DRAFT

CITY OF
Lakeport
CALIFORNIA

LOCAL ROAD SAFETY PLAN

(a Safety Action Plan)

April 2026

Prepared by:

GCW
ENGINEERS \ SURVEYORS

CITY OF Lakeport CALIFORNIA

LOCAL ROAD SAFETY PLAN

Clear Lake
Lakeport, CA

APRIL 2026

The Local Road Safety Plan (LRSP) Update is a final work product of the FY 2025/26 Overall Work Program and was completed under Work Element 619.

PREPARED FOR:

City of Lakeport
225 Park Street
Lakeport, CA 95453

Lake Area Planning Council
525 S. Main Street, Suite #G
Ukiah, CA 95482

PREPARED BY:

GCW, Inc.
5422 Longley Lane, Suite A
Reno, NV 89521

DRAFT

ACKNOWLEDGEMENTS

The Lake Area Planning Council, City of Lakeport staff, and other project stakeholders were instrumental in the creation of this Local Road Safety Plan. The local knowledge and collaborative attitude of all stakeholders involved helped create a holistic LRSP. GCW would like to express appreciation to the staff and project stakeholders who contributed to this plan.

Source: lakecounty.com

Stakeholders

Advocacy Groups

CalFire

California Highway Patrol

Caltrans

City of Lakeport

City of Lakeport Public Works

Emergency Services

Lake County Social Services

Lake Transit Authority

Law Enforcement

Tribal Governments

Lake Area Planning Council (APC)

Lisa Davey-Bates
Executive Director

Alexis Pedrotti
Project Manager

John Speka
Senior Transportation Planner

GCW Team

Loren Chilson, PE

Joseph Paiva

Lauren Picou, PE, PTOE, RSP1

Sierra Rodriguez-Torres

Abby Titlow

STATUTORY NOTICE

23 U.S.C. 409: US Code – Section 406:
Discovery and admission as evidence of certain reports and surveys

Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway- highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

keport Blvd / S. Main St
Lakeport, CA

Lakeport, CA
Source: City of Lakeport Instagram

California Government Code – GOV § 7550

This section is included per California Government Code - GOV § 7550 which states that:

"(a) Any document or written report prepared for or under the direction of a state or local agency, that is prepared in whole or in part by nonemployees of the agency, shall contain the numbers and dollar amounts of all contracts and subcontracts relating to the preparation of the document or written report; if the total cost for the work performed by nonemployees of the agency exceeds five thousand dollars ($5,000). The contract and subcontract numbers and dollar amounts shall be contained in a separate section of the document or written report.

(b) When multiple documents or written reports are the subject or product of the contract, the disclosure section may also contain a statement indicating that the total contract amount represents compensation for multiple documents or written reports."

The contract amount is $109,912 for three Local Road Safety Plans, which includes this Lakeport LRSP.

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Lakeport, CA

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EXECUTIVE SUMMARY

The City of Lakeport Local Roadway Safety Plan (LRSP) is a comprehensive, data-driven safety action plan that establishes a framework for identifying, evaluating, and prioritizing transportation safety improvements for all roadway users on local streets. Consistent with Vision Zero principles, the LRSP recognizes that traffic-related deaths and serious injuries are preventable and sets a foundation for coordinated actions to move toward a safer transportation system for everyone.

The development of this LRSP was guided by the Safe System Approach and aligns with the *California State Highway Safety Plan*. The plan incorporates public input, analyzes five years of available crash data (2019–2023), identifies priority safety focus areas, and recommends countermeasures and strategies across the four E's of traffic safety: *Engineering*, *Enforcement*, *Education*, and *Emergency Services*. Together, these elements support a proactive and systemic approach to reducing fatal and serious injury crashes.

Identified focus areas represent the greatest opportunities to improve safety and reduce fatal and serious injury crashes in Lakeport based on the Public Outreach results and Crash Data Analysis.

Each emphasis area and its rationale for inclusion in the LRSP are detailed in the Focus Area section of this plan. Recommended countermeasures and strategies may be implemented systemically or at targeted locations.

An implementation plan for the LRSP recommendations is detailed in the Focus Area Strategy Tables and the Implementation Plan sections of this report. The implementation plan outlines initial steps for applying engineering and non-engineering countermeasures and identifies potential funding sources.

The plan also includes Potential Projects that identify high-priority systemic safety improvements for roadway segments, roadway lighting, unsignalized intersections, and pedestrian and bicycle facilities as well as site specific safety improvements (**Appendix E**).

This LRSP was developed in close coordination with the Lake Area Planning Council, City of Lakeport staff, local stakeholders, and the community in compliance with applicable State and Federal requirements for Highway Safety Improvement (HSIP) and Safe Routes for All (SS4A) funding eligibility. The plan provides the necessary data, analysis, and documentation to support future grant applications. Potential HSIP projects are identified in **Appendix E**, and an SS4A Self-Certification Checklist is included in **Appendix F**. The LRSP is intended to be a living document and will be updated every five years using the most up-to-date crash data to assess the effectiveness of implemented countermeasures, monitor progress toward Vision Zero goals, and refine safety focus areas over time.

SR 29 / Lakeport Boulevard / Bevins Street
Lakeport, CA

INTRODUCTION

The City of Lakeport has undertaken this Local Road Safety Plan with the goal of improving roadway safety on local roads. This LRSP serves as a comprehensive safety action plan that establishes the framework and processes for developing transportation safety improvements aimed at reducing fatal and serious injury crashes in Lakeport.

INTRODUCTION

This Local Roadway Safety Plan (LRSP) serves as a comprehensive safety action plan for the City of Lakeport to improve roadway safety and reduce roadway fatalities and serious injuries. The study area for this LRSP is within the city limits of Lakeport, California. LRSPs for the City of Clearlake and the unincorporated areas of Lake County are prepared under separate but parallel efforts. This action plan identifies key roadway safety challenges through data-driven analysis and outlines implementable strategies and programmatic initiatives to address the community's most significant transportation-related safety risks.

The LRSP process provides a standardized approach for local agencies to evaluate crash data, identify priority safety focus areas, and select appropriate countermeasures. The plan establishes a framework for identifying and addressing systemic safety issues on local roads based on historical crash trends.

Exhibit 1. The LRSP Process – Identify Stakeholders, Use Safety Data, Choose Proven Solutions, and Implement Solutions.
Source: FHWA

Focus Areas

In 2023, crashes on United States (US) roadways accounted for 40,901 fatalities and represent one of the leading causes of death across the US.[1] By evaluating crash data systemically, the LRSP identifies specific focus areas which represent the largest opportunities to improve safety such as distracted driving or pedestrian safety. The LRSP process also identifies hot spot locations with a high number of crashes historically as well as locations which have similar roadway characteristics but may lack a history of crashes.

Countermeasures are identified based on the types, frequency, and contributing elements of crashes. Identified countermeasures fall under one of the four "E's" of traffic safety which include Engineering, Enforcement, Education, and Emergency Services. The four "E's" are the main thrust of accident prevention and control across the world. Countermeasures and strategies in all four categories are included in the applicable Focus Area and are divided based on the "E" which they address.

Engineering safety projects may be systemic or location specific, and Education and Enforcement strategies are often best implemented following buy-in from community partners and

[1] FARS Encyclopedia

stakeholders. Developing countermeasures across these four areas of traffic safety ensures a plan that improves traffic safety through a variety of approaches.

Grant Funding

Implementation of identified countermeasures typically requires additional grant funding for many agencies. In 2020, the LRSP was established as a required document for any agencies applying for Highway Safety Improvement Program (HSIP) funding. The HSIP is a federal aid program which requires states to develop comprehensive Statewide Highway Safety Plans (SHSPs) focused on reducing fatal and serious injury crashes. The HSIP Grant Program is one of the primary funding mechanisms for roadway safety enhancements across the United States. Each state department of transportation is able to allocate HSIP funding to local entities for traffic safety projects focused on reducing fatal and serious injury crashes. The California Department of Transportation (Caltrans) has required any agency applying for HSIP funding to first complete an LRSP (or equivalent) for funding Cycle 11 and beyond.

Additionally, the U.S. Department of Transportation's (U.S. DOT) National Roadway Safety Strategy is supported by the Safe Streets and Roads for All (SS4A) program, which is a "competitive grant program that funds regional, local, and Tribal initiatives through grants to prevent roadway fatalities and serious injuries." [2] An SS4A compliant "Action Plan" includes key components, which are addressed in this plan.

The Safe System Approach

The U.S. DOT utilizes a Safe System Approach as its guiding methodology for significantly reducing serious injuries and deaths on the nation's roads. This approach is a key step in working toward a "Vision Zero" goal or reaching zero deaths for all roadway users in the future. The National Roadway Safety Strategy (NRSS) states: "The Safe System Approach works by building and reinforcing multiple layers of protection to prevent crashes from happening in the first place and minimize the harm caused to those involved when crashes do occur."[3]

This approach acknowledges that humans make mistakes and that the design and management of transportation infrastructure can help reduce safety risks and minimize crash severity by anticipating these human vulnerabilities. In a safe system, it is acknowledged that responsibility is shared among roadway users

Exhibit 2. The Safe System Approach has five key objectives: Safer People, Safer Roads, Safer Vehicles, Safer Speeds, and Post-Crash Care.
Source: U.S. Department of Transportation

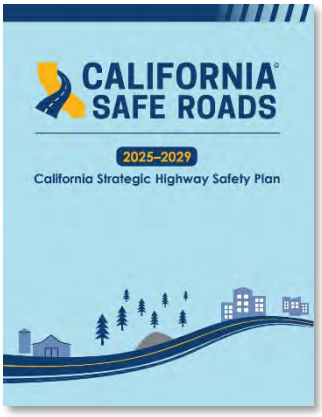
[2] Safe Streets and Roads for All (SS4A) Grant Program | US Department of Transportation
[3] What Is a Safe System Approach? | US Department of Transportation

and those who design, operate, and manage the transportation system.[4] Safety is proactive and redundancy is crucial.

This LRSP incorporates principles of the Safe System Approach through Focus Areas which incorporate both the roadway network and human behavior, and through the 4 E's, which incorporate solutions involving engineering, education, enforcement and emergency services.

Connection with the SHSP

This LRSP aligns with the *2025-2029 "California Safe Roads" Strategic Highway Safety Plan (SHSP)* developed by Caltrans to provide technical assistance in prioritization and deployment of safety countermeasures across the state. The statewide SHSP provides the overall framework, while the LRSP is a specific plan tailored to the unique safety challenges of a local jurisdiction. The SHSP identifies countermeasures and strategies to address specific safety issues which allows local agencies to leverage road safety planning processes to identify and address local needs based on the SHSP countermeasures. The 2025-2029 *SHSP* identifies the following "High Priority Challenge Areas" which represent the greatest opportunity for reducing fatal and serious injury crashes across the state:[5]



- Active Transportation: Bicyclists
- Active Transportation: Pedestrians
- Impaired Driving
- Intersections
- Lane Departures
- Speed Management/Aggressive Driving

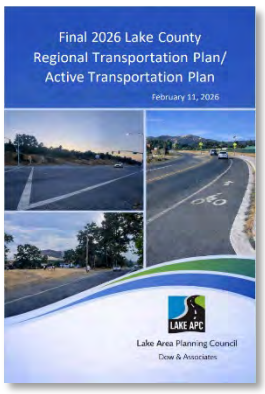
The City of Lakeport LRSP identifies all these high-priority challenge areas as focus areas based on the crash data analysis. These focus areas represent the greatest opportunity for improving safety in the City.


Main Street
Lakeport, CA

[4] Safe System—An Approach Toward Zero Traffic Deaths | FHWA
[5] 2025-2029 California Strategic Highway Safety Plan

Existing Efforts

The purpose of this LRSP is to enhance and expand upon other planned projects and safety initiatives in the City of Lakeport. Several roadway improvement projects have been identified in Lakeport through various planning studies conducted within the last five years. These studies and projects were considered in the LRSP process and countermeasure selection.



2026 Regional Transportation Plan/Active Transportation Plan – "The Regional Transportation Plan (RTP) is a long-range planning document developed by the Lake Area Planning Council (Lake APC) in coordination with local, regional, state, and federal partner agencies with the goal of promoting the safe and efficient management, operation and development of a multimodal transportation system, that when linked with appropriate land-use planning, will serve the mobility and needs of people and goods movement throughout the region."[6]

The RTP/ATP provides a list of *financially constrained projects* for state highways, local streets, and roads. Short-term projects are expected to be completed within a one- to 10-year period and long-term projects within an 11- to 20-year period. This list includes projects on State Highways and local roads.

FINANCIALLY CONSTRAINED PROJECTS	TIMEFRAME
Lakeport Boulevard Rehabilitation	Short-Term Programmed
South Main Street – First Street to Lakeport Boulevard	Short-Term Programmed
Roadway Reconstruction/Rehabilitation	Short-Term Programmed
Roadway Overlay	Short-Term Programmed

The list of *financially unconstrained projects* includes the following:

FINANCIALLY UNCONSTRAINED PROJECTS	TIMEFRAME
Roundabout – Eleventh Street/Forbes Street	Long-Term Programmed
Lakeport Boulevard/Bevins Street Roundabout – SR 29 Lakeport Boulevard Interchange	Long-Term Programmed
Lakeport Boulevard/Todd Road Roundabout – SR 29 Lakeport Boulevard	Long-Term Programmed
Lakeport Boulevard Reconstruction	Short-Term Programmed
Roadway Reconstruction/Rehabilitation	Long-Term Programmed
Roadway Overlay	Long-Term Programmed

[6] Final-2026-RTP-ATP.pdf

2025 City of Lakeport Active Transportation Plan (ATP) – This plan identifies priority multimodal projects and provides strategies and policy initiatives to enhance all modes of transportation in Lakeport.

2023 City of Lakeport Speed Zone Study – This report indicates speed recommendations for 32 surveyed roadway segments in the City of Lakeport, with seven segments identified for changes.

2021 City of Lakeport Local Road Safety Plan – The previous LRSP included two selected projects from a list of thirteen potential engineering projects with further detail:

POTENTIAL ENGINEERING PROJECTS
Intersection Safety – Systemic Unsignalized Intersections – Most crashes occur at unsignalized intersections, with many of the top locations located on 11th Street. This is a systemic project that would implement improvements at intersections with additional signage, flashing beacons, and upgraded pavement markings.
Pedestrian Safety – Systemic Pedestrian Crosswalk at Unsignalized Intersections – Three intersections were identified for a pedestrian crash history and lack of upgraded or enhanced crosswalks. (Forbes Street/Martin Street, 11th Street/Brush Street, 11th Street/Main Street)

In addition to the adoption of these planning documents, the City works closely with local partners and agencies to improve safety on the roadways every single day. Through a variety of day-to-day and project specific activities, the City of Lakeport and Lake APC are continually working to enhance transportation safety for all users.

According to the RTP, "active transportation areas in the City include the following: Westside Park, Downtown and the lakefront parks, Lakeport Public Schools, and the Mendocino College campus. Various bicycle and pedestrian facilities are proposed to ensure safe multimodal access to schools and neighborhoods for all roadway users, including on Eleventh Street which has been identified as a priority for corridor specific improvements in the Lakeport ATP and the 2020 Eleventh Street Corridor Multimodal Engineered Feasibility Study."[7]

Policies and Standards

Lakeport/Lake County has established several transportation safety-related policies that are documented across several planning documents, including the following:

- The *Regional/ Active Transportation Plan* as described in the existing efforts, includes policies for multiagency committees for transportation-related matters (Policy Advisory Committee), Complete Streets (aimed at benefiting all transportation modes and users), Vision Zero (a policy calling for zero fatal and serious injury crashes by 2025), planning policies for multimodal uses including bicycle

[7] Final-2026-RTP-ATP.pdf – Page 76

parking, pedestrian facilities, street lighting and transit. This plan also includes standards for Americans with Disabilities Act (ADA) compliance.

- The *City of Lakeport Active Transportation Plan* includes recommendations for adopting a policy that prioritizes ATP projects.
- The *General Plan* also provides policies and best practices for multimodal uses, speed zones, traffic control devices, and more – all of which promote safety on the roadway network.

These policies and standards collectively support the goal of creating a safer roadway network in the City of Lakeport.


Lakeport, CA

7th Street Pedestrian Crossing (Xabatin Park)
Lakeport, CA

VISION & MISSION

This LRSP aligns with state and national goals of improving roadway safety, particularly by reducing fatal and serious injury crashes. The City of Lakeport shares the vision of federal and national safety initiatives such as Vision Zero and embraces a Safe Systems approach to improve roadway safety.

VISION AND MISSION STATEMENTS

The City of Lakeport is committed to creating a roadway system free of fatal and serious-injury crashes. This LRSP aligns with state and national safety initiatives that promote a Safe System approach and prioritize strategies like speed management, traffic calming, improved visibility, etc. The plan also supports California's focus on advancing safety through innovation, technology, education, and enforcement.

Commitment to Zero

Placeholder for City of Lakeport Commitment to Zero Statement

Vision Statement

"TO HELP ALL TRANSPORTATION USERS IN THE CITY OF LAKEPORT REACH THEIR DESTINATION SAFELY."

Mission Statement

"TO REDUCE THE NUMBER OF FATALITIES AND SERIOUS INJURIES OCCURRING ON THE ROADWAY SYSTEM IN LAKEPORT FOR ALL USERS."

The mission and vision statements were developed by the stakeholder group to guide the LRSP and ensure the final recommendations improve safety while furthering the vision and existing efforts of the City. These statements aim to reduce fatalities and serious injuries occurring on the roadway system for all users by applying data-driven strategies, engaging community partners, and implementing proven infrastructure, education, enforcement, and emergency-response measures.

Lakeport Waterfront
Source: lakecounty.com

STAKEHOLDER ENGAGEMENT

Representatives from regional planning agencies, County and City departments, and local public agencies and organizations participated in a Stakeholder Working Group that provided guidance and valuable input throughout the development of the LRSP.

STAKEHOLDER ENGAGEMENT

The Stakeholder Working Group was developed to provide important input and guidance throughout the project, which included assisting with the development of the project vision and mission statements, identifying focus areas, and considering safety strategies and countermeasures.

The Stakeholder Working Group included over 25 representatives from city departments, local and state agencies, and tribal communities including (but not limited to) the following:

Stakeholder Group Members	
• Advocacy Groups	• Lakeport Unified School District
• CalFire	• Lake Area Planning Council
• California Highway Patrol	• Lake County Social Services
• Caltrans	• Lake Transit Authority
• City of Lakeport Public Works	• Law Enforcement and Emergency Services
• Lakeport Fire	• Tribal Governments

Advocacy groups and other local interest groups included Lake Links, various Fire Protection District representatives, school district representatives, and local media outlets. These stakeholders were invited to participate by attending meetings, sharing the public outreach, and voicing concerns and potential solutions. All participation was optional.

The stakeholders group convened twice throughout the LRSP process to collaborate and provide feedback on the crash data analysis, public outreach, identified countermeasures, and implementation strategies and timeframes. Stakeholder agencies and meeting data is included in **Appendix A.** The stakeholder group will also be key in implementing countermeasures, measuring outcomes, and updating the plan in the future.

Stakeholder Meeting #1: December 2025

The first Stakeholder Working Group meeting was held on December 11, 2025 (online meeting) to introduce the project, discuss the process, outline the public outreach methods, and to identify initial issues and areas of concern.

Stakeholder Meeting #2: March 2026

The second Stakeholder Working Group meeting was held on March 30, 2026 (online meeting) to review the findings of the public outreach survey and to provide feedback on potential projects and countermeasures.

Library Park Gazebo
Source: cityoflakeport.com

PUBLIC OUTREACH

The LRSP process was supported by robust public outreach to ensure community members had opportunities to share their transportation safety concerns. A public outreach survey was conducted in two languages and featured an interactive map that enabled residents to submit georeferenced locations of concern and provide contextual comments.

PUBLIC OUTREACH

Public Outreach Methods

Public outreach was conducted through an online survey via ArcGIS Survey123 and an interactive public comment map through ArcGIS Online. The survey was open for public response from January 20 to March 23, 2026, and was available in English and Spanish. Seven survey questions were developed in consultation with Lake APC and the stakeholder group with an objective to identify demographics, travel habits, transportation-related safety concerns, and focus area prioritization.

OUTREACH METHODS

- ✓ Survey available in English and Spanish
- ✓ In-person and online public outreach
- ✓ Non-electronic (paper copies) available

In addition to the survey questions, respondents were directed to an interactive map which provided an opportunity to identify transportation safety concerns at specific locations in the City of Lakeport using a georeferenced dot. Respondents could categorize their comments on the map as one of the identified emphasis areas or select 'Other' if their comment did not fall under one of the focus areas. In addition, respondents were able to vote in support of or endorse other user comments.

The published survey was distributed via QR code and direct web address through a mix of in-person and digital outreach methods, including the Stakeholders working group, local websites, social media accounts, a bilingual informational flyer, and email distribution lists. The informational flyer was shared electronically and posted at physical locations throughout the City, and is provided in **Appendix B**. The flyer included a QR code for immediate access to the survey using a smartphone and provided accessibility instructions for submitting paper copies at the City of Clearlake and City of Lakeport offices.

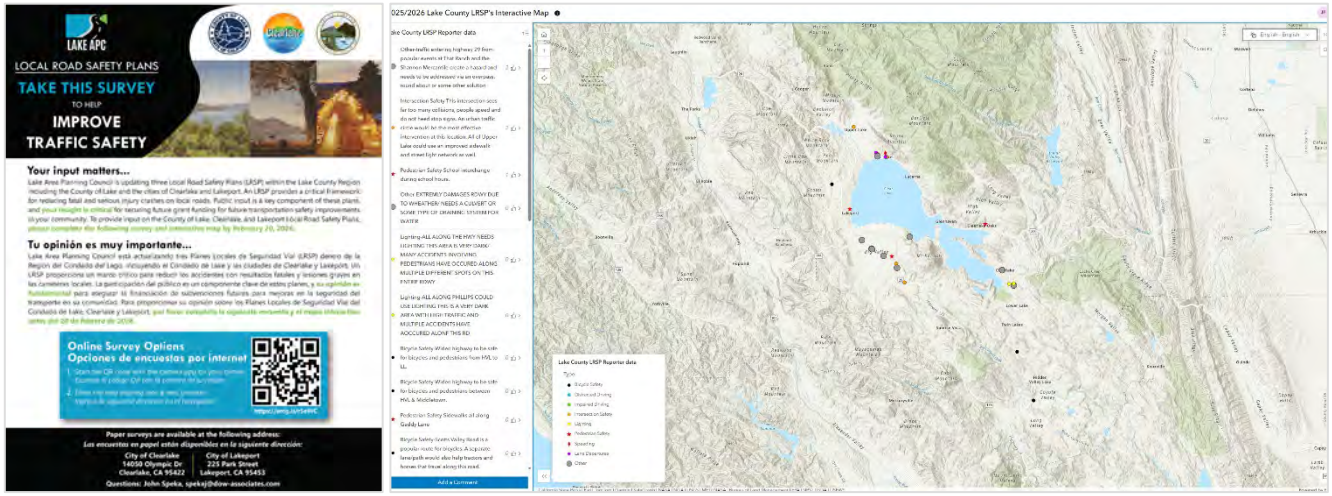


Exhibit 3. The public outreach survey was advertised through a mix of methods, including an informational flyer (shown left). Survey respondents were directed to an interactive map to identify georeferenced transportation safety concerns (shown right).

The City of Lakeport public outreach effort produced a total of 161 completed survey responses and two individual georeferenced safety concerns/comments submitted through the interactive map.

161
SURVEY
RESPONSES

Public Meeting

Additionally, an in-person meeting (with an online option) was held on March 23, 2026 at the Lakeport City Council Chambers. This meeting was held from 5:00 pm to 7:00 pm to allow members of the public to come as convenient for them. The meeting included a presentation covering the LRSP process and findings to date. Members could attend this presentation in person or online via Zoom. After the presentation, members of the project team were on hand with large maps to answer questions, take comments and recommendations, and assist in taking the survey either online or via paper.

Public Outreach Results

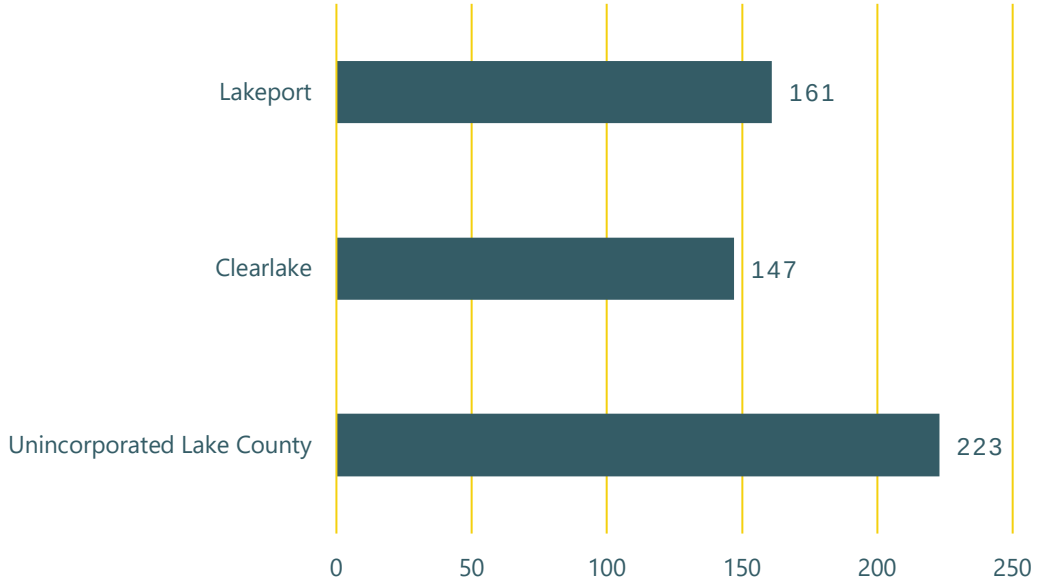
The public outreach survey was structured to gain insight into basic travel habits and age demographics, and to uncover respondents' areas of concern in relation to the LRSP focus areas and their priorities related to potential transportation safety improvements. The input received was critical in the development of the LRSP goals and verification of project focus areas, helping to pinpoint specific safety issues and prioritize the community's safety concerns.

The survey results are summarized below. **Appendix B** includes a more detailed analysis of survey responses and the interactive map results that include public comments, focus area type, and number of user votes per comment.

Note: This outreach effort was conducted for the three LRSPs being developed concurrently – Lakeport, Lake County Unincorporated, and Clearlake. The first question asked respondents which areas they frequently traverse, allowing for multiple selections. This was used to separate the responses by LRSP.

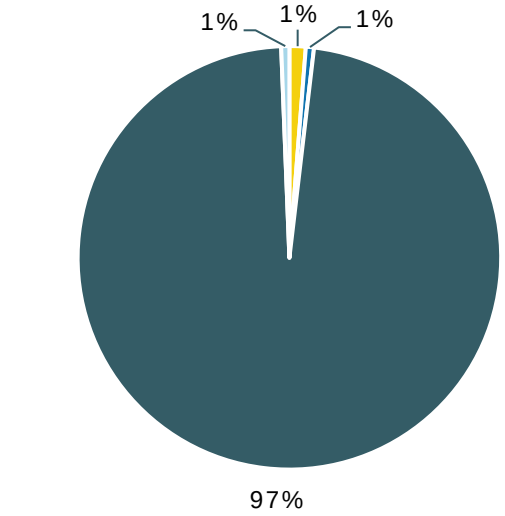
Main Street / Eleventh Street
Lakeport, CA

Question 1: What areas do you traverse frequently?

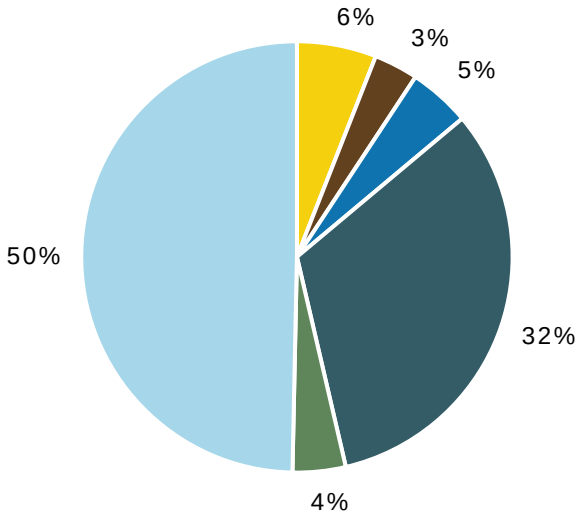


Question 1 Summary: This question was utilized to filter respondent answers to the appropriate Local Road Safety Plan, with a total of 161 survey respondents indicating they regularly travel within the City of Lakeport. Responses from these users were then applied for the subsequent six survey questions.

Question 2: What is your primary mode of transportation?

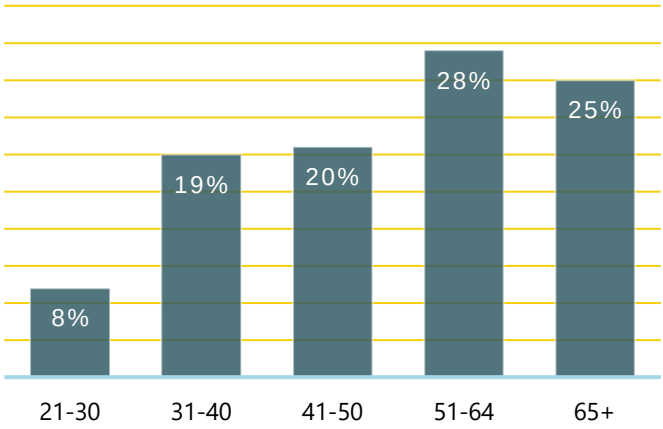


Question 3: What is your secondary mode of transportation?



Question 2 and 3 Summaries: An overwhelming majority of respondents use a personal vehicle as their primary mode of transportation (97%). For the secondary mode of transportation, respondents indicated walking the most with 50 percent, followed by personal vehicle (32%) and bicycle (6%).

Question 4: What is your age?



City of Lakeport Population Estimates	
Persons Under 5 Years	7.9%
Persons Under 18 Years	23%
Persons aged 18 Years to 65 Years	43.3%
Persons 65 Years and Over	25.8%

Question 4 Summary: The City of Lakeport is a small, incorporated city in Lake County, with an overall 2024 population estimate of 5,104.[8] The most survey responses came from those aged between 51 and 64-years-old, followed by those 65-years and older. In addition, the survey results generally aligned with the percentage of residents aged 65 years or older within the City.

Question 5: Please rank the following categories based on your personal level of concern.

Focus Areas	Rank/Priority
Distracted Driving	1
Pedestrian Safety	2
Impaired Driving	3
Intersection Safety	4
Bicycle Safety	5
Speeding	6
Lighting	7
Lane Departures	8
Other (Fill In)	9

Question 5 Summary: 'Distracted Driving' was ranked as the highest priority, followed by 'Pedestrian Safety'. Since the development of the *2021 City of Lakeport Local Road Safety Plan*, the top ranked emphasis area remained the same, but pedestrian safety increased in public priority. In addition, bicycle safety moved up in priority, impaired driving and speeding dropped, while lighting and lane departures remained the same. 'Other' results varied and included topics such as roadway maintenance pertaining to pavement and striping conditions, walkability concerns for pedestrians including the need for sidewalks to ensure stroller and wheelchair access, and speeding.

[8] U.S. Census Bureau QuickFacts: Lakeport city, California

Question 6: Which types of transportation safety improvements would be the most beneficial? Rank your top priorities in order.

Focus Areas	Rank/Priority
Better Street Lighting	1
Enforcement (ex: speeding, distracted driving, etc.)	2
Expanded Sidewalk Network	3
Intersection Improvements	4
More or Improved Pedestrian Crosswalks	5
Education Campaigns for Drivers or Pedestrians	6
Protected Bike Lanes	7
Traffic Calming	8
Other (Fill In)	9

Question 6 Summary: 'Better Street Lighting', 'Enforcement', and 'Expanded Sidewalk Network' were indicated as the top three priorities among survey respondents. 'Other' results varied and included topics such as roadway maintenance to improve pavement conditions and striping, speeding and enforcement, and the need for protected bike lanes and sidewalks for pedestrians,

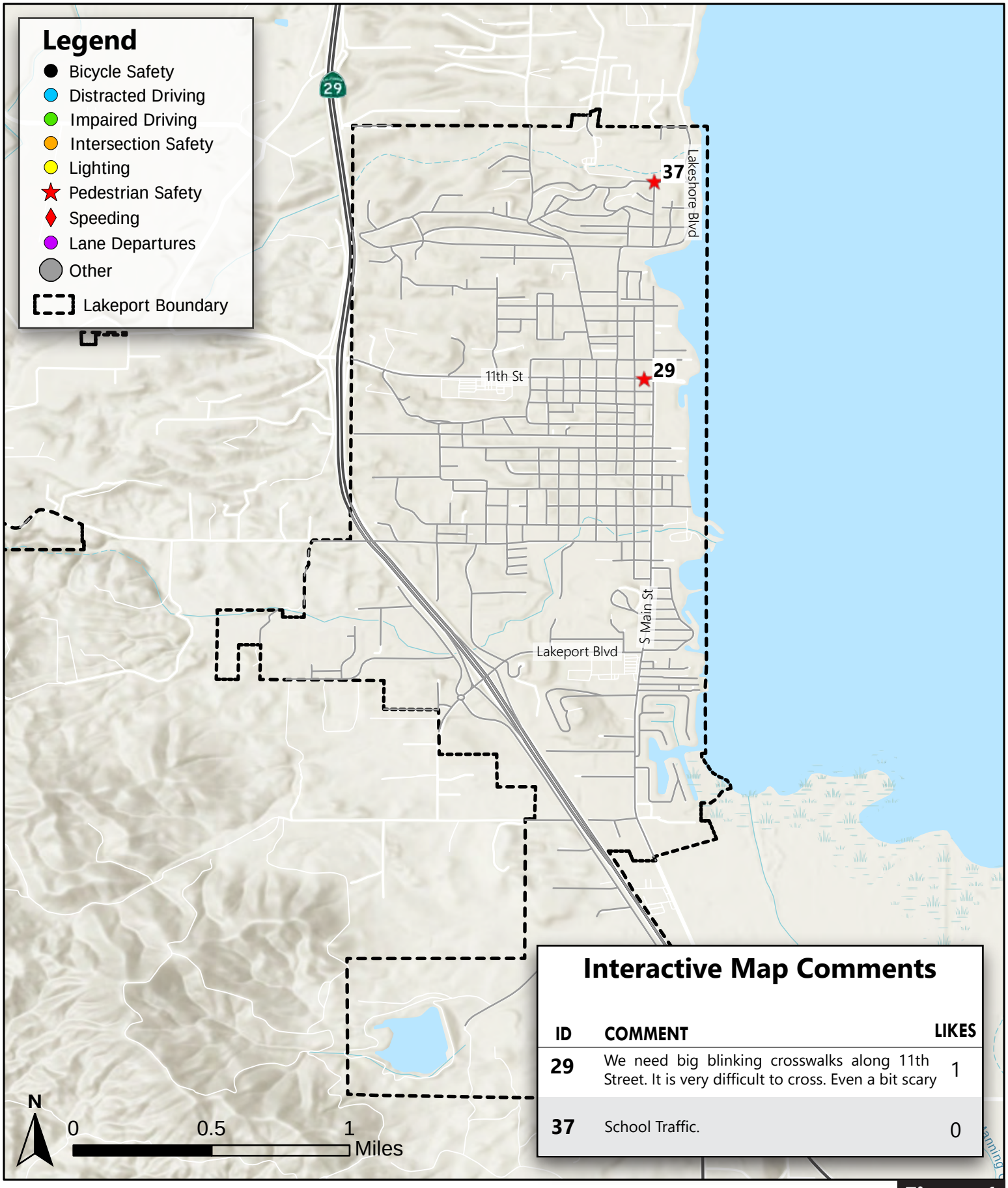
Question 7: Please provide any comments relating to transportation safety in Lake County below.

Open-ended comments from this question of the public outreach survey are provided in **Appendix B**. General comments ranged from road maintenance, lighting conditions, speeding and walkability concerns in Lakeport. Respondents expressed a need for more sidewalks throughout the City. Speeding and distracted driving concerns were noted on busy corridors such as Lakeshore Boulevard and Main Street, with pedestrian safety identified as a primary point of concern.

Summary of Key Areas

Furthermore, the results of the interactive map helped to pinpoint specific locations with safety concerns while assessing their relative priority through the ranked focus areas indicated through the public survey. Within the City of Lakeport, there were two comments relating to pedestrian safety – one on 11th Street between Forbes Street and N. Main Street and one at Lange Street/Giselman Street. These georeferenced comments are provided on **Figure 1**.

For more detailed information regarding public concerns, refer to **Appendix B** which includes open-response comments to Question 7 of the public outreach survey.



Interactive Map Comments

ID	COMMENT	LIKES
29	We need big blinking crosswalks along 11th Street. It is very difficult to cross. Even a bit scary	1
37	School Traffic.	0

Figure 1

Lakeport
Local Road Safety Plan

Interactive Public Outreach Map with Comments by Focus Area

GCW ENGINEERS \ SURVEYORS

N. Main Street / Third Street
Lakeport,, CA

CRASH DATA ANALYSIS

An in-depth analysis of the most recent five years of crash data was conducted to identify crash trends and high frequency crash intersections and roadway segments within the City of Lakeport. The crash data was analyzed to identify overall trends and to uncover key information relating to focus areas on local roads.

CRASH DATA ANALYSIS

Crash data records provide detailed information for each collision, including crash type, time of day, lighting conditions, alcohol involvement, and other contributing factors. Reviewing multiple years of crash data allows for the identification of recurring patterns and locations that may present safety concerns. Given the volume of available crash data, analysis typically begins at a high level (i.e., annual crash totals) and progresses to a more detailed review of crash characteristics and contributing factors, and ultimately to an evaluation of specific locations.

Methodology

Crash data for the most recent five years (2019-2023) for the City of Lakeport was obtained from California CHP database and utilized to identify crash trends and high frequency crash intersections and roadway segments.

Crash data records were initially evaluated for the location (intersection/road segment), facility ownership (State/Local), and crash type (Head-on, Vehicle-Pedestrian, Overturned, etc.). Further analysis evaluated the contributing factors including the lighting conditions, pedestrian actions, primary collision factors, and alcohol involvement. Analyzing crash data based on these multiple contributing factors helps to gain a more thorough understanding of specific safety issues and crash trends citywide.

Note Regarding Property Damage Only Crashes

- The CHP database contains PDO crashes, but it is understood that not all PDO crashes are reported to this site and the actual number of PDO crashes is potentially higher.
- The focus of the LRSP is on reducing serious injury and fatal crashes, however all crashes in the database are evaluated for a thorough investigation. Most categories are reported for both overall crashes and only serious injury and fatal crashes.

Overall

Reviewing the total number of crashes year by year helps to identify overarching crash trends and evaluate whether crashes are becoming more frequent. **Figure 2** shows the total number of crashes by year and the crash severity (fatal, serious injury, etc.) across the City of Lakeport between 2019 and 2023.

