

Local Road Safety Plan

City of Crescent City

June 2022



Acknowledgements

A special thanks to all the Safety Partners that contributed to this plan.

The Stakeholder Working Group included the following representatives:

- County of Del Norte
- City of Crescent City
- Del Norte Local Transportation Commission
- Caltrans, District 1
- Del Norte County Department of Health and Human Services
- Elk Valley Rancheria
- Tolowa Dee-ni' Nation
- Yurok Tribe
- Resighini Rancheria
- Downtown Divas
- College of the Redwoods
- Crescent City Harbor District
- Redwood Coast Transit
- Del Norte Trail Alliance
- Del Norte Unified School District

Law enforcement and emergency responders including:

- Crescent City Police Department
- California Highway Patrol
- Crescent City Fire and Rescue
- Fort Dick Fire Protection District (FPD)
- Gasquet FPD
- Klamath FPD
- Smith River FPD
- Del Norte Ambulance
- Del Norte County Sheriff's Office

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List of Abbreviations

AASHTO	American Association of State Highway and Transportation Officials
APS	Accessible Pedestrian Signal
ATP	Active Transportation Program or Plan
BCR	Benefit to Cost Ratio
BUI	Biking Under the Influence
CA MUTCD	California Manual on Uniform Traffic Control Devices
CMAQ	Congestion Mitigation and Air Quality
DUI	Driving Under the Influence
EPDO	Equivalent Property Damage Only
FHWA	Federal Highway Administration
FSI	Fatal or Severe Injury
HSIP	Highway Safety Improvement Program
HSM	Highway Safety Manual
LRSM	Local Roadway Safety Manual
LRSP	Local Road (or Roadway) Safety Plan
SHSP	Strategic Highway Safety Plan
SSAR	Systemic Safety Analysis Report
SWITRS	Statewide Integrated Traffic Records System
TIMS	Transportation Injury Mapping System

Executive Summary

In 2020, the City of Crescent City was awarded a state grant from Caltrans to perform a Local Road Safety Plan (LRSP). The LRSP is a requirement for Cycle 11 of the Highway Safety Improvement Program (HSIP). The LRSP grant application included a citywide analysis of the roadway system evaluating the current collisions patterns and high-risk roadway characteristics (systemic analysis). Crescent City's goal is to identify safety countermeasures to help mitigate the City's primary crash type trends and reduce the overall collision severity.

This LRSP is a collaborative process with a local leadership group that represents the 5 E's (not just engineering) and public outreach. **The 5 E's of traffic safety include Engineering, Enforcement, Education, Emergency Services, and Emerging Technologies.**



This holistic approach allows certain areas of concern not showing a crash pattern to be analyzed. Also, it fosters local, state, and agency partnerships to advance local road safety.

In following the overall LRSP process, a Stakeholder Working Group (Working Group) was formed with the City of Crescent City and Del Norte County as the leads and local organizations from the 5 E's and anyone with an interest in improving the City and County's roadway safety. This group gathered for meetings to discuss the overall collision analysis, goals, priorities, safety recommendations, and overall development of the safety plan.

Based on the past 5 years' collision analysis and the Stakeholder Working Group Meetings, this LRSP will address multiple Strategic Highway Safety Plan (SHSP) Challenge/Emphasis Areas including but not limited to:

1. Intersections
2. Aggressive Driving/ Speed Management
3. Bicyclists
4. Lane Departures
5. Pedestrians
6. Impaired Driving

In addition, the vision, mission statement, and goals were established in guiding the development of the LRSP. It was also decided that the LRSP for the City of Crescent City would be a living document with desired updates every five (5) years.

Data analysis, public input, and City feedback helped to determine the priority locations within Crescent City. Some of the intersection locations are along state highways and fall within Caltrans jurisdiction. These locations have been separated from the City jurisdiction intersections. All the locations, along with their proposed countermeasures, are shown in the tables below.

Table 1: Priority Intersections and Recommended Countermeasures

Location (North/South Road)	Recommended Countermeasures
J St/ 7 th St	Install/update warning signs, upgrade intersection pavement markings, improve sight distance to intersection, re-evaluate parking near intersection
H St/ 8 th St	Install/update warning signs, upgrade intersection pavement markings, re-evaluate parking near intersection, re-evaluate stop sign location
Gary St/ Becky Ct.	Install/update signs with new florescent sheeting, Install variable speed warning signs, speed enforcement
A St/ Essex St	Speed enforcement
Breen St./ Coolidge Ave	Improve sight distance to intersection, speed enforcement

Table 2: Priority Segments and Recommended Countermeasures

Location (City Jurisdiction)	Recommended Countermeasures
E Cooper Ave from Cemetery Rd to US 101	No Countermeasure Proposed: The single collision at this segment was driveway related.
Systemic	Add intersection lighting, Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs, Upgrade intersection pavement markings, Install/upgrade pedestrian crossing at uncontrolled locations, Install/Upgrade signs with new fluorescent sheeting (regulatory or warning), Install sidewalk/pathway (to avoid walking along roadway)
Location (Caltrans Jurisdiction)	Recommended Countermeasures
US 101 from Front St to Elk Valley Rd	Install sidewalk/pathway (to avoid walking along roadway) between N Street and Front Street, Install/upgrade pedestrian crossing (with enhanced safety features), pedestrian education campaign, DUI enforcement
US 101 from E Cooper Ave to 9 th St	No Countermeasure Proposed: The single collision at this segment was a sideswipe.

It is important to understand the upcoming funding opportunities in the successful implementation of these safety projects. Most of the proposed countermeasures are HSIP fundable (next cycle 11 is scheduled to open in April/May 2022). However, countermeasures can be implemented through other funding sources including:

- Rural Surface Transportation Grant
- Active Transportation Program (ATP)
- Sustainable Transportation Planning Grant (Sustainable Communities)
- Stimulus funding sources
- Capital Improvement Program or with on-going maintenance work

1. Introduction

The Local Road Safety Plan (LRSP) provides local agencies an opportunity to address unique roadway safety needs in their jurisdictions. This comprehensive document will both help to guide the City in safety countermeasures and allow eligibility for funding in future HSIP applications. The process of preparing an LRSP creates a framework to systematically identify and analyze local safety problems and recommend engineering safety improvements for future Highway Safety Improvement Program (HSIP) funding.

Preparing an LRSP facilitates local agency partnerships and collaboration, resulting in a prioritized list of improvements and actions that contribute to California’s Strategic Highway Safety Plan (SHSP) overall vision and goals. This SHSP focuses on reducing fatal and severe injury collisions (FSI collisions) within challenge/emphasis areas with a focus on the Five “E’s” of Traffic Safety (see **Figure 1**).

