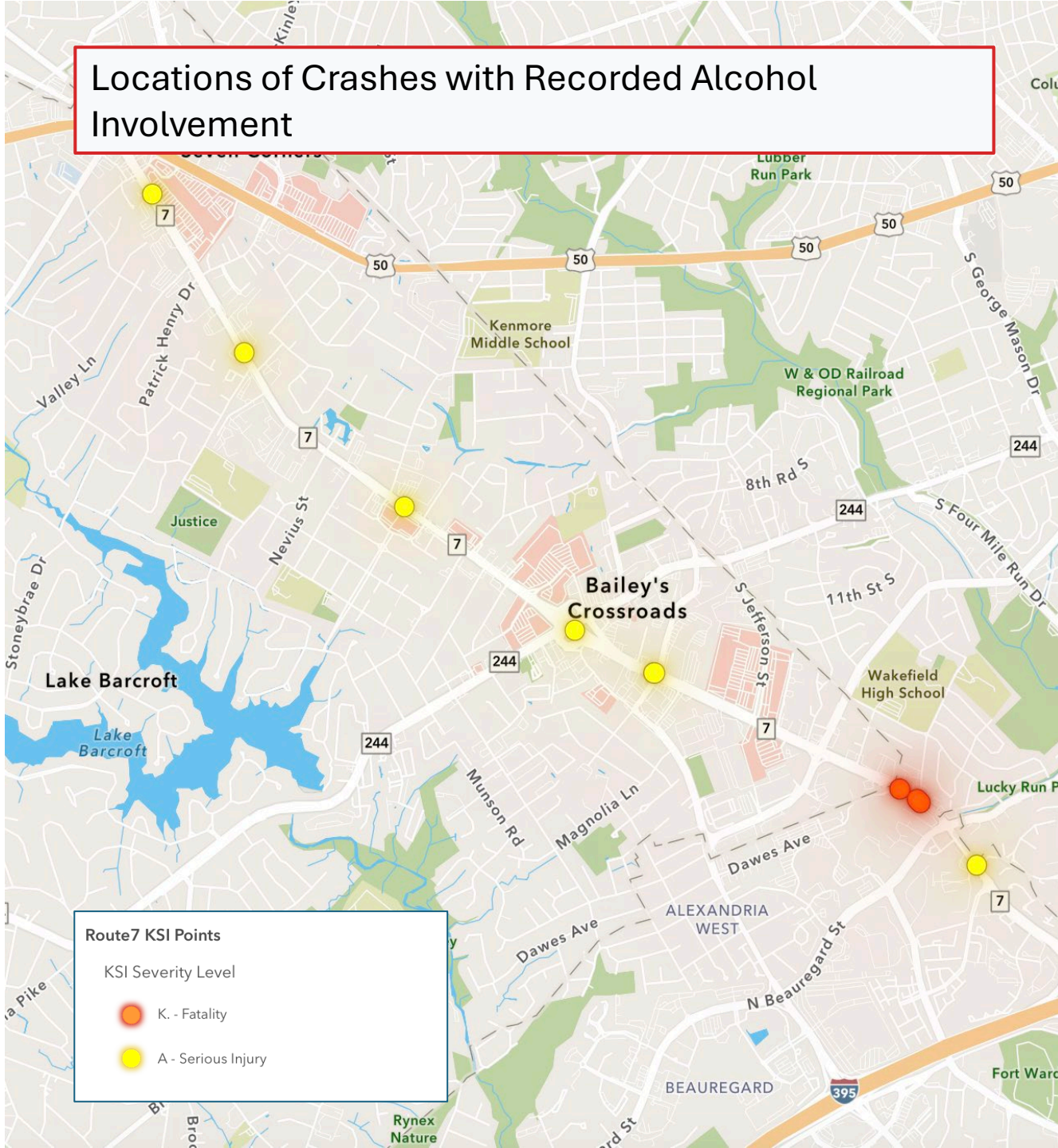
Alcohol involvement is recorded at the crash level. This export does not identify whether the driver or pedestrian had consumed alcohol and does not establish impairment or fault.

Alcohol related crashes are largely surrounding retail and restaurant heavy areas.

Alcohol involvement was recorded in **16 crashes:** 10 serious-injury crashes and 6 fatal crashes.

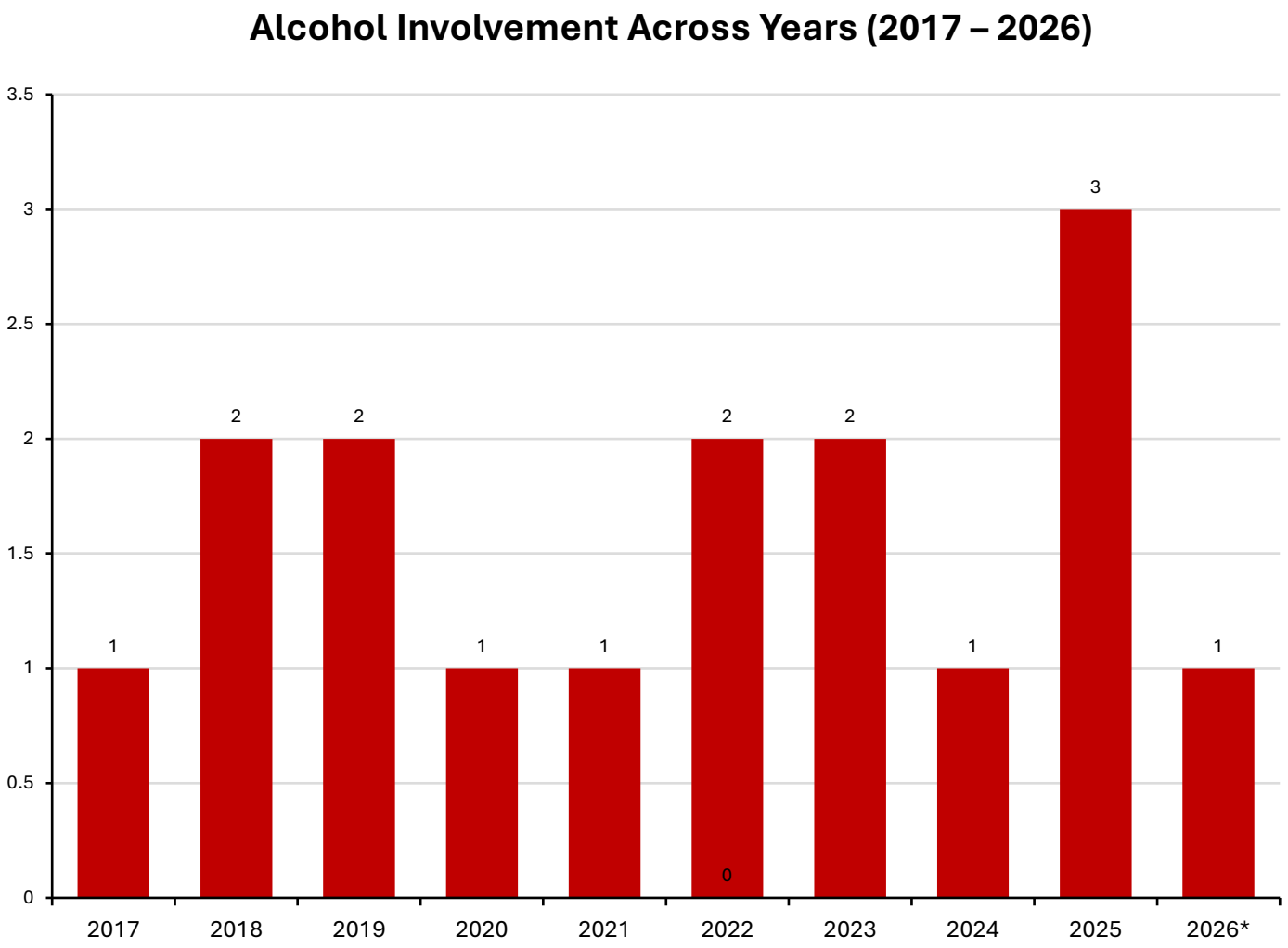
These represent **27%** of the study's 59 crashes and 55% of its 11 fatal crashes.

