RESOLUTION NO. 28-2025

A RESOLUTION OF THE CITY OF CLINTON TO ADOPT THE CLINTON COMPREHENSIVE SAFETY ACTION PLAN IN ALIGNMENT WITH THE SAFE STREETS AND ROADS FOR ALL (SS4A) PROGRAM AND TO COMMIT TO REDUCING TRANSPORTATION-RELATED SERIOUS INJURIES AND DEATHS THROUGH A SYSTEMATIC APPROACH.

WHEREAS, the Mayor and City Council serve as the governing body for the City of Clinton and provide a platform for collaborative decision-making in transportation planning; and

WHEREAS, safe, accessible, and multimodal transportation options are essential to the City's mission to enhance the quality of life for all residents; and

WHEREAS, between 2020 and 2024, the City experienced 46 fatal and serious injury (KSI) crashes, resulting in 3 fatalities (including 2 pedestrians) and 55 serious injuries. This highlights the need for a proactive and comprehensive approach to improving roadway safety; and

WHEREAS, the Clinton SS4A Comprehensive Safety Action Plan aims to develop a holistic and well-defined strategy to prevent roadway deaths and serious injuries within the City; and

WHEREAS, the Safety Action Plan is a data-driven, comprehensive, and actionable strategy to improve transportation safety for all users across the City's street network; and

WHEREAS, implementing the strategies outlined in the Safety Action Plan will contribute to the U.S. Department of Transportation's (USDOT) vision of zero traffic deaths and serious injuries and align with the State of Missouri's goal of zero deaths and serious injuries.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF CLINTON, AS FOLLOWS:

The City of Clinton hereby adopts the Clinton Comprehensive Safety Action Plan, which provides a systematic and data-driven approach to reducing transportation-related serious injuries and fatalities throughout the City.

The City of Clinton commits to prioritizing roadway safety as a core element of its transportation planning, design, and operations, with the goal of achieving zero deaths and serious injuries on the City's transportation network by 2040.

Read and passed this 16th day of December, 2025.

Carla Moberly

Carla Moberly, Mayor

ATTEST

Wendee Seaton

Wendee Seaton, City Clerk

THE CITY OF CLINTON MISSOURI
GREAT PEOPLE. BY NATURE

City of Clinton MISSOURI

Safe Streets for All

Comprehensive Safety Action Plan

December 16, 2025

Adopted by the
City of Clinton

Prepared By:

CJW

This safety action plan and the information contained herein is prepared solely for the purpose of identifying, evaluating, and planning safety improvements on public roads which may be implemented utilizing federal aid highway funds; and is therefore exempt from discovery or admission into evidence pursuant to 23 U.S.C.407.

Table of Contents

Clinton's Comprehensive Safety Action Plan Resolution 5

Acknowledgements 6
- Safety Action Plan Steering Committee

Chapter 1. Clinton's Comprehensive Safety Action Plan Overview 8
- Introduction
- Safe System Approach

Chapter 2. Safety Analysis 11
- Unbelted Occupants
- Motorcyclists
- Freeway, Principal & Minor Arterials
- Intersections
- Segments
- Lane Departure
- Older Drivers
- Run-Off-Road
- Unlicensed / Improperly Licensed Drivers
- Aggressive Driving
- Distracted Driving
- Younger Drivers
- Commercial Motor Vehicles
- Non-Motorized (Pedestrians & Bicyclists)
- Post-Crash Care
- High Injury Network

Chapter 3. Equity & Vulnerable Road Users 73
- Introduction
- Economic Challenges & Transportation Risks
- Vulnerable Road Users
- Strategies to Improve VRU Safety
- Equity-Focused Engagement & Decision-Making
- Summary

Table of Contents

Chapter 4. Engagement & Collaboration 75
- Public Engagement
- Engagement Activities
- Online Survey

Chapter 5. Policy & Process Changes 78
- Introduction
- Key Policy & Process Recommendations
- Alignment with Clinton's Safety Action Plan
- Summary

Chapter 6. Strategy & Project Selections 82
- Introduction
- Project Prioritization Process
- SS4A Prioritization
- Project Sources
- Education
- Safety Action Plan – Segments
- Safety Action Plan – Intersections

Chapter 7. Progress & Transparency 88
- Introduction
- Goals for Progress & Transparency
- Monitoring & Evaluation
- Public Engagement Strategies
- Transparency in Decision-Making
- Next Steps

Appendices ..... (Provided as a Separate Document)

MO18/Ohio Street RSA ..... (Provided as a Separate Document)

2nd Street RSA ..... (Provided as a Separate Document)

City of Clinton, Missouri

Resolution No. [Insert Number]

A **RESOLUTION OF THE CITY OF CLINTON TO ADOPT THE CLINTON COMPREHENSIVE SAFETY ACTION PLAN IN ALIGNMENT WITH THE SAFE STREETS AND ROADS FOR ALL (SS4A) PROGRAM AND TO COMMIT TO REDUCING TRANSPORTATION-RELATED SERIOUS INJURIES AND DEATHS THROUGH A SYSTEMATIC APPROACH.**

WHEREAS:

- The Mayor and City Council serve as the governing body for the City of Clinton and provide a platform for collaborative decision-making in transportation planning; and
- Safe, accessible, and multimodal transportation options are essential to the City's mission to enhance the quality of life for all residents; and
- Between 2020 and 2024, the City experienced 46 fatal and serious injury (KSI) crashes, resulting in 3 fatalities (including 2 pedestrians) and 55 serious injuries. This highlights the need for a proactive and comprehensive approach to improving roadway safety; and
- The Clinton SS4A Comprehensive Safety Action Plan aims to develop a holistic and well-defined strategy to prevent roadway deaths and serious injuries within the City; and
- The Safety Action Plan is a data-driven, comprehensive, and actionable strategy to improve transportation safety for all users across the City's street network; and
- Implementing the strategies outlined in the Safety Action Plan will contribute to the U.S. Department of Transportation's (USDOT) vision of zero traffic deaths and serious injuries and align with the State of Missouri's goal of zero deaths and serious injuries.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF CLINTON, AS FOLLOWS:

1. The City of Clinton hereby adopts the Clinton Comprehensive Safety Action Plan, which provides a systematic and data-driven approach to reducing transportation-related serious injuries and fatalities throughout the City.
2. The City of Clinton commits to prioritizing roadway safety as a core element of its transportation planning, design, and operations, with the goal of achieving zero deaths and serious injuries on the City's transportation network by 2040.

PASSED AND ADOPTED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF CLINTON, THIS [DAY] DAY OF [MONTH], 2025.

ATTEST:

Wendee Seaton, City Clerk
City of Clinton, Missouri

SIGNATURE:

Carla Moberly, Mayor
City of Clinton, Missouri

ACKNOWLEDGEMENTS

The Clinton Safety Action Plan is the product of collaborative efforts from individuals and organizations committed to improving transportation safety and quality of life in the City of Clinton.

We thank the following contributors:

City of Clinton's Elected Officials
Thank you to the City of Clinton's elected officials for your leadership and support. Your guidance has been vital in advancing roadway safety initiatives across the community.

Safety Action Plan Steering Committee
We appreciate the contributions of the Safety Action Plan Steering Committee. Your expertise and collaboration have been essential to developing the strategies outlined in this plan. The Steering Committee's responsibilities included guiding the development of the Safety Action Plan, reviewing data and findings, providing local insights and feedback, and helping to establish priorities for future implementation and monitoring of progress toward improved roadway safety.

Additional Contributors
We acknowledge the Missouri Department of Transportation Southwest District (MoDOT SW District), community members, and other stakeholders for providing valuable input, data, and support throughout the planning process. Your involvement has strengthened the plan and reinforced the commitment to safer roadways.

This plan represents a collective effort to implement effective safety strategies, fostering safer and more equitable roadways for all.



Safety Action Plan Steering Committee

LOCAL GOVERNMENT		
TJ Williams	City of Clinton	Street Superintendent
Chuck Bailey	City of Clinton	Community Development Director
Gary Mount	City of Clinton	Council Member
Christy Maggi	City of Clinton	City Administrator
LAW ENFORCEMENT		
Capt. John Scott	City of Clinton	CPD Deputy Chief
Shane Lawson	City of Clinton	CPD School Resource Officer
PUBLIC HEALTH		
Rachel Boyles	GVMH	Chief Service Officer
Peggy Bowles	Henry Co. Health Center	Administrator
COMMUNITY ORGANIZATIONS		
David Lee	Clinton Chamber of Commerce	Executive Director
Susan Jones-Hard	Disability Community Representative	Resident
BUSINESS COMMUNITY		
Greg Shannon	Katy Trails Tours & Shuttle	Owner
Ben Hendershot	Cycles & Cream	Owner
COMMUNITY RESIDENTS		
Jennifer Hinton	Citizen	Resident
EDUCATION		
Dr. Rob Anthony	Clinton School District	Assistant Principal, CHS
TRANSPORTION		
Ashley Swartz	KBRPC	Executive Director
Michael Wake	MoDOT	Traffic Studies Specialist
EMERGENCY SERVICES		
Amy Guynn	GVMH	EMS
Mark Manuel	City of Clinton	Fire Chief

Steering Committee Role & Responsibilities

The Steering Committee was charged with the **development**, **implementation**, and **monitoring** of a data-driven, community-based safety plan. As discussed at the kickoff meeting, the Committee helps set priorities, review progress, and coordinate with partners to advance Clinton's goal of eliminating serious injuries and fatalities on its transportation network.

CHAPTER 1

CLINTON'S COMPREHENSIVE SAFETY ACTION PLAN OVERVIEW



Introduction

The City of Clinton, the county seat of Henry County, serves as a regional center for healthcare, shopping, business, and industry. It also marks the western endpoint of the Katy Trail, a 225-mile path popular with cyclists, runners, and horseback riders. The City has a population of approximately 9,174.

Clinton is committed to making its roadways safer for all users. The **Clinton Safe Streets and Roads for All (SS4A) Comprehensive Safety Action Plan** was developed to address key safety challenges and reduce traffic-related crashes and injuries.

Between 2020 and 2024, Clinton recorded 46 crashes resulting in death or serious injury (KSI), including 3 fatalities— 2 of whom were pedestrians—and 55 serious injuries. These statistics underscore the need for focused, proactive strategies to prevent crashes and save lives.

To guide this work, the City is applying the **Federal Highway Administration's (FHWA) Safe System Approach**, which is based on **Vision Zero** principles. This approach emphasizes designing roads and transportation systems that protect all users, even when mistakes occur. It promotes safer infrastructure, improved vehicle technology, and smarter traffic management to reduce the likelihood and severity of serious crashes.

The **Clinton SS4A Comprehensive Safety Action Plan** identifies safety risks, sets clear priorities, and outlines actionable steps to make travel safer throughout the community. Through collaboration with residents, law enforcement, and other local stakeholders, the City is fostering a lasting culture of safety. The plan not only addresses current safety concerns but also supports long-term improvements for a safer, more accessible transportation network.

With data-driven strategies and strong community input, the City of Clinton reaffirms its commitment to making local roads safer and easier to use for everyone.

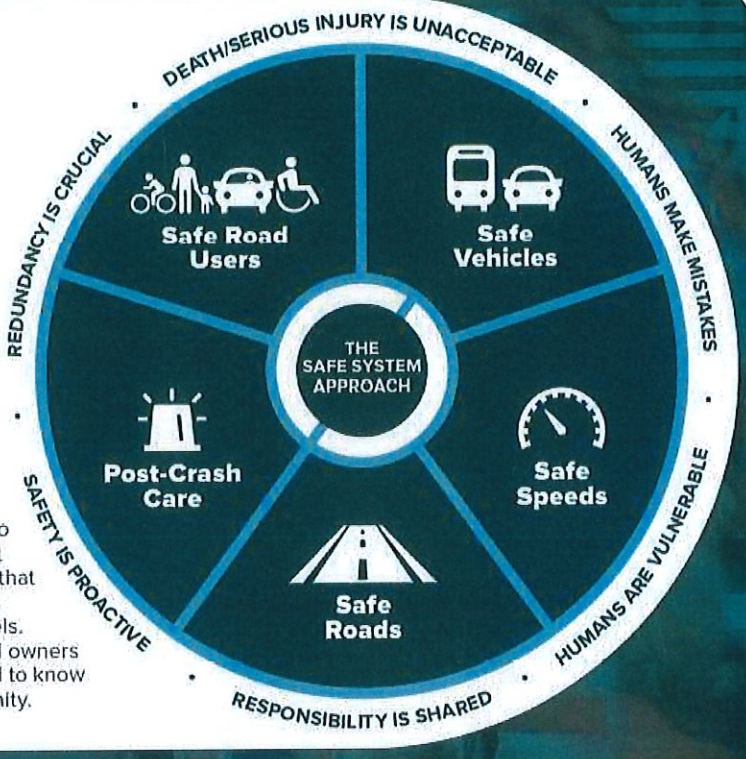
THE

SAFE SYSTEM

APPROACH

Zero is our goal. A Safe System is how we will get there.

Imagine a world where nobody has to die from vehicle crashes. The Safe System approach aims to eliminate fatal & serious injuries for all road users. It does so through a holistic view of the road system that first anticipates human mistakes and second keeps impact energy on the human body at tolerable levels. Safety is an ethical imperative of the designers and owners of the transportation system. Here's what you need to know to bring the Safe System approach to your community.



SAFE SYSTEM PRINCIPLES

Death/Serious Injury is Unacceptable

While no crashes are desirable, the Safe System approach prioritizes crashes that result in death and serious injuries, since no one should experience either when using the transportation system.

Humans Make Mistakes

People will inevitably make mistakes that can lead to crashes, but the transportation system can be designed and operated to accommodate human mistakes and injury tolerances and avoid death and serious injuries.

Humans Are Vulnerable

People have limits for tolerating crash forces before death and serious injury occurs; therefore, it is critical to design and operate a transportation system that is human-centric and accommodates human vulnerabilities.

Responsibility is Shared

All stakeholders (transportation system users and managers, vehicle manufacturers, etc.) must ensure that crashes don't lead to fatal or serious injuries.

Safety is Proactive

Proactive tools should be used to identify and mitigate latent risks in the transportation system, rather than waiting for crashes to occur and reacting afterwards.

Redundancy is Crucial

Reducing risks requires that all parts of the transportation system are strengthened, so that if one part fails, the other parts still protect people.

U.S.Department of Transportation
Federal Highway Administration

FHWA-SA-20-015

Safe Roads for a Safer Future
Investment in roadway safety saves lives

SAFE SYSTEM ELEMENTS

Making a commitment to zero deaths means addressing every aspect of crash risks through the five elements of a Safe System, shown below. These layers of protection and shared responsibility promote a holistic approach to safety across the entire transportation system. The key focus of the Safe System approach is to reduce death and serious injuries through design that accommodates human mistakes and injury tolerances.

Safe Road Users

The Safe System approach addresses the safety of all road users, including those who walk, bike, drive, ride transit, and travel by other modes.

Safe Vehicles

Vehicles are designed and regulated to minimize the occurrence and severity of collisions using safety measures that incorporate the latest technology.

Safe Speeds

Humans are unlikely to survive high-speed crashes. Reducing speeds can accommodate human injury tolerances in three ways: reducing impact forces, providing additional time for drivers to stop, and improving visibility.

Safe Roads

Designing to accommodate human mistakes and injury tolerances can greatly reduce the severity of crashes that do occur. Examples include physically separating people traveling at different speeds, providing dedicated times for different users to move through a space, and alerting users to hazards and other road users.

Post-Crash Care

When a person is injured in a collision, they rely on emergency first responders to quickly locate them, stabilize their injury, and transport them to medical facilities. Post-crash care also includes forensic analysis at the crash site, traffic incident management, and other activities.

THE SAFE SYSTEM APPROACH VS. TRADITIONAL ROAD SAFETY PRACTICES

Traditional		Safe System
Prevent crashes	→	Prevent deaths 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

Whereas traditional road safety strives to modify human behavior and prevent all crashes, the Safe System approach also refocuses transportation system design and operation on anticipating human mistakes and lessening impact forces to reduce crash severity and save lives.

WHERE ARE YOU ON THE SAFE SYSTEM JOURNEY?

Implementing the Safe System approach is our shared responsibility, and we all have a role. It requires shifting how we think about transportation safety and how we prioritize our transportation investments. Consider applying a Safe System lens to upcoming projects and plans in your community: put safety at the forefront and design to accommodate human mistakes and injury tolerances. Visit **safety.fhwa.dot.gov/zerodeaths** to learn more.

The KSI (Fatal or Seriously Injured) crash data for Clinton from 2020 to 2024 highlights concerning trends that should guide the City's safety interventions.

GRAPH 2.1 illustrates a significant rise in serious injury crashes, increasing from 5 incidents in 2020 (the onset of the COVID-19 pandemic) to 12 in both 2022 and 2023 during the post-pandemic recovery period. A decline was observed in 2024, with 8 incidents.

During the pandemic year of 2020, reduced Vehicle Miles Traveled (VMT) contributed to fewer crashes overall, including KSI incidents. However, as traffic volumes rebounded in 2022 and 2023, serious injury crashes peaked.

Fatal crashes, while less frequent, first appeared in 2020 with 1 recorded incident and increased to 2 in 2023 as traffic patterns normalized. These fluctuations, influenced by pandemic-related behavioral changes, traffic patterns, and variations in VMT, underscore the importance of targeted prevention strategies to address these emerging trends.

TABLE 2.1 provides key insights into the most common crash types that require focused attention:

- **Out of Control Crashes:** A total of 10 such crashes were recorded, with a peak of 5 incidents in 2022. These crashes suggest issues related to speed management and roadway design.
- **Angle-Related Crashes:** Crashes categorized as "Left Turn Right Angle" (9 incidents) and "Right Angle" (6 incidents) together account for nearly one-third of all KSI crashes, highlighting deficiencies in intersection safety.
- **Vulnerable Road User Crashes:** Incidents involving pedestrians (4 crashes) and cyclists (1 crash) emphasize the need for enhanced protections for non-motorized travelers.
- **Left Turn Crashes:** Various types of left turn crashes (12 total) were consistently observed throughout the study period, underscoring a significant safety concern.

GRAPH 2.1: CRASH SEVERITY BY YEAR (KSI)
2020 - 2024

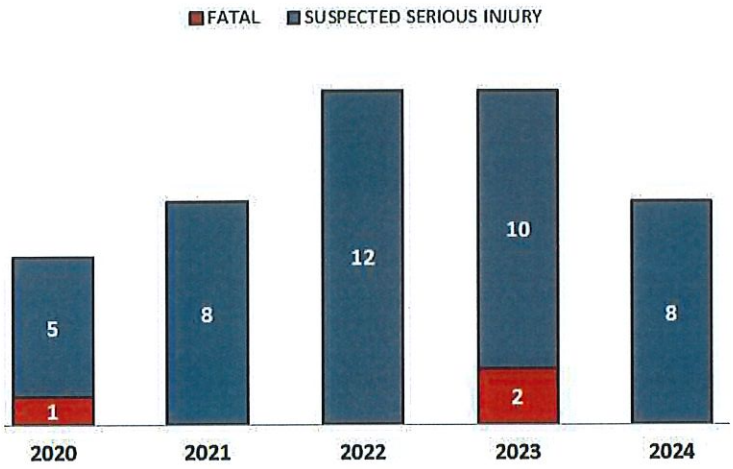


TABLE 2.1: CRASH TYPE 2020 - 2024

Crash Type	YEAR					
	2020	2021	2022	2023	2024	TOTAL
AVOIDING	-	1	-	-	1	2
HEAD ON	-	-	-	2	-	2
LEFT TURN	1	-	-	1	1	3
LEFT TURN RIGHT ANGLE	2	2	1	3	1	9
OTHER	-	-	1	1	-	2
OUT OF CONTROL	1	1	5	1	2	10
PARKING OR PARKED CAR	-	-	-	-	1	1
PEDALCYCLE	-	-	1	-	-	1
PEDESTRIAN	1	-	-	2	1	4
REAR END	-	2	1	1	-	4
RIGHT ANGLE	1	2	2	-	1	6
RIGHT TURN RIGHT ANGLE	-	-	1	1	-	2
TOTAL	6	8	12	12	8	46

Analysis of Clinton's KSI (Fatal or Seriously Injured) crashes from 2020 to 2024 highlights notable environmental and temporal trends that warrant attention. Weather, road surface and lighting conditions all contributed to these incidents, with clear patterns emerging throughout the year.

Seasonal variations are particularly evident, with certain months reporting higher concentrations of crashes. These trends suggest that environmental factors, combined with specific time periods, create higher-risk conditions on Clinton's roadways.

Understanding these patterns provides essential context for developing targeted safety interventions that address both the physical conditions and temporal factors associated with these incidents.

TABLE 2.2: CONTRIBUTING CIRCUMSTANCES KSI CRASHES 2020 - 2024

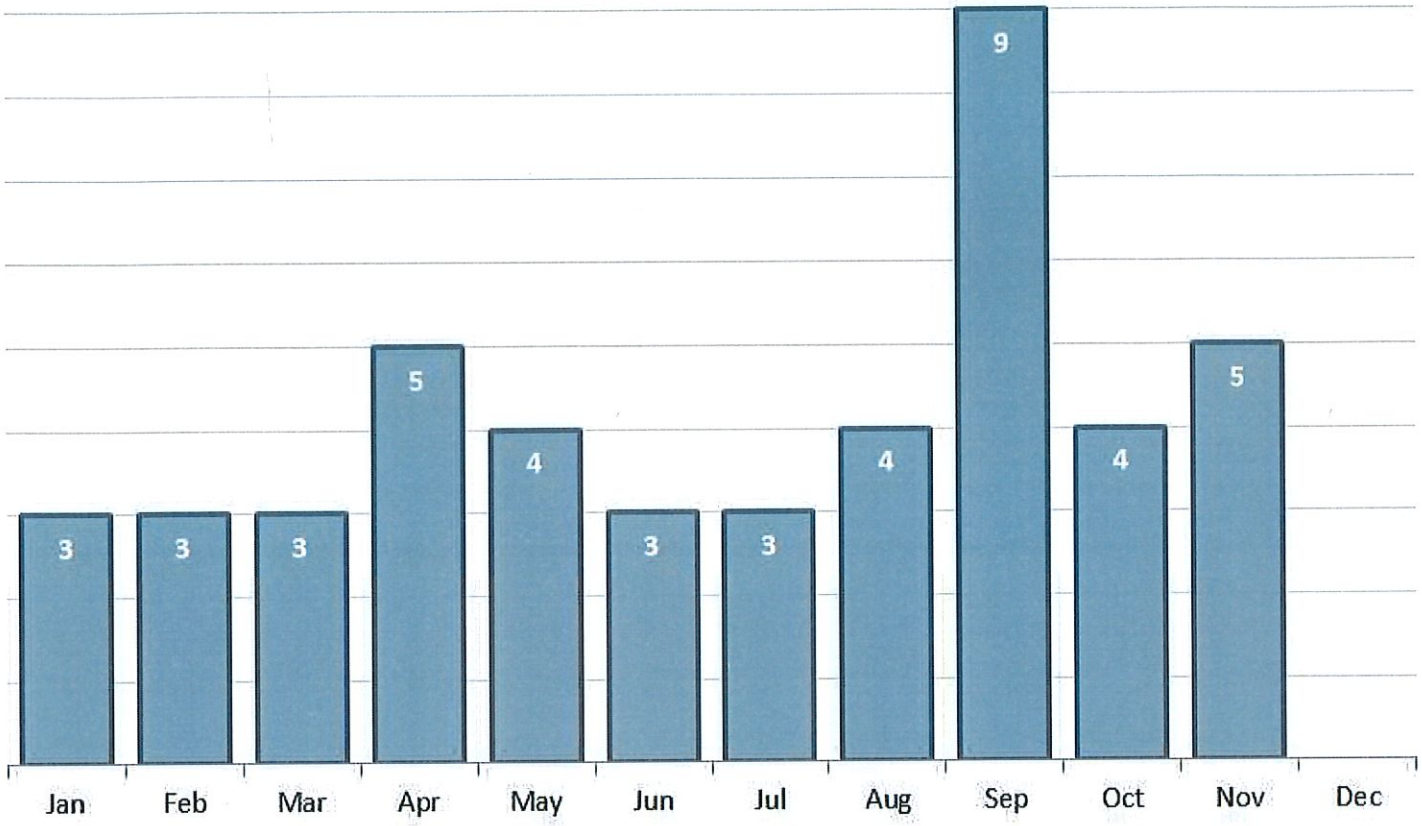
WEATHER CONDITIONS	YEAR					TOTAL
	2020	2021	2022	2023	2024	
CLEAR	6	7	10	11	7	41
CLOUDY	-	1	2	1	1	5
TOTAL	6	8	12	12	8	46
SURFACE CONDITIONS	**YEAR**					**TOTAL**
	2020	2021	2022	2023	2024	
DRY	6	7	11	12	8	44
ICE	-	-	1	-	-	1
WET	-	1	-	-	-	1
TOTAL	6	8	12	12	8	46
LIGHT CONDITIONS	**YEAR**					**TOTAL**
	2020	2021	2022	2023	2024	
DARK W/ LIGHTS OFF	1	3	2	3	-	9
DARK W/ LIGHTS ON	-	-	2	-	2	4
DAYLIGHT	5	5	8	9	6	33
TOTAL	6	8	12	12	8	46

TABLE 2.2:

An analysis of environmental factors for KSI (Fatal or Seriously Injured) crashes reveals the following trends:

- Weather Conditions:
  - 89% of crashes (41 out of 46) occurred during clear weather.
- Road Surface Conditions:
  - 95.7% of crashes (44 out of 46) happened on dry road surfaces.
- Lighting Conditions:
  - 71.7% of crashes (33 crashes) occurred during daylight hours.
  - 28.3% (13 crashes) occurred in darkness, with nine of these taking place where streetlights were either off or nonexistent.

