



On the Road to Safety, Every Life Counts

Clark County, IN

Safety Action Plan



6/25/2025



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Appendix A – Safety Countermeasure Cost Estimate Ranges and Project Implementation Timeline Reference Chart



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CLARK COUNTY

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Clark County Highway Department

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Introduction

In 2023, Clark County, in collaboration with the Kentuckiana Regional Planning & Development Agency (KIPDA) and 15 other participating cities and counties, applied for and successfully received a Safe Streets and Roads for All (SS4A) Action Plan Grant. The SS4A Action Plan Grant is a vital component of the broader federal SS4A initiative to improve road safety across the United States. The goal of the SS4A Program is to create a safer transportation network by supporting the development and implementation of comprehensive safety plans that are data-driven and community-focused.



Clark County is dedicated to working towards a goal of zero traffic deaths and serious injuries by 2050. Achieving this goal will require a clear focus on prioritizing safety for all road users. The Clark County Safety Action Plan addresses seven important SS4A Program safety components. Each component is a chapter in the Safety Action Plan.

	Leadership Commitment and Goal Setting
	Planning Structure
	Safety Analysis
	Engagement and Collaboration
	Policy and Process Changes
	Strategy and Project Selections
	Progress and Transparency



Safe System Approach

The Safe System Approach is a comprehensive approach based on the understanding that humans are fallible and make mistakes, but those mistakes should not result in fatalities or serious injuries. There are five broad impact areas for achieving this goal: **Safer People, Safer Vehicles, Safer Speeds, Safer Roads, and Post-Crash Care**. This approach significantly expands the traditional safety plan focus on roadway infrastructure. Six key principles undergird the approach.



Safe System Key Principles

Death and Serious Injuries are Unacceptable: Every human life is invaluable, and ensuring safety is the highest priority.

Humans Make Mistakes: Recognizing that human error is inevitable, we design and manage our roads to be forgiving, mitigating the potential consequences of these errors to prevent serious harm.

Humans are Vulnerable: We design the roadway system to account for the biological limits the human body can tolerate in a crash.

Responsibility is Shared: Preventing fatal and serious injuries is a shared responsibility. All stakeholders must work together to enhance road safety.

Safety is Proactive: Taking a proactive stance on safety means anticipating and addressing risks before they result in crashes. Being proactive involves identifying potential hazards and implementing measures to mitigate them.

Redundancy is Crucial: Embedding multiple layers of safety within the transportation system is important, so that if one layer fails, others can still protect people. This redundancy is vital for creating a resilient transportation network.



Safe System Approach vs Traditional Approach

The traditional approach to road safety often relies on perfect human behavior from all road users and tends to react to crashes *after* they occur, focusing on individual accountability. In contrast, the Safe System Approach acknowledges that humans are fallible and will inevitably make mistakes. This approach builds a system designed to minimize the severity of crashes resulting from those errors. This shift from an individual-focused model to a system-centric one highlights all stakeholders' shared responsibilities. The comparative graphic illustrates this fundamental shift, showcasing how the Safe System Approach aims to create a safer, more forgiving transportation system.

Traditional approach

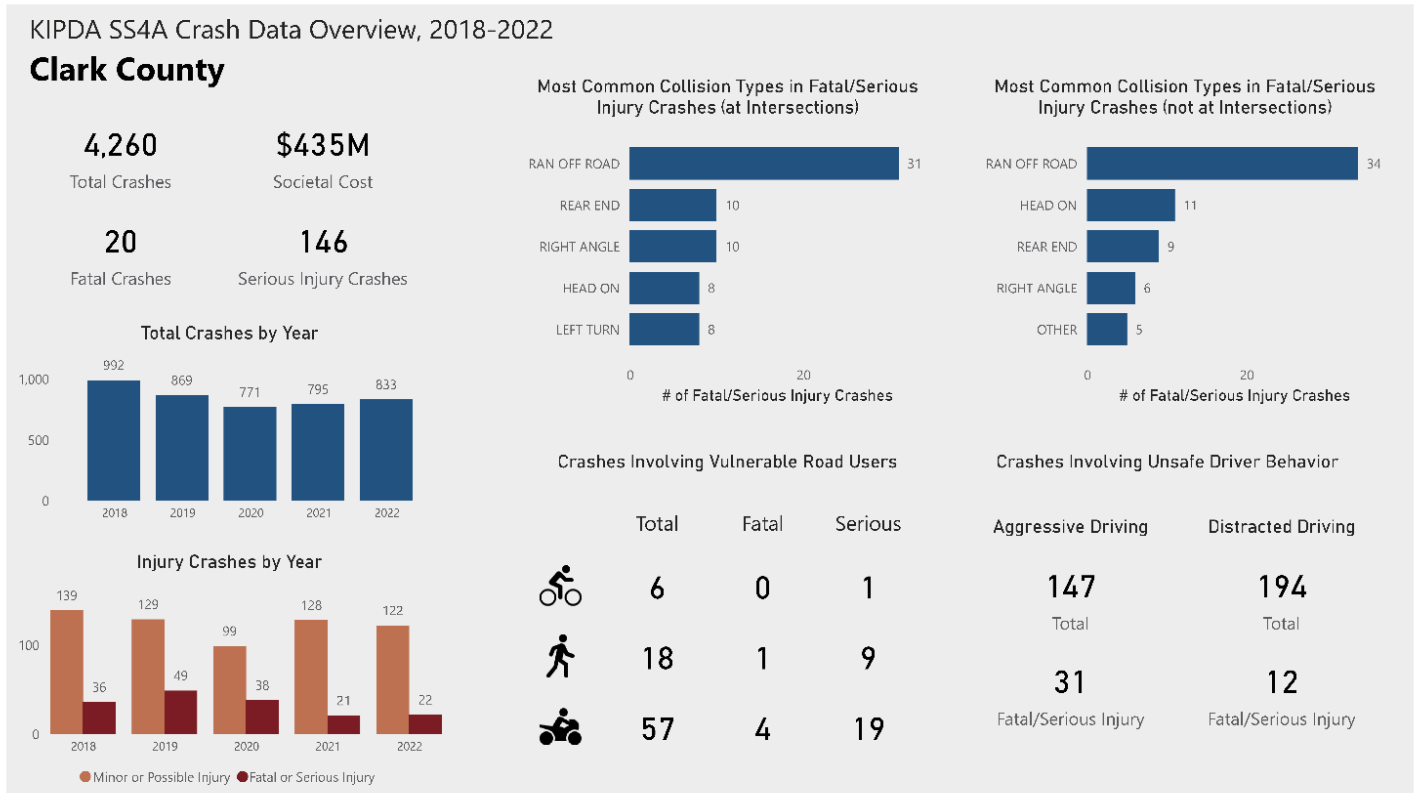
Safe System approach

Prevent crashes	→	Prevent death and serious injuries
Improve human behavior	→	Design for human mistakes/limitations
Control speeding	→	Reduce system kinetic energy
Individuals are responsible	→	Share responsibility
React based on crash history	→	Proactively identify and address risks



Overview

Clark County had 20 fatal crashes and 146 serious injury crashes during the five-year period from 2018 to 2022, for a total of 166. There were 4,260 total crashes during this time. The total societal cost of all crashes was \$435 million (including economic and quality of life factors). The area covered by these numbers excludes Jeffersonville, Clarksville, and Charlestown, as they have their own Safety Action Plans. The figure below provides an overview of the Clark County crash data.



Important safety findings for Clark County include:

- Fatal and serious injury crashes are spread across the county on state and local highways
- Several fatalities have occurred around Memphis and Wilson
- The highest density of all crash types occurs in Sellersburg
- 65 of 166 fatal / serious injury crashes were run-off road crashes
- 11 of 166 fatal / serious injury crashes involved a pedestrian or bicyclist
- 22 of 166 fatal / serious injury crashes involved failure to yield right of way
- 12 of 166 fatal / serious injury crashes involved driver inattention / distraction



1. Leadership Commitment and Goal Setting

Clark County is dedicated to ensuring safety for all users on the County’s streets and roads. The County’s commitment is demonstrated by the resolution on the following page, which states that its leaders have established “a goal of working towards zero traffic fatalities and serious injuries by the year 2050.”

The County’s commitment and leadership in implementing safety-focused projects, strategies, and policies are also supported by current programs and policies.

The Clark County Comprehensive Plan was adopted in 2019 and is implemented through the coordinated efforts of the Clark County Planning Commission, local government officials, and community stakeholders.

The Comprehensive Plan outlines strategies to enhance road safety and improve transportation infrastructure. For example, for the community of Borden it states, “High traffic areas should focus on safety improvements for both vehicles and pedestrians including crosswalk enhancements and a separation between the roadway and sidewalk. The plan emphasizes the development of new walking and biking trails to create alternative transportation networks and planning for sidewalks. It lists projects that “will improve vehicular access within Clark County for both residents and visitors, while improving safety and reducing congestion.”

The Comprehensive Plan lists the following as a guiding principle: “High traffic areas should focus on safety improvements for both vehicles and pedestrians including crosswalk enhancements and a separation between the roadway and sidewalk.” Subsequently it lists the following transportation goal: “Increase connectivity in Clark County by planning for safe and maintained transportation routes” One of the strategies to achieve this goal is widening narrow highways, many of which have limited or no shoulder, often with drainage concerns as well.

The Unified Development Ordinance, amended in 2024, provides for the provision of sidewalks and paths with new developments.

The Clark County Highway Department is responsible for upgrading highways, shoulders, and drainage. They also maintain signs and striping on County maintained highways.

Clark County also continues to pursue the implementation of road safety projects such as the single lane roundabout being built at the intersection of CR 403 and Stacey Road in the City of Charlestown. This Highway Safety Improvement Program (HSIP) eligible project involves a partnership between Clark County, INDOT, and Charlestown and will provide important safety benefits to the traveling public.



RESOLUTION NO 4 -2024

A RESOLUTION OF CLARK COUNTY, INDIANA IN SUPPORT OF VISION ZERO

WHEREAS, the Board of Commissioners of Clark County, Indiana is utilizing a planning grant through the Safe Streets and Roads for All Program (SS4A) and coordinating with the Kentuckiana Regional Planning and Development Agency (KIPDA) to develop a safety action plan for Clark County, Indiana to analyze existing conditions, historical trends, systemic and specific needs and to identify projects and strategies to address identified problems; and

WHEREAS, a safety action plan is an eligibility requirement for implementation grants through the SS4A Program; and

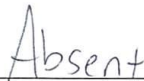
WHEREAS, community commitment to an eventual goal of zero fatalities and serious injuries is an important component for USDOT consideration of an implementation grant through the SS4A program.

NOW, THEREFORE BE IT RESOLVED that the Board of Commissioners of Clark County, Indiana hereby establishes a goal of working towards zero traffic fatalities and serious injuries by the year 2050.

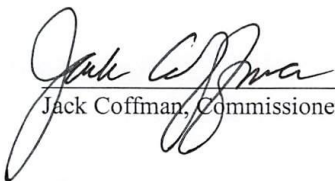
So Resolved this 19th day of December, 2024.



Bryan Glover, Commissioner

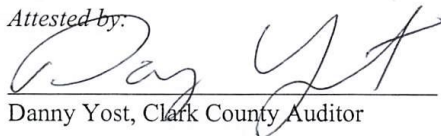


Connie Sellers, Commissioner



Jack Coffman, Commissioner

Attested by:



Danny Yost, Clark County Auditor

2. Planning Structure

The planning structure for the Clark County Safety Action Plan consisted of various committees, each playing a crucial role. The following describes these bodies and their collaborative efforts in the development of the plan.

Regional Steering Committee

The Regional Steering Committee provided oversight and strategic direction for the Safety Action Plan development process. The Committee was composed of representatives from 16 local government agencies, including Clark County. It also included KIPDA staff. Steering Committee meetings were held at key points to provide information and gather input and feedback. Topics covered during the meetings included:

- Purpose of safety action plans
- Data collection and safety analysis
- Identification of high crash highways and intersections
- Countermeasure identification and prioritization
- Documentation and implementation opportunities

Clark County Leadership Meetings and Plan Review

Meetings were held with county leadership at two key points during the plan development to receive and relay detailed input and feedback. The first meeting focused on presenting the initial data analysis and prioritization of needs, allowing county leadership to identify, confirm, and prioritize critical safety issues. The second meeting gave county leadership the opportunity to provide feedback on the draft High Injury Network (HIN) and potential safety countermeasures. These interactions allowed the unique concerns and priorities of Clark County to be adequately addressed in the plan.

The final Safety Action Plan was also reviewed by county leadership to provide feedback and yield a plan that is useful for moving Clark County forward toward a safer future.

Safety Committee Meetings

The Safety Committee is the cornerstone of the planning structure, providing localized oversight and input into the plan. The Safety Committee also provides a means of continuing the safety planning and project implementation process in the future. The Committee consisted of key Clark County stakeholders including Highway Department staff.

The Safety Committee provided advice and feedback on the plan development and is intended to continue this advisory role as the plan moves into implementation and monitoring. The Committee provided input and feedback on potential safety needs and possible reactive and systemic safety



countermeasures. Having many different perspectives and agencies in the meetings facilitates effective communication and results in a more effective safety action plan that better addresses the five elements of the Safe System Approach. A detailed review of the Safety Committee Meetings is provided in [Chapter 4. Engagement and Collaboration](#). The dialogue is expected to continue in the future, facilitated by KIPDA staff, as the plan is implemented, updated, and enhanced over time.



3. Safety Analysis

Study Area

The study area for the safety analysis includes the entirety of Clark County, Indiana, as shown in Figure 3-1. This study includes all public streets and roads within the County except interstate highways, private streets, or parking lots.

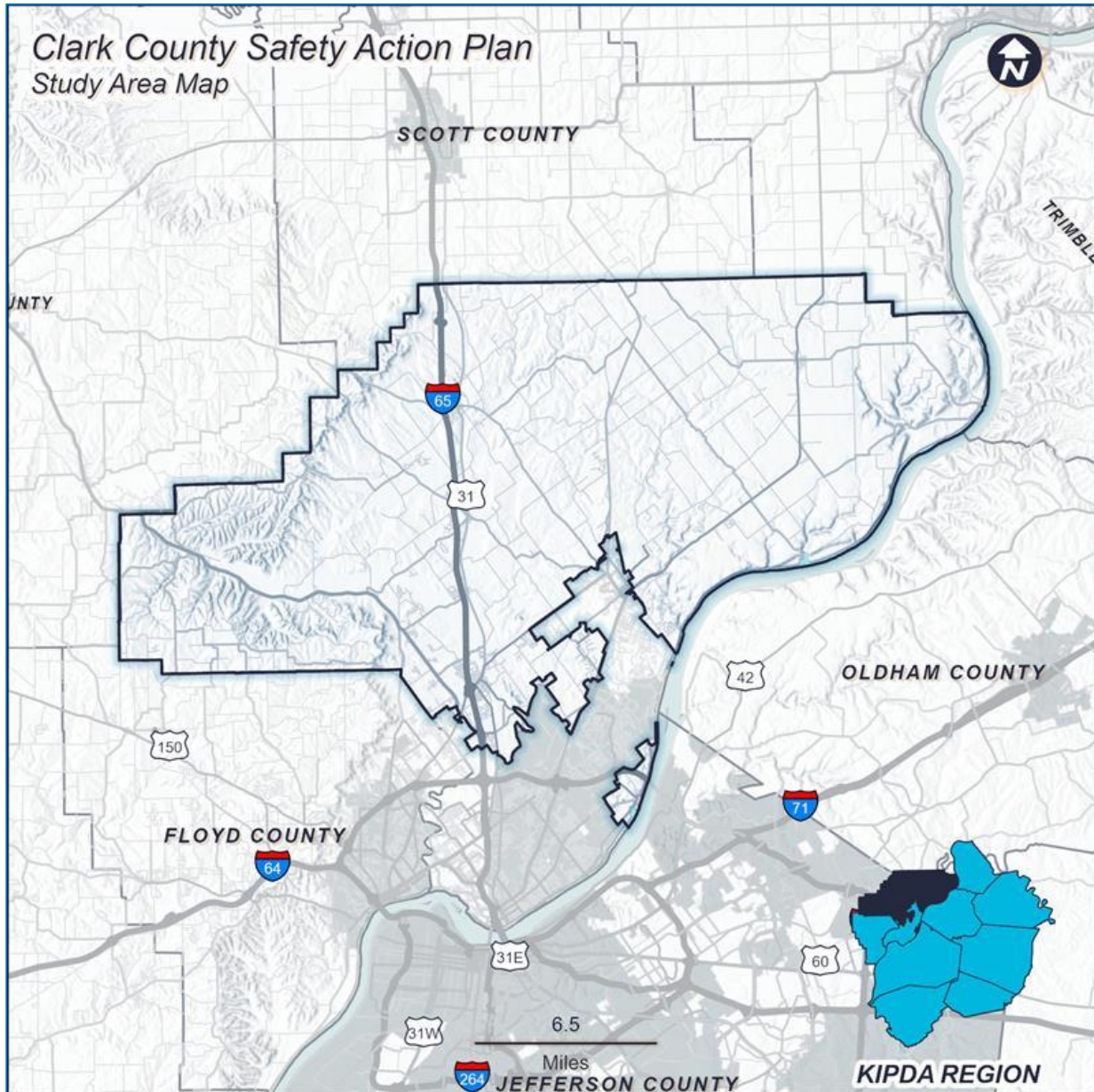


Figure 3-1. Study Area



Crash Data

The safety analysis was conducted using the five years of crash data between 2018 and 2022. This period was selected based on the desire to study consistent crash trends over a consecutive period, the availability of data when the project started, and expectations regarding future funding application data requirements.

The project team obtained the crash data from the Indiana State Police (ISP) crash database - Automated Reporting Information Exchange System (ARIES). This data is primarily collected by city, county, and state police department crash investigation teams when they complete an Indiana Officer's Standard Crash Report form. This form captures critical information about crashes, including location, type, severity, individuals and units involved, environmental factors, and contributing factors. Departments enter this information into a database maintained by ISP.

The initial crash data included all Clark County crashes from 2018 to 2022. Crashes located on I-65 and those that occurred in parking lots were removed from the dataset. Additionally, some crashes could not be linked to the GIS roadway due to missing information. After these adjustments, the final crash database used for the study included 4,260 crashes.

This report focuses on crash events based on the most severe injury sustained in each incident. Since the analysis is event-based rather than individual-based, a single crash involving multiple injuries is counted as one event, categorized by the highest severity level recorded. Pedestrian crashes involve at least one pedestrian and one motor vehicle. Similarly, bicycle crashes refer to crashes involving at least one bicycle and one motor vehicle. Vehicle crashes involve at least one vehicle and do not involve a pedestrian or a bicycle.

The study team obtained geographic information system (GIS) files of with roadway characteristics and traffic data for roadways where this information was available. The team used this information to create a database of roadway segments and intersections. The crash data was joined with the GIS information to create a crash database that facilitates detailed analyses to identify crash trends, areas of opportunity, and risk factors to assist in prioritizing projects.

Crash Severity

The crash database uses the KABCO Injury Classification Scale. The KABCO injury classification system categorizes traffic crash injuries into five levels: Fatal (K), Suspected Serious (A), Suspected Minor (B), Possible (C), and No Apparent Injury (O). The KABCO scale is the recommended best practice for individual injury reporting by the Model Minimum Uniform Crash Criteria (MMUCC), developed by the National Highway Traffic Safety Administration (NHTSA). ISP uses the KABCO scale during field data collection and reporting the injury severity of a crash. Crash severity is determined by the most severe injury occurring in the crash. For example, if a fatality occurs, the crash is classified as a "K" or fatal injury crash.



For this plan, the crash severity data was reviewed against the reported detailed injury data to confirm the severity. This resulted in some crashes being adjusted to better match the MMUCC. The following table provides a breakdown of the total crashes by severity. Table 3-1 provides a breakdown of the crashes in Clark County by severity.

Severity	MMUCC Severity Description	Crashes (2018-2022)	%
K	Fatal Injury	20	<1%
A	Suspected Serious Injury	146	3%
B	Suspected Minor Injury	463	11%
C	Possible Injury	154	4%
O	No Apparent Injury	3477	82%
Total		4,260	100%

Table 3-1. Crashes by Severity

Figure 3-2 shows the location of all 4,260 crashes documented during the study period. Density of crashes is shown with a gradient scale. The highest number of crashes during the study period occur near Sellersville.

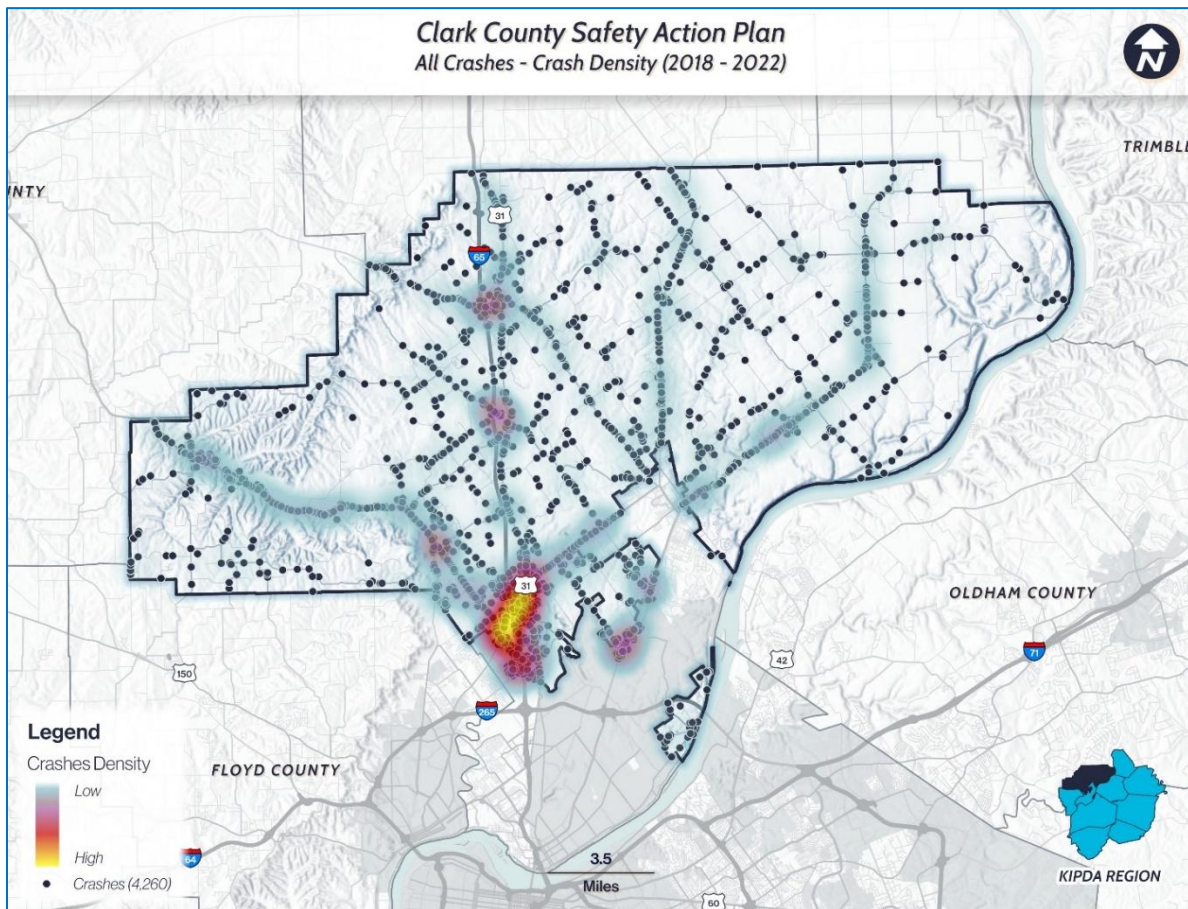


Figure 3-2. Crash Density Map



Figure 3-3 shows the locations of fatal and suspected serious injury crashes. Fatal crashes occur throughout the county, with clusters along Charlestown Memphis Road, Hansberry Road, and State Route 60.

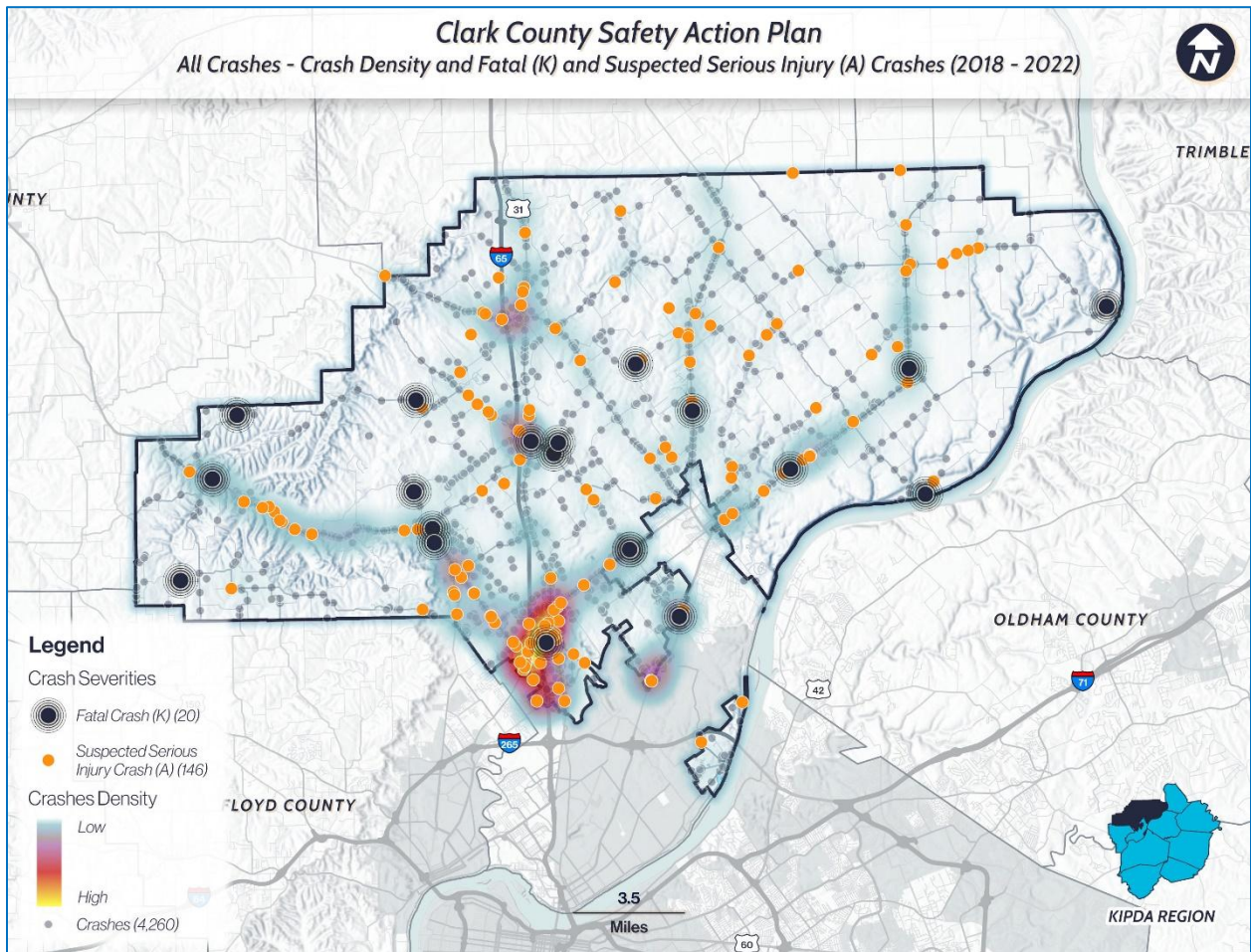


Figure 3-3. Fatal and Suspected Serious Injury Crash Map



Crash Trends

The crash data has been examined considering a number of different factors to identify patterns and safety needs. This trend analysis also provides information about potential safety countermeasures and approaches that could be explored to address those needs.

