



YUBA-SUTTER

Regional Safety Action Plan

Final Draft

January 2026

Made possible by a Safe Streets 4 All Planning Grant



Acknowledgments



Yuba County



City of Marysville



City of Wheatland



Sutter County



City of Yuba City



City of Live Oak

This study applies a systemic safety approach that identifies certain features on particular roadways that are correlated with specific crash types and frequencies. This broad approach is necessitated by the inherent nature of covering an entire region’s facilities in one study and the limited scope/budget available to prepare roadway safety plans. Limited time is available to perform field observations throughout the study area to contextualize the data, and therefore, it is beyond the scope of work to perform in-depth “hot spot” evaluations at all locations.

The analysis and recommendations in this report are conceptual in nature based upon limited information, and before implementing any changes, or using any of its information for design or construction, more detailed analysis should be conducted to make sure that the design or construction documents reflect specific, detailed, local, and field conditions.

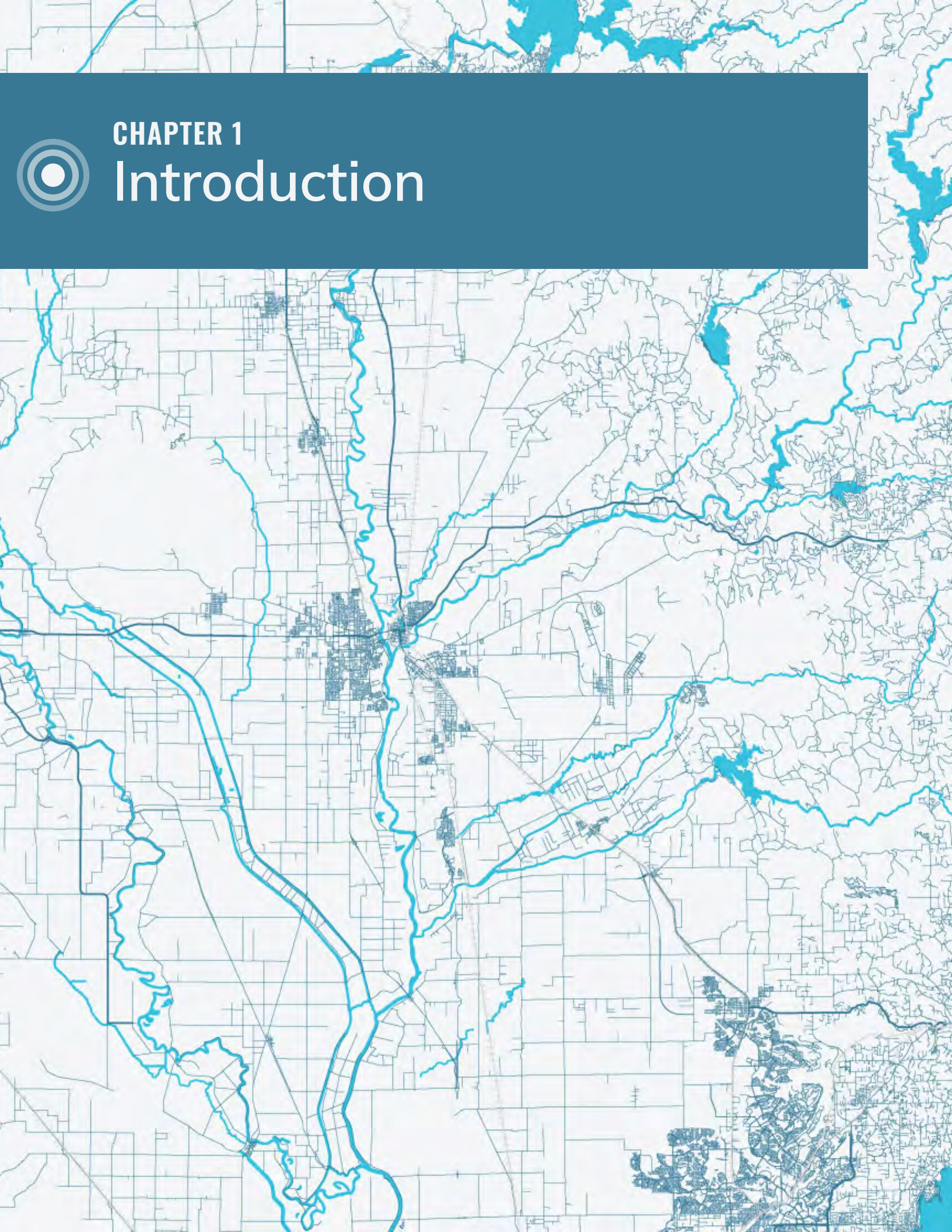
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What’s In This Plan

CHAPTER 1	Introduction
CHAPTER 2	Community Engagement
CHAPTER 3	Regional Crash Analysis
CHAPTER 4	Regional Implementation Plan
CHAPTER 5	Yuba County Safety Analysis
CHAPTER 6	Marysville Safety Analysis
CHAPTER 7	Wheatland Safety Analysis
CHAPTER 8	Sutter County Safety Analysis
CHAPTER 9	Yuba City Safety Analysis
CHAPTER 10	Live Oak Safety Analysis
APPENDICES	A: Policy Benchmarking & Additional Policy Considerations B: Community Engagement Materials & Feedback C: Safety Corridor Background & Technical Methodology D: Safety Countermeasure Toolbox

Note: Chapters 5 through 10 serve as standalone documents.



CHAPTER 1

Introduction

This Plan and Our Region

Yuba and Sutter Counties and four incorporated cities, Marysville, Wheatland, Yuba City, and Live Oak, are committed to prioritizing transportation safety and eliminating traffic-related deaths and serious injuries on their roadways.

The development of this Regional Safety Action Plan (RSAP) was led by a joint effort of County, City, and partner agencies in the Yuba-Sutter region. By combining efforts, the Yuba-Sutter region can provide leadership in roadway safety and more effectively spearhead the implementation of roadway safety policy, projects, and programs. This RSAP covers the two counties and four incorporated cities in them: Yuba County, Marysville, Wheatland, Sutter County, Yuba City, and Live Oak.

Yuba County and Sutter County are situated in the Sacramento Valley. The counties have a combined total population of over 180,000, with people concentrated in Yuba City and Marysville. Roadway safety is a pressing issue facing the region today. In 2021, the Office of Traffic Safety ranked Yuba County eighth of 58 counties statewide based on the total number

of crashes resulting in injury and fatality, third for crashes involving pedestrians, and fifth for crashes involving motorcycles. Sutter County ranked sixth for total number of crashes resulting in injury and fatality, third for crashes involving bicyclists under the age of 15, and seventh for crashes where a party involved had been drinking.

The beginning chapters of the document cover the regional aspects of the plan, including project vision and goals, potential countermeasures, and a Safety Action Plan that will act as a roadmap for Yuba-Sutter and its member agencies to implement this RSAP. The second portion of the plan contains six jurisdiction-specific chapters, each of which includes crash analysis, focus areas, priority projects, and project lists.

 Project team conducting walk audits



Safe System Approach

The Safe System Approach acknowledges that mistakes are inevitable while also asserting that severe injuries and fatalities are avoidable on our roadways. According to the World Health Organization, the goal of a Safe System is to ensure that if crashes occur, they “do not result in serious human injury.”¹ The Safe System Approach to road safety started internationally as part of the Vision Zero proclamation that death and serious injury on the roadway system is unacceptable.^{2 3}

As shown in **Figure 1.1**, the Safe System Approach is founded on several principles, including acknowledging that humans make mistakes and humans are vulnerable. As a

result, a proactive, redundant system is needed to prevent death and serious injuries.⁴ Countries that have adopted the Safe System Approach have had success reducing highway fatalities, with reductions in fatalities between 50% and 70%.⁵ The Safe System Approach is the foundation for the National Safety Strategy released by the United States Department of Transportation (USDOT) in 2022. In 2022, Caltrans also adopted both a Safe System Approach and a Vision Zero goal as part of their Strategic Highway Safety Plan to eliminate all traffic fatalities and serious injuries by 2050.

To anticipate human mistakes, a Safe System seeks to⁶:

- Separate users in a physical space (e.g., sidewalks, dedicated bicycle facilities)
- Separate users in time (e.g., pedestrian scramble, dedicated signal turn phases)
- Alert users to potential hazards
- Accommodate human injury tolerance through interventions that reduce speed and/or impact force

Creating a Safe System means shifting a major share of the responsibility for preventing crashes from road users to those who design the road transport system. “Individual road users have the responsibility to abide by laws and regulations”⁷ and do so by exhibiting due care and proper behavior on the transportation system. While road users are responsible for their own behavior, this is a shared responsibility with those who design, operate, and maintain the transportation network including the automotive industry, law enforcement, elected officials, and government bodies.⁸ In a Safe System, roadway system designers and operators take on the highest level of ethical responsibility.



WHAT

A Safe System aims to eliminate fatal and serious injuries for all road users.



WHY

A Safe System acknowledges the vulnerability of the human body.



WHO

A Safe System requires a partnership between cities, counties, Caltrans, police, and road users.

Figure 1.1: Safety System Elements and Principles



References

1. World Health Organization (2011). Decade of Action for Road Safety 2011-2020. Retrieved from https://www.who.int/roadsafety/decade_of_action/plan/plan_en.pdf, p. 9
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4. Belin, M.-Å., Tillgren, P., & Vedung, E. (2012). Vision Zero - a road safety policy innovation. International Journal of Injury Control and Safety Promotion, 19, 171-179.
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7. World Health Organization (2011). Decade of Action for Road Safety 2011-2020. Retrieved from https://www.who.int/roadsafety/decade_of_action/plan/plan_en.pdf.
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Commitment & Vision



Our Commitment

The Yuba-Sutter Region will **work collaboratively** to **eliminate** traffic fatalities and serious injuries by 2050.



Our Vision

The Yuba-Sutter Region will have a **multimodal** and **sustainable** transportation system where users of **all ages** and **abilities** can travel **conveniently, reliably**, and **free from harm**.

Guiding Principles: Safety Is Our Highest Priority.



1. Traffic deaths and serious injuries are a preventable public health issue that must be addressed.



2. Safety is a shared responsibility.



3. Actions towards Vision Zero will be data-driven based on available crash data and risk factors (e.g., exposure, likelihood, and severity).



4. Evaluation will be ongoing. Regular data collection and analysis will help measure performance against Regional Safety Action Plan objectives.

Existing Policy Landscape

In recent years, leaders at the federal and state levels have taken bold and consistent steps to acknowledge the persistent and unacceptable level of severe injuries and fatalities on our roadways, commit to eliminating these occurrences, and follow international best practices and public health fundamentals to form a new safety paradigm in the US. This has specifically involved embracing the Vision Zero goal of safe mobility for all and adopting the Safe System Approach as the way to get there. The Safe System Approach is a significant evolution in how roadway safety is conceptualized.

This Safety Action Plan has been developed to align with the pivot to the Safe System Approach. This chapter summarizes the primary reference documents and policy considerations that influenced the direction, decisions, and priorities in this RSAP. This Plan focuses on addressing crash risk through an assessment of vehicle speed, mass, and exposure that is inherently proactive and systemic. This Plan presents a holistic assessment of the needs and opportunities for enhancing safety consistent with a systemic risk factors, from systematically addressing socioeconomic and land use, features of the built environment, and passive and active safety tools. Finally, this Plan aspires to make safety the default choice: the easy choice for people as they move about and the easy choice for roadway design decisions. This Plan identifies the opportunities to streamline decision making to prioritize safety and improve internal alignment in programs, practices, and policies consistent with the Safe System Approach.

Federal Policy Considerations

National Roadway Safety Strategy

The United States Department of Transportation (USDOT) incorporated the Safe System Approach as part of its most recent National Roadway Safety Strategy (NRSS), adopted in January 2022. This NRSS is the first national commitment to the goal of zero fatalities on America’s roadways, and names the Safe System Approach as the way to accomplish that goal. Federal transportation officials have since unveiled a number of policies and programs geared towards the application and implementation of the Safe System Approach at the state and local levels.

Safe Streets and Roads for All (SS4A)

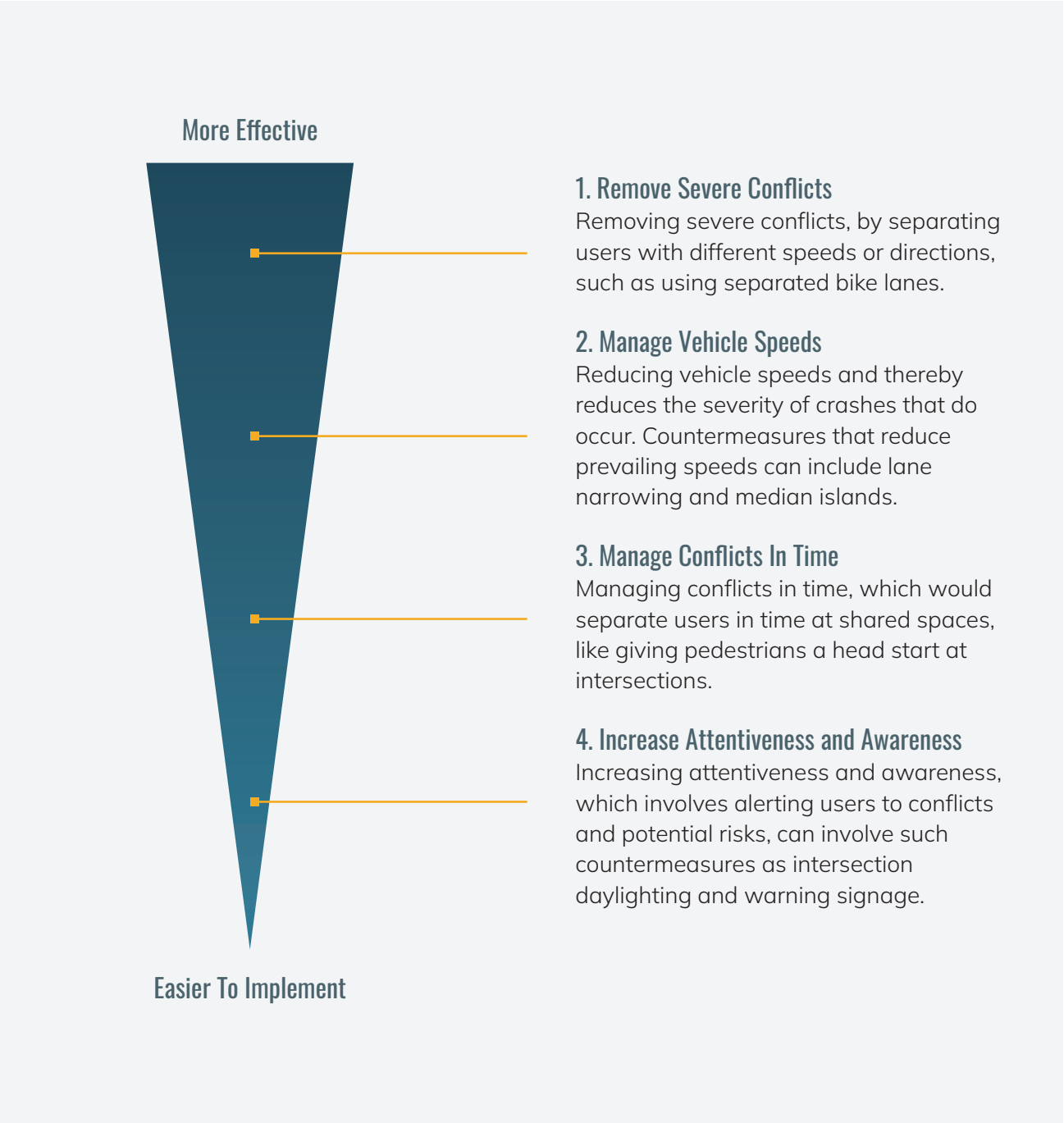
The Safe Streets and Roads for All (SS4A) grant program was established by the Bipartisan Infrastructure Law in 2022, centered around USDOT’s National Roadway Safety Strategy and its goal of zero deaths and serious injuries on America’s roadways. It provides \$5 billion in grant funding over its five-year duration (2022 - 2026) to develop and implement safety plans and projects. The SS4A grant program provides funding for local agencies to create Comprehensive Safety Action Plans (CSAPs). It also provides funding to implement safety projects, but only to those agencies that have an adopted CSAP or equivalent.

1. Introduction

Safe System Roadway Design Hierarchy

The Safe System Roadway Design Hierarchy, created by the Federal Highway Administration (FHWA) in 2024, provides guidance in contextualizing and assessing infrastructure-based countermeasures and strategies on their alignment with the principles of the Safe System Approach.

The Hierarchy classifies countermeasures into four tiers, from most to least aligned with Safe System principles. Crucially, the Hierarchy prioritizes improvements and countermeasures that make physical changes to the system for the whole population as more effective than measures that rely on roadway users and individual decisions.