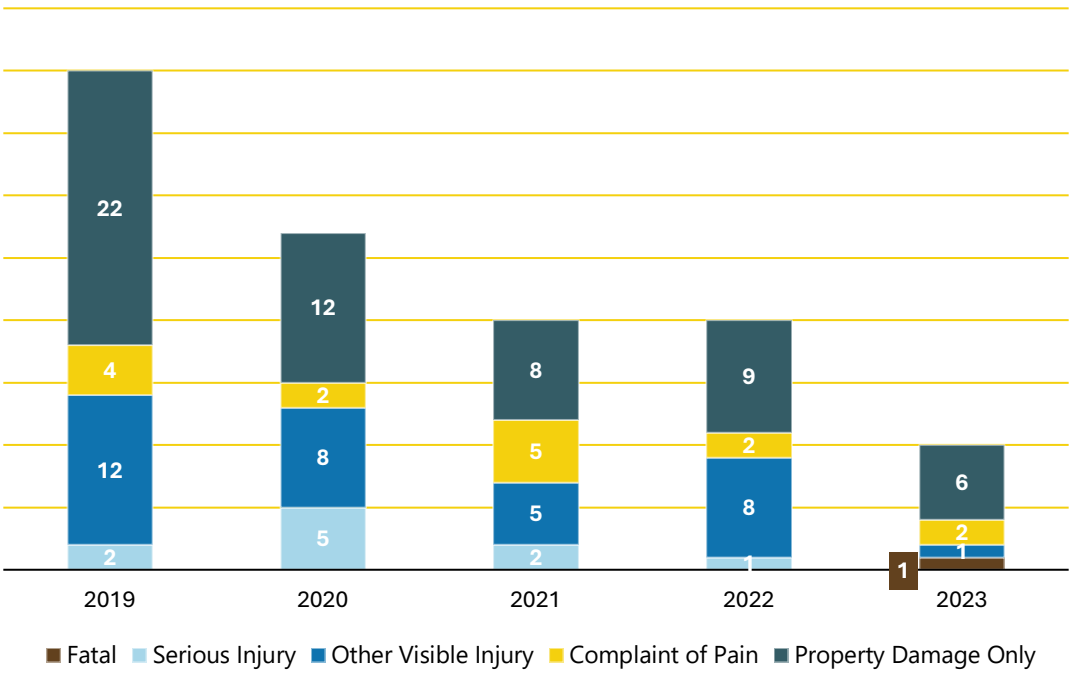


Figure 2. Lakeport Crashes by Severity (2019-2023)

A total of 117 crashes occurred in the City of Lakeport between 2019 and 2023. Over this five-year period, a total of 57 crashes were 'Property Damage Only', 59 resulted in an injury (Complaint of Pain, Other Visible Injury, or Serious Injury), and 1 resulted in a fatality. Less than 10 percent (11 crashes) resulted in severe injury and fatality. The data shows a downward trend in the analysis period. In comparison to the previous data from (2015-2019), there has also been a reduction in overall crashes and in injury crashes.

Figures 3-5 show the crash data graphically by location of the total crashes by severity, a heatmap, and severe injury and fatal crashes.

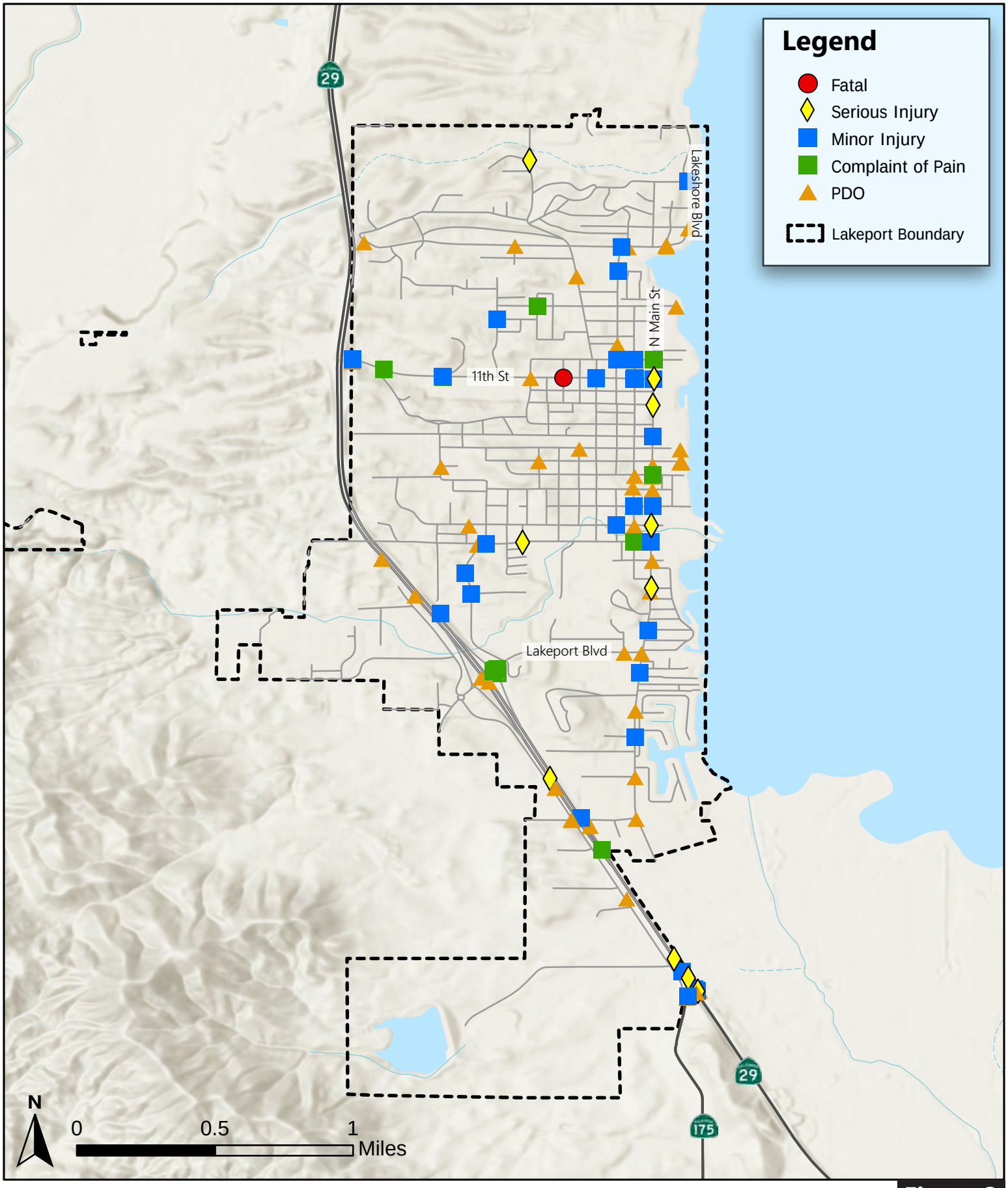


Figure 3

Lakeport
Local Road Safety Plan
Crash Locations by Severity

GCW ENGINEERS \ SURVEYORS

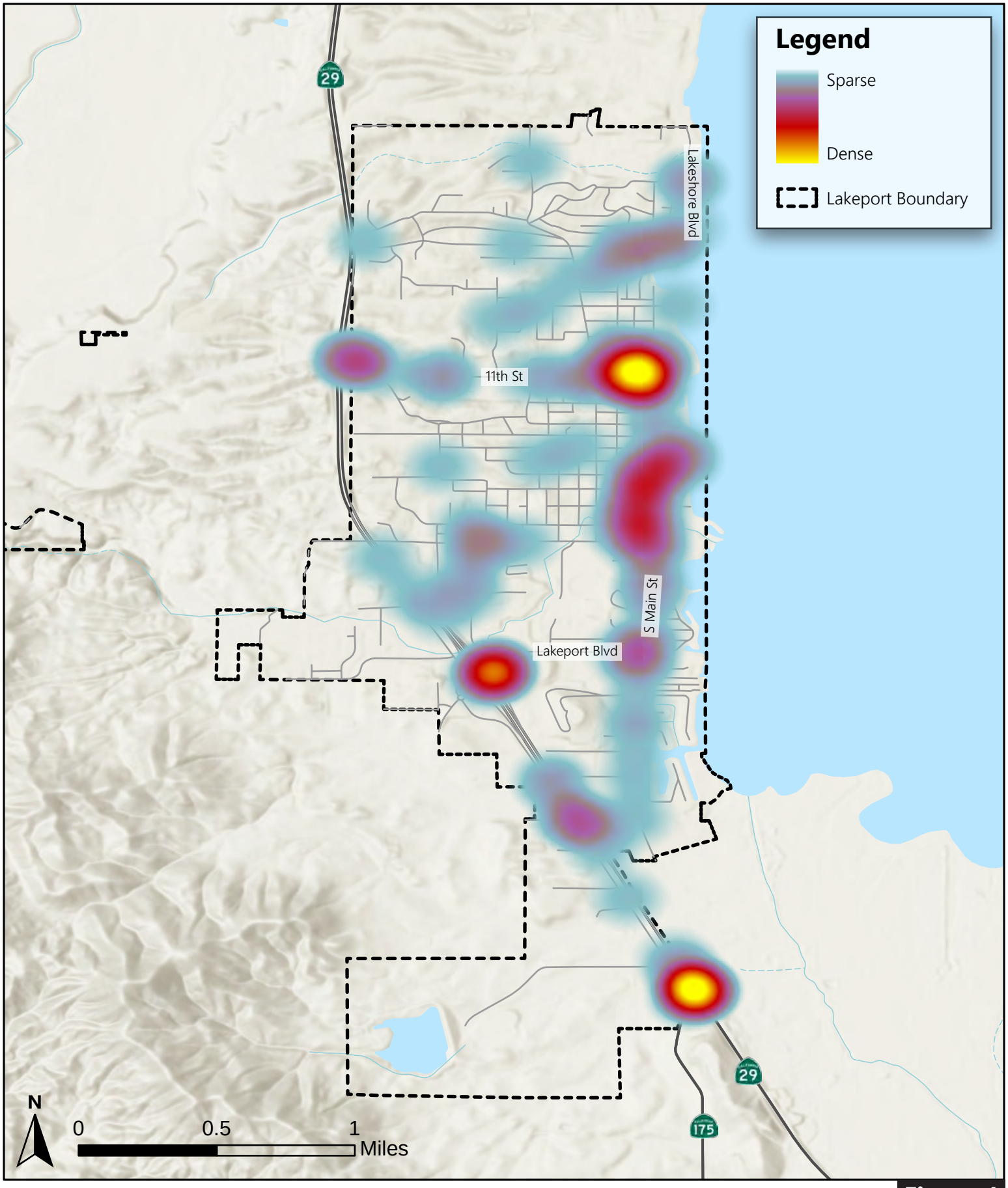


Figure 4

Lakeport
Local Road Safety Plan
Crash Heatmap

GCV ENGINEERS \ SURVEYORS

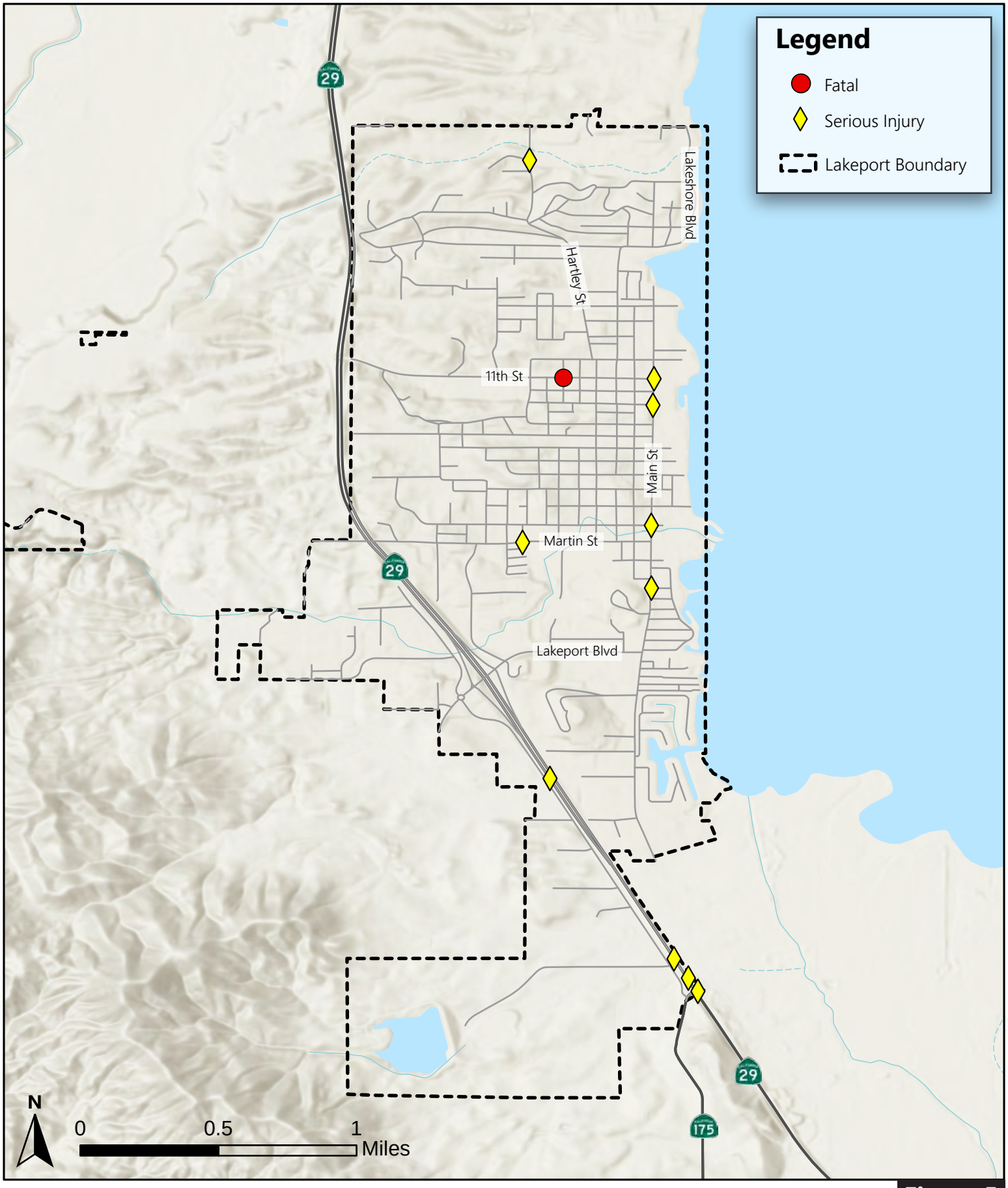


Figure 5

Lakeport
Local Road Safety Plan
Fatal and Serious Injury Crashes

GCW ENGINEERS \ SURVEYORS

Collision Factors

Crash records typically include a 'Primary Collision Factor' (PCF) which can help to identify systemic and location specific crash trends. A PCF represents the leading factor that contributed to the crash but can often provide little detail into the cause of the crash. The top five PCFs and associated percentages which may indicate a crash trend are shown in **Figure 6**, and the top PCFs resulting in a fatal and serious injury are shown in **Figure 7**.

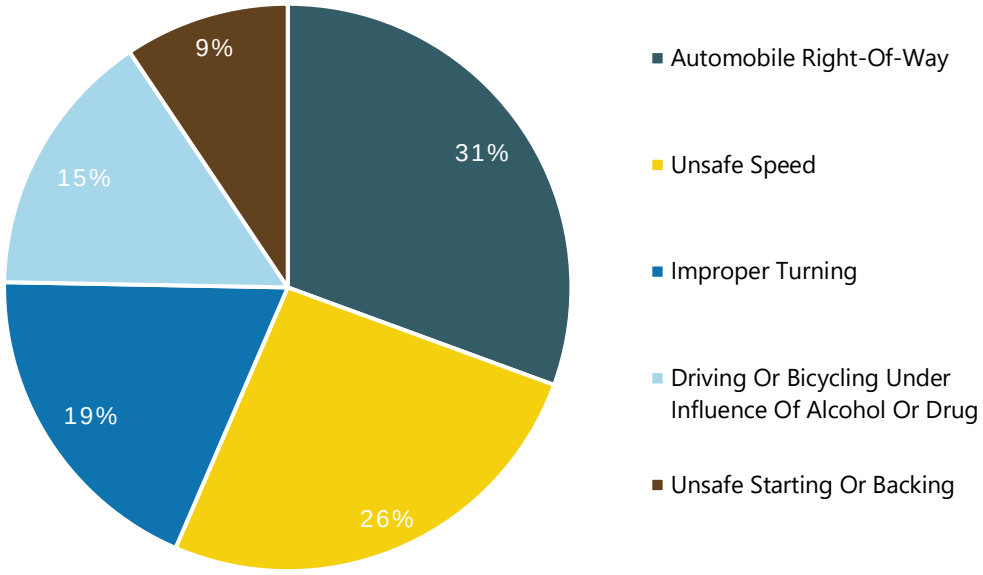


Figure 6. Lakeport Primary Collision Factor (2019-2023)

For the City of Lakeport, the top PCFs are: Automobile Right of Way, Unsafe Speed, Improper Turning, Driving or Bicycling Under Influence of Alcohol Or Drugs, Unsafe Starting or Backing. The PCFs are listed in order of magnitude starting with most common.

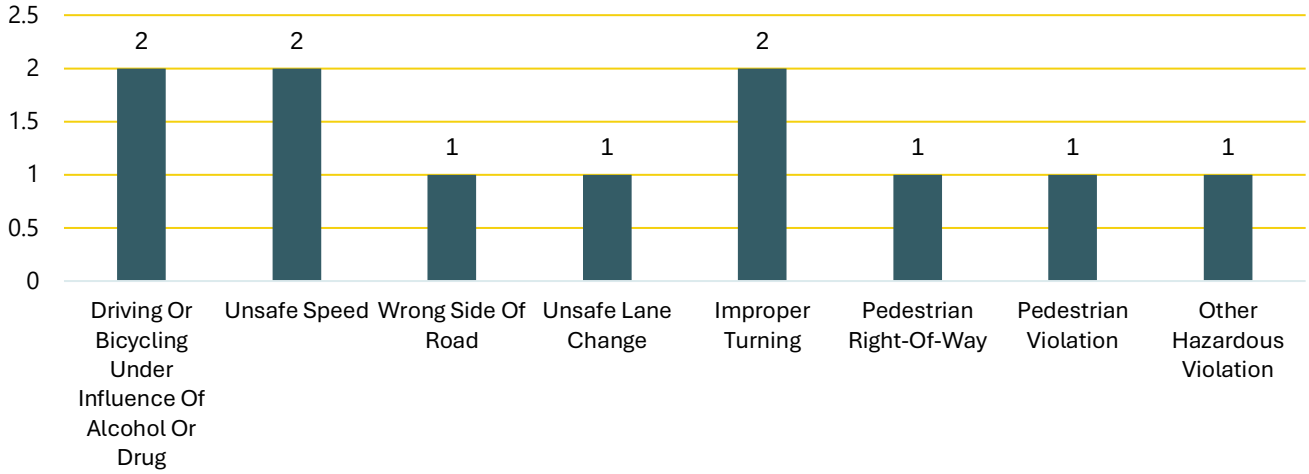


Figure 7. Lakeport Primary Collision Factor – Fatal & Serious Injury Only (2019-2023)

Lakeport had 11 Fatal or Serious Injury crashes which spanned eight PCFs. The three top PCF's for fatal or serious injury crashes, with two crashes attributed to each, were Driving or Bicycling Under Influence of Alcohol or Drugs, Unsafe Speed, and Improper turning. The other five PCF's each had one crash associated with them.

Top Primary Collision Factors (2019-2023), Serious Injury and Fatal Crashes

- Driving or Bicycling Under the Influence of Alcohol or Drugs
- Unsafe Speed
- Improper Turning

In comparison to the *2021 City of Lakeport Local Road Safety Plan*, the top PCF's generally remained the same for all crashes as well as fatal and serious injury crashes.

Figures 8-11 provide mapped locations of crashes where driving under the influence, speeding, and distracted driving were indicated as collision factors.

Table 1 provides the total crashes with *Unsafe Speed* indicated as the PCF, while **Table 2** identifies the locations of crashes with *Unsafe Speed* indicated as the PCF. **Figures 8-9** show unsafe speed crashes locations by severity and on a heatmap.

Table 1. Unsafe Speed Crashes

Crash Severity						
Crash Type	**Fatal**	**Injury (Severe)**	**Injury (Other Visible)**	**Complaint of Pain**	**PDO**	**Total**
Intersection	0	1	3	1	2	7
Roadway Segments	0	1	4	1	9	15

The data analysis indicates that 22 crashes had *Unsafe Speed* listed as the PCF. This was the second most common PCF for all crashes. There were zero fatalities related to unsafe speed in the City of Lakeport, but there were two serious injury crashes.

Table 2. Unsafe Speed Locations

Primary Road	Secondary Road	Severity	Location	Map Votes
South Main St	Grace Ln	Injury (Other Visible)	Roadway	0
SR 29 S/B	Lakeport Blvd	Property Damage Only	Roadway	0
Hartley St	19th St	Property Damage Only	Roadway	0
South Main St	E St	Injury (Severe)	Intersection	0
Lakeshore Blvd	Lange St	Injury (Other Visible)	Intersection	0
SR 29 N/B to 11th St	11th St	Property Damage Only	Roadway	0
4th St	Park St	Property Damage Only	Intersection	0
Bevins St	Bevins Ct	Injury (Other Visible)	Intersection	0
North Main St	1st St	Injury (Other Visible)	Intersection	0
Armstrong St	Armstrong St 1095	Property Damage Only	Roadway	0
11th St	Central Park Ave	Complaint Of Pain	Intersection	0
Lakeshore Blvd	Ashe St	Property Damage Only	Intersection	0
SR 29 N/B to 11th St	11th St	Property Damage Only	Roadway	0
SR 29	Lakeport Blvd	Injury (Other Visible)	Roadway	0
SR 29	SR 175 Hopland	Injury (Other Visible)	Roadway	0
SR 29	SR 175	Injury (Other Visible)	Roadway	0
SR 29 S/B	Lakeport Blvd	Property Damage Only	Roadway	0
SR 29	Lakeport Blvd	Injury (Severe)	Roadway	0
SR 175 Extension	SR 29	Property Damage Only	Roadway	0
SR 29	SR 175 Extension	Property Damage Only	Roadway	0
SR 29 N/B to Lakeport Blvd	Lakeport Blvd	Complaint Of Pain	Roadway	0
SR 175 Extension	SR 29	Property Damage Only	Roadway	0

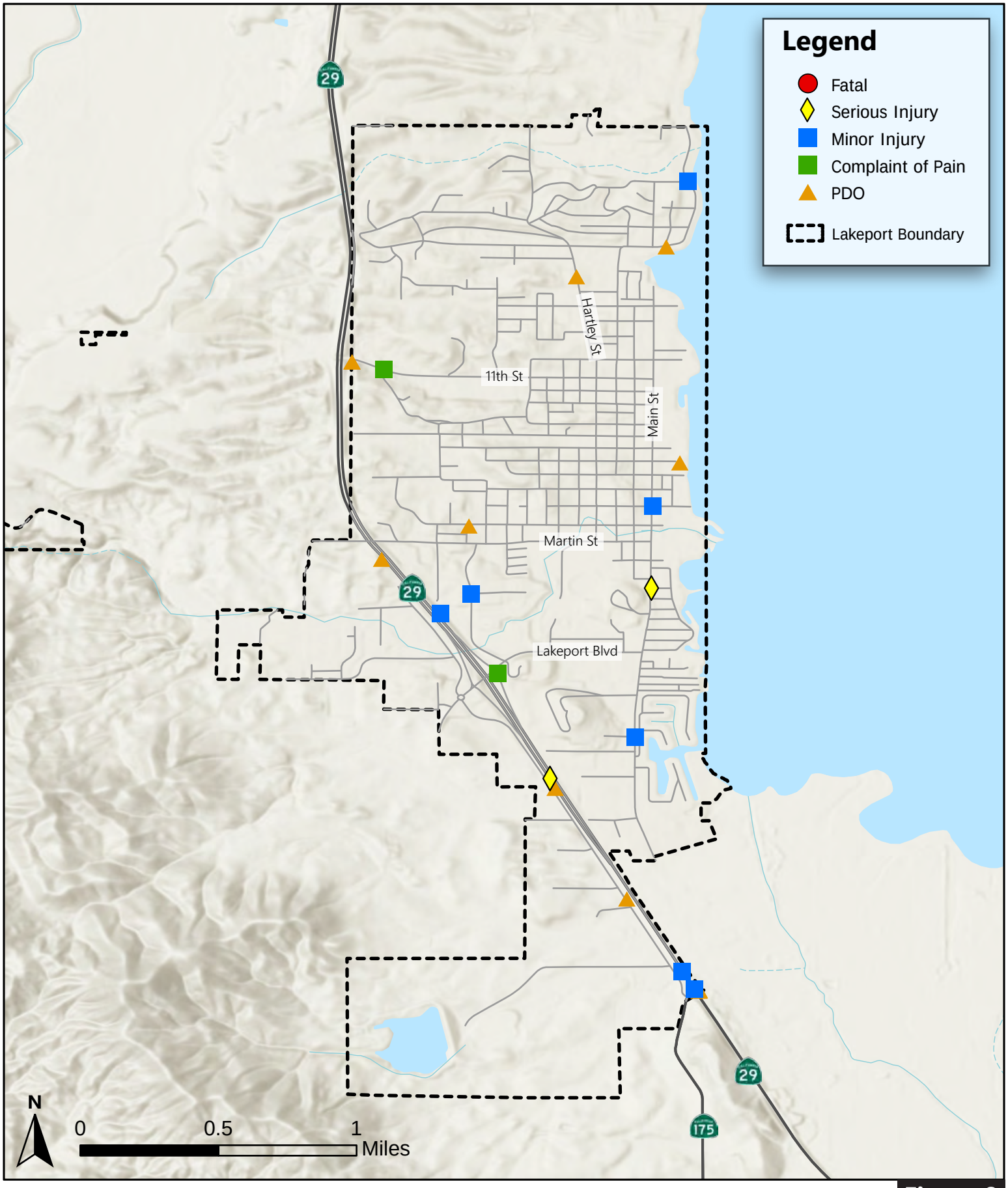


Figure 8

Lakeport
Local Road Safety Plan
Unsafe Speed Crashes by Severity

GCW ENGINEERS \ SURVEYORS

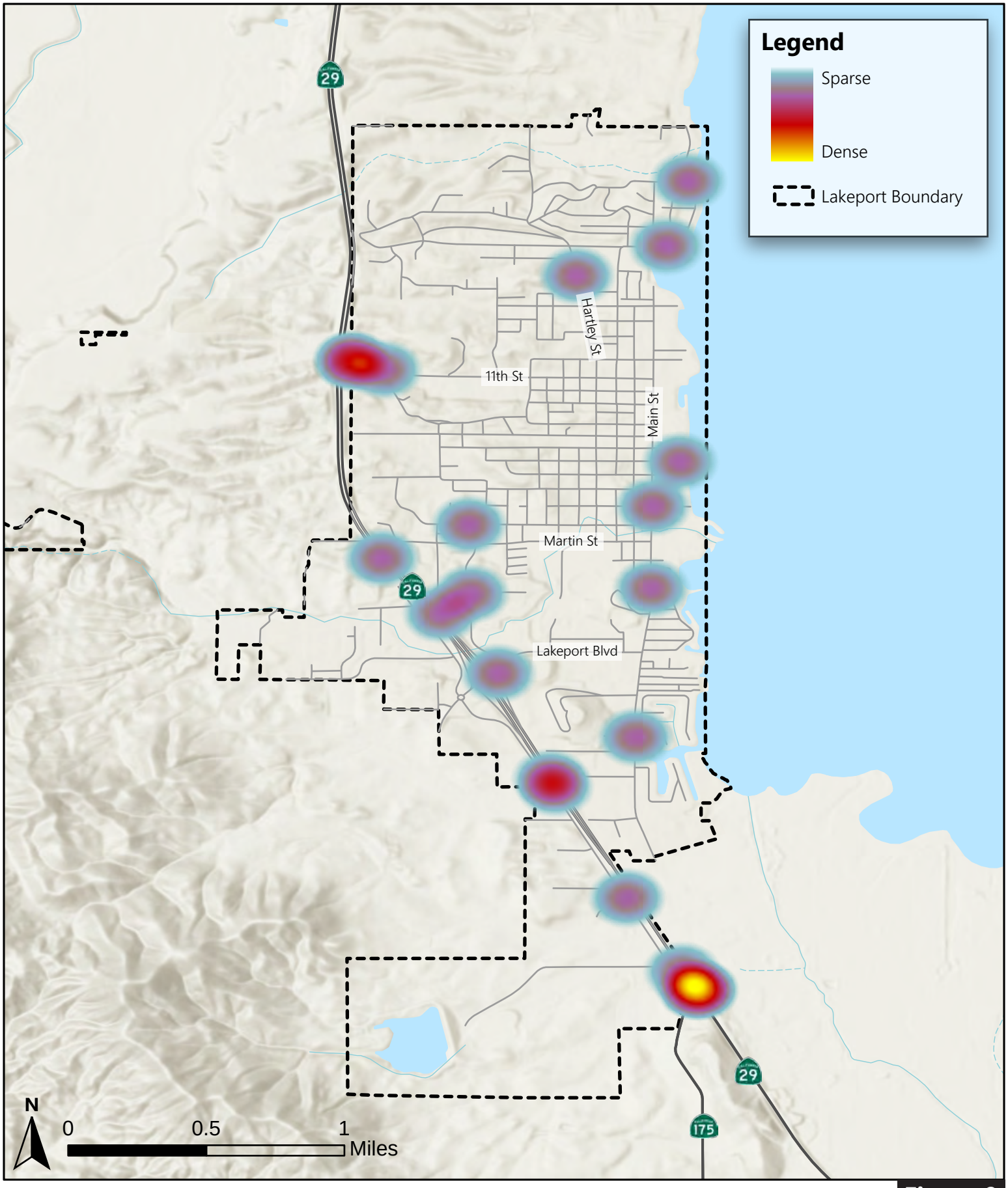


Figure 9

Lakeport
Local Road Safety Plan
Unsafe Speed Crashes Heatmap

GCW ENGINEERS \ SURVEYORS

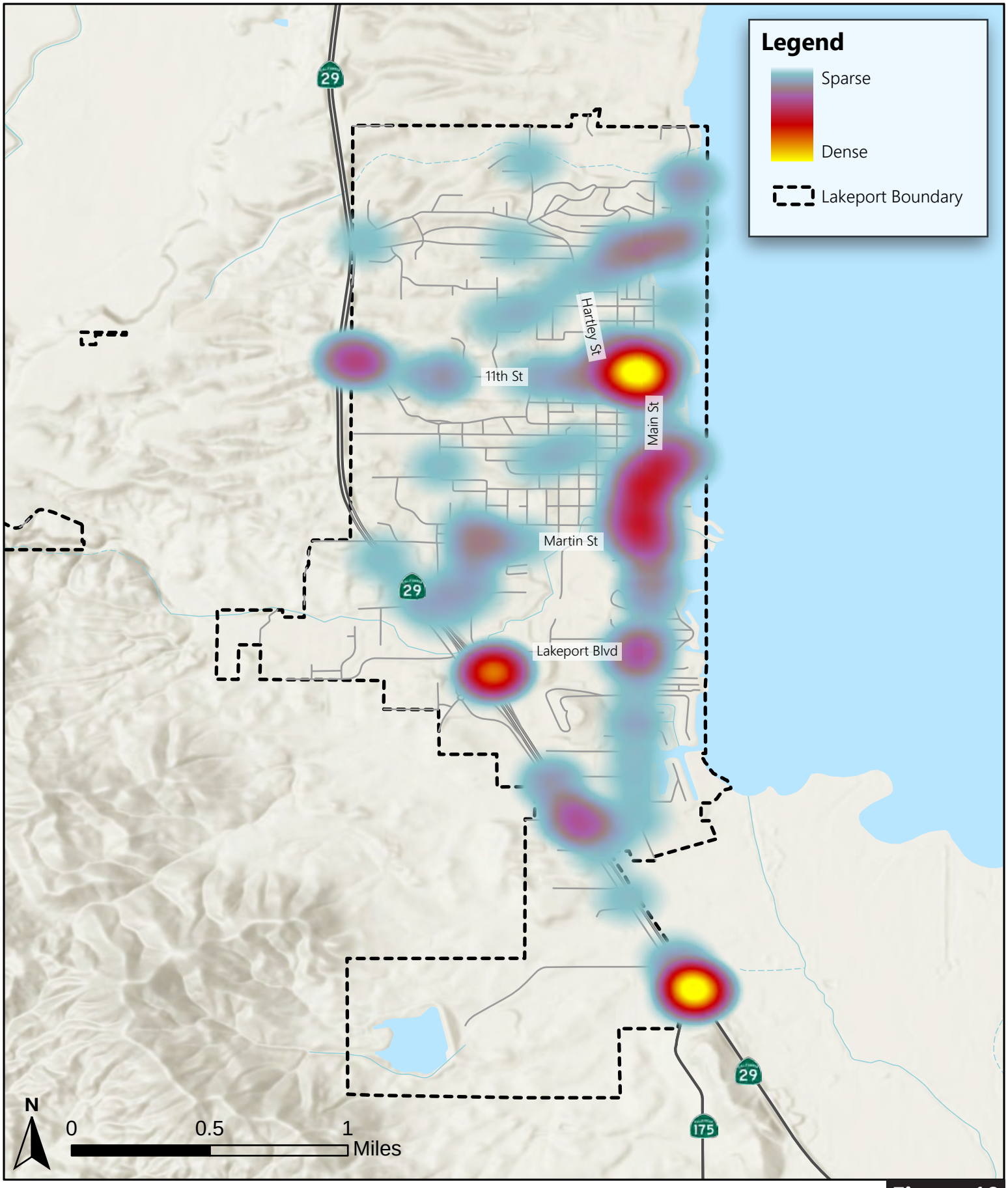


Figure 10

Lakeport
Local Road Safety Plan
Impaired Crashes Heatmap

GCW ENGINEERS \ SURVEYORS

As shown on **Figures 8**, concentrated areas of speeding-related crashes are noted along State Route 29 through Lakeport. No fatalities occurred, but two severe injury crashes occurred at the following locations: South Main Street/E Street and SR 29/Lakeport Boulevard. The heatmap on **Figure 9** shows one distinct hot spot where crashes occurred with unsafe speed listed as the PCF.

- Hot Spot 1: SR 29 and SR 175

As shown on **Figure 10**, concentrated areas of impaired crashes are highest on State Route 29 and Main Street at various intersections. Impairment was one of the top PCFs in severe injury and fatal crashes and was attributed to 11 percent of all crashes and 15 percent of severe injury and fatal crashes. Crashes involving impairment were one and a half times more likely than non-impaired crashes to result in severe injury or fatality. Thirty (30) percent of impaired crashes occurred on a Wednesday compared to 17 percent on average for any given day.

Additionally, crash data typically does not show distracted driving as a PCF; however, many crashes are at least partially a result of distracted driving which was indicated as the highest-ranking safety concern among the Lakeport community in the public outreach.

As presented in **Table 3** and **Figure 11**, distracted driving was a factor in 19 crashes in the City of Lakeport. The newest crash records include an attribute for cellphone usage and inattentive driving, which was included in the presented data.

Table 3. Distracted Driving by Severity and Location

Crash Severity						
Crash Type	**Fatal**	**Injury (Severe)**	**Injury (Other Visible)**	**Complaint of Pain**	**PDO**	**Total**
Intersection	0	0	5	2	4	11
Roadway Segments	0	0	4	0	4	8

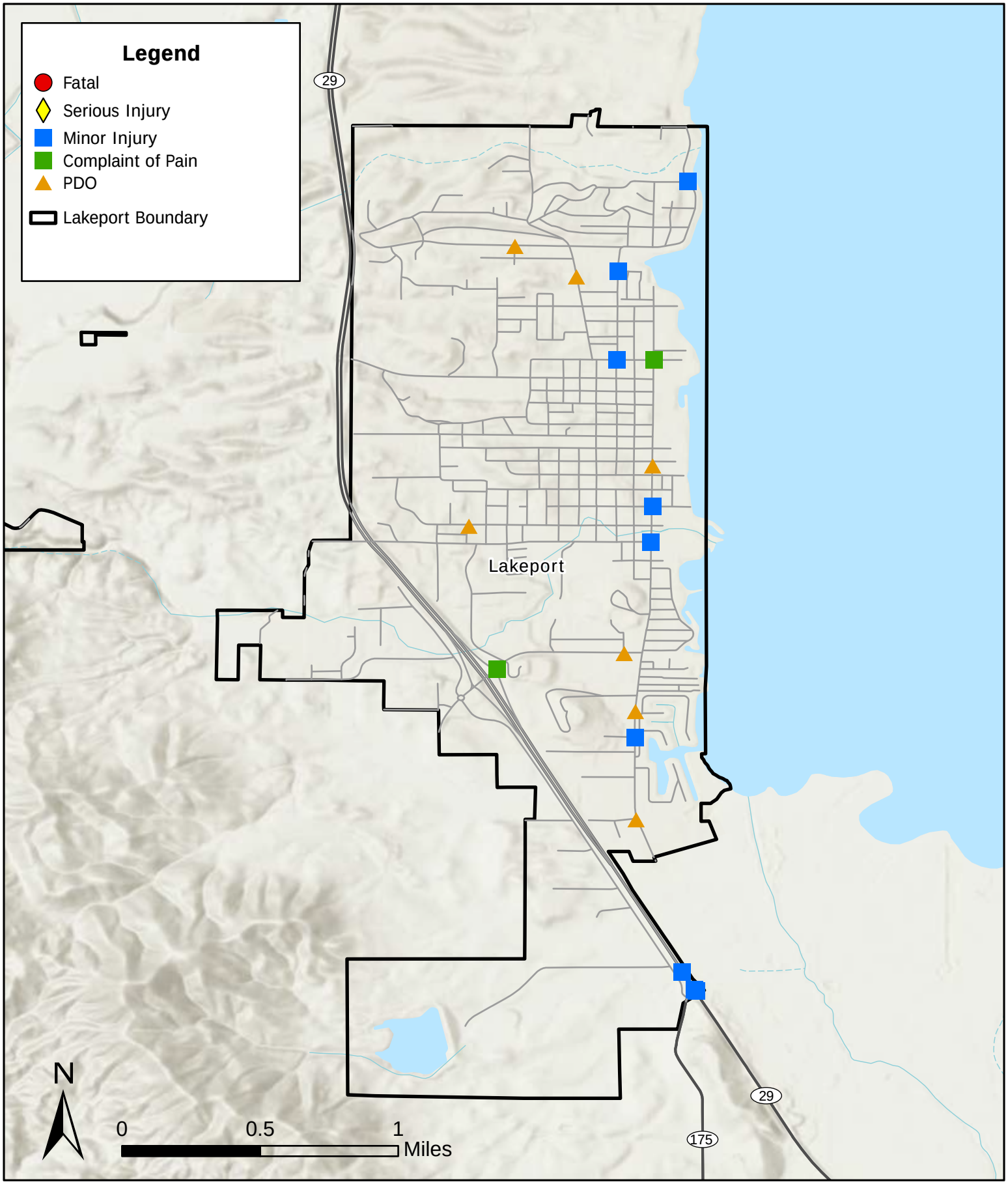


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Figure 11

Lakeport

Local Road Safety Plan

Distracted Driving Crash Locations By Severity

Crash Types

The crash types are shown in **Figure 12** for all crashes, and **Figure 13** for severe and fatal crashes.