Annual Crash Trends

The 2018-2022 crash analysis shows a relatively consistent rate of crashes per year, with highest rate occurring in 2018 (992 crashes). The lowest number of crashes occurred in 2020, with 771. The decline in 2020 aligns with COVID-19 pandemic, which greatly affected traffic patterns and volumes. It also likely led to an underreporting of crashes, especially low severity crashes. In early 2020, police operating procedures were modified to minimize potential exposure to the virus. Consequently, the reported number of crashes in 2020 may not reflect all of the crashes that occurred during that year.

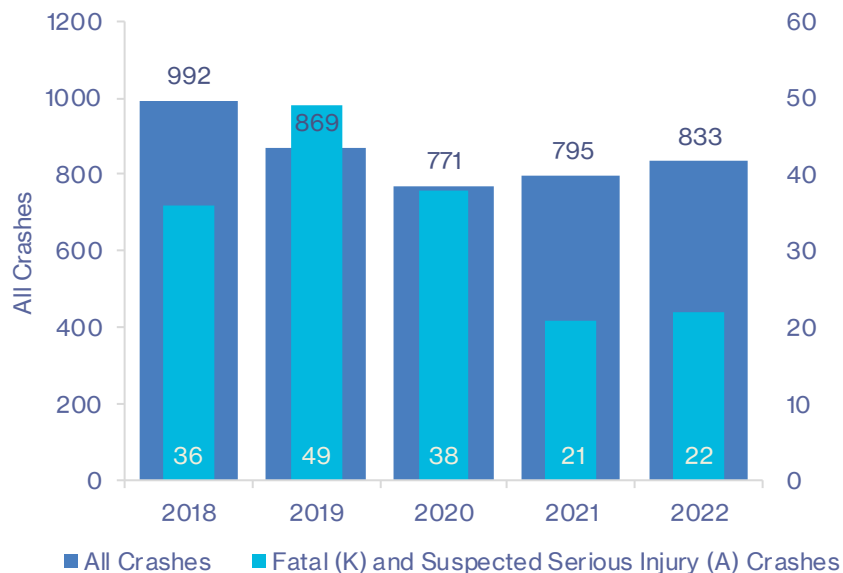


Figure 3-4. Overall Crashes per Year

Figure 3-4 shows the trajectory of severe fatal (K) and suspected serious injury (A) crashes through the study period, with a range between 49 and 21 crashes. The highest number of fatal and suspected serious injury crashes occurred in 2019, which had the second highest rate of crashes for the study period.



Crash Occurrence

Month

The following chart presents the crashes by month over the five-year study period. This monthly crash data shows notable variations in crash frequency and severity throughout the year. The highest total crashes occurred in October and November, with 411 crashes occurring in each month. However, June and July had the highest rates of fatal and suspected serious injury crashes, with 11% and 12% of total fatal and serious crashes for the year occurring in June and July, respectively. In comparison, these months each accounted for only 7% of annual crashes of all types.



Figure 3-5. Monthly Crash Breakdown



Day of Week

As seen in the Figure 3-6, crashes remain relatively consistent across the weekdays, ranging from 697 crashes on Wednesday to 620 crashes on Monday. A slight decline is observed on weekends, with 428 crashes on Sunday, representing the lowest crash frequency. The decrease in weekend crashes is most likely attributed to lower traffic volumes, lowering the potential for crashes. However, severe crash frequency does not necessarily align with the frequency of all crash types. Even though Wednesdays and Thursdays have the highest crash volumes overall, Fridays and Saturdays account for the highest number of fatal and suspected serious injury crashes.

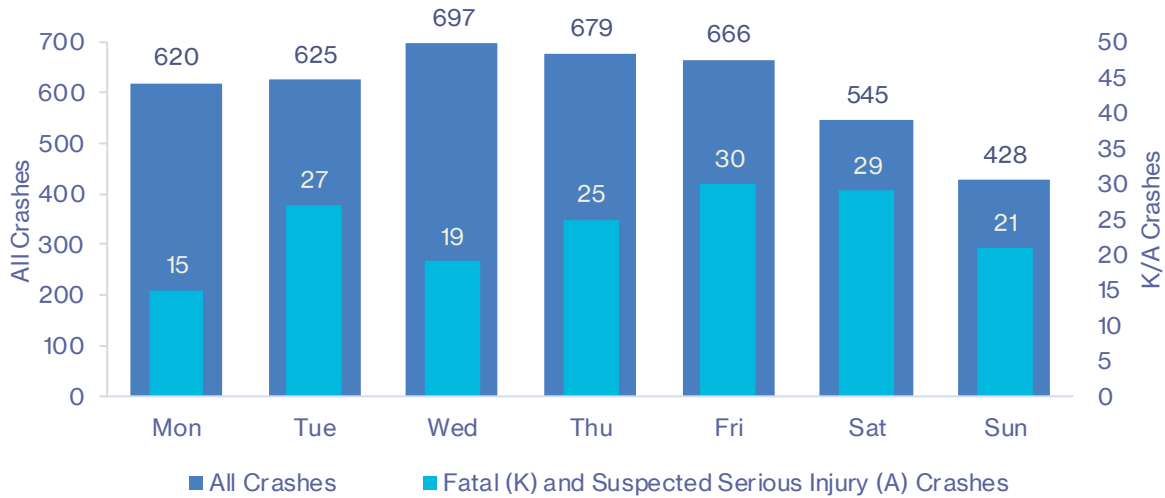


Figure 3-6. Crashes by Day of Week



Time of Day

The 3-6 pm period experiences the highest number of crashes, with 863, or 20% of all crashes. This time frame also experienced a high number of severe crashes, with 37 fatal and suspected serious injury crashes. The period between 6 am and 6 pm shows a relatively consistent number of severe crashes, ranging from 5 to 8 fatal and suspected serious injury crashes during each time frame.

The late night and early morning hours, including 9-12 pm and 12-3 am, report the lowest crash frequencies, with 305 and 225 crashes, respectively. However, the late-night hours from 9-12 pm have a disproportionately high number of fatal and suspected serious injury crashes; 7% of all crashes occurring between 9 and 12 pm were fatal or suspected serious injury crashes.

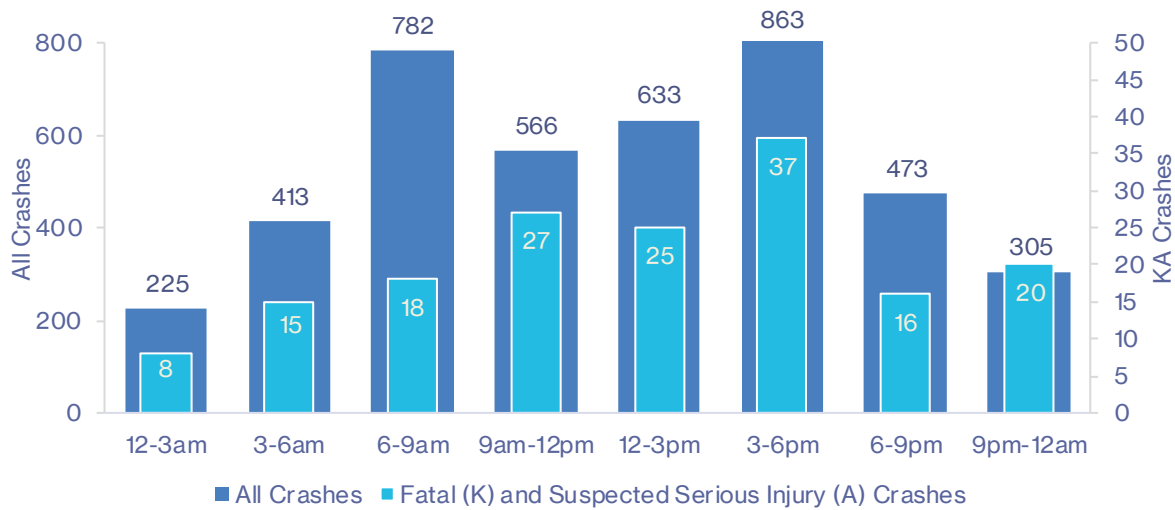


Figure 3-7. Crashes by Time of Day



Manner of Collision

Single-vehicle crashes (ran off road, and collisions with objects and animals) account for approximately 36% of all crashes and 47% of all fatal and serious injury crashes. Head-on crashes, while only comprising 2% of all crashes, contribute to 11% of fatal and suspected serious injury crashes, demonstrating that they are disproportionately severe when they occur.

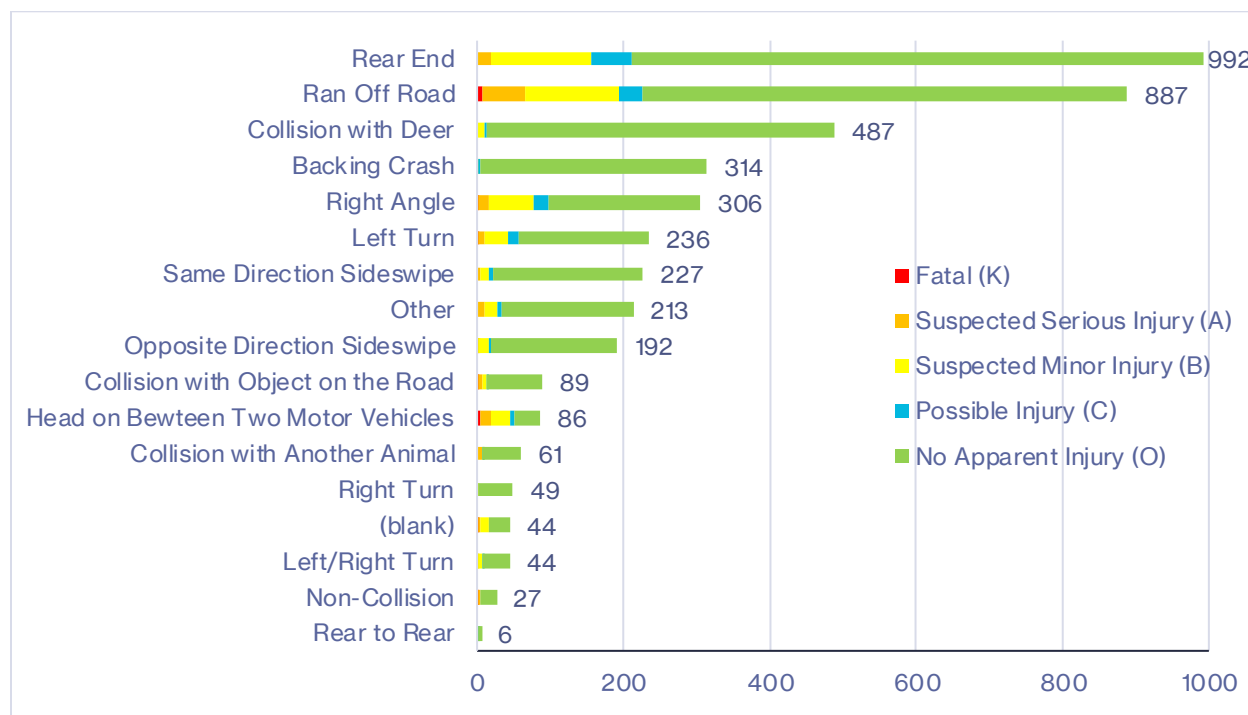


Figure 3-8. Manner of Collision by Severity

Driver Behavior

Driver behavior is a shared responsibility and can be the determining factor in a crash. The actions and decisions drivers make can significantly influence the likelihood and severity of crashes. Addressing key areas of concern, such as aggressive, distracted, and impaired driving, is essential to fostering a safer roadway environment. These three behavior areas have been selected as key to promoting safety in Clark County.

Aggressive Driving

Aggressive driving is generally defined as behavior by drivers that negatively impacts the safety of other motorists or pedestrians, contributing to crashes. Aggressive crashes are coded to have the following behaviors.

- Failure to yield to the right of way
- Following too close
- Traveling too fast for conditions



- Disregarding traffic control
- Exceeding the posted speed limit
- Improper passing
- Weaving in traffic

Crashes involving aggressive driving contribute disproportionately to fatal crashes when compared to all crashes. While aggressive driving behaviors are present in 2% of all crashes (101), they account for 10% of crashes resulting in fatalities and suspected serious injuries, indicating a higher risk of severity associated with aggressive driving behaviors.

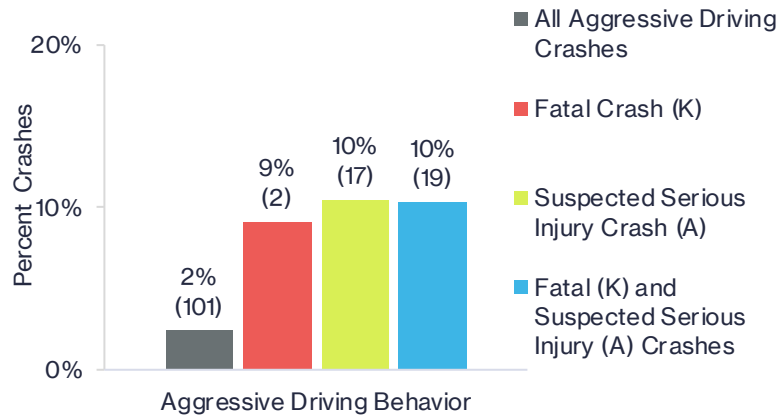


Figure 3-9. Aggressive Driver Crashes by Severity

Distracted Driving

Distracted driving refers to any activity by a vehicle operator that diverts their attention from the primary task of driving, thereby increasing the risk of a crash. The three main types of distracted driving involve drivers taking their eyes off the road, hands off the wheel, and minds away from driving. In Clark County, distracted driving accounted for a varying number of crashes annually, with a peak of 38 in 2022 and a low of 13 crashes in 2019.

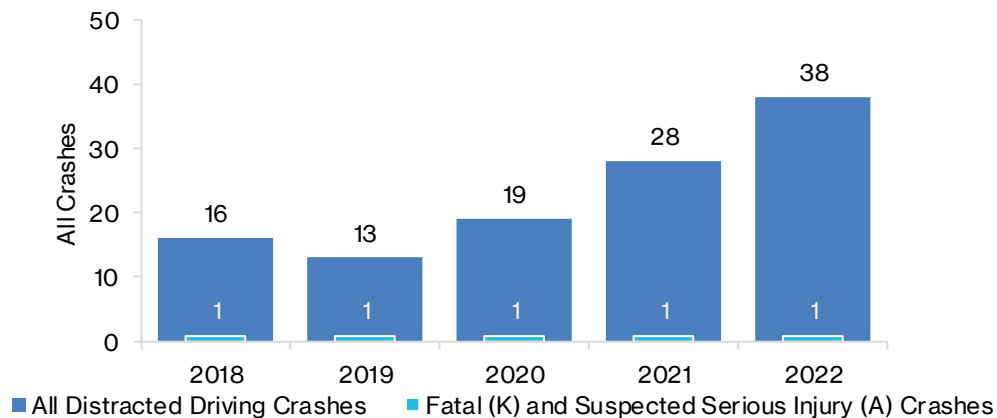


Figure 3-10. Distracted Driver Crashes by Year



In Clark County, distracted driving accounts for 3% of all crashes and contributed to 2% of fatal and suspected serious injury (Figure 3-11).

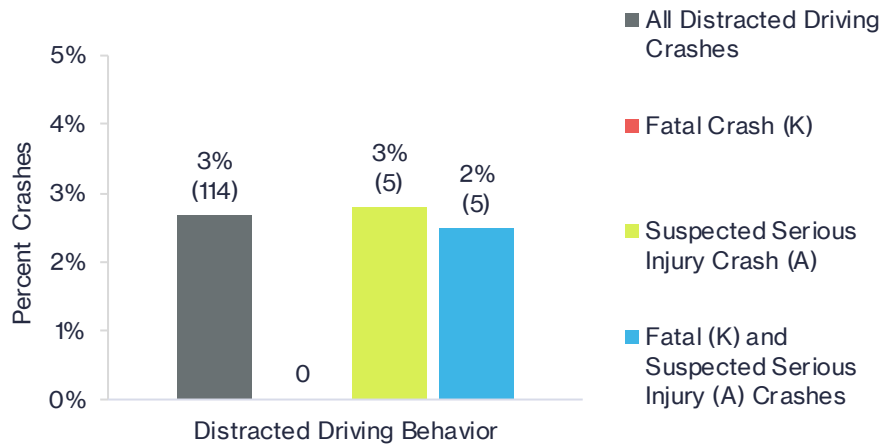


Figure 3-11. Distracted Driver Crashes by Severity

Impaired Driving

Impaired driving is the act of driving a motor vehicle while under the influence of alcohol or narcotics. Impairment affects reaction time, judgment, and coordination, which are critical to safely operating a vehicle. Impaired driving resulted in less than 1% of all crashes, but it was associated with 8% of fatal crashes.

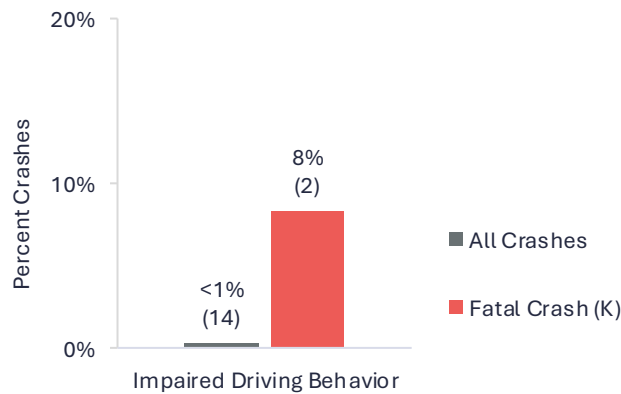


Figure 3-12. Impaired Driver Crashes by Severity



Lighting Conditions

Roadway lighting is a safety factor that impacts visibility and reaction times. However, the documentation of lighting infrastructure is not comprehensive. The available crash data provides only anecdotal evidence regarding the lighting condition during a crash. Currently, there is no established infrastructure database detailing the presence and condition of street lighting, making it challenging to analyze the correlation between illumination and road safety.

The following chart indicates that 64% of all crashes during the five-year study period occur during daylight. Still, a higher percentage (71%) of fatal and serious injury crashes occur during daylight. In contrast, 25% of all crashes occur in non-daylight dark conditions. In comparison, 23% of fatal and suspected serious injury crashes occur during non-daylight dark conditions. This distribution suggests that while reduced visibility may increase crash risk, most severe crashes in Clark County occur under daylight conditions.

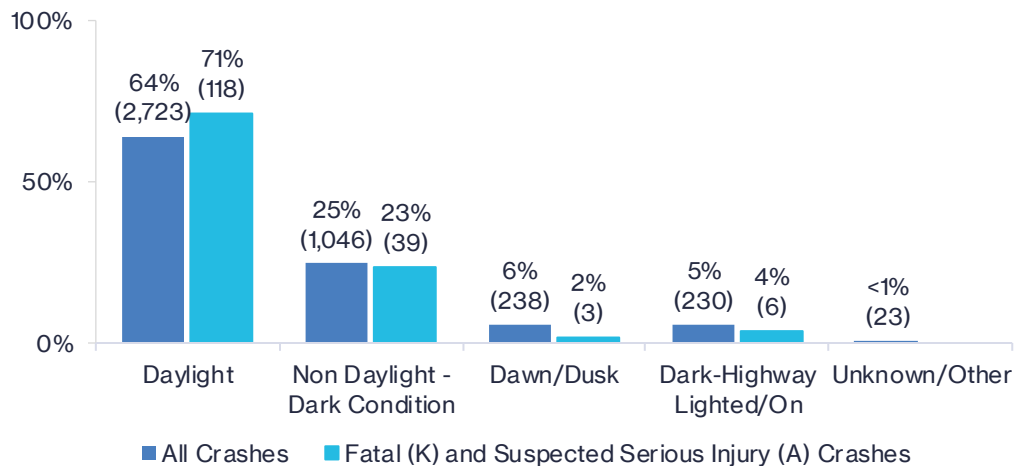


Figure 3-13. Crashes by Light Condition

Figure 3-14 shows the locations of crashes that took place during non-daylight dark conditions. Forty-two of these crashes were fatal or suspected serious injury.



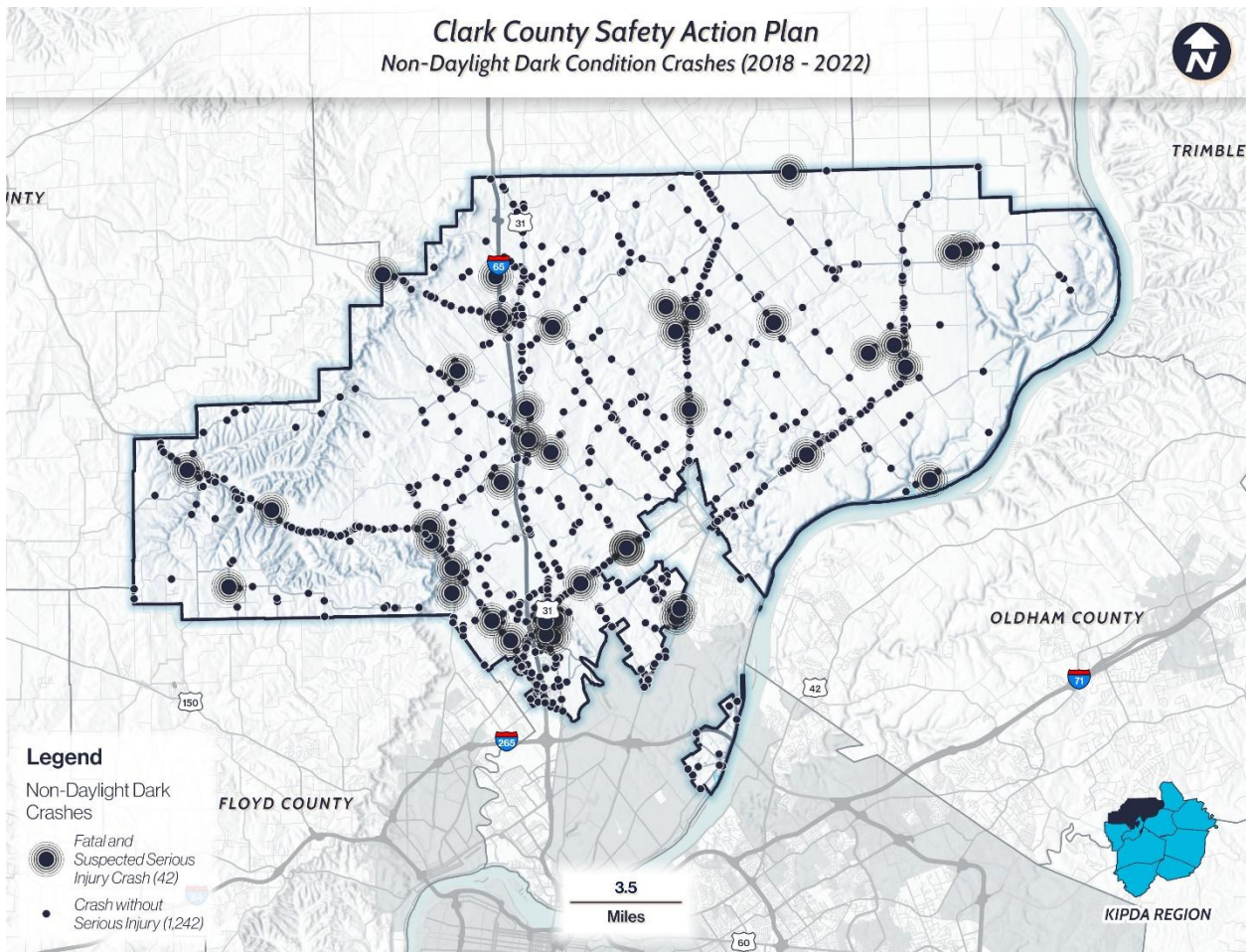


Figure 3-14. Lighting Condition. Non-Daylight Dark Condition Crashes Map



Crashes by Locations

The crash data shows that the number of crashes that occur in intersections is about the same as those that happen at segments, (47% at intersections, 53% along highway segments). Fatal and suspected serious injury crashes are also nearly evenly divided between intersections and segments.