GRAPH 2.2: Seasonal Trends in KSI Crashes by the Month 2020 - 2024



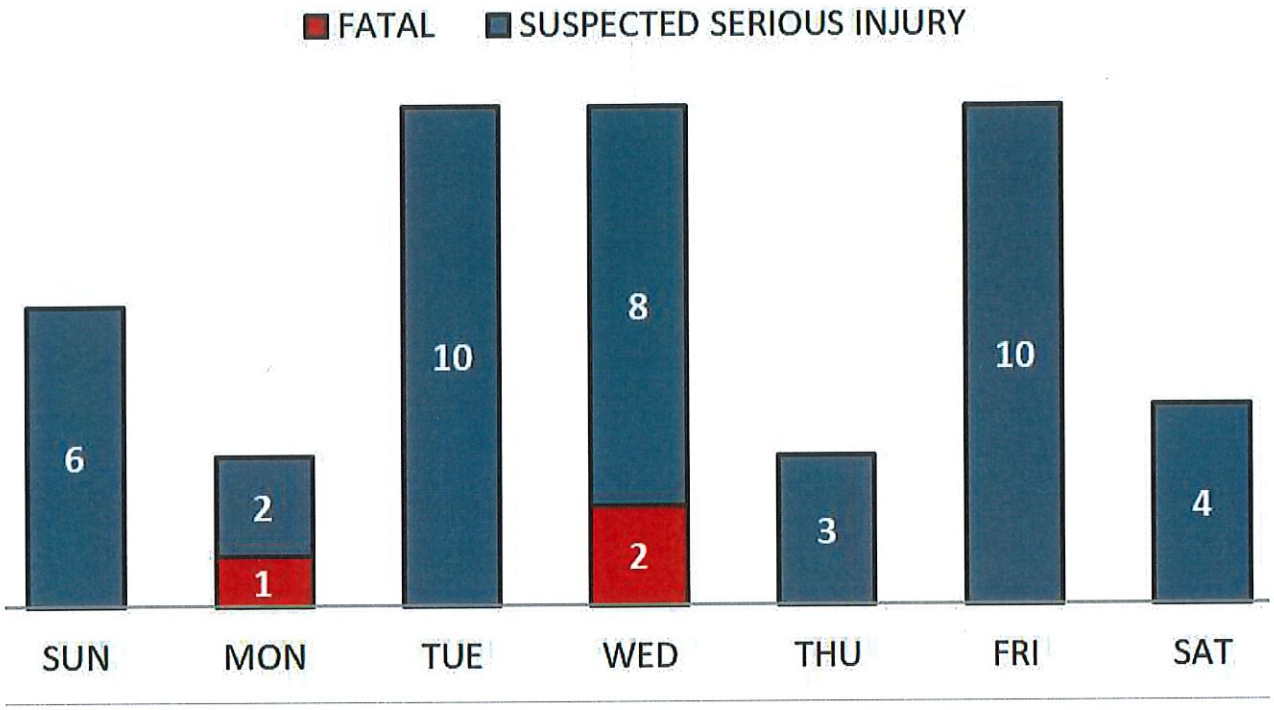
Graph 2.2 Overview

Graph 2.2 illustrates notable seasonal variations in KSI (Killed or Seriously Injured) crashes, highlighting opportunities for targeted safety interventions:

- September: The highest number of crashes occurred in September, with 9 KSI incidents (19.6% of the total).
- April and November: Each recorded 5 KSI crashes.
- Other Months: Most other months saw 3 to 4 KSI crashes, indicating a consistent baseline level of incidents throughout the year.

These trends demonstrate that KSI crashes occur year-round, with distinct seasonal peaks. This suggests the need for both ongoing attention and focused interventions during higher-risk months.

GRAPH 2.3: CRASH SEVERITY BY DAY OF WEEK (KSI) 2020 - 2024

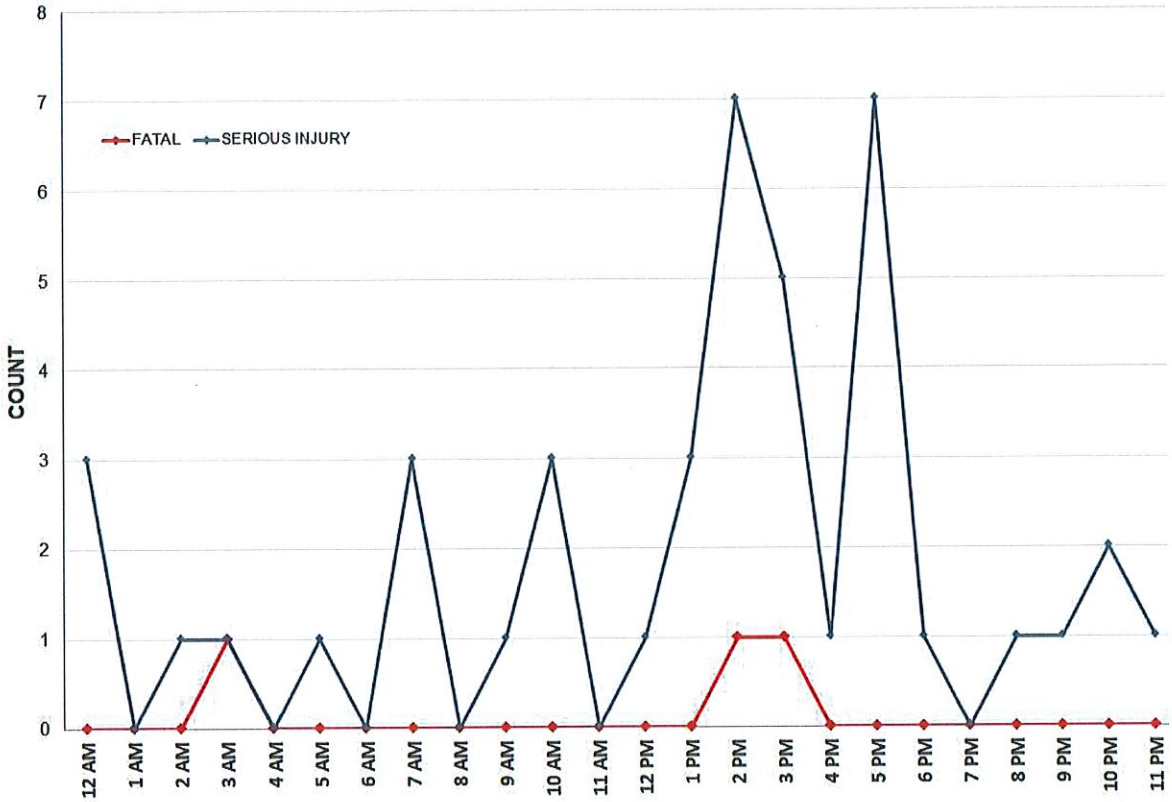


Graph 2.3 shows how KSI crashes were distributed across the days of the week:

- Tuesday, Wednesday, and Friday: These days recorded the most crashes, with 10 each.
  - Tuesday and Friday: All 10 crashes involved serious injuries.
  - Wednesday: 8 crashes involved serious injuries, and 2 were fatal.
- Sunday: 6 crashes, all involving serious injuries.
- Saturday: 4 crashes, all involving serious injuries.
- Thursday and Monday: Each recorded 3 crashes.
  - Thursday: All 3 crashes involved serious injuries.
  - Monday: 2 crashes involved serious injuries, and 1 was fatal.

These findings show that while certain days see more crashes, serious injury crashes occur throughout the week, emphasizing the need for consistent safety measures.

GRAPH 2.4: CRASH SEVERITY BY TIME OF DAY (KSI) 2020 - 2024



School Impact

Graph 2.4 shows that the highest frequency of KSI (fatal and serious injury) crashes occurs between 2 PM and 3 PM, coinciding with school dismissal times. This highlights the need for enhanced safety measures around schools during afternoon pickup.

Commute Patterns

- Morning Commute (7 AM - 9 AM): An increase in KSI crashes is observed during this period.
- Evening Commute (4 PM - 6 PM): This period has the second-highest frequency of KSI crashes.

Peak Comparison

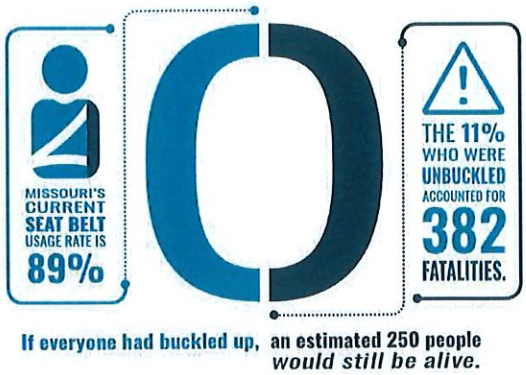
- Highest Peak: 2 PM - 3 PM, likely influenced by a combination of school traffic and early commuters returning home.
- Lowest Peak: Crashes are lowest at 4 AM, 6 AM, 8 AM, 11 AM, and 7 PM.

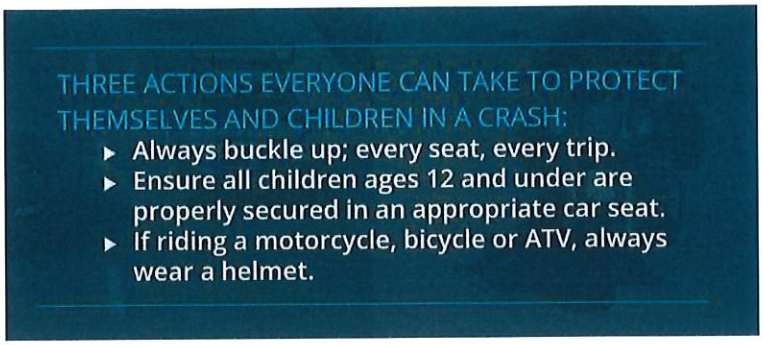
This comparison underscores the significant influence of daily routines on crash patterns, with 2 PM to 3 PM emerging as the period of greatest risk.

Recommendations

Traffic safety efforts should prioritize:

- School Zones: Implement enhanced safety measures during dismissal times to protect students and families.
- Commuter Traffic: Focus on managing traffic during the afternoon peak, when school and work commutes overlap, as well as during morning commute hours.





Source: Missouri's Strategic Highway Safety Plan 2021-2025

Unbelted Fatal Crashes

Although no unbelted fatal crashes were reported in Clinton between 2020 and 2024, addressing unbelted occupant behavior remains critical for improving roadway safety. Unbelted crashes are a priority focus area in Missouri's Strategic Highway Safety Plan (SHSP) due to their significant contribution to severe injuries and fatalities across the state.

Statewide Context

Unbelted occupants account for a disproportionate share of fatal and serious injury (KSI) crashes in Missouri. In 2022 alone, over 60% of vehicle occupant fatalities statewide involved individuals who were not wearing seat belts. Missouri's SHSP highlights seat belt use as one of the most effective strategies for reducing crash severity and saving lives.

Recommended Countermeasures

To continue this positive trend, Clinton can implement the following strategies:

- Public Awareness Campaigns: Partner with Missouri's safety initiatives to promote seat belt use through social media, local events, and school programs.
- High-Visibility Enforcement: Collaborate with law enforcement to conduct targeted campaigns, such as "Click It or Ticket," which emphasize compliance with seat belt laws.
- Engagement: Work with schools, businesses, and healthcare providers to highlight the importance of seat belt use.
- Youth Education: Focus outreach efforts on younger drivers and passengers, who often have lower seat belt compliance rates, to establish lifelong safety habits.



Source: MCRS

Summary

Although no unbelted fatalities occurred in Clinton from 2020 to 2024, prioritizing seat belt use is vital to preventing severe crashes and aligning with Missouri's SHSP goals. Through education, enforcement, and community collaboration, Clinton can take proactive steps to prevent unbelted KSI crashes and enhance roadway safety.

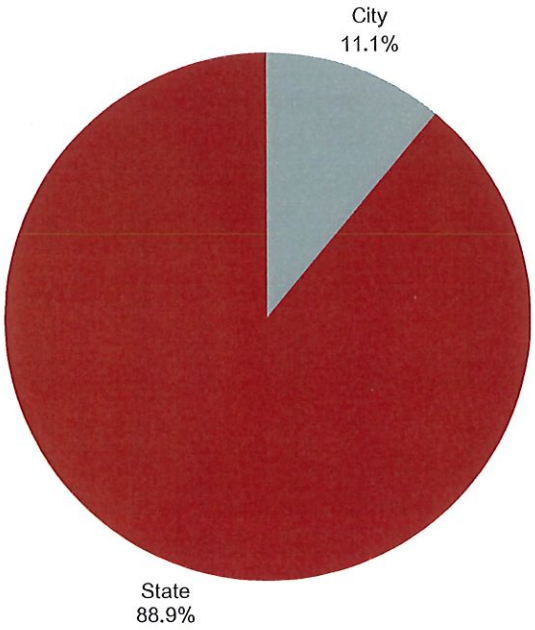
Motorcycle Crashes

From 2020 to 2024, motorcycles accounted for 1 fatality and 8 SI crashes (19.57% of SI crashes) in Clinton. Notably, 8 of 9 motorcycle KSI crashes occurred on the state system, underscoring the need for targeted safety improvements.

Contributing Factors

- Speeding increases crash severity.
- Visibility Challenges make motorcycles harder to detect.
- Lack of Helmet Use reduces rider protection.
- Driver Inattention contributes to failure-to-yield crashes.

Roadway Ownership of Motorcycle KSI Crashes



Strategies

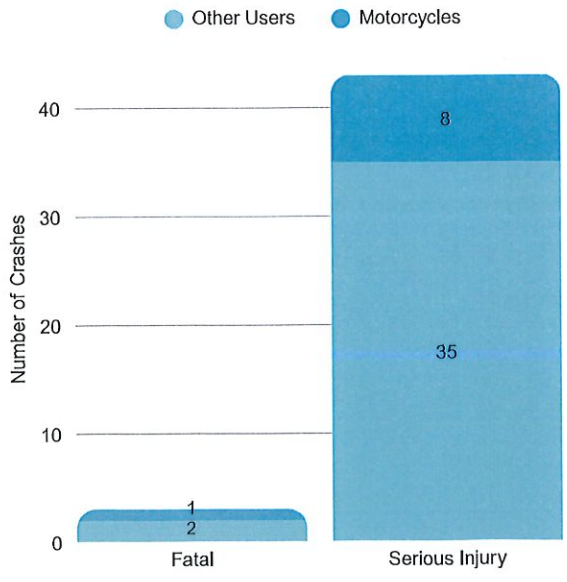
Clinton can reduce motorcycle crashes by continuing to leverage the Missouri Coalition for Roadway Safety (MCRS) programs:

- Support & Work for a state law requiring helmets for all riders.
- Education: Promote "Share the Road" and helmet safety campaigns.
- Training: Support rider safety programs like the Missouri Motorcycle Safety Program.
- Enforcement: Target speeding and impaired riding on high-risk roads.
- Roadway Improvements: Enhance lighting, signage, and pavement quality at intersections.
- Data-Driven Focus: Use crash data to identify high-risk areas and evaluate safety strategies.



HELMETS REDUCE THE CHANCE OF FATAL INJURY BY 42% AND REDUCE THE RISK OF SUSTAINING A HEAD INJURY BY 69% FOR MOTORCYCLE RIDERS.

Source: Community Preventive Service Task Force

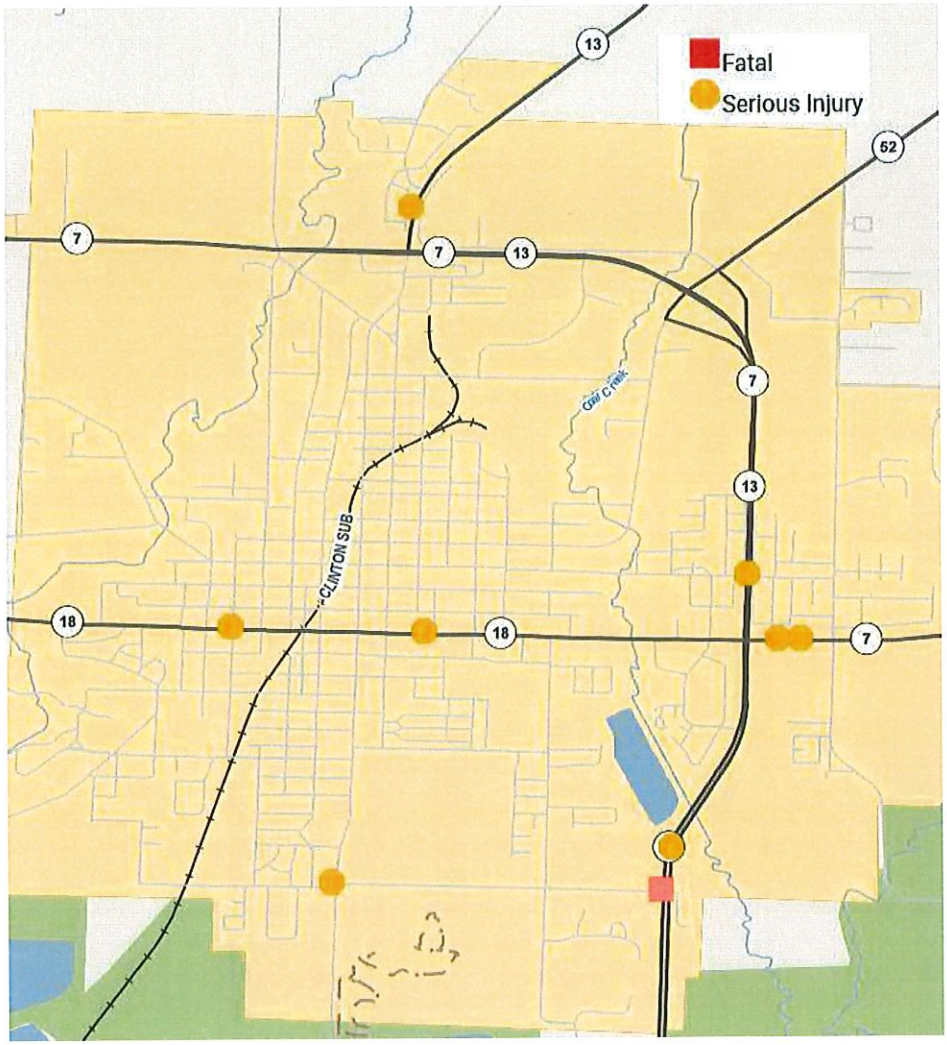


Summary

Motorcycle crashes disproportionately impact KSI outcomes in Clinton, particularly on the state system. Addressing contributing factors through education, enforcement, and infrastructure improvements can improve motorcyclist safety.

Motorcycle KSI Crashes: 2020 - 2024

1 Fatal Crash
8 Serious Injury Crashes
46 Total KSI Crashes
19.57% of Total KSI



Crash Risk for Motorcyclists



National Statistics:

In 2023, motorcyclists were:

- 28 times more likely than passenger car occupants to die in a motor vehicle crash.
- 5 times more likely to be injured.

These figures underline the extreme vulnerability of motorcyclists compared to passenger vehicle occupants. The lack of a protective vehicle structure significantly increases the severity of injuries in crashes.

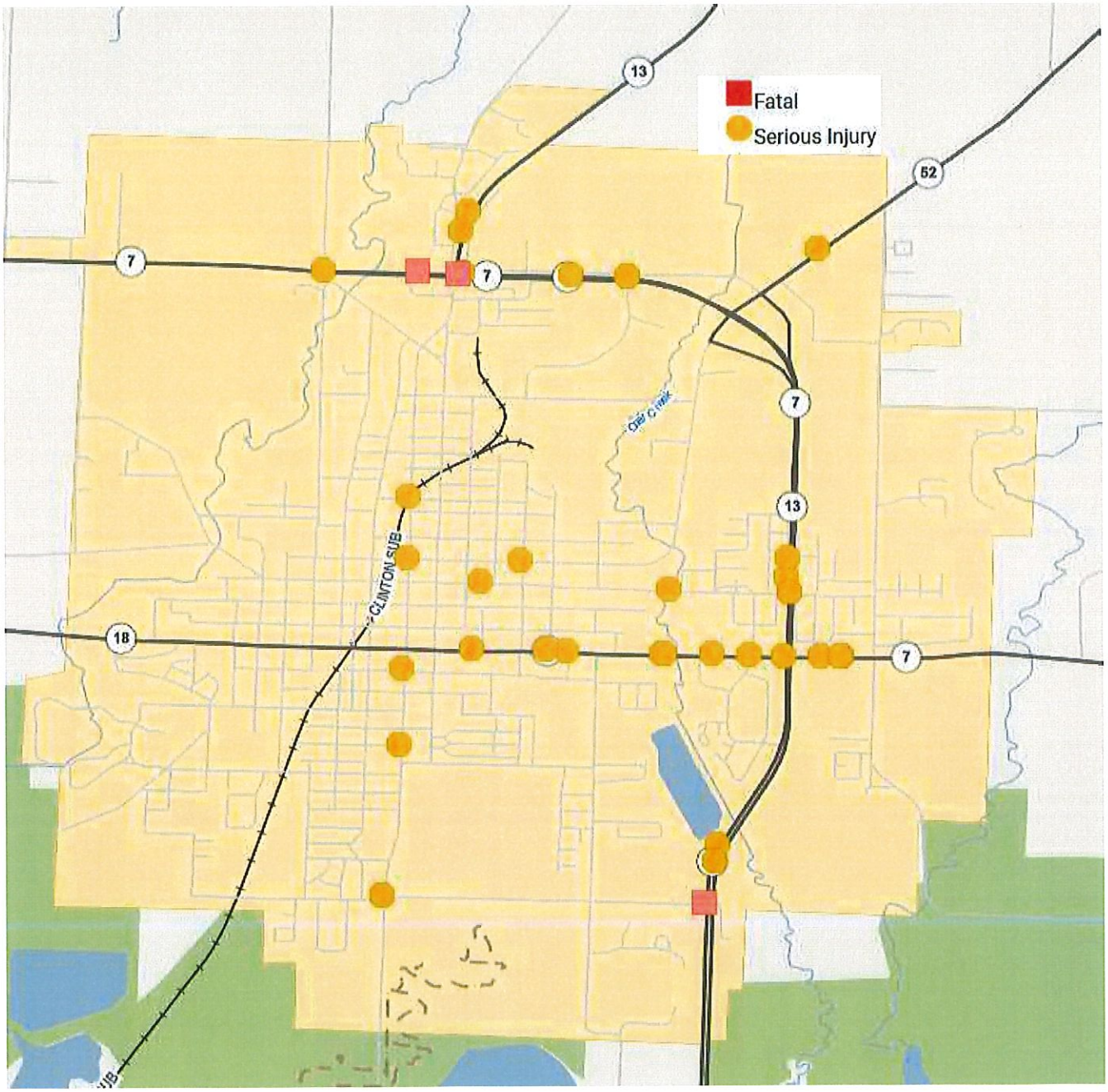
Missouri Trends:

- From 2020 to 2024, motorcyclists accounted for 15% of all traffic fatalities in Missouri, despite representing a smaller percentage of total road users.
- The 2020 repeal of Missouri's universal helmet law contributed to a sharp increase in motorcycle fatalities, which spiked by more than one-third in the following year and have since remained elevated.

Freeway, Principal & Minor Arterials

KSI Crashes: 2020 - 2024

3 Fatal Crashes
36 Serious Injury Crashes
46 Total KSI Crashes
84.78% Total KSI Crashes
14.6% of Centerline Miles



KSI Crashes on Freeways, Principal & Minor Arterials

Crash Data Overview

Between 2020 and 2024, freeways, principal, and minor arterials in Clinton accounted for 84.78% of all KSI crashes, despite comprising only 14.6% of centerline miles.

- Fatal Crashes:
  - Three fatal crashes occurred, involving two pedestrians and one motorcyclist, all on MoDOT-managed roadways.
  - Vulnerable road users represented 100% of fatalities on these roadways.
- Serious Injury Crashes:
  - 36 serious injury crashes, with:
    - 27 occurring on the state system (MoDOT-managed roads).
    - 9 occurring on city streets.

Key Findings

- Disproportionate Impact:
  - Freeways, principal, and minor arterials accounted for the vast majority of KSI crashes, despite their limited mileage.
- Vulnerable Road Users at Risk:
  - All fatalities involved pedestrians or motorcyclists, underscoring the need for targeted safety measures for these road users.
- Crash Severity Linked to Roadway Characteristics:
  - Higher speed limits and increased traffic volumes were significant contributors to severe outcomes.
- State System Focus:
  - The majority of KSI crashes occurred on MoDOT-managed roads, emphasizing the importance of state-level collaboration for safety improvements.

Key Contributing Factors

- Higher Speeds:
  - Increased speeds reduce reaction time and magnify crash impact, especially for vulnerable road users.
- Traffic Volumes:
  - Heavier traffic increases the likelihood of vehicle conflicts and crash severity.
- Intersection Complexity:
  - Signalized intersections and frequent access points create conflict zones, raising crash risks.
- Vulnerable Road Users:
  - Pedestrians and motorcyclists face elevated risks due to exposure and limited protection.
- Driver Behavior:
  - Speeding and distracted driving were significant factors, though no impaired driving was reported.

Strategies for Improvement

The following strategies align with the Safe System Approach outlined in the Missouri Show-Me Zero Plan, focusing on Safer Speeds, Safer Infrastructure, and Safer People:

- Speed Management:
  - Install dynamic speed feedback signs in high-risk areas to alert drivers to their speeds.
  - Conduct targeted speed enforcement campaigns on corridors with high crash rates.
  - Collaborate with MoDOT to review and adjust speed limits, particularly where higher speeds contribute to crashes.
- Intersection Safety Enhancements:
  - Upgrade signal timing and introduce protected left-turn phases to reduce vehicle conflict points.
  - Consider innovative designs such as roundabouts, which have been shown to reduce severe crashes by over 75%.
  - Add pedestrian hybrid beacons (PHBs) or Rectangular Rapid Flashing Beacons (RRFBs) at high-pedestrian-traffic intersections.
- Access Management:
  - Consolidate driveways and limit access points on high-speed roads to reduce vehicle conflicts.
  - Implement raised medians or restricted turning movements (e.g., right-in, right-out designs) in high-crash areas.
- Infrastructure Improvements:
  - Enhance road delineation with rumble strips, centerline markings, and high-visibility crosswalks.
  - Improve nighttime visibility with LED lighting and reflective signage.
  - Add protected bike lanes and refuge islands for vulnerable road users, especially at intersections.
- Enforcement & Education:
  - Focus enforcement efforts on speeding and distracted driving, which were primary contributing factors.
  - Partner with the Missouri Coalition for Roadway Safety (MCRS) to launch public awareness campaigns targeting:
    - Pedestrian and motorcyclist safety.
    - Safe driving behaviors, including the Buckle Up Phone Down (BUPD) initiative.
- Data-Driven Solutions:
  - Use Missouri's Crash Analysis Reporting System (CARS) to identify high-risk areas and prioritize safety interventions.
  - Regularly evaluate the effectiveness of implemented measures and revise strategies based on crash data trends.

