

DRAFT

RESOLUTION NO. R26-48

A RESOLUTION OF THE MAYOR AND CITY COUNCIL OF THE CITY OF COLUMBUS, NEBRASKA, ADOPTING THE SAFE STREETS AND ROADS FOR ALL COMPREHENSIVE SAFETY ACTION PLAN (CSAP) TO GUIDE SPECIFIC STEPS TO ELIMINATE ALL FATALITIES AND SERIOUS INJURIES BY 2050 AND FURTHER ADOPT THE CSAP-CREATED COUNTERMEASURES TOOLBOX TO GUIDE SAFETY MEASURES TO APPLY TO TRANSPORTATION PROJECTS.

WHEREAS, the City of Columbus received funding through the federal Safe Streets and Roads for All (SS4A) program and is completing a Comprehensive Safety Action Plan (CSAP) for the city's transportation network; adopting a CSAP is a prerequisite for seeding additional federal funding through the SS4A program; and the CSAP developed by the City of Columbus is consistent with the U.S. Department of Transportation's Safe System Approach, which creates a positive and proactive roadway safety culture; and

WHEREAS, between 2017 and 2023, there were 63 traffic-related fatality and serious injury crashes in the City of Columbus, and traffic crashes are the second leading cause of deaths in the United States; and

WHEREAS, the health, safety, and wellbeing of all persons living and traveling within the City of Columbus are our utmost priority, and no one should be seriously injured or killed while traveling in the region; and

WHEREAS, the City of Columbus recognizes that transportation safety is a shared responsibility with community leaders and members and requires a holistic approach to eliminate fatalities and serious injuries city-wide; and

WHEREAS, improving safety for all roadway users requires coordinated projects, countermeasure strategies, recommendations, prioritized projects and stakeholders and community support of safety objectives and action plans that are guided by community input; and

WHEREAS, City of Columbus government leaders and their residents have participated in the development of the CSAP to inform the resulting projects and priorities; and

WHEREAS, the City of Columbus intends to advance the priority projects and initiatives recommended in the CSAP to reduce and ultimately eliminate traffic-related deaths and serious injuries.

NOW, THEREFORE BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF CITY OF COLUMBUS NEBRASKA, that the City of Columbus resolves to adopt the Safe Streets and Roads for All Comprehensive Safety Action Plan (CSAP) to guide

specific steps to eliminate all fatalities and serious injuries by 2050 and further adopt the CSAP-created countermeasure toolbox to guide safety measures to apply to transportation projects. The City of Columbus resolves to work within their means to prioritize the safety projects identified in the CSAP, and consider how to best use the city's funding capacity to prioritize CSAP projects. The City of Columbus further resolves to emphasize the importance of behavior change and education in building a proactive roadway safety culture, a copy of CSAP and City Council vote of which is attached hereto and incorporated herein by reference.

This resolution shall repeal all resolutions or portions thereof in conflict herewith.

INTRODUCED BY COUNCIL MEMBER _____

PASSED AND ADOPTED THIS ____ DAY OF _____, 2026.

Voting was Ayes: _____ Nays: _____ Absent: _____

MAYOR

ATTEST:

CITY CLERK

APPROVED AS TO FORM:

CITY ATTORNEY



Accountability - Dedication
Honesty - Integrity - Respect

MEMORANDUM

DATE: March 11, 2026
TO: Tara Vasicek, City Administrator
FROM: Richard J. Bogus, City Engineer
RE: Safe Streets and Roads for All, Comprehensive Safety Action Plan

RECOMMENDATION:

I recommend approval of the Resolution for the Safe Streets and Roads for All (SS4A), Comprehensive Safety Action Plan (CSAP), to guide specific steps to eliminate all fatalities and serious injuries by 2050 and further adopt the CSAP-created countermeasures toolbox to guide safety measures to apply to transportation projects.

DISCUSSION:

The SS4A, CSAP is a compilation of months of data collection, public input, and evaluation of the citywide high-priority network, high-risk network, and high-injury network. Between 2017 and 2023 there were 63 traffic related fatality and serious injury in the City. The City recognizes that transportation safety is a shared responsibility with community leaders and members and requires a holistic approach to eliminate fatalities and serious injury city wide. Improving safety for all roadway users requires coordinated projects, countermeasure strategies, recommendations, prioritized projects and stakeholders and community support of safety objectives and action plans that are guided by community input.

The draft final CSAP was presented to the Committee of the Whole on December 15, 2025.

FISCAL IMPACT:

The approval is a prerequisite for the City to seek federal funding through the SS4A Implementation grants and Better Utilize Investments to Leverage Development (BUILD) grants.

ALTERNATIVE:

Do not approve.

SIGNATURE:

By: Richard J. Bogus

Approved By: [Signature]



SAFE STREETS FOR ALL

CITY OF COLUMBUS

Comprehensive Safety Action Plan

Columbus, Nebraska



Terms & Definition Glossary

Safety Analysis & Networks

- High-Injury Network (HIN): Roadway segments within city limits with the highest concentration of fatal and serious-injury crashes based on historical data.
- High-Risk Network (HRN): Roadway segments that share risk factors with severe-crash locations identified through systemic analysis, even if the site itself has limited severe-crash history.
- High Priority Network (HPN): The final set of corridors prioritized for safety investment that integrates HIN, HRN, and local context.
- Systemic Safety Approach: A proactive method that applies low-cost treatments across multiple sites with shared risk factors rather than relying only on site-specific crash history.

Crash Severity & Reporting

- KSI (Killed or Seriously Injured): Crashes resulting in a fatality or a suspected serious injury (K + A).
- FSI (Fatal and Serious Injury): Same as KSI in this report.
- Suspected Serious Injury (A): An injury that appears to be incapacitating or life-altering at the scene (e.g., loss of limb, severe fractures, or major internal injury). Because crash reports are based on what the officer can observe, they may not capture the final medical outcome, and serious injuries may be under-reported.
- Severe Crashes: Fatal and serious-injury crashes (FSI/KSI).
- All Crashes: All severities combined, including fatal, serious injury, minor injury, possible injury, and property damage only.
- VRU (Vulnerable Road User): Includes pedestrians, bicyclists, and other non-motorized users who are at higher risk of severe injury or death in a crash.
- SSA (Safe System Approach): A proactive framework emphasizing shared responsibility among road users, designers, and policymakers to eliminate fatal and serious injuries through systemwide design, speed management, and equitable safety strategies.

Treatments & Design Tools



- RCI (Reduced Conflict Intersection): Also called RCUT or J-turn; design that eliminates direct left and through movements from side streets by requiring a right turn followed by a U-turn to reduce severe angle crashes.
- RCUT (Reduced Conflict U-Turn): See RCI.
- J-Turn: See RCI.
- RIRO (Right-In Right-Out): Access control that allows only right turns into and out of a driveway or side street, often paired with a median for safety.
- RRFB (Rectangular Rapid Flashing Beacon): Pedestrian-activated flashing lights mounted below crosswalk signs that alert drivers to pedestrians waiting to cross.
- PHB (Pedestrian Hybrid Beacon): A mid-block traffic control device that provides a red signal to drivers when activated by pedestrians, allowing safe crossing without a full signalized intersection.
- LPI (Leading Pedestrian Interval): Signal timing that gives pedestrians a 3–7 second head start before parallel vehicle traffic gets a green, improving visibility and reducing conflicts.
- Median Refuge Island: Raised area in the center of a two-way street that lets pedestrians cross one direction of traffic at a time.
- High-Visibility Crosswalk: Crosswalk with bold ladder or continental markings to enhance visibility.
- Access Management: Strategy that reduces conflict points by spacing or consolidating driveways and intersections.

Funding & Programming

- CIP (Capital Improvement Program): The City's multi-year plan and budget for capital projects and major equipment.
- STIP (Statewide Transportation Improvement Program): Nebraska DOT's four-year program of federally supported and state-funded projects.
- SS4A (Safe Streets and Roads for All): U.S. DOT grant program that funds planning and implementation projects to prevent roadway deaths and serious injuries.
- TAP (Transportation Alternatives Program): Federal funding for pedestrian, bicycle, Safe Routes to School, and other community-focused active transportation projects (administered by states/MPOs).



- HSIP (Highway Safety Improvement Program): Federal-aid, data-driven program funding proven safety countermeasures on public roads to reduce fatalities and serious injuries.
- STBG (Surface Transportation Block Grant): Flexible Federal-aid funding for a wide range of transportation needs, roadway, bridge, safety, transit-supportive projects, distributed by states/MPOs.

Regional Planning Entities

- MPO (Metropolitan Planning Organization): Regional body responsible for transportation planning in urbanized areas with over 50,000 population; Columbus coordinates with state and local programs where MPO coverage does not apply.
- COG/RPA (Council of Governments / Regional Planning Affiliation): Regional planning entities that may coordinate transportation planning and funding with rural cities and counties.

Documents & Plans

- CSAP (Comprehensive Safety Action Plan): Local plan developed under the Safe Streets and Roads for All program to identify priorities, projects, and policies to reduce fatal and serious-injury crashes.
- CSAP (Comprehensive Safety Action Plan): Local plan developed under the Safe Streets and Roads for All program to identify priorities, projects, and policies to reduce fatal and serious-injury crashes.
- SHSP (Strategic Highway Safety Plan): Statewide, data-driven plan developed by each state DOT to coordinate safety efforts and strategies across agencies with the goal of reducing fatalities and serious injuries.
- LRTP (Long-Range Transportation Plan): Regional or statewide plan that outlines transportation priorities, investments, and policies over a 20+ year horizon.
- MTP (Metropolitan Transportation Plan): Federally required long-range plan developed by a Metropolitan Planning Organization (MPO) to guide transportation investments and performance goals in a metro area.



Columbus Comprehensive Safety Action Plan

Chapter 1 – Introduction

In 2023, USDOT awarded the City of Columbus, Nebraska \$400,000 through the Safe Streets and Roads for All (SS4A) program to develop a Comprehensive Safety Action Plan (CSAP). This funding enables Columbus to advance existing transportation goals with strategies aimed at eliminating traffic fatalities and serious injuries.

What is Safe Streets and Roads For All?

SS4A is a competitive grant program established in 2021 through the Infrastructure Investment and Jobs Act passed by Congress. The U.S. Department of Transportation manages the SS4A fund, with \$5 billion in funding available through 2022-2026. The program helps to fund regional and local safety projects that will prevent roadway fatalities and serious injuries, with an overall goal of zero roadway deaths.

Safe System Approach

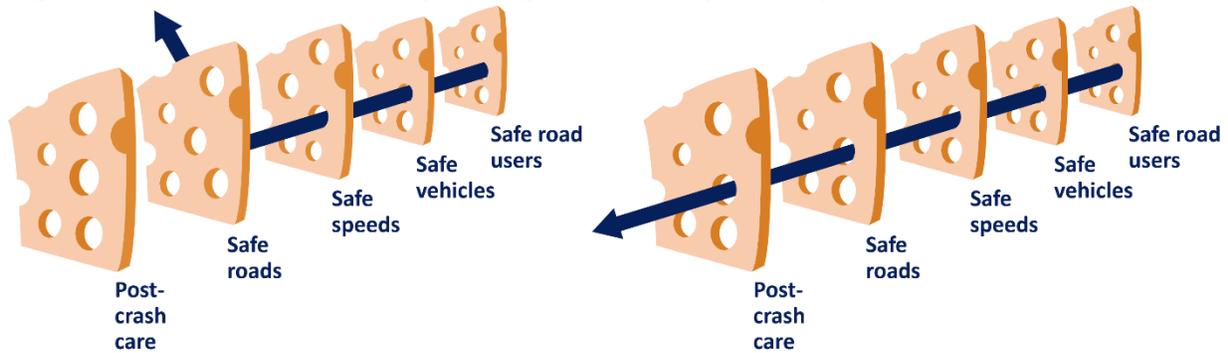
The aim for zero roadway deaths is guided by the Federal Highway Administration's (FHWA) Safety System Approach (SSA), which takes a holistic approach to safety by sharing responsibility amongst all individuals involved in the use, planning, design, or construction of the transportation network, as shown in **Figure 1**. The Safe System Approach is a shift from conventional road safety thinking because it focuses on both human mistakes and human vulnerability by designing systems with layers of protection. If one layer of safety fails, another will help prevent a crash or lessen the likelihood of serious injury or death, as illustrated in **Figure 2**.

Figure 1: FHWA Safe System Approach



Source: FHWA

Figure 2: Shared Responsibility through the Safe System Approach



Redundancy provides layers of protection such that if one or more layers fail, another layer prevents or minimizes harm. **Source: FHWA**

Why do we need a Comprehensive Safety Action Plan?

In order to be eligible for SS4A implementation funding, the City of Columbus must complete a CSAP to outline the region’s safety goals and create an actionable framework for identifying safety issues and appropriate strategies to move towards zero roadway deaths as referenced in Figure 3: Components of a CSAP.

Figure 3: Components of a CSAP



Who was engaged in the CSAP?

The City of Columbus led development of the CSAP and engaged the Nebraska Department of Transportation (NDOT), the FHWA Nebraska Division, and a range of community stakeholders. The City gathered public input through a community survey (May – July 2025), engagement booths, public open houses, and social media. Feedback from residents, businesses, advocacy groups, and technical partners directly informed policy and project recommendations.

What did the safety analysis say?

The safety analysis identified contributing factors that concentrate severe crashes on a smaller share of the street network. Using crash history and local context, the team developed a High-Injury Network (HIN) and emphasis-area High-Risk Networks (HRNs). Overlaying these networks produced a High Priority Network (HPN) to focus investments where they will have the greatest impact on eliminating fatalities and serious injuries.

The emphasis areas guiding Columbus recommendations are:

- Angle crashes
- Speed-related crashes
- Vulnerable Road Users (pedestrians and bicyclists)
- Alcohol / impairment
- Motorcycles
- Younger drivers

The Safe System Approach (SSA) frames strategy selection—prioritizing removal of severe conflicts, managing operating speeds, improving visibility and predictability, and layering treatments so human error does not result in death or serious injury.

What happens next?

With the CSAP complete, the City of Columbus will move from planning to implementation. The City intends to pursue multiple opportunities, potentially including SS4A implementation funding. Generally, the city will seek to align projects with funding programs (e.g., Highway Safety Improvement Program (HSIP), Transportation Alternatives Program (TAP), Surface Transportation Block Grant (STBG)) to deliver priority treatments on the HPN. Eligible activities include design, engineering, construction, and quick-build strategies targeted toward the emphasis areas.



Formal adoption of the CSAP by the Columbus City Council is a prerequisite for eligibility to apply for future SS4A implementation grants. The plan is anticipated to be brought forward for Council consideration in early 2026. Once adopted, the CSAP will serve as the City's guiding safety strategy and will be used to prioritize projects and competitive grant applications.

In parallel, the City will integrate CSAP priorities into the Capital Improvement Program, coordinate with NDOT on state-facility opportunities, and advance enabling initiatives, such as standardized safety checklists in project scoping, targeted road safety screenings at high-need intersections, and demonstration pilots for speed management and safer crossings. The City will maintain the HPN as a living network, updating it with new data and public feedback to sustain progress toward eliminating roadway fatalities and serious injuries.

The City and its partners, including the Nebraska Infrastructure Hub, will continue corridor-level planning and project development on priority locations such as Howard Boulevard and 8th Street as funding opportunities emerge. CSAP adoption ensures these efforts remain consistent with federal guidance and positions Columbus to compete successfully for external funding.

Chapter 2 - Commitment to Reaching Zero

Colombus Governance

The City of Columbus delivers the local transportation system through direct capital investment, operations, and maintenance of major streets, and through policy and oversight for planning, zoning, public safety, and enforcement. The following City departments participated in the CSAP:

- Mayor's Office
- City Council
- Community Development
- Public Works
- Police Department
- Parks & Recreation

Columbus also coordinates with state and federal partners on system management, funding, and oversight for major streets, including:

- Nebraska Department of Transportation (NDOT)
- Federal Highway Administration (FHWA)



Columbus Leadership Commitment

The City of Columbus commits to the only sensible goal for traffic safety: zero fatalities and zero serious injuries on all public roads within city limits. Columbus will plan and deliver safety improvements using the Safe System Approach (SSA), recognizing that progress will take time and require shared responsibility across City departments, state and federal partners, and all road users.

Columbus set a target year of 2050 to reach zero traffic deaths and serious injuries. The City will establish annual interim reduction targets, prioritize investments on the High Priority Network, and report performance publicly to maintain accountability.



Resolution No. [_____]

**A RESOLUTION OF THE CITY OF COLUMBUS CITY COUNCIL
ADOPTION OF THE SAFE STREETS AND ROADS FOR ALL COMPREHENSIVE SAFETY
ACTION PLAN**

WHEREAS, the City of Columbus received funding through the federal Safe Streets and Roads for All (SS4A) program and is completing a Comprehensive Safety Action Plan (CSAP) for the city's transportation network; adopting a CSAP is a prerequisite for seeding additional federal funding through the SS4A program; and the CSAP developed by the City of Columbus is consistent with the U.S. Department of Transportation's Safe System Approach, which creates a positive and proactive roadway safety culture;

WHEREAS, between 2017 and 2023, there were 63 traffic-related fatality and serious injury crashes in the City of Columbus, and traffic crashes are the second leading cause of deaths in the United States;

WHEREAS, the health, safety, and wellbeing of all persons living and traveling within the City of Columbus are our utmost priority, and no one should be seriously injured or killed while traveling in the region;

WHEREAS, the City of Columbus recognizes that transportation safety is a shared responsibility with community leaders and members and requires a holistic approach to eliminate fatalities and serious injuries city-wide;

WHEREAS, improving safety for all roadway users requires coordinated projects, countermeasure strategies, recommendations, prioritized projects and stakeholders and community support of safety objectives and action plans that are guided by community input;

WHEREAS, City of Columbus government leaders and their residents have participated in the development of the CSAP to inform the resulting projects and priorities;

and

WHEREAS, the City of Columbus intends to advance the priority projects and initiatives recommended in the CSAP to reduce and ultimately eliminate traffic-related deaths and serious injuries;

AND THEREFORE BE IT, by the *City Council of the City of Columbus*, as follows:



The City of Columbus resolves to adopt the Comprehensive Safety Action Plan (CSAP) to guide specific steps to eliminate all fatalities and serious injuries by 2050 and further adopt the CSAP-created countermeasure toolbox to guide safety measures to apply to transportation projects. The City of Columbus resolves to work within their means to prioritize the safety projects identified in the CSAP, and consider how to best use the city’s funding capacity to prioritize CSAP projects. The City of Columbus further resolves to emphasize the importance of behavior change and education in building a proactive roadway safety culture.

PASSED AND ADOPTED by the *City Council* of the *City of Columbus*, State of Nebraska, on *February 23, 2026*, by the following vote: [_____].



Chapter 3 – Safety Analysis

Columbus is committed to eliminating fatalities and serious injuries on its multi-modal transportation network. This chapter presents a data-driven analysis of crash trends, identifies high-risk locations and behaviors, and highlights disparities in safety outcomes across the community. The findings form the foundation for targeted strategies and investments that support a SSA and advance the goal of zero deaths and serious injuries.

CRASH TRENDS & CHARACTERISTICS



This analysis reviewed crash data across the city to identify patterns in fatal and serious injury crashes. Key factors include travel mode, time of day, location type (urban vs. rural), and contributing behaviors.

HIGH INJURY NETWORK (HIN)



The HIN highlights corridors with the highest concentration of severe crashes. This network includes all travel modes and helps focus resources on the ~8% of roads where over 84% of fatal or serious injury crashes occur. In other words, a relatively small share of the roadway system accounts for the vast majority of Columbus's most severe crashes. The 8% figure reflects the proportion of total roadway mileage included within the HIN, while the 84% reflects the share of fatal and suspected serious injury (KSI/FSI) crashes occurring on those same corridors during the 2017–2023 analysis period.

HIGH RISK NETWORK (HRN)



This proactive analysis identifies locations with high crash risk based on roadway design, speed, lighting, and surrounding land use. These areas may not have a history of severe crashes but share characteristics with high-crash locations.

A High-Risk Network (HRN) analysis involves identifying corridors that have greater risk in relation to a specific crash contributing factors based on the crash data. These crash contributing factors that stand out are referred to as key emphasis areas.

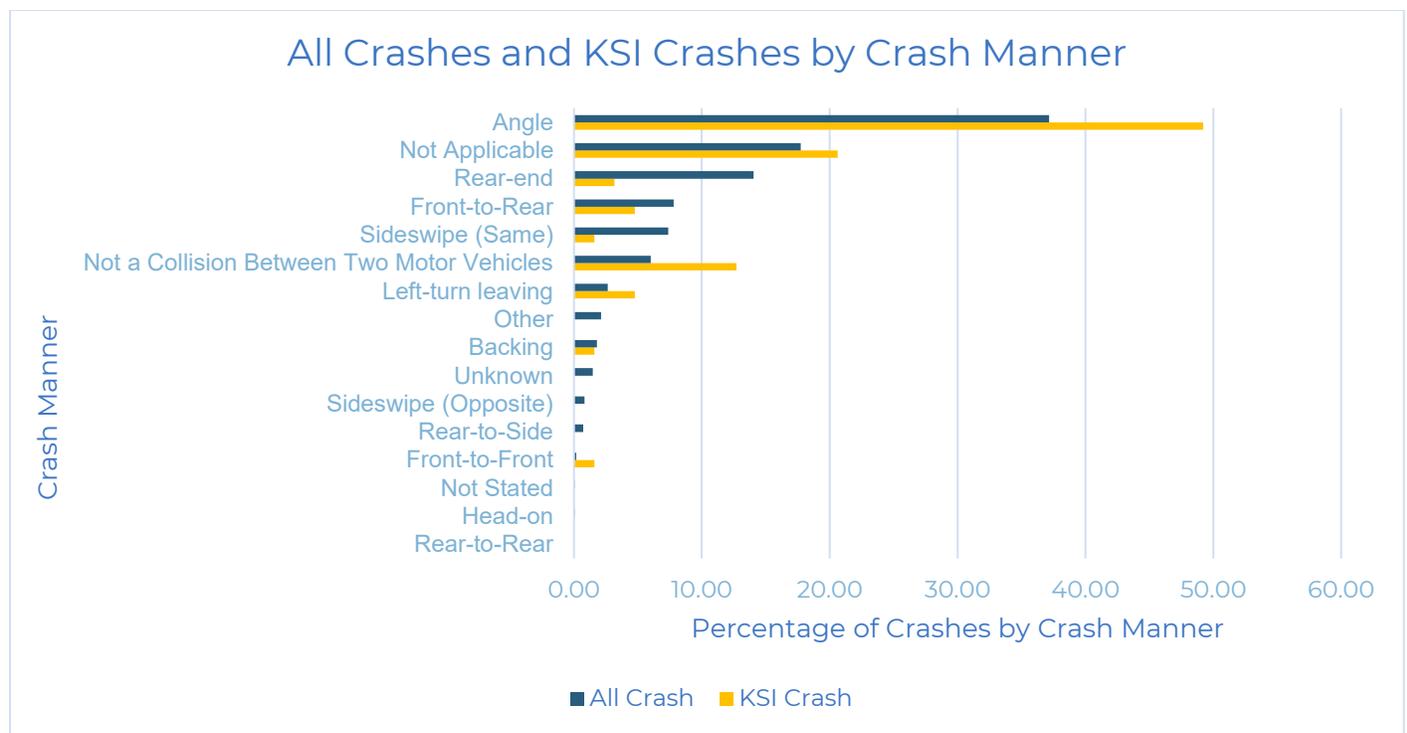
Throughout the engagement process, residents also frequently raised concerns about heavy vehicle traffic (including large trucks). While this concern was documented and considered in the corridor design discussions, the crash analysis and community survey data showed that speeding, aggressive driving, red-light running, and visibility issues were more consistently identified as the primary safety risks across vehicle types. Accordingly, heavy vehicle traffic was treated as an important design context factor rather than a top-ranked crash emphasis area, and

truck considerations are reflected in recommendations such as context-appropriate lane widths, speed management, and access control.

Crash Trends and Conditions

Columbus recorded 63 fatal and suspected serious injury (KSI/FSI) crashes between 2017 and 2023, averaging about 9 per year, and represent the City’s most severe crashes. Fatal and suspected serious injury crashes are over-represented in February, March, May, and August through November, and occur more often on Saturdays, Sundays, and Mondays. Conditions linked with a higher share include dark (with streetlights) environments, horizontal or vertical curves, angle, single-vehicle, and turning crashes, and corridors with grass or barrier medians. The share of fatal and suspected serious injury crashes increased in the most recent three years of the dataset. Crash severity for the years 2017 to 2023 is illustrated in **Figure 4**.

Figure 4: Columbus Crashes by Crash Manner, 2017-2023



KSI refers to crashes resulting in a fatality or serious injury (K + A), collectively referred to as “severe” crashes throughout this report.

Analysis of fatal and serious injury crashes in the Columbus area highlights several recurring patterns and contributing factors:



- **Crash types:** Over-representation of angle, single-vehicle/roadway-departure, and turning crashes; many severe outcomes occur on horizontal or vertical curves and on corridors with grass or barrier medians.
- **Context factors:** Higher fatal and serious injury crashes share in dark-lighted conditions and on weekend/early-week days (Saturday–Monday).
- **Driver behavior/context notes:** Failure to Yield Right-of-Way (FTYROW) and alcohol involvement appear in a meaningful subset of severe crashes.
- **Safety emphasis areas:** To guide future safety strategies, several crash contributing factors – also known as emphasis areas – were identified based on crash trends and risks common to users and the built environment. The emphasis areas are listed below with the percentage of total crashes that they represent:
 - Angle Crashes: 25% of all crashes (35% of fatal & suspected serious injury)
 - Vulnerable Road Users (people walking/biking): <1% of all crashes (11% of fatal & suspected serious injury)
 - Speed-related / roadway departure: ≈9% of all crashes (over-represented on curved and higher-speed corridors)
 - Alcohol-involved: 3% of all crashes (13% of fatal & suspected serious injury)
 - Speed-related / roadway departure: ≈9% of all crashes (over-represented on curved and higher-speed corridors)
 - Motorcycle-involved: <1% of all crashes (14% of fatal & suspected serious injury)
 - Young Drivers (under 21): 16% of all crashes (10% of fatal & suspected serious injury)
 - Motorcycle-involved: <1% of all crashes (14% of fatal & suspected serious injury)

These findings have been used to make targeted recommendations to improve roadway safety throughout the Columbus region.



Figure 5: Safety Emphasis Areas in Columbus

To guide the development of these emphasis areas and other safety strategies, a structured safety analysis process was conducted. The process, which begins with compiling and analyzing crash data, then applies both systemic and location-specific methods to identify risk. This framework ultimately informs the development of the HPN, which will be discussed further below.

This CSAP is a planning-level document focused on understanding where severe-crash risk is concentrated across the overall network. The analysis is intended to guide future policy updates, systemic safety investments, and corridor-level design studies. While individual streets and intersections informed the HIN, HRN, and HPN, the CSAP does not function as a site-specific engineering report or rank individual “worst locations.” Detailed design, feasibility review, and project development will occur in subsequent phases using this plan as the foundation.

The key findings that follow provide further insight into how the safety analysis supports Columbus in progressing toward zero traffic-related deaths and serious injuries by 2050.

Key Safety Findings

- Angle crashes are dominant on key arterials
 - Angled crashes represent one of the most frequent and severe crash types in Columbus, particularly along US 30, the US 30 Bypass, 33rd Avenue, Howard Boulevard, and 8th Street. These locations consistently appear in both the HIN and HRN analyses.
- Recurring crash patterns along major corridors
 - Systemic safety concerns, such as speeding, driver inattention, and roadway departure, are prevalent along US 30, Howard Boulevard, and 33rd Avenue, indicating opportunities for corridor-level countermeasures like speed management, access control, and intersection redesign.
- Young drivers' risk zones
 - Corridors with higher concentrations of crashes involving drivers under 21 include US 30, 33rd Avenue, and 8th Street, suggesting the need for targeted educational campaigns, improved signage, and intersection visibility treatments.
 - VRU crashes cluster downtown and along arterial corridors.
 - Crashes involving pedestrians and bicyclists are concentrated within Downtown Columbus and along major arterial connectors, where mixed traffic, limited crossing opportunities, and higher travel speeds increase risk.
- Speed-related crashes on curvy/low-visibility roads
 - Segments with horizontal or vertical curves, especially on the US 30 Bypass and portions of Howard Boulevard, show elevated rates of speed-related and roadway-departure crashes, indicating the need for geometric review, enhanced curve delineation, and speed feedback or warning signage.

High-Injury Network (HIN)

The HIN identifies corridors with the highest concentrations of fatal or serious injury crashes between 2017 and 2023. Rather than focusing solely on total crash counts, the HIN prioritizes locations where fatal or serious injury crashes are most concentrated. Each crash was assigned a severity weight, giving greater emphasis to more severe outcomes, to better reflect the impact of these incidents. This approach aligns with the SSA, which emphasizes reducing the most harmful crashes. While lower-severity crashes were included as early indicators of risk, they were weighted less heavily. The resulting network highlights corridors with the greatest need for intervention. The weighted scale is as follows:

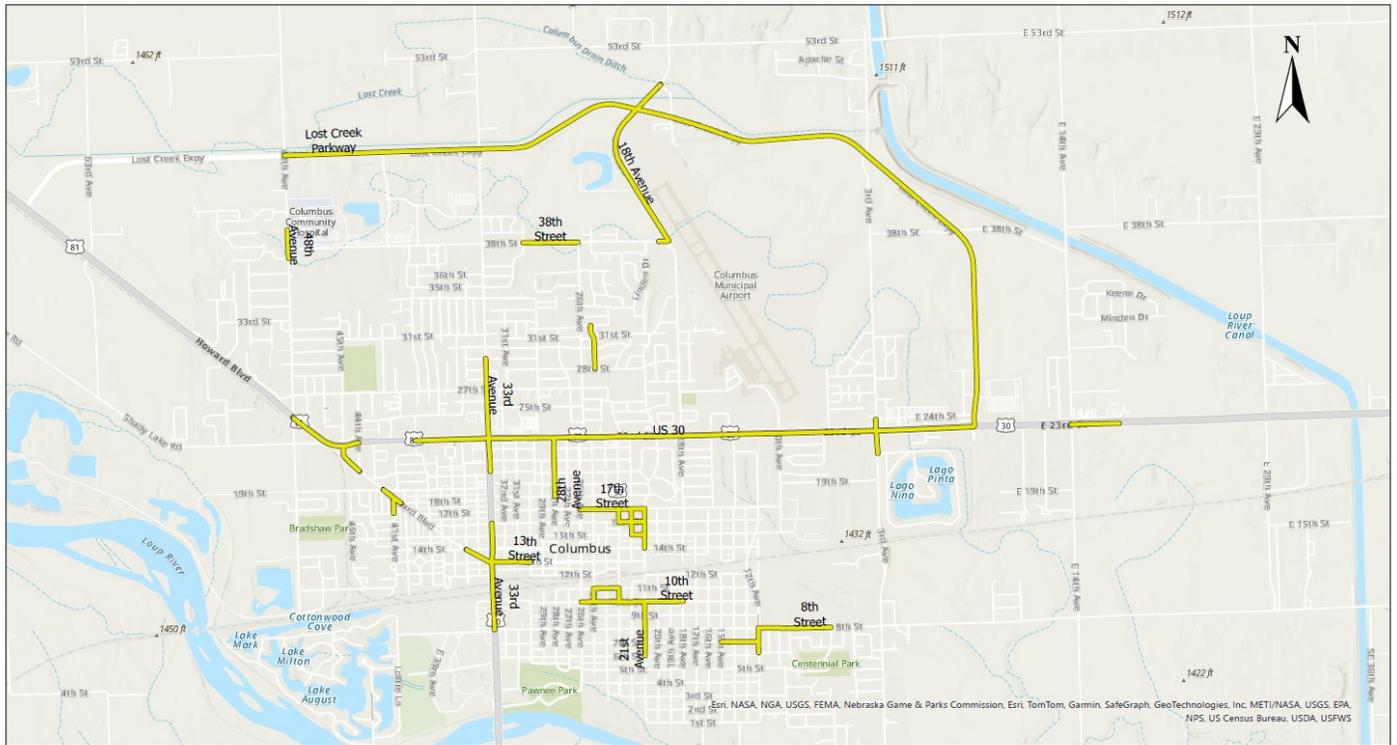
- Fatal and serious injury: 3



- Minor Injury: 2
- Possible and unknown injury: 1

The complete HIN is shown in **Figure 6**. In this CSAP, the HIN is a diagnostic input, used alongside the HRN and contextual factors, to build the High Priority Network (HPN); recommendations are reserved to the HPN.

Figure 6: High Injury Network (HIN)



Legend

— High Injury Network

Columbus HIN



High-Risk Network (HRN)

A High-Risk Network (HRN) analysis involves identifying corridors that have greater risk in relation to a specific crash contributing factors based on the crash data. These crash contributing factors that stand out are referred to as key emphasis areas.

Key emphasis areas are identified for the analysis. Each emphasis area has a threshold selected to target approximately 10% of the roadway network based on the crash count for the key emphasis areas. This provides a network for specific crash factors that is also a manageable network in size, helping prioritize agency efforts and funds. This can guide planning, design, and leadership decisions or identify locations for specific crash type countermeasures or treatments

In total, seven key emphasis areas were identified:

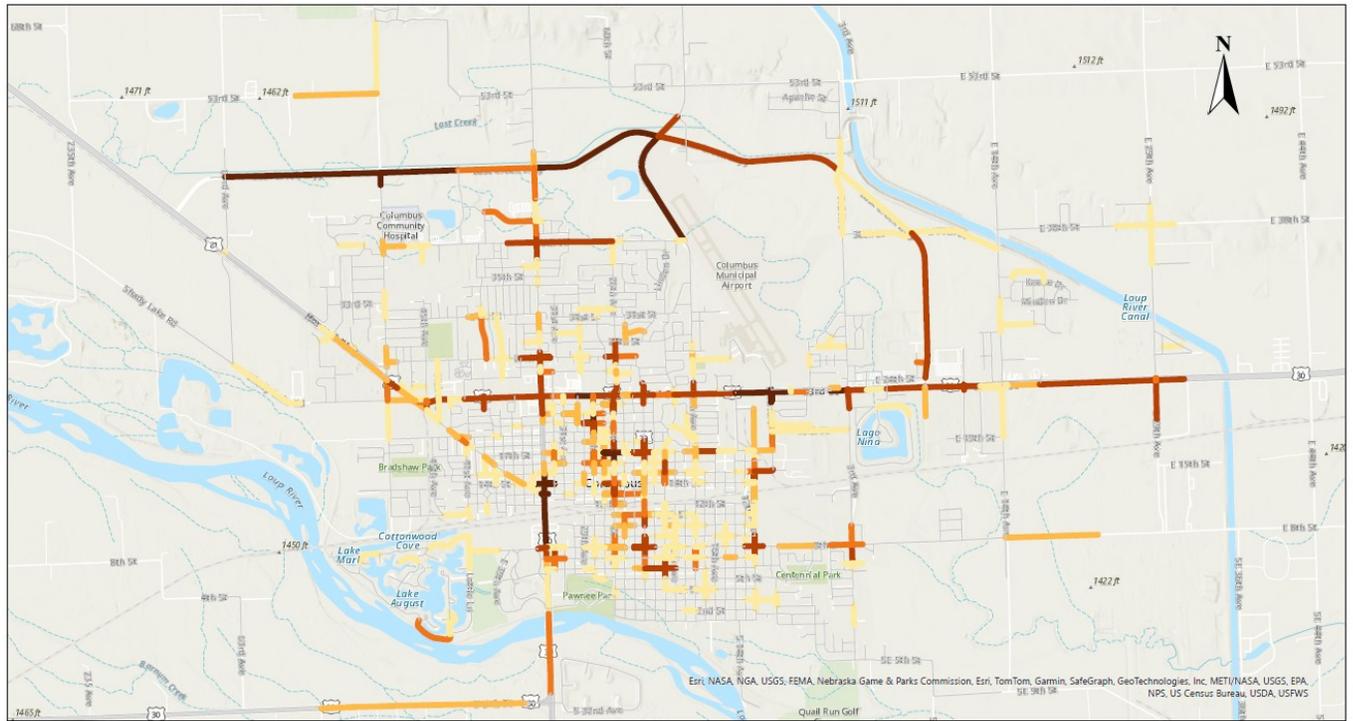
- All crashes
- KSI
- Intersections
- Alcohol
- Young Drivers (Under 21)
- Motorcycle
- Angle
- VRU

For each key emphasis area, crashes were filtered by that key emphasis area and used to identify high crash locations. For example, the “Alcohol” key emphasis area filtered crashes that had alcohol involved. The segment was then tallied for the total number of alcohol crashes. Starting with the highest crash total segment, segments by crash total groups (1 alcohol crash segment, 2 alcohol crash segment, etc.) were included in the risk network until approximately 10% of the roadway network was covered.

Once the seven key emphasis areas were evaluated, the High-Risk Network was created by determining the number of key emphasis areas that each segment was included in. Each roadway segment was evaluated based on how many key emphasis areas it met to identify corridors with the highest risk, as depicted in

Figure 7.



Figure 7. High Risk Network Overlays**Legend**

High Risk Network	3
6 - 7	2
4 - 5	1
	0

Columbus HRN

The HRN integrates multiple emphasis area networks to highlight locations where multiple risk types converge. These overlapping segments inform prioritization for targeted safety countermeasures and project development.

High Priority Network (HPN)

The HPN represents the most critical corridors for safety investment, combining data-driven analysis with local insight. To develop the HPN, results from the HIN and HRN (systemic crash analysis) were layered with input from city staff and the public. Segments with five or more overlapping key emphasis areas were prioritized, regardless of which specific emphasis areas were present. This produced a large, fragmented network, so additional segments were added to create connections, and a Downtown Focus Area was added to capture the city's core commercial and high pedestrian activity zone, ensuring that areas with concentrated multimodal conflicts are also prioritized for safety investment. To narrow the HPN to the top 20% of roadways, segments with lower risk were removed from the network.