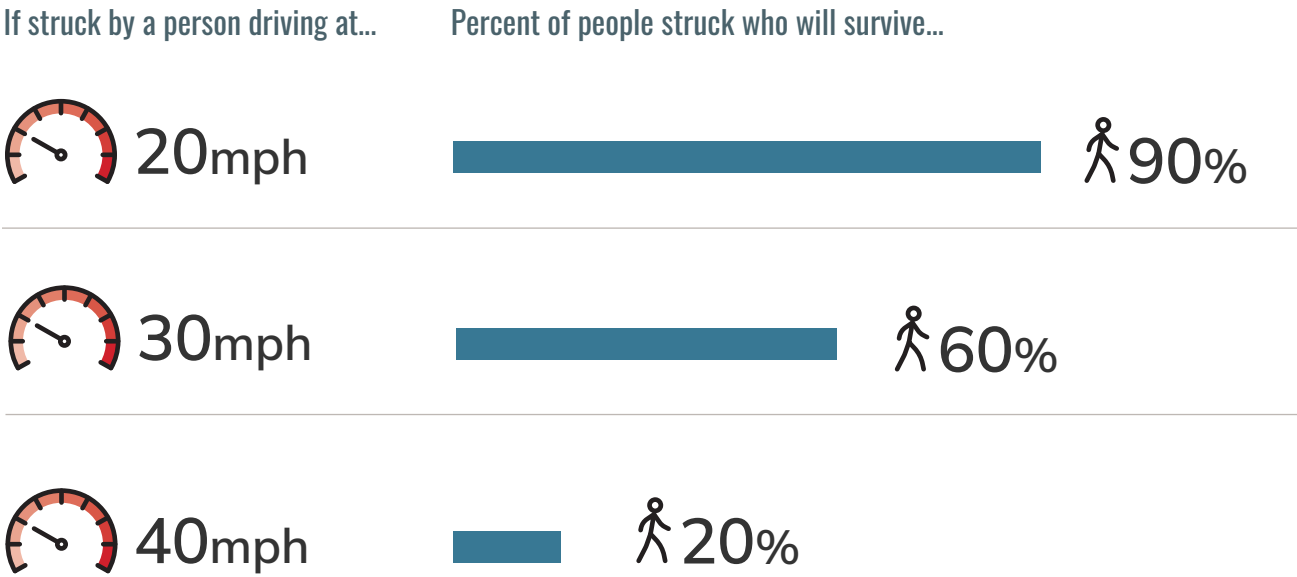
Safe System Approach for Speed Management

The FHWA's 2023 report on the Safe System Approach for Speed Management provides targeted recommendations around speed management. The report notes the need for agencies to place safety and the prevention of injury crashes (as opposed to throughput or travel times) as the highest priority when it comes to speed setting on roadways, and highlights the need to change the physical design and context of the roadway beyond merely changing regulatory speed limits in order to achieve target speeds. The report outlines a five-stage framework to speed management consistent with the Safe System Approach.

Primer on Safe System Approach for Pedestrians and Bicyclists

The Primer, released by the FHWA in 2021, emphasizes the importance of protecting pedestrians and bicyclists, as vulnerable users, under the Safe System Approach. The Primer details the considerations surrounding pedestrians and bicyclists under each of the five elements of the Safe System Approach and provides strategies and actions that can be taken at the federal, state, and local levels towards implementing the Safe System Approach. Also included is an appendix on benchmarking policies, programs, and practices for Safe System consistency.

Speed Management and Roadway Safety



Regional and Local Policy Considerations

Fully committing to Vision Zero and following the Safe System approach requires a fundamental pivot that involves infusing safety into all programs, policies, and practices within the agency as well as reconsidering existing agency approaches, budgets, and priorities where they conflict with Safe System principles. The Project Team developed a benchmarking tool for Federal Highway Administration as part of the Primer on the Safe System Approach for Pedestrians and Bicyclists where agencies can assess their standing on current safety policy and work against industry best practices. A combination of General Plans, Local Road Safety Plans, Standard Plans & Specifications, and Active Transportation Plans/Bicycle Master Plans were reviewed for the six jurisdictions to identify opportunities to improve how processes prioritize safety.

 Pedestrians in Live Oak City



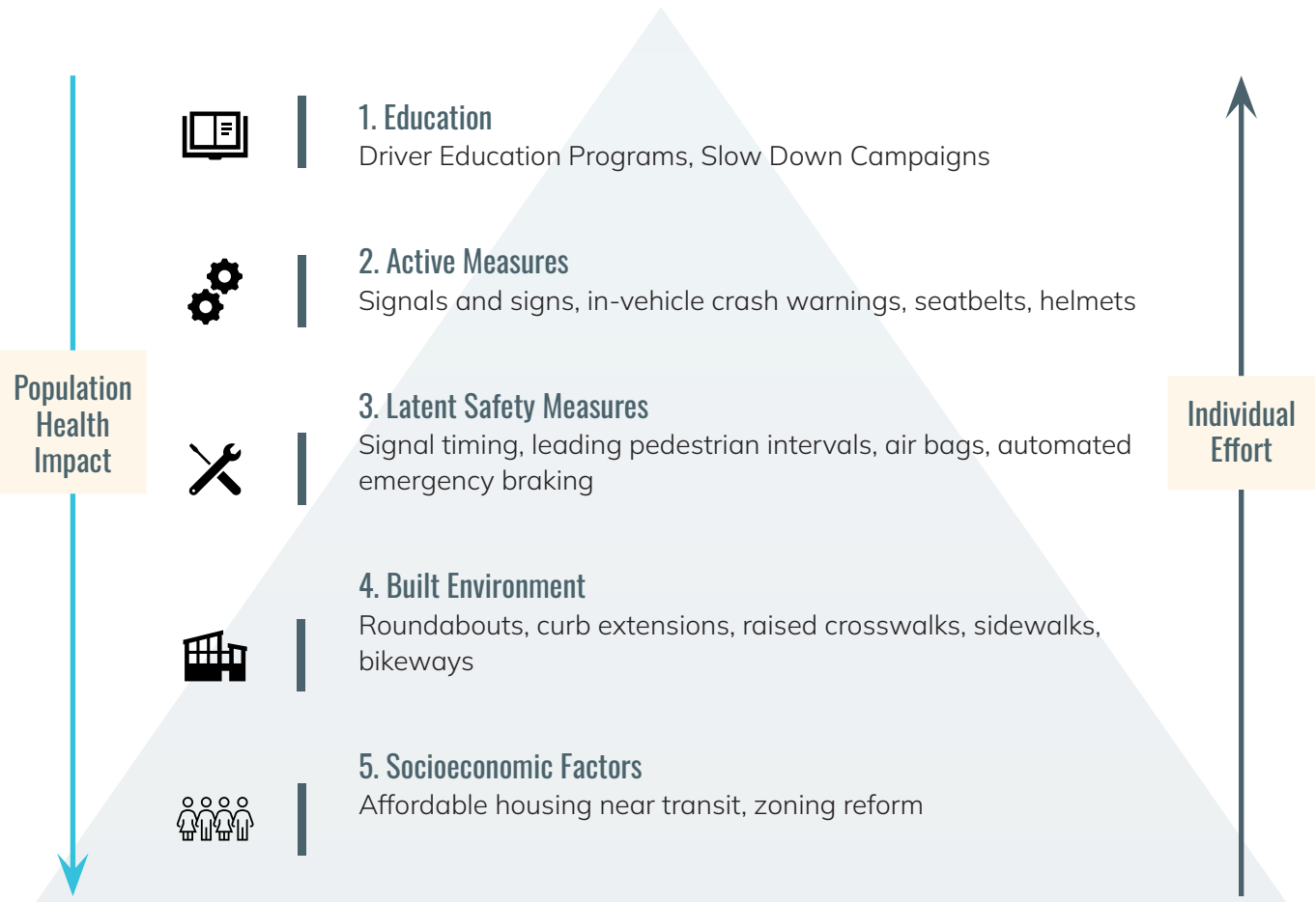
The General Plans include policies to prioritize safety in roadway projects or enhance safety while making other transportation system improvements. General Plans also bolster a Safe System by addressing the socioeconomic factors that have an impact on roadway safety. Older Improvement Standards and Specifications for some jurisdictions should be updated to focus on reducing the likelihood and severity of crashes (e.g., speed management). Over half of the jurisdictions have Active Transportation Plans/Bicycle Master Plans that identify recommendations for facilities with physical separation between vehicles and bicyclists/pedestrians. Yuba City, Marysville, and Yuba County already have Local Road Safety Plans. Many safety planning benchmarks are current efforts with this RSAP, but others will require additional work beyond the plan. For a detailed listing of relevant local policies, see **Appendix A**.

Safety as A Public Health Concern

This RSAP draws from emerging best practices which identifies and prioritizes strategies focused on addressing the potential for injury from the force generated by moving vehicles or individuals in a crash. The Safe Systems Pyramid, shown below, draws from public health principles to emphasize that interventions with the broadest reach and lowest individual effort are the most effective. This framework serves as a guide for prioritizing roadway design and operational

strategies that maximize safety impacts while fostering collaboration beyond traditional safety-focused efforts. It highlights the role of agency partners and community stakeholders in the RSAP and addresses upstream, systemic issues to tackle root causes more holistically. The Safe System Pyramid guided the selection and prioritization of implementation strategies in **Chapter 4**.

Safe System Pyramid





CHAPTER 2

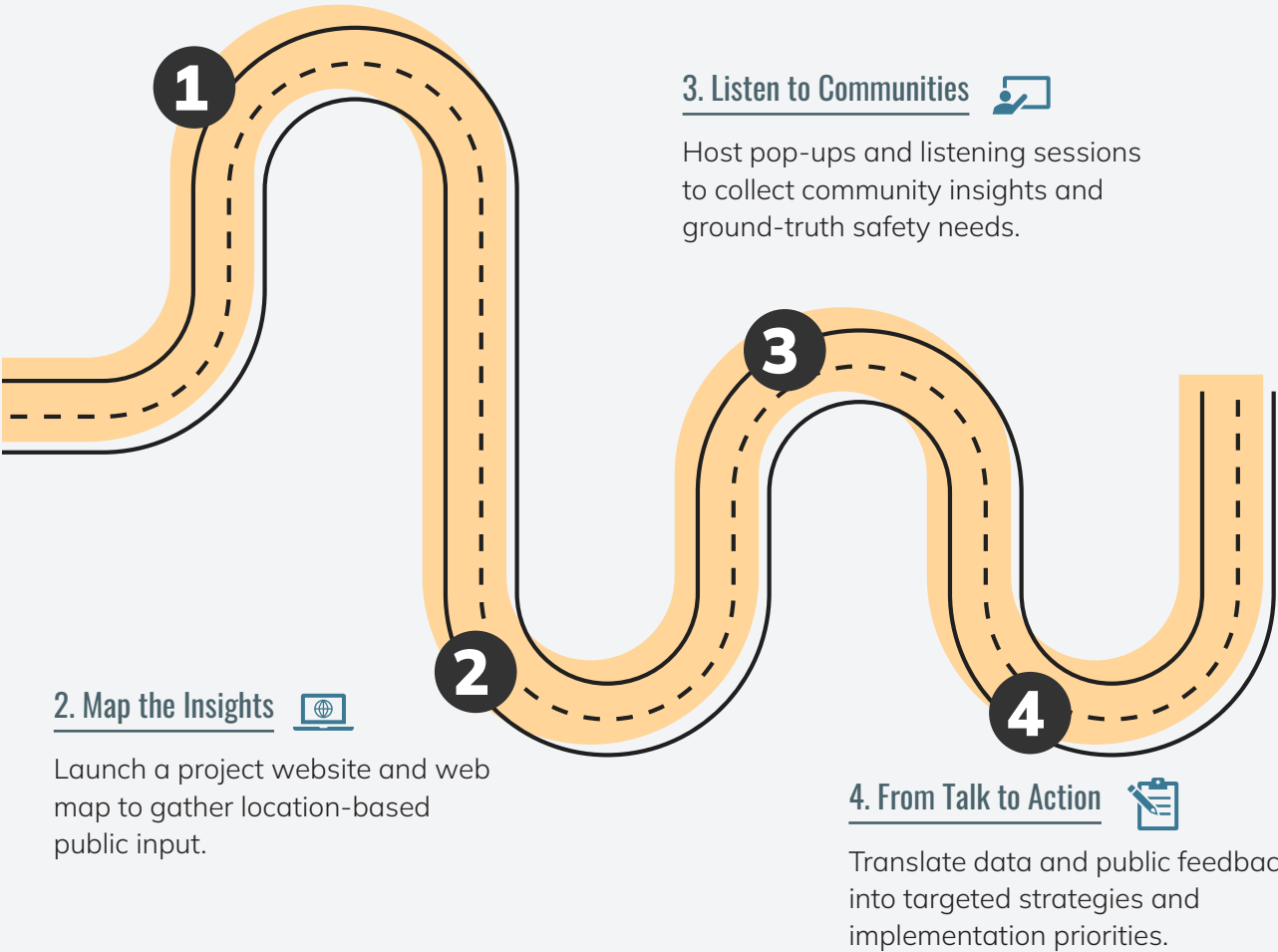
Community Engagement

The project team engaged with organizational partners around the region and the community at large, seeking insight to ensure that the resulting Regional Safety Action Plan (RSAP) creates a vision for improving the region’s roadways that aligns with the community’s values.

Our Community Engagement Journey Towards Vision Zero

1. United for Vision Zero

Establish a multi-agency task force to align strategies, share data, and guide Vision Zero efforts.



 United for Vision Zero

Vision Zero Task Force

A Task Force was convened for the development of this Regional Safety Action Plan (RSAP) which comprised staff representatives from the partner jurisdictions' agencies as well as community organizations such as Blue Zones and the Yuba Area Bike Advocates. The Task Force is responsible for the Action Plan's development, implementation, and monitoring phases.

Over the course of the development of this RSAP, the Task Force met three times. The first meeting included an introduction on the Safe System Approach and Vision Zero and preliminary discussions on funding, regional coordination, and how best to address the needs of the public. During the second meeting, the Task Force discussed results of the crash data analysis along with the locations with disproportionately high injuries and fatalities and suggested other locations to consider based on their local knowledge. They also shared information about ongoing safety related projects or policies taking place within their jurisdiction or by their organization. During the third meeting, the groups discussed the results of the public facing community engagement along with focus areas...and choosing solutions to fit the contexts of the Yuba-Sutter region.

The Task Force included staff or members from the following agencies and organizations:

- Yuba County Public Works
- City of Wheatland Engineering Department
- Sutter County Public Works
- Yuba City Public Works
- City of Yuba City Public Works
- Marysville Joint Unified School District
- Yuba County Sheriff
- Sutter County Police Department
- Yuba City Police Department
- Sacramento Area Council of Governments
- Yuba Area Bike Advocates
- Blue Zones Yuba-Sutter

 Task Force meeting



 Map the Insights

Project Website & Interactive Web Map

A website was developed for the Plan to collect public feedback, consisting of project information, an interactive web map, and a project calendar. In the web map, visitors could identify specific locations within the region where they had roadway safety concerns by leaving comments and tag them by mode of travel (i.e. walking, biking, driving, etc.). The web map was open for public response from November 2024 to June 2025, and made available in English, Spanish, and 10 other languages. The web map received a total of 49 comments. A map and log of all comments are included in **Appendix B**.

49 Total Comments



14 Walking Safety Comments

Unsafe crossings, poor lighting, and no ADA access.



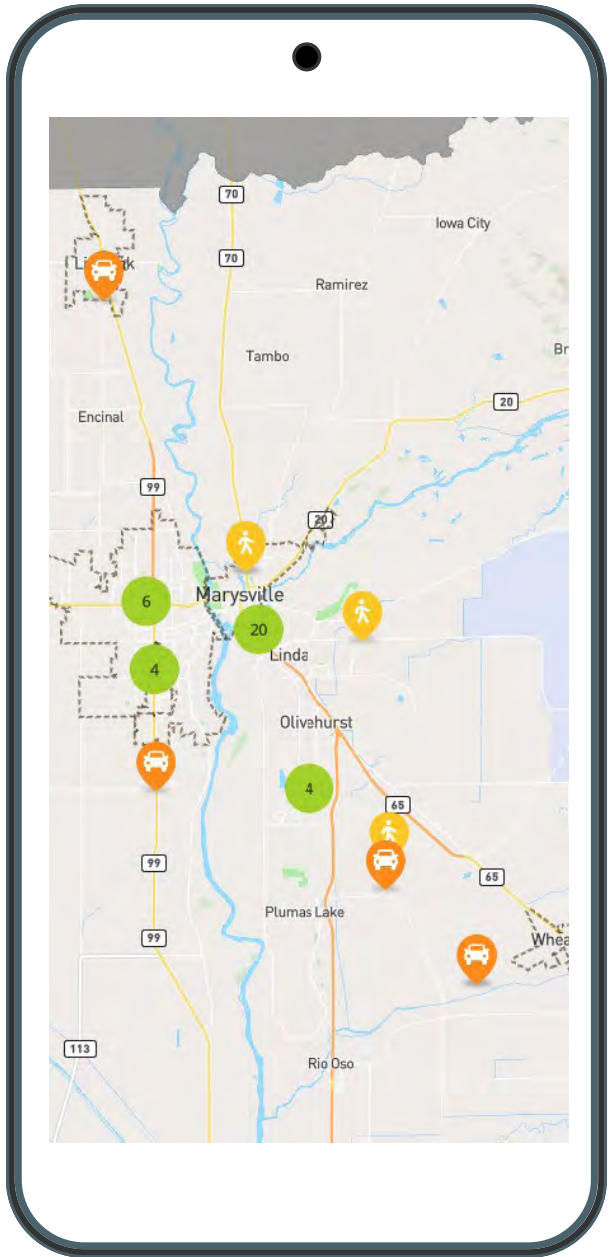
15 Biking Safety Comments

Unsafe crossings, poor lighting, and no ADA access.



20 Driving Safety Comments

Unsafe crossings, poor lighting, and no ADA access.



 United for Vision Zero

In-Person Outreach

Task Force and online engagement were supplemented with in-person events around the region to raise awareness and gather public input. At each pop-up event and listening session, project staff was available to inform the public about this Plan and its purpose. Residents were encouraged to share their safety concerns through interactive activities, direct conversations with the project team, and add comments on the web map. Lawn signs and posters that directed community members to project resources were strategically posted in high-traffic areas throughout the community.

Pop-Ups

To meet people where they are and optimize engagement, project staff participated at three community events. These events provided the opportunity for the engagement of a broader cross-section of the public than that which would attend a typical project-specific public meeting. At the first pop-up event in January 2025, the team distributed informational takeaway cards and engaged attendees in conversations about the project while they were in line for food at a Yuba-Sutter Food Bank distribution site. The outreach team later joined a Group Walking event with Blue Zones, a community-based organization, where they discussed the project and safety concerns with other attendees. During the third event, the team shared project information and gathered input at the Family Skate Night, which took place at the Tri-Counties Community Center.