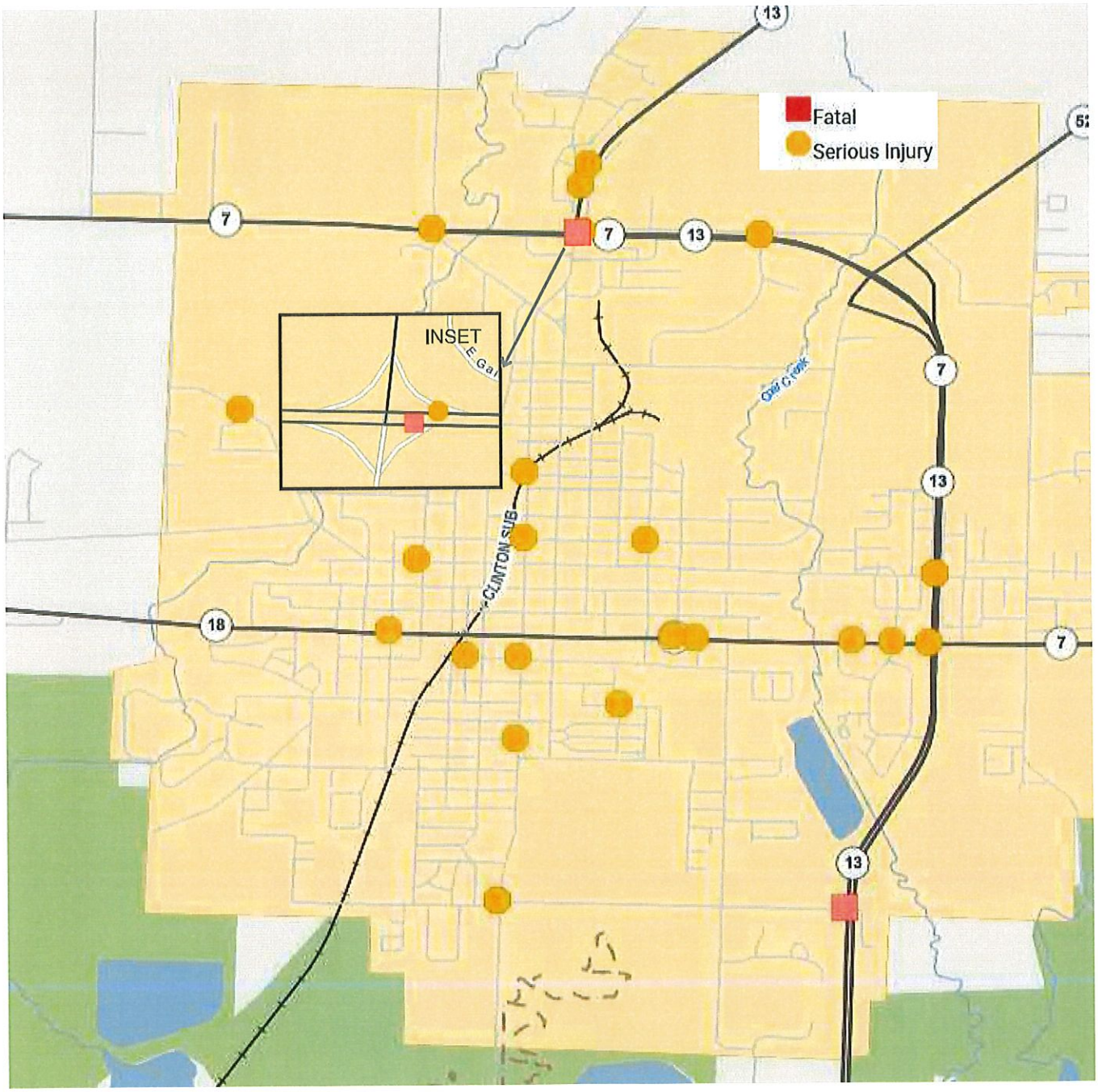
Summary

Freeways, principal, and minor arterials are vital for Clinton's mobility but present significant safety risks, especially for vulnerable road users like pedestrians and motorcyclists. These roadways accounted for the vast majority of KSI crashes between 2020 and 2024, with higher speeds, traffic volumes, and intersection complexity being key contributors.

By adopting Show-Me Zero's Safe System Approach through speed management, infrastructure upgrades, access management, and public education, Clinton can significantly reduce KSI crashes on these critical roadways. Collaboration with MoDOT and MCRS will play a pivotal role in achieving the shared vision of zero fatalities and serious injuries on Missouri roadways.

Intersection KSI Crashes: 2020 - 2024

2 Fatal Crashes
25 Serious Injury Crashes
46 Total KSI Crashes
58.70% of Total KSI Crashes



KSI Intersection Crash Analysis: Clinton, MO (2020–2024)

Intersections in Clinton are a critical area of focus for roadway safety, accounting for a substantial proportion of fatal and serious injury (KSI) crashes. This analysis and recommended strategies for addressing intersection crashes uses the Missouri Show-Me Zero Strategic Highway Safety Plan framework.

Crash Data Overview: Clinton, MO (2020–2024)

- Intersection-Related KSI Crashes:
  - 58.7% of all KSI crashes (27 out of 46 total KSI crashes) occurred at intersections.
  - This includes 2 fatal crashes and 25 serious injury (SI) crashes.
- Fatal Crashes:
  - 66.6% of fatal crashes (2 out of 3 fatalities in Clinton) occurred at intersections.
  - All fatal crashes were on the MoDOT system.
- Serious Injury Crashes:
  - Of the 25 serious injury crashes at intersections:
    - 13 occurred on the MoDOT system.
    - 12 occurred on Clinton's local streets, highlighting the need for safety improvements at the local level.

Key Findings

- High Risk at Intersections:
  - Over half of all KSI crashes (58.7%) in Clinton occurred at intersections, demonstrating their critical role in roadway safety.
- Fatal Crashes on the MoDOT System:
  - All intersection-related fatalities occurred on high-speed, high-traffic MoDOT-managed roadways, emphasizing the need for targeted interventions on the state system.
- Local Streets and Serious Injuries:
  - Half of the SI crashes occurred on Clinton's local streets, suggesting the need for localized safety enhancements to reduce crash severity.

Contributing Factors to Intersection Crashes

Intersection crashes in Clinton are influenced by several factors, consistent with statewide trends identified in the Show-Me Zero Plan:

- Traffic Conflicts:
  - Turning and crossing movements inherently increase the likelihood of collisions at intersections.
- Driver Behavior:
  - Speeding, failure to yield, running red lights, and distracted driving are common contributors to intersection crashes.
- Visibility Issues:
  - Poor lighting, sightline obstructions (e.g., vegetation or parked vehicles), and complex intersection layouts reduce driver reaction times.
- Road System Differences:
  - On the MoDOT system, higher speeds and traffic volumes elevate the risk of severe crashes.
  - On local streets, crashes occur more frequently, though injuries are often less severe.

Strategies to Improve Intersection Safety

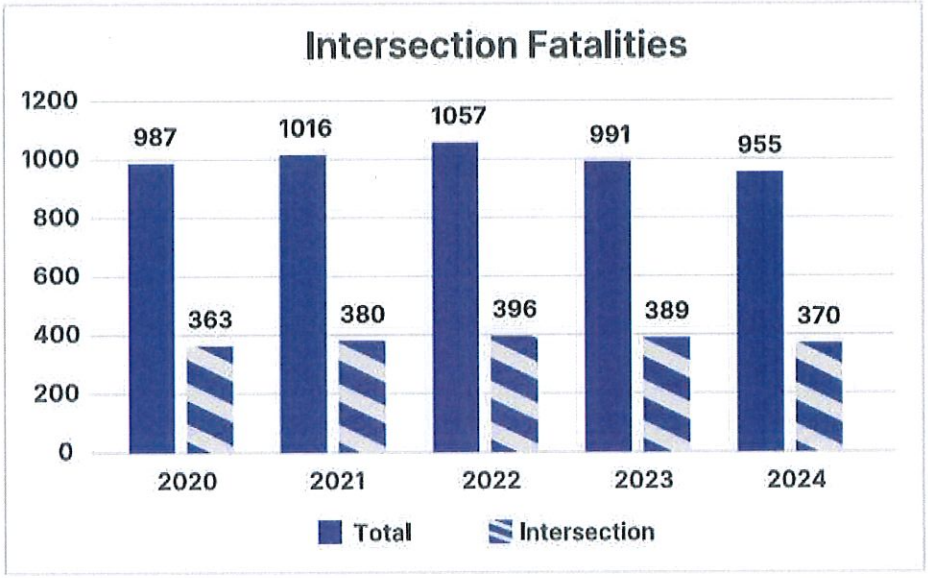
Clinton should collaborate with MoDOT and other stakeholders to implement safety improvements aligned with the Safe System Approach under the Show-Me Zero Plan.

- Signal & Traffic Control Improvements:
  - MoDOT System:
    - Install protected left-turn phases to reduce conflict points.
    - Adjust signal timing to optimize traffic flow and minimize red-light running.
    - Add all-red clearance intervals to prevent intersection-related crashes.
  - Local Streets:
    - Optimize signal timing at key intersections.
    - Implement stop-controlled measures (e.g., 4-way stops) where appropriate.
- Intersection Design Enhancements:
  - Consider converting high-risk intersections to roundabouts to reduce severe crashes by slowing traffic and eliminating certain conflict points.
  - Add pedestrian refuge islands and high-visibility crosswalks to improve safety for vulnerable users, such as pedestrians and cyclists.
- Visibility & Lighting Improvements:
  - MoDOT System:
    - Enhance lighting at intersections to improve nighttime visibility.
    - Install advance warning signs on high-speed approaches to signalized intersections.
  - Local Streets:
    - Trim obstructing vegetation and ensure unobstructed sightlines.
    - Improve overhead lighting at key intersections.
- Driver Behavior Interventions:
  - Launch public education campaigns to promote safe driving behaviors, including:
    - Yielding at intersections.
    - Obeying red lights and stop signs.
    - Practicing safe turning practices.
  - Install dynamic warning signs to alert drivers approaching high-risk intersections.
- Enforcement:
  - MoDOT System:
    - Increase enforcement of speeding, red-light running, and failure-to-yield violations at high-risk intersections.
  - Local Streets:
    - Focus enforcement on stop sign compliance and distracted driving in residential areas.
- Data-Driven Focus:
  - Use crash data to identify and prioritize high-risk intersections on both the MoDOT and local systems.
  - Regularly evaluate the effectiveness of implemented measures and adjust strategies as needed.

Summary
Intersection-related crashes are a major safety concern in Clinton, accounting for 58.7% of all KSI crashes and 66.6% of fatal crashes during the 2020–2024 period.

- Fatal crashes occurred exclusively on the MoDOT system, underscoring the need for focused improvements on higher-speed state roadways.
- Serious injury crashes were evenly split between the MoDOT system and local streets, highlighting the importance of collaboration between Clinton and MoDOT to address safety concerns.

By improving signal timing, enhancing intersection design, addressing visibility issues, and promoting safe driving behaviors, Clinton can significantly reduce intersection-related crashes. These targeted interventions align with the Show-Me Zero vision of eliminating roadway fatalities and serious injuries in Missouri.

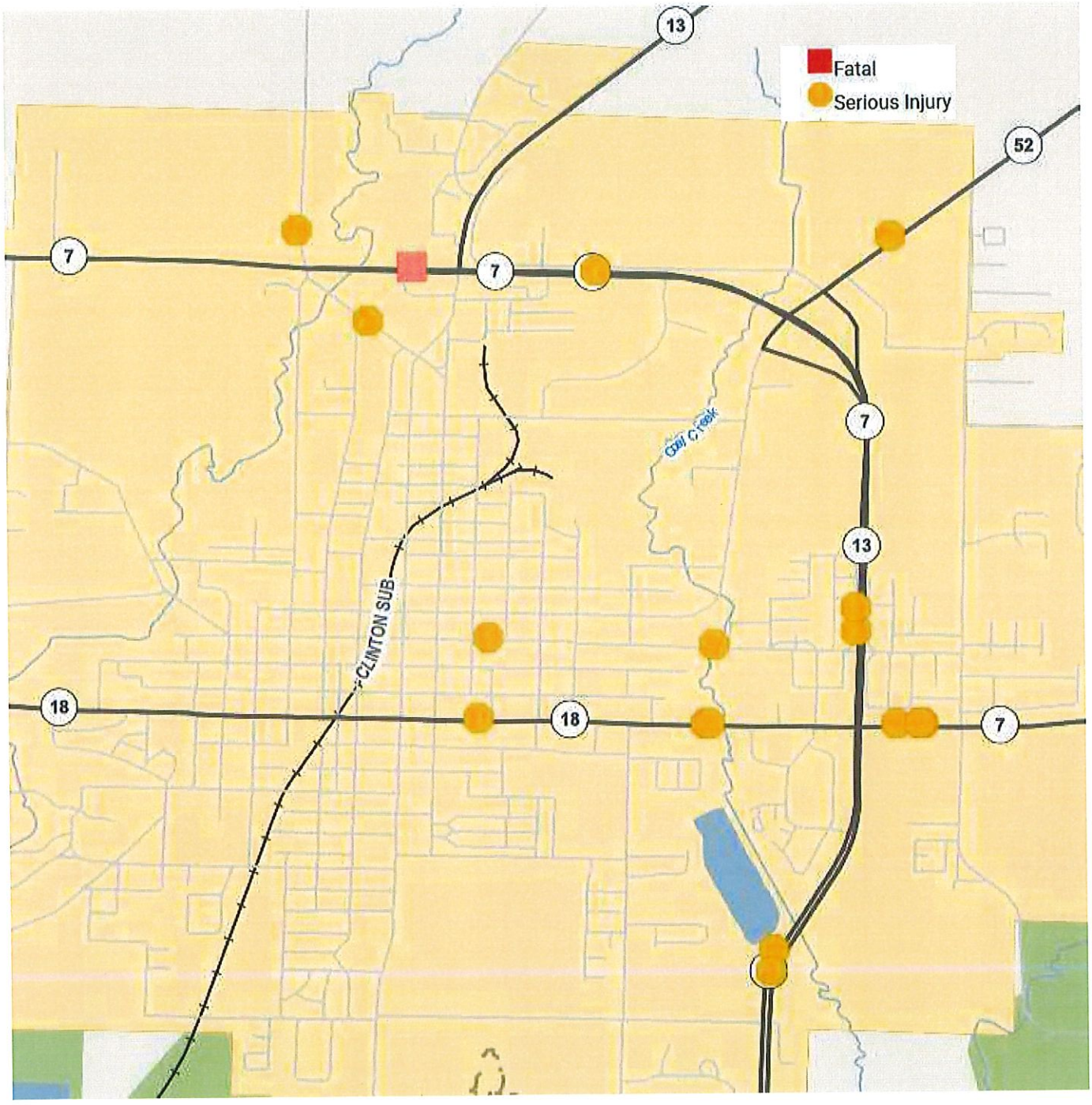


Over the past five years in Missouri, 38% of traffic fatalities have occurred at intersections.

Source: Show Me ZERO Missouri's SHSP

Segments KSI: 2020 - 2024

1 Fatal Crash
18 Serious Injury Crashes
46 Total KSI Crashes
41.30% Total KSI Crashes



KSI Segment Crash Analysis: Clinton, MO (2020–2024)

Street segments in Clinton experienced a significant number of fatal and serious injury (KSI) crashes between 2020 and 2024. This analysis and recommendations for addressing segment-related crashes integrates strategies from the Missouri Show-Me Zero Strategic Highway Safety Plan.

Crash Data Overview: Clinton, MO (2020–2024)

- Total KSI Segment Crashes:
  - 19 KSI crashes occurred on street segments, including:
    - 1 fatal crash
    - 18 serious injury (SI) crashes
- Crash Location Breakdown:
  - 79% (15 crashes) occurred on the MoDOT system, comprising:
    - 1 fatal crash
    - 14 SI crashes
  - 21.05% (4 crashes) occurred on city-managed street segments, all of which were SI crashes.

Key Findings

- MoDOT System Focus: The majority of segment-related KSI crashes occurred on MoDOT-managed roadways, highlighting the risk posed by high-speed, high-traffic state routes.
- Fatal Crash on MoDOT Segment: The single fatal crash during this period also occurred on a MoDOT segment.
- Crash Severity and Contributing Factors: Higher speeds and increased traffic volumes on MoDOT roadways were likely contributors to the severity of crashes.

Contributing Factors

- Higher Speeds: Elevated speeds, particularly on straight and open segments, reduce driver reaction time and increase crash severity.
- Driver Behavior: Speeding and distracted driving are prominent contributing factors to segment crashes, though no impaired driving was reported.
- Segment Characteristics: Long, straight roadways on the MoDOT system encourage higher speeds, while local street segments may experience more frequent but less severe crashes due to lower speeds.

Strategies to Address KSI Segment Crashes

Clinton and MoDOT can adopt a Safe System Approach to reduce KSI crashes on street segments, focusing on Safer Speeds, Safer Roads, Safer People, and Data-Driven Solutions.

- Speed Management:
  - Install dynamic speed feedback signs on high-risk segments to encourage compliance with speed limits.
  - Conduct speed studies to reevaluate and adjust speed limits on MoDOT-managed segments where excessive speeds contribute to crashes.
  - Implement traffic calming measures (e.g., narrowing lanes or adding rumble strips) on city-managed segments to reduce speeds.

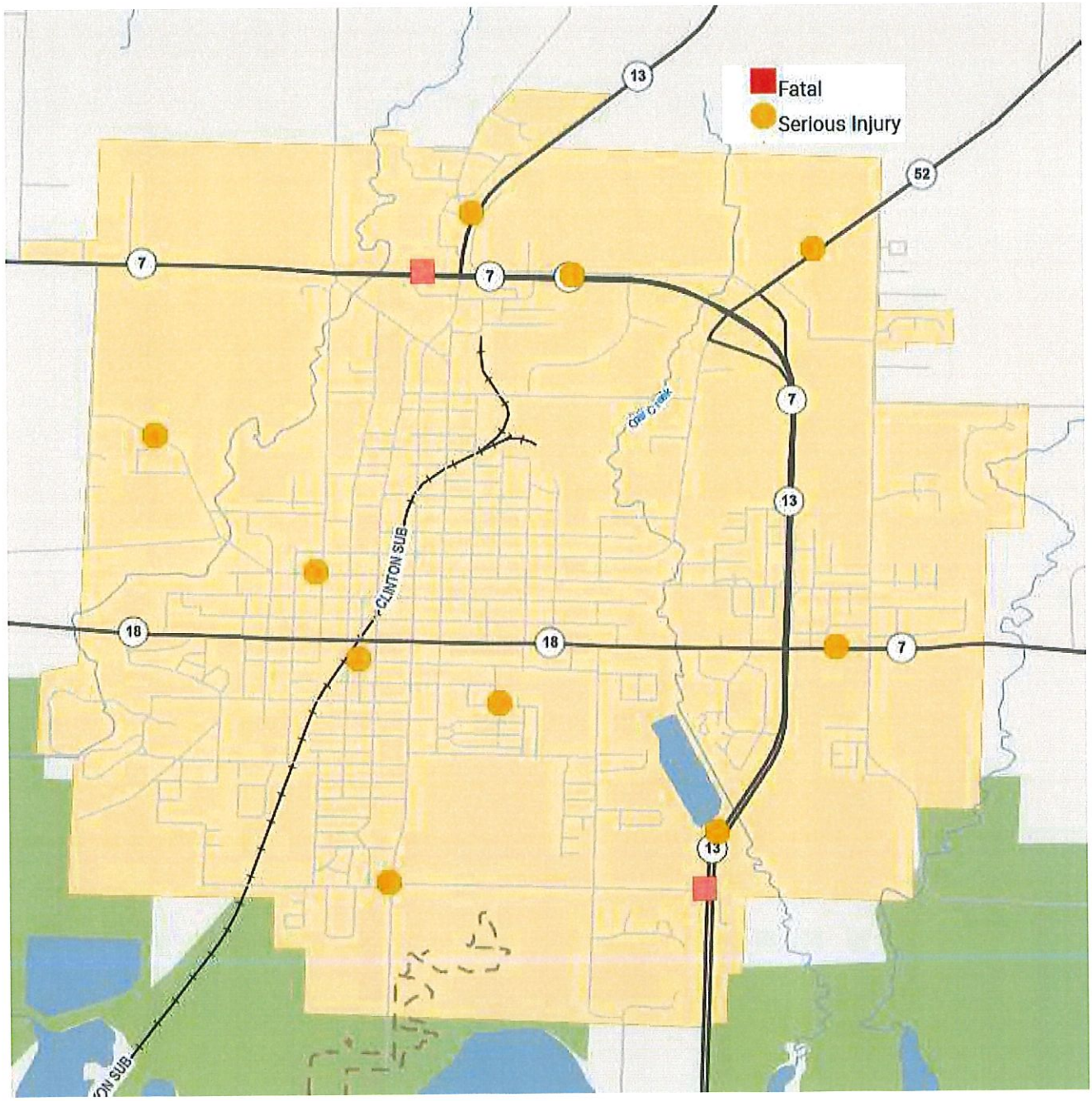
- Enhanced Safety Features:
  - Consider adding centerline and shoulder rumble strips on higher-speed MoDOT segments to alert drivers of lane departures.
  - Install reflective signage and high-visibility lane markings to improve driver awareness, particularly at night or in adverse weather.
  - Consider road diets or lane reconfigurations on city-managed segments to reduce speeding and improve safety for all road users.
- Targeted Enforcement and Education:
  - Increase enforcement of speeding and distracted driving violations on high-risk segments.
  - Use high-visibility enforcement campaigns to deter unsafe driving behaviors.
  - Collaborate with the Missouri Coalition for Roadway Safety (MCRS) to conduct public awareness campaigns, focusing on:
    - The dangers of speeding and distracted driving.
    - Promoting the Buckle Up Phone Down (BUPD) initiative to encourage seatbelt use and reduce distractions.
- Data-Driven Improvements:
  - Use crash data to identify high-risk segments for targeted safety enhancements.
  - Prioritize segments with a history of high-speed crashes or recurring contributing factors.
  - Regularly monitor and evaluate the effectiveness of implemented measures, adjusting strategies based on outcomes.

Summary

- KSI segment crashes in Clinton, particularly on the MoDOT system, represent a critical safety concern, with 79% of crashes occurring on state-managed roadways.
- Contributing factors such as higher speeds and driver behavior must be addressed through targeted speed management, enhanced safety features, and enforcement measures.
- Collaboration between Clinton, MoDOT, and MCRS is essential to implementing proactive, data-driven solutions that align with the Show-Me Zero vision of eliminating roadway fatalities and serious injuries.
- By focusing on speed control, infrastructure improvements, and public education, Clinton can reduce the frequency and severity of segment-related crashes, ensuring safer conditions for all road users.

Lane Departure KSI: 2020 - 2024

2 Fatal Crashes
10 Serious Injury Crashes
46 Total KSI Crashes
26.09% Total KSI Crashes



Lane Departure Crash Analysis: Clinton, MO (2020–2024)

Lane departure crashes in Clinton are a significant safety concern due to their high likelihood of severe outcomes. These crashes often occur on high-speed roads or those with limited recovery areas, influenced by driver behavior and roadway design. The following analysis incorporates strategies from Missouri's Show-Me Zero Strategic Highway Safety Plan to address lane departure crashes effectively.

Crash Data Overview

- 26.09% of KSI crashes (12 out of 46 total KSI crashes) involved lane departure.
- 2 fatal crashes and 10 serious injury (SI) crashes involved lane departures.
- Location Breakdown:
  - Both fatal crashes and 5 SI crashes occurred on MoDOT-managed roads.
  - The remaining 5 SI crashes occurred on city-managed roads, emphasizing the need for local and state collaboration.

Key Challenges

- Driver Behavior:
  - Distracted driving, speeding, drowsiness, and impairment are major contributors to lane departure crashes.
  - Drivers may also face challenges with reaction time or decision-making when navigating curves or narrow roadways.
- Roadway Design:
  - Sharp curves, narrow or absent shoulders, and poor or faded pavement markings increase the likelihood of lane departures.
  - Limited recovery areas on high-speed roads exacerbate crash severity when lane departures occur.
- State System Roads:
  - Many lane departure crashes happen on MoDOT-managed roads, which tend to have higher speeds and traffic volumes.
  - Addressing these crashes requires close coordination with MoDOT to implement targeted safety improvements.

Goals & Objectives

Clinton's goals to reduce lane departure crashes align with the Safe System Approach in the Show-Me Zero Plan:

- Enhance Roadway Safety:
  - Upgrade road features, including markings, rumble strips, shoulders, and barriers, to prevent lane departures and reduce crash severity.
- Encourage Safer Driving:
  - Educate drivers on the dangers of distracted driving, speeding, and drowsy driving.
  - Enforce traffic laws to deter risky behaviors.

- Partner with MoDOT:
  - Work collaboratively with MoDOT to address risks on state-managed roads and prioritize safety improvements.

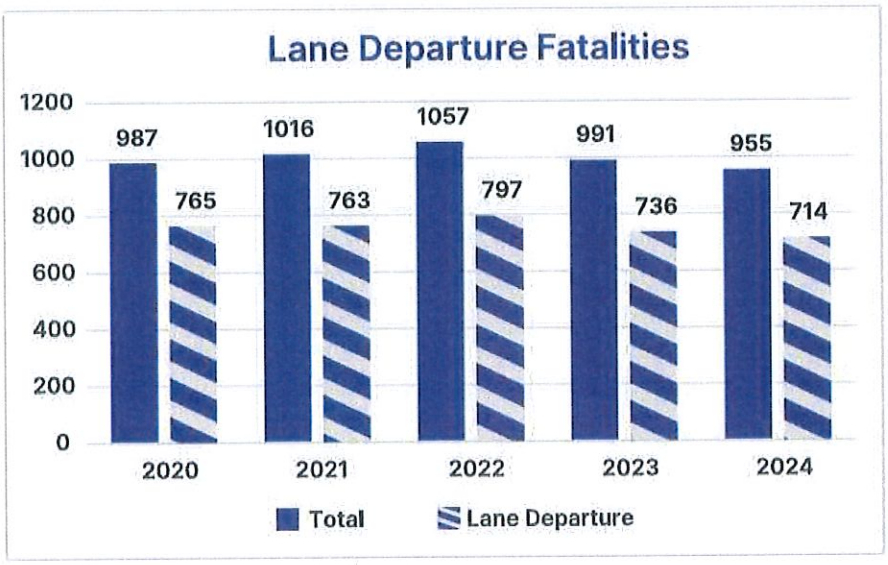
Strategies to Reduce Lane Departure Crashes

Clinton can reduce lane departure crashes with a multifaceted approach addressing Safer Roads, Safer People, and Safer Speeds.