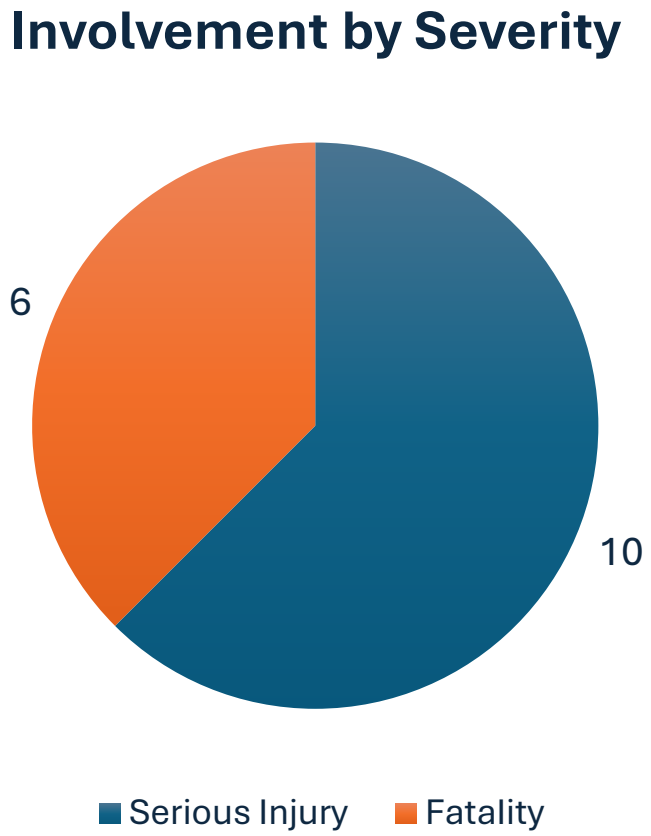
50% of alcohol related crashes occur within 0.5 miles of Bailey's Crossroads.



Road User Behavior

Alcohol Involvement





Near Miss Reports on Route 7



Route 7 Near Miss Reports and KSI Crash Overlay

Study area: 7 Corners to Beauregard

Near-miss data captures places where people experienced or observed a dangerous traffic situation that could have resulted in a crash, even if no collision was officially reported. This makes it especially useful because crash records only show incidents that already happened and were documented, while near misses can reveal recurring risks before they result in serious injury or death.

For this analysis, the near-miss data covers the area between Seven Corners and Beauregard, within roughly a 0.5-mile radius of the corridor. The Route 7 KSI crash layer provides the documented crash history, while the near-miss layer helps show where residents are still experiencing or observing dangerous conditions.

Near miss reports, Jan. 2025-June 2026; TREDS KSI crashes, 2021-2026 YTD

The Near Miss and Dangerous Locations Reporting and Dashboard application was developed by Northern Virginia Families for Safe Streets and launched in June 2021. The dashboard visualizes crowdsourced near-miss and dangerous-location reports submitted by people who use Northern Virginia streets, roads, sidewalks, and trails.

Users can explore individual reports, view mapped locations, and compare community-reported concerns with TREDS crash data from the Virginia Department of Motor Vehicles. The dashboard can help users identify clusters of reported danger, recurring issues, and possible relationships between near misses and actual crash locations.

The data is publicly available at no cost. It can be used by advocates, transportation agencies, elected officials, and local partners to better understand high-risk locations and prioritize safety improvements. For more detail, users can access the public dashboard and reporting tool here:

Dashboard: http://bit.ly/3kZWc5b
Report form/data tool: http://bit.ly/3JrXXSP

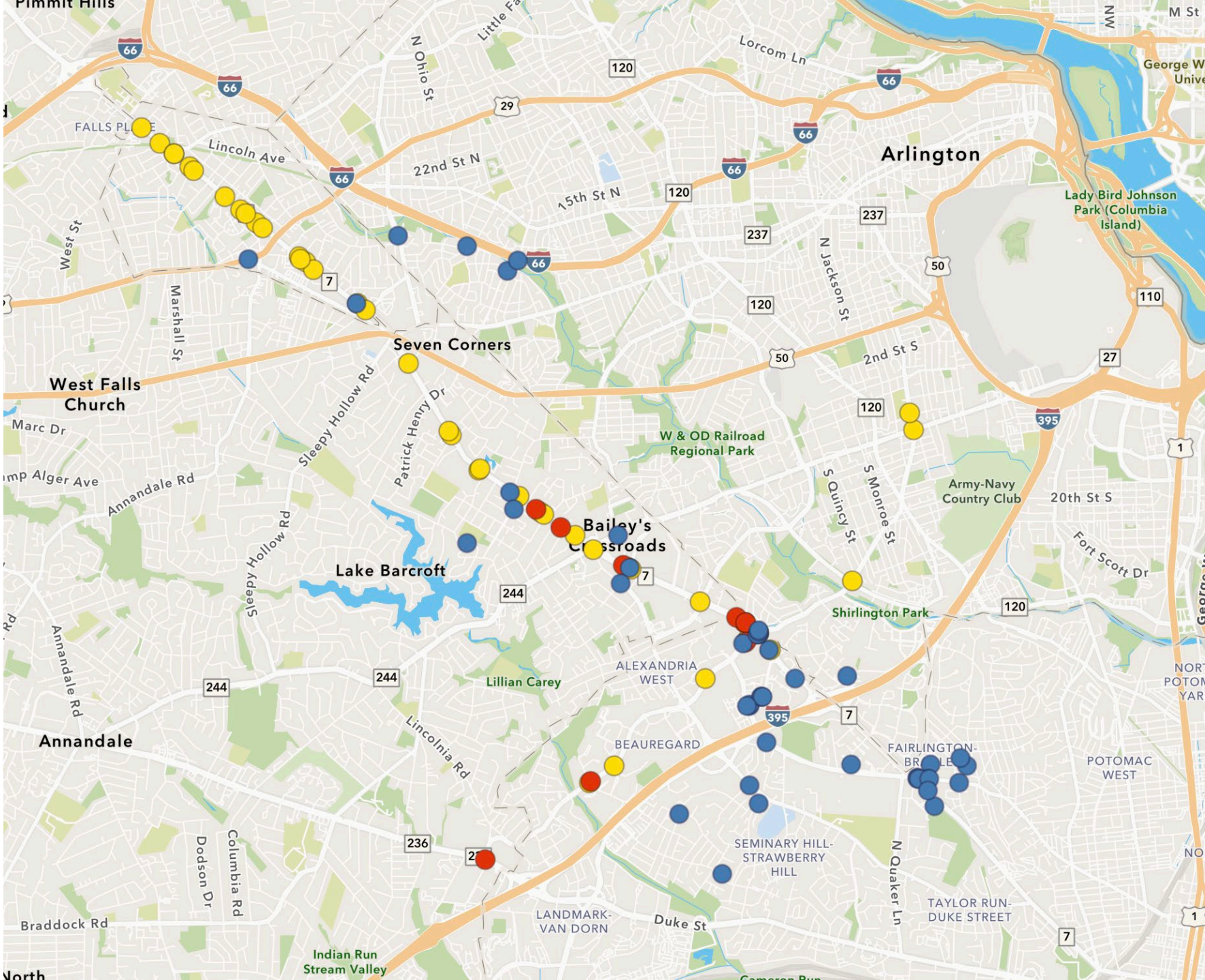
Near Miss Reports with KSI Reports

Near Miss Report Points

Route7 KSI Points

KSI Severity Level

- K. - Fatality
- A - Serious Injury

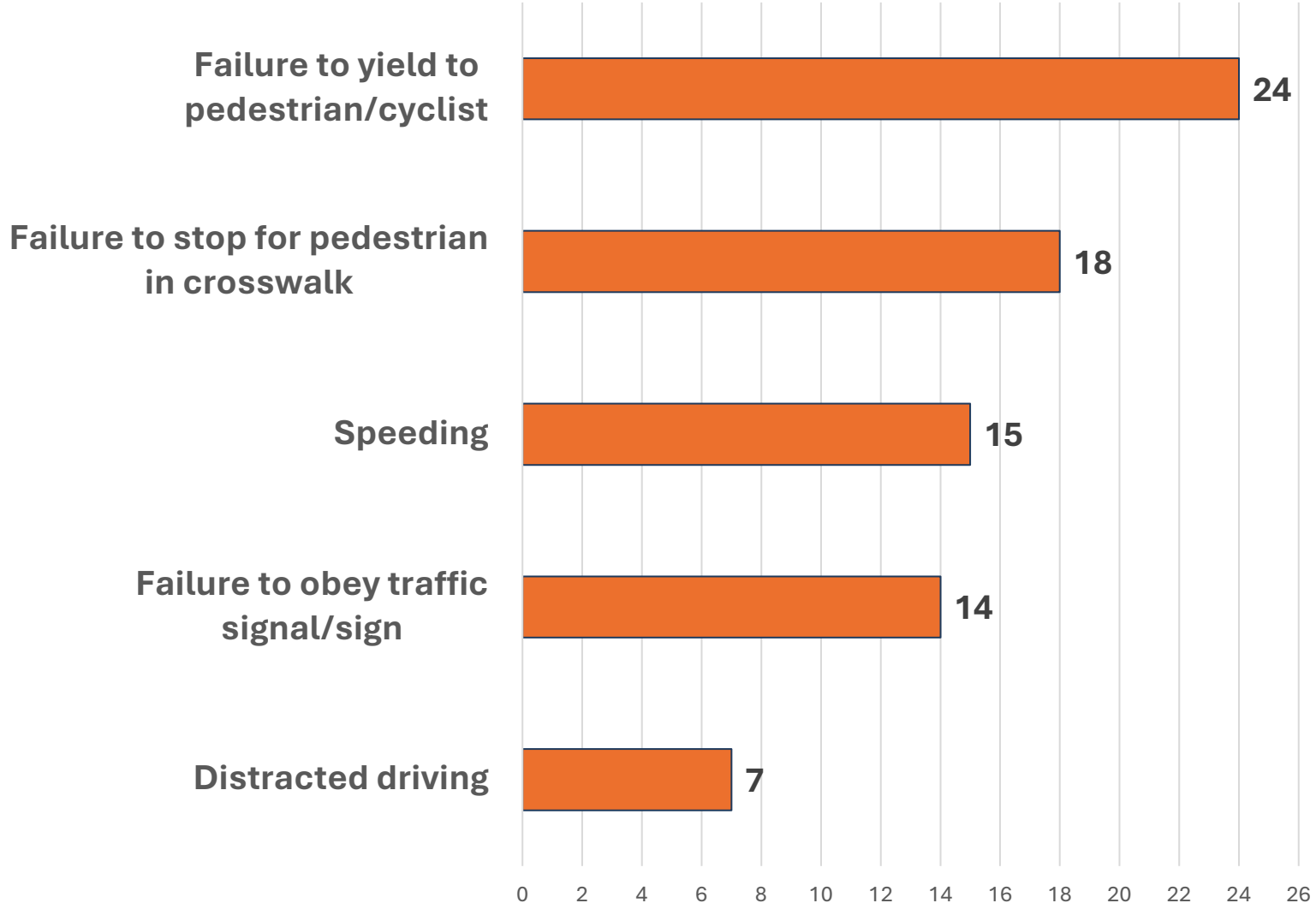


44

near-miss reports in the 7 Corners to Beauregard area

NoVA Families for Safe Streets

Near Miss Report User Behavior

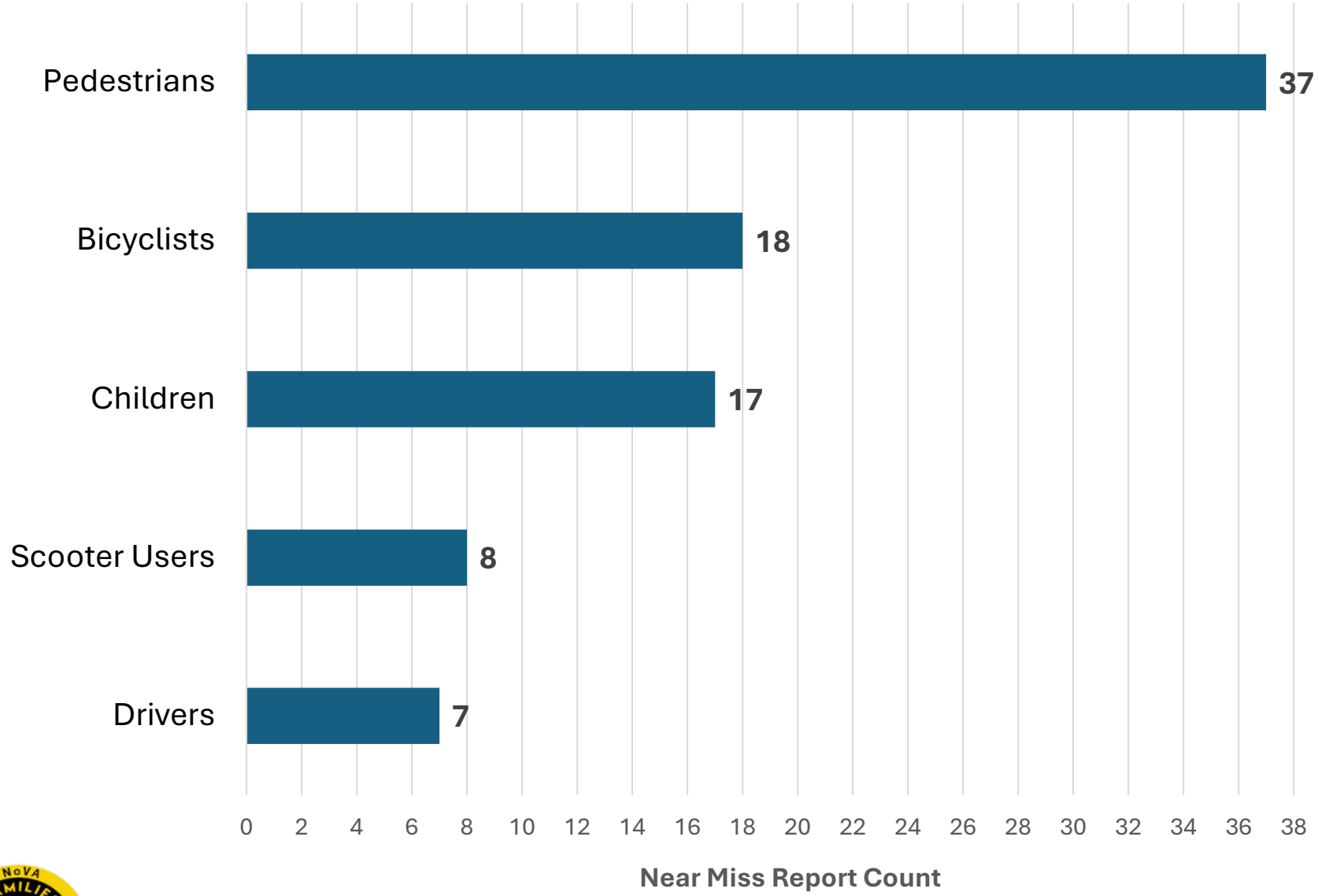


Main Behavior Pattern

Driver compliance at crossings dominates the reports. Failure to yield appears in 24 of 44 reports, followed by failure to stop in a crosswalk (18), speeding (15), and signal or sign violations (14). Categories can overlap.