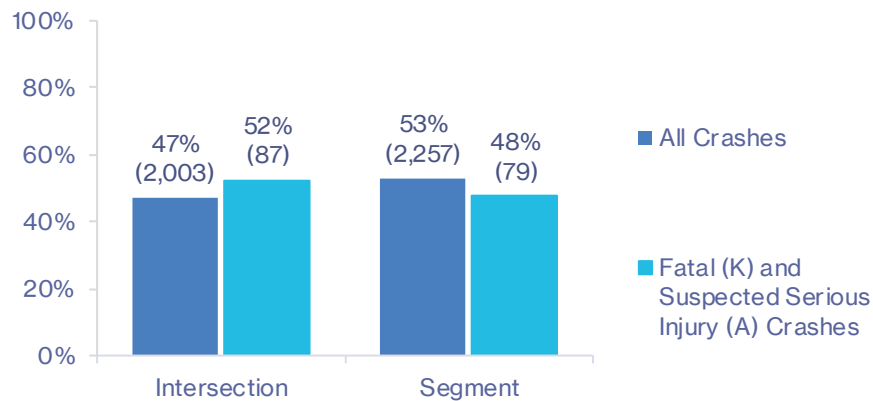


Figure 3-15. Crashes by Location

Intersections

The high severity intersection types tend to be higher speed rural intersections with moderately high volumes or complex signalized and unsignalized intersections. Many of the high crash severity intersections are in and around Sellersburg, but there are also others further out in the county. The intersection with the most severe crashes is actually an active county project – the proposed roundabout at CR 403 and Stoney Point Road/Bethany Road. This is a very well-conceived improvement for an intersection of this type, especially one on the edge of a developed (and developing) area.

Segments

Narrow two-lane segments across the county as well as heavily traveled segments in the more developed areas account for many of the severe segment crashes. As discussed in the next section roadway departure crashes are a major challenge on many rural roadway segments.



Roadway Departure Crashes

Roadway departure crashes occur when a vehicle crosses an edge line, a centerline, or leaves the traveled way. These crashes often lead to some of the most severe outcomes due to the increased risk of collision with fixed objects, overturning, or encountering unsafe roadside conditions. The inherent dangers of leaving the roadway contribute to higher rates of serious injuries and fatalities compared to other crash types.

The crash data indicates that roadway departure crashes significantly contribute to severe outcomes. Although roadway departure crashes account for 21% of all crashes, they disproportionately represent a much higher percentage of fatal and serious injury crashes. Specifically, 39% of fatal and suspected injury crashes are related to roadway departures.

Most of these crashes are recorded as “ran off road to the right”, but some are also associated with unsafe speeds and overcorrecting. The lighting data appears to show a correlation between nighttime driving and speeding and running off the road.

Figure 3-17 shows the locations of roadway departure crashes, highlighting the locations of crashes that resulted in suspected serious injuries or fatalities.

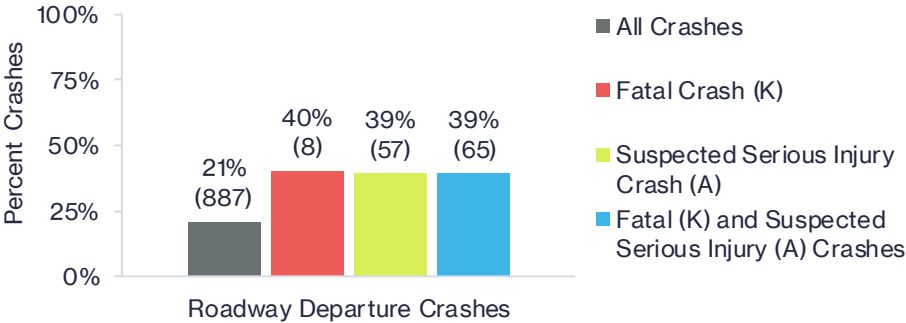


Figure 3-16. Roadway Departure Crashes by Severity



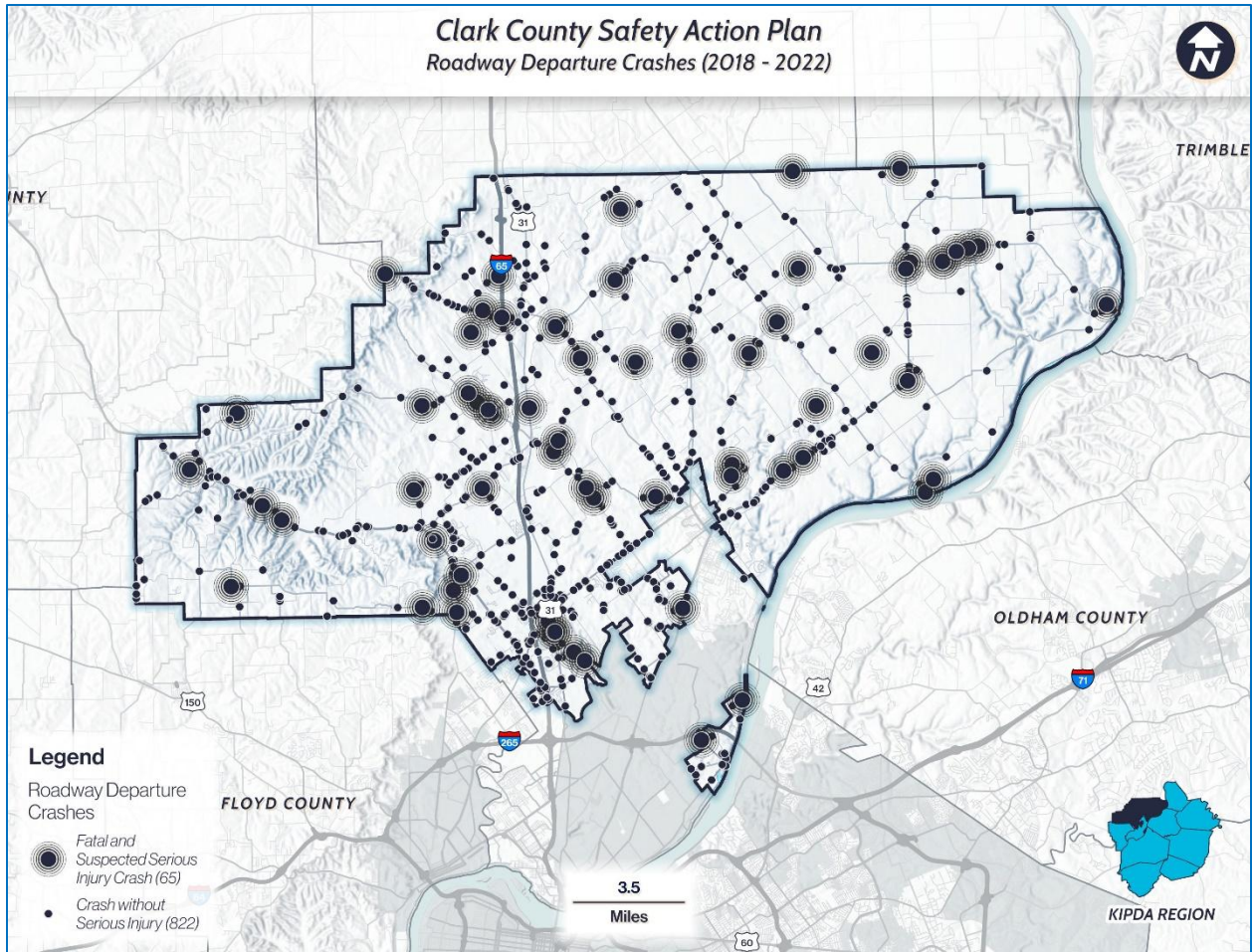


Figure 3-17. Roadway Departure Crashes Map



Vulnerable Road Users

Vulnerable road users, including pedestrians and bicyclists, are at greater risk due to their lack of physical protection compared to motor vehicle occupants. These crashes typically result in more severe injuries and fatalities because there is little to no buffer between these users and the force of a collision. No bicycle crashes were reported during the study period.

Pedestrians

Clark County has experienced 18 reported pedestrian crashes. The majority of the pedestrian crashes occurred in and around Sellersburg. Although pedestrian crashes are relatively infrequent in the County, they tend to result in injuries when they do occur. In fact, 56% of crashes involving pedestrians lead to fatality or suspected serious injury. This highlights the need for continued emphasis on pedestrian safety. Figure 3-18 shows the locations of pedestrian crashes in Clark County, with most of them occurring in and near Sellersburg.

Severity	Description	Crashes	%
K	Fatal	1	6%
A	Suspected Serious Injury	9	50%
B	Suspected Minor Injury	4	22%
C	Possible Injury	3	17%
O	No Apparent Injury	1	6%
TOTAL		18	

Table 3-2. Pedestrian Crashes by Severity

Bicyclists

There have been six bicycle crashes in the County, with one serious injury resulting. The locations of these crashes are shown below.

Severity	Description	Crashes	%
K	Fatal	0	0%
A	Suspected Serious Injury	1	17%
B	Suspected Minor Injury	2	33%
C	Possible Injury	0	0%
O	No Apparent Injury	3	50%
TOTAL		6	

Table 3-3. Bicyclist Crashes by Severity



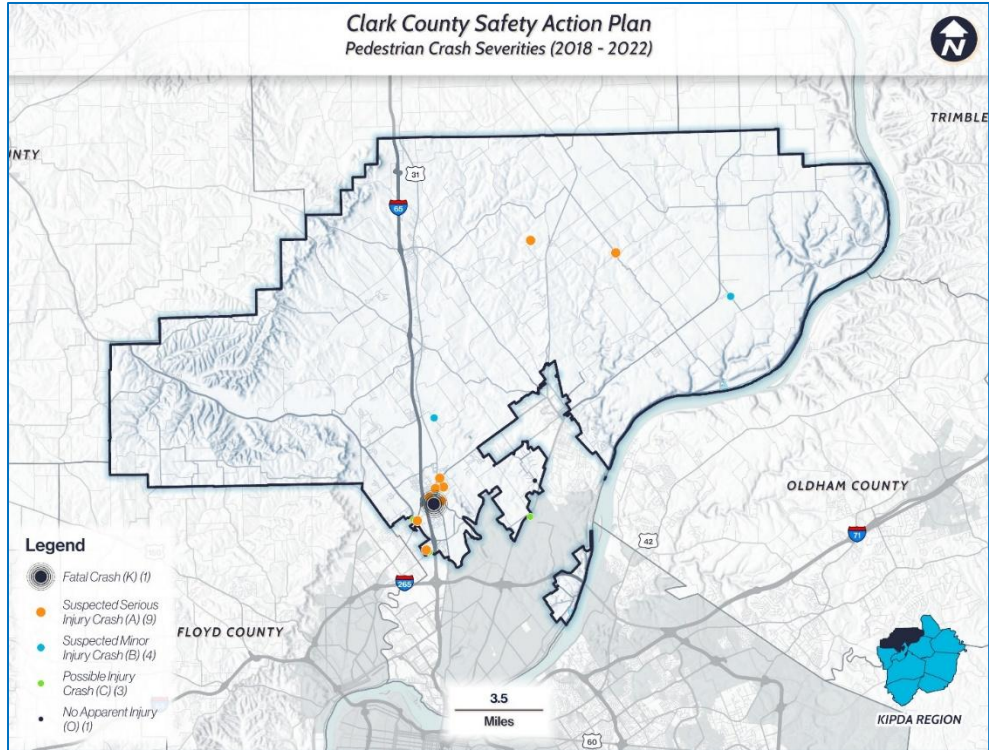


Figure 3-18. Pedestrian Crashes

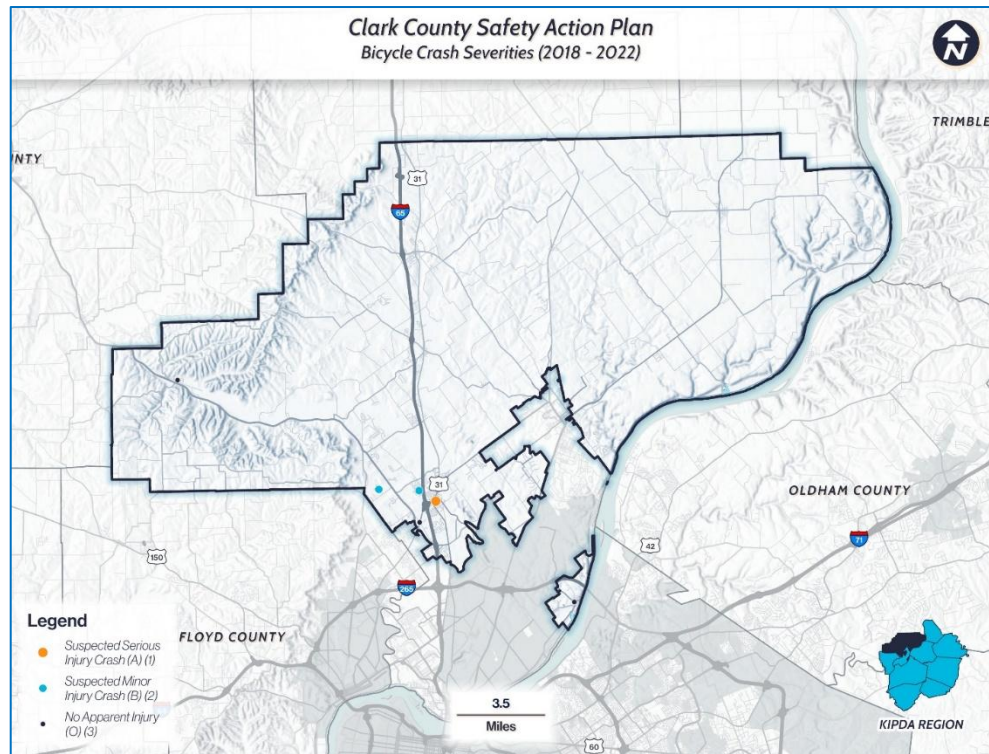


Figure 3-19. Cyclist Crashes



Driver Age

In Clark County, approximately 45% of fatal and suspected serious injury crashes involved drivers aged 20 - 39. Historically, this age group has been particularly prone to risky driving behaviors such as speeding and distracted driving.

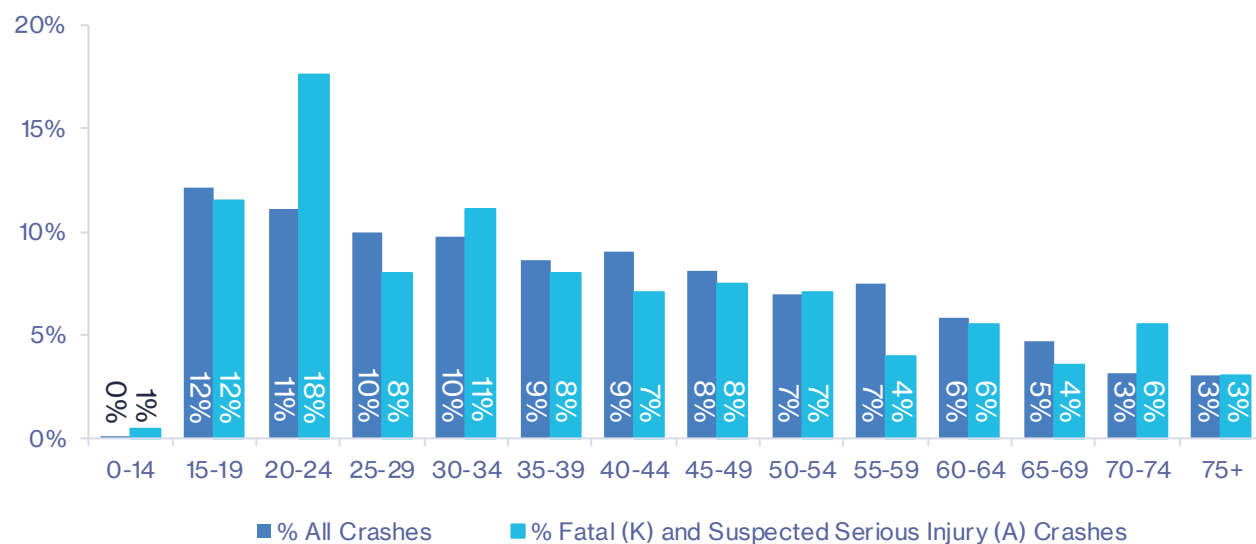


Figure 3-20: Crash Percentages by Driver Age



Human Factors

Human factors play a significant role in crash occurrences, often tied to errors in judgment and risky behaviors. These factors include speeding, failing to yield, distractions, fatigue, and the influence of alcohol or drugs.

Following too closely is the leading factor for crashes in Clark County, contributing to 776 crashes, followed by failure to yield right of way (570). The following figure lists the number of crashes attributed to each human factor.

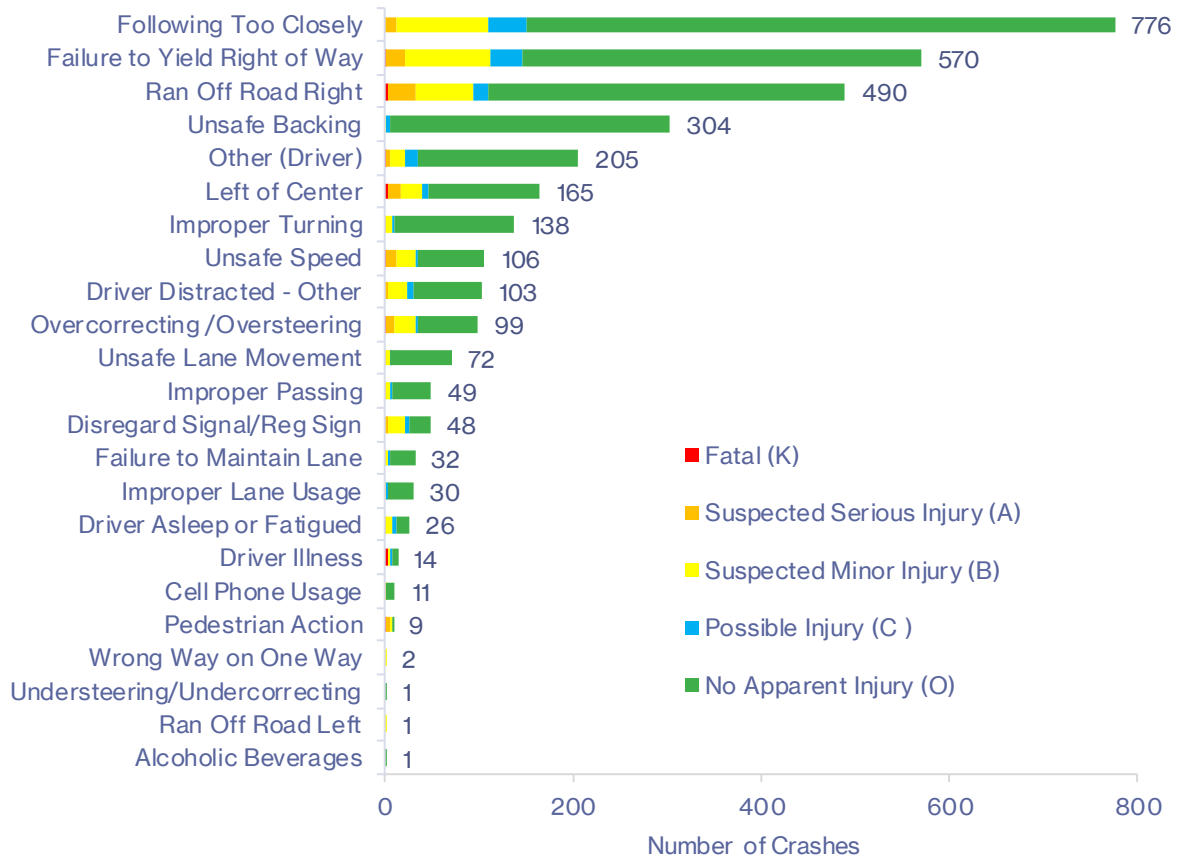


Figure 3-21. Crashes by Human Factor



The factor contributing to the highest number of fatal and suspected serious injury crashes is following too closely at 24% (34). Failure to yield right of way and driving left of the center attributed to 16% and 12%, respectively, as shown in Figure 3-22.

Given the high proportion of severe crashes where drivers ran off the road, crossed the centerline, or failed to yield the right of way, a speed management program is recommended. This would be designed to encourage drivers to make better decisions regarding their speed in various conditions. It could include infrastructure, behavioral, educational, and enforcement elements.

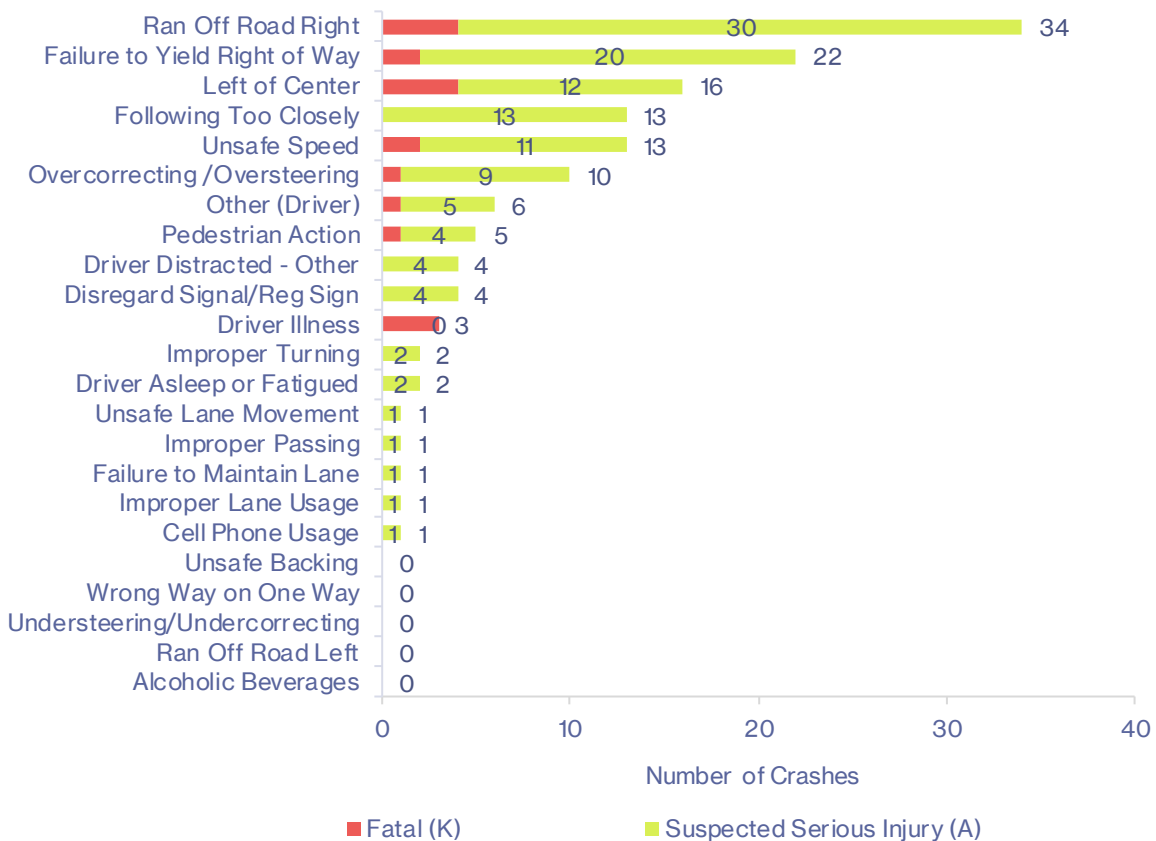


Figure 3-22. Fatal and Suspected Serious Injury Crashes by Human Factor

Environmental and Roadway Conditions

Environmental roadway conditions do not appear to contribute significantly to crash occurrence or severity. Adverse roadway conditions, defined as wet, snow, ice, or less common road conditions, comprise a moderate share of the overall crashes. Rain conditions account for 10% of all crashes and 11% of fatal and suspected serious injury crashes. In comparison, snow conditions account for 2% of all crashes and 1% of severe crashes. Foggy conditions account for more severe crashes than snow are 3%.



Roadway Condition	All Crashes		Fatal and Suspected Serious Injury Crashes	
	#	%	#	%
Clear	2927	69%	116	70%
Cloudy	748	18%	25	15%
Rain	414	10%	18	11%
Snow	84	2%	1	1%
Fog/Smoke/Smog	31	1%	5	3%
Sleet/Hail/Freezing Rain	26	1%	0	0%
Blowing Sand/Soil/Snow	20	0%	1	1%
Other	10	0%	0	0%
	4260		166	

Table 3-4 Crashes by Roadway Condition

High Injury Network

A High Injury Network (HIN) is a data-driven approach used to identify roadway segments that account for a disproportionate amount of a community’s fatal and serious injury crashes. The HIN enables communities to concentrate their limited resources on improving safety along those high-priority, dangerous corridors. Following the Safe System Approach, the HIN also corresponds to the Safe Roads pillar. This pillar focuses on designing roadway environments to mitigate human mistakes and account for injury intolerances, encourage safe behaviors, and facilitate safe travel by the most vulnerable users.

The HIN provides a data-driven and focused list of corridors where a majority of the community’s fatal and suspected serious injury crashes are occurring. The routes identified in the HIN will guide the development of strategies and project selection. These strategies and more information on the HIN can be found in [Chapter 6: Strategy and Project Selection](#).



4. Engagement and Collaboration

A key component of the planning process is meaningful engagement with both the public and stakeholders. Throughout the development of this Safety Action Plan, engagement took various forms, allowing for a deeper understanding of current conditions, safety concerns, and challenges. These insights provide crucial context for the safety analysis. The following summarizes the community and stakeholder engagement completed for this Safety Action Plan.

Safety Action Plan Community Engagement

Regional Steering Committee

The Regional Steering Committee, comprised of diverse members from the region, was the guiding force and planning structure for the Safety Action Plan development. The Safety Action Plan's development evolved through a series of Committee meetings.

The first meeting provided an overview of the Safe Streets for All (SS4A) program and plan components, an explanation of the safety analysis process, outline of the engagement process connection points and tools, an overview of community considerations, and an overview of the project selection strategy and potential countermeasures. The second meeting reviewed detailed preliminary findings from the crash analysis. The project team identified focus areas based on feedback and local insights. Then, the project team guided the communities to adopt a Leadership Commitment resolution, setting a goal for each community to achieve the eventual goal of zero fatalities and serious injuries. The third meeting focused on the data collected from the public engagement to date and updates to the draft Safety Action Plan documents. During the fourth meeting, the discussions of the Committee centered on how the communities can use the Safety Action Plans, project identification, and potential improvements at the prioritized intersections and corridors on the High Injury Network (HIN).