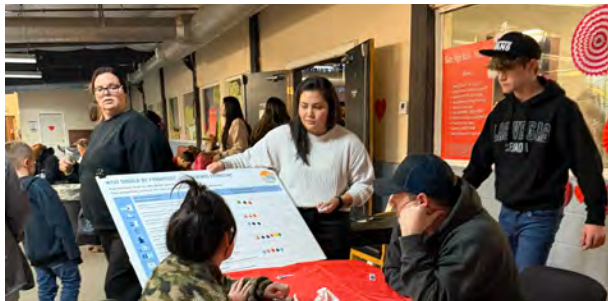
 Food bank pop up



 Project team distributing flyers



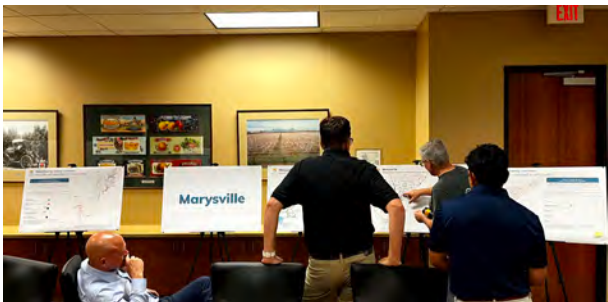
 Project team collecting feedback



Listening Session

In May, the team hosted four listening sessions, one in each of the four partner cities during evenings. These meetings were conducted in an open-house style, with informational and interactive boards set up around the room for attendees to interact with. For each jurisdiction, one board displayed crash trends and crash hotspot maps and a second board listed the safety corridors identified by the project team for potential improvements and again solicited feedback on the community's agreement on those corridors being given higher priority, as well as provide an opportunity for them to propose other locations. All boards were translated into Spanish. Boards utilized are in **Appendix B**.

 Marysville listening session



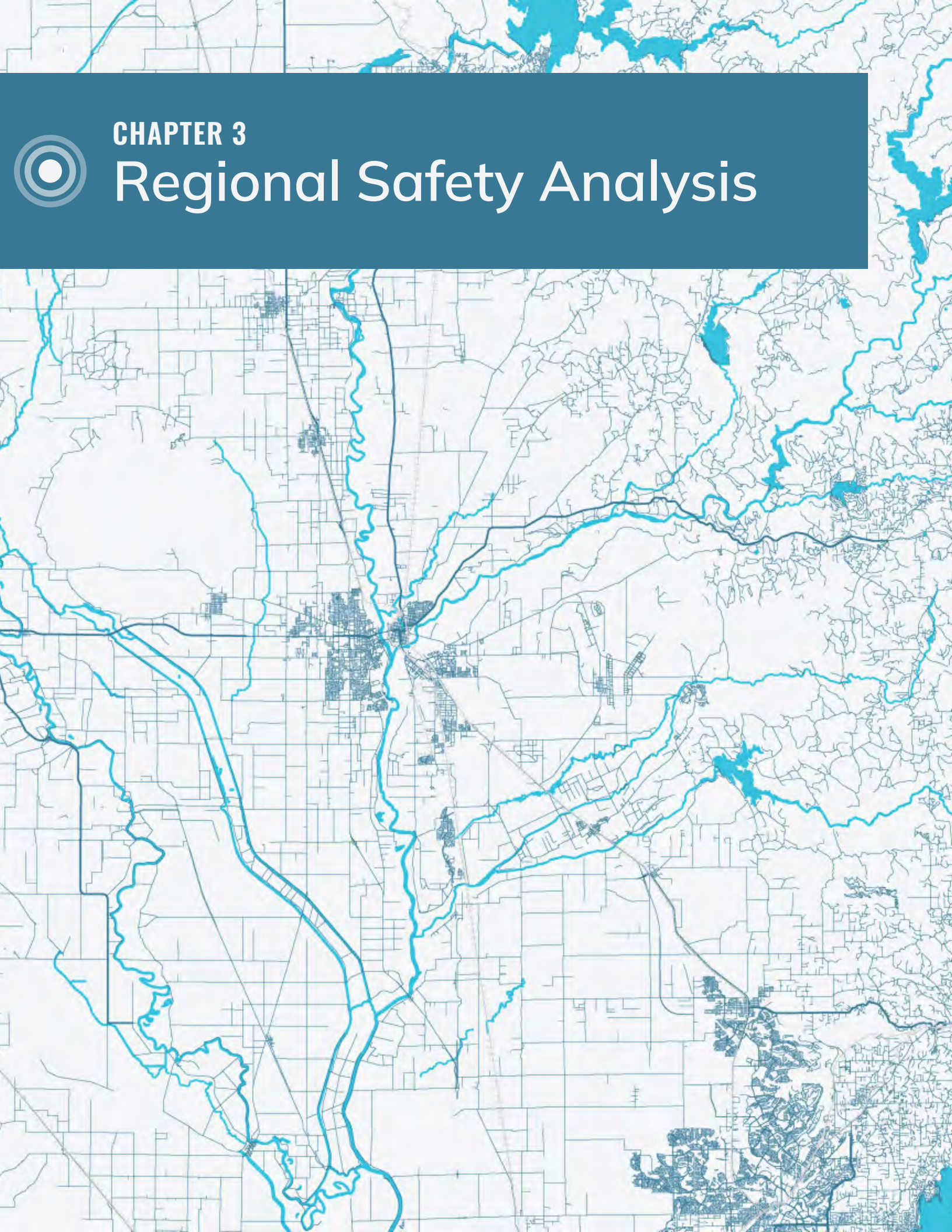
 Wheatland listening session



 From Talk to Action

Key Takeaways

-  **Speeding is a primary concern.**
Residents consistently identified vehicle speeding as a top safety issue across neighborhoods.
-  **Pedestrian crossing safety is a major theme.**
Many comments focused on the need for safer crossings, particularly near schools.
-  **Infrastructure improvements are widely requested.**
Community members called for enhanced sidewalks, traffic calming measures, and improved lighting—especially in residential and downtown areas.



CHAPTER 3 Regional Safety Analysis

This chapter summarizes key findings from the region’s crash data, including the identification of high-injury safety corridors and region-wide focus areas. Together, these components highlight crash trends across the Yuba-Sutter region and inform the systemic safety strategies presented in Chapter 4.

About the Data

Crash analysis for 2018 to 2023 for Yuba-Sutter Region was carried out using crash data obtained from the California Highway Patrol’s Statewide Integrated Traffic Records System (SWITRS) database. The analysis includes all crashes that led to injury and excludes property-damage-only crashes. Data collected includes the type of crash, primary cause, and at-fault party, etc.

While crash databases such as the SWITRS, accessed through the Transportation Injury Mapping System (TIMS), remain the best source of crash data, they have been found to have certain reporting biases, including:

- Crashes involving people walking, on bicycles, or on motorcycles are less likely to be reported than crashes with people driving.
- Younger victims are less likely to report crashes.
- Alcohol-involved crashes may be underreported.

 Bicyclist using crosswalk at signalized intersection



3. Regional Safety Analysis

About KSI Crashes

Severe injuries resulting from a traffic crash can result in a number of catastrophic impacts, including permanent disability, lost productivity and wages, and ongoing healthcare costs. These injuries can include:

- Broken or fractured bones
- Dislocated or distorted limbs
- Severe lacerations
- Severe burns
- Skull, spinal, chest or abdominal injuries
- Unconsciousness at or when taken from the crash scene

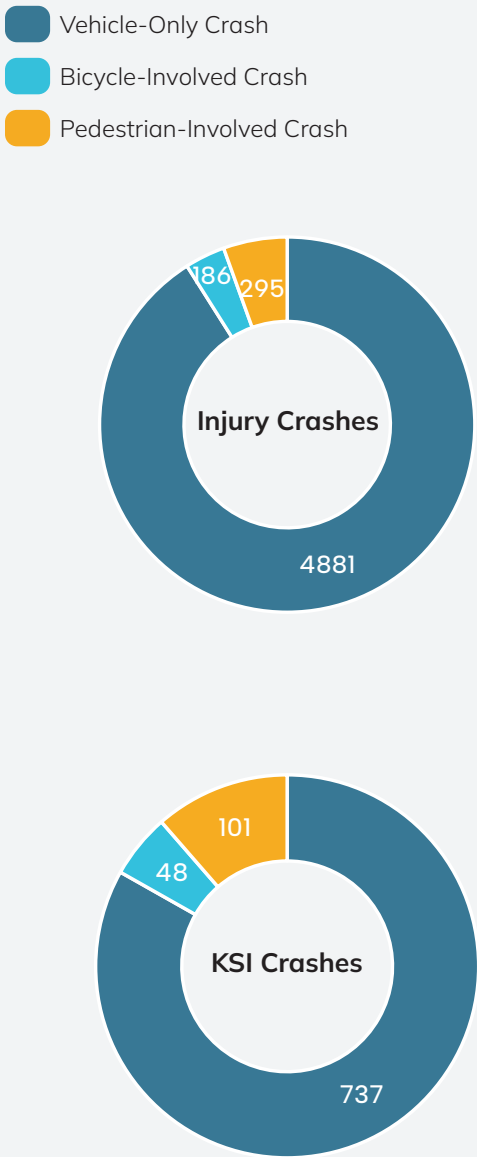
Throughout this analysis, the acronym KSI is used to denote crashes where someone was killed or severely injured.

Summary of KSI Crashes

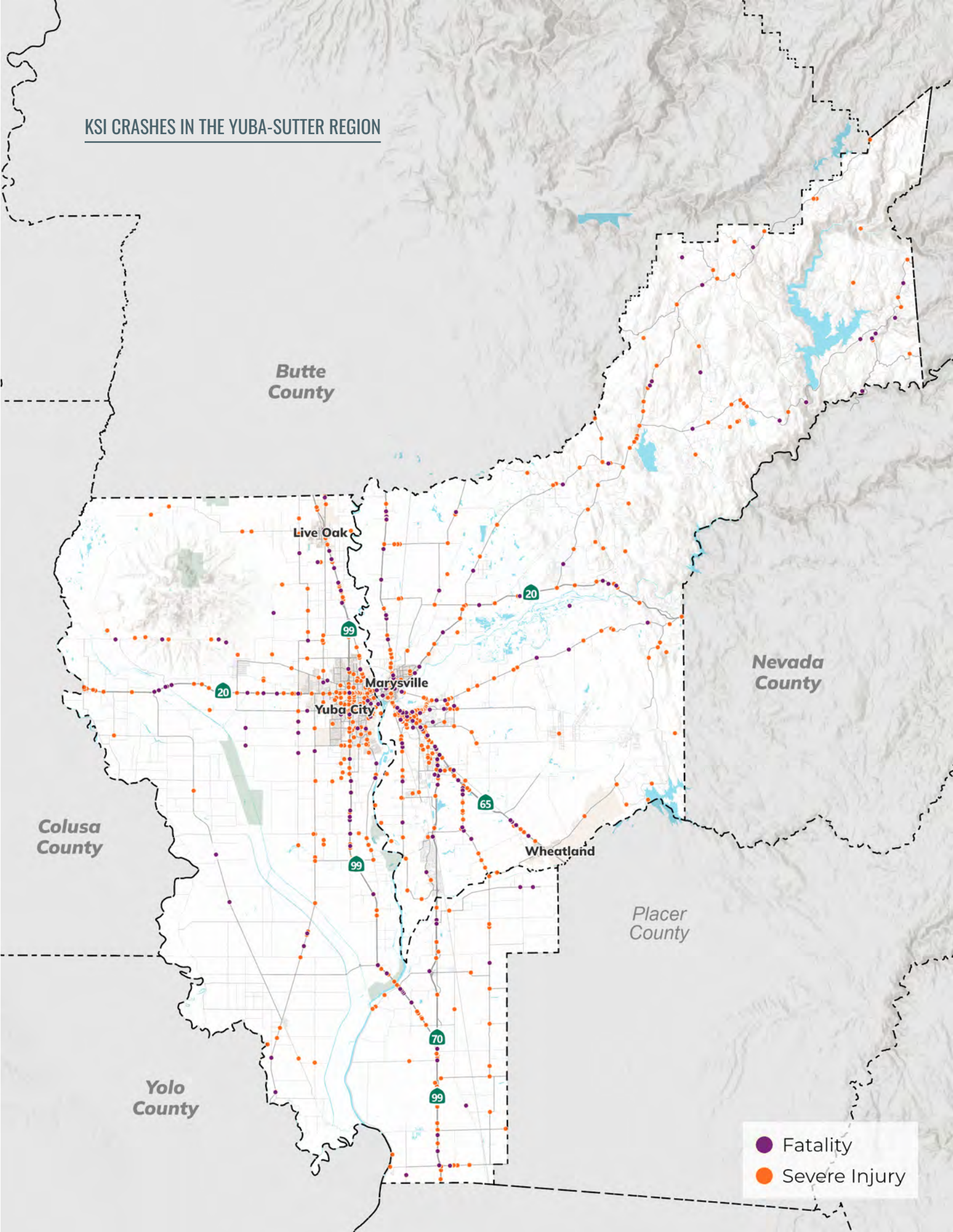
886 of the region's 5,362 crashes resulted in a victim being Killed or Severely Injured (KSI). There was a disproportionately greater share of KSI crashes that involved pedestrians when compared to all crashes. 101 (11 percent of KSI crashes compared to 6 percent) involved pedestrians, and 48 KSI crashes (5 percent) involved bicyclists.

Distracted Driving: The Safe System Approach addresses human mistakes such as loss of attention, distracted driving, and aggressive driving by designing road infrastructure and traffic systems that anticipate these errors. The goal is to minimize their consequences by creating multiple layers of protection that prevent severe crashes even when mistakes occur. These protections include improved visibility, in-vehicle technology, traffic calming measures, lane departure warnings, and physical barriers that separate traffic flows.

Figure 3.3
Crash Mode Share by Severity



KSI CRASHES IN THE YUBA-SUTTER REGION



Crash Data Fact Sheet

The region's crash history includes several categories, as explained below.

What are the different crash types?

Broadside: also known as a T-bone crash, occurs when the front of one vehicle strikes the side of another. These crashes can be severe due to limited protection on vehicle sides. It is the most common type of crash in the Yuba-Sutter region.



Rear End: happens when one vehicle hits the back of another, typically due to sudden stops or following too closely at an unsafe speed. It is the second most common type of crash in the region.



Vehicle/Pedestrian: involves a vehicle striking a pedestrian. In the Yuba-Sutter region, this crash type had the highest rate of KSI outcomes, due to the vulnerability of pedestrians.



Hit Object: occurs when a vehicle collides with a fixed object like a tree, pole, or barrier. These crashes often involve just one party. Hit object crashes make up the largest share of KSI crashes in the region.



Head-On: occurs when two vehicles collide front-to-front, usually on undivided roads. These are among the most dangerous crash types and represent the second highest share of KSI crashes in the region.



Overtaken: occurs when a vehicle flips onto its side or roof, often due to sharp turns or high speeds. Overtaken crashes can be especially hazardous for occupants.



Sideswipe: occurs when two vehicles traveling in the same or opposite directions brush against each other, often during lane changes or merging.



Primary Crash Factor

Determining the cause of a crash is not always straightforward, as multiple contributing factors may be involved. The primary crash factor (PCF), is the element identified by the reporting officer as most responsible for the incident. Below are some of the most common crash factors observed in the Yuba- Sutter region:

- **Unsafe Speed:** refers to motorists operating a vehicle at a speed that exceeds what is considered safe given roadway conditions, including weather, traffic volume, and road characteristics. Even when it is not cited as the primary cause of a crash, speed contributes to the resulting severity of crashes.
- **Improper Turning:** refers to any turn made that violates traffic regulations or safety guidelines. This includes executing an illegal turn, failing to use a turn signal, or making a turn that interrupts traffic flow.
- **Vehicle Right-of-Way Violation:** occurs when a driver fails to properly yield to another vehicle who has the legal right to proceed.
- **Driving or Bicycling Under the Influence:** involves operating a motor vehicle or bicycle while impaired by alcohol or drugs. Impaired driving significantly increases collision risk by reducing reaction time, impairing judgment, and affecting motor coordination.
- **Traffic Signals and Signs:** indicates failure to comply with traffic control devices, including stop signs and traffic signals. Typical violations include running red lights and failing to stop at limit lines.
- **Wrong Side of Road:** involves a vehicle driving on the incorrect side of the road.
- **Following Too Closely:** indicates tailgating or not maintaining a safe distance from the vehicle ahead.

- **Pedestrian Violation:** refers to when pedestrians fail to follow traffic laws, such as crossing outside of designated pedestrian crosswalks or against signals. Pedestrian violations sometimes indicate inadequate pedestrian infrastructure surrounding the crash area.

Who's at fault?

The "at-fault" party refers to the individual determined to be primarily responsible for the crash. In most instances, it is the operator of a motor vehicle making the driving error. In vehicle/pedestrian crashes, it could be a pedestrian who violated rules of the road by walking in areas not designated for pedestrian use. However, pedestrian violations may be overrepresented due to a lack of clear information related to crash circumstance, such as a lack of crosswalks and the increased likelihood that the pedestrian party may be unable to provide their side of the incident at the time of the crash.

Time of Day and Lighting Conditions

Crashes are divided into four categories based on lighting conditions:

- Daylight
- Dusk and dawn
- Dark/nighttime, working streetlights present
- Dark/nighttime, streetlights not present or working.

Knowing the lighting condition of crashes helps reveal where improvements such as increased lighting can help with reducing crash risks.

Driving Under the Influence

This category summarizes the share of crashes that involved a driver or bicyclist impaired by alcohol and/or drugs.

Regional Crash Analysis

Crash Summary

Between 2018 and 2023, the Yuba-Sutter region (encompassing Yuba County and Sutter County) saw 5,362 crashes that led to some degree of injury. 186 crashes (3 percent) involved bicyclists and 295 (5 percent) involved pedestrians.

886 of the region’s 5,362 crashes resulted in a victim being Killed or Severely Injured (KSI). A disproportionately greater share of KSI crashes involved pedestrians when compared to all crashes. 101 (11 percent of KSI crashes compared to 6 percent of all crashes) involved pedestrians, and 48 KSI crashes (5 percent) involved bicyclists. Broadside crashes emerged as the most common type of crash, with speeding as the top primary cause of crashes.