The City will follow the Federal Highway Administration’s (FHWA) Local Road Safety process in the following six (6) steps as shown in **Figure 2**.



Figure 1: California SHSP (2020-2024)



Figure 2: FHWA’s LRSP Development Process

For the first step of establishing leadership, the City of Crescent City, the County of Del Norte, and the consultant team, reached out to the various stakeholder representative for the LRSP working group in capturing the “5E’s” and local community members that can contribute to the overall safety plan for the City of Crescent City. This working group was key in creating a comprehensive safety plan that is tailored to address local needs and issues.

2. Background

2.1 Purpose and Need

The City of Crescent City has an estimated population of 6,673 as of the 2020 U.S. Census. It is the only incorporated city in Del Norte County and has US Highway 101 running through the City. The City roadways serve a variety of users including pedestrians, bicyclists, transit riders, passenger cars, and heavy trucks, with a mix of local, recreational, and regional trips.

Crescent City adopted the Economic Development Strategic Action Plan (also known as the Economic Cookbook) on June 21, 2021. This plan was created to envision the future economic characteristics of the City and provides a framework to achieve this vision. The plan contains nine economic developmental goals, establishes over a dozen targeted industry sectors, and presents over eighty projects relating to meeting the economic developmental goals. The following goals from this plan relate to the LRSP:

Goal 6: Pursue infrastructure improvement as a form of economic development

Goal 7: Focus on efforts to enhance downtown

Additionally, some of the projects set forth in this plan may correlate or be part of safety projects that will be recommended through the LRSP. Some examples of these projects and how the LRSP relates to the project are described below:

1K: Partner with Del Norte School District. The LRSP includes representation from the school district in its stakeholder working group.

1N: Partner with Chamber of Commerce. The LRSP includes representation from the Chamber of Commerce in its stakeholder working group.

1O: Other Key Partnership. The LRSP development process was a collaborative effort between Del Norte County and the City.

2C: Grant Availability Inventory. The LRSP will contain a list of potential grant programs relating to transportation funding. Some of the countermeasures recommended in the LRSP are fundable through the HSIP grant program.

6A: City Management Planning. This LRSP can serve as a management plan for the City's road system in terms of roadway safety.

6B: Think of all City Activities as Economic Development. Safety improvements, which are infrastructure improvements in general, are a City activity that can encourage further economic development.

6D: Front Street Improvements. There are no specific improvements currently identified for the remaining section of Front Street. However, systemic countermeasures can be implemented to reduce collision risks.

6M: Utility Underground. Roadway lighting needs can be incorporated with this effort.

6P: Support Regional Transportation Infrastructure. US 101 is a regional highway that runs through the City. The LRSP recommended potential countermeasures along US 101.

6Q: Enhancements to Pedestrian and Bicycle Infrastructure. The LRSP proposed countermeasures (specific and systemic locations) to address pedestrian and bicycle safety deficiencies.

8A: *Re-envision Downtown.* The LRSP proposed systemic countermeasures that can be applied to downtown roadways relating to pedestrian and bicycle safety. Improving pedestrian and bicycle safety will potentially encourage more activity.

8Q: *Highway 101 Improvements through Downtown East.* Some systemic countermeasures recommended in the LRSP can be implemented through downtown segments of US 101. Improvements along US 101 will need to be coordinated with Caltrans.

City Roadways

During the ten-year period (2011-2020), there were no fatal and one severe injury collisions recorded for the roadways under the City of Crescent City’s jurisdiction. There was one fatal and one severe injury collision on Caltrans roadways at the intersections of City roadways. The fatal incident was an alcohol related vehicle-pedestrian collision where the pedestrian was not crossing the street in a crosswalk in the dark with no streetlights.

See **Figure 3** for a map of the fatal and severe injury collisions on City and Caltrans roadways between 2011 and 2020. In improving roadway safety for the City of Crescent City, it is important to focus on mitigating these high injury and loss of life collisions.

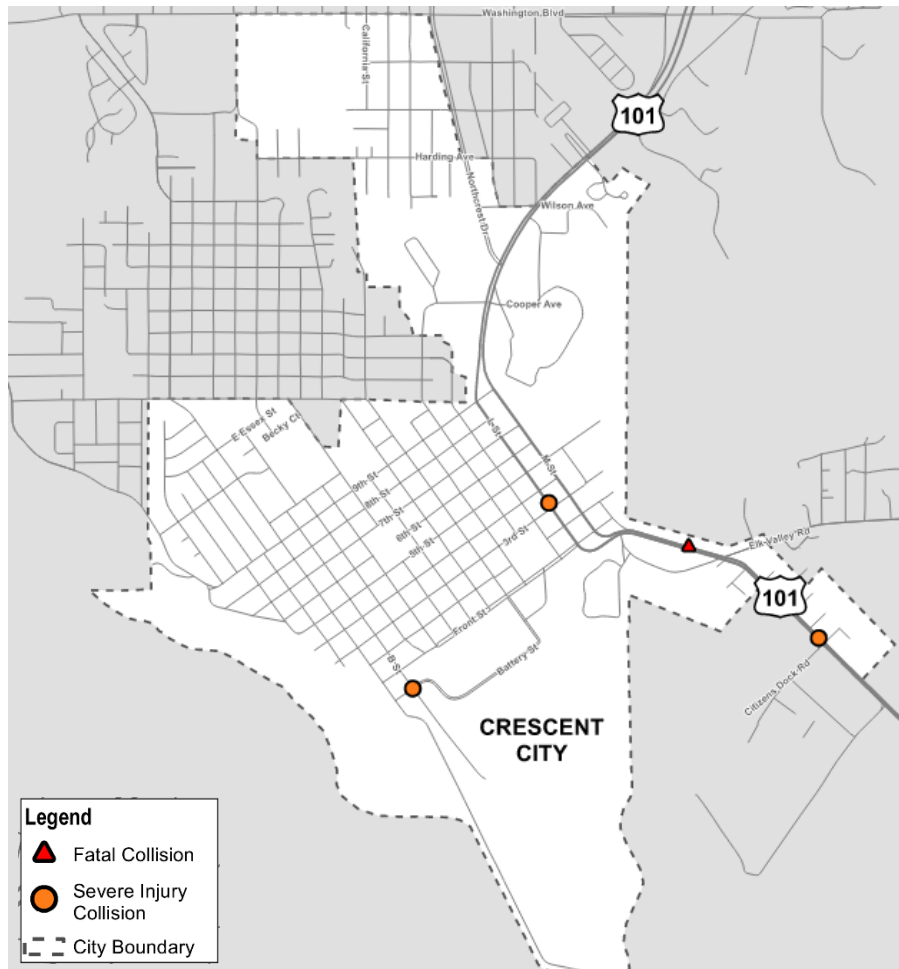


Figure 3: Fatal and Severe Injury Collisions in the City of Crescent City (2011-2020)

Standards and Guidelines

In developing the City of Crescent City’s LRSP, the following standards and guidelines were followed:

- “Local Roadway Safety, A Manual for California’s Local Road Owners”, Caltrans, Version 1.5, April 2020.
- 2020-2024 California’s Strategic Highway Safety Plan (SHSP), “California Safe Roads: 2020-2024 Strategic Highway Safety Plan”, Caltrans.
- “Developing Safety Plans, A Manual for Local Rural Road Owners”, Federal Highway Administration, March 2012.
- “Highway Safety Manual”, American Association of State Highway Officials (AASHTO), 1st Edition, 2014 supplement.
- “California Manual of Uniform Traffic Control Devices (CA MUTCD)”, Revision 5, 2014.