Stakeholder Meetings

Twice during the planning process, the project team held one-on-one meetings with key stakeholders in the community to discuss elements brought up during the overall steering committee meetings. Local community engagement with the Safety Action Plan provided invaluable local knowledge and insight.

Meeting One

In July 2024, the first meeting introduced the project and set expectations for the project team and local leadership. The meeting included a request for previous plans and initiatives for community safety and future commitment goals to safety. The project team informed Stakeholders that the team would form Safety Committees following the first stakeholder meeting. The project team then



provided a more extensive discussion of the currently available data and facilitated a discussion focusing on local conflict areas.

Meeting Two

The second meeting, held in February 2025, focused on reviewing the crash analysis dashboard and getting feedback on the initial prioritized High Injury Network (HIN) segments and priority intersections. Data on the dashboard included the location of the crash, mode of transportation, directional analysis, manner of collision, roadway condition, light condition, and the updated human factor. The group then discussed edits to the presented HIN potential corridor strategies, priority intersections, and potential intersection strategies.

Safety Committee

The Clark County Safety Committee played an important role in developing both the Clark County Safety Action Plan. Participants provided feedback and insights into existing safety issues and concerns.

The Committee reviewed the draft prioritized HIN corridor segments, prioritized intersections, and potential safety countermeasures. The data provided included a preliminary ranking for each intersection and HIN corridor. It also included descriptions of potential countermeasures with their expected safety impacts. The project team provided maps of the HIN corridors and intersections for reference. The committee provided their priorities for both the HIN and the intersection list. They also provided feedback on what improvements they thought would be most appropriate and beneficial.

ACTIVITY B

SAFETY COUNTERMEASURES



Potential Segment Countermeasures





Countermeasure	Description	Safety Impact
Road Rightizing		
	Reconfigured lanes/pace within roadway based on number of vehicles per day to calm traffic speeds and improve safety for all users.	All Crashes ↓ 30%
Enhanced Curve Signing		
	Enhanced signs and striping can alert drivers to upcoming curves, the direction of curves, and sharpness of the curve.	Night-time Crashes ↓ 28%
Rumble Strips		
	Alerting drivers through vibration and sound, these tell drivers that their vehicle has left the travel lane.	CLRS ↓ 41.61% ELRS ↓ 13.61%
Center Turn Lanes		
	Provide a painted median that removes left-turning traffic (which is slowing or stopped) from the travel lanes.	All Crashes ↓ 24%

Figure 4-1: Meeting Handout: Potential Safety Countermeasures



Public Engagement

Survey One

The project team and committees conducted public engagement for the Safety Action Plan through an interactive online map. Residents within the KIPDA Region, including Clark County, could provide input by identifying specific pedestrian, bicycle, or vehicle concerns on a map. Participants could add comments, images, and review or react to the contributions of others. This input offered valuable community perspectives on local safety issues.

The survey was available between July 9, 2024, and October 18, 2024. A total of 1,047 comments were collected for the entire region, with 38 comments located within Clark County. Figure 4-4 provides an example view of the engagement map.

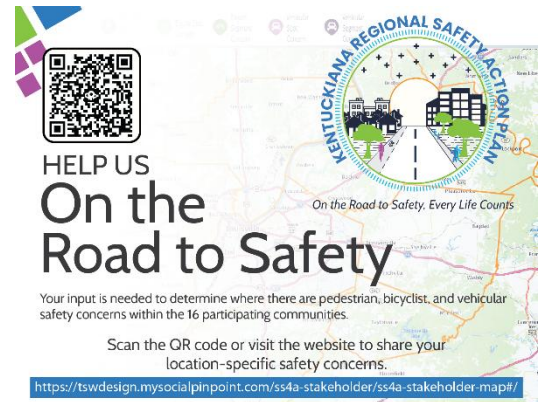


Figure 4-2: Promotional Flyer for Community Survey

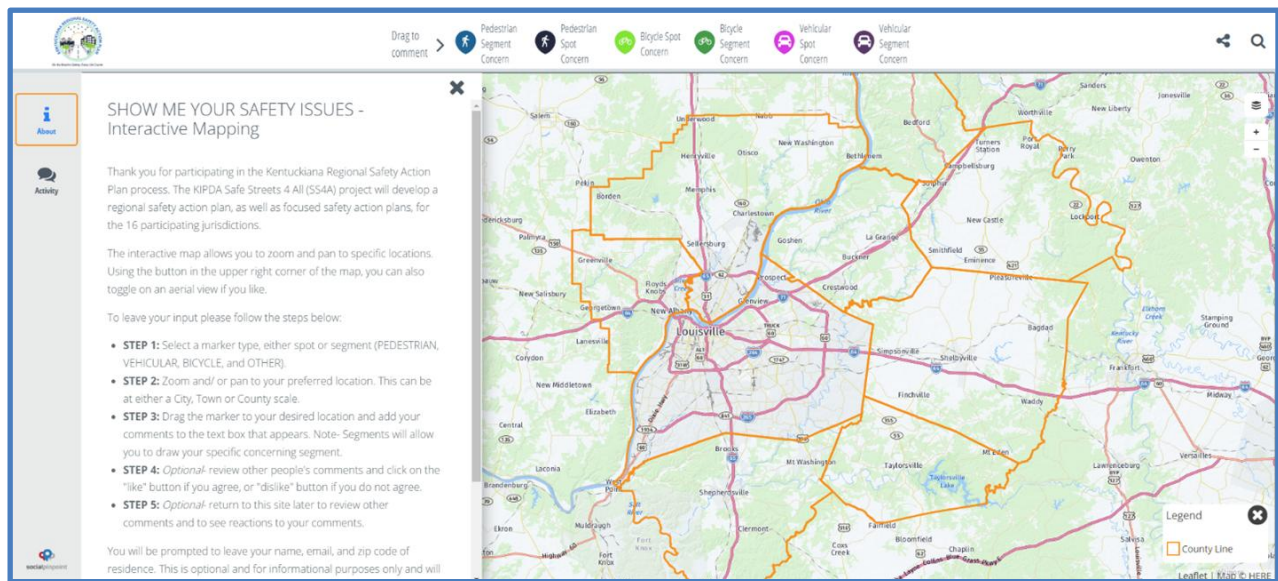


Figure 4-3: Social Pinpoint Online Engagement

Vehicular Safety Concerns

- Signalization
- Blind Turns/Hills
- Narrow roads
- Speed Limits
- Roadway Width

- Vegetation Viewshed
- Intersection Improvements
- Signage
- Turning lanes
- Interstate Access Points

Pedestrian Safety Concerns

- Adding sidewalks
- Adding crosswalks

Bicycle Safety Concerns

- Separated Protected Bike Lanes
- Revised Bike Routes

Other Safety Concerns

- All roads are too narrow for traffic levels
- School Bus Stops

The feedback collected from this platform played an integral role in identifying high-risk areas and shaping safety strategies so that the KIPDA Regional Safety Action Plan and the Clark County Safety Action Plan address the concerns and needs of the public. The project team compared comment locations to the fatalities (K) and suspected serious injuries (A) in the 2018-2022 crash data to compare the public perception of safety and data-driven crash densities. The following map shows the crash locations (blue) with the public comments (yellow). The locations where these two colors overlap (green-toned areas) represent locations where the perception of a safety issue is consistent with where severe crashes have occurred. An example of this is along the State Route 31 corridor near Sellersburg.

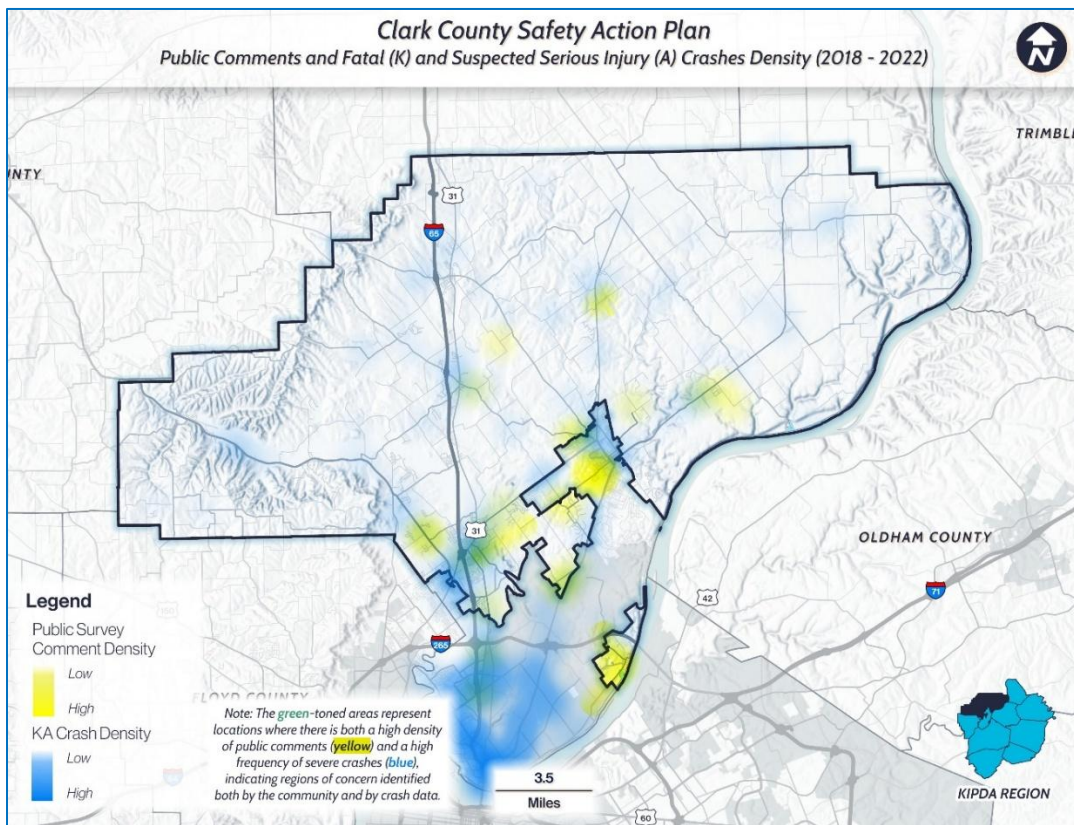


Figure 4-4. Spot Comments and Crash Density – Clark County, IN

Survey Two

The project team and committees conducted a second public survey for the Safety Action Plan. Residents within the KIPDA Region, including Clark County, could provide input on the results of



the crash data analysis and potential countermeasures to improve safety in each community. Participants could provide opinions on if the identified recommended strategies and safety improvements were appropriate for each community. Links to additional information about the recommended strategies were included for reference.

The survey was available between April 1, 2025, and April 30, 2025. A total of 524 responses were collected for the entire region, with 20 responses located within Clark County. The respondents prioritized improvements to CR 403, CR 311 (Charlestown Road), and US 31 (Indiana Avenue). They also prioritized upgrades to the intersection of CR 403/ Bethany Road. Highway 60 was mentioned as a roadway that should be considered, as was SR 62 and Utica Pike. Traffic safety related to River Ridge was discussed as a critical issue in the area.

Intersection and highway lighting was given strong support as were low cost intersection improvements, left turn lanes, center two-way left turn lanes, shoulder treatments, and reflective backplates at signals.

Active and Planned Projects

Transportation plans were reviewed to identify relevant Indiana Department of Transportation (INDOT) projects, KIPDA Transportation Improvement Program (TIP) and Metropolitan Transportation Plan (MTP) projects, and ongoing Jeffersonville projects. The first table and map show the current projects that have committed funds and are actively moving forward. The second table and map show the long-range planning projects.

Map No.	State ID	KIPDA ID	Name	Type	Sponsor	Description
T1	1802805	2549	CR 403 and Stacy Road Intersection Improvements	Intersection/ Interchange	Clark County	Intersection improvement including construction of a roundabout to improve safety at CR 403 and Stacy Road. Roundabout construction would include hot-mix asphalt (HMA) pavement, curb, gutter and storm sewer for drainage, and intersection lighting.
T55	2001595	3032	I-65 Small Structure Pipe Lining	Maintenance	INDOT	Small structure pipe lining on I-65, 3.54 miles north of SR 160.
T56	2001597	3033	I-65 Small Structure	Maintenance	INDOT	Small structure paved invert on I-65, 3.42 mile north of SR 160.
T57	2001598	3034	I-65 Small Structure	Maintenance	INDOT	Small structure paved invert on I-65, 0.67 mile north of SR 160.
T58	2001599	3142	I-65 Small Structure Pipe Lining	Maintenance	INDOT	Small structure pipe lining on I-65, 9.21 miles north of SR 311.
T59	2001600	3143	I-65 Bridge Widening at Brownstown Road	Roadway - Minor Widening	INDOT	Bridge widening on the southbound I-65 at Brownstown Road, 2.03 miles north of SR 160.
T60	2001601	3144	I-65 Bridge Widening at Brownstown Road	Roadway - Minor Widening	INDOT	Bridge widening on northbound I-65 at Brownstown Road, 2.03 mile north of SR 160.



Map No.	State ID	KIPDA ID	Name	Type	Sponsor	Description
T63	2001779	3146	SR 60 Drainage Ditch Correction	Maintenance	INDOT	Drainage ditch correction along SR 60 from SR 335 to 4.91 miles W of I-65 (Grant Line Road), various locations
T72	1900373	3155	SR 60 Intersection Improvement	Intersection/ Interchange	INDOT	Intersection improvement with added turn lanes at the intersection of SR 60 and Twinbrook Drive/Old SR 60 in Sellersburg.
T76	2200698	3156	SR 160 Bridge Deck Overlay	Maintenance	INDOT	Bridge deck overlay on SR 160 over I-65, 0.54 mile west of US 31.
T81	2200052	3054	SR 60 at St. Joe Road West Intersection Improvement	Intersection/ Interchange	INDOT	Intersection improvement with added turn lanes at SR 60 and St. Joe Road West.
T113	1593192	2314	US 31	Maintenance	INDOT	Construct a bridge deck overlay on US 31, 1.94 miles south of IN 160 over Caney Fork.
T120	1700111	2487	US 31	Maintenance	INDOT	Pavement replacement on US 31, 1.53 miles north of IN 60 (Foothill Road) to 3.28 miles north of IN 60.
T123	1600750	2492	I-65	Maintenance	INDOT	Replace superstructure on I-65, 2.68 miles south of IN 160 over Blue Lick Creek WBL.
T124	1902858	3025	Henryville Welcome Center Reconstruction	Maintenance	INDOT	Rest area modernization project in Henryville on I-65 north bound at mile marker 22.
T125	1600744	2493	I-65	Maintenance	INDOT	Replace superstructure on I-65, 2.68 miles south of IN 160 over Blue Lick Creek NBL.
T143	1600729	2587	I-65 Replace Superstructure	Intersection/ Interchange	INDOT	Replace superstructure on I-65, 01.81 miles south of IN 160 over Caney Fork North Bound Lane.
T144	1600733	2588	I-65 Bridge Deck Replacement	Intersection/ Interchange	INDOT	Bridge deck replacement on I-65, 01.81 mile south of IN 160 over Caney Fork South Bound lane.
T145	1801026	2590	IN 160 Small Structure	Roadway - Operations	INDOT	District small structure replacement on IN 160, east of IN 60 at Clark/Scott County Line.
T147	1700135	2616	Widening of I-65	Roadway - Major Widening	INDOT	Widen I-65 from 4 to 6 lanes from 0.25 miles south of Biggs Road (RP 16+42) in Clark County to Scottsburg (RP 28.88).
T152	1800375	2618	US 31 Intersection Improvement	Roadway - Minor Widening	INDOT	There is a pattern of rear-end crashes with a railroad running parallel to US 31. When a train is crossing Bud Prather Road (east approach), there is not a large amount of room to store vehicles and a southbound vehicle may not have a safe storage place.
T155	1802996	2719	US 31 Replace Superstructure	Maintenance	INDOT	Bridge superstructure replacement on US 31, 02.89 miles south of IN 160, US 31 @ Blue Lick Creek.
T156	1900343	2722	US 31 at Wolf Run	Maintenance	INDOT	Bridge replacement on US 31, 00.20 mile north of IN 160 at Wolf Run.
T157	2000339	2838	SR 60 WB Bridge Over I-65	Maintenance	INDOT	Construct a bridge thin deck overlay on SR 60 westbound bridge over I-65, 1.05 miles east of SR 311. This is a baby des with contract B-42896.
T158	2000341	2839	SR 60 EB Bridge Over I-65	Maintenance	INDOT	Construct a bridge thin deck overlay over the east bound bridge over I-65, 01.05 miles east



Map No.	State ID	KIPDA ID	Name	Type	Sponsor	Description
						of SR 311. This is a baby des to contract number B-42896.
T167	2000301	2845	US 31 Bridge Deck Overlay	Maintenance	INDOT	Bridge rehabilitation project on US 31 constructing a bridge deck overlay over Silver Creek, 00.87 miles south of SR 60.
T168	2000467	2846	SR 62 Hot-Mix Asphalt (HMA), PM	Maintenance	INDOT	Road rehabilitation project constructing a hot-mix asphalt (HMA) overlay, preventive maintenance on SR 62, 0.27 miles east of SR 3 to SR 362.
T193	2002049	2912	SR 60 Bridge Replacement Over Packwood Branch	Maintenance	INDOT	Bridge replacement on SR 60 over Packwood Branch, 02.47 miles east of SR 335.
T198	2001805	2911	SR 60	Maintenance	INDOT	Replace small structures and drainage in/around SR 60 at RP 58+32 which is 1.51 miles west of SR 311.
T199	2100834	2978	SR 60 Small Structure Pipe Lining Over East SR 335	Maintenance	INDOT	SR 60 small structure pipe lining 4.5 miles east of SR 335.
T206	2100800	2973	SR 60 Small Structure Replacement, 1.58 Miles West of I-65	Maintenance	INDOT	Small structure replacement over unnamed ditch 1.58 miles west of I-65.
T209	2100744	2971	SR 60 Bridge Deck Overlay Over Muddy Fork	Maintenance	INDOT	Bridge deck overlay over Muddy Fork 4.70 east of SR 335.
T215	2100048	2964	SR 60 Intersection Improvement, Roundabout	Intersection/ Interchange	INDOT	Intersection improvement going to a roundabout at SR 60 and CR 311.
T216	2100029	2972	SR 60 New Signal Installation	Intersection/ Interchange	INDOT	New signal installation on SR 60 at the intersection of St. Joe Road East.
T226	2101785	3162	Repair or Replace Lighting at Various Locations in Seymour District	Maintenance	INDOT	Replace or repair lighting with LED at various locations within the Seymour District.
T338	2200050	3194	SR 60 & Perry Crossing Road Intersection Improvement	Intersection/ Interchange	INDOT	Intersection improvement at SR 60 and Perry Crossing Road.
T390	2300823	0	SR 160 Bridge over Pigeon Roost Creek	Roadway - Operations	INDOT	Scour protection on SR 160 Bridge over Pigeon Roost Creek, 03.44 mi W I-65
T2	2300707	3323	SR 62 and Charlestown Pike	Maintenance	INDOT	Project is an intersection improvement that will take place over 6.25 miles of SR 62 from 0.39 mi. north of SR 265 to SR 3.
T404	2300848	3257	"I-65 SB Bridge Over		INDOT	Bridge thin deck overlay I-65 Bridge over Brownstown Rd, 02.03 mi N of SR 160
T405	2300847	3258	Brownstown Rd"		INDOT	Bridge thin deck overlay I-65 NB Bridge over Brownstown Rd, 02.03 mi N of SR 160
T406	2300846	3259	"I-65 NB Bridge Over		INDOT	Bridge Thin Deck Overlay on I-65 Hebron Church Rd Bridge over I-65 NB/SB, 01.27 mi. N of SR 160
T407	2300845	3260	Brownstown Rd"		INDOT	Bridge Thin Deck Overlay on I-65 Biggs Road Bridge over I-65, 02.51 mi S of SR 160



Map No.	State ID	KIPDA ID	Name	Type	Sponsor	Description
T408	2300844	3261	I-65 Hebron Church Rd		INDOT	Bridge Thin Deck Overlay on I-65 Ebenezer Church Road Bridge over I-65 NB/SB, 04.46 mi S of SR 160
T409	2300988	3262	I-65 Biggs Rd		INDOT	Small Structure Paved Invert on I-65 0.06 mi N of SR 311 at the intersection with the I-65 NB ramp
T410	2300986	3263	"I-65 Ebenezer Church		INDOT	Small Structure Pipe Lining 5.66 mi N of SR 311 on I-65
T428	2301023	3281	Rd"		INDOT	Small Structure Replacement on SR 160 Bridge over Guernsey Creek, E of SR 60. This will be constructed in FY 2028.
T429	2201590	3255	I-65 Small Structure		INDOT	Small structures and drains constructions on SR 60 1.50 mile N of SR 311 for 4.52 miles
T449	2301706	3284	I-65 Small Structure		INDOT	Sidewalk improvements on US 31, 1.53 miles north of IN 60 (Foothill Road) to 3.28 miles north of IN 60. This project
T511		3306	SR 160	Bicycle Pedestrian	Radius Indiana	This is a shared-use path and recreational trail facility running on the abandoned CSX and Monon railroad corridor from the Floyd County / Clark County line north through Clark, Washington, Orange, and Lawrence Counties and ending at Yockey Road in Lawre
T535	2300823	3247	SR 60 Small Structures and Drains Construction		INDOT	Scour Protection on SR 160 Bridge over Pigeon Roost Creek, 03.44mi W I-65
T538	2300292	3321	US 31 - Sidewalk Improvements		INDOT	The purpose of this project is to maintain or improve the current condition ratings of this large culvert at .32mi W SR 311 and will extend the life of the structure.
T4	2401157	3324	Monon South Trail	Maintenance	INDOT	SR 3 Bridge over Pleasant Run, 1.01 miles N o SR 62. Bridge Deck Overlay.
T547		3331	SR 160 Bridge over Pigeon Roost Creek		Town of Sellersburg	Installation of safety curb on both sides of the roadway. Starting point on Allentown Road approx 830" South of Perry Crossing Rd. Includes 4 driveway culver replacements.
T548	2401687	3332	SR 60 Over Tributary to Sugar Creek		Town of Sellersburg	Installation of safety curb on S Penn Ave, 230" North of US-31. Project continues for 405" North along East side of Penn Ave. Project ends 636" North of US 31.
T549	2401688	3333	SR 3 Bridge Deck Overlay		Town of Sellersburg	Installation of Lighting along Camp Run Parkway and American Way
T585	2401479	3396	Allentown Road Safety Curb		Indiana Department of Transportation (INDOT)	Small structure and drain repair/replacement on SR 3, 4.85 miles N of SR 62.
T586	2401349	3397	Penn Ave Safety Curb		Indiana Department of Transportation (INDOT)	Repair/replacement of culvert on SR 60, 5.38 miles E of SR 335.

Table 4-1. Current Clark County TIP Projects



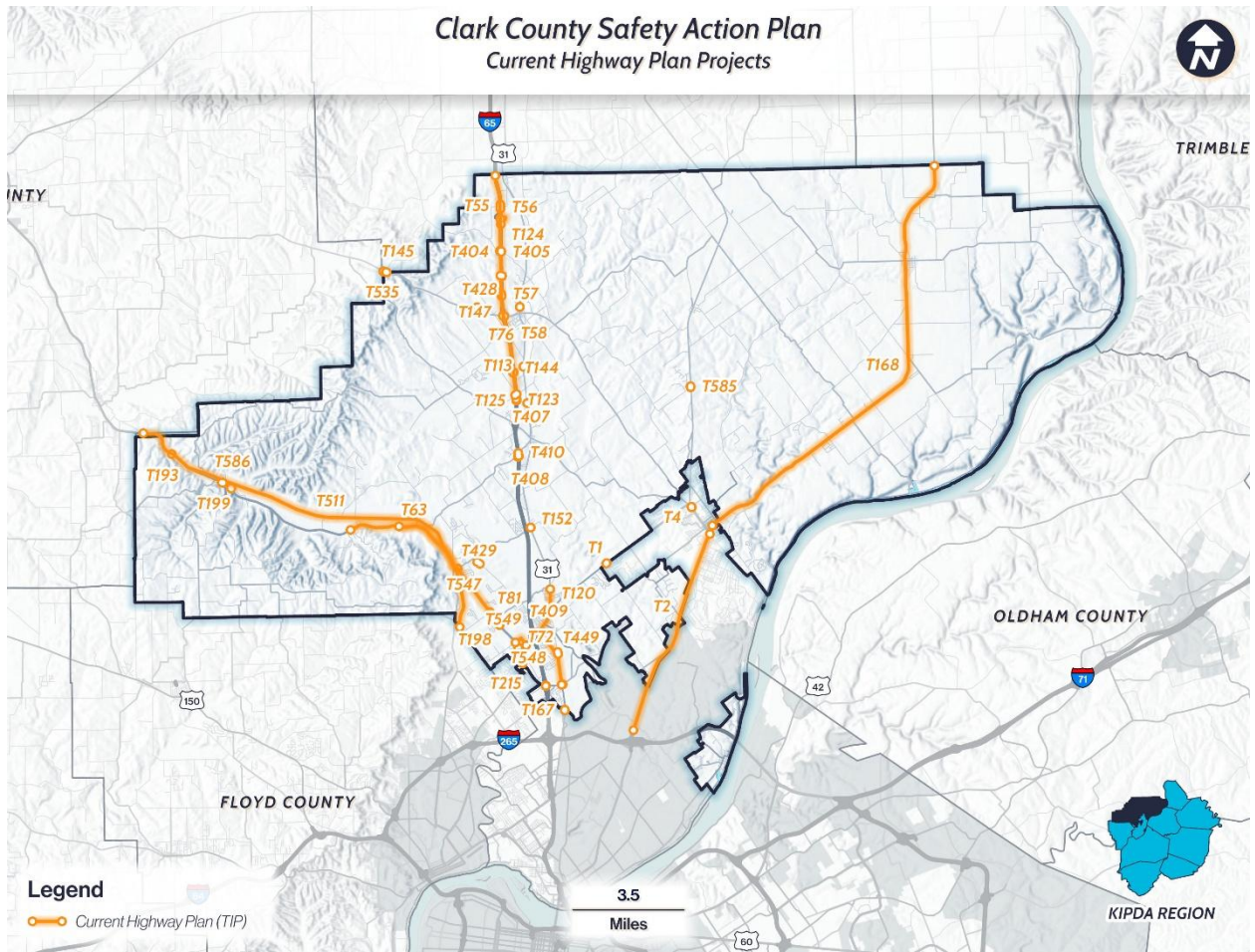


Figure 4-5. Current Clark County TIP Projects



Map No.	KIPDA ID	Name	Type	Sponsor	Description
M6	3194	SR 60 & Perry Crossing Road Intersection Improvement	Intersection/ Interchange	INDOT	Intersection improvement at SR 60 and Perry Crossing Road.
M1	2549	CR 403 and Stacy Road Intersection Improvements	Intersection/ Interchange	Clark County	Intersection improvement including construction of a roundabout to improve safety at CR 403 and Stacy Road. Roundabout construction would include hot-mix asphalt (HMA) pavement, curb, gutter and storm sewer for drainage, and intersection lighting.
M31	3065	Charlestown-Jeffersonville Pike Improvements	Roadway - Minor Widening	Clark County	Repave and widen the existing travel lanes from 8 to 10 feet on Charlestown-Jeffersonville Pike lanes from Highway 62 to the Salem-Noble Road. Paved shoulders will be provided and right of way for the future development of sidewalks will be secured. Inte
M2	3066	CR 403 Widening	Roadway - Major Widening	Clark County	Widen CR 403 from Greenleaf Road to Gospel Road from two to four lanes with left turn lanes and considerations for dedicated bike lanes.
M65	3143	I-65 Bridge Widening at Brownstown Road	Roadway - Minor Widening	INDOT	Bridge widening on the southbound I-65 at Brownstown Road, 2.03 miles north of SR 160.
M66	3144	I-65 Bridge Widening at Brownstown Road	Roadway - Minor Widening	INDOT	Bridge widening on northbound I-65 at Brownstown Road, 2.03 mile north of SR 160.
M140	3025	Henryville Welcome Center Reconstruction	Maintenance	INDOT	Rest area modernization project in Henryville on I-65 north bound at mile marker 22.
M151	2616	Widening of I-65	Roadway - Major Widening	INDOT	Widen I-65 from 4 to 6 lanes from 0.25 miles south of Biggs Road (RP 16+42) in Clark County to Scottsburg (RP 28.88).
M157	2618	US 31 Intersection Improvement	Roadway - Minor Widening	INDOT	There is a pattern of rear-end crashes with a railroad running parallel to US 31. When a train is crossing Bud Prather Road (east approach), there is not a large amount of room to store vehicles and a southbound vehicle may not have a safe storage place.
M180	2964	SR 60 Intersection Improvement, Roundabout	Intersection/ Interchange	INDOT	Intersection improvement going to a roundabout at SR 60 and CR 311.
M259	2775	Utica Ridge Road	Roadway - New	Utica	Install new connector road to lessen travel miles of east Utica residents, eliminate through traffic in central part of town, providing two lanes parallel to Highway 265 for local traffic.