INJURY CRASH TOTAL

5,362

KSI CRASH TOTAL

886

Figure 3.1 Injury Crashes by Year

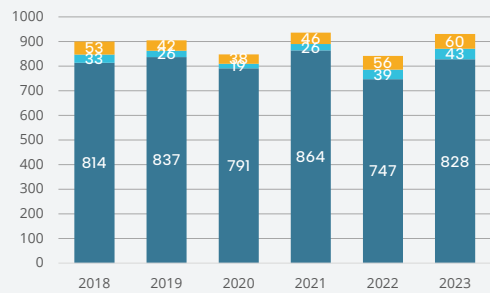
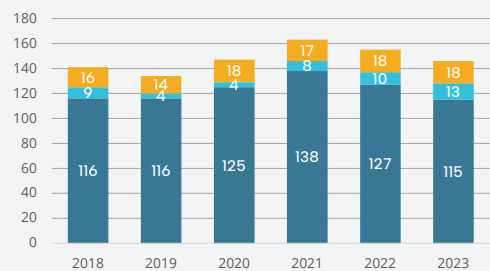
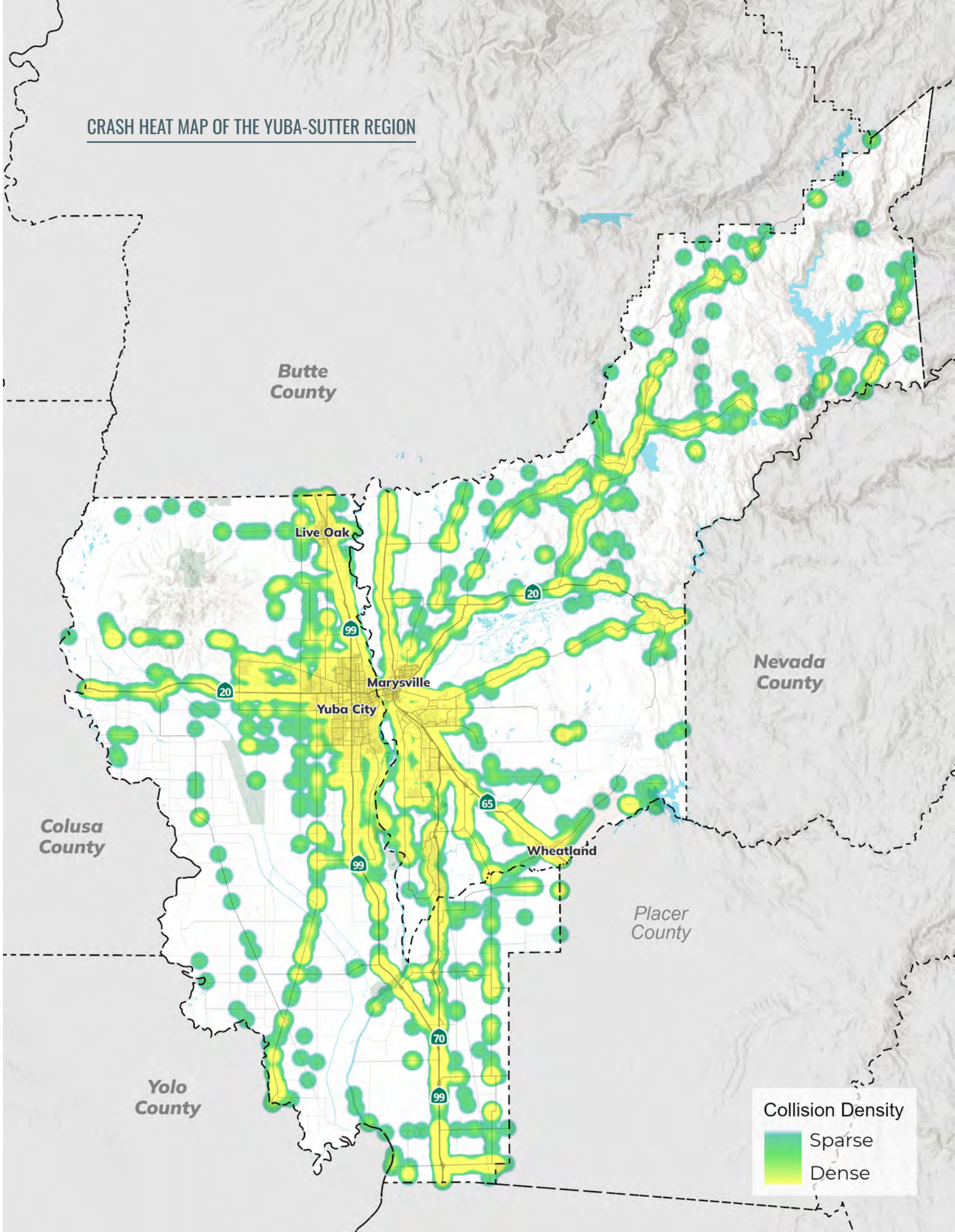


Figure 3.2 KSI Crashes by Year



- Vehicle-Only Crashes
- Bicycle-Involved Crashes
- Pedestrian-Involved Crashes

CRASH HEAT MAP OF THE YUBA-SUTTER REGION



3. Regional Safety Analysis

Crashes by Crash Type

Broadside (27 percent), rear end (24 percent), and hit object (19 percent) emerged as the most common types of crashes throughout the region, accounting for 70 percent of crashes.

Crashes by Primary Crash Factor (PCF)

Unsafe speed (25 percent), improper turning (22 percent), vehicle right of way violation (16 percent), and driving or bicycling under the influence (12 percent) were the most common reported primary causes of crashes, accounting for 75 percent of crashes.

Crashes by Time of Day and Lighting Condition

Overall, most crashes occurred in the daylight (67 percent), 4 percent occurred during dusk and dawn, 14 percent occurred in the dark where streetlight was present, and 15 percent occurred in the dark with no lighting. 54 percent of KSI crashes happened in the daytime, 4 percent occurred during dusk and dawn, and 16 percent occurred in the dark with streetlight present. A disproportionately greater share of KSI crashes occurred during nighttime in areas that lacked lighting, at 26 percent compared to 15 percent of all injury crashes.

Driving Under the Influence (DUI)

13 percent of all crashes involved a DUI charge. Notably, this share was larger for KSI crashes, at 25 percent.

Figure 3.4
Share of Injury Crashes by Crash Type, 2018 - 2023

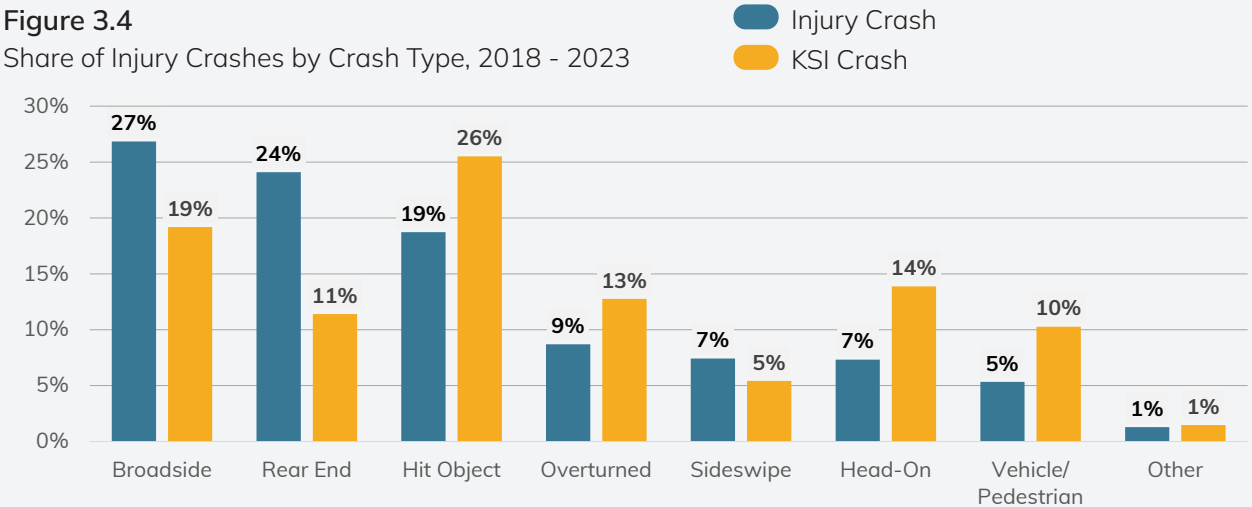


Figure 3.5
Share of Injury Crashes by Primary Crash Factor (PCF), 2018 - 2023

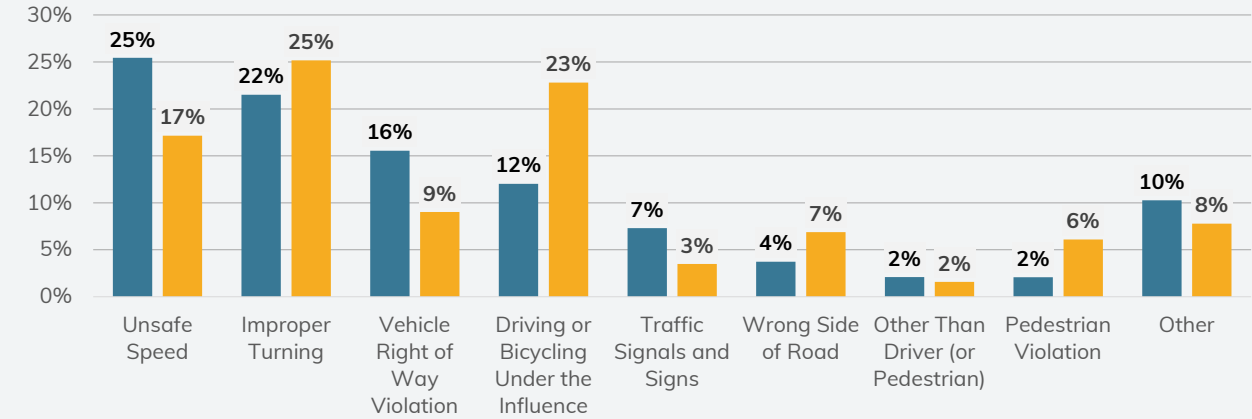


Figure 3.6
Crashes by Time of Day & Lighting, 2018 - 2023

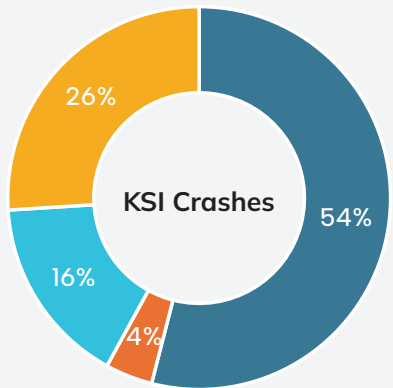
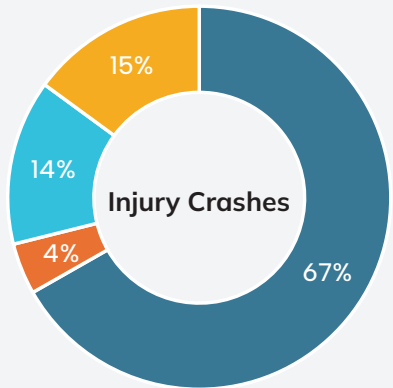
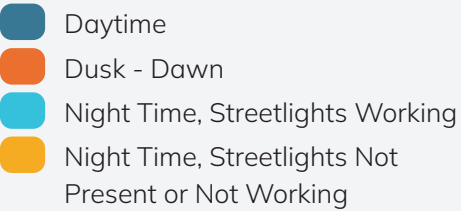
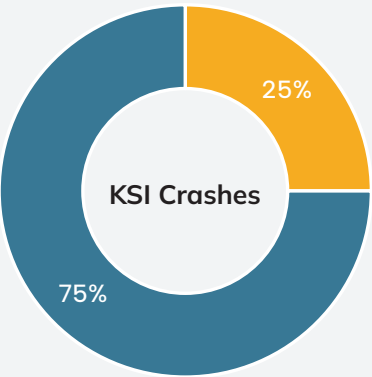
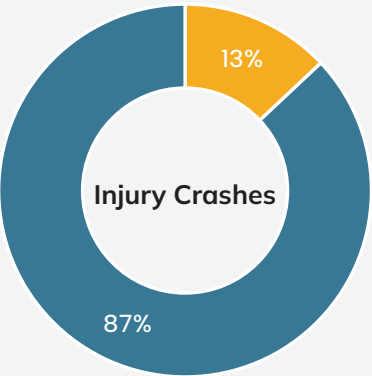
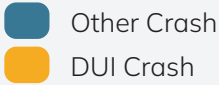


Figure 3.7
DUI Crashes, 2018 - 2023



Railroad Crash Summary

The railroad crash data analyzed covers the same time span as the roadway crash data: 2018 through 2023. There were eight railroad crashes that occurred in the same time period. Six crashes were within unincorporated Yuba County, five of them being on private roads and one being on Virginia Road southeast of Ostrom. There were two crashes within unincorporated Sutter County, one on Paseo Road and the other one on Clark Road south of Live Oak.

Of the crashes reported, two resulted in fatalities, two involved serious injuries, and two involved no injuries. Each crash report includes a narrative field that provides additional context. In six of the eight cases, the narrative stated: “Stopped on Crossing.” The remaining two crashes also attributed fault to the road user, though with different wording.

About the Data

Railroad crash data was sourced from the U.S. Department of Transportation’s Federal Railroad Administration (FRA), from the Highway-Rail Grade Crossing Incident Data.

According to the USDOT, a highway-rail grade crossing crash is defined as any impact between on-track railroad equipment and a highway user (e.g., automobile, pedestrian, etc.) occurring at a designated highway-rail grade crossing. These incidents are documented by FRA personnel when such crashes occur.

Incident information captured includes:

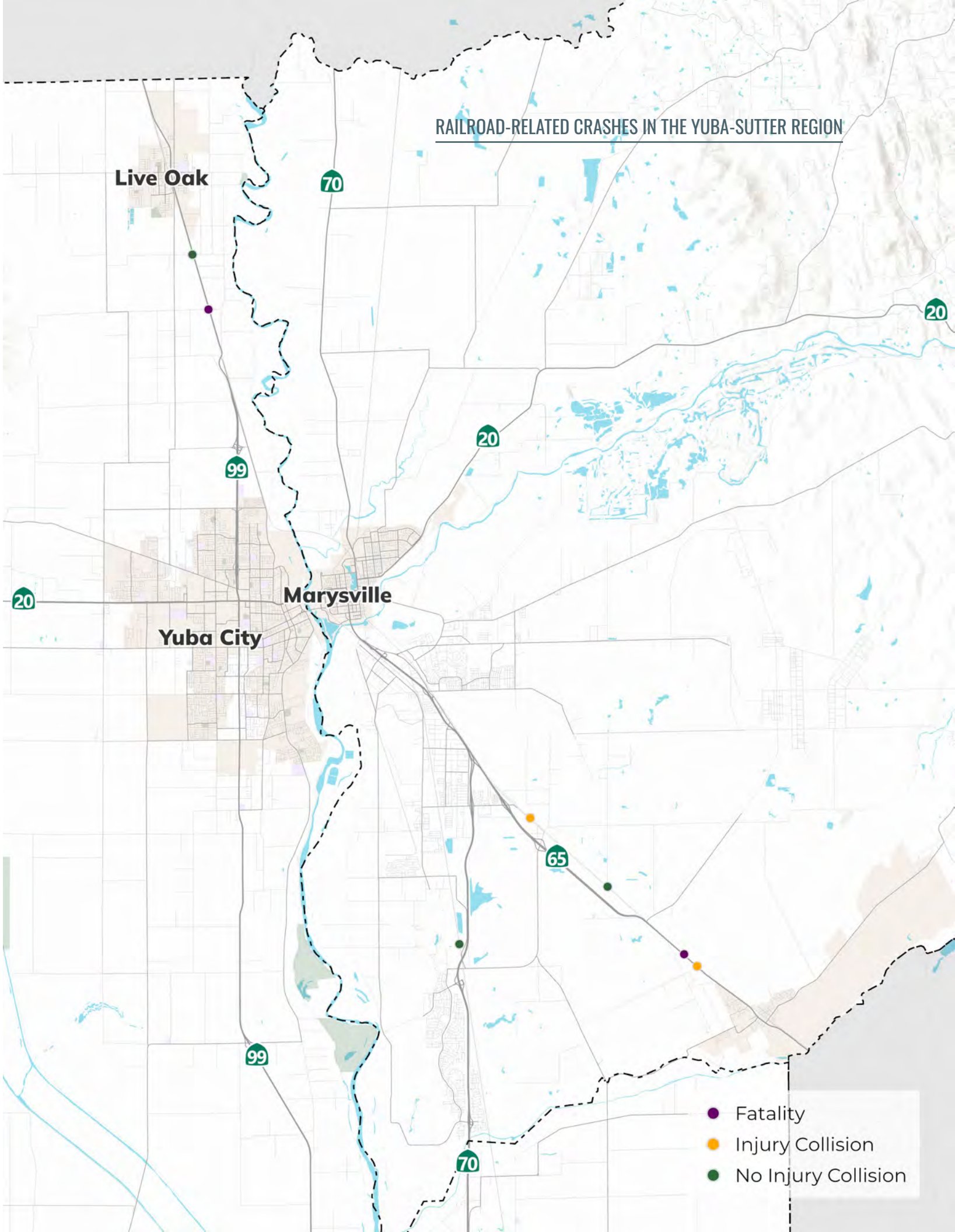
- Crash cause category (e.g., human factors, track issues, signal failures, mechanical problems)
- Casualty data (total killed and injured)
- Damage estimates
- Crash type (e.g., derailment)
- Track type (e.g., main line, yard)
- Track characteristics including signalization and method of operation (e.g., direct train control, yard/restricted limits)

Rail Crossing Rules and Regulations

The California Manual on Uniform Traffic Control Devices provides standards and specifications for all official traffic control devices in California (California MUTCD Part 8, Traffic Control for Rail and Light Rail Transit Crossings, <https://dot.ca.gov/programs/safety-programs/camutcd>).