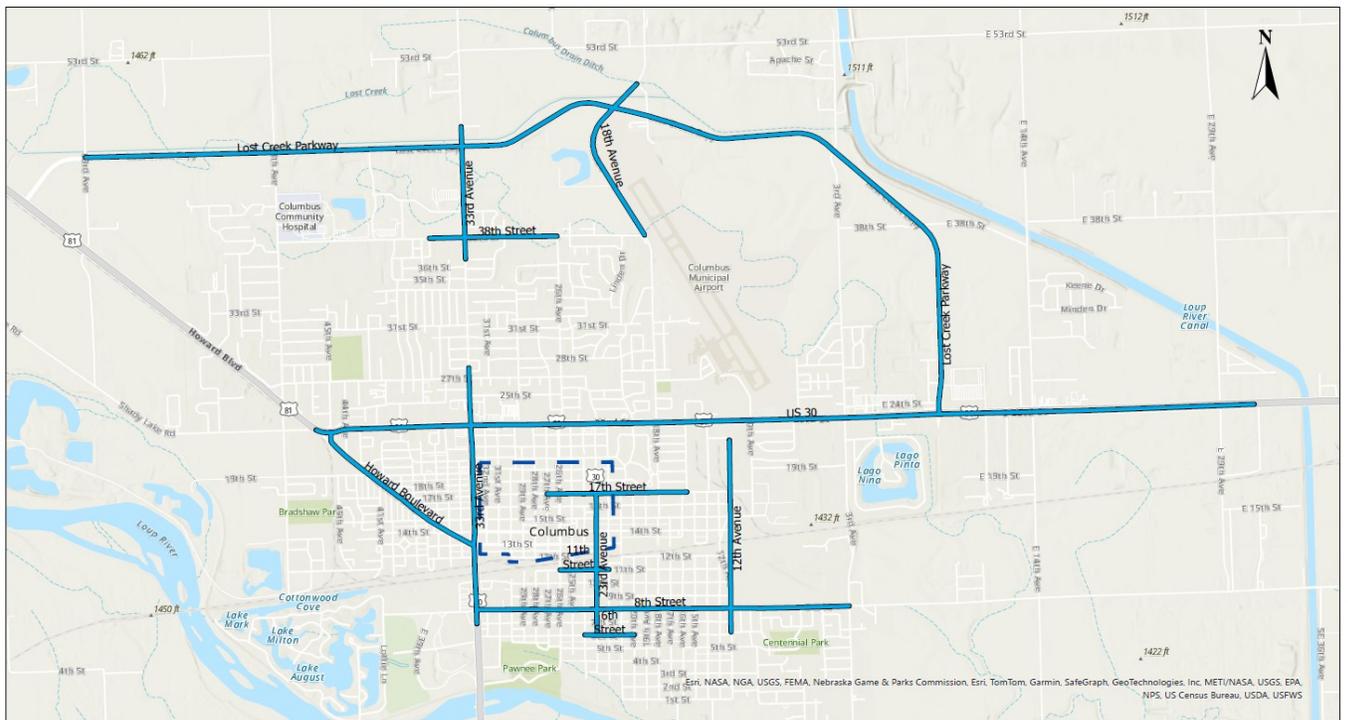
This approach ensures that the HPN reflects both the most pressing safety concerns and the greatest opportunities for positive impact. **Figure 8** illustrates the resulting HPN identified as part of this CSAP.



Key corridors in the HPN include:

- US 30 (23rd Street) – 10th Avenue to 48th Avenue
- US 30 Bypass – 23rd Street to 33rd Avenue
- 33rd Avenue – 8th Street to Lost Creek Parkway
- Howard Boulevard – 18th Avenue to 33rd Avenue
- 8th Street – 23rd Avenue to 33rd Avenue
- Lost Creek Parkway – Howard Boulevard to 48th Avenue
- Downtown Core – 10th Street to 33rd Avenue (The downtown focus area includes the city’s primary commercial and civic district where high pedestrian activity, on-street parking, and closely spaced intersections create elevated multimodal conflict potential.)
- 19th Street – 10th Avenue to 33rd Avenue
- 15th Street – 10th Avenue to 33rd Avenue
- 48th Avenue – Lost Creek Parkway to 23rd Street

Figure 8: High Priority Network (HPN)



Legend

- High Priority Network
- - - Columbus Downtown Safety Focus Area

Columbus HPN



Community Considerations

Crash data was overlaid with demographic and socioeconomic indicators to identify disparities in safety outcomes. Areas with higher concentrations of low-income households, renters, and communities of color often coincide with higher crash rates and gaps in safety infrastructure. Addressing disparities is a core tenet of the Safe System Approach. Strategies should enable safe travel for all residents, regardless of income, age, or ability. This section focuses on poverty as the equity indicator used for mapping.

The SS4A program defines an “Underserved Community” as any census tract with a poverty rate of at least 20% per the 2014-2018 American Community Survey (ACS) from the U.S. Census Bureau. There are no census tracts in Columbus that meet that criteria. Accordingly, this project cannot claim SS4A “Underserved Community” status at the tract level for eligibility or scoring. However, using more recent, 2019-2023 ACS data, and breaking that data down to the smaller census block groups, Columbus does have some areas with 20% or more of the population living below the federal poverty level, as shown in Figure 9. As a next-tier local equity screen (for prioritization, not SS4A eligibility), we designate these block groups as “Priority Equity Areas” ($\geq 20\%$ poverty, 2019–2023 ACS) to focus engagement and emphasize near-term safety investments along HPN corridors. These block groups highlight priority areas for directing safety investments along HPN corridors.



In-Person Engagement

Interactive Design Meetings

The City hosted interactive design meetings focused on four priority corridors at the Columbus Community Building (3rd-floor Community Room), July 22–23, 2025. Sessions covered: Downtown subarea, 8th Street, Howard Boulevard, Lost Creek Parkway, and 33rd Avenue north of 38th Street. Bilingual (English/Spanish) invitations were distributed by the City's Engineering Department, with contact information for the project engineer and time/place details.

Safety Committee

The City created a Safety Committee to guide the SS4A process. The committee has met two times; and a third meeting is scheduled for early 2026. The committee met in-person in April and October 2025.

Members of the Safety Committee included City of Columbus staff, including City Manager and public works employees; the interim Chief of Columbus Police Department; elected officials including the Mayor and City Councilmembers; members of the downtown business improvement district; representatives from Centro Hispano; leadership from local schools; Chamber of Commerce representatives; and chair of the City's Americans with Disabilities Act committee.

During the April meeting, committee members learned about the SS4A process, shared their concerns and experiences driving in town, and discussed how they can support the study effort.

The October meeting focused on reviewing the HPN, reviewing community input, and discussing potential solutions.

A third meeting will be held in early 2026 and will review the CSAP and identify roles and responsibilities for implementation.

Pop-Up Events

Three engagement booths were held at community events. The booths were staffed by members of the project team. Conversations were held in English and Spanish.

In addition to providing a high-level overview of the SS4A program and the Columbus-specific project, visitors who attended these booths were encouraged to participate in activities, including an online comment map or paper survey, and provide their input on which safety concerns they wanted to see prioritized. Also, coloring pages featuring traffic safety themes were provided to engage and educate children.



Engagement Booth Details

Event	Date	Estimated Attendees
Beats and Eats Concert	Thursday, June 5, 2025	15
Pawnee Plunge	Friday, June 6, 2025	15
Beats and Eats Concert	Thursday, June 19, 2025	23

Top reported safety concerns included:

- Red light running
- Unsafe pedestrian/cyclist conditions
- Speeding
- Distracted driving

Public Open House

The City hosted interactive, corridor-focused focus groups to gather targeted feedback for the CSAP. Sessions were held July 22–23, 2025 at the Columbus Community Building and organized around priority corridors (Downtown, 8th Street, Howard Boulevard, Lost Creek Parkway and 33rd Avenue). The City engaged younger drivers, downtown visitors/shoppers, business owners and nearby residents, and held a High-Injury/High-Risk/High-Priority Network workshop with City staff and City Council to align policy and project direction with on-the-ground needs.

Online Engagement

Web Site

The Columbus Safe Streets and Roads for All [project website](#) served as the information hub for the CSAP, hosting the online survey, interactive comment map, project updates, and an email sign-up so residents could track progress and share input. Few people provided comments directly on the website; however, several people provided pins on the comment map, often citing speeding and requesting traffic-calming (e.g., speed cushions). Example locations included Lost Creek Expressway, Howard Boulevard, the high-school area, central Columbus, and corridors crossing US-30. These concerns aligned with survey and focus-group feedback.



Survey

The City conducted an online safety survey from May 23 to July 21, 2025, alongside a map-based tool that captured 233 location-specific comments. Respondents most often reported feeling unsafe as drivers (73%), though many also described discomfort when walking and biking due to limited crossings, visibility issues, and a lack of protection. The top concerns centered on speeding, distracted driving, and red-light running, followed by poor turn visibility, inadequate crosswalks, and insufficient bike protection; lighting gaps, impaired driving, winter conditions, and EMS response time were also noted.

In terms of solutions, participants favored separated facilities for people walking and biking, conflict-reducing intersection designs such as roundabouts and protected turn phases, and speed management and traffic-calming measures including feedback signs, targeted enforcement, access management, and crosswalk visibility and lighting upgrades. These findings guided the CSAP toward strategies that prioritize vulnerable road users, address high-risk driver behaviors, and focus investments on corridors and intersections within the High Priority Network.

Key Engagement Results

Key safety findings were developed from the City's engagement (online survey, map-based comments, and stakeholder touchpoints). Highlights:

- Speeding is the top community concern. In the survey, speeding ranked #1 (136 mentions), with closely related issues of distracted driving (99 mentions) and red-light running (69 mentions) also prominent.
- Intersections need targeted upgrades. A majority of location-specific concerns were at intersections (69%), citing congestion, unprotected/permissive left turns, drivers ignoring controls, and pedestrians feeling unsafe crossing.
- Perceived safety by mode. Respondents most often reported feeling unsafe as drivers (73%); comments also highlighted discomfort for people walking and biking due to inadequate crossings, visibility, and lack of protection.
- Frequently requested improvements. Themes included more separated/protected facilities for people walking and biking, better crosswalk visibility and lighting, turn lanes/turn arrows at key intersections, speed management (e.g., lower limits, calming, feedback signs), and access management on busy corridors.

Chapter 5 – Policy and Process Changes

Columbus's commitment to safety extends beyond infrastructure investments; it includes a deliberate shift in how transportation policy, planning, and internal



processes support the SSA. While this CSAP identifies specific corridors and projects, sustainable safety outcomes will depend on the City's ability to integrate safety into everyday practices and decision-making structures.

This chapter outlines a forward-looking framework to align City policies and internal processes with the vision of eliminating fatal and serious injury crashes. These recommendations support a long-term strategy that enhances project delivery, improves design consistency, and ensures that all projects, from routine maintenance to major capital investments, advance community safety goals. Additional details on both the underlying review of existing policies and procedures and proposed areas of policy focus are included in **Appendix 3** and **Appendix 4**, respectively.

While education and licensing programs also influence roadway safety outcomes, particularly for teen and novice drivers, these programs are governed primarily at the State level. The CSAP therefore focuses on tools within the City's direct authority, such as roadway design, local enforcement strategy, emergency response coordination, and capital programming, while encouraging continued partnership with schools, community organizations, and insurers to support safe-driving education.

Existing Columbus Safety Policy

The CSAP builds on national best practices and Nebraska's safety emphasis areas, aligning City policy with FHWA's [Safe System Roadway Design Hierarchy](#) and design guidance from American Association of State Highway and Transportation Officials (AASHTO), National Association of City Transportation Officials (NACTO). Columbus's approach emphasizes policy updates (e.g., Complete Streets-type guidance, access management), data-driven project review, and consistent design application to reduce severe conflicts, manage operating speeds, and improve visibility and predictability for all users. As part of this effort, the City will apply context-appropriate lane widths to support safe operating speeds, generally targeting 10-foot lanes on urban streets and 11-foot lanes where heavy vehicle or freight traffic is common. Lane narrowing may be accomplished through physical or visual measures; simply striping a narrower line without a corresponding edge treatment is often insufficient, as drivers may still use the full paved width.

Through early CSAP development, the City and partners inventoried practices and identified opportunities to embed safety in routine workstreams. Priority policy/process opportunities include adopting intersection and access policies that reduce conflicts (e.g., roundabout-first where feasible), formalizing lighting strategies on high-risk corridors, integrating safety into development review and traffic impact studies, and establishing standard details for low-cost countermeasures to streamline delivery. Key findings from the review include:



- Columbus can strengthen policy tools (e.g., intersection control, access management, lighting) that directly target high-severity crash types.
- Safety should be systematically integrated into Capital Improvement Plan (CIP) scoping, resurfacing/asset programs, and development review so every project is a safety project.
- Publishing standard drawings/specifications for proven, low-cost countermeasures will reduce barriers to adoption by City Public Works crews and private developers.
- Columbus should maintain clear emphasis areas, as shown in Figure 5, to focus policy and investment where risk is highest, reinforcing SSA principles across departments and partners.

Foundations of a Safe Policy Framework

The CSAP organizes safety needs into emphasis areas drawn from Columbus crash patterns, Nebraska SHSP emphasis areas, and SS4A guidance. Each area is addressed at both the crash-event and systemic levels, reflecting the SSA's layered protections. The eight emphasis areas are:

The emphasis areas:

- Angle Crashes
- Vulnerable Road User (VRU)
- Speed-Related
- Alcohol / Impairment
- Motorcycles
- Younger Drivers

The order of these emphasis areas is also intentional and based on the approach of the Safe System Roadway Design Hierarchy (shown in **Figure 10**). Angle crashes and VRU safety are closely related to Tier 1 of that hierarchy – removal of severe conflicts, which has the highest potential for severe crash reduction or elimination. Next, Speeding is related to Tier 2.

While the remaining emphasis areas are not design or engineering focused – alcohol and impairment has some potential to be addressed by the City through policy and law enforcement activity. Motorcyclists and younger drivers, are users of the system –



Figure 10. FHWA Safe System Roadway Design Hierarchy

street designs and policy can change to better accommodate these users – but working with users on behavior modifications may take partnerships for the City to implement.

Crash Emphasis Areas Linked to Policy

Each of the emphasis areas from the crash analysis links directly to policy needs based on federal, state, and local guidance:

- **Angle Crashes:** Roundabout-first policy, access management standards.
- **Vulnerable Road Users:** Complete Streets policy adoption, crossing warrants, ADA upgrades.
- **Speed:** Context-based speed policy, narrower minimum lane widths, raised crosswalks as a standard near schools.
- **Alcohol/Impairment:** Partner with bars and ride-hail to offer safe-ride vouchers on weekends and run targeted DUI enforcement with event-based education.
- **Motorcycles:** Promote helmet use through community distribution and fittings, require or subsidize rider training, and run seasonal “Look Twice for Motorcycles” campaigns.
- **Younger Drivers:** Recognize that licensing requirements and driver training are set at the State level; however, the City can support stronger graduated licensing with nighttime and passenger limits, and may partner with schools and community organizations on driver education refreshers and parent-teen agreements.

Implementation Steps & Recommended Safety Processes

- Revise design manuals and standard drawings to include best practices, such as providing curb extensions at all intersections where there is on-street parking
- Road Safety Audits
- Partner with schools, nonprofits, employers, insurers, and law-enforcement agencies to support safe-driving education initiative
- Speed Management Plan
- Sidewalk and trail snow removal
- Update CIP project scoping forms to require a safety policy checklist



- Adopt resolutions or ordinances for key policies (e.g., roundabout-first, Complete Streets)
- Train staff and consultants on updated standards
- Monitor compliance through internal staff project review processes

Chapter 6 – Projects and Strategies

Project and Strategy Philosophy

The Columbus CSAP philosophy for safety projects and strategies can be summarized by the three tiers depicted in Figure 11. In short, policy strategies are the foundation for systemic projects (which creates a proactive safety approach), and the top tier are the limited but critical major safety infrastructure projects. The following paragraphs describe each tier in more detail.

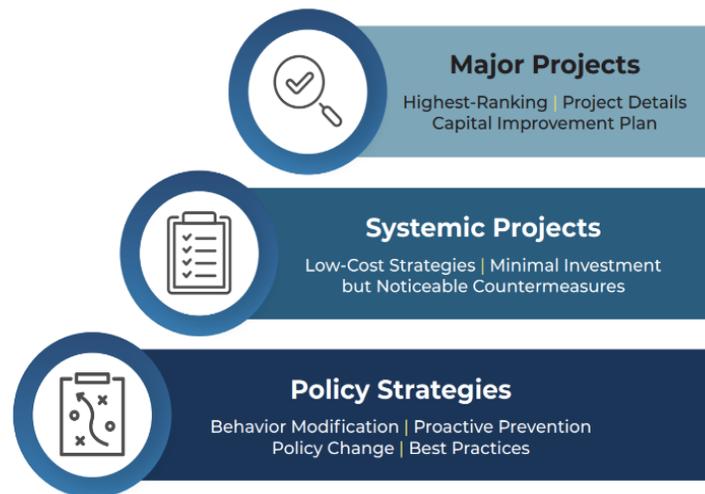


Figure 11. Project Strategies.

Policy strategies are foundational; they cover how City departments, partners, and the traveling public approach safe travel and the development of safe multimodal travel networks. Policy strategies are a powerful component on crash-reduction efforts and on future severe crash reductions because modified behaviors, proactive planning, meaningful changes to policies, and adoption of safety best practices can affect every piece of local multimodal facilities over time. The Columbus CSAP links the policy and process recommendations in Chapter 5 and its appendices to concrete project and program actions so policies lead to funded design, operations, and maintenance changes.

The second layer of safety recommendations are the systemic strategies and their resulting projects. Systemic approaches focus on the risk of severe crashes and where those risks may be elevated. For example, a systemic approach may be useful for severe road-departure crashes as they are often related to common combinations of contributing factors (e.g., level of travel, road geometry, and features of the built and natural environment like curves and steep slopes). In the Columbus dataset, where detailed severe-crash samples may be limited at specific locations, the project team

pairs history of property-damage and lower-severity injury crashes as a proxy for future severe-crash risk. In the systemic framework, each risk factor is paired with appropriate low-cost treatments that can be deployed in standalone safety projects over multiple higher-risk locations, for example, bundling improvements to convert several skewed two-way stop-controlled intersections on 35–45 mph corridors to right-in/right-out (RIRO) operations with median refuge islands, lighting upgrades, and high-visibility crosswalks. The systemic approach can also be put in action by using risk maps to add safety value to smaller-scope maintenance and rehabilitation projects (even projects focused on non-transportation infrastructure like water and gas utility projects).

The final layer is major safety projects. Major safety projects re-shape the built environment so streets and intersections may have new features added (e.g., medians, curb bulb-outs/curb extensions) or features re-sized (e.g., intersections converted to roundabouts, walkways or bikeways widened or protected). Major safety projects typically apply one or more best-practice countermeasures in areas with severe crash history or elevated systemic risk. These more significant infrastructure countermeasures often provide the best means to reduce severe conflicts, manage the balance of speed to context, increase user separation in time, and improve traveler awareness. However, due to their cost and time to develop and deliver, major projects must be focused first on the highest-priority locations identified in the Columbus HPN.

Segment and Intersection Countermeasures

Columbus's CSAP establishes a Safer Streets Toolkit that summarizes proven safety countermeasures to incorporate into infrastructure projects to reduce crashes. The Toolkit is foundational to the projects and strategies in this CSAP and serves as a ready reference for both systemic (network-wide) and major (location-specific) projects.

The Toolkit is organized into segment and intersection countermeasures that can be applied on their own or combined in comprehensive corridor packages. Each category groups targeted strategies that address observed crash trends and local context. Strategies were vetted through the 2019–2023 crash analysis, input from City staff and emergency responders, and community feedback gathered through the survey, comment map, and interactive design meetings.

Segment- and intersection-level strategies address recurring safety concerns in Columbus, including:

- Angle crashes at unsignalized or complex intersections
- Roadway departures on higher-speed corridors and curves
- Speed-related crashes near schools and activity centers



- Rear-end and turning crashes on multi-lane arterials with heavy access
- Crashes involving vulnerable road users (VRUs) where crossings and protection are limited

Countermeasures include both low-cost, systemic improvements and larger capital treatments, selected for effectiveness, crash-reduction potential, and feasibility.

Examples include:

- Vertical and horizontal traffic calming (speed humps/tables, curb extensions/bulb-outs, chicanes, lane narrowing)
- Roadway reconfigurations (e.g., 4-to-3 lane conversions with center turn lanes and improved crossings, rightsizing)
- Bikeway and pedestrian upgrades (protected or buffered bike lanes, shared-use paths, sidewalk gap closures, pedestrian refuge islands, daylighting at crossings)
- Intersection safety treatments (protected left-turn phasing, leading pedestrian intervals, prohibiting right turns on red, signal hardware upgrades with reflective backplates, Rectangular Rapid-Flashing Beacons (RRFBs), and Pedestrian Hybrid Beacons (PHBs) at uncontrolled or midblock crossings, left-turn hardening, all-way stop conversions where warranted)
- Conflict reduction and access management (raised medians, driveway consolidation, Reduced Conflict Intersection (RCIs)/J-turns where appropriate, roundabouts at high-conflict nodes)
- Speed management and visibility (dynamic speed feedback signs, LED lighting retrofits at intersections and midblock crossings, enhanced curve delineation with chevrons, edge-line rumble strips on rural transitions, high-friction surface treatments on problem curves)

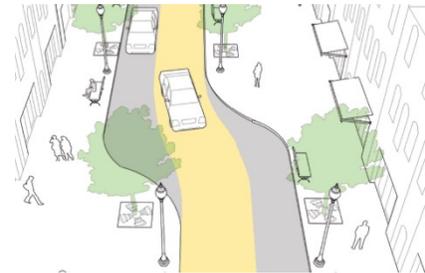


Figure 12. Example of traffic calming measures

Full descriptions, cost tiers, crash reduction factors, and implementation guidance are included in the Safer Streets Toolkit (see Appendix 4).

Systemic Projects

Systemic projects reduce risk conditions citywide, including areas without a severe crash history, by applying proven countermeasures across similar roadway environments. These projects are typically low to moderate cost and fit naturally into routine maintenance, resurfacing, and asset preservation cycles.

Low-Cost Safety Enhancements

Systemic safety projects may include low-cost safety enhancements, such as:

- High-visibility crosswalks and advance yield markings
- Reflective signal backplates
- Radar speed feedback signs
- Pedestrian refuge islands
- Lighting enhancements at intersections and midblock crossings
- Rectangular Rapid Flashing Beacons (RRFBs) at uncontrolled pedestrian crossings
- Edge line rumble strips on curves and rural transitions
- Chevron signs and dynamic curve warnings
- Speed cushions
- Striping changes to narrow lane widths

These improvements are not corridor-specific but rather context-specific, based on adjacent land uses, roadway geometry, and potential user conflicts, and informed by crash type patterns observed across similar locations, rather than site-specific crash history.

Policy and Planning Integration

Columbus integrates systemic safety into ongoing City processes and capital planning so every project is a safety project.

- Capital Improvement Program (CIP) – by using the Safer Streets Toolkit in concept development and intentionally budgeting funding for safety projects (potentially to serve as match for federal or state safety funds)
- Asset rehabilitation processes and resurfacing schedules – by applying context-sensitive, Complete Street, and street rightsizing principles



- Land development permit and land use or zoning change requests – by focusing reviews on access management policies and safety impact mitigation from Traffic Impact Studies

Integration with Crash Emphasis Areas

Each systemic project should align with one or more emphasis areas from the safety analysis. **Table 1** below illustrates examples of applicable countermeasures mapped to specific crash types. The following pages focus deeper on combining observed safety needs from individual emphasis areas to targeted portions of the Columbus streets network where that emphasis area is prevalent and could be treated with systemic strategies.

Table 1. Emphasis Area Aligned to Systemic Strategies

Angle Crashes	Reflective backplates, protected left-turn phasing, access management, roundabouts
Vulnerable Road Users	RRFBs, midblock crossings, sidewalk gap closures, curb extensions, pedestrian refuges
Speed	Speed feedback signage, narrowed travel lanes, chicanes
Alcohol	Rumble strips, lighting, speed cushions, nighttime speed enforcement
Motorcycles	Enhanced curve delineation, dynamic speed signs, friction surface treatments
Younger Drivers	Radar feedback signs, simplified signage, painted centerlines

Integration with NDOT Statewide Processes

This CSAP implementation aligns with NDOT statewide processes. Accordingly, this CSAP grounds recommendations in the same safety-first, performance-based framework NDOT uses for capital programming, linking policy strategies, systemic projects, and major projects to the Nebraska Strategic Highway Safety Plan (SHSP) and to programming through the Statewide Transportation Improvement Program (STIP) and the City's CIP. Public engagement for this CSAP (survey, comment map, and interactive design meetings) informed emphasis areas that the SHSP also addresses, ensuring a consistent, data-driven approach across City and State programs. Columbus will coordinate delivery with NDOT and partner agencies through routine capital and STIP planning so CSAP priorities advance in both near- and long-term investments.

Major Projects: High-Priority Capital Improvement

While systemic strategies address risk across the network, several Columbus corridors require larger capital solutions due to concentrated severe crashes,

repeated appearance across multiple crash emphasis areas (e.g., angle, speed, VRU), and strong opportunities to pair safety with corridor redesign. Major project elements may include corridor reconstruction with separated walking/biking facilities, intersection conversions (e.g., roundabouts), signal modernization, context-sensitive speed management and access control, and multimodal upgrades such as lighting and ADA improvements.

These corridor efforts are not stand-alone; the City of Columbus will integrate them into larger capital projects through its CIP, pursue external funding opportunities (such as SS4A, HSIP, TAP, and STBG), and apply phased or quick-build approaches where appropriate. Current and candidate priority locations include Downtown Columbus, US 30 (23rd Street), 33rd Avenue, Howard Boulevard, 8th Street, Lost Creek Parkway, and the US 30 Bypass, each reflecting the crash patterns and emphasis areas identified through the CSAP and informed by community and stakeholder input.

Several of these corridors are already the subject of ongoing planning, concept development, or funding coordination efforts led by the City and its partners — including the Nebraska Infrastructure Hub. This work will continue beyond completion of the CSAP to refine feasible project concepts, identify staging and funding options, and prepare competitive implementation grant applications. The CSAP serves as the policy and network-level foundation for these next-step corridor studies rather than replacing or duplicating them.

Project Prioritization and Implementation

Recommendations were prioritized using:

- Crash history and severity
- Alignment with the High-Injury Network (HIN) / High Priority Network (HPN)
- Context-specific feasibility (right-of-way, utilities, phasing/readiness)
- Support from technical stakeholders and public input

Priority corridors are shown on maps in Chapter 3. These maps guide implementation of countermeasures, ensuring selected projects are evidence-based and locally relevant. The emphasis-area-focused countermeasures, major project definitions, and prioritization process ensure that both proactive and location-specific solutions address the City's most critical crash patterns. By integrating these strategies into the CIP and routine project delivery, Columbus can reduce fatal and serious-injury crashes while building a safer, more consistent transportation network for all users.



Projects on the High Priority Network (Coordination with NDOT & CITY CIP)

Because Columbus is not within an MPO planning area, CSAP implementation is coordinated through the City's Capital Improvement Program (CIP) and NDOT's Statewide Transportation Improvement Program (STIP). Nebraska's Federal Funds Purchase Program (FFPP) also affects how local projects are delivered. Under FFPP, NDOT may purchase a local agency's federal-aid funds at a discount and provide state cash instead, allowing locals to deliver eligible projects with state requirements rather than federal process. This statewide exchange mechanism helps explain the lack of a regional MPO entity managing federal fund distribution for Columbus.

Several programmed or recently completed projects overlap the HPN and are safety-oriented, covering roadway, bicycle, and pedestrian improvements. A summary table of current safety-oriented projects on/near the HPN (e.g., Downtown pedestrian nodes, 33rd Avenue improvements, Lost Creek Parkway signals, and NDOT's 23rd Street reconstruction) is provided in Table 2. These projects are considered higher-priority efforts for advancing the region's multimodal safety needs and are expected to leverage a mix of local and federal sources (e.g., SS4A, HSIP, TAP, STBC) as funds become available.



Table 2: Safety-Oriented Projects on/near the High Priority Network

Project Type	Location	Timeframe	Cost (2025)	Cost (YOE)	Responsible Agency
Street Reconstruction / Turn Lanes / ADA	US-30 / 23rd Street Reconstruction (CN 32234) – from US-81 (north jct) to E. 11th Ave	2023–2025 (final phase underway in 2025)	NDOT hasn't posted a 2025 cost	\$18.5M (2019 fact sheet estimate) (Nebraska Department of Transportation)	NDOT
Signals & Multimodal Upgrades	Lost Creek Pkwy @ 48th Ave new signal; signal upgrades at Wilderness Rd & 33rd Ave; trail/ADA elements	2024 – mid-2025 (signal installation complete; full operations expected by early 2026)	\$932,147.58	\$932,147.58	City of Columbus (Watts Electric)
Bridges / Safety	US-30/US-81 Columbus South Bridges – bridge replacement & traffic staging	2025–2026 (active construction)	Not yet posted		NDOT (Hawkins Construction)
Pavement/ADA & Pedestrian Nodes	33rd Ave (38th St to N of 30th St): concrete paving, storm sewer, ADA ramps	FY 2025–2026	\$1,900,000	\$1,900,000	City of Columbus
Pedestrian Safety (Downtown)	13th St & 28th Ave (east side): pedestrian nodes & concrete work	FY 2025–2026	\$50,000	\$50,000	City of Columbus

^a Where NDOT or the City has not posted a current (2025) estimate, the “Cost (2025)” cell is left blank and older Year-of-Expenditure (YOE) figures are shown when available (e.g., 2019 fact sheet estimate for US-30/23rd St)



Chapter 7 – Progress and Transparency

The Columbus CSAP establishes a data-driven foundation for reducing fatal and serious injuries across the city. To ensure accountability and maintain momentum toward the goal of zero traffic deaths by 2050, it is essential to track progress over time and make safety progress information available to the public. This chapter outlines proposed performance metrics, transparency strategies, and recommendations for sustaining long-term safety improvements.

Annual Fatal and Serious Injury Crashes

Fatal and suspected serious injury crashes are the primary metrics for evaluating the success of the CSAP. The City will track both the total number of fatal and suspected serious injury crashes and the rate per 100 million vehicle miles traveled (VMT). Between 2017 and 2023, Columbus experienced 63 fatal and suspected serious injury crashes, and while recent years have shown slight improvement, the current trend is not yet on pace to achieve zero deaths and serious injuries by 2050. This metric will be monitored and updated annually to measure progress and evaluate the effectiveness of implemented strategies and safety investments.

Annual Pedestrian and Bicycle Fatal or Serious Injury Crashes

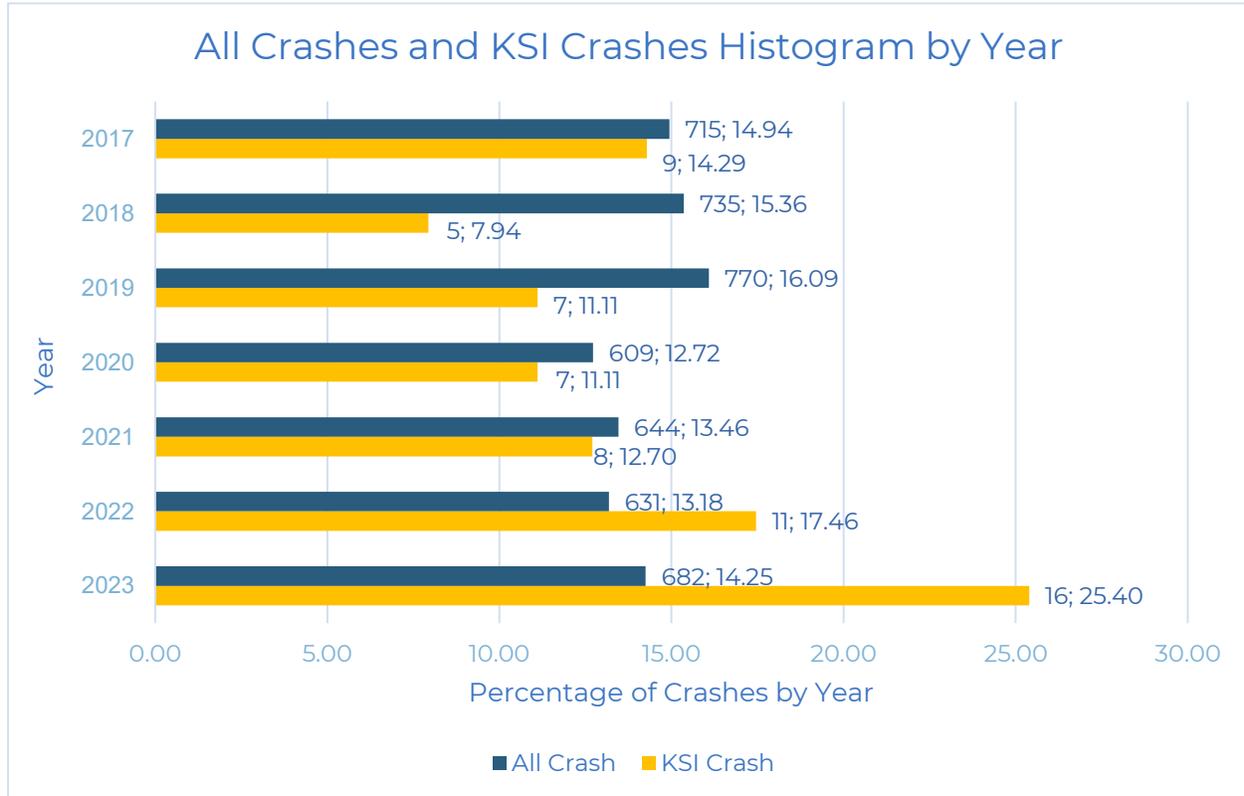
Vulnerable Road Users (VRUs), including people walking and biking, account for approximately 11% of fatal and suspected serious injury crashes in Columbus. This metric will continue to track pedestrian and bicycle crashes separately, recognizing that countermeasures and design strategies differ for each mode. Safety improvements planned along Downtown corridors, 33rd Avenue, US 30, and the US 30 Bypass, all identified in the HIN and HPN are expected to reduce the frequency and severity of VRU crashes over time.

Annual Crashes by Severity – Totals

While the CSAP centers on fatal and suspected serious injury outcomes, tracking all crash severities provides a fuller picture of safety trends. Columbus will report annual totals and rates for fatal, suspected serious injury, minor injury, and property damage only crashes. Figure 14 shows totals for 2017–2023. The primary objective is to reduce fatal and serious-injury (FSI) crashes; lower-severity crashes may fluctuate or even increase as speeds drop and conflict types shift, which may be acceptable if severe outcomes decline. Tracking all severities supports data-driven adjustments over time to sustain and expand FSI reductions.



Figure 14: Total Crashes in Columbus 2017-2023



Project-Level Safety Performance Metrics

To evaluate the effectiveness of the CSAP, Columbus may track more detailed performance measures annually:

- The implementation status of priority projects (projects completed or projects in design)
- Crash trends before and after project implementation
 - Fatal or serious injury crashes
 - VRU crashes
 - Emphasis area crash types

Monitoring these metrics will help assess the effectiveness of the CSAP and help to evaluate future plans and projects.

Public Access and Transparency

Annual progress reports on the CSAP progress should be published and made publicly available on the Columbus, NE City website, summarizing key actions, performance metrics, project milestones, and funding updates. To track progress more effectively, a public dashboard or dedicated webpage could be developed to display performance data, crash data, project updates, and progress reports.



Needs and Recommendations

Ensuring the CSAP is implemented and progress is tracked publicly is essential to sustain support for safety initiatives. Columbus should formalize a Safety Implementation Committee (e.g., by continuing the Safety Committee established for this CSAP) to oversee delivery of projects, update metrics annually, and maintain a public-facing dashboard and report.

The CSAP should be tracked alongside the Columbus's transportation system planning – like the community's most recent Long-Range Transportation Plan (LRTP) and NDOT safety performance measures (PM1). PM1 includes total fatalities, fatality rate, total suspected serious injuries, serious injury rate, and non-motorized fatalities and suspected serious injuries. Aligning CSAP metrics with the LRTP and NDOT's PM1 targets will help Columbus meet federal performance requirements while keeping local and regional planning efforts coordinated.



Appendices



Appendix 1 - Policy Review Memo

Policy Review Memo

Introduction

Vision Zero and the Safe Streets and Roads for All (SS4A) program is an international movement dedicated to implementing strategies that eliminate traffic deaths and serious injuries and improve the overall safety of the transportation network for all users. Reaching zero deaths can be achieved through the implementation of a Safe System Approach (SSA) which is comprised of five core elements and six principles, detailed later in this memorandum. The City of Columbus is leading the development of a Comprehensive Safety Action Plan (CSAP) that will utilize the SSA to locate key areas of safety concern and establish solutions targeting these areas. This document identifies how the plans and policies implemented across the City of Columbus align with the SSA and highlights opportunities for refining and strengthening policies and processes.

Safe System Approach¹

The SSA is a holistic and comprehensive approach that provides the guiding framework to make the transportation system safer for everyone. Making a commitment to zero traffic deaths means addressing all aspects of safety through the framework, as depicted in **Figure 1**.

¹ Foundational definitions of the Safe System Approach have been included in their original form from the US DOT web site: [What Is a Safe System Approach? | US Department of Transportation](#)





Figure 1. What Is a Safe System Approach? | US Department of Transportation

The SSA is a shift from conventional road safety thinking because it focuses on both human mistakes and human vulnerability and aims at designing systems with layers of protection. If one countermeasure fails, another will help prevent a crash or lessen the likelihood of serious injury or death, as shown in **Figure 2**.

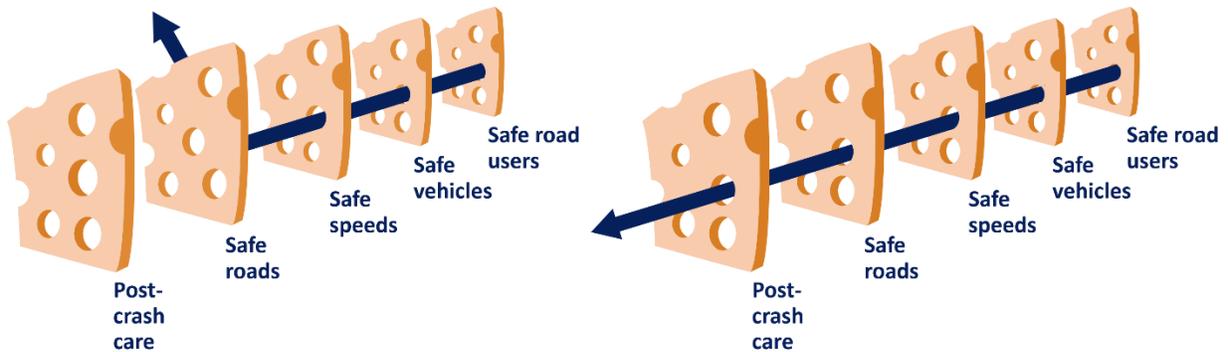


Figure 2. Source: Federal Highway Administration

In the SS4A grant program, comprehensive safety action plans (referred to as “Action Plans”) are the basic building blocks to significantly improve roadway safety. They are aimed at reducing and eliminating serious injury and fatal crashes for all roadway users. A successful Action Plan includes seven key components.