Map No.	KIPDA ID	Name	Type	Sponsor	Description
					Right-of-way is preliminarily estimated to be 80 feet with 11-foot
M261	539	Salem-Noble Road	Roadway - Operations	Clark County	Reconstruct Salem-Noble Road as a 2 lane (no additional lanes) road from IN 62 to IN 403.
M297	3177	Jeffersonville-Charlestown Pike Improvements	Bicycle/ Pedestrian	Clark County	The Jeffersonville-Charlestown Pike project begins at the intersection of Jeffersonville-Charlestown Pike and Salem Noble Road and extend 0.8 miles to the intersection with Highway 62. The project will extend the Jeffersonville Project that begins at Uti
M298	3178	Salem-Noble Road From Highway 62 to Jeffersonville-Charlestown Pike	Roadway - Minor Widening	Clark County	The project begins at the intersection of Highway 62 and Salem-Noble Road and extends to the intersection of Salem-Noble Road and Jeffersonville-Charlestown Pike approximately 0.35 miles. The project is a part of the Clark County Salem-Noble Road project
M299	3179	Memphis Truck Stop	Maintenance	Clark County	Truck stop entrance along Memphis Blue Lick is very confusing and difficult to maneuver. Improvements and entrance restrictions are planned to improve safety and provide safe access to trucks and vehicular traffic.
M300	3180	Henryville Sidewalks	Bicycle/ Pedestrian	Clark County	The existing sidewalks in the Henryville area are crumbling and do not currently meet ADA requirements. Ramps will be added at intersections and slopes will be adjusted to help meet current ADA requirements. Extending sidewalks from the Henryville High S

Table 4-2. Current Clark County MTP Projects



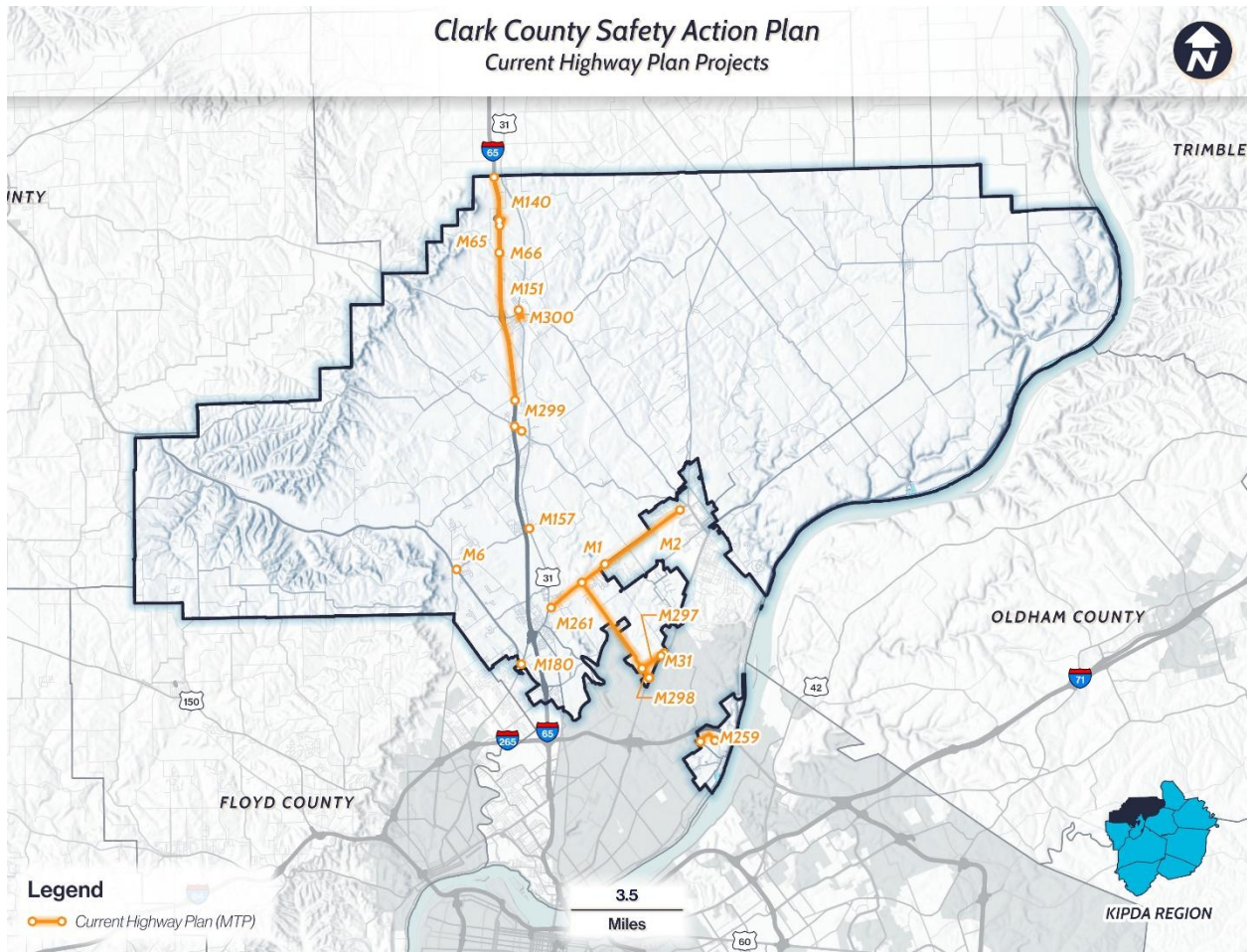


Figure 4-6. Current Clark County MTP Projects



Community Considerations

The Safety Action Plan analyzed socio-economic and demographic data together with the crash data to determine if there are important trends, findings, or considerations related to specific areas or communities within the county.

Areas of Persistent Poverty

The Safe Streets and Roads for All 2025 Notice of Funding Opportunity defines Areas of Persistent Poverty (APP) based on the Infrastructure Investment and Jobs Act (IIJA, 49 U.S.C. 6702(a)(1)). It also states that this applies to the definition of Underserved Communities. Based on this definition, a project is located in an Area of Persistent Poverty if:

1. *The County in which the project is located consistently had greater than or equal to 20% of the population living in poverty in all three of the following datasets: (a) the 1990 decennial census; (b) the 2000 decennial census; and (c) the most recent (2021) Small Area Income Poverty Estimates; OR*
2. *The Census Tract in which the project is located has a poverty rate of at least 20% as measured by the 2014-2018 5-year data series available from the American Community Survey of the Bureau of the Census; OR*
3. *The project is in any territory or possession of the United States.*

Clark County has an area that is designated as an Area of Persistent Poverty. It is important to consider these areas when planning safety projects as they are often areas of underinvestment in transportation safety infrastructure. It is also important to consider them because they tend to be overrepresented with regard to crashes and especially high severity crashes. This is the case in the APP designated portion of Clark County.

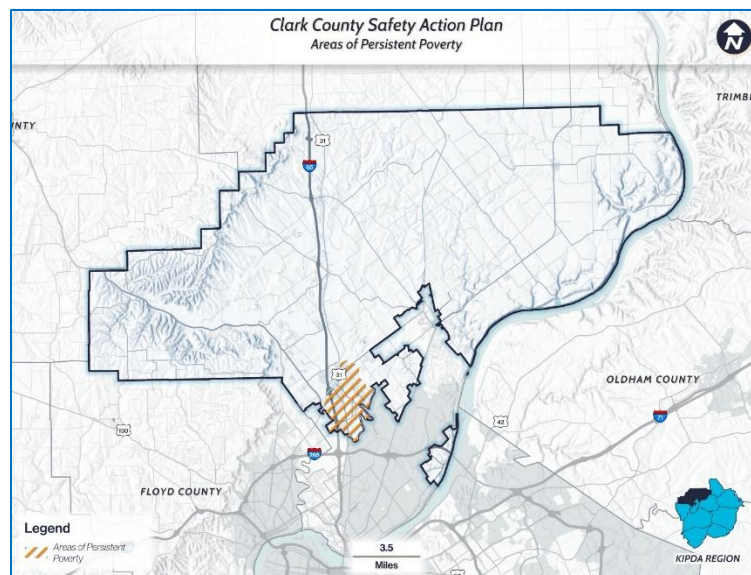


Figure 4-7. Areas of Persistent Poverty



Community Demographic Summary

The Safety Action Plan analyzed census tract areas, population, and crash occurrences within communities. The following four populations were analyzed using the United States Census American Survey (ACS). The 2022 ACS five-year table was used.

Elderly Population

Approximately 16.3% of the population of Clark County is 65 or older. Higher percentages of elderly residents live near Clarkstown and New Washington, as shown below. Portions of the county with high elderly populations should consider tailored roadway safety countermeasures. Oversized signage, lighting, pedestrian refuge islands, leading pedestrian intervals (LPIs), and raised crosswalks are some of the countermeasures that benefit elderly populations.

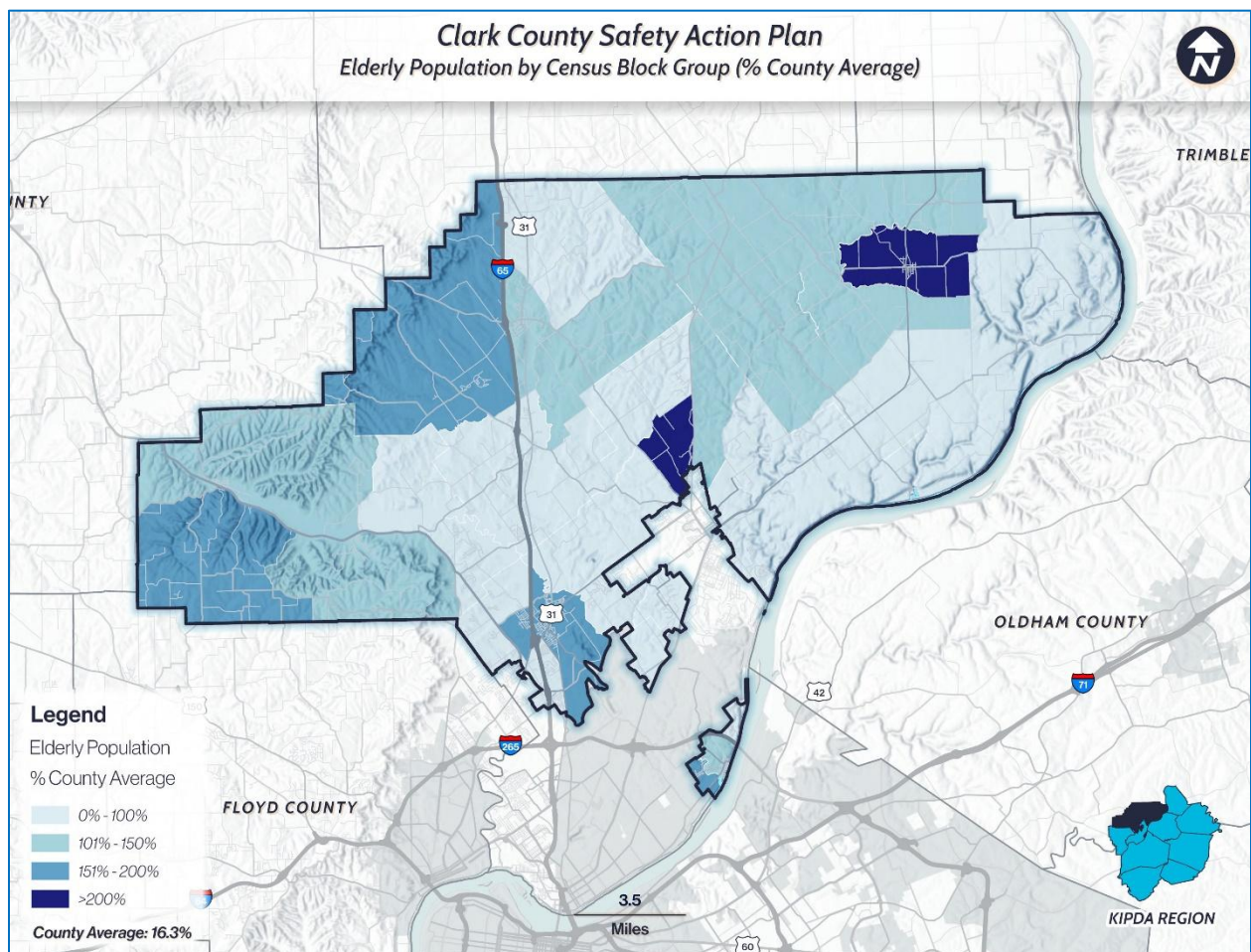


Figure 4-8. Elderly Population by Census Block Group

Population Impacted by Disability

In Clark County, approximately 27.5% of households have one or more occupants with a disability. Similar to elderly populations, there are safety countermeasures available that support disabled populations. Many of these relate to pedestrian facilities such as curb ramps.

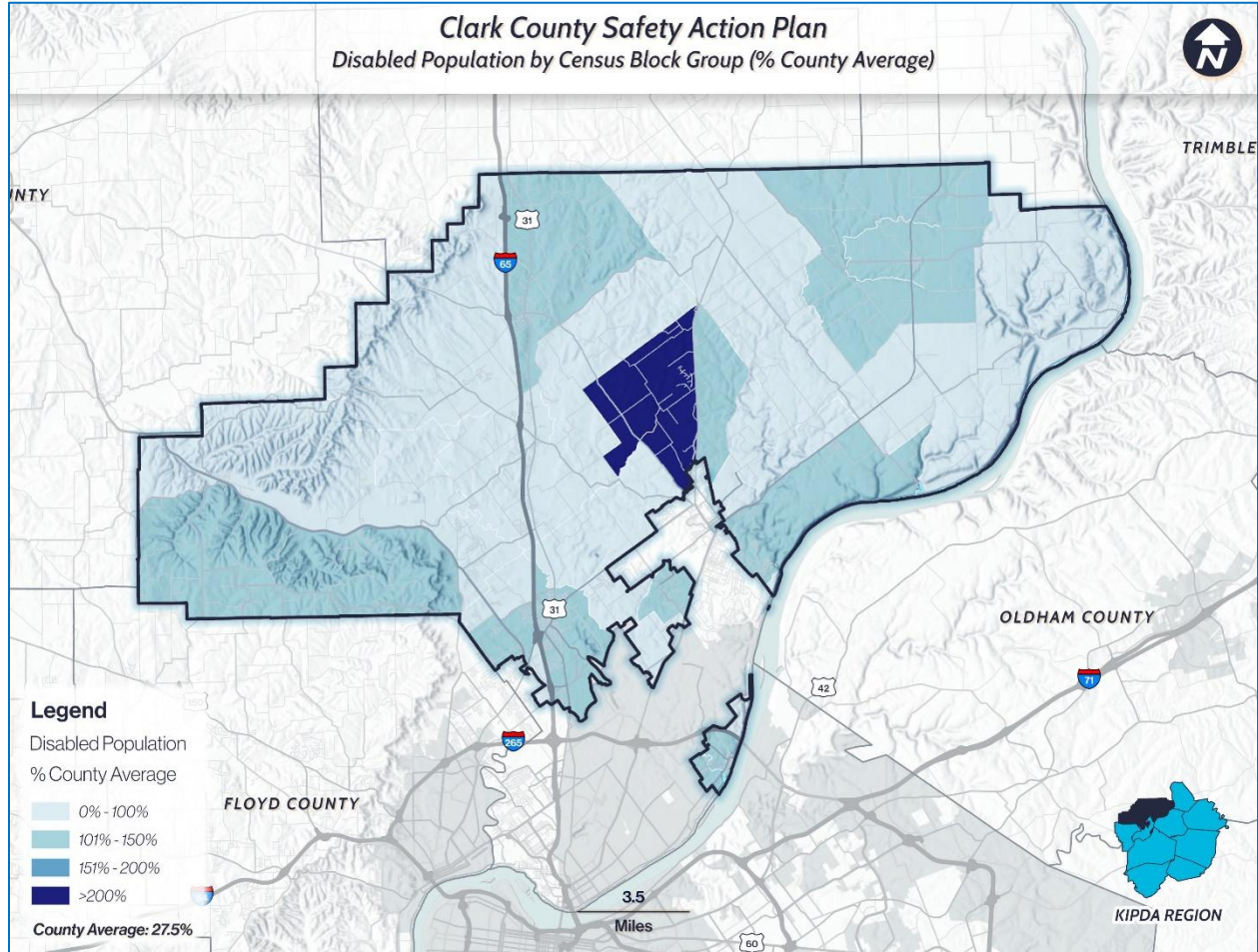


Figure 4-9. Disabled Population by Census Block Group



Population Experiencing Poverty

Approximately 9.7% of the population are at or below the poverty line with many of those residents living in the Census Block Group areas noted in the figure below. Areas with high poverty rates are often areas of underinvestment with regard to infrastructure and safety.

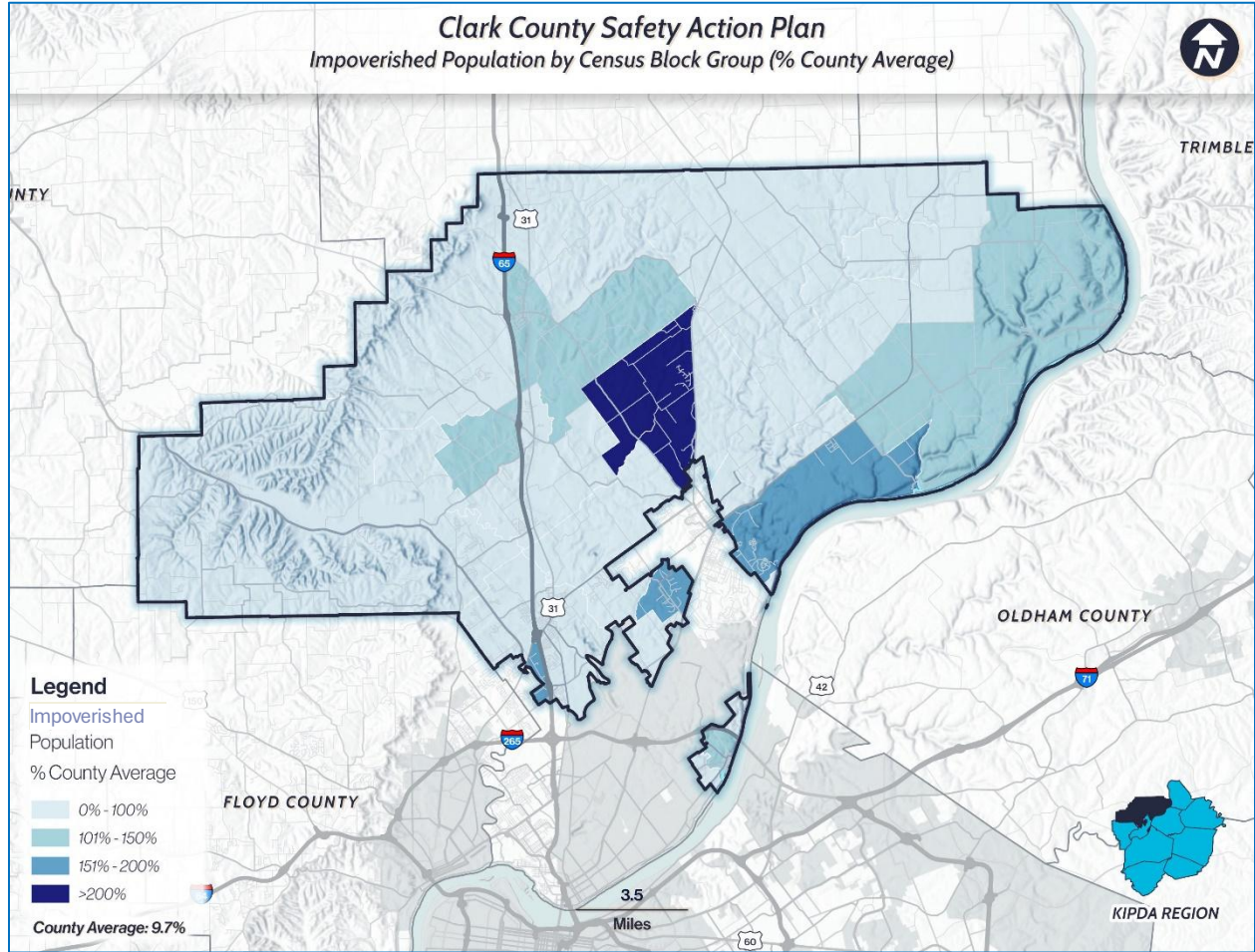


Figure 4-10. Impoverished Population by Census Block Group



Minority Population

Approximately 15.4% of the population of Clark County identifies as non-white as illustrated in the figure below.

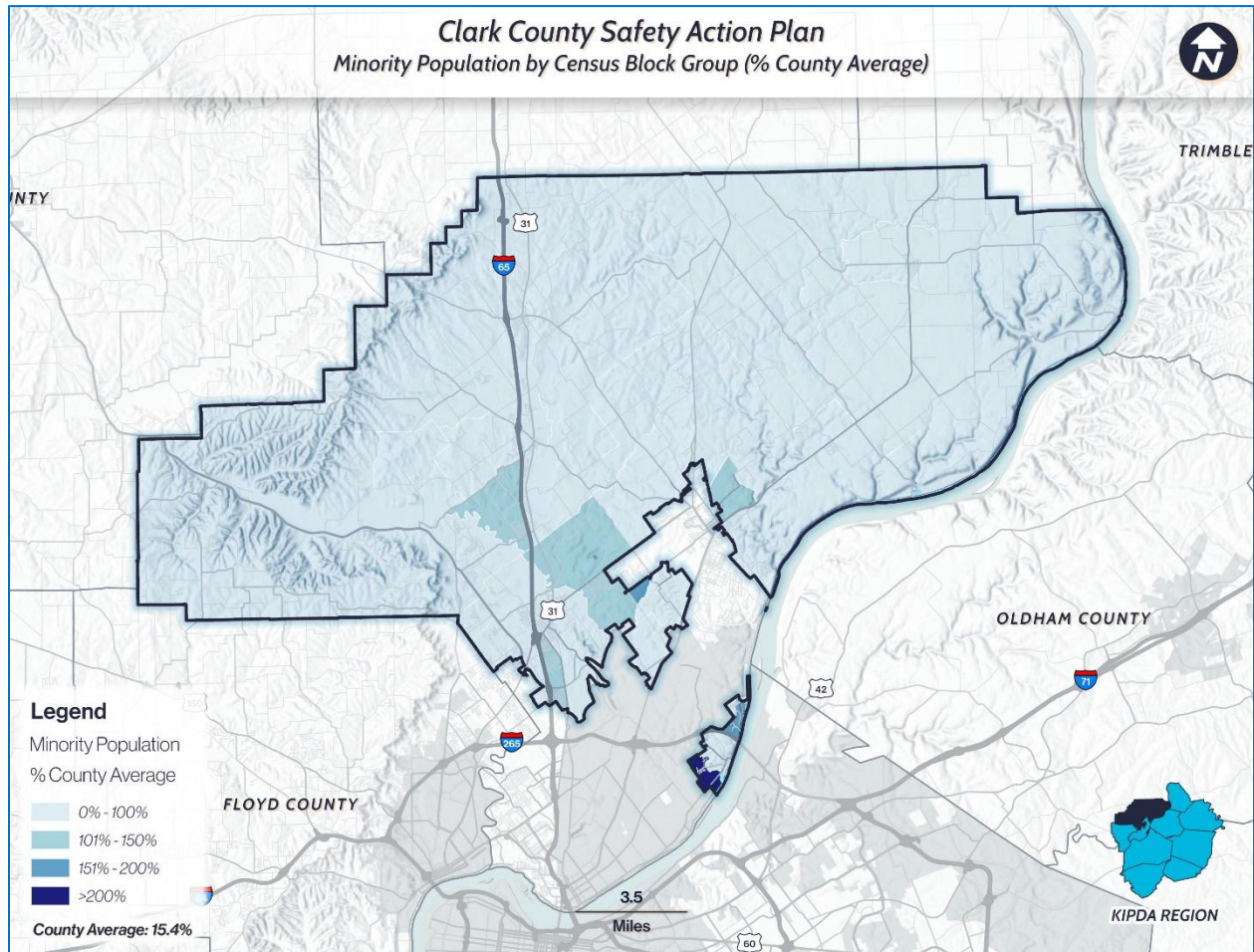


Figure 4-11. Minority Population by Census Block Group



5. Policy and Process Changes

A comprehensive review of Clark County's existing policies, plans, guidelines, and standards has identified key opportunities to enhance transportation safety. The County aims to elevate safety as a priority while also creating a more accessible transportation network for all users.