The California Public Utilities Commission, which oversees the design, construction, and maintenance of rail crossings, hosts a webpage with the rules, guidance, and references for these high-risk areas: <https://www.cpuc.ca.gov/crossings/>

The CPUC also recently updated their Guidance on Pedestrian Treatments for Rail Crossings, which includes geometric design considerations and design elements such as markings, signage, channelization, and warning devices.



Safety Corridors

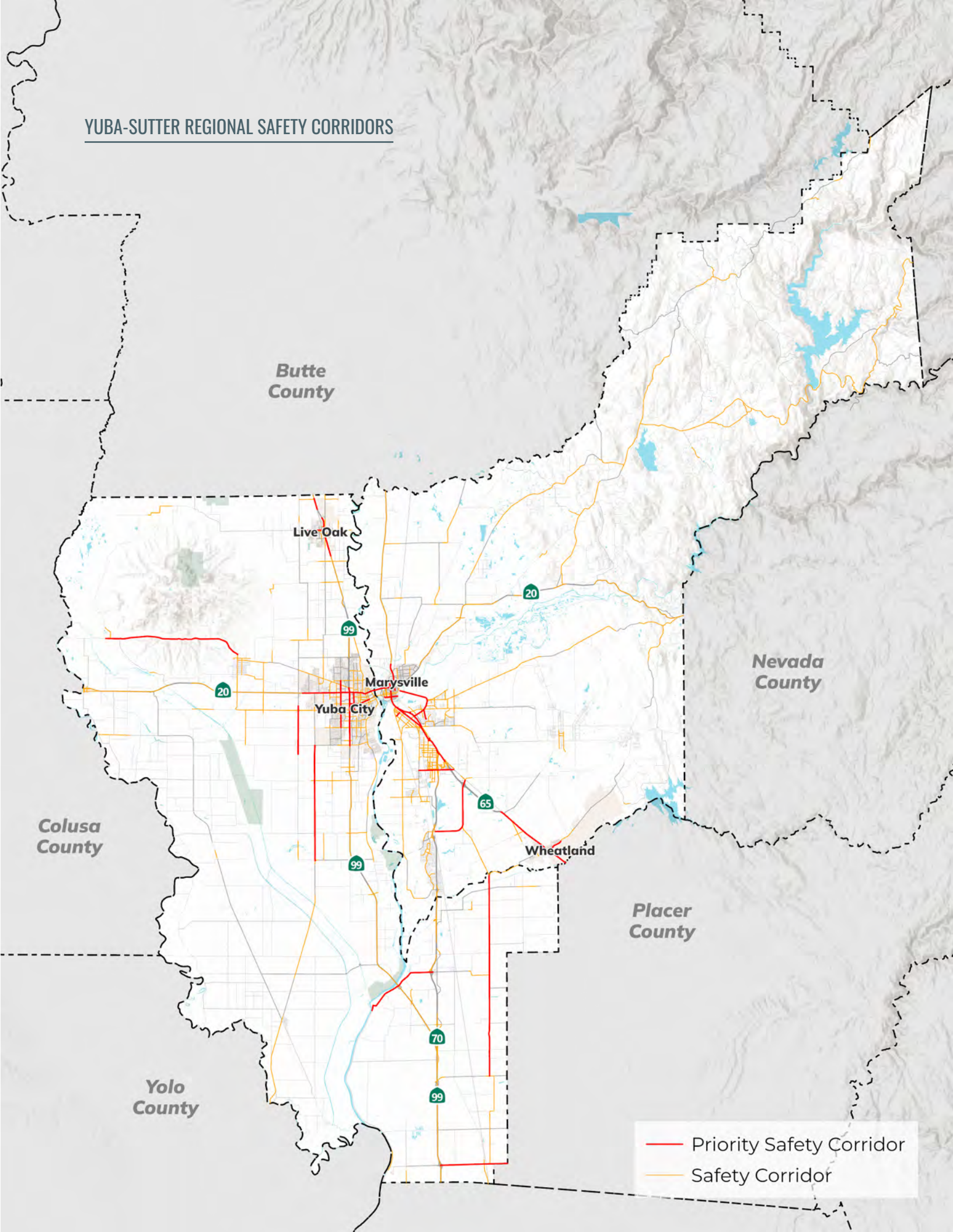
Safety corridors are defined as the roadways with the highest number and risk of crashes resulting in severe injury or death. This section discusses the methodology used to identify them.

Policy Background: Assembly Bill 43

Assembly Bill (AB) 43 is state traffic safety legislation aimed at reducing road fatalities by giving local governments more flexibility in setting speed limits. AB 43 enables jurisdictions to consider pedestrian and cyclist safety, school zones, and crash history when setting speed limits. If a jurisdiction, after completing an engineering and traffic survey, finds that the speed limit on a roadway segment is higher than reasonable or safe, they may declare a default speed limit that has been reduced an additional five miles per hour if that segment is designated as a *safety corridor*. A safety corridor is a roadway segment within an overall roadway network where the highest number of serious injury and fatality crashes occur; AB 43 stipulates that a jurisdiction's set of safety corridors must account for at least 25 percent of all killed or seriously injured (KSI) crashes and must comprise 20 percent of its streets or less. More information on AB 43 can be found in **Appendix A**.

Methodology

The methodology developed for this safety corridor identification is based on best practices identified from a review of Safe System-focused Vision Zero programs, as well as the recent *California Manual on Uniform Traffic Control Devices* definition of Safety Corridors. Safety corridors were designated based on crash frequency and contextual risk factors such as crash severity and mode, proximity to schools, the presence of vulnerable populations, etc. This methodology adopts a proactive, systemic safety analysis rather than relying solely on historical crash data. It incorporates known risk factors from national and state-level research. A network of safety corridors was developed using the 5-year crash dataset for 2018-2023 from the Transportation Injury Mapping System (TIMS), Safe Transportation Research and Education Center database. Other data sources such as the USDOT Equitable Transportation Community (ETC) and Wejo speed data were used to incorporate contextual data into the network. For a full description of the technical methodology, see **Appendix B**.



Focus Areas

Focus areas were identified to represent the most significant patterns behind injury crashes—especially KSI crashes—in the region. Six such focus areas, denoted ‘A’ through ‘F’, were identified across the region, with each one applicable to several or all of the jurisdictions covered by this RSAP.

The following pages contain cutsheets that present each focus area, along with the following information:

- Description and associated information about each focus area
- Number of crashes associated, including number of KSI crashes among those (note that focus areas are not mutually exclusive; crashes can fall under multiple, and totals will exceed 100%)
- A map identifying locations of crashes within the focus area

Engineering countermeasures that can potentially address these crashes are also presented in each jurisdictions’ chapter.

Yuba-Sutter Region Focus Areas:

- **FOCUS AREA A**
Crashes on State Highways Serving as Main Streets
- **FOCUS AREA B**
Right-of-Way Issues at Intersections
- **FOCUS AREA C**
Driving Under the Influence
- **FOCUS AREA D**
Crashes Involving People Walking and Biking
- **FOCUS AREA E**
Improper Turning Away from Intersections
- **FOCUS AREA F**
Hit Object



3. Regional Safety Analysis



FOCUS AREA A

Crashes on State Highways Serving as Main Streets

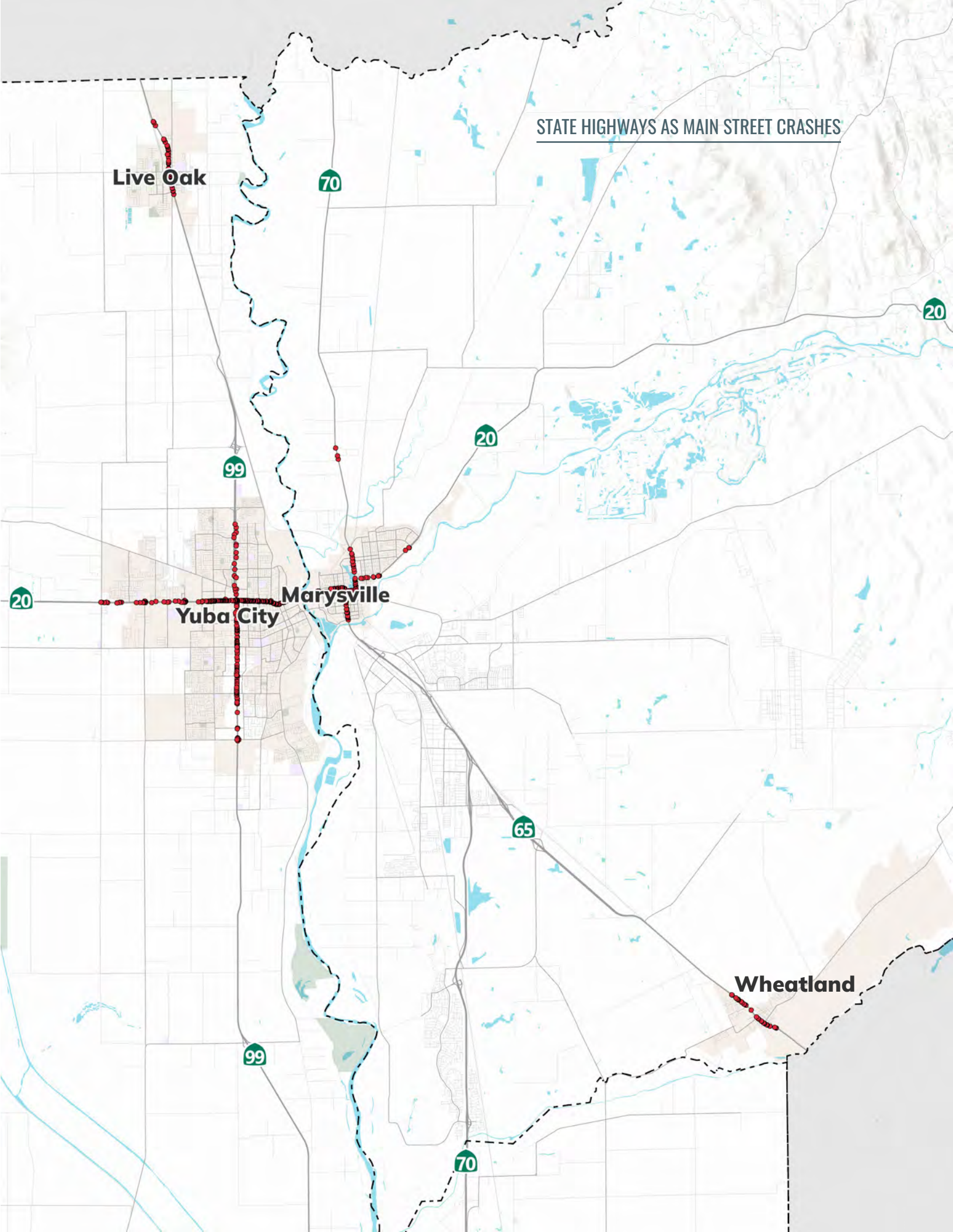
INJURY CRASH STATISTICS

829 (15%) Total Crashes 80 (9%) KSI Crashes

State Routes 20, 49, 65, 70, 99, and 113 traverse through the region and serve as key corridors within Yuba and Sutter County jurisdictions. Due to their high volumes and travel speeds, these highways present elevated safety risks and are frequently the sites of crashes. 39 percent of all crashes and 42 percent of KSI crashes in the Yuba-Sutter region occurred on state highways. Sections of highways that function as Main Streets in more populous areas often see conflicts between

different modes of transportation—40 percent of all highway crashes (16% overall) occurred in such areas throughout the region. Speeds exceeding 60 mph were a factor in 40 percent of “main street” highway crashes, and in 10 percent of bicycle- and pedestrian-related incidents on these highways.

Countermeasures that can improve safety along highway main streets focus on slowing vehicle speeds, organizing traffic flow, and reducing conflict points between drivers, pedestrians, and bicyclists.



Complete Streets on the State Highway System

Caltrans Complete Street Contextual Design Guidance (DIB94)

The Yuba-Sutter region includes a mix of rural communities, suburban neighborhoods, and semi-urban downtown centers, many of which are bisected by state highways. These state routes frequently serve as community main streets in areas with growing residential development, schools, transit use, and walkable town centers. However, these corridors often lack adequate facilities for people walking, biking, or accessing transit, leading to serious safety risks, particularly for vulnerable road users.

Through the published Complete Streets Contextual Design Guidance (Design Bulletin 94), Caltrans has provided new flexibility in the design of complete streets projects on the State Highway system. The guidance includes considerations for changing speed limits, constructing appropriate bike facilities, and increasing shoulder widths – all context-sensitive solutions appropriate to better serving travelers of all ages and abilities.



Project Criteria

A project must meet the following criteria to follow this new guidance:

- Located in an urban area, suburban area, or rural main street
- Posted speed limit does not exceed 45 MPH
- Includes a bike, pedestrian, or transit facility.



Suggested Guidance

Some of the guidance suggested by DIB 94 is as follows:

- **Design Contexts:** Reallocate roadway space to enhance safe and efficient connectivity for communities, regardless of travel mode. To accommodate bicycle and pedestrian facilities, use strategies such as narrowing or removing travel lanes, adjusting median or turn lane widths, and reducing or eliminating on-street parking.
- **Vehicle Speeds:** Traffic calming and speed management strategies are tools to achieve safe and predictable speed transitions. Proposed speed limits should be based on place type, helping avoid sharp accelerations or decelerations along transitions such as from a rural area into a commercial district where pedestrians are more likely to be present.
- **Roadway Cross-sections:** Cross-sectional design should consider factors such as place type, operating speed, and current and potential users when establishing or modifying lane widths and preferred sidewalk and bikeway widths. Considering the community context and place type is key to aligning the class and location of treatments such as bicycle facilities for optimal safety and connectivity.
- **Crosswalks:** The placement and frequency of crosswalks should support pedestrian safety and visibility, particularly near schools, transit stops, and community destinations.

Where does this apply in Yuba-Sutter?

Several corridors in the region not only meet the DIB 94 eligibility criteria but also reflect ongoing safety concerns and latent demand for safer multimodal travel, particularly for non-motorized users. Examples include:

SR 20 through Marysville and Yuba City

This route traverses central business districts and neighborhoods with significant pedestrian activity. Speed limits are typically 35–45 MPH, and these corridors serve local bus routes but lack safe crossing opportunities and continuous bike facilities.

SR 70 through Linda and Olivehurst

This route serves as a main spine for residential communities and local schools. SR 70 has multiple driveways, cross streets, and transit stops—features typically found in a rural main street context. Current roadway geometry and traffic volumes, however, present safety challenges especially for pedestrians and cyclists, especially at uncontrolled crossing points.

SR 99 in Yuba City

This route is a key corridor with significant pedestrian activity, transit stops, and adjacent commercial and residential areas. It lacks consistent or protected bicycle facilities, often depending on narrow shoulders or intermittent bike lanes. This route also experiences land use transitions that would benefit from more predictable speed profiles.

SR 99 in Live Oak

This state highway cuts through small-town centers where pedestrian activity is high, but facilities are lacking or outdated and are candidates for safety enhancements, including sidewalk improvements, safer crossings, and improved visibility for vulnerable road users.

In each of these locations, existing land use, speed profiles, and community access needs, make the roadway a good candidate for design treatments as outlined in DIB 94. Several sites identified in this plan's crash analysis have shown repeated collisions on these highway segments, underscoring the need for safety improvements catered towards low-speed, multimodal infrastructure.

The design flexibilities provided under DIB 94 offer local agencies and Caltrans a valuable opportunity to modernize transportation infrastructure in a way that is both efficient and responsive to local context. Designing with this guidance in mind allows for rural and suburban settings like Yuba and Sutter Counties to design solutions that better match the context of the communities they serve.

3. Regional Safety Analysis



FOCUS AREA B

Right of Way Issues at Intersections

INJURY CRASH STATISTICS

1,005 (20%) Total Crashes

94 (11%) KSI Crashes

Improper turning is one of the primary causes of crashes and accounts for 1,153 crashes (nearly 22 percent) of all and 223 (25 percent) of KSI crashes in the Yuba-Sutter region. Of those 1,153 crashes,

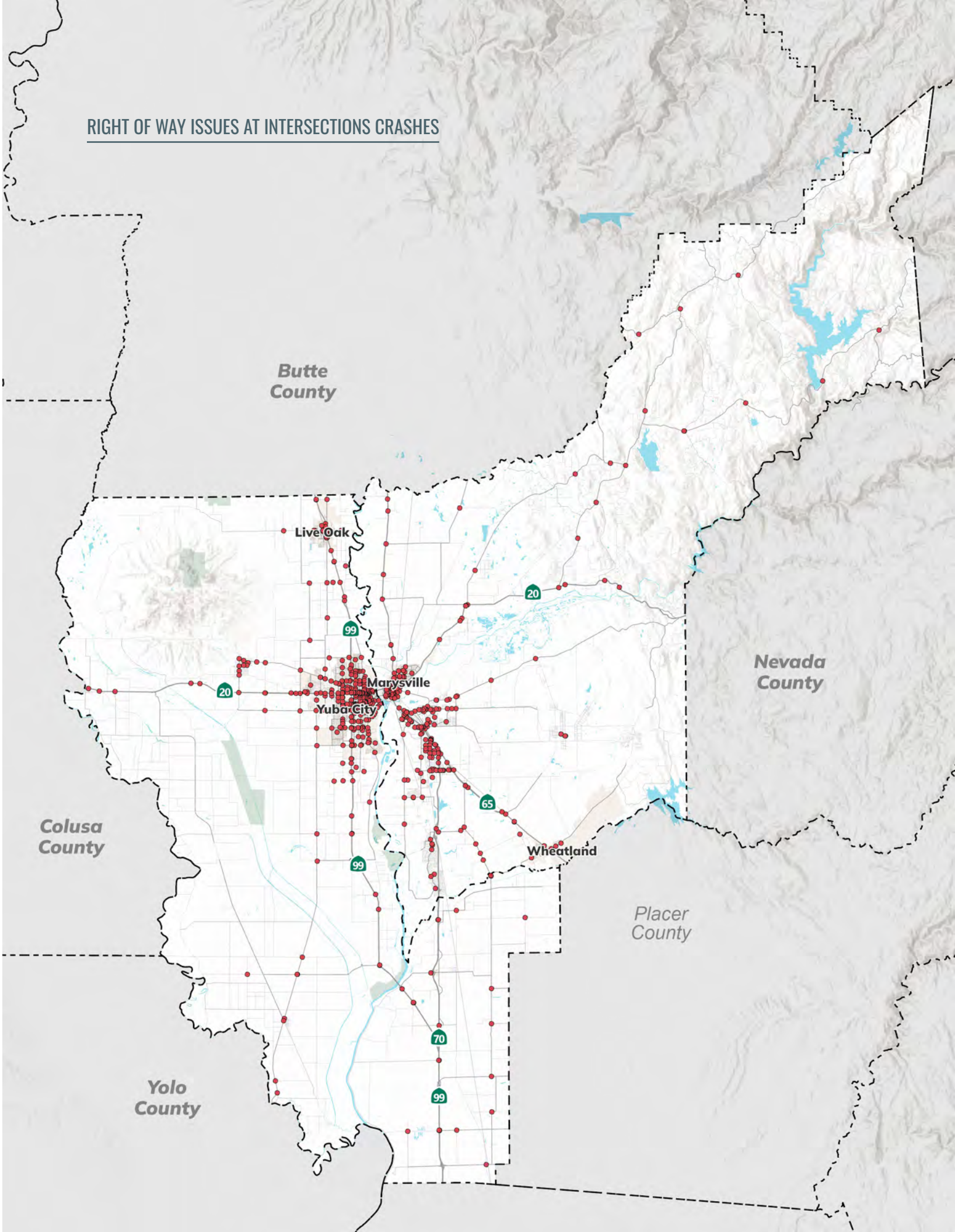
740 occurred away from the intersection of two roadways, accounting for 14 percent of the region's crashes. Crashes with a primary collision factor of improper turning that aren't occurring at intersections of roadways include a wide range of actions, such as mis-attributing a turn into a driveway. In the moments leading up to these collisions, 43 percent of at-fault parties made an unsafe turning action (e.g. making abrupt lane changes) and 25 percent ran off

the road. This crash type is strongly related to roadway departure on highways and county roads where speeds exceed 55 MPH.