- Roadway Infrastructure Improvements:
  - Install rumble strips (centerline and shoulder) to alert drivers when they leave their lane.
  - Add or widen paved shoulders to provide recovery areas for vehicles.
  - Upgrade pavement markings with high-visibility, retroreflective materials for improved nighttime visibility.
  - Evaluate and address sharp curves, including adding chevron signage and curve speed warning signs.
- Speed Management:
  - Conduct speed studies to identify high-risk segments where excessive speed contributes to lane departure crashes.
  - Collaborate with MoDOT to adjust speed limits where necessary, especially on rural or curved roadways.
- Driver Behavior Interventions:
  - Partner with the Missouri Coalition for Roadway Safety (MCRS) to launch public awareness campaigns focusing on:
    - The dangers of distracted and drowsy driving.
    - The importance of avoiding speeding on high-risk roads.
    - Promoting the Buckle Up Phone Down (BUPD) initiative.
  - Increase enforcement of speeding, distracted driving, and impaired driving laws, particularly on rural and MoDOT-managed roads.
- Data-Driven Focus:
  - Use crash data to identify high-risk segments for lane departure crashes.
  - Conduct safety audits on both MoDOT and city-managed roads to prioritize improvements.
  - Regularly monitor and evaluate the effectiveness of implemented measures and adjust strategies as needed.

Summary

- Lane departure crashes account for 26.09% of KSI crashes in Clinton, with 58% occurring on high-speed, high-traffic roads managed by MoDOT.
- Key contributing factors include driver behavior (e.g., speeding, distracted driving) and roadway design (e.g., sharp curves, narrow shoulders).
- Focusing on infrastructure improvements, speed management, driver education and enforcement can significantly reduce the frequency and severity of these crashes.
- Collaboration with MoDOT and commitment to the Show-Me Zero vision will help create safer roadways for all users in Clinton.

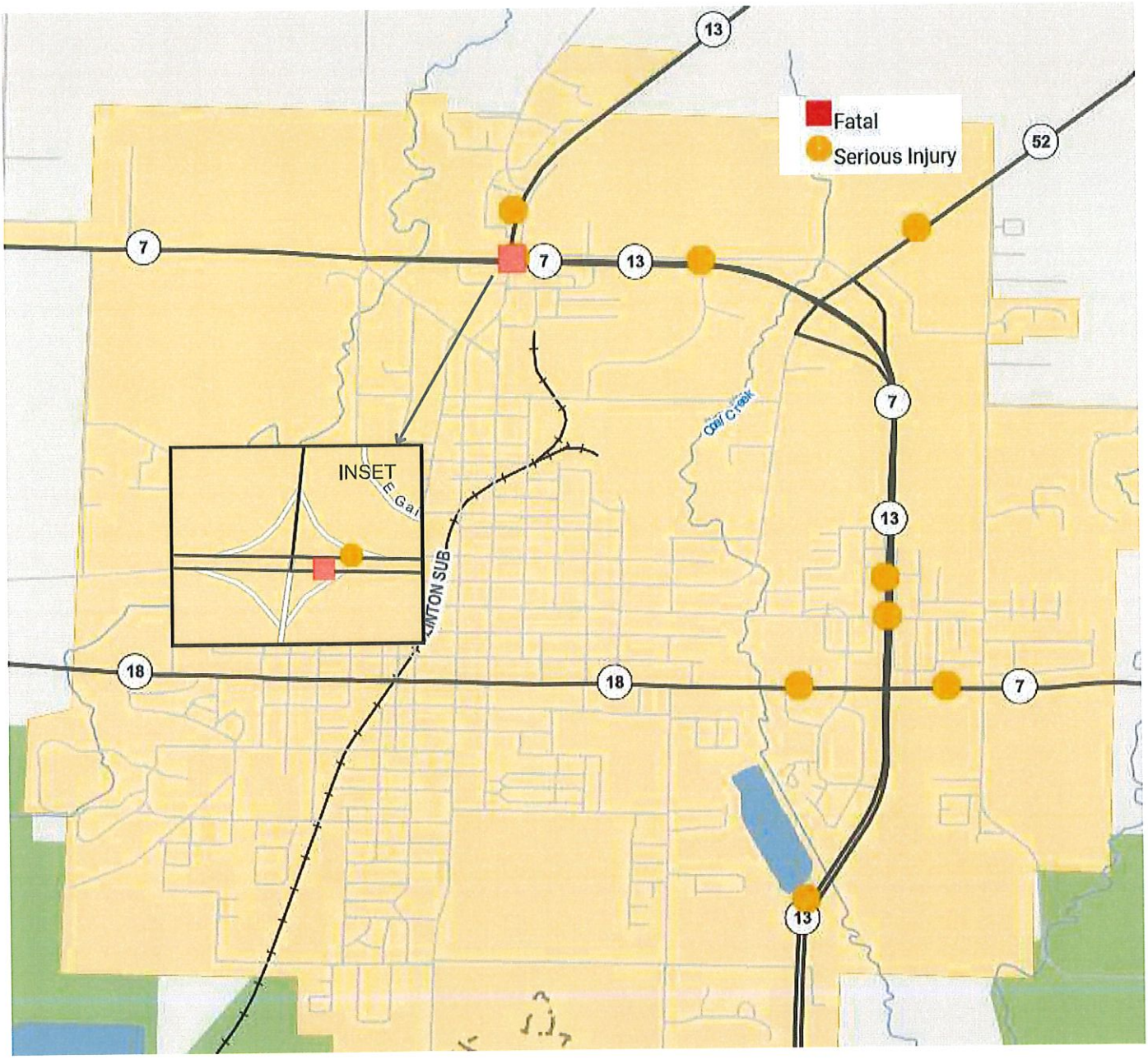


Over the past five years in Missouri, lane departures have been a factor in 75% of traffic fatalities.

Source: Show Me ZERO Missouri's SHSP

Older Driver KSI: 2020 - 2024

1 Fatal Crash
9 Serious Injury Crashes
46 Total KSI Crashes
21.74% of Total KSI Crashes



Older Driver Crash Analysis: Clinton, MO (2020–2024)

Older drivers (65 years and older) represent a significant portion of the driving population, and their involvement in crashes often results in severe outcomes. In Clinton, all older driver KSI crashes occurred on MoDOT-managed roadways, demonstrating the importance of state-level collaboration to address safety concerns. This section integrates crash data and strategies from Missouri's Show-Me Zero Strategic Highway Safety Plan (SHSP) to improve safety for older drivers.

Crash Data Overview: Clinton, MO (2020–2024)

- Older Driver KSI Crashes:
  - Older drivers were involved in 10 KSI crashes (21.74% of all KSI crashes in Clinton).
  - This includes 1 fatal crash and 9 serious injury (SI) crashes.
- Location:
  - All 10 KSI crashes involving older drivers occurred on MoDOT-managed roadways, underscoring the need for targeted safety measures on state routes.
- Proportion of Crashes:
  - Older drivers are overrepresented in KSI crashes compared to their share of the driving population, reflecting unique challenges faced by this demographic.

Key Challenges

- Declining Abilities:
  - Age-related changes in vision, reaction time, and cognitive function make it more difficult for older drivers to navigate complex traffic situations, particularly on high-speed or multilane roads.
- Intersection Risks:
  - Older drivers are more likely to be involved in crashes at intersections, especially when making left turns or navigating multilane intersections on busy state roadways.
- High Speeds and Traffic Volumes:
  - MoDOT-managed roads, which typically feature higher speeds and traffic volumes, pose significant risks for older drivers, as these conditions leave less margin for error.
- Physical Vulnerability:
  - Older adults are more physically fragile, increasing the likelihood of severe injuries or fatalities when crashes occur.

Goals & Objectives

Clinton's goals to improve safety for older drivers are aligned with the Show-Me Zero vision and include:

- Enhance Roadway Safety: Focus on improving state-managed roadways to accommodate the needs of older drivers and reduce crash risks.
- Support Safe Mobility: Ensure that older drivers can travel safely by implementing infrastructure and traffic control measures that address their unique challenges.

- Educate & Empower: Promote education and outreach to help older drivers adapt their driving habits and utilize resources to stay safe on the road.

Strategies to Improve Older Driver Safety on MoDOT-Managed Roads

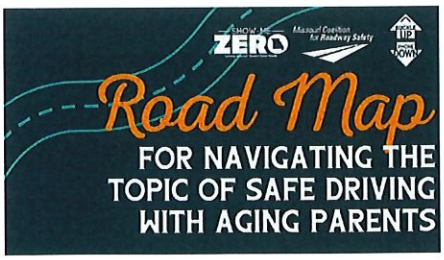
Given that all older driver KSI crashes in Clinton occurred on the MoDOT system, collaboration with MoDOT will be critical to implementing effective solutions that address both infrastructure and behavioral challenges.

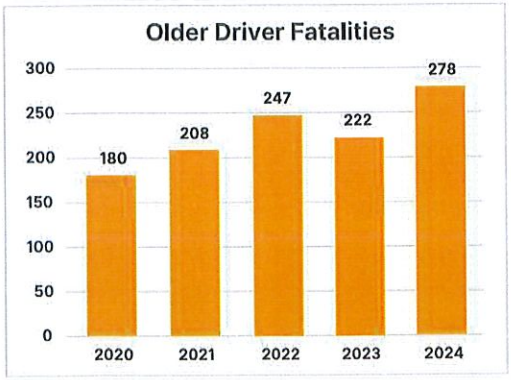
- Roadway Infrastructure Improvements:
  - Intersection Enhancements:
    - Add protected left-turn signals at high-risk intersections to simplify turning movements and reduce decision-making pressure.
    - Install clear lane markings and high-visibility crosswalks to improve navigation.
  - Signage & Visibility:
    - Use larger, retroreflective signage to improve readability for older drivers with declining vision.
    - Install advance warning signs for intersections, stop signs, and curves to provide older drivers with additional time to react.
    - Enhance overhead lighting at intersections and along high-speed segments to improve nighttime visibility.
  - Lane & Shoulder Adjustments:
    - Widen lanes and shoulders on state-managed roadways to reduce the likelihood of lane departures and provide recovery areas.
    - Install rumble strips along shoulders and centerlines to help prevent unintended lane departures.
- Speed Management:
  - Conduct speed studies on MoDOT-managed roads to identify segments where excessive speeds contribute to older driver crashes.
  - Adjust speed limits where necessary, particularly at intersections or on curved segments frequented by older drivers.
- Driver Education and Resources:
  - Partner with the Missouri Coalition for Roadway Safety (MCRS) to promote older driver safety programs, such as:
    - AARP Smart Driver Courses, which teach older drivers to adapt their driving habits in response to age-related changes.
    - Educational materials for families to help assess older drivers' abilities and determine when it may be time to limit or stop driving.
  - Raise awareness about vehicle safety technologies (e.g., lane-keeping assist, blind-spot monitoring) that can help older drivers navigate state roads safely.

- Enforcement and Awareness Campaigns:
  - Increase enforcement of traffic laws on MoDOT routes to address speeding, distracted driving, and failure-to-yield violations that contribute to older driver crashes.
  - Collaborate with MCRS to launch public awareness campaigns emphasizing the importance of safe driving behaviors for all age groups, including:
    - Yielding at intersections.
    - Avoiding distractions.
    - Slowing down on high-risk roadways.
- Data-Driven Focus:
  - Use crash data to identify high-risk intersections and segments on the MoDOT system that are frequently associated with older driver crashes.
  - Conduct regular evaluations of implemented measures to assess their effectiveness and make adjustments as needed.

Summary

- Older drivers were involved in 21.74% (10 of 46) of KSI crashes in Clinton from 2020 to 2024.
- All of these crashes occurred on MoDOT-managed roadways, where higher speeds and complex traffic conditions create significant risks.
- By focusing on roadway improvements, speed management, driver education, and enforcement on state routes, Clinton and MoDOT can reduce crash risks and improve safety for older drivers.
- These efforts support the Show-Me Zero vision of eliminating roadway fatalities and serious injuries while promoting safe mobility for older adults.





Older Driver traffic fatalities are up 54% since 2020 in Missouri.

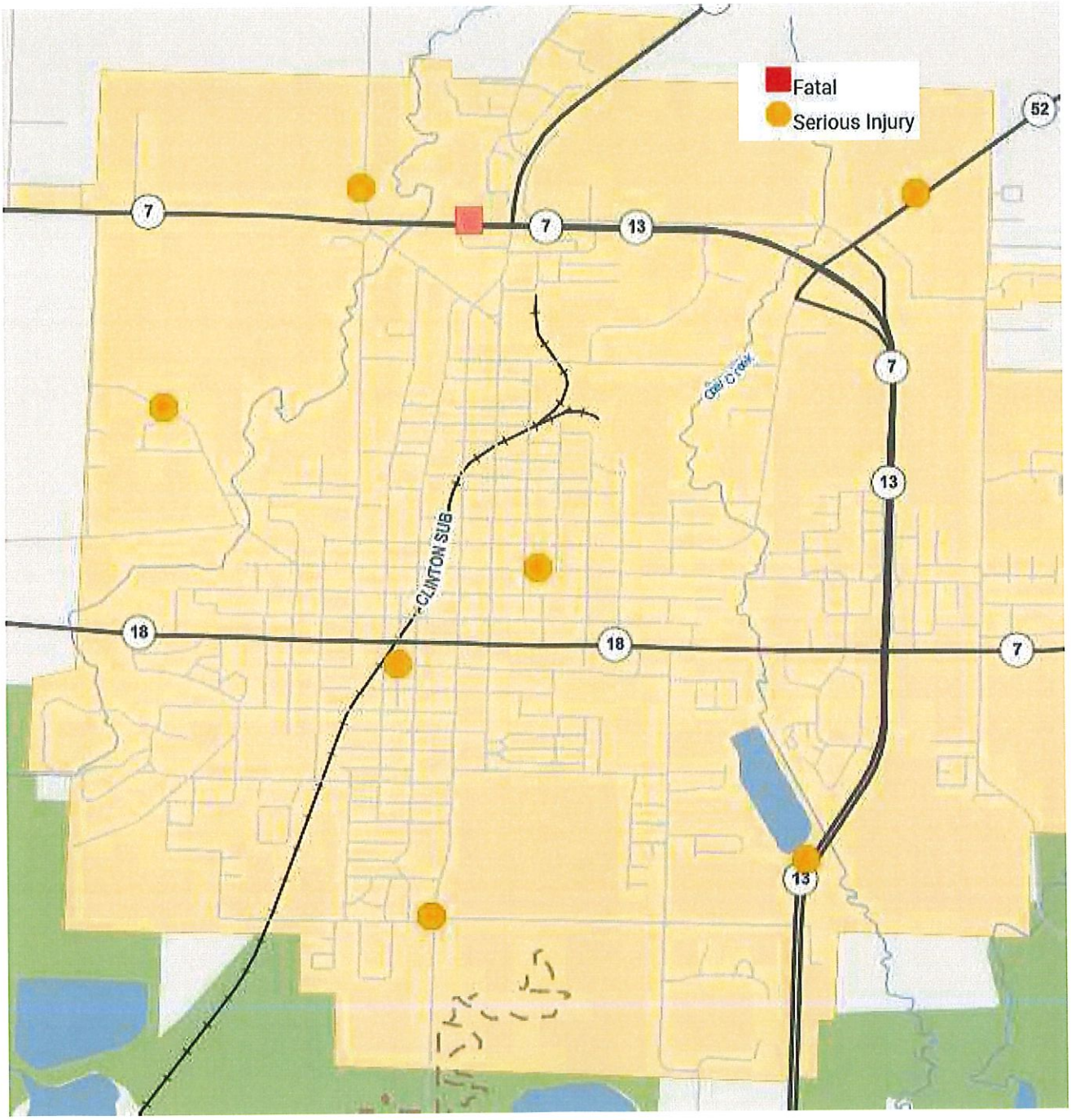
If your loved ones are no longer able to drive safely, you can guide them toward transportation options that meet their mobility needs.

Answering the following questions may help you decide if you need to initiate a conversation with an older driver about driving safely:

- Are they getting lost on routes that should be familiar?
- Have you noticed new dents or scratches to the vehicle?
- Have they received a ticket for a driving violation?
- Have they experienced a near-miss or crash recently?
- Have they been advised to limit/stop driving due to a health reason?
- Are they overwhelmed by road signs and markings while driving?
- Are they taking any medication that might affect driving safely?
- Have you noticed them speeding or driving too slowly for no reason?
- Are they suffering from any illnesses that may affect driving skills?

Run-Off-Road KSI: 2020 - 2024

1 Fatal Crash
8 Serious Injury Crashes
46 Total KSI Crashes
19.57% of KSI Crashes



Run-off-Road (ROR) Crash Analysis: Clinton, MO (2020–2024)

Run-off-road (ROR) crashes are a safety concern in Clinton due to their high likelihood of resulting in severe injuries or fatalities. This analysis reviews crash data, contributing factors, and trends, and proposes strategies aligned with the Missouri Show-Me Zero Strategic Highway Safety Plan (SHSP) to reduce the occurrence and severity of ROR crashes.

Crash Data Overview

- Total ROR Crashes:
  - 31 injury crashes, including:
    - 1 fatal crash
    - 8 serious injury (SI) crashes
    - 22 minor injury crashes
- Crash Locations:
  - MoDOT System:
    - 1 fatal crash, 2 SI crashes, and 6 minor injury crashes occurred on state-managed roadways.
  - City Streets:
    - The remaining crashes occurred on locally managed streets.
- Pavement Conditions:
  - Dry Pavement:
    - 1 fatal crash, 7 SI crashes, and 21 minor injury crashes occurred on dry pavement, underscoring the role of driver behavior under favorable driving conditions.
- KSI (Fatal and Serious Injury) Crashes:
  - ROR crashes accounted for 19.57% of all KSI crashes in Clinton (9 out of 46 total KSI crashes).

Key Factors Contributing to ROR Crashes

Driver-Related Factors:

- Speeding: Excessive speed, particularly on curves, is a leading cause of ROR crashes, often exacerbated by overconfidence on dry pavement.
- Distracted Driving: Internal distractions (e.g., mobile phone use) and external distractions frequently result in vehicles leaving the roadway.
- Fatigue or Impairment: Non-performance errors, such as drowsy driving or driving under the influence, significantly increase the risk of ROR crashes.

Roadway & Environmental Factors:

- Horizontal Curves: Sharp curves, particularly on high-speed roads, are common sites for ROR crashes due to misjudgment or loss of control.
- Roadside Hazards: Limited clear zones, trees, utility poles, or steep embankments increase crash severity when vehicles leave the roadway.

Vehicle-Related Factors:

- Vehicle Types: SUVs and trucks, which are more prone to rollovers, often result in more severe injuries during ROR crashes.
- Lack of Safety Features: Older vehicles without advanced safety technologies like lane departure warnings or electronic stability control are at higher risk.

Recommendations & Strategies for Improvement

To reduce the frequency and severity of ROR crashes, Clinton can implement strategies aligned with the Safe System Approach and the Show-Me Zero SHSP.

Roadway Design & Infrastructure Improvements:

- Curve Enhancements:
  - Realign or widen curves to improve sight distances and reduce crash risks.
  - Install curve warning signs and advisory speed limits with retroreflective materials for better visibility, especially at night.
- Rumble Strips:
  - Add centerline and shoulder rumble strips to alert drivers when they drift out of their lane.
- Clear Zone Improvements:
  - Expand roadside clear zones by removing fixed objects (e.g., trees, poles) or adding shielding (e.g., guardrails).
  - Install safety barriers in areas with steep drop-offs to mitigate crash severity.
- Lighting Enhancements:
  - Install lighting at high-crash locations to improve nighttime visibility and reduce collision risks.

Behavioral & Educational Interventions:

- Driver Education Programs:
  - Offer education on the risks of distracted driving, speeding, fatigue, and impaired driving, especially targeting high-risk drivers.
- Public Awareness Campaigns:
  - Launch campaigns that emphasize:
    - Safe speeds on curves.
    - The dangers of distractions and impaired driving.
    - The importance of maintaining control under all roadway conditions.
  - Promote the Buckle Up Phone Down (BUPD) initiative to encourage seatbelt use and eliminate distractions.

Enforcement of Traffic Laws:

- Increase speed enforcement in high-crash areas, particularly on the MoDOT system and curved roadways.
- Consider high-visibility enforcement campaigns to address speeding and distracted driving.

Focus on MoDOT System Safety:

- Since all fatal crashes and the majority of KSI crashes occurred on MoDOT roadways, prioritize safety improvements on these roads.
- Collaborate with MoDOT to implement targeted countermeasures, including:
  - Enhanced signage.
  - High-visibility pavement markings.
  - Curve treatments (e.g., chevrons, advisory speeds).

Data-Driven Focus:

- Use crash data to:
  - Identify high-risk locations for ROR crashes, particularly on curves or segments with limited clear zones.
  - Conduct roadway safety audits on the MoDOT system and city streets to guide improvements.
- Regularly evaluate the effectiveness of implemented measures and adjust strategies as needed.

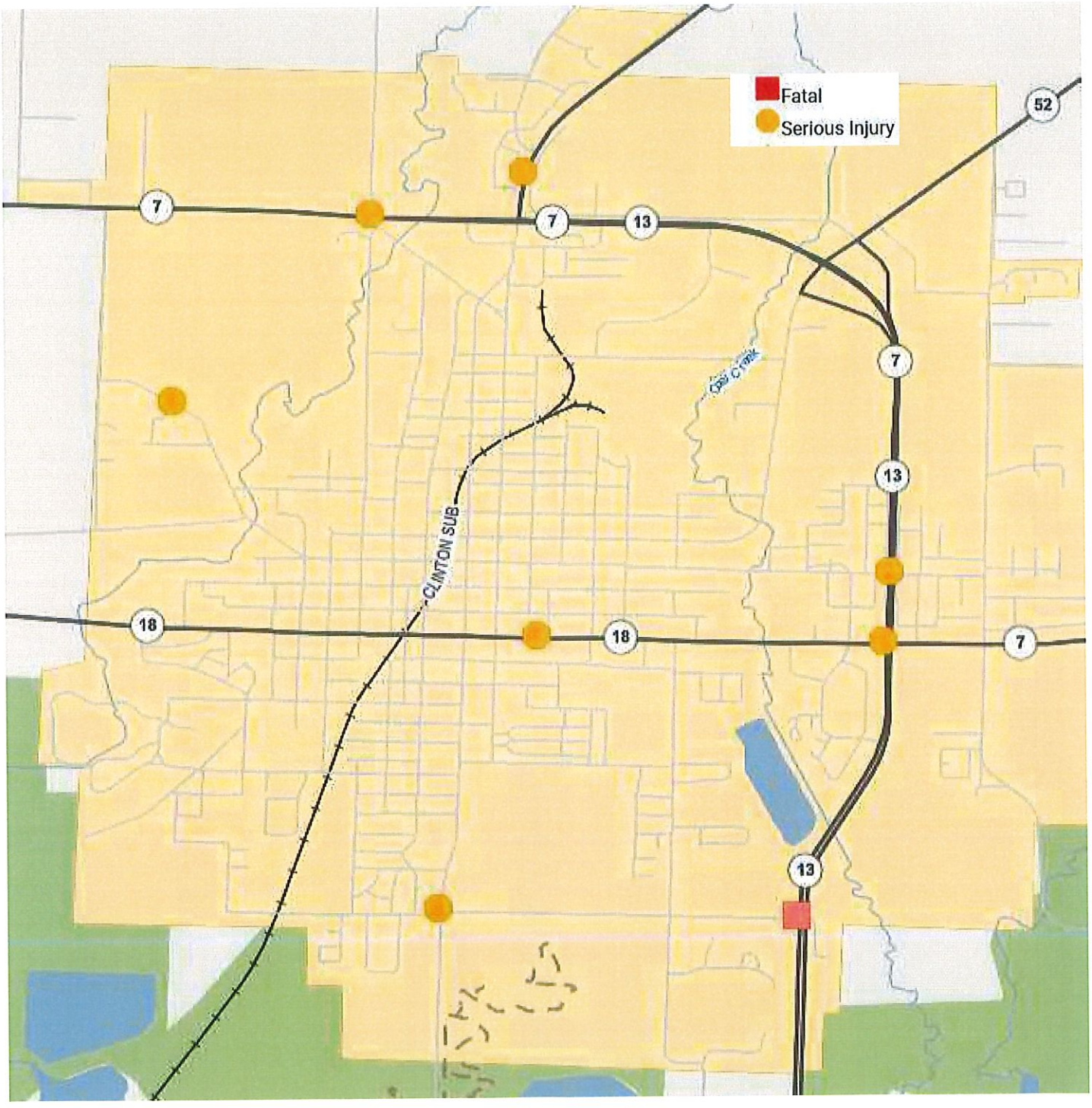
Summary

Run-off-road crashes accounted for 19.57% of KSI crashes in Clinton and remain a significant safety issue, especially on dry pavement and MoDOT-managed roads. Key contributing factors include driver behavior (e.g., speeding, distractions) and roadway characteristics (e.g., sharp curves, limited clear zones).

By addressing driver behavior, improving roadway design, and collaborating with MoDOT, Clinton can reduce the frequency and severity of ROR crashes. These efforts align with the Show-Me Zero vision of eliminating roadway fatalities and serious injuries, ensuring safer conditions for all road users.

Unlicensed/Improperly Licensed Drivers KSI: 2020 - 2024

1 Fatal Crash
7 Serious Injury Crashes
17.39% of KSI Crashes



Unlicensed/Improperly Licensed Driver Crash Analysis: Clinton, MO (2020–2024)

Unlicensed or improperly licensed drivers are a serious safety concern in Clinton, contributing significantly to fatal and serious injury (KSI) crashes. These drivers often lack the legal authorization, necessary training, and experience to operate vehicles safely, particularly motorcycles. Updated crash data emphasizes the overrepresentation of motorcyclists and the prevalence of unlicensed driver crashes on state-managed roadways. This analysis incorporates strategies from the Missouri Show-Me Zero Strategic Highway Safety Plan (SHSP) to address these issues effectively.