Figure 3. Comprehensive Safety Action Plans | Source: US Department of Transportation

- **Leadership Commitment & Goal Setting** – An official public commitment by a high-ranking official and/or governing body to eliminate roadway fatalities and serious injuries based on a timeline and set of goals.
- **Planning Structure** – A committee, task force, implementation group, or similar body charged with oversight of the Action Plan’s development, implementation, and monitoring.
- **Safety Analysis** – Analysis of existing conditions, historical trends, contributing factors, crash types, and crash severity to provide a baseline understanding of crashes involving fatalities and serious injuries across a jurisdiction.
- **Engagement & Collaboration** – Engagement with the public and stakeholders to allow for community representation and feedback.
- **Policy & Process Changes** – Assessment of current policies, plans, guidelines, and standards to identify opportunities to improve how processes prioritize transportation safety.
- **Strategy & Project Selections** – Using data, noteworthy practices, stakeholder input, and community considerations, a comprehensive set of projects and strategies will be identified that will address the safety problems and focus on a SSA.
- **Progress & Transparency** – Ongoing efforts to measure progress to ensure transparency is established with community members and stakeholders.

Policy Review

The policy review documented in this memo involved examining current transportation and land use plans, policies, and standards from Columbus. The list below provides a summary of the document types reviewed for this task:

- **Comprehensive Plan** – Identifies goals, policies, strategies, and actions in the areas of land use, public facilities and utilities, transportation, housing, as well as recommendations for plan implementation and plan maintenance.
- **Long Range Transportation Plan (LRTP)** – Provides an assessment of the region’s transportation system and its future needs, including a list of regionally significant transportation projects based on reasonably anticipated local, state, and federal revenues.
- **Traffic Studies** – Assess existing and forecasted conditions along a corridor or at an interchange and develops recommendations for improvement.

The purpose of this memo is to perform a high-level document review and provide an overview of how practices and policies within Columbus align with the seven Action Plan components and six SSA principles previously noted. The document types listed were identified for review due to their impact on the transportation network and the relevancy of their goals and policies to the SS4A planning efforts. The following sections highlight key findings organized by Action Plan component topic.

Leadership Commitment & Goal Setting

Based on the document review, there is a need to identify and document safety related goals that align with the SS4A program. These goals will provide clarity and direction and allow for key decision makers to track the Plan’s progress. Additionally, providing a public commitment from local leadership to these goals will garner additional public support and encourage action toward safety improvements and initiatives for targeted and systemic safety.

Planning Structure

Columbus currently does not have a pre-existing safety committee, task force, or implementation group dedicated to enhancing and advocating safety-focused projects and programs. Establishing a group to oversee the development, implementation, and monitoring of the Action Plan will prove vital to the overall success of the Plan. The City may hold key roles on the implementation group – but it could also involve other safety interest groups in the planning structure. The Envision Columbus 2040 Comprehensive Plan agrees that some initiatives cannot be accomplished by the City government on its own so committees, commissions, and organizations are important to the success and sustainable implementation of Plans.



Through the development of the Columbus Comprehensive Safety Action Plan, a Safety Task Force and Stakeholder Group will be formed to help guide the development of the CSAP and provide insight on local safety concerns, infrastructure needs, and community priorities. One practical path for an on-going implementation group would be to formalize the Safety Task Force and Stakeholder Group at plan completion as the inaugural implementation group.

Safety Analysis

The LRTP notes that from 2014 to 2016, in comparison with other cities in Nebraska of relative size, the City of Columbus experienced the third highest 3-year average for total crashes even though it measured as the fourth largest city. In the Plan, crash data obtained from the Nebraska Department of Transportation was analyzed and summarized by the attributes listed below. While six roadways were chosen as representative roadways for crash analysis, no recommendations or countermeasures were specifically given for these locations. Additionally, safety was not listed as a recommended type of project.

- Severity
- Crash type
- Functional classification of roadway
- Light condition
- Roadway condition
- Time of day

The South Mobility Study developed a heat map to graphically illustrate crash frequency. This helped identify the locations along the 8th Street corridor that had a higher concentration of crashes including at 33rd Avenue, 12th Avenue and 3rd Avenue.

Engagement & Collaboration

The Envision Columbus 2040 Comprehensive Plan emphasizes stakeholder involvement as a guiding principle and notes that public outreach and engagement were integral in the development of the Plan. It also recommends public input continually be sought out throughout implementation and for any future amendments. The Plan highlights how important partnership and collaboration across governments and sectors is for the success of the Plan. The Comprehensive Plan notes that the City would like to promote interlocal cooperation agreements between its departments and their corresponding counterparts within Platte County so as to establish consistent policies regarding engineering standards and development.

While public and stakeholder engagement has been identified as a priority for Columbus through the development of the Comprehensive Plan, there is an



opportunity to expand educational outreach within the City through the Action Plan and place a greater emphasis on the safer people objective of the SSA.

Policy & Process Changes

Several key policies and processes were referenced throughout the material reviewed for this memo. While Columbus doesn't have an access management policy, the Envision Columbus 2040 Comprehensive Plan discusses the importance of access management to maintain safety, improve mobility and access, and improve travel conditions by minimizing conflicts between through vehicles and slower, turning vehicles. Several objectives are identified in the Plan to ensure access to existing and future development is accommodated in a safe and efficient manner. However, it would be beneficial to provide additional guidance to better meet the specific needs of the community.

The existing plans include general development principles to emphasize pedestrian facilities and access. These principles place an emphasis on safer users which is another objective of the SSA. One main goal of the Envision Columbus 2040 Comprehensive Plan is developing "an integrated network of attractive streets which are safe and accessible for all people, regardless of age, ability, income, ethnicity, or chosen mode of travel". The Comprehensive Plan suggests a three tiered approach to promote the use of pedestrian systems:

- Provide facilities
- Build supporting policies
- Educate and encourage the public regarding available transportation choices

Some of the recommended strategies that are detailed in the Comprehensive Plan include ensuring street intersections are designed to provide safe crossings, developing a phased sidewalk construction program, and implementing a formal traffic calming program. The Envision Columbus 2040 Comprehensive Plan also notes wanting to improve pedestrian circulation Downtown with a focus on 6th Street, 8th Street, and 11th Street as principal pedestrian north-south linkages. The key objective is providing an interconnected system of paths, recreational trails, on-street bike lanes, and routes that are multi-purpose, safe, accessible, and convenient; and connect Columbus' parks to neighborhoods, schools, workplaces, and other community destinations.

In addition to an access management policy and traffic calming program, the LRTP also recommends the implementation of additional policies and plans such as corridor preservation, missing connections, and Safe Routes to School.



Strategy & Project Selections

The Envision Columbus 2040 Comprehensive Plan includes specific performance measures and quantitative indicators that can be used to evaluate and report project priorities. For transportation infrastructure, the metrics include:

- Vehicle Miles Traveled (VMT) per Capita
- Active Transportation Facilities
- Bicycle and Pedestrian Mode Share
- Bicycle and Pedestrian Activity and Safety
- Land Consumption
- Accessibility

The LRTP also identifies recommended transportation improvements and classifies them as either short-term, mid-term, or long-term projects. Each improvement falls within one of approximately nine project types listed below. Potentially problematic intersection locations or “Hot Spots” were also identified in the LRTP based on history, known concerns, and known needed improvements.

- Policy
- Roadway Capacity Improvement / Planning
- Public Transit
- Non-Motorized (Trail Improvement)
- Railroad Viaduct Study
- Pedestrian Viaduct
- Railroad Quiet Zone Implementation
- ITS Design / Policy
- TSM Implementation / Policy

All of the preceding examples of strategy and project selection show that Columbus is committed to implementing safety-related projects which correlates with the safer roads objective of the SSA. However, most of these locations were selected and analyzed due to traffic concerns, system deficiencies, and the need for roadway capacity improvements. There is the potential to expand safety-focused project selection even further through adjustments to directly target safety data analysis findings and through expanded or optimized funding to increase strategy implementation.

Progress & Transparency

Based on the document review, there is a need to develop a system for tracking and reporting on the progress of projects, safety goals, and action items. In the Envision Columbus 2040 Comprehensive Plan, the City notes that they will provide regular reporting on the progress being made towards the achievement of Plan goals and objective. This will be done through monitoring mechanisms/tools such as



establishing baseline data and updating the data book to maintain both the relevance and credibility of the Plan. The Comprehensive Plan also encourages an adaptive assessment strategy that includes a process for monitoring and amending plan elements and strategies to remain abreast of changing conditions.

A similar approach to progress evaluation is recommended for the CSAP to ensure transparency is established and ongoing. This can be done through annual reporting on the progress of reducing fatal and serious injury crashes in the area as well as providing public access to the Action plan, safety data, policy changes and other key information.

Key Findings

The project team has inventoried existing plans and policies for the City of Columbus and identified several safety related practices. In general, Columbus has several safety topics that are starting to be discussed and addressed but that haven't necessarily been developed into everyday practices. There were also a few Action Plan components that didn't have any current practices associated with them, which suggests potential opportunities exist to initiate such practices. The Columbus CSAP project will expressly consider opportunities where there may be high benefit and limited resource cost to implement a practice to support fatality and serious injury reductions. The following list summarizes the key findings from the review:

- Safety related goals should be well-defined, and consistent practices should be developed for project prioritization and transparency.
- Opportunities exist to increase public awareness and education through engagement with local leadership and stakeholders.
- Existing practices and policies can be aligned with the Safe System Approach through the implementation of plans and programs such as:
 - Safe Routes to School
 - Complete Streets
 - Access Management
 - Traffic Calming
- Several recommended policies and projects were identified for pedestrian and bicycle facilities but there is room to expand funding for such projects and identify / prioritize other safe system projects and strategies.
- Key corridors and intersection hot spots were identified throughout the document review with some having been further studied for individual mobility and operations analysis. However, most of these locations were



selected and analyzed due to traffic concerns, system deficiencies, and the need for roadway capacity improvements. There is the opportunity to include safety as a project type consideration when recommending projects, policies, and plans.

- A safety committee should be organized to provide oversight of the Action Plan – and the inaugural safety committee could come from the project Safety Task Force and Stakeholder Group.

Following the completion of this existing practices and policy review, the Columbus Technical Committee will continue to refine the safety analysis to identify a high-priority safety network based on reducing existing fatal and serious injury crash patterns. The project team will also further develop Columbus-approved policy and process change recommendations to support the CSAP plan document.



Appendix 2 – Engagement Summary



Introduction

As part of the City of Columbus Safe Streets For All (SS4A) project, a public survey was used to gather input on safety concerns in Columbus and where safety concerns are occurring. Survey respondents were asked to provide information about their safety concerns via a comment map and provide optional demographic information. The survey was available from May 23 through July 21, 2025.

General Safety Concerns

Respondents were asked about general transportation safety concerns. Common responses were related to driver behavior, including speeding, running red lights, running stop signs, distracted driving, etc. Additionally, lack of enforcement of laws related to these behaviors was reported. Accessibility concerns were also mentioned regarding ramps versus curbs at intersections and better signage for visually impaired users.

A few respondents noted that they would like to see a bypass to help alleviate semi-truck traffic through town, while a few others noted the need for traffic calming devices like roundabouts, speed bumps, etc. Many people noted specific areas of concern regarding sight distance, stop lights, safe crossings for students, etc.

A full list of general transportation safety concern responses is available in Appendix A.

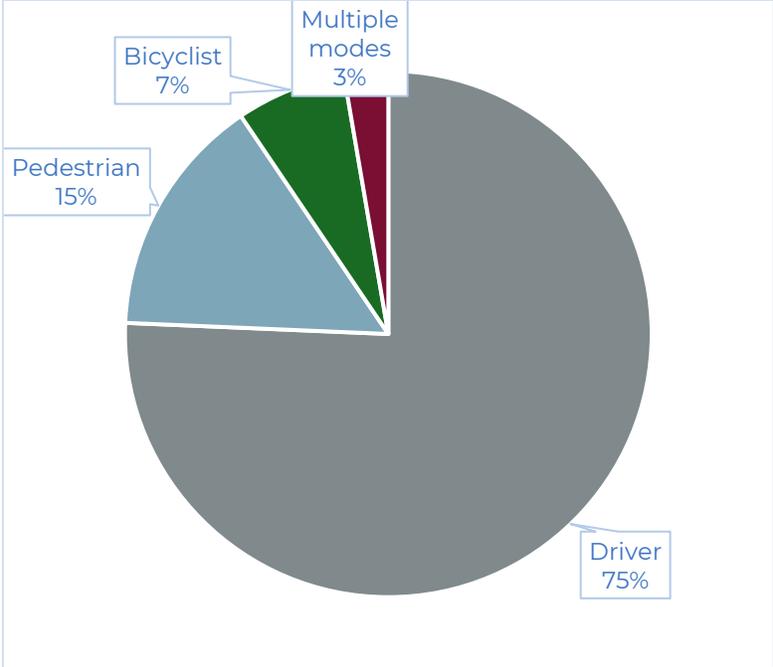
Location-Specific Transportation Concerns

Survey respondents could also identify a specific location in Columbus on a map and note what safety concerns they had in that location. Respondents added a total of 233 comments on the map.

Transportation Mode

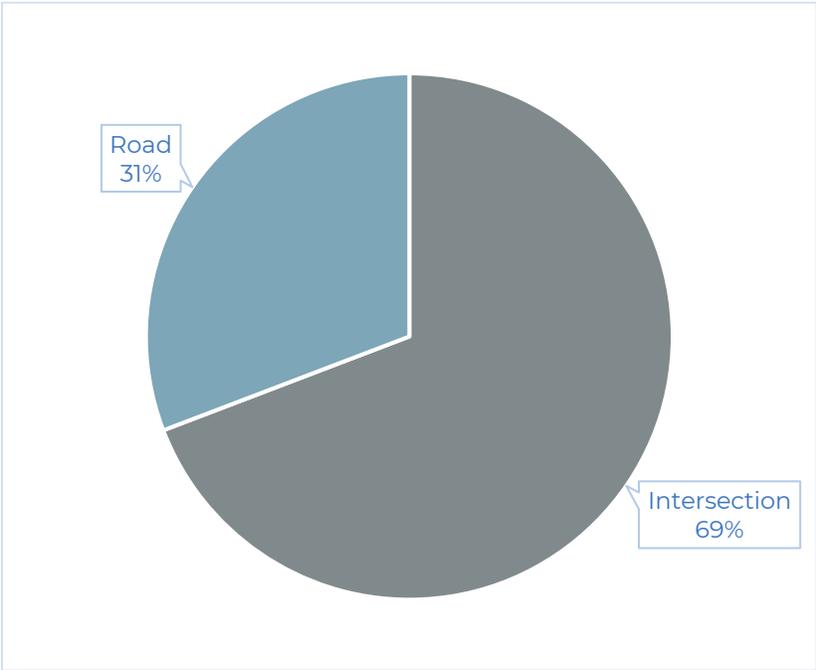
Respondents were asked to report the mode of transportation they feel most unsafe as. The majority of respondents (73%) reported feeling unsafe as drivers.





Intersection versus Roadway Concerns

Respondents were asked to identify if the location-specific safety concern was at an intersection or on a roadway. The majority reported safety concerns occurred at intersections (69%).



Safety Concern

Respondents reported their top safety concern is speeding. Safety concerns were reported as follows:

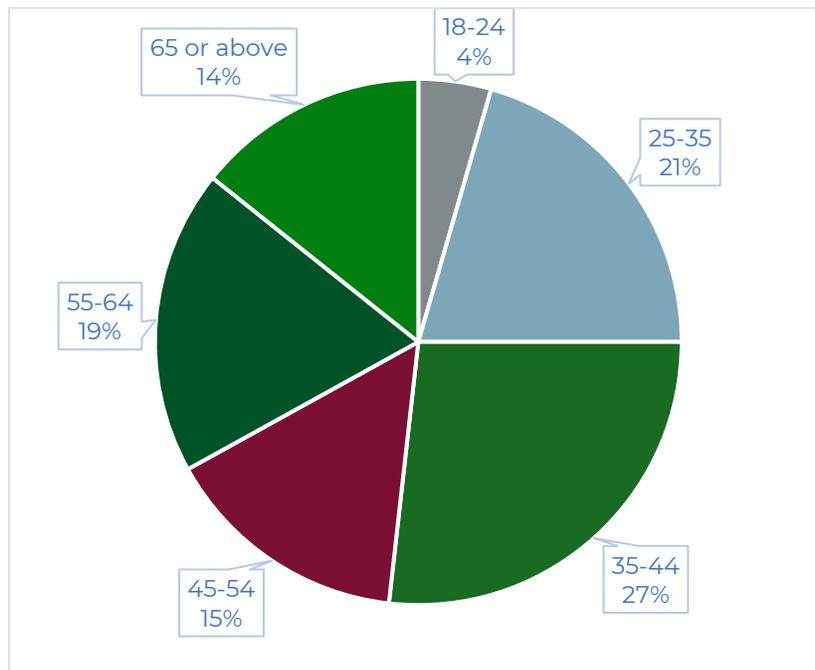
1. Speeding (136 responses)
2. Distracted driving (99 responses)
3. Red-light running (69 responses)
4. Poor visibility when turning (63 responses)
5. Inadequate crosswalks (43 responses)
6. Lack of bike protection (35 responses)
7. Inadequate shoulders (19 responses)
8. Bad lighting (12 responses)
9. Impaired driving (11 responses)
10. Winter road conditions (8 responses)
11. Emergency service response time (3 responses)

A full list of other location specific transportation concerns can be found in Appendix B.

Demographics

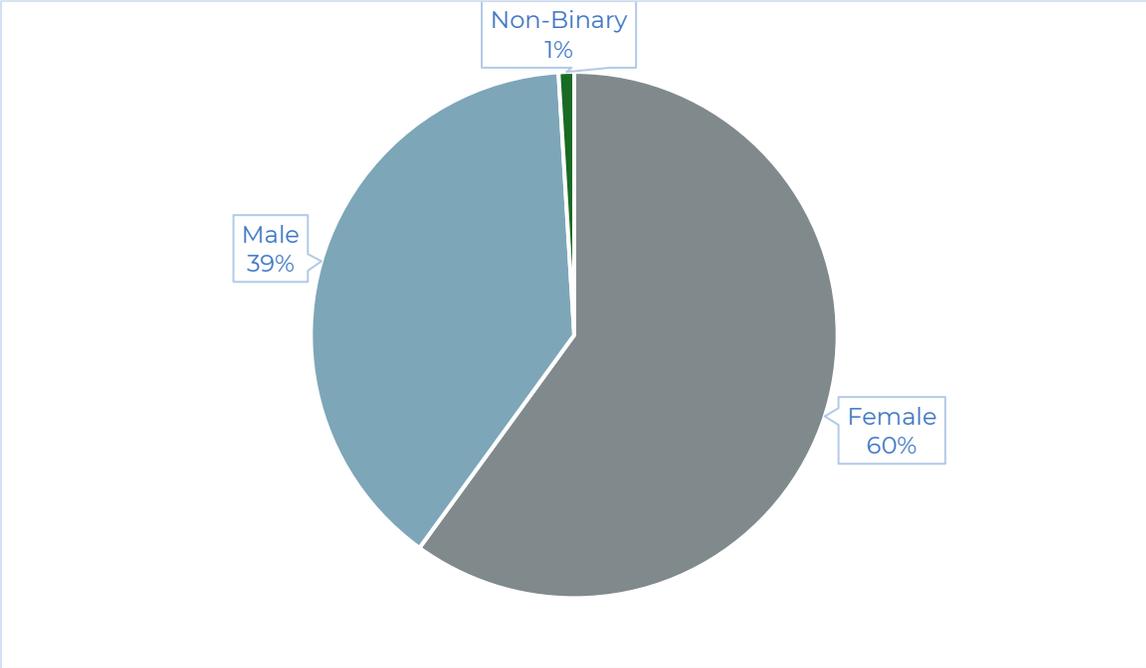
Age Group

The majority of respondents (27%) were between the ages of 35 and 44 years old.



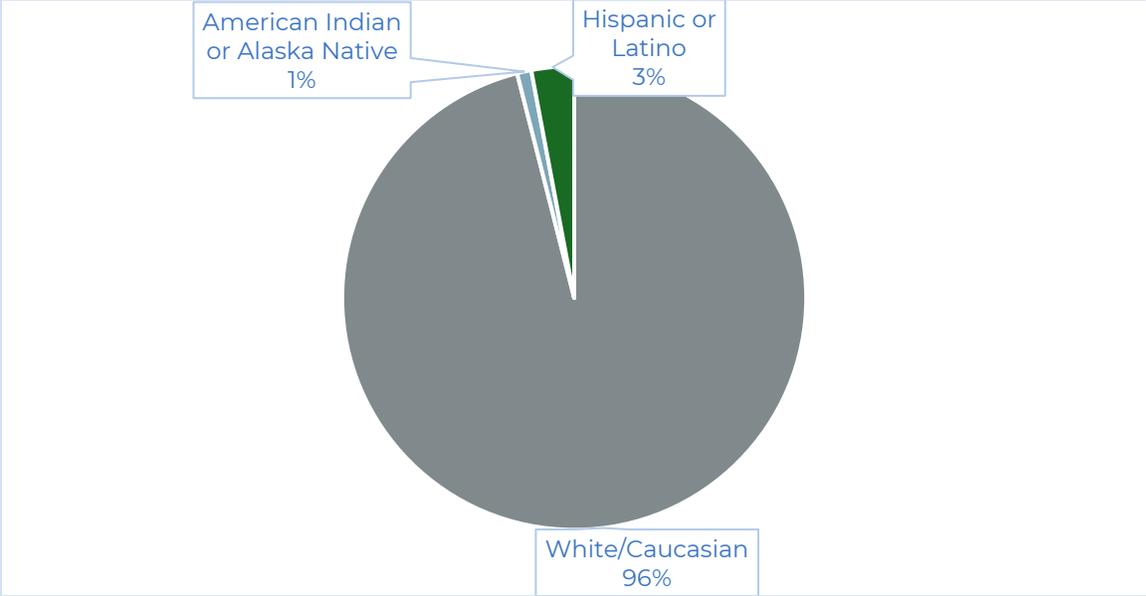
Gender

The majority of respondents identified as female (60%).



Race

The majority of respondents identified as White/Caucasian (96%).



Appendix 2-A: General Transportation Safety Concerns Responses

We need another bypass on the south side of town to alleviate truck traffic just passing through anyway.

The intersection at 3rd Ave and Hwy 30 is terrifying. Trying to turn on to it with no outer turn lane to slow down in, when other drivers are barreling behind you. Turning onto Hwy 30 from 3rd is so dangerous, the curve makes visibility much more limited. Not sure why this intersection doesn't have stop lights like the other intersections along Lost Creek Parkway.

Too many distracted drivers. I wish we were a hands-free town to encourage drivers to be more accountable to the roads they are driving on.

Driving westbound on 6th Street and 26th Avenue. I feel you have to pull far out into the intersection to see traffic from the south due to visual obstructions.

(Tree)

8th street traffic flow, WATER DRAINAGE ON 8TH ST, specifically at 14th Ave

The need for a walking bridge over the highway for Middle School kids is DIRE. Absolute must.

This intersection needs to be upgraded sooner than later. with all the new doors coming to that area, we need to get this intersection improved. either a roundabout or widening.

The boulevard and highway 81, at 14th street and 13th street should be completely redone, as drivers are often heading the wrong way on one ways.

There a many cyclists and walkers that use this corridor and have too narrow of walks and no crosswalks

Blatant disregard of Red Signal Lights at the intersection of 8th Street and 33rd Ave by vehicles traveling both North and South, especially Semi Tractor Trailer rigs. Let's be proactive rather than reactive after someone dies at this intersection. It is bound to happen.

I don't know why, but a number of types I've nearly t-boned cars while heading west on US HWY 30 Alt and vehicles making a left turn from US HWY 30 ALT to



Wilderness Road--it's as if there's something preventing them from seeing oncoming vehicles.

The sidewalks of 8th Street are very deteriorated, in addition to being too narrow to travel, despite being an important street south of Columbus it has very bad lighting, unevenness, cracks or blockages for pedestrians during the night. You cannot see over the viaduct sitting at either stop signs. It is TERRRABLE trying to decide whether or not to turn, go straight, or what to do. This was the worst decision process. They need to somehow make this better. I have seen multiple wrecks happen right in front of me, and tons about to happen. There defiantly needs to be something done here.

speeders

people not stopping at stop signs

no use of turn signals

People on cell phones - you know that is what is going on when you are driving down a major street, you are half a block away when the light turns green and you get to that line of cars before it starts to move. You can only get 3 cars through the light on 31st Ave and 23rd Street coming from the south most of the time as trucks continue to turn left through a red light on a continuous basis.

Gravel roads in town. Namely on the east highway by tractor supply. When the weather is bad it is white out with gravel dust. Also the gravel roads on the far south side streets. Bad for motorcycles.

Speeding and red right running is a huge issue through town. Columbus desperately needs more speed bumps, stop signs and traffic circles. Speeding in Pawnee park is out of control. Drunk Drivers speed coming from Quail Run and have driven into my yard coming around the curve, there needs to be a speed bump. Semis do not stop for red lights on highway 30. Truck traffic should be moved outside of town. More focus on making it safe for walkers around schools. It is hard to look both directions with the angle of the road and the curve makes it hard to gauge the speed of the existing traffic. A light is needed.

More protected left turns are needed at major intersections in. Lost creek parkway/18th Ave intersection, and 48th Ave/23rd street.

26th Ave also very dangerous people speed I think the speed limit should be 20 like downtown . For one Emerson school is there and the preschool is also there too



The speed on 33rd is awful. The semis think they don't have rules. And on 8th St most people think the stop signs are suggestions. Very scary.

That I will die of a heart attack when I open my home valuation

I have safety concerns about electric bikes being used for the road

The city needs more safe routes for bikes and/or sidewalks need to not have curbs

Lack of traffic laws being enforced. As I drive around town rarely see city police anywhere and see more city enforcement from state patrol and county sheriffs

School bus for all students and public schools would be nice!

I have a concern with the middle school kids trying to cross 23rd at any where from 26th Ave to 18th Ave. 23rd Ave and 23 St is the very worst. Running through cars. Not using the cross walks. We are going to lose a child because of there being bi safe way for them to cross.

Streets and sidewalks on 11th street

We need better lighting and Repaint the lane lines they are barely visible at night

Traffic is terrible when the high school gets out. Kids fly through the neighborhood, racing and speeding.

Not able to see cross traffic

People not knowing right of way rule.

Running red lights.

To many semis going through town. We need to have a south bypass for them to get to ADM and not go through town. They are constantly running red lights and others will just go right behind them on the red light. Cops don't do anything about it they just watch them.



One important way to improve traffic safety in Columbus is by adding a second entrance/exit to the Wilderness Park Soccer Complex.

On busy nights and tournament weekends, traffic backs up significantly along 18th Avenue. With only one way in and out, this creates safety concerns for families, children, and emergency responders. If an emergency were to occur, delayed access or exit could have serious consequences.

Adding a second access point would:

- Alleviate traffic congestion
- Improve emergency access
- Create safer flow of vehicles within the complex
- Support growing use of the facility by our community

Wilderness Park is a wonderful resource, but the current traffic setup poses safety risks that can and should be addressed with improved infrastructure. too many cars parked on residential streets. makes many streets 1 way. dangerous to drive on and make a turn into such streets.

Many ignore stop signs completely.

Make survey easier to take. Wrong address in the paper. Made several calls before I received the correct information.

Why not have paper surveys at library, or places of business so all could participate.

people ignore stop sign in front of Menards and mcchristy jewelry. People race and speed on this street also.

people in general ignore stop signs

people have so many cars on residential streets that they become 1 way streets. very difficult to turn on to streets.

12th avenue and 8th street people ignore stop signs'

I think 38th street should be widened to 4 lanes along with 33rd Ave from 23rd St to Lost Creek Parkway.

Also need a right turn lane on northbound 33rd Ave at Lost creek parkway.



Speed of traffic at all times. Lack of traffic calming devices on this long stretch of road entices many to speed way beyond the speed limit at all times of the day or night.

Semis running red lights especially by Super Saver. People not yielding right of way on unmarked intersections. The intersection of 20th Street and 28th Avenue has had numerous accidents over the years. People running stop signs.

Speeding in residential areas. With the highway construction and people trying to avoid it more people are going through residential areas and driving at highway speed. Not slowing down at intersections and not taking through streets. Lots of people not using turn signals. Tailgating is a huge problem. Too many people without licenses and insurance. Too many people not really understanding the rules of the road. Sorry so long but it is a serious problem in town. We don't like to drive much at certain times of the day such as before work, lunchtime, and after work. Crazy!!

This intersection is nearly impossible to cross during school hours, by any means of transportation. (It is especially difficult to go anywhere by car turning south from the east road, you have to go around to 38th Street and 33rd Ave and wait for the arrow to turn south.) I worry for students trying to cross to get to and from school (at 40th Street). During non school hours, many cars do not stop for the blinking lights for walkers or bikers.

Excessive speed by motorists often accompanied by cell phone use.

I have witnessed numerous drivers running red lights while a police/sheriff vehicle is within site and the drivers are not pulled over/ticketed.

I also read in the "Columbus Telegram" the majority of the Sheriff's office media log shows numerous warnings issued, but not many citations.

Disregard to Red Lights, Speeding, Distracted Driving, lack of traffic signals on the Parkway/Arterial --- all of these factors cause safety concerns for me.

Plus, the road construction has really been lengthy in time and drivers are getting frustrated and impatient.



Is anyone working with this project even aware of this National Day, June 6th, tomorrow? In cities on open roads, it's a BIG problem!

FOR IMMEDIATE RELEASE

Road to Safety: June 6th is National Secure Your Load Day

Seattle, Washington, May 30th 2025----this is the 9th year of National Secure Your Load Day but in Washington State we have been diligently working on educating the public on load securement since 2004. Sharing this safety message is definitely working in our state. Law enforcement, public education and the Secure Your Load program at waste facilities is truly making a difference; as it is in other states.

Renee Tucker's daughter Sonja was driving on I-66 in Virginia when a tractor trailer lost a dual tire assembly that went through her windshield. Sonja lived but lives were forever changed that day. The truck driver never came forward leaving the family devastated. We all know that at the end of the day the driver had to have known they lost their dual wheel assembly.

<https://www.nbcwashington.com/investigations/virginia-family-fighting-for-tougher-trucking-safety-laws-after-wheel-off-incident-disabled-woman/3609996/>

In 2024, Illinois spent 26 million on litter <https://www.kfvs12.com/2025/05/14/idot-asks-help-public-put-lid-litter/> Remember up to 40% of litter/road debris comes from unsecured loads. Consider a Secure Your Load program at your waste facilities...it really works in conjunction with law enforcement and public education.

Kudos to two professional truckers, both named Dan, who reached out to me about developing load securement training for flat-bed trucks. Since then, they have developed a training video that is currently under review. <https://www.facebook.com/share/g/16Ub87Jz8z/?mibextid=wwXlfr> Their Facebook link is above so that you can follow their progress. Hat's off to both of you for stepping up to the plate.



Do you feel safe driving behind that truck ahead of you.... you know the one with the load of items not securely fastened to the vehicle? I too often hear that these are freak accidents but in truth they are frequent incidents, deadly and totally preventable. What is a secured load? All items need to be securely fastened to the vehicle. Use good nets, tarps, straps, and/or rope; sometimes you should use several of these items to properly secure your load. Please do not use bungee cords. There are no “do overs” in the world of safety! Company CEO’s, Robin Abel and Paul Reif ask that you protect our families on the road. Please make good load securement a standard practice for all your vehicles.

Ask yourself, “What can I do?” share this safety message with family and friends, and most of all, be proactive. Speak up. It is not easy and it may feel awkward but by speaking up you will save someone’s life.

There is power in numbers and last year 46 states participated in Secure Your Load Day safety campaign educating thousands of drivers on the importance of good load securement. Together we are saving lives and millions of dollars!

“Button it up America, Secure Your Loads” “Secure Your Load as if everyone you love is driving in the car behind you!” Robin Abel, Founder Secure Your Load
www.secureyourload.com

Twin Tragedy

Our family experienced a horrific double tragedy due to an unsecured load that could have been prevented if not for the carelessness of the actual individual involved, followed by the politics

The issues with vehicles running the red lights at 23rd St. and 33rd Ave. is dangerous. Many times cars that are behind larger vehicles (i.e. semi trucks) that run the red lights, are following too closely and also run the red lights due to their inability to see the lights.



One important way to improve street safety is to increase patrols in areas where drivers frequently run red lights. A specific concern is 8th Street on the south side of the viaduct, where this is becoming a regular issue and poses a serious risk to drivers and pedestrians.

Additionally, I recommend implementing a short delay between one light turning red and the cross-traffic light turning green at key intersections. This brief pause would help prevent collisions caused by drivers who try to beat the red light and enter the intersection late.

Thank you for your continued efforts to keep our community safe.

11th and 12th Street from 23rd Avenue and 13th Avenue is a racetrack. There is gravel on 1/2 of that length of 12th and no sidewalks. With the pedestrian bridge in 18th, there is a lot of foot traffic on both of these streets. Drivers fly down 11th and 12th from the viaduct and 8th. Also, you need to do something about the chop shop/meth den/used car lot and junkyard at 1804 11th St.

Consider adding a right hand turn lane to go south on 3rd Avenue.

During construction, I've noticed that there's no clear designated or safe area for pedestrians to walk or cross the street. Unlike vehicles, pedestrians don't have the flexibility to detour easily, especially at intersections.

To improve safety, it would be helpful to implement a temporary walkway marked with cones or barriers, with a clearly visible path and signage. The surface should be flat and free from trip hazards to ensure it's accessible for all pedestrians, including those using mobility aids or pushing strollers.

Howard Boulevard could be changed to a 3-lane street with center turn lane and pedestrian/bike protections. No need for a 2x2 highway dividing these neighborhoods.

27th street could be an amazing active transportation corridor, safe for kids to ride to the middle school, if parking removed and protected bike lanes added. Connection needed between trails along 38th Street (Wilderness Park and High School/Wellness Center areas).

Downtown doesn't need traffic lights or one-way streets -- 4-way stops and two-way traffic can slow traffic downtown and support walking/biking.

There should be an effort to ensure as many kids can walk or bike to their schools as possible.



Safety, Cost, or Speed? What is the city's priority? The SS4A information says 0 is the acceptable number of serious injuries and deaths on our streets and roads. Is the city actually for that or just saying it? Slow the cars. Give people dignity when walking and biking. Make Columbus a better place for every resident.

School time traffic backs up on 26th Avenue and people pull out in front of cars in order to get going

No left turn lane since viaduct. Always very difficult to turn left.

Speed of traffic during busy times.

Traffic around the high school and Lost Creek Elementary School. People are using the turn lane as an extra lane around traffic.

Almost impossible to turn north off of Discover's Drive onto 33rd Ave.

Lack of safe areas on 23rd Street. 23rd St. is dangerous to cross for kids.

Lack of right-hand turn lanes to enter the Lost Creek Parkway. Lots of people use the shoulder.

Downtown speeding. I get mad when people honk at you downtown instead of just stopping to let you back out of your parking space. At 20 mph 13th street should not be used as a commuter route.

Also, I am curious if Columbus will continue to redo curbs without ramped sidewalks. Is this the homeowners responsibility to initiate? If so could Columbus encourage everyone to do it with a group cost discount? I would like to see more wheelchair or stroller friendly intersections.

Thanks!

People run way too many red lights, attempt to speed through a yellow light or are on their phones and not paying attention while driving.

See the 14th street light before 14th when southbound



My husband is visually impaired and always comments on the poor street signs. The larger light up signs-especially on the highway-would make a huge improvement.

We have way too many horrible drivers on the roads. There's virtually no enforcement on stoplight violations, I witness someone running red lights several times a week and have reported it many times, nobody cares. The 23rd St/33rd Ave light is one that has been a problem for well over 10 years, trucks run this light probably daily, although I don't witness it quite that often. The stop sign on Mueller Drive has been gone for probably 2 months - apparently we no longer have to stop at this intersection? We reported this sign being loose MONTHS ago and nothing was done, so it blew completely off during a wind storm about 2 months ago now. Whoever programmed the stop light at 27th St/33rd Ave needs to be fired. That light has no rhyme or reason for why it changes the way it does. I can be the only person sitting at that light in the morning waiting to go straight south, and the northbound light will turn green along with the green arrow for northbound people turning west. Or, I could be sitting there when I come home going northbound with no other cars in the turning lanes, but the green arrows for the turning lanes will turn green. The old stoplight was far superior to the programming done on this newer one. The stoplight on the bypass/33rd Ave- who thinks this was programmed decently? People going north/south get barely any time to go even when there's NO east/west traffic. Not to mention, why on earth are there no turning lanes for people going northbound turning east or west? Take the 4-way stop signs out on 8th street, make that a thru street. Enforce the laws we already have. Make the police chief go back to pulling people over for ALL violations instead of looking the other way, we used to have a good police force in Columbus, now it's getting to be a joke (this is back at the horrible drivers we have all over now, the reason is because nobody enforces laws anymore). Get rid of speed tables and speed bumps, they aren't maintained and end up crumbling to bits and actually causing damage.

People that can't speak or read English should they be driving?

They park trains on the tracks near cubbies. This should not be allowed.



Too many people are running red lights and stop signs. On Lost Creek Parkway, it is very difficult to see when turning onto the parkway. 3rd Avenue really needs a stop light there with how busy that intersection is. Also, 18th Ave needs turn arrows. I just lost a close family friend on 18th Ave and Lost Creek Parkway. There have been WAY too many accidents there, especially with how many deaths have occurred there and it really needs something done. 8th st and 12th Ave has too many lanes for the width of streets. It is far too congested and does not work well, a light may be a better answer. And going from 15th street onto 12th Avenue is very hard to see cars coming down the viaduct. Drivers speeding over the safety bump in front of the community building and not stopping for pedestrians.

Semis running the red lights on the main highway road because of the red construction.

City trucks/cars are sometimes aggressive drivers and don't know how to leave space between cars while driving.

12th Ave and 15th St and 17th street intersections are difficult to navigate and drive through. Vehicles often travel northbound down the viaduct and 35-45mph. It's nearly impossible to see traffic from this direction at the 15th street intersection without creeping half way into the intersection. 17th street is just as difficult. That road is a major artery especially so with the hwy 30 construction and there are parked vehicles to the south, and the intersection is very rough to drive through. I think a roundabout is necessary in at least one of the intersections to keep traffic flowing.

I hope this helps!

All throughout Columbus people run stop signs especially along eighth Street 12th Ave. 18th Ave. 26th Ave. 3rd Avenue also I've seen police officers roll through the stop signs and also third Avenue exiting Centennial Park school when they let out at 3:30.