32 percent of this crash category led to an object being hit and 17 percent to the vehicle overturning, the majority of which occur outside of city limits in more rural parts of the region. Countermeasures for this focus area include a combination of signage, roadway enhancements, and visibility improvements such as rumble strips, curve warning signs, guardrails, and additional shoulder space, which can help prevent dangerous turning maneuvers and roadway departures by guiding drivers and providing recovery space.



RIGHT OF WAY ISSUES AT INTERSECTIONS CRASHES



3. Regional Safety Analysis



FOCUS AREA C

Driving Under the Influence

INJURY CRASH STATISTICS

707 (13%) Total Crashes 227 (26%) KSI Crashes

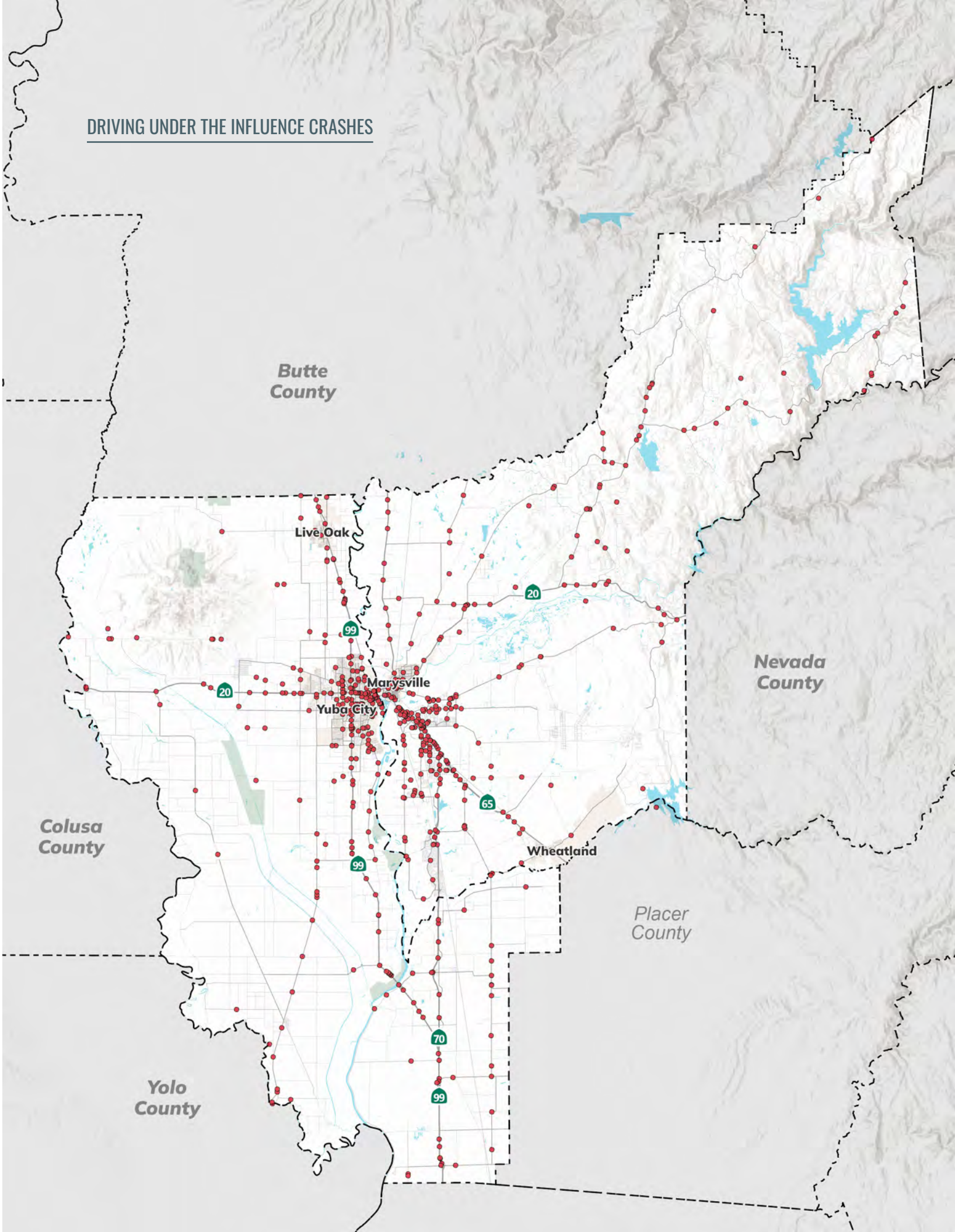
Driving under the influence (DUI) is a significant contributor to injury crashes, especially and disproportionately to KSI crashes. 26 percent of KSI crashes involves alcohol impairment. Friday, Saturday, and Sunday see higher crash frequency from 6pm to 3am, compared to other times of day and days of the week.

Within cities, there are higher concentrations of DUI crashes on arterial and collector roads along commercial areas, where there is also a

higher share of DUI crashes involving bicyclists and pedestrians—even with crosswalks present. In the unincorporated areas, 63 percent of DUI crashes occurred on rural roads, and 44 percent resulted in a hit object crash. Narrow two-lane corridors such as SR-113, and curved road segments also host sites of DUI crashes. Countermeasures for DUIs are typically programs that target education and enforcement rather than engineering or infrastructure changes.



DRIVING UNDER THE INFLUENCE CRASHES



3. Regional Safety Analysis



FOCUS AREA D

Crashes Involving People Walking and Biking

INJURY CRASH STATISTICS

480 (9%) Total Crashes 149 (17%) KSI Crashes

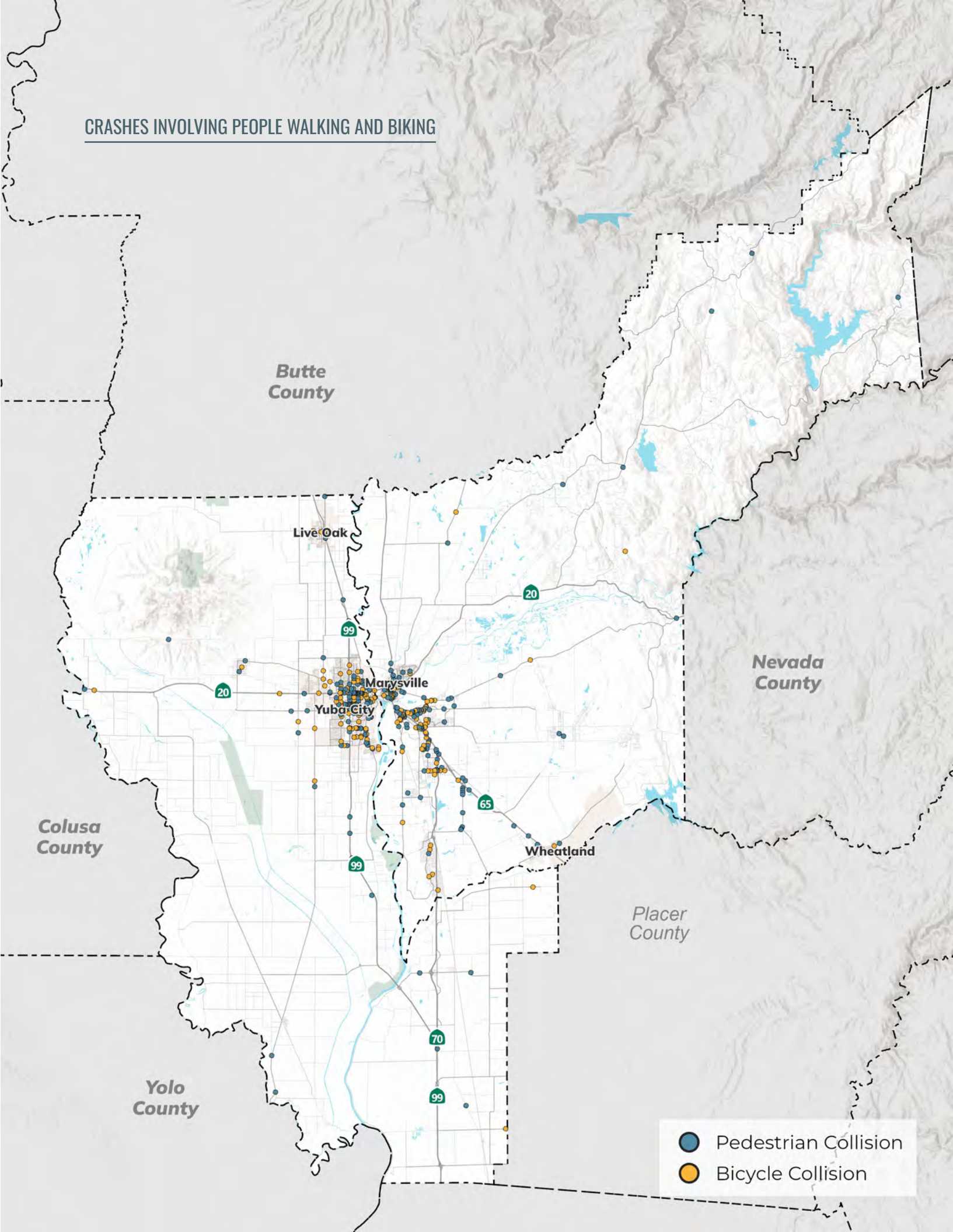
People walking and riding bicycles are considered vulnerable roadway users. Although crashes involving bicyclists and pedestrians make up less than nine percent of all crashes, they account for nearly seventeen percent of all KSI crashes in the region.

Sutter County’s KSI crashes are concentrated within Yuba City, while Yuba County’s crashes are dispersed throughout Marysville and the unincorporated communities of Linda and Olivehurst. There are higher rates of KSI crashes involving bicylists and pedestrians on wide four-lane arterials along commercial

areas, sometimes with two-way left turn medians or median islands. Mid-block crashes occurred more often in areas where pedestrian crossings are sparse, mainly in unincorporated areas. Additionally, 24 percent of KSI crashes involving bicyclists and pedestrians occurred within a quarter-mile of a school and 25 percent ran off the road. Countermeasures for crashes involving bicyclists and pedestrians that occurred within a quarter-mile of a school typically offer vulnerable road users with dedicated, protected space and increased visibility, like bikeways and lighting.



CRASHES INVOLVING PEOPLE WALKING AND BIKING



3. Regional Safety Analysis



FOCUS AREA E

Improper Turning Away from Intersections

INJURY CRASH STATISTICS

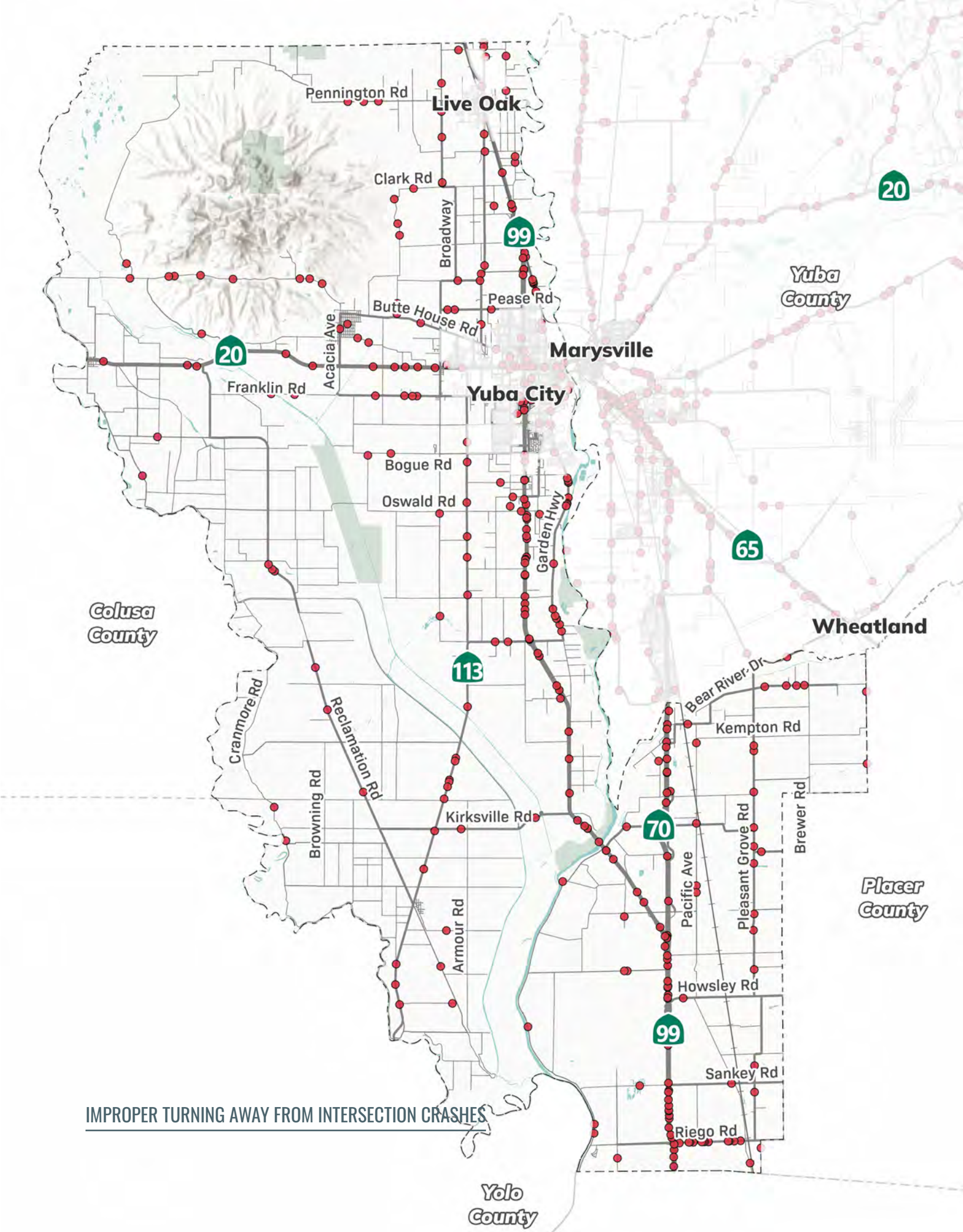
740 (14%) Total Crashes

172 (19%) KSI Crashes

Improper turning is one of the primary causes of crashes and accounts for 1,153 crashes (nearly 22 percent) of all and 223 (25 percent) of KSI crashes in the region. Of those 1,153 crashes, 740 occurred away from an intersection, accounting for 14 percent of the region's crashes. In addition, 32 percent of crashes with improper turning as the primary factor and occurring away from intersections led to hit object and 17 percent to overturned, both crash types happening almost exclusively outside of city limits. This indicates roadway departure on highways and county roads where speeds exceed 55MPH. In the moments leading up to this focus area, 43 percent of at-fault parties

made an unsafe turning action (e.g. making abrupt lane changes) and 25 percent ran off the road.

A combination of signage, roadway enhancements, and visibility improvements, such as rumble strips, curve warning signs, guardrails, and delineators, can help prevent unsafe turning and mitigate roadway departures by guiding drivers and providing recovery space. Pairing these countermeasures with speed limit reductions can reduce crash severity by lowering the kinetic energy transferred during high-speed impacts, helping prevent serious injuries.