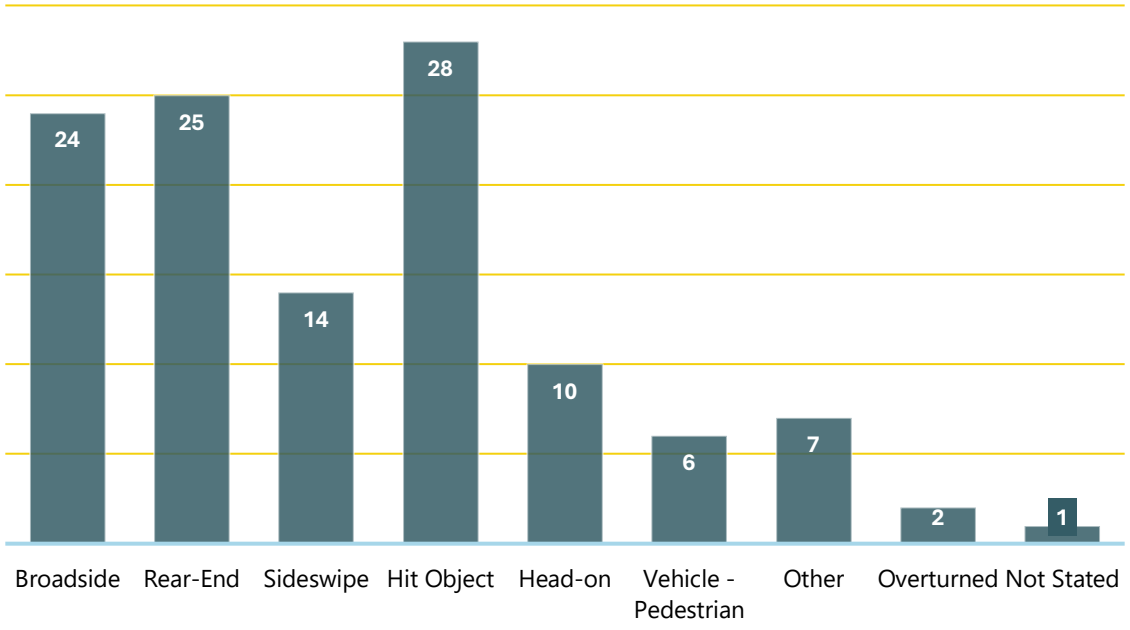


Figure 12. Lakeport Crash Types (2019-2023)

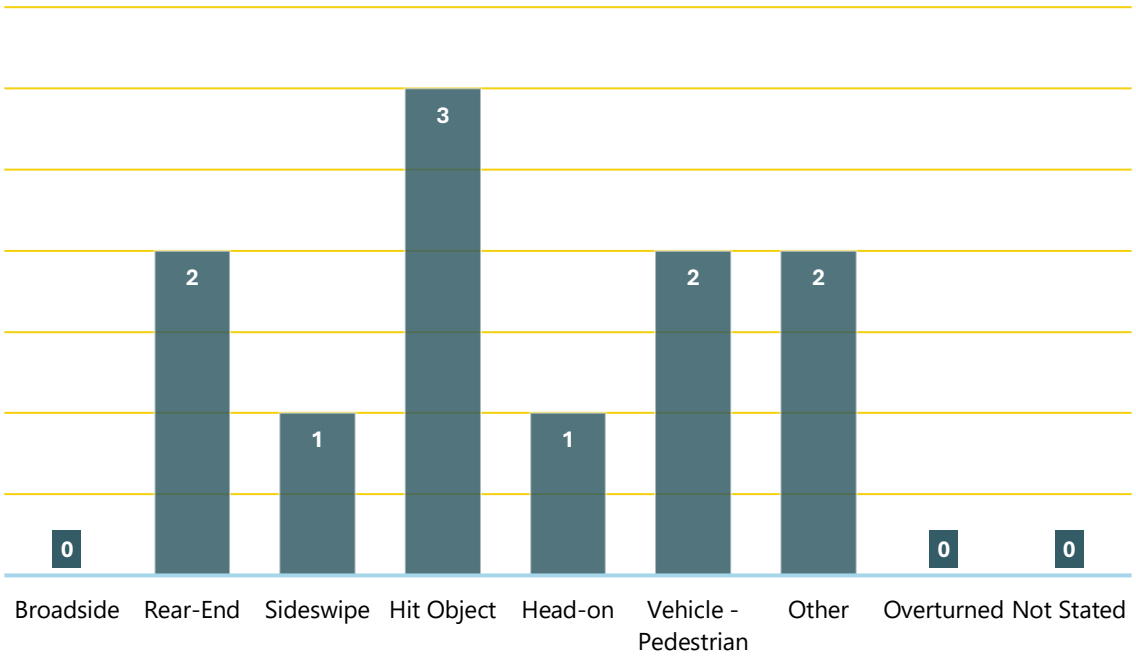


Figure 13. Lakeport Crash Types - Fatal & Serious Injury Only (2019-2023)

As shown in **Figures 12-13**, Hit Object was the most common crash type. Hit Object, Vehicle-Pedestrian, Rear-End, and Other had the most occurrences of severe injury or fatal crashes. The most common crash type for all crashes between 2019 and 2023 was Hit Object, which represents 24 percent of all crashes and 27 percent of all fatal and serious injury crashes. Rear-End was the second most common crash type at 21 percent of all crashes. Rear-End, Vehicle-Pedestrian, and Other each had two fatal and serious injury crashes attributed.

Facility

Crashes by severity were analyzed based on location (intersections verses roadways) as well as roadway ownership. **Table 4** presents the total crashes and the severe injury and fatal crashes at intersections and on roadways, as indicated in the database as intersections 'yes/no'.

Table 4. Intersection and Roadway Crashes (2019-2023)

	Intersections	Roadways	Total
Total Crashes	84	33	117
Percent of Total Crashes	71.8%	28.2%	100%
Total Severe Injury and Fatal Crashes	7	4	11
Percent of Severe Injury and Fatal Crashes	63.6%	36.4%	100%

As indicated in **Table 4**, most crashes were identified as intersection related, accounting for approximately 72 percent of the total crashes and nearly 64 percent of the severe injury and fatal crashes.

Intersections

The crash types and collision factors contributing to crashes were further analyzed by intersections to determine trends, as shown in **Figures 14-16**.

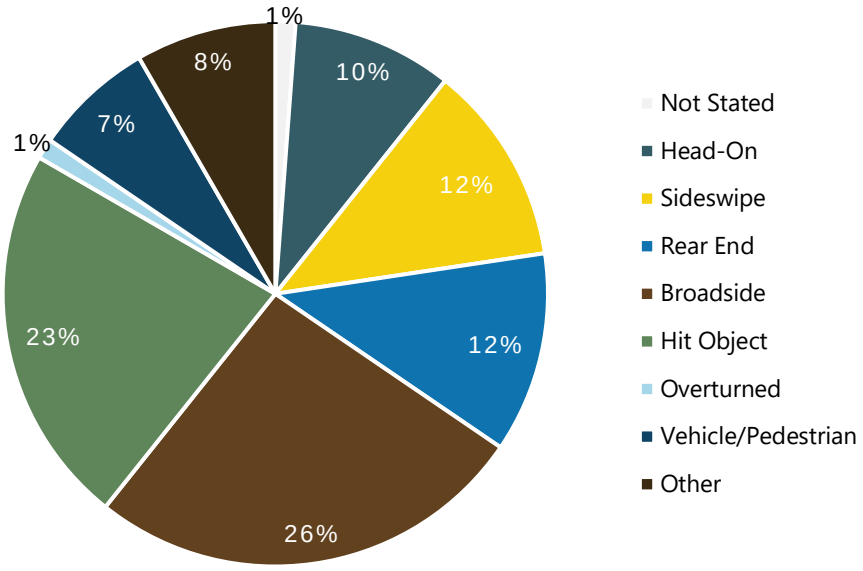
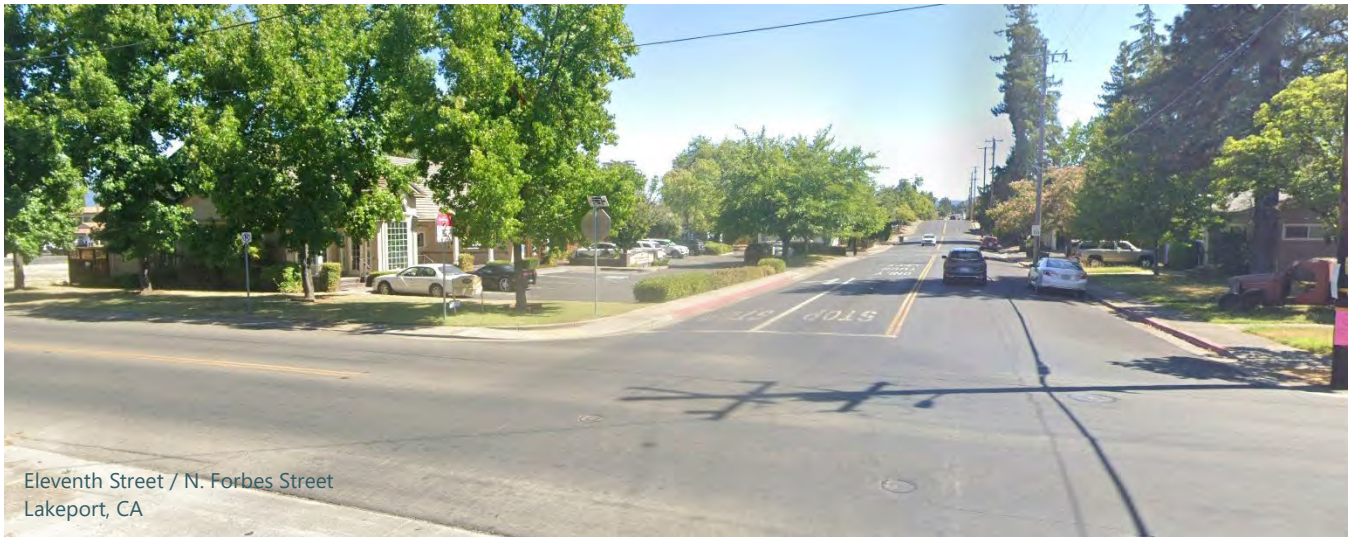


Figure 14. Intersection Crashes by Type

As shown in **Figure 14**, the most common crash type at intersections is *Broadside*, accounting for 26 percent of crashes at intersections. The location of intersection crashes by severity are presented on **Figure 15,** followed by **Figure 16** which shows the following intersection hot spot**:**

- Hot Spot 1: Eleventh Street / N. Forbes Street



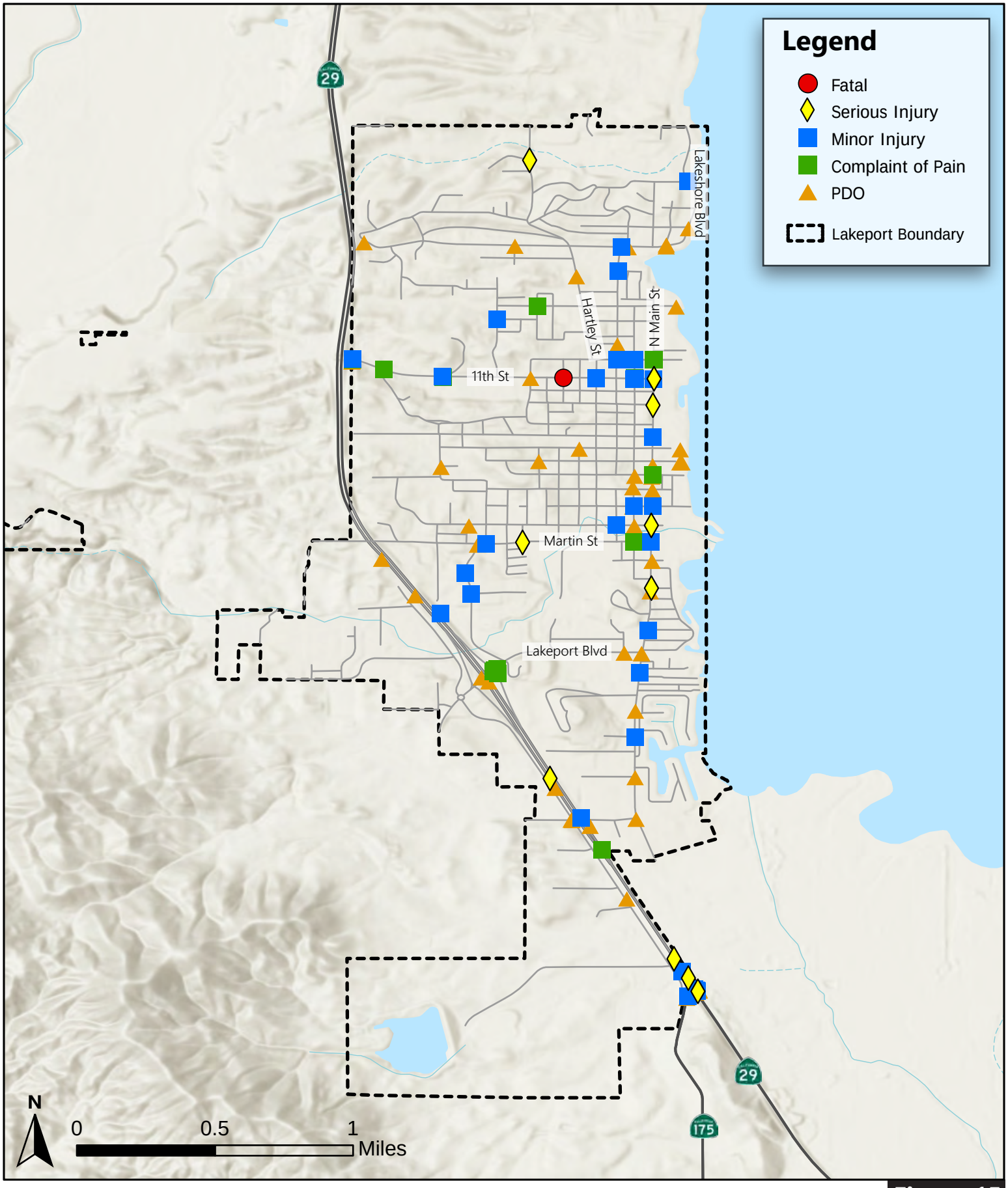


Figure 15

Lakeport
Local Road Safety Plan
Intersection Crashes by Severity

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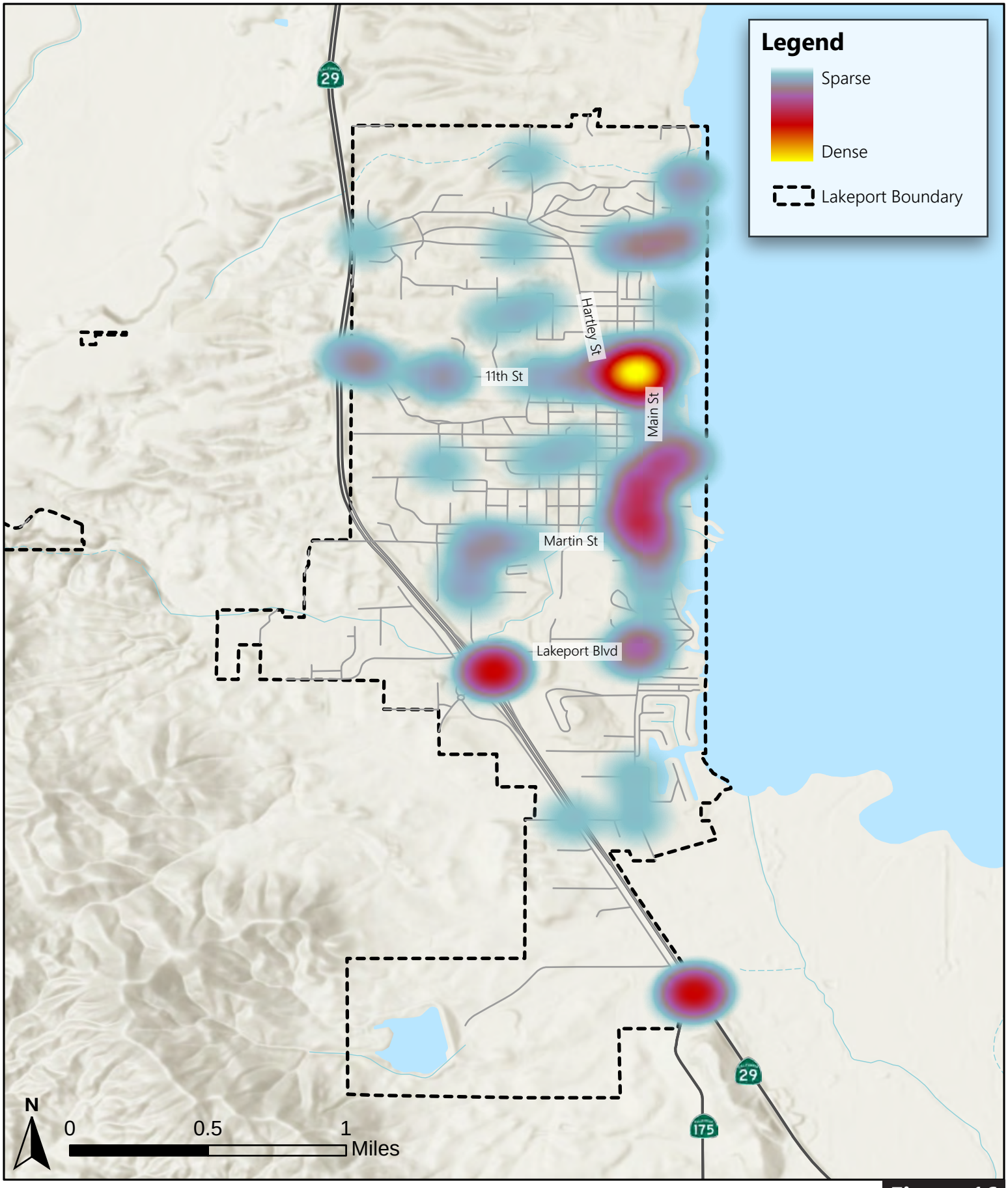

Figure 16

Lakeport
Local Road Safety Plan
Intersection Crash Heatmap

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As shown on **Figure 16**, the N. Forbes Street/Eleventh Street intersection had the highest total crashes. The intersections with at least one local roadway with the highest crash impacts considering crash severity and number of crashes are listed in **Table 5**. It is noted that the intersections of the major state highways had higher instances of crashes as expected, given the higher vehicular use.

Table 5. Top Crash Intersections

Intersection	Fatal	Injury (Severe)	Injury (Other Visible)	Injury (Complaint of Pain)	PDO	Total	Intersection Control	Map Votes
N. Forbes St/11th St	0	0	5	2	0	7	Unsignalized	0
Clearlake Ave/N. Main St	0	0	0	2	1	3	Unsignalized	0
Lakeport Blvd/SR 29 Ramp	0	0	0	3	3	6	Unsignalized	0
SR 29/SR 281	0	1	1	0	3	5	Signalized	0

As shown in **Table 5**, most of these crashes occurred at unsignalized intersections. This table represents the intersections that may benefit the most from safety improvements. Potential countermeasures are evaluated in subsequent sections.

Roadways

The crash types and collision factors contributing to all crashes is presented in **Figure 17** and were further analyzed to determine crash severity trends by roadway ownership (i.e., state verses local roads) in **Table 6**.

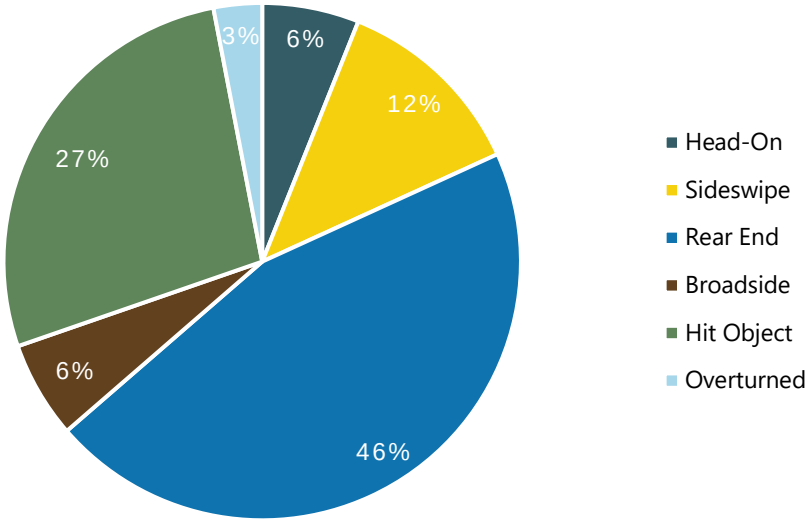

Figure 17. Roadway Crashes by Type

The leading types of roadway crashes are *Rear End* followed by *Hit Object*. Lane Departure (head-on, hit object, sideswipe, and overturned) type crashes accounted for approximately 48 percent of crashes on roadways and 46 percent of the severe injury and fatal crashes. Of the lane departure type crashes, 14 percent occurred on a state highway. In addition, **Table 6** indicates that the majority of total crashes in the City occurred on local roads, which included one fatality and six severe injury crashes.

Table 6. Crash Severity by Roadway Ownership (2019-2023)

Ownership	Fatal		Serious Injury		Other Visible Injury		Complaint of Pain		Property Damage Only	
	Crashes	%	Crashes	%	Crashes	%	Crashes	%	Crashes	%
State Roads	0	0%	4	40%	6	17.6%	5	33.3%	18	31.6%
Local Roads	1	`100%	6	60%	28	82.4%	10	66.7%	39	68.4%
Total	1	100%	10	100%	34	100%	15	100%	57	100%

Figures 18-19 show the difference in crash types and collision factors based on roadway ownership – State Highways and Non-State Highways.

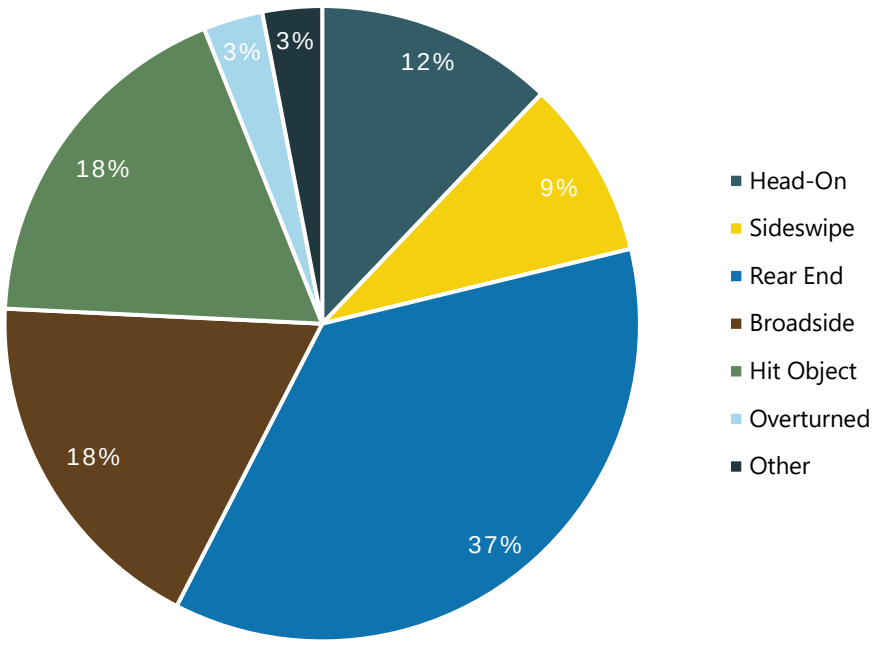

Figure 18. State Highway Crash Types

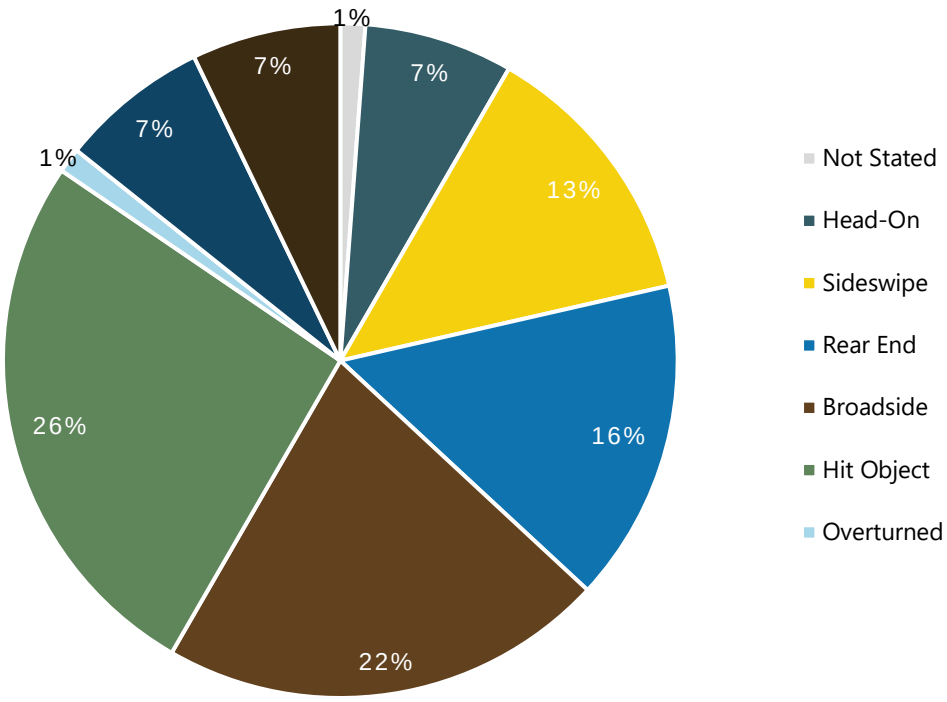

Figure 19. Non-State Highway Crash Types

The leading collision factor on state highways was Rear End, while the majority of crashes on non-state highways are Hit Object, Broadside, and Rear End.

Figure 20 presents the locations of roadway crashes and roadway segments with the highest crashes per mile and **Figures 21-22** show heatmaps of crashes occurring on state highways and non-state highways respectively.

SR 29 Ramp to Lakeport Boulevard
Lakeport, CA

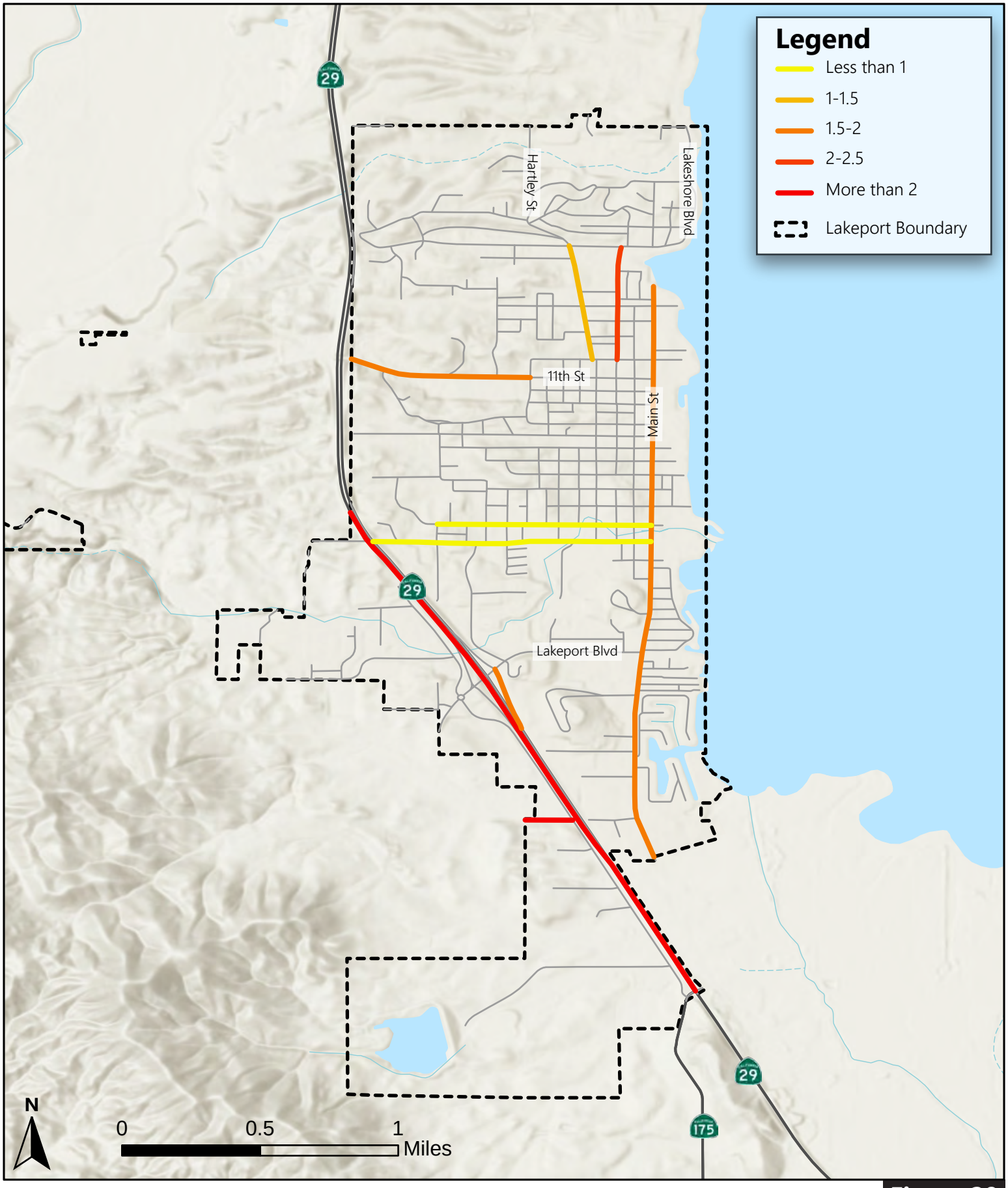

Figure 20

Lakeport
Local Road Safety Plan
Roadway Crashes Per Mile

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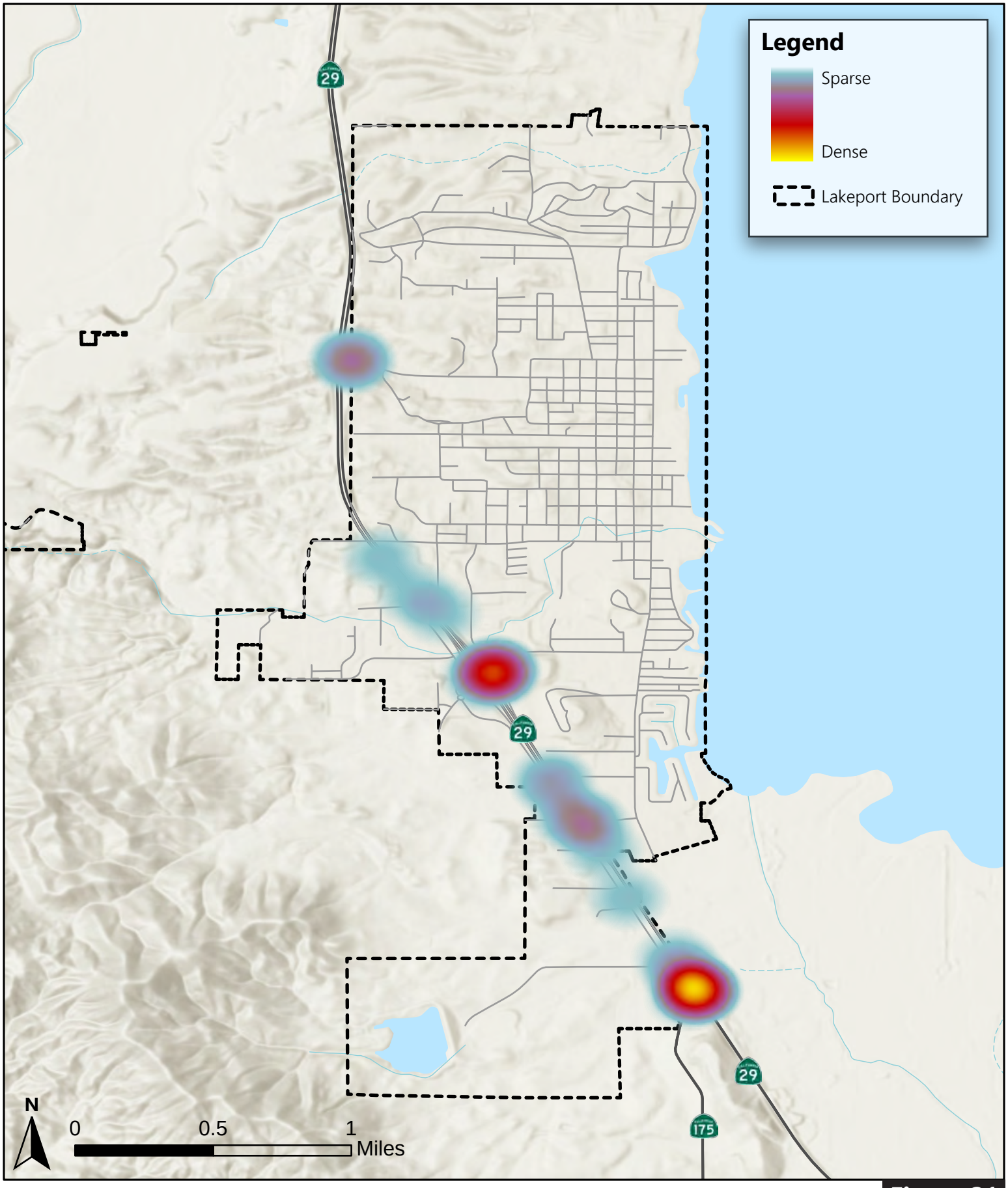

Figure 21

Lakeport
Local Road Safety Plan
State Highway Crash Heatmap

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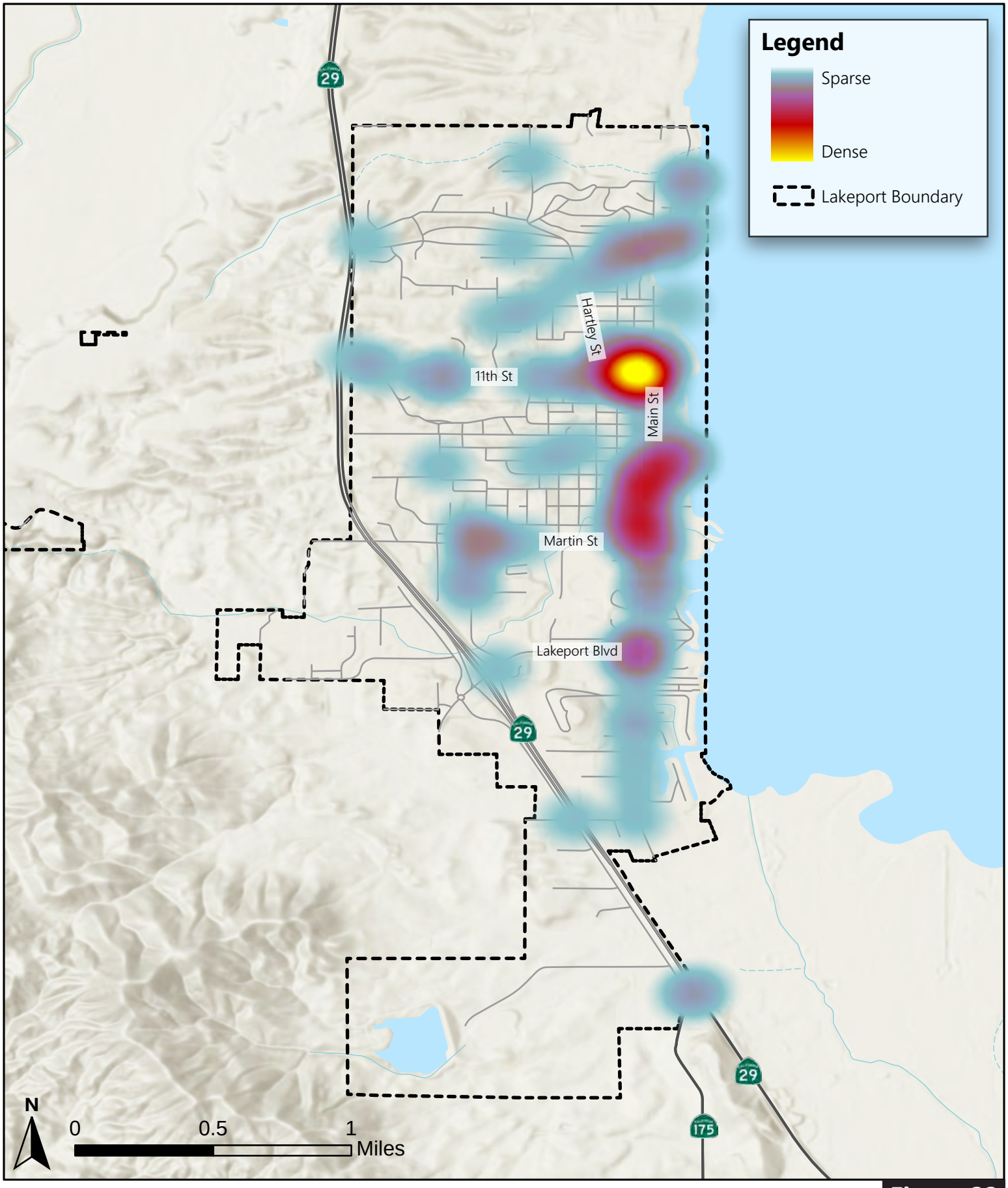

Figure 22

Lakeport
Local Road Safety Plan
Non-State Highway Crash Heatmap

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Pedestrian and Bicycle

As identified through public outreach, pedestrian safety is the second highest priority safety concern among Lakeport residents. **Table 7** and **Figure 23** present the bicycle- and pedestrian-involved crashes by crash severity. A total of 11 pedestrian and bicycle-involved crashes occurred in Lakeport between 2019 and 2023, one of which was fatal and two resulted in serious injury.

Table 7. Percent of Bicycle- and Pedestrian-Involved Crashes

Crash Severity	Pedestrian Involved Crashes	Bicycle Involved Crashes	All Crashes	Pedestrian Involved Percent of all Crashes	Bicycle Involved Percent of all Crashes
Fatal	1	0	1	100.0%	0.0%
Serious Injury	1	1	10	10.0%	10.0%
Other Visible Injury	5	0	34	14.7%	0.0%
Complaint of Pain	2	1	15	13.3%	6.7%
Property Damage Only	0	0	57	0.0%	0%
Total	9	2	117	7.7%	1.7%

As shown in the table, crashes involving a bicyclist or pedestrian account for just over nine percent of the overall crashes. There was only one fatality in the past five years, which was pedestrian-involved. Bicycle- and pedestrian-involved crashes are three times more likely to result in serious injury or fatality as compared to overall crash trends. As shown in **Figure 23**, 27 percent of pedestrian and bicycle crashes resulted in severe injury or fatality.