Crash Data Overview

- 17.39% of KSI crashes in Clinton (8 out of 46 total KSI crashes) involved unlicensed or improperly licensed drivers.
- Crash Breakdown:
  - 4 motorcyclists (50% of crashes involving unlicensed drivers):
    - 1 fatal crash involving a motorcyclist without a valid motorcycle (MC) endorsement.
    - 3 serious injury (SI) crashes involving:
      - 2 motorcyclists without valid MC endorsements.
      - 1 motorcyclist with a suspended license.
  - 4 drivers (non-motorcyclists):
    - 1 SI crash involving a driver with an expired license.
    - 2 SI crashes involving drivers with suspended licenses.
    - 1 SI crash involving a driver with a cancelled license.
- Crash Locations:
  - 6 of the 8 crashes (75%) occurred on the MoDOT system, including:
    - 1 fatal crash involving a motorcyclist.
    - 2 SI crashes involving motorcyclists.
    - 3 SI crashes involving improperly licensed drivers of other vehicle types.

Key Challenges

- Motorcyclist Overrepresentation:
  - Motorcyclists accounted for 50% of crashes involving unlicensed or improperly licensed drivers (4 out of 8 KSI crashes).
  - Riders without valid MC endorsements lack the specialized training needed for safe motorcycle operation, increasing crash risks.
  - Motorcyclists are particularly vulnerable to severe injuries or fatalities in crashes due to their exposure and the dynamics of motorcycle crashes.
- Prevalence on State Roads:
  - 75% of crashes involving unlicensed or improperly licensed drivers occurred on MoDOT-managed roadways, which typically feature higher speeds and more complex traffic conditions.

- This highlights the need for collaborative efforts between Clinton and MoDOT to address these risks.

- Legal & Administrative Barriers:
  - Many individuals face challenges in obtaining or maintaining valid licenses due to financial constraints, legal issues, or logistical challenges.
  - Motorcyclists may avoid obtaining MC endorsements due to limited access to training programs or misinformation about licensing requirements.
- Limited Enforcement Resources:
  - Detecting unlicensed or improperly licensed drivers, especially motorcyclists, requires significant enforcement resources, which can strain local law enforcement capacity.

Goals & Objectives

- Strengthening Enforcement: Enhance efforts to detect and penalize unlicensed drivers, particularly in high-risk areas and among motorcyclists.
- Promoting Licensing Compliance: Address barriers to obtaining proper licenses through education, outreach, and accessible resources.
- Improving Motorcycle Safety: Raise awareness of the importance of MC endorsements and provide resources for riders to obtain proper training and licensing.
- Collaborating with MoDOT: Prioritize safety improvements on state roads to address the high rate of crashes involving unlicensed drivers on these roadways.
- Using Data to Drive Interventions: Leverage crash data to target high-risk groups, behaviors, and locations effectively.

Strategies to Reduce Unlicensed/Improperly Licensed Driver Crashes

- Targeted Enforcement:
  - Collaborate with MoDOT and law enforcement agencies to conduct high-visibility enforcement campaigns targeting:
    - Unlicensed drivers and motorcyclists without MC endorsements.
    - High-crash areas on state roads.
  - Use license checkpoints to identify unlicensed or improperly licensed drivers.
  - Increase enforcement of motorcycle licensing requirements, focusing on riders without MC endorsements.
- Motorcycle Safety & Licensing Programs:
  - Partner with the Missouri Coalition for Roadway Safety (MCRS) to promote training programs, including:
    - **Basic Rider Courses** (BRC) for motorcyclists to develop safe riding skills.
    - Outreach initiatives emphasizing the importance of obtaining an MC endorsement.
  - Use social media, community events, and local partnerships to raise awareness about these programs.

- Explore options for offering incentives, such as reduced fees or subsidies, for motorcyclists who complete training and licensing program.

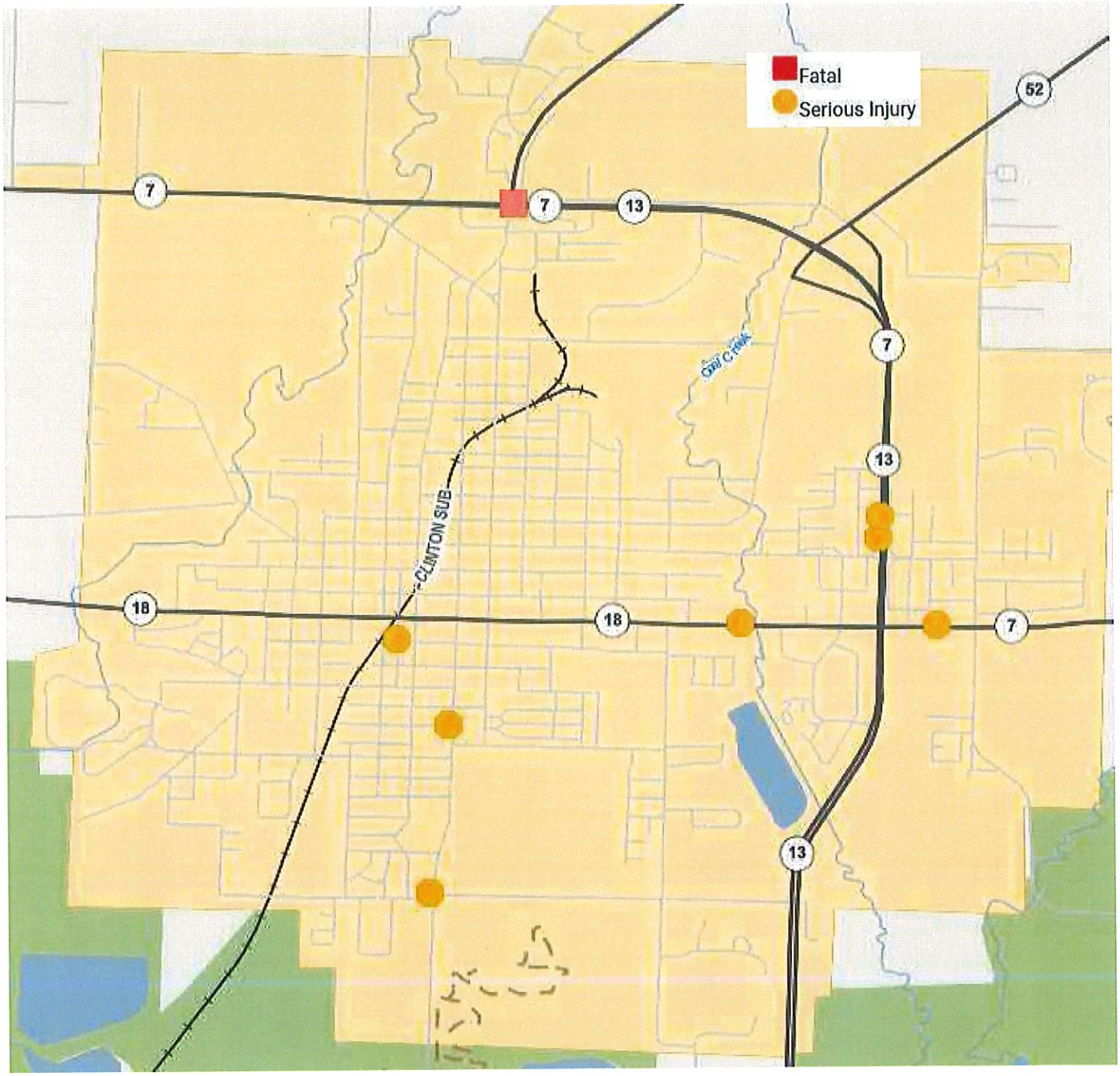
- Education & Outreach:
  - Launch public awareness campaigns emphasizing:
    - The dangers of driving or riding without proper licensing.
    - The importance of MC endorsements for motorcyclists.
    - The benefits of completing proper licensing processes, including improved safety and legal compliance.
  - Promote these messages through city websites, social media, and partnerships with local organizations.
  - Develop and distribute materials to high-risk groups about licensing requirements and available resources for obtaining or reinstating licenses.
- Addressing Barriers to Licensing:
  - Partner with state agencies to ensure drivers and motorcyclists have access to licensing resources, such as training programs, testing centers, and financial assistance.
  - Promote programs to help individuals regain driving privileges after license suspensions or cancellations, incorporating safety education as part of the process.
- Data-Driven Interventions:
  - Use crash data to identify high-risk locations, such as state routes with recurring unlicensed driver crashes.
  - Focus enforcement and outreach efforts on these locations.
  - Regularly assess the impact of enforcement, education, and outreach programs and adjust strategies as needed.

Summary

- Unlicensed or improperly licensed drivers were involved in 17.39% of KSI crashes in Clinton from 2020 to 2024, with motorcyclists accounting for 50% of these crashes (including 1 fatal crash and 3 SI crashes).
- 75% of these crashes occurred on MoDOT-managed roads, underscoring the need for targeted safety improvements on state roadways.
- By focusing on enforcement, education, and accessible licensing programs, particularly for motorcyclists, Clinton can reduce crashes and improve roadway safety.
- These efforts, in partnership with MoDOT and MCRS, align with the Show-Me Zero vision of eliminating roadway fatalities and serious injuries, fostering safer roads for all users.

Aggressive Driving KSI: 2020 - 2024

1 Fatal Crash
7 Serious Injury Crashes
17.39% of KSI Crashes



Aggressive Driving Crash Analysis: Clinton, MO (2020–2024)

Aggressive driving is a significant safety issue in Clinton, contributing to fatal and serious injury (KSI) crashes. This analysis provides an overview of crash data, contributing factors, and strategies to reduce aggressive driving-related crashes. The strategies align with Missouri's Show-Me Zero Strategic Highway Safety Plan (SHSP), which focuses on eliminating roadway fatalities and serious injuries through evidence-based solutions.

Crash Data Overview

- Between 2020 and 2024, aggressive driving contributed to 8 KSI crashes in Clinton:
  - 1 fatal crash
  - 7 serious injury (SI) crashes
- Crash Locations:
  - 5 crashes (1 fatal and 4 SI) occurred on the MoDOT system (62.5%).
  - 3 SI crashes occurred on the city network.

Key Findings

- Concentration on MoDOT Segments: The majority (62.5%) of aggressive driving-related KSI crashes occurred on the state system, indicating a need for focused interventions on these roadways.
- Fatal Crash: The single fatality resulting from aggressive driving occurred on the MoDOT system, highlighting the severity of aggressive driving behaviors on higher-speed roadways.
- Crash Severity: Aggressive behaviors, such as speeding, tailgating, and unsafe passing, contributed to the severity of these crashes.

Contributing Factors

- Speeding: Excessive speeds reduce reaction times and significantly increase the likelihood of severe crashes.
- Tailgating: Following too closely heightens the risk of rear-end and multi-vehicle collisions.
- Unsafe Passing: Risky maneuvers, particularly on high-speed or narrow roadways, can lead to head-on or side-swipe collisions.
- Driver Behavior: Aggressive driving often stems from impatience, distraction, or risky decision-making.

Strategies to Address Aggressive Driving

Clinton, in collaboration with MoDOT and the Missouri Coalition for Roadway Safety (MCRS), should implement the following strategies, which align with the Show-Me Zero SHSP priorities:

- Enhanced Enforcement
  - Conduct targeted enforcement of aggressive driving behaviors, including speeding, tailgating, and unsafe passing, particularly in high-risk locations on the MoDOT system and city streets.
  - Increase law enforcement visibility in areas with a history of aggressive driving-related crashes to deter risky behaviors.
  - Train officers to recognize and address aggressive driving behaviors, such as identifying patterns of speeding or tailgating, and enforce penalties effectively.

- Public Awareness Campaigns
  - Collaborate with MCRS to educate the public on the dangers of aggressive driving behaviors, emphasizing how they contribute to crashes and injuries.
  - Launch local outreach programs to promote defensive and courteous driving practices and encourage patience on the roads.
  - Expand participation in statewide campaigns, such as Buckle Up Phone Down (BUPD), to address the connection between distracted and aggressive driving.
  - Utilize social media, local media outlets, and community events to distribute information and materials on safe driving practices.
- Data-Driven Solutions
  - Analyze crash data to identify aggressive driving hotspots on the MoDOT system and city network.
  - Focus enforcement and educational efforts on these high-risk areas.
  - Regularly evaluate the effectiveness of interventions and adjust strategies based on updated crash data and trends.
- Community Involvement
  - Encourage community members to report instances of aggressive driving to local law enforcement.
  - Partner with schools, businesses, and local organizations to integrate safe driving messages into community programs.
  - Work with schools to promote defensive driving education for teens and young drivers, a group often overrepresented in aggressive driving crashes.

Summary

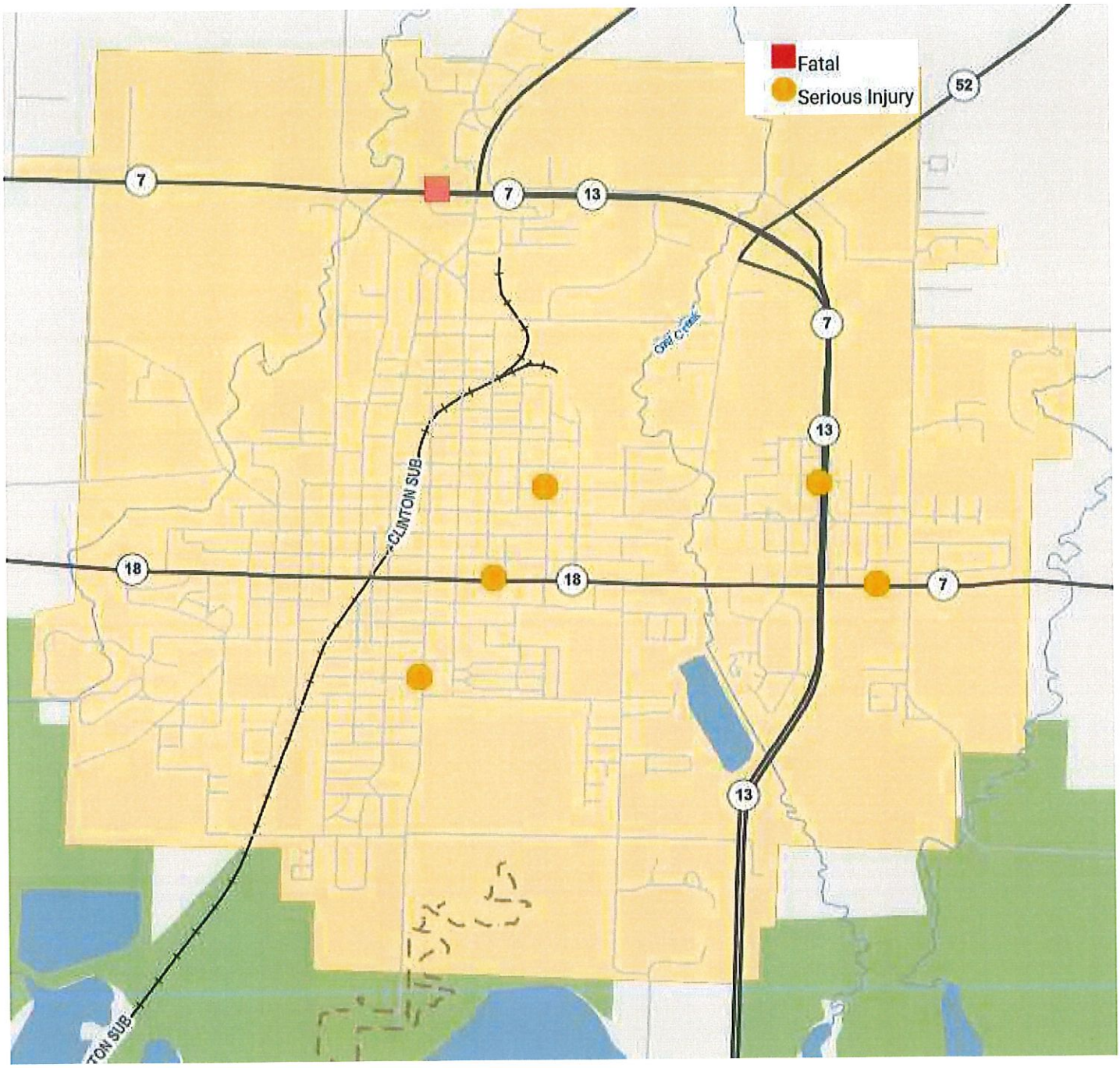
The strategies outlined above align with the Show-Me Zero SHSP, which prioritizes reducing fatalities and serious injuries through:

- Education: Raising awareness of aggressive driving's impact and promoting safe driving behaviors.
- Enforcement: Targeting high-risk behaviors and increasing law enforcement visibility.
- Engineering: Using crash data to identify problem areas and implement targeted safety improvements.
- Public Policy: Supporting efforts to promote defensive driving and discourage aggressive driving through community engagement.

By leveraging the SHSP framework, Clinton and MoDOT can address aggressive driving as part of a broader statewide effort to improve roadway safety.

Distracted Driving KSI: 2020 - 2024

1 Fatal Crash
5 Serious Injury Crashes
13.04% of KSI Crashes



Distracted Driving Crashes

Distracted driving is a significant contributor to crash-related injuries and fatalities in Clinton. This section analyzes crash data, identifies key contributing factors, and recommends strategies aligned with Missouri's Show-Me Zero Strategic Highway Safety Plan (SHSP) to address this critical safety issue.

Crash Data Overview

- Fatal and Serious Injury Crashes:
  - 1 fatal crash
  - 5 serious injury (SI) crashes
- Crash Locations:
  - 1 fatal crash and 3 serious injury crashes occurred on the MoDOT system, highlighting the prevalence of distracted driving incidents on higher-speed and higher-volume state roadways.
- Pavement Conditions:
  - All fatal and serious injury crashes occurred on dry pavement, suggesting that favorable road conditions can mask the risks of distracted driving.
- Lighting Conditions:
  - All serious injury crashes occurred during daylight, while the fatal crash occurred at night with no lighting.

Key Factors Contributing to Distracted Driving Crashes

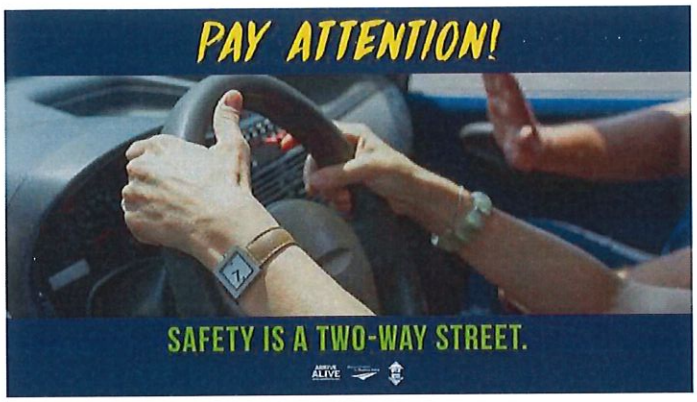
- Driver Behavior:
  - Mobile Device Use: Texting, calling, or interacting with smartphones is a leading cause of distracted driving crashes.
  - Cognitive Distractions: Mental distractions, such as daydreaming or being preoccupied with personal stress, impair focus on the road.
  - Manual Distractions: Actions like eating, adjusting controls, or reaching for objects divert attention from driving.
- Roadway & Environmental Factors:
  - Complex Traffic Situations: Distracted driving becomes especially dangerous in areas with high traffic volumes, intersections, or roadway curves, common on the MoDOT system.
  - Dry Pavement Conditions: Drivers may overestimate their ability to multitask under good road conditions, increasing the likelihood of crashes.
- Crash Severity Trends:
  - Distracted driving crashes often result in severe outcomes due to delayed reaction times, especially at higher speeds or in situations requiring quick decisions (e.g., avoiding a collision or navigating an intersection).

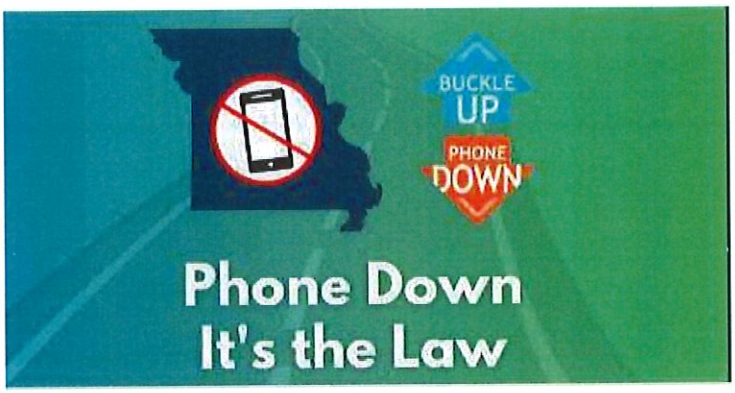
Strategies to Address Distracted Driving

- Education & Awareness Campaigns:
  - Partner with MCRS, schools, workplaces, and community organizations to educate drivers on the dangers of distracted driving.
  - Target high-risk groups, including young drivers, with tailored education programs emphasizing the risks associated with mobile device use.
  - Collaborate with MCRS to launch statewide campaigns highlighting the dangers of texting, calling, and other distractions while driving.
  - Promote the "hands-free, eyes on the road" message through social media, radio, and local events.
  - Expand participation in the Buckle Up Phone Down (BUPD) campaign to encourage safe driving practices.
- Enforcement of Distracted Driving Laws:
  - Increase enforcement of texting and handheld device bans, particularly on the MoDOT system and high-crash corridors.
  - Conduct distracted driving enforcement waves, where officers focus on identifying and citing distracted drivers.
  - Use unmarked vehicles to identify violations more effectively.
  - Work with community members to report distracted driving behaviors, creating a culture of accountability and awareness.
- Technological Solutions:
  - Encourage drivers to use apps or in-vehicle features that block texting and other distractions while driving.
  - Promote the adoption of "Do Not Disturb While Driving" settings available on most smartphones.
  - Advocate for vehicles equipped with collision avoidance systems, lane-keeping assist, and automatic emergency braking to help mitigate the effects of distraction.
- Focus on MoDOT System Safety:
  - Improve pavement markings with reflective materials to guide drivers and reduce errors caused by distractions.
  - Install warning signs in high-crash locations to remind drivers of the risks of distracted driving.
- Data-Driven Solutions:
  - Use crash data to identify distracted driving hotspots on both the MoDOT system and city-managed roadways.
  - Prioritize enforcement and education initiatives in high-risk areas.
  - Regularly assess the effectiveness of enforcement and education campaigns, adjusting strategies as necessary based on updated data and trends.

Summary

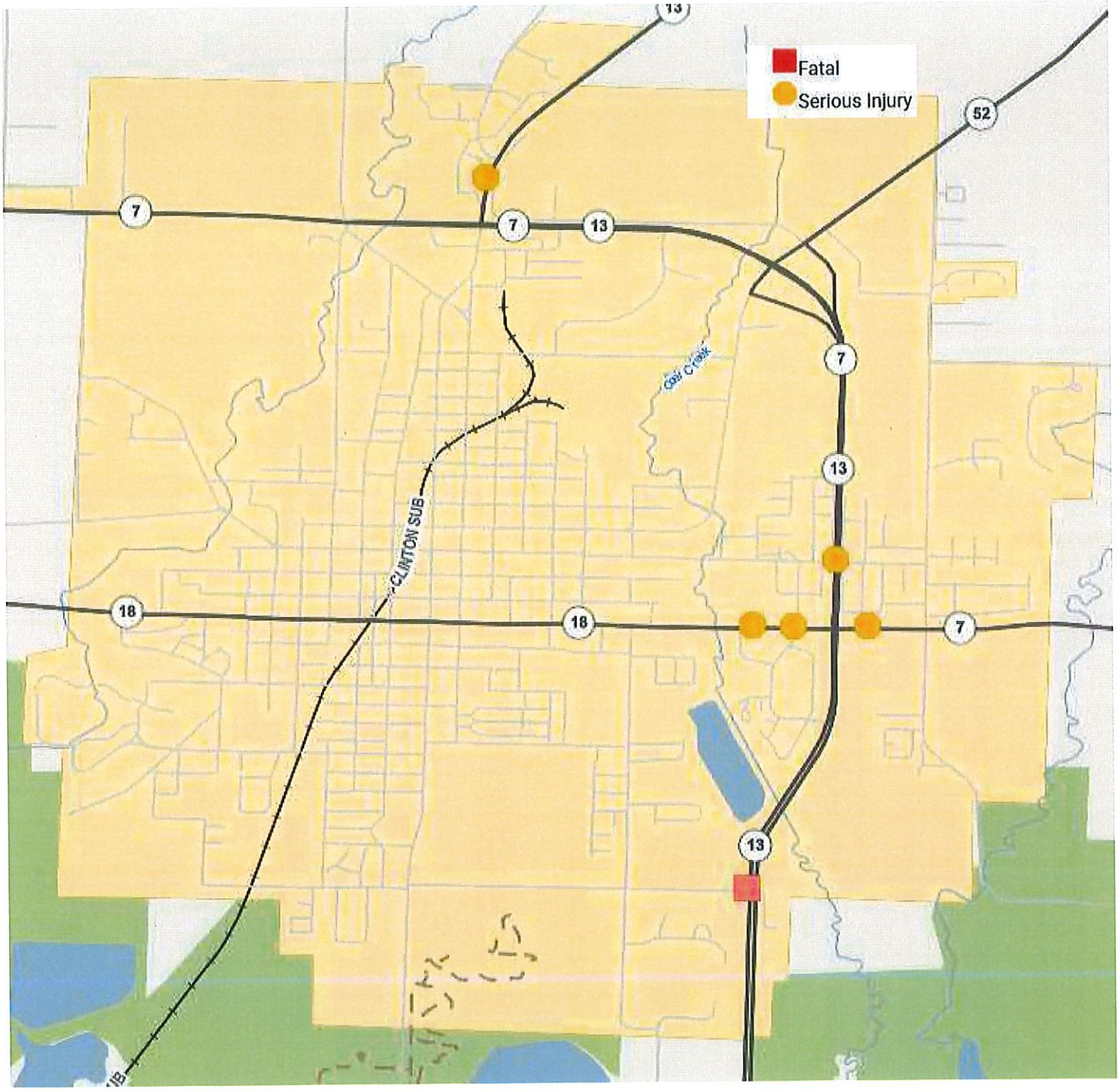
- Distracted driving remains a significant contributor to crashes in Clinton, particularly on the MoDOT system and under dry pavement conditions.
- The combination of mobile device use, cognitive and manual distractions, and complex traffic situations contributes to severe outcomes, including fatalities and serious injuries.
- By implementing strategies aligned with Missouri's Show-Me Zero SHSP, including education, enforcement, technological advancements, and data-driven interventions, Clinton can reduce distracted driving crashes and create safer roadways for all users.
- These efforts will support the broader goal of eliminating roadway fatalities and serious injuries, moving closer to a future with zero crashes caused by distraction.