Comprehensive Plan

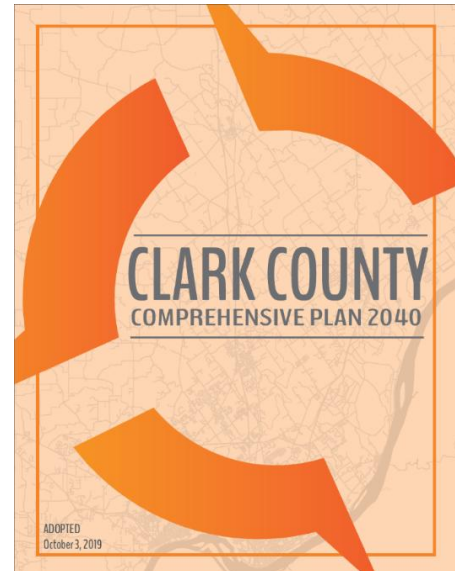
Link: [Clark County Comprehensive Plan 2019](#)

The Clark County Comprehensive Plan is a planning document prepared and adopted by the citizens and officials of Clark County and its cities. This plan is intended to provide a long-range guide for the public and private sectors of the County.

The overall transportation goals of this comprehensive plan is to promote the most efficient and safe movement of people and goods throughout the transportation system. To achieve this goal, the plan provides two transportation goals:

Goal: Improve Accessibility to employment centers and schools.

Goal: Increase connectivity in Clark County by planning for safe and maintained transportation routes.



Future Comprehensive Plan Considerations

It is recommended that future comprehensive plans and/or amendments consider the following:

Implement Context Sensitive and Active Transportation Street Policies: To improve how processes prioritize safety, it is recommended to develop and context-sensitive street guidelines that support safety, connectivity, comfort, and accessibility for all users. These guidelines would be applied to new and existing road projects, ensuring that streets are designed to accommodate pedestrians, cyclists, motorists, and transit riders.

Promote Safe and Accessible Transportation for All: Ensure transportation improvements address the needs of all community members. Conduct periodic community-focused analyses to identify and mitigate transportation safety and access hot spots.



Unified Development Ordinance – October 2024

Link: [Clark County Zoning Ordinance](#)

The Unified Development Ordinance outlines regulations and requirements based on the adopted comprehensive plan. The plan considers land uses, growth patterns, and the specific characteristics of different districts. This Code sets rules that align with the goals, objectives, and policies of the approved Comprehensive Plan.

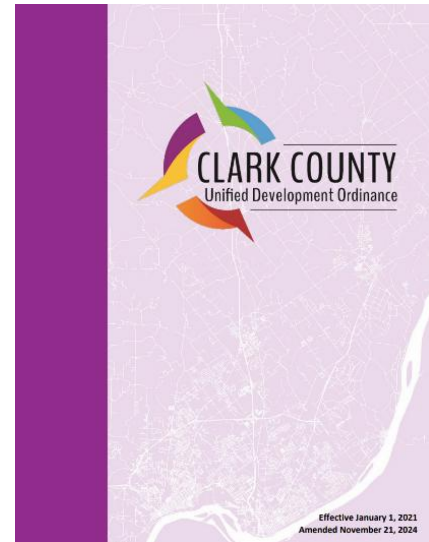
Development Ordinance Future Considerations

These recommendations include guidance for future plan amendments that support eliminating road deaths and serious injuries.

Traffic Calming Measures: Consider updating regulations to include guidelines for traffic calming measures, such as roundabouts, speed humps, chicanes, and raised intersections and crosswalks in residential subdivisions to reduce vehicle speeds and enhance safety for pedestrians and bicyclists. Implementing traffic calming strategies will reduce the risk and severity of crashes.

Active Transportation Infrastructure: Consider updating active transportation infrastructure requirements for new developments within the county to promote safe access is provided for all vulnerable road users. Sidewalks should meet accessibility standards and provide safe crossings at all intersections. Consider incorporating dedicated pathways or multi-use trails in all new developments and requiring connectivity to existing pedestrian and active transportation networks.

Traffic Safety Analysis and Improvements: Consider including language that requires a traffic safety analysis to demonstrate that the development or subdivision is not significantly impacting safety on nearby roads or intersections. Language could also be integrated into zoning and subdivision ordinances to provide for the analysis of, and recommendations for, potential countermeasures to address any potential impacts.



6. Strategy and Project Selection

The development of strategies and project selection is based on a comprehensive analysis of historical crash data, best practices implementation, and active engagement with stakeholders and the community. The reactive approach involves a detailed examination of crash data by frequency, severity, and location to identify the areas needing improvement the most. The following sections detail the methodology for prioritizing projects and strategy selection.

Prioritization

The County aims to eliminate fatal and serious injury crashes; therefore, crash severity is critical in prioritizing projects and strategy selection. Comprehensive crash costs combine the economic cost of a crash and monetized pain and suffering. The Federal Highway Administration (FHWA) developed national crash costs to use as default crash unit values ([Crash Costs for Highway Safety Analysis](#)), that states and municipalities can adjust based on regional differences. Table 6-1 provides the comprehensive cost per crash adjusted to the KIPDA region as prescribed in the FHWA [Crash Costs for Highway Safety Analysis](#).

Severity	Severity Description	Comprehensive Cost Per Crash (2022 Dollars)
K	Fatal Injury	\$10,175,024
A	Suspected Serious Injury	\$594,471
B	Suspected Minor Injury	\$182,274
C	Possible Injury	\$116,572
O	No Apparent Injury	\$12,220

Table 6-1 KIPDA Comprehensive Crash Cost

Equivalent Property Damage Only Method

The Equivalent Property Damage Only (EPDO) is a method of weighting crashes by severity using the equivalent number of No Apparent Injury Crash costs, also called Property Damage Only (PDO) crash costs, to develop the weights. The following table shows the comprehensive costs and EPDO value breakdown by crash severity.



Severity	Comprehensive Cost Per Crash (2022 Dollars)	EPDO Weighted Value
K	\$10,175,024	833
A	\$594,471	49
B	\$182,274	15
C	\$116,572	10
O	\$12,220	1

Table 6-2. KIPDA EPDO Crash Value

As shown in Table 6-2, the comprehensive cost of a fatal crash (K) compared to the other crash severities is significant. The EPDO method, however, may overly emphasize fatal crashes, potentially skewing focus towards areas with fewer crashes. To address this imbalance, analysts used a modified EPDO (MEPDO) approach to equally consider both fatal and suspected serious injury crashes by blending their values based on their comprehensive costs and frequency.

Table 6-3 presents a breakdown of the MEPDO, providing a more balanced evaluation while maintaining a focus on fatal and suspected serious injury crashes. The crashes for the entire KIPDA region were used to calculate weighted average costs and MEPDO.

Severity	Crashes	Comprehensive Cost Per Crash (2022 Dollars)	Severity	Weighted Average Costs	MEPDO Value
K	618	\$10,175,024	KA	\$2,224,193	182
A	3,015	\$594,471			
B	12,841	\$182,274	B	\$182,274	15
C	11,770	\$116,572	C	\$116,572	10
O	113,611	\$12,220	O	\$12,220	1

* KA Cost = $(618 * \$10,175,024 + 3,015 * \$594,471) / (618 + 3,015) = \$2,224,193$
** KA Value = $\$2,224,193 / \$12,220 = 182$

Table 6-3. KIPDA MEPDO Crash Value



Reactive Approach

Methodology

The reactive approach for analyzing crashes includes joining the crash data with roadway data. The team gathered Indiana geographic information system (GIS) files with roadway and traffic data. The GIS roadway layer was divided into segments and intersections. Analysts combined the crash data with the GIS information to facilitate detailed analysis by identifying the location of the crashes by road segment and intersection.

After joining the crashes to the roadway segments and intersections, analysts applied the MEPDO method to generate lists of prioritized intersections and corridors.

The lists are for planning purposes only. The intersections and corridors identified could potentially benefit from safety countermeasures; however, it is not necessary to make improvements in the listed order. In addition, there may be other high priority locally identified safety projects. Therefore, these lists provide high-level planning guidance for future agency consideration.

Intersections

Enhancing safety at intersections is vital for achieving a Safe System Approach. Evaluating roadway features such as geometrics and traffic operation and control is necessary for eliminating fatal and serious injury crashes. Intersections are deliberate points of interaction where vehicles and non-motorized users converge, significantly impacting the overall safety performance of the transportation system. These conflict points are historically where fatal and serious injury crashes occur. Therefore, intersection projects present unique opportunities to incorporate Safe System principles into planning, design, and operational decisions. Improving intersections can play a significant role in eliminating fatal and serious injury crashes.

Prioritized Intersections

Clark County experienced 87 fatal and suspected serious injury crashes at intersections, representing 52% of all fatal and suspected serious injury crashes. These crashes occurred at both signalized and unsignalized intersections. Both types of intersections contain multiple conflict points and offer significant opportunities to enhance safety for all users. MEPDO was calculated and ranked for each intersection.

Table 6-4 lists the top 20 intersections by MEPDO. These intersections account for 37 of the fatal and suspected serious injury crashes at intersections.



Ranking	Intersection	K	A	B	C	O	KA	TOTAL	MEPDO	Local Priority
1	CR-403 & Bethany Rd	2	2	5	0	21	4	30	824	2
2	US-31 & Memphis Bluelick Rd	1	2	6	1	13	3	23	658	
3	SR-62 & Salem Noble Rd	0	2	6	8	60	2	76	590	3
4	SR-60 & W St. Joe Rd	0	2	3	3	6	2	14	443	2
5	Old SR-60 & CR-311	0	2	3	1	16	2	22	434	2
6	CR-403 & Salem Noble Rd	0	2	2	1	11	2	16	414	1
7	CR-403 & Greenleaf Rd & St No. 23	0	2	1	0	32	2	35	411	1
8	SR-62 & Decker Ln	0	2	2	0	3	2	7	397	3
9	SR-60 & Hunter Station Rd	0	2	0	1	13	2	16	387	2
10	E Utica St & Penn St	0	2	0	1	9	2	12	383	
11	S Indiana Ave (US-31) & Penn St	0	2	0	0	11	2	13	375	
12	SR-60 & Tall Pine Ln	0	2	0	0	1	2	3	365	2
13	New Washington Bethlehem Rd & Harn Rd	0	2	0	0	1	2	3	365	
14	New Washington Bethlehem Rd & Gill Rd	0	2	0	0	0	2	2	364	
15	S Indiana Ave (US-31) & CR-311	0	1	3	3	38	1	45	293	3
16	S Indiana Ave (US-31) & W Utica St	0	1	3	1	32	1	37	268	
17	SR-60 & Wilson Switch Rd	0	1	4	0	10	1	15	252	2
18	SR-62 & Paul Garrett Ave	0	1	3	1	13	1	18	249	3
19	CR-311 & I-65 SB Off Ramp	0	1	1	1	38	1	41	244	3
20	SR-60 & Bennettsville Rd	0	1	3	0	15	1	19	242	2

Table 6-4. Prioritized Intersections by MEPDO



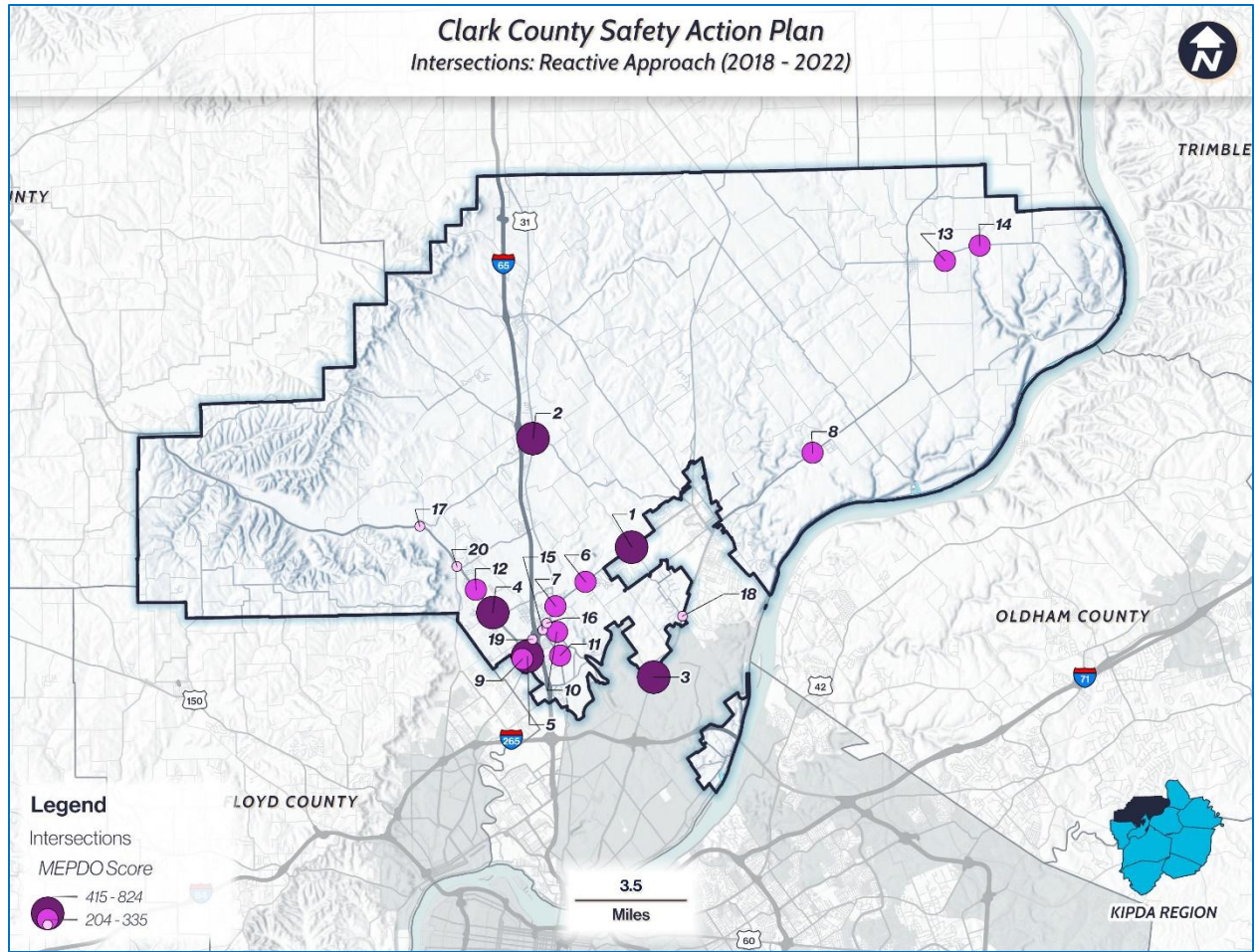


Figure 6-1. Intersections: Reactive Approach Map



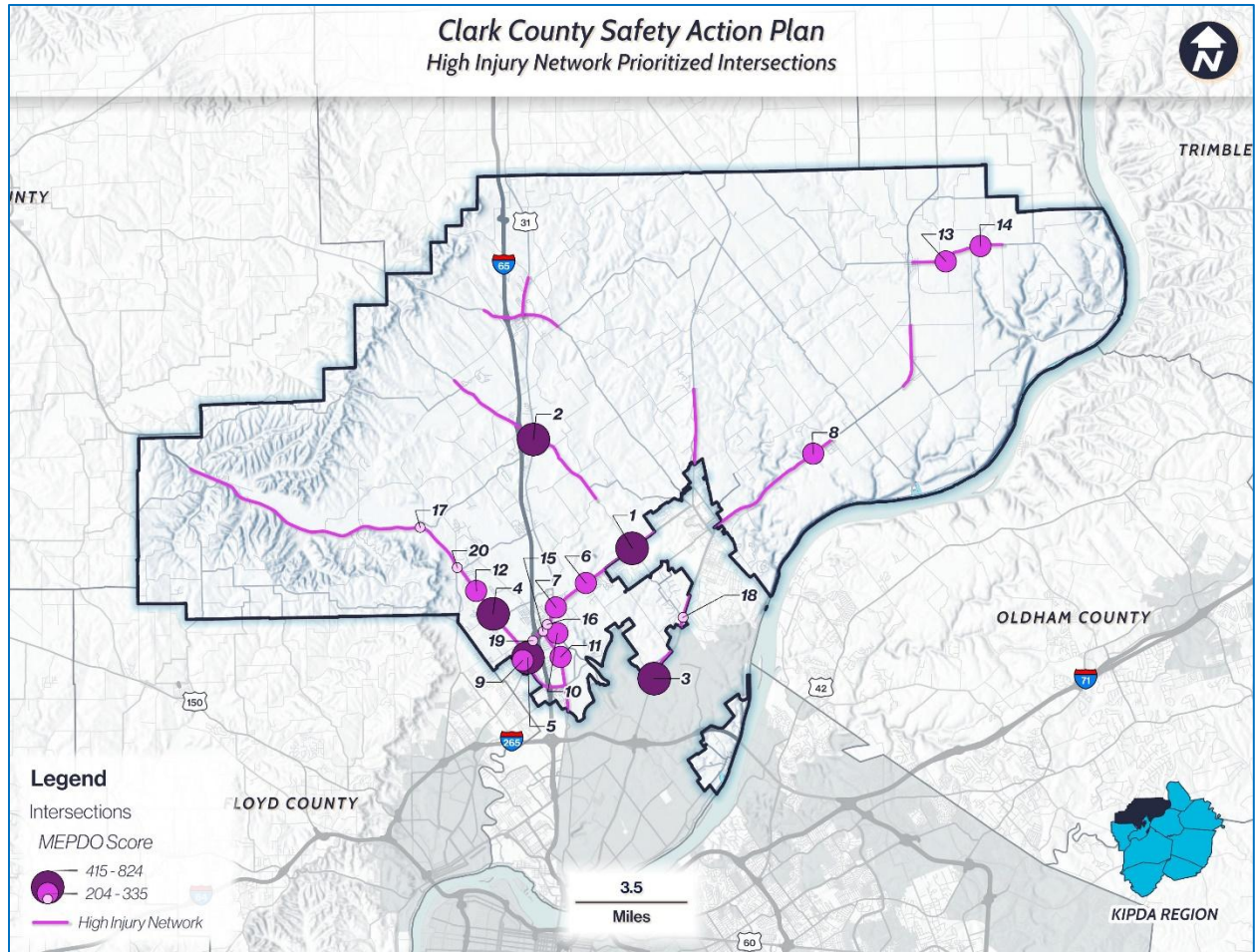


Figure 6-2. Intersections Prioritized by MEPDO Map



High Injury Network and Prioritized Corridors

A High Injury Network (HIN) is a data-driven approach to identify roadway segments that experience a disproportionately high number of fatal and serious injury crashes. This approach enables communities to focus resources on improving safety along those high-priority corridors. Clark County's HIN was developed using detailed crash data analysis and GIS mapping to pinpoint corridors with the highest concentration of severe crashes. Table 6-5, Figure 6-3, Figure 6-4, and Figure 6-5 illustrate Clark County's HIN, highlighting its overlap with locations of fatal and serious injury crashes, and prioritized intersections based on MEPDO analysis.

Ranking	Route	Begin	End	Length (mile)	MEPDO	MEPDO/mile
1	Charlestown Rd (Hwy-311)	Hometown Rd	S Indiana Ave (US-31)	1.37	2363	1725
2	Old Indiana 403 (CR-403)	N Indiana Ave (US-31)	County Limits	3.80	2716	715
3	SR 60	Grant Line Road (CR-111)	American Way / Poindexter Ln	3.12	2092	670
4	E Utica St	N Indiana Ave (US-31)	Bean Rd / Utica-Sellersburg Rd	1.30	868	668
5	W Water St (SR 60)	Star Valley Way	Dow Knob Rd	1.87	1204	644
6	E 10th St (SR 62)	Salem Rd	20th St / Lentz Ave	2.62	1584	604
7	Blue Lick Rd	Battle Knob Rd	Biggs Rd	1.37	759	554
8	Highway 31 / S Indiana Ave (US-31)	Diamond Heights	Hwy 311 / Prather St	2.40	1323	551
9	Indiana Ave (US-31)	Hwy 311 / Prather St	Weber Rd	1.55	822	531
10	New Washington Bethlehem Rd	SR 62	Gill Rd	2.50	1299	519
11	N Ferguson St (US-31)	Colonels Way (SR 160)	Brownstown Rd	1.20	623	519
12	Ohio River Scenic Byway (SR 62)	Monroe St	Decker Ln	3.74	1927	515
13	SR 160	Forestry Rd	Ferguson St (US-31)	0.80	365	457
14	SR 160	Speith Rd	Forestry Rd	1.28	541	423
15	Charlestown New Market Rd	Marion Martin Rd	Zimmerman Rd	1.65	611	370
16	Grant Line Road	W St Joe Road	SR 60	1.80	655	364
17	W Water St (SR 60)	W Main St	Star Valley Way	2.00	725	362
18	SR 3	Crescent Rd	Leon Prall Rd	3.00	1043	348
19	SR 60	American Way / Poindexter Ln	US 31	2.28	758	333
20	Chas Memphis Rd	US 31	Stoney Point Rd	2.43	775	319
21	Vienna Rd	Edgewood Dr	Jack Teeple Rd	1.25	385	308



Ranking	Route	Begin	End	Length (mile)	MEPDO	MEPDO/mile
22	SR 160	Caney Rd / Henryville Otisco Rd	Dunley Rd	1.42	414	292
23	Ohio River Scenic Byway (SR 62)	Lakeside Dr	Lena Bower Rd	1.86	464	250
24	W Water St (SR 60)	Southern Hills Dr	Grant Line Road (CR-111)	3.74	903	242
25	Ohio River Scenic Byway (SR 62)	S Poplar St	S Carrol Rd	1.92	443	231
26	W Water St (SR 60)	Dow Knob Rd	Southern Hills Dr	2.00	404	202
27	Blue Lick Rd	Biggs Rd	US 31	1.47	294	200
28	SR 3	Leon Prall Rd	Mahan Rd / New Market Rd	2.78	472	170
29	US-31	Memphis Blue Lick Rd	Mt Zion Rd	2.50	393	157
30	US-31	Weber Rd	Bud Prather Rd / Perry Crossing Rd	1.86	239	128
31	Battle Knob Road	Reed Road	Daisy Hill Rd / Frainy Knob Rd / Reed Rd	3.20	404	126
32	SR 160	County Line Road / S Casey Rd	Speith Rd	2.69	328	122
33	N Ferguson St (US- 31)	Brownstown Rd	County Line Road	3.35	380	113

