FRANKLIN COUNTY
SAFETY ACTION PLAN

June 2026

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Leadership Commitment and Accountability

The Franklin County Engineer's Office (FCEO) is making a formal, public commitment to eliminate deaths and serious injuries for all road users by equitably improving all modes of transportation and advancing systemic safety improvements to create a safe, connected network. This commitment reflects the FCEO's determination to develop, implement, and monitor a comprehensive, data-driven approach to transportation safety. This plan, and the components outlined below, demonstrate the County's dedication to safety for all users by establishing a clear framework and defining a path toward eliminating serious roadway injuries and fatalities.

Figure 1: Franklin County's Roadway

Over the last five years, 42 people have died on Franklin County roadways, and 240 people have experienced life-altering injuries. The Safe System Approach is a holistic and comprehensive approach to transportation safety that is grounded in the belief that ***deaths and serious injuries on our roadways are unacceptable.*** This Comprehensive Safety Action Plan outlines the path to reduce traffic fatalities and serious injuries, which will embody the principles of the Safe System Approach.

Executive Summary

FRANKLIN COUNTY

The mission of the Franklin County Engineer's Office (FCEO) is to provide for safe and efficient movement of people and goods from place to place by designing, building and maintaining Franklin County's roads, bridges and infrastructure for multiple modes of transportation. We are an agency of action, innovation, and collaboration.

Franklin County has focused on improving roadway safety through its Local Road Safety Plan, which identifies high-crash intersections and implements targeted countermeasures. These efforts have reduced crashes at priority locations. The County has also utilized a High Crash Curve Prioritization program for several years.

In pursuit of enhanced safety measures, the FCEO initiated the development of this comprehensive Safety Action Plan. This plan includes an expanded crash analysis that encompasses road segments, integrates the Safe System Approach for proactive prevention, and prioritizes projects in disadvantaged communities and areas identified in regional High Injury Networks. Additional goals include enhancing pedestrian and bicyclist safety, supporting the County's Complete Streets Policy, and improving connections to the Central Ohio Greenways trail system. By diversifying transportation options and investing in systemic, low-cost strategies, the FCEO aims to significantly reduce fatalities and serious injuries across the 251 miles of county-maintained roads.

SS4A Comprehensive Safety Action Plan Goals

This Safety Action Plan (SAP):

1. Is a comprehensive plan aimed at reducing and eliminating serious injury and fatal crashes affecting all roadway users. It identifies the key factors in these types of crashes by combining data analysis with community feedback.
2. Is a roadmap for improving safety in Franklin County. It will identify safety issues, develop strategies and recommendations for improvements, and help prioritize safety investments.
3. Will include systemic strategies for all roadway projects in the future.
4. Covers all road users, including people who drive, bike, or walk on Franklin County roadways.
5. Is intended to eliminate fatal and serious injury (FSI) crashes, working toward a goal of zero incidents by the year 2050.

Figure 2 shows the potential safety improvement projects in Franklin County, identified through community engagements, crash data analysis, and the high-risk and high-injury network.

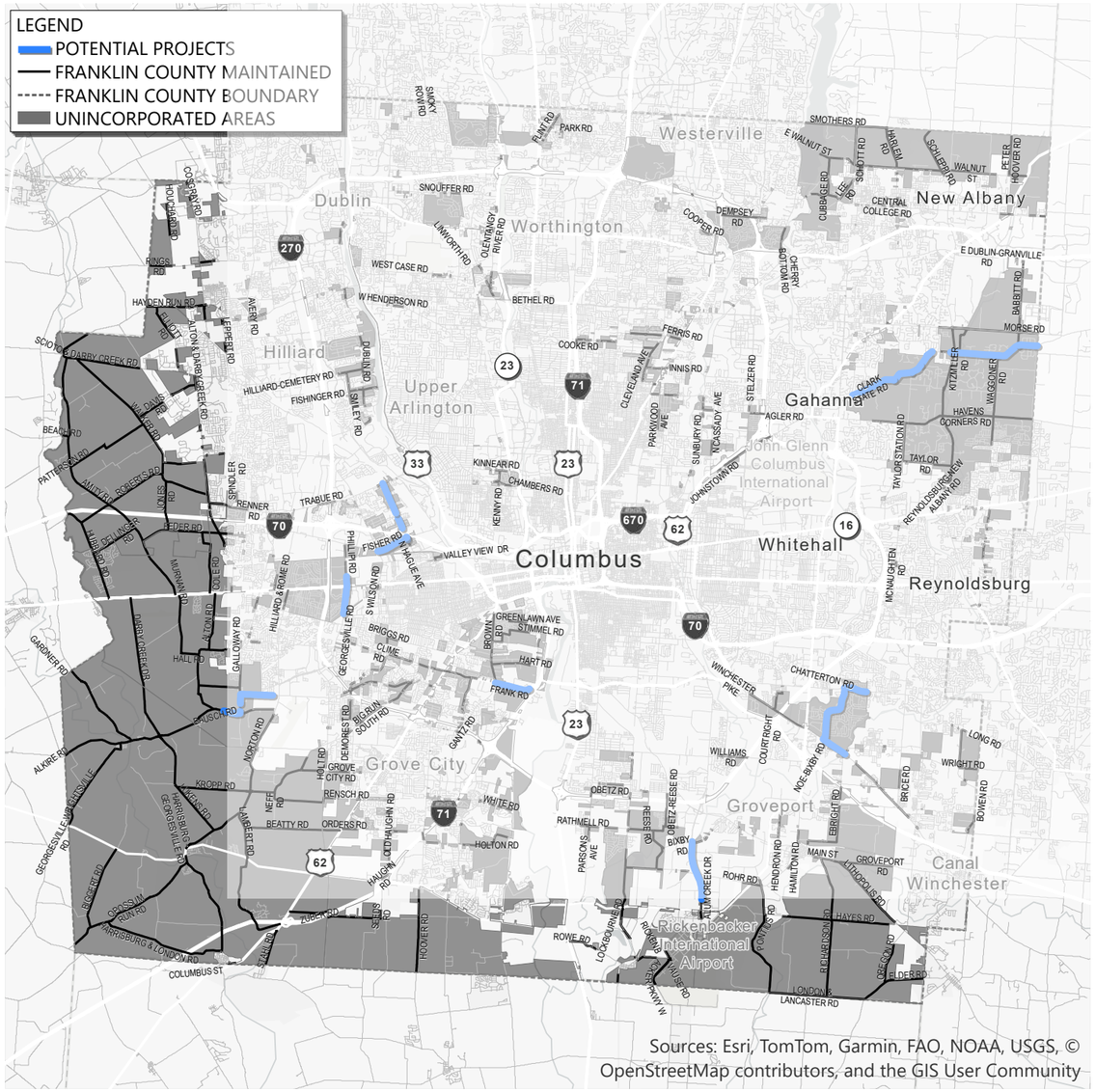


Figure 2: Potential Projects in Franklin County to Improve Safety

This Action Plan is intended to eliminate fatal and serious injury crashes, working toward a goal of zero incidents by the year 2050.

Safety Countermeasure Toolbox

The Safety Toolbox is a practical resource designed to help communities identify and apply proven transportation countermeasures that improve safety, accessibility, and connectivity for all road users. Organized into five major categories—Segment, Intersection, Pedestrian and Bicyclist Safety, Rural and Highway, and Behavioral Countermeasures—the toolbox supports data-driven decision-making and flexible application across a wide range of community contexts. The toolbox is intentionally straightforward and accessible, allowing transportation professionals, safety advocates, and community stakeholders to quickly understand what countermeasures are available, their safety benefits, and where they are most effectively applied. Countermeasures can be used independently or in combination, enabling communities to tailor solutions to local needs, roadway conditions, and safety priorities.

Based on Franklin County crash analysis, five Countermeasure Spotlights are highlighted as priority focus areas that directly address key safety themes identified in crash trends. These spotlights emphasize strategies with strong safety benefits and applicability across multiple roadway contexts:

- Roadway Edge Treatments to reduce roadway departure crashes
- Curve Delineation to improve safety on horizontal curves
- Systemic Signal and Intersection Modifications to enhance safety for drivers, pedestrians, and bicyclists
- Traffic Calming to address speeding and protect vulnerable road users
- Roundabouts to improve intersection safety and reduce vehicle speeds

Together, the Safety Toolbox and its Countermeasure Spotlights provide safety countermeasures for Franklin County to consider and implement on roadways.

Systemic Safety Strategies

This action plan outlines a comprehensive, proactive approach to improving roadway safety across Franklin County, with a focus on systemic, data-driven strategies that reduce crash frequency and severity. Central to the effort is the establishment of a formal Road Safety Audit (RSA) program targeting high-risk corridors within the High Priority Network. By integrating multidisciplinary analysis into corridor planning and project development, RSAs support consistent, cost-effective safety decision-making and have demonstrated crash reductions of up to 60 percent where recommendations are implemented.

Speed management is emphasized as a critical safety lever, particularly on urban roadways with posted speeds above 35 mph. Strategies include revising speed limits, narrowing lane widths, and implementing complementary design countermeasures to align speeds with surrounding land use and user needs. Additional focus areas include roadway departure countermeasures, such as enhanced striping, shoulder improvements, and clear zones, to address run-off-road crashes on both rural and urban roadways.

Systemic signal modifications and targeted intersection lighting improvements are recommended to enhance visibility, compliance, and safety at signalized intersections, with proven crash reductions of 15–25 percent. Collectively, these strategies provide a scalable framework to address Franklin County's most pressing roadway safety challenges.

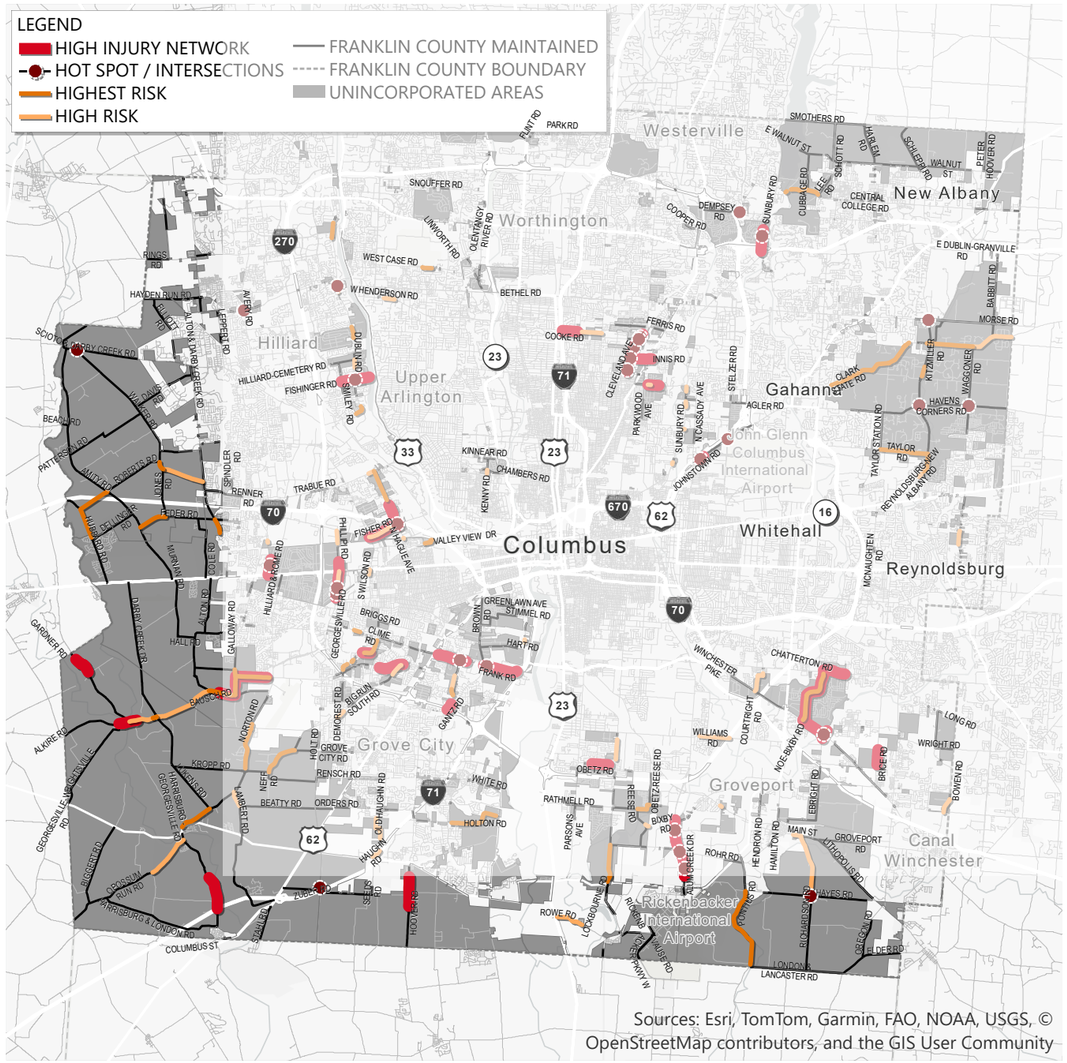


Figure 3: High Injury Network, High Risk Network, and Hot-spot Intersections

Introduction

01

PURPOSE OF THIS ACTION PLAN

The FCEO Safety Action Plan will use the Safe System Approach to reduce traffic deaths. The Safe System Approach, promoted by the U.S. Department of Transportation, is a comprehensive strategy that acknowledges human mistakes are inevitable but aims to ensure those mistakes do not result in death or serious injury. It focuses on building layers of safety through safer roads, safer speeds, safer vehicles, safer road users, and post-crash care. By adopting this approach, the FCEO is taking proactive steps to create a resilient transportation system that protects everyone—whether driving, walking, or biking. The plan updates current practices to include the Safe System Approach to address crashes and potential crash locations on the County's 251 miles of roadway. This Safety Action Plan will align with the mission statement of the Mobility Department and position the FCEO to truly create safe streets and places for all.

Goals and Outcomes of this Safety Action Plan

This Safety Action Plan (SAP):

1. Is a comprehensive plan aimed at reducing and eliminating serious injury and fatal crashes affecting all roadway users. It identifies the key factors in these types of crashes by combining data analysis with community feedback.
2. Is a roadmap for improving safety in Franklin County. It will identify safety issues, develop strategies and recommendations for improvements, and help prioritize safety investments.
3. Will include systemic strategies for all roadway projects in the future.
4. Covers all road users, including people who drive, bike, or walk on Franklin County roadways.
5. Is intended to eliminate fatal and serious injury (FSI) crashes, working toward a goal of zero incidents by the year 2050.

Safety Action Team

The FCEO developed a Safety Action Team to provide oversight, implementation, and monitoring of the goals and strategies included in the plan.

- Mike Andrako, Mobility Engineer
- Bill Hebble, Assistant Mobility Engineer
- Kristen Mastalski, Mobility Design Engineer
- Edith Kwaw, Mobility Technician IV

Figure 4: Map of Franklin County Roadways

Safe Streets and Roads for All (SS4A)

The Safe Streets and Roads for All (SS4A) grant program provides funding to prevent roadway deaths and serious injuries. The purpose of an SS4A Safety Action Plan is to develop a context-specific strategy to prevent roadway fatalities and serious injuries. The resulting action plan can then be leveraged to apply for SS4A grant funding to demonstrate and/or implement recommended project and program strategies. The Bipartisan Infrastructure Bill established the SS4A grant program in 2021.

Bipartisan Infrastructure Bill: Passed on November 06, 2021, this bill invested $110 billion towards reconstruction and improvement of America's infrastructures, including transportation systems. This bill established the Safe Streets and Roads for All grant program to improve roadway safety along the nation's transportation systems.

Safe Streets and Roads for All (SS4A) Program: The SS4A program provides grants to local, regional, and tribal communities to prevent fatal and serious injuries on the nation's roadway system. Through the U.S. Department of Transportation (USDOT), the program provides $5 billion in grants over five years (2022-2026) for communities to apply for and to help fund roadway safety improvement projects. The U.S. Department of Transportation's Safe Streets and Roads for All (SS4A) program, authorized at $5 billion under the Bipartisan Infrastructure Law (2022–2026), has now directed approximately $3.9 billion in federal funding to more than 2,000 communities nationwide through funding rounds completed in 2022–2025. This includes over $1.2 billion awarded to 710 communities in FY 2024 and about $982 million awarded to 521 communities in the FY 2025 round.

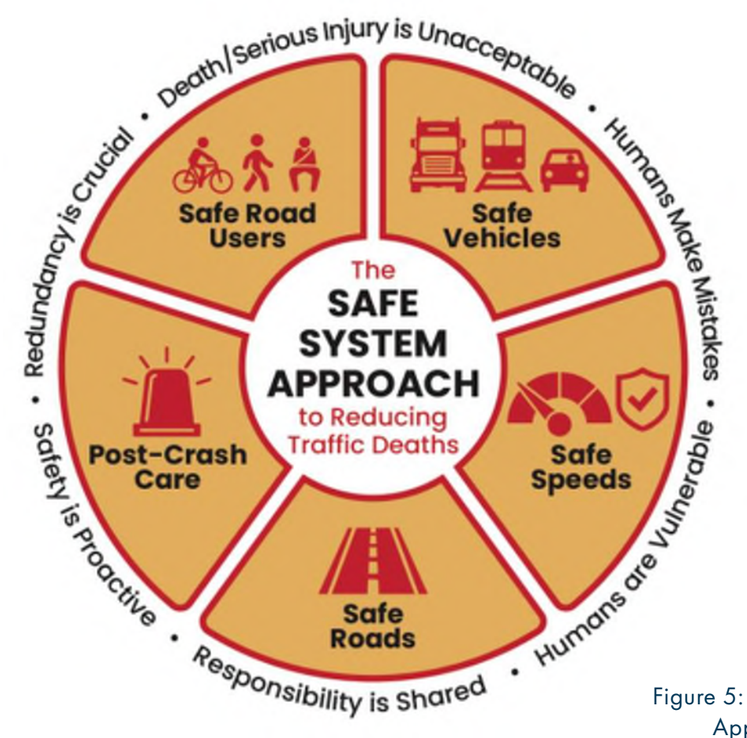


Figure 5: Safe System Approach

Safe System Approach

Historically, traditional planning and designing for traffic safety assumed humans would behave perfectly and accepted – often reluctantly – that some traffic deaths were inevitable. The Safe System Approach shifts from the traditional approach to a systemic approach to safety founded in the belief that all traffic deaths are preventable. This approach has six key principles:

1. Death and serious injury are unacceptable. Although no crashes are desired, the Safe System Approach focuses on eliminating crashes where people can die or be seriously injured.

2. Humans make mistakes. There is no perfect person, so mistakes should be expected when people are traveling. Roadway design and operation should ensure these human mistakes do not result in life-changing injuries or death for the people traveling.

3. Humans are vulnerable. Human bodies can only withstand so much force before a serious injury or death occurs.

4. Responsibility is shared. There are many different players that make the transportation system safe or unsafe. Elected officials, planners, engineers, designers, and people traveling need to work together to create a safe roadway network.

5. Safety is proactive. A crash should not have to happen to prove that something is unsafe. Transportation agencies should use best practices and research to proactively identify and address dangerous locations.

6. Redundancy is crucial. Redundancy makes sure the transportation system stays safe, even if one part of it fails.

Figure 6: Vision Zero Strategy

SS4A Comprehensive Safety Action Plan Goals

The goal of an SAP is to develop a holistic, well-defined strategy to prevent roadway fatalities and serious injuries. A successful action plan includes the following **key components**:

1. Leadership commitment and goal setting. An official commitment to move towards zero roadway fatalities and serious injuries.

2. Planning structure. A committee or group charged with oversight of the Action Plan development, implementation, and monitoring.

3. Safety analysis. An analysis of existing conditions, trends, and needs to establish a baseline level of fatal and serious injury crashes, identify contributing factors and crash types, and understand both systemic and location-specific safety needs.

4. Engagement and collaboration. Robust engagement with the public and relevant stakeholders.

5. Equity considerations. Plan development using inclusive and representative processes.

6. Policy and process changes. Assessment of current policies, plans, guidelines, and/or standards to identify opportunities to improve how processes prioritize transportation safety.

7. Strategy and project selections. Identification of a comprehensive set of projects and strategies to address the safety problems described in the Action Plan that are shaped by data, the best available evidence and noteworthy practices, stakeholder input, as well as equity considerations.

8. Progress and transparency. Method to measure progress over time after an Action Plan is developed or updated, including outcome data.

Project Timeline

The project timeline was built around four key phases of plan development and adoption. From September to December 2025, the process began with data analysis and a community survey to gather input and insights. From December 2025 to February 2026, a draft plan was developed based on the collected data and feedback. The next phase, occurring in February 2026, featured public open houses to engage the community and gather additional feedback about the recommendations set forth in the plan. Finally, in June 2026, the project process culminates with the adoption of the final plan by the Franklin County Board of Commissioners.

> ***"I'm encouraged to hear the Engineer's Office's interest in road diets (where appropriate), and a commitment to improve multimodal options."***
>
> *- Survey Participant*

Existing Policies, Programs, Processes, and Partners

A range of policies, programs, processes, and partners have been implemented within Franklin County and across Ohio that provide support and guidance for roadway safety. The following paragraphs summarize the most relevant initiatives, along with their key findings and outcomes, and describe how they inform and influence this SAP.

Local Road Safety Plan: In the Local Road Safety Plan (LRSP), the FCEO committed to the goal of reducing roadway fatalities and serious injury crashes by 3% annually, with an overall target of an 80% reduction by the year 2050. To accomplish this, the FCEO collects and analyzes crash data from law enforcement, focusing on locations within its jurisdiction. FCEO staff members meet annually to discuss low, medium, and high-cost countermeasures to address safety concerns at each priority location. Intersections are ranked based on crash severity, frequency, and traffic volume, with special attention to trends and underserved communities. High-priority locations are examined in detail, and both traditional and innovative low-cost safety countermeasures are implemented. The plan is integrated into broader infrastructure planning, including the Capital Improvement Program, and is updated annually to reflect progress and new priorities. Collaboration with local agencies and ongoing evaluation ensure the plan remains effective and responsive to the community's needs. While these efforts have improved safety at dangerous intersections, the current procedures do not address crashes in other locations.

Complete Streets Policy: The FCEO Complete Streets Resolution ensures all transportation projects within the county's public right-of-way are planned, designed, constructed, operated, and maintained to accommodate all modes of travel. This includes pedestrians of all ages and abilities, cyclists, motorists, and transit users. The resolution emphasizes creating street networks that safely connect all properties and foster a more livable, welcoming community. By encouraging non-motorized transportation options and integrating features such as sidewalks, bicycle facilities, pedestrian crossings, and transit accommodations, the policy aims to reduce congestion, support economic growth, and enhance community stability. The resolution also highlights the importance of context-sensitive design, ensuring street improvements complement surrounding land use and community character, ultimately making travel safer, more convenient, and accessible for everyone.