Flashing yellow lights should be put on both North and South lanes of the viaduct on 33rd St. 8th street needs reworked, after 23rd is finished. Stop lights on 8th street would be good too....A lot of people roll through the stop signs. It is sometimes very hard to get on 8th St.



Speeding and red light running are becoming a serious issue in and around Columbus. General rules of the Nebraska Drivers handbook are not followed by most drivers and getting worse by the day since the police force is not out doing their job which is policing the rules of the road. Second area of concern is the distracted driving, I see more and more people on their phones driving and sending texts while driving often not aware of their lane position, or traffic control devices. Its becoming a real problem and honestly, if the police were out enforcing the rules, which they are paid to do so, I strongly feel that we wouldn't even need to be having surveys or conversations like this. Semi's are notorious and extremely bad about running the 23rd, and 33rd avenue light especially when traveling west. I see this nearly every single time I'm stopped at this light. Speeding in residential neighbor hoods is getting out of hand. 25mph is not obeyed, I cant count the number of accidents that nearly happened when i lived in town yet. City police are equally as bad at this as I have witnessed both City Police without emergency lights and civilians speeding through residential neighborhoods, and I'm talking 40 mph nearly daily. Again, most of this could be handled by Police doing their job in my opinion.

Unmarked intersections...people do not follow the "right-of-way" laws. They will fly through the unmarked intersections as if they are always on the right. I think putting in a stop light by the Casey's off of 8th St might be in order once the housing gets rolling and the shopping area traffic keeps up. With highway 30 being under construction, 8th St is seeing a LOT more traffic in that area. It's overall a busy area.

Seems like crossing 23rd street in several areas is a safety concern. I crossed on foot at 23rd St and 23rd avenue and that light does not stay green for long. I had to almost run to make it.



Appendix 2-B: Other Location Specific Transportation Safety Concerns

Another turn arrow to turn onto Howard boulevard when you are westbound on the highway would be ideal rather than having to run a red light	41.4385272932 - 1816	97.3825512655 6948
As a motorcyclist, I find myself having to run this red light at night since North and southbound traffic is less frequent. These lights at these intersections should be flashing like they do on the highway through town.	41.4626502063 - 673	97.3526716834 8717
Bad drivers. Can a viaduct be built over the neighborhood to Lost Creek Parkway?	41.45531117788 - 9904	97.3683514243 6739
During high traffic hour it is really hard to make a left from 10th Avenue to 23rd St	41.43841292119 - 911	97.3394239127 9155
East/West traffic needs turn arrows to ease the flow of traffic. Too many people have to run the red light to make a turn.	41.4423458253 - 4392	97.368179208 40758
Get rid of the four-way stop on 26th avenue and 18th avenue so it's easier to get on 8th Street	41.424070474 - 84863	97.349495796 582
Get rid of the four-way stop on 26th avenue and 18th avenue so it's easier to get on 8th Street	41.4242093738 - 4347	97.3595519010 9303
Hard to see cars coming with the other cars parked on the side	41.43020113481 - 748	97.36189158191 664



I usually avoid this intersection due to how difficult it is to cross or turn on when north or south bound. There needs to be a light at each of these major intersections	41.4589745349 - 2594	97.330029192 63285
Insanely rough tracks that can cause damage to vehicles especially when a semi truck drives on them and bounces the concrete slabs a foot in the air	41.43275651155 - 069	97.2911571763 0565
Needs a sidewalk	41.446084856 - 79686	97.358479704 37023
Needs a stop light	41.4598555605 - 04295	97.387928505 72281
No turn lane to get onto the highway. Seriously this was completely overlooked	41.438448444 - 5653	97.329564943 32325
Numerous bicyclist using this road they make a circle going up 18th ave to lake north and return to columbus down 48th they don't use bob white trail due to gravel. There is no room on shoulder for bikers to travel safely	41.47337919316 - 559	97.387800575 20232
Running stop signs, so much traffic	41.4239842834 - 0358	97.341979920 03824
Terrible intersection and too many deaths and accidents here	41.4628357529 - 6197	97.3526431141 7275
The programming of the light is not very good for people traveling north and south on 33rd avenue	41.4602309967 - 85896	97.3682191127 7266



There is no turn lane to get onto the parkway, which would be a huge help in getting cars out of the area	41.4602043549-3007	97.36823931883865
There needs to be a longer turn lane for those heading East to the factories. It is highly unsafe in the morning during school traffic with vehicle side by side in the same lane	41.4389252184-3005	97.34919901747064
This intersection needs a light like 48th is getting	41.4583533852-0575	97.33027706694052
This light needs a turn arrow to head East. The viaduct already impairs visibility with speeding oncoming vehicles.	41.4293867267-5021	97.36823155265388
Very hard to see to turn in the summer when the corn is tall.	41.4530514382-4623	97.3587061167132
Why do we not have turn lanes at this light?	41.4600721446-9997	97.36840187595047
This intersection is a nightmare, especially after school events.		
Why is the turn signal gone, get it back!	41.4293969655-5642	97.36804123274668
You cannot see cars on the viaduct when trying to turn onto 12th Ave from 15th	41.4310480286-5356	97.34203790667118
Intersection is not wide enough to handle this many lanes of traffic and volume of cars. Too much confusion over which vehicle can proceed through intersection	41.4238861333-53605	97.34215873832854
Needs traffic control	41.4492732044-43735	97.37529808175167
Poor visibility west to east and cars come over viaduct quickly	41.4329768465-3039	97.341769636184



Poor visibility crossing east and west and cars come over the viaduct really fast.	41.43104632172-731	97.34194129756095
Tough for semis to stop at the bottom of a viaduct. Addition of a right turn arrow on red light for westbound traffic to use when southbound traffic has a protected turn signal could improve traffic flow and reduce red light runners for those turning north off of 8th Street	41.4243247985-4272	97.36805318358856
You can't see if a car is coming until you are out in the intersection and it's too late	41.4302859126-9757	97.36059911917113
congestion, too many vehicles at a narrow intersection	41.4239298850-1248	97.3420445371312
Intersection is too narrow/small to accommodate commuters to/from Columbus Public High School and Lost Creek Elementary School	41.4532548692-51886	97.36796733852086
Intersection is too narrow/small to accommodate commuters to/from Columbus Public High School and Lost Creek Elementary School	41.4532548692-51886	97.36796733852086
Intersection is too narrow/small to accommodate commuters to/from Columbus Public High School and Lost Creek Elementary School	41.4532548692-51886	97.36796733852086



Since the area surface was re-worked. The 45mph speed sign has not been replace. is allowed to travel 55 mph through the intersection (East Walmart Entrance)

41.43851507181 -
Traffic 006 97.3152529299
0814

Stop signs are ignored. East/West traffic crossing distance too long. Drivers are unsure when to proceed

41.4392448263 -
3399 97.324875563
52248

Traffic lights at Montesary Rd and the bypass are not sync'd. Once the flashing yellow light warns drivers of a light change, cars speed up to 'make' the lights.

41.4630609932 -
7237 97.3522318886
9041

Needs a stoplight and turn lane asap

41.4601502818 -
2287 97.3875412726
5062

This block always has heavy parking, which is legal but very crowded for driving. I believe most locations have alley parking, so it would be nice to investigate this and possibly deter street parking on this first block coming on/off the highway.

41.4332549573 -
8531 97.3675391411
4574

When approaching from the east it is difficult to see traffic coming over the viaduct from the south. Especially dangerous if you are trying to cross through the intersection.

41.4310128694 -
351 97.342094154
8318

Cars can park on both sides of road. Difficult or impossible two vehicles.

41.4333396173 -
46874 97.366983995
63916

not completely stopping at stop sign or racing through intersection.

41.43321896190 -
295 97.359468445
97943



Unclear on who has right of way	41.4371537609 -	
	93304	97.343874670
		00724
Drivers going in the opposite direction as	41.4303727966 -	
intended	0001	97.370671482
		93487
Increased traffic due to additional housing	41.4239598071 -	
going up. This is a highly used road and it is	63456	97.334246522
about to be 4x as busy with the people living		99801
nearby, school traffic, those avoiding the hwy		
construction, and now new residents going in		
the new housing. No traffic lights, just a 4 way		
stop on 8th/12th and 8th/3rd. Worried about		
traffic levels and flow.		
many drivers tailgate going northbound on this	41.42615108801 -	
viaduct at 40mph when the speed limit is	423	97.342016403
30mph and they do not seem to realize that the		75488
speed like is only 30mph. an additional speed		
limit sign should be added closer to the start of		
the viaduct so that drivers know the correct		
speed limit.		
westbound traffic turning south does not know	41.43712387114 -	
who has right of way versus southbound traffic	702	97.343925310
turning east and vice versa creating risk of		07065
accident. Many North bound drivers also run		
the yield sign when other drivers have right of		
way. Intersection should be studied and		
appropriate signage should be added.		



Parking on both sides near 33rd Ave. makes is unsafe for motorists navigating that intersection.	41.4333473984 - 248	97.367863230 01652
People parking on the curves makes it difficult to see and navigate.	41.4523600793 - 2411	97.3754875917 3366
Should be a 3 way stop. Very difficult leaving the high school in the mornings.	41.4553085004 - 24564	97.370742763 98631
Length of green light. When traveling north/south with the way the intersection was designed (not having a right turn lane when going north..who thought to not do that ??) you sometimes have to sit through multiple lights to get through the intersection. 3rd avenue continues to be very busy with the viaduct and the bypass to the north.	41.4384342544 - 7153	97.3296834351 3755
There needs to be a turning arrow here	41.4293422352 - 53095	97.3681139945 9839
High traffic volume and would be beneficial for a stop light	41.4385998641 - 7294	97.310359403 44897
15th St.	41.4314787427 - 7698	97.367953266 61083
Is a right turn only going both directions and drivers are not adhering to that. They go across the traffic to go left or across to continue on 15th St. Watched this happen at the end of work days so was alot of traffic.	41.43143852316 - 7664	97.368436064 2335
This needs a turn signal for traffic attempting to turn east is dangerous with traffic coming over the viaduct	41.42917255481 - 525	97.367946864 25003
Inadequate crosswalks during construction	41.4385866223 - 09394	97.359146837 68492



35th Ave is crumbling due to continual heavy equipment operations. Running, walking, and driving are difficult.	41.4289982369 - 94076	97.370720674 90199
Asphalt county road which has no access to multi-purpose trails	41.4633246931 - 8711	97.368260631 46356
For events, this roadway get congested and cannot flow well.	41.45715395539 - 2556	97.3529835187 2046
Insufficient crosswalks in middle Columbus. This is typical for the central part of Columbus.	41.436960860 - 40763	97.365483262 58755
Intersection gets congested then people run lights. Mostly during school peak hours.	41.4423254797 - 952	97.368245569 25731
Intersection is congested and narrow. Drivers use extreme caution.	41.42393041134 - 31	97.3419982414 27
I've seen multiple people drive the wrong way at the connection of HWY 81 and Howard boulevard.	41.4301646393 - 9111	97.370071580 32038
One-ways are narrow and congested. Traffic lights are inadequate at times. As a pedestrian it can get overwhelming due to the one-ways and awkward parking.	41.42997121412 - 82	97.359416607 40421
poor visibility in general when southbound	41.4242798398 - 4523	97.3558146323 9284
poor visibility of northbound traffic when westbound	41.4222176023 - 4902	97.3595996271 88



Road isn't paved. Speed is tremendously high and multiple people walk and bike in the street.	41.4280733792 - 9639	97.347244642 26014
Speeding	41.43103362941 - 153	97.341976783 75489
Poor visibility when turning		
Speeds and the traffic counts can cause perceived issues at this intersection.	41.4568967383 - 9232	97.413472977 66643
Students who walk to school are put in unsafe situations due to distracted drivers and congestions.	41.4437248727 - 92124	97.358739820 50853
The frontage road has multiple stop signs that people blow or don't see. Created speeding situation.	41.4392442434 - 7246	97.326372847 36305
The roadway seems too wide for 35mph. Maybe it should be repainted?	41.45011831875 - 41	97.349099680 0669
Tons of speeding along 15th Street	41.43114563797 - 3664	97.349980495 45533
Traffic signals can be difficult to see. Southbound left turn to eastbound needs a dedicated light.	41.4294561486 - 86356	97.368200443 41803



Typical for all of Howard Boulevard: 41.43318512198 -
 Intersections are dangerous and approach the 839 97.3756130241
 boulevard at bad angles. I feel unsafe while 4515
 approaching these intersections from off the
 boulevard and on Howard. Lanes are also
 narrow and feel tight. When a person is turning
 left either southbound or northbound, there is
 congestion due to no turning lane. There's been
 multiple close calls on the roadway.

Winter road conditions 41.45301323351 -
 Emergency medical service response time 4014 97.349764867
 There has been multiple crashes, near misses, 90259
 and property damages with people funning
 through the intersection into the airport.

Would love to have multiple trails that connect 41.4606436285 -
 the north side of the parkway. 2719 97.3787759218
 4978

A large round hay bale, improperly secured, 41.41957265051 -
 killed a person or persons in this area by New 45 97.368082012
 World Inn. Secure your load.com 64354
 Making a left-hand turn (south) on to 33rd Ave. 41.4423532107 -
 from the west-bound lane of 27th St. is difficult 96334 97.368253674
 because the east-bound lane contains both cars 0205
 turning south and going straight. When traffic
 stacks up in the east-bound lane, it's difficult to
 see who's turning



Need a roundabout. Dangerous intersection cars turning left each morning.	41.4967377858 - 333	97.349517729 08457
No turn lane for lake oconee	41.4754369089 - 331	97.483684491 31948
Street parking only for the courthouse congests traffic on 14th St.	41.4302721436 - 5808	97.359906639 56615
The angles of the intersection make it difficult to see oncoming traffic and/or bikes/pedestrians.	41.4628836122 - 92494	97.3526613346 7518
The crosswalk in the middle of the block is a bad idea	41.4302077910 - 75134	97.358705009 92748
Too much traffic to turn and traffic gets backed up into other lanes	41.4750872345 - 38655	97.443172406 35854
Unsecured loads	41.4379779042 - 64045	97.296327557 07713
When approaching the intersection from the south, there is signage in the parking lot of Linn Chiropractic at 4307 23rd St that make it difficult to see oncoming traffic to the west.	41.4386110940 - 7106	97.3796451292 3817
31st Ave does not have sidewalks for biking. Sidewalks end and the curbs are so large that you are forced to ride in the rode	41.4374998855 - 7492	97.365499476 86372
Cars pull into the center lane to enter tall grass well before the turn in area. Makes it difficult and scary trying to pull in and out of driveways. I'd see this all over town, cars drive way to early into the center lanes.	41.457447024 - 08094	97.3875253451 3766



Cars turning left (west) right in front of incoming traffic	41.4530651387 - 9404	97.3587393215 0393
Drivers pull to far past the area where you are suppose to stop. Makes it difficult to turn past those vehicles to stick out way to far.	41.4533766735 - 11265	97.387331034 995
Ignoring right-only sign	41.4386294142 - 1971	97.3515409383 8212
Needs sidewalk to continue all the way down	41.4532828016 - 7277	97.364392755 57886
Pedestrian Walking signal is not working for crossing going South at the light that is at the bottom of the viaduct	41.42921571893 - 0074	97.3679210102 1004
People not stopping for crosswalk	41.4552138390 - 3154	97.3681664219 2105
Running stop signs	41.4238276676 - 90496	97.3419609416 5462
The sidewalk is so close to the road and huge semi trucks are traveling quickly	41.4379943049 - 5262	97.368026671 30272
This needs to be 4 lane - or at least have 2 turning lanes on 33rd south of the parkway. After school traffic is horrendous if trying to go straight through and often have to wait for several lights. More dangerous as despite the fact it does not have turn lanes, people create their own which can cause accidents.	41.4574875655 - 8697	97.368313803 83705
TONS of little kids play in the street at this intersection/road. It's unsafe for the kids and drivers to who can't see them. There is no adult supervision for the kids playing in the street here.	41.44521381433 - 09	97.348111251511 34



Wrong turns running straight into kids crossing
crosswalk, creating back ups in middle school
lot

41.4434717837 -
3155 97.3541853951
606

This crossing should be more visible and
protected. I have, multiple times, seen people
almost hit while crossing in the cross-walk
because someone saw the opportunity to turn
left while the driving lane yielded.

41.4491913744 -
5566 97.368233540
3274



Appendix 3 – Safety Analysis Memos (Parts 1 and 2)

Columbus Safety Analysis

Acronyms

- SAP – Safety Action Plan
- CSAP – Comprehensive Safety Action Plan
- GIS – Geographic Information Systems
- SHSP – Strategic Highway Safety Plan
- KSI – Fatal and Serious Injury Crash
- VRU – Vulnerable Road User
- MPO – Metropolitan Planning Organization
- FTYROW – Failure to Yield Right-of-Way
- HIN – High Injury Network
- HRN – High Risk Network
- Young Driver – Driver under 21 years of age



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Introduction

The City of Columbus is currently developing their Safe Streets for All (SS4A) Safety Action Plan. As part of the safety analysis, several key task items were completed:

Data Compilation / Conflation – Providing the analysis with quality and meaningful data is an important underlying theme for an effective safety analysis. To achieve this, data were reviewed for accuracy and viability, as well as for identification of relationships between disparate datasets (i.e., crash events, roadway characteristics, and socioeconomic traits) based on shared attributes. Using a geographic information system (GIS) conflation process, associated data were combined based on events and features that share a physical space. Understanding the data, and respective shortcomings, helps guide and inform all subsequent analysis.

Descriptive Statistics – Crash data review to summarize key trends and attributes within the Columbus area occurred. Key crash risk factors were identified, and this list was compared against the Nebraska Strategic Highway Safety Plan (SHSP) to assess Columbus area specific emphases. Further analytical tasks depend on these results.

High Injury Network (HIN) – Location-based safety data analysis identified key locations based on elevated crash densities by focusing on the occurrence of fatal, serious injury, and minor injury (KAB) crashes. The result is a reactive, or hot spot, view of severe crash locations based on historic performance results.

High-Risk Network (HRN)– Focused on areas with similar characteristics to higher crash risk locations, relative to network conditions and/or volume exposure. Through this process, high risk factors were identified. These areas increase opportunities for maximum impact with targeted treatments to reduce potential future crash hot spot locations.

High Priority Network (HPN) – Results from the HIN and HRN were melded to produce a final high priority network (HPN) for safety treatments. The process to identify key locations also included input from the public and city staff. The HPN converted the technical analysis into a planning level location-based map that allows Columbus to incorporate safety strategies into planning processes towards achievable action items.

These tasks identified key crash risks, crash locations, and general trends to inform the project team in their approach to improving safety and targeting zero deaths on the transportation system. A visual representation of how these components interact is provided in **Figure 10**. Following a discussion of the Safety System Approach, each of the previously summarized steps are detailed, describing the methodology and providing analysis results.



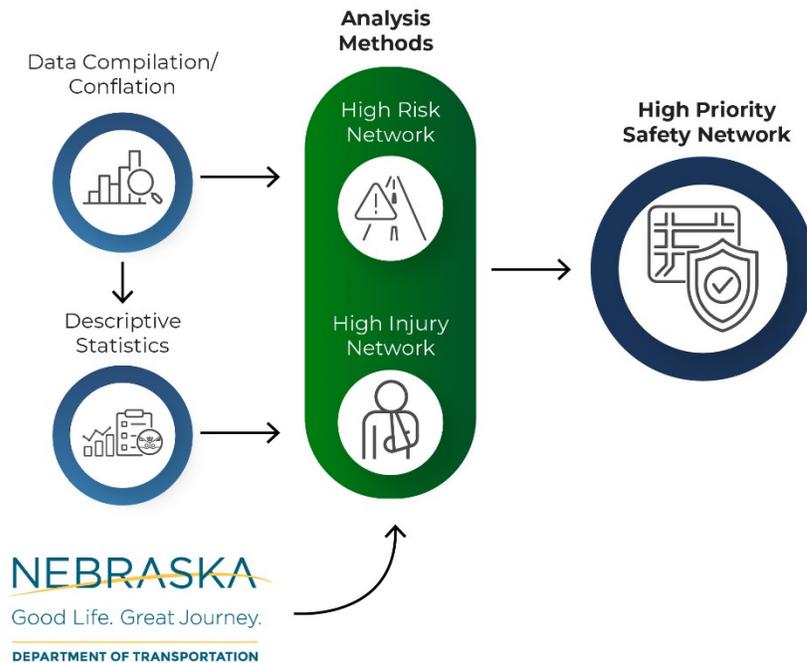


Figure 10: Data Process

Relationship to the Safe System Approach

The Safe System Approach provides the framework needed to target zero deaths on the transportation system. The Safe System Approach is a holistic approach to transportation safety that shares responsibility among all individuals involved in the use, planning, design, or construction of the transportation network.

Figure 11 presents the principles and elements of the Safe Systems Approach, with the guiding principles around the outside and the elements constituting the inside of the Safe System Approach wheel. The interaction and application of these elements and principles reduces the potential for fatalities and serious injuries.



Figure 11: Safe System Approach

*Source: FHWA

The six core principles of the Safe System Approach are:

Death / Serious Injury is Unacceptable – Fatal and severe injury crashes are the most impactful and thus most desirable to reduce and eliminate.

Humans Make Mistakes – Mistakes will happen, but the transportation system can be designed to protect users so inevitable mistakes are not fatal.

Humans are Vulnerable – Humans are frail in comparison to the physical forces that can be present in a crash; design must consider human tolerances.

Responsibility is Shared – All stakeholders share responsibility for safety.

Safety is Proactive – Safety cannot simply be a reactive approach. Latent risk is present but not always obvious.

Redundancy is Crucial – Without redundancy, any failure in the system may lead to death or serious injury. As previously stated, mistakes and failures will happen so redundancy is crucial. Redundancy is achieved when strides are made in all of the five elements together.

Along with the six core principles are five elements of crash risk. These elements have an impact on crash risk that results in fatal or serious injury. These elements assign responsibility to key stakeholders to provide a safe system based on redundancy.

Safer People – All individuals who use the transportation network are responsible for safe behavior, whether they are drivers, pedestrians, cyclists, or transit riders.

Individuals from all modes can take steps to improve safety. Additionally, there are people within the transportation system who are at more risk than others due to some disadvantage(s).

Safer Vehicles – Vehicles should be designed to minimize occurrence and severity of crashes by using safety features.

Safer Speeds – Reducing speeds improves the potential to avoid a crash and reduces kinetic energy that can lead to death and life-altering injuries in the event of a crash.

Safer speeds is a critical component of the safe system approach as it is a significant factor in crash injury outcomes, especially with vulnerable road users (VRUs). Safer speeds are promoted by roadway design, enforcement, and educational outreach.

Safer Roads – Roadway design can add redundancy and create barriers when mistakes happen by separating users in time and space.

The design of the roadway environment can reduce the potential severity of a crash in the event of a crash. Roadway design can include measures such as dedicated bike lanes and rumble strips.

Post-Crash Care – When a crash does occur, emergency responders can provide critical care to minimize the severity of injuries.

Providing good care after an incident, and quickly, can help mitigate the worsening of injuries. Providing quick response can also reduce the amount of time that a secondary crash could occur.

Each of the five key task items, such as the descriptive statistics and systemic crash patterns, provide an analysis of the roadway performance. The details of these analysis can guide future policy to enhance the roadway system through a specific safe system element.

Targeting Zero Deaths

Targeting the objective of zero deaths and serious injuries is a requirement for the Safety Streets and Roads for All program that has funded this analysis. To help the city determine their path to that target of zero, a Columbus, NE forecast figure has been developed (**Figure 12**) depicting alternate goal timeframes and indicating Vision Zero benchmarks. Along the horizontal axis is the year in which the Vision Zero goal is achieved originating from a 2024 implementation. The last year of crash data in the analysis was 2023 meaning that 2024 was the first year for which projections could be performed. The vertical axis is the total fatal and severe injury crashes (KSI).



Within the graph, the solid orange line shows the current trajectory trendline as indicated by the historic KSI crash totals (shown by the black dots). Each color line is a trendline related to an alternative goal timeframe. For example, the solid maroon line is the goal of Vision Zero by 2050. Shorter (earlier) goal timeframes result in steeper reductions of KSI crashes.

Table 3 summarizes both the frequency and percent reduction per year needed to achieve each target year.



Figure 12: Path to Vision Zero Projections

Table 3: Path to Vision Zero Projections Reduction Targets

Path to Zero Target Year	Average Number of KSI Reductions per Year From 2024
2030	2.3
2035	1.29
2040	0.87
2045	0.66
2050	0.53

Ultimately, the Columbus comprehensive safety action plan will adopt a target year for reaching zero fatalities and serious injuries based in part on this analysis.

Data and Data Compilation / Conflation

Data was collected from a variety of sources for the safety analysis and reviewed for accuracy and usability within the analysis. The data used was only crash data and roadway data, both provided from the Nebraska DOT. The data extent covered the



city of Columbus as well as some select roadways outside of city limits to create an actionable analysis area for inclusion in future planning projects.

Data

Crash data, as well as roadway network data, was received from the Nebraska DOT for the years 2017-2023. The crash database contains compiled enforcement reported details such as crash severity, conditions, and manner of the crash.

Descriptive Statistics

Descriptive statistics were developed to determine factors that are associated with a higher crash risk and, specifically, higher KSI crash risk, using a data-driven methodology. The factors reviewed primarily revolved around the crash characteristics and temporal trends (year, month, day of week, etc.).

Methodology

Crash data was reviewed from the provided years of 2017-2023. Descriptive statistics do not account for exposure or relative rates, simply the raw number. Care should be taken when interpreting results and associated patterns. An example is daytime pedestrian crashes which are likely to manifest as a risk factor via descriptive statistics as more pedestrians typically walk during daytime and are similarly exposed to increased potential vehicle conflicts. However, this would not necessarily indicate a higher rate of daylight pedestrian crashes than during other times of day but, rather, simply that a majority of pedestrian crashes occur during daytime.

This review consisted of comparing the crash percentage of all crashes (regardless of severity) to the crash percentages of KSI crashes within several crash categories. Essentially, this is comparing two histograms for a given category. For example, when examining crashes by month, the percentage of all crash severities was compared to the percentage of KSI crashes for each month. Months where the percentage of KSI crashes was higher than the all crash severity percentage signified an over-representation of KSI crashes for that category. Categories where KSI crash proportions were lower than the all crash severity percentage signified that KSI crashes were under-represented.

Results

Key trends were identified by comparing the percentage of KSI crashes to all crashes (regardless of severity). This identified factors that are more likely to produce a KSI crash than other crash severities. Several key trends were graphed and are presented below. Some key observations for where the percentage of KSI crashes is higher:

- February, March, May, and August through November



- Saturday, Sunday, and Monday
- Horizontal and vertical curved roads
- Angle, Single vehicle, and turning vehicle crashes
- Dark - lighted conditions
- Barrier or grass medians

Key trends that are related to temporal trends and crash characteristics are presented in 13 through **Figure 20**. Each figure displays the factor categories along one axis and the percentage of that factor category along the other axis for both all crashes and KSI crashes. Labels for each data bar are provided. The first number is the crash count, be it the all crash or KSI crash, and the second number is the percentage of crashes in the category bin. In 13, the January bin for “All Crash” shows a value of “126, 8.86”. This means that January has 126 all crashes, and that 8.86% of all crashes occurred in January.

The first set of figures deal with temporal trends for total and KSI crashes. This includes the month, day of week, and year that crashes occurred. KSI crashes tended to occur in the months of February, March, May, and August through November. For the day of week, Saturday, Sunday, and Monday had a higher KSI percentage of crashes. Dark-lighted conditions had a higher KSI percentage. The percentage of KSI crashes rose for the last three years of data collection.



Figure 13: KSI Crashes by Month: Label [Total Count; %]

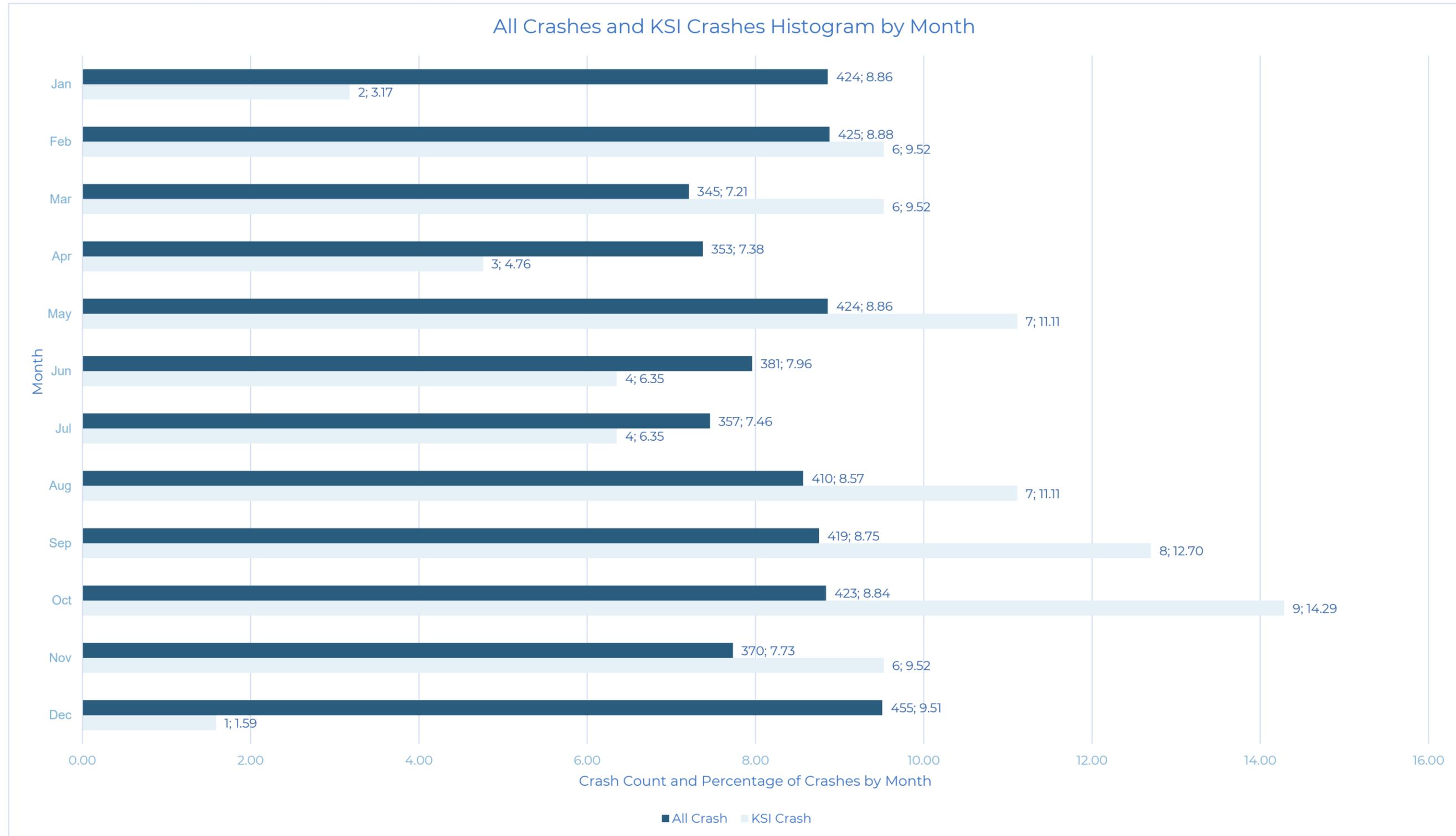


Figure 14: KSI Crashes by Day of Week: Label [Total Count; %]

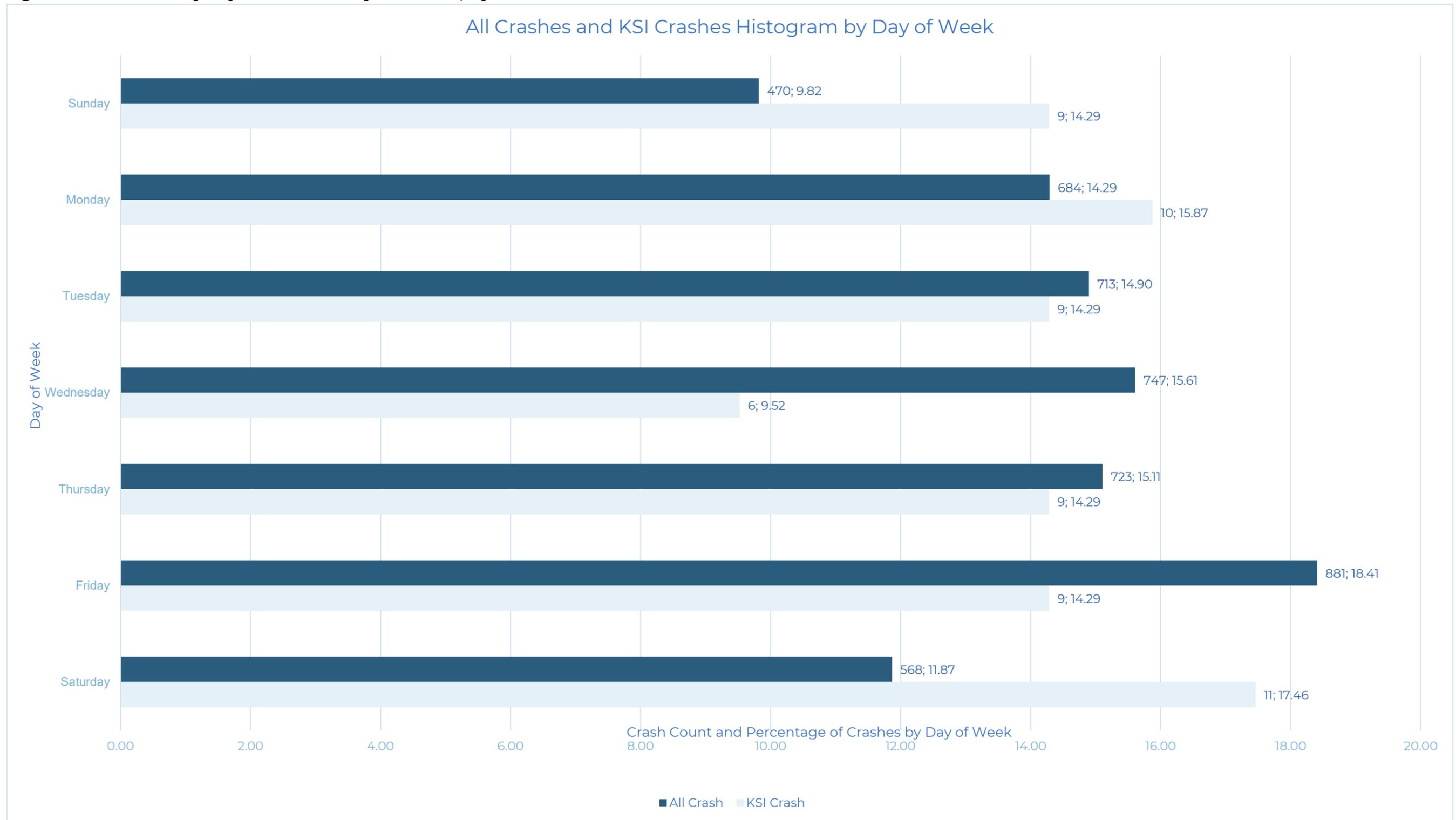


Figure 15: KSI Crashes by Year: Label [Total Count; %]