Younger Drivers KSI: 2020 - 2024

1 Fatal Crash
5 Serious Injury Crashes
13.04% of KSI Crashes



Younger Driver Crash Analysis: Clinton, MO (2020–2024)

Younger drivers are a critical focus in Clinton's efforts to improve roadway safety, as they are disproportionately involved in crashes resulting in severe injuries and fatalities. This section analyzes crash data, identifies contributing factors, and outlines strategies aligned with Missouri's Show-Me Zero Strategic Highway Safety Plan (SHSP) to reduce crash risks for younger drivers.

Crash Data Overview

- Fatal and Serious Injury Crashes:
  - 1 fatal crash
  - 5 serious injury (SI) crashes
- Crash Severity:
  - Younger drivers were involved in 13.04% of all KSI (Fatal and Serious Injury) crashes in Clinton, underscoring the severity of their involvement in roadway incidents.
- Crash Locations:
  - All fatal and serious injury crashes occurred on the MoDOT system, highlighting the heightened risks associated with high-speed and high-volume state roadways.
- Pavement Conditions:
  - All fatal and serious injury crashes occurred on dry pavement, suggesting that favorable road conditions often mask risky driving behaviors among younger drivers.
- Lighting Conditions:
  - All six crashes (1 fatal and 5 serious injury) occurred during daylight hours, highlighting that visibility alone does not mitigate the risks associated with younger driver behavior.

Key Factors Contributing to Younger Driver Crashes

- Driver-Related Factors:
  - Inexperience: Younger drivers often lack the skills to handle complex driving situations, such as navigating high-speed roadways or intersections.
  - Risk-Taking Behavior: Speeding, tailgating, and failure to yield are common issues among younger drivers, increasing crash risks.
  - Distractions: Younger drivers are more likely to engage in distracted driving, particularly texting or using mobile devices, which delays reaction times.
  - Impairment: Underage drinking and drug use can result in impaired driving, further elevating crash risks.
- Roadway & Environmental Factors:
  - High-Speed Roadways: The MoDOT system's higher speeds and traffic volumes pose increased risks for less experienced drivers.
  - Dry Pavement Conditions: While dry pavement provides good traction, it may encourage overconfidence and risky behaviors, such as speeding or sudden lane changes.

- Lighting Conditions: Despite favorable daylight visibility, younger drivers may still engage in risky behaviors, such as speeding and distracted driving, leading to severe crashes.
- Intersection Challenges: Younger drivers may struggle with judging gaps, yielding, and making safe left turns at complex intersections.

- Crash Severity Trends:
  - Younger drivers are disproportionately involved in crashes with severe outcomes, as their inexperience and risk-taking behaviors often lead to poor decision-making in critical moments.

Strategies to Address Younger Driver Crashes

Clinton can reduce younger driver crash risks by implementing the following strategies, which align with Missouri's Show-Me Zero SHSP:

- Education & Awareness Campaigns:
  - Driver Education Programs:
    - Partner with schools and community organizations to offer defensive driving courses tailored for younger drivers.
    - Emphasize high-risk behaviors, including speeding, distracted driving, and impaired driving.
  - Parent-Teen Driving Agreements:
    - Encourage parents to set clear rules for their teens regarding nighttime driving, passenger limits, and mobile phone use.
  - Public Messaging Campaigns:
    - Use targeted outreach to educate younger drivers on the dangers of distracted and impaired driving.
    - Incorporate real-life stories and crash statistics to highlight the consequences of risky driving behaviors.
  - Buckle Up Phone Down (BUPD):
    - Promote participation in Missouri's BUPD campaign to encourage younger drivers to avoid distractions and wear seatbelts.
- Enforcement and Policy Measures:
  - Graduated Driver Licensing (GDL) Programs:
    - Strengthen GDL policies to limit high-risk driving situations, such as nighttime driving and carrying multiple passengers.
  - High-Visibility Enforcement:
    - Conduct enforcement campaigns targeting speeding, seatbelt use, and distracted driving, particularly on the MoDOT system.
  - Zero-Tolerance Policies:
    - Enforce strict zero-tolerance laws for underage drinking and driving to deter impaired driving among younger drivers.

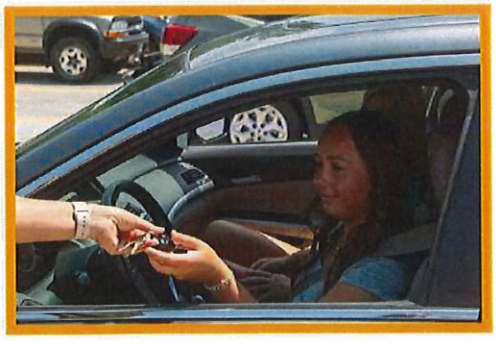
- Technological Solutions:
  - In-Vehicle Safety Technology:
    - Promote the use of vehicles equipped with advanced driver assistance systems (ADAS), such as lane-keeping assist, forward collision warnings, and automatic braking.
  - Parental Monitoring Tools:
    - Encourage the use of apps and devices that monitor teen driving behaviors, including speed, location, and phone usage.
- Focus on MoDOT System Safety:
  - Roadway Lighting:
    - While all crashes occurred during daylight hours, improved lighting at intersections and along segments with high younger-driver crash rates may further enhance safety for all users.
  - Enhanced Signage:
    - Install dynamic message signs (DMS) to provide real-time alerts about speed limits, traffic conditions, and potential hazards.
- Data-Driven Solutions:
  - Use crash data to identify younger driver crash hotspots, focusing on high-risk areas on the MoDOT system.
  - Evaluate the effectiveness of interventions and adjust strategies based on updated crash data and trends.

Summary

- Younger drivers (ages 15–24) are overrepresented in severe crashes, accounting for 13.04% of all KSI crashes in Clinton.
- Their crashes are concentrated on the MoDOT system and under dry pavement conditions, with all six crashes occurring during daylight hours, where visibility alone does not mitigate the risks posed by inexperience and risky behavior.
- By implementing strategies aligned with Missouri's Show-Me Zero SHSP, including education, enforcement, technological advancements, and targeted interventions on the MoDOT system, Clinton can reduce crash risks for younger drivers.
- These efforts will help Clinton achieve its vision of safer streets and a reduction in fatalities and serious injuries for all road users.

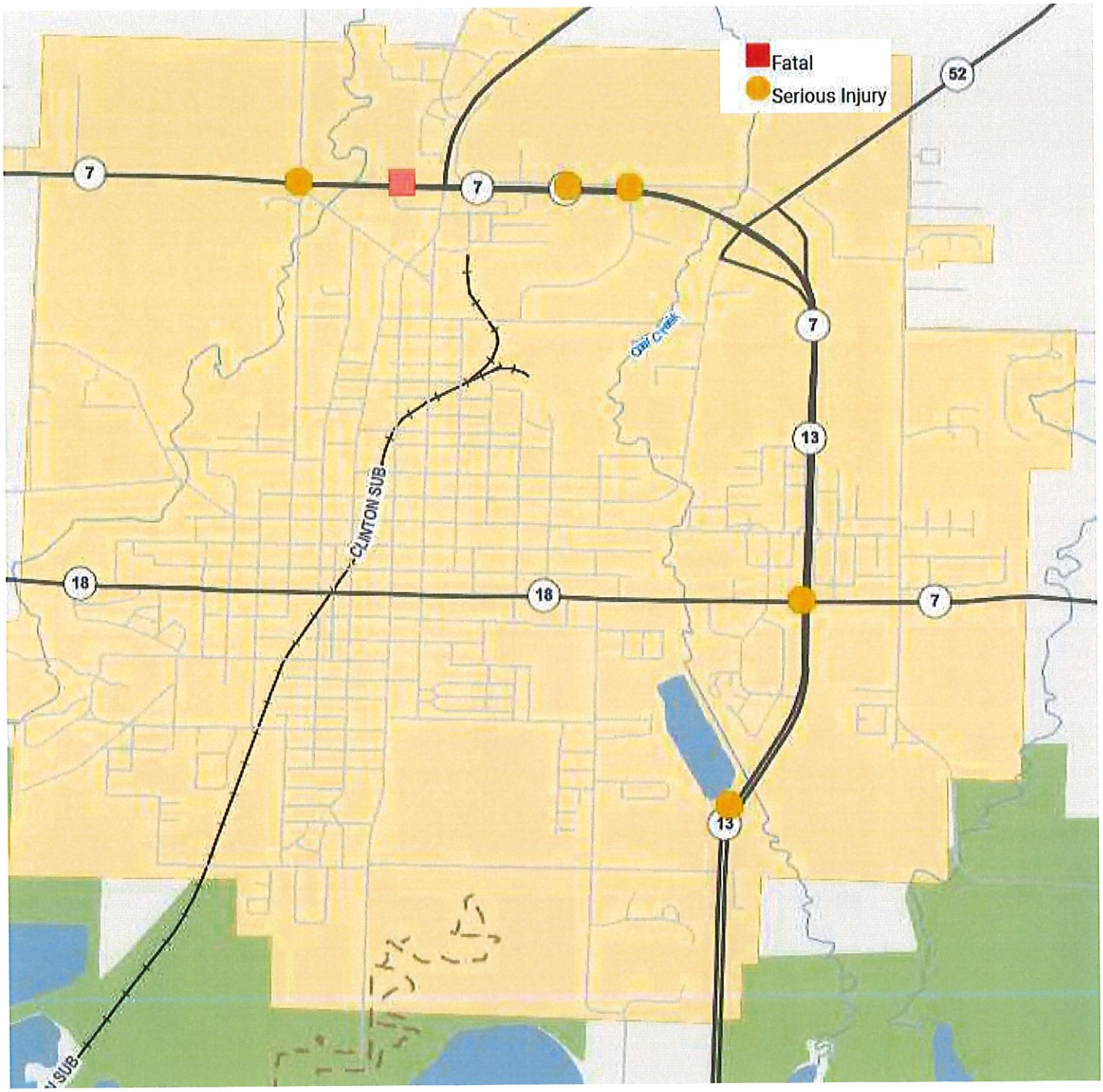
The Bad News:
Car crashes are the #1 cause of death for teens in Missouri.

The Good News:
We're working to change that.



CMV KSI: 2020 - 2024

1 Fatal Crash
5 Serious Injury Crashes
13.04% of KSI Crashes



Commercial Motor Vehicle (CMV) Crash Analysis: Clinton, MO (2020–2024)

Commercial Motor Vehicle (CMV) crashes are a significant safety concern in Clinton due to the large size and weight of these vehicles, which often result in severe outcomes when crashes occur. This section analyzes CMV crash data, contributing factors, and strategies for reducing the frequency and severity of these incidents, aligned with Missouri's Show-Me Zero Strategic Highway Safety Plan (SHSP) and the Safe Streets and Roads for All (SS4A) initiative.

Crash Data Overview

- Fatal & Serious Injury Crashes:
  - 1 fatal crash
  - 5 serious injury (SI) crashes
- Crash Locations:
  - All fatal and serious injury crashes occurred on the MoDOT system, emphasizing the risks associated with high-speed, high-traffic state roadways.
- Pavement Conditions:
  - All fatal and serious injury crashes occurred on dry pavement, suggesting that favorable road conditions do not mitigate the risks posed by CMVs.
- Lighting Conditions:
  - Dark (unlighted): 1 fatal crash and 2 serious injury crashes.
  - Daylight: 3 serious injury crashes.

Key Factors Contributing to CMV Crashes

- Driver-Related Factors:
  - Fatigue: Long driving hours and insufficient rest periods for CMV operators can lead to impaired reaction times and decision-making.
  - Distractions: Both CMV drivers and other road users engaging in distracted driving contribute to CMV-related crashes.
  - Speeding or Following Too Closely: CMVs require longer braking distances, making speeding and tailgating particularly dangerous.
  - Impaired Driving: Although less common, impairment due to alcohol, drugs, or medication can also affect CMV drivers.
- Roadway & Environmental Factors:
  - MoDOT System Risks: High speeds, heavy traffic volumes, and a mix of vehicle types on the MoDOT system increase the likelihood of severe CMV crashes.
  - Dry Pavement Conditions: While dry pavement provides better traction, it can lead to overconfidence and riskier behaviors, such as speeding or abrupt lane changes.
  - Lighting Conditions: Crashes in dark, unlit areas emphasize the need for better visibility, while crashes in daylight show that visibility alone cannot eliminate crash risks.
  - Intersections and Work Zones: CMVs are often involved in crashes at intersections and work zones due to limited maneuverability and visibility.

- Vehicle-Related Factors:
  - Vehicle Size and Weight: The large size and weight of CMVs increase the severity of crashes, especially for passenger vehicles involved in collisions with CMVs.
  - Mechanical Failures: Brake failures, tire blowouts, or other mechanical issues can contribute to CMV crashes.

Strategies to Address CMV Crashes

The following strategies, aligned with Missouri's Show-Me Zero SHSP, aim to reduce the frequency and severity of CMV crashes in Clinton:

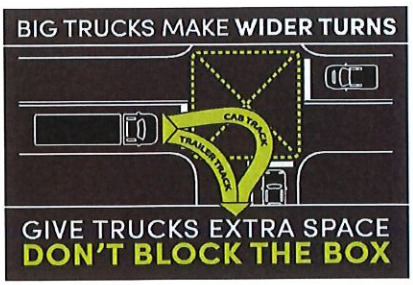
- Driver Education & Training:
  - CMV Driver Training:
    - Reinforce training on defensive driving techniques, fatigue management, and safe driving in high-traffic areas like the MoDOT system.
    - Emphasize safe speeds, proper following distances, and maneuvering through intersections and work zones.
  - Public Awareness Campaigns:
    - Educate passenger vehicle drivers on safely sharing the road with CMVs, including avoiding blind spots, maintaining a safe following distance, and understanding CMV maneuverability limitations.
- Enforcement and Regulatory Measures:
  - Coordination with Missouri Highway Patrol Commercial Vehicle Enforcement Division:
    - Work closely with the Missouri Highway Patrol Commercial Vehicle Enforcement Division, as they are responsible for inspections and enforcement actions for CMVs.
    - Enforce compliance with safety regulations, including Hours-of-Service (HOS) requirements, proper load securement, and adherence to speed limits.
    - Conduct regular CMV inspections to ensure vehicles meet safety standards, focusing on brakes, tires, and lighting systems.
  - MoDOT and Missouri Highway Patrol Responsibilities:
    - Partner with MoDOT and the Missouri Highway Patrol to improve enforcement targeting high-risk behaviors, such as speeding, tailgating, and distracted driving by CMV operators and passenger vehicle drivers.
    - Ensure enforcement campaigns focus on the MoDOT system, where all fatal and serious injury CMV crashes occurred.
- Roadway Design and Infrastructure Improvements:
  - Intersection Enhancements:
    - Upgrade signage, signals, and pavement markings at intersections to accommodate CMV turning radii and improve visibility.
    - Simplify intersection layouts to reduce complexity for CMV operators.

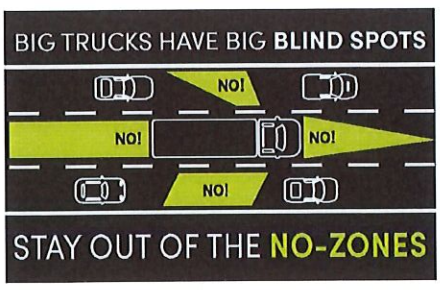
- Work Zone Safety:
  - Implement clear signage and advanced warnings for CMV operators in work zones.
- Rumble Strips:
  - Install centerline and shoulder rumble strips to alert CMV drivers of lane departures, particularly on higher-speed roadways.

- Technology & Vehicle Safety Advancements:
  - Collision Avoidance Systems:
    - Encourage CMV operators to adopt advanced driver assistance systems (ADAS), such as automatic emergency braking (AEB), lane departure warnings, and blind spot monitoring.
- Focus on MoDOT System Safety:
  - Dynamic Message Signs (DMS):
    - Use DMS to provide real-time alerts, including traffic conditions, weather updates, and work zone information.
  - Roadway Lighting Enhancements:
    - Improve lighting along dark, unlighted segments of the MoDOT system to enhance visibility and reduce crash risks during nighttime driving.

Summary

- CMV crashes pose a significant risk, particularly on MoDOT-managed routes. Notably, 1 fatal and 2 serious injury crashes occurred in dark, unlighted conditions, while 3 serious injury crashes happened during daylight.
- The Missouri Highway Patrol Commercial Vehicle Enforcement Division, in partnership with MoDOT, plays a key role in enforcing safety regulations, conducting inspections, and addressing high-risk behaviors to reduce CMV-related crashes.
- By focusing on enhanced driver education, coordinated enforcement, roadway design improvements, and technology adoption, Clinton can lower the frequency and severity of CMV-related crashes.
- These efforts align with Missouri's Show-Me Zero Strategic Highway Safety Plan (SHSP) and the SS4A initiative, advancing safer roadways for all users and reducing fatalities and serious injuries.

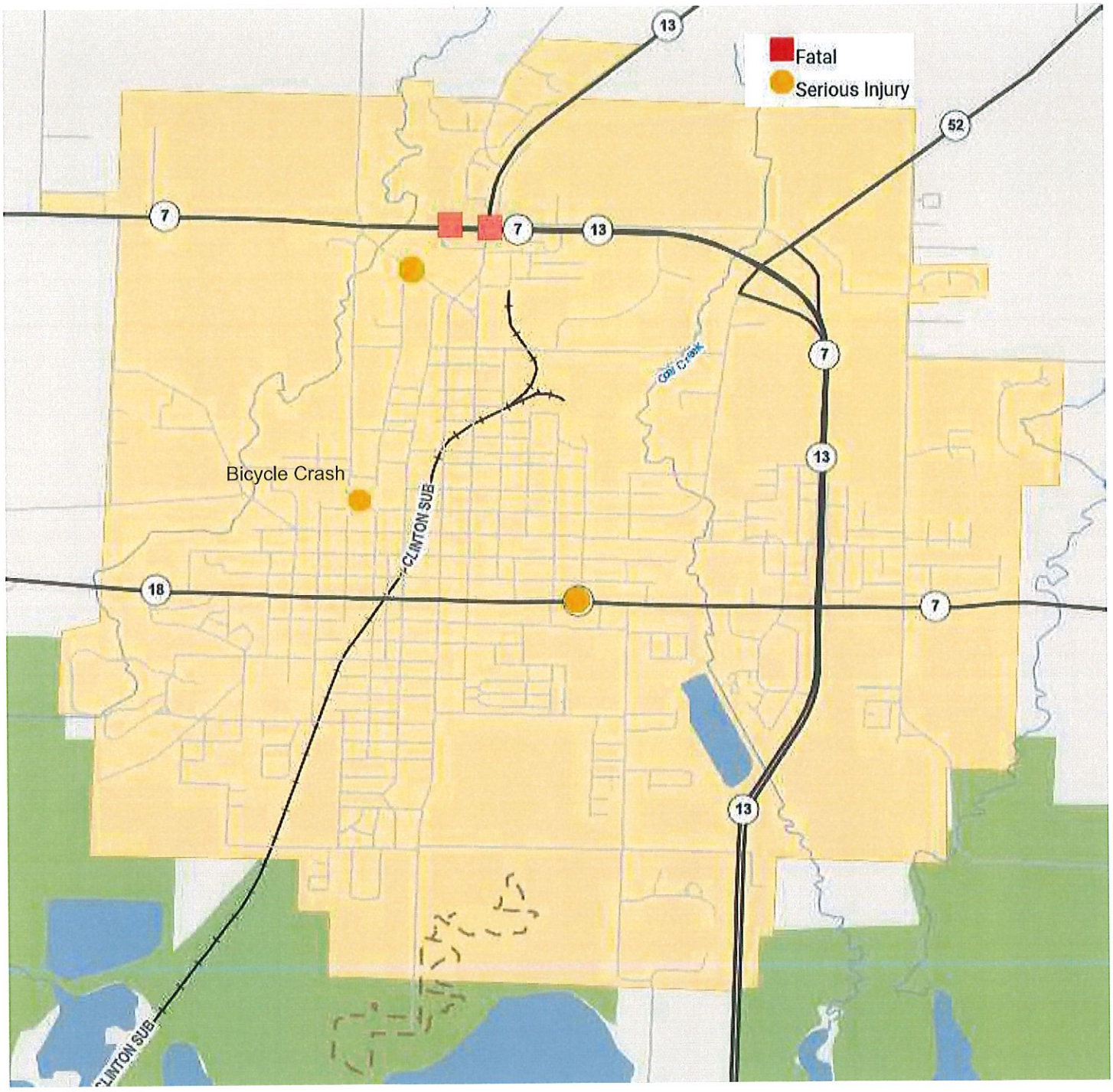




Source: Show Me ZERO Missouri's SHSP

Non-Motorized KSI: 2020 - 2024

2 Fatal Crashes
3 Serious Injury Crashes
10.87% of KSI Crashes



Non-Motorized Crash Analysis: Clinton, MO (2020–2024)

Non-motorized road users, such as pedestrians and bicyclists, are among the most vulnerable in traffic crashes due to their lack of physical protection. In Clinton, crashes involving non-motorized users resulted in several fatalities and serious injuries (KSI), emphasizing the need for targeted safety interventions. This analysis uses crash data and strategies from **Missouri's Show-Me Zero Strategic Highway Safety Plan (SHSP)** and highlights the importance of collaboration with the **Missouri Coalition for Roadway Safety (MCRS)** to address these issues.

Crash Data Overview

Fatal & Serious Injury (KSI) Crashes: 5 total

- 2 fatal pedestrian crashes
- 2 serious injury pedestrian crashes
- 1 serious injury bicyclist crash

Crash Locations:

- 3 crashes (2 fatal, 1 serious injury) occurred on MoDOT-managed roads.

Contributing Factors:

- Pedestrian failure to yield: 1 fatal, 2 serious injury crashes.
- Bicyclist failure to yield and improper lane use: 1 serious injury crash.
- Driver traveling too fast for conditions: 1 fatal crash.
- Driver distraction/inattention: 1 fatal crash.

Lighting Conditions:

- Dark (unlit areas): 1 fatal crash.
- Daylight: 1 fatal crash, 3 serious injury crashes.

Key Challenges

- Dark Conditions:
  - Crashes in unlit areas, especially on state roads, highlight the dangers of poor visibility for pedestrians.
- Failure to Yield:
  - Pedestrian and bicyclist failure to yield contributed to multiple crashes, highlighting the need for public education on safe crossing practices and traffic rules.
- Driver Behavior:
  - Distracted driving and speeding were significant factors, particularly on state roads with higher speeds and traffic volumes.
- Infrastructure Gaps:
  - The lack of crosswalks, pedestrian signals, and protected spaces for non-motorized users increases crash risks, especially on high-speed roads.

- Vulnerable Populations:
  - Children playing in traffic and pedestrians making unsafe crossing decisions represent high-risk groups requiring targeted intervention.

Goals & Objectives

- Improve Visibility and Lighting: Enhance nighttime visibility on roadways, particularly on the State System, to reduce pedestrian crashes.
- Promote Safe Behaviors: Educate pedestrians, bicyclists, and drivers on safe behaviors, including yielding, avoiding distractions, and following traffic laws.
- Enhance Infrastructure: Provide safer walking and biking spaces, including crosswalks, pedestrian signals, and protected lanes.
- Target High-Risk Locations: Focus on high-crash areas on both State System and City Streets to prioritize safety improvements.
- Collaborate with MoDOT and MCRS: Partner with MoDOT to implement safety measures on state-managed roadways and with MCRS to strengthen behavioral, educational, and enforcement programs.

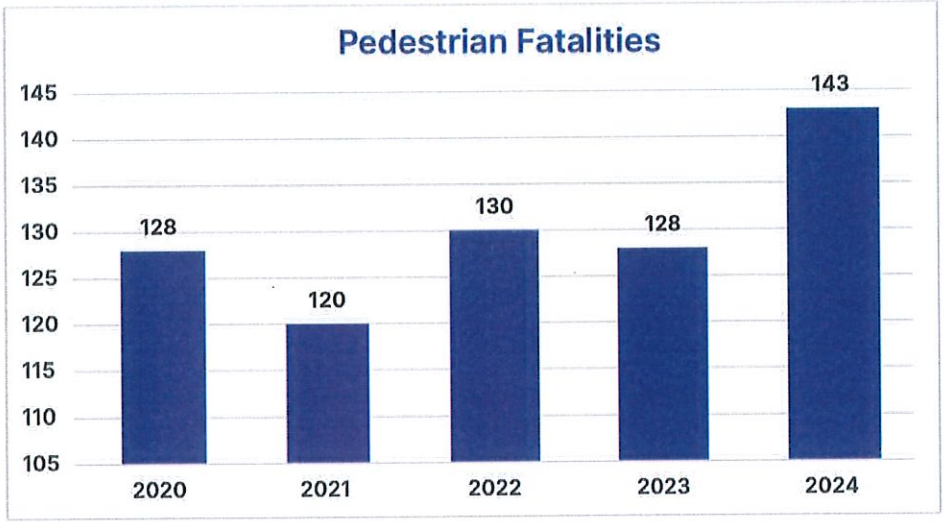
Strategies to Improve Non-Motorized Safety

Roadway Infrastructure Improvements

- Lighting Enhancements:
  - Add streetlights at high-crash locations, particularly on dark/unlighted segments of the State System.
  - Use pedestrian-level lighting at intersections and busier pedestrian corridors to improve visibility.
- Pedestrian & Bicycle Facilities:
  - Install high-visibility crosswalks and pedestrian signals at key locations, particularly on the State System.
  - Add mid-block crossings with pedestrian refuge islands where long distances between intersections encourage unsafe crossings.
- Traffic Calming Measures:
  - Implement speed reduction measures, such as narrowing lanes, near pedestrian-heavy areas.
- Clear Zones:
  - Ensure that roadside areas are clear of hazards to reduce risks for pedestrians exiting vehicles or walking near roadways.
- Behavioral & Educational Interventions
  - Public Awareness Campaigns:

Summary

- Four pedestrian KSI crashes in Clinton were influenced by factors such as dark conditions, failure to yield, and distracted driving, with two fatal crashes occurring on the State System.
- One bicyclist SI crash involved improper lane use and failure to yield, highlighting the need for bicyclist education and improved infrastructure.
- Focusing on infrastructure improvements, behavioral interventions, and targeted enforcement can reduce non-motorized crashes and enhance safety for vulnerable road users.
- Collaboration with MoDOT on infrastructure improvements and MCRS on education, enforcement, and behavioral programs will ensure a comprehensive approach aligned with the Show-Me Zero vision of eliminating roadway fatalities and serious injuries.