Crash Data Organization: Throughout the year, crash data is collected from law enforcement agencies and filtered to include incidents within the FCEO's jurisdiction. Each crash is then digitally filed, capturing details such as location, date, severity, road and light conditions, crash type, intersection or segment, and traffic control. After compiling the annual data, the FCEO compares its records with those from the Ohio Department of Public Safety to ensure accuracy. Intersections are ranked based on crash severity, frequency, and average daily traffic, with additional consideration given to trends over a three-year period and proximity to underserved communities.

Coordination with Adjacent Agencies: The FCEO has collaborated with ODOT to pursue safety funding for roundabout projects on state routes. The County also serves as the coordination lead for several multi-jurisdictional safety projects, and actively participates in Columbus Public Health's Traffic Fatality Review Board, partnering with public health and engineering professionals to review fatal crashes across Franklin County.

Vision Zero Commitment: As part of the previously adopted LRSP in 2018, the FCEO committed to reducing roadway fatalities and serious injury crashes. To further the safety commitment made in the LRSP, this Safety Action Plan aims to eliminate fatal and serious injury crashes, working toward a goal of zero incidents by the year 2050.

Setting a goal to reduce traffic fatalities in a Safety Action Plan is critically important because it establishes a clear, measurable target that guides all safety efforts and investments. By aiming to reduce and ultimately eliminate deaths and serious injuries, the plan prioritizes the protection of every road user—drivers, pedestrians, and cyclists—and acknowledges that human mistakes are inevitable but should not result in tragedy. This goal aligns with the Safe System Approach, which emphasizes shared responsibility among planners, engineers, and the community to design transportation networks that minimize risks and mitigate the consequences of crashes. Having a defined goal also helps focus resources on the most effective strategies, fosters accountability, and encourages community engagement, making it possible to track progress and adjust actions as needed. The FCEO undertook development of a Safety Action Plan to continue advancing this goal, expand crash analysis to include roadway segments and curves, integrate the Safe System Approach for proactive prevention, and prioritize projects in disadvantaged communities and areas identified in regional High Injury Networks.

Community Engagement

02

COMPREHENSIVE ENGAGEMENT

Community engagement is a critical component of successful transportation and roadway safety projects. Involving local residents, businesses, and stakeholders in the planning process ensures the solutions developed are not only technically sound but also reflect the unique needs and concerns of the specific neighborhood. Engaging with the community before making significant changes allows project leaders to gather valuable insights regarding existing issues, traffic patterns, and safety concerns that may not be immediately evident to outside experts.

The team utilized a mix of digital platforms and in-person events to connect with the Franklin County community. These efforts aimed to raise awareness about the impact of serious and fatal crashes, explain how the Safety Action Plan (SAP) will guide strategies to reduce these incidents, and gather firsthand input on safety concerns across the county's road network. The table below lists the comprehensive engagement activities conducted as part of this SAP.

Engagement Activities and Events

Engagement Activity	Date	Topics
Webpage	Throughout	Project info, survey participation
Pop-Up Event - Touch-a-Truck	10/16/2025	Project info, survey participation
Area Commission Meetings	10/14/25, 10/28/25, 11/11/25, 11/20/25, 12/16/25	Project info, conversations with local government, survey participation
Online Survey	10/13/2025 - 12/31/2025	Identification of specific safety challenges and locations
Public Open House	2/12/2026 and 2/17/2026	Presentation of draft plan for public comment

Safety Action Plan Webpage

In addition to a robust social media campaign, the plan's webpage was created to be a main source of project information (via a factsheet) and updates. The webpage also housed the public survey. All public engagement materials featured a QR code or link to the webpage.

Figure 7: Safety Action Plan Webpage

City of Columbus Area Commissions Meetings

Between October and December 2025, the project team delivered presentations to five Area Commissions throughout Franklin County. These commissions are neighborhood-based advisory bodies that provide input on zoning, development, and community issues within their respective areas. They serve as a link between residents and government. The presentations explained:

- **What a Safety Action Plan is –** a comprehensive strategy to improve transportation safety and reduce serious injuries and fatalities.
- **Why is FCEO developing one –** to create safer streets for all users and align with Vision Zero principles.
- **How the plan will be used –** as a guiding document for prioritizing safety projects and securing funding.
- **Ways Area Commissions can get involved –** by sharing local safety concerns, reviewing proposed actions, and helping engage community members.

Community Pop-Up Event

The Touch-A-Truck Pop-Up Event took place Thursday, October 16, 2025, from 4:00 p.m. to 8:00 p.m. at Fortress Obetz in Obetz, Ohio. The event drew significant community interest, with over 1,100 attendees reported. Representatives from the FCEO attended to engage the community, seeking their thoughts and feedback for the development of the FCEO Safety Action Plan. Attendees were encouraged to complete the online community survey as they stopped by the Safety Action Plan table. Representatives also walked the grounds to engage more people and vendors and share the community survey. While a few individuals opted to fill out the survey on provided tablets, greater success was found in having people scan the QR code to complete it later at their convenience.

Open House Public Meetings

Two in-person open houses were hosted across the county to present the Safety Action Plan's intial recommendations for public review and comment. Held on Thursday, February 12, 2026, at Franklin County's East Maintenance Facility, and Tuesday, February 17, 2026, at the West Maintenance Facility, these events provided an opportunity for community members to learn about and engage with the planning process. Presentation materials outlined the overall approach, key analysis findings, and proposed safety countermeasures. Participants were encouraged to share feedback on workshop outcomes, including community values, priorities, and proposed improvements, as well as on the plan's ongoing development, process details, and safety statistics. Comment forms were provided for additional input to ensure attendee perspectives were captured.

> ***"Sidewalk improvements and crosswalks are needed all along Frank Rd."***
>
> *- Survey Participant*

FRANKLIN COUNTY
SAFETY ACTION PLAN

Franklin County is developing a Safety Action Plan to help reduce the number of fatal and serious-injury crashes throughout the County's transportation system.

From 2020–2024, nearly 14,000 people were involved in car crashes on County- maintained roadways. 240 people were seriously injured and 45 people lost their lives. Franklin County is dedicated to developing a framework to reduce fatalities and serious injuries within the County's transportation system.

This plan will address the safety for **ALL ROAD USERS** including those **DRIVING, WALKING OR BIKING.**

HOW WILL WE DO THIS?

The Franklin County Engineer's Office (FCEO) Safety Action Plan will use the Safe System Approach to reduce traffic deaths. The Safe System Approach, promoted by the U.S. Department of Transportation, is a comprehensive strategy that acknowledges human mistakes are inevitable but aims to ensure those mistakes do not result in death or serious injury. It focuses on building layers of safety through safer roads, safer speeds, safer vehicles, safer road users, and post-crash care. By adopting this approach, Franklin County is taking proactive steps to create a resilient transportation system that protects everyone—whether driving, walking, or biking. We will update current practices to include the Safe System approach to address crashes and potential crash locations on the County's 253 miles of roadway. This Safety Action Plan will align with the mission statement of the Mobility Department and position the FCEO to truly create safe streets and places for all.

Project Timeline

Sept - Dec 2025	Dec 2025	Feb 2026	June 2026
Data Analysis & Community Survey	Draft Plan Development	Public Open Houses	Adopt Final Plan

Presentation on the Safety Action Plan at Far West Area commission meeting.

Figure 9: Public Engagement Events and Materials

Online Surveys

The online survey consisted of two components. The first invited participants to drop pins on an interactive map, highlighting traffic safety issues and suggesting ideas to reduce fatal and serious injury crashes. This map received **66** contributions. The second component featured questions about travel habits, perceptions of safety, top five safety concerns, the three street design changes participants believed would most improve traffic safety in Franklin County, and the conditions they consider essential for feeling safe while biking, walking, or using transit. The survey questions received **39** contributions.

The survey was available on the project's webpage from October 16 to December 31, 2025, and was distributed through the FCEO's social media posts, as well as via QR codes shared at Touch-a-Truck events and Area Commission meetings.

Mapping Community Safety Concerns

Locations identified by respondents as safety concerns were distributed throughout Franklin County, but only about half were within FCEO jurisdiction. Concentrations of community safety concerns were located in the Clinton Township area, near the Fisher Rd/Hague Ave interchanges with I-70, and the Southwest Columbus area. The locations shown in **Figure 10** are limited to the concerns of online participants, and only county maintained locations are shown. There may be other locations of concerns that were not identified due to the pool of participants.

Residents note safety concerns while driving in Franklin County, including high vehicle speeds, heavy traffic, and limited visibility at certain intersections.

Many of the comments about feeling unsafe while cycling focused on unprotected bike lanes that cars use for turning or parking. Fast-moving traffic, impatient drivers, and vehicles merging through bike lanes also create challenging conditions for cyclists. Participants also noted a lack of connectivity. Bike lanes and trails sometimes end abruptly, forcing cyclists onto busy roads or damaged sidewalks, and there is a need for more protected bike lanes, off-street walking paths and better connections between routes.

People feel unsafe walking in Franklin County due to missing or poorly maintained sidewalks, high vehicle speeds, inadequate crosswalks, and poor or no lighting. Many comments highlight the lack of safe pedestrian spaces and the need for improved infrastructure to protect those on foot. People feel safest while driving and least safe using a mobility device or motorcycle.

> ***"Hague Avenue north of Valleyview Dr. is generally hostile to anyone not in a motor vehicle. There are no sidewalks, little room for pedestrians, and the combination of narrow road lanes (a good thing) and moderately high traffic makes for unsafe cycling. Despite this, I regularly see pedestrians and cyclists who are forced to use Hague. As more housing gets added along Hague, this will be a growing problem."***
>
> *- Survey Participant*

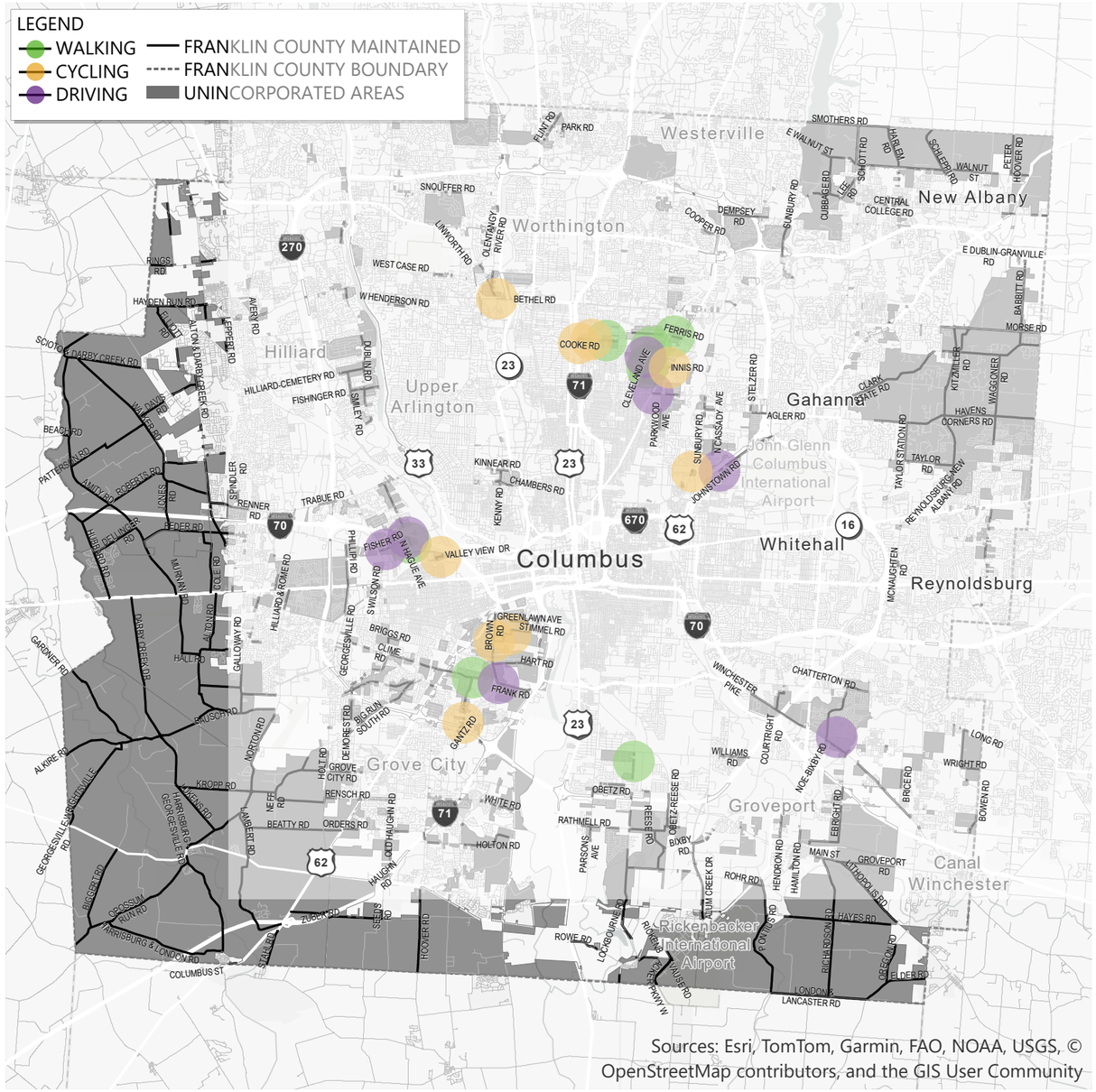


Figure 10: Mapped Community Safety Concerns by Mode

Key Engagement Takeaways

Ultimately, community engagement ensures roadway safety projects not only meet engineering and regulatory standards but also align with the priorities and expectations of the people who will be most affected, leading to safer, more inclusive outcomes. Engagement efforts throughout the planning process have identified detailed safety information that will guide recommendations as well as the following notable top five safety themes:

1. Distracted Drivers - people operating a vehicle while their attention is diverted away from the primary task of driving

2. Speeding (tied) - people driving a vehicle faster than the posted speed limit or too fast for current road, traffic, or weather conditions

2. Intersection Design (tied) - how a roadway intersection is designed and constructed to manage the movement of vehicles, pedestrians, cyclists, and buses in a safe and efficient manner.

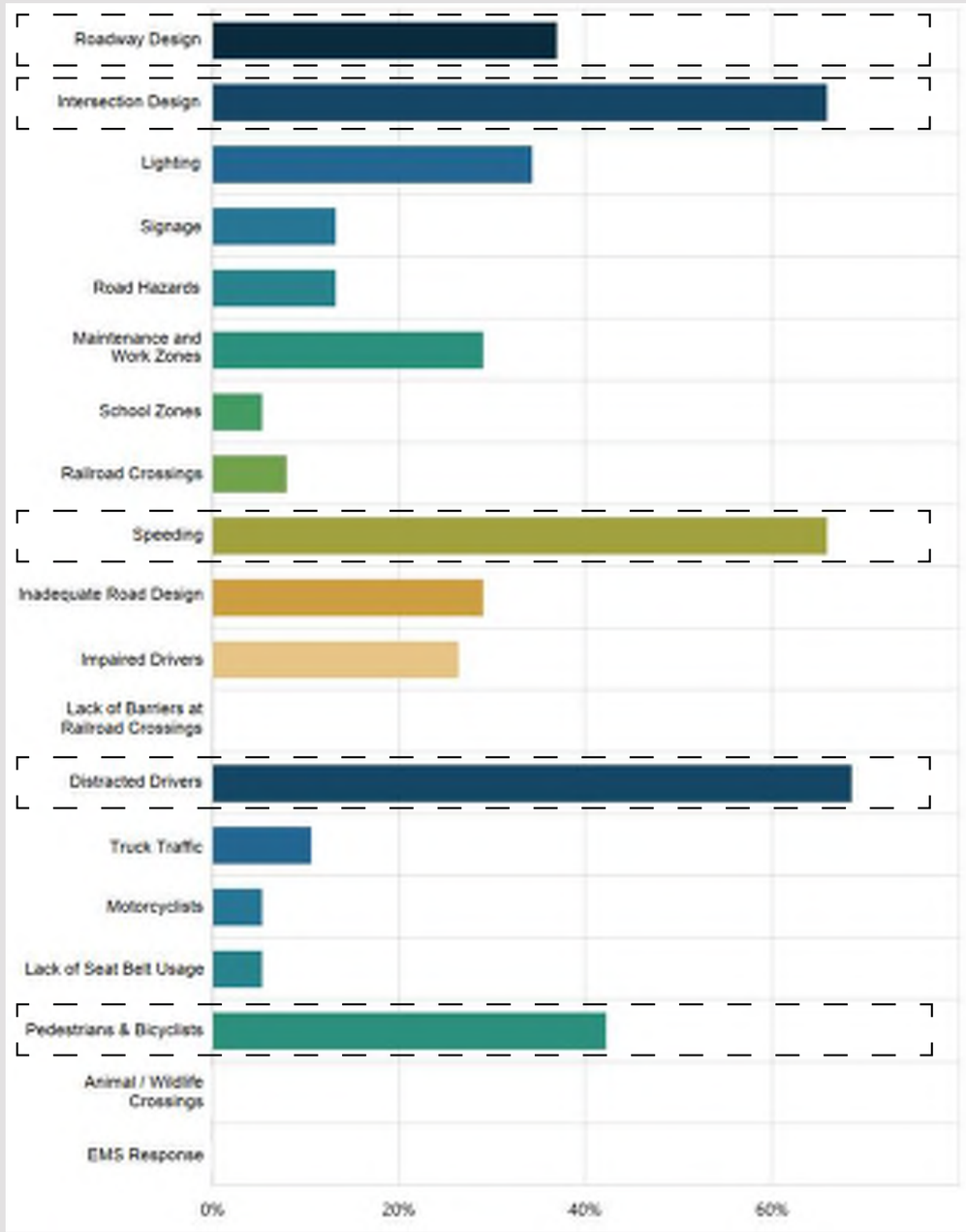
4. Pedestrians and Bicyclists - non-motorized users on roadways who travel on or along the roads and sometimes share space with vehicles.

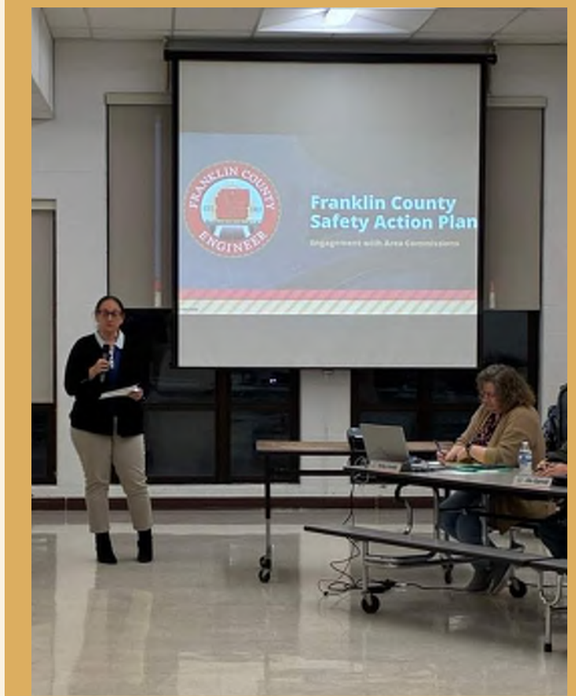
5. Roadway Design - how a roadway is designed and constructed to manage the movement of all modes.

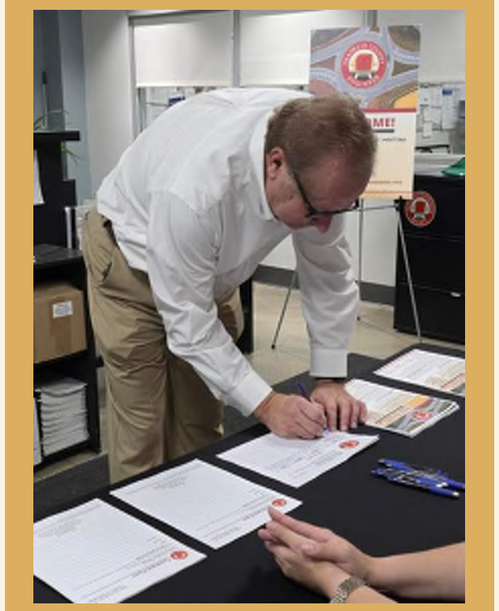
To ensure well-rounded and responsive recommendations, the crash analysis and safety focus areas will be integrated with community feedback, capturing both statistical trends and lived experiences. This balanced approach allows for solutions that not only address documented safety concerns but also reflect the values and priorities of those who use the streets every day.

What are the top street design changes that would have the greatest impact on improving traffic safety in Franklin County?

Top Five Safety Concerns







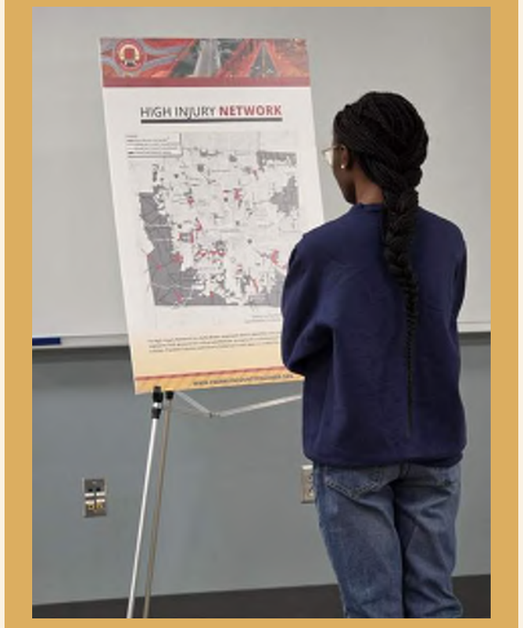


Figure 11: FCEO SAP Public Engagement

State of Safety: Analysis of Conditions

03

STATE OF SAFETY

The 'State of Safety' chapter analyzes regional safety trends and patterns and provides an exploration of safety focus areas identified through crash data, analysis, and the public engagement process.

The safety focus areas are pivotal in addressing the region's safety challenges and have been categorized into five broader focus groups. The safety analysis starts by looking at crash trends in Franklin County, setting the stage for a detailed discussion on each focus area's relationship with fatal and serious injury crashes. A standard metric in the focus areas is the representation ratio, or likelihood of a fatal or serious injury crash occurring, which addresses the over- or under-representation of various factors in the data. This helps show what characteristics in each focus area cause or contribute to severe crashes. Much of the previous data influenced the High Priority Network's (HPN) creation. The HPN is a critical component in the region's safety improvement strategy, composed of the High Injury Network (HIN), the High Risk Network (HRN), and data from the Community Survey Map. The HIN identifies road segments with a high concentration of severe crashes, allowing for targeted interventions in areas most needing safety enhancements. The HRN highlights infrastructure that poses significant risks to road users, focusing on systemic improvements to mitigate potential hazards. The Community Survey Map integrates public input with technical analysis, ensuring community concerns and lived experiences inform safety priorities. Together, these elements create a comprehensive framework for identifying and addressing regional safety issues.