California Strategic Highway Safety Plan

The LRSP will complement California’s SHSP 2020-2024. Per this plan, the recommended challenge areas are shown in **Figure 4**. This plan will focus on challenge/emphasis areas that are determined through data analysis and stakeholder input.



Figure 4: SHSP Challenge Areas

2.2 Methodology

The LRSP methodology followed the FHWA’s LRSP development process as shown in **Figure 5**.

Below is a roadmap created by the Federal Highway Administration to show the process of creating the Local Road Safety Plan. Here are the primary steps used to create this plan:

1. Identify Stakeholders

- Working Group was formed of the 5 E’s and other interested representatives.

2. Use Safety Data

- Past 5 years of collisions were analyzed with discussion of other high-risk locations.

3. Chose Proven Solutions

- *FHWA Proven Countermeasures and Caltrans safety countermeasures were used in mitigation collision trends and risk characteristics.*

4. Implement Solutions

- *Projects were identified for specific location and systemically.*



Figure 5: FHWA's LRSP Development Map (Source: Federal Highway Administration)

3. Safety Partners/ Stakeholders

3.1 Stakeholder Working Group Members

Based on community connections, the City of Crescent City and the County of Del Norte led the formation of the LRSP Stakeholder Working Member Group. This leadership group was crucial in the development of the LRSP and helped in capturing the safety needs, goals, and priorities including safety countermeasures for the City of Crescent City.

The Stakeholder Working Group included the following representatives:

- County of Del Norte
- City of Crescent City
- Del Norte Local Transportation Commission
- Caltrans, District 1
- Del Norte County Department of Health and Human Services
- Elk Valley Rancheria
- Tolowa Dee-ni' Nation
- Yurok Tribe
- Resighini Rancheria
- Downtown Divas
- College of the Redwoods
- Crescent City Harbor District
- Redwood Coast Transit
- Del Norte Trail Alliance

School Districts and Education representatives including: Del Norte Unified School District

- Bess Maxwell Elementary School
- Joe Hamilton Elementary School
- Margaret Keating Elementary School
- Mountain Elementary School
- Pine Grove Elementary School
- Redwood Elementary School
- Smith River Elementary School
- Crescent Elk Elementary School
- Del Norte High School
- Sunset High School
- Adult Education School
- Del Norte Community School
- Castle Rock Charter School
- Uncharted Shores Academey

Law enforcement and public assistance members including:

- Crescent City Police Department
- California Highway Patrol
- Crescent City Fire and Rescue
- Fort Dick Fire Protection District (FPD)
- Gasquet FPD
- Klamath FPD
- Smith River FPD
- Del Norte Ambulance
- Del Norte County Sheriff's Office

Stakeholder Working Group Meetings

Three meetings were held with the stakeholder working group and facilitated by the consultant team. The virtual meetings were as follows:

- Monday, December 6, 2021 from 1 p.m. to 3 p.m. / Wednesday, December 8, 2021 from 2 p.m. to 4 p.m.
 - Discussed the LRSP overall process, working group members' safety priorities, past 6 years of collisions (County and Caltrans roadways), vision, goals, and priorities.
- Monday, February 7, 2022 from 2 p.m. to 4 p.m.
 - Reviewed first meeting, discussed public comments and ways to address their concerns, recent developments, safety countermeasures and projects, refined of LRSP's guiding principles, and coordinated next steps.

The meeting agendas for the stakeholder working group meetings are in **Appendix A: Stakeholder and Public Input**. The stakeholder working group also provided their feedback and comments on the Draft Local Road Safety Plan document before the plan was finalized. With many of the safety countermeasures to include engineering, enforcement, and emergency response, it is important to have buy off from the stakeholders in understanding how the plan will be implemented.

3.2 SHSP Challenge Areas

Based on the LRSP Working Group Meetings, this LRSP will address multiple Strategic Highway Safety Plan (SHSP) Challenge Areas including:

1. Intersections
2. Aggressive Driving/ Speed Management
3. Bicyclists
4. Lane Departures
5. Pedestrians
6. Impaired Driving

3.3 Guiding Principles

The City along with members of the working group coordinated to establish the vision, mission statement, and goals that guided the development of the document. Ideally, this document will help the City move toward Vision Zero. The aim of Vision Zero is to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, and equitable mobility for all. Traditionally, traffic deaths and severe injuries have been considered as inevitable side effects of modern life. The reality is that these tragedies can be addressed over time by taking a proactive, preventative approach that prioritizes traffic safety as a public health issue.

Safe System Approach

The Federal Highway Administration (FHWA) is using the Safe System approach to work towards their goal of zero fatalities in vehicles. In providing a comprehensive approach to safety, the Safe System approach is to design our vehicles and infrastructure in a manner that anticipates human error and accommodates human tolerances with a goal of reducing fatal and serious injuries. The following framework is intended to assist the vehicle and infrastructure communities in making decisions in alignment with Safe System principles. Implementing and selecting safe system practices and design will incrementally improve safety over time.

FHWA defines the Safe System Approach Principles and Elements as follows:

- *Safe Road Users—The safety of all road users is equitably addressed, including those who walk, bike, drive, ride transit, or travel by other modes.*
- *Safe Vehicles—Vehicles are designed and regulated to minimize the frequency and severity of collisions using safety measures that incorporate the latest technology.*
- *Safe Speeds—Humans are less likely to survive high-speed crashes. Reducing speeds can accommodate human-injury tolerances in three ways: reducing impact forces, providing additional time for drivers to stop, and improving visibility.*
- *Safe Roads—Designing transportation infrastructure to accommodate human mistakes and injury tolerances can greatly reduce the severity of crashes that do occur. Examples include physically separating people traveling at different speeds, providing dedicated times for different users to move through a space, and alerting users to hazards and other road users.*
- *Post-Crash Care—People who are injured in collisions rely on emergency first responders to quickly locate and stabilize their injuries and transport them to medical facilities. Post-crash care also includes forensic analysis at the crash site, traffic incident management, and other activities.*

Adopting a Safe System approach does not absolve users of their responsibility. Other safety practices such as speed management strategies, driver education, enforcement, and effective emergency response will remain essential to improving road safety.