Reports may include more than one behavior.

Road Users Identified as at Risk in Community Reports



27 of 44

Indicated children were present during the incident or typically present at the reported location.

37 of 44

Reports describe a recurring incident.

Road-user categories allow multiple selections. Seventeen reports explicitly identified children as at risk; a separate question identified children's actual or typical presence in 27 reports. These counts measure different things and should not be added together.

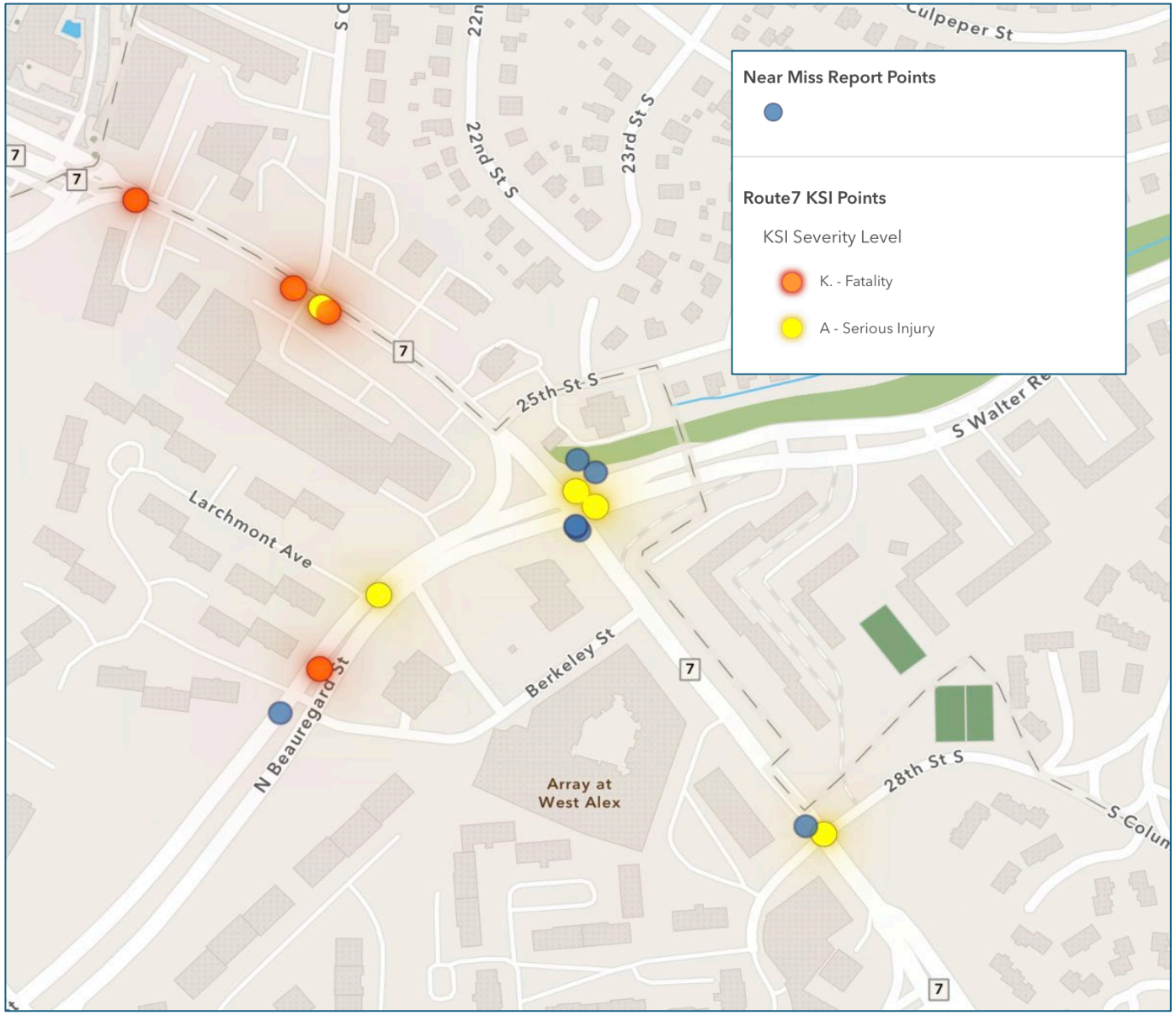
Route 7 Priority Near Miss Hot Spot Locations