Jurisdiction	Persons Killed or Seriously Injured Per 100,000 population
Madison County	328.2
Sandusky County	319.6
Montgomery County	196.5
Ohio	180.3
Cuyahoga County	176.0
Hamilton County	154.5
Summit County	154.2
Greene County	150.0
Butler County	141.1
Franklin County	137.6
Delaware County	129.6

2023 and 2024 fatal and serious injury crashes totaled from the Ohio Traffic Safety Office Dashboard. Population per county and state averaged for the same years, pulled from the Census data website. The crashes per 100,000 population were manually calculated.

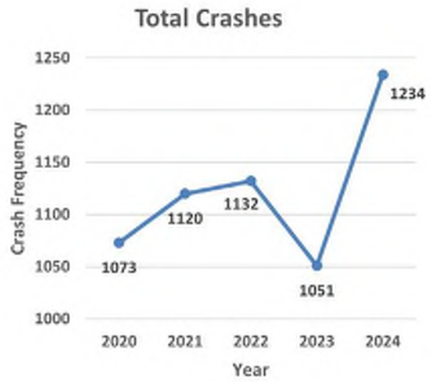
The goal of this analysis is to provide a thorough understanding of the county's safety landscape, highlighting key focus areas and opportunities for systemic improvements.

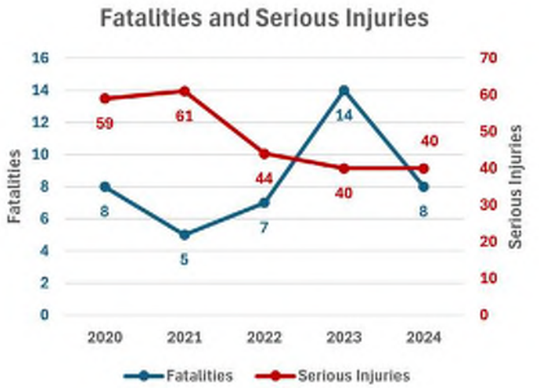
Note: Unless otherwise noted, the data presented in this chapter was derived from the 2020-2024 crash data (provided by ODOT) for the study area.

Key Safety Analysis Takeaways

Based on the Franklin County roadway data, the following key safety insights highlight recurring themes, analytical findings, and supporting statistics.

- A total of 240 fatal and serious injury (FSI) crashes occurred between 2020 and 2024, with 42 fatalities and 244 serious injuries reported.
- Vulnerable Road User (VRU) crash data represented a small proportion of the total trips and miles traveled in Franklin County but were disproportionately represented in the FSI crashes, where people walking (11.7%), biking (1.7%), and riding motorcycles/ATVs (17.1%) accounted for 30.4% of all FSI crashes.
- 20% of FSI crashes occurred at intersections.
- 17% of FSI crashes were related to roadway departure. Roadway departure FSI crashes were overrepresented on roadways with 50 mph and 35 mph speed limits.
- Principal Arterials only comprise about 4% of the FC network but accounted for more than 20% of the FSI crashes reported.
- Major collector roads with 45 mph speed limits comprise less than 10% of the road network, but account for more than 20% of the roadway departure FSI crashes.
- Minor arterial roads with 45 mph speed limits comprise about 13% of the road network, but account for more than 18% of roadway departure FSI crashes.
- Principal arterial roads with 35 mph speed limits account for a similar percentage of FSI crashes as minor arterial roads and major collector roads with 45 mph speed limits.
- Younger drivers (age 15-25) stood out as a subset of the population most frequently involved in FSI crashes.





Fatal and Serious Injury (FSI) Crash Analysis

Franklin County encompasses 251 centerline miles of roadway and in the last five years alone, 286 fatal and serious injuries have occured through 240 FSI crashes. There were 5,610 crashes in total, however this analysis focuses only on FSI crashes as they are more impactful and life-altering. Figure 12 geographically showcases the FSI crashes in Franklin County. *Note, only county-maintained roads were analyzed, all municipality and ODOT maintained roads were not included in the analysis.*

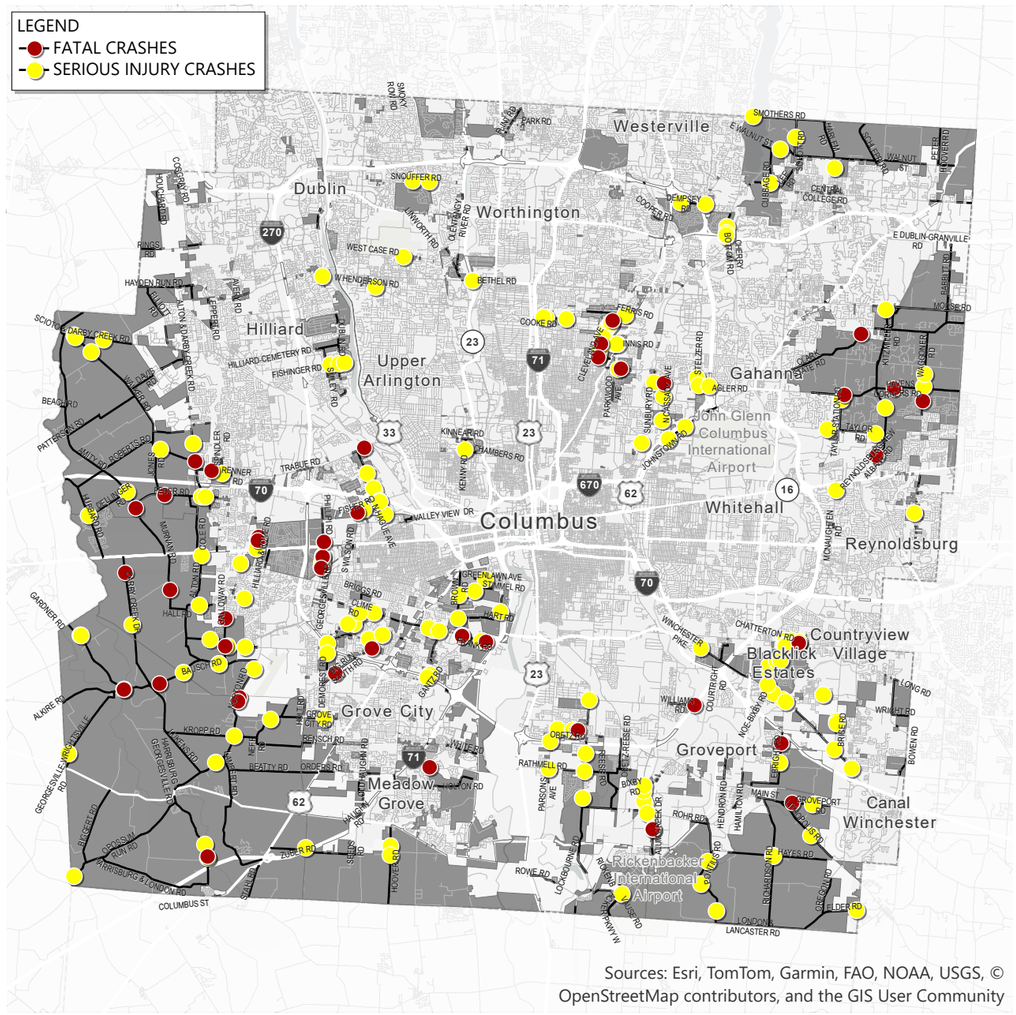
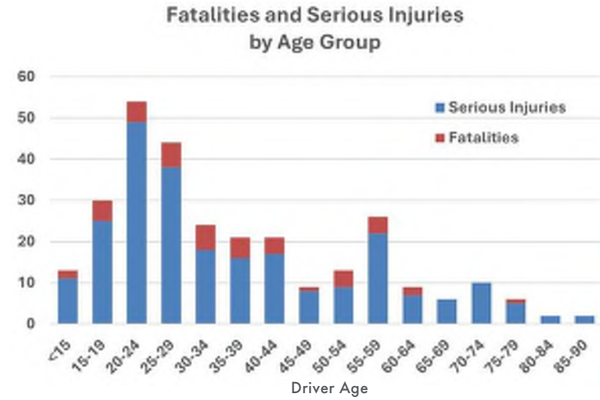
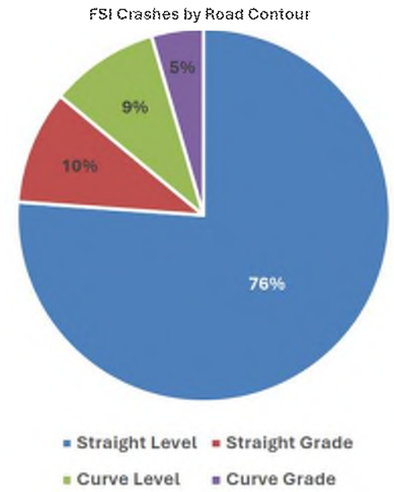


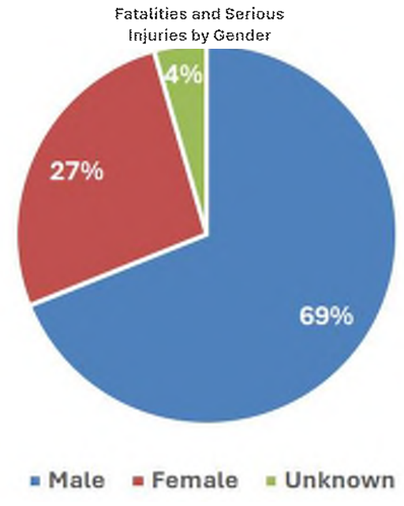
Figure 12: Fatal and Serious Injury Crashes

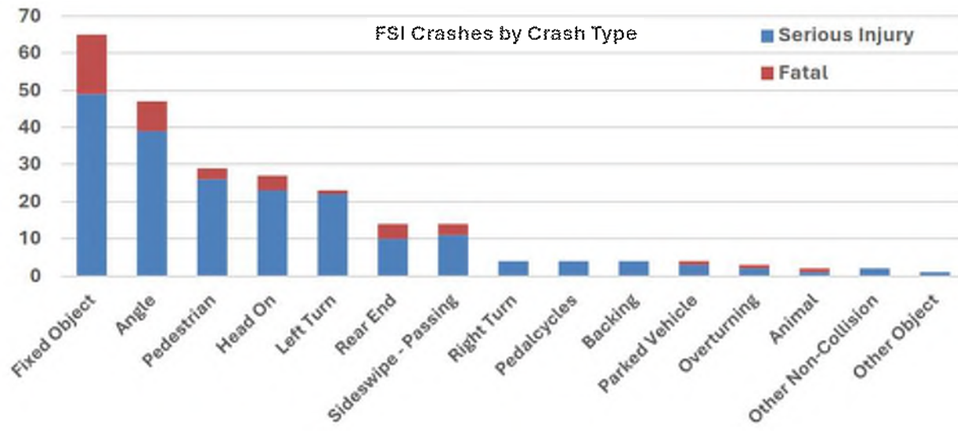
Crash Characteristics

People between the ages of 20 and 29 years old had the highest FSI crash involvement out of all age groups. The majority of FSI crashes occured on straight roadways. Males were more than twice as likely as females to be seriously injured or killed in traffic crashes. Fixed object, angle, and pedestrian crashes were the three most frequent FSI crash types.





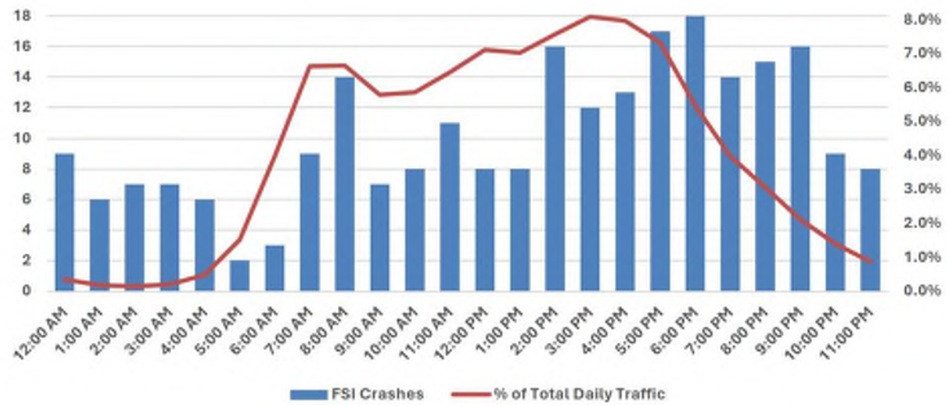




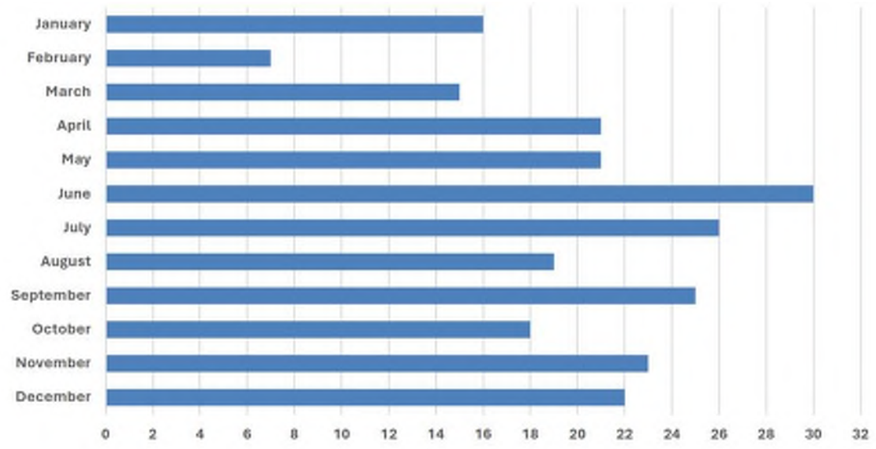
Crash Characteristics (continued...)

Approximately 83% of FSI crashes occurred on dry road surfaces, and 89% occurred under clear or cloudy weather. Approximately 55% of FSI crashes occurred under daylight conditions, while the rest were under dark or low light conditions. Approximately 22% of FSI crashes occurred after dark on roadways with no street lighting. Another 15% occurred after dark on roadways with lighting.

A higher portion of FSI crashes occurred in the afternoon into evening hours, beginning at 2:00 PM and continuing through 9:00 PM, with a notable peak between 5:00 PM and 6:00 PM. FSI crashes also trended upward around 8:00 AM, though considerably less than the afternoon. An additional data point of note is the continued frequency of FSI crashes beyond the peak traffic period in the evening. As the traffic volumes tapered off, FSI crashes continued to remain high.



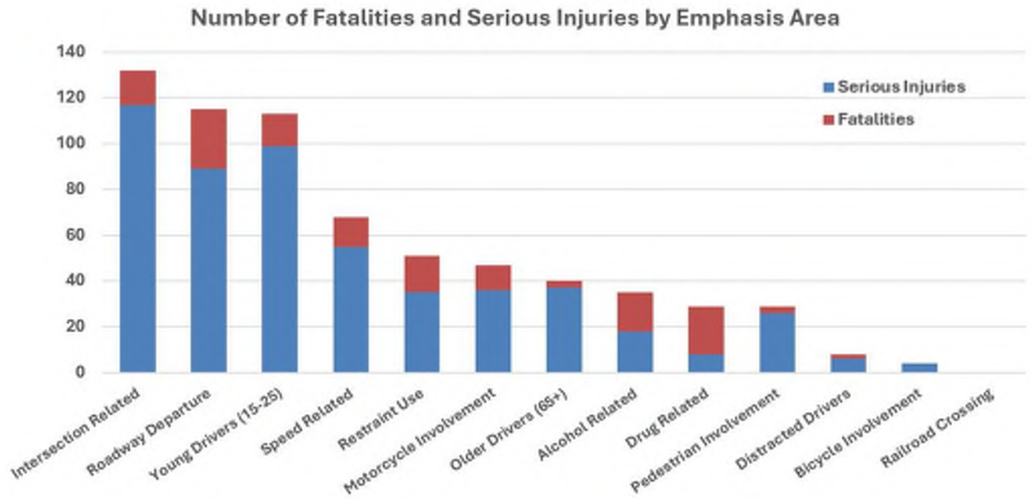
Fatal and serious injury crashes were elevated on Thursdays and Fridays. Weekends did not appear to influence crash frequency. FSI crash frequencies were lowest between January and March, while June through September had the greatest frequency.



Statewide Emphasis Area Comparison

Crash data for Franklin County was analyzed in relation to the Ohio Strategic Highway Safety Plan (SHSP) emphasis areas—factors noted in crash reports as potential contributors. Multiple factors can apply to a single crash; for example, a distracted, unbelted driver who runs off the road would fall under Distracted Driving, Roadway Departure, and Restraint Use. In Franklin County, the leading emphasis areas for fatalities and serious injuries were Intersection Related, Roadway Departure, and Young Drivers (ages 15–25). Intersection-related crashes are notably higher in the county in part due to the greater density of intersections in its urban environment. While the County has a slightly higher population of people under 25 than the state average, the at-fault statistics for the County are on par with the state. However, the young driver at-fault statistics are higher when looking at FCEO Maintained Roadways. County roads often feature higher speed limits, suggesting that the higher percentage of FSI crashes in Franklin County compared to statewide averages may be attributed to a combination of high speed and lack of experience.

EMPHASIS AREA	FRANKLIN COUNTY	STATEWIDE
Intersection Related	20%	15%
Roadway Departure	17%	18%
Young Drivers (15-25)	17%	12%
Speed Related	10%	11%
Restraint Use	8%	12%
Motorcycle Involvement	7%	6%
Older Drivers (65+)	6%	8%
Alcohol Related	5%	7%
Drug Related	4%	5%
Pedestrian Involvement	4%	3%
Distracted Drivers	1%	2%
Bicycle Involvement	1%	1%
Railroad Crossing	0%	0%



Vulnerable Road User FSI Crashes

Vulnerable Road User (VRU) crashes occurred in smaller overall numbers; however, VRUs were disproportionately represented in fatal and serious injury (FSI) crashes. No consistent location-based themes were identified for VRU FSI crashes, although the provision and quality of VRU facilities remain a key safety focus.

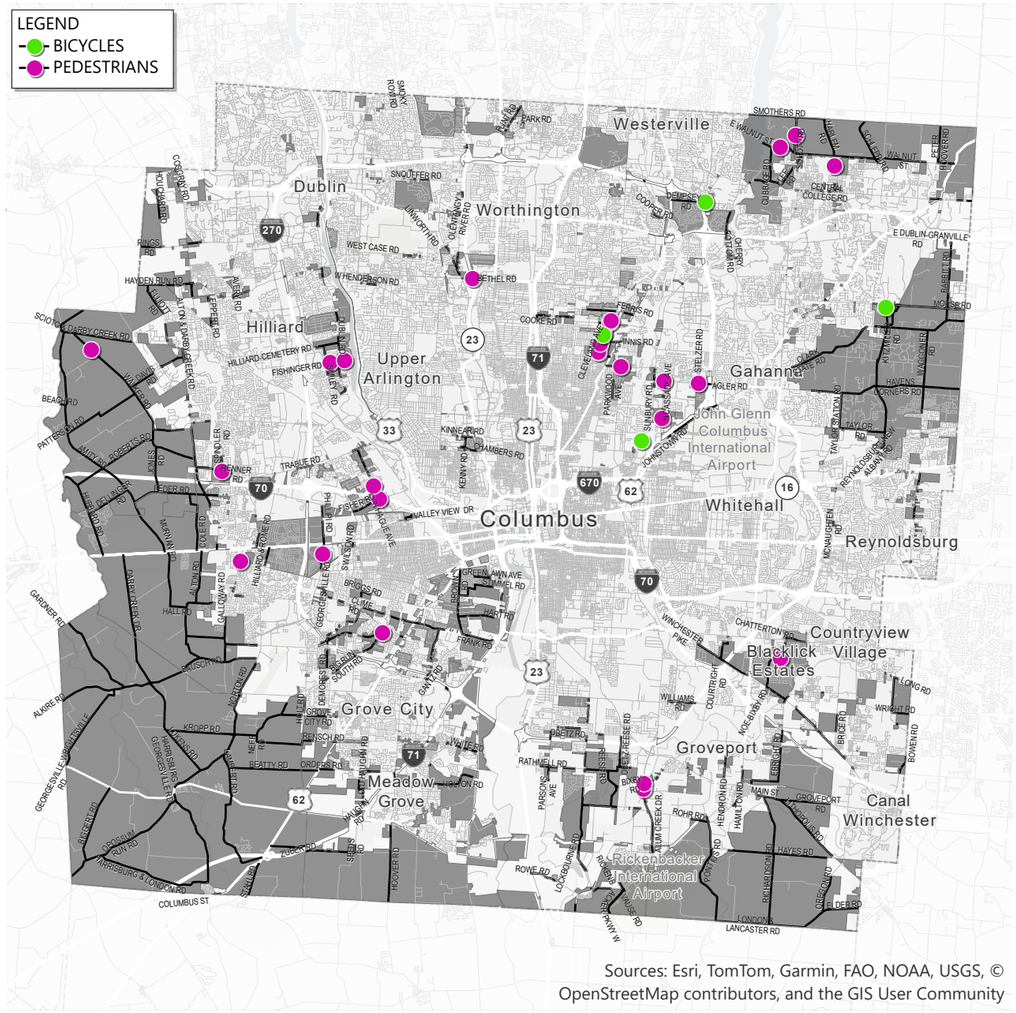


Figure 13: Vulnerable Road User Fatal and Serious Injury Crashes

Roadway Departure FSI Crashes

The roadway characteristics that had strong correlations to roadway departure crashes were combined and assessed across the entire network. Segments that included several of these risk factors were identified in the Roadway Departure High Risk Network. Only about 8% of roadway-departure fatal and serious injury (FSI) crashes occurred on principal arterials, but these crashes were disproportionately concentrated on roadways posted at 50 mph and 35 mph. The presence of a horizontal curve was also identified as a primary risk factor.