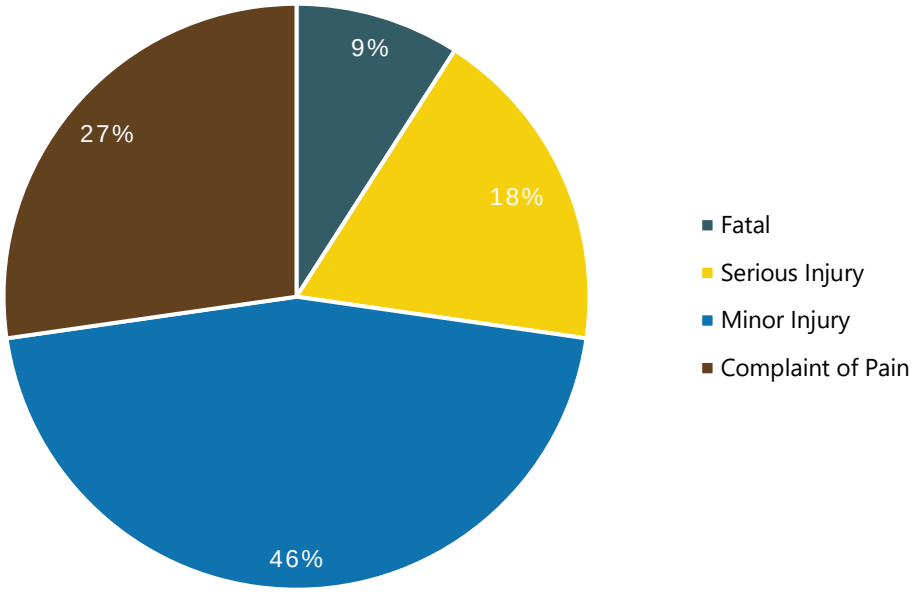


Figure 23. Bicycle and Pedestrian Crashes by Severity

Figure 24 provides an overview of the bicyclist and pedestrian crashes by action. Pedestrian crashes were more common at intersections. Half of the bicycle- and pedestrian-involved crashes occurred with 'Crossing in Crosswalk at Intersection' indicated as the action, while 20 percent occurred in the 'Road, Including Shoulder,' and 20 percent occurred 'Not in Road'.

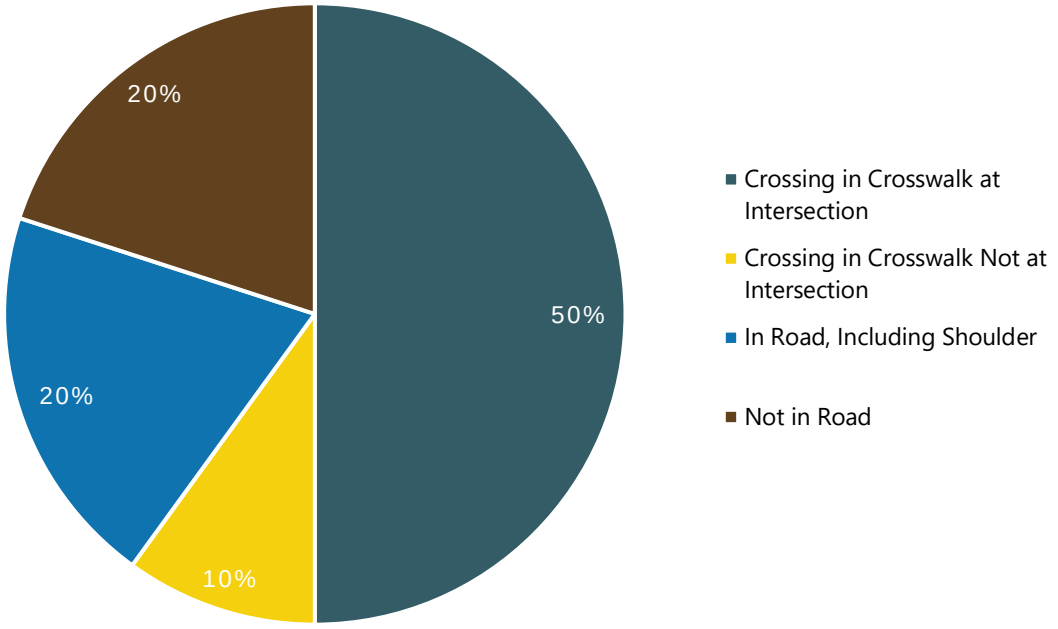


Figure 24. Bicycle and Pedestrian Crashes by Action

Tables 8-10 provide further details regarding pedestrian and bicycle-involved crashes, with **Table 8** providing an overview of pedestrian injury crashes at intersections including the control, severity, pedestrian action, and surrounding pedestrian/bicycle facilities. It is noted that no pedestrian-involved crashes occurred on roadways in Lakeport.

Table 8. Pedestrian Crashes at Intersections

Primary Road	Secondary Road	Control	Severity	Pedestrian/Bicycle Facilities	Pedestrian/Bicycle Action	Map Votes
11th St	North St	Unsignalized	Fatal	Sidewalk: One Side	In Road, Including Shoulder	0
N Main St	11th St	Unsignalized	Injury (Other Visible)	Sidewalks: Crosswalks	Not In Road	0

Primary Road	Secondary Road	Control	Severity	Pedestrian/Bicycle Facilities	Pedestrian/Bicycle Action	Map Votes
3rd St	NMain St	Unsignalized	Complaint Of Pain	Sidewalks: Crosswalks	Crossing In Crosswalk At Intersection	0
N Main St	6th St	Unsignalized	Injury (Other Visible)	Sidewalks: Crosswalks	Crossing In Crosswalk At Intersection	0
S Main St	Martin St	Unsignalized	Injury (Other Visible)	Sidewalks: Crosswalks	Not In Road	0
Brush St	11th St	Unsignalized	Injury (Other Visible)	Sidewalks: Crosswalks	In Road, Including Shoulder	0
N Main St	1st St	Unsignalized	Injury (Other Visible)	Sidewalks: Crosswalks	Crossing In Crosswalk At Intersection	0
S Main St	Armstrong St	Unsignalized	Injury (Severe)	Sidewalks: Crosswalks	Crossing In Crosswalk At Intersection	0
11th St	11th St 1071	Unsignalized	Complaint Of Pain	Sidewalks: Crosswalks	Crossing In Crosswalk Not At Intersection	0

As shown in **Table 8**, all pedestrian crashes occurred at unsignalized intersections. Five of these crashes occurred when the pedestrian crossed in the crosswalk at the intersection.

One bicycle-involved crash occurred on a roadway segment, as shown in **Table 9**. This crash resulted in severe injury.

Table 9. Bicycle Crashes on Roadways

Primary Road	Secondary Road	Control	Severity	Pedestrian/Bicycle Facilities	Pedestrian/Bicycle Action	Map Votes
N Main St	11th St	Unsignalized	Injury (Severe)	Sidewalks: Crosswalks	No Pedestrian involved	1

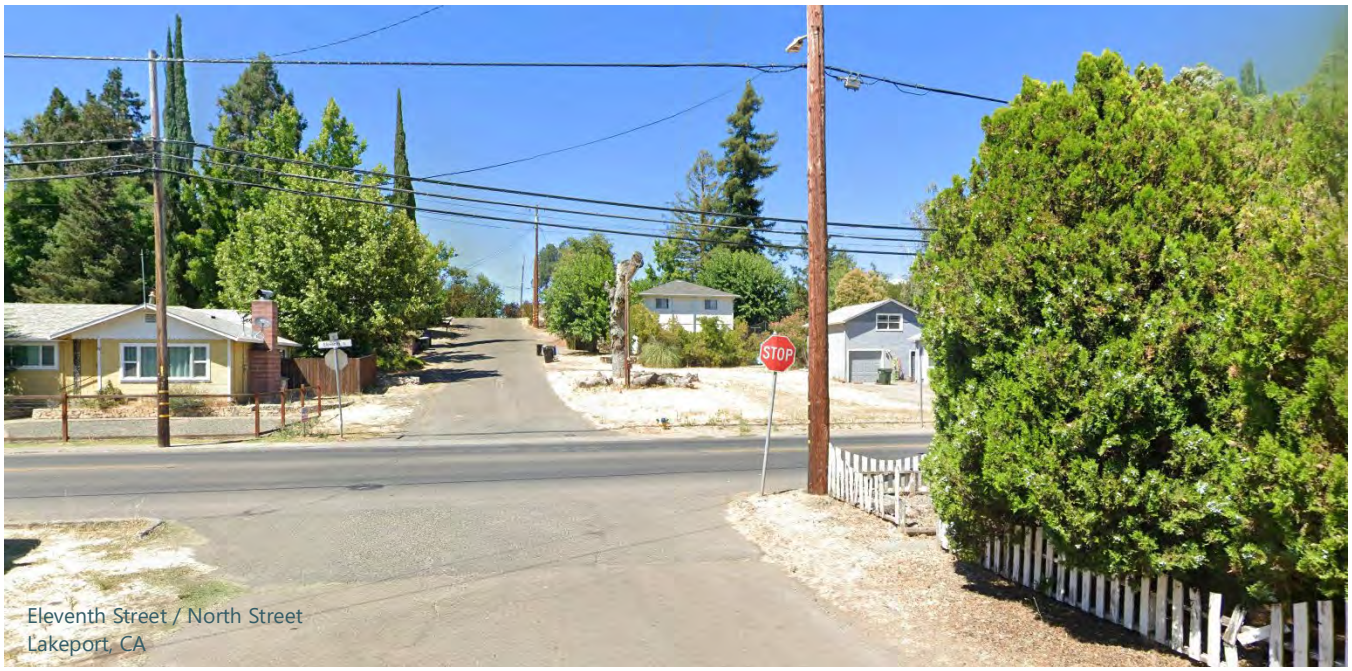
Table 10 shows one bicycle-involved crashes at an intersection, which occurred with the bicyclist's action indicated as crossing in a crosswalk at an intersection.

Table 10. Bicycle Crashes at Intersections

Primary Road	Secondary Road	Control	Severity	Pedestrian/Bicycle Facilities	Pedestrian/Bicycle Action	Map Votes
3rd St	N Main St	Unsignalized	Complaint of Pain	Sidewalks: Crosswalks	Crossing in Crosswalk at Intersection	0

As shown in **Tables 8-10**, the majority of bicycle- and pedestrian-involved crashes occurred on local roads.

Figures 25-26 show the pedestrian and bicycle crashes by severity. As shown on **Figure 25**, one pedestrian fatality occurred at Eleventh Street/North Street and one severe injury crash at S. Main Street/Armstrong Street. The pedestrian action associated with these fatalities were: in the road (including shoulder) and crossing in a crosswalk at an intersection.



Eleventh Street / North Street
Lakeport, CA

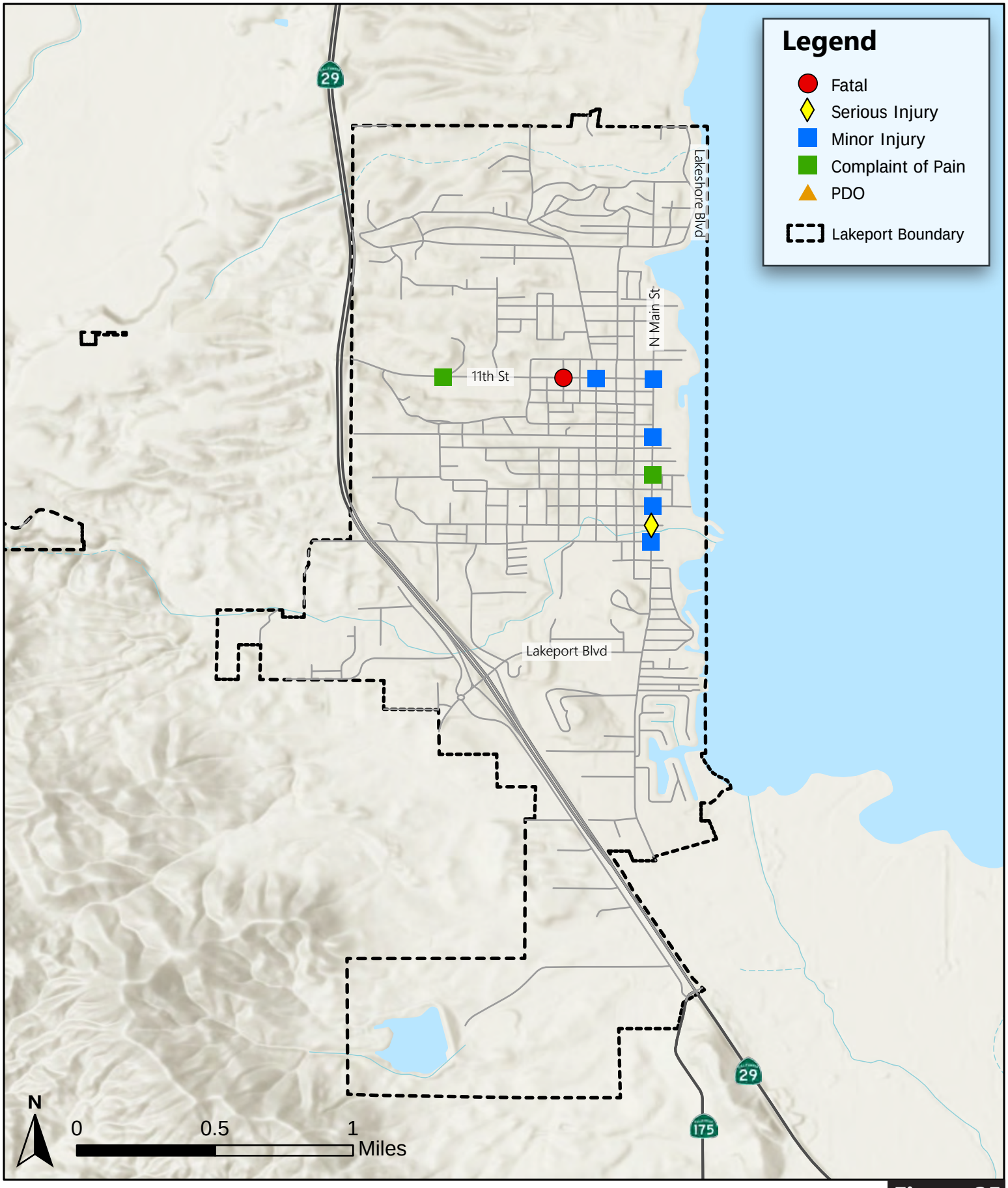


Figure 25

Lakeport
Local Road Safety Plan
Pedestrian Crashes by Severity

GCW ENGINEERS \ SURVEYORS

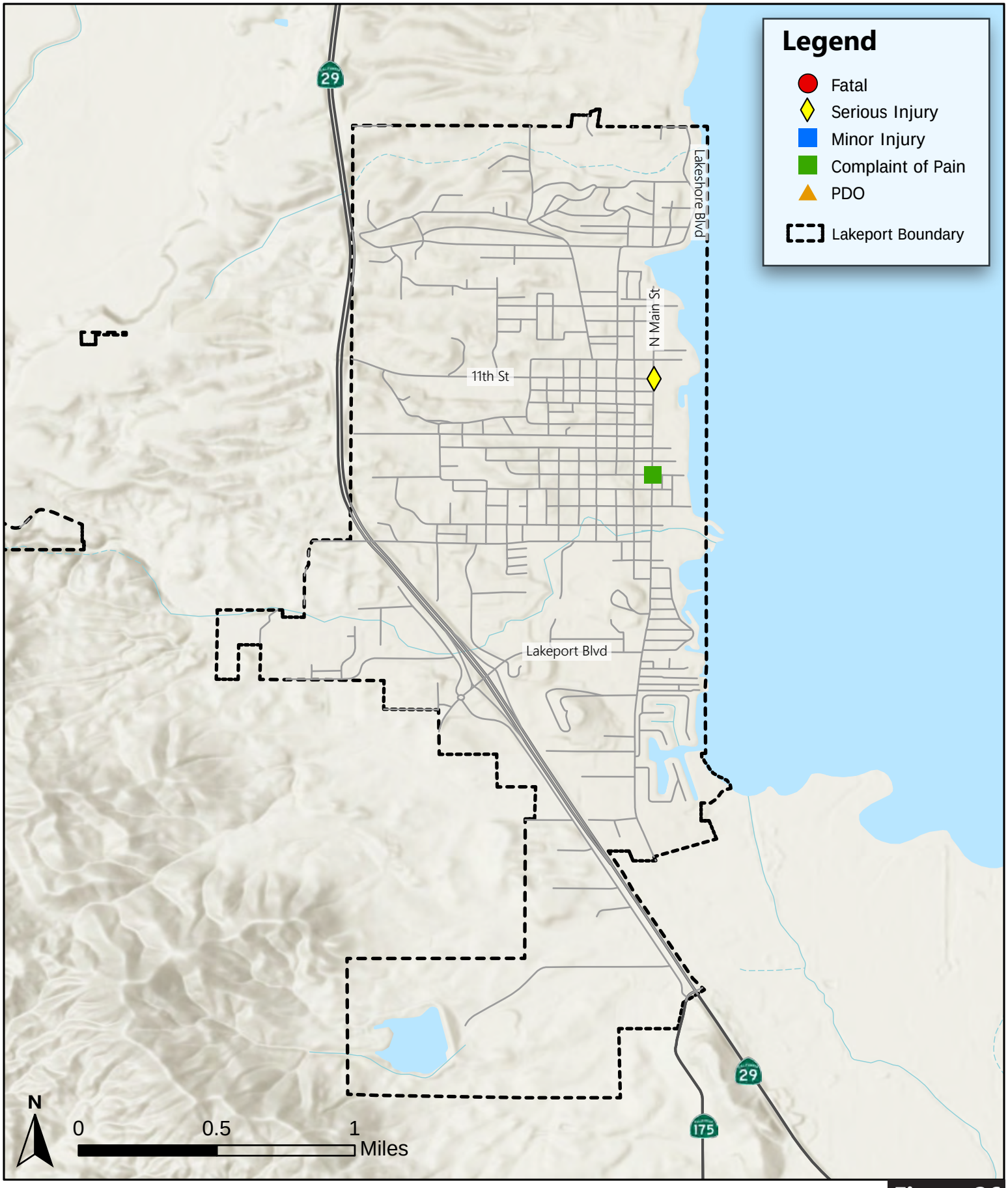


Figure 26

Lakeport
Local Road Safety Plan
Bicycle Crashes by Severity

GCW ENGINEERS \ SURVEYORS

Lighting Conditions

Additional factors contributing to crashes such as roadway and intersection lighting were analyzed. High levels of street lighting, especially at intersections, help to illuminate objects and hazards in the roadway thus reducing crashes. However, it is important to note that accident data alone does not indicate the need for a lighting project. An analysis should be conducted in the City to determine areas of insufficient lighting. Notation of 'Dark Conditions' on the crash report does not confirm that lighting conditions contributed to the crash.

Table 11 shows the associated lighting condition with the severity of crashes that occurred.

Table 11. Lighting Condition and Crash Severity

Crash Severity						
Lighting Condition	**Fatal**	**Injury (Severe)**	**Injury (Other Visible)**	**Complaint of Pain**	**PDO**	**Total**
Daylight	0	5	28	12	37	82
Dusk - Dawn	0	1	1	0	1	3
Dark - Street Lights	1	2	4	3	13	23
Dark - No Street Lights	0	2	1	0	6	9
Dark - Street Lights Not Functioning	0	0	0	0	0	0

Crashes that occurred under 'Dark – No Street Lights' conditions accounted for 8 percent of the total crashes, and 18 percent severe injury and fatal crashes, which is a reduction from the data indicated in the *2021 City of Lakeport Local Road Safety Plan*. The most common crash type associated with dark conditions was 'hit object' (66 percent), and the majority were on roadways as opposed to intersections (55 percent).

Figure 27 highlights via heatmap the crashes where the lighting condition was listed as 'Dark – No Street Lights'.

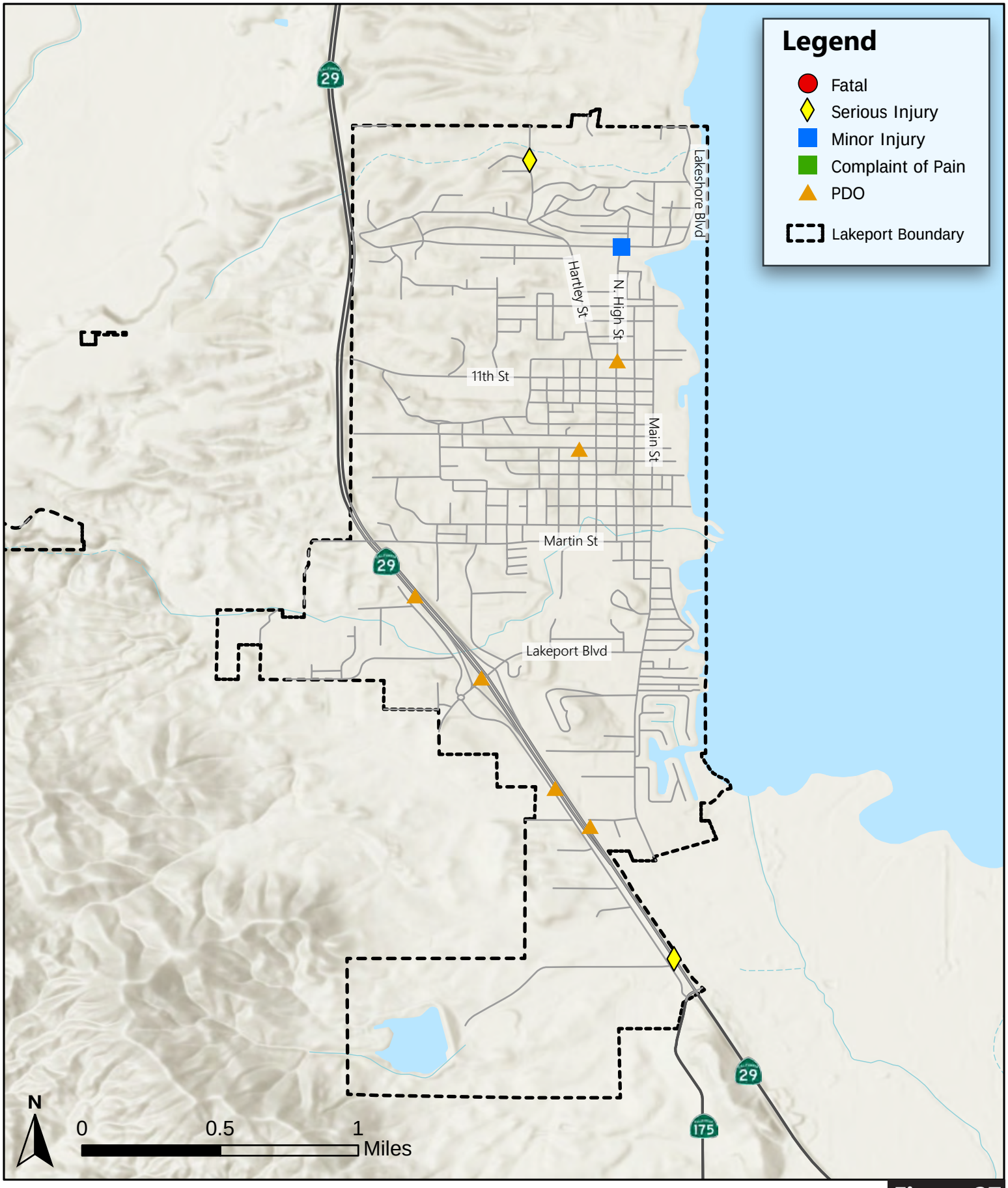


Figure 27

Lakeport
Local Road Safety Plan
Dark - No Street Lights Crashes by Severity

GCW ENGINEERS \ SURVEYORS

Lakeshore Boulevard
Lakeport, CA

Equity Analysis

Figure 28 shows the disadvantaged communities in the Lake County boundary.[9] No disadvantaged areas occur within the city boundaries of Lakeport.

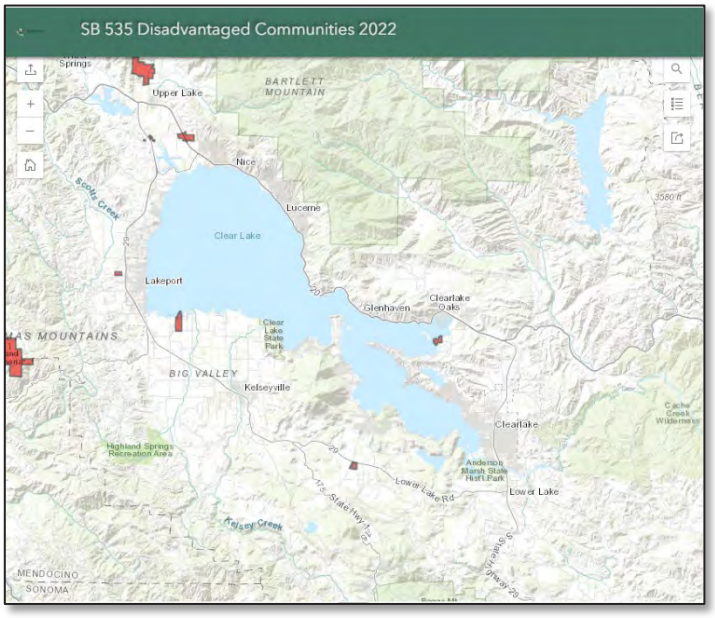


Figure 28. Lake County Disadvantaged Areas

[9] Source: State of CA OEHHA https://oehha.ca.gov/calenviroscreen/sb535

Crash Data Summary

The main takeaways from the analysis of available crash data between 2019 and 2023 for local roads in the City of Lakeport are:

- A total of 117 crashes occurred in the City of Lakeport, which was a reduction from 187 crashes recorded during the previous five years.
- Nine percent of the crashes in Lakeport resulted in severe injury or fatality. The one fatality crash was pedestrian-involved.
- The most common Primary Collision Factors in order of magnitude in the City of Lakeport are:
  - Automobile Right-of-Way
  - Unsafe Speed
  - Improper Turning
- The most common crash type is *Hit Object*, which represents 24 percent of all crashes and 27 percent of fatal and serious injury crashes in Lakeport.
- There were 11 fatal and serious injury crashes in Lakeport, with Hit Object accounting for three crashes, followed by Rear End, Vehicle-Pedestrian, and Other each accounting for two crashes.
- Crashes occurred more frequently at intersections rather than on roadway segments. The most common crash type at intersections is Broadside.
- Pedestrian and bicycle-involved crashes are three times more likely to be serious or fatal compared to overall crash trends; 27 percent of pedestrian and bicycle crashes resulted in severe injury (2) or fatality (1).
- Half of the bicycle- and pedestrian- involved crashes (five crashes) occurred when crossing in a crosswalk at an intersection was indicated as the action.
- 'Dark – No Street Lights' conditions accounted for eight percent of the total crashes, and 18 percent of the severe injury and fatal crashes.

Crash Data Considerations

The Local Road Safety Plan process largely relies on the accuracy and completeness of existing crash data. The data available in Lakeport is sufficient to identify overall crash trends and prioritize areas of greatest need. However, data fields for variables such as lighting, weather, alcohol influence, pedestrian/bicycle information, often have a higher percentage of 'Not Stated', 'Unknown', or blank records. This limitation is common in crash datasets nationwide and is not unique to Lakeport. As crash records improve over time, more direct insights into crash patterns may be identified.

Main Street
Source: 2026 RTP

FOCUS AREAS

Safety strategies and countermeasures are proven to mitigate specific crash types. This section details emphasis areas that were identified through the crash data analysis, stakeholder and public input, and aligned with challenge areas that represent the greatest opportunities to improve roadway safety countywide.

FOCUS AREAS

Focus areas or emphasis areas guide the priorities of a roadway safety action plan and typically relate to specific crash types that have the highest potential for reducing fatal and serious injury crashes. Each focus area was identified through the crash data analysis, stakeholder engagement, and public input. Each focus area was analyzed to determine patterns, identify needs, and pinpoint hot spots.

The focus areas are aligned with the "High Priority Challenge Areas" identified in the *2025-2029 SHSP* (highlighted in **bold**). These focus areas represent a significant opportunity to reduce fatal and serious injury crashes across California and in the City of Lakeport.

FOCUS AREAS

1. Distracted Driving
2. **Pedestrian Safety**
3. **Impaired Driving**
4. **Intersection Safety**
5. **Bicycle Safety**
6. **Speeding**
7. Lighting
8. **Lane Departures**
9. Motorcycle Safety

The following section provides an overview of the public input and crash data analysis which supports the inclusion of each emphasis area in this plan and the application of Focus Area countermeasures (i.e. systemic, spot specific, programmatic). Potential countermeasures which address each focus area across the 4 E's of Traffic Safety (Engineering, Education, Enforcement, or Emergency Services) are included in the following section: Countermeasures Development.

For each Focus Area, a Countermeasure Toolbox is provided in **Appendix C**, and Strategy Tables are provided in **Appendix D**. Potential Engineering Projects for select focus areas are provided in **Appendix E**.

1. DISTRACTED DRIVING

This focus area was ranked as the highest safety priority by the public, and enforcement of distracted driving behaviors was ranked second for potential improvements.

This focus area incorporates distracted driving behaviors such as inattention, cell phone usage, and situations such as eating, reading, and interacting with pets and children as the distracting factors.[10] Distracted driving was ranked as the highest safety priority among the Lakeport community through the public outreach survey. It was a factor in 18 percent of injury crashes.

Crash data typically does not show distracted driving as a PCF; however, many crashes are at least partially a result of distracted driving. Over the past decade, the number of potential distractions for drivers has increased dramatically from cellphone usage to on-board touch screen displays within vehicles. This is the most common type of distraction and has resulted in an increase in distracted driving across the nation. The newest crash records include an attribute for cellphone usage and inattentive driving, and this data was utilized for **Table 3** and **Figure 11**.

[10] Distracted Driving crashes were identified by inattention and cell phone usage within the SWITRS dataset.

Strategies in this emphasis area are intended to address this unwanted driver behavior primarily through non-engineering strategies including increased enforcement and educational campaigns such as the following:

- **Education** – *Distracted Driving Public Outreach Campaign*: Messaging campaign using a variety of local media outlets.
- **Enforcement** – *High-Visibility Cell Phone Usage Enforcement Campaign*: Conduct a high visibility enforcement program, contingent on staff resources, and issue citations as appropriate. High visibility programs incorporate several strategies designed to increase enforcement and create public awareness.

These strategies are generally applicable towards speeding, aggressive driving and other driver behavior-based safety concerns.

Additionally, Emerging technologies aimed at addressing distracted driving are being incorporated into vehicles (lane assist, hands-free communication, lane departure assist) and into phones (app-based solutions) which may help to address distracted driving from the consumer product side. Other focus area projects aimed at increasing visibility of an intersection, roadway, or pedestrian/bicycle accommodations may help to improve distracted driving.


Source: California Highway Patrol Distracted Driving Program

Finally, potential Engineering countermeasures that increase visibility and generally reduce crashes overall will have a positive benefit for distracted driving. These countermeasures are detailed in subsequent focus areas.

2. PEDESTRIAN SAFETY

This focus area was identified as the highest priority safety concern among public survey respondents. The only recorded fatal crash involved a pedestrian.

According to the public outreach, there has been a shift in public priority since 2021 with pedestrian safety now identified as the second highest safety priority among the City of Lakeport community (previously identified as the fifth priority). There was one fatal crash in Lakeport in the past five years and it involved a pedestrian.

Pedestrian crashes by action are referenced on **Figure 24** and pedestrian crash locations by severity are referenced on **Figure 25**. It is noted that the majority of pedestrian-related crashes (50 percent) involved a pedestrian crossing a crosswalk. Through the interactive map and open-response survey comments, concern for pedestrian safety was indicated throughout with emphasis placed on a perceived lack of walkability, the need for more sidewalks to accommodate wheelchairs and strollers, and crosswalk improvements to increase pedestrian visibility. In addition, public survey respondents indicated expanded sidewalk networks and more/improved pedestrian crosswalks as the third and fifth priorities for transportation safety improvements.

Strategies and countermeasures under this focus area are targeted toward locations where a pedestrian fatality or serious injury has occurred with potential projects identified in **Appendix E**.

S. Main Street / Armstrong Street
Lakeport, CA

In addition to HSIP engineering countermeasures provided in **Appendix C**, some examples of education and enforcement strategies are included below that focus on making pedestrians more aware of the rules of the road, providing targeted enforcement, and pedestrian safety for some of the most vulnerable roadway users.

- **Education** –
  - » *Bike/Ped Physical Education Program*: Incorporate pedestrian and bicycle training into the physical education curriculum at local elementary schools through collaboration with the county, school district, parents, teachers, and students.
  - » *Safe Routes to School*: Create a plan for local elementary and middle schools that includes potential projects and recommended improvements to enhance pedestrian safety.
  - » *Share the Road & Pedestrian Safety Awareness Messaging*: Increase driver awareness of pedestrian and bicyclist rights and needs on the roadway.
- **Enforcement**
  - » *Passive Alcohol Sensors*: Equip law enforcement officers with Passive Alcohol Sensors to increase efficiency of Alcohol Checkpoints and normal traffic stops.

3. IMPAIRED DRIVING

Ranked as the third highest priority safety concern in the public outreach. Impairment is one of three top PCFs in fatal and serious injury crashes.

Impaired driving was ranked as the third safety priority in the public outreach. The data analysis indicated that *Driving Under the Influence* was the fourth most common Primary Crash Factor. Eleven (11) percent of all crashes and 15 percent of fatal and serious injury crashes involved impairment.

Crashes involving impairment were one and a half times more likely than non-impaired crashes to result in severe injury or fatality.

Strategies in this focus area are largely focused on improving behaviors through education and increased enforcement, while providing alternatives to driving for intoxicated individuals. These countermeasures are further expanded upon in the non-engineering implementation portion of this plan. Some examples include the following:

- **Education** – *Drunk & Impaired Driving Awareness Campaign*: Messaging campaign using a variety of local media outlets.
- **Enforcement**

- » *Passive Alcohol Sensors*: Equip law enforcement officers with Passive Alcohol Sensors to increase efficiency of Alcohol Checkpoints and normal traffic stops.
- » *Publicized Sobriety Checkpoints*: Highly publicized sobriety checkpoints conducted regularly to increase perceived risk of arrest for impaired driving.
- » *High-Visibility Saturation Patrols*: Focused patrols around specific areas where impaired-driving crashes are common as part of an on-going saturation program.

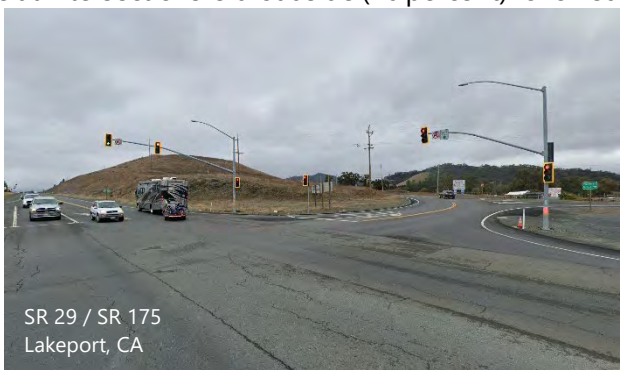
Enforcement efforts are typically focused on weekends; Wednesday had the highest occurrence in Lakeport.

4. INTERSECTION SAFETY

Identified as the fourth priority safety concern and the fourth priority for transportation safety improvements in the public outreach.

Intersection safety is among the high-priority challenge areas identified in the *California SHSP,* and it was ranked as the fourth priority safety concern in the public outreach. Additionally, survey respondents indicated intersection safety as the fourth preferred for transportation safety improvement.

Intersection crashes account for 72 percent of the total crashes, and 64 percent of the severe injury and fatal crashes in the City of Lakeport. The most common crash type at intersections is broadside (26 percent) followed by hit object (23 percent). Broadside crashes may indicate a potential safety issue with red-light running, improper yielding at a stop sign, pedestrian visibility and compliance, or unsafe speeds through an intersection.


SR 29 / SR 175
Lakeport, CA

Engineering countermeasures under this focus area can be applied systemically and at spot locations, and are expanded upon in **Appendix C** (HSIP countermeasures) and **Appendix E** (Potential Project Packages).

5. BICYCLE SAFETY

Bicycle safety was identified as the fifth priority safety concern through the public outreach survey, with 10 percent of serious injury crashes involving a bicyclist.

The crash data analysis indicated that two crashes involved a bicyclist in Lakeport, with one resulting in severe injury and the other complaint of pain. Both bicycle-involved crashes occurred at unsignalized intersections. Through the open response comments in the public outreach survey, some respondents indicated a need for bike lane improvements.

Bicycle safety countermeasures are intended to provide additional space on the roadway for these vulnerable road users, make bicyclists more visible at night, and improve bicyclist and driver behaviors through safety training. In addition to the non-engineering countermeasures described under the Pedestrian Safety focus area some other examples of education strategies geared toward bicycle safety are included below.

- **Education** –
  - » *Bicycle Safety Courses*: Collaborate with existing bicycle safety courses by providing course materials and/or sponsoring American League of Bicyclist Certified Instructors. The city/county can work with organizations to identify the greatest need.
  - » *Active Lighting/Conspicuity Enhancement*: Make pedestrians and bicyclists more visible at night to avoid collisions by providing free lighting equipment and retroreflective clothing.
  - » *Driver Training Materials*: Collaborate with the Department of Motor Vehicles and other driver instruction providers to include information about bicyclist safety and bicyclists' rights into driving training materials. Changing existing driver training materials is anticipated to be an extensive process, which may require convening driver instruction providers to address the issue holistically at a local level.

6. SPEEDING

Twenty-six (26) percent of all crashes indicated 'Unsafe Speed' as the PCF, and speeding enforcement was ranked as the second preferred transportation improvement.

Speeding was ranked sixth in priority in the public outreach, with 26 percent of the crashes identifying 'Unsafe Speed' as the PCF. Concentrated areas for crashes where speeding was a factor are highlighted in the crash data analysis on **Figure 9**, with hotspots of speeding-related crashes noted at SR 29/Lakeport Boulevard and SR 29/SR 175. Stakeholders have identified speeding as a major concern across the city, especially on neighborhood streets, near schools, and in areas with heavy pedestrian traffic.

Strategies in this focus area are intended to address this unwanted driver behavior, primarily through engineering countermeasures such as traffic calming improvements to reduce speeds and increased enforcement and educational campaigns. In fact, respondents to the public outreach survey ranked enforcement as the second highest priority for transportation safety improvements.

These countermeasures are further expanded upon in **Appendix C** (HSIP countermeasures) and **Appendix D** (Strategy Tables). Some examples include the following:

- **Engineering**
  - » *Speed Evaluations*: Conducted to determine areas affected by speeding and where speed limits should be posted.
  - » *Traffic Calming Measures*: Examples include portable speed trailers, radar/dynamic speed feedback signs, later shifts, chicanes, speed humps, speed tables, median islands, and curb extensions. The FHWA provides thorough documentation of traffic calming measures, applications, effects and other useful information through the traffic calming ePrimer.[11] Speed humps and speed tables are recommended on residential and local roadways as identified

[11] Traffic Calming ePrimer | FHWA

through traffic calming evaluations. Per County policy, speed humps and tables are limited to roadways posted at 25 mph.