Hotspot	Near-miss reports	Area cue	Priority reason
Cluster 1	8	W. Braddock Road / Kenwood–Scroggins	Largest linked concentration
Cluster 2	7	King Street / N. Beauregard / West Alex	Repeated crossing and turning conflicts
Cluster 3	6	King Street / Sanger–Beauregard	Dense cluster near transit and housing
Cluster 4	3	W. Braddock Road / Scroggins–Valley	Repeated reports in one corridor segment
Cluster 5	2	Seven Corners / west Route 7	Paired reports near documented KSI history
Cluster 6	2	Culmore / Glen Forest	Paired reports near Route 7 retail and crossings

Near Miss Report
Public Testimonies along Route 7

The following testimonies are direct quotes received through **NoVA Families for Safe Street's Near Miss Report Survey,** regarding Near Misses along Route 7.

Cluster Location: **King Street at S. Walter Reed Drive and N. Beauregard Street**



Public Comment from Near Miss Report

"I was hit by a DASH bus that turned into the crosswalk while I had the signal to cross."
September 26, 2025

"Driver making right on red without looking almost hit me as I rode my bike, with the light, in the crosswalk."
September 10, 2025

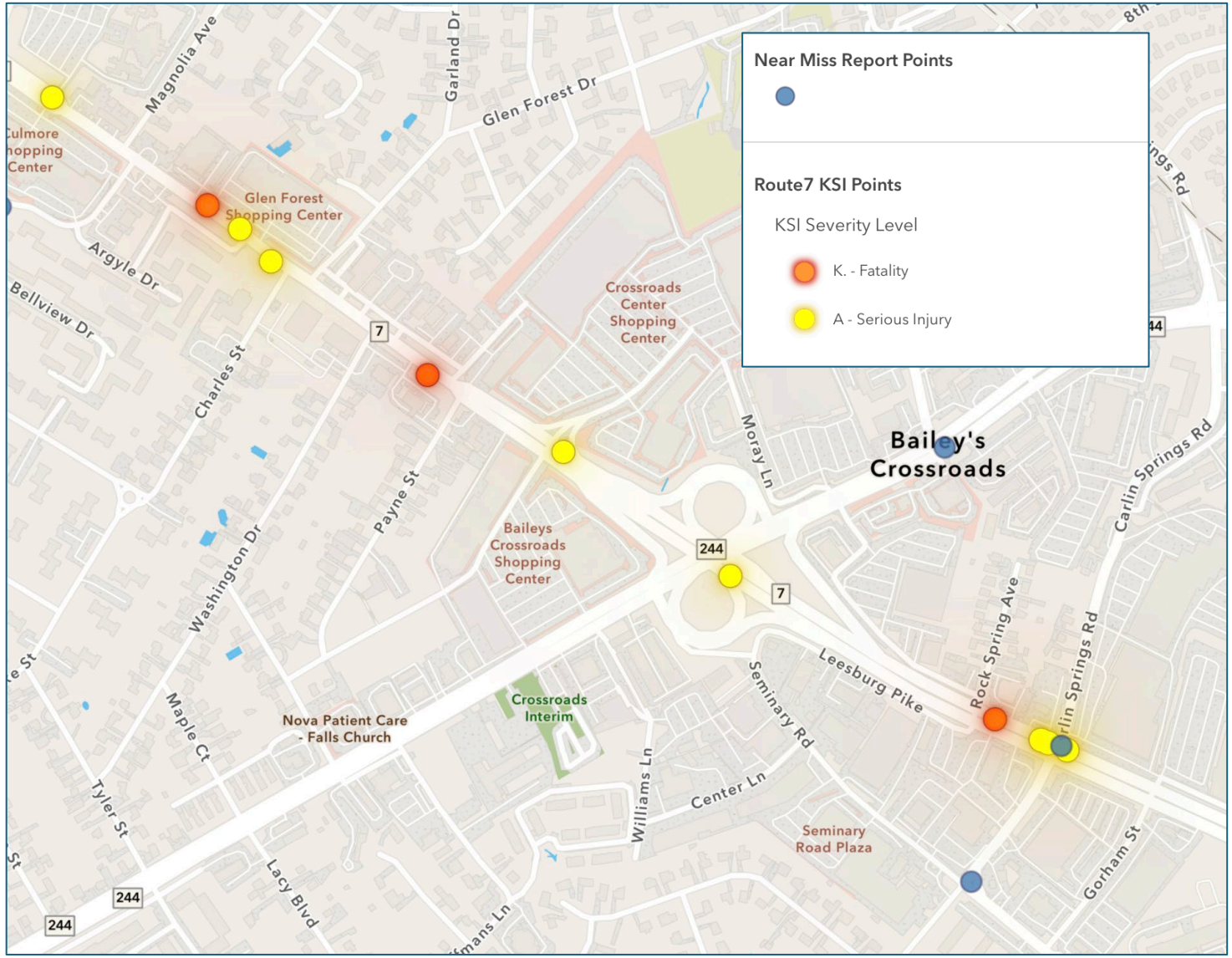
RELATED NEWS

Cyclist struck by Metro bus on King Street in Alexandria's West End

ALXnow, August 12, 2024

alxnow.com/2024/08/12/cyclist-struck-by-metro-bus-on-king-street-in-alexandrias-west-end/