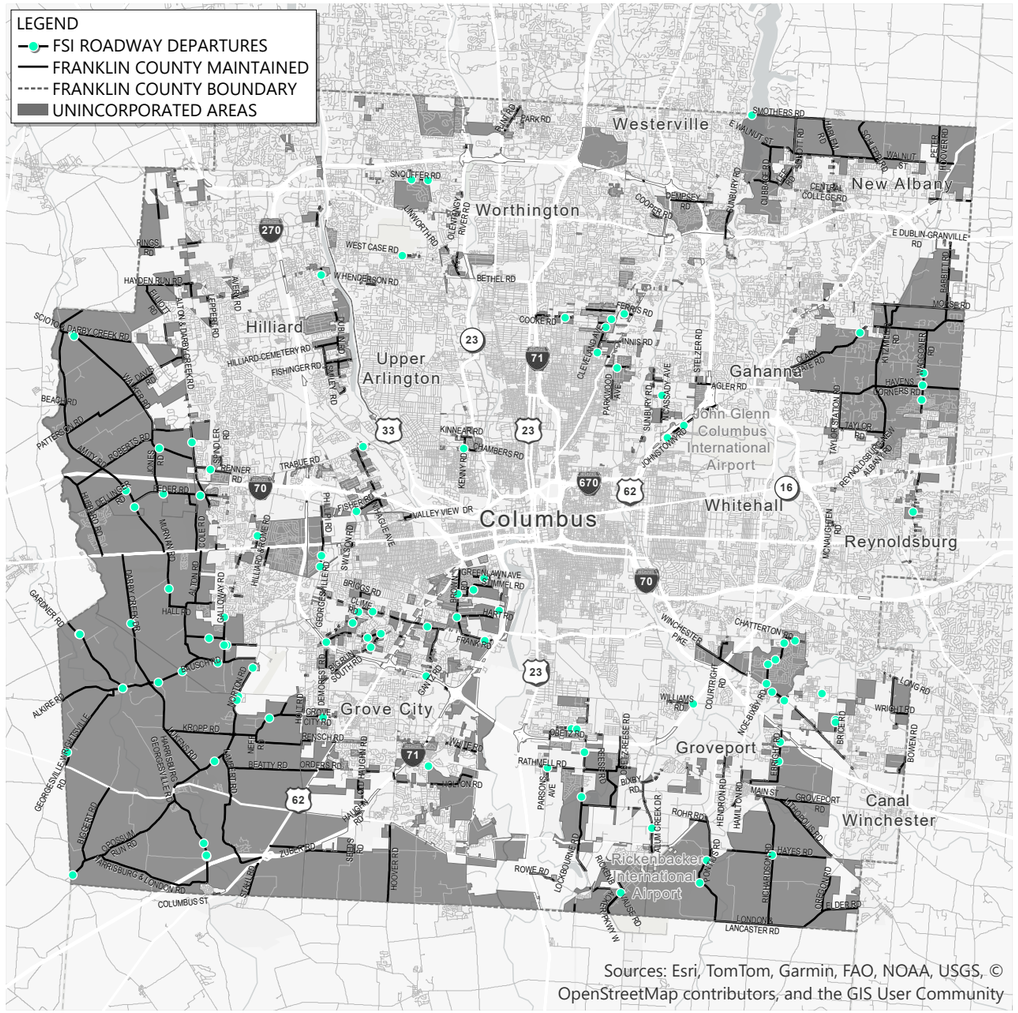


Figure 14: Roadway Departure Fatal and Serious Injury Crashes

Safety Focus Areas

It is notable that while FSI crashes involving bicycles or pedestrians only account for a small percentage (0.07% and 0.5% respectively) of total crashes, they account for a higher-than-expected FSI crash percentage (1.7% and 11.7% respectively). ***This highlights the need to not only identify solutions for vehicle-vehicle collisions but also vulnerable road users.***

The Safety Action Plan identifies fourteen Focus Areas that emerged as key issues or opportunities to address the FCEO's safety challenges. These focus areas were grouped into a set of five broader Focus Groups: **High Risk Infrastructure, Safety Zones, Vulnerable Road Users, Contributing Crash Factors, and Safe System.** The challenges presented by the crash analysis results fall within one or more of these focus areas. This section discusses these focus areas, along with the representation in the FSI crashes.

FOCUS AREAS
Arterial Roadways
Rural Roads
Signalized Intersections

High-Risk Infrastructure

The physical characteristics of roadways can influence the likelihood and severity of crashes. Arterials, signalized intersections, and a lack of roadway lighting are all infrastructure factors that correlate with an increased prevalence of fatal and serious injury crashes. While rural roads have a lower FSI crash rate than urban streets, they are included as a focus area due to the unique crash characteristics of those crashes and of the solutions put into place.

- *Roadway departures were concentrated on roads posted at 35 mph and 50 mph.*
- *Roadway departures account for 17% of FSI crashes.*
- *Intersections account for 20% FSI crashes.*

FOCUS AREAS
Maintenance & Work Zones
School & Pedestrian Zones

Safety Zones

Safety Zones focus area looks at the safety concerns of an area, as opposed to high-risk infrastructures, which are exact locations; this focus group is dedicated to addressing critical areas in traffic safety, emphasizing two primary focus areas: 1. Maintenance and Work Zones, and 2. School and Pedestrian Zones. This focus aims to enhance the protection of construction workers, road maintenance personnel, and pedestrians, particularly around schools and work zones. By analyzing crash data and identifying trends, the focus seeks to implement strategies that minimize risks and improve safety in these vulnerable areas.

- *Though no specific areas were highlighted in the FSI themes for VRU, safety near bus stops, schools, shopping, and in workzones should be a focus.*

FOCUS AREAS
Pedestrians & Bicyclists
Young & Male Drivers

Vulnerable Road Users

Vulnerable Road Users focus area looks into the people most affected, namely: pedestrians/bicyclists, motorcyclists, young drivers, and male drivers. The first two, pedestrians/bicyclists and motorcyclists, are vulnerable to traffic itself and, therefore, are much more likely to be involved in a crash that is severe. Young and male drivers, on the other hand, have a "self-imposed" vulnerability to more frequent crashes and severity due to the lack of experience (young), aggressive driving behavior (male), and risk-taking behavior (both).

- *Young drivers account for 17% FSI crashes.*
- *Pedestrians are disproportionately represented in FSI crashes.*

FOCUS AREAS
Speed

Contributing Crash Factors

Contributing Crash Factors look at the underlying features and corroborating circumstances that lead to FSI crashes. Most importantly, speeding in Franklin County is a concern. Roads with posted speeds of 35 mph and 50 mph experience higher levels of FSI crashes.

- *22% percent of FSI crashes occurred after dark in areas without lighting. Limited illumination is often a contributing factor in nighttime crashes, as reduced visibility and restricted sight distance can impair driver reaction time and stopping ability.*

FOCUS AREAS
Safe Vehicles
Post-Crash Care

Safe Systems

The last focus area is Safe Systems, which includes: 1. Safe Vehicles and 2. Post-Crash Care. The other Safe Systems (Roads, Users, and Speeds) were imbedded in the other focus areas. Additionally, both Safe Vehicles and Post-Crash Care require systemic coordination at high levels to measure data and implement countermeasures.

High Injury Network (HIN)

The high injury network identifies roadways or intersections where the highest number of people are being killed or seriously injured on Franklin County's roadways. Of the roadway segments and intersections that have the highest concentrations of FSI crashes, approximately the top 8%, make up the HIN.

The roadway network was analyzed using a sliding window methodology that breaks the network into 0.3-mile segments with a 0.1 window slide. Small gaps less than 50 feet long between HIN segments were manually connected to create more consistent corridors in the results. Segments that had two or more FSI crashes were included in the resulting HIN. The FCEO HIN is comprised of 20 miles of roadway segments, which represents 7.8% of the County-maintained street network and 53% of the FSI crashes.

Segment	Total Length (miles)
Agler Rd	0.30
Alkire Rd	2.77
Alum Creek Dr	1.56
Bethel Rd	0.35
Brice Rd	0.41
Chatterton Rd	0.60
Cleveland Ave	1.13
Clime Rd	1.71
Cooke Rd	0.44
Demorest Rd	0.22
Feder Rd	0.88
Fishinger Rd	0.77
Gantz Rd	0.19
Gardner Rd	0.50
Hoover Rd	0.80
Innis Rd	0.42
Johnstown Rd	0.15
N Hague Ave	0.37
Noe-Bixby Rd	1.54
Norton Rd	1.34
Obetz Rd	0.45
Phillipi Rd	0.99
Pontius Rd	0.25
Sunbury Rd	0.59
Winchester Pike	0.69

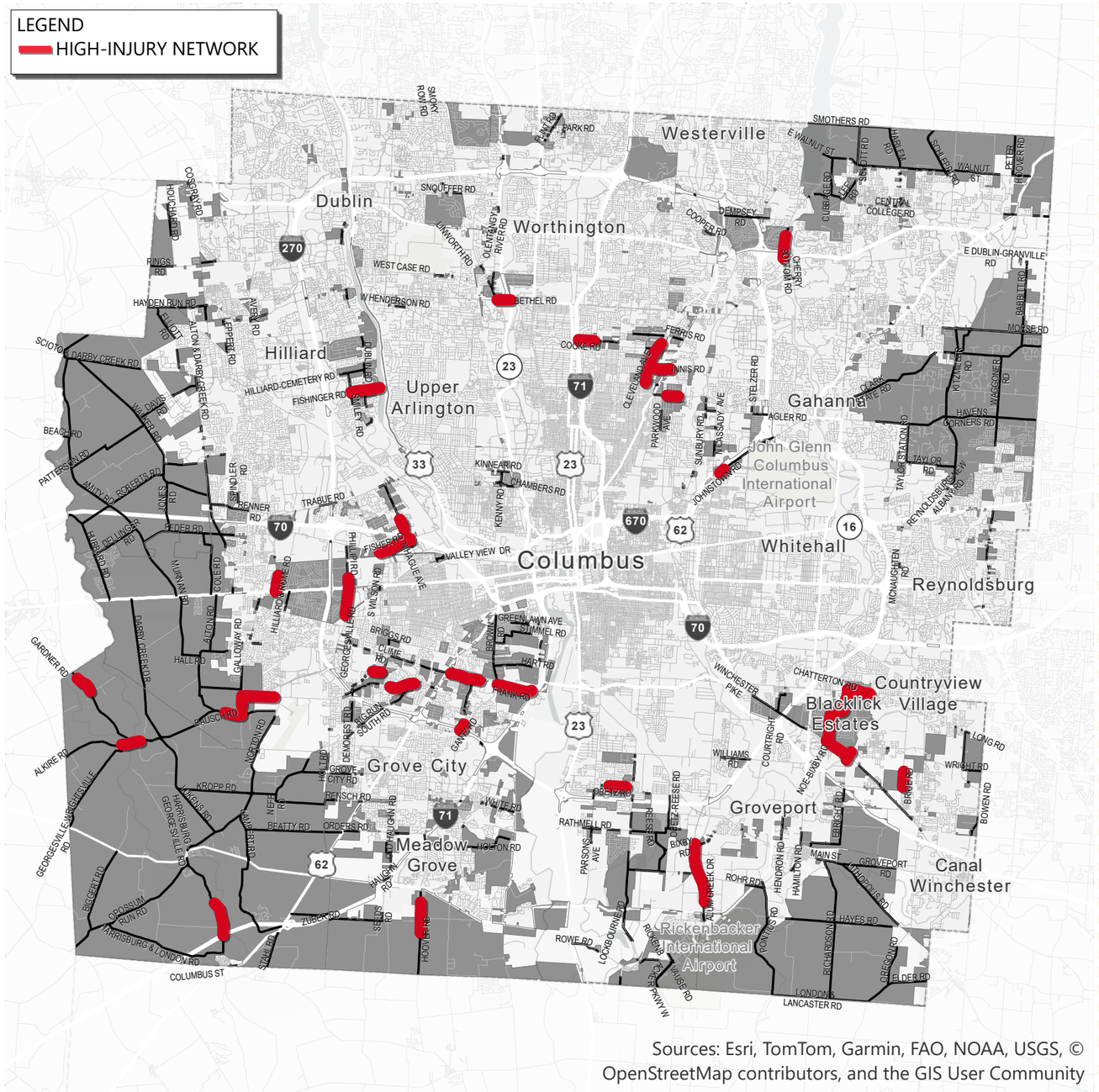


Figure 15: High Injury Network

Hot Spot / Intersection Analysis

The hot spot, or intersection-based analysis, identifies and prioritizes intersections using a combination of an equivalent property damage only (EPDO) factor, equivalent property damage only rate, and frequency of total crashes. This method is more robust and was chosen for this analysis due to the crash dataset being relatively small. Using a single metric, such as EPDO alone, can distort or skew the results with such a small dataset. For example, with the EPDO metric, intersections with a high number of property damage only crashes could rank higher than those with a few serious injury crashes. This composite approach balances out those effects and provides a more reliable result. For each intersection on the County-maintained roadway network, a score was calculated for each of the three metrics (EPDO, EPDO rate, and total crashes). The scores were calculated using min-max normalization, which captures the relative differences between intersections. These normalized scores are then weighted and summed to create a composite score, which forms the basis of the final prioritization rankings.

Min-max normalization:

$$Score = \frac{x_i - \min(x)}{\max(x) - \min(x)}$$

Composite Score Calculation:

$$Composite\ Score = EPDO\ Score * \frac{1}{3} + EPDO\ Rate\ Score * \frac{1}{3} + Frequency\ Score * \frac{1}{3}$$

The following are the top 30 priority intersections for the FCEO road network based on the hot spot analysis.

1. Fisher Rd & Hague Ave
2. Cleveland Ave & Innis Rd
3. Alum Creek Dr & Rohr Rd
4. Winchester Pk & Ebright Rd & Shannon Rd
5. Frank Rd & Brown Rd & Hardy Pkwy St
6. Hilliard & Rome Rd & Beacon Hill Rd & Hillbrook Dr
7. Alum Creek Dr & Toy Rd & Creekside Pkwy
8. Alum Creek Dr & Spiegel Dr
9. Cleveland Ave & Dunbar Dr & Piedmont Rd
10. Sunbury Rd & Valley Quail Blvd S
11. Cleveland Ave & Huy Rd
12. Dublin Rd & Fishinger Rd
13. Cleveland Ave & Cooke Rd & Pegg Rd
14. Georgesville Rd & Industrial Mile Rd
15. Johnstown Rd & 17th Ave & I-670 EB Off-Ramp
16. Johnstown Rd & Stelzer Rd
17. Georgesville Rd & Lincoln Park Ct
18. Havens Corners Rd & Reynoldsburg-New Albany Rd
19. Hayes Rd & Richardson Rd
20. Havens Corners Rd & Waggoner Rd
21. Frank Rd & Gantz Rd
22. Scioto & Darby Creek Rd & Walker Rd
23. Avery Rd & Hayden Run Rd
24. Dublin Rd & Hayden Blvd
25. Dempsey Rd and Bader Rd
26. Young Rd & Zuber Rd (North)
27. Cleveland Ave & Radnor Ave
28. Cleveland Ave & Elmore Ave
29. Norton Rd & Kropp Rd & Grove City Rd
30. Morse Rd & Reynoldsburg-New Albany Rd

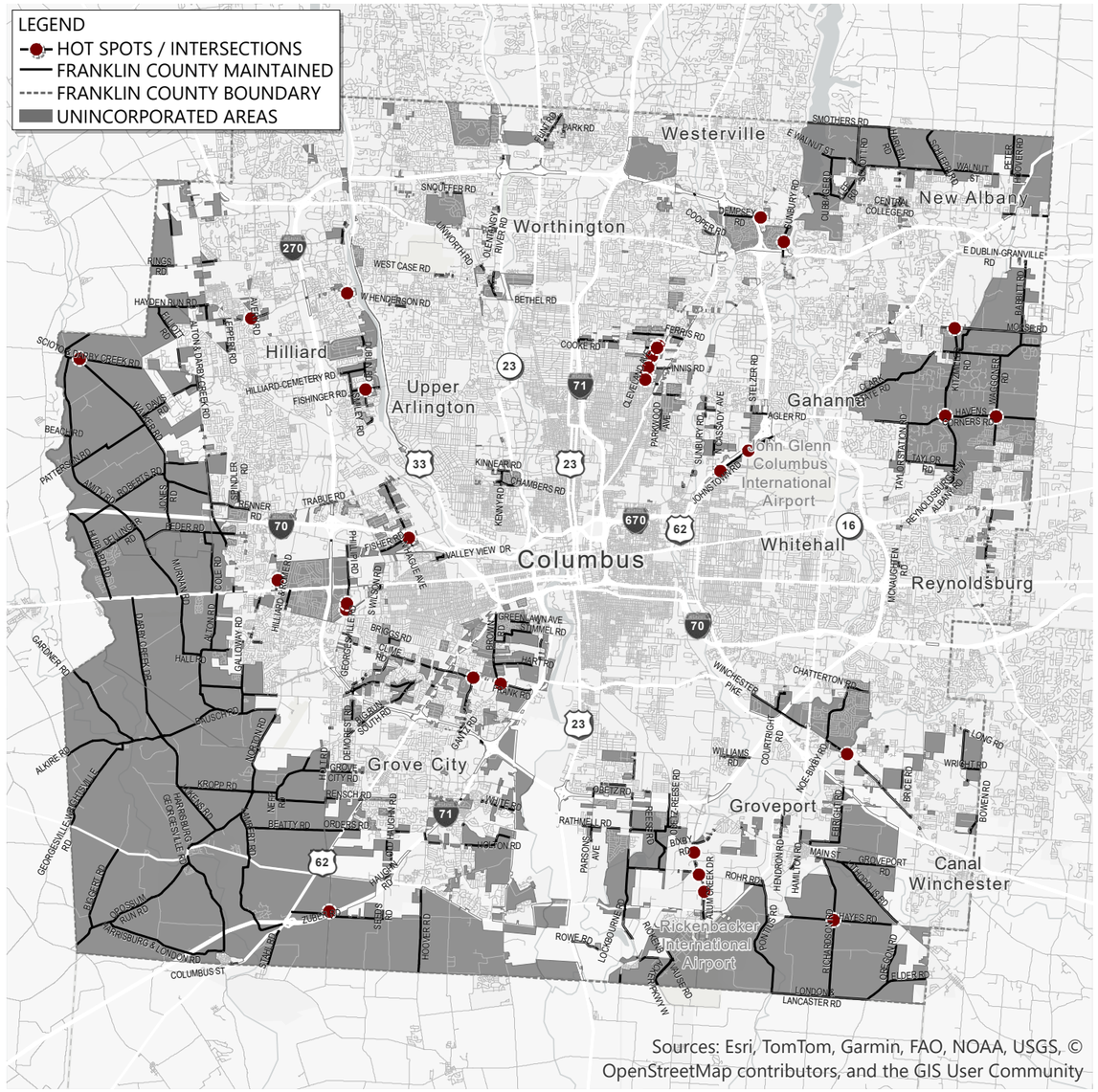


Figure 17: Top 30 Intersections from the Hot Spot Analysis

Intersection	FSI (45.68)	Minor Injury (6.55)	Possible Injury (4.44)	Property Damage Only (1.00)	EPDO	EPDO per crash	Total Crashes (frequency)	EPDO Score	EPDO per crash Score	Total Crash Score	Composite Score	Composite Rank
A	2	17	19	89	376.07	2.96	127	0.87	0.06	1.00	**0.76**	**1**
B	5	13	18	39	432.47	5.77	75	1.00	0.13	0.59	**0.66**	**2**
C	1	5	7	55	278.6	4.10	68	0.64	0.09	0.54	**0.49**	**3**
D	4	6	12	34	309.3	5.52	56	0.72	0.12	0.44	**0.49**	**4**

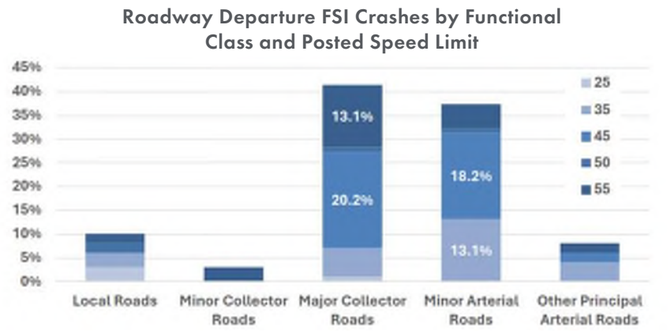
Figure 16: Example of how the composite score is calculated for each intersection

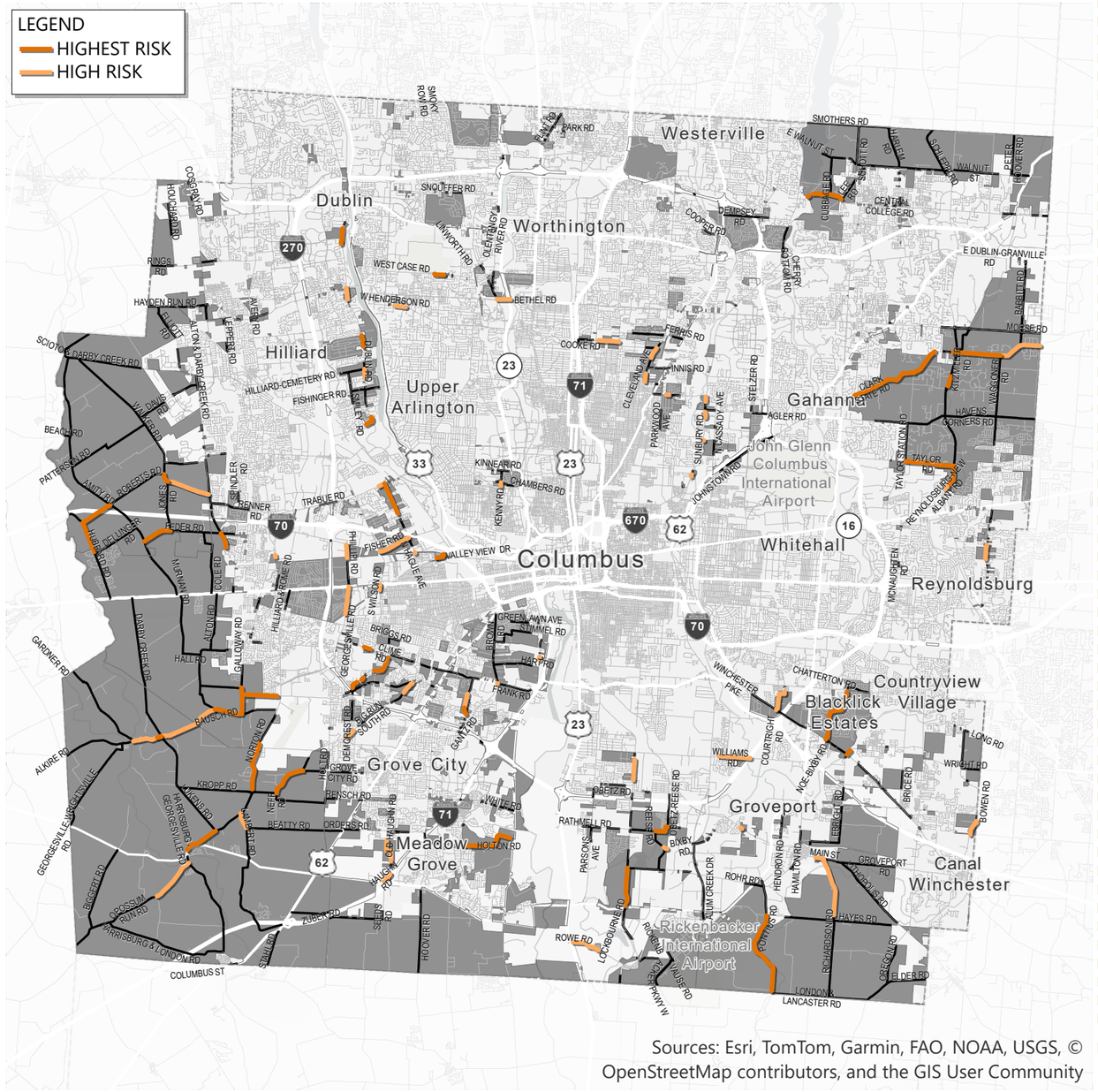
High Risk Network (HRN) Anaylsis

The High Risk Network (HRN) helps identify where potential FSI crashes may occur, as fatal and serious injury crashes are a small share of total vehicle interactions and near misses never get reported. The goal is to highlight parts of the transportation system with roadway features (i.e., number of lanes, curves, etc) and driver behaviors (i.e., speeding, etc) that may increase the likelihood of an FSI crash on the network. This type of analysis identifies risk factors across an entire transportation network, which can help agencies to more proactively address potential safety issues in locations where severe crashes have not yet occurred. Additionally, focusing the systemic analysis on a priority emphasis area helps evaluate more specific safety issues and allows for targeted implementation of specific countermeasures. For the Franklin County road network, the systemic analysis was conducted for roadway departure crashes. The following factors reflected the most significant trends with roadway departure crashes:

- functional class
- traffic volumes
- roadway width
- posted speed limit
- roadway context (rural or urban)
- roadside hazards (County identified)
- presence of horizontal curvature

Number of travel lanes, surface type, and average lane width were additional factors (datasets) that were reviewed but did not correlate with roadway departure crashes. Presence of horizontal curvature, roadside hazards and functional class had the greatest correlation with FSI roadway departure crashes and were given a higher weight in the final analysis. The following is a summary of the analysis conducted using the roadway characteristics data to better understand which factors may be more prone to roadway departure fatal and serious injury crashes. The roadway characteristics that had strong correlations to roadway departure crashes were combined and assessed across the entire network. Segments that included several of these risk factors were identified in the Roadway Departure High Risk Network. For more detail about the risk asessment, see the Traffic Safety Data Memorandum.





Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Figure 18: High Risk Network

Community Survey Network

As the HIN and the HRN identify historical and potential crash hotspots considering existing crash data and a systemic crash analysis using roadway attributes, the community input collected as part of this planning effort was also incorporated into the HPN to help identify any safety concerns that may not have been captured with the other tools.

The Community Survey Network responses identified concerns along roadway segments and intersections across a wide portion of the County's roadway network,. Public feedback aligns with the high risk network, reinforcing the priority locations identified through the High Risk and High Injury Network analysis.

Step 1

Drop pins on the map to share location-specific ideas or concerns.

"Reduce speed on Dublin Rd (from Roberts to Fishinger) from 45 to 35.."

- Survey Participant

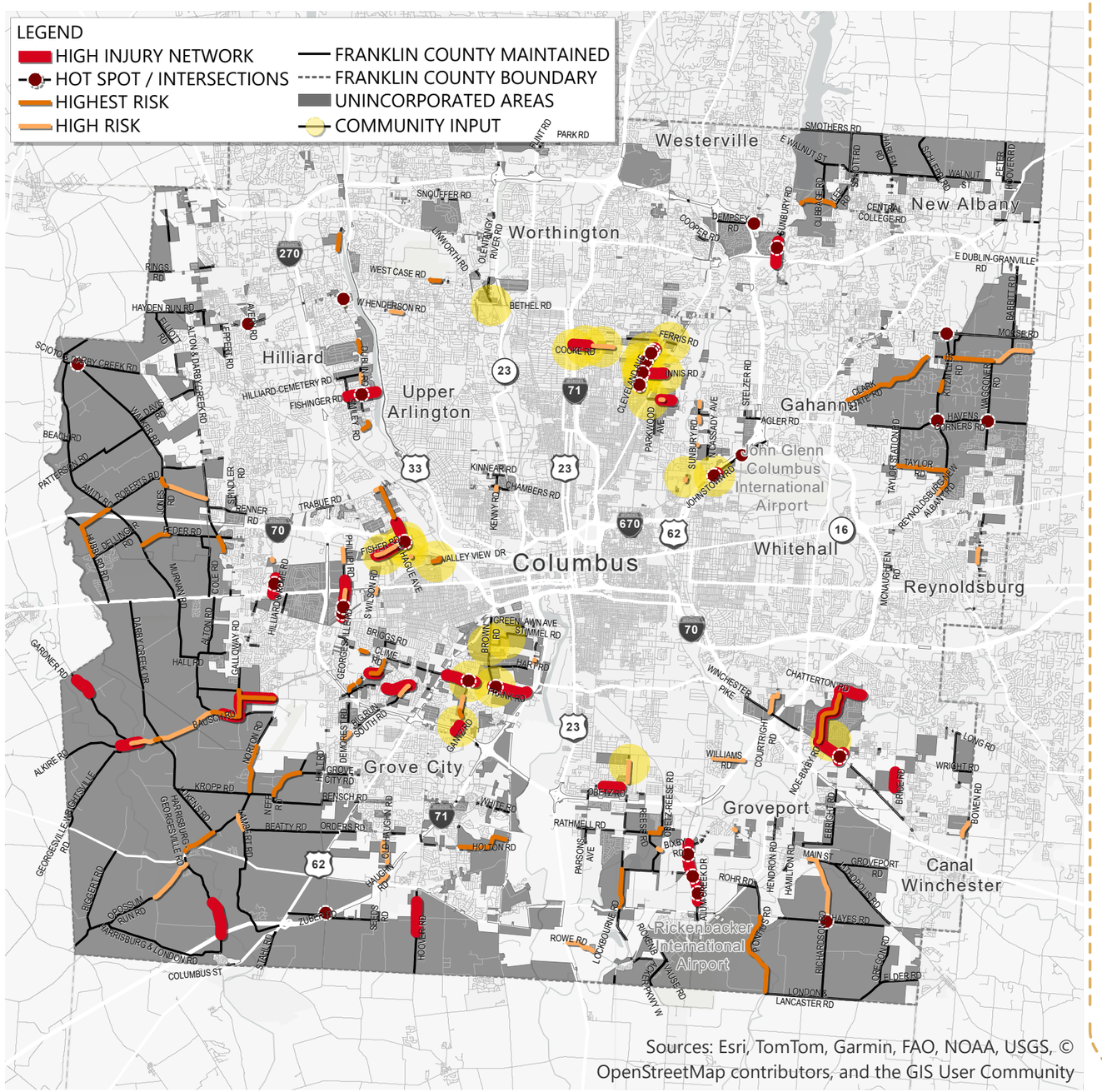


Figure 19: High Priority Network and Public Concern Feedback

High Priority Network (HPN)

The High Priority Network (HPN) is a tool that identifies priority roads and intersections for project implementation through a combination of crash history, potential risk, and community concern; it combines a hotspot analysis of high fatal and serious injury crash rates, a risk analysis of roadway characteristics, and the results of a survey of safety conditions in Franklin County. Three tools contributed to the HPN, answering three key questions:

1. High Injury Network: Where have there been crashes?
2. High Risk Network: Where will there be crashes?
3. Community Survey: What safety concerns does the community have?

If a part of the transportation network was identified on the high injury network, the high risk network, or the community survey, it became a part of the HPN.

All HPN analyses use ODOT crash data to identify high-injury and high-risk locations on County-maintained roadways. The dataset includes fatal and serious injury (FSI) crashes for all travel modes.

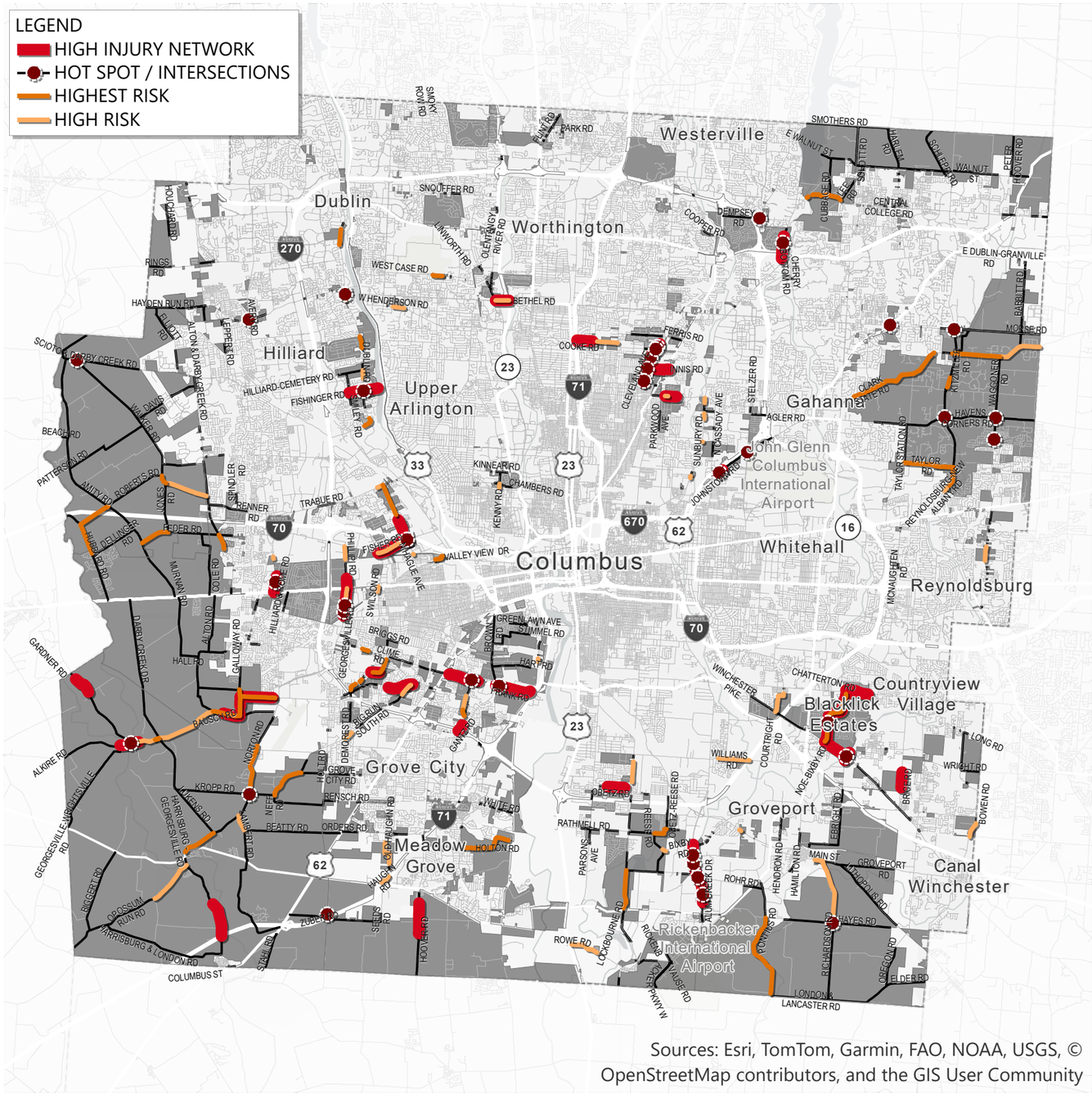


Figure 20: High Priority Network

Human Impacts: Community Analysis

04

UNDERSERVED COMMUNITIES

To better understand the condition of communities experiencing an underinvestment in transportation facilities, this report utilizes Areas of Persistent Poverty Census Tracts and Zero-Car Households as markers of potential areas to prioritize. The impacts of these markers, among others, on roadway safety are then evaluated.

Areas of Persistent Poverty (APP)

A census tract where 20% or more of the population has lived in poverty for at least 30 consecutive years, as measured by the 1990 and 2000 decennial censuses and the most recent Small Area Income and Poverty Estimates (SAIPE). Alternatively, any census tract with a poverty rate of 20% or higher based on recent American Community Survey data also qualifies. This designation is used by federal programs (e.g., USDOT grants) to target resources toward communities with long-term economic hardship.

Figure 21 highlights the 46 tracts within Franklin County that are designated as APP, with only seven falling under FCEO jurisdiction. Within these APP tracts, approximately one mile of the High-Injury Network (HIN) spans three tracts, while about 0.7 miles of the High Risk Network (HRN) extends across two tracts. Notably, none of the Top 30 priority intersections listed on page 19 are located within an APP tract.

HIN + APP Overlap

Road Name	Miles
Agler Rd	0.3
Demorest Rd	0.03
Innis Rd	0.08
Johnstown Rd	0.08

HRN + AAP Overlap

Road Name	# Segments	Miles
Agler Rd	1	0.08
Demorest Rd	3	0.3
Clime Rd	1	0.16

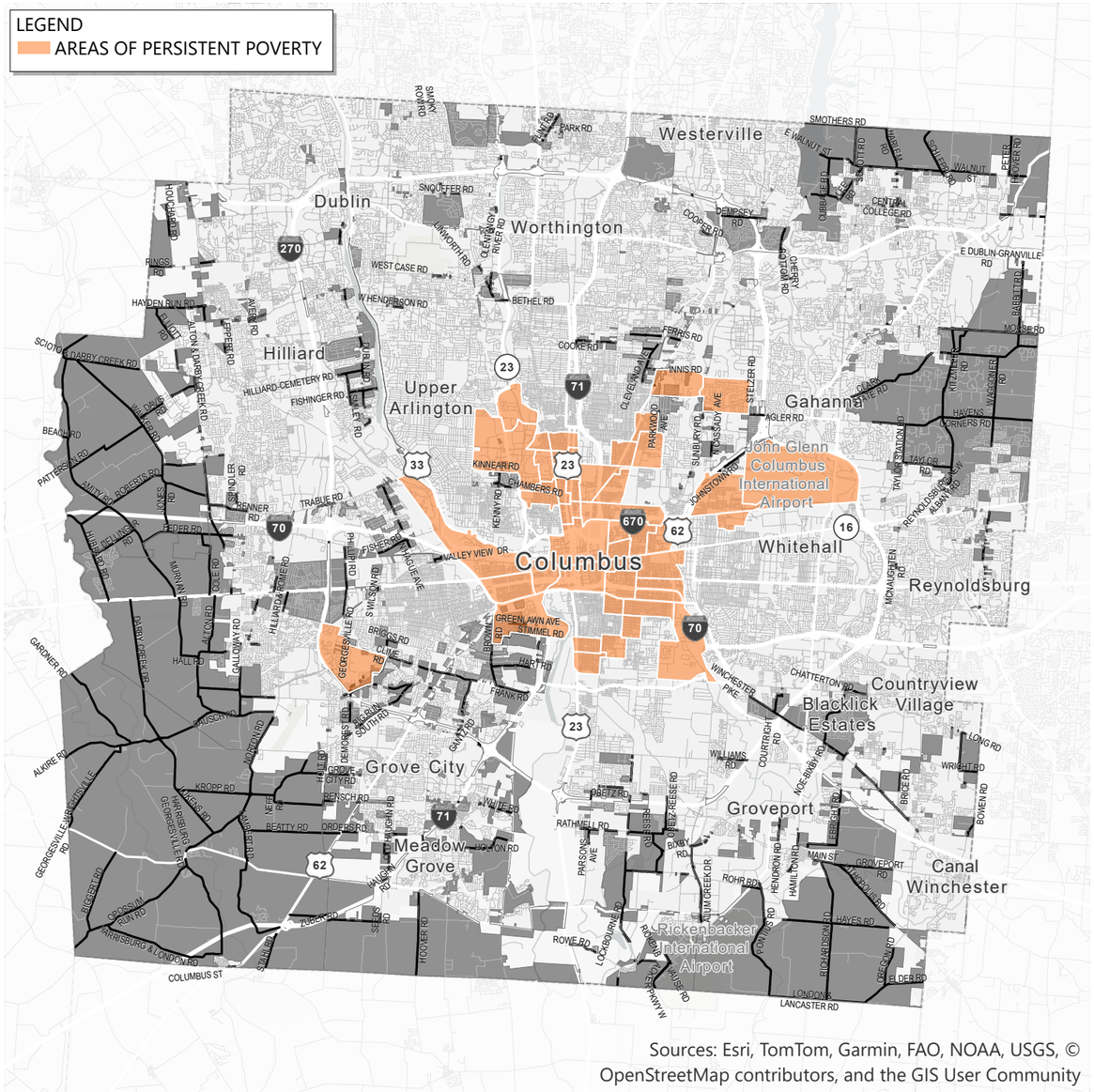


Figure 21: Areas of Persistent Poverty in Franklin County

Zero-Car Households

A zero-car household refers to a household that does not own or have access to a private automobile. Vehicle ownership is directly related to mobility. Households without a car typically make less than half as many trips as those with one, limiting access to essential services such as supermarkets, post offices, medical offices, and hospitals. While most higher-income households own a car, only about half of low-income households do, creating a significant disparity in transportation options. These households rely on alternative transportation modes such as public transit, walking, biking, or ridesharing for their mobility needs.

Figure 22 shows the percentage of households with no vehicle.

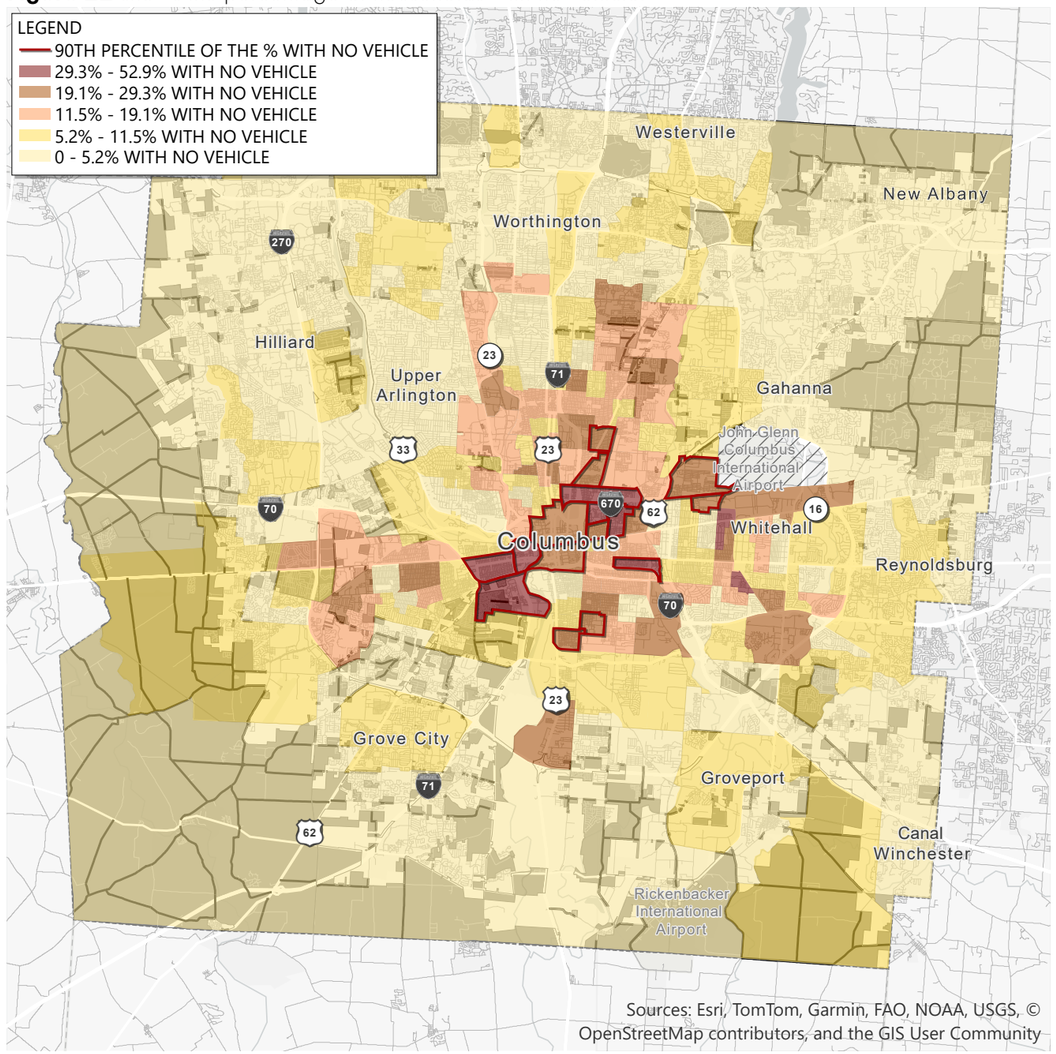


Figure 22: Percentage of Households with No Vehicle

Road Safety Impacts

Over the past several decades, policies, programs, and projects nationally and in Ohio have created socioeconomic disparities across the transportation system. These disparities are seen in terms of access to schools, jobs, and recreation, as well as in crash rates across the county. This plan acknowledges these disparities and recognizes that any effort to reduce traffic fatalities or serious injuries needs to also address socioeconomic injustices.

Demographic groups such as children, older adults, people experiencing homelessness, pedestrians, cyclists, and individuals with disabilities are often disproportionately affected by crashes. When these groups are involved, crashes are more likely to result in serious injury or death. Prioritizing investments that improve safety for these travelers can deliver benefits across the entire transportation system.

An analysis of Franklin County's transportation investment and transportation insecurity found the following trends:

- An estimated 7.2% of households in Franklin County do not own personal vehicles.[1] The largest concentration of these households is in the center of Columbus.
- 14% of households in Franklin County are living below the poverty level.
- A typical Ohio household spends $13,781 per year on transportation costs, mostly from car ownership. On average, Ohio households spend 27% of income on transportation, slightly higher than the national average (22%) and 12 percentage points higher than the recommended threshold of affordability.[2]
- Pedestrian, bicycle, and motorcyle crashes account for 25.5% of all FSI crashes, despite these modes representing a very small proportion of total trips and miles traveled.

1 Franklin County Cares. (n.d.). Transportation: Vehicle ownership. Franklin County Cares Indicators. Retrieved December 23, 2025, from https://www.franklincocares.org/indicators/index/view?indicatorId=281&localeId=38

2 Ohio Housing Finance Agency. (2023). Utilities. Retrieved December 23, 2025, from https://ohiohome.org/research/utilities-23.aspx

Toolkit of Safety Countermeasures

05

COUNTERMEASURES THAT WORK

As summarized in Chapters 3 and 4, ***data from the FCEO and feedback from residents show fatal and serious injury crashes most often occur along principal arterial corridors, at intersections, and in locations where roadway departures are a concern***.

The most frequent crash types included angle, fixed object, and pedestrian crashes, with contributing factors such as failure to yield, other improper action[1], and vehicles driving off the roadway. Many of these crashes involve vulnerable road users, underlining the need for improved bicycle and pedestrian safety. Many crashes occur at intersections and on arterial roadways with speeds exceeding 35 mph. These patterns highlight the importance of systemic improvements for pavement edges, at intersections, and to slow vehicle speeds. It also highlights the importance of incorporating safer pedestrian crossings, street lighting, and programmatic improvements targeting young drivers. All of these combined systemic, priority location improvements, and programs will support a safer transportation system in Franklin County. This chapter presents proven safety practices and countermeasures based on the crash-data and community input for roadways maintained by Franklin County.