- **Enforcement** – *Speed Enforcement*: Reduce speeding issues along select corridors through regular and targeted and/or automated enforcement methods.
- **Education** – *Speed Kills Campaign:* A public outreach campaign about the importance of driving the speed limit and the impact just 5 mph can have on the severity of a crash.

7. LIGHTING

Crashes occurring during 'Dark – No Street Lights' conditions accounted for 18 percent of the severe injury and fatal crashes in the City of Lakeport.

Roadway and intersection lighting is identified as a potential factor in many of the focus areas in the *California SHSP* and is a factor in eight percent of all crashes and 18 percent of the severe injury and fatal crashes. Through the public survey, better street lighting was ranked as the highest priority for transportation safety improvements and some open-response comments mentioned roadway and intersection lighting as a safety concern.

Countermeasures for this emphasis area are intended to improve nighttime visibility on roadways or intersections as identified as having insufficient lighting. Potential HSIP countermeasures related to dark condition crashes are provided in **Appendix E**.

8. LANE DEPARTURES

Collision types associated with lane departures accounted for 62 percent of the total roadway crashes and 46 percent of the fatal and serious injury crashes in Lakeport.

This emphasis area focuses on crash types associated with vehicles veering out of the lane, which typically occurs on roadway segments. Lane departure crashes include head-on, sideswipe, hit object, and overturned type crashes such as when a vehicle runs off the road or crosses into the opposing lane prior to the crash.

Collision types often associated with lane departures (head-on, sideswipe, hit object, and overturned) accounted for 62 percent of the total crashes, and 46 percent of the severe injury and fatal crashes. As shown in **Figure 12**, the most common crash type among all crashes was hit object.

Engineering countermeasures within this focus area are geared toward systemic safety improvements to reduce lane confusion and the number of total lane departure crashes, with examples including removing or shielding fixed objects, upgrading or installing advanced warning signage, installing edge-lines and centerlines, upgrading pavement markings, etc. Potential HSIP Countermeasures related to this focus area are provided in **Appendix C**.

S. Main Street
Lakeport, CA

9. MOTORCYCLE SAFETY

Identified in the California SHSP as a Challenge Area, with motorcyclists overrepresented in traffic-related fatalities in the state.

This focus area is identified as a challenge area in the *California SHSP*. In Lakeport, motorcycle-involved collisions account for 18 percent of the fatal and serious injury crashes. In order to increase driver awareness of motorcyclists and reduce motorcycle-involved crashes, countermeasures in this focus area are primarily tailored to educational campaigns, while Engineering strategies may include projects related to intersection safety and lane departures to improve motorcycle visibility.

- **Education**
  - » *Motorcycle Safety Awareness Campaign*: Motorcycle safety awareness messaging campaigns may be conducted through advertisements, social media, etc.
  - » *California Motorcyclists Safety Program (CMSP)*: In partnership with the California Highway Patrol, the CMSP aims to reduce motorcycle-involved crashes and fatalities through comprehensive educational and behavior modification modalities."[12]

Lakeport Boulevard / S. Main Street
Lakeport, CA


Third Street / N. Forbes Street
Lakeport, CA

[12] CMSP - California Motorcyclists Safety Program

N. Forbes Street
Lakeport, CA

COUNTERMEASURE DEVELOPMENT

To address each Focus Area, potential countermeasures across the four categories of safety planning – Engineering, Enforcement, Education, and Emergency Services, were identified for site-specific locations or systemically in Lakeport. Potential actions addressing each Focus Area were compiled into Strategy Tables to provide overarching strategies and identify responsible parties to ensure local road safety is addressed in a holistic manner.

COUNTERMEASURE DEVELOPMENT

Countermeasures are actions or treatments implemented to reduce or offset crash risk. Establishing a comprehensive set of countermeasures and strategies across the four E's of safety planning—*Engineering*, *Education*, *Enforcement*, and *Emergency Services*—is critical to ensure the multifaceted nature of local road safety is addressed in a coordinated, holistic manner.

The Four "E's" of Traffic Safety

Countermeasures and strategies in all four "E's" are included in the applicable Focus Area and are divided based on the traffic safety area in which they address. *Education* and *Enforcement* strategies are often best implemented following buy-in from community partners and stakeholders, therefore it will be critical to collaborate with these groups in order to ensure that resources and efforts are shared whenever possible.

Countermeasures

Potential countermeasures across the four E's of safety planning and based on the SMART model were compiled into a Countermeasure Toolbox. The toolbox is provided in **Appendix C** and summarizes measures found in the California Local Roadway Safety Manual (CA-LRSM), which is intended to provide roadway safety information in a single document. The CA-LRSM represents industry best practices and pulls information from the Crash Modification Factor (CMF) Clearinghouse and three other FHWA-published safety manuals (Roadway Departure Safety, Intersection Safety, and Roadways Safety Information Analysis.)

SMART Method

- ✓ **Specific**
- ✓ **Measurable**
- ✓ **Attainable**
- ✓ **Relevant**
- ✓ **Time Based**

The toolbox includes both HSIP countermeasures and non-HSIP countermeasures. Included along with HSIP eligible countermeasures are the applicable crash type(s), crash reduction factors (CRFs), federal funding eligibility, and opportunity for systemic implementation, with recommendations divided into three groups related to the countermeasure type (Signalized Intersection, Unsignalized Intersection, Roadway Segment). The HSIP number is represented by "S" for signalized intersections, "NS" for unsignalized intersections, or "R" for roadway followed by corresponding number and description.

Information included for HSIP-eligible countermeasures include:

1. Crash Type – "All", "P&B" (Pedestrian & Bicycle), "Night", "Emergency Vehicle", or "Animal"
2. CRF – Crash Reduction Factor used for HSIP calls-for-projects and HSIP Benefit/Cost Ratio calculation
3. Expected Life – 10 years or 20 years
4. Federal Funding Eligibility – The maximum federal reimbursement ratio
5. Systemic Approach Opportunity – Highlights the opportunity to implement the selected countermeasure with a systemic approach: "Very High", "High", "Medium", or "Low"

The Countermeasure Toolbox is intended to help inform ongoing safety efforts city- and countywide and presents a list of select strategies to address the primary safety issues in the City of Lakeport. This data was used as a guide to develop improvements that will provide potential for funding opportunity.

The countermeasures provided in **Appendix C** are not an exhaustive list of safety improvements. Other non-HSIP eligible improvements are also considered and recommended as applicable. Potential countermeasures and strategies to address each focus area are included in the Focus Area Strategy Tables in the subsequent section.

Systemic Applications

A systemic approach to roadway safety groups countermeasures across multiple locations with and without high levels of historical crash data. This enables agencies to move beyond relying solely on high-crash hot spots, by proactively identifying other locations with similar risk factors – even if they have not yet experienced a significant crash history. This system supports more equitable and preventive safety investments, reducing the likelihood of severe crashes before they occur. Additionally, the HSIP program provides a list of countermeasures (included in **Appendix C**) and identifies the opportunity for systemic implementation for each.

Site Specific Applications

Potential projects can be developed for high crash frequency site-specific locations if the risk factors and recommended improvements do not fit into a systemic application.

The identified top crash segments and intersections (**Figures 16 and 20**) represent the highest priority applications of the safety countermeasures based on crash data and public outreach.

Policies and Standards Countermeasures

Lakeport/Lake County has established several transportation safety-related policies that are documented across several planning documents and are discussed in the Existing Efforts section. These policies and standards collectively support the goal of creating a safer roadway network in Lakeport. Future iterations should consider updates to or expanding upon these policies to account for evolving technologies and lifestyles among roadway users. Potential policy updates for consideration include:

1. **Review of ADA Standards** to ensure they are up-to-date and are aligned with best practices.
2. **Micromobility Usage** – This may include modes such as e-scooters, e-bikes, etc. Provide a formal definition and identify permissible operating areas (streets, sidewalks, and/or shared-use paths), speed limits, helmet requirements, and parking requirements.
3. **Distracted Driving and In-Vehicle Technology** – Define policy and laws addressing distracted driving that go beyond texting and utilize crash reports to accurately capture and document distracted driving related incidents.

4. **Rideshare and Delivery Trends** – As delivery services and ride-sharing become more prevalent, implement policies and design standards that designate pickup, drop-off, or loading zones; restrict parking on designated corridors or intersections and/or explore time-of-day curb use policies; regulate designated rideshare areas for major event venues.
5. **Speed Management Policies** – Include specific traffic calming and speed management policies, including targeted speed frameworks by context (urban core, neighborhood, rural); authority to set speed limits below the traditional 85th percentile; and the use of traffic calming as standard practice.

S. Main Street
Lakeport, CA

N. Main Street / Second Street
Lakeport, CA

STRATEGY TABLES

Addressing Focus Areas may involve the concurrent implementation of multiple strategies by a range of stakeholders, including City and County departments, and community partners. This section provides planning-level strategies, identifies responsible parties, and defines completion goals and performance measures for all recommendations.

STRATEGY TABLES

Addressing focus areas often requires the coordinated implementation of multiple strategies involving various stakeholders, including regional planning agencies, county and city departments, and community partners. The following Focus Area Strategy Tables were developed to clearly identify planning-level strategies, responsible parties, anticipated completion targets, and performance measures for each strategy supporting a focus area.

Each Focus Area Strategy Table includes potential *Engineering* countermeasures which are intended to be applied systemically or at spot locations, prioritizing intersections and roadway segments with high crash frequency or where a fatal crash occurred. In addition, each table includes *Education* programs designed to address driver behaviors, *Enforcement* efforts to increase visibility and curb unwanted driver behavior, and *Emergency Services* projects intended to increase response times and/or enhance safety for emergency response. Not all categories had recommendations for each focus area.

The Strategy Tables are created to foster collaboration and generate buy-in from stakeholders. A summary of the Strategy Tables is presented in **Tables 12-20**, following the order of priority identified in the public outreach. The full tables are provided in **Appendix D**.

The Strategy Tables include:

STRATEGY TABLES

- Strategic Linkage
- Objectives and Success Indicators
- Actions and Target Outputs
- Responsible Parties
- Date of Completion (Short-, Medium-, or Long-Term)
- Monitoring and Evaluation Parameters
- Potential Funding Sources

Table 12. Distracted Driving Focus Area Strategy Table

DISTRACTED DRIVING			
	Actions	**Target Output**	**Funding Opportunities**
Education	Distracted Driving Public Outreach Campaign	Local distracted driving messaging campaign, targeted at Young Drivers using a variety of media outlets	NHTSA 402, NHTSA 405(e), SS4A
	Social Media Outreach Campaign	This highly targeted outreach effort includes providing educational materials to target populations regarding the dangers and penalties associated with distracted driving exclusively through social media platforms.	NHTSA 402, NHTSA 405(e), SS4A
Enforcement	High Visibility Enforcement	Conduct high visibility enforcement program, contingent on staff resources, to increase awareness of enforcement efforts and to provide citations as needed. May be combined with *High Visibility Enforcement* programs from other Focus Areas.	CTFGP, NHTSA 402, NHTSA 405(e), SS4A
	Increased rate of crash data completion	Crash data for all applicable fields are completed for all crashes within Lakeport.	NHTSA 402

Table 13. Pedestrian Safety Focus Area Strategy Table

PEDESTRIAN SAFETY				
	Actions	**Target Output**		**Funding Opportunities**
Education	Elementary-Age Child Pedestrian Training	Established program to equip school aged children with knowledge of how to be a safe pedestrian. Similar to the *NHTSA Child Pedestrian Safety Curriculum*.		NHTSA 402 NHTSA 405(h), SS4A
	Conspicuity Enhancement	Increased visibility of pedestrians at night through greater use of retroreflective, bright colored, and fluorescent clothing while walking.		NHTSA 402 NHTSA 405(h), SS4A
Enforcement	Increased rate of crash data completion	Crash data for all applicable fields are completed for all crashes within the City of Lakeport.		NHTSA 402
Engineering	Safe Routes to School Planning	Comprehensive plan to improve walking and biking safety for students to / from school		ATP, SS4A
	ADA Compliance	Design standards are reviewed and updated as needed for ADA compliance. Constructed projects are ADA compliant.		ATP, SS4A
	Short-term: Develop HSIP location specific and systemic grant application(s) Develop grant application(s) for other funding sources **Long-Term:** Obtain grant funding Construct safety countermeasures	Potential Pedestrian Safety Countermeasures	Install sidewalk / pathway (to avoid walking along roadway)	HSIP, ATP, CMAQ, SS4A
			Convert standard crosswalks to continental crosswalk style	
			Install pedestrian crossing (S.I.)	
			Modify signal phasing to implement a Leading Pedestrian Interval (LPI)	
			Install pedestrian crossing at uncontrolled locations (new signs and marking only)	
			Install/upgrade pedestrian crossings at uncontrolled locations (with enhanced safety features)	
			Install Rectangular Rapid Flashing Beacon (RRFB)	

Table 14. Impaired Driving Focus Area Strategy Table

IMPAIRED DRIVING			
	Actions	**Target Output**	**Funding Opportunities**
Education	Responsible Beverage Service	Local server training programs for serving alcohol are intensive, high quality, and face-to-face programs	Existing Budget
	Coordinate with Transportation Network Companies (Uber, Lyft, etc.) for Sober Ride Home program	Increased number of ride-hailing services and vehicles available	Existing Budget
	Coordinate with Transportation Network Companies (Uber, Lyft, etc.) for Sober Ride Home program	Established program to provide Sober Rides Home to residents	NHTSA 402
Enforcement	High Visibility Enforcement Program	Conduct high visibility enforcement program, contingent on staff resources, to increase awareness of enforcement efforts and to provide citations as needed. May be combined with *High Visibility Enforcement* programs from other Focus Areas.	CTFGP, NHTSA 402, NHTSA 405(d), SS4A
	Publicized DUI Checkpoints	Publicly noticed DUI checkpoints conducted during high alcohol-involved periods, contingent on staff resources	CTFGP, NHTSA 402, NHTSA 405(d)
	Increased rate of crash data completion	Crash data for all applicable fields are completed for all crashes within Lakeport	NHTSA 402

Table 15. Intersection Safety Focus Area Strategy Table

INTERSECTION SAFETY				
	Actions	**Target Output**		**Funding Opportunities**
Enforcement	Increased rate of crash data completion	Crash data for all applicable fields are completed for all crashes within the City of Lakeport.		NHTSA 402, SS4A
Engineering	**Short-term:** Develop HSIP location specific and systemic grant application(s) Develop grant application(s) for other funding sources **Long-Term:** Obtain grant funding Construct safety countermeasures	Potential ***Unsignalized*** Intersection Safety Countermeasures	Add intersection lighting	HSIP, ATP, CMAQ, SS4A
			Upgrade intersection pavement markings (NS.I.)	
			Install pedestrian crossing at uncontrolled locations (new signs and marking only)	
			Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features)	
			Install Rectangular Rapid Flashing Beacon (RRFB)	
EMS	Evaluate emergency vehicle detection along priority emergency routes	Increase emergency vehicle detection and response times along priority routes		HSIP*, SS4A, Other

Table 16. Bicycle Safety Focus Area Strategy Table

BICYCLE SAFETY				
	Actions	**Target Output**		**Funding Opportunities**
Education	Bike Safety Education for Children	Bike safety instruction for children through school or county program		ATP, NHTSA 402, SS4A
	Bike Safety Education for Adults	Bike safety instruction for adults through a county program		NHTSA 402, SS4A
	Active Lighting / Rider Conspicuity	Make bicyclists more visible at night to avoid collisions		NHTSA 402, NHTSA 405(h), SS4A
	Driver Training	Incorporate bicycle safety and sharing the road information into local driver training (Drivers Education) courses		Existing Budget
	Share the Road Awareness Program	Increase driver awareness of bicyclist rights and needs on the roadway		NHTSA 402, SS4A
Enforcement	Increased rate of crash data completion	Crash data for all applicable fields are completed for all crashes within the City of Lakeport		NHTSA 402
Engineering	Safe Routes to School Planning	Comprehensive plan to improve walking and biking safety for students to / from school		ATP, SS4A
	Short-Term: Develop HSIP location specific and systemic grant application(s) Develop grant application(s) for other funding sources **Long-Term:** Obtain grant funding Construct safety countermeasures	Potential Bicycle Safety Countermeasures	Install bike lanes	HSIP, ATP, CMAQ, NHTSA 405(h), SS4A
			Install protected bike lanes	
			Install Advance stop bar before crosswalk (Bicycle Box)	
			Install pedestrian crossings at uncontrolled locations (new signs and marking only)	
			Install/upgrade pedestrian crossings at uncontrolled locations (with enhanced safety features)	
			Install Rectangular Rapid Flashing Beacon (RRFB)	

Table 17. Speeding/Aggressive Driving Focus Area Strategy Table

SPEEDING / AGGRESSIVE DRIVING			
	Actions	**Target Output**	**Funding Opportunities**
Education	Speed Kills Campaign	Conduct public outreach campaign about the importance of driving the speed limit and the impact just 5 mph can have on the severity of a crash	NHTSA 402 NHTSA 405(e), SS4A
Enforcement	Targeted Speed Enforcement Campaign	Reduce speeding issues along select corridors through regular and targeted enforcement patrols	NHTSA 402, NHTSA 405(e), SS4A
Engineering	Systemic Speeding Management Project	Dynamic Speed Signs and/or portable trailers to inform motorists of speeding.	HSIP, NHTSA 402, SS4A

Table 18. Roadway & Intersection Lighting

ROADWAY & INTERSECTION LIGHTING			
	Actions	**Target Output**	**Funding Opportunities**
Enforcement	Pedestrian & Bicycle Conspicuity Enhancement	Provide lighting elements and retroreflective materials to local pedestrians and bicyclists in order to improve nighttime visibility of vulnerable roadway users.	NHTSA 402, NHTSA 405(h), SS4A
	Increased rate of crash data completion	Crash data for all applicable fields are completed for all crashes within the City of Lakeport.	NHTSA 402
Engineering	**Short-term:** Conduct Lighting Analysis at high nighttime crash intersections and Intersections with Pedestrian Fatality **Long-term**: Conduct systemic lighting analysis at signalized and unsignalized intersections	Comply with lighting standards and provide lighting at select unlit or under illuminated roadways and intersections.	Existing Budget, HSIP, SS4A

Table 19. Lane Departures Focus Area Strategy Table

LANE DEPARTURES				
	Actions	**Target Output**		**Funding Opportunities**
Enforcement	Increased rate of crash data completion	Crash data for all applicable fields are completed for all crashes within the City of Lakeport.		NHTSA 402
Engineering	**Short-term:** Develop HSIP location specific and systemic grant application(s) Develop grant application(s) for other funding sources **Long-Term:** Obtain grant funding Construct safety countermeasures	Potential Systemic Lane Departure HSIP Countermeasures	Implement a SafetyEdge for rural roads	HSIP, CMAQ, SS4A
			Widen Lanes	
			Add Lighting	
			Install Guardrail	
			Install centerline rumble strips/stripes	
			Install edgeline rumble strips/stripes	
			Remove or relocate fixed objects outside of Clear Recovery Zone	
			Install chevron signs on horizontal curves	
			Install curve advance warning signs	
			Install delineators, reflectors, and/or object markers	
			Install edge-lines and centerlines	
EMS	Protect Emergency Responders	Clear vegetation; Provide protection ("bumper") trucks to block/buffer emergency response vehicles; Implement emergency vehicle notifications - notifications sent to Waze/ Google maps, smart vehicles		HSIP, SS4A

Table 20. Motorcycle Safety Focus Area Strategy Table

MOTORCYCLE SAFETY			
	Actions	**Target Output**	**Funding Opportunities**
Education	Motorcycle Safety awareness messaging	Increased driver awareness of motorcyclists and reduction in motorcyclist-involved crashes	NHTSA 402, NHTSA 405(e), SS4A
Engineering	Engineering projects for Intersection Safety and Lane Departures will contribute to motorcycle visibility.		

Lakeshore Drive (Austin Park)
Clearlake, CA

POTENTIAL PROJECTS

A systemic approach to risk mitigation can address past crash trends while reducing the likelihood of future incidents. In partnership with the City and key stakeholders, four systemic projects and four site specific projects were developed for application within the City of Lakeport.

POTENTIAL PROJECTS

The top intersections and roadway segments identified in previous sections of this LRSP represent the locations with the highest crash frequency, number of serious or fatal crashes, or public comments.

FHWA Risk Factors

Site evaluations identify appropriate engineering countermeasures by examining risk factors, such as roadway elements that are missing or could be improved to enhance safety. These risk factors reflect common roadway or intersection characteristics that may have contributed to previous crashes or could increase the likelihood of future incidents. The *Federal Highway Administration (FHWA) Systemic Safety Project Selection Tool*[13] provides a reference list of typical risk factors for intersections and roadway segments to be used during systemic safety review and project identification. Preliminary site evaluations were initiated to identify specific risk factors within the roadway and intersection network that may be influencing the crash trends observed in the data analysis.

The nature of crashes in the City of Lakeport indicates that the following partial subset of risk factors should be considered when identifying locations for systemic safety projects.

RISK FACTORS

- Pavement condition and friction
- Presence of shoulder or centerline rumble strips
- Presence of pavement striping and markings
- Presence of lighting
- Presence of advanced warning signs
- Presence of pedestrian crosswalks and crosswalk enhancements
- Presence of sidewalks and bicycle lanes
- Clear zones on roadways
- Site distance obstructions at intersections

Locations and roadway segments with similar characteristics but no history of crashes may still be eligible for systemic safety projects that address these risk factors because of the increased potential for future crashes. Addressing risk factors in the City of Lakeport on a systemic basis will help address historical crashes as well as potential future crashes.

Potential Projects

In consultation with the Stakeholders Working Group, potential projects were developed. Potential engineering projects were identified based on crash trends and locations with high crash frequencies. These

[13] Source: https://safety.fhwa.dot.gov/systemic/fhwasa13019/element1.cfm#el12

potential projects may be used to pursue HSIP or other funding. Systemic safety projects enable the deployment of proven countermeasures across multiple intersections with similar risk characteristics, rather than focusing on isolated locations. These potential projects are presented on **Figure 29** and are further summarized in **Appendix E**.

For systemic applications, locations throughout the network with characteristics similar to the top crash intersections and segments (control type, equipment, striping, etc.) should be identified using available roadway condition/equipment datasets, field visit, or local knowledge. Each potential project describes:

- Project Description
- Project Need (crash data and other criteria for project selection)
- Public Outreach Endorsement
- Potential locations, reasons for inclusion, and associated risk factors
- Potential Countermeasures
- Anticipated potential Benefit/Cost Ratio Potential

Projects were developed for:

1. *Systemic Roadway Improvements*
2. *Systemic Lighting Project*
3. *Systemic Unsignalized Intersection Improvements*
4. *Systemic Pedestrian and Bicycle Improvements*
5. *Eleventh Street Corridor Improvements*
6. *Main Street Corridor Improvements*

All potential locations should be verified by a field review, using the Countermeasure Toolbox and FHWA Risk Factors as a checklist.

Systemic Roadways

Distracted driving was identified as the highest priority safety concern in the public outreach, and the most common crash type in Lakeport is hit object as shown in **Figures 12-13**. Potential locations for roadway improvements on local (non-state) roadways are provided in **Appendix E.** These locations were selected based on crash history, primary collision factors, public outreach results, and locations identified by stakeholders as having similar risk factors.

Roadway improvements are best addressed through systemic applications due to the high systemic opportunity for roadway segment countermeasures. Countermeasures identified for the project segments may be applied to these segments, following a field review, in addition to those included in the Countermeasure Toolbox.

Systemic Lighting

In the City of Lakeport, 'Dark – No Street Lights' is a factor in 18 percent of fatal and severe injury crashes and eight percent of all crashes. A heatmap of these crashes is presented on **Figure 27**, and a preliminary list of locations to enhance lighting along roadways and intersections is provided in **Appendix E**. Systemic lighting improvements should be grouped by intersections with similar characteristics, and field/lighting evaluations should be conducted to determine if lighting levels are sufficient.


Hartley Street / Anastasia Drive
Lakeport, CA

Unsignalized Intersections

A list of preliminary locations for systemic safety projects at unsignalized intersections was developed and is provided in **Appendix E**. The top unsignalized intersections for potential locations were identified as N. Forbes Street/Eleventh Street and Clear Lake Avenue/N. Main Street based on the number and severity of crashes, along with other injury-crash locations. Upon initial virtual field review, it was noted that potential improvements may include enhanced visibility, signage/ striping and pedestrian accommodations.


N. Main Street / Clear Lake Avenue
Lakeport, CA

The full list of countermeasures to be considered are provided in the Countermeasure Toolbox. All intersection conditions should be verified by a field review, using the toolbox, and FHWA Risk Factors as a checklist.

Systemic Pedestrian and Bicycle Improvements

As indicated in the public outreach, pedestrian safety is the second highest priority safety concern among the Lakeport community and 'expanded sidewalk network' was ranked as the third priority for preferred transportation safety improvements. Nine crashes, one of which was fatal, involved pedestrians. Potential projects for systemic pedestrian and bicycle improvements may consist of constructing crosswalks, sidewalks or multi-use paths, bicycle lanes, and/or enhancements to locations with these features. Potential locations for systemic improvements on local roads are provided in **Appendix E**. Countermeasures should be applied at or near the locations corresponding to the crash data.

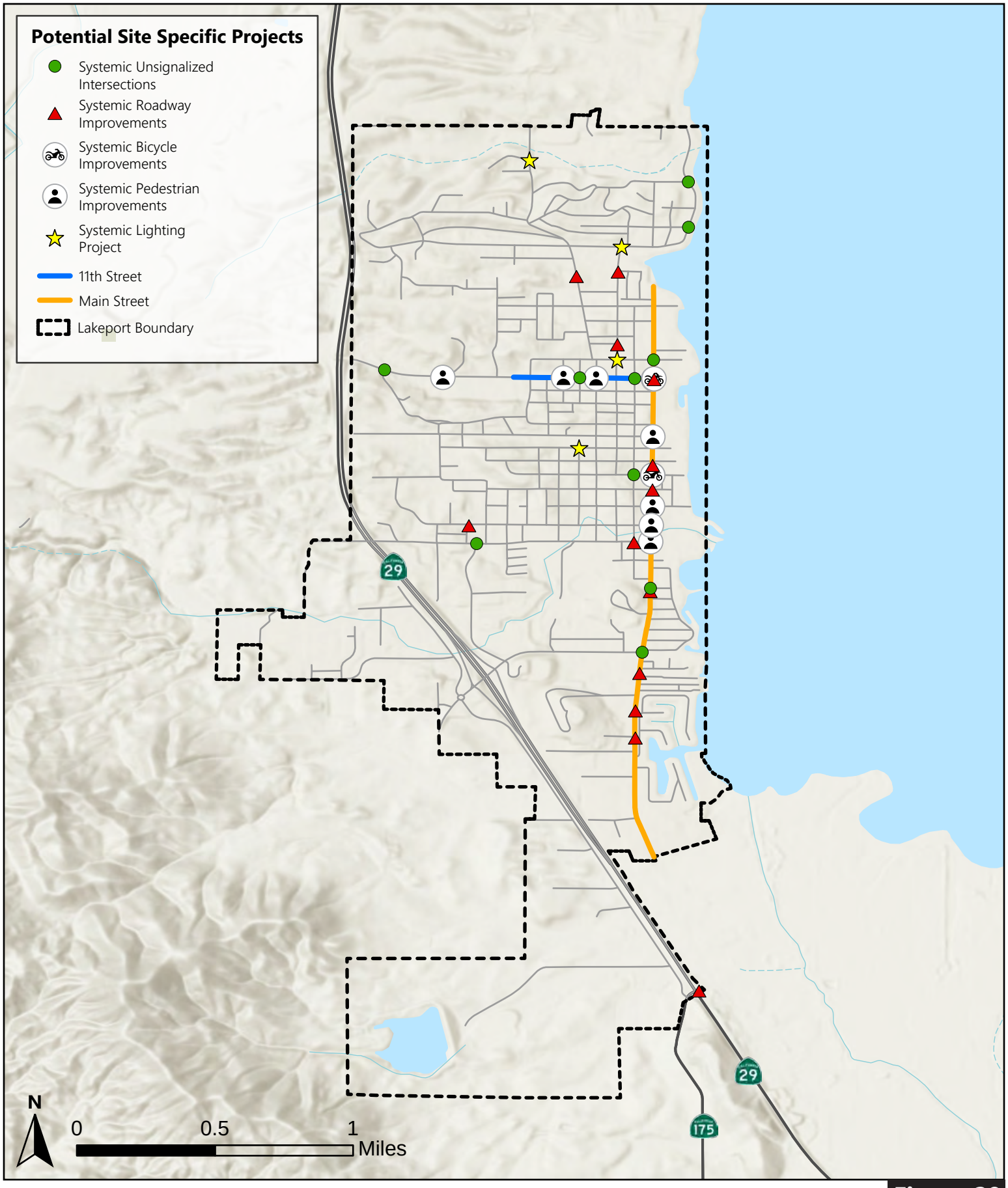


Figure 29

Lakeport
Local Road Safety Plan
Potential Projects

GCW ENGINEERS \ SURVEYORS

N. Main Street / Eleventh Street
Lakeport, CA

IMPLEMENTATION PLAN

This section summarizes the plan for successful LRSP implementation, highlights key considerations, and identifies next steps. The plan focuses on addressing high priority safety issues first and also identifies systemic safety improvements to be incorporated into safety programs and future grant applications.

IMPLEMENTATION PLAN

The implementation plan serves as a guide for carrying out the countermeasures and strategies identified within each focus area. Emphasis is placed on addressing high-priority or "low-hanging fruit" safety issues early in the process. The plan also emphasizes identifying systemic safety improvements that can be integrated into ongoing maintenance and safety programs, as well as future grant applications. The following sections provide an overview of the plan, outline key considerations, and identify next steps. Additional details for each countermeasure**,** including anticipated completion dates, performance measures, and responsible parties**,** are included in the Focus Area Strategy Tables.

Key Steps for Successful LRSP Implementation

In July 2020, the Federal Highway Administration (FHWA) released guidance (Implementing a Local Road Safety Plan) based on best practices and lessons learned by agencies around the country for implementing LRSPs.14 This guidance identified six key steps:

1. **Maintain Buy-In and Support:** Maintaining and expanding the stakeholder and public support fostered during the development of this LRSP will require ongoing communication and coordination through educational materials, news releases, and meetings. Implementation of many non-engineering countermeasures will require partnerships with stakeholders to achieve a successful outcome. The City should identify the specific outreach methods and level of detail that is achievable for continued communications with stakeholders, the general public, and decision makers. Education and Enforcement strategies are often best implemented following buy-in from community partners and stakeholders, and it will be important to collaborate closely with these groups to ensure shared resources.
2. **Identify Funding Mechanisms:** LRSPs are required for future HSIP funding, however, other funding mechanisms can also be used to improve local safety. Potential funding mechanisms for all countermeasures and strategies are included in the Focus Area Strategy Tables.
3. **Identify and Prioritize Projects:** Projects, programs, and initiatives should be prioritized based on potential safety improvement and ease of obtaining funding and implementation. Potential systemic project packages were developed for signalized and unsignalized intersections, roadway segments, pedestrian improvements at locations with and without crosswalks, and bicycle improvements. These project packages are provided in **Appendix E**. Applying these countermeasures to other

[14] Implementing a Local Road Safety Plan | FHWA

intersections with similar characteristics will help the City of Lakeport proactively address potential safety issues.

4. **Determine project delivery methods:** Projects identified through this LRSP will be primarily delivered through grant funded projects and initiatives due to existing funding constraints. When possible, countermeasures should be included in ongoing maintenance programs and incorporated into other projects.

5. **Evaluate effectiveness:** Performance measures and evaluation metrics are included in the Focus Area Strategy Tables (**Appendix D**) for each countermeasure to assist the City in monitoring progress towards implementation and impacts on specific crash types and factors. This living document is intended to be updated every four years. However, the City of Lakeport would benefit from tracking safety metrics annually to gauge implementation outcomes on a more frequent basis.

6. **Continue communication and coordination:** It is important to maintain close communication with stakeholders in order to coordinate efforts whenever possible and provide the public with updates regarding implementation progress and outcomes.

Lakeport, CA
Source: City of Lakeport Instagram

Key Components of Non-Engineering Implementation

The successful implementation of non-engineering LRSP countermeasures relies on several critical actions, including the development of effective public outreach messaging, enhanced collaboration with stakeholders and local agencies, and the pursuit of grant funding to support expanded outreach efforts. While each countermeasure in the plan plays a role in improving transportation safety in Lakeport, the countermeasures and general strategies described below are best suited for early implementation and provide the greatest potential safety benefit among non-engineering strategies.

Social Media Campaign and Continued Outreach

Providing the public with important safety information and messaging through a variety of platforms including social media, online advertisements, TV, and radio is an important strategy for increasing awareness around safety and reducing crashes. The specific type of media used for each campaign depends on the audience, the message, and available resources. Some outreach campaigns may focus exclusively on social media, and some may require more holistic approaches including more traditional media like TV, newspaper, and radio. However, these larger outreach campaigns may require long timeframes for implementation and higher budget considerations. A targeted social media campaign can be implemented quickly with very little budget by utilizing existing messaging, such as those provided by the Caltrans Office of Traffic Safety through the *Go Safely, California* program.[15]

GO SAFELY CALIFORNIA

CALIFORNIA OFFICE OF TRAFFIC SAFETY IN PARTNERSHIP WITH CALTRANS

Go Safely, California is a resource for public outreach and education materials covering a variety of safety topics, including focus areas included in this LRSP, such as impaired driving, distracted driving, and bicycle and pedestrian safety. This program provides free and compelling outreach materials to local agencies for educational campaigns as well as pre-made toolkits available to supplement existing outreach efforts.

Targeted social media messaging campaigns can focus outreach efforts to a particular demographic, such as young drivers between 15 and 23 years of age regarding the potential risks of distracted driving and impaired driving. Targeted messaging campaigns through social media can broaden awareness with minimal budget impacts. Additionally, the reach of social media messages and campaigns may be amplified many times if stakeholders share the safety campaign messages through their own social media accounts.

Partnerships & Collaborations

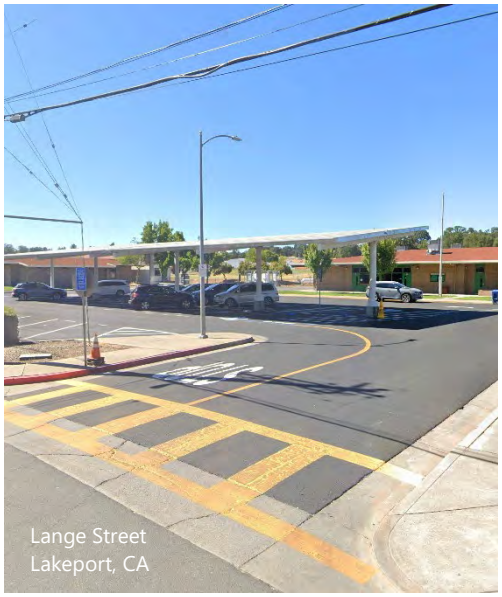
Roadway safety and the implementation of roadway safety plans is a shared responsibility that requires coordinated action. Successful execution of many of the identified strategies will require collaborative

[15] Go Safely CA – Traffic Safety

engagement among key stakeholders to establish strong interdepartmental and interagency partnerships. The following strategies will depend on direct partnerships and close collaboration to be successful:

Safe Routes to School

Pedestrian safety was identified as a high-priority safety concern through the interactive map and the public outreach survey, with some respondents noting safety issues near schools. Safe Routes to School plans make walking and biking safer for students and the greater community.


Lange Street
Lakeport, CA

Sober Ride Home

Transportation Network Companies such as Uber and Lyft as well as traditional taxi companies may work with the City to provide discounted or free rides home to intoxicated individuals within the city to avoid driving while under the influence of drugs or alcohol. This program may first be focused on specific time periods such as Saint Patrick's Day, New Year's Eve, or Halloween and expanded, based on funding and need later on.

Responsible Beverage Service (RBS)

Responsible Beverage Service (RBS) is an intervention program designed to teach servers to responsibly serve alcoholic beverages. With the passage of Assembly Bill 1221 and Assembly Bill 82, every alcohol server and their manager is required to have a valid Responsible RBS certification from an ABC accredited RBS training provider and pass an online ABC administered RBS exam within 60 calendar days from the first date of employment as of July 1, 2022.[16] The City may work with the local chamber of commerce and local alcohol server training providers to promote face-to-face training programs as the standard for local businesses as these programs have been shown to be more effective.

Crash Data Update Process

To ensure that local data represents the most accurate information, the Lakeport Public Works department should convene regularly with all associated agencies – Caltrans, CHP, and Police Department - to conduct a data reconciliation process among various sources, and to re-evaluate how data is collected and reported to best support future safety analysis.

[16] California's Mandatory Alcohol Server Training Deadline Draws Near | Alcoholic Beverage Control

Engineering Countermeasures

Many of the countermeasures identified through this LRSP are Engineering countermeasures. These countermeasures were identified to address the specific crash trends identified throughout the Lakeport and are included in the Countermeasure Toolbox in **Appendix C**.

Engineering countermeasures can be applied at specific locations or systemically across a network. This plan includes potential projects to be implemented at specific high crash locations as well as systemically across Lakeport. Incorporating safety elements into planned projects will achieve project efficiencies and reduce the overall cost for improving roadway safety.

Eleventh Street
Lakeport, CA

Lakeport Boulevard / S. Forbes Street
Lakeport, CA

FUNDING & TIMEFRAMES

To implement many of the identified countermeasures and strategies detailed in this LRSP, the City will likely pursue grant opportunities. The following section outlines key considerations for pursuing funding and provides details regarding each potential grant funding source.

IMPLEMENTATION FUNDING & TIMEFRAMES

Grant Funding

The City of Lakeport and local stakeholders will likely pursue grant opportunities to implement many of the identified countermeasures and strategies. Additionally, the timeframes for implementation will be contingent on obtaining grant funding as well as maintaining existing maintenance and construction funding levels. The following section highlights key considerations for each potential grant funding opportunity.

Highway Safety Improvement Program (HSIP)

This federal program is managed by Caltrans and focuses on infrastructure projects with nationally recognized crash reduction factors. This is one of the major funding mechanisms for safety projects across California and is closely tied to the Local Road Safety Plan. To be eligible for HSIP grant funding, agencies must have a completed LRSP or equivalent plan. Calls for projects under this funding program are typically announced every other year, with the last round of HSIP funding closing in September 2024. The next round has not been announced. Based on the available data and identified countermeasures, potential HSIP projects for high crash intersections and segments were developed and included in **Appendix E**.

Safe Streets and Roads for All (SS4A)

The U.S. Department of Transportation's (U.S. DOT) National Roadway Safety Strategy is supported by the Safe Streets and Roads for All (SS4A) program, which is a "competitive grant program that funds regional, local, and Tribal initiatives through grants to prevent roadway fatalities and serious injuries." [17] An SS4A compliant "Action Plan" includes the following seven key components, which are addressed in this plan as noted.