Vision

A vision statement describes what the Local Road Safety Plan is trying to achieve. Crescent City’s vision is as follows.

The City of Crescent City will strive toward the elimination of all traffic fatalities and severe injuries, while increasing safe, healthy, and equitable mobility for all.

Mission Statement

The mission statement defines the purpose of the plan, what it does, and what it is about. The mission statement was developed in collaboration with the working group. Crescent City’s mission statement is as follows.

Crescent City will provide a safe, innovative, efficient, and equitable multimodal transportation system for all users of the public roadways in the City in order to promote a high quality of life for residents, businesses, and visitors.

Goals

Safety goals were developed for the Local Roadway Safety Plan. It is important to capture realistic goals that can be measurable or evolve over time.

1. Create a safe, livable, healthy, and welcoming community by developing a roadway safety plan that targets Crescent City’s transportation and roadway safety needs.
2. Reduce fatal and injury collisions Citywide by increased maintenance, grant funded projects, and increased education and enforcement.

3. Identify cost-effective countermeasures and safety investments that can be applied systemically (i.e., flashing yellow arrow, retroreflective backplates, leading pedestrian interval, etc.).
4. Reduce hit object and lane departures collisions by implementing safety countermeasures and strategies.
5. Improve multimodal transportation safety by expanding the City’s opportunities for non-motorized transportation infrastructure.
6. Improve safety around schools by increasing multimodal infrastructure, enhanced crossings, and education and enforcement.
7. Reduce speeding and improper turning related collisions through engineering, enforcement, emerging technologies, and education strategies.

4. Analyze Safety Data

4.1 Recently Completed Projects

Front Street Project

The City secured a Community Development Block Grant to help reduce flooding of residential properties. This Project installed a redundant storm drain piping system within the C Street drainage basin between 5th Street and Front Street, and F Street drainage basin between Front Street and 4th Street. The Project also includes street improvements, ADA compliant curb ramps, sidewalks and curb and gutter on the affected streets.



Sunset Circle Multi-Use Trail Project

The Sunset Circle Multi-Use Trail Project connects the existing North Harbor Trail along Beachfront Park to the Promenade Trail at the Harbor with a multi-use path. Sunset Circle is the last significant segment of the California Coastal Trail to be upgraded to a shared-use facility in the immediate Crescent City area. The completion of this project has created a safe and convenient route for tourists and recreational users who actively use the two trail systems today. The trail is conveniently located adjacent to established lodging, tourist destinations, and a recreational vehicle campground. This project has created an apparent route for visitors and tourists unfamiliar

with the City to both the Harbor and Downtown Crescent City. For local residents already using Sunset Circle as a connection, the trail has created a safer and more inviting environment for recreational activities.



4.2 Collision Data

The City of Crescent City collision data was gathered using the Statewide Integrated Traffic Records System (SWITRS) and Transportation Injury Mapping System (TIMS). Each data set was analyzed, crosschecked, and compiled into one complete comprehensive data set. The data set contains ten years' worth of collisions spanning from January 1, 2011 to December 31, 2020. A heat map of collisions is shown in **Figure 6**.

Between 2011 and 2020, 40 collisions were reported in the City of Crescent City. These collisions were classified based on roadway jurisdiction (City or Caltrans). Collisions were further categorized into intersection related collisions and roadway segment related collisions with a separate focus on City streets and Caltrans roadways.

The pie chart in **Figure 7** depicts the number of collisions by collision location (intersection or segment) and jurisdiction (City, US 101). The highest number of collisions was along US Highway 101 Intersections (17 collisions).

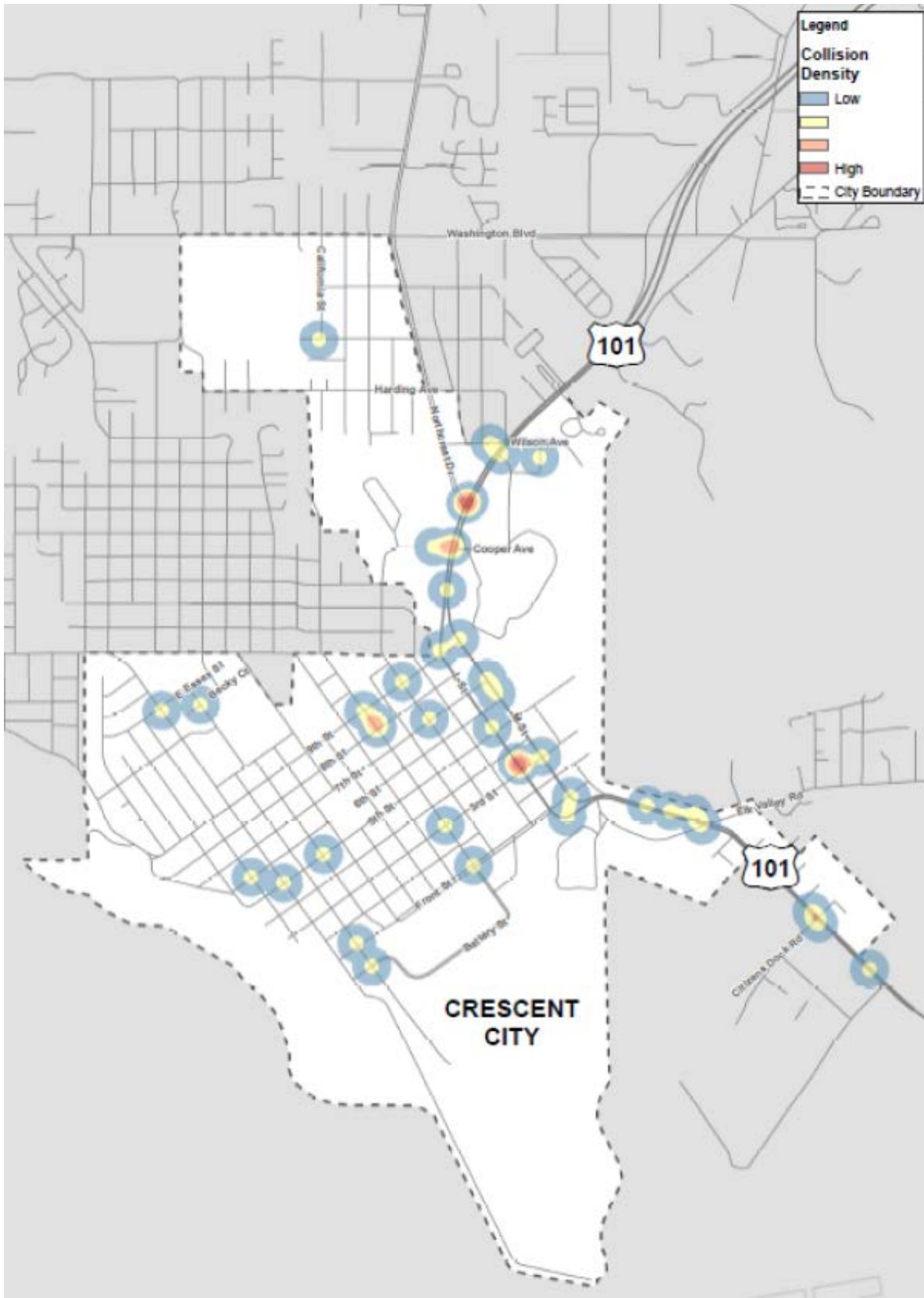


Figure 6: Collision Density Map (2011-2020)