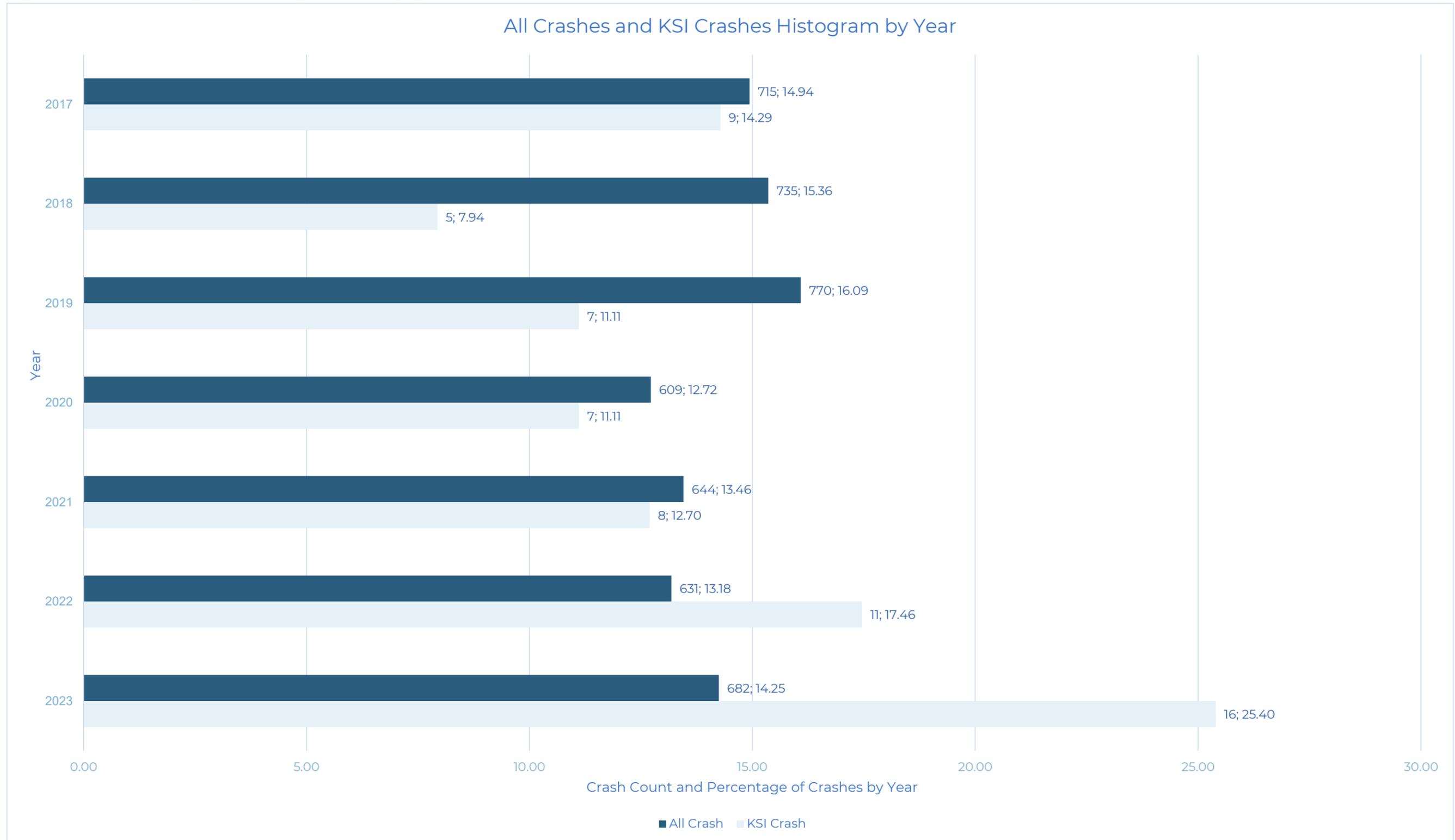
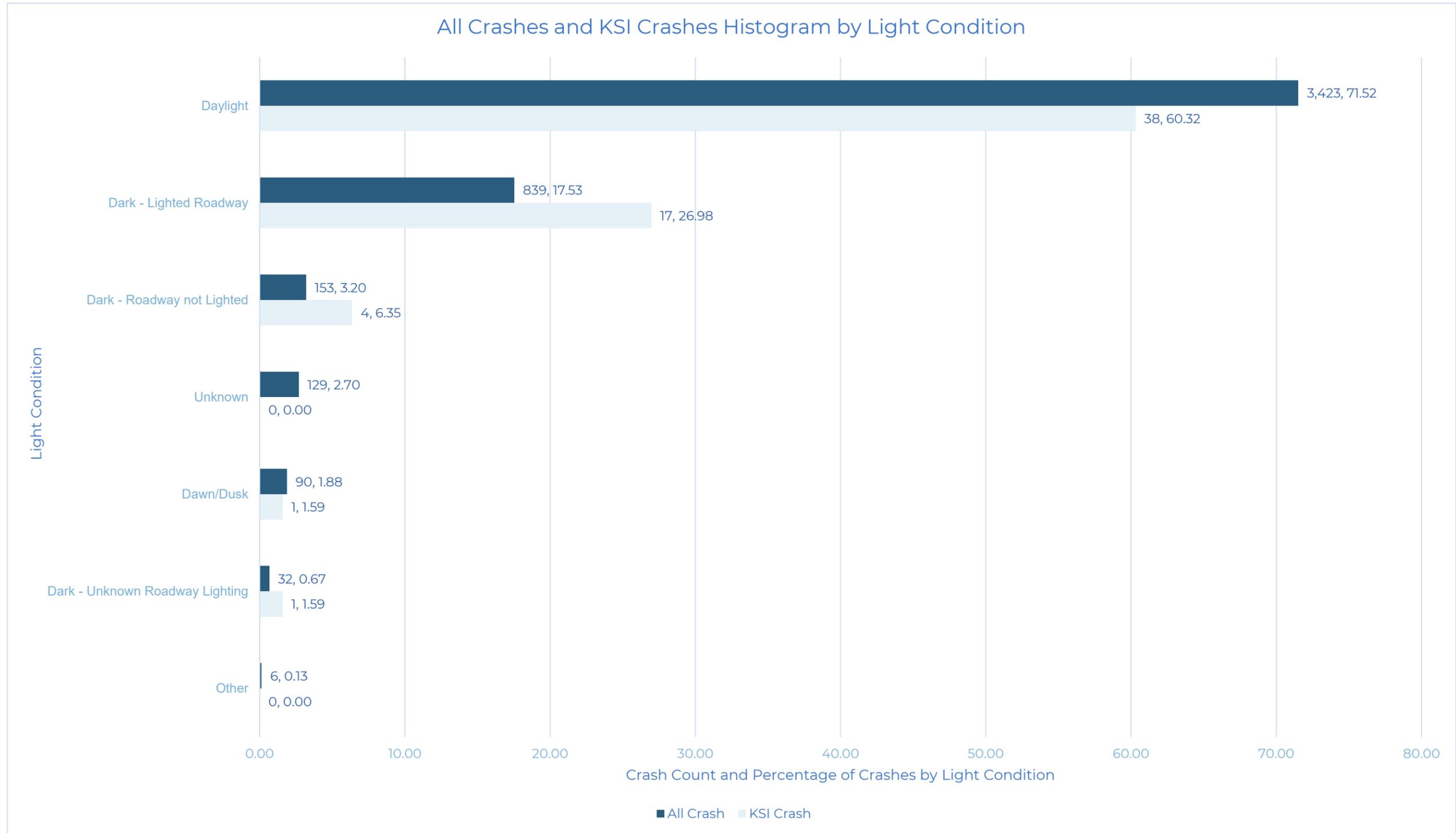


Figure 16: KSI Crashes by Light Condition: Label [Total Count; %]

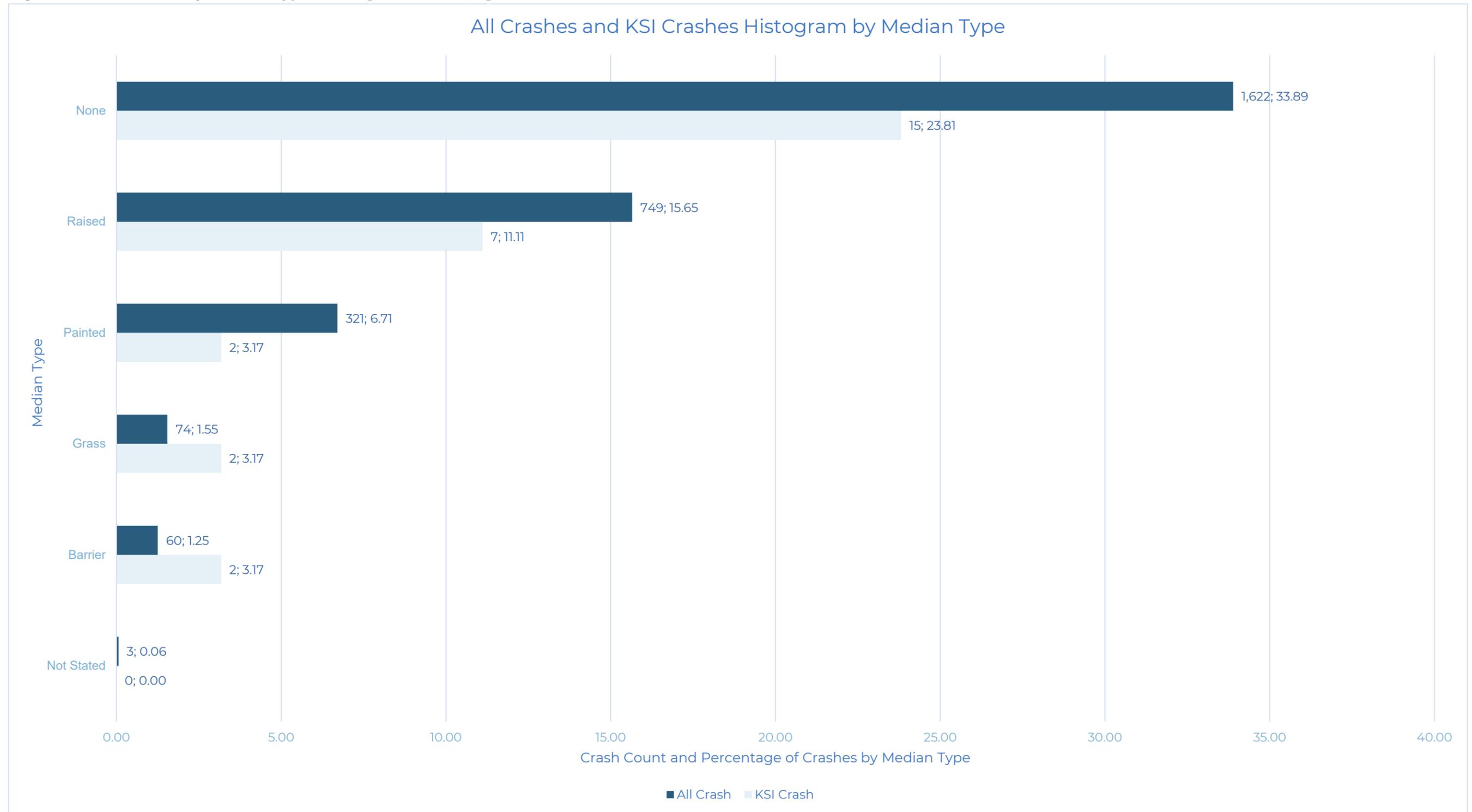


The next group of descriptive statistics was based on crash and roadway characteristics. The crash data included several roadway features in the dataset itself. Due to data changes over time, some crash categories analyzed did not include the full 2017-2023 period, thus total crashes reduced from 4,786 to 2,829. Median types of grass and barrier had a higher KSI percentage and are also roads typically associated with higher speeds. Roads that had horizontal or vertical curves also had a higher percentage of KSI crashes. Additionally, angle, turning vehicle crashes, and single vehicle crashes had a higher percentage of KSI crashes.



*2017-2020 data only

Figure 17: KSI Crashes by Median Type: Label [Total Count; %]



*2017-2020 data only

Figure 18: KSI Crashes by Road Characteristic: Label [Total Count; %]

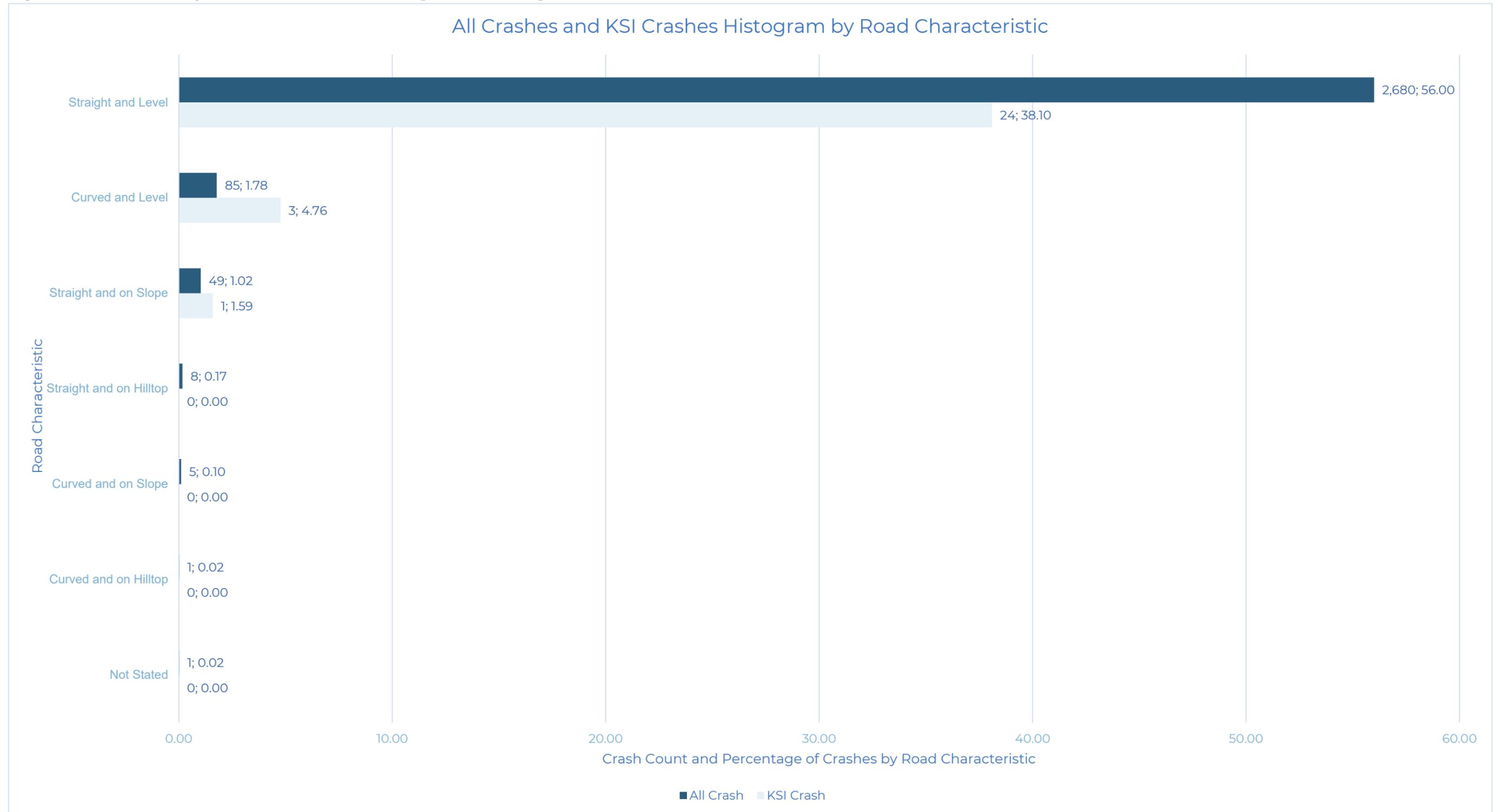


Figure 19: KSI Crashes by Crash Manner: Label [Total Count; %]

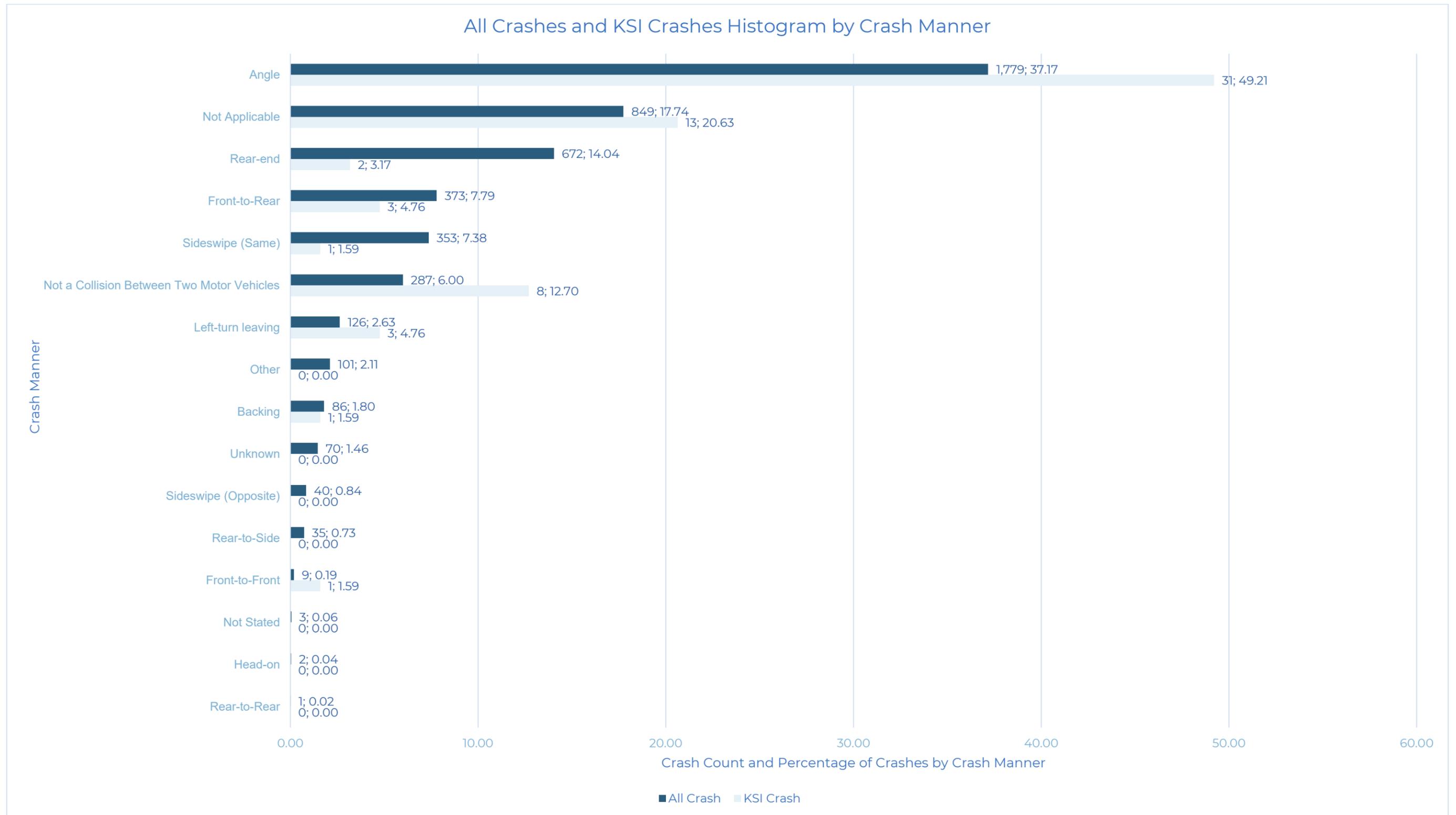
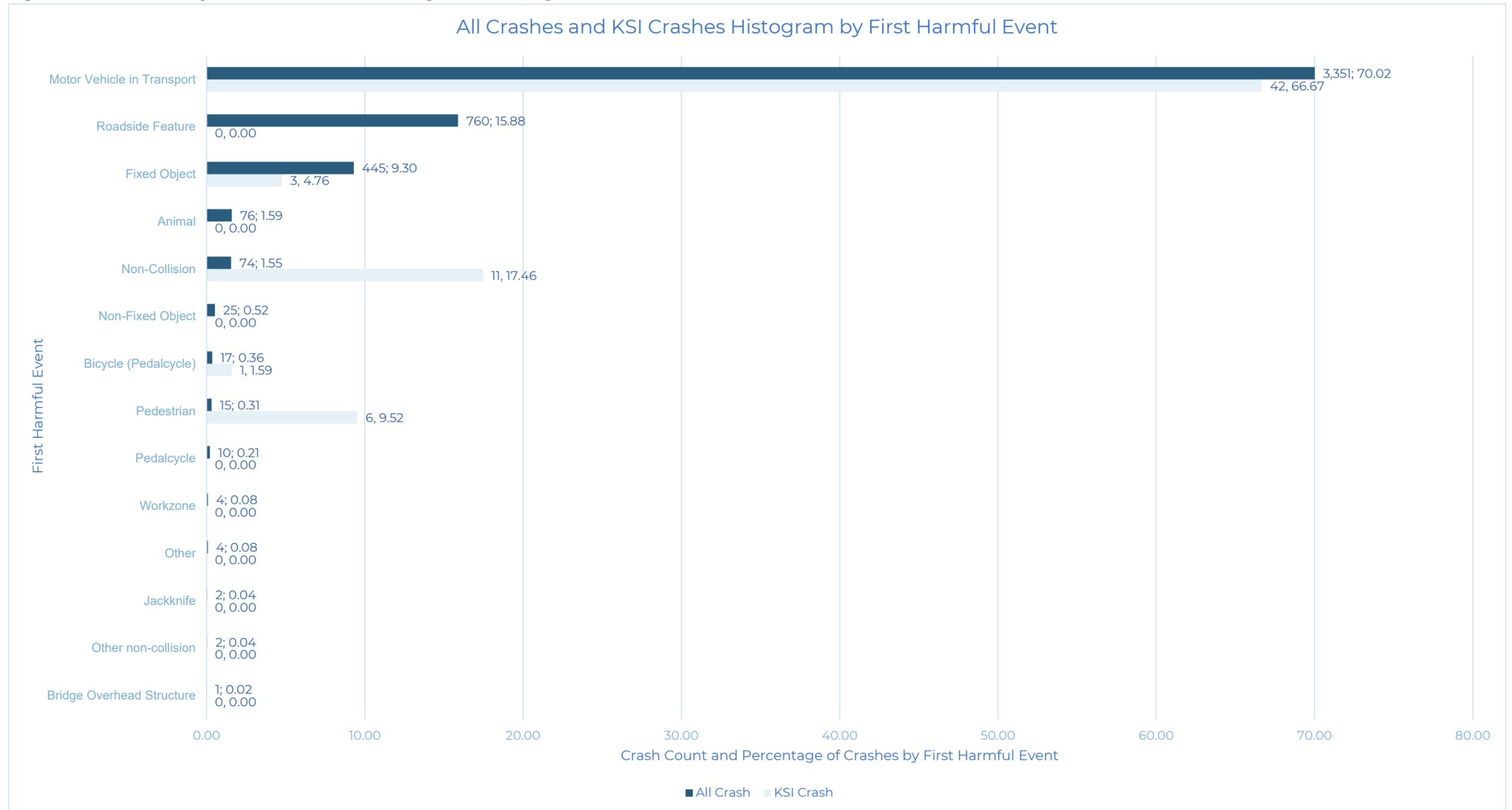


Figure 20: KSI Crashes by First Harmful Event: Label [Total Count, %]



High Injury Network (HIN)

The HIN was developed based on severe crash frequency along individual segments. Crash severities were weighted so that more severe crashes carried more emphasis in the HIN. Creating a network based on weighted crash severities can highlight areas that experience KSI crashes, rather than a focus on total crash count. Targeting KSI crashes are more aligned with Safe System Approach. Injury levels below “Serious Injury” were included as potential proactive indicators to a future severe crash – but were weighted at a lower level. Identifying crash locations based on crash frequency can be performed via various methodologies such as hot-spot analysis or network screening in addition to the HIN. For the Columbus safety analysis, the HIN analysis method was used.

Methodology

The crash data and roadway data were joined by snapping each crash to the nearest roadway segment for mid-block crashes and to the nearest intersection within 250’ for intersection crashes. The intersection crashes were then tied to both intersecting roadway segments. This was done as the exact GPS location may not tag the crash to the correct roadway segment.

To weigh the crashes for the HIN, a severe crash density was calculated for each roadway segment. This included only KAB crashes. The KA crashes had a weight of 1 while the B crash severity had a weight of 0.1. The sum of the crash weights was taken for each segment. Crashes at intersections were tied to each intersecting segment. Once a sum of the crash weights was calculated, the crash weights were divided by the segment length to get a crash weight density. The highest ranked, or highest density segments, were then selected for the HIN. Some manual simplification of the network was also employed to join small, isolated segments into more coherent corridors. The final selection of segments aimed to capture at least 80% of KA crashes while covering less than 10% of roadway miles.

Results

The final HIN consists of just 7.5% of the roadway miles in the analysis area but covers 84.1% (53 out of 63) of fatal and serious injury (KSI) crashes. A map of the final HIN is provided in **Figure 21**.



High-Risk Networks (HRN)

A High-Risk Network (HRN) analysis involves identifying corridors that have greater risk in relation to a specific crash contributing factors based on the crash data. These crash contributing factors that stand out are referred to as key emphasis areas.

Key emphasis areas are identified for the analysis. Each emphasis area has a threshold selected to target approximately 10% of the roadway network based on the crash count for the key emphasis areas. This provides a network for specific crash factors that is also a manageable network in size, helping prioritize agency efforts and funds. This can guide planning, design, and leadership decisions or identify locations for specific crash type countermeasures or treatments.

Methodology

The crash categories, or key emphasis areas, were identified through the descriptive statistics and the Nebraska SHSP. The crash data was assigned to the nearest roadway segment. For each key emphasis area, crash counts per segment were sorted from highest to lowest, selecting those segments with the greatest number of emphasis-area crashes until their combined length comprised a target 10% of the total roadway network. This was an iterative process to reach the approximate thresholds. The process for each key emphasis area is as follows:

- Calculate the number of key emphasis area crashes for each segment.
- Calculate the roadway network percentage share for each segment based on centerline mileage.
- Sort the segments in descending order of most key emphasis area crashes to the least number of key emphasis area crashes.
- Group segments based off their key emphasis area crash totals. Aggregate the roadway network miles and network percentage share for all segments in the group.
- Work in a descending fashion including each crash total group until the cumulative network percentage exceeds the 10% threshold. Once the 10% threshold is met, remove the last included segment to get under the 10% threshold. Discretion was applied when deciding whether to stay above or below the target threshold based on how far above or below the results provided.

The results of this process are provided in **Table 4** for segments. **Table 4** provides the key emphasis area, the crash threshold, and the roadway network share.

A similar process was performed for intersection crashes. Intersection crashes were defined as crashes within 250' of an intersection. The target threshold for intersections was approximately 5% of all intersections. The results are provided in



Table 5. Table 5 provides the key emphasis area, the crash threshold, and the intersection network share.

Results

Location-based crash maps and data were analyzed for eight key emphasis areas resulting in separate HRNs. These areas were selected based on the descriptive statistics as well as the available crash data linked to roadway data. The HRN categories are:

- All crashes
- KSI
- Intersections
- Alcohol
- Young Drivers (Under 21)
- Motorcycle
- Angle
- VRU

Two tables are provided with an overview of the crash threshold values and the network segment, or intersection share in **Table 4** for segments and **Table 5** for intersections.

Table 4: Segment HRN Emphasis Areas Summary

HRN	Threshold (crash count greater than or equal to)	Miles of Roadway	Percent of Roadway Network
All	14	24	12%
Angle	9	20	10%
Alcohol	1	26	13%
KSI	1	19	9%
Motorcycle	1	11	5%
Young Driver	4	23	12%
VRU	1	8	4%

Table 5: Intersection HRN Emphasis Areas Summary

HRN	Threshold (greater than or equal to)	Number of Intersections Meeting Threshold	Percent of Intersections
All	17	115	6%
Angle	9	107	5%
Alcohol	2	37	2%
KSI	1	94	5%



Motorcycle	1	51	3%
Young Driver	5	99	5%
VRU	1	65	3%

Each KEA following provides a summary of crashes along with the HRN map. A KEA crash type total is provided for all crash severities and KSI crashes. The percentages provided are the percentage of total crashes and the percentage of KSI crashes. For example: The KEA HRN includes 314 total KEA crashes (10%) and 5 KEA KSI crashes (11%). The (10%) is 314 KEA crashes out of 3,141 total crashes counted for the study and the (11%) is 5 KSI KEA crashes out of 46 total KSI crashes counted for the study area.

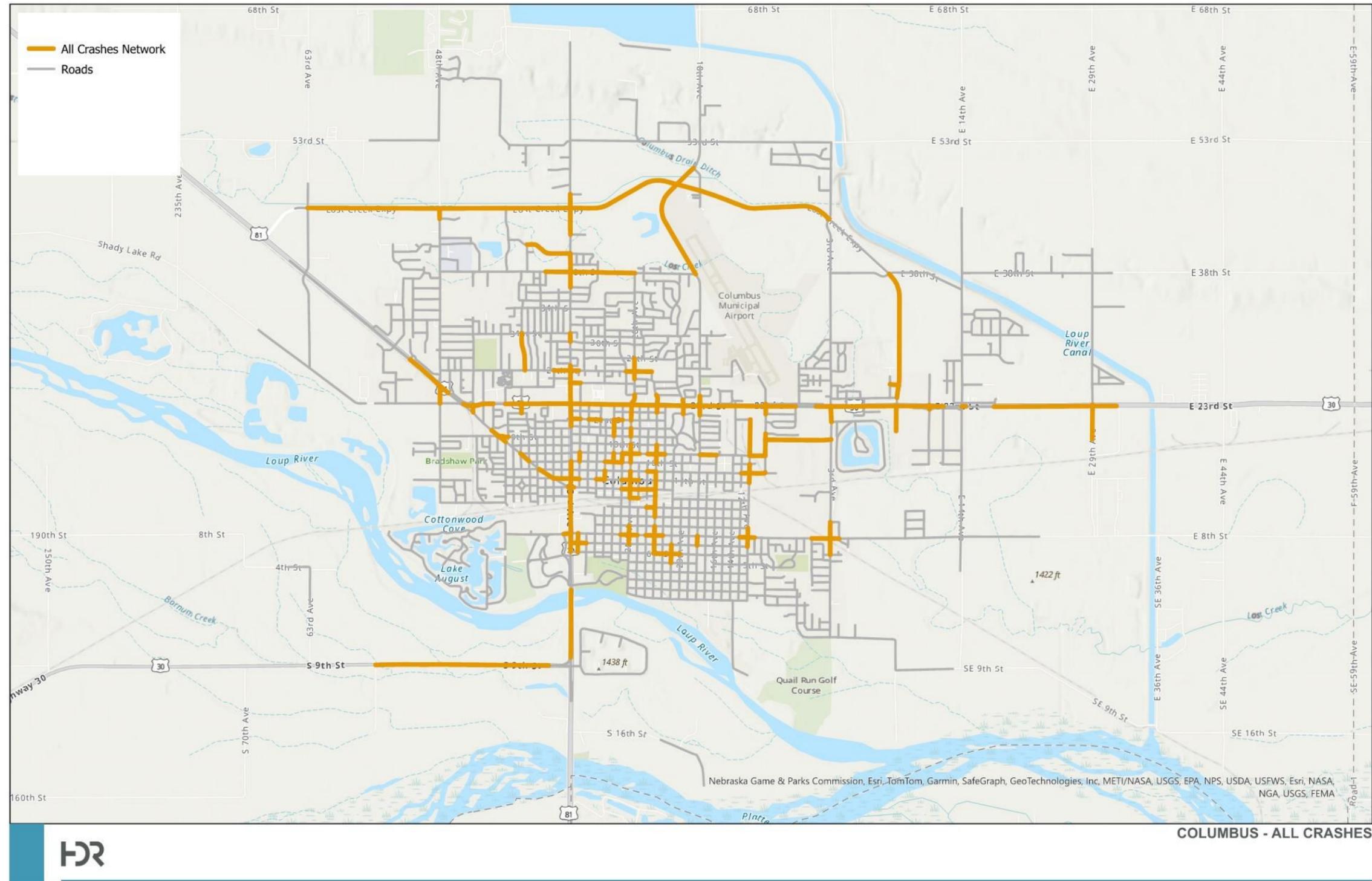
All

The All segment network covers 12% of the roadway network. There are 2,997 crashes (63%) and 43 KSI crashes (68%) in the all-crash network.

The All segment network is presented in **Figure 22**. Any roadway segment that meets or exceeds the threshold is displayed. The network consists of corridors along US 30, the US 30 bypass, 33rd Avenue, Howard Boulevard, and sections around the downtown area.



Figure 22: All-Crash HRN – Segments

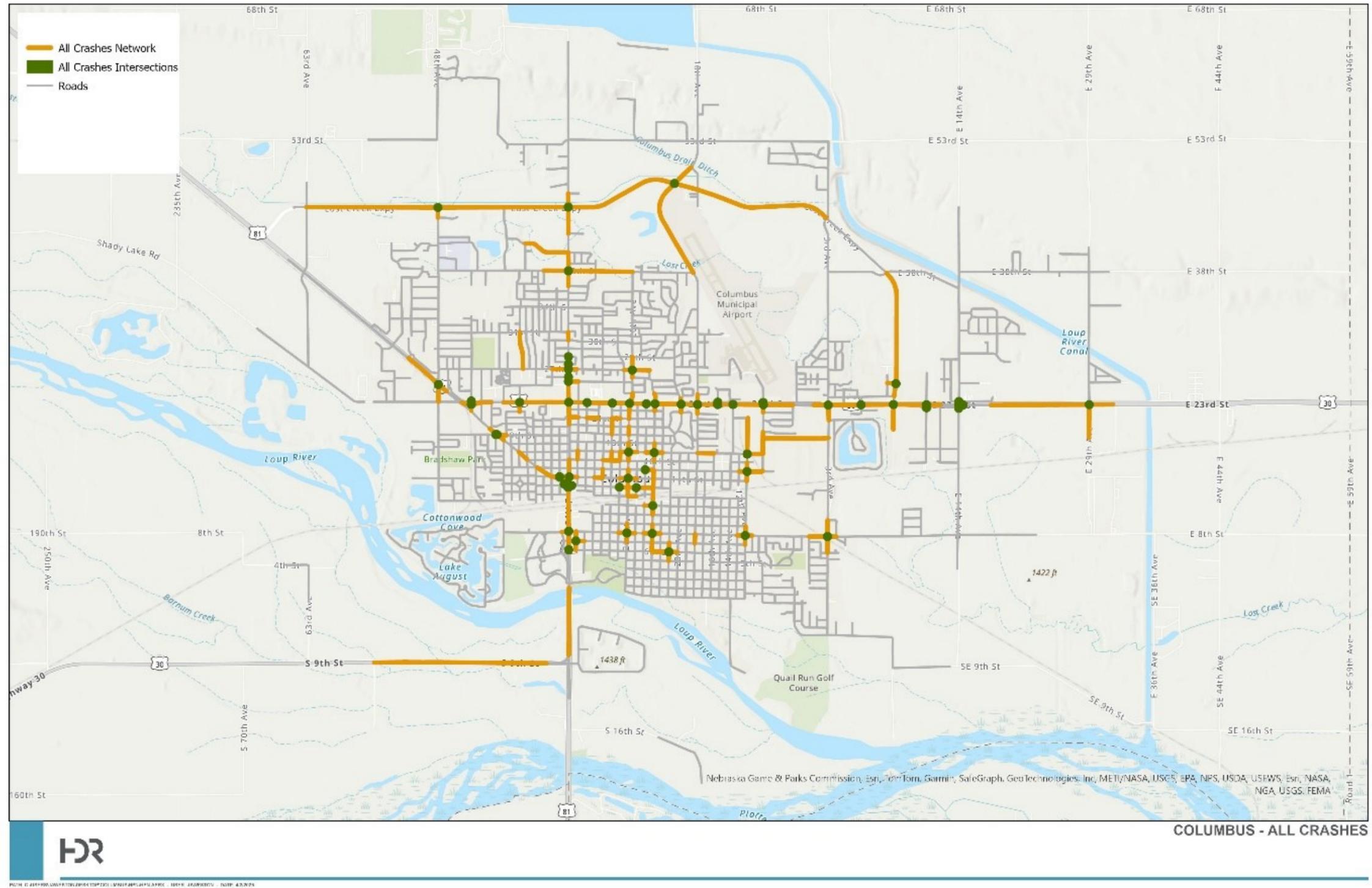


The All intersection network covers 6% of the intersection network. There are 2,733 crashes (57%) and 45 KSI crashes (71%) in the all-intersection network.

The All intersection network is presented in 23. Any intersection that meets or exceeds the threshold is displayed. The network consists of corridors along US 30, the US 30 bypass, 33rd Avenue, Howard Boulevard, and sections around the downtown area.



Figure 23: All-Crash HRN – Intersections



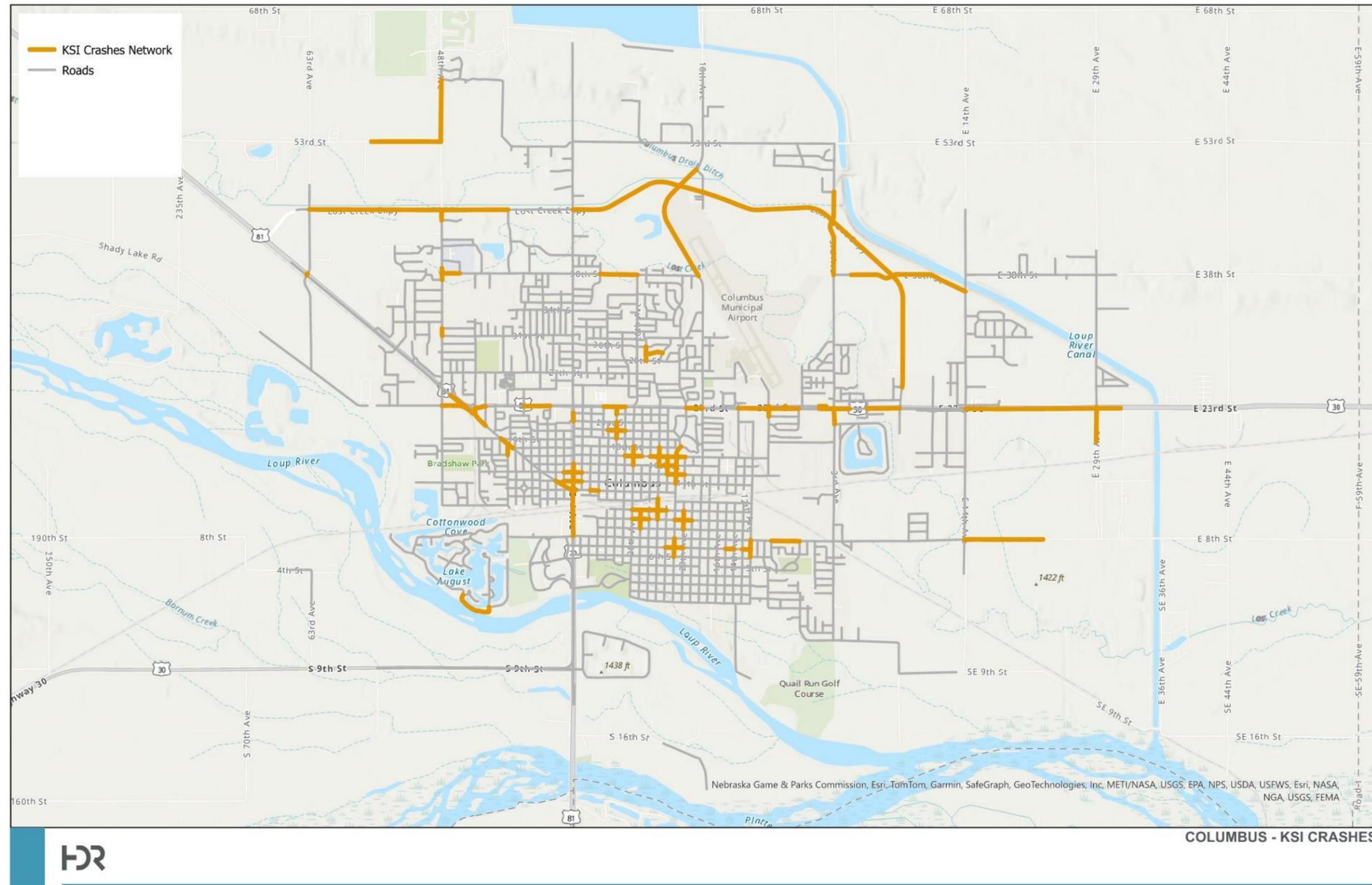
KSI

The KSI segment network covers 10% of the roadway network and includes 63 total KSI crashes, all of which are KSI crashes and is 100% of the KSI crashes.

The KSI segment network is presented in **Figure 24**. Any roadway segment that meets or exceeds the threshold is displayed. The network consists of corridors along US 30, the US 30 bypass, 33rd Avenue, Howard Boulevard, 8th Street, and sections around the downtown area.



Figure 24: KSI-Crash
HRN - Segment



The KSI intersection network covers 5% of the intersection network. This is 56 crashes, all of which are KSI (1% of total crashes and 89% of KSI crashes).

The KSI intersection network is presented in **Figure 25**. Any intersection that meets or exceeds the threshold is displayed. The network consists of corridors along US 30, the US 30 bypass, 33rd Avenue, Howard Boulevard, 8th Street, and sections around the downtown area.