Source: Show Me ZERO Missouri's SHSP

Objective

Enhance emergency response and post-crash care in Clinton by strengthening partnerships with Golden Valley Memorial Healthcare (GVMH)—a key community asset— to ensure timely stabilization and transfer of crash victims to advanced trauma centers.

Background

Missouri's Strategic Highway Safety Plan (SHSP) highlights post-crash care as a core element of the Safe System Approach, recognizing that prompt medical response saves lives and reduces injury severity.

GVMH serves as a cornerstone of Clinton's healthcare system, providing emergency stabilization, coordinating patient transfers, and offering community education and outreach. Strengthening collaboration among GVMH, EMS, and supporting agencies will enhance post-crash care and advance the state's "Show-Me Zero" vision of eliminating traffic fatalities and serious injuries.

Key Challenges

- Limited Trauma Designation: GVMH is not a designated trauma center but plays a crucial role in stabilizing patients and coordinating transfers to higher-level facilities.
- Rural Response Times: Clinton's rural geography can delay EMS response and transport to advanced care.
- Limited Public Preparedness: Low public awareness of first aid and emergency response reduces the effectiveness of bystander assistance before professionals arrive.

Strategies & Actions

- Strengthen GVMH's Role in Post-Crash Care
  - Review protocols between GVMH, EMS, and regional trauma centers for rapid stabilization and transfer of crash victims.
  - Review telemedicine capabilities to enable real-time consultation with trauma specialists during critical patient care.
  - Partner with GVMH to lead community outreach efforts promoting first aid and roadway safety education.
- Enhance Emergency Response Systems
  - Review communication policies between GVMH, EMS, and trauma centers to ensure seamless patient handoffs.
  - Ensure that EMS teams are equipped with advanced lifesaving tools, such as tourniquets and portable blood transfusion kits.

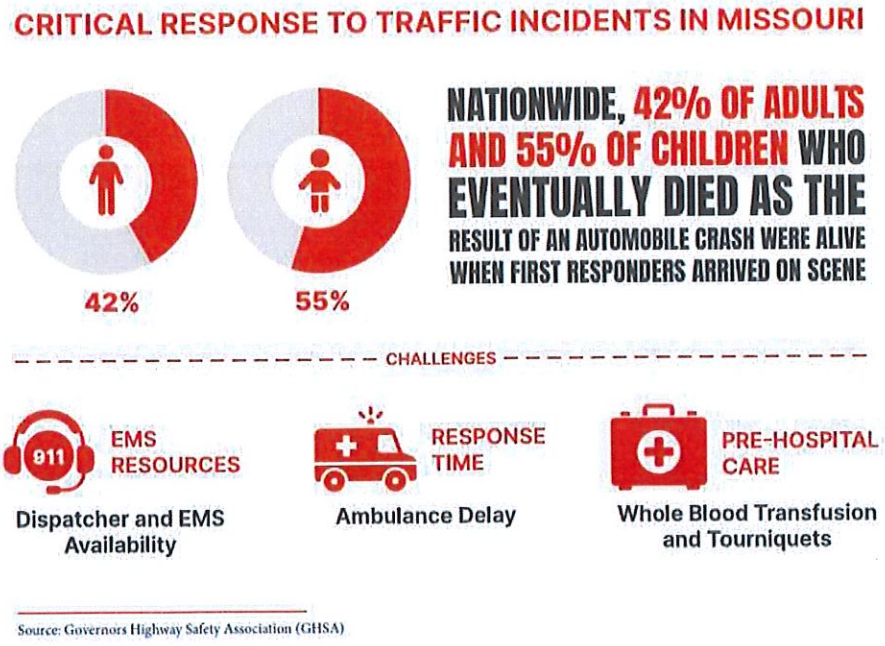
- Expand Training & Public Education
  - Collaborate with GVMH to offer community-wide "Stop the Bleed" and CPR training for first responders, teachers, and residents.
  - Host workshops to teach basic first aid and crash response techniques, empowering bystanders to act effectively until professionals arrive.

Performance Measures

- Increased number of trained first responders and residents in trauma care and lifesaving techniques.
- Reduction in fatalities and severe injuries through faster stabilization and improved access to advanced care.

Summary

Golden Valley Memorial Healthcare (GVMH) is an essential partner in Clinton's post-crash care network. By reinforcing its role in emergency stabilization, improving communication and equipment for first responders, and expanding community training, Clinton can strengthen its emergency response system and save lives. These efforts directly support Missouri's **"Show-Me Zero"** goal of creating safer, more resilient roadways for all.



CLINTON HIGH INJURY NETWORK

Introduction

The City of Clinton is committed to improving road safety by reducing traffic deaths and serious injuries. As part of the Safe Streets and Roads for All (SS4A) initiative, the City has developed a High Injury Network (HIN) to identify and prioritize roadways with the highest number of crashes, especially those involving fatalities and severe injuries.

The High Injury Network is a key tool for understanding crash patterns and identifying high-risk areas within the city. By analyzing recent crash data—including incidents related to aggressive driving and speeding—the City can focus safety efforts where they are most needed. This data-driven approach ensures resources are used effectively and helps implement targeted safety measures to reduce risks and improve overall road safety.

Network Screening

The HIN analysis has identified locations in Clinton with recurring safety concerns, providing a foundation for investments in infrastructure and safety programs. Three separate High Injury Networks have been created to address the needs of different roadway users:

- **HIN for All Roadway Users:**
  - Focuses on all users, including motorists, motorcyclists, bicyclists, and pedestrians. This network highlights road segments with the highest number of fatal and serious injury (KSI) crashes.
- **HIN for Vulnerable Road Users:**
  - Addresses vulnerable groups such as motorcyclists, bicyclists, and pedestrians. It prioritizes areas where these users face greater risks of severe injuries or fatalities.
- **HIN for Non-Motorized Users:**
  - Concentrates on crashes involving bicyclists and pedestrians. It identifies high-risk locations for these users and promotes targeted safety improvements to protect them.

In addition to road segments, the analysis also identifies intersections with the highest number of KSI crashes within the city limits. These insights help guide the City's efforts to enhance road safety through data-informed decisions.

CLINTON HIGH INJURY NETWORK

Segment Analysis (All Roadway Users)

The segment analysis identified roads in Clinton with the highest number of KSI crashes. While Freeways, Principal Arterials, and Minor Arterials comprise only 14.6% of the City's total roadway mileage, they account for 84.8% of all KSI crashes. The following steps were used to identify these high-risk road segments:

- **Data Collection:** Crash data from 2020 to 2024 focusing on KSI crashes was compiled.
- **Segment Identification:** Road segments were identified and sorted by the number of KSI crashes.
- **Crash Frequency:** Segments with at least one fatal or serious injury crash were listed based on the total number of crashes.
- **Ranking:** Segments were ranked in descending order to highlight those with the highest number of KSI crashes.

Intersection Analysis (All Roadway Users)

The intersection analysis identified locations in Clinton with the highest concentration of KSI crashes. The process followed the same methodology as the segment analysis:

- **Data Collection:** KSI crash data for intersections from 2020 to 2024 was compiled.
- Intersection Identification: Intersections were defined based on traffic controls and roadway configurations.
- **Crash Frequency:** Intersections with at least one fatal or serious injury crash were sorted by the total number of crashes.
- **Ranking:** Intersections were ranked in descending order to identify those with the highest number of KSI crashes.

Segment Analysis (Vulnerable Road Users)

The segment analysis for vulnerable road users focuses on road segments with the highest number of KSI crashes involving pedestrians, bicyclists, and motorcyclists. The process mirrored the approach used for all roadway users:

- **Data Collection:** KSI crash data involving vulnerable road users from 2020 to 2024 was compiled.
- **Segment Identification:** Segments with at least one KSI crash involving a vulnerable road user were identified.
- **Crash Frequency:** Segments were sorted by the total number of KSI crashes involving vulnerable users.
- **Ranking:** Segments were ranked in descending order to highlight those with the highest number of incidents.

CLINTON HIGH INJURY NETWORK

Segment Analysis (Non-Motorized Road Users)

The segment analysis for non-motorized road users focuses on road segments with injury crashes involving bicyclists and pedestrians. The following steps were used to identify these segments:

- **Data Collection:** Crash data for all injury incidents involving non-motorized road users from 2020 to 2024 was compiled.
- **Segment Identification:** Roadway segments with at least one injury crash involving a non-motorized road user were selected.
- **Crash Frequency:** Segments were sorted by the total number of injury crashes involving non-motorized road users.
- **Ranking:** Segments were ranked in descending order to identify those with the highest number of incidents.

Goals of the High Injury Network

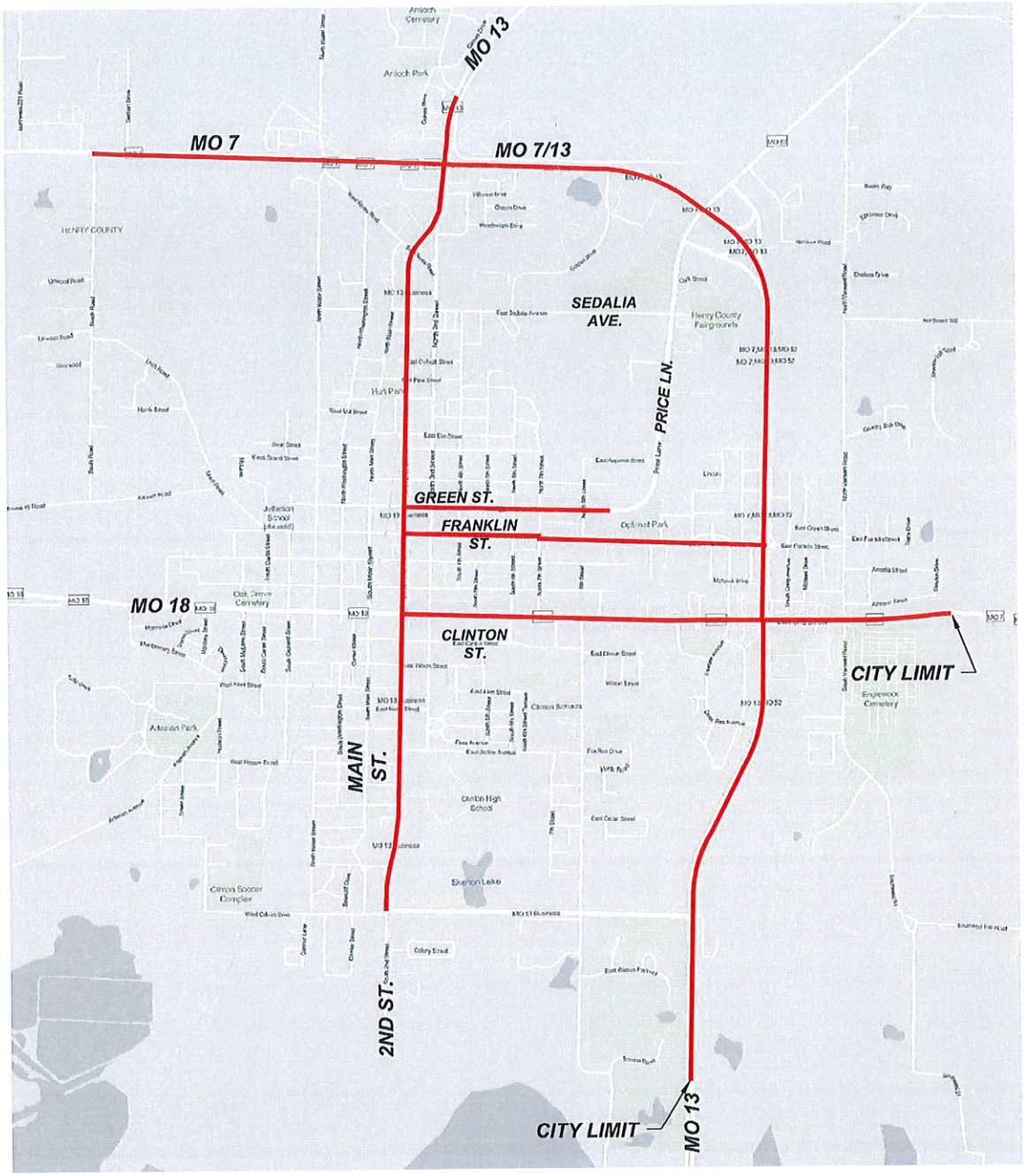
The High Injury Network (HIN) is designed to improve roadway safety through a focused, data-driven approach. Its goals include:

- **Identify High-Risk Areas:** Use crash data to map and analyze high-injury locations, enabling targeted safety interventions.
- **Enhance Safety Measures:** Implement strategies to improve safety in high-risk areas, such as physical roadway upgrades, better signage, and community education initiatives.
- **Engage the Community:** Work with local stakeholders—including residents, law enforcement, advocacy groups, and community partners—to address safety concerns and encourage shared responsibility for road safety.
- **Monitor & Evaluate:** Regularly review the effectiveness of safety strategies, using data to adjust and improve approaches for lasting results.

Commitment to Zero Traffic Fatalities

By establishing the High Injury Network, the City is taking proactive steps to reduce KSI crashes. Through collaboration and targeted interventions that address key risk factors—such as distracted driving, speeding, aggressive driving, impaired driving, and occupant protection—the City aims to create safer roads for everyone.

This effort reflects the City's commitment to achieving the ultimate goal of zero traffic fatalities and serious injuries.



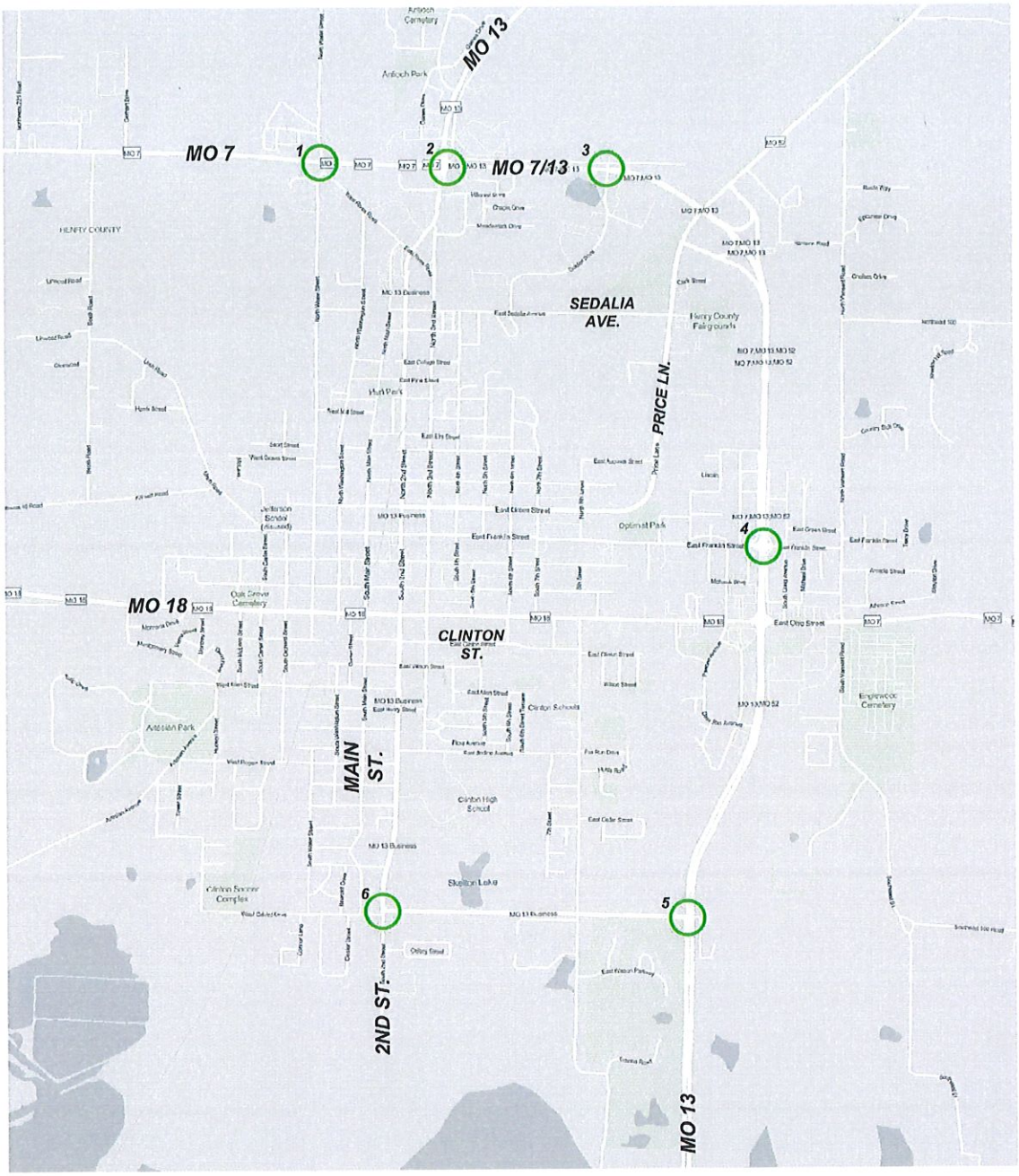
CITY OF CLINTON HIGH INJURY NETWORK, SEGMENTS ALL USERS
ROADWAY MAP

DATE: July 23, 2025
JOB NO. 24101

CHECKED BY: JOA
DRAWN BY: JOA

5051 S. National Avenue
Suite 7A
Springfield, MO 65810
Tel: 417.889.3400
Fax: 417.889.3402

CJW Transportation Consultants, L.L.C.
www.GoCJW.com



HIN INTERSECTION LEGEND:

01 – MO. 7 & WATER STREET
02 – MO. 7/13 & 2ND STREET
03 – MO. 7/13 & GOLDEN DRIVE
04 – MO. 7/13 & FRANKLIN STREET
05 – MO. 13 & CHARLES E. CALVIRD DRIVE
06 – 2ND STREET & CHARLES E. CALVIRD DRIVE

N

LEGEND:

HIN INTERSECTIONS, ALL –

5051 S. National Avenue
Suite 7A
Springfield, MO 65810
Tel: 417.889.3400
Fax: 417.889.3402

CITY OF CLINTON HIGH INJURY NETWORK, INTERSECTIONS ALL USERS ROADWAY MAP

DATE: July 23, 2025
JOB NO. 24101
CHECKED BY: JOA
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CJW

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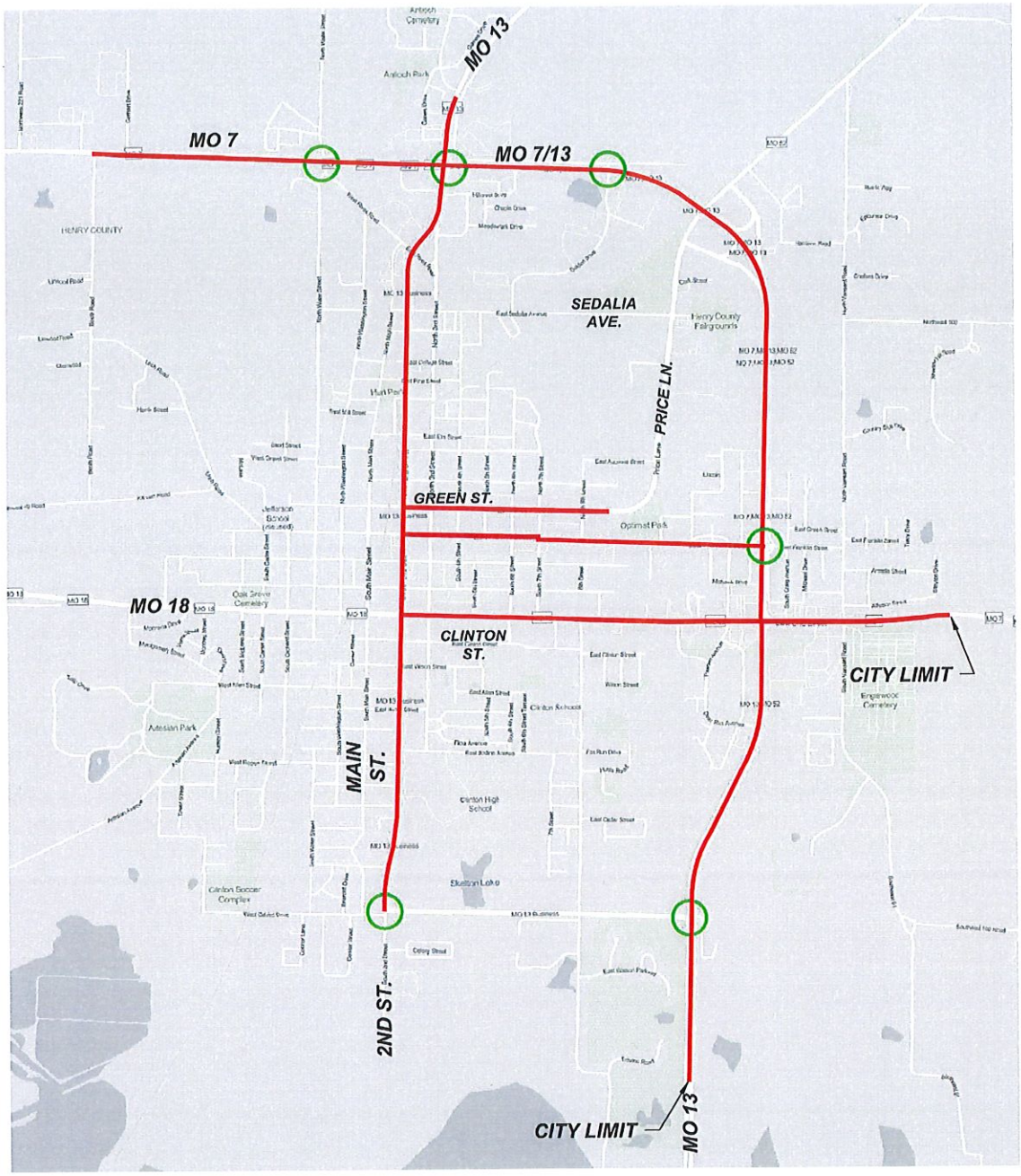

HIN INTERSECTION LEGEND:

01 – MO. 7 & WATER STREET
02 – MO. 7/13 & 2ND STREET
03 – MO. 7/13 & GOLDEN DRIVE
04 – MO. 7/13 & FRANKLIN STREET
05 – MO. 13 & CHARLES E. CALVIRD DRIVE
06 – 2ND STREET & CHARLES E. CALVIRD DRIVE

N

LEGEND:

HIN SEGMENTS, ALL –

HIN INTERSECTIONS, ALL –

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CITY OF CLINTON HIGH INJURY NETWORK, SEGMENTS AND INTERSECTIONS ALL USERS
ROADWAY MAP

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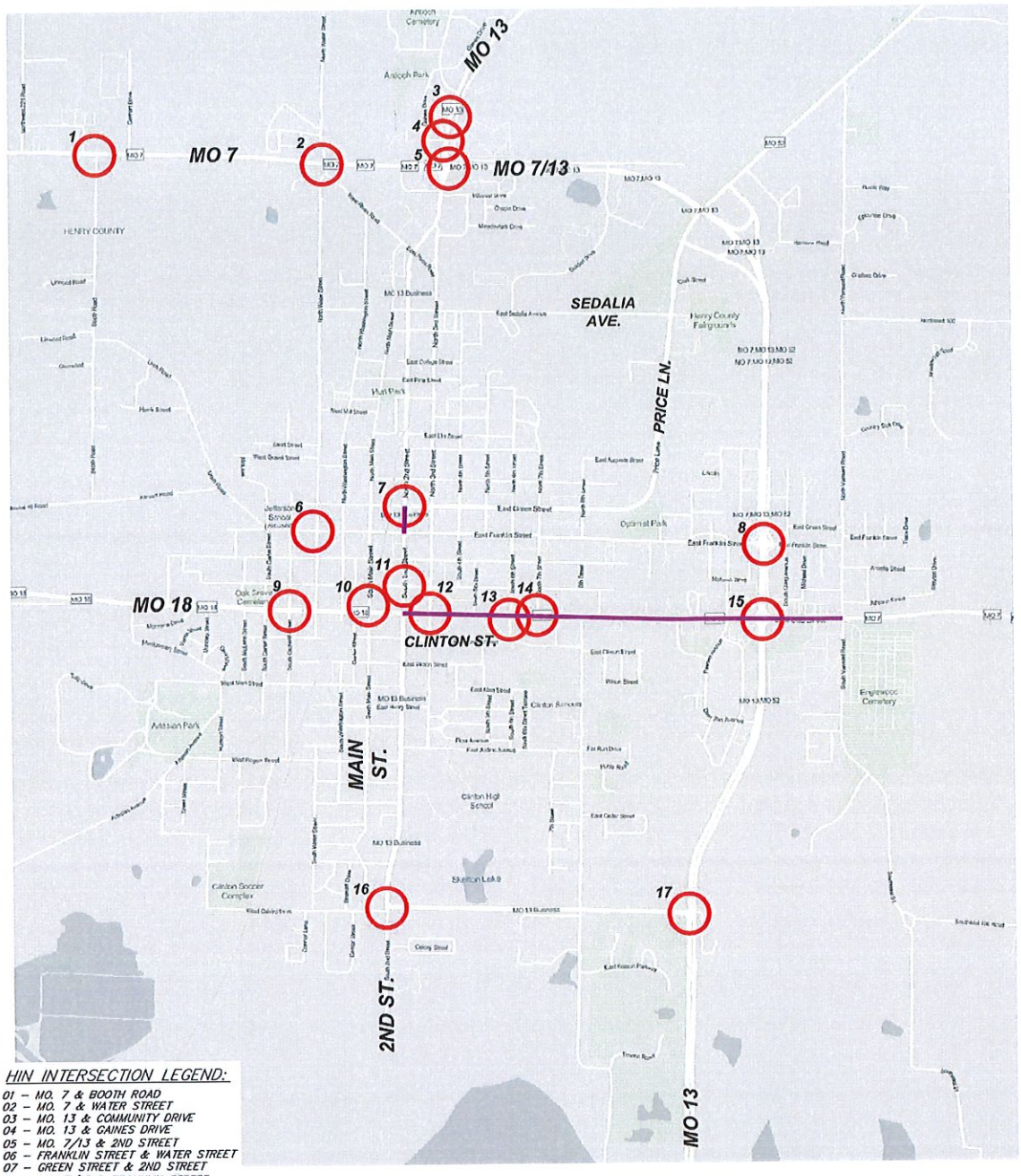

HIN INTERSECTION LEGEND:

01 – MO. 7 & BOOTH ROAD
02 – MO. 7 & WATER STREET
03 – MO. 13 & COMMUNITY DRIVE
04 – MO. 13 & GAINES DRIVE
05 – MO. 7/13 & 2ND STREET
06 – FRANKLIN STREET & WATER STREET
07 – GREEN STREET & 2ND STREET
08 – MO. 7/13 & FRANKLIN STREET
09 – MO. 18 & ORCHARD STREET
10 – MO. 18 & MAIN STREET
11 – GRANDRIVER STREET & 2ND STREET
12 – MO. 18 & 3RD STREET
13 – MO. 18 & 6TH STREET
14 – MO. 18 & 7TH STREET
15 – MO. 18 & MO. 7/13
16 – CHARLES E. CALVIRD & 2ND STREET
17 – CHARLES E. CALVIRD & MO 13

N

LEGEND:

HIN SEGMENTS, VULNERABLE –

HIN INTERSECTIONS, VULNERABLE –

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CITY OF CLINTON HIGH INJURY NETWORK, SEGMENTS AND INTERSECTIONS VULNERABLE USERS
ROADWAY MAP

DATE: July 23, 2025
JOB NO. 24101

CHECKED BY: JOA
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Introduction

Transportation equity means ensuring that everyone—regardless of income, age, or ability—can travel safely and reliably. Between 2020 and 2024, Clinton recorded 46 KSI (fatal and serious injury) crashes, resulting in 3 fatalities (2 pedestrians and 1 motorcyclist) and 55 serious injuries. These numbers highlight the need to improve conditions for Vulnerable Road Users (VRUs)—people walking, biking, or riding motorcycles—who face greater danger where infrastructure is lacking.