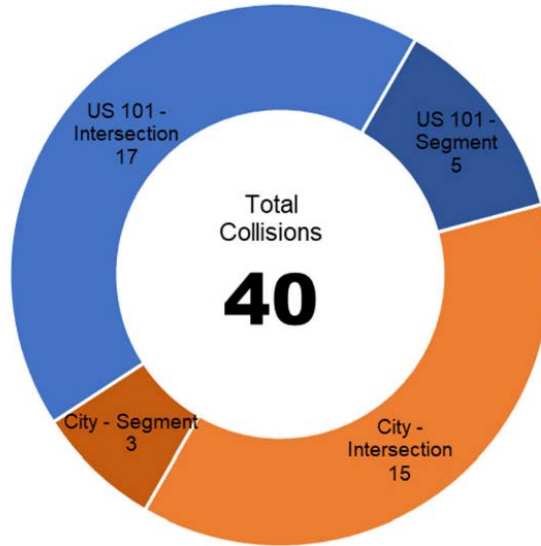


Figure 7: Total Collisions within the City of Crescent City (2011-2020)

As shown on the collision density map for 2011 to 2020, areas with high density of collisions include intersections along Highway 101 (Caltrans jurisdiction) and intersections along H Street. It should be noted however that these locations only include a small number of accidents.

4.3 Collision Characteristics

Of the 40 collisions recorded within Crescent City between 2011 and 2020, there was 1 fatal and 3 severe injury collisions. The fatal collision occurred on US 101 just north of Elk Valley Road in Caltrans jurisdiction. Since the incident occurred, pedestrian safety projects have been completed in that area. One of the severe injury collisions also took place on US 101 at Citizens Dock Road which is also Caltrans jurisdiction. Hit object and broadside were the most common types of collisions within the City. Figure 8 below summarized the City jurisdiction collisions based on severity and type.

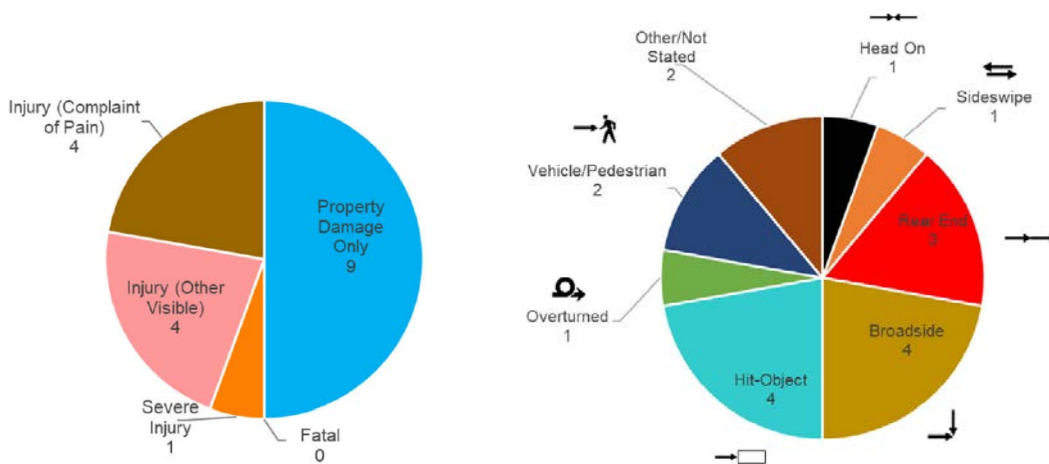


Figure 8: Collision Characteristics (Severity and Collision Type)

The top violation categories for City jurisdiction roadways are presented in **Figure 9**. The top violation category on City roadways (not including unknown or not stated collisions) was unsafe speed followed by automobile right of way.

With the Highway Safety Improvement Program (HSIP) funding concentrating on the past five (5) years of collision data, further collision analysis focused on 2016 to 2020. The total number of collisions and Equivalent Property Damage Only (EPDO) rating were assessed to determine the top study intersections (refer to **Appendix B: Collision Data**). Per the *Caltrans Local Roadway Safety Manual*, it is recommended to rank locations with higher severity as higher focus. The Highway Safety Manual (HSM) methodology of Equivalent Property Damage Only (EPDO) rating assigns a weight to collisions in capturing the relative severity in equivalent property damage only (PDO =1).

Table 3 provides the comprehensive collision costs and EPDO weights that were used in ranking the collisions. Collision costs include both direct and indirect costs. Direct crash costs include ambulance service, police and fire services, property damage, insurance, and other costs directly related to the crashes. Indirect collision costs account for the value society would place on pain and suffering or loss of life associated with the crash.