FHWA Proven Safety Countermeasures

Over the past decade, the Federal Highway Administration (FHWA) has been researching national crash patterns to identify critical crash locations and crash types that have led to the most fatalities and serious injury crashes on the nation's roadways. Results of this research indicate that roadway departures (45%), intersection crashes (18%), pedestrian and bicycle crashes (13%), along with combinations of these crash types (11%), account for almost 90% of traffic fatalities in the U.S. To address these crashes, the FHWA developed the Proven Safety Countermeasures (PSC) initiative - a collection of 28 countermeasures and strategies effective in reducing roadway fatalities and serious injuries. FHWA strongly encourages the implementation of these PSC initiatives to achieve national, state, and local safety goals. The countermeasures address focus areas such as speed management, intersections, roadway departures, crosscutting issues, as well as pedestrians and bicyclists.

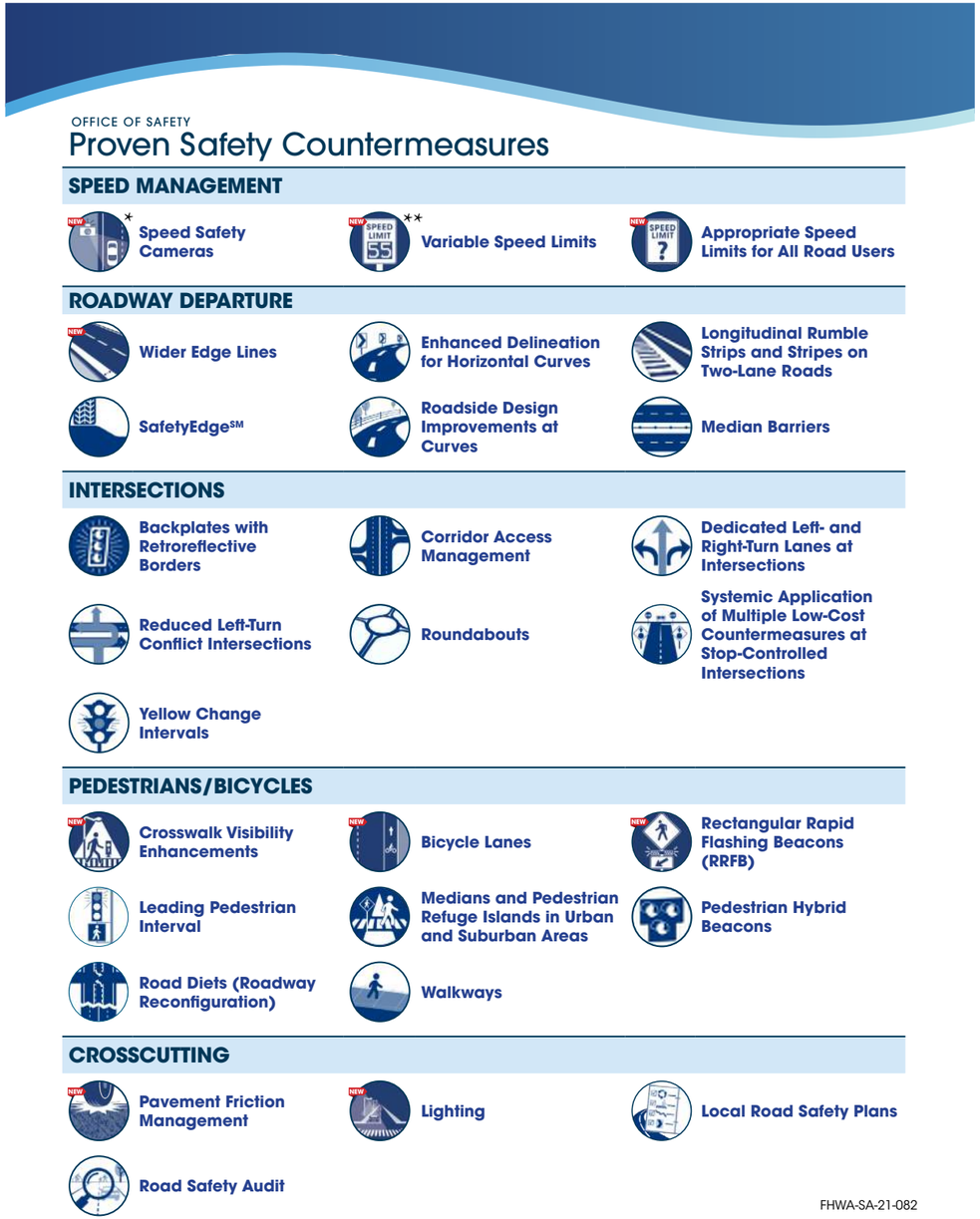


Figure 23: FHWA Proven Safety Countermeasures

Note:
* Speed Safety Cameras are currently not legal for use in Ohio without an officer present
** Variable Speed Limits does not apply to the county's roadway system

1 Police use this category when the driver's contributing action is clearly improper and contributed to the crash, but does not fit any standard coded contributing factor (e.g. speeding, distraction, failure to yield).

The Safety Toolbox

The Safety Toolbox is a resource that compiles useful information regarding transportation countermeasures with known safety benefits. The toolbox features five major categories of countermeasures, including:

1. ***Segment Countermeasures***
2. ***Intersection Countermeasures***
3. ***Safety Countermeasures for Pedestrians and Bicyclists***
4. ***Rural and Highway Countermeasures***
5. ***Behavioral Countermeasures***

These countermeasures are included to help make the transportation network safer and more accessible for all road users, regardless of ability, age, or preferred travel method. The toolbox can be utilized in conversations around safety, especially in reaching a shared understanding about creating a safer roadway system for all. As communities across Franklin County come in all shapes and sizes, it is important to include a variety of countermeasures within the toolbox so each community can handpick countermeasures and tailor them to improve connectivity and safety.

Audience: This toolbox is simple, straightforward, and easily understandable. Although the primary audience are transportation professionals and safety advocates in roles where they have an impact on what projects are implemented within their community (such as members of Planning or Public Works departments, etc.), this toolbox was designed to ensure anyone could pick it up and understand what these countermeasures are, their benefits, and where they are applicable to be used.

Application: The Safety Toolbox aims to provide a variety of countermeasures that are targeted for different contexts. These countermeasures can be used independently or in conjunction with each other, giving communities flexibility in choosing countermeasures best suited to their needs and existing conditions.

> ***"I'm encouraged to hear the Engineer's Office's interest in road diets (where appropriate), and a commitment to improve multimodal options.."***
>
> *- Survey Participant*

Description of Safety Toolbox Information

Name and Description:
The title of each countermeasure.
1-2 sentences describing the countermeasure.

Applicable Crash Types:
The crash profile relationship with crash types shown on police reports. For the first four categories, these are identified symbolically; for behavioral countermeasures, these are identified by key words.

Lane Departure: Fixed Object, Head-on, Overturn, Sideswipe, Parked Vehicle, Single Vehicle

Rear-end

Angle: Left Turn, Right Angle

Bike/Ped: Bicyclists/ Pedestrians

Other: Animal, Train, Other

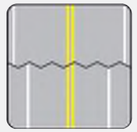
Crash Reduction Factor:
The potential reduction of crashes due to the implementation of a countermeasure for all crash severities and types, with exceptions for roadway lighting, cable median barrier, and all pedestrian and bicycle safety-related countermeasures. These come from FHWA's Proven Safety Countermeasures. See www.highways.dot.gov/safety/proven-safety-countermeasures.com

Quick-Build Capable:
A symbolic indication of if a countermeasure is quick-build capable or not, dependent on factors like right of way, cost, and time to implement.

Cost:
The relative cost for the countermeasure.
$ < $10k **$$** $10-$100k **$$$** $100k-$1M **$$$$** $1M+

Traffic Considerations:
Traffic considerations are factors (such as roadway geometry, traffic volume, number of lanes, and more) that help users decide if a countermeasure may be a good fit for a potential area or project. As behavioral countermeasures are not dependent on the existing geometry of the roadway network, general considerations (such as crash history) are the factors considered.

Segment Countermeasures

Countermeasures		Description	Applicable Crash Types	Crash Reduction Factor	Quick Build Capable	Cost	Traffic Consideration	Speed Management
	**Roadway Reconfiguration**	Roadway reconfigurations reduce the number of lanes, cutting conflict points, crossing distances, and vehicle speeds.		30%	✓	$$ - $$$	4-to-2 thru lanes: <18,000 ADT 6-to-4 thru lanes: <36,000 ADT	✓
	**Lane Narrowing**	Lane narrowing shrinks roadway width while keeping lane count, slowing traffic, shortening pedestrian crossings, and adding bike/pedestrian areas.		25%	✓	$$	Avoid on Truck Routes	✓
	**Landscaped Buffers/ On-Street Parking**	Landscaped buffers, on-street parking, and street trees implemented in conjunction or separately can slow traffic and improves safety.		-		$$$	Evaluate Line of Sight at Intersections	✓
	**One-way to Two-way Street Conversions**	Converting one-way to two-way streets calms traffic, increases connectivity, and creates safer streets for all users.		30%		$$$	Evaluate Signal Modifications, Access, and Turn-Lanes	✓
	**Horizontal Traffic Calming**	Horizontal traffic calming techniques, such as road narrowing, chicane installation, and roundabouts, slows traffic and improves safety.		30%	✓	$	<20,000 ADT	✓
	**Vertical Traffic Calming**	Vertical traffic calming techniques, such as speed humps, raised crosswalks/intersections, and traffic circles, slows traffic and improves safety.		30%	✓	$$	<10,000 ADT Ensure Compliant with EMS Vehicles	✓
	**Roadway Lighting**	Street lighting improves visibility, especially at intersections, crosswalks, and other high-traffic areas, reducing crashes and enhancing pedestrian safety.		20%		$$	-	
	**Raised Medians and Access Management**	Medians separate traffic, reducing head-on collisions and providing safe havens for pedestrians. Limiting driveways improves access management and reduces traffic conflicts.		40%	✓	$$$$	>12,000 ADT	

LEGEND

Applicable Crash Type relationship with what is shown on police reports:

- **Lane Departure:** Fixed Object, Head-on, Overturn, Sideswipe, Parked Vehicle, Single Vehicle
- **Rear-end**
- **Angle:** Left Turn, Right Angle
- **Bike/Ped:** Bicyclists/ Pedestrians
- **Other:** Animal, Train, Other

Crash Reduction Factors are for all crash severities and types, except for:

1. Roadway Lighting is for Nighttime only crashes
2. Pedestrian & Bicycle safety countermeasures only apply to pedestrian and bicycle crashes
3. Cable Median Barrier only applies to fatal and serious injury crashes

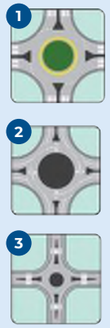
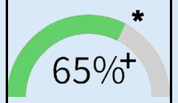
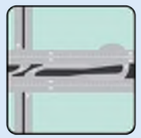
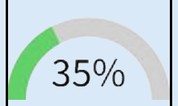
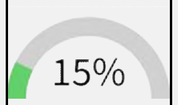
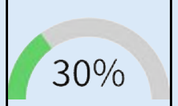
Quick Build Capable Criteria:

1. Little to no impact to right-of-way or road geometry
2. Cost of quick-build version is less than 50% the capital cost
3. Can be completed in less than a year, from concept to completion

Relative Cost Ranges:

$ <$10k
$$ $10k - $100k
$$$ $100k - $1M
$$$$ $1M +

Intersection Countermeasures

Countermeasure	Description	Applicable Crash Types	Crash Reduction Factor	Quick Build Capable	Cost	Traffic Consideration	Speed Management
 **1. Single Lane Roundabouts** **2. Multi-lane Roundabouts** **3. Mini Roundabouts**	**1.** Single-lane roundabouts reduce traffic speed, 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. Turbo roundabouts add dividers to improve safety. **3.** Mini-roundabouts are smaller, single-lane versions of traditional roundabouts with traversable centers for larger vehicles without requiring additional ROW.				**$$-$$$$** **$$$$** **$$-$$$**	<30,000 EADT <45,000 EADT <20,000 EADT	✓
	**All-way Stop Control Conversion**	All-way stop control converts either two-stops or unwarranted signals to four-way stops, reducing wait times and making intersections more predictable.		✓	**$**	<12,000 ADT(each approach) <=2 thru-lanes (each approach	
	**Reduced Left-turn Conflict Intersections**	• Reduced left-turn conflict intersections redesign left turns to reduce crashes and improve safety. Common types include RCUTS and MUTs. • Right-in, right-out (RIRO) and three quarter intersections simplify traffic flow by restricting side-street movements, forcing right turns, and reducing crossing paths				**$$$$**	Prior Condition Stop-Controlled	
	**Systemic Traffic Signal Modifications**	Traffic signal modifications improve safety and efficiency through both hardware and software upgrades, such as: • Hardware: Signal Light Upgrades, Retroreflective Backplates, Ped. Countdowns, and Stop-bar/ Crosswalk Striping • Software: Updated Timings, Leading Pedestrian Intervals, and ITS Implementation			✓	**$$**	-	
	**Intersection Daylighting and Curb Extensions**	• Intersection daylighting improves visibility by restricting parking near intersections using pavement markings and flexible posts. • Curb extensions and bulb-outs shorten crossing distances, improve visibility, and increase pedestrian comfort at intersections.			✓	**$$**	Avoid at High Truck Volume Intersections	
	**Left-turn Hardening**	Left-turn Hardening reduces vehicle turning speed and increases vehicle yielding to pedestrians by guiding vehicles to take wider turns			✓	**$$**	Avoid at High Truck Volume Intersections	✓

*NOTE: This is the minimum crash reduction factor for roundabouts. And increase in safety can be achieved based on existing conditions, design and geometrics, and traffic volumes.

LEGEND

Applicable Crash Type relationship with what is shown on police reports:

- Lane Departure: Fixed Object, Head-on, Overturn, Sideswipe, Parked Vehicle, Single Vehicle
- Rear-end
- Angle: Left Turn, Right Angle
- Bike/Ped: Bicyclists/ Pedestrians
- Other: Animal, Train, Other

Crash Reduction Factors are for all crash severities and types, except for:

1. Roadway Lighting is for Nighttime only crashes
2. Pedestrian & Bicycle safety countermeasures only apply to pedestrian and bicycle crashes
3. Cable Median Barrier only applies to fatal and serious injury crashes

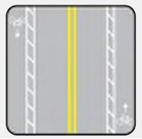
Quick Build Capable Criteria:

1. Little to no impact to right-of-way or road geometry
2. Cost of quick-build version is less than 50% the capital cost
3. Can be completed in less than a year, from concept to completion

Relative Cost Ranges:

$ <$10k
$$ $10k - $100k
$$$ $100k - $1M
$$$$ $1M +

Safety Countermeasures for Pedestrians and Bicyclists

Countermeasure		Description	Applicable Crash Types	Crash Reduction Factor	Quick Build Capable	Cost	Traffic Consideration	Speed Management
	**Rectangular Rapid Flashing Beacon**	RRFBs use flashing lights to improve safety at unsignalized crosswalks, especially crossings of three lanes or less and under 40 mph		45%		**$$**	See FHWA STEP Guide, Table 1	✓
	**Pedestrian Hybrid Beacon**	PHBs use flashing lights to improve driver yielding to pedestrians at unsignalized crossings, especially on higher-speed roadways		55%		**$$$**	See FHWA STEP Guide, Table 1	✓
	**Systemic Crossing Modifications**	Systemic crossing modifications improve pedestrian safety and accessibility across busy streets with marked crosswalks, lighting, refuge islands, and clear signage		30%	✓	**$$**	See FHWA STEP Guide, Table 1	
	**Raised Crossing**	Raised crossings improve pedestrian safety and accessibility by slowing traffic and providing a level crossing surface.		30%		**$$**	See FHWA STEP Guide, Table 1	✓
	**Sidewalks**	Sidewalks improve pedestrian and cyclist safety by providing designated spaces separate from traffic, including ADA-compliant features.		90%		**$$-$$$**	-	
	**Bicycle Lanes**	Bicycle lanes make cycling safer and more comfortable by separating cyclists from traffic and pedestrian facilities using paint or physical barriers		45% Where Sidewalks are Missing	✓	**$$**	<6,000 ADT and <35 MPH	
	**Protected Bicycle Lanes/ Cycle Tracks**	Protected bike lanes separate cyclists from traffic with physical barriers, significantly reducing collisions and improving safety.		55%	✓	**$$$**	6,000 - 20,000 ADT and <45 MPH Evaluation Exclusive Turn-lanes and Protected Turn Signal Phasing	
	**Shared-use Path**	Shared-use paths (off-street trails) improve safety and accessibility for active transportation and recreation by separating users from traffic		25%		**$$-$$$**	>20,000 or >45 MPH	
	**Safe Routes to School**	Safe Routes to School encourages walking and biking to school, educates students, and supports projects that create safe, active routes.		35%		**$$-$$$**	-	

LEGEND

Applicable Crash Type relationship with what is shown on police reports:

- Lane Departure: Fixed Object, Head-on, Overturn, Sideswipe, Parked Vehicle, Single Vehicle
- Rear-end
- Angle: Left Turn, Right Angle
- Bike/Ped: Bicyclists/ Pedestrians
- Other: Animal, Train, Other

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1. Roadway Lighting is for Nighttime only crashes
2. Pedestrian & Bicycle safety countermeasures only apply to pedestrian and bicycle crashes
3. Cable Median Barrier only applies to fatal and serious injury crashes

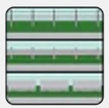
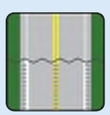
Quick Build Capable Criteria:

1. Little to no impact to right-of-way or road geometry
2. Cost of quick-build version is less than 50% the capital cost
3. Can be completed in less than a year, from concept to completion

Relative Cost Ranges:

$ <$10k
$$ $10k - $100k
$$$ $100k - $1M
$$$$ $1M +

Rural and Highway Countermeasures

Countermeasure		Description	Applicable Crash Types	Crash Reduction Factor	Quick Build Capable	Cost	Traffic Consideration	Speed Management
	**Systemic Stop-control Modifications**	Systemic stop-control modifications improve intersection visibility with advanced warning signs, retroreflective panels, enlarged signs, rumble strips, and cross-traffic warning signs.		40%	✓	$$	History of Stop Sign Running History of Nighttime Crashes	
	**Safety Edge**	Safety Edges provide a smooth transition between paved roadway and shoulders, preventing tire damage and vehicle loss of control while increasing pavement durability.		50%		$$$	Curb-less/Guardrail-less Roadways	
	**Shoulder Installation/ Widening**	Installing or widening shoulders provides space for disabled vehicles, maintenance, and other safety activities. Safety edges can be installed on new or widened existing shoulders.		25%		$$$	Most Effective When ADTs >1,000	
	**Turn-lane Additions**	Adding auxiliary lanes separates turning traffic, reducing crashes while improving visibility.		45%		$$$	Visibility Concerns History of Left-turn Related of Rear-end Crashes	
	**Pavement Friction Management**	Pavement Friction Management measures, monitors, and maintains pavement friction to improve safety, especially at intersections, crosswalks, and crash-prone locations.		55%		$$$$	More Effective on Curves	
	**Cable Median Barrier**	Cable Median Barriers protect against fixed roadside hazards, reducing fatal and serious crashes		40%		$$$	History of Median Crossover or Head-on Crashes	
	**Curve Delineation Modifications**	Enhanced Curve Delineation uses reflective chevrons and advance warning signs to significantly reduce curve crashes, especially at night and in rural areas.		30%	✓	$$	Existing Sideslope and Distance to Roadside Features History of Roadway Departure or Nighttime Crashes	
	**Wider Edge Lines**	Wider edge lines improve visibility, reducing roadway departure crashes, especially on rural two-lane highways. Adding center and edge lines where they are missing further improves safety.		15%	✓	$$	Presence of Curves History of Single-Vehicle or Nighttime Crashes	
	**Rumble Strips**	Rumble strips alert drivers to lane departure, reducing head on and run-off-the-road crashes.		15%		$$	History of Lane Departure Crashes Consider Potential Noise Concerns	
	**1. Single-lane Roundabouts** **2. Multi-lane Roundabouts**	1. Single-lane roundabouts reduce conflict points, speed, and angle crashes, improving safety for all road users. 2. Multi-lane roundabouts handle more traffic but have more conflicts than single-lane roundabouts. Turbo roundabouts add dividers to improve safety		50%		$$$$	<30,000 EADT <45,000 EADT	✓

LEGEND

Applicable Crash Type relationship with what is shown on police reports:

Lane Departure: Fixed Object, Head-on, Overturn, Sideswipe, Parked Vehicle, Single Vehicle

Rear-end

Angle: Left Turn, Right Angle

Bike/Ped: Bicyclists/ Pedestrians

Other: Animal, Train, Other

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Quick Build Capable Criteria:

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Relative Cost Ranges:

$ <$10k
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$$$ $100k - $1M
$$$$ $1M +

Behavioral Countermeasures

Countermeasure		Description	Applicable Crash Types	Crash Reduction Factor	Quick Build Capable	Cost	Traffic Consideration	Speed Management
	**Automated Enforcement*** **Currently not allowed in Ohio.*	Automated enforcement uses cameras to detect and document traffic violations like red light running and speeding, notifying vehicle owners by mail.	Speed	50%		$$$	Data-driven Location Selection	✓
	**Roadway Feedback Signs**	Speed feedback signs display approaching drivers' speeds to make them aware of their current speed, with flashing numbers indicating speeding.	Speed	5%	✓	$	-	✓
	**1. Speed Limit Reduction** **2. Slow Zone *** **Currently not allowed by ORC for County/Township.*	1. Speed limit reductions, based on context and activity level, reduce crashes by lowering speeds and increasing sign frequency. 2. Slow zones designate lower speeds (15 - 20 mph) in areas with vulnerable populations, like parks, school zones, and neighborhoods	Speed All	30%	✓	$$$	<5,000 ADT	✓
	**High-Visibility Saturation Patrols**	Saturation patrols deter drunk driving by increasing the perceived risk of arrest in high-risk areas. These programs should be regular and highly publicized	Impaired	-		-	See NHTSA Countermeasures That Work: High-Visibility Saturation Patrols	
	**Publicized Sobriety Checkpoints**	Sobriety checkpoints deter drunk driving by visibly removing impaired drivers from the road	Impaired	-		$-$$$	See NHTSA Countermeasures That Work: Publicized Sobriety Checkpoints	
	**Increased Traffic Safety Enforcement**	Traffic enforcement focuses on behaviors like drunk driving, speeding, distracted driving, and seatbelt use. Specialized patrols and checkpoints target impaired drivers, especially at night.	Impaired	-		-	See NHTSA Countermeasures That Work	✓
	**Sober Ride Home Programs**	Alternative transportation programs reduce drunk driving by providing options like rideshare services, nonprofit safe rides, and public transportation.	Impaired	-		$$	See NHTSA Countermeasures That Work: Alternative Transportation	
	**Mass Media Campaigns**	Mass media campaigns use radio, TV, and social media to promote safety and tailor messages to make maximum impact	Impaired	-		$$$	See NHTSA Countermeasures That Work: Mass Media Campaigns	

LEGEND

Applicable Crash Type relationship with what is shown on police reports:

Lane Departure: Fixed Object, Head-on, Overturn, Sideswipe, Parked Vehicle, Single Vehicle

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$$$ $100k - $1M
$$$$ $1M +

Countermeasure Spotlights

Based on the Franklin County crash analysis, the following countermeasures and strategies are extremely relevant to address the roadways and driving behaviors experienced. The following five countermeasures are especially noteworthy and are featured here as countermeasure spotlights.