1. Leadership commitment and goal setting: This LRSP was developed in close coordination with a Stakeholders Working Group, which helped to establish the Vision and Mission Statements and a Commitment to Zero with the primary aim of preventing fatalities and serious injuries on the local roadway system.
2. Planning structure: The Lake Area Planning Council engineering/traffic staff oversaw the development of this plan in close collaboration with the consultant staff and project stakeholders.
3. Safety analysis: An in-depth Crash Data Analysis of the past five years of crash data for local roads in the City of Lakeport was conducted to identify overall crash trends and help to identify the highest priority safety needs.
4. Engagement and collaboration: The LRSP process was supported by stakeholder meetings, review of existing efforts, and robust Public Outreach. A public feedback survey and interactive map was distributed in two languages to gain transportation safety related insight from the Lakeport community.
5. Policy and process changes: This LRSP draws upon current "Vision Zero" methodology through the implementation of the Safe Systems Approach, and provides a review

[17] Safe Streets and Roads for All (SS4A) Grant Program | US Department of Transportation

and/or assessment of ongoing programs, policy frameworks in Lake County, and other existing efforts in the City. In addition, the Implementation plan provides a framework for prioritizing countermeasures and strategies.

6. Strategy and project selections: A comprehensive set of Engineering Countermeasures and Potential Projects were developed through a layered approach, drawing upon crash data results and input from key stakeholders and the Lakeport community. The potential projects package is provided in **Appendix E**.
7. Progress and transparency: This LRSP is an update to the *2021 City of Lakeport LRSP*. The LRSP should continue to be a living, and publicly accessible document, updated every four to five years to assess current crash trends, the performance of implemented countermeasures, and the focus areas. This study documents progress since the 2021 LRSP as well as methods to track future progress.

An SS4A self-certification checklist is provided in **Appendix F**.

Active Transportation Program (ATP)

This competitive statewide program consolidates federal and state funding from several sources including the State Senate Bill 1 (SB1), Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and State Safe Routes to School (SRTS). This program is focused on increasing the use of walking and biking by increasing safety and mobility for non-motorized users, advancing regional active transportation efforts, and providing a broad spectrum of projects to benefit many types of active transportation users. Eligible grant applicants include public schools and school districts and local, regional, or state agencies. For a project to qualify as a Safe Routes to School project, it must be within two miles of a public school or within the vicinity of a public-school bus stop with the students intended as the primary beneficiaries of the project. This program typically releases calls for projects every other year, with the 2027 ATP (Cycle 8) in progress.

Congestion Mitigation and Air-Quality Improvement Program (CMAQ)

This flexible federal funding program managed by Caltrans may be used for a variety of projects which further the goals of the Clean Air Act and its amendments on a reimbursable basis. Projects must be included in the Transportation Improvement Program (TIP) in order to be eligible for this funding stream. This funding may be used for bicycle and pedestrian outreach programs, constructing bicycle and pedestrian facilities which are not exclusively recreational and reduce vehicle trips, and public education and outreach activities.

National Highway and Traffic Safety Administration (NHTSA)

The NHTSA provides traffic safety grants through the California Office of Traffic Safety. Based on the most recent guidance, OTS accepts applications for this funding program on an annual basis with a grant application deadline of January 31. The following grant opportunities were identified as the most applicable to Lakeport's needs.

Section 402: State & Community Highway Safety Grant Program – This versatile funding program can be used for a variety of initiatives focused on reducing deaths and serious injuries on our roadways including enhancing pedestrian and bicycle safety, increasing enforcement of traffic safety laws, improving traffic records, or reducing speeding.

Section 405: National Priority Safety Program – This program authorizes funding to address high priority safety issues across the nation including impaired driving, distracted driving, and non-motorized safety. Funding for each issue is authorized as a separate tier under the Section 405 program.

- Section 405(d): Impaired Driving Countermeasures – This tier represents 52.5 percent of the total annual funding for the full Section 405 program. These funds are intended for programs which reduce the risk of driving under the influence of alcohol or drugs. A matching share of 20 percent must be provided by the local agency.
- Section 405(e): Distracted Driving – A total of 8.5 percent of Section 405 funds are allocated for distracted driving incentive grants. Funds are intended for programs which reduce the risk of distracted driving.
- Section 405(h): Non-motorized Safety – Five percent of Section 405 is available under this tier for states where the combined bicycle and pedestrian fatalities represent more than 15 percent of all roadway fatalities in that state based on the most recent FARS data from NHTSA. Funding under this tier requires a 20 percent match and is only eligible for training law enforcement on state laws applicable to pedestrian and bicycle safety, enforcement mobilizations and campaigns designed to enforce those state laws, or public education and awareness programs designed to inform motorists, pedestrians, and bicyclists.

FHWA Local and Tribal Road Safety MATCH Program

The Federal Highway Administration's (FHWA) Mentoring, Assistance, Training, and Communication Help (MATCH) Program provides free assistance to local and tribal agencies to address roadway safety in their community. The program connects agencies requesting assistance with volunteers that have specific expertise to help successfully address the identified challenges. The program connects agencies requesting assistance with volunteers that have specific expertise to help successfully address the identified challenges.

California Highway Patrol (CHP) Cannabis Tax Fund Grant Program (CTFGP)

Funding for this program comes from the passage of Proposition 64, The Control, Regulate, and Tax Adult Use Marijuana Act (AUMA) in 2016. The intent of this program is to reduce the number of crashes by impaired drivers, increase public awareness related to the dangers of impaired driving, and improve highway safety. The purpose of the funds is to supplement and not supplant funding for current activities and programs. The grant application period for FY 2026/2027 is about to be concluded.

Implementation Timeframes

The approximate timeframe for completion of each countermeasure is identified in each Focus Area Strategy Table, provided in **Appendix D**. The approximate timeframe for completion was broken into three possible timeframes:

TIMEFRAMES

- Short-Term: 1-2 years
- Medium-Term: 3-5 years
- Long-Term: 6-10 years

Countermeasures and strategies with Medium- and Long-Term implementation timeframes may be revisited during future LRSP update cycles.

Key Findings and Next Steps

This LRSP used a methodical process and input from stakeholders and the public to identify focus areas, analyze crash trends, and develop countermeasures across the four E's of safety planning (*Engineering*, *Education*, *Enforcement*, and *Emergency Services*). The plan includes strategy tables identifying responsible parties, completion goals, and performance measures.

The implementation plan and key considerations identified in this plan will help the City of Lakeport successfully implement the LRSP. The most critical next steps include:

1. Identifying projects and countermeasures, and complete applications for the next cycle of HSIP.
2. Coordinate with the School District to pursue ATP grant funding for a comprehensive Safe Routes to School Plan.
3. Establish working teams for the short-term actions. This primarily includes grant applications, and education and enforcement activities.

In summary, the key findings and recommendations included in this LRSP include the following:

- The plan draws from previous studies and existing efforts within the City of Lakeport, with several transportation safety improvements currently planned or underway.
- The top priority safety concerns indicated through the public outreach survey and interactive map were Distracted Driving, Pedestrian Safety, Impaired Driving, and Intersection Safety.
- A total of 117 crashes occurred in the City of Lakeport between 2019 and 2023. Less than 10 percent of the crashes in Lakeport resulted in severe injury, and there was one pedestrian-involved fatality.
- The three top PCF's for fatal or serious injury crashes, with two crashes attributed to each, were Driving or Bicycling Under Influence of Alcohol or Drugs, Unsafe Speed, and Improper turning.

- The majority of crashes were identified as intersection related, accounting for approximately 72 percent of the total crashes and nearly 64 percent of the severe injury and fatal crashes.
- The most common crash type is *Hit Object*, which represents 24 percent of all crashes and 27 percent of fatal and serious injury crashes in Lakeport.
- There were 11 fatal and serious injury crashes in Lakeport, with Hit Object accounting for three crashes, followed by Rear End, Vehicle-Pedestrian, and Other each accounting for two crashes.
- The most common crash type at intersections is Broadside, accounting for 26 percent of crashes at intersections.
- The leading types of roadway crashes are Rear End followed by Hit Object. Lane Departure (head-on, hit object, sideswipe, and overturned) type crashes accounted for approximately 62 percent of crashes on roadways and 46 percent of the severe injury and fatal crashes.
- Twenty-seven (27) percent of pedestrian and bicycle crashes resulted in severe injury (2) or fatality (1).
- The crash data was reviewed in combination with the public outreach to determine specific locations that may warrant safety improvements.
- The top priorities for developing systemic countermeasure applications projects included roadway improvements, roadway and intersection lighting projects, unsignalized intersection improvements, and pedestrian and bicycle safety improvements.
- Site specific locations for potential improvements were identified on the following corridors: Eleventh Street and Main Street.

The LRSP is a living document and should be updated every four to five years using the most up-to-date crash data to evaluate the performance of implemented countermeasures and re-evaluate focus areas. Future iterations of this LRSP should consider updates to or expanding upon existing transportation policies to account for evolving technologies and lifestyles among roadway users.


Lakeport, CA

Lakeport, CA
Source: City of Lakeport Instagram

APPENDICES

Appendix A
Stakeholder Collaboration

Appendix B
Public Outreach Results & Analysis

Appendix C
Countermeasures and Toolbox

Appendix D
Focus Area Strategy Tables

Appendix E
Potential Project Packages

Appendix F
SS4A Self-Certification Checklist

APPENDIX A

Stakeholder Collaboration

Lake County LRSP Update - Lakeport, Clearlake, Unincorporated Areas Stakeholder Working Groups

Agencies *	
Beyond Lucid (SR2S Grant)	Lake County Office of Emergency Services
Big Valley Advisory Council	Lake County Public Outreach
Big Valley Band of Pomo Indians	Lake County Record Bee
Blue Zones	Lake County Sheriff
Board, Lake APC, Council City of Clearlake	Lake County Social Services
CalFire	Lake Links
California Highway Patrol	Lake Transit Authority
Caltrans - Regional Planning D1	lake Tribal Admin
Caltrans District 1	Lake Tribal Council
Caltrans District 1, Safe Systems	Lakeport Fire
Central Region Town Hall	Lakeport Public Works
City of Clearlake	Lakeport Unified School District
City of Clearlake Public Works	Lower Lake Community Action Group
Clearlake Admin Services - events / social media	Lucerne Elementary School District
Clearlake Engineering	Middletown Area Town Hall
Cobb Advisory Council	Middletown Rancheria
Crandle Tribal Group	Middletown Unified School District
Eastern Region Town Hall	Northshore Fire Protection District
Elem Indian Colony	Other Tribal agency contact
Habematolel Rancheria in Upper Lake	PegTV
Kelseyville Fire Protection District	Redwood Region Rise
Kelseyville Unified School District	Robinson Rancheria
Kno'Qoti Native Wellness	Scotts Valley Band of Pomo Indians
Koi Nation / Habematolel Pomo of Upper Lake	Scotts Valley Community Advisory Council
Konocti Unified School District	Scotts Valley Rancheria
Lake Area Planning Council	Technical Advisory Board (Lake APC)
Lake Co News	Tribal Advisory Councils
Lake County Fire Protection District	Upper Lake Unified School District
Lake County Office of Education	Western Region Town Hall
Lake County Office of Education	

**Summary list of agencies contacted to participate in meetings, share public survey, and provide feedback. Participation varied.*

APPENDIX B

Public Outreach Results & Analysis

LAKE APC

LOCAL ROAD SAFETY PLANS

TAKE THIS SURVEY

TO HELP

IMPROVE TRAFFIC SAFETY

Your input matters...

Lake Area Planning Council is updating three Local Road Safety Plans (LRSP) within the Lake County Region including the County of Lake and the cities of Clearlake and Lakeport. An LRSP provides a critical framework for reducing fatal and serious injury crashes on local roads. Public input is a key component of these plans, and **your insight is critical** for securing future grant funding for future transportation safety improvements in your community. To provide input on the County of Lake, Clearlake, and Lakeport Local Road Safety Plans, **please complete the following survey and interactive map by February 20, 2026.**

Tu opinión es muy importante...

Lake Area Planning Council está actualizando tres Planes Locales de Seguridad Vial (LRSP) dentro de la Región del Condado del Lago, incluyendo el Condado de Lake y las ciudades de Clearlake y Lakeport. Un LRSP proporciona un marco crítico para reducir los accidentes con resultados fatales y lesiones graves en las carreteras locales. La participación del público es un componente clave de estos planes, y **su opinión es fundamental** para asegurar la financiación de subvenciones futuras para mejoras en la seguridad del transporte en su comunidad. Para proporcionar su opinión sobre los Planes Locales de Seguridad Vial del Condado de Lake, Clearlake y Lakeport, **por favor complete la siguiente encuesta y el mapa interactivo antes del 20 de febrero de 2026.**

Online Survey Options
Opciones de encuestas por internet

1. Scan the QR code with the camera app on your phone.
   Escanea el código QR con la cámara de tu celular.
2. Enter the web address into a web browser.
   Ingresa la siguiente dirección en el navegador.

https://arcg.is/r5eWC

Paper surveys are available at the following address:

Las encuestas en papel están disponibles en la siguiente dirección:

City of Clearlake
14050 Olympic Dr
Clearlake, CA 95422

City of Lakeport
225 Park Street
Lakeport, CA 95453

Questions: John Speka, spekaj@dow-associates.com

Q5 - Please rank the following categories based on your personal level of concern. This space can be used to explain "Other"
Walking with children is difficult
PAINTED LANES / REFLECTORS/ DAMAGED RDS/ POT HOLES/ STREET SIGNS
More bike lanes/ pedestrian walking lanes to encourage health living/ family bonding.
This particular graph has a glitch and can not rank
Also pedestrian- but high need for sidewalks that accommodate wheel chairs and strollers
Road conditions including lines
Speeding through Lucerne and Nice
Poor road conditions leading to issues with my car and possibly breaking down
Wide lanes
Passing in turn lanes through Nice and Lucerne
Many of the roads are seriously potholed and hard on my car.
Lack of traffic law enforcement.
2 lane roads in and out of county are what create speeding. Semis on the commute routes do not yield to heavy traffic. passing lanes create bottlenecks.
We need a turning lane at the beginning of Lucerne between Foothill Drive and the Morrison Bridge. It's very dangerous to try and make a left turn there. 2 of the properties there house our seniors
Speeding second lots of speeding I. lake County all over. Never enough police or sheriff officers around.
Traffic congestion
Narrowness of corners and lack of reflectors on soda bay road
Crappy roads potholes
Overall road conditions are poorly maintained.
Road rage
Please upgrade the crosswalk at East Lake Elementary School in Clearlake Oaks! ❤️ Help keep our students safe!
Cars crossing double yellow lines to pass.
Driving under the speed limit and not allowing cars to pass
Drive like on race track..
Passing in the middle turning lane
My other pertains to lighting in and around crosswalks. Middletown specifically is very dangerous and there have been injuries that could have been otherwise prevented.
Too many elderly people that can no longer safely drive themselves have caused traffic issues almost every time I am out in my car.
Condition of the roads. There are so may potholes and disrepair that drivers often maneuver in lanes unsafely in order to avoid pot holes and bumps.
Many center and side lines could use fresh painting. It is a danger during the rain.
Blinking crosswalks on 11th Street, Lakeport
Drivers cutting corners on winding roads
Yellow lights turn red too fast

Need stop signs/speed bumps in high traffic areas
Yield on green stop lights that have heavy traffic pedestrian and cars.
Road conditions, repairs needed
Want to see passing lanes on 20 between Blue Lakes and Clearlake Oaks
Pavement Conditions
To many uneven/pot holes.
Condition of roads is unsafe, old pavement, potholes.
I really only worry about pedestrians on Main Street.
Intersection at 29 & 175 in Lakeport, signal for east/west turn, Light Hwy 29 & Thomas Drive.
The city of Clearlake needs more stop signs. Financial resources will be saved by installing more stop signs. One is needed at lakeshore drive/park/manakee instead of the yield right sign. Also Lucerne badly needs a light on 29. This will save lives.
Road condition
Road Improvements and repairs
Rough, pot holed roads
Pedestrian
2) Intersection Safety, 3) Speeding 4) Impaired driving including reaching for phone
Road conditions
Some roads in very poor condition
Asphalt has deteriorated/very large potholes
road repair long awaited
Can't drag to change order
Some roads are not wide enough and do not have white lines, shoulders, sidewalks which make these roads very unsafe for, walking, riding a bike, riding horses ect.
Wheelchair mobility

Q6 - Which types of transportation safety improvements would be the most beneficial? Rank your selections from highest to lowest concern.
This space can be used to explain "Other"2
More passing lalnes! 4 lanes all around the lake.
PAINTED LANES / REFLECTORS/ DAMAGED RDS/ POT HOLES/ STREET SIGNS
This graph has a glitch and can not rank properly
upgrade/repair reflective road signs. Many are not legible at night anymore
Pedestrian paths and road maintenance.
Center lane removed and angle parking put in
More cameras to catch people speeding or passing traffic in the center turn lanes
repair and maintain roads within city/town limits.
more lanes in and out of county for emergency, commerce and commuting safety
Dedicated horse lanes
Bridle trail for equestrians
Crappy roads potholes
Protected bike lanes would be great, but there are many areas that lake bike lanes in any real form, and frequently existing bike lanes are not maintained. the same is true for sidewalks.
Billboards
New pavement, road improvement.
I'm only concerned about better marked pedestrian crossings.
175 & 29 in Lakeport. Turn signals on East & West . Locals know, out of towners have big problems.
Speed kills, Arizona endorses 1 mile over but CA could endorse 5 or even 10 mile over.
Can you pull together a crew of law enforcement to review signage and common places for accidents? Reviewing common places for accidents will save resources to make improvements to the intersections.
Adding turn lanes to congested rural road intersections
All of the above are a top priority to me and my family
Roadside brush clearing and removal of abandoned vehicles.
Improved road conditions
Anastasia Drive is in such disrepair that it is a significant safety and health risk to residents, pedestriansn and vehicles alike. The dust settling on and inside our homes has created an ongoing health and cleanliness concern.
better streetlights, but the type that doesn't disturb birds or create more light pollution (we've got a pretty night sky, should keep it that way!)
Do not allow businesses to pop up in areas where roads are not wide enough, have no white lines, shoulders or crosswalks as this is dangerous for the community and travelers.

7. Please provide any comments relating to transportation safety in Lake County below.
Reduced speed limits at priority locations of Highway 20
Lucerne. It's a weird area because it's a major highway that connects Sacramento to the coast, and it goes right through town and barely has multiple lanes until you hit Mendocino. I think safety would be increased dramatically by adding more passing lanes, not just broken yellow lines.
Fix the roads.
PAINTED LANES / REFLECTORS/ DAMAGED RDS/ POT HOLES/ STREET SIGNS
Road conditions are very poor in Lake County, Cars dodging potholes is also a problem.
It would be nice to have more sidewalks in the County especially on Gaddy Lane. This road is traveled by a lot and is not safe for pedestrians.
The roads need basic maintenance and repaving more than anything.
street cleaner doesn't clean the full street because there's no sidewalks or gutters. Drivers still go the wrong way on the street even though there are do not enter signs. Driving the suggested speed limit of 25 mph on Central Park Ave isn't suggested due to how unmaintained the street is and how busy the street is with residents and local law enforcement using it to get to and from home and or work. It would be a good idea for the city to take back roads like Central Park Ave into consideration to replace and make it safer to drive. The street is poorly lit with one street light near the top of the hill that was never replaced with an LED light like all the other streetlights. Central Park Ave is neglected in the city limits of Lakeport.
For locals and tourism around the lake we should promote bicycling.
Cyclists should be cited for riding in crosswalks when bike lanes are available. If not available, they should follow the same rules of the road as any other vehicle. Bicyclists in sidewalks can be distracting and harmful. There is a large need for sidewalks that span in Nice from Marina Market all along Lakeshore, by Keeling Park, towards Hammond Ave. This is a huge pedestrian corridor that is overlooked. This area also needs lighting. I almost hit a group of kids on bicycles who were riding in dark clothes in the middle of the street next to the Boat House Bar. There are also cars parked blocking the road often making it a transportation nightmare. High street, 17th st, Hartley in Lakeport All need new or improved sidewalks. As well as 11th st. If possible, move or underground power so that poles are not in the way. Often have to push a stroller in the bike lane, if there is one. Would love to be able to walk Lakeport safely. Start slowing traffic on Lakeport blvd.
The speed limit on lakeshore blvd is 35 and people routinely go 40-50 with so many pedestrians. I have almost been hit while running multiple times due to poor lighting, distracted drivers, people speeding, and terrible intersections.
There should be more opportunities to cross the highways (29 and 20) via overpasses- such as at popular destinations like That Ranch and the Shannon Mercantile. It is not reasonable to expect a safe exit/entry during the many events those two places have, without endangering the driving public.
More sidewalks in rural areas.
Please please PLEASE do something about the overpass at Hamburger Hill. It's chaos.

different kinds of funding. There are many streets, especially in the unincorporated parts of Lake County that contain deep potholes or bulging areas of the road. This will lead to people swurving and driving in the wrong lane which poses a safety hazard.
The roads are awful, not maintained regularly especially "county roads."
Lakeport Main Street is so dangerous that few people are willing to shop there.
intersections in residential or urban areas. These function better than stop signs, keep traffic moving, reduce the number and severity of collisions, and are compatible with better street lighting, sidewalks, and bike lanes. I spent nearly a decade living in a moderately sized city and urban traffic circles were all over, and they work very well.
Too many people exceed the speed limits especially through Nice and Lucerne in throughout the day but very little enforcement. Put up more cameras if there isnt enough law enforcement officers
when its raining lights need to be on and this needs to be enforced
needs major surface repair
maintenance features.
Speeding on highway 20 is always an issue. Enforcement of speed limits needs to be reinforced. Also the roads within many of the city/town limits are very poor and potholed.
people are conscious about being nice, I do find that drivers here are much more negligent and unpredictable in their movements. It's very common for people to cross the median or drive into shoulder because the think it's faster. E.g. Scott's valley/11th street. (Ironically they're often the slowest drivers in a corner.) Or people will simply turn from the lane of traffic and not from a marked turn lane or from the right most possible position on the road. And we don't do any meaningful enforcement about such rules. I once compared lake county roads to someone recklessly pointing a gun with a finger in the trigger. They might
People drive so crazy here especially from clearlake oaks to nice round about
I've seen significant improvements in the past few years. Keep moving forward
With so many 2-lane roadways rated for highway speed, a campaign to encourage folks to abide by the solid yellow 'no passing' areas, in addition to the 'stay in your lane through the corner' issue. Folks frequently 'cut' corners on our twisty residential roads, which leads to headlight-to-headlight collisions.
I moved to Lake County because I heard it had a strong equestrian community. I was surprised at how dangerous the country roads are for horses, bikes, and pedestrians to be able to travel. Soda bay road is a great road which connects many communities, but is extremely dangerous for bicycles or horses with no bike lane and narrow roads while people drive fast in large trucks.
Eastlake school needs a crosswalk
East lake elementary school in Clearlake oaks needs a cross walk. Make the school and surrounding areas safer for the kids!
The school in Clearlake Oaks on Hwy 20 is in desperate need of a safer way to cross the highway. Many families walk because it's so close or they can't afford other transportation. It should be a high priority to keep our kids safe to and from school.
Eastlake school in Clearlake oaks is in need of lighting and safe crosswalks for students. Its amazing no one has been injured or killed there due to speeding and distracted drivers

PUBLIC COMMENTS – SURVEY QUESTION 7

I would like to see the school zones addressed.
A new/updated crosswalk by east lake elementary school is incredibly needed. It's a shame that we do not feel safe taking our children to school
The cross walk to East Lake Elementary across the highway is incredibly unsafe. I pray to God it doesn't take a child getting seriously injured for this area to be safer.
Adding street light signals (stop lights) in Clearlake Oaks at the school should be a must! More sidewalks everywhere! And streets lights in most of Clearlake where there is none.
The safety of our children is a high priority. Please upgrade the crosswalks at East Lake Elementary School in Clearlake Oaks! ♥ Help keep our students safe!
I would love to see a crosswalk with a sign that lights up and flashes out by East Lake School! It is dangerous enough, so maybe this will help the drivers be more alert in this area!
Excessive speeds on residential roads in the county areas. I realize this is outside of Caltrans responsibility but is a serious problem. We have drivers, and some are actual neighbors, flying up our residential road at approximately 40-50 mph in addition to coming around a blind corner. We need to be able to have speed bumps installed without all of the red tape involved.
Too many pedestrians have died. Like it or not our hwy and local road systems ARE used by vulnerable residents, and with improvements could be an appeal for tourists and rec to modernize safety on roadways.
Please address pedestrian safety, and consider additional roundabouts in areas of need.
lake county. My family lives close enough to the schools in lakeport that my children should be able to walk, but there is I don't think a single sidewalk from our house to the schools, and very few street lights. On top of that people speed like crazy in that area, so I wouldn't even walk that path on my own, let alone allow my kids to. Addition to that, you can't drive anywhere in this county without running into an elderly person that shouldn't be driving. I have personally been cut off by someone not looking, daily they are turning from the far right and not using left turn lanes, plowing through stop signs or alternatively sitting at stop signs and blocking traffic. I understand that there isn't much that can be done about them driving past when they should, but I have called to report these things and I have never seen enforcement happen in the city or the county.
would love to see that change in the future, but at this time I believe funding would be much better spent on other lacking arears of our roads.
We need better driving schools offered
recovering.
I walk everyday with my dog. People drive way to fast in residential areas, downtown and parking lots. I see many folks not even stopping at stop signs. What happened to pedestrians have the right away? Better signage or blinking speed signs to help slow folks down. On my residential street I can't believe how fast drivers go and there is a blind hill with driveways, one being mine. Looking forward to seeing some changes.
Night driving in Nice is way too dark especially where there is high pedestrian traffic. Better lighting is needed. Also people drive way too fast. In Lakeport and Kelseyville I also see people driving too fast. Speed bumps heading in and out of town proper would help.
The timing on some of the lights in the c County do not provide adequate time to safely come to a stop when traveling the posted speed limits. Could also use more streetlights especially in more rural areas.
The fallen culvert on Hartley, 11th Street and Lakeport Blvd are hazardous. I know a lot of effort has been put into downtown lately, but our other main roads are embarrassing.
The cross walk in front of the East Lake School across highway 20 should have more safety measures.

Mhs and mms have a stop light that is yield on green and has student pedestrians crossing while the light is green because it's yielding on green. It needs to be changed so no one is driving into children while they are crossing. No more yield on green. Better street lights everywhere in the country. Highway 29 and Hwy 53 specifically near Anderson marsh where many people have been tragically killed needs lights and safety measures. People often walk between lower lake and Clearlake.
Driver education is also a key to safety. Most younger drivers and most possibly a language issue have created a noticeable decline in driving skills and understanding of the laws. Failing right of ways, intersection protocol, turn lanes etc.
People drive way too fast, pass in turning lanes, and don't stop for pedestrians.
Please please add passing lanes on 20
Reduce speed limits on highway 20
Speed humps on residential streets where speeding is constant ex: Lakeshore Blvd in Nice!
deserve a safe crosswalk.
There is no safe walkable or even a way to bicycle to get from Lakeport to Upper Lake/Nice. Please fix this!!
We need to improve traffic safety conditions and reduce vehicle speeds
better way of temporarily fixing so when the first rains comes it doesn't get washed away. Sidewalks are badly needed in Clearlake
Many people including me have had a light stay green when opposite traffic light is green as well. Lower Lake on Hwy 53 and 29. Should be addressed.
Safety is good,low population, very little traffic. Speed limits are to low and to many CHP and police.
Intersection at Hwy 29 & Highland Springs Rd make the East and West bound right hand lanes right turn only to many driver use them at passing lanes and creates road rage as well. Same goes for Hwy 29 and Red Hills Rd. Plus I think these intersections cause accidents by the people using these right hand lanes to pass.
People need better sidewalks. Add sidewalk on Hwy 53 in Clearlake from Olympic traffic light to Walmart. People get hit all the time as there is no clear path
aware. Every once in a while, pedestrians try to cross - either in a designated crosswalk or not - and drivers don't acknowledge them or see them in advance.
South Main Street paving. Someones got to give or come to an agreement.
Lines painted clearly with reflectors on both sides of the road (middle and shoulder) along with physical barriers to oncoming traffic in high risk areas
Come t agreement on South Main St & Soda Bay repair. Trucks are killing the roads. Please repair.
Desperately in need of more stop signs an stop lights.
dangerously solid yellow line or not. I rarely see a hwy patrol or sherriff around. Consistently would be a deterrent but crime isn't I understand but you asked
The survey is not working properly
Don't forget horses, bicycles, and tractors on the non-highway roads. Scotts Valley Road is frequently used by all of those as well as many speeding motorists. It is also important to consider our beautiful and rare night sky. Don't let increased lighting created light pollution and affect owl and other night hunting creatures. Mandate 'dark sky' fixtures.
safety and traffic, pedestrian lights with very clear signs and signals that light up to show pedestrians crossing, re-striping of the roads,

PUBLIC COMMENTS – SURVEY QUESTION 7

Repair roads where the pavement has warped from heat and ground moisture they look like a wash board. Repair roads that have distinct unlevel road surfaces that vehicle operation is unsafe. Have a more improved way of communicating to the public the importance of securing there loads and reporting these hazards from roads that can cause accidents.
Trying to cross North Forbes downtown Lakeport by the courthouse/County building is dangerous whether you're in a car or a pedestrian. There are so many parked vehicles in the area for people visiting the county building that create a low visibility issue and people on North Forbes fly down that road with no stop sign at Second or Third Street intersections. Please put in stop signs in those intersections so people can safely cross.
areas of the county.
Enforcement of traffic laws
No comments about transportation safety in Lake County other than what was already stated.
It seems like there are people wandering around the streets, and aggressive rude drivers. More/better sidewalks should help, as would bike lanes. And tickets for the drivers who endanger others .
significant risk for children and adults to be struck by a vehicle as driven within the 25 mph speed limit. Requesting speed limit reduction to 5 MPH on Reeves Lane where there is no sidewalk or a sidewalk installed. Thank you.
who want to walk around and want to ride their bicycles at night? I think it would only be fair. Besides, with gas prices these days. Don't you think it's time to dust off the ol 10 speed and get out there and enjoy the most beautiful place in the whole world? C.
Speeding and Parking enforcement need to be addressed
Please no more round abouts in Lake County. Please stop approving projects on the dangerous roads that are not wide enough, there are no white lines, shoulders ect. The roads are not 4290. We who live in these areas deserve to be able to continue to safely walk, ride bikes or horses on our roads In which we have been doing for 40 plus years. If you cant make the roads safe and in compliance then please stop allowing new projects.
Not enough streetlamps, especially on 29/175. More stop signs downtown. More stop sign signal flashers.

APPENDIX C

Countermeasures & Toolbox

	No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP Funding Eligibility	Systemic Approach Opportunity	Potential Applications
Non-Signalized Intersections	NS01	Lighting	Add/Upgrade intersection lighting (NS.I)	Night	40%	20	100%	Medium	Apply as needed to areas with insufficient lighting as identified through crash analysis and/or intersection audits.
	NS02	Control	Convert to all-way STOP control (from 2-way or yield control)	All	50%	10	100%	High	As need is identified and confirmed through engineering study.
	NS03	Control	Install Signals	All	30%	20	100%	Low	
	NS06	Operation / Warning	Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs	All	15%	10	100%	Very High	As need is identified.
	NS07	Operation / Warning	Upgrade intersection pavement markings (NS.I.)	All	25%	10	100%	Very High	Perform an audit, starting with the top ten crash corridors to identify system-wide need and implement as resources available.
	NS11	Operation / Warning	Improve sight distance to intersection (Clear sight triangles)	All	20%	10	90%	High	As need is identified and confirmed through engineering study.
	NS16	Geometric Modification	Reduced Left-Turn Conflict Intersection (NS.I)	All	50%	20	90%	Medium	As need is identified and confirmed through engineering study.
	NS19PB	Ped and Bike	Install raised medians / refuge islands (NS.I)	P & B	45%	20	90%	Medium	Apply as needed to crosswalks, starting with intersections identified as having a vehicle-pedestrian crash.
	NS20PB	Ped and Bike	Install pedestrian crossing at uncontrolled locations (new signs and marking only)	P & B	25%	10	100%	High	Apply as need identified through crash analysis and intersection audit, starting with intersections identified as having a vehicle-pedestrian crash.
	NS21PB	Ped and Bike	Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features)	P & B	35%	20	100%	Medium	
	NS22PB	Ped and Bike	Install Rectangular Rapid Flashing Beacon (RRFB)	P & B	35%	20	100%	Medium	
	NS23PB	Ped and Bike	Install Pedestrian Signal (including Pedestrian Hybrid Beacon "HAWK")	P & B	55%	20	100%	Low	
	Systemic Application of Low-Cost Countermeasures at Stop controlled intersections (FHWA - Proven Safety Countermeasures)	Operation / Warning	Double-up (left & right) oversized advance intersection warning signs (on major approach)	Fatal & Night	10% (Fatal) 15% (Night)	New Countermeasure from FHWA not included in current Caltrans HSIP guidance. Anticipate these will be included in future HSIP guidance documents for Cycle 11 based on on-going Caltrans SHSP update			As need is identified
		Operation / Warning	Enhanced Pavement markings that delineate through lane edge lines (on major approach)						
		Operation / Warning	Double-up (left & right) oversized advanced "Stop Ahead" intersection warning signs						
		Operation / Warning	Double-up on oversized stop signs						
		Operation / Warning	Retroreflective sheeting on sign posts						
		Operation / Warning	Review & update stop bar crossing conditions and locations						
		Operation / Warning	Remove vegetation, parking, and other obstructions that limit sight triangles at the intersection.						
		Operation / Warning	Double arrow warning sign at stem of T-intersections						

	No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP Funding Eligibility	Systemic Approach Opportunity	Potential Applications
Signalized Intersections	-	Ped and Bike	Convert standard crosswalks to continental crosswalk style	P & B	-	-	-	-	Apply this strategy to upgrade existing crosswalks from the traditional to the continental crosswalk style according the CA-MUTCD.
	S01	Lighting	Add intersection lighting	Night	40%	20	100%	Medium	Apply as needed to areas with insufficient lighting as identified through crash analysis and/or intersection audits.
	S02	Signal Modification	Improve signal hardware: lenses, back plates with retroreflective borders, mounting, size, and number	All	15%	10	100%	Very High	Apply as needed through inventory audit, starting with the top twenty highest crash intersections
	S03	Signal Modification	Improve signal timing (coordination, phases, red, yellow, or operation)	All	15%	10	50%	Very High	Review signal timing parameters to determine if modifications are needed.
	S04	Signal Modification	Provide Advanced Dilemma Zone Detection for High Speed Approaches	All	40%	10	100%	High	Review signalized intersections with high broadside crashes to determine applicability
	S05	Signal Modification	Install Emergency Pre-emption systems	Emergency Vehicle	70%	10	100%	High	Apply as needed to signalized intersections on major arterials and primary emergency response routes.
	S06	Signal Modification	Install Left-turn lane and add turn phase (signal has no left-turn lane or phase before)	All	55%	20	90%	Low	As need is identified.
	S07	Signal Modification	Provide protected left-turn phase (left turn lane already exists)	All	30%	20	100%	High	
	S08	Signal Modification	Convert signal to mast-arm (from pedestal-mounted)	All	30%	20	100%	Medium	
	-	-	Install Flashing Yellow Arrow	-	-	-	-	-	
	S10	Operation / Warning	Install flashing beacons as advance warning (S.I)	All	30%	10	100%	Medium	As need is identified.
	S11	Operation / Warning	Improve pavement friction (High Friction Surface Treatments)	All	55%	10	100%	Medium	
	S18PB	Ped and Bike	Install pedestrian crossing (S.I)	P & B	25%	20	100%	High	As need is identified.
	S19PB	Ped and Bike	Pedestrian Scramble	P & B	40%	20	100%	High	As need is identified.
	S20PB	Ped and Bike	Install Advance stop bar before crosswalk (Bicycle Box)	P & B	15%	10	100%	Very High	As need is identified.
	S21PB	Ped and Bike	Modify signal phasing to implement a Leading Pedestrian Interval (LPI)	P & B	60%	10	100%	Very High	

	HSIP No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP Funding Eligibility	Systemic Approach Opportunity	Potential Applications
Roadways	R01	Lighting	Add Segment Lighting	Night	35%	20	100%	Medium	Apply as needed to areas with insufficient lighting as identified through crash analysis and/or roadway audits.
	R22	Operation / Warning	Install / Upgrade signs with new fluorescent sheeting (regulatory or warning)	All	15%	10	100%	Very High	As need is identified.
	R23	Operation / Warning	Install chevron signs on horizontal curves	All	40%	10	100%	Very High	Apply as needed to roadway curves with identified safety concerns.
	R24	Operation / Warning	Install curve advance warning signs	All	25%	10	100%	Very High	
	R26	Operation / Warning	Install dynamic/variable speed warning signs	All	30%	10	100%	High	Apply as needed to areas identified to have speed issues.
	R27	Operation / Warning	Install delineators, reflectors, and/or object markers	All	15%	10	100%	Very High	Perform an audit, starting with the top ten crash corridors to identify system-wide need and implement as resources available.
	R28	Operation / Warning	Install edge-lines and centerlines	All	25%	10	100%	Very High	Perform an audit, starting with the top ten crash corridors, to identify system-wide need and implement as resources available.
	R32PB	Ped and Bike	Install bike lanes	P & B	35%	20	90%	High	Apply this strategy along local roadways which are identified in the ATP as candidates for bicycle facilities, in order to construct new bike lanes in
	R33PB	Ped and Bike	Install protected bike lanes	P & B	45%	20	90%	High	
	R34PB	Ped and Bike	Install sidewalk / pathway (to avoid walking along roadway)	All	80%	20	90%	Medium	
	R31	Operation / Warning	Install edgeline rumble strips / stripes	All	15%	10	100%	High	As need is identified.
		Geometric Modification	Implement a SafetyEdge for rural roads	Fatal & Injury	11%**	-	-	-	As need is identified.