This chapter identifies strategies within the Clinton SS4A Safety Action Plan to address economic and infrastructure gaps that increase crash risk. By focusing investments where safety needs are greatest, the City of Clinton aims to reduce crashes and create safer, more accessible streets for everyone.

Economic Challenges & Transportation Risks

Residents in economically challenged areas often experience higher transportation risks due to:

- Gaps in sidewalks, bike lanes, and other VRU facilities.
- Poorly maintained pavement and pedestrian infrastructure.
- Greater reliance on walking, biking, or motorcycling due to limited vehicle access.
- Exposure to high-speed corridors without adequate safety features.

To address these conditions, the Safety Action Plan will:

- Prioritize High-Risk Locations: Target safety investments where VRU crashes are most frequent or severe.
- Improve Affordable Mobility Options: Make walking, biking, and motorcycling safer and more convenient.
- Engage the Community: Partner with residents to identify safety needs and co-create solutions.
- Leverage Funding: Utilize TAP, SS4A, and other grant opportunities to close infrastructure gaps and improve equity.

Vulnerable Road Users

VRUs—including pedestrians, bicyclists, motorcyclists, and individuals with mobility challenges—are disproportionately represented in serious crashes. In Clinton's recent KSI data, two-thirds of traffic fatalities involved VRUs, underscoring the need for targeted improvements.

- **Common Challenges:**
  - High-speed corridors with limited pedestrian protection.
  - Incomplete or inaccessible sidewalks and curb ramps.
  - Poor intersection design that increases turning conflicts and reduces visibility.

Strategies to Improve VRU Safety

The Clinton SS4A Safety Action Plan promotes design and operational changes to protect vulnerable users, including:

- Complete Streets Design: Reconfigure streets to safely accommodate all modes with sidewalks, bike facilities, and safer intersections.
- Traffic Calming: Use measures like narrowed lanes, chicanes, and roundabouts to reduce speeds and increase awareness.
- Enhanced Crossings and Lighting: Add mid-block pedestrian signals, high-visibility crosswalks, refuge islands, countdown signals, and improved lighting at key locations.
- Motorcyclist Safety: Improve road surface conditions, maintain lane markings, and conduct outreach on safe riding practices.
- ADA Compliance: Upgrade sidewalks, ramps, and transit stops for accessibility.
- Data-Driven Enforcement: Focus enforcement and education on high-risk driver behaviors such as speeding, distraction, and failure to yield.

Equity-Focused Engagement & Decision-Making

- **Community Engagement:**
  - Hold surveys, workshops, and public meetings to gather input on safety concerns.
  - Use both in-person and non-digital communication to ensure all residents can participate, including those with limited internet access.
- **Data-Driven Equity Analysis:**
  - Analyze KSI data to pinpoint high-risk areas and evaluate crash patterns.
  - Assess proposed safety projects to ensure they meet the needs of VRUs and benefit areas with the highest equity needs.

Summary

The City of Clinton's SS4A Safety Action Plan integrates equity and VRU protection into all phases of safety planning. By focusing on high-risk areas, improving multimodal infrastructure, and engaging the community in decision-making, the city is committed to building a safer, more accessible transportation network for all residents—especially those most vulnerable to serious injury or fatal crashes.

CHAPTER 4 Engagement & Collaboration

Public engagement during the development of the Clinton Safety Action Plan (SAP) ensured that the plan reflects the community's needs, priorities, and concerns. Residents and area stakeholders had multiple opportunities to provide input, both directly through public feedback sessions and indirectly through community representatives on the Steering Committee. Chapter 4 outlines the scope of engagement activities, summarizes the feedback received, and explains how public input was incorporated into the Safety Action Plan.

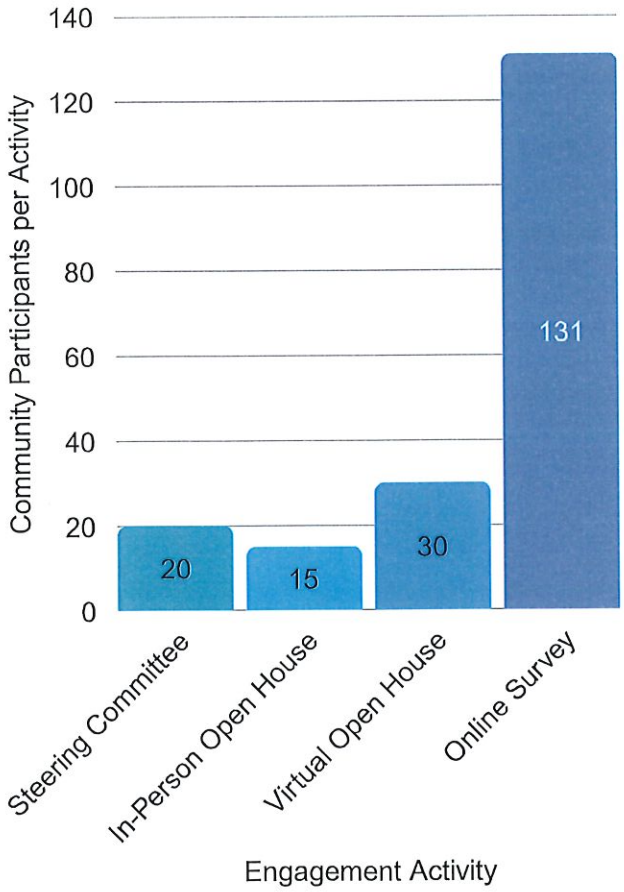


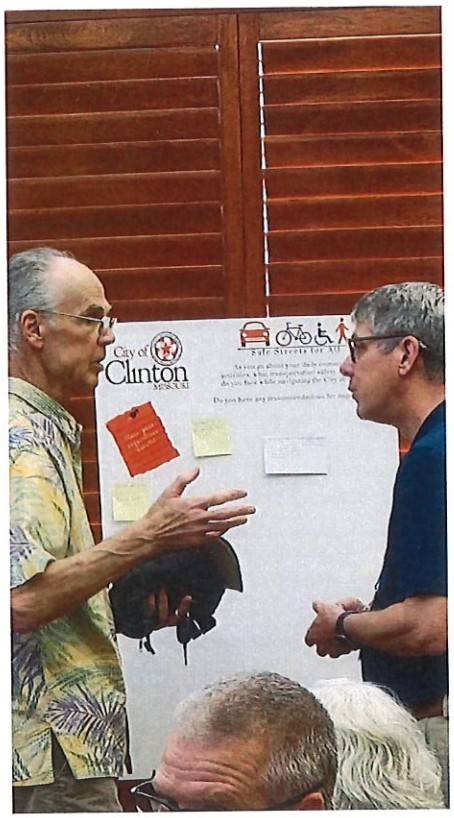
Engagement Activities

The SAP received input from the public through four primary methods:

- Steering Committee
- In-Person Open House
- Virtual Open House
- Online Survey

In addition to engaging the broader public, the project was guided by a team of public officials and traffic safety professionals. Feedback from the public was regularly reviewed and discussed during Progress Meetings held throughout the project development period.





To guide the plan's development, a Steering Committee representing diverse community perspectives was established. This committee included stakeholders from the Clinton Community, such as representatives from City Council and Staff, MoDOT, the Chamber of Commerce, Fire Department, Police Department, Golden Valley Memorial Healthcare, local businesses, residents, and various interest groups. The Steering Committee convened for a total of three meetings to provide guidance throughout the Safety Action Plan (SAP) development process. The Steering Committee played a key role in informing the public about opportunities for input and providing valuable feedback on identified safety issues. A draft of the final SAP was provided to the Steering Committee for review and comment. Following the project team's incorporation of the Committee's feedback, the SAP was formally presented to the Steering Committee for their recommendation of adoption by the City Council.

To gather additional input from Clinton residents, an **in-person Open House** was held on May 14 at Clinton City Hall from 3:00 p.m. to 6:00 p.m. This event provided an opportunity for community members to engage directly with the project team, ask questions, and learn more about the Safety Action Plan. Attendees were encouraged to share their feedback and recommendations through open discussions and interactive poster displays designed to highlight key safety topics and potential strategies.



To provide greater opportunity for the community to provide feedback on the safety of City transportation facilities, a **Virtual Open House** was hosted from May 27th to June 11th. Both Open House formats were advertised through the City of Clinton Facebook page and through word of mouth by the Steering Committee.

A focused Project Team, consisting of the Consultant and City staff, met bi-weekly throughout the development of the Safety Action Plan to address concerns, respond to inquiries, ensure consistency with City goals, and collaborate on all aspects of the Plan. Additionally, Steering Committee members participated in the Road Safety Audits conducted on 2nd Street and Ohio Street, further supporting the collaborative and data-driven approach of the Safety Action Plan.

Online Survey: To gather broader input from the community, a comprehensive online survey was conducted over a period of 32 days from January 23 through February 24, 2025. The online survey was promoted through the City of Clinton Facebook page, a radio announcement, and a news release from the City of Clinton. This survey received 131 responses and covered a variety of topics, including:

- **Demographics:** Understanding the diverse makeup of the community to tailor safety strategies effectively.
- **Transportation Habits:** Insight into how residents travel, including the use of cars, pickups/SUVs, motorcycles, walking, biking, and public transit.
- **Top Safety Concerns:** Identifying the primary safety issues observed by the community on City roads and streets.
- **Perceptions of Safety:** Gauging how safe residents feel while using City transportation infrastructure.
- **Suggestions for Improvements:** Collecting ideas and recommendations from the public to enhance road safety.

The News Release and Summary of Survey Results can be found in the **Appendix** for **Chapter 4**.

Policy & Process Changes

Introduction

The **SS4A** framework provides a roadmap for eliminating traffic fatalities and serious injuries while promoting accessible transportation networks. This approach aligns Clinton's transportation policies with national goals emphasizing safety, accessibility, and sustainable transportation infrastructure for all street users — including pedestrians, cyclists, motorists, and transit users.

To integrate these principles locally, Clinton may choose to:

1. Amend Municipal Code Chapter 44 (Streets & Sidewalks) to incorporate the recommendations of this Chapter; or
2. Adopt a separate **Transportation Policy** by **Council Resolution** to implement the same recommendations administratively, preserving flexibility for future code updates.

These recommendations reflect the 2015–2030 Clinton Comprehensive Plan and community input gathered through the SS4A Safety Action Plan development process.

Key Policy & Process Recommendations

1. Integrating Transportation & Land Use Planning

Current Condition:

- Chapter 44 lacks explicit policies linking transportation infrastructure with land use and economic development goals.

Recommended Changes:

- Incorporate policies that align transportation improvements with Clinton's Comprehensive Plan, prioritizing infrastructure projects in key development corridors such as:
  - MO Hwy 7/13/52 Loop
  - MO Business 13/2nd Street
  - Ohio Street / MO Highway 18
  - The Downtown Square
- **Example addition:**
  - "Transportation infrastructure projects should align with the City's land use and economic development strategies to support growth, connectivity, and community character, as outlined in the current Clinton Comprehensive Plan. High-priority corridors, including Vansant Road (north of MO7) and Price Lane, should be prioritized for these improvements."

2. Sidewalk Safety Improvements

Current Condition:

- Sidewalk maintenance is the responsibility of property owners, leading to inconsistent quality and gaps in the network.
- A dedicated funding source is absent for sidewalk maintenance, connectivity, and ADA compliance.

Recommended Changes:

- Develop a Citywide Sidewalk Improvement Plan within 24 months of the formal adoption date of this Safety Action Plan to address gaps and ADA compliance.
- Prioritize connectivity to schools, parks, recreational areas, and commercial districts.
- Establish a cost-sharing program to reduce the financial burden for property owners while encouraging timely upgrades.
- **Example addition:**
  - "All sidewalk projects should prioritize connectivity to employment centers, schools, and recreational areas. The city will pursue funding opportunities, including grants and partnerships, to expand and enhance the sidewalk network."

3. Access Management

Current Condition:

- Chapter 44 does not include access management policies.

Recommended Changes:

- Add an Access Management Section or standalone Access Management Policy to:
  - Regulate driveway spacing.
  - Encourage shared access points.
  - Require turning lanes or medians in high-traffic areas.
- Ensure that access management policies are consistent with accepted practices and the goals and objectives of Clinton's Comprehensive Plan.
- **Example addition:**
  - "The city should implement access management standards to improve safety and traffic flow on city streets. These standards will regulate driveway spacing, promote shared access, and require turning lanes or medians where appropriate."

4. Multimodal Transportation & Complete Streets

Current Condition:

- Chapter 44 lacks language promoting multimodal transportation or Complete Streets principles.

Recommended Changes:

- Expand and maintain bike-friendly routes, prioritizing connectivity between the Katy Trail, neighborhoods, business districts, and key destinations.
- Designate specific streets (e.g., Price Lane and Green Street) as bike-friendly corridors.
- **Example addition:**
  - "Public roadway projects should incorporate multimodal transportation strategies into high-priority corridors, including pedestrian and bicycle infrastructure, to promote connectivity and a healthy lifestyle."

5. Traffic & Safety Enhancements

Current Condition:

- Chapter 44 does not address traffic-calming measures or intersection safety improvements.

Recommended Changes:

- Add provisions for traffic-calming measures, such as curb extensions, speed management strategies, and pedestrian safety infrastructure.
- Require traffic impact studies for new developments that meet defined thresholds to minimize disruptions to existing transportation networks.
- **Example addition:**
  - "Traffic-calming measures should be incorporated into roadway designs to enhance bicyclist & pedestrian safety and reduce vehicle speeds in high-traffic areas."

6. Regional Coordination

Current Condition:

- Chapter 44 does not provide guidance for inter-jurisdictional coordination.

Recommended Changes:

- Add language to promote collaboration with key regional partners, including:
  - MoDOT (Missouri Department of Transportation)
  - Henry County
  - Kaysinger Basin Regional Planning Commission (KBRPC)
- Focus on securing funding for priority projects through partnerships and regional planning initiatives.
- **Example addition:**
  - "The city should continue to actively engage with MoDOT, Henry County, and the Kaysinger Basin Regional Planning Commission (KBRPC) to coordinate transportation projects and secure funding for priority infrastructure improvements."

Alignment with Clinton's Safety Action Plan

The recommended updates to **Chapter 44** — or the adoption of a separate **Transportation Policy** by **Council Resolution** — aligns with the **Clinton Safety Action Plan** by advancing the following priorities:

- Comprehensive Safety Planning:
  - Integrate transportation and land use planning, multimodal strategies, and access management policies to create a safer, more connected road network.
- Accessibility:
  - Advance ADA compliance and improve connections to schools, parks, employment centers, and neighborhoods through coordinated sidewalk and multimodal enhancements.
- Regional Collaboration:
  - Strengthen partnerships with MoDOT, Henry County, and the Kaysinger Basin Regional Planning Commission (KBRPC) to align local and regional safety goals while pursuing federal and state funding for priority projects.

Summary

Updating Clinton's Municipal Code Chapter 44 — or adopting a separate **Transportation Policy** by **Council Resolution**— will institutionalize SS4A principles across local transportation programs, reinforcing safety and accessibility in decision-making.

These updates align directly with the Clinton Comprehensive Plan and community goals, supporting infrastructure investments that reduce fatalities and serious injuries while improving multimodal connectivity.

By formally adopting these principles, Clinton can build a transportation system that advances safety, accessibility, and quality of life for all users.

Introduction

The built environment plays a critical role in roadway safety. Design deficiencies, insufficient infrastructure for vulnerable road users (VRUs), and inadequate maintenance can result in serious traffic crashes, threatening lives and diminishing community well-being. This chapter presents a systematic approach developed to prioritize critical local projects aimed at improving safety across the City of Clinton. The prioritization process focuses on addressing locations with the most fatal and serious injury crashes. By addressing the challenges identified throughout the region and strategically prioritizing investments, this plan seeks to enhance safety and multimodal accessibility for all road users. In addition to the prioritization process, two road safety audits were conducted and inform the Safety Action Plan.

Project Prioritization Process

The project prioritization process was informed by data from a variety of sources, including the High Injury Network (HIN) developed in this report, contributions from public input opportunities, and feedback from local agency partners. These data points were used to identify key community needs and evaluate infrastructure projects.

SS4A Prioritization

Each project was first ranked using the Safe Streets and Roads for All (SS4A) criteria. This process considered factors such as crash history, alignment with the High Injury Network, and equity considerations. The Safety Action Plan scoring matrix was developed to evaluate and rank projects based on key safety and equity criteria. This scoring matrix ensures that projects are evaluated transparently and consistently, prioritizing those with the greatest potential to enhance safety and equity. A detailed breakdown of project scores is included in the **Appendices**.

Criteria	Assigned Points if...	Points
Number of Fatal and Serious Injuries	More than 2 recorded	6
On Either High Injury Network	True	5
On Both HINs	True	7
Number of Fatalities	One or More	5
Number of Serious Injuries	One or More	3
Project is in a Plan	True	2
Received Public Input	True	1

Safety Action Plan Scoring Matrix

Project Sources

Projects were identified from a comprehensive review of existing plans, community feedback, safety assessments, and systemic improvements. The following sources were integral to the prioritization process:

- **Community Feedback and Safety Assessments -** Input from community members and insights from safety assessments were crucial for identifying specific areas of concern. This feedback was gathered through public engagement activities described in Chapter 3 of this report. Public engagement ensures that project prioritization reflects the needs and priorities of the community.
- **Roadway Safety Audits -** Two Roadway Safety Audits (RSA) were conducted during the development of this report. One on MO-18 (Ohio Street) and one on 2nd Street. These both produced reports which are here included by reference. Each has a list of recommended safety enhancements which are included in the Appendix of this Safety Action Plan.
- **Systemic Safety Improvements** - This approach prioritizes addressing recurring safety issues across the transportation network. By implementing systemic improvements, Clinton aims to enhance safety for all users, rather than focusing solely on isolated locations. These were primarily identified through the High Injury Network developed in Chapter 2 of this report.
- **MoDOT High-Priority Unfunded Needs Project List** - This list provides a detailed inventory of infrastructure projects that have been identified through the State planning process, but lack funding. It serves as a valuable resource for understanding unmet community needs and prioritizing future investments.

By incorporating these diverse sources, the prioritization process is informed by a wide range of perspectives and data, resulting in a more robust and effective approach to safety improvements.

Education

In addition to engineering and enforcement strategies that follow, education is a critical systemic safety countermeasure for Clinton. A coordinated education program can improve community awareness of safe travel behaviors and reinforce respect for all modes of transportation. The City, Clinton School District, Henry County, and regional and state agencies should work collaboratively to deliver consistent safety messages through schools, public events, driver education programs, and media outreach. By combining resources and expertise, these partners can expand the reach and effectiveness of safety campaigns, ensuring that residents of all ages understand how to travel safely whether they walk, bike, drive, or ride transit.

Safety Action Plan Priorities - Segments

Roadway	Limits	Recommended Safety Enhancements
MO-7	West City Limits to MO-52 Overpass	Raised Median Barrier, Advance Cross Street Signs
2nd Street	MO-7/13 North Junction to Calvird Dr.	Retroreflective Backplates, Flashing Yellow Arrows, Improved Lighting
MO-18	2nd Street to Vansant Road	Marked Crosswalks with RRFB, Continuous Sidewalks, Corridor Access Management
MO-18	2nd Street to MO-7/13 South Junction	RRFB Crossings, Speed Management
MO-7	MO-7/13 South Junction to East City Limits	Median barrier, Alternative Intersection Design at Vansant, Corridor Access Management
Franklin Street	2nd Street to MO-7/13	Traffic Calming, Speed Management

Safety Action Plan Priorities - Segments

Roadway	Limits	Recommended Safety Enhancements
MO-13	South Junction to South City Limits	Reduce Speed Ahead Signage, Curve Warning Signage
MO-7	MO-52 Overpass to MO-7/13 South Junction	Median Barrier, Advance Cross Street Signs
2nd Street	Green Street to Franklin Street	Flashing Yellow Arrow, Reduce Sight Obstructions, Improve Lighting
Green Street	2nd Street to Price Lane	Traffic Calming, Speed Management
Calvird Dr	2nd Street to MO-13	Speed Management, Reduce Lane Widths

Safety Action Plan Priorities - Intersections

Primary Approach	Cross Approach	Recommended Safety Enhancements
MO-7	MO-13 (North Junction)	Retroreflective Backplates, Dynamic Signal Warning Flasher, Hardened Center Lines
MO-13	Calvird Drive	J-Turn Education
2nd Street	Calvird Drive	Improve Stop Ahead Signage, Stop Ahead Pavement Marking, In-Lane Rumble Strips
MO-7	Franklin Street	Retroreflective Backplates, Dynamic Signal Warning Flasher, Hardened Center Lines, Alternative Intersection Design
MO-7	Water Street	Intersection Conflict Warning System, Alternative Intersection Design, Intersection Ahead Signange
2nd Street	Green Street	Improve Pedestrian Accommodations, Review Signal Timing, Flashing Yellow Arrows, Remove Sight Obstructions
MO-13	Gaines Drive	Offset Right Turn Lane, Lane Assignment Signage
MO-18	7th Street	Access Management, Alternative intersection design
MO-7	Booth Road	Intersection Conflict Warning System

Safety Action Plan Priorities - Intersections

Primary Approach	Cross Approach	Recommended Safety Enhancements
MO-7	Golden Drive	Intersection Conflict Warning System, J-Turn
MO-18	Orchard Street	Monitor pavement condition, Remove Sight Distance Obstructions
Franklin St	Water Street	Remove Potential Sight Distance Obstructions
MO-18	MO-13	Retroreflective backplates, Advanced Warning Signage, Alternative Intersection Design
MO-18	3rd Street	Enhanced Crosswalks
MO-18	6th Street	Reduce visual obstructions for stopped drivers. Improve pavement marking
MO-18	Main Street	Revise Stop Sign Placement. Improve pavement marking
2nd Street	Grandriver Street	Revise Stop Sign Placement. Improve pavement marking

Introduction

Clinton is committed to enhancing safety across its transportation network. This chapter outlines the Safety Action Plan's approach to monitoring progress, ensuring transparency, and engaging stakeholders. These efforts are essential for accountability and the ongoing improvement of safety outcomes.

Goals for Progress & Transparency

- Continuous Improvement
- Evaluate the effectiveness of safety measures regularly.
- Adjust strategies based on data-driven insights and changing community needs.
- Stakeholder Engagement
- Maintain open communication with residents, local agencies, and organizations.
- Encourage public feedback and participation throughout the process.
- Data Sharing
- Make safety data and reports accessible to all stakeholders.
- Build trust by sharing progress updates and decision-making information.

Monitoring & Evaluation

- **Performance Metrics**
  - Clinton will use Key Performance Indicators (KPIs) to assess the success of safety initiatives. These include:
    - Reduction in traffic fatalities and serious injuries.
    - Decrease in crashes involving vulnerable road users (pedestrians, cyclists, and motorcyclists).
    - Increased compliance with safety regulations (e.g., speed limits, seatbelt use).
    - Faster emergency response times to traffic incidents.

- **Regular Reporting**
  - Publish annual progress reports detailing achievements, challenges, and adjustments to safety strategies.
  - Include analysis of trends, key data, and updates on initiatives.

Public Engagement Strategies

- Community Meetings
  - Host annual meetings to discuss safety concerns, share progress, and gather public input.
- Online Platforms
  - Use the city's website and social media to:
    - Share safety information and crash data.
    - Provide updates on progress and project timelines.
    - Collect public feedback and comments.
- Partnerships
  - Collaborate with schools, businesses, and community organizations to promote safety awareness and gather diverse perspectives.

Transparency in Decision-Making

- Open Data Policy
  - Implement an open data policy to make crash statistics, project updates, and funding allocations publicly available.
  - Present data in a user-friendly and accessible format.
- Documentation
  - Maintain detailed records of safety-related decisions, including the rationale behind chosen strategies.
  - Share these records with stakeholders to ensure clarity and accountability.

Next Steps

This chapter will be reviewed annually to reflect the community's evolving safety needs. Stakeholder feedback will inform updates to the Clinton Safety Action Plan, ensuring it remains relevant and effective.