Alcohol

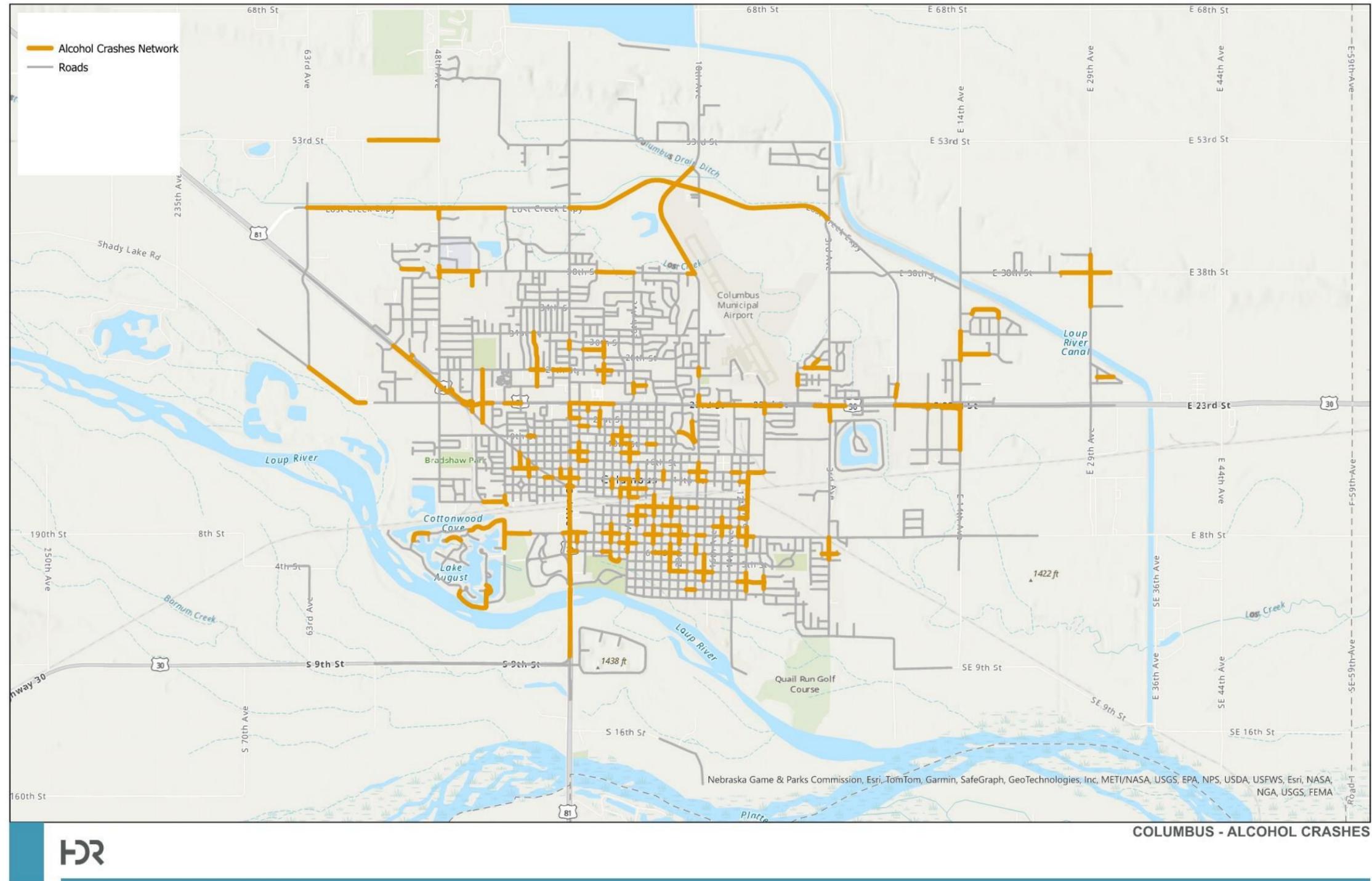
An Alcohol crash HRN is made up of crashes where alcohol was suspected to be a factor in the crash.

The Alcohol segment network covers 13% of the roadway network and includes 100% of alcohol crashes in Columbus. The Alcohol HRN includes 149 alcohol crashes (3%) and 8 KSI alcohol crashes (13%).

The Alcohol segment network is presented in **Figure 26**. Any roadway segment that meets or exceeds the threshold is displayed. The network consists of corridors along US 30, the US 30 bypass, 33rd Avenue, Howard Boulevard, 8th Street, and sections around the downtown area.



Figure 26: Alcohol-Crash HRN - Segment

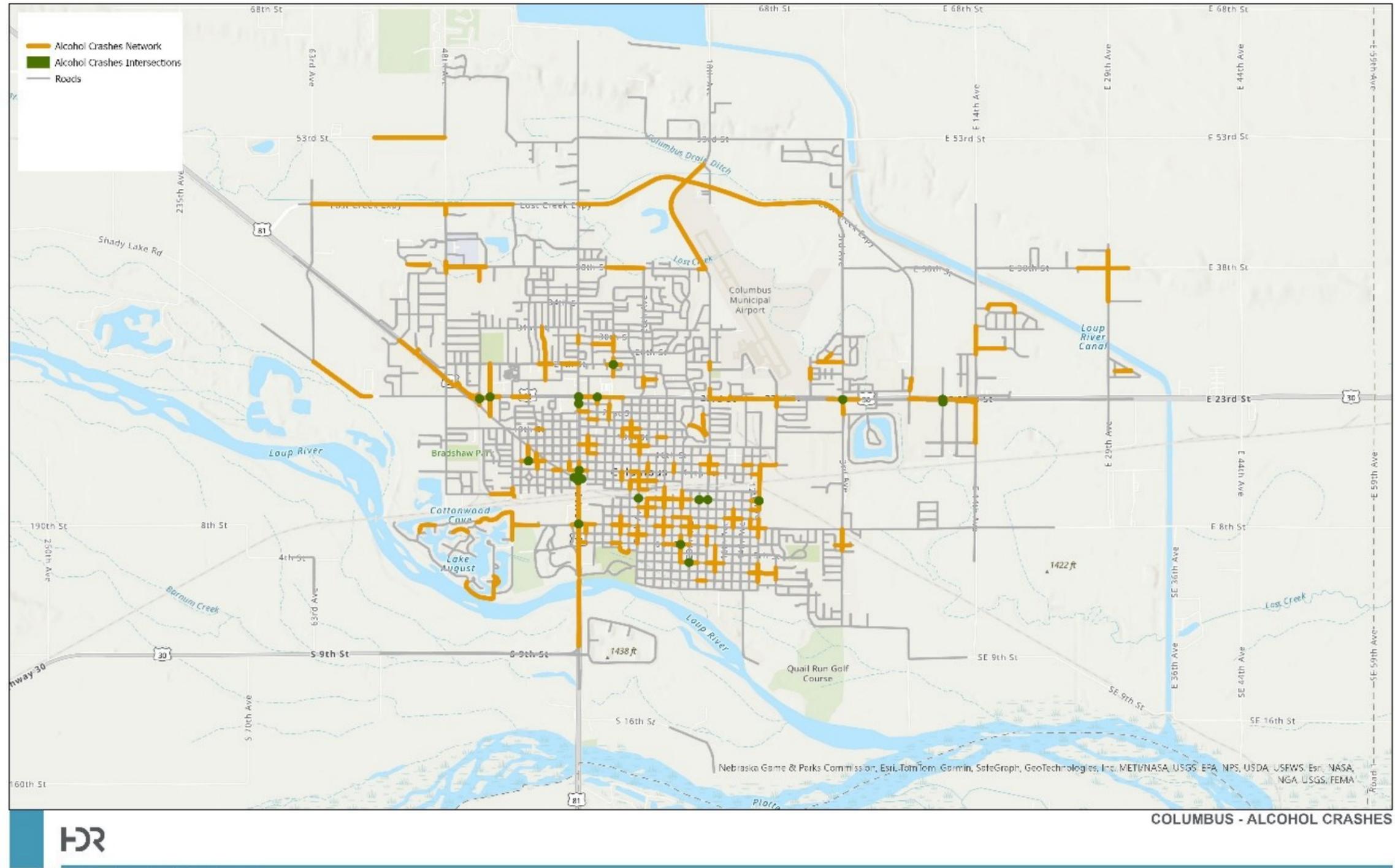


The Alcohol intersection network covers 5% of the intersection network and includes 44% of alcohol crashes. The Alcohol HRN includes 66 total crashes (1%) and 5 KSI crashes (8%).

The Alcohol intersection network is presented in **Figure 27**. Any intersection that meets or exceeds the threshold is displayed. The network consists of corridors along US 30, the US 30 bypass, 33rd Avenue, Howard Boulevard, 8th Street, and sections around the downtown area.



Figure 27: Alcohol-Crash HRN - intersection



Young Driver

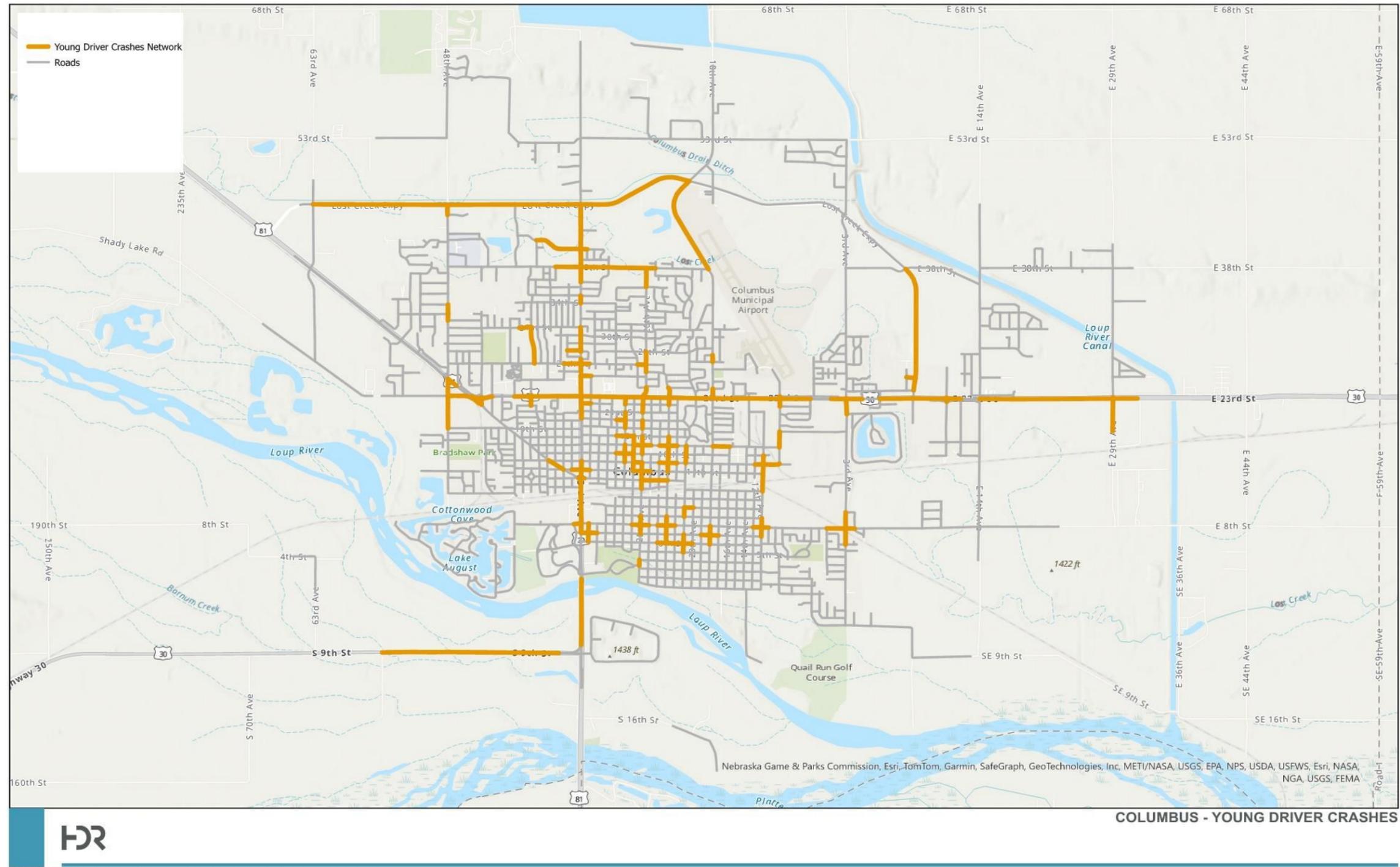
A Young Driver crash HRN is made up of crashes where at least one of the drivers involved was under the age of 21.

The Young Driver segment network covers 12% of the roadway network and includes 70% of young driver crashes in Columbus. The Young Driver HRN includes 772 young driver crashes (16%) and 6 young driver KSI crashes (10%).

The Young Driver segment network is presented in **Figure 28**. Any roadway segment that meets or exceeds the threshold is displayed. The network consists of corridors along US 30, the US 30 bypass, 33rd Avenue, Howard Boulevard, 8th Street, and sections around the downtown area.



Figure 28: Young Driver-Crash HRN - Segment

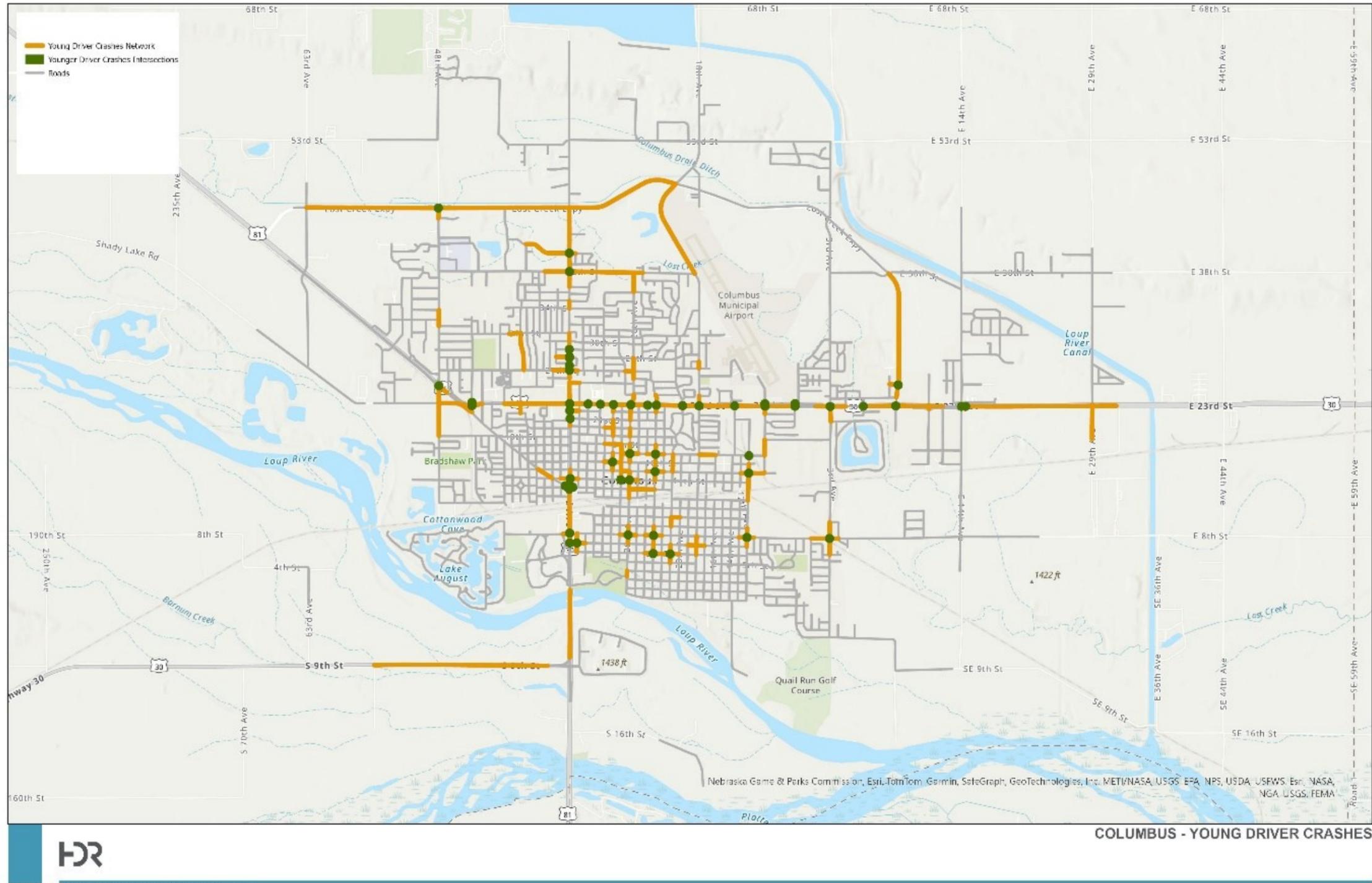


The Young Driver intersection network covers 5% of the intersection network and includes 61% of all young driver crashes. The Young Driver HRN includes 667 young driver crashes (14%) and 7 young driver KSI crashes (11%).

The Young Driver intersection network is presented in **Figure 29**. Any intersection that meets or exceeds the threshold is displayed. The network consists of corridors along US 30, the US 30 bypass, 33rd Avenue, Howard Boulevard, 8th Street, and sections around the downtown area.



Figure 29: Young Driver-Crash HRN - Intersection



Motorcycle

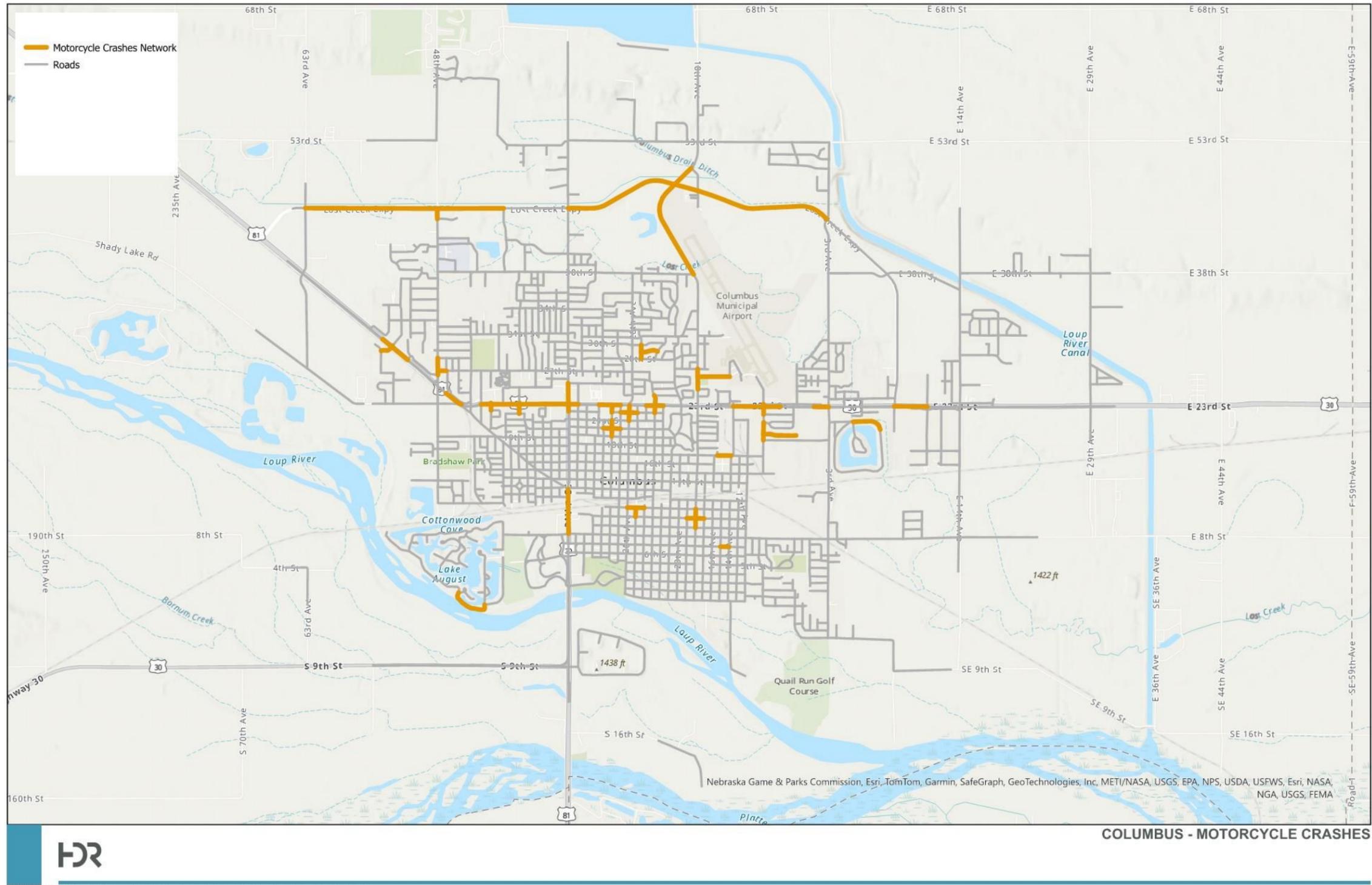
A Motorcycle crash HRN is made up of crashes where at least one of the vehicles involved was a motorcycle.

The Motorcycle segment network covers 5% of the roadway network and includes 100% of motorcycle crashes in Columbus. The Motorcycle HRN includes 30 crashes (less than 1%) and 9 KSI crashes (14%).

The Motorcycle segment network is presented in **Figure 30**. Any roadway segment that meets or exceeds the threshold is displayed. The network consists of corridors along US 30, the US 30 bypass, and 33rd Avenue.



Figure 30: Motorcycle-Crash HRN – Segment

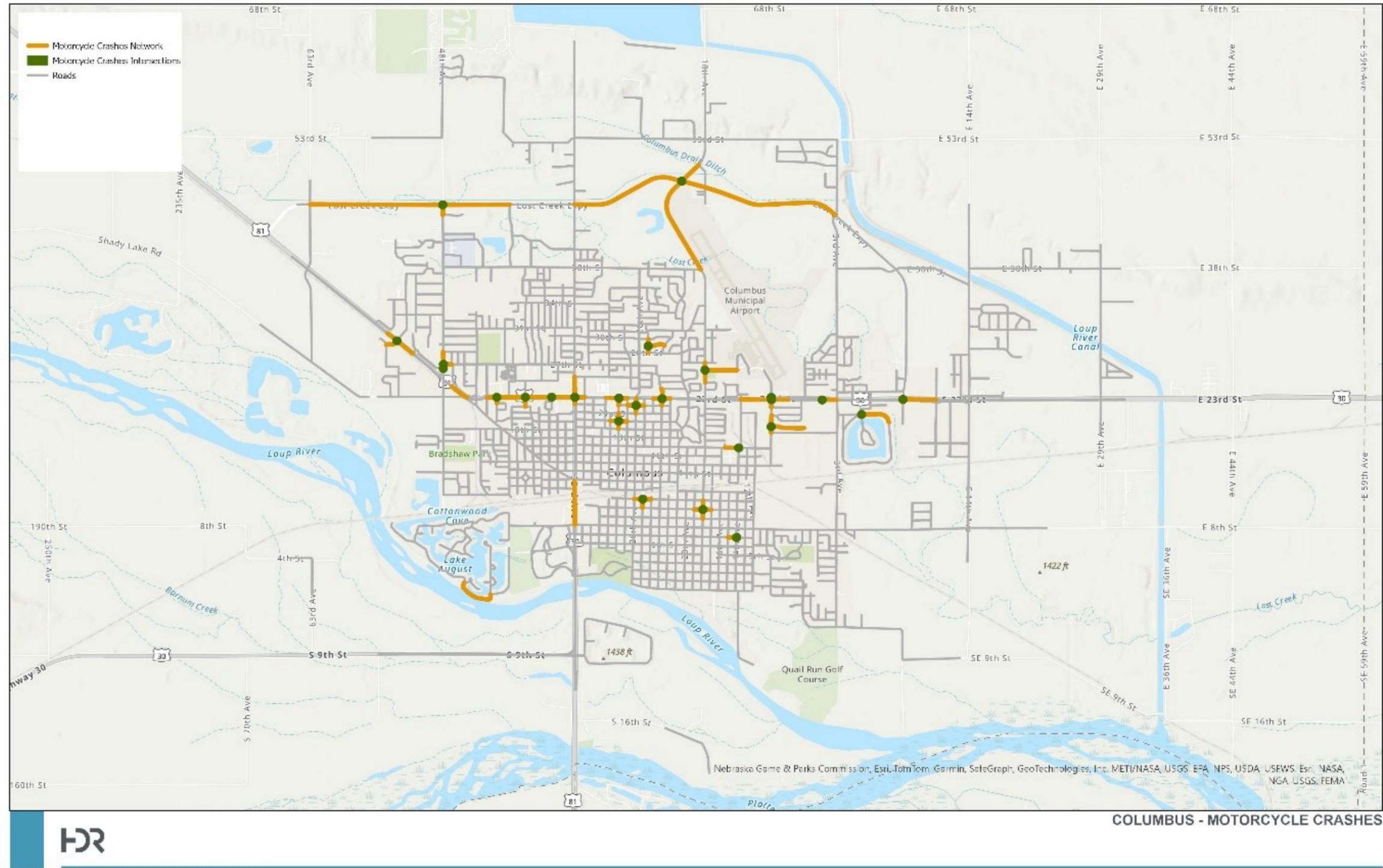


The Motorcycle intersection network covers 3% of the intersection network and includes 64% of motorcycle crashes. The Motorcycle HRN includes 19 total crashes (less than 1%) and 5 KSI crashes (8%).

The Motorcycle intersection network is presented in **Figure 31**. Any intersection that meets or exceeds the threshold is displayed. The network consists of corridors along US 30, the US 30 bypass, and 33rd Avenue.



Figure 31: Motorcycle-Crash HRN - Intersection



Angle

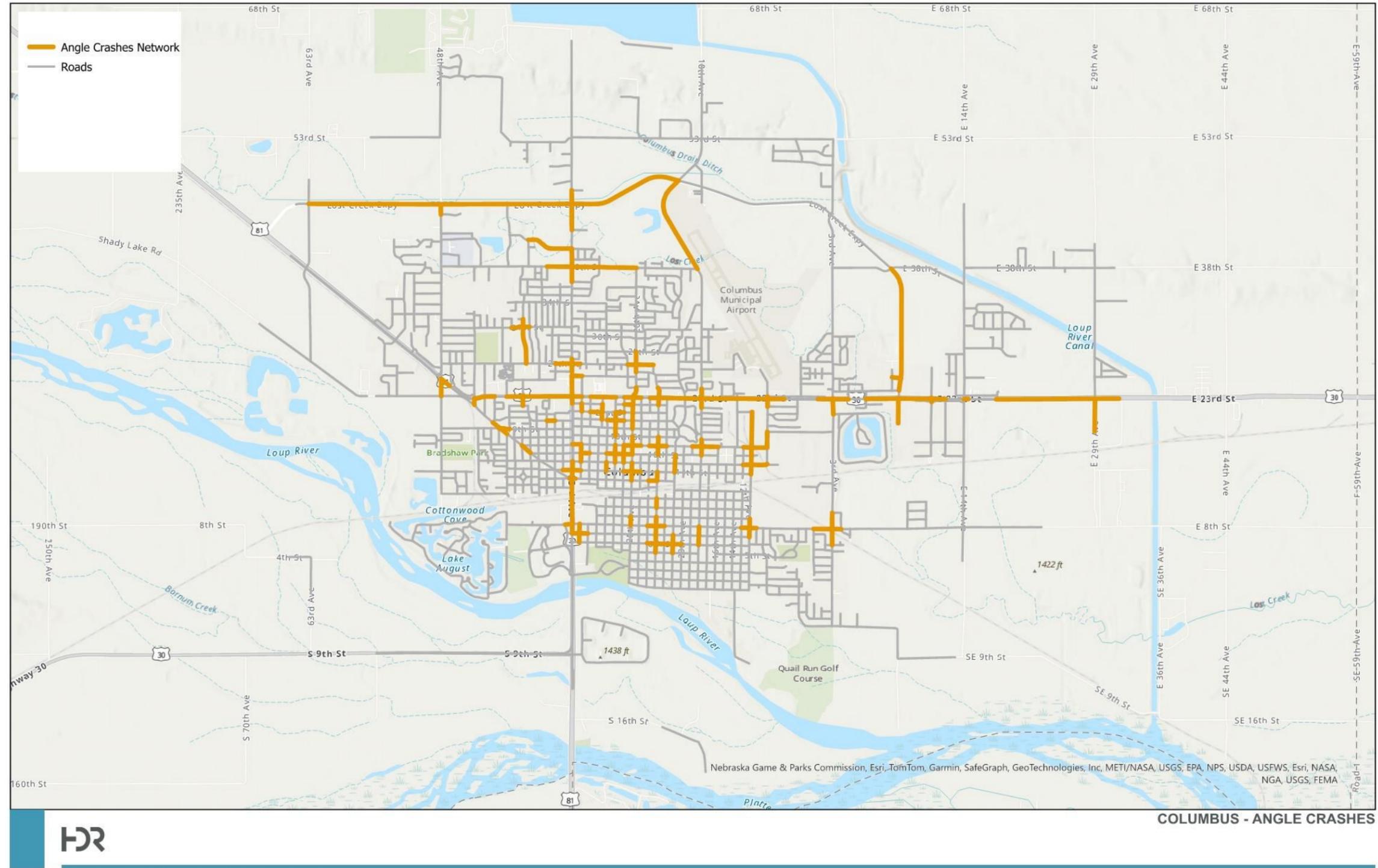
An Angle crash HRN is made up of crashes where angle was the defined crash type.

The Angle segment network covers 10% of the roadway network and includes 67% of Angle crashes. In the Angle segment HRN there are 1,184 crashes (25%) and 22 KSI crashes (35%).

The Angle segment network is presented in **Figure 32**. Any roadway segment that meets or exceeds the threshold is displayed. The network consists of corridors along US 30, the US 30 bypass, 33rd Avenue, Howard Boulevard, 8th Street, and sections around the downtown area.



Figure 32: Angle-Crash HRN - Segment

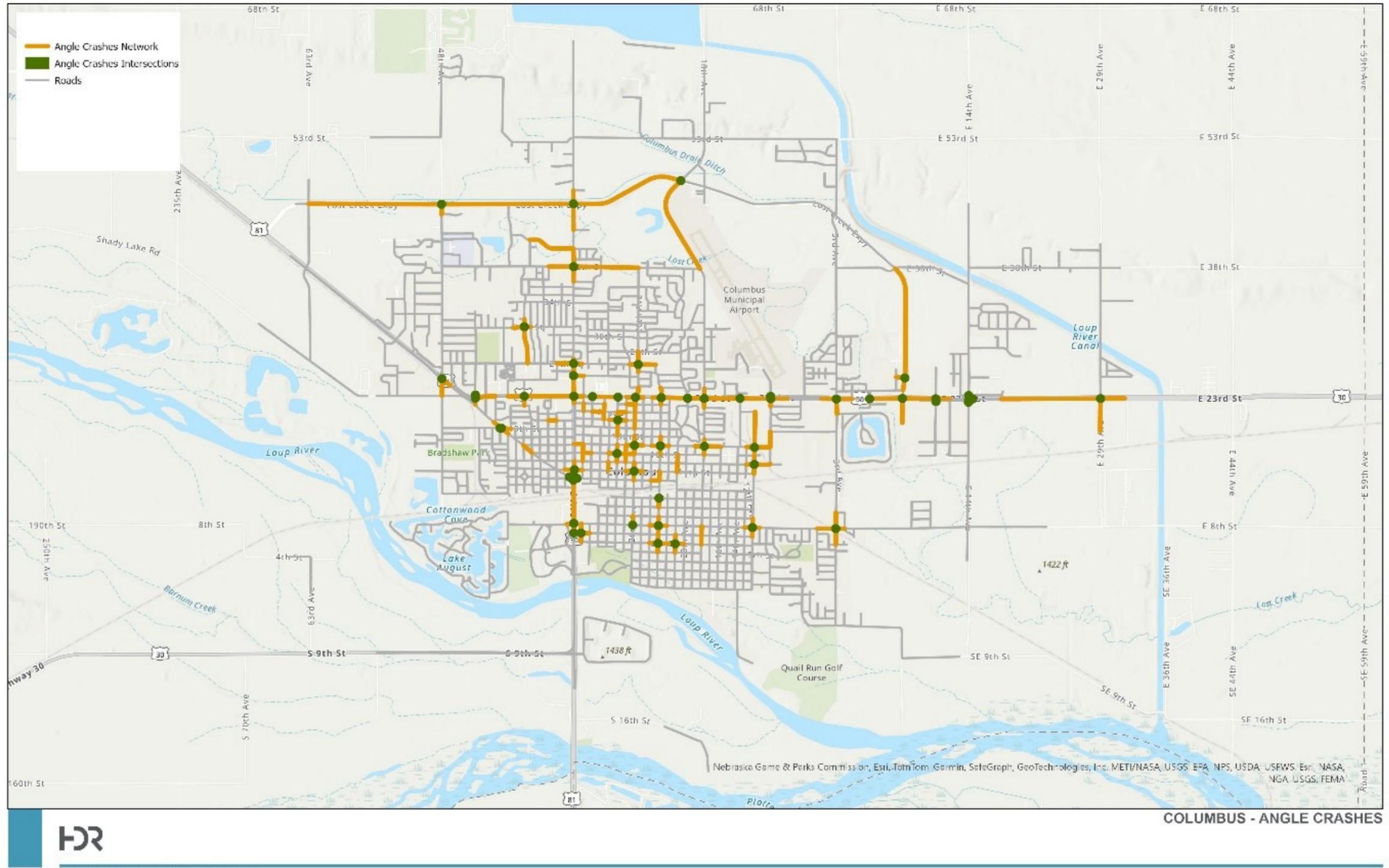


The Angle intersection network covers 5% of the intersection network and includes 59% of all angle crashes. The Angle intersection HRN includes 1,066 crashes (22%) and 22 KSI crashes (35%).

The Angle intersection network is presented in **Figure 33**. Any intersection that meets or exceeds the threshold is displayed. The network consists of corridors along US 30, the US 30 bypass, 33rd Avenue, Howard Boulevard, 8th Street, and sections around the downtown area.



Figure 33: Angle-Crash HRN - Intersection



VRU

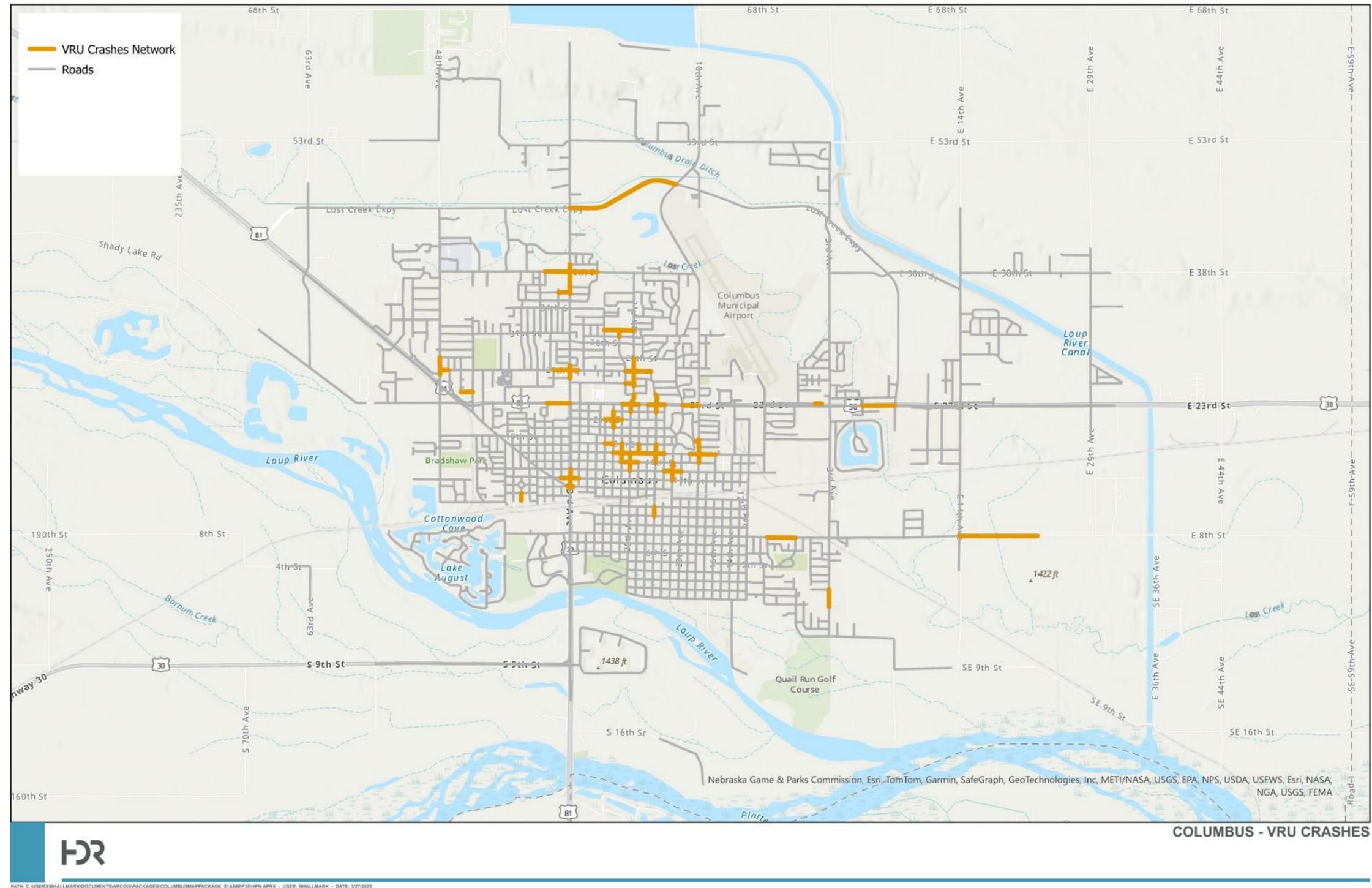
A VRU crash HRN is made up of crashes where at least one VRU was involved.

The VRU segment network covers 4% of the roadway network and includes 100% of VRU crashes. There are 43 crashes (less than 1%) and 7 KSI crashes (11%).

The VRU segment network is presented in **Figure 34**. Any roadway segment that meets or exceeds the threshold is displayed. The network consists of corridors along US 30, the US 30 bypass, 33rd Avenue, and sections around the downtown area.



Figure 34: VRU-Crash HRN – Segment



The VRU intersection network covers 3% of the intersection network and includes 72% of VRU crashes. The VRU intersection HRN includes 31 crashes (less than 1%) and 4 KSI crashes (6%).

The VRU intersection network is presented in **Figure 35**. Any intersection that meets or exceeds the threshold is displayed. The network consists of corridors along US 30, the US 30 bypass, 33rd Avenue, and sections around the downtown area.