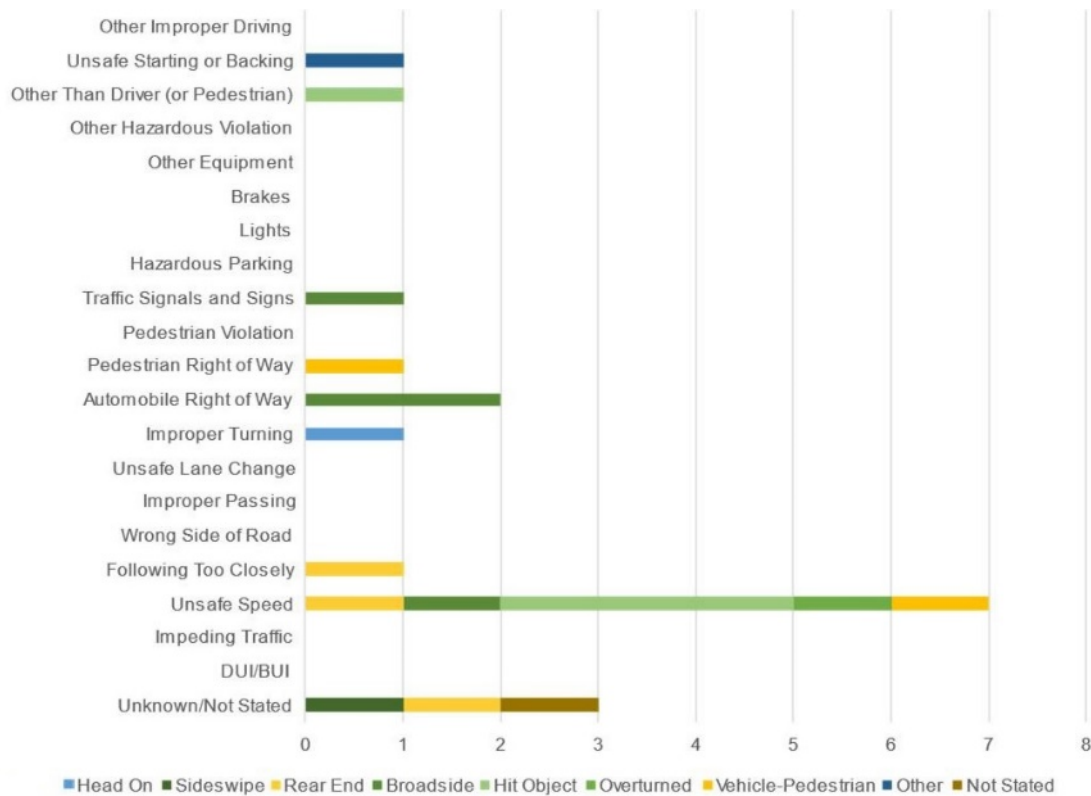


Figure 9: Top Causes of Collisions (City Jurisdiction)

Table 3: Comprehensive Collision Costs and EPDO Weights (2020 dollars)

Severity	Location	Comprehensive Costs	EPDO Ranking
Fatal & Severe Injury	Signalized Intersection	\$1,590,000	120
	Non-Signalized Intersection	\$2,530,000	190
	Roadway	\$2,190,000	165
Other Visible Injury	-	\$142,000	11
Complaint of Pain	-	\$80,900	6
Property Damage Only	-	\$13,300	1

The intersection of H and 8th Streets had the highest severity ranking or EPDO (7), and the highest number of collisions (2). **Table 4** shows the top intersections, per collision analysis. Further detailed collision analysis is in **Appendix A: Collision Data**.

Table 4: Top Intersections on Roadways in Crescent City (Per Collision Analysis)

North/ South Road	East/ West Road	LRSB EPDO	Total Collisions
H St	8 th St	7	2
US 101	Elk Valley Rd	6	1
J St	7 th St	1	1
Breen St.	Coolidge Ave	1	1

The segment collisions were also analyzed by EPDO and total number of collisions. **Table 5** shows the top segments, per collision analysis. The segment with the highest EPDO is US 101 from Front Street to Elk Valley Road. This falls within Caltrans jurisdiction and is currently being upgraded with sidewalks and other safety improvements.

Within the City’s jurisdiction, E Cooper Avenue from Cemetery Road to US 101 saw one collision during the analysis period. Due to the low EDPO rating and lack of other priority segments, the City will focus on systemic safety upgrades and intersection projects to help improve overall safety.

Table 5: Top Segments on Roadways in Crescent City (Per Collision Analysis)

Segment	Length (mi)	LRSB EPDO	Total Collisions
US 101 (Front St to Elk Valley Rd)	0.41	167	3
US 101 (E Cooper Ave to 9 th St)	0.41	11	1
E Cooper Ave (from Cemetery Rd. to US 101)	0.13	1	1

Collisions Related to Challenge/ Emphasis Areas

Intersections

Between 2011 and 2020, 40 collisions took place on roadways in Crescent City including state highways in Caltrans jurisdiction. Of those, 32 (80%) occurred at intersections with 15 at intersections under the City’s jurisdiction and 17 occurring at intersections under Caltrans jurisdiction. The City intersection collisions were attributed to a number of factors including unsafe speed, following too closely, improper turning, automobile right of way, pedestrian right of way, and traffic signals/ signs.

Aggressive Driving / Speed Management

Aggressive driving including speeding can be assessed through collision violation categories for unsafe speed and traffic signals/ signs violations. There were 8 total unsafe speed collisions at City intersections from 2011 to 2020 and 1 collision related to traffic signals/ signs. There was 1 additional unsafe speed collision and 4 traffic signals/ signs collision on Caltrans roadways. Many of these incidents resulted in broadside or hit object collisions.

Bicyclists

There were 7 total bicycle collisions in the City from 2011 to 2020 including 6 under Caltrans jurisdiction (**Figure 10**). Broadside incidents accounted for two collisions with the other collision types being vehicle-pedestrian interactions, or other/not stated. The majority of these collisions took place along Highway 101.

Pedestrians

There were three total collisions involving pedestrians from 2011 to 2020. These largely took place on roadways under Caltrans jurisdiction including a fatal incident on Highway 101 after the intersection with Elk Valley Rd. The pedestrian location at the time of collision, along with corresponding severity, is shown in **Figure 11**. Of the 3 collisions, one included pedestrians in the road (including the shoulder), and two involved pedestrians crossing the road not in a crosswalk (jaywalking).