***https://safety.fhwa.dot.gov/provencountermeasures/safety_edge/*

Non-HSIP Eligible Countermeasures (Policy / Program related)

Safety E Category	Focus Area	Countermeasure Name	Description
Education	Speeding	Increased Public Outreach & Communication	Leverage available state-wide messaging campaigns to target drivers to reduce speeding. Messaging campaigns should provide information about the program, including expected safety benefits and to persuade motorists that detection and punishment for violations is likely.
Education	Distracted Driving	Increased Public Outreach & Communication	Developing distracted driving messaging campaigns and outreach to the general public in order to reduce the frequency of distracted driving. Messaging may be targeted to a specific group or for all motorists.
Education	Pedestrian Safety	Elementary-Age Child Pedestrian Training	Program designed to equip school-age children with knowledge and practice to enable them to walk safely in environments with traffic and other safety hazards. Similar to WalkSafe in Miami-Dade County or NHTSA Child Pedestrian Safety Curriculum. Work with School Districts to incorporate into Physical Education curriculum.
Education	Pedestrian Safety	Conspicuity Enhancement	Provide retroreflective, bright colored, and fluorescent clothing to residents and students in order to increase the visibility of pedestrians in the City.
Education	Bike Safety	Bike Safety Education For Children	Teach children the basics of using a bicycling including handing skills, traffic signs and signals, how to ride on streets with traffic present, proper helmet use, bicycle safety checks, and bicycle maintenance. Regular school curriculum can reach all students but opportunities outside of school (community centers, City parks and recreation departments, etc.) may be more feasible and more flexible. Work with School District to incorporate into Physical Education curriculum.
Education	Bike Safety	Bike Safety Education for Adults	The goal of bicycle safety education for adult bicyclists is to improve knowledge of laws, risks, and cycling best practices, and to lead to safer cycling behaviors, including riding predictably and the use of safety materials such as reflective clothing and helmets. May include educational materials, tip sheets, and a pledge program for local agencies to adopt and disseminate. *Contingent upon available staff and funding for classroom / handout materials.*
Education	Bike Safety	Active Lighting / Rider Conspicuity	The goal of this strategy is to make bicyclists more visible to motorists and to allow motorists more opportunity to see and avoid collisions with bicyclists. This strategy focuses on providing materials to bicyclists including active lighting, retroreflective clothing/materials, bright clothing, etc.
Education	Bike Safety	Driver Training	Consideration should be given to working with local driver education programs to enhance existing driver training and incorporate new driver training about sharing the road with bicyclists. The purpose of addressing bicycle safety as part of driver education is to increase the sensitivity of drivers to the presence and characteristics of bicyclists and how to safety share the road with them. The direct effectiveness of this countermeasure is unknown at this time.
Education	Bike Safety	Share the Road Awareness Program	Increase driver awareness of bicyclists' rights and the need for mutual respect of bicyclists on the roadway. Campaign education efforts are intended to improve the safety of all road users, including bicyclists and enhance the understanding and compliance with relevant traffic laws.
Education	Impaired Driving	Responsible Beverage Service	Consider reviewing existing Server Training programs which are required to serve alcohol and ensure that they are intensive, high quality, face-to-face programs.
Engineering, Education, Enforcement	Pedestrian & Bicycle Safety	Safe Routes to School Planning	The goal of Safe Routes to School Planning is to increase the amount of walking and bicycle trips to and from school while simultaneously improving safety for children walking or bicycling to school. Agencies may partner to pursue grant funding to conduct a comprehensive Safe Routes to School Program for all schools .
Engineering, Enforcement	Pedestrian Safety	Pedestrian Safety Zones	Focus resources on select areas where a significant number of pedestrian crashes have occurred in order to apply a targeted approach and create a greater overall reduction in crashes.

(Source: NHTSA Countermeasures That Work 9th Edition)

Enforcement Contingent Upon Adequate Police Staffing Levels			
Safety E Category	**Focus Area**	**Countermeasure Name**	**Description**
Enforcement	Distracted Driving	High Visibility Cellphone Enforcement	High visibility patrols for distracted driving / cellphone use by drivers involve law enforcement concentrating a large amount of resources in a particular geographic area in order to look for drivers who are potentially distracted or using a cellphone. *This recommendation is contingent on adequate staffing and budget.*
Enforcement	Impaired Driving	High-Visibility Saturation Patrols	A saturation patrol (also called a blanket patrol) consists of a large number of law enforcement officers patrolling a specific area looking for impaired drivers. These patrols usually take place at times and locations where impaired-driving crashes commonly occur. *This recommendation is contingent on adequate staffing and budget* .
Enforcement	Pedestrian Safety	High Visibility Pedestrian Enforcement Program	Highly visible crosswalk sting programs draw attention to the importance of drivers yielding to pedestrians, especially in critical locations for pedestrian crashes. *This recommendation is contingent on adequate staffing and budget.*

Table 1. Countermeasures for Signalized Intersections

No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP Funding Eligibility	Systemic Approach Opportunity?
SI01NT	Lighting	Add intersection lighting (S.I.)	Night	40%	20	90%	Medium
SI02	Signal Mod.	Improve signal hardware: lenses, back-plates with retroreflective borders, mounting, size, and number	All	15%	10	90%	Very High
SI03	Signal Mod.	Improve signal timing (coordination, phases, red, yellow, or operation)	All	15%	10	50%	Very High
SI04EV	Signal Mod.	Install emergency vehicle pre-emption systems	Emergency Vehicle	70%	10	90%	High
SI05	Signal Mod.	Install left-turn lane and add turn phase (signal has no left-turn lane or phase before)	All	55%	20	90%	Low
SI06	Signal Mod.	Provide protected left turn phase (left turn lane already exists)	All	30%	20	90%	High
SI07	Signal Mod.	Convert signal to mast arm (from pedestal-mounted)	All	30%	20	90%	Medium
SI08	Operation/ Warning	Install raised pavement markers and striping (Through Intersection)	All	10%	10	90%	Very High
SI09	Operation/ Warning	Install flashing beacons as advance warning (S.I.)	All	30%	10	90%	Medium
SI10	Operation/ Warning	Improve pavement friction (High Friction Surface Treatments)	All	55%	10	90%	Medium
SI11	Geometric Mod.	Install raised median on approaches (S.I.)	All	25%	20	90%	Medium
SI12PB	Geometric Mod.	Install pedestrian median fencing on approaches	P & B	35%	20	90%	Low
SI13	Geometric Mod.	Create directional median openings to allow (and restrict) left-turns and u-turns (S.I.)	All	50%	20	90%	Medium
SI14	Geometric Mod.	Install right - turn lane (S.I.)	All	15%	20	90%	Medium
SI15	Geometric Mod.	Reduced Left-Turn Conflict Intersections (S.I.)	All	50%	20	90%	Medium
SI16RA	Geometric Mod.	Convert intersection to roundabout (from signal)	All	Varies	20	90%	Low
SI17RA	Geometric Mod.	Convert intersection to compact roundabout (from signal)	All	Varies	20	90%	Low
SI18PB	Ped and Bike	Install pedestrian countdown signal heads	P & B	25%	20	90%	Very High
SI19PB	Ped and Bike	Install pedestrian crossing (S.I.)	P & B	25%	20	90%	High
SI20PB	Ped and Bike	Pedestrian Scramble	P & B	40%	20	90%	High
SI21PB	Ped and Bike	Install advance stop bar before crosswalk (Bicycle Box)	P & B	15%	10	90%	Very High
SI22PB	Ped and Bike	Modify signal phasing to implement a Leading Pedestrian Interval (LPI)	P & B	60%	10	90%	Very High

Table 2. Countermeasures for Non-Signalized Intersections

No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP Funding Eligibility	Systemic Approach Opportunity?
NS01NT	Lighting	Add intersection lighting (NS.I.)	Night	40%	20	90%	Medium
NS02	Control	Convert to all-way STOP control (from 2-way or Yield control)	All	50%	10	90%	High
NS03	Control	Install signals	All	30%	20	90%	Low
NS04RA	Control	Convert intersection to roundabout (from all way stop)	All	Varies	20	90%	Low
NS05RA	Control	Convert intersection to roundabout (from stop or yield control on minor road)	All	Varies	20	90%	Low
NS06RA	Control	Convert intersection to compact roundabout (from all way stop)	All	Varies	20	90%	Medium
NS07RA	Control	Convert intersection to compact roundabout (from stop or yield control on minor road)	All	Varies	20	90%	Medium
NS08	Operation/ Warning	Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs	All	15%	10	90%	Very High
NS09	Operation/ Warning	Upgrade intersection pavement markings (NS.I.)	All	25%	10	90%	Very High
NS10	Operation/ Warning	Install Flashing Beacons at Stop-Controlled Intersections	All	15%	10	90%	High
NS11	Operation/ Warning	Install flashing beacons as advance warning (NS.I.)	All	30%	10	90%	High
NS12	Operation/ Warning	Install transverse rumble strips on approaches	All	20%	10	90%	High
NS13	Operation/ Warning	Improve sight distance to intersection (Clear Sight Triangles)	All	20%	10	90%	High
NS14	Operation/ Warning	Improve pavement friction (High Friction Surface Treatments)	All	55%	10	90%	Medium
NS15	Geometric Mod.	Install splitter-islands on the minor road approaches	All	40%	20	90%	Medium
NS16	Geometric Mod.	Install raised median on approaches (NS.I.)	All	25%	20	90%	Medium
NS17	Geometric Mod.	Create directional median openings to allow (and restrict) left-turns and u-turns (NS.I.)	All	50%	20	90%	Medium
NS18	Geometric Mod.	Reduced Left-Turn Conflict Intersections (NS.I.)	All	50%	20	90%	Medium
NS19	Geometric Mod.	Install right-turn lane (NS.I.)	All	20%	20	90%	Low
NS20	Geometric Mod.	Install left-turn lane (where no left-turn lane exists)	All	35%	20	90%	Low
NS21PB	Ped and Bike	Install raised medians / refuge islands (NS.I.)	P & B	45%	20	90%	Medium
NS22PB	Ped and Bike	Install pedestrian crossing at uncontrolled locations (new signs and markings only)	P & B	25%	10	90%	High
NS23PB	Ped and Bike	Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features)	P & B	35%	20	90%	Medium
NS24PB	Ped and Bike	Install Rectangular Rapid Flashing Beacon (RRFB)	P & B	35%	20	90%	Medium
NS25PB	Ped and Bike	Install Pedestrian Signal (including Pedestrian Hybrid Beacon (HAWK))	P & B	55%	20	90%	Low

Table 3. Countermeasures for Roadways

No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP Funding Eligibility	Systemic Approach Opportunity?
R01NT	Lighting	Add segment lighting	Night	35%	20	90%	Medium
R02	Remove/ Shield Obstacles	Remove or relocate fixed objects outside of Clear Recovery Zone	All	35%	20	90%	High
R03	Remove/ Shield Obstacles	Install Median Barrier	All	25%	20	90%	Medium
R04	Remove/ Shield Obstacles	Install Guardrail	All	25%	20	90%	High
R05	Remove/ Shield Obstacles	Install impact attenuators	All	25%	10	90%	High
R06	Remove/ Shield Obstacles	Flatten side slopes	All	30%	20	90%	Medium
R07	Remove/ Shield Obstacles	Flatten side slopes and remove guardrail	All	40%	20	90%	Medium
R08	Geometric Mod.	Install raised median	All	25%	20	90%	Medium
R09	Geometric Mod.	Install median (flush)	All	15%	20	90%	Medium
R10PB	Geometric Mod.	Install pedestrian median fencing on approaches	P & B	35%	20	90%	Low
R11	Geometric Mod.	Install acceleration/ deceleration lanes	All	25%	20	90%	Low
R12	Geometric Mod.	Widen lane (initially less than 10 ft)	All	25%	20	90%	Medium
R13	Geometric Mod.	Add two-way left-turn lane	All	30%	20	90%	Medium
R14	Geometric Mod.	Road Diet (Reduce travel lanes and add a two way left-turn and bike lanes)	All	35%	20	90%	Medium
R15	Geometric Mod.	Widen shoulder	All	30%	20	90%	Medium
R16	Geometric Mod.	Curve Shoulder widening (Outside Only)	All	45%	20	90%	Medium
R17	Geometric Mod.	Improve horizontal alignment (flatten curves)	All	50%	20	90%	Low
R18	Geometric Mod.	Flatten crest vertical curve	All	25%	20	90%	Low
R19	Geometric Mod.	Improve curve superelevation	All	45%	20	90%	Medium
R20	Geometric Mod.	Convert from two-way to one-way traffic	All	35%	20	90%	Medium
R21	Geometric Mod.	Improve pavement friction (High Friction Surface Treatments)	All	55%	10	90%	High

Table 3. Countermeasures for Roadways (Continued)

No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP Funding Eligibility	Systemic Approach Opportunity?
R22	Operation/ Warning	Install/Upgrade signs with new fluorescent sheeting (regulatory or warning)	All	15%	10	90%	Very High
R23	Operation/ Warning	Install chevron signs on horizontal curves	All	40%	10	90%	Very High
R24	Operation/ Warning	Install curve advance warning signs	All	25%	10	90%	Very High
R25	Operation/ Warning	Install curve advance warning signs (flashing beacon)	All	30%	10	90%	High
R26	Operation/ Warning	Install dynamic/variable speed warning signs	All	30%	10	90%	High
R27	Operation/ Warning	Install delineators, reflectors and/or object markers	All	15%	10	90%	Very High
R28	Operation/ Warning	Install edge-lines and centerlines	All	25%	10	90%	Very High
R29	Operation/ Warning	Install no-passing line	All	45%	10	90%	Very High
R30	Operation/ Warning	Install centerline rumble strips/stripes	All	20%	10	90%	High
R31	Operation/ Warning	Install edgeline rumble strips/stripes	All	15%	10	90%	High
R32	Operation/ Warning	Speed Safety Cameras	All	20%	10	90%	High
R33PB	Ped and Bike	Install bike lanes	P & B	35%	20	90%	High
R34PB	Ped and Bike	Install Separated Bike Lanes	P & B	45%	20	90%	High
R35PB	Ped and Bike	Install sidewalk/pathway (to avoid walking along roadway)	P & B	80%	20	90%	Medium
R36PB	Ped and Bike	Install/upgrade pedestrian crossing (with enhanced safety features)	P & B	35%	20	90%	Medium
R37PB	Ped and Bike	Install raised pedestrian crossing	P & B	35%	20	90%	Medium
R38PB	Ped and Bike	Install Rectangular Rapid Flashing Beacon (RRFB)	P & B	35%	20	90%	Medium
R39AL	Animal	Install animal fencing	Animal	80%	20	90%	Medium

APPENDIX D

Focus Area Strategy Tables

Lakeport Local Road Safety Plan
Distracted Driving - Focus Area Strategy Table

Strategic Linkage

Identified as one of 16 Challenge Areas an Focus Area in the California Strategic Highway Safety Plan (SHSP).
Ranked as the highest area of concern in public outreach survey
Accounts for 18% of Injury Crashes, and 16% of All Crashes

Objectives	**Success Indicators**
Increased awareness of safety impacts of distracted driving. Implement successful public outreach and driver engagement efforts to increase awareness.	Reduction in annual citations for cellphone usage or other distracted driving Reduction in crashes attributed to distracted driving

	Actions	Target Output	Responsible Parties	Implementation Timeframe	Performance Measures	Monitoring and Evaluation	Funding Opportunities
Education	Distracted Driving Public Outreach Campaign	Local distracted driving messaging campaign, targeted at Young Drivers using a variety of media outlets	Lakeport - Public Works & Law Enforcement, and Other Local Partners	Medium-term	1. Grant funding obtained for specific Distracted Driving outreach campaign 2. Implemented outreach campaign for full quarter (3 months)	Total fatal & serious injury crashes Total fatal & serious injury crashes involving distracted driving (cellphone usage, or other distraction) Number of distracted driving or distracted driving related violations issued annually	NHTSA 402, NHTSA 405(e), SS4A
	Social Media Outreach Campaign	This highly targeted outreach effort includes providing educational materials to target populations regarding the dangers and penalties associated with distracted driving exclusively through social media platforms.	Lakeport - Public Works & Law Enforcement, and Other Local Partners	Short-term / Medium-term	Monthly social media blast providing educational materials from Lakeport - Public Works (Secondary parties may be used to amplify and extend the reach of the campaign through coordination with the Lakeport Public Works)		NHTSA 402, NHTSA 405(e), SS4A
Enforcement	High Visibility Enforcement	Conduct high visibility enforcement program, contingent on staff resources, to increase awareness of enforcement efforts and to provide citations as needed. *May be combined with High Visibility Enforcement programs from other Focus Areas.*	Lakeport Law Enforcement Local law enforcement partners	Medium - Term	**Short-term:** Grant funding obtained for increased High Visibility Enforcement Program **Medium-term:** High Visibility Enforcement Program established & implemented quarterly		CTFGP, NHTSA 402, NHTSA 405(e), SS4A
	Increased rate of crash data completion	Crash data for all applicable fields are completed for all crashes within Lakeport	Lakeport Law Enforcement California Highway Patrol	Long-term	Crash Data Working Group: 1. Establishes annual data reconciliation process between Law Enforcement and Public Works 2. Tracks data record completion rates annually 3. Identifies beneficial data attributes, as needed	Data record completion rates	NHTSA 402

Lakeport Local Road Safety Plan
Impaired Driving - Focus Area Strategy Table

Strategic Linkage

Identified in the California Strategic Highway Safety Plan (SHSP) as a High Priority Challenge Area.
Ranked as the third highest priority in the public outreach survey
Tied with others for highest Primary Collision Factor in serious injury and fatal crashes, accounting for 11 percent of all crashes and 15 percent of fatal and serious injury crashes

Objectives	**Success Indicators**
Alcohol/drug involved crashes, injuries, and fatalities are reduced.	Reduction in frequency of crashes, injuries, and fatalities involving alcohol and drugs.

	Actions	Target Output	Responsible Parties	Implementation Timeframe	Performance Measures	Monitoring and Evaluation	Funding Opportunities
Education	Responsible Beverage Service	Local server training programs for serving alcohol are intensive, high quality, and face-to-face programs	Lakeport Public Works, Local Chamber of Commerce	Long - Term	Local server training programs include in person instruction	Annual number of alcohol-involved crashes Annual alcohol-involved fatal & serious injury crashes	Existing Budget
	Coordinate with Transportation Network Companies (Uber, Lyft, etc.) for increased presence	Increased number of ride-hailing services and vehicles available	Lakeport Public Works, Ride-hail companies (Uber, Lyft, etc.), Local Chamber of Commerce, other local partners	Medium - Term	Number of active, licensed ride-hail drivers/vehicles (Uber, Lyft)	Number of active, licensed ride-hail drivers/vehicles (Uber, Lyft)	Existing Budget
	Coordinate with Transportation Network Companies (Uber, Lyft, etc.) for a Sober Ride Home program	Established program to provide Sober Rides Home to residents	Lakeport Public Works, Ride-hail companies (Uber, Lyft, etc.), Local Chamber of Commerce, other local partners	Medium - Term	1. Pilot program with Uber / Lyft established to provide discounted sober rides home 2. Long-term Sober Rides home program / partnership established with TNC company	Annual rides through the Sober Rides Home program Annual alcohol/drug involved crashes	NHTSA 402
Enforcement	High Visibility Enforcement Program	Conduct high visibility enforcement program, contingent on staff resources, to increase awareness of enforcement efforts and to provide citations as needed. *May be combined with High Visibility Enforcement programs from other Focus Areas.*	Lakeport Law Enforcement Local law enforcement partners	Medium - Term	1. Grant funding obtained for increased High Visibility Enforcement Program 2. High Visibility Enforcement Program established & implemented quarterly	Annual number of alcohol-involved crashes Annual DUI Arrests Annual alcohol-involved fatal & serious injury crashes	CTFGP, NHTSA 402, NHTSA 405(d) , SS4A
	Publicized DUI Checkpoints	Publicly noticed DUI checkpoints conducted during high alcohol-involved periods, contingent on staff resources	Lakeport Law Enforcement Local law enforcement partners	Long-Term	1. Grant funding obtained for increased DUI checkpoints 2. DUI Checkpoints publicized and conducted	Annual number of alcohol-involved crashes Annual DUI Arrests Annual alcohol-involved fatal & serious injury crashes	CTFGP, NHTSA 402, NHTSA 405(d)
	Increased rate of crash data completion	Crash data for all applicable fields are completed for all crashes within Lakeport	Lakeport Law Enforcement California Highway Patrol	Long-term	Crash Data Working Group: 1. Establishes annual data reconciliation process between Law Enforcement and Public Works 2. Tracks data record completion rates annually 3. Identifies beneficial data attributes, as needed	Data record completion rates	NHTSA 402

Lakeport Local Road Safety Plan
Speeding/ Aggressive Driving - Focus Area Strategy Table

Strategic Linkage							
Identified in the California Strategic Highway Safety Plan (SHSP) as a High Priority Challenge Area. Accounted for 19 percent of all crashes and 26 percent of fatal and serious injury crashes							
Objectives			**Success Indicators**				
Reducing speeding and other aggressive driving behaviors			Serious injury & fatal crashes involving 'Unsafe Speed' are reduced.				
	Actions	**Target Output**	**Responsible Parties**	**Implementation Timeframe**	**Performance Measures**	**Monitoring and Evaluation**	**Funding Opportunities**
Education	Speed Kills Campaign	Conduct public outreach campaign about the importance of driving the speed limit and the impact just 5 mph can have on the severity of a crash	Lakeport Public Works and Lakeport Law Enforcement	Short-term	1. Grant funding obtained for specific Speeding focused outreach campaign 2. Implemented outreach campaign for full quarter (3 months)	Total, fatal & serious injury crashes involving 'Unsafe Speed' Primary Collision Factor	NHTSA 402, NHTSA 405 (e) , SS4A
Enforcement	Targeted Speed Enforcement Program	Reduced speeding issues along select corridors through regular and targeted enforcement patrols	Lakeport Public Works and Lakeport Law Enforcement	Medium-term	1. Grant funding obtained for Targeted Speed Enforcement Program 2. Targeted Speed Enforcement implemented quarterly along at least three corridors for a full calendar year.		NHTSA 402, NHTSA 405 (e) , SS4A
Engineering	Systemic Speeding Management Project	Dynamic Speed Signs and/or portable trailers to inform motorist of speeding.	Lakeport Public Works and Lakeport Law Enforcement	Short-term / Long-term	Short-term: Grant Application(s) completed Long-term: Constructed safety countermeasures		HSIP, NHTSA 402, SS4A

Lakeport Local Road Safety Plan
Intersection Safety - Focus Area Strategy Table

Strategic Linkage

Identified in the California Strategic Highway Safety Plan (SHSP) as a High Priority Challenge Area.
'Intersection Safety' was ranked as the 4th highest concern in the public outreach survey, and 'Intersection Improvements' ranked as the 4th highest preferred safety improvement
72% of all crashes, and 64% of serious injury and fatal crashes occur at an intersection

Objectives	Success Indicators
Crashes, injuries, and fatalities at signalized and non-signalized intersections are reduced.	Reduction in frequency of crashes, injuries, and fatalities at signalized and non-signalized intersections.

	Actions	Target Output		Responsible Parties	Implementation Timeframe	Performance Measures	Monitoring and Evaluation	Funding Opportunities
Enforcement	Increased rate of crash data completion	Crash data for all applicable fields are completed for all crashes within the Lakeport		Lakeport Law Enforcement California Highway Patrol	Long-term	Crash Data Working Group: 1. Establishes annual data reconciliation process between Law Enforcement and Public Works 2. Tracks data record completion rates annually 3. Identifies beneficial data attributes, as needed	Data record completion rates	NHTSA 402 , SS4A
Engineering	**Short-term:** Develop HSIP location specific and systemic grant application(s) Develop grant application(s) for other funding sources **Long-Term:** Obtain grant funding Construct safety countermeasures	Potential Unsignalized Intersection Safety Countermeasures	Add intersection lighting Upgrade intersection pavement markings (NS.I.) Install pedestrian crossing at uncontrolled locations (new signs and marking only) Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features) Install Rectangular Rapid Flashing Beacon (RRFB)	Lakeport Public Works Caltrans	Short-term / Long-term	**Short-term:** HSIP Grant Application(s) Completed ATP Grant Application(s) Completed (City or CUSD) **Long-Term:** Constructed safety countermeasures through successful HSIP or other grant(s)	Number of serious injury & fatal crashes which occur at signalized & non-signalized intersections Number of serious injury & fatal crashes at signalized & non-signalized intersections by crash type Number of crashes at signalized & non-signalized intersections	HSIP, ATP, CMAQ, SS4A
EMS	Evaluate emergency vehicle detection along priority emergency routes	Increase emergency vehicle detection and response times along priority routes		Lakeport Public Works/ Caltrans	Medium-term	Emergency vehicle detection system installed along highest priority emergency routes	Corridors with emergency vehicle detection systems operational	HSIP*, SS4A Other

**If Emergency Vehicle involved crashes have occurred at the project location. If not, other funding necessary.*

Lakeport Local Road Safety Plan
Pedestrian Safety - Focus Area Strategy Table

Strategic Linkage

Identified in the California Strategic Highway Safety Plan (SHSP) as a High Priority Challenge Area.
Pedestrian Safety was ranked as the 2nd highest concern in the public outreach survey
100% of fatal crashes involved a pedestrian (1 crash), and 10% of serious injury crashes.
The majority (50%) of crashes involved a pedestrian crossing in a crosswalk

Objectives	Success Indicators
Pedestrian crashes, injuries, and fatalities are reduced. Pedestrian crashes, injuries, and fatalities in marked crosswalks are eliminated.	Reduction in frequency of crashes, injuries, and fatalities of pedestrians in the Lakeport Reduction in frequency of crashes, injuries, and fatalities of pedestrians in marked crosswalks.

	Actions	Target Output	Responsible Parties	Implementation Timeframe	Performance Measures	Monitoring and Evaluation	Funding Opportunities
Education	Elementary-Age Child Pedestrian Training	Established program to equip school aged children with knowledge of how to be a safe pedestrian. *Similar to NHTSA Child Pedestrian Safety Curriculum.*	Lakeport School District & Lakeport Public Works	Long-term	Short-term: Pilot pedestrian safety program initiated at least one Lakeport School District affiliated school Long-term: Pedestrian safety program incorporated into Physical Education curriculum across all elementary schools	Number of programs implemented	NHTSA 402 NHTSA 405(h), SS4A
	Conspicuity Enhancement	Increased visibility of pedestrians at night through greater use of retroreflective, bright colored, and fluorescent clothing while walking	Lakeport School District & Lakeport Public Works	Medium-term	Obtain high visibility / retroreflective materials for pedestrians through grant funding or standard procurement Provide high visibility / retroreflective materials for pedestrians at in-person events on a regular and on-going basis (at least semi-annually)	Percent of pedestrian crashes which occur outside of 'Daylight' lighting conditions	NHTSA 402 NHTSA 405(h), SS4A
Enforcement	Increased rate of crash data completion	Crash data for all applicable fields are completed for all crashes within the Lakeport	Lakeport Law Enforcement California Highway Patrol	Long-term	Crash Data Working Group: 1. Establishes annual data reconciliation process between Law Enforcement and Public Works 2. Tracks data record completion rates annually 3. Identifies beneficial data attributes, as needed	Data record completion rates	NHTSA 402
	Safe Routes to School Planning	Comprehensive plan to improve walking and biking safety for students to / from school	Lakeport School District & Lakeport Public Works	Short-term / Medium-term	**Short-term:** ATP Application submitted for Safe Routes to School Plan **Medium-term:** Safe Routes to School Plan completed for all county schools	Percentage of students walking to school (gathered during safe routes to school plan and through annual evaluation / monitoring) Total Vehicle / Pedestrian crashes Total Vehicle / Pedestrian fatal & serious injury crashes	ATP , SS4A
Engineering	ADA Compliance	Design standards are reviewed and updated as needed for ADA compliance. Constructed projects are ADA compliant.	Lakeport Public Works	Short-term / Long-term	**Short-term:** Standards reviewed and updated **Long-term:** Projects meet ADA compliance	Completed ADA compliant projects	ATP , SS4A
	Short-term: Develop HSIP location specific and systemic grant application(s) Develop grant application(s) for other funding sources **Long-Term:** Obtain grant funding Construct safety countermeasures	Potential Pedestrian Safety Countermeasures: Install sidewalk / pathway (to avoid walking along roadway) Convert standard crosswalks to continental crosswalk style Install pedestrian crossing (S.I) Modify signal phasing to implement a Leading Pedestrian Interval (LPI) Install pedestrian crossing at uncontrolled locations (new signs and marking only) Install pedestrian crossing at uncontrolled locations (new signs and markings only) Install/upgrade pedestrian crossings at uncontrolled locations (with enhanced safety features) Install Rectangular Rapid Flashing Beacon (RRFB)	Lakeport Public Works/ Caltrans	Short-term / Long-term	**Short-term:** HSIP Grant Application(s) Completed ATP Grant Application(s) Completed **Long-Term:** Constructed safety countermeasures through successful HSIP or other grant(s)	**Short-term:** Number of safety focuses grant applications submitted **Long-term:** Pedestrian / Vehicle percent of all fatal crashes Pedestrian / Vehicle percent of all serious injury crashes	HSIP, ATP, CMAQ, SS4A

Lakeport Local Road Safety Plan
Bicycle Safety - Focus Area Strategy Table

Strategic Linkage
Identified in the California Strategic Highway Safety Plan (SHSP) as a High Priority Challenge Area. Bicycle Safety was ranked as the 5th highest priority in the public outreach survey 10% of serious injury crashes involved a bicyclist, 2% of overall crashes

Objectives	Success Indicators
Bicyclist involved crashes, injuries, and fatalities are reduced. Bicyclist involved crashes result in fewer injuries due to reduced vehicle-bicycle conflicts	Reduction in frequency of crashes, injuries, and fatalities of bicyclists. Achieve Bicycle Friendly City designation from League of American Bicyclists

	Actions	Target Output	Responsible Parties	Implementation Timeframe	Performance Measures	Monitoring and Evaluation	Funding Opportunities
Education	Bike Safety Education for Children	Bike safety instruction for children through school or county program	Lakeport School District & Lakeport Public Works Local Bike Advocacy Groups	Long-term	Short-term: Pilot bicycle safety program initiated at least one Lakeport School District affiliated school Long-term: Bicycle safety program incorporated into Physical Education curriculum across all Lakeport elementary schools	Percentage of students biking to school (gathered during safe routes to school plan and through annual evaluation / monitoring)	ATP, NHTSA 402, SS4A
	Bike Safety Education for Adults	Bike safety instruction for adults through a county program	Lakeport Law Enforcement & Lakeport Public Works Local Bike Advocacy Groups	Long-term	Bicycle Safety & Basics course for Lakeport residents taught by League of American Bicyclists certified Instructor through local bicycle organizations	Bicyclist percent of all fatal & serious injury crashes Bicyclist percent of all crashes	NHTSA 402, SS4A
	Active Lighting / Rider Conspicuity	Make bicyclists more visible at night to avoid collisions	Lakeport Police/ Sheriff & Lakeport Public Works Local Bike Advocacy Groups	Medium-term	**Short-term:** Obtain high visibility / retroreflective materials for bicyclists through grant funding or standard procurement **Medium-term:** Provide high visibility / retroreflective materials for bicyclists at in-person events on a regular and on-going basis (at least semi-annually)	Annual bicyclist-involved nighttime fatal & serious injury crashes Annual bicyclist-involved nighttime crashes	NHTSA 402, NHTSA 405(h) , SS4A
	Driver Training	Incorporate bicycle safety and sharing the road information into local driver training (Drivers Education) courses	Lakeport Public Works & Department of Motor Vehicles	Long-term	Driver safety training provided in the Lakeport includes specific bicycle safety information regarding bicyclist rights and rules of the road	Bicyclist percent of all fatal & serious injury crashes Bicyclist percent of all crashes	Existing Budget
	Share the Road Awareness Program	Increase driver awareness of bicyclist rights and needs on the roadway	Lakeport Public Works & Public Information	Short-term	Grant funding obtained for specific Share the Road Awareness outreach campaign Implemented outreach campaign for full quarter (3 months)	Bicyclist-involved crashes percent of all fatal & serious injury crashes Bicyclist-involved crashes percent of all crashes	NHTSA 402 , SS4A
Enforcement	Increased rate of crash data completion	Crash data for all applicable fields are completed for all crashes within the City of Lakeport	Lakeport Law Enforcement California Highway Patrol	Long-term	Crash Data Working Group: 1. Establishes annual data reconciliation process between Law Enforcement and Public Works 2. Tracks data record completion rates annually 3. Identifies beneficial data attributes, as needed	Data record completion rates	NHTSA 402

	Actions	Target Output		Responsible Parties	Implementation Timeframe	Performance Measures	Monitoring and Evaluation	Funding Opportunities
Engineering	Safe Routes to School Planning	Comprehensive plan to improve walking and biking safety for students to / from school		Lakeport School District & Lakeport Public Works	Short-term / Medium-term	**Short-term:** ATP Application submitted for Safe Routes to School Plan **Medium-term:** Safe Routes to School Plan completed for all county schools	Percentage of students walking to school (gathered during safe routes to school plan and through annual evaluation / monitoring) Total Vehicle / Pedestrian crashes Total Vehicle /	ATP, SS4A
	Short-term: Develop HSIP location specific and systemic grant application(s) Develop grant application(s) for other funding sources **Long-Term:** Obtain grant funding Construct safety countermeasures	Potential Bicycle Safety Countermeasures	Install bike lanes	Lakeport Public Works/ Caltrans	Long-term	**Short-term:** HSIP Grant Application(s) Completed ATP Grant Application(s) Completed (City or CUSD) **Long-Term:** Constructed safety countermeasures through successful HSIP or other grant(s)	Bicyclist-Involved crashes percent of all fatal crashes Bicyclist-Involved crashes percent of all serious injury crashes Bicyclist-Involved crashes percent of all crashes	HSIP, ATP, CMAQ, NHTSA 405(h), SS4A
			Install protected bike lanes					
			Install Advance stop bar before crosswalk (Bicycle Box)					
			Install pedestrian crossings at uncontrolled locations (new signs and marking only)					
			Install pedestrian crossings at uncontrolled locations (new signs and markings only)					
			Install/upgrade pedestrian crossings at uncontrolled locations (with enhanced safety features)					
			Install Rectangular Rapid Flashing Beacon (RRFB)					

Lakeport Local Road Safety Plan

Roadway & Intersection Lighting - Focus Area Strategy Table

Strategic Linkage

Roadway and Intersection Lighting is a key countermeasure for several of the Challenge Areas in the California Strategic Highway Safety Plan (SHSP).
'Better Street Lighting' was the highest ranked preferred safety improvement in the public outreach survey.
'Dark Conditions – No Streetlight' crashes account for 8 percent of the total crashes, and 18 percent of the severe injury and fatal crashes.

Objectives	Success Indicators
Crashes, injuries, and fatalities listed under 'Dark – No Street Lights' and Dark 'Street Lights not Functioning' lighting conditions are reduced. Higher roadway and intersection illumination	Reduction in frequency of crashes, injuries, and fatalities during 'Dark' or 'Dusk' conditions. Achieve higher level of illumination at high crash frequency intersections

	Actions	Target Output	Responsible Parties	Implementation Timeframe	Performance Measures	Monitoring and Evaluation	Funding Opportunities
Enforcement	Pedestrian & Bicycle Conspicuity Enhancement	Provide lighting elements and retroreflective materials to local pedestrians and bicyclists in order to improve nighttime visibility of vulnerable roadway users.	Lakeport School District & Lakeport Public Works Local Bike Advocacy Groups	Medium-term	**Short-term:** Obtain high visibility / retroreflective materials for pedestrians & bicyclists through grant funding or standard procurement **Medium-term:** Provide high visibility / retroreflective materials for pedestrians & bicyclists at in-person events on a regular and on-going basis (at least semi-annually)	Pedestrian & Bicyclist percent of all annual fatal & serious nighttime injury crashes Annual pedestrian & bicyclists fatal & serious injury crashes Total amount of materials distributed annually	NHTSA 402, NHTSA 405(h), SS4A
Enforcement	Increased rate of crash data completion	Crash data for all applicable fields are completed for all crashes within the City of Lakeport	Lakeport Law Enforcement California Highway Patrol	Long-term	Crash Data Working Group: 1. Establishes annual data reconciliation process between Law Enforcement and Public Works 2. Tracks data record completion rates annually 3. Identifies beneficial data attributes, as needed	Data record completion rates	NHTSA 402
Engineering	**Short-term:** Conduct Lighting Analysis at high nighttime crash intersections and roadway segments **Long-term:** Conduct systemic lighting analysis city-wide	Comply with lighting standards and provide lighting at select unlit or under illuminated roadways and intersections.	Lakeport Public Works	Short-term / Long-term	**Short-term:** Lighting analysis conducted and lighting up to standard at all high crash frequency and pedestrian fatality intersections. Lighting deficiencies to be included with HSIP location specific and systemic grant applications, as applicable **Long-term:** Systemic lighting analysis conducted and additional lighting constructed	Annual nighttime fatal and serious injury crashes	Existing Budget, HSIP, SS4A

Lakeport Local Road Safety Plan
Lane Departures - Focus Area Strategy Table

Strategic Linkage

Identified in the California Strategic Highway Safety Plan (SHSP) as a High Priority Challenge Area
Collision types often associated with lane departures (head-on, sideswipe, hit object, and overturned type crashes) account for 62 percent of the total crashes, and 46 percent of the severe injury and fatal crashes.

Objectives	Success Indicators
Lane Departure type crashes (Head-on, sideswipe, hit object, and overturned) resulting in injuries, and fatalities are reduced.	Reduction in frequency of lane departure type crashes resulting in injuries, and fatalities.

	Actions	Target Output		Responsible Parties	Implementation Timeframe	Performance Measures	Monitoring and Evaluation	Funding Opportunities
Enforcement	Increased rate of crash data completion	Crash data for all applicable fields are completed for all crashes within the Lakeport		Lakeport Law Enforcement California Highway Patrol	Long-term	Crash Data Working Group: 1. Establishes annual data reconciliation process between Law Enforcement and Public Works 2. Tracks data record completion rates annually 3. Identifies beneficial data attributes, as needed	Data record completion rates	NHTSA 402
Engineering	**Short-term:** Develop HSIP location specific and systemic grant application(s) Develop grant application(s) for other funding sources **Long-Term:** Obtain grant funding Construct safety countermeasures	Potential Systemic Lane Departure HSIP Countermeasures	Implement a SafetyEdge for rural roads Widen lanes Add lighting Install Guardrail Install centerline rumble strips/stripes Install edgeline rumble strips/stripes Remove or relocate fixed objects outside of Clear Recovery Zone Install chevron signs on horizontal curves Install curve advance warning signs Install delineators, reflectors, and/or object markers Install edge-lines and centerlines	Lakeport Public Works/ Caltrans	Short-Term / Long-term	**Short-term:** HSIP Grant Application(s) Completed ATP Grant Application(s) Completed (City or other) **Long-Term:** Constructed safety countermeasures through successful HSIP or other grant(s)	Lane departure crashes (head-on, sideswipe, hit object, and overturned) percent of all fatal & serious injury crashes Total lane departure type fatal & serious injury crashes	HSIP, CMAQ, SS4A
EMS	Protect Emergency Responders	Clear vegetation Provide protection ("bumper") trucks to block/buffer emergency response vehicles Implement emergency vehicle notifications - notifications sent to Waze/ Google maps, smart vehicles		Lakeport Public Works, Caltrans, Law Enforcement, Fire, EMS	Short-Term / Long-term	Short-term: HSIP Grant Application(s) Completed Long-Term: Constructed safety countermeasures through successful HSIP or other grant(s), clear vegetation, secure protection vehicles, establish emergency vehicle notifications	Lane departure crashes (head-on, sideswipe, hit object, and overturned) percent of all fatal & serious injury crashes Total lane departure type fatal & serious injury crashes	HSIP, SS4A

Lakeport Local Road Safety Plan
Motorcycle Safety - Focus Area Strategy Table

Strategic Linkage							
Identified in the California Strategic Highway Safety Plan (SHSP) as a Challenge Area. 18% of fatal and serious injury crashes involve a motorcycle							
Objectives			**Success Indicators**				
Motorcycle involved crashes, injuries, and fatalities are reduced.			Reduction in frequency of crashes, injuries, and fatalities of bicyclists.				
	Actions	**Target Output**	**Responsible Parties**	**Implementation Timeframe**	**Performance Measures**	**Monitoring and Evaluation**	**Funding Opportunities**
Education	Motorcycle Safety awareness messaging	Increased driver awareness of motorcyclists & Reduction in motorcyclist-involved crashes	Lakeport Law Enforcement & Lakeport Public Works Local Advocacy Groups	Medium-term	1. Grant funding obtained for specific Motorcycle Safety outreach campaign 2. Implemented outreach campaign for full quarter (3 months)	Total Motorcycle-Involved fatal & serious injury crashes	NHTSA 402, NHTSA 405 (e), SS4A
Engineering	Engineering projects for Intersection Safety and Lane Departures will contribute to motorcycle visibility.						