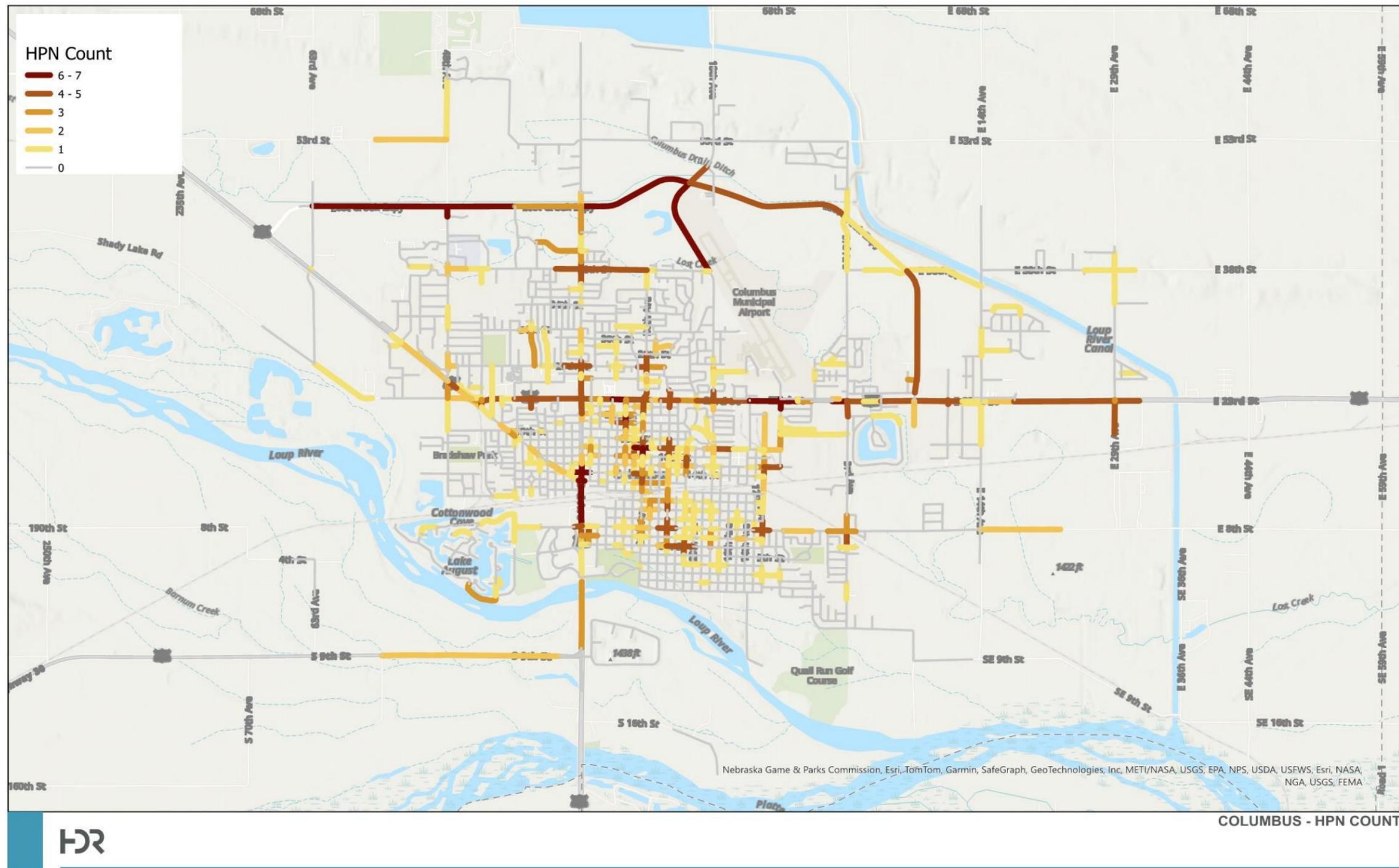


High Priority Network

The high priority network (HPN) is a conglomerate of the location-based crash analysis as well as input from the public or city staff. The HPN was developed by overlapping the key emphasis area maps and selecting the network based on which areas had the most key emphasis areas included. **Figure 36** provides a map for roadway segments based on the number of key emphasis areas where they meet or exceed the given threshold. Segments with more key emphasis overlap are darker. Essentially this is a stacked map of the HRN results. No preference is given to which key emphasis areas overlap, simply that the thresholds are met. The HPN development process does include consideration of the HIN as well.



Figure 36: Segment High Risk Network Key Emphasis Area Summary



Similarly, an HPN was created for intersections. An HRN count map of intersections is provided in **Figure 37**. Intersections are mapped according to the number of key emphasis areas where the crash type criteria threshold is met.



Figure 37: Intersection High Risk Network Key Emphasis Area Summary

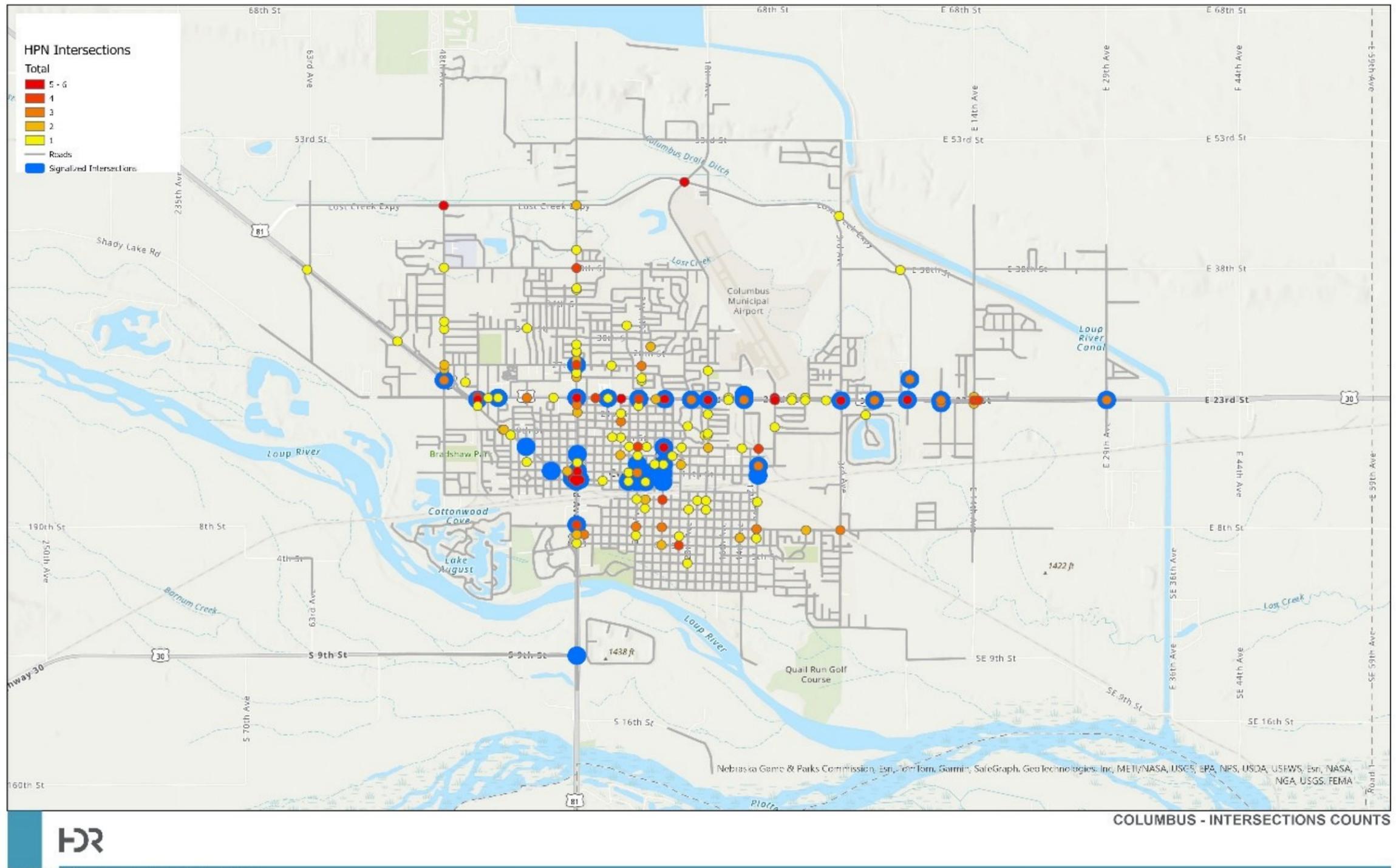
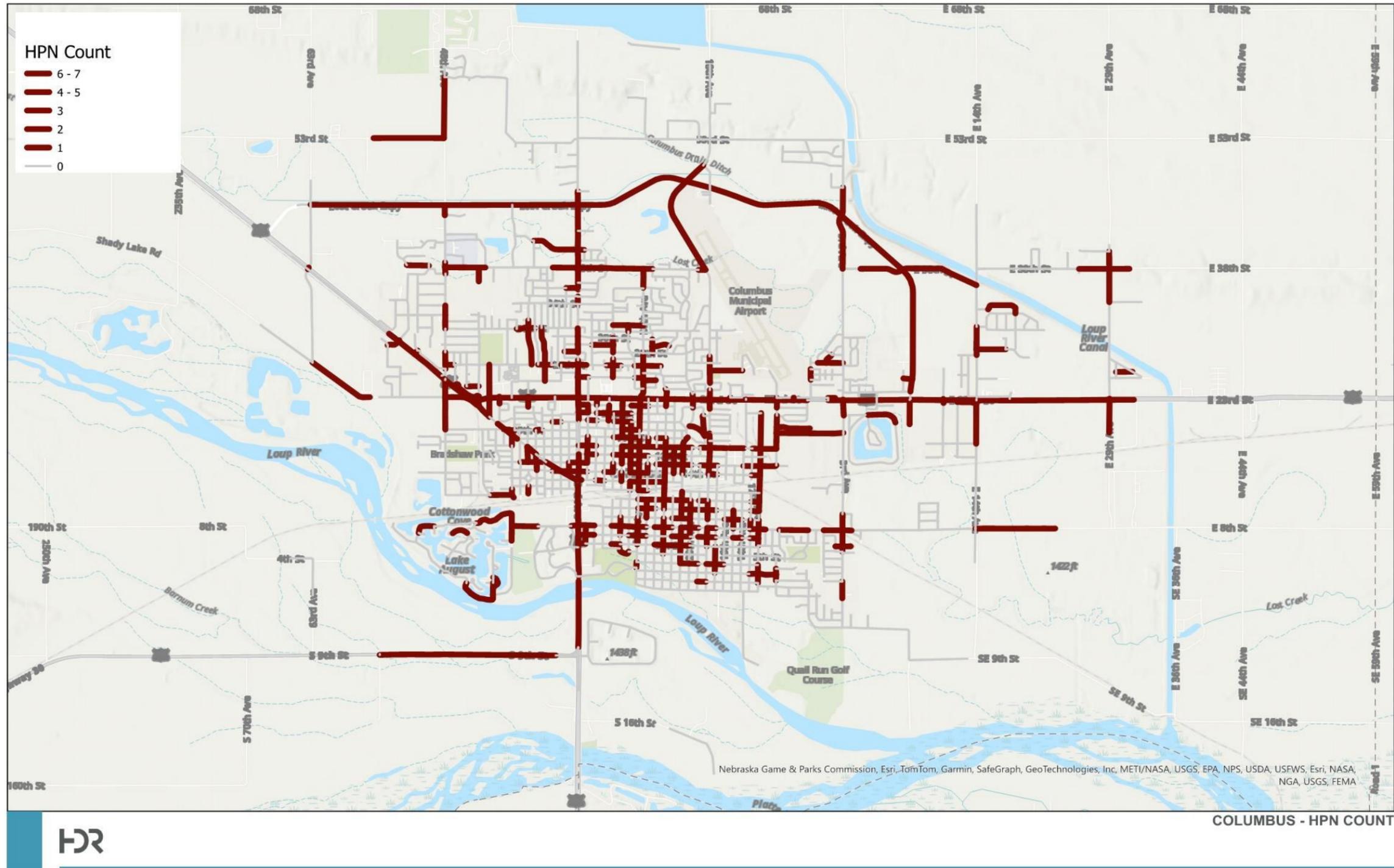


Figure 38 provides the same map view as **Figure 27** but with every segment the same thickness if the segment meets the threshold for at least one key emphasis area.



Figure 38: High Risk Network Full



When working with data driven approaches, networks that are created tend to be fragmented due to the nature of the roadway network and crash locations. When applying these approaches to future planning it is important to create a refined network that all stakeholders and potential users can understand. In this smoothing – the project team also took an initial effort to screen down to a more manageable list of high-risk corridors. To this end, the key emphasis areas map, **Figure 36**, was smoothed to create a consistent set of corridors and areas for the City of Columbus to include in their final safety analysis network. This smoothed network, the HPN, is presented in **Figure 39**. The final summary statistics of the HPN are provided in **Table 6**. The final HPN included a total of 2,444 crashes, 44 of which were KSI. This comes out to 51% of all crashes and 69% of KIS on only 9% of the roadway network (16 miles).



Figure 39: Combined High Priority Network

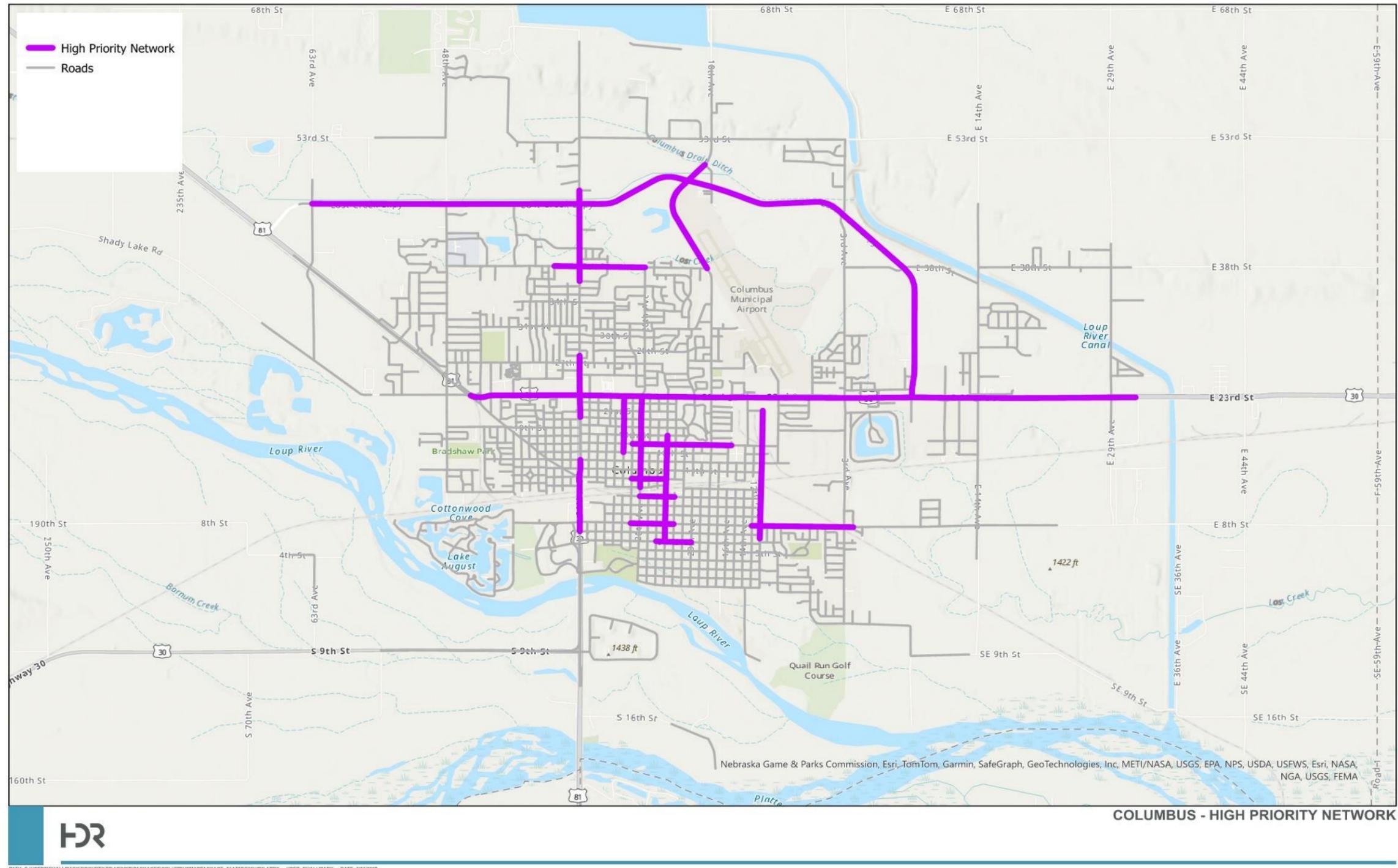


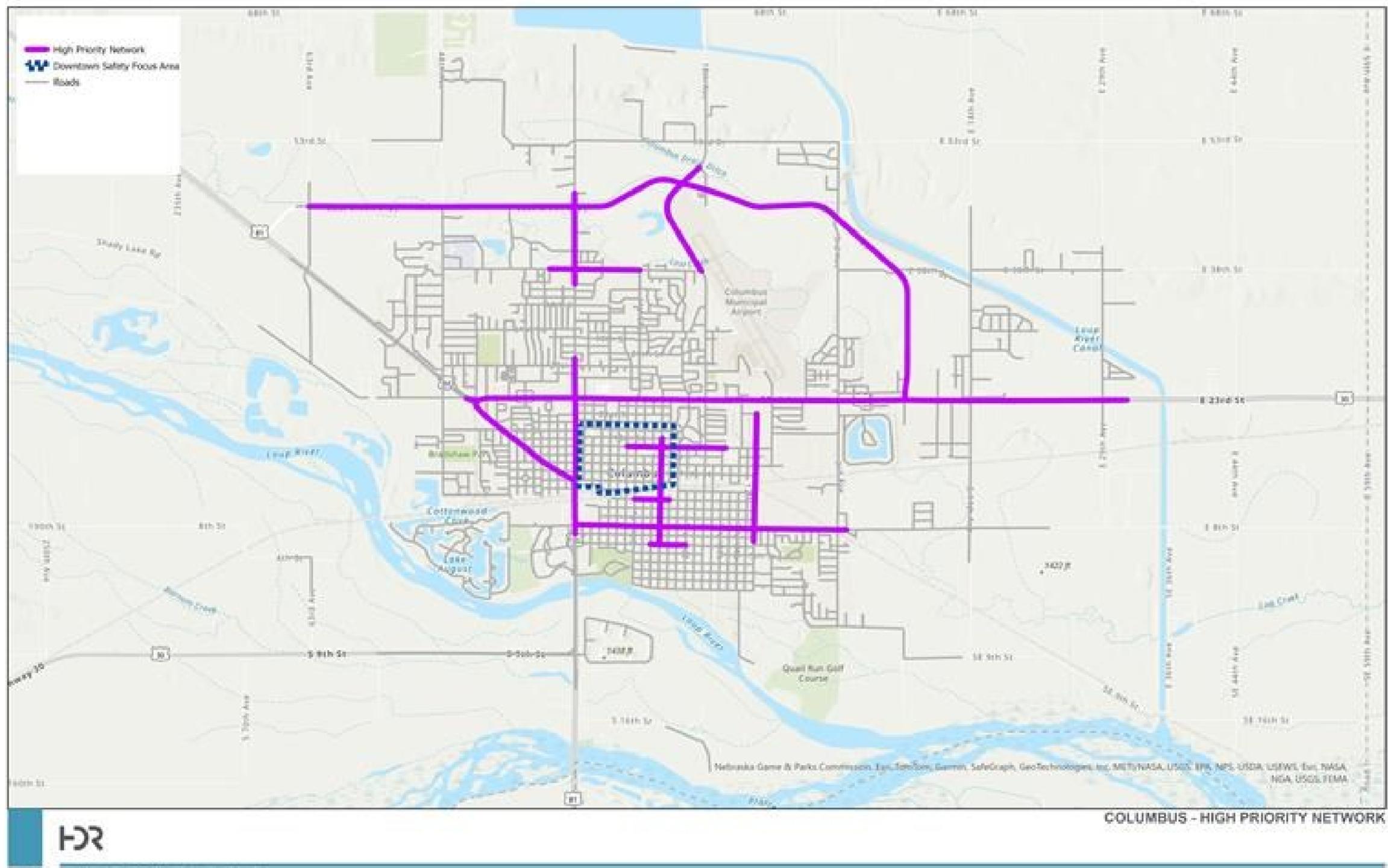
Table 6: Final High Priority Network Summary

Category	HRN Crashes	All Crash Category	HRN Share
All	2,443	4,786	51.04%
Angle	935	1,779	52.56%
Alcohol	56	149	37.58%
KSI	44	63	66.67%
Motorcycle	19	30	63.33%
Young Driver	623	1,097	56.79%
VRU	29	43	67.44%
Roadway Network	18.35 (miles)	200 (miles)	9.18%

In addition to the HPN linear features, a downtown safety focus area was created. This area represents the downtown core of Columbus where many people enjoy time. Due to the increased risk, it was added to the HPN. A visual map is provided for in **Figure 40**. With the addition of the focus area, the total crash count increases to 2,837 crashes with 46 being KSI. This equates to 59% of all crashes, 73% of KSI crashes, and 14% of the roadway network.



Figure 40: Final High Priority Network



A final HPN of top intersections was also developed. A map is provided in **Figure 41**. This provides a list of the top intersections with red dots. Blue dots are provided for the signalized intersections in Columbus.



Conclusion

The safety analysis for Columbus includes several key components: a High Injury Network (HIN), High Risk Network (HRN), and a High Priority Network (HPN). Each of these components were influenced by the available data, the Nebraska SHSP, and the descriptive statistics.

The HIN identified key locations and corridors that have experienced a high number of severe crashes. The HIN includes all modes of travel and is one singular network. The HRN identified key emphasis areas and thresholds to create a refined risk network. The HPN provides a final unified network to incorporate into future plans, as well as a review of all segments that meet a key emphasis threshold.

The final network identifies several key corridors. The final HPN covers about 18 miles of roadway and 44 KSI crashes. This equates to about 9% of the roadway network and 67% of all KSI crashes. These corridors fall mainly along US 30, 33rd Avenue, Howard Boulevard, 8th Street, and the US 30 Bypass.



Figure 10. List of Priority Corridors

Road	Extents	Speed Management	Painted Crosswalks	Protected Traffic Signals	RRFB	Pedestrian Islands	Chevrons	Rumble Strips	Reflective Backplates	Sidewalks	Midblock Crossings	Lighting at Intersections	Crosswalk Visibility Enhancements	Speed Displays	Corridor Access Management	Speed Safety Cameras	Traffic Calming	Enforcement
US 30	18th Ave – 33rd Ave	X	X	X	X	X		X	X	X		X	X	X	X		X	X
US 30 Bypass	23rd St – 33rd Ave	X				X	X	X				X		X			X	X
33rd Ave	8th St – Lost Creek Pkwy	X	X	X	X		X		X	X	X	X	X	X	X		X	X
Howard Blvd	18th Ave – 33rd Ave	X						X	X	X		X					X	X
8th St	23rd Ave – 33rd Ave	X	X		X	X				X		X	X	X			X	
Lost Creek Pkwy	Howard Blvd – 48th Ave	X				X	X	X				X		X	X		X	X
23rd St (US 30)	10th Ave – 48th Ave	X	X		X			X	X	X		X	X	X	X			X
Downtown Core	10th St – 33rd Ave	X	X	X	X	X				X	X	X	X	X	X		X	X
19th St	10th Ave – 33rd Ave	X	X		X					X				X				
15th St	10th Ave – 33rd Ave		X		X					X				X				
48th Ave	Lost Creek Pkwy – 23rd St	X				X	X	X				X			X		X	



Appendix 4 – Safe Streets for All (SS4A) Projects and Strategies Memo

Purpose

The Projects and Strategies Memo outlines a list of recommended strategies and projects that will enhance safety across the transportation system in Columbus.

These recommendations are tailored to address safety concerns in high-risk and high injury areas derived from the safety analysis and input from the public survey conducted from May to July 2025.

The memo adopts a comprehensive framework (Figure 1) to develop a holistic suite of recommendations that consists of policy strategies, systemic projects, and major projects.



Figure 42. Projects and Strategies Framework

Policy Strategies. These refer to broad-level changes to standards, guidelines, plan, procedure, and review processes aimed at enhancing safety on all local roads and for all road users. As such, these strategies are foundational to the system’s overall safety but can, however, seem too general for some stakeholders to recognize their importance and appear passive since no project is being built. More targeted and immediate action in the form of systemic and major projects will beneficially supplement policy strategies, especially in areas within the city where we already know are experiencing disproportionately higher rates of crashes.

Systemic Projects. These projects involve improvements to the physical environment based on data-driven risk or contributing factors using lower cost countermeasures that can apply to a larger network of road segments and intersections within the existing right-of-way. Works involved in systemic projects are typically smaller in scale and can therefore also be implemented quickly.

Major Projects. Like systemic projects, major projects alter the built environment but to a larger extent. These generally entail redesigning and reconstructing existing roadway infrastructure. In both types of projects, specific interventions and changes to the roadways are designed to address the unique issues encountered at different road segments or intersections.

All recommendations were developed with guidance from research and principles established by the Safe System Approach (SSA)² and referenced standards and best practices published by the National Association of City Transportation Officials (NACTO) and the American Association of State Highway and Transportation Officials (AASHTO). To facilitate implementation of recommendations, this memo also describes and suggests potential opportunities for collaboration and coordination among public agencies and other non-profit organizations and advocacy groups. Together, these recommendations are designed to achieve the goal of reducing deaths and severe injuries to zero on the transportation network within the City of Columbus.

² [Safe System Approach | FHWA](#)



A Safe System

This plan utilizes FHWA's Safe System Roadway Design Hierarchy to guide the development of strategies (Figure 2). The hierarchy is a tool that characterizes the various types of infrastructure-based countermeasures and strategies to help transportation agencies and practitioners identify and prioritize the most appropriate combination of countermeasures and strategies.

The hierarchy includes four tiers that are arranged from most to least effective based on principles of the SSA. Countermeasures and strategies in Tiers 1 and 2 generally alter the design of transportation infrastructure to remove roadway conflicts and create greater separation between vulnerable road users and traveling vehicles, whereas Tiers 3 and 4 options have a greater emphasis on influencing road user behavior.

Typically, cities and transportation agencies place more focus on countermeasures and strategies in Tier 4, but a combination of strategies from multiple tiers is necessary to effectively improve safety across the transportation system. This plan thus ensures that each group of recommendations in the Projects and Strategies Framework comprises countermeasures that are well distributed across all four tiers.



Policy Strategies

By examining the relationship between various factors and crash occurrences using crash data from Columbus and descriptive statistics from the Nebraska Strategic Highway Safety Plan, safety analysis found that the following risk factors were highly correlated with crash occurrences:

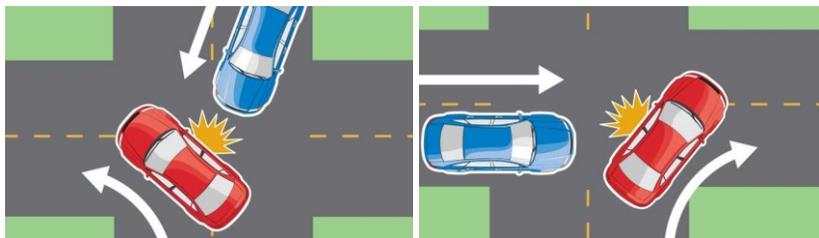
- Angle, and Turning Vehicle Crashes
- Vulnerable Road Users (VRU)
- Alcohol
- Younger Drivers

Policy strategies addressing these key risk factors are therefore likely to be more effective in reducing overall deaths and severe crashes in the city. Policy strategies generally involve updating internal policies, procedures, design standards and criteria, and project review processes; educating the public on issues and safe driving habits; and strategic enforcement on non-compliant driving behavior. By adopting and incorporating the latest best practices in the field of safety that correspond to all tiers of the Safe System Road Design Hierarchy, these strategies seek to modify behavior and take preventative action to reduce crashes. This section discusses how each factor or key emphasis area could contribute to high fatal or severe injury crashes and then lists relevant policy strategy recommendations.

Angle and Turning Crashes

Primary Strategy: Policy + Roadway Conflict Reduction

Angle crashes often occur at intersections or driveways where turning movements are involved and there is inadequate signalization to protect movements crossing high speed travel paths. Turning vehicle crashes, in particular, occur at intersections when the turning vehicle crosses into the path of oncoming vehicles, which are unable to slow down or stop in time to avoid the turning vehicle.



Policy-Level Approach:

- Support adoption of intersection design policies that prioritize roundabouts and other conflict reducing designs such as protected turns and enhanced signalization

- Consider corridor-level access management strategies such as driveway consolidation when implementing city capital projects – including resurfacing and reconstruction due to projects like water main and utility relocations.

Proactive Prevention:

- Evaluate reduced conflict (also called 3/4 and right-in, right-out) intersections or roundabouts at skewed intersections or TWSC locations on higher-speed corridors.
- Apply reflective backplates, protected-phase left turn signals, and advanced warning signage at intersections with documented angle crashes.

Behavior Modification:

- Run public awareness campaigns focused on encouraging and educating safe and defensive driving at intersections

Enforcement:

- Prioritize targeted enforcement of red-light running and failure-to-yield violations at high-crash intersections.

Vulnerable Road Users (VRU)

Primary Strategy: Safe Crossings + Separation

VRUs, including pedestrians, bicyclists, and micromobility users, are disproportionately affected by crashes in the downtown core and arterial corridors with limited crossings.

Policy-Level Approach:

- Develop or adopt a complete street toolkit or design guide for public work and its contracted support.
- Include VRU countermeasures as required elements in project scopes for any roadway resurfacing or redesign.

Proactive Prevention:

- Implement RRFBs, high-visibility crosswalks, pedestrian refuge islands, and sidewalk gap closures on identified VRU corridors – regardless of site-specific crash history.

Behavior Modification:

- Develop signage and outreach materials reminding drivers of pedestrian yielding laws, particularly at mid-block crossings.

Enforcement:



- Conduct regular pedestrian crosswalk enforcement operations at priority crossings and corridors.

Lighting Conditions

Primary Strategy: Visibility Enhancement

Poor lighting conditions make it difficult for drivers to see their environments and can reduce the reaction time they have when they do notice other vehicles or people. This contributes to increased crash risk, especially for vulnerable users and at intersections.

Policy-Level Approach:

- Develop a Safety Lighting Action Plan that lays out strategies and priorities for enhancing or adding roadway lighting on high-risk corridors and mid-block crossings.
- Integrate lighting audits into the CIP and corridor planning processes.

Proactive Prevention:

- Add or upgrade lighting at intersections and known VRU conflict points, especially in areas with high nighttime crash rates.

Behavior Modification:

- Include nighttime visibility education (e.g., pedestrian reflectors, headlight use) in public outreach strategies.

Enforcement:

- Enforce headlight-use compliance and impaired-driving checks during nighttime hours.

Alcohol/Impairment

Primary Strategy: Enforcement + Impairment Reduction

Alcohol reduces reaction time and impairs hand-eye-foot coordination and sound decision-making. This has resulted in a significant portion of fatal and serious injury crashes that involve alcohol (13% on road segments and 8% at intersections).

Policy-Level Approach:

- Collaborate with law enforcement to increase DUI checkpoints or saturation patrols on known high-risk corridors.

Proactive Prevention:



- Coordinate with Nebraska's State Highway Safety Plan and Impaired Driving Strategic Plan to adopt and implement appropriate operational or infrastructure countermeasures.

Behavior Modification:

- Partner with local bars, breweries, and event organizers to promote designated driver programs or ride-share partnerships.

Enforcement:

- Increase targeted DUI patrols during high-risk times (weekend nights, holidays, special events).



Younger Drivers (Under 21)

Primary Strategy: Behavior Modification + Education

Crashes involving younger drivers often stem from inexperience, speed, or distraction. These crashes cluster near schools, commercial areas, and wider arterial roadways.

Policy-Level Approach:

- Coordinate with local schools and law enforcement to support safe driving programs targeting new drivers.
- Consider school zone speed enforcement policies or youth-targeted road safety programs.

Proactive Prevention:

- Target lower-cost interventions such as radar feedback signs and speed displays on corridors with recurring crashes involving younger drivers.

Behavior Modification:

- Promote education initiatives and media campaigns tailored to early drivers, including social media-based outreach.
- Share and amplify already funded education campaigns by State Highway Safety Offices and seek public relations and media training opportunities to grow local roles in safety messaging.

Enforcement:

- Increase graduated driver's license (GDL) compliance checks and targeted patrols around schools and youth gathering areas.

Other Enabling Policy Strategies

The policy strategies discussed above can contribute to reducing crashes associated with each risk factor, but supplementing them with other supporting and crosscutting policy changes is also necessary to enable successful implementation. These enabling policies typically involve establishing planning policies and imposing requirements during the development and review processes. **Table 1** enumerates well-established processes and policies that the city can enact.



Table 7. Recommended Safety Processes

Safety Study or Process	Aligned Emphasis Areas	Description	Cost	References
Complete Streets Policy and Design Guidance	Speeding Angle Crashes VRU Lighting	Complete Streets is an approach to planning, designing, and building streets that enables safe access for all users, including pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. Developing and enacting a complete streets policy and design guidance provides a framework for accommodating VRU user needs, as well as conditions that implement a safer road for all users.	\$\$	Complete Streets
Road Safety Audits	All	Road safety audits are formal evaluations that estimate and report potential road safety issues as well as identify potential opportunities for safety improvements at a road segment or intersection. These audits are typically conducted by an independent, multidisciplinary team but are typically led by state or local jurisdictions. Safety departments or office should develop city guidance for RSA implementation into various traffic studies and planning efforts.	\$\$	Road Safety Audits
Intersection Control Evaluation (ICE)	Angle Crashes VRU Lighting	The ICE policy should evaluate safety, traffic and transit operations, active transportation access, cost, and right-of-way impact among other factors. Adhering to an ICE policy enables a uniform and data-driven approach that will include the consideration of community and agency priorities, especially from	\$	Intersection Control Evaluation



a safety aspect. The proposed countermeasures based on the outcomes of the ICE can range from redesign (e.g. adding a roundabout), addition of features (median treatment), or changes to signalization.

A Traffic Impact Study (TIS) policy should be developed to include safety and crash analysis at its core. All development projects (including infill) of a certain size would trigger the requirement for a study of safe access generated and traveling adjacent to the site. This effort should be a joint study with potential cost-sharing between the City and the private sector.

Traffic
Impact
Studies
Policy

Angle
Crashes
VRU
Lighting

\$

[Traffic Impact Studies](#)

The policy developed can also accomplish safe standards for access management of all development projects – even those that do not meet specific traffic impact thresholds.



Systemic Safety Project Strategies

The SSA emphasizes layered protection by recognizing that human error is inevitable and roadway design, speed, visibility, and predictability can further reduce crash occurrences and the consequences of crashes that do occur. A comprehensive safety strategy therefore not only requires policy strategies but also needs to be augmented by projects that address systemic conditions that contribute to preventable crashes across the roadway network and location-specific high-risk corridors. This section discusses systemic projects that can be implemented at various locations across the city that share similar roadway characteristics or safety risks. The next section then dives deeper into the identified major projects on road segments that are of highest priority.

Systemic Projects

Systemic projects involve implementing proven countermeasures in areas with similar roadway environments. They can be applied across the city, even in locations without a significant crash history as a preventative measure. These projects are typically low to moderate in cost and are ideal for implementation during routine maintenance, resurfacing, or asset preservation cycles.

Safer Streets Toolkit

The proven countermeasures used in systemic projects are selected from a Safer Streets Toolkit (Appendix A), a collection of relevant safety countermeasures adapted best practices by FHWA, NACTO, and other guides. These have shown to produce safety outcomes, including reducing the number of fatal and severe injury crashes. These countermeasures can be used independently or in conjunction with each other depending on existing conditions and the needs of the community. Examples of these countermeasures include:

- High-visibility crosswalks and advance yield markings
- Radar speed feedback signs
- Pedestrian refuge islands
- Lighting enhancements at intersections and midblock crossings
- Rectangular Rapid Flashing Beacons (RRFBs) at uncontrolled pedestrian crossings
- Edge line rumble strips on curves and rural transitions
- Chevron signs and dynamic curve warnings
- Speed cushions or striping changes to narrow perceived lane widths



Systemic Countermeasures

Similar to policy strategies, systemic countermeasures recommended in this plan seek to address key risk factors that were identified as part of the safety analysis. Given the unique contexts at different locations in the city, the set of countermeasures selected should account for adjacent land uses, crash type history, roadway geometry, user conflict potential and other relevant factors to yield maximum benefits. Part of the process of identifying countermeasures also involved ensuring the kinds of strategies are distributed across the tiers of the Safe System Roadway Design Hierarchy. Table 2 summarizes the list of applicable systemic countermeasures that can be implemented to address each risk factor and indicates how they align with the tiers from the Roadway Design Hierarchy.

Table 2. Applicable Systemic Countermeasures Addressing Key Risk Factors

Key Risk Factor	Applicable Systemic Strategies	Roadway Design Hierarchy Tiers
Angle Crashes	Roundabouts	1, 2
	Protected Left-Turn Phasing	1
	Access Management	1
	Reflective Backplates	4
Vulnerable Road Users	Curb Extensions. Speed Cushions	1,2
	Pedestrian Refuges, Midblock Crossings, Sidewalk Gap Closures	1
	Leading Pedestrian Interval, Pedestrian Hybrid Beacon	3
	Rectangular Rapid Flashing Beacons (RRFBs)	4
Alcohol	Rumble Strips, Lighting, Nighttime Speed Enforcement	4
	Speed Cushions	2
Younger Drivers	Radar Feedback Signs, Simplified Signage, Painted Centerlines	4

Potential locations for systemic projects

Countermeasures should generally be implemented at locations that have a greater likelihood of crashes. These locations could be areas where, historically, a high number of crashes associated with the key emphasis areas have occurred. Additionally, other important factors to consider as the city identifies appropriate



locations for systemic projects include higher vehicle counts (actual and planned), higher speed limits, and land uses that generate more pedestrian and bicyclist traffic, e.g. residential, mixed-use, public facilities, all of which may cause segments and intersections to have greater exposure to potential conflict points.