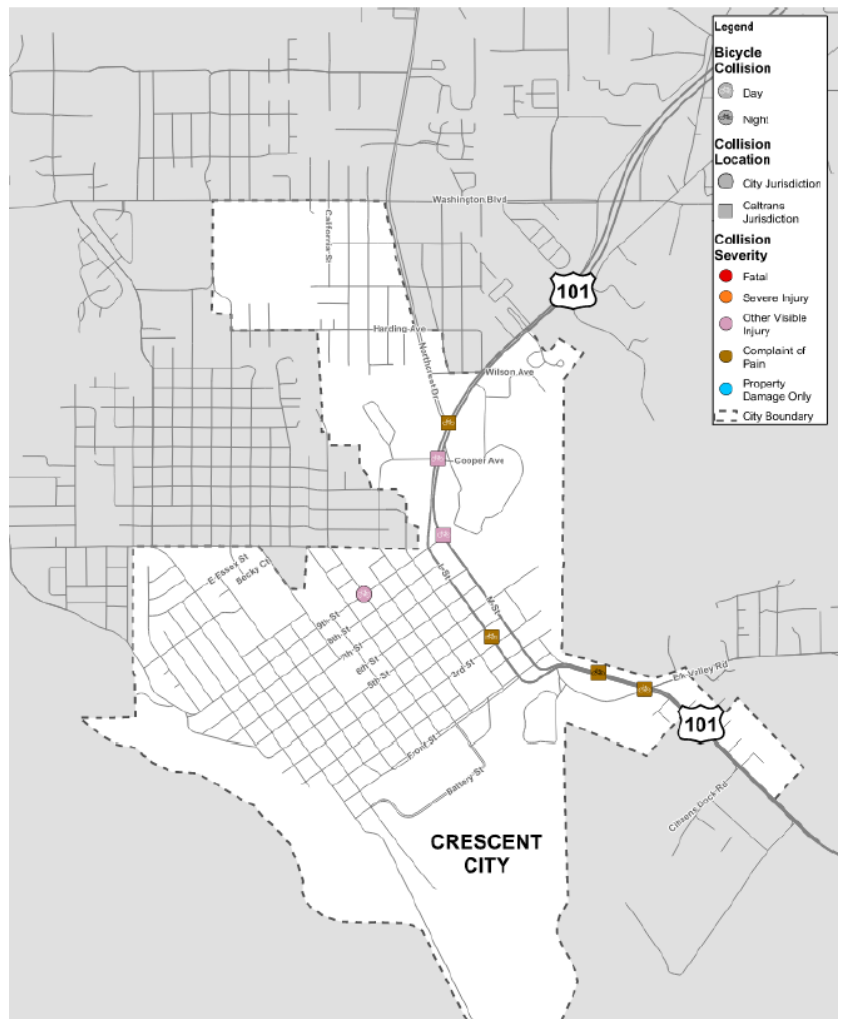


Figure 10: Bicycle Collisions from 2011 to 2020

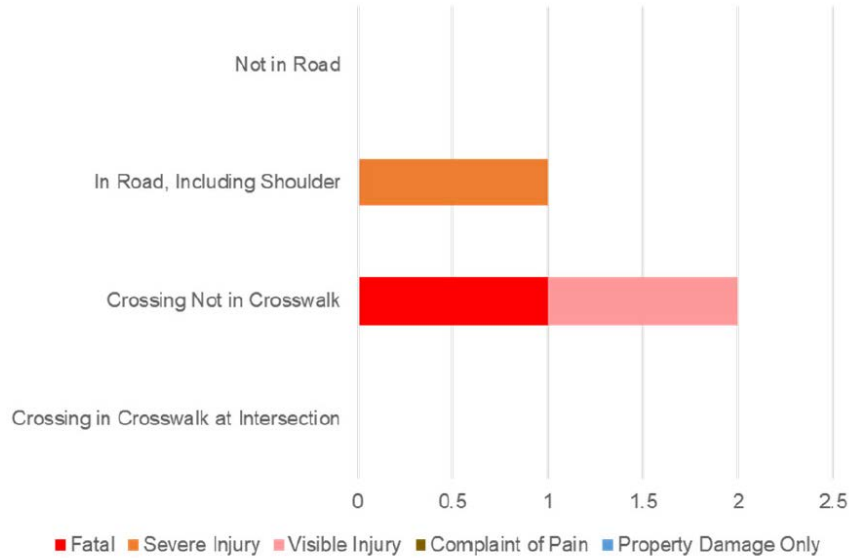


Figure 11: Pedestrian Collisions from 2011 to 2020)

Distracted Driving

Distracted driving is categorized in collision data as inattention. Categories for inattention include cell phones (handheld or hands-free), electronic equipment, smoking, eating, children, animal, personal hygiene, and reading. From 2011 to 2020 there were 2 collisions related to distracted driving including one attributed to eating that resulted in a rear end collision on US 101 and another categorized as “Other”.

Impaired Driving

Impaired driving refers to driving under the influence of alcohol, controlled substances, or other substances that impairs a person’s mental capacity. Of the 40 collisions that occurred on City roadways, 4 involved alcohol with 1 incident directly attributed to driving under the influence that resulted in a head on collision.

4.4 Field Reconnaissance

A field visit was performed on February 23, 2022 to analyze the roadways throughout the City of Crescent City and observe areas with high densities of public comments and collisions. Notes and photos from this visit have been compiled in **Appendix C: Field Reconnaissance**.

Some key findings from the field review are noted below.

- Faded pavement markings, including crosswalks, and lack of edge lines.
- Discontinuous sidewalks were observed in several locations.
- Uneven pavement and limited ADA curb ramps.



Figure 12: Front Street at Play Street

5. Public Outreach

5.1 Public Website

A project website was created on the Social Pinpoint platform to inform the public about the LRSP and provide a platform for public engagement for both the City and Del Norte County LRSPs. The project website had the Google Translate option enabled that could translate the webpage in over 100 languages and detect the user's browser settings to automatically display the website in their language preference. In addition, the user could toggle the preferred language on the upper right corner of the webpage. Visitors to the page were invited to provide comments on an interactive project map and share their thoughts through a project survey. Comments from the interactive map and detailed results from the survey are included in **Appendix A: Stakeholder and Public Input**.

5.2 Interactive Map

The interactive map feature on the website allowed the public to drag icons to a location within the City and County and leave a comment regarding driving, transit, schools biking, or pedestrians at that location. **Figure 13** shows the interactive map feature from the website. Areas with high densities of interactive map comments within the City of Crescent City included areas along Front St, along 9th St, along A St, on 5th St at US 101, E Cooper Ave at US 101 and on H St near 11th St.