Cluster Location: **Leesburg Pike through Culmore and Bailey's Crossroads**



Public Comment from Near Miss Report

"Cars speed along this road behind the Culmore Plaza and ignore the crosswalks. I witnessed a pregnant woman with her child who was almost hit by a car while she was in the middle of the crosswalk. She had to run out of the way to avoid being hit."
September 4, 2025

"Driver turning right didn't yield to pedestrians or cyclists. Happens frequently here."
April 26, 2026

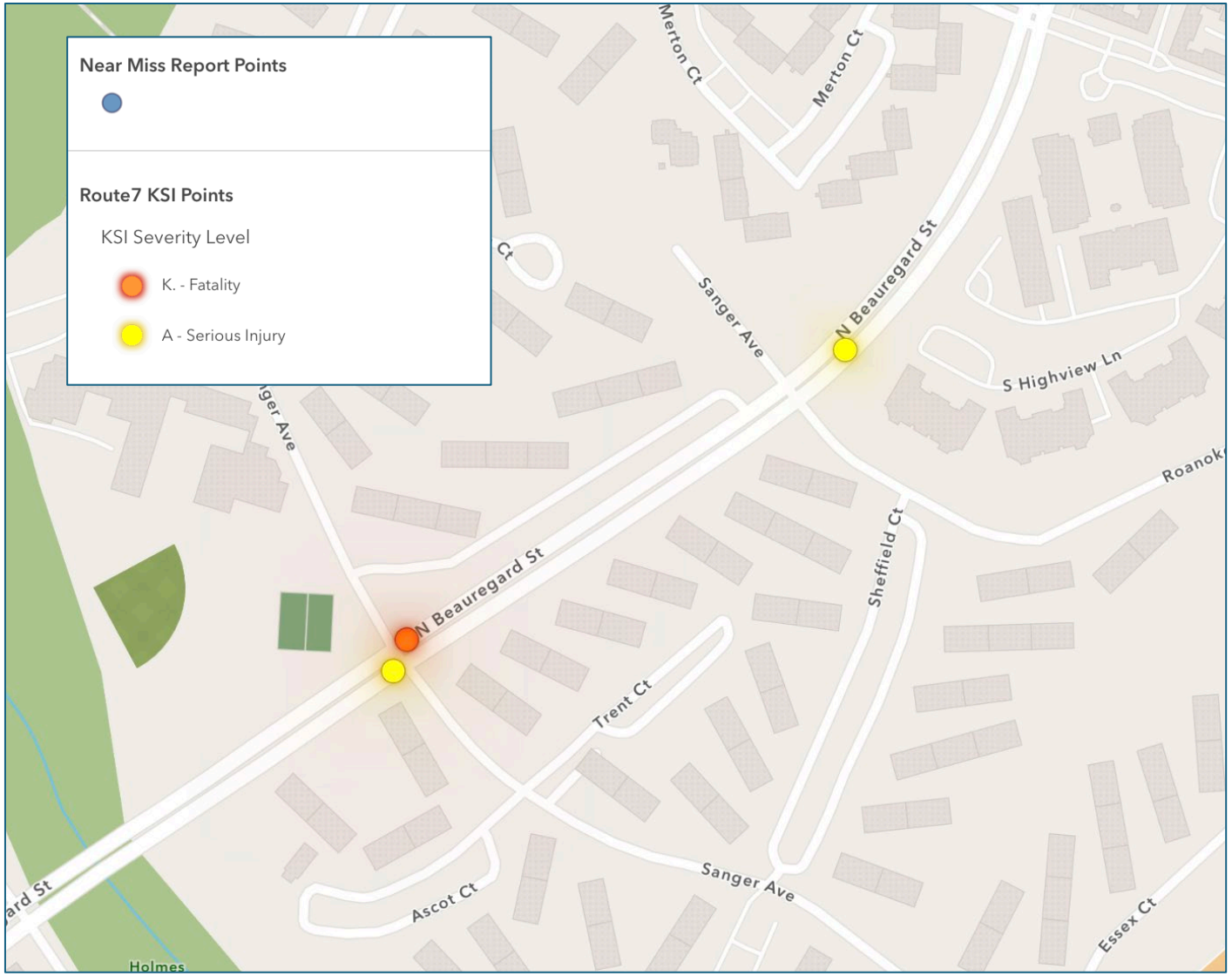
RELATED NEWS

Pedestrian Killed in Hit-and-Run on Route 7

FFXnow, October 27, 2022

ffxnow.com/2022/10/27/pedestrian-killed-in-hit-and-run-on-route-7-in-alexandria/

Cluster Location: **N. Beauregard Street at Sanger Avenue**



Public Comment from Near Miss Report

"One dude was speeding and he was in his phone and we had to jump out his way."
December 2, 2025

"A red pickup truck... almost hit a child crossing... The truck braked within 18 inches of hitting the child."
December 12, 2025