Roadway Edge Treatments - These could be rumble strips, safety edges, and/or shoulder edge widening. These treatments should be used to address roadway departure crashes.

Curve Delineation - These could be rumble strips along the edge, signage, and pavement surface treatments. These treatments should be used to address roadway departure crashes at horizontal curves.

Systemic Signal and Intersection Modifications - These could be signal improvements like signage, signal backplates, flashing yellow arrows, signal timing, leading pedestrian intervals, stop bar placement/crosswalk enhancements, and/or ITS implementation. These treatments should be used to address safety at intersections for drivers, pedestrians, and cyclists.

Traffic Calming - These could be improvements at intersections, midblock crossings, and along the roadway edges and include lane narrowing, curb extensions, speed humps, raised crosswalks, raised medians, and/or signals and signage. These treatments should be used to address vulnerable road user safety.

Roundabouts - Roundabouts can be used to improve safety at intersections and slow vehicle speeds.

Roadway Edge Treatments

Safety countermeasures for roadway edge treatments are design features and strategies used to reduce the risk and severity of crashes when vehicles leave the travel lane. These countermeasures address common hazards at the road edge—such as drop-offs, soft shoulders, fixed objects, or steep slopes—by making the edge more forgiving and recoverable.

Safety Countermeasures	
Longitudinal Rumble Strips and Stripes on Two-Lane Roads	Rumble stripes are edge line or center line rumble strips where the pavement marking is placed over the rumble strip. This can increase the visibility and durability of the pavement marking during wet, nighttime conditions and can improve the durability of the marking on roads with snowplowing operations.
Safety Edge	The SafetyEdgeSM technology shapes the edge of the pavement at approximately 30 degrees from the pavement cross slope during the paving process. This safety practice eliminates the potential for vertical drop-off at the pavement edge, has minimal effect on project cost, and can improve pavement durability by reducing edge raveling of asphalt.
Wider Edge Lines	Wider edge lines increase drivers' perception of the edge of the travel lane and can provide a safety benefit to all facility types.

With roadway departure crashes accounting for more than half of the fatal roadway crashes annually in the United States and a high percentage in Franklin County, rumble strips, safety edge, and wider edge stripes are designed to address these crashes by alerting distracted, drowsy, or otherwise inattentive drivers who drift from their lane. The goal is to help drivers maintain control, regain the roadway safely, or minimize crash consequences if a departure occurs. In addition to geometric and surface treatments, roadway edge safety countermeasures often incorporate visual and physical guidance to improve driver awareness and behavior. These treatments are best layered together to reduce run-off-road crashes, support driver recovery, and enhance over all safety in systemic ways.

BEST PRACTICES & REFERENCES:

- FHWA Proven Safety Countermeasures
- USDOT SafetyEdge
- USDOT Rumble Strips and Safety Management
- USDOT Pavement Markings

Curve Delineation

Enhanced delineation at horizontal curves includes a variety of potential strategies that can be implemented in advance of or within curves, in combination, or individually. Enhanced delineation treatments can alert drivers to upcoming curves, the direction and sharpness of the curve, and appropriate operating speed. Agencies can take the following steps to implement enhanced delineation strategies:

1. Review signing practices and policies to ensure they comply with the Manual on Uniform Traffic Control Devices (MUTCD) principles of traffic control devices. Consistent practice for similar curves sets the appropriate driver expectancy.
2. Use the systemic approach to identify and treat problem curves. For example, Minnesota uses risk factors that include curve radii between 500 and 1,200 ft, traffic volumes between 500 and 1,000 vehicles per day, intersection in the curve, and presence of a visual trap.
3. Match the appropriate strategy to the identified problem(s), considering the full range of enhanced delineation treatments. Once the MUTCD requirements and recommendations have been met, an incremental approach is often beneficial to avoid excessive cost.

Potential Strategies	In advance of curve	Within curve
Pavement markings (standard width or wider)	X	X
In-lane curve warning pavement markings	X	
Retroreflective strips on sign posts	X	X
Delineators		X
Chevron signs		X
Enhanced conspicuity (larger, fluorescent, and/or retroreflective signs)	X	X
Dynamic curve warning signs (including speed radar feedback signs)	X	
Sequential dynamic chevrons		X

BEST PRACTICES & REFERENCES:

- FHWA Proven Safety Countermeasures
- FHWA Horizontal Curve Safety

Systemic Signal and Intersection Modifications

The implementation of traffic signal modifications can provide improvements in adherence to traffic signal cycles, yielding behavior to pedestrians and bicyclists crossing, red-light-running, and crashes at signalized intersections. Several of these hardware and software upgrades are proven safety countermeasures by the FHWA, such as:

- Retroreflective backplates see a 15% reduction in total crashes at intersections
- Yellow change intervals see a 36-50% reduction in red-light running and 8-14% reduction in total crashes
- LPIs see a 13% reduction in pedestrian-vehicle crashes at intersections

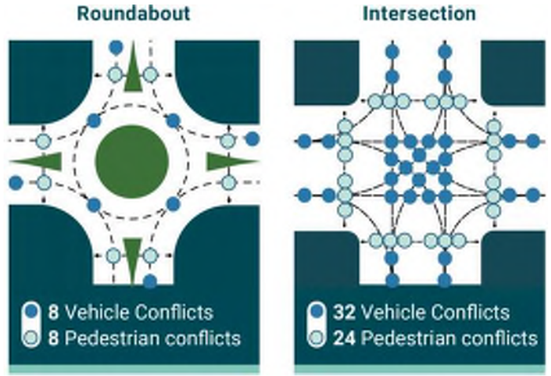
Safety Countermeasures	
Signal Light Upgrades	Signal light upgrades is the improvement of a signalized intersection through one or multiple upgrades, such as using LED lights in the signal head for better visibility and energy efficiency, having a signal head per lane of traffic, or switching from a pole light to a mast-arm light.
Retroreflective Backplates	Retroreflective backplates improve the visibility of the illuminate face of the signal by framing the signal with a 1 to 3-inch yellow retroreflective border; this signal modification improves visibility during daytime and nighttime conditions.
Stop-bar/Crosswalk Striping	Stop-bar and crosswalk striping improve visibility of crossing locations at intersections, indicating clearly where vehicles should stop and the space for pedestrians and cyclists to cross.
Updated Signal Timings	Updating signal timings are the adjustment of green light duration and cycle length, clearance interval duration, or other changes in traffic timing to better reflect existing traffic conditions.
Leading Pedestrian Intervals	Leading pedestrian intervals (LPI) give pedestrians 3-7 seconds of crossing time before vehicles are given a green light; LPIs increase pedestrian visibility, increase the yielding behavior of motorists, and can provide additional time to cross.
Flashing Yellow Arrow	A flashing yellow arrow is a traffic signal indication that allows drivers to make a permissive left turn after yielding to oncoming traffic and pedestrians, improving safety by clearly communicating turn expectations and reducing left-turn crashes caused by driver confusion.
ITS Implementation	ITS refers to the use of technology to improve safety and efficiency through multiple measures, such as adaptive traffic control, advance detection, and coordinated signal systems.

BEST PRACTICES & REFERENCES:

- FHWA Proven Safety Countermeasures
- FHWA STEP Studio
- Manual on Uniform Traffic Control Devices (MUTCD), Section 4F.17. FHWA, (2023).

Roundabouts

Roundabouts are circular intersections designed to promote a continuous flow of traffic. Unlike traditional intersections, roundabouts do not use traffic signals. Instead, vehicles enter the roundabout and yield to traffic already circulating. This design reduces the likelihood of severe collisions, with vehicles moving counterclockwise in right-hand traffic countries and clockwise in left-hand traffic countries.



Roundabouts are known for their safety and efficiency in managing traffic volumes. Roundabouts have been proven to enhance road safety significantly. Studies indicate roundabouts reduce the occurrence of fatal and serious injury crashes by up to 90% compared to traditional intersections (FHWA, 2021). The primary safety benefit comes from the reduced speed of vehicles, as the circular design requires motorists to slow down. Moreover, eliminating traffic signals means fewer points of conflict, such as head-on or high-speed right angle collisions. The continuous movement also reduces rear-end collisions commonly associated with traffic light intersections (IIHS, 2020).

Common Concern	Solutions
Confusion: Drivers unfamiliar with roundabouts may find them confusing, leading to potential hesitation or incorrect navigation.	Driver confusion can be addressed through public education campaigns and clear, intuitive signage that guides drivers through the roundabout.
Pedestrian Safety: There are concerns about pedestrian safety, especially for those with disabilities, who must cross multiple lanes of moving traffic.	Implementing pedestrian crossings with clear markings and actuated crossing lights at multilane crossings to ensure safe passage.
Large Vehicles: Concerns regarding the maneuverability of trucks and emergency vehicles within the roundabout's tight curves.	Roundabouts are designed with truck aprons that allow sufficient space to accommodate larger vehicles, and some middle islands are built to be mountable.
Construction Costs: The initial cost of constructing a roundabout can be higher than installing traffic signals, leading to budgetary concerns.	Highlighting the long-term benefits and cost savings associated with reduced crash rates, improved traffic flow, and no cost of traffic signal maintenance.

BEST PRACTICES & REFERENCES:

- Roundabouts: An Information Guide (FHWA)
- Guidelines for the Planning and Design of Roundabouts (MassDOT)
- Guide for Roundabouts (NCHRP)

Traffic Calming

Traffic calming is a set of countermeasures that encourage safer vehicle speeds by changing the built environment around the transportation network. These countermeasures consist of horizontal, vertical, roadside, and other features that changes the perception of the roadway to improve safety, mobility, and comfort. Traffic calming countermeasures can be implemented individually or combined with other countermeasures. According to the FHWA Traffic Calming ePrimer, "implementation of traffic calming measures can reduce traffic speed, reduce motor-vehicle collisions, and improve safety for pedestrians and cyclists. These measures can also increase pedestrian and bicycling activity."Many traffic calming measures are proven safety countermeasures by the FHWA and have measurable reductions in all types of injury crashes.

Safety Countermeasures		
	Lane Narrowing	Lane narrowing is the reduction of the width of the roadway without adjusting the number of lanes; the reclaimed space can be used for on-street parking, pedestrian or bicycle facilities, or greenery. Narrow lanes encourage slower speeds and shortens crossing distances for pedestrians.
	Chicane Installation	A chicane installation creates an S-shaped curve in the road using curb extensions, edge islands, or alternating on-street parking. The change in the orientation in the roadway encourages slower speeds.
	Curb Extensions/ Bump-outs	Curb extensions and bump-outs can be constructed at mid-block crossings or at intersections to narrow crossing distances for pedestrians while encouraging safer speeds for motorists. Curb extensions can also narrow corner radii, which slows turning speeds and improves yield behavior.
	Speed Humps/ Speed Cushions	Speed humps are raised sections in a roadway that can be tailored to a street and match the target speed; speed cushions - speed humps with cutouts to the street level - allow emergency vehicles to pass through without having to reduce speed.
	Raised Crosswalks/ Raised Intersections	Raised crossings allow pedestrians to cross at the same height as the sidewalk, improving accessibility. Raised crosswalks can be implemented at mid-block locations or as a raised intersection.
	Raised Medians/ Refuge Islands	Medians separate opposing traffic, reducing the number of head-on, cross-median crashes. Raised medians are built higher than the road level, offering pedestrians and bicyclists refuge mid-crossing, limiting motor vehicle turns, and mitigating head-on crashes.

BEST PRACTICES & REFERENCES:

- FHWA Proven Safety Countermeasures
- NACTO Urban Street Design Guide, Speed Reducation Mechanisms
- FHWA Traffic Calming ePrimer

Priority Network and Systemic Improvements

06

PRIORITY NETWORK AND SYSTEMIC INFRASTRUCTURE IMPROVEMENTS

This section outlines priority locations identified to address safety issues highlighted in the safety and human impact analysis and informed by public feedback. In recent years, the FCEO has implemented numerous local improvements targeting the county's highest crash locations. The identification and prioritization of project locations are designed to build on those efforts by addressing both safety and connectivity needs, while establishing a systematic approach to improving safety across all County-maintained roads.

Project Prioritization

A data-driven project identification and prioritization process was used to identify proposed safety improvements along Franklin County–maintained roadways within the High Priority Network (HPN), drawing on the tools summarized in the Safety Countermeasures Toolbox. The resulting Candidate Safety Projects are intended to provide a broad menu of options that communities may use when prioritizing street improvements or identifying strong candidates for safety-related grant funding. The following pages describe the project identification and prioritization process and results, including maps of the prioritized projects. It is important to note the scope and proposed recommendations for each project are not conclusive, but rather serve as a starting point for further study as projects move toward implementation. Priority projects were identified by first selecting roadways and intersections on County-maintained roads within the HPN and cross-referencing them with locations highlighted through public engagement to inform initial priorities and the human impact analysis. Community-raised concerns were acknowledged and incorporated into the decision-making process, reinforcing the team's commitment to addressing locally identified needs. Based on this combined analysis of crash data and public input, the top three priority areas were selected to be further refined for potential projects that address the specific safety concerns identified.

The methodology used to determine and prioritize safety improvement projects in Franklin County considers the following factors:

- **High Injury Network:** Identifying roads and intersections with elevated rates of FSI crashes.
- **High Risk Network:** Evaluating high-risk road segments with known road departure crash-inducing characteristics, such as high speeds, poor visibility, or inadequate pedestrian infrastructure.
- **Intersection Analysis**: Ranking of intersections based on crash analysis.
- **Community Feedback:** Integrating input from public engagement efforts, which highlighted key safety concerns and provided local insight into high-priority areas.
- **Community Impact Considerations:** Ensuring priority projects address transportation disparities and enhance accessibility for historically underserved populations.

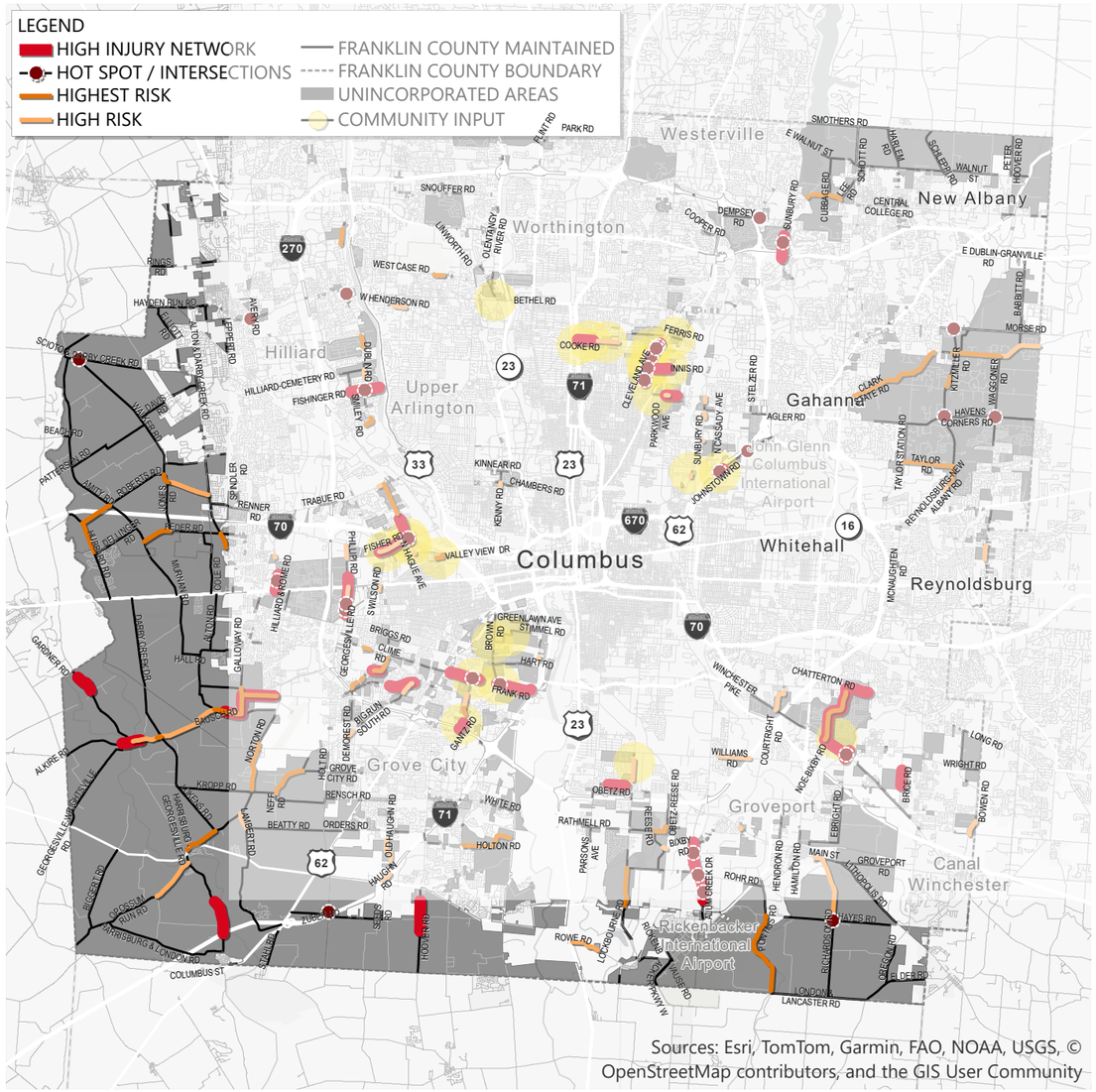


Figure 24: High Priority Network with Community Input Markers from the Public Survey

Candidate Safety Projects

Proposed countermeasures were linked to each project through a high-level planning analysis. Each proposed segment and intersection improvement location was assigned a project type (i.e., Roadway Edge Treatments, Curve Delineation, Systemic Signal and Intersection Modifications, Traffic Calming, Roundabout). These project types draw from the Toolkit of Safety Countermeasures in Chapter 6, with the specific countermeasures being grouped into broader project types appropriate for the generalized planning-level nature of this project identification process. The Implementation Process highlights what levels of next steps would be needed (i.e., if a road safety audit (RSA) is needed, if quick builds could be beneficial, if infrastructure reconstruction is needed, and if behavioral programs are warranted).

Throughout this process, the 2020-2024 crash history was referenced to gain a general understanding of crash patterns at each potential project location and to determine which project types would likely be most effective at mitigating those crash patterns.

Notably, Cleveland Avenue between E Dunedin Road and Ormond Avenue would be a potential project location, but improvements along the corridor were implemented in October 2025 when this analysis began. The corridor was removed from the Potential Project Location map as the County is not expecting to apply further improvements to the area at this time.

Road Name	Project Type	Implementation Process	Timeline / Priority
Winchester Pike/ Noe Bixby Road/ Chatterton Road *	• Roadway Edge Treatments • Curve Delineation • Traffic Calming • Roundabout • Sidewalks	• Road Safety Audit • Quick Builds • Reconstruction • Behavioral Program	Near Term / Top Priority
Alum Creek Drive	• Roadway Edge Treatments • Curve Delineation • Systemic Signal and Intersection Modification • Sidewalks/Shared-use Path	• Road Safety Audit • Reconstruction • Behavioral Program	Short Term / Top Priority
Georgesville Road	• Traffic Calming • Systemic Signal and Intersection Modification	• Road Safety Audit	Second Priority
Frank Road	• Traffic Calming	• Road Safety Audit	Second Priority
Clark State Road	• Roadway Edge Treatments • Shared-use Path • Curve Delineation	• Road Safety Audit	Second Priority
Alkire Road	• Roadway Edge Treatments • Curve Delineation	• Road Safety Audit	Second Priority
Fisher /Hague Road *	• Roadway Edge Treatments • Traffic Calming • Roundabout	• Road Safety Audit	Second Priority

* Segments of these roadways that are in close proximity to each other or where they come together.