APPENDIX E

Potential Project Packages

CITY OF LAKEPORT – POTENTIAL PROJECT PACKAGES

Background

Past HSIP Awards

Cycle	Project	Description
8	**Lakeport - Install pavement markings.**	Various arterial and collector streets
10	**City of Lakeport Sign Replacement Program**	Implement a street sign replacement program. Replace 547 signs in the City including warning, regulatory, guide and City specific signs.

Previous LRSP Recommendations

1. Intersection Safety – Systemic Unsignalized Intersections

- 11th St. / N. Forbes St.
- 11th St. / Central Park Ave.
- 11th St. / Tunis St.
- S. Main St. / E St.
- N. Forbes St. / 3rd St.
- S. Main St. / Lakeport Blvd.*
- Main St. / Clear Lake Ave.**
- Bevins St. / Martin St.
- Lange St. / Lakeshore Blvd.
- Sayre St. / Lakeshore Blvd.

2. Pedestrian Safety – Systemic Pedestrian Crosswalk at Unsignalized Intersections

- 11th St. / Brush St.
- Forbes St. / Martin St.
- Main St. / 11th St

3. Intersection Safety – Site Specific - 11th Street/ Forbes Street - Unsignalized Intersection

4. Intersection Safety – Site Specific - Rt 29/ Rt 175 - Signalized Intersection

5. Intersection Safety – Systemic Unsignalized Intersections 1

- 11th Street / Central Park Street
- 11th Street / Tunis Street
- Forbes Street / Martin Street
- 11th Street / SR 29

6. Intersection Safety – Systemic Unsignalized Intersections 2

- 11th Street / Central Park Street
- 11th Street / Tunis Street
- Forbes Street / Martin Street

CITY OF LAKEPORT – POTENTIAL PROJECT PACKAGES

7. Pedestrian Safety – Systemic Pedestrian Crosswalk at Unsignalized Intersections

8. Pedestrian Safety – Systemic Sidewalk

- 11th Street Corridor (Main Street to SR 29)
- 6th Street
- Lakeshore Boulevard

9. Lane Departures – Systemic Clear Recovery Zone

- 11th Street
- Lakeshore Boulevard
- Main Street

10. Lane Departures – Site Specific – Lakeshore Boulevard

11. Lane Departures – Site Specific – 11th Street Corridor

12. Lane Departures/Distracted Driving/Intersection Safety – Site Specific – Main Street

13. Lighting – Systemic Lighting Project

14. Speeding – Systemic Speed Project 1

- Lakeshore Blvd
- 11th St
- Main St
- Lakeport Blvd

15. Speeding – Systemic Speed Project 2

CITY OF LAKEPORT
POTENTIAL PROJECTS

1. **Systemic Roadway Improvements**
2. **Systemic Lighting Project**
3. **Systemic Unsignalized Intersection Improvements**
4. **Systemic Pedestrian and Bicycle Improvements**
5. **11th Street Corridor Improvements**
6. **Main Street Corridor Improvements**

1. Systemic Roadway Improvements

Project Description

The project is to improve roadway segments with features primarily to reduce lane departure crashes – this is often attributed to run-off-the road or side-swipe crash types.

Project Need

In Lakeport:

- Distracted driving top concern in the public outreach
- Hit object most common crash type

Systemic safety projects enable the deployment of proven countermeasures across multiple intersections with similar risk characteristics, rather than focusing on isolated locations. By applying treatments known to improve safety at scale, these projects can achieve meaningful reductions in overall crashes and serious injury crashes across the network. This approach maximizes the safety benefit of available resources while addressing systemic risk factors.

From the Survey:

"Road conditions including lines"

"With so many 2-lane roadways rated for highway speed, a campaign to encourage folks to abide by the solid yellow 'no passing' areas, in addition to the 'stay in your lane through the corner' issue. Folks frequently 'cut' corners on our twisty residential roads."

"I see lots of speeding traffic use the center turn lane to pass vehicles following the speed limit."

"Lines painted clearly with reflectors on both sides of the road (middle and shoulder) along with physical barriers to oncoming traffic in high risk areas"

Public Endorsement

In the public survey, distracted driving was the highest concern. Better street lighting was also the most preferred improvement.

Potential Locations and Risk Factors

Preliminary locations were selected based on several factors such as:

- Crash history (number and severity of crashes)
- Public outreach survey results
- Other locations as identified by stakeholders as having similar risk factors.

Table 1 shows the potential locations with a roadway crash on a local (non-state) highway with 'Hit Object' or 'Sideswipe' as the primary collision factor.

Table 1: Lakeport Systemic Roadways Project Potential Locations

Primary Roadway	Secondary Roadway	Severity
North Main St	11th St	Severe Injury
South Main St	Grace Ln	Other Visible Injury
2nd St	North Main St	PDO
Hartley St	19th St	PDO
N High St	13th St	PDO
South Main St	S Main St 555	PDO

This list is preliminary. It may be modified, expanded or reduced in subsequent phases of grant application or planning. Other locations should be added for a systemic application.

Potential Countermeasures

Potential countermeasures are provided in **Table 2,** along with corresponding HSIP data as applicable. Systemic improvements should be grouped by locations with similar characteristics, although with justification it is possible to have countermeasures apply to some but not all locations.

Table 2: Countermeasures for Roadways

No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP Funding Eligibility	Systemic Approach Opportunity?
R02	Remove/ Shield Obstacles	Remove or relocate fixed objects outside of Clear Recovery Zone	All	35%	20	90%	High
R22	Operation/ Warning	Install/Upgrade signs with new fluorescent sheeting (regulatory or warning)	All	15%	10	90%	Very High
R26	Operation/ Warning	Install dynamic/variable speed warning signs	All	30%	10	90%	High
R27	Operation/ Warning	Install delineators, reflectors and/or object markers	All	15%	10	90%	Very High
R28	Operation/ Warning	Install edge-lines and centerlines	All	25%	10	90%	Very High
R30	Operation/ Warning	Install centerline rumble strips/stripes	All	20%	10	90%	High
R31	Operation/ Warning	Install edgeline rumble strips/stripes	All	15%	10	90%	High

Source: HSIP

CITY OF LAKEPORT – POTENTIAL PROJECT PACKAGES

BCR Potential

The Benefit Cost Ratio (BCR) will be determined by specific locations, limits and countermeasures applied. The BCR potential is anticipated to be low/medium for this project.

Considerations

- Locations should be grouped by similar characteristics and needed countermeasures.
- Systemic locations should be added as needed while maintaining a competitive BCR.

2. Systemic Lighting Project

Project Description

The potential project is to enhance lighting along roadways and intersections.

Project Need

In Lakeport:

- Two Serious Injury crashes and 9 total crashes occurred in 'Dark Conditions No Lighting' Conditions.
- 'Dark Conditions – No Streetlight' crashes account for 8 percent of the total crashes, and 18 percent of the severe injury and fatal crashes.
- The most common crash is hit object; this may be attributed to lighting in some areas.

From the Survey:

"better streetlights, but the type that doesn't disturb birds or create more light pollution (we've got a pretty night sky, should keep it that way!)"

"All of Lake county needs to have the roads re-paved, lighting for better visibility…"

"We need lighting especially at street corners"

"We need more sidewalks and lighting"

Systemic safety projects enable the deployment of proven countermeasures across multiple intersections with similar risk characteristics, rather than focusing on isolated locations. By applying treatments known to improve safety at scale, these projects can achieve meaningful reductions in overall crashes and serious injury crashes across the network. This approach maximizes the safety benefit of available resources while addressing systemic risk factors.

Public Endorsement

Better Street lighting was the highest ranked priority for improvements.

Potential Locations

Lighting conditions for all potential locations should be verified in a field/lighting evaluation to determine if levels are sufficient. These locations had a crash that occurred in "Dark No Streetlights" conditions on a local (non-state highway) location. Other locations should be added for systemic application.

Table 3: Lakeport Systemic Lighting Project Potential Locations

Primary Roadway	Secondary Roadway	Severity
Hartley St	Anastasia Dr	Severe Injury
20th St	N High St	Other Visible Injury
5th St	Tunis St	PDO
Clearlake Av	N High St	PDO

CITY OF LAKEPORT – POTENTIAL PROJECT PACKAGES

Potential Countermeasures

Potential countermeasures are provided in **Table 4,** along with corresponding HSIP data as applicable. Systemic improvements should be grouped by intersections with similar characteristics, although with justification it is possible to have countermeasures apply to some but not all locations.

Table 4: Countermeasures for Lighting

No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP Funding Eligibility	Systemic Approach Opportunity?
SI01NT	Lighting	Add intersection lighting (S.I.)	Night	40%	20	90%	Medium
NSI01NT	Lighting	Add intersection lighting (NS.I.)	Night	40%	20	90%	Medium
RI01NT	Lighting	Add segment lighting	Night	35%	20	90%	Medium

Source: HSIP

BCR Potential

The Benefit Cost Ratio (BCR) will be determined by specific locations, limits and countermeasures applied. The BCR potential is anticipated to be low.

Considerations

- Field evaluation to confirm lighting needs.
- Systemic locations added in as needed.

3. Systemic Unsignalized Intersection Improvements

Project Description

The potential project is to enhance and upgrade unsignalized intersections.

Project Need

In Lakeport:

- Improper turning is at top common primary collision factor for fatal and serious injury crashes.
- 72% of all crashes, and 64% of serious injury and fatal crashes occur at an intersection.
- Rear-end and broadside are the 2nd and 3rd most common crash types.

Systemic safety projects enable the deployment of proven countermeasures across multiple intersections with similar risk characteristics, rather than focusing on isolated locations. By applying treatments known to improve safety at scale, these projects can achieve meaningful reductions in overall crashes and serious injury crashes across the network. This approach maximizes the safety benefit of available resources while addressing systemic risk factors.

From the Survey:

"The speed limit on lakeshore blvd is 35 and people routinely go 40-50 with so many pedestrians. I have almost been hit while running multiple times due to poor lighting, distracted drivers, people speeding, and terrible intersections."

"I walk everyday with my dog. People drive way too fast in residential areas, downtown and parking lots. I see many folks not even stopping at stop signs. What happened to pedestrians have the right away?"

"Way too many near misses of people failing to stop at the Second Street stop sign"

Public Endorsement

'Intersection Safety' was ranked as the 4th highest concern in the public outreach survey. In the same survey, *'Intersection Improvements'* ranked as the 4th highest preferred safety improvement. Additionally, there were 4 individual georeferenced map comments regarding intersection safety.

Potential Locations and Risk Factors

Preliminary locations were selected based on several factors such as:

- Crash history (number and severity of crashes)
- Public outreach survey results

This list is preliminary. It may be modified, expanded or reduced in subsequent phases of grant application or planning. **Table 5** shows the top unsignalized crash locations along local roads, and **Table 6** shows additional locations.

Table 5: Systemic Unsignalized Intersection Improvements Potential Locations (Top Intersections)

Intersection	Fatal	Injury (Severe)	Injury (Other Visible)	Injury (Complaint of Pain)	PDO	Total	Intersection Control	Map Votes
N Forbes St & 11th St	0	0	5	2	0	7	Unsignalized	0
Clear Lake Ave & N Main St	0	0	0	2	1	3	Unsignalized	0

Table 6: Systemic Unsignalized Intersection Improvements Potential Locations (Additional Intersections)

Primary Road	Secondary Rd	Severity
11th St	North St	Fatal
Hartley St	Anastasia Dr	Severe Injury
Martin St	S Polk St	Severe Injury
North Main St	9th St	Severe Injury
South Main St	E St	Severe Injury
South Main St*	Armstrong St	Severe Injury
11th St	North Forbes St	Other Visible Injury
11th St	N Brush St	Other Visible Injury
20th St	N High St	Other Visible Injury
Armstrong St	S High St	Other Visible Injury
Bevins St	Bevins St 525	Other Visible Injury
Bevins St	Bevins Ct	Other Visible Injury
Brush St	11th St	Other Visible Injury
Clear Lake Av	North Main St	Other Visible Injury
Lakeshore Bl	Lange St	Other Visible Injury
Martin St	Russell St	Other Visible Injury
Mellor St	15th St	Other Visible Injury
N High St	Clearlake Av	Other Visible Injury
North Forbes St	First St	Other Visible Injury
North Main St	11th St	Other Visible Injury
North Main St	6th St	Other Visible Injury
North Main St	1st St	Other Visible Injury
Parallel Dr	Hwy 175	Other Visible Injury
South Main St	Martin St	Other Visible Injury
South Main St*	Lupoyoma Av	Other Visible Injury
11th St	Central Park Av	Possible Injury
16th St	Palm Dr	Possible Injury
3rd St	North Main St	Possible Injury
North Main St	Clearlake Av	Possible Injury
*Recent improvements in this area		
Potential Additions for Systemic Application		
Additional intersections on 11th St TBD		
Intersections on 10th between Main Street and Manzanita Street (as an alternative to 11th)		
Intersections on Armstrong between Main Street and Polk Street/ Russell Street		
North Main Street / 7th Street		

CITY OF LAKEPORT – POTENTIAL PROJECT PACKAGES

Potential Countermeasures

Potential countermeasures are provided in **Table 7,** along with corresponding HSIP data as applicable. Other locations added for systemic improvements should be grouped by intersections with similar characteristics.

Table 7: Countermeasures for Unsignalized Intersections

No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP Funding Eligibility	Systemic Approach Opportunity?
NS08	Operation/Warning	Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs	All	15%	10	90%	Very High
NS09	Operation/Warning	Upgrade intersection pavement markings (NS.I.)	All	25%	10	90%	Very High
NS10	Operation/Warning	Install Flashing Beacons at Stop-Controlled Intersections	All	15%	10	90%	High
NS11	Operation/Warning	Install flashing beacons as advance warning (NS.I.)	All	30%	10	90%	High
NS13	Operation/Warning	Improve sight distance to intersection (Clear Sight Triangles)	All	20%	10	90%	High
NS21PB	Ped and Bike	Install raised medians / refuge islands (NS.I.)	P & B	45%	20	90%	Medium
NS22PB	Ped and Bike	Install pedestrian crossing at uncontrolled locations (new signs and markings only)	P & B	25%	10	90%	High
NS23PB	Ped and Bike	Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features)	P & B	35%	20	90%	Medium
NS24PB	Ped and Bike	Install Rectangular Rapid Flashing Beacon (RRFB)	P & B	35%	20	90%	Medium
NS25PB	Ped and Bike	Install Pedestrian Signal (including Pedestrian Hybrid Beacon (HAWK))	P & B	55%	20	90%	Low

Source: HSIP

BCR Potential

The Benefit Cost Ratio (BCR) will be determined by specific locations, limits and countermeasures applied. The BCR potential is anticipated to be high.

Considerations

- Locations should be selected that have not recently been improved or are planned to be improved.
- Locations should be grouped by similar characteristics and needed countermeasures.

4. Systemic Pedestrian and Bicycle Improvements

Project Description

The project is to construct new pedestrian crosswalks, add sidewalk or multiuse paths, bicycle lanes, and enhancements to locations with these features.

Project Need

In Lakeport:

- 9 crashes involved pedestrians – 1 fatal, 1 serious injury.
- 2 bicycle related crashes occurred – 1 severe injury and 1 possible injury.
- 50% occurred crossing in a crosswalk at an intersection.
- Most pedestrian crashes (over 50%) are at intersections, most fatalities and severe injuries.
- The majority occurred on 11th Street (4 – 1 fatal, 2 minor injury) and on Main St

Public Endorsement

In the public survey, *'Pedestrian Safety'* was the 2nd highest ranked safety concern. '*Expanded Sidewalk Network*' and '*More or Improved Pedestrian Crosswalks*' was ranked 3rd and 5th priority for preferred improvements in the survey. In addition, 2 map comments were on pedestrian safety - one on 11th Street between Forbes Street and N. Main Street and one at Lange Street/Giselman Street.

Potential Locations and Risk Factors

Locations with a pedestrian crash are shown in **Table 8**. Other locations, particularly at or near schools, should be added for a systemic application.

From the Survey:

"A large portion of residents rely on daily driving, but there are also many families, workers, seniors, and residents without access to a personal vehicle who depend on walking, bicycles, or public transportation—especially in higher-density areas."

"Walking with children is difficult"

"I'm only concerned about better marked pedestrian crossings."

"Too many pedestrians have died."

"More bike lanes/ pedestrian walking lanes to encourage health living/ family bonding."

"My family lives close enough to the schools in lakeport that my children should be able to walk, but there is I don't think a single sidewalk from our house to the schools, and very few street lights. On top of that people speed like crazy in that area, so I wouldn't even walk that path on my own, let alone allow my kids to."

Table 8: Systemic Pedestrian Intersection Improvements Potential Locations

Primary Road	Secondary Road	Control	Severity	Pedestrian/Bicycle Facilities	Pedestrian/Bicycle Action	Map Votes
Pedestrian						
11th St	North St	Unsignalized	Fatal	Sidewalk on one side, no crosswalks	In Road, Including Shoulder	0
South Main St*	Armstrong St	Unsignalized	Injury (Severe)	Sidewalks and Crosswalks	Crossing in Crosswalk at Intersection	0
Brush St	11th St	Unsignalized	Injury (Other Visible)	Sidewalk on one side, no crosswalks	In Road, Including Shoulder	0
North Main St	11th St	Unsignalized	Injury (Other Visible)	Sidewalks and Crosswalks	Not in Road	0
North Main St	6th St	Unsignalized	Injury (Other Visible)	Sidewalks and Crosswalks	Crossing in Crosswalk at Intersection	0
North Main St	1st St	Unsignalized	Injury (Other Visible)	Sidewalks and Crosswalks	Crossing in Crosswalk at Intersection	0
South Main St*	Martin St	Unsignalized	Injury (Other Visible)	Sidewalks and Crosswalks	Not in Road	0
11th St	11th St 1071	Unsignalized	Complaint of Pain	Sidewalks and Crosswalks	Crossing in Crosswalk Not at Intersection	0
3rd St	North Main St	Unsignalized	Complaint of Pain	Sidewalks and Crosswalks	Crossing in Crosswalk at Intersection	0
*Recently updated with new pavement and crosswalks						
Bicycle						
3rd St	North Main St	At intersection	Complaint of Pain	Crosswalks and bicycle lanes on Main		0
North Main St	11th St	Roadway	Injury (Severe)	No bicycle lanes marked		0

Other Identified Potential Locations for Systemic Application:

- Lakeshore Boulevard, Beach Lane, Rainbow Road and Howard Avenue – this is an identified project to incorporate sidewalks (and potentially bicycle lanes), signage and lighting.
- At and adjacent to schools in effort to provide safe routes to schools. Identified SRTS Projects:
  - » 20th Street (South Side) – Hartley St. to High St.

CITY OF LAKEPORT – POTENTIAL PROJECT PACKAGES

- Lakeshore Blvd (North Side) – High St. to Green St.
- Lakeshore Blvd (North Side) – Green St. to Gisleman St.
- Lakeshore Blvd (North Side transitioning to West Side after bend) – Gisleman St. to Ashe St.
- Lakeshore Blvd (West Side) – Ashe St. to Sayre St.
- Lakeshore Blvd (West Side) – Sayre St. to Jones St.
- Lakeshore Blvd (West Side) – Jones St. to Lange St.
- Lakeshore Blvd (West Side) – Lange St. to Beach Ln. (City Limits)
- Lange Street (North Side)
- Gisleman Street (West Side) – Lakeshore Blvd to Lange St.
- Lakeshore Blvd (West Side) – Beach Ln. to Rainbow Rd.
- Rainbow Rd (North Side) – Lakeshore Blvd to Beach Ln.
- Rainbow Rd (North Side) – Beach Ln. to Mason / Redwing
- Rainbow Rd (North Side) – Mason / Redwing to Howard Ave.
- Howard Ave (West Side) – Rainbow Rd to Lakeport Unified School

Potential Countermeasures

Potential countermeasures are provided in **Table 9,** along with corresponding HSIP data as applicable.

Table 9: Countermeasures for Pedestrians and Bicyles

No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP Funding Eligibility	Systemic Approach Opportunity?
NS13	Operation/Warning	Improve sight distance to intersection (Clear Sight Triangles)	All	20%	10	90%	High
NS23PB	Ped and Bike	Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features)	P & B	35%	20	90%	Medium
NS24PB	Ped and Bike	Install Rectangular Rapid Flashing Beacon (RRFB)	P & B	35%	20	90%	Medium
NS25PB	Ped and Bike	Install Pedestrian Signal (including Pedestrian Hybrid Beacon (HAWK))	P & B	55%	20	90%	Low
NS22PB	Ped and Bike	Install pedestrian crossing at uncontrolled locations (new signs and markings only)	P & B	25%	10	90%	High
NS23PB	Ped and Bike	Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features)	P & B	35%	20	90%	Medium
NS24PB	Ped and Bike	Install Rectangular Rapid Flashing Beacon (RRFB)	P & B	35%	20	90%	Medium
NS25PB	Ped and Bike	Install Pedestrian Signal (including Pedestrian Hybrid Beacon (HAWK))	P & B	55%	20	90%	Low

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No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP Funding Eligibility	Systemic Approach Opportunity?
R33PB	Ped and Bike	Install bike lanes	P & B	35%	20	90%	High
R34PB	Ped and Bike	Install Separated Bike Lanes	P & B	45%	20	90%	High
R35PB	Ped and Bike	Install sidewalk/pathway (to avoid walking along roadway)	P & B	80%	20	90%	Medium

Source: HSIP

BCR Potential

The Benefit Cost Ratio (BCR) will be determined by specific locations, limits and countermeasures applied. The BCR potential is anticipated to be high.

Considerations

- Projects should be constructed where they would provide the greatest benefit considering pedestrian generators, existing and planned sidewalks.
- Countermeasures should be applied at or near the locations corresponding to the crash data; however, with justification the countermeasures can be applied to nearby locations that are more practical.
- Systemic locations should be added as needed while maintaining a competitive BCR.

5. 11th Street Corridor Improvements

Project Description

The project would provide improvements to the roadway, intersections and pedestrian accommodations to promote lower speeds and increased visibility for pedestrians. The project limits are approximately from Main Street to Manzanita Street.

Project Need

This corridor has been previously identified as a priority safety corridor requiring improvements and has been the subject of prior studies that provided targeted recommendations. Furthermore, proposed safety enhancements would align effectively with the planned project to underground utilities along 11th Street, which will support the construction of sidewalks and other corridor upgrades.

From the Survey:

"Blinking crosswalks on 11th Street, Lakeport"

"It's very common for people to cross the median or drive into shoulder because the think it's faster. E.g. Scott's valley/11th street. (Ironically they're often the slowest drivers in a corner.)"

"The fallen culvert on Hartley, 11th Street and Lakeport Blvd are hazardous. "

Public Endorsement

In the public survey, *'Pedestrian Safety'* was the 2nd highest ranked safety concern. '*Expanded Sidewalk Network*' and '*More or Improved Pedestrian Crosswalks*' was ranked 3rd and 5th priority for preferred improvements in the survey.

Crash History

The crash history along 11th Street is shown in **Table 10**.

Table 10. Eleventh Street Crash Data Summary

Primary Rd	Secondary Road	Severity	Type	Pedestrian Involved	Bicycle Involved
11th St	11th St 1071	Visible Injury	Sideswipe		
11th St	Forbes St	Visible Injury	Sideswipe		
11th St	North Forbes St	Visible Injury	Broadside		
11th St	North St	Fatal	Vehicle/Pedestrian	Y	
North Main St	11th St	Visible Injury	Other	Y	
11th St	North Forbes St	Visible Injury	Broadside		
North Main St	11th St	Severe Injury	Hit Object		Y
11th St	North Forbes St	Visible Injury	Not Stated		
SR-29 N/B To 11th Street	11th Street	PDO	Rear End		
11th St	N Brush St	Visible Injury	Head-On		

CITY OF LAKEPORT – POTENTIAL PROJECT PACKAGES

Primary Rd	Secondary Road	Severity	Type	Pedestrian Involved	Bicycle Involved
11th St	Pool St	PDO	Hit Object		
11th St	North Forbes St	Possible Injury	Broadside		
11th St	North Forbes St	Visible Injury	Broadside		
11th St	11th St 1071	Possible Injury	Vehicle/Pedestrian	Y	
11th St	North Forbes St	Possible Injury	Broadside		
11th St	Central Park Av	Possible Injury	Hit Object		
SR-29 N/B To 11th Street	11th Street	PDO	Rear End		

Potential Countermeasures

This list is preliminary. It may be modified, expanded or reduced in subsequent phases of grant application or planning. Potential countermeasures are provided in **Table 11,** along with corresponding HSIP data as applicable.

Table 11. Countermeasures for 11th Street

No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP	Systemic Approach Opportunity?
Primary Countermeasures							
R35PB	Ped and Bike	Install sidewalk/pathway (to avoid walking along roadway)	P & B	80%	20	90%	Medium
R36PB	Ped and Bike	Install/upgrade pedestrian crossing (with enhanced safety features)	P & B	35%	20	90%	Medium
Other Potential Countermeasures							
NS01	Lighting	Add intersection lighting (NS.I.)	Night	40%	20	90%	Medium
NS02	Control	Convert to all-way STOP control (from 2-way or Yield control)	All	50%	10	90%	High
NS08	Operation/Warning	Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs	All	15%	10	90%	Very High
NS09	Operation/Warning	Upgrade intersection pavement markings (NS.I.)	All	25%	10	90%	Very High
NS10	Operation/Warning	Install Flashing Beacons at Stop-Controlled Intersections	All	15%	10	90%	High
NS11	Operation/Warning	Install flashing beacons as advance warning (NS.I.)	All	30%	10	90%	High
NS13	Operation/Warning	Improve sight distance to intersection (Clear Sight Triangles)	All	20%	10	90%	High

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No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP	Systemic Approach Opportunity?
NS22PB	Ped and Bike	Install pedestrian crossing at uncontrolled locations (new signs and markings only)	P & B	25%	10	90%	High
NS23PB	Ped and Bike	Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features)	P & B	35%	20	90%	Medium
NS24PB	Ped and Bike	Install Rectangular Rapid Flashing Beacon (RRFB)	P & B	35%	20	90%	Medium
NSI01NT	Lighting	Add intersection lighting (NS.I.)	Night	40%	20	90%	Medium
R27	Operation/ Warning	Install delineators, reflectors and/or object markers	All	15%	10	90%	Very High
R28	Operation/ Warning	Install edge-lines and centerlines	All	25%	10	90%	Very High
R33PB	Ped and Bike	Install bike lanes	P & B	35%	20	90%	High
R34PB	Ped and Bike	Install Separated Bike Lanes	P & B	45%	20	90%	High

Source: HSIP

BCR Potential

The Benefit Cost Ratio (BCR) will be determined by specific locations, limits and countermeasures applied. The BCR potential is anticipated to be medium-high.

Considerations

- Countermeasures and locations should be considered with past studies/plans.

6. Main Street Corridor Improvements

Project Description

The project would provide improvements to the roadway and pedestrian accommodations to promote lower speeds and increased visibility for pedestrians.

Project Need

This corridor has previously been identified as a safety corridor in need of improvements and has been the focus of past studies providing recommendations.

From the Survey:

"I really only worry about pedestrians on Main Street."

"Lakeport Main Street is so dangerous that few people are willing to shop there."

"South Main Street paving"

Public Endorsement

In the public survey, *'Pedestrian Safety'* was the 2nd highest ranked safety concern. '*Expanded Sidewalk Network*' and '*More or Improved Pedestrian Crosswalks*' was ranked 3rd and 5th priority for preferred improvements in the survey.

Crash History

The crash history along Main Street is shown in **Table 12**.

Table 12. Main Street Crash Data Summary

Primary Road	Secondary Road	Severity	Crash Type
South Main St	Grace Ln	Other Visible Injury	Hit Object
South Main St	C St	PDO	Broadside
South Main St	Peckham Ct	PDO	Hit Object
Clear Lake Av	North Main St	Other Visible Injury	Rear End
North Main St	11th St	Other Visible Injury	Other
South Main St	Royale Av	Other Visible Injury	Head-On
Main St	Martin St	PDO	Hit Object
South Main St	E St	Severe Injury	Other
South Main St	Industrial Av	PDO	Sideswipe
Main St	Lakeport Bl	PDO	Hit Object
North Main St	Clearlake Av	Possible Injury	Broadside
3rd St	North Main St	Possible Injury	Vehicle/ Pedestrian
2nd St	North Main St	PDO	Sideswipe
North Main St	11th St	Severe Injury	Hit Object
South Main St	S Main St 1565	PDO	Rear End
North Main St	6th St	Other Visible Injury	Vehicle/ Pedestrian
South Main St	S Main St 555	PDO	Sideswipe
South Main St	Martin St	Other Visible Injury	Vehicle/ Pedestrian
North Main St	Clear Lake Av	Possible Injury	Broadside

CITY OF LAKEPORT – POTENTIAL PROJECT PACKAGES

Primary Road	Secondary Road	Severity	Crash Type
North Main St	4th St	PDO	Broadside
North Main St	1st St	Other Visible Injury	Rear End
South Main St	Lakeport Bl	PDO	Sideswipe
North Main St	9th St	Severe Injury	Hit Object
South Main St	Armstrong St	Severe Injury	Vehicle/ Pedestrian
South Main St	Lupoyoma Av	Other Visible Injury	Broadside
North Main St	3rd St	PDO	Rear End
Clearlake Av	North Main St	PDO	Broadside

Potential Countermeasures

This list is preliminary. It may be modified, expanded or reduced in subsequent phases of grant application or planning. Potential countermeasures are provided in **Table 13,** along with corresponding HSIP data as applicable.

Table 13. Countermeasures for Main Street

No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP	Systemic Approach Opportunity?
NS08	Operation/Warning	Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs	All	15%	10	90%	Very High
NS09	Operation/Warning	Upgrade intersection pavement markings (NS.I.)	All	25%	10	90%	Very High
NS10	Operation/Warning	Install Flashing Beacons at Stop-Controlled Intersections	All	15%	10	90%	High
NS11	Operation/Warning	Install flashing beacons as advance warning (NS.I.)	All	30%	10	90%	High
NS13	Operation/Warning	Improve sight distance to intersection (Clear Sight Triangles)	All	20%	10	90%	High
NS22PB	Ped and Bike	Install pedestrian crossing at uncontrolled locations (new signs and markings only)	P & B	25%	10	90%	High
NS23PB	Ped and Bike	Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features)	P & B	35%	20	90%	Medium
NS24PB	Ped and Bike	Install Rectangular Rapid Flashing Beacon (RRFB)	P & B	35%	20	90%	Medium
NSI01NT	Lighting	Add intersection lighting (NS.I.)	Night	40%	20	90%	Medium
R27	Operation/ Warning	Install delineators, reflectors and/or object markers	All	15%	10	90%	Very High
R28	Operation/ Warning	Install edge-lines and centerlines	All	25%	10	90%	Very High

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No.	Type	Countermeasure Name	Crash Type	CRF	Expected Life (Years)	HSIP	Systemic Approach Opportunity?
R33PB	Ped and Bike	Install bike lanes	P & B	35%	20	90%	High
R34PB	Ped and Bike	Install Separated Bike Lanes	P & B	45%	20	90%	High
R35PB	Ped and Bike	Install sidewalk/pathway (to avoid walking along roadway)	P & B	80%	20	90%	Medium
R36PB	Ped and Bike	Install/upgrade pedestrian crossing (with enhanced safety features)	P & B	35%	20	90%	Medium

Source: HSIP

BCR Potential

The Benefit Cost Ratio (BCR) will be determined by specific locations, limits and countermeasures applied. The BCR potential is anticipated to be high.

Considerations

- This corridor has recent improvements and pedestrian accommodations. Countermeasures should be selected based on to address remaining risk factors.
- Countermeasures and locations should be considered with past studies/plans.

APPENDIX F

SS4A Self-Certification Checklist

Safe Streets and Roads for All
Self-Certification Eligibility Worksheet

All applicants should follow the instructions in the NOFO to correctly apply for a grant. See the SS4A website for more information.

Table 1 of the SS4A NOFO describes seven components of an Action Plan, which correspond to the questions in this worksheet. Applicants should use this worksheet to determine whether their existing plan(s) contains the required components to be considered an eligible Action Plan for SS4A.

This worksheet is required for all SS4A **Implementation Grant** applications and any **Planning and Demonstration Grant applications to conduct Supplemental Planning/Demonstration Activities only**. Please complete the form in its entirety, do not adjust the formatting or headings of the worksheet, and upload the completed PDF with your application.

Eligibility

An Action Plan is considered eligible for an SS4A application for an Implementation Grant or a Planning and Demonstration Grant to conduct Supplemental Planning/Demonstration Activities if the following two conditions are met:

- You can answer "YES" to Questions **3, 6,** and **8** in this worksheet; *and*
- You can answer "YES" to **at least three of the five remaining** Questions, **1, 2, 4, 5,** and **7.**

If both conditions are not met, an applicant is still eligible to apply for a Planning and Demonstration Grant to fund the creation of a new Action Plan or updates to an existing Action Plan to meet SS4A requirements.

Applicant Information

Lead Applicant: Lake Area Planning Council **UEI:** _____

Action Plan Documents

In the table below, list the relevant Action Plan and any additional plans or documents that you reference in this form. **Up to three plans or documents may be included**. Please provide a hyperlink to any documents available online or indicate that the Action Plan or other documents will be uploaded in Valid Eval as part of your application. Note that, to be considered an eligible Action Plan for SS4A, the plan(s) coverage must be broader than just a corridor, neighborhood, or specific location.

Document Title	Link	Date of Most Recent Update
Lakeport Local Road Safety Plan		May 2026

Action Plan Components

For each question below, answer "YES" or "NO." If "YES," list the relevant plan(s) or supporting documentation that address the condition and the specific page number(s) in each document that corroborates your response. This form provides space to reference multiple plans, but please list only the most relevant document(s).

1. Leadership Commitment and Goal Setting

Are **BOTH** of the following true?

- A high-ranking official and/or governing body in the jurisdiction publicly committed to an eventual goal of zero roadway fatalities and serious injuries; and
- The commitment includes either setting a target date to reach zero OR setting one or more targets to achieve a reduction in roadway fatalities and serious injuries by a specific date.

☑ **YES**

☐ **NO**

Note: This may include a resolution, policy, ordinance, executive order, or other official announcement from a high-ranking official and the official adoption of a plan that includes the commitment by a legislative body.

If "YES," please list the relevant document(s) and page number(s) that corroborate your response.

Document Title	Page Number(s)
Vision and Mission Statements, Commitment to Zero	9

2. Planning Structure

To develop the Action Plan, was a committee, task force, implementation group, or similar body established and charged with the plan's development, implementation, and monitoring?

☑ **YES**

☐ **NO**

Note: This should include a description of the membership of the group and what role they play in the development, implementation, and monitoring of the Action Plan.

If "YES," please list the relevant document(s) and page number(s) that corroborate your response.

Document Title	Page Number(s)
Stakeholder Engagement	11

3. Safety Analysis

Does the Action Plan include **ALL** of the following?

- Analysis of existing conditions and historical trends to provide a baseline level of crashes involving fatalities and serious injuries across a jurisdiction, locality, Tribe, or region;
- Analysis of the location(s) of crashes, the severity, contributing factors, and crash types;
- Analysis of systemic and specific safety needs, as needed (e.g., high-risk road features, specific safety needs of relevant road users, or post-crash care and emergency response); and,
- A geospatial identification (geographic or locational data using maps) of higher risk locations.

☑ **YES**
☐ **NO**

Note: Availability and level of detail of safety data may vary greatly by location. The Fatality and Injury Reporting System Tool (FIRST) provides county- and city-level data. When available, local data should be used to supplement nationally available data sets.

If "YES," please list the relevant document(s) and page number(s) that corroborate your response.

Document Title	Page Number(s)
Crash Data Analysis	20-53

4. Engagement and Collaboration

Did development of the Action Plan include **ALL** of the following activities?

- Engagement with the public and relevant stakeholders, including the private sector and community groups;
- Incorporation of information received from the engagement and collaboration into the plan; and
- Coordination that included inter- and intra-governmental cooperation and collaboration, as appropriate.

☑ **YES**
☐ **NO**

Note: This should include a description of public meetings, participation in public and private events, and proactive meetings with stakeholders.

If "YES," please list the relevant document(s) and page number(s) that corroborate your response.

Document Title	Page Number(s)
Stakeholder Engagement (Appendix A for detail)	11
Public Outreach (Appendix B for detail)	13-18

5. Policy and Process Changes

Are **BOTH** of the following true?

- The plan development included an assessment of current policies, plans, guidelines, and/or standards to identify opportunities to improve how processes prioritize safety; and
- The plan discusses implementation through the adoption of revised or new policies, guidelines, and/or standards.

☑ **YES**

☐ **NO**

Note: This may include existing and/or recommended Complete Streets policy, guidelines for community engagement and collaboration, policy for prioritizing areas of greatest need, local laws (e.g., speed limit), design guidelines, and other policies and processes that prioritize safety.

If "YES," please list the relevant document(s) and page number(s) that corroborate your response.

Document Title	Page Number(s)
Policies and Standards	6-7
Policies and Standards Countermeasures	64-65

6. Strategy and Project Selections

Does the plan identify a comprehensive set of projects and strategies to address the safety problems in the Action Plan, with information about time ranges when projects and strategies will be deployed, and an explanation of project prioritization criteria?

☑ **YES**

☐ **NO**

Note: This should include one or more lists of community-wide multi-modal and multi-disciplinary projects that respond to safety problems and reflect community input, indication of expected time ranges to complete each project, and a description of how your community will prioritize projects in the future.

If "YES," please list the relevant document(s) and page number(s) that corroborate your response.

Document Title	Page Number(s)
Focus Areas	55-61
Strategy Tables (Appendix D for detail)	67
Potential Projects (Appendix E for detail)	78-81

7. Progress and Transparency

Does the plan include **BOTH** of the following?

- A description of how progress will be measured over time that includes, at a minimum, outcome data.
- The plan is posted publicly online.

☑ **YES**

☐ **NO**

Note: This should include a progress reporting structure and list of proposed metrics.

If "YES," please list the relevant document(s) and page number(s) that corroborate your response.

Document Title	Page Number(s)
Implementation Plan (Appendix D for detail)	83-87
Implementation Funding and Time Frames (Appendix D for detail)	89-93

8. Action Plan Date

Was at least one of your plans finalized and/or last updated between 2021 and May 26, 2026?

☑ **YES**

☐ **NO**

Note: Updates may include major revisions, updates to the data used for analysis, status updates, or the addition of supplemental planning documents, including but not limited to an ADA Transition Plan, one or more Road Safety Audits conducted in high-crash locations, or a Vulnerable Road User Plan.

If "YES," please list your most recent document, date of finalization, and page number(s) that corroborate your response.

Document Title	Date of Most Recent Update	Page Number(s)
Lakeport Local Road Safety Plan	May xx, 2026	Cover Page


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