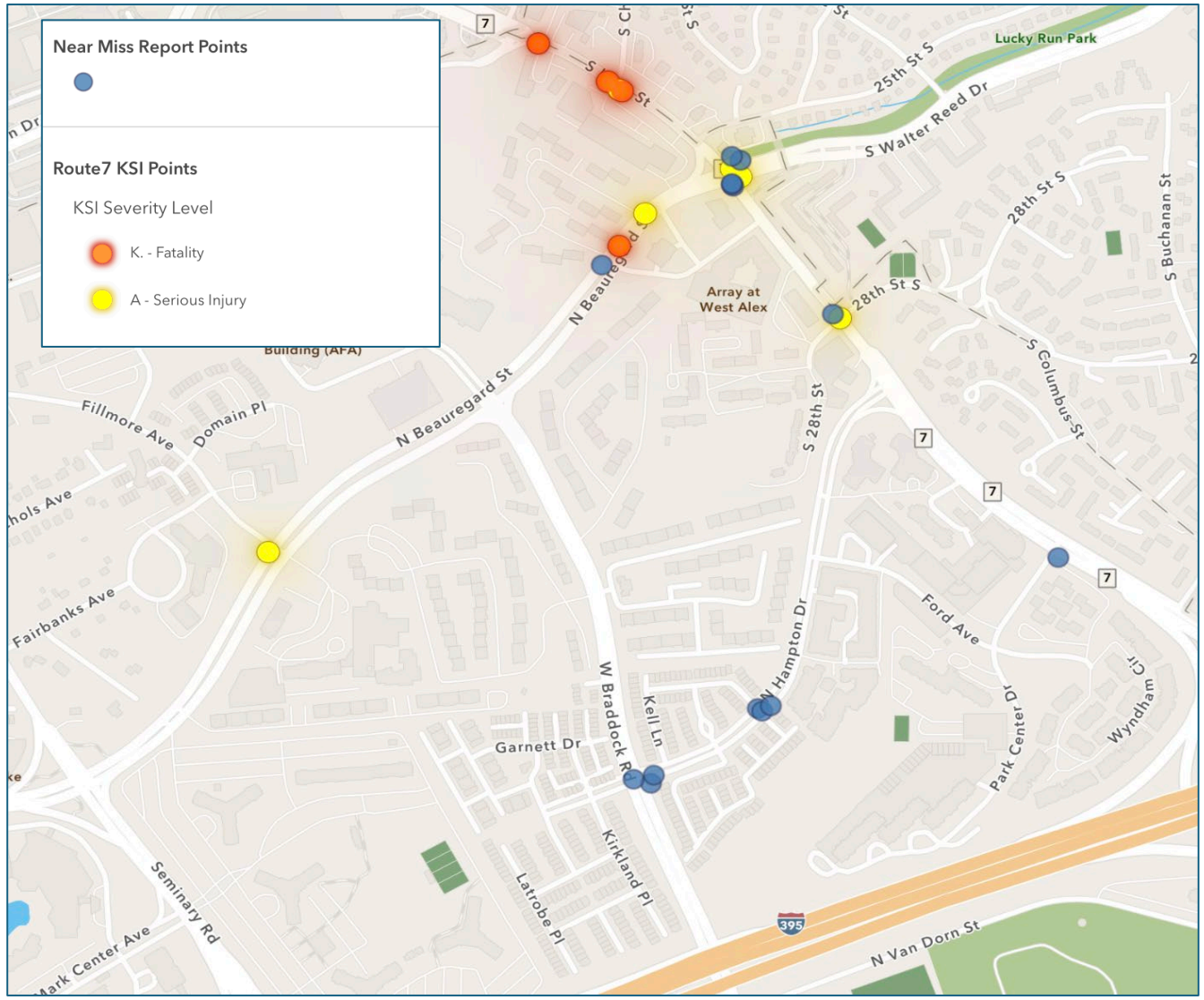
RELATED NEWS

Teen on Scooter Dies After Crash at Beauregard and Sanger

Patch, September 2022

patch.com/virginia/westendalexandria/teen-scooter-injured-alexandria-crash-police

Cluster Location: **King Street and N. Beauregard corridor from Dawes Avenue to W. Braddock Road**



Public Comment from Near Miss Report

"Drivers constantly speed through this intersection and run the red lights."
April 2, 2026

"A car approaching a red light did not slow down, and went full speed to make a right on red. A man on a scooter was nearly hit as he was passing through the crosswalk."
March 27, 2026

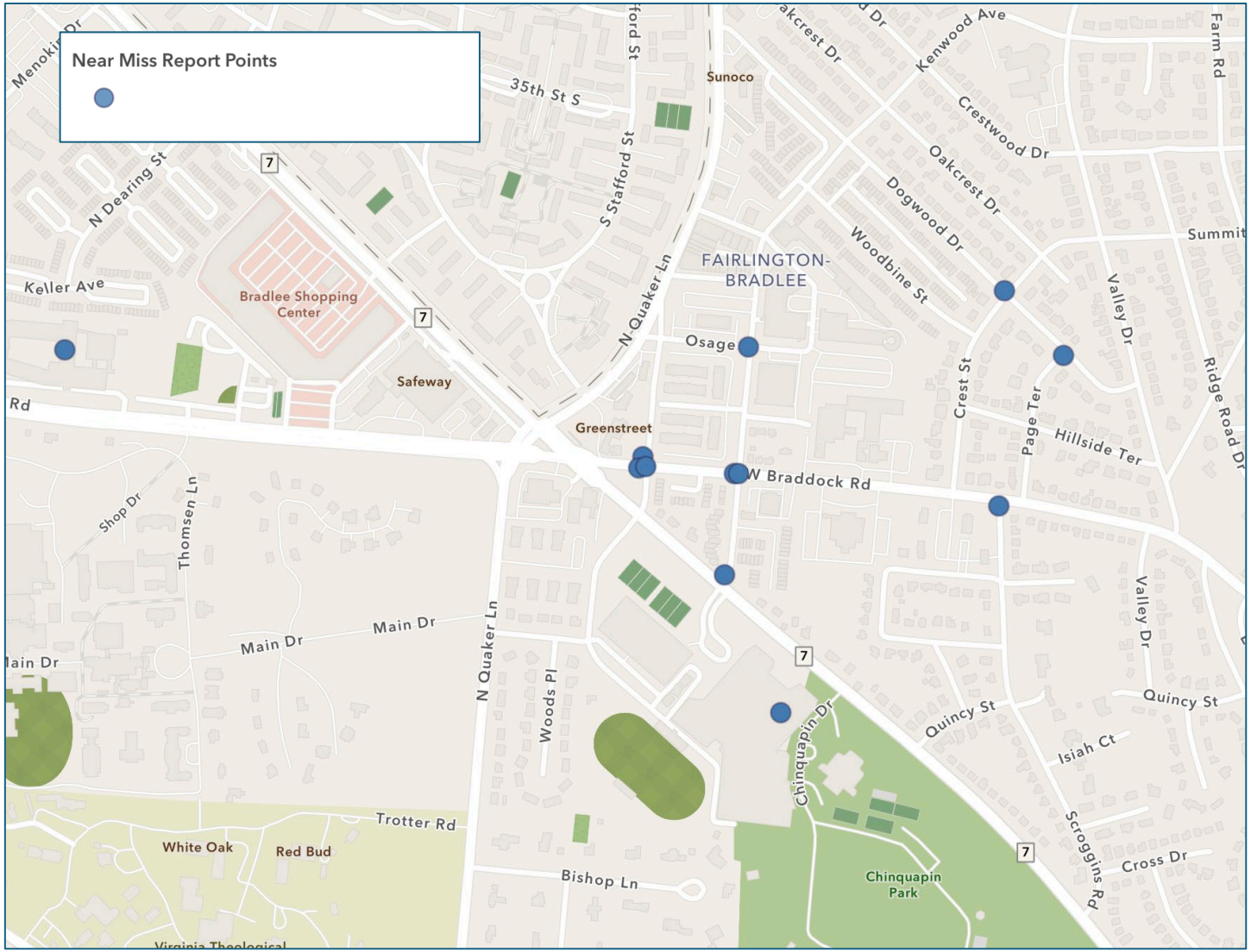
RELATED NEWS

Pedestrian dies after King Street Crash Near Dawes Avenue

ALXnow, April 17, 2025

alxnow.com/2025/04/17/just-in-pedestrian-succumbs-to-injuries-after-wednesday-night-crash-on-king-street/