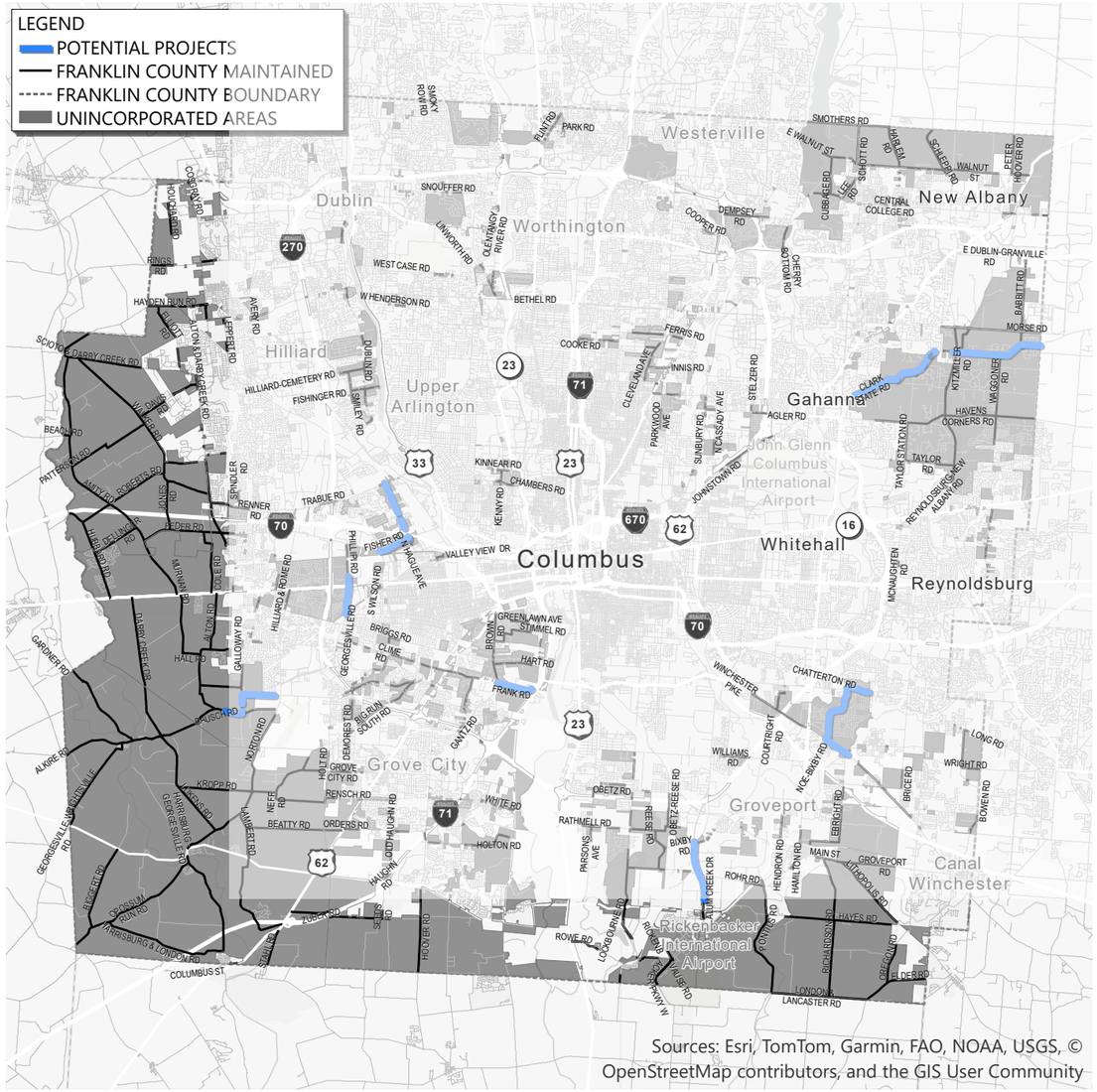


Figure 25: Potential Project Locations

Timeframe Descriptions

Reversing decades of vehicle-centric street design will take time, but immediate steps can test projects that prioritize safety for all road users. Some actions will require additional analysis, engineering design, and environmental review to identify suitable locations, while others may involve policy changes aligned with broader county goals. Recommendations are grouped into short-, near-, and long-term categories based on funding availability and coordination needs. Project types are described as follows:

Short term: Short term projects focus on quick-build opportunities and policies that can help streamline future efforts. While funding and resources are being allocated for larger, longer-term projects, demonstration projects can be implemented using existing county resources to pilot improvements and solicit additional community feedback. Typically, these projects could be implemented within the next two years.

Near Term: Near term projects focus on smaller effort initiatives that could be accomplished through existing local or state funding sources. These sources include ODOT's Traffic Safety Office and Safe Routes to School programs. Near term projects may include an initial study or demonstration project as an intermediate step to accomplishing the final solution. Typically, these projects will take three to five years to complete.

Long Term: Long term projects include those that will require additional coordination with ODOT, municipalities, or other local agencies to identify funding and construction for the improvement. These projects also include work that may require right-of-way acquisition or closure of roadways to vehicular traffic. Typically, these projects take five or more years to implement.

Quick Build Demonstration Projects are temporary installations to test new street design improvements that improve safety for all users. Benefits include:

1. Ability to **address issues immediately** to improve safety of a dangerous intersection or street.
2. **Low cost tests specific designs** and interventions to gain feedback and evaluate impacts.
3. **Build needed trust for stronger permanent projects** by demonstrating responsiveness and showing that change is possible.

Short Term/Top Priority: Winchester Pike/Noe Bixby Road/ Chatterton Road

Roadway Classification(s)	: Minor Arterial (Winchester Pike/Noe Bixby Road), Major Collector (Chatterton Road)
Focus Area	: **Winchester Pike from Ebright Rd to Noe Bixby Rd, Noe Bixby Rd from Winchester to Chatterton Rd, and Chatterton Rd from Noe Bixby Rd to Fontaine Rd**
Vehicular AADT	: 6,486 (Winchester Pike), 7,571 (Noe Bixby Road), 17,447 (Chatterton Road)
Problem(s) to be Addressed	: Intersections, Roadway Edge, Curve, Speeds, Behaviors
Crash Type(s) Being Targeted	: Roadway departures, rear ends, sideswipe
Safe System Approach Connection	: Safe Roads, Safe Speeds, Safe Users

These three roadways are in close proximity and are therefore combined into a single top-priority subarea. Together, they serve neighborhoods and residents along Noe Bixby Road, with Winchester Pike and Chatterton Road providing key connections. Each roadway has distinct safety considerations due to the mix of anticipated users, including gaps in sidewalk coverage, multiple horizontal curves along Noe Bixby Road, and transit access along Chatterton Road.

Safe crossing opportunities for vulnerable road users are limited, and posted speeds range from 35 to 50 mph. Based on the crash analysis and HRN designation, speed management and driver behavior appear to be contributing factors to safety concerns for non-motorized and transit users. As a result, a RSA is recommended for this subarea, including both roadway segments and intersections along each corridor.

The RSA should include evaluation and observation of operating speeds, with particular attention to intersections where pedestrian activity and bus users are anticipated. Roadway departure risk and geometric conditions should be evaluated along Noe Bixby Road, especially in relation to the multiple horizontal curves and posted speed limit. Potential roadway obstructions and fixed objects that could pose safety concerns should also be assessed. If opportunities exist to improve curve alignment or introduce additional safety features—particularly those that enhance nighttime visibility—they should be considered. Given the likelihood of operating speeds exceeding posted speeds, available sight distance should be evaluated along all roadway segments and at intersections within the subarea.

Second Priority Projects

All potential future projects should begin with a Road Safety Audit (RSA). The RSA will use the existing data and analysis as a baseline, while providing an opportunity to validate conditions in the field, identify issues not captured in the data, and determine the appropriate scope of safety improvements. The following section provides additional insight informed by the data analysis.

Phillipi Road/Georgesville Road - From Fisher Road to Sullivant Ave

This corridor includes a wide range of land uses and driver expectations, from residential neighborhoods to industrial areas, casinos, retail centers, and interstate access. Access management strategies and facilities for vulnerable road users vary along the corridor, with gaps and safety improvements needed. Potential considerations could include intersection and signal safety enhancements, improved access management, and increased driver awareness related to operating speeds.

Frank Road - Harrisburg Pike (US 62) to I-71

This corridor includes industrial areas and adjacent neighborhoods, creating potential conflicts between trucks and vulnerable road users. Safety related to truck turning movements and sight distance should be evaluated. The horizontal curvature approaching the interstate connections should also be reviewed to improve driver awareness. Potential considerations could include speed management and traffic calming measures.

Clark State Road - Hamilton Road to Dixon Road SW

This section is more rural and is anticipated to experience higher travel speeds. Driver behavior and speeding are key safety concerns. Potential considerations may include roadway departure countermeasures, horizontal curve treatments, pedestrian and bike facilities, and measures to improve driver awareness.

Alkire Road - Norton Road to Darby Creek Drive

This corridor is more rural in character, consisting of a long segment with multiple curves taken at higher speeds. It connects several destinations and features varying roadway edges and driver expectations. Potential considerations may include improved curve delineation, roadway departure countermeasures, and enhanced driver awareness to address speeding.

Fisher Road - N. Wilson Road to Hague Avenue; Hague Avenue - Fisher Road to Trabue Road

These two corridors are combined due to the intersection at Fisher and Hague being a high-crash location. The area includes many residential neighborhoods and has generated community concerns during public involvement. The corridor also provides interstate access. Potential considerations may include speed management, roadway departure countermeasures, and traffic calming strategies.

Systemic Improvements

Recognizing the FCEO's commitment to a proactive, systemic approach to safety, this section outlines strategies for implementing a comprehensive program of improvements paced realistically and aligned with available funding.

These strategies provide a clear, data-driven basis for prioritizing systemic improvements, aligning with the FCEO's commitment to the Safe System Approach and long-term safety goals.

ROAD SAFETY AUDIT PROGRAM

Establish a formal Road Safety Audit (RSA) program to proactively improve safety along corridors identified in the High Priority Network (HPN). The program would apply a systematic, multidisciplinary evaluation process to assess roadway design, operations, and surrounding land use with the goal of identifying safety risks for all users. Through field reviews and data-driven analysis, RSAs would help determine appropriate, context-sensitive safety interventions—such as speed management strategies, access control, and multimodal improvements—prioritizing cost-effective solutions that reduce crash frequency and severity. By embedding RSAs into corridor planning and project development, the program supports consistent, proactive safety decision-making across the region.

COST: RSAs can be added to other projects at minimal additional cost.

BENEFIT: Use of RSAs has shown up to 60% decrease in crashes where recommendations were implemented.

SPEED MANAGEMENT

Implement a comprehensive speed management approach on urban roadways with posted speeds above 35 mph to identify opportunities to reduce operating speeds and improve safety for all users. This effort would include reviewing speed limits and roadway design characteristics, such as reducing lane widths to 11 feet, and aligning complementary countermeasures including traffic calming treatments, access management, and multimodal enhancements. Together, these strategies support safer speeds that better reflect surrounding land uses and user needs while reducing crash severity.

COST: Cost could be minimal up front through a systemic study. Cost on implementation would vary based on treatments and findings.

BENEFIT: With speeds being a major issue in Franklin County, addressing speeding could have major impacts on safety.

ROADWAY DEPARTURE COUNTERMEASURES

Apply proven roadway departure countermeasures on all county roadways—whether on the High Priority Network or elsewhere—where crash history, roadway geometry, or curve delineation indicate elevated risk. For any roadway project in rural areas, systematically evaluate opportunities to incorporate departure-reduction treatments such as enhanced signing and striping, shoulder improvements, rumble strips, and clear zone enhancements to reduce the frequency and severity of run-off-road crashes.

COST: Cost could become more signficant as countermeasures are added to future projects.

BENEFIT: With roadway departures being a major safety issue, the benefit could be equally as significant.

SYSTEMIC SIGNAL MODIFICATIONS

Implementing targeted signal and intersection upgrades can significantly improve safety and user compliance at signalized intersections. Proven countermeasures—including signal head upgrades, reflective backplates, improved striping, updated signal timing, leading pedestrian intervals, and select ITS strategies—have been shown to reduce crashes, red-light running, and pedestrian-vehicle conflicts. These improvements should be applied systemically, with priority given to locations demonstrating elevated risk, consistent with the strategies outlined on page 38.

COST: Could be higher to implement, but the return for the technologies is high.

BENEFIT: Addresses the safety concerns at signalized intersections that are experienced in Franklin County.

INTERSECTION LIGHTING

Provide or enhance lighting at intersections to improve nighttime visibility, increase driver awareness, and reduce the frequency and severity of crashes involving all users. Lighting should be considered at conflict points with vulnerable road users and at intersections with a history of nighttime crashes.

COST: Lighting is expensive, and there is a high up front investment.

BENEFIT: Greatly increases awareness at conflict points between modes and shows to have a 15-25% reduction in crashes.

Safety Action Plan

07

SAFETY ACTION PLAN

This section outlines the safety actions, next steps, and recommendations for Franklin County. The recommendations are organized into six sections, with the first five grounded in the Safe System Approach and addressing policy, education, planning, prioritization, design updates, enforcement, funding, and legislation.

1. Leadership & Commitment
2. Safer Roads
3. Post-Crash Care
4. Safer Speeds
5. Safer Users
6. Data, Transparency, Metrics, and Accountability

Stakeholder engagement and a comprehensive analysis of historic crash data informed the development of these recommendations. This process ensures the strategies are rooted in real-world conditions, best practices, and a shared commitment to preventing fatal and serious injury crashes. By incorporating diverse perspectives, the recommendations address all elements of the Safe System Approach and respond directly to the County's most pressing safety challenges.

The goal of this action plan is not to prescribe a one-size-fits-all solution but to provide a robust menu of options that Franklin County can tailor to its unique contexts. Whether through safety-focused roadway design, funding prioritization, legislative and enforcement strategies, education initiatives, or enhancements to emergency response systems, the County can select and combine the most effective interventions to address safety in a holistic manner.

Grounded in the FCEO Local Road Safety Plan and aligned with FCEO's Complete Streets Resolution, these recommendations translate safety principles into standard operating practices through scalable, context-sensitive actions tailored to the County's roadway network. Organized into clear strategic categories and phased across short-, near-, and long-term implementation horizons, the recommendations are designed to support consistent and actionable progress.

Central to this approach is a shift from reactive, site-specific responses toward a systemic safety framework that prioritizes roadway characteristics and user behaviors associated with elevated risk. By embedding this framework into planning, design, maintenance, and operational decision-making, Franklin County can proactively deploy proven countermeasures across the roadway network—reinforcing safe behaviors and delivering durable safety improvements, regardless of crash history at individual locations.

Structure of Recommendations

Name:
The title of each recommendation

Recommendation:
1-2 sentences describing the action for the applicable party.

Justification:
1-2 sentences providing further description and justification.

Cost:
The relative cost figue is associated with the descriptions.

NA - not applicable
$ - Can be implemented with current staff, perhaps with training; limited costs for equipment or facilities
$$ - Requires some additional staff time, equipment, facilities, and/or publicity.
$$$ - Requires extensive new facilities, staff, equipment, or publicity, or makes heavy demands on current resources.

Timeline:
Timeframe for associated descriptions.
Upon Plan Adoption - Complete within 6 months
Short-term - complete in 6 months to 2 years
Ongoing - Start within 1 year with no end date
Long-term - Complete in 2-5 years
Undefined - Over 5 years

Applicable Parties:
Jurisdiction to which the recommendation applies, most important if partners outside of Franklin County.

Leadership & Commitment

These actions take the County's commitment to safety a step further than the 3% annual reduction goal set in the Local Road Safety Plan by committing to a goal of zero FSI crashes by 2050. Achieving these goals is a shared responsibility among all stakeholders, including law enforcement, emergency services, local municipalities and townships, transportation agencies, and the broader community, each playing a critical role in improving roadway safety.

COORDINATION / EDUCATION

ADOPT A SAFETY RESOLUTION

RECOMMENDATION: Adopt a safety resolution to reduce FSI crashes to zero traffic fatalities and serious injuries by 2050.

JUSTIFICATION: A countywide commitment to an ambitious target can create a sense of urgency and focuses resources on achieving measureable outcomes. A clear deadline can help raise awareness.

COST: NA

TIMELINE: Upon Plan Adoption

APPLICABLE PARTIES: All partners

FUNDING & PRIORITIZATION

ESTABLISH A SAFETY SPECIFIC FUNDING

RECOMMENDATION: Increase the share of annual projects/monies on the CIP budget whose primary focus is safety by a set percentage each year.

JUSTIFICATION: By targeting funding for transportation projects that provide the greatest safety benefits, Franklin County can maximize their reductions in FSI crashes.

COST: $

TIMELINE: Ongoing

APPLICABLE PARTIES: County

LEGISLATION

SUPPORT STATEWIDE LEGISLATION

RECOMMENDATION: Support and continue to support statewide legislation for seat belts, banning cell phone usage, and other safety measures that impact driver behaviors.

JUSTIFICATION: Support legislation is an easy way to enact laws that embrace safety.

COST: NA

TIMELINE: Long-term

APPLICABLE PARTIES: All Partners

FUNDING & PRIORITIZATION

ENSURE TIP/CIP INCLUDES SAFETY

RECOMMENDATION: Ensure the CIP and TIP apply safety-focused criteria for transportation project identification and prioritization. The criteria should include FSI focused safety countermeasures.

JUSTIFICATION: The county's CIP and MORPC's TIP are annual projects planned out for a certain number of years. Ensuring that safety is incorporated into those projects will reduce FSI crashes at a systemic level.

COST: $

TIMELINE: Short-term

APPLICABLE PARTIES: County / MPO (MORPC)

POLICY / EDUCATION

ANNUAL SAFETY SUMMIT

RECOMMENDATION: Continue supporting the annual Mobility Exchange and the Ohio State Traffic Safety Summit.

JUSTIFICATION: This continued awareness and opportunity for resource sharing and learning from others can help to identify ways to further meet the goals and reductions of crashes.

COST: $

TIMELINE: Ongoing

APPLICABLE PARTIES: County

Safe Roads

The physical characteristics and design of roadways can influence the likelihood and severity of crashes. Many communities across the region and nationally have implemented plans, policies, standards, and specific projects that have resulted in safer streets. The following Safe Roads recommendations present a range of options, drawing from local and national examples, which are grouped into the following sub-types: standards and guidance update, funding and prioritization, and policy/planning.

STANDARDS & GUIDANCE UPDATE

ROUNDABOUT EVALUATION AND DESIGN STANDARD IMPROVEMENTS

RECOMMENDATION: Review and standardize roundabout design principals being applied across County projects to provide a more consistent and easily reproducible outcome. Look for ways to enhance processes for evaluating roundabout feasibility.

JUSTIFICATION: Roundabouts reduce FSI crashes and are one of the best tools to prevent roadway deaths.

COST: $

TIMELINE: Ongoing

APPLICABLE PARTIES: County

POLICY / PLANNING

SAFETY LIGHTING ACTION PLAN

RECOMMENDATION: Develop and implement a Safety Lighting Action Plan to enhance roadway illumination, aiming to reduce nighttime traffic fatalities and serious injuries.

JUSTIFICATION: Adequate lighting is a proven countermeasure for improving traffic safety. Enhanced illumination at intersections, pedestrian crossings, and high-risk areas increases visibility for all road users, thereby reducing the likelihood of crashes during low-light conditions. FHWA provides guidance and resources for creating plans and overall best practices.

COST: $$

TIMELINE: Long-term

APPLICABLE PARTIES: County

FUNDING & PRIORITIZATION

RURAL ROAD SHOULDER IMPROVEMENTS

RECOMMENDATION: Apply for federal and state Highway Safety Improvement Program (HSIP) funding for county rural road surface shoulders to add safety countermeasures to address roadway departure.

JUSTIFICATION: ODOT has systemic safety funding through HSIP for rural roads.

COST: $

TIMELINE: Ongoing

APPLICABLE PARTIES: County, State

POLICY /PLANNING

ROAD SAFETY AUDITS

RECOMMENDATION: Develop a formalized program for road safety audits in the county. These can be incorporated into traffic impact analysis, corridor studies, and other planning efforts.

JUSTIFICATION: Road Safety Audits follow a formal process utilizing a multidisciplinary group that reviews street safety aspects and makes recommendations. Use of RSAs has shown up to a 60% decrease in crashes where recommendations were implemented.

COST: $

TIMELINE: Long-term

APPLICABLE PARTIES: County

STANDARDS & GUIDANCE UPDATE

SYSTEMIC SIGNAL IMPROVEMENT STANDARDS

RECOMMENDATION: All signals at High-Priority Intersection locations should consider installing retroreflective backplates, ITS sensors, pedestrian countdown timers, high-visibility crosswalk striping / stop bars, and leading pedestrian intervals.

JUSTIFICATION: Systemic signing and visibility improvements at signalized intersections have been shown to reduce fatal and injury crashes by 15% to 25%.

COST: $$

TIMELINE: Ongoing

APPLICABLE PARTIES: County

Post-Crash Care

A Safe System has multiple layers of protection for road users, and the post-crash care provided by first responders and trauma response teams is the critical last line of defense against a crash outcome becoming more serious or resulting in a fatality. The following recommendations highlight opportunities for increased collaboration and communication, as well as infrastructure and wayfinding that can enhance emergency response efficiency and safety.

DATA MANAGEMENT

EMS AND HOSPITAL DATA

RECOMMENDATION: Coordinate with state departments and regional trauma centers to gather, compile, analyze, and share anonymized EMS and hospital data related to motor vehicle crashes to policymakers, safety professionals, and jurisdiction leaders.

JUSTIFICATION: Studies have shown longer EMS response times are associated with higher rates of motor vehicle crash mortality, highlighting the importance of timely medical intervention. With access to comprehensive data from both EMS and hospital sources, policymakers and safety professionals can identify critical factors influencing crash outcomes and develop targeted interventions to reduce fatalities.

COST: $

TIMELINE: Short-term

APPLICABLE PARTIES: County, State, EMS/ Hospitals

Safe Speeds

Speed is a key factor in Franklin County in traffic fatalities and serious injuries, and it is often the deciding factor that separates these from minor injury or property damage only crashes.

POLICY / EDUCATION

SPEED MANAGEMENT PLAN

RECOMMENDATION: Develop a speed management plan and update it every 10 years. The speed management plan can dive deeper into the data on speeding and identify actions specifically related to speeding.

JUSTIFICATION: The study can systematically review posted speed limits and actual prevailing driver speeds across the county. It can look at policies, setting speed limits, and specific locations.

COST: $

TIMELINE: Long-term

APPLICABLE PARTIES: County

COORDINATION / EDUCATION

DYNAMIC SPEED DISPLAY / FEEDBACK SIGNS

RECOMMENDATION: Consider and expand deployment of speed feedback signs (termporary or permanent) in locations determined through a data-driven approach, or on the HPN or in heavy vulnerable road user zones.

JUSTIFICATION: Speed feedback signs dynamically show the driver's speed alongside the posted speed limits and have been shown to slow overall speeds where deployed. They also can help to educate drivers on the importance of safe speeds.

COST: $

TIMELINE: Short-term

APPLICABLE PARTIES: Any Jurisdiction

Safe Users

The following recommendations aim to promote safe and responsible behaviors among road users and foster conditions that prioritize their safe arrival at their destinations.

COORDINATION / EDUCATION

SAFETY PLEDGE

RECOMMENDATION: Create an online safety pledge where community members can pledge to practice safe driving habits and support safety initiatives. This could aligned with the 2025 Ohio law for drivers education for individuals under 21.

JUSTIFICATION: A safety pledge asks residents to take personal responsibility for their actions while fostering a culture of safety. If done during drivers education, this could support the concern of young drivers being overrepresented in crash types.

COST: NA

TIMELINE: Short-term

APPLICABLE PARTIES: County, State

Data, Transparency, Metrics, and Accountability

The data, transparency, and accountability recommendations aim to establish a framework for tracking progress, fostering public trust, and ensuring data-driven decision-making in achieving the goals of this action plan.

DATA MANAGEMENT

CRASH DATA COLLECTION TRAINING

RECOMMENDATION: Develop a training program for law enforcement officers to ensure accurate and consistent reporting of crash details. Coordination should include education on how engineers and planners use crash reports and reconcile what level of effort is needed.

JUSTIFICATION: Ensuring accurate and consistent reporting of crash details is crucial, as inaccuracies can significantly impede traffic safety analysis, slow the development of effective countermeasures, make it harder to get funding for safety measures, and result in ineffective policy decisions.

COST: $

TIMELINE: Long-term

APPLICABLE PARTIES: County, State

DATA MANAGEMENT

DASHBOARD TO REDUCTION OF CRASHES

RECOMMENDATION: Create a data dashboard of existing crashes at this point in time and the actions and prioritized projects identified.

JUSTIFICATION: This dashboard can be used to track progress of safety countermeasures utilized, projects accomplished, policies updated, and track crash severity reduction.

COST: $$

TIMELINE: Ongoing

APPLICABLE PARTIES: County