Table 6-5. Prioritized Corridors - High Injury Network



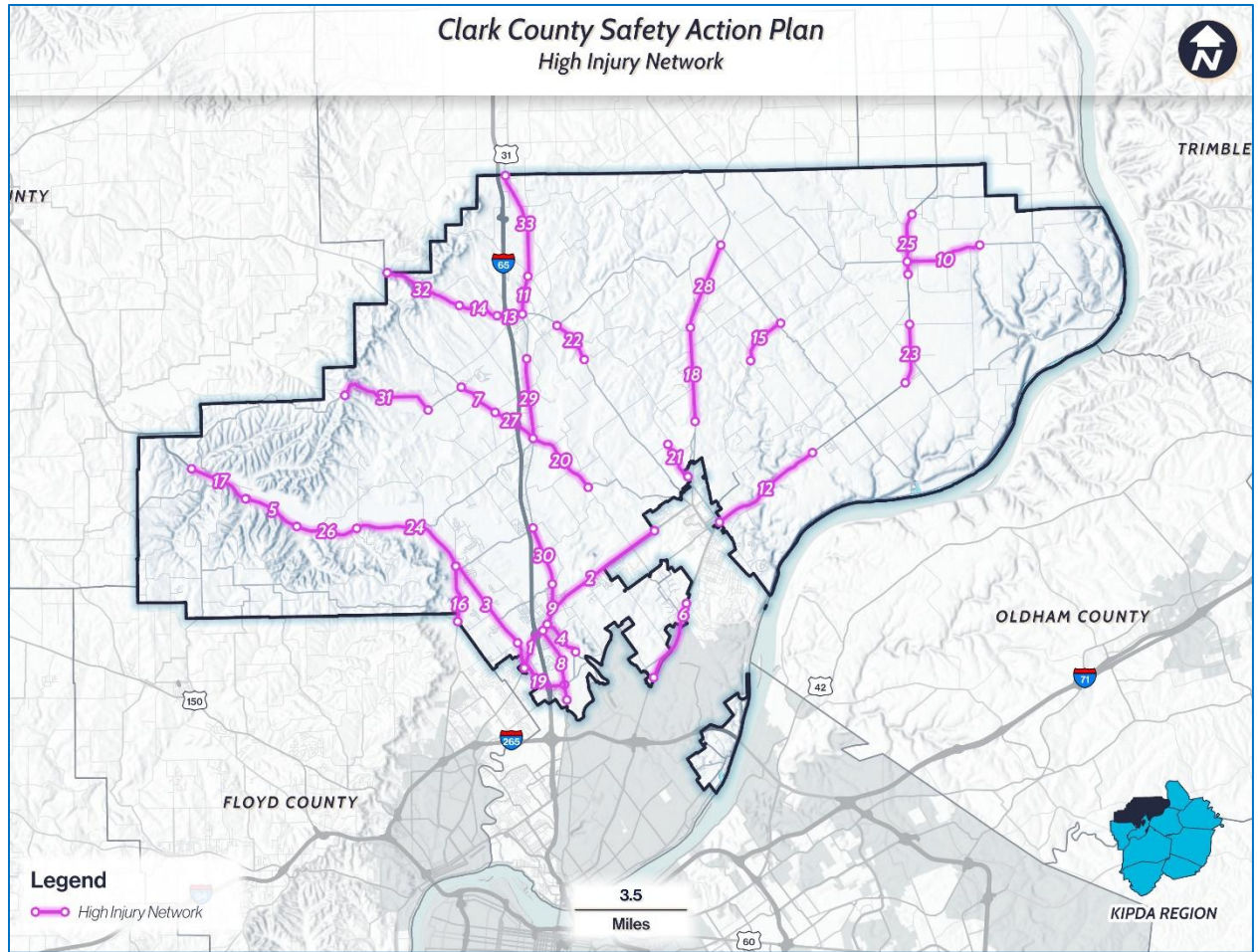


Figure 6-3. High Injury Network



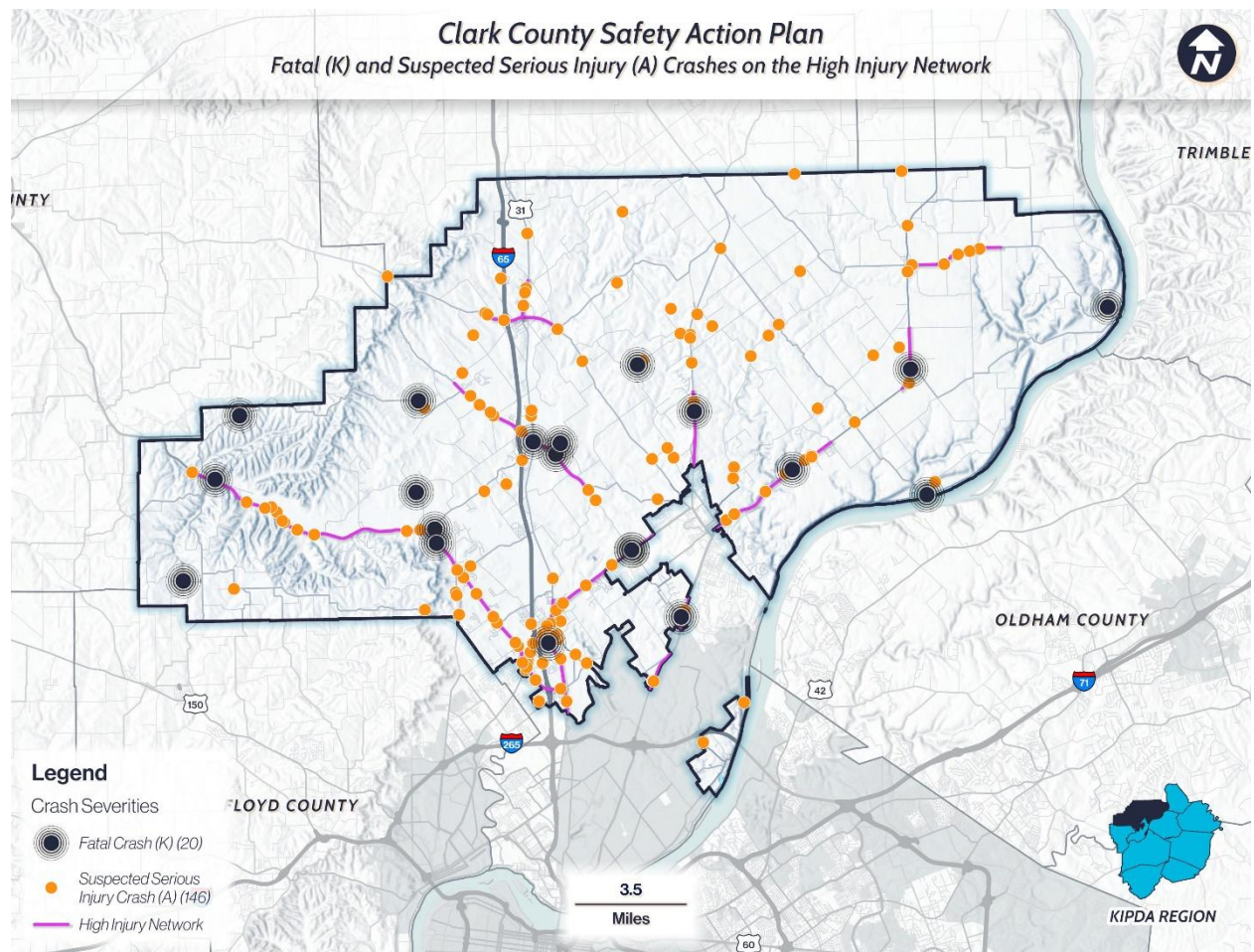


Figure 6-4. High Injury Network and Fatal and Suspected Serious Injury Crashes



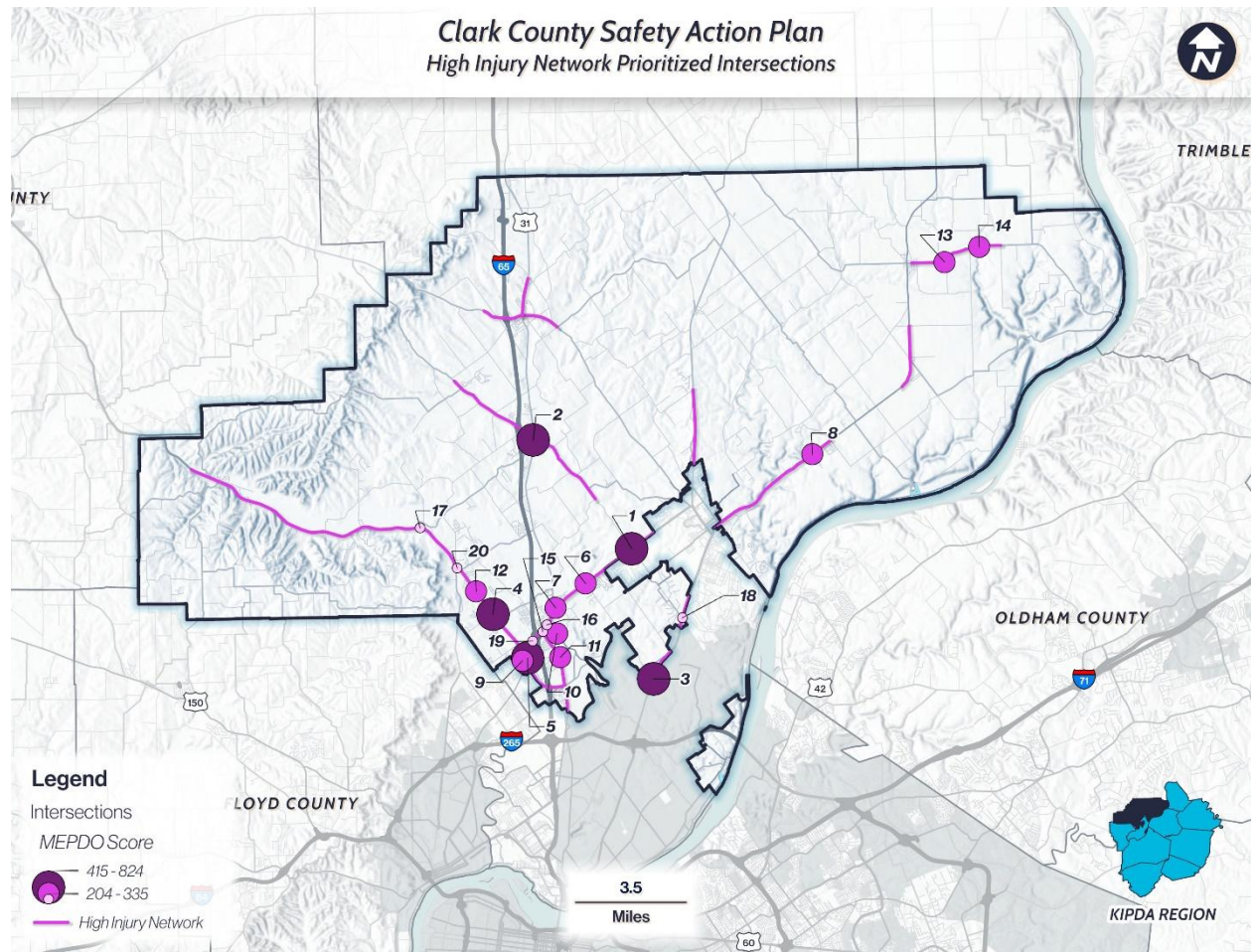


Figure 6-5. High Injury Network and Prioritized Intersections



Project Selection

A comprehensive set of recommended strategies and safety improvements was developed for the top-ranked intersections and corridors within the HIN. The improvements are based on the results of the safety analysis, feedback from Safety Committee and the public, and the principles of the Safe System Approach.

Proven Safety Countermeasures

The following tables present a selection of proven safety countermeasures designed to reduce crashes. These measures are informed by before-and-after crash data from case studies. The countermeasures are organized into roadway segment and intersection improvement tables. The countermeasures includes an image, a description of the countermeasure's safety benefits, estimated safety impact statistics, and a link for further information.

Countermeasures should be implemented as appropriate based on the prioritized project locations. Estimated cost ranges for safety countermeasures can be found in Appendix A. This appendix also includes a project implementation timeline reference chart, which provides high-level guidance on the time required to complete a range of potential safety improvement projects. Please refer to the notes on the chart during the development of project timelines.

Additional information on potential safety countermeasures can be found using these links:

Proven Safety Countermeasures (Federal Highway Administration)

<https://highways.dot.gov/safety/proven-safety-countermeasures>

Innovative Intersections (Virginia Department of Transportation)

<https://www.vdot.virginia.gov/about/our-system/highways/innovative-intersections/virginia-icap/>

Federal Highway Administration Safety Programs

Intersection Safety - <https://highways.dot.gov/safety/intersection-safety/about>

Roadway Departure Safety - <https://highways.dot.gov/safety/RwD>

Speed Management Safety - <https://highways.dot.gov/safety/speed-management>

Pedestrian and Bicycle Safety - <https://highways.dot.gov/safety/pedestrian-bicyclist>

Local and Rural Safety - <https://highways.dot.gov/safety/local-rural>

Safety Data Analysis and Tools - <https://highways.dot.gov/safety/data-analysis-tools>





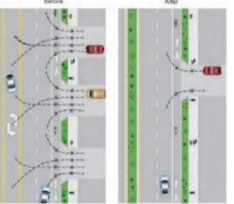





Example Segment Countermeasures							
Countermeasure	Description	Safety Impact	Links	Countermeasure	Description	Safety Impact	Links
Enhanced Delineation for Horizontal Curves				Roadside Design Improvements at Curves			
	High visibility markings and delineators around curves provide drivers with better information about curves.	Severe crashes ↓15-18%	FHWA		Includes treatments that improve horizontal curves, giving drivers the opportunity to recover safely or reducing crash severity.	Single Vehicle or All Crashes ↓8-44%	FHWA
Access Management (segment treatments)				Medians and Pedestrian Refuge Islands			
	Reducing the number and proximity of access points to focus turning traffic to fewer locations. Reduces turning conflicts.	2-lane Rural Road Crashes ↓5- 23% Urban Severe Crashes ↓25- 31%	FHWA		Provide curbed median between opposing travel lanes to provide separation, reduce left-turn risks, and improve pedestrian safety.	Ped Crashes ↓46-56% Vehicle Crashes ↓15%	FHWA and FHWA
Roadway Reconfiguration (Right Sizing or Road Diet)				Shoulder Treatment – Safety Edge			
	Often involves converting a 4-lane undivided road to a 3-lane road with 2 through lanes and a center two-way left-turn lane, which slows traffic and reduces conflicts.	All Crashes ↓19-47%	FHWA		Shoulder edge upgrades to improve recoverability for roadway departures.	Severe ↓11% Run-Off-Road ↓21% Head-On ↓19%	FHWA
Dynamic Speed Feedback Signs				Pavement Friction Management			
	Provide positive and negative feedback to drivers regarding their speed.	All Crashes ↓5%	FHWA (pg 5) FHWA Clearing house		High Friction Surface Treatment (HFST) can prevent roadway departure, intersection, and pedestrian-related crashes.	Severe Crashes at Curves ↓48% Crashes at Intersections ↓48%	FHWA

Table 6-6. Example Segment Countermeasures


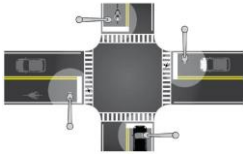





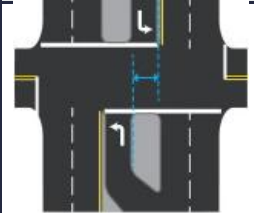
Example Intersection Countermeasures							
Countermeasure	Description	Safety Impact	Links	Countermeasure	Description	Safety Impact	Links
Access Management (intersection treatments)				Intersection Lighting			
	This refers to the design and control of access points including intersections which can enhance safety for all modes.	2-lane Rural Road Crashes ↓5- 23% Urban Severe Crashes ↓25- 31%	FHWA		Increased visibility at nighttime can improve safety for all modes of travel.	Nighttime Ped Injuries ↓42% Nighttime Crashes ↓33-38%	FHWA
Crosswalk Visibility Enhancement				Reflective Backplates			
	High-visibility crosswalks can reduce pedestrian injury crashes.	Pedestrian Injury Crashes ↓40%	FHWA		Improve the visibility of the illuminated face of the signal by introducing a controlled-contrast background.	Total Crashes ↓15%	FHWA
Low-Cost Countermeasures at Stop-Controlled Intersections				Modern Roundabouts (RAB)			
	Deploying a package of low-cost countermeasures, including enhanced signing and pavement markings increasing driver awareness.	Severe Crashes ↓10% Night Crashes ↓15% Rural Severe Crashes ↓27%	FHWA		Converting an intersection (stop or signal) into a roundabout can slow traffic. It also minimizes conflicts and reduces crash severity.	2-way Stop to RAB Severe Crashes ↓82% Signal to RAB Severe Crashes ↓78%	FHWA
Left and Right Turn Lanes				Positive Offset Left-Turn Lane			
	Left and right turn lanes provide physical separation between through traffic and turning traffic that is slowing or stopped.	Left Turn Lane ↓28-48% Right Turn Lane ↓14-26%	FHWA		Provides increased visibility for drivers turning left. It prevents opposing left turning vehicles from blocking sightlines.	Severe crashes ↓36%	FHWA

Table 6-7. Example Intersection Countermeasures

Potential Intersection Strategies

The following table lists the prioritized intersections based on their MEPDO values. Each intersection was evaluated for its existing condition. Relevant safety countermeasures were identified as potential improvements for each intersection.

Intersections – Reactive Approach																
Ranking	Intersection	Location	Potential Countermeasures													
			Dedicated LT/RT Turn Lane(s)	Offset Left Turn Lanes	Cycle Length and Clearance Intervals	Remove Channelization/Tighten Up Intersection	Reflective Backplates	RCUT	Roundabout	Enhanced Markings / Striping	Enhanced Signage	Lighting	Access Management	Tree Trimming	Crosswalk Visibility Enhancements	Re-Align Intersection
1	CR-403 & Bethany Rd	County	X							X	X	X	X			
2	US-31 & Memphis Bluelick Rd	County	X							X	X	X	X		X	
3	SR-62 & Salem Noble Rd	County/ Jeffersonville		X	X		X	X			X	X				
4	SR-60 & W St. Joe Rd	County	X							X	X	X				
5	Old SR-60 & CR-311	County/ Sellersburg			X		X			X	X	X		X		X
6	CR-403 & Salem Noble Rd	County			X		X			X	X	X				
7	CR-403 & Greenleaf Rd & St No. 23	Sellersburg								X	X	X		X		X
8	SR-62 & Decker Ln	County	X							X	X	X	X			
9	SR-60 & Hunter Station Rd	Sellersburg			X					X	X	X				
10	E Utica St & Penn St	Sellersburg									X	X				
11	S Indiana Ave (US-31) & Penn St	Sellersburg								X	X	X		X		X
12	SR-60 & Tall Pine Ln	County									X	X		X		
13	New Washington Bethlehem Rd & Ham Rd	County									X	X				X
14	New Washington Bethlehem Rd & Gill Rd	County									X	X		X		
15	S Indiana Ave (US-31) & CR-311	Sellersburg			X	X		X			X	X				
16	S Indiana Ave (US-31) & W Utica St	Sellersburg			X		X				X	X			X	
17	SR-60 & Wilson Switch Rd	County								X	X	X				
18	SR-62 & Paul Garrett Ave	County		X	X		X	X			X	X				
19	CR-311 & I-65 SB Off Ramp	Sellersburg									X	X				
20	SR-60 & Bennettsville Rd	County									X	X				

Table 6-8. Potential Intersection Strategies



Potential High Injury Network Corridor Strategies

The following table outlines potential safety improvement strategies for the identified HIN. The list of improvements was developed using proven safety countermeasures aimed at reducing and eventually eliminating severe crashes. These routes can be further studied to guide implementation efforts.

Rank	Location	Route Name	Begin and End Limits	Length (mile)	Potential Project Strategies
1	Sellersburg/ County	Charlestown Rd (Hwy-311)	Hometown Rd and S Indiana Ave (US-31)	1.37	Innovative intersections, lighting, pedestrian facilities, enhanced pedestrian crossings Active project: 3-lane section, other improvements
2	County	Old Indiana 403 (CR-403)	N Indiana Ave (US-31) and County Limits	3.80	Innovative intersections, turn lanes, rumble strips, enhanced striping, pedestrian facilities and crossings
3	County	SR 60	Grant Line Road (CR-111) and American Way / Poindexter Ln	3.12	Enhanced signing and striping, edgeline rumble strips, turn lanes, innovative intersections
4	Sellersburg	E Utica St	N Indiana Ave (US-31) and Bean Rd / Utica-Sellersburg Rd	1.30	Innovative intersections, pedestrian facilities, pedestrian crossings
5	County	W Water St (SR 60)	Star Valley Way and Dow Knob Rd	1.87	Enhanced signing and striping, edgeline rumble strips
6	County/ Jeffersonville	E 10th St (SR 62)	Salem Rd and 20th St / Lentz Ave	2.62	RCUT Corridor, offset turn lanes, lighting, innovative intersections
7	County	Blue Lick Rd	Battle Knob Rd and Biggs Rd	1.37	Minor road widening, enhanced striping, rumble strips, curve signing
8	Sellersburg/ County	Highway 31 / S Indiana Ave (US-31)	Diamond Heights and Hwy 311 / Prather St	2.40	Innovative intersections, turn lanes, rumble strips, enhanced striping, pedestrian facilities and crossings
9	Sellersburg/ County	Indiana Ave (US-31)	Hwy 311 / Prather St and Weber Rd	1.55	Innovative intersections, lighting, pedestrian facilities, enhanced pedestrian crossings, curb bump outs
10	County	New Washington Bethlehem Rd	SR 62 and Gill Rd	2.50	Enhanced signing and striping, innovative intersections, curve realignment, enhanced pedestrian crossings
11	County	N Ferguson St (US-31)	Colonels Way (SR 160) and Brownstown Rd	1.20	Edgeline and centerline rumble strips, enhanced striping, pedestrian facilities
12	County/ Charlestown	Ohio River Scenic Byway (SR 62)	Monroe St and Decker Ln	3.74	Enhanced signing and striping, innovative intersections
13	County	SR 160	Forestry Rd and Ferguson St (US-31)	0.80	Road rightsizing, interchange improvements, pedestrian facilities, enhanced pedestrian crossings, lighting
14	County	SR 160	Speith Rd and Forestry Rd	1.28	Enhanced striping, enhanced signing, rumble strips, sight distance improvements
15	County	Charlestown New Market Rd	Marion Martin Rd and Zimmerman Rd	1.65	Minor road widening, enhanced striping, rumble strips, curve signing, curve realignment
16	County	Grant Line Road	W St Joe Road and SR 60	1.80	Enhanced signing and striping, edgeline and centerline rumble strips, innovative intersection
17	County	W Water St (SR 60)	W Main St and Star Valley Way	2.00	Enhanced signing and striping, edgeline rumble strips



Rank	Location	Route Name	Begin and End Limits	Length (mile)	Potential Project Strategies
18	County	SR 3	Crescent Rd and Leon Prall Rd	3.00	Rumble strips, enhanced striping and signing, innovative intersections
19	Sellersburg/ County	SR 60	American Way / Poindexter Ln and US 31	2.28	Innovative intersections, lighting, offset turn lanes
20	County	Chas Memphis Rd	US 31 and Stoney Point Rd	2.43	Minor road widening, enhanced striping, rumble strips, curve signing, curve realignment
21	County	Vienna Rd	Edgewood Dr and Jack Teeple Rd	1.25	Minor road widening, enhanced striping, rumble strips, curve signing
22	County	SR 160	Caney Rd / Henryville Otisco Rd and Dunley Rd	1.42	Minor road widening, enhanced striping, rumble strips, curve signing
23	County	Ohio River Scenic Byway (SR 62)	Lakeside Dr and Lena Bower Rd	1.86	Enhanced signing and striping, innovative intersections, turn lanes
24	County	W Water St (SR 60)	Southern Hills Dr and Grant Line Road (CR-111)	3.74	Enhanced signing and striping, edgeline rumble strips, innovative intersection
25	County	Ohio River Scenic Byway (SR 62)	S Poplar St and S Carrol Rd	1.92	Enhanced signing and striping, innovative intersections, turn lanes, enhanced pedestrian crossings
26	County	W Water St (SR 60)	Dow Knob Rd and Southern Hills Dr	2.00	Enhanced signing and striping, edgeline rumble strips
27	County	Blue Lick Rd	Biggs Rd and US 31	1.47	Innovative intersections, turn lanes, rumble strips, enhanced striping, pedestrian facilities and crossings
28	County	SR 3	Leon Prall Rd and Mahan Rd / New Market Rd	2.78	Rumble strips, enhanced striping and signing, innovative intersections pedestrian facilities
29	County	US-31	Memphis Blue Lick Rd and Mt Zion Rd	2.50	Edgeline and Centerline Rumble Strips, enhanced striping (A portion of this segment was reduced from 55 mph to 45 mph in February 2025)
30	County	US-31	Weber Rd and Bud Prather Rd / Pery Crossing Rd	1.86	Edgeline and Centerline Rumble Strips, enhanced striping
31	County	Bartle Knob Road	Reed Road and Daisy Hill Rd / Frainy Knob Rd / Reed Rd	3.20	Minor road widening, enhanced striping, rumble strips, curve signing, curve realignment Planned: Culvert replacement – needs funding
32	County	SR 160	County Line Road / S Casey Rd and Speith Rd	2.69	Enhanced striping, enhanced signing, rumble strips, sight distance improvements
33	County	N Ferguson St (US-31)	Brownstown Rd and County Line Road	3.35	Edgeline and centerline rumble strips, enhanced striping

Table 6-9. Potential Corridor Strategies



System Level Approach and Strategies

The system level (or systemic) approach to safety identifies and addresses high-risk features across the entire roadway network rather than focusing solely on specific crash locations, as in the reactive approach. Risk factors for Clark County's roadway network were identified by analyzing crash and roadway data.

Systemic strategies involve implementing widespread improvements to reduce the likelihood and severity of crashes across an area, not just at specific locations. These strategies proactively identify and mitigate potential hazards to prevent crashes.

Strategy 1 – Roadside Edge Treatments

65 (39%) of the 166 severe crashes in the county in the study period involved a roadway departure. Many of these crashes occurred on low volume rural roadways. To the extent possible, given the County's right-of-way restrictions it is recommended that roadway edge treatments be improved. The goal of these treatments is to both reduce the likelihood of a vehicle leaving the roadway and to reduce the severity of the crash when a vehicle does leave the roadway.

This is in keeping with the [Indiana Strategic Highway Safety Plan](#) strategies for addressing roadway departures. Strategy 1 calls for improving the roadway, roadside, and traffic control devices. Strategy 2 calls for improving the roadside safety equipment and traffic control devices.

It is recommended that roadside edges treatments be considered for all county roadways with between 500 and 5,000 vehicles per day that have a higher than average number of potential hazards (curves, fixed objects, intersections, horizontal or vertical sight distance limitations). Example roadways include Bethlehem New Washington Rd, Highway 160, and Bartle Knob Road. Improvements could also be made to smaller county roads whenever possible. Potentially, the lower-cost treatments could be made standard on all repaving projects.

Specific proven safety countermeasures that could be applied systemically to county roadways include the following:

- All Roads – Wider Edge Lines (up to 37% crash reduction) and Safety Edge
- Curves – Enhance curve delineation, guardrail, if volumes are sufficiently high curve flattening or high friction surface treatment could be considered
- Intersections and Sight Distance Limitations – Additional signing and markings or oversized signs, speed management techniques such as speed feedback signs (where volumes are higher)
- Fixed Objects (culverts etc.) – install upgraded guardrail
- Intersections – Rural roundabouts or transverse rumble strips



Strategy 2 – Center Line Buffers or Center Rumble Strips

While only 86 (2%) of the 4260 crashes in the county were head-on crashes, 19 (11%) of the 166 severe crashes were head-on crashes. Furthermore, of the 196 individuals that died or were severely injured 30 (15%) were involved in a head-on crash. This is because these crashes involve two vehicles and are frequently high severity crashes. Roadways that could be considered for this strategy include roads such as CR 160 and Charlestown New Market Road.

One of the most effective methods for preventing head-on crashes on rural two-lane highways is to introduce centerline buffers. The research on this approach shows that a one-foot buffer can eliminate nearly 20% of these crashes and a two-foot buffer can eliminate nearly 40% of these crashes. It is recommended that Clark County consider a new design standard that includes a painted buffer between the directions of travel on roadways where the pavement width can be designed to accommodate it.

If it is not possible to accommodate a center buffer then center rumble strips are recommended. These have also proven to reduce head-on crashes.

Strategy 3 – Speed Management

High speeds in Clark County are associated with more severe crashes. As highways are upgraded over time, steps should be taken to incorporate speed management techniques. This can include roundabouts, active speed feedback signs, using striping to narrow lanes (while leaving the road width unchanged), and many other techniques. Changing speed limits can be part of a speed management plan, especially if done in concert with other changes.