W. Braddock Road at Kenwood Avenue, Radford Street and Scroggins Road



Public Comment from Near Miss Report

"Drivers never stop. I've seen them whiz past kids in the crosswalk... I've had to go out into the road as an adult to stop traffic for kids trying to cross."
April 29, 2025

"Drivers constantly run the stop sign at Kenwood and Osage in all directions... Someone will get killed with this callous behavior, and it's made easier by the wide lanes and narrow sidewalks."
September 22, 2025

RELATED NEWS

Children Were Present in Half of 241 Near-Miss Reports Filed in Alexandria

Alexandria Brief, September 16, 2026
https://www.alexandriabrief.com/children-were-present-in-half-of-241-near-miss-reports-filed-in-alexandria/

Overall Findings and Recommendations for Route 7



Immediate Findings from the Route 7 Analysis

Pedestrians along Route 7 are moving between public resources and destinations along a high-volume corridor with nighttime, crossing, and vehicle-behavior risk layered on top.

Trend	Route 7 Finding
Nighttime fatality pattern	10 of 11 fatal crashes occurred at night or in darkness conditions.
Limited Crossing-Access	33 of 59 KSI crashes were more than 1,000 ft from a mapped crossing.
Transit and Retail exposure	37 of 59 KSI crashes were within 500 ft of a bus stop; 37 were within 1,000 ft of retail.
Behavior hot spots	Excessive speeding, hard braking, and phone distraction concentrate around Bailey's, Skyline, and Seven Corners, all areas where there are clusters of KSIs.

Key Route 7 Bus Stop Findings

Finding	Route 7 Data Point	Interpretation
KSI crashes near bus stops	37 of 59 within 500 ft	Most severe crashes occur close to transit access points.
Fatal crashes near bus stops	7 of 11 within 500 ft	Fatal crash locations often overlap with areas where people may be walking to or from transit.
Broader bus stop influence	47 of 59 within 1,000 ft	The transit-access pattern extends beyond the stop itself.
Nighttime bus stop risk	18 nighttime/darkness KSI within 500 ft	Bus stop access should be reviewed together with lighting and nighttime visibility.
Immediate bus stop-area risk	25 KSI within 200 ft	The area closest to bus stops has the highest crash count.

Recommended Field Review Priorities

Field review should focus on locations where bus access overlaps with nighttime crashes, crossing gaps, retail activity, and complex vehicle movements.

Priority Area	Why It Should Be Reviewed	What to Check in the Field
Bailey's Crossroads / Skyline	Repeated KSI activity near dense retail, apartments, and bus access.	Stop placement, nearest crossing distance, lighting, routes people actually use between homes, shops, bus stops and crossings, driveway conflicts.
Beauregard / King St / Glen Forest	Strong nighttime fatal hotspot near bus access and public-facing destinations.	Night visibility, crossing gaps, signal access, stops serving opposite travel directions and the walking connection between them, pedestrian crossing behavior.
Seven Corners	Complex roadway environment with high traffic volumes and multiple access points.	Turning conflicts, signal timing, pedestrian refuge, crossing convenience.
Tysons / Dranesville west end	Nighttime crashes include longer crossing distances and more hit-and-run records.	Lighting gaps, high-speed conditions, crossing spacing, sidewalk continuity.

Vehicle-Behavior Layers Point to the Same Activity Centers on Route 7

Behavior Layer	Highest area	Top cell	Elevated cells
Excessive speeding	Skyline / Lower Bailey's	19.1%	32
Hard braking	Bailey's Crossroads	1.3%	22
Phone distraction	Skyline / Lower Bailey's	12.8%	11

The behavior layers do not identify crash causation. Rather, they show where consistent dangerous driving behaviors are most visible near the same corridor locations where pedestrian activity is concentrated.

Recommended Next Steps

Recommendation	Route 7 Finding	Purpose
Review bus stop pairs near KSI clusters	37 KSI within 500 ft of a bus stop	Determine whether riders must cross Route 7 without a nearby controlled crossing.
Improve crossings near high-risk stops	9 of 11 fatal crashes within 1,000 ft of a bus stop	Reduce unsafe crossing behavior around transit access points.
Audit lighting around stops and crossing paths	18 nighttime/darkness KSI within 500 ft of a bus stop	Improve visibility for pedestrians walking to, waiting at, or crossing near stops.
Evaluate stop relocation where crossings are too far	Many KSI points are near stops but not near marked crossings	Align bus stops with safer pedestrian crossing locations.
Prioritize Bailey's Crossroads / Skyline and Beauregard / King St	These areas show repeated nighttime/fatal crash patterns	Focus limited safety review resources on the strongest crash clusters first.

CONCLUSION

The Route 7 corridor shows a concentrated and consistent pedestrian and bicyclist safety problem. The **59 KSI crashes recorded between January 2017 and June 2026**, including **11 fatalities**, cluster in locations shaped by nighttime visibility, difficult crossing distances, transit access, retail activity, and repeated pedestrian movement across a high-volume roadway.

Effective intervention requires a coordinated, multi-agency response focused on lighting, controlled crossing access, bus stop placement, pedestrian signal timing, and high-conflict commercial areas such as **Bailey's Crossroads / Skyline** and **Beauregard / King St / Glen Forest**. In addition, TREDS crash data should be paired with emerging roadway behavior data, including measures of speeding, hard braking, and distracted driving, to better identify where severe crash risk is building before another fatal crash occurs.

Field inspections at the highest-priority Route 7 crash locations should begin immediately.

Prioritize field review of the locations identified in this analysis.

The corridor's most vulnerable communities depend on decisive action.

Data: VDOT TREDS · Analysis period: Feb 2017–June 2026