3. Regional Safety Analysis



FOCUS AREA F

Hit Object

INJURY CRASH STATISTICS

1,004 (19%) Total Crashes

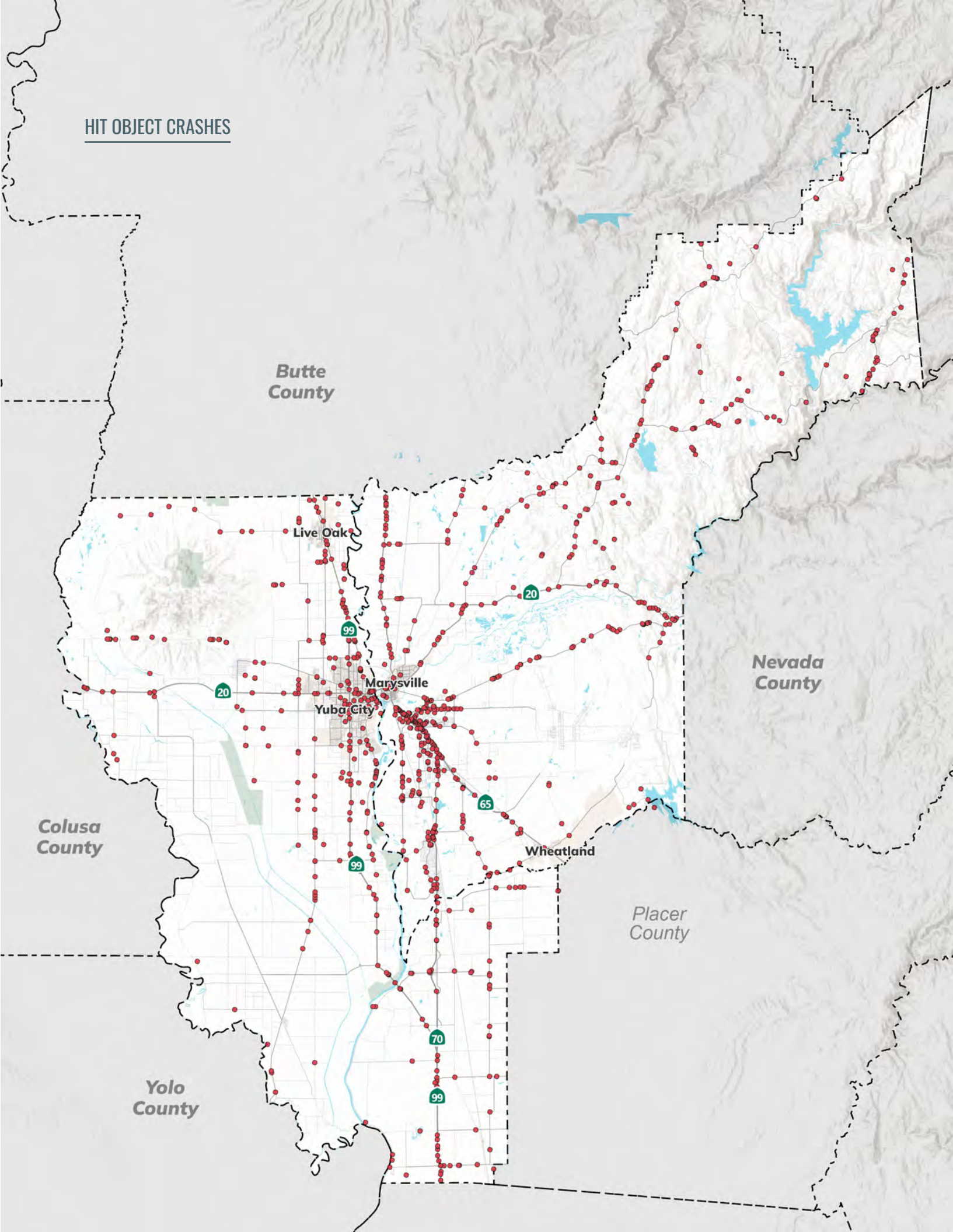
229 (26%) KSI Crashes

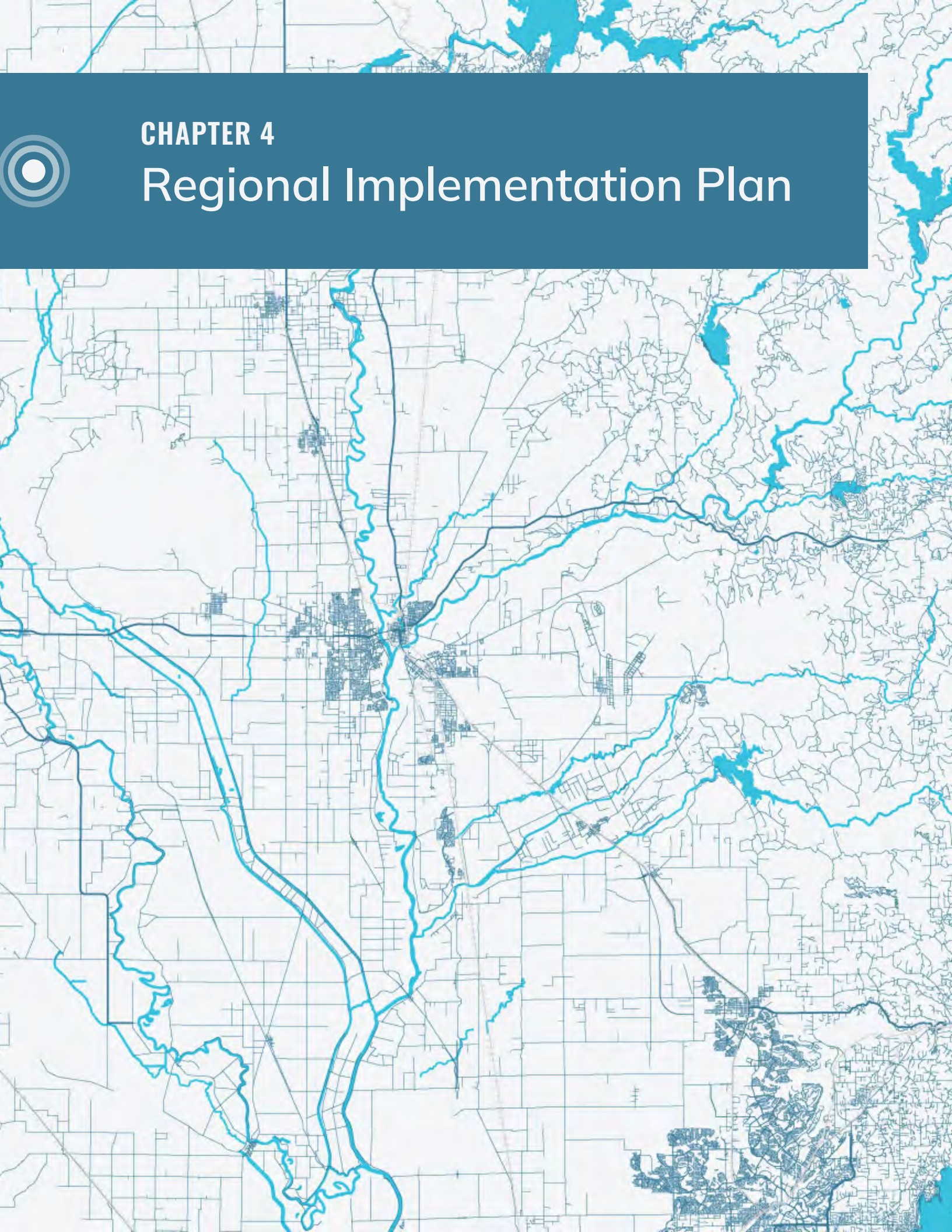
Overall, 1,004 of crashes resulted in hit object, making up 19 percent of the region's crashes. However, this type of crash accounted for 26 percent of KSI crashes. 95 percent of all hit object crashes involved only one party.

896 crashes, or 89 percent, of hit object crashes occurred outside of city limits. Out of those, 68 percent occurred on non-state facilities. In unincorporated Sutter County, many of these hit object crashes occurred on two-lane rural county roads—typically narrow lanes without shoulders, most of which have posted speed limits of 55MPH and up. In unincorporated Yuba County, many non-state-highway hit object crashes occurred in and near residential areas, mainly Linda and Olivehurst, where some roads range from two- to four-lanes and often have on-street parking.

Most of the objects hit were fixed objects (83 percent), such as trees and utility poles, nine percent were other objects such as items dropped from a vehicle, and two percent were animals.

Countermeasures like clear zone improvements and widened shoulders help prevent crashes with objects and provide recovery space, while rumble strips and reflectors enhance driver awareness and guidance, especially in low-visibility conditions. Speed limit reductions are especially critical, as lower speeds directly reduce the kinetic energy transferred during a crash, which in turn lowers the risk of severe injury or fatality.





CHAPTER 4

Regional Implementation Plan

Engineering & Programmatic Countermeasures

This section presents a toolbox of safety countermeasures that can be deployed to address crash trends and the systemic factors behind them. Systemic improvements, both engineering and programmatic/non-engineering related, were identified for implementation.

What Are Engineering Countermeasures?

Engineering countermeasures are physical, infrastructure-based improvements that can be made to roadways to reduce likelihood of crashes.

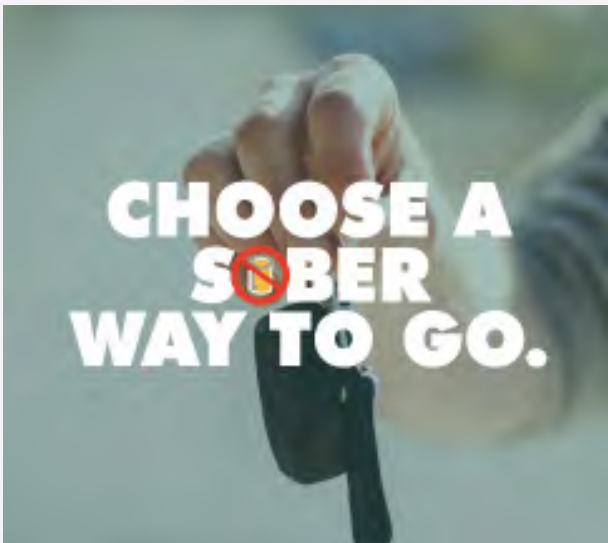
Example: Rectangular Rapid Flashing Beacon



What Are Programmatic/Non-engineering Countermeasures?

Programmatic/Non-engineering countermeasures introduce education, enforcement, and other policy instruments as means of encouraging safer roadways through user behavior, and they can be used to tackle traffic safety problems such as alcohol and drug impaired driving, distracted driving, speeding, and pedestrian and bicyclist safety.

Example: OTS Go Safely California campaign resources



Engineering Countermeasures

Engineering countermeasures are presented in a toolbox in **Appendix D**, which includes descriptions of the countermeasures, its applicable tier(s) in the Safe System Roadway Design Hierarchy, estimated high-level cost, and opportunities for quick-build versions. Countermeasures that are part of FHWA’s list of Proven Safety Countermeasures and/or in the 2020 Caltrans Local Roadway Safety Manual (LRSM) are also noted. Both distinctions can be advantageous for use in Caltrans Highway Safety Improvement Program (HSIP) grant funding applications.

As practitioners select countermeasures for specific projects, they should consider crash history, contextual factors, design features, costs, and a range of other issues. In each jurisdictions’ chapter in subsequent sections of this Plan, countermeasures from this toolbox are paired with focus areas to provide a systemic approach to addressing crash trends.

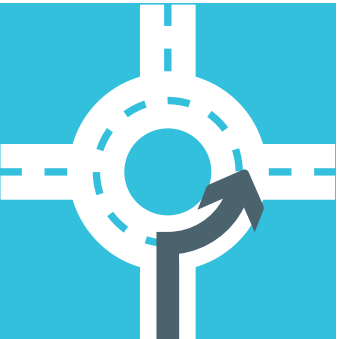
Example Countermeasure - Roundabout

Roundabouts represent a proactive approach to improving intersection safety and efficiency within the Yuba-Sutter region. Their design aligns with the goals of the Regional Safety Action Plan by reducing severe crashes, enhancing traffic flow, and accommodating diverse users. Implementing roundabouts in strategic rural and urban locations can serve as a cost-effective and sustainable measure to advance both safety and mobility outcomes identified in the plan.

Example Engineering Countermeasure

Roundabout

INTERSECTIONS & ROADWAYS



Description

A roundabout is a circular intersection where traffic flows in one direction around a central island, and vehicles must yield at entrance lanes. Unlike conventional intersections, roundabouts eliminate severe conflicts from crossing and left-turn movements. The design of a roundabout forces drivers to slow down, which narrows the range of vehicle speeds and reduces the severity of crashes. Additionally, pedestrians only need to cross one direction of traffic at a time, minimizing their exposure to vehicles.

 FHWA PROVEN COUNTERMEASURE

Context	Urban/Rural
LRSM ID	S16/NS04
Cost	\$\$\$

Low-Cost / Quick-Build
Alternative Available

Safe System Hierarchy

	Tier 1	Remove Severe Conflicts
	Tier 2	Reduce Vehicle Speeds
	Tier 3	Manage Conflicts in Time
	Tier 4	Increase Attentiveness and Awareness

Programmatic Countermeasures

Programmatic countermeasures can also be effective in reducing the likelihood and severity of crashes. Programmatic countermeasures include education, enforcement, and other strategies. *Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices, 11th Edition*, published by the National Highway Traffic Safety Administration (NHTSA) in 2023, provides a range of information on example traffic safety programs, including examples and effectiveness rankings.

What’s Included?

- Speed limit decrease opportunities, especially near schools or in downtowns
- Enforcement based on crash history
- High-visibility DUI enforcement
- DUI prevention through partnerships with public health agencies
- Education and public awareness campaigns targeted at speeding, DUIs, and increasing awareness of people walking and biking
- Automated enforcement with red-light cameras or speed cameras

More information on these and other programs can be found in **Appendix D**.

Local Efforts

Locally, several safety programs have already been implemented. CHP has previously been awarded grants from the California Office of Traffic Safety to perform targeted enforcement in high-frequency crash areas. Marysville has recently performed a round of DUI enforcement. Live Oak is in the process of performing engineering and traffic studies to implement lower speed limits in key areas.

There have been several other efforts through Blue Zones and First Five Sutter County as well as other local groups that have conducted education and outreach related to active transportation. Additionally, several of the jurisdiction’s Health Departments have funding for bike helmet give-aways.

Example Programmatic Countermeasure

 Speed Limit Modification

Description

California Assembly Bill (AB) 43 was passed in 2021 to provide a means to lower speed limits on corridors that meet certain criteria. AB 43 focused on giving local jurisdictions more flexibility in setting speed limits, especially regarding vulnerable road users:

- Speed Limit Reduction: Reduction of additional 5 mph based on several factors, including designation of Safety Corridors, as described in Chapter 3
- Prima Facie Speed Limits: Options for 15 and 25 mph in certain areas such as school zones depending on context
- Business Activity Districts: Option for 20 or 25 mph speed limits

Effectiveness and Cost



Cost: \$

Implementation Plan

This section presents the Action Plan for the Yuba-Sutter Region partner agencies. Yuba-Sutter is committed to providing regional leadership to improve roadway safety and working to eliminate fatalities and severe injuries on the roadway network. The Action Plan is comprised of strategies to facilitate successful implementation and evaluate and communicate progress.

Infrastructure

A priority corridor list was prepared for each jurisdiction based on the locations of the safety corridor network that had the highest number of severe and fatal crashes, community input, location of sensitive land uses, as well as review of the jurisdiction's other infrastructure needs and priorities. See identified projects in each jurisdiction's section.

Prioritization

The FHWA Safe System Roadway Design Hierarchy provides guidance on how to prioritize projects when reviewing development applications and making land use and transportation planning decisions. Projects identified in the project list, as well as any future projects, should prioritize higher tiers with the goal of first removing severe conflicts. Project priorities should include those with the greatest potential of reducing crash risk (exposure, likelihood, and severity).

Policies and Practices

In addition to infrastructure projects, the success of this RSAP is dependent on changes to the policies and practices that institutionalize the Safe System Approach for the region's partner agencies in. As a result of the benchmarking assessment described in **Appendix A** and recommendations from the

Task Force, the Action Plan contains strategies, institutional improvements, and new standard practices that center safety in the day-to-day operations of the Yuba-Sutter counties and local agencies. For example, rolling safety projects into existing capital improvement projects by consolidating safety improvements with maintenance efforts such as roadway resurfacing can be cost efficient and expedite project implementation and delivery. Yuba-Sutter's commitment to the goals of this RSAP emphasize that safety considerations are prioritized in projects over other competing factors.

Oversight, Coordination, and Partnership

The Action Plan also provides for oversight and accountability towards the commitment to safety. Yuba-Sutter will continue the momentum from the Task Force that convened during the creation of this plan. Having the leadership and oversight of this group will help maintain buy-in and support from elected officials and the community as Yuba-Sutter encourages Caltrans to implement countermeasures on state-owned facilities identified in the RSAP.

Continued communication and transparency with community members can allow for greater trust and support of the RSAP's goals. The Action Plan also contains policies that promote

community education to develop collective awareness around safety, target educational campaigns towards identified emphasis areas, and create a culture that supports both policy and infrastructure changes.

Partner agencies must work together to carry out the projects and policies listed in each jurisdiction chapter and assume a shared responsibility for the implementation of the Plan.

Yuba-Sutter's city councils and county boards of supervisors should receive regular updates on if their jurisdictions are on track to meet the Vision Zero goal. The future success of this plan will require a comprehensive effort across government and the community, including partnerships with neighborhoods and community based organizations to encourage engagement and support.

Implementation Phasing & Sequencing

Implementing countermeasures, policies, and projects identified in the Plan typically requires an ongoing, long-term commitment. To facilitate the evaluation and prioritization of funding, it is desirable to consider the implementation of safety projects through different time horizons.

Jurisdictions should seek overlapping opportunities where safety improvements will be implemented as part of an upcoming effort such as the repaving program or CIP. Implementation should also happen proactively as part of any development impact review process to ensure that new developments align with the Safe System Approach and meet safety requirements. All transportation construction projects should be reviewed to ensure they align with the Safe System Approach and follow recommendations in this Plan.

Consistency with the Safe System

This Plan builds on existing safety practices to ensure consistency with the Safe System Approach. The Plan establishes a framework for the Region to guide transportation-related implementation moving forward to be aligned with the Safe System Approach. This includes rethinking how the jurisdictions in the Yuba-Sutter Region prioritize projects and allocate funding to address safety concerns systematically and proactively. The Plan also includes guidance for developing projects by reviewing them through a safety-first lens. All transportation projects should be reviewed to ensure severe crash risks are minimized for vulnerable road users.