Safety Action Plan Implementation

This plan has documented and prioritized many safety challenges. Based on the data, agency / stakeholder input, and best practices, it has also identified potential strategies and projects that would address these challenges. The focus continues to be on reducing high-severity crashes across the community. This section outlines an initial action plan for deploying potential strategies, projects, and safety programs. The actions are proposed to be implemented in four time ranges: short-term (0-3 years); mid-term (4-6 years); long term (7+ years); and ongoing. They cover the main intervention categories: infrastructure, behavioral safety, operational safety, and policies/procedures.

The implementation of each project, strategy, or program is dependent on funding availability. It is also dependent on the support of all relevant agencies and the County's capacity to execute each action. In cases where the County does not have primary authority for implementing the action, they will need to play a supporting role.



Timeframe	No	Project / Strategy / Program Description	Document Reference	Recommended First Step	Primary Category
Short Term (0 to 4 years)	1	Adopt updated traffic calming and/or updated safety related codes and policies	Chapter 5	Work with KIPDA to obtain model policies for adoption	Policy / Procedures
	2	Submit application for SS4A grant funding for one of the top HIN segments	Chapter 6; Table 6-9	Work with partners (as relevant) to identify and agree on a project and match funding	Infrastructure
	3	Initiate first safety outreach; Consider focusing on aggressive driving, speeding, and actions that cause roadway departures	Chapter 3 and 4	Work with KIPDA and other jurisdictions to develop a multi-agency outreach approach	Behavioral
	4	Implement initial low-cost Speed Management strategies on HIN corridors	Chapters 3, 4 and 6; Systemic Sec.	Work with law enforcement and INDOT to identify key corridors	Operational
	5	Support targeted speed and traffic control enforcement	Chapter 3 and 4	Work with law enforcement to identify key locations	Operational
Mid Term (4 to 8 years)	6	Implement one easy to implement systemic infrastructure focused project	Chapters 3 and 6; Systemic Sec.	Work with partners (as relevant) to identify a promising project and funding	Infrastructure
	7	Implement high priority HIN segment project	Chapter 3 and Chapter 6	Work with partners (as relevant) to identify a promising project and funding	Infrastructure
	8	Implement high priority intersection project	Chapter 3 and Chapter 6	Work with partners (as relevant) to identify a promising project and funding	Infrastructure
	9	Implement safety focused local street/highway upgrades and maintenance	Chapter 3 and Chapter 6	Use local funds to advance priority local projects / maintenance	Infrastructure
	10	Initiate second safety outreach; Consider focusing on aggressive driving, speeding, actions that cause roadway departures, or other relevant topics	Chapter 3 and 4	Work with KIPDA and other jurisdictions to develop a multi-agency outreach approach	Behavioral
Long Term (9+ years)	11	Implement additional systemic infrastructure focused projects (goal is one or more every five years)	Chapters 3 and 6; Systemic Sec.	Build long-term partnerships and identify funding to address key systemic needs	Infrastructure
	12	Implement additional infrastructure projects on HIN (goal is one or more every five years)	Chapter 3 and Chapter 6	Build long-term partnerships and identify funding to address key HIN needs	Infrastructure
	13	Implement additional intersection infrastructure projects (goal is one or more every five years)	Chapter 3 and Chapter 6	Build long-term partnerships and identify funding to address key intersection needs	Infrastructure
	14	Implement additional safety focused local street/highway improvements (goal is one or more every five years)	Chapter 3 and Chapter 6	Increase local funds to advance priority local projects / maintenance	Infrastructure
Ongoing	15	Continue Local Safety Meetings	Chapters 2 and 4	Schedule quarterly meetings	Policy / Procedures
	16	Collaborate with KIPDA to monitor, assess, and publicly report progress	Chapter 7	Coordinate with KIPDA to implement reporting plan	Policy / Procedures
	17	Continue building staff/agency knowledge regarding highway safety	Chapters 4, 5, and 6	Coordinate with KIPDA to schedule annual sessions	Policy / Procedures

Table 6-10: Implementation Action Plan Timeline



7. Progress and Transparency

Clark County, with support from KIPDA, is dedicated to ensuring the success of this Safety Action Plan. Effective communication, continuous monitoring, and evaluation are crucial to eliminating fatalities and serious injury crashes by 2050. Maintaining ongoing transparency through public accessibility and clear communication of outcome data is also essential.

The following chapter outlines the plan for measuring progress, maintaining transparency, and continuously incorporating feedback to enhance this road safety initiative.

Safety Performance Measurement

Safety improvements are measured using community-wide performance metrics to assess progress. Additionally, project-specific performance is monitored to promote effective implementation and positive safety impacts. The following sections outline the annual public and accessible progress reporting structure and proposed metrics.

Annual Safety Performance Measures

Crash Severity

The County and KIPDA expect to monitor the total number of crashes annually by crash severity: Fatal, Suspected Serious Injury, Suspected Minor Injury, Possible Injury, and No Apparent Injury. In addition, the crash rate for the total number of crashes would be estimated. The crash rate is the total number of crashes per vehicle miles traveled in the County.

Fatal and Suspected Serious Injury Crashes

Evaluating fatal and suspected serious injury crash trends is a key focus. Fatal and suspected serious injury crashes should be monitored annually. The measurement includes monitoring the total number of fatal and suspected serious injury crashes and the crash rate. The crash rate is the number of fatal and suspected serious injury crashes per vehicle miles traveled in the County annually.

Vulnerable Road User Crashes

Crashes involving vulnerable road users should be monitored annually, focusing on fatal and suspected serious injury crashes. Since a significant portion of severe crashes involve vulnerable road users, this metric is critical for assessing safety improvements.

Community Focused

The County and KIPDA expect to assess the above safety performance metrics by Census Tract to explore underlying factors contributing to crash trends. By comparing these metrics to county-wide results, patterns can be identified, allowing for tailored solutions and resources to meet the needs of different parts of the community. This approach aims to create a safer environment for all, by addressing concerns and promoting safety across the different parts of the community.



Project-Specific Performance Measures

The safety action plan recommends improvements using both the reactive and systemic approaches. Monitoring focuses on project-specific improvements at prioritized signalized intersections, unsignalized intersections, and along the corridors identified on the High Injury Network. Key project-specific measures anticipated to be collected include:

Safety Improvement Projects Implemented at Prioritized Locations

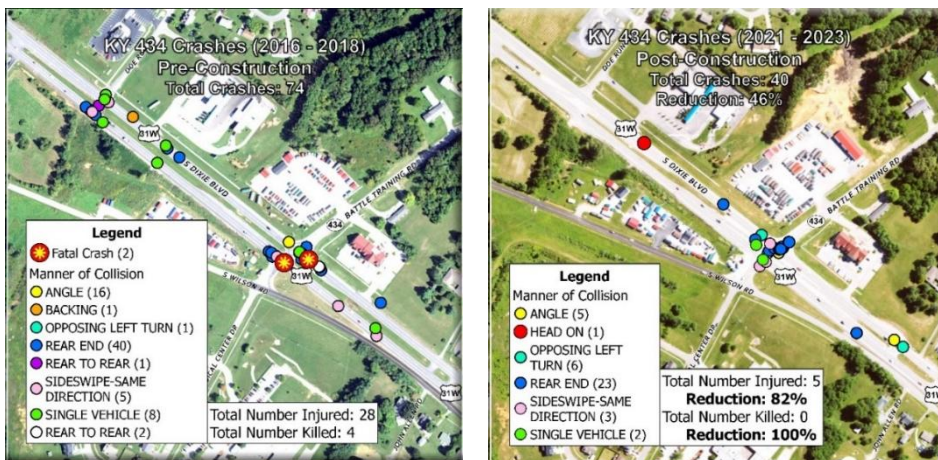
This performance measure tracks the number of safety-focused improvement projects constructed from the potential improvements listed in **Chapter 6**. The total number of safety improvements implemented at the intersection and along the corridors identified on the HIN would be recorded annually.

Crash Trends at Project Locations

When a safety improvement project has been constructed, pre-construction and post-construction crash data can be collected to document the realized crash reduction benefit. Crash trends would be assessed for each project specific improvement to aid decision-makers in future safety improvement decisions. This performance measure tracks fatal and suspected serious injury crashes for each improvement project.

Safety Studies and Design

The status of safety studies and design plans are monitored annually. These studies and design plans, which include cost estimates, public engagement, NEPA documentation, and project readiness, move projects closer to construction and the ultimate goal of eliminating fatal and suspected serious injury crashes.



Geospatial representation of crash trends for specific projects is an effective method to demonstrate their impact to the community. Illustrating pre and post-construction crash data, with a focus on the decrease in fatal and suspected serious injury crashes, clearly communicates safety improvements.

PRE-CONSTRUCTION

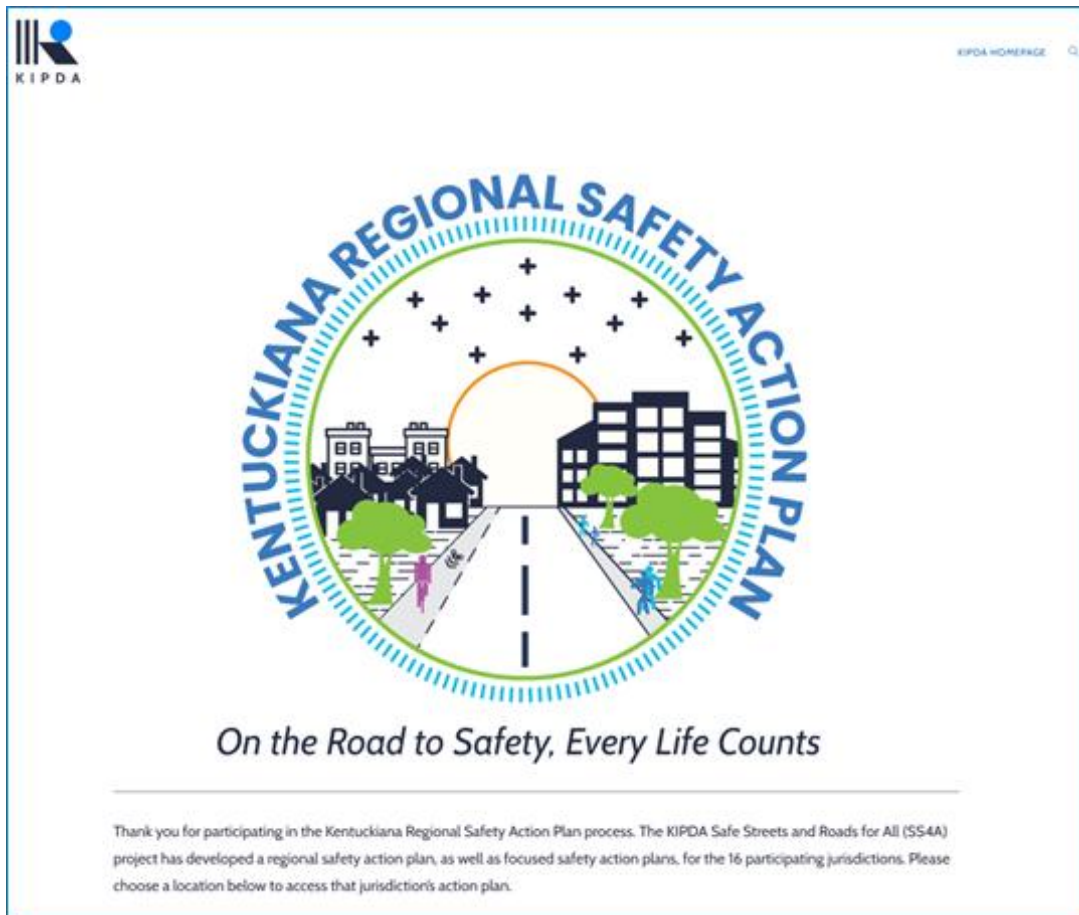


POST-CONSTRUCTION



Transparency

The development of the Safety Action Plan has been shared publicly with residents and other relevant stakeholders through the KIPDA website. The MPO utilized its website to engage the community and disseminate further resources, including maps, the Safe Streets and Roads for All Grant Program, and the Safe Systems Approach. The Clark County Safety Action Plan is posted publicly online at [SS4A – KIPDA Transportation](#). The KIPDA website will continue to be the platform to engage the community and serve as a source of information and updates to the public.



Feedback and Continuous Improvement

Creating the Safety Action Plan involved a collaborative effort with active community participation. The project team conducted comprehensive public surveys and facilitated stakeholder discussions through Stakeholder and Safety Committees. This engagement underscored the importance of continuous improvement in achieving safety goals. By advancing ongoing dialogue, feedback is used to assess the plan's efficacy and provides for regular plan amendments. This can help keep the Safety Action Plan relevant and effective in addressing community needs.



Appendix A

Safety Countermeasure Cost Estimate Ranges

and

Project Implementation Timeline Reference Chart



Planning Level Safety Countermeasure Cost Estimate Ranges

Values are based on an assumed construction cost and percentages for all other categories

Results are for order of magnitude cost estimation only

6/12/2025

Notes: **Low Cost** Assumes Minimal Scope, Low Cost Approaches, and/or Ideal Conditions

High Cost Assumes Full Scope and Several Project Challenges

All category and contingency percentages may need to be adjusted based on project size and complexity

Project	Unit	Cost Percentages ==>										(7%/yr compounded)							
		5%		15%		20%		10%		12%		15%		50%		61%		61%	
		Planning	Permitting	Right-of-Way	Utilities	Inspection	Construction	Subtotal	Contingency	Contingency	Low Planning Level	High Planning Level	Low Total 2025	High Total 2025	Low Total 2032	High Total 2032	Low Total 2032	High Total 2032	
Curve Realignment (moderate right-of-way/utilities)	Curve	\$37,500	\$112,500	\$150,000	\$75,000	\$90,000	\$750,000	\$1,215,000	\$182,250	\$607,500	\$1,397,250	\$1,822,500	\$2,243,678	\$2,926,537					
Dynamic Speed Feedback Sign	Each	\$1,250	\$3,750	\$5,000	\$2,500	\$3,000	\$25,000	\$40,500	\$6,075	\$20,250	\$46,575	\$60,750	\$74,789	\$97,551					
Enhanced Signing/Striping - Curves	Curve	\$750	\$2,250	\$3,000	\$1,500	\$1,800	\$15,000	\$24,300	\$3,645	\$12,150	\$27,945	\$36,450	\$44,874	\$58,531					
Enhanced Signing/Striping - Intersection	Intersection	\$1,500	\$4,500	\$6,000	\$3,000	\$3,600	\$30,000	\$48,600	\$7,290	\$24,300	\$55,890	\$72,900	\$89,747	\$117,061					
Enhanced Signing/Striping - Transition Zones	Location	\$1,500	\$4,500	\$6,000	\$3,000	\$3,600	\$30,000	\$48,600	\$7,290	\$24,300	\$55,890	\$72,900	\$89,747	\$117,061					
Enhanced Striping - Highway	Mile	\$1,000	\$3,000	\$4,000	\$2,000	\$2,400	\$20,000	\$32,400	\$4,860	\$16,200	\$37,260	\$48,600	\$59,831	\$78,041					
Guardrail Upgrades (minimal regrading)	500 Feet	\$1,500	\$4,500	\$6,000	\$3,000	\$3,600	\$30,000	\$48,600	\$7,290	\$24,300	\$55,890	\$72,900	\$89,747	\$117,061					
High Friction Surface Treatments (\$40/sq yd)	Curve	\$5,000	\$15,000	\$20,000	\$10,000	\$12,000	\$100,000	\$162,000	\$24,300	\$81,000	\$186,300	\$243,000	\$299,157	\$390,205					
Lighting - Highway (multilane)	Mile	\$30,000	\$90,000	\$120,000	\$60,000	\$72,000	\$600,000	\$972,000	\$145,800	\$486,000	\$1,117,800	\$1,458,000	\$1,794,943	\$2,341,229					
Lighting - Intersection	Intersection	\$3,750	\$11,250	\$15,000	\$7,500	\$9,000	\$75,000	\$121,500	\$18,225	\$60,750	\$139,725	\$182,250	\$224,368	\$292,654					
Pedestrian Enhancements (signs, striping, ADA, bulb outs)	Location	\$5,000	\$15,000	\$20,000	\$10,000	\$12,000	\$100,000	\$162,000	\$24,300	\$81,000	\$186,300	\$243,000	\$299,157	\$390,205					
Pedestrian Enhancements (signs, striping, ADA, refuge)	Location	\$2,500	\$7,500	\$10,000	\$5,000	\$6,000	\$50,000	\$81,000	\$12,150	\$40,500	\$93,150	\$121,500	\$149,579	\$195,102					
Positive Offset Left Turn Lanes	Each	\$15,000	\$45,000	\$60,000	\$30,000	\$36,000	\$300,000	\$486,000	\$72,900	\$243,000	\$558,900	\$729,000	\$897,471	\$1,170,615					
Raised Median (no widening)	Sq Yards	\$8	\$23	\$30	\$15	\$18	\$150	\$243	\$36	\$122	\$279	\$365	\$449	\$585					
Reflective Backplates (no signal rebuild)	Intersection	\$1,250	\$3,750	\$5,000	\$2,500	\$3,000	\$25,000	\$40,500	\$6,075	\$20,250	\$46,575	\$60,750	\$74,789	\$97,551					
Reflective Backplates (with signal rebuild)	Intersection	\$10,000	\$30,000	\$40,000	\$20,000	\$24,000	\$200,000	\$324,000	\$48,600	\$162,000	\$372,600	\$486,000	\$598,314	\$780,410					
Restricted Crossing U-Turn Crossing Intersection (un-signalized)	Location	\$87,500	\$262,500	\$350,000	\$175,000	\$210,000	\$1,750,000	\$2,835,000	\$425,250	\$1,417,500	\$3,260,250	\$4,252,500	\$5,235,249	\$6,828,586					
Restricted Crossing U-Turn Crossing Intersection (signalized)	Location	\$150,000	\$450,000	\$600,000	\$300,000	\$360,000	\$3,000,000	\$4,860,000	\$729,000	\$2,430,000	\$5,589,000	\$7,290,000	\$8,974,713	\$11,706,147					
Road Reconfiguration (Convert 4-lane to 3-lane, w/ resurfacing)	Mile	\$25,000	\$75,000	\$100,000	\$50,000	\$60,000	\$500,000	\$810,000	\$121,500	\$405,000	\$931,500	\$1,215,000	\$1,495,785	\$1,951,024					
Roundabout (dual-lane)	Each	\$120,000	\$360,000	\$480,000	\$240,000	\$288,000	\$2,400,000	\$3,888,000	\$583,200	\$1,944,000	\$4,471,200	\$5,832,000	\$7,179,770	\$9,364,918					
Roundabout (single lane)	Each	\$50,000	\$150,000	\$200,000	\$100,000	\$120,000	\$1,000,000	\$1,620,000	\$243,000	\$810,000	\$1,863,000	\$2,430,000	\$2,991,571	\$3,902,049					
Rumble Strips - Center (no widening)	Mile	\$1,000	\$3,000	\$4,000	\$2,000	\$2,400	\$20,000	\$32,400	\$4,860	\$16,200	\$37,260	\$48,600	\$59,831	\$78,041					
Rumble Strips - Edge (no widening, both sides)	Mile	\$1,250	\$3,750	\$5,000	\$2,500	\$3,000	\$25,000	\$40,500	\$6,075	\$20,250	\$46,575	\$60,750	\$74,789	\$97,551					
Rural Re-Align Skewed Intersection (limited ROW/utilities)	Intersection	\$37,500	\$112,500	\$150,000	\$75,000	\$90,000	\$750,000	\$1,215,000	\$182,250	\$607,500	\$1,397,250	\$1,822,500	\$2,243,678	\$2,926,537					
Rural to Urban Transition Zone Treatments (high-cost)	Location	\$37,500	\$112,500	\$150,000	\$75,000	\$90,000	\$750,000	\$1,215,000	\$182,250	\$607,500	\$1,397,250	\$1,822,500	\$2,243,678	\$2,926,537					
Rural to Urban Transition Zone Treatments (low-cost)	Location	\$12,500	\$37,500	\$50,000	\$25,000	\$30,000	\$250,000	\$405,000	\$60,750	\$202,500	\$465,750	\$607,500	\$747,893	\$975,512					
Shoulder Widening & Roadside Improvements (limited ROW/utilities)	Mile	\$60,000	\$180,000	\$240,000	\$120,000	\$144,000	\$1,200,000	\$1,944,000	\$291,600	\$972,000	\$2,235,600	\$2,916,000	\$3,589,885	\$4,682,459					
Sidewalks - Highway (one side only)	Mile	\$20,000	\$60,000	\$80,000	\$40,000	\$48,000	\$400,000	\$648,000	\$97,200	\$324,000	\$745,200	\$972,000	\$1,196,628	\$1,560,820					
Sidewalks - Intersection (includes ADA)	Intersection	\$4,000	\$12,000	\$16,000	\$8,000	\$9,600	\$80,000	\$129,600	\$19,440	\$64,800	\$149,040	\$194,400	\$239,326	\$312,164					
Sight Distance Improvements (vegetation)	Intersection	\$1,000	\$3,000	\$4,000	\$2,000	\$2,400	\$20,000	\$32,400	\$4,860	\$16,200	\$37,260	\$48,600	\$59,831	\$78,041					
Signal Timing - Cycle Length, Clearance and Leading Ped Intervals	Intersection	\$500	\$1,500	\$2,000	\$1,000	\$1,200	\$10,000	\$16,200	\$2,430	\$8,100	\$18,630	\$24,300	\$29,916	\$39,020					
Signal Upgrade (may be required for protected left turn phasing)	Intersection	\$10,000	\$30,000	\$40,000	\$20,000	\$24,000	\$200,000	\$324,000	\$48,600	\$162,000	\$372,600	\$486,000	\$598,314	\$780,410					
Tighten Intersection (small intersection, limited drainage)	Each	\$17,500	\$52,500	\$70,000	\$35,000	\$42,000	\$350,000	\$567,000	\$85,050	\$283,500	\$652,050	\$850,500	\$1,047,050	\$1,365,717					
Tree Trimming	Linear Foot	\$3	\$8	\$10	\$5	\$6	\$50	\$81	\$12	\$41	\$93	\$122	\$150	\$195					
Turn Lanes (one turn lane, 150 ft plus taper)	Each	\$12,500	\$37,500	\$50,000	\$25,000	\$30,000	\$250,000	\$405,000	\$60,750	\$202,500	\$465,750	\$607,500	\$747,893	\$975,512					
Urban Re-Align Skewed Intersection (limited ROW/utilities)	Intersection	\$75,000	\$225,000	\$300,000	\$150,000	\$180,000	\$1,500,000	\$2,430,000	\$364,500	\$1,215,000	\$2,794,500	\$3,645,000	\$4,487,356	\$5,853,073					
Access Management (Low Complexity)	Mile	\$75,000	\$225,000	\$300,000	\$150,000	\$180,000	\$1,500,000	\$2,430,000	\$364,500	\$1,215,000	\$2,794,500	\$3,645,000	\$4,487,356	\$5,853,073					
Adjusted Cost Percentages ==>		3%	12%	20%	10%	10%	10%	10%	35%	61%	61%								
Access Management (Moderate Complexity)	Mile	\$120,000	\$480,000	\$800,000	\$400,000	\$400,000	\$4,000,000	\$6,200,000	\$620,000	\$2,170,000	\$6,820,000	\$8,370,000	\$10,951,430	\$13,440,391					
Access Management (High Complexity, Often Complete Rebuild)*	Mile	\$300,000	\$1,200,000	\$2,000,000	\$1,000,000	\$1,000,000	\$10,000,000	\$15,500,000	\$1,550,000	\$5,425,000	\$17,050,000	\$20,925,000	\$27,378,574	\$33,600,977					



Project Implementation Timeline Reference Chart
6/23/2025

This chart is intended to provide high-level guidance on the time required to complete a range of potential safety improvement projects.

- 1) The time required to secure funding for each phase (federal, state, or local) is not included. The time to execute federal grant agreements or other state or federal project agreements is also not included.
- 2) Time to procure planning, design, or other professional services should be added as required. Construction and inspection procurement are included if they can reasonably be accommodated during the pre-construction phases.
- 3) Local agencies should coordinate with state and KIPDA staff to estimate the time required for each task. This applies to local public agency (LPA) projects and includes projects using federal, state, and KIPDA funding.

To use this table, please determine the level of complexity for each phase of the project you are considering. For example, a project may be moderate with respect to planning, design, and construction, but complex with respect to right-of-way and utility coordination. This would likely result in a project that is somewhere between those two categories for the total project timeline.

Level of Complexity for Each Phase	Planning	Preliminary Engineering and Environmental	Final Design	Right-of-Way (ROW)	Utility Coordination	Construction	Estimated Total Project Timeline
Simple	3-6 months Few alternatives Limited or no public involvement No anticipated controversy No TIP/STIP issues	6 - 9 months Minimal design No survey or geotech NEPA CE (programmatic or low level)	6 months Minimal design effort	N/A Within existing ROW	3-6 months Notification only No relocations	6 - 9 months <\$500K No phasing needed	2 to 3 years
Moderate	6-12 months Several alternatives Public involvement May require TIP/STIP mods	6-12 months Straightforward design Survey required NEPA CE (with public input)	6-12 months Moderate design effort Agency reviews	6-12 months Easements and/or minor acquisitions	6-18 months Relocations possible Agreements possible	6-12 months \$500K-\$2M Lane closures/phasing	3 to 6.5 years
Complex	12-18 months Numerous alternatives Public involvement May require TIP/STIP mods Multiple agencies involved	12-18 months Alternatives analysis Extensive design (survey, traffic, geotech) NEPA EA or CE (with public input)	12-18 months Major design effort Extensive permitting Environmental constraints	12-24 months Full ROW Relocations/eminent domain	12-18 months Major relocations Agreements required	12-24 months \$2M+ Detours or complex staging	6 to 10 years

Notes:

Schedule estimates assume all required project funding is available

NEPA = National Environmental Policy Act of 1969

CE = Categorical Exclusion

EA = Environmental Assessment

TIP/STIP = Transportation Improvement Program / State Transportation Improvement Program