Figure 1. Land Use Classification and Arterial Classification

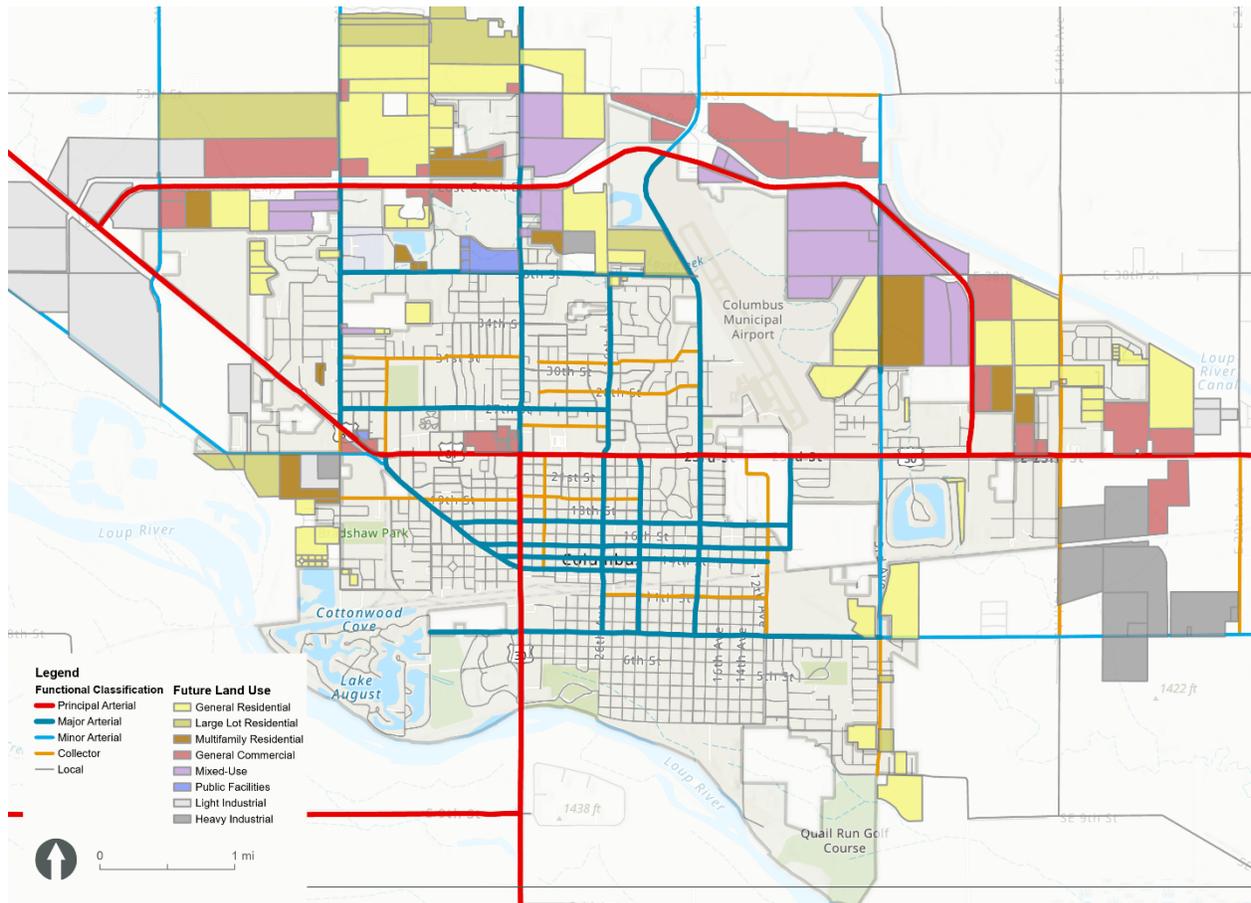


Figure 2. Speed Limits within City Limits.

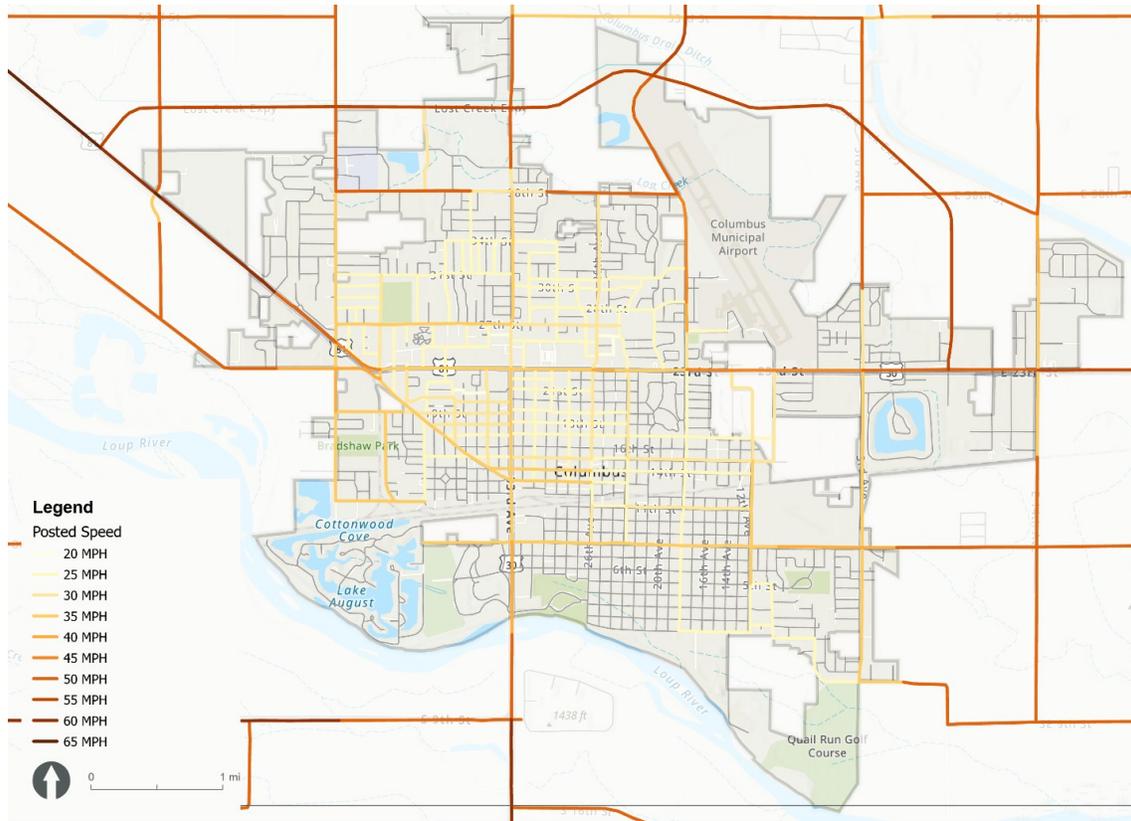
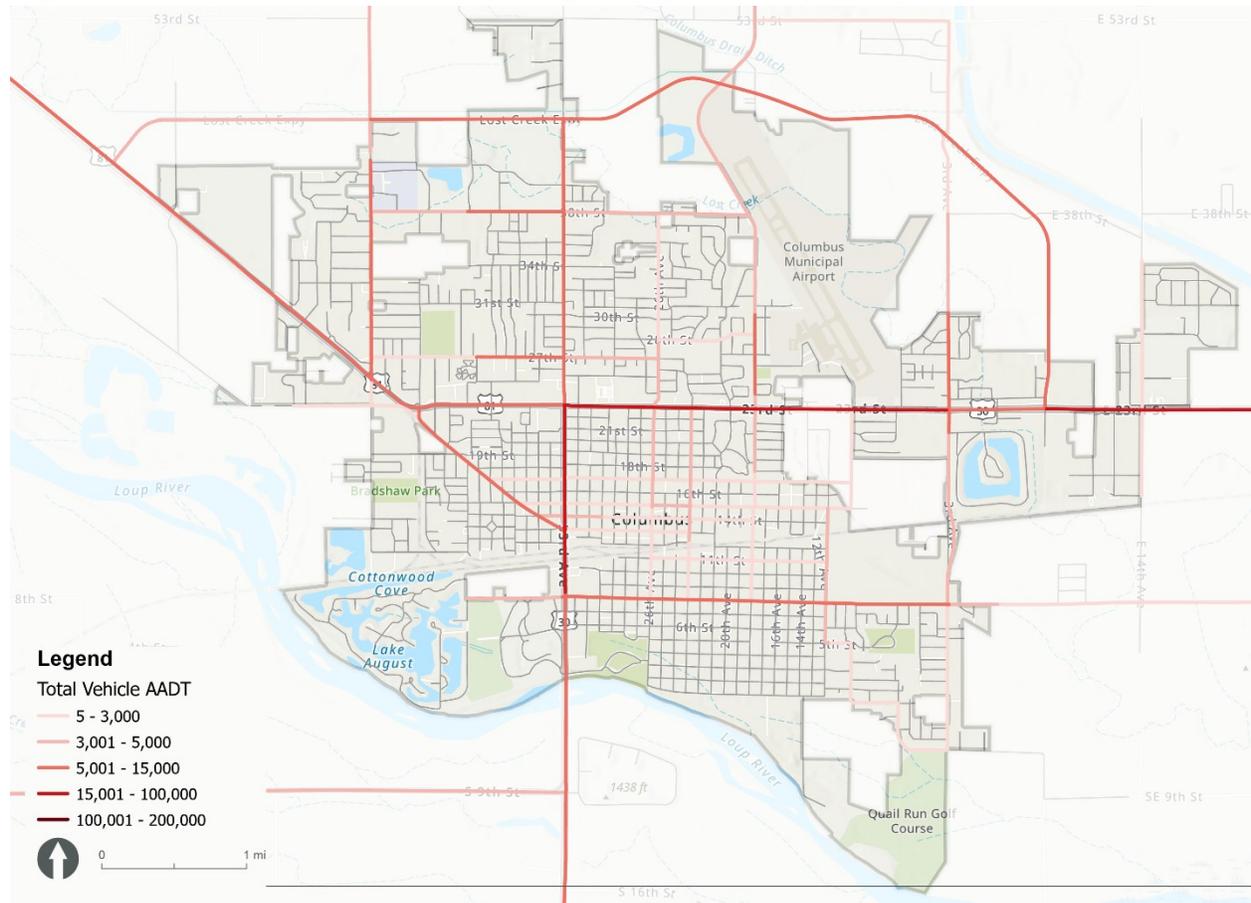


Figure 3. Total Vehicle Annual Average Daily Traffic (AADT)



Implementation of systemic projects

As discussed in the previous section, the City of Columbus should establish enabling policies to implement the recommended policy strategies. The same enabling policies should also require or promote the integration of low-cost systemic countermeasures as part of ongoing city processes and capital planning cycles. This can include:

- Capital Improvement Program (CIP) project programming – by using the Safer Street Toolkit in concept development and sequencing and intentionally reserving some funding for safety projects (potentially to serve as match for federal or state safety funds).
- Asset rehabilitation processes and resurfacing schedules – incorporating low-cost safety enhancements as during maintenance and rehabilitation works
- Land development permit and land use or zoning change requests – focusing reviews on access management policies and safety impact mitigation from

Traffic Impact Studies; requiring developers to incorporate countermeasures in their design proposal

- Community and Economic Development projects (particularly in Areas of Persistent Poverty) – by intentionally scoping improvements to fill gaps in limited pedestrian infrastructure and reduce crashes in historically overrepresented streets and intersections affecting certain user types.
- Standard Details for Safety Countermeasures – creating baseline standard design details and construction specifications for safety countermeasures to improve clarity and ease the process of adoption by developers.



Major Projects: High-Priority Capital Improvement

Building on systemic strategies that address risk across the network, major projects are larger-scale significant capital investments that target specific corridors that have experienced high concentrations of crashes and pose greater safety risks to all users. Works carried out in a major project may contain elements similar to those in systemic projects and may also include a combination of:

- Corridor reconstruction or redesign with integrated pedestrian and bicycle facilities
- Intersection conversions to roundabouts
- Signalization upgrades
- Context-sensitive speed reduction design and access management strategies
- Multimodal enhancements, including lighting, ADA upgrades

Roundabouts

Roundabouts are quickly growing in popularity due to their significant safety benefits. Compared to signalized and two-way stop-controlled intersections, roundabouts reduce fatal and injury crashes by about 80% through slower speeds and a decrease in conflict points¹. Therefore, Columbus' goal of improving roadway safety can be supported through the introduction of roundabouts at key intersections.

Conflict points are shared spaces on the roadway or street network, which could be the locations of vehicle collisions. As seen in Figure 1, a typical four-way intersection has 32 vehicle-to-vehicle conflict points while a four-way roundabout has 8 vehicle-to-vehicle conflict points. This is a 75% decrease in conflict points, greatly decreasing the likelihood of a collision. Furthermore, slower, single-direction traffic in roundabouts decreases the likelihood of serious collisions resulting in injuries or fatalities.



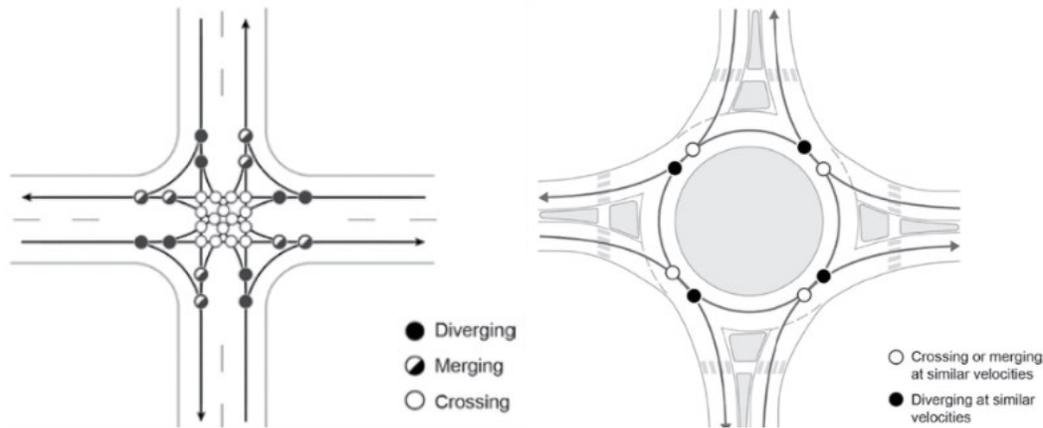


Figure 1: (L) Typical four-way stop vehicle conflict points. (R) Typical roundabout vehicle conflict points. Source: NCHRP Report 1043 (pg. 106-107)

Existing Roundabouts in Columbus

There are two roundabouts in Columbus today, a single-land roundabout at the intersection of Discoverer Drive and 41st Avenue implemented in 2016 and a recently constructed roundabout on 63rd Avenue as a part of the development of Harrah’s Casino. Both roundabouts were designed to maintain efficient traffic movement for users of different modes of transportation while improving safety through grade-separated pedestrian crossings.

Implementing Future Roundabouts

Other intersections in Columbus, such as some of those along Howard Boulevard and 33rd Avenue, may be suitable for conversions to roundabouts if they possess the following features:

- The intersection has a history of severe crashes
- The intersection has high potential of angle crashes
- The intersection has a wide right-of-way width and sufficient space
- The intersection is highly active
- The intersection has multimodal uses

Implementing roundabouts should be done in phases and in conjunction with raising public awareness. Educating the public of the roundabout concept and gaining support from them and local leadership is especially critical as they are the roadway users who will have to adapt to a new design.

Project Prioritization Methodology

Corridors that meet the criteria for major projects were identified through the safety analysis conducted as part of the plan. The analysis had generated an HIN and HRNs based on crash counts and assigned scores to the various corridors.

- **High Injury Network (HIN):** Identified based on crash severity, specifically corridors with elevated concentrations of fatal and serious injury crashes.
- **High Risk Networks (HRNs):** Developed for each crash emphasis area, identifying segments where specific crash types or contributing factors are overrepresented.

Overlaying both networks then led to the development of a High Priority Network (HPN), which represents corridors and intersections where:

- Safety outcomes can be improved through targeted investments in the short- to medium-term;
- Strategies can be matched to observed crash types and conditions; and
- Opportunities exist to integrate treatments with capital planning, maintenance, or external funding

The City then relied on a framework that blends crash data, local context, resource availability and project feasibility and readiness to rank and prioritize projects that can be advanced in the near-term. These selected priority corridors are discussed in the sections below. As additional data and funding is made available, project development for other corridors can be advanced. At the same time, as a dynamic network, the HPN may incorporate new locations as more data and public feedback inform the need for future major projects.

Priority Major Projects

Howard boulevard

Howard Boulevard was an old rail spur that has since been converted into a four-lane undivided roadway. It connects downtown commerce with many western residential areas and commercial/industrial businesses. The northwest to southeast orientation provides a cut through for regional traffic traveling on US 81 but adds traffic to a street that was originally developed within a neighborhood. Vehicle speed and traffic volumes lead to difficult conditions for traffic crossing or turning left onto Howard Boulevard. The street's pattern cutting through the grid of neighborhood streets has also yielded complex intersections, challenging skew angles, and difficult non-motorist crossings. With many students accessing West Park Elementary School and Columbus Christian School and residents going to the various churches and commercial shops along this corridor on foot or by bicycles, multiple crashes have occurred in the last five years, several of them leading to deaths or severe injuries.

Possible capital investments for this corridor that are being explored include a neighborhood gateway feature that also introduces speed management and traffic calming. This may include conversion of intersections to roundabouts, access consolidation, redesigning the roadway to include designated turn lanes, reducing



lane widths, and adding shared use paths to increase separation between vehicles and VRUs.

8th Street

8th Street is a two-lane undivided residential street in older part of the city that is located south of the railway tracks. Even though the part of 8th Street within the city goes through a predominantly single-family residential area where the population is generally older empty nesters, a high volume of traffic, including truck traffic, has been observed along this street as drivers use it to travel to and from downtown and connect to US30/81. The wider lanes along this street has also encouraged higher vehicle speeds. Moreover, the corridor supports active transportation users who rely on it for safe access to destinations, creating more opportunities for crashes involving vulnerable road users. Similar to Howard Boulevard, multiple intersections and segments along 8th Street are on the HIN and HRN due to the occurrences of crashes in the recent past.

Possible interventions along this corridor include narrowing lanes; adding protected bike lanes or shared use paths; enhancing crosswalk visibility through improved lighting, signing, and pavement markings; adding curb extensions and RRFBs to increase driver awareness; or converting key intersections to mini roundabouts.

Downtown

13th and 14th Street in Downtown Columbus are two-lane unidirectional streets which have experienced a high number of crashes, especially where both streets meet 26th Avenue. Speeding has been an issue along these streets, which some argue is because the streets are unidirectional.

Possible countermeasures that are being discussed for the Downtown area include converting these streets to bidirectional streets, improving the pedestrian walking experience by converting parking spaces into parklets, or narrowing the existing one-way streets to one lane each. Other potential countermeasures include curb extensions at intersections, raised crossings, and narrowed travel lanes to reduce vehicle speeds.

33rd Avenue and Lost Creek Parkway

This corridor is a two-lane road with a two-way left-turn lane that primarily serves Columbus High School. Multiple crashes have been observed at road segments and the intersection near Columbus High School on 33rd Avenue and Los Creek Parkway. A significant number of these crashes have involved young drivers, who tend to speed and drive more aggressively, and can also be attributed to the straight geometry of the roadway that encourages speeding.



Possible countermeasures for this corridor may include those that reduce speed and increase driver awareness such as roundabouts at key intersections, adding medians, radar feedback signs, stop sign control conversions, and horizontal and vertical traffic calming measures like chicanes, curb extensions, and speed humps. Separated grade pedestrian crossings can also be considered to reduce points of conflict between VRUs and vehicles.

Lost Creek Parkway

Lost Creek Parkway is a four-lane divided highway that is designed to be a bypass route for US Hwy 30. The highway has been designed to accommodate traffic from future development on adjacent land parcels, but there have been high occurrences of fatal and severe injury crashes driven by vehicles going at high speeds along this road.

Possible countermeasures for this highway may entail improvements at intersections such as separated grade pedestrian crossings across Lost Creek Parkway, protected/permitted left turns or other reduced left-turn conflict intersections. Other countermeasures include dynamic speed feedback signs, advance warning signs or reflective chevrons to delineate curves.

23rd Street

23rd Street is a state-owned four-lane undivided road with a two-way left turn lane. It is a major east-west thoroughfare that connects US 30 and US 81 within the city limits. This corridor has not only experienced a high number of crashes, including those that lead to deaths and severe injuries, but has also been identified as one of the high-risk corridors within the city.

Today, the road is already undergoing reconstruction as part of Nebraska DOT's improvement works, which consists of new pedestrian facilities, enhancements to existing turn lanes, new additional turn lanes, driveway consolidation, roadway lighting, and traffic signal updates.

Implementation

To implement these major projects, the city will integrate them into larger capital projects through the City's **Capital Improvement Plan (CIP)**, ensuring that infrastructure upgrades address both current deficiencies and long-term safety priorities. Other projects that are not yet programmed in the CIP may advance through separate funding sources or be implemented incrementally through a phased approach.

For these and other corridors that may be identified as high risk in the future, the Safety Action Plan should guide the way major projects are scoped, phased, and delivered. Where resources may not yet be available to fully execute the project, the



city and partner agencies should continue to seek out low-cost opportunities to institute interim safety improvements.

Conclusion

To enhance the overall safety for all road users in the City, a multi-pronged approach is required to minimize crash risks on road segments and intersections. This memo provides a unified framework that recommends a myriad of policy strategies, systemic countermeasures, and major capital investments that work together to achieve the safety goals of the City's CSAP. The emphasis areas and prioritization process ensure that both proactive and location-specific solutions target areas of the city with the highest and most urgent need. Implementing these projects and strategies will require strong commitment by the City and the involvement of other parties like the private sector and non-profit organizations. The City will explore opportunities to integrate these strategies into the Capital Improvement Plan and routine project delivery and partner with other private and non-profit entities to systematically build a safer and more reliable transportation network for all users.



Appendix 4-A

Table 8: Safer Streets Toolkit Outline

Toolkit Feature	Description
Countermeasure Name	Name of the countermeasure
Image	Visual depiction of the strategy
Description	Description of the countermeasure
Crash Types	Crash types addressed by the countermeasure: <ul style="list-style-type: none"> • Lane Departure: Fixed object, head-on, overturn, sideswipe, parked vehicle, single vehicle • Rear-end • Angle: Left-turn, right angle • Bike/Ped: Bicyclists and/or pedestrians
Crash Reduction Factor	Potential reduction in all crash severities and types owing to implementation of the countermeasure
Project Type	Each countermeasure was grouped into either major project or systemic project depending on the impact of implementation and required funding.
Cost	The estimated cost for implementation of the countermeasure: <p style="text-align: center;"> \$ = <\$10k \$\$ = \$10k – \$100k \$\$\$ = \$100k - \$1M \$\$\$\$ = \$1M+ </p>
Traffic Considerations	Factors that help determine if a countermeasure may be a good fit for a potential location or project. Some examples include roadway geometry, traffic volume, speed limits, etc.
References	Links to industry resources and references that provide additional information on each countermeasure.



Segment Countermeasures

Countermeasure	Image	Description	Crash Types	Crash Reduction Factor	Project Type	Cost	Traffic Considerations	References
Horizontal Traffic Calming	 <p>Source: NACTO</p>	<p>Horizontal traffic calming techniques slow traffic and improve safety. Examples include:</p> <ul style="list-style-type: none"> • Chicanes • Curb extensions/bulb-outs • Refuge islands • Pinch points • Lane shifts 	All	30%	Systemic Project	\$	<20,000 ADT	Speed Reduction Mechanisms
Vertical Traffic Calming	 <p>Source: NACTO</p>	<p>Vertical traffic calming techniques slow traffic and improve safety. Examples include:</p> <ul style="list-style-type: none"> • Speed humps • Raised crosswalks/intersections • Traffic circles 	Speed Bike/Ped Departure Angle	30%	Systemic Project	\$\$	<10,000 ADT Ensure Compliant with EMS Vehicles	Vertical Speed Control Elements
Landscaped Buffers / On-Street Parking	 <p>Source: PEDSAFE</p>	<p>Landscaped buffers, on-street parking, and street trees implemented in conjunction or separately can slow traffic and improve safety.</p>	All	-	Major Project	\$\$\$	Evaluate Line of Sight at Intersections	On-Street Parking Enhancements Landscaping
Lane Narrowing	 <p>Source: Braintree, MA</p>	<p>Lane narrowing reduces roadway width while maintaining the existing lane count which slows traffic, shortens pedestrian crossings, and adds space for bike/pedestrian areas.</p>	Speed Bike/Ped Departure	25%	Systemic Project	\$\$	Avoid on Truck Routes	Lane Narrowing

Sidewalks



Source: [NACTO](#)

Sidewalks improve pedestrian and cyclist safety by providing designated spaces separate from traffic, including ADA-compliant features.

Ped/Bike

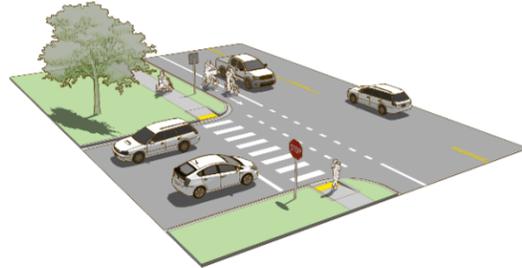
90%
(where sidewalks are missing)

Major Project

\$\$-\$\$\$

[Walkways](#)

Bicycle Lanes



Source: [Rural Design Guide](#)

Bicycle lanes make cycling safer and more comfortable by separating cyclists from traffic and pedestrian facilities using paint or physical barriers.

Ped/Bike

45%

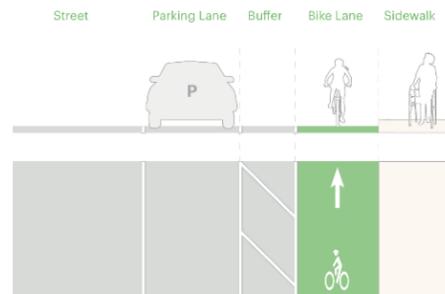
Major Project

\$\$

<6,000 AADT
<35 MPH

[Bicycle Lanes](#)

Protected Bicycle Lanes/Cycle Tracks



Source: [NACTO](#)

Protected bike lanes separate cyclists from traffic with physical barriers, significantly reducing collisions and improving safety.

Ped/Bike

55%

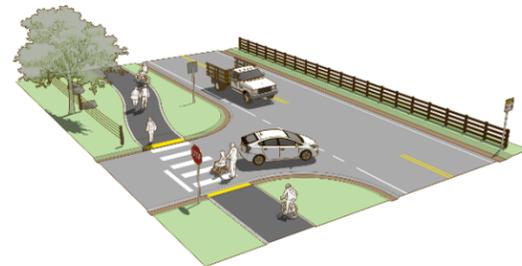
Major Project

\$\$\$

6,000 - 20,000 AADT
<45 MPH
Evaluate Exclusive Turn-Lanes and Protected Turn Signal Phasing

[Separating Protected Bike Lanes](#)

Shared-use Paths



Source: [Rural Design Guide](#)

Shared-use paths (off-street trails) improve safety and accessibility for active transportation and recreation by separating users from traffic.

Ped/Bike

25%

Major Project

\$\$-\$\$\$

>20,000 AADT
>45 MPH

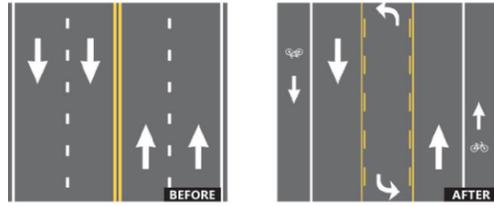
[Paths](#)

Additional Countermeasures

Raised Median & Roadway Reconfiguration

Access Management

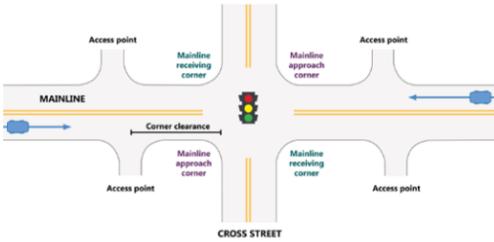
Roadway Reconfiguration



Source: [FHWA](#)

Roadway reconfigurations reduce the number of lanes resulting in a decrease in conflict points, crossing distances, and vehicle speeds.

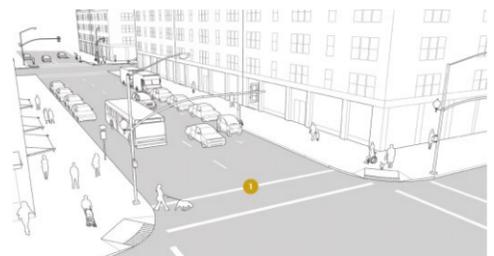
Raised Medians and Access Management



Source: [FHWA](#)

Medians separate traffic, reducing head-on collisions and providing safe havens for pedestrians. Limiting driveways improves access management and reduces traffic conflicts.

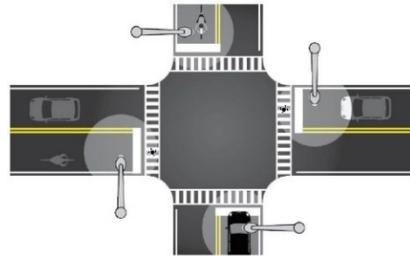
One-way to Two-way Street Conversions



Source: [NACTO](#)

Converting one-way streets to two-way streets calms traffic, increases connectivity, and creates safer streets for all users.

Roadway Lighting



Source: [FHWA](#)

Street lighting improves visibility, especially at intersections, crosswalks, and other high traffic areas, which reduces crashes and enhances pedestrian safety.

Dynamic Speed Feedback Sign



Source: [Department of Transportation](#)

Speed feedback signs display approaching drivers' speeds to make them aware of their current speed, with flashing numbers indicating speeding.

All	30%	Major Project	\$\$-\$\$\$	4-to-3 lanes: <20,000 ADT	Roadway Reconfiguration
All	40%	Major Project	\$\$\$\$	>12,000 ADT	Corridor Access Management Raised Medians
Bike/Ped	30%	Major Project	\$\$\$	Evaluate Signal Modifications, Access, and Turn-lanes	One-Way to Two-Way Street Conversion
Bike/Ped Angle	20%	Systemic Project	\$\$		Lighting
Speed	5%	Systemic Project	\$		Dynamic Speed Feedback Sign

Shoulder Installation / Widening

Curve Delineation Modifications



Source: [PEDSAFE](#)



Source: [FHWA](#)

Installing or widening shoulders provides space for disabled vehicles, maintenance, and other safety activities.

Departure

25%

Major Project

\$\$\$

Most effective when ADTs >1,000

[Shoulders and Walkways](#)

Enhanced Curve Delineation uses reflective chevrons and advance warning signs to significantly reduce curve crashes, especially at night and in rural areas.

Departure

30%

Systemic Project

\$\$

History of Roadway Departure or Nighttime Crashes

[Enhanced Delineation for Horizontal Curves](#)

Intersection Countermeasures

Countermeasure	Image	Description	Crash Types	Crash Reduction Factor	Project Type	Cost	Traffic Considerations	References
Systemic Traffic Signal Modifications		Traffic signal modifications improve safety and efficiency through both hardware and software upgrades such as: Hardware: Signal light upgrades, retroreflective backplates, pedestrian countdowns, and stop-bar/crosswalk striping Software: Updated timings, leading pedestrian intervals, and intelligent transportation systems (ITS) implementation	All	15%	Systemic Project	\$\$		Traffic Signal Enhancements
Systemic Crossing Modifications		Systemic crossing modifications improve pedestrian safety and accessibility across busy	Ped/Bike	30%	Systemic Project	\$\$	See FHWA STEP Guide, Table 1	Marked Crosswalks

Source: [FHWA](#)



Rectangular Rapid-Flashing Beacon



Source: [PEDSAFE](#)

streets with marked crosswalks, lighting, refuge islands, and clear signage.

RRFBs use flashing lights to improve safety at unsignalized crossings, especially crossings of two lanes or less and under 40 mph

Ped/Bike

45%

Major Project

\$\$

[See FHWA STEP Guide, Table 1](#)

[Crosswalk Visibility Enhancements](#)

[Rectangular Rapid Flashing Beacons \(RRFB\)](#)

Pedestrian Hybrid Beacon



Source: [FHWA](#)

PHBs use flashing and steady lights to improve driver yielding to pedestrians at unsignalized crossings, especially on higher-speed and multilane roadways.

Ped/Bike

55%

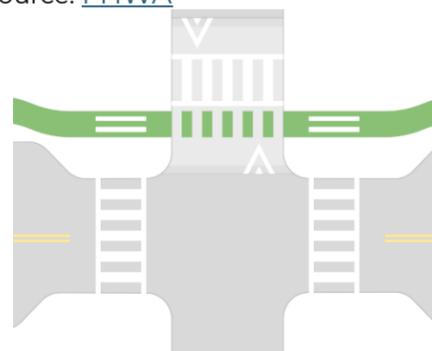
Major Project

\$\$\$

[See FHWA STEP Guide, Table 1](#)

[Pedestrian Hybrid Beacons](#)

Raised Crossing



Source: [NACTO](#)

Raised crossings improve pedestrian safety and accessibility by slowing traffic and providing a level crossing surface.

Ped/Bike

30%

Major Project

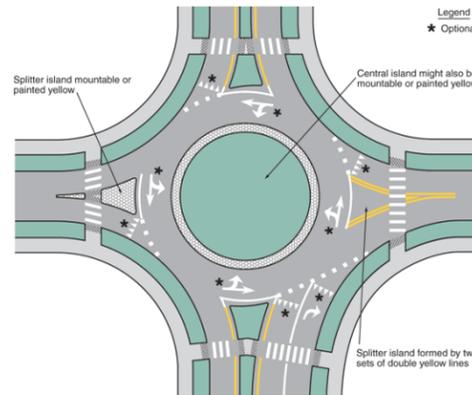
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[See FHWA STEP Guide, Table 1](#)

[Design Tools for Intersections](#)

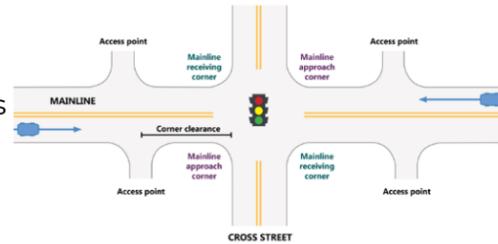


Roundabouts



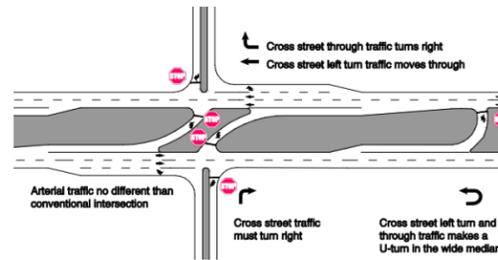
Source: FHWA

Raised Medians and Access Management



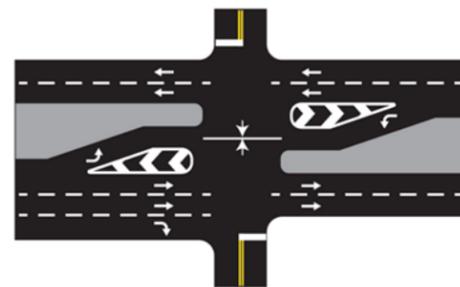
Source: FHWA

Reduced Conflict Intersections



Source: FHWA

Turn-lane Additions



Source: FHWA

1. **Single-lane roundabouts** reduce traffic speeds, eliminate dangerous angle crashes, and shorten crossing distances for pedestrians.
 2. **Multi-lane roundabouts** handle more traffic but have more conflicts than single-lane roundabouts.
 3. **Mini-roundabouts** are smaller, single-lane versions of traditional roundabouts with traversable centers for larger vehicles without requiring additional ROW.

Medians separate traffic, reducing head-on collisions and providing safe havens for pedestrians. Limiting driveways improves access management and reduces traffic conflicts.

Reduced conflict intersections redesign left turns to reduce crashes and improve safety. Common types include RCUTs and MUTs. Right-in, right-out (RIRO) and three-quarter intersections simplify traffic flow by restricting side-street movements, forcing right turns, and reducing crossing paths.

Adding auxiliary lanes separates turning traffic, reducing crashes while improving visibility.

Roundabouts	All	65%	Major Project	\$\$-\$\$\$\$	<30,000 AADT <45,000 AADT <20,000 AADT	Roundabouts
Raised Medians and Access Management	All	40%	Major Project	\$\$\$\$	>12,000 ADT	Corridor Access Management Raised Medians
Reduced Conflict Intersections	Bike/Ped Angle Rear-End	35%	Major Project	\$\$\$\$	Prior Condition Stop-Controlled	Reduced Left-Turn Conflict Intersections
Turn-lane Additions	Angle Rear-End	45%	Major Project	\$\$\$	Visibility Concerns History of Left-Turn Related or Rear-End Crashes	Dedicated Left- and Right-Turn Lanes at Intersections

Additional Countermeasures

All-way Stop Control Conversion



Source: [FHWA](#)

All-way stop control converts either two-stops or unwarranted signals to four-way stops, reducing wait times and making intersections more predictable.

Bike/Ped Angle

50%

Major Project

\$

<12,000 ADT (each approach)
<=2 thru-lanes (each approach)

[Stop-Controlled Intersections](#)

Curb Extensions



Source: [PEDSAFE](#)

Curb extensions and bulb-outs shorten crossing distances, improve visibility, and increase pedestrian comfort at intersections.

Bike/Ped Angle

30%

Systemic Project

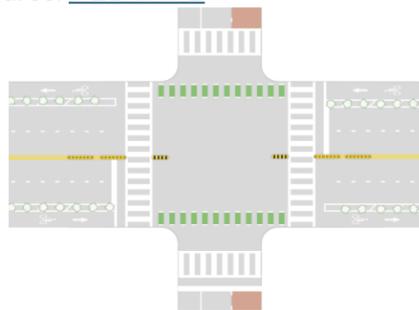
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[See FHWA STEP Guide, Table 1](#)

[Avoid at High Truck Volume Intersections](#)

[Curb Extensions](#)

Left turn Hardening



Source: [NACTO](#)

Left turn hardening reduces vehicle turning speed and increases vehicle yielding to pedestrians by guiding vehicles to take wider turns.

Speed
Bike/Ped Angle

30%

Systemic Project

\$\$

Avoid at High Truck Volume Intersections

[Left-Turn Hardening](#)

Systemic Stop-Control Modifications



Source: [FHWA](#)

Systemic stop-control modifications improve intersection visibility with:

- Advanced warning signs
- Retroreflective panels
- Enlarged signs
- Rumble strips
- Cross-traffic warning signs

Departure Angle
Rear-End

40%

Systemic Project

\$\$

History of Stop-sign Running or Nighttime Crashes

[Systemic Application of Multiple Low-Cost Countermeasures at Stop-Controlled Intersections](#)