Caltrans Project Implementation

Caltrans Project Delivery

Once the Regional Safety Action Plan (RSAP) is adopted, projects taking place on the California State Highway System (SHS), such as Highways 20, 70, and 99, will involve Caltrans. Project delivery with Caltrans is a structured, multi-phase approach designed to ensure projects are safe, efficient, and aligned with statewide mobility goals.

Following project identification from the planning process, Caltrans or one of the cities or counties involved with the RSAP will prepare a Project Initiation Document (PID). This document outlines the project’s purpose, scope, schedule, and estimated cost, and serves as the foundation for securing funding. The PID includes analysis of key issues such as traffic operations, environmental impacts, multimodal considerations, and community involvement. It is essential for programming the project into the State Transportation Improvement Program (STIP) or Regional Transportation Improvement Program (RTIP), which commits funding from sources like the State Highway Account.

Projects may be developed directly by Caltrans as part of the State Highway Operation and Protection Program (SHOPP) which focuses on maintenance of existing facilities but will incorporate feasibility, safety, and multimodal elements as identified by various planning processes. Alternatively, the local agencies may implement projects on the SHS through the encroachment permit process for smaller, less complex projects or through the formal Project Study Report approval process for larger projects.

Following programming, the project enters the development phase, which includes environmental studies, securing necessary approvals and permits, acquiring rights of way, and completing detailed design plans. Caltrans then prepares and advertises the construction contract. Once a contractor is selected, the project moves into construction and contract administration, where Caltrans oversees the execution of the work to ensure compliance with specifications, timelines, and safety standards. The final step is project close-out, which includes documentation, final inspections, and transitioning the project into operational status.

Throughout this process, Caltrans coordinates closely with local agencies, especially when projects are locally sponsored or require regional input. This collaboration ensures that projects reflect community needs and are delivered efficiently and equitably.

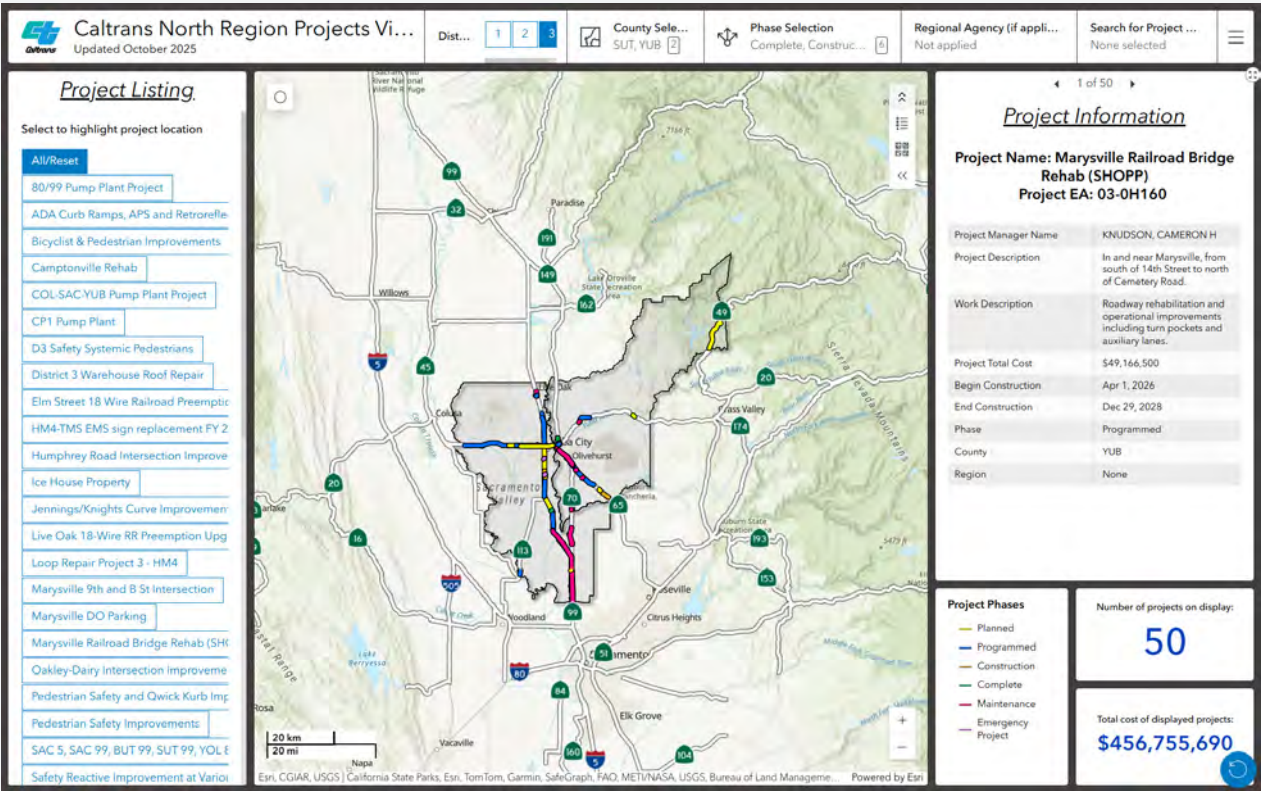
More information on project delivery can be found from the link here:
<https://dot.ca.gov/programs/project-delivery>

Caltrans Project Delivery can be reached at:

- ProjectDeliveryWeb@dot.ca.gov
- (916) 653-2451

North Region Projects Viewer

The North Region Projects Viewer is a publicly available map-based web application that displays Caltrans projects occurring within the Caltrans North Region, consisting of Caltrans Districts 1, 2, and 3, under six project phase categories: Complete, Construction, Maintenance, Planned, Programmed and Emergency. Members of the public may use this tool to view projects and track their progress. The application can be accessed from the link here: <https://www.arcgis.com/apps/dashboards/239772ff383d416483addc029ae9c6fa>



4. Regional Implementation Plan

Performance Measures

This Plan is a policy document and requires regular updates and monitoring to evaluate its efficacy and to ensure the Region is on track to achieve zero KSI crashes by 2050. Each jurisdiction in the Yuba-Sutter Region will monitor the following performance measures on an annual basis and make additional adjustments to the Plan as needed to meet the zero goal. The goal of monitoring is to understand if the measures are effective at reducing crashes as the region works toward zero fatalities and serious injuries. Additionally, ongoing monitoring will help to identify locations with high propensity for KSIs based on exposure, likelihood, and severity. Historic crash patterns can inform these considerations, but design decisions will be proactive and based on reducing safety risk. Every five years, the Yuba-Sutter Region will update their Safety Action Plan to reevaluate the crash data and performance measures. Performance measures will be added or removed to meet the goal of reducing fatal and severe injury crashes to zero.

Plan Implementation Metrics
The number of roadway miles and intersections improved
The percentage of streets where the operating speed matches the target speed
The number of projects implemented with the systemic deployment of countermeasures
Policy and Programmatic Changes
The provision of continuous sidewalks, low stress bicycle facilities, and traffic calming improvements alongside land use zoning changes
Set contextually appropriate target speeds and prioritize and implement speed management strategies to meet those targets
Standardize the selection and implementation of pedestrian and bicycle improvements based on contextual factors such as speed and volume
The prioritization of projects for transportation connections to communities of persistent poverty and underserved populations along Walk and Roll Routes and key transit corridors
The collaboration with transit, land use, and social service partners for strategies at the base of the Safe Systems Pyramid
The review and reprioritization of the city's and county's annual CIP budget to shift funding toward proactive and opportunistic opportunities to efficiently address safety priorities
The collaboration with agency partners to make meaningful progress on cross-jurisdictional efforts
The creation of a rapid response program to evaluate roadway design and context of crash locations after KSI crashes
Crash Statistics
The number of KSI crashes on Safety Corridors
The number of crashes where the crash type was identified as unsafe speed
The number of DUI-related crashes
The number of youth bicyclist-involved crashes

Funding

Below are federal and state funding sources applicable to the future implementation of this Plan.

FEDERAL FUNDING	
Funding Source	Program Purpose
Safe Streets and Roads for All (SS4A) Grant Program	The Safe Streets & Roads for All (SS4A) grant program is a Federal grant program established by the Bipartisan Infrastructure Law centered around the Department of Transportation's National Roadway Safety Strategy and its goal of zero deaths and serious injuries on America's roadways. It provides \$5 billion in grant funding over 5 years to develop safety action plans and implement safety projects.
Congestion Mitigation and Air Quality (CMAQ) Improvement Program	The FAST Act continued the CMAQ program to provide a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas).
Rebuilding American Infrastructure with Sustainability and Equity (RAISE)	This program supports surface transportation infrastructure projects that will improve safety; environmental sustainability; quality of life; mobility and community connectivity; economic competitiveness and opportunity including tourism; state of good repair; partnership and collaboration; and innovation.
Reconnecting Communities and Neighborhoods Program	The Reconnecting Communities and Neighborhoods program combines the Reconnecting Communities Pilot (RCP) and Neighborhood Access and Equity (NAE) discretionary grant programs into a single funding opportunity. The program funds projects that address the impact of transportation infrastructure, such as freeways and railroads, that form barriers for travel in communities. The program funds the removal, retrofit, mitigation, or replacement of the infrastructure in question.
Community Development Block Grant (CDBG) Program	The Community Development Block Grant (CDBG) program is a flexible program that provides communities with resources to address a wide range of unique community development needs. Communities often use CDBG funds to construct and repair streets and sidewalks.

4. Regional Implementation Plan

STATE FUNDING	
Funding Source	Program Purpose
Highway Safety Improvement Program (HSIP)	California’s Local HSIP focuses on infrastructure projects with nationally recognized crash reduction factors (CRFs). Local HSIP projects must be identified on the basis of crash experience, crash potential, crash rate, or other data-supported means.
Active Transportation Program (ATP)	ATP is a statewide competitive grant application process with the goal of encouraging increased use of active modes of transportation. The ATP consolidates existing federal and state transportation programs, including the Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and State Safe Routes to School (SR2S), into a single program with a focus to make California a national leader in active transportation. The ATP is administered by the Division of Local Assistance, Office of State Programs.
SB-1 Transportation Funding	The State Transportation Improvement Program (STIP) is the biennial five-year plan for future allocations of certain state transportation funds for state highway improvements, intercity rail, and regional highway and transit improvements.
Caltrans Sustainable Transportation Planning Grant Program	This program is intended to encourage local and regional planning that furthers state goals, including, but not limited to, the goals and best practices cited in the Regional Transportation Plan Guidelines adopted by the California Transportation Commission.
California Office of Traffic Safety (OTS)	OTS administers traffic safety grants in the following areas: Alcohol Impaired Driving, Distracted Driving, Drug-Impaired Driving, Emergency Medical Services, Motorcycle Safety, Occupant Protection, Pedestrian and Bicycle Safety, Police Traffic Services, Public Relations, Advertising, and Roadway Safety and Traffic Records.
Affordable Housing and Sustainable Communities (AHSC)	The Affordable Housing and Sustainable Communities (AHSC) Program makes it easier for Californians to drive less by making housing, jobs, and key destinations accessible by walking, biking, and transit.



Action Plan

The following pages present safety strategies organized into three priorities: integrate the Safe System Approach in policy and practice; systemically and proactively address common crash focus areas; educate all roadway users.

Priority A: Integrate Safe System in Policy and Practice

These strategies aim to infuse roadway safety concepts, especially the Safe System Approach, as part of routine practices and design decisions.

 Action 1	Maintain the Vision Zero Task Force and advance safety plans and projects; coordinate on funding opportunities.
Timeline	 Ongoing
Responsible Agency	• Yuba County Public Works Department & Sheriff’s Department • Sutter County Public Works Department & Sheriff’s Department • City of Marysville Public Works Department • City of Wheatland Engineering Department • City of Yuba City Public Works Department • City of Live Oak Public Works Department • Caltrans • California Highway Patrol • Partner Organizations (Blue Zones, YABA, etc.)
Evaluation Metric	Number of meetings with Vision Zero Task Force. Number of federal, state, regional, and local funding opportunities applied for regionally.
 Action 2	Prioritize safety in funding decisions, such as during regular updates to local capital improvement plans.
Timeline	 Ongoing
Responsible Agency	• Yuba County Public Works Department • Sutter County Public Works Department • City of Marysville Public Works Department • City of Wheatland Engineering Department • City of Yuba City Public Works Department • City of Live Oak Public Works Department
Evaluation Metric	Documented roadway safety considerations during decision-making processes for major plan updates, including local Capital Improvement Plans, local General Plan Updates, and SACOG’s Metropolitan Transportation Plan.

 Action 3	Integrate safety improvements into regular maintenance based on countermeasures from this plan. Find opportunities for partnership through infrastructure project bundling.
Timeline	 Ongoing
Responsible Agency	• Yuba County Public Works Department • Sutter County Public Works Department • City of Marysville Public Works Department • City of Wheatland Engineering Department • City of Yuba City Public Works Department • City of Live Oak Public Works Department • Caltrans
Evaluation Metric	Percent of regular maintenance projects that infuse roadway safety countermeasures from this Plan. Number of infrastructure projects bundled.
 Action 4	Evaluate and implement lower speed limits in business districts, school areas, and other areas that have a high concentration of vulnerable road users, as eligible through AB 43.
Timeline	 Long Term
Responsible Agency	• Yuba County Public Works Department • Sutter County Public Works Department • City of Marysville Public Works Department • City of Wheatland Engineering Department • City of Yuba City Public Works Department • City of Live Oak Public Works Department • Local School Districts
Evaluation Metric	Number of qualifying roadways with lower speed limits.

4. Regional Implementation Plan

 Action 5	Update street design standards to include designs that reduce kinetic energy and reflect Complete Streets principles based on state and national guidance (e.g. National Association of City Transportation Officials).
Timeline	 Short Term
Responsible Agency	• Yuba County Public Works Department • Sutter County Public Works Department • City of Marysville Public Works Department • City of Wheatland Engineering Department • City of Yuba City Public Works Department • City of Live Oak Public Works Department
Evaluation Metric	Design standards updated.

 Action 6	Work with emergency responders to identify barriers and improve response times, as necessary.
Timeline	 Ongoing
Responsible Agency	• Yuba County • Sutter County • City of Marysville • City of Wheatland • City of Yuba City • City of Live Oak • Local Emergency Responders
Evaluation Metric	Annual meetings with emergency response agencies to review the previous year’s emergency response metrics and methods for improvement.

Priority B: Systemically and Proactively Address Common Crash Focus Areas

These strategies target key areas for improvement identified through crash analysis, including intersection control and vulnerable users.

 Action 1	Advance design concepts and apply for grant funding or identify other financing methods for three priority corridors every five years.
Timeline	 Ongoing
Responsible Agency	• Yuba County Public Works Department • Sutter County Public Works Department • City of Marysville Public Works Department • City of Wheatland Engineering Department • City of Yuba City Public Works Department • City of Live Oak Public Works Department
Evaluation Metric	Number of projects advanced through design or grant applications.

 Action 2	Install low-cost safety improvements at six regional locations per year—including new road markings, signs, and minor signal modifications—that address the focus areas in this plan.
Timeline	 Short Term
Responsible Agency	• Yuba County Public Works Department • Sutter County Public Works Department • City of Marysville Public Works Department • City of Wheatland Engineering Department • City of Yuba City Public Works Department • City of Live Oak Public Works Department
Evaluation Metric	Number of low-cost projects that address focus areas implemented regionally per year.

4. Regional Implementation Plan

 Action 3	Complete three projects that improve bicycle and pedestrian safety near schools and community destinations such as parks and downtown business areas within five years.
Timeline	 Short Term
Responsible Agency	• Yuba County Public Works Department • Sutter County Public Works Department • City of Marysville Public Works Department • City of Wheatland Engineering Department • City of Yuba City Public Works Department • City of Live Oak Public Works Department
Evaluation Metric	Number of bicycle and pedestrian projects implemented.

Priority C: Educate All Roadway Users

These strategies represent a variety of educational and outreach programs and strategies that encourage behavior change in road users.

 Action 1	Launch high-visibility multilingual education PSA campaigns against speeding, distracted driving, impaired driving, and other high-risk behaviors, with a focus on safety corridors. The campaigns should have both digital and in-person components for greatest reach into the communities.
Timeline	 Short Term
Responsible Agency	• Yuba County Public Works Department • Sutter County Public Works Department • City of Marysville Public Works Department • City of Wheatland Engineering Department • City of Yuba City Public Works Department • City of Live Oak Public Works Department • Local law enforcement agencies • California Highway Patrol
Evaluation Metric	Estimated number of people reached.

 Action 2	Deter impaired driving by targeting education and outreach at alcohol-serving establishments. Develop a public promotional campaign encouraging the use of taxis, rideshares, on-demand transit, and other services as alternatives to impaired driving.
Timeline	 Long Term
Responsible Agency	• Local Police Departments • Yuba County Sheriff • Sutter County Sheriff • California Highway Patrol • Local Businesses • Yuba-Sutter Transit
Evaluation Metric	Number of establishments reached. Number of programs established.
 Action 3	Improve data collection and reporting on speed, impairment, cell phone use, and distraction for KSI crashes.
Timeline	 Long Term
Responsible Agency	• Local Police Departments • Yuba County Sheriff • Sutter County Sheriff • California Highway Patrol
Evaluation Metric	Share of crash records including this data.

4. Regional Implementation Plan

 Action 4	Partner with community-based organizations such as YABA, Blue Zones, and Civic Thread on educational campaigns focused on vulnerable road users, such as Safe Routes to School and early driver education.
Timeline	 Long Term
Responsible Agency	• Yuba County • Sutter County • City of Marysville • City of Wheatland • City of Yuba City • City of Live Oak • Local community-based organizations (CBOs) • Local School District
Evaluation Metric	Number of joint campaigns between local agencies and CBOs.

Our commitment: Yuba-Sutter will periodically review the effectiveness of the strategies to identify those that would be helpful to expand and those that could be replaced. Each strategy includes an implementation timeline and evaluation metric(s), and identifies the parties and partnerships needed to be successful.