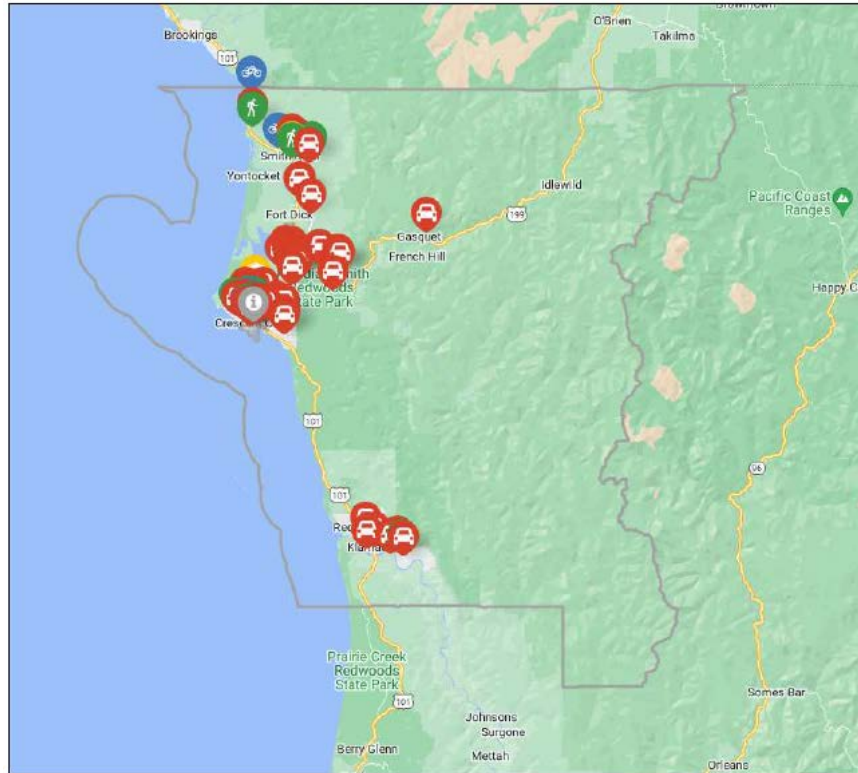


Figure 13: Public Website Interactive Map

5.3 Public Survey

The City of Crescent City and the County of Del Norte Public Survey asked nine questions relating to the LRSP. In total, 53 survey responses were received. The interactive map received 94 total comments with 30 comments relating directly to the City. According to the survey, the primary safety issues identified were lack of infrastructure, speeding, driving under the influence (DUIs), distracted driving, and lack of enforcement (Figure 14). Other identified issues included pavement condition, lack of streetlights, lack of turn lanes on highways, inadequate bicycle lanes and pedestrian crossings on bridges, faded pavement markers, and unlicensed drivers.

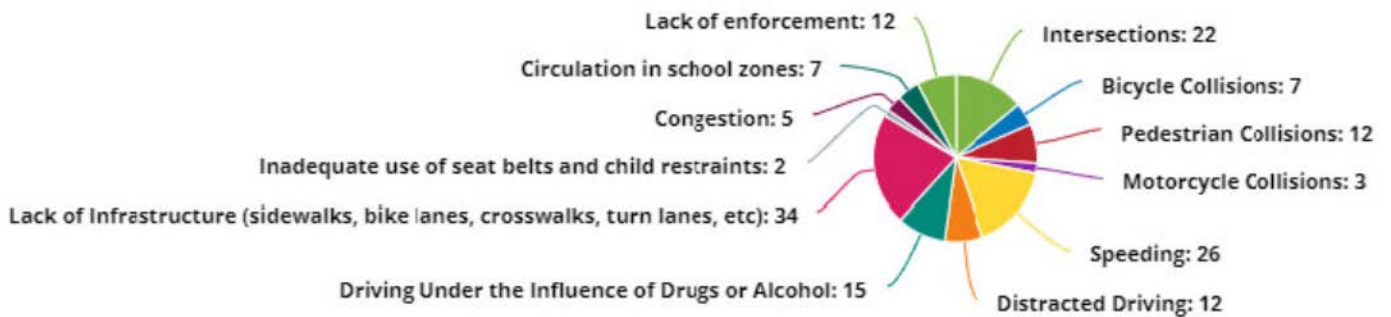


Figure 14: Public Survey Areas of Concern

5.4 Public Workshop

A joint public workshop was hosted through the Zoom platform on February 15, 2022 to discuss details about the Crescent City and Del Norte County LRSPs. This workshop updated the public with the work completed on the plans and provided time at the end of the presentation for the attendees to address any questions or concerns they had. A summary from this workshop is included in **Appendix A. Stakeholder and Public Input**.

Public-Identified Strategies

Areas with high densities of interactive map comments within the City of Crescent City included areas along Front St, along 9th St, along A St, on 5th St at US 101, E Cooper Ave at US 101 and on H St near 11th St. Repaving Front Street in its entirety was mentioned multiple times. Lack of infrastructure was also identified by many as a safety concern. Public comments suggested building additional sidewalks, adding additional street lighting, adding more bike lanes and multi-use paths, and increasing overall safety as some main priorities for improvements to encourage alternate modes of travel.

6. Identify Strategies

Through coordination and feedback from the City of Crescent City, LRSP stakeholder working group, and public outreach, safety projects and strategies were identified for the Local Road Safety Plan.

The LRSP references specific location engineering projects and systemic safety applications. In addition, safety strategies and projects that address the other E's to include Enforcement, Education, Emergency Response, and Emerging Technologies will be discussed below.

6.1 Engineering Strategies

Recommended countermeasures for the priority locations were chosen per the most recent Caltrans, Local Roadway Safety Manual (Version 1.5), April 2020, guidance from the City and stakeholders on preferred countermeasures, crash characteristics, and observations from Google Maps.

Collisions from the past five years (2016-2020) were used to determine crash characteristics for priority intersections and segments throughout the City, including along US 101 within Caltrans jurisdiction. Based on these characteristics, the most suitable countermeasures were developed.

Intersection Projects

The locations and characteristics of the 5 priority intersections are shown in **Table 6** below. The countermeasures recommended for these locations are presented in **Table 7**.

Table 6: Priority Intersection Characteristics

Location	Control	Crash Characteristics											
		Total Crashes	Top Type of Collision (Number of Collisions)	Top Violation Category (Number of Collisions)	Fatal + Severe Injury	% Night	Wet	Pedestrian	Pedestrian Not in Crosswalk	Bicycle	Ran Off Road	Involv. w/Fixed Object	Alcohol Involved
J St/7 th St	TWSC	1	Broadside (1)	Auto (R/W) (1)	0	0	0	0	0	0	0	0	0
H St/8 th St	Two-way Stop Control (TWSC)	2	Sideswipe (1), Other (1)	Unsafe backing (1), Unknown (1)	0	50%	0	0	0	0	0	0	0
Gary St/Becky Ct	Uncontrolled	1	Overtaken (1)	Unsafe speed (1)	0	0	0	0	0	0	0	1	0
A St./Essex St	TWSC	1	Hit-object (1)	Unsafe Speed (1)	0	0	0	0	0	0	0	1	0
Breen St/Coolidge Ave	TWSC	1	Hit-object (1)	Unsafe Speed (1)	0	100%	0	0	0	0	0	1	0

Some of the proposed Intersection Countermeasures for City Roadways are highlighted below:

Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs

- J Street / 7th Street
- H Street / 8th Street



Upgrade intersection pavement markings

- J Street / 7th Street
- H Street / 8th Street



Improve sight distance to intersection (Clear Sight Triangles)

- J Street / 7th Street
- Breen Street / Coolidge Avenue

Update school warning sign and install dynamic/variable speed warning signs

- Gary Street / Becky Court



Table 7: Recommended Countermeasures for Priority Intersections

Intersection	Control	Relative Severity (EPDO)	Total Crashes	Top Type of Collision (Number of Collisions)	Top Violation Category (Number of Collisions)	Countermeasure Number	CRF	Funding Eligibility	Recommended Countermeasures	Reasoning
City Jurisdiction										
J ST / 7TH ST	TWSC	1	1	Broadside (1)	Automobile Right of Way (1)	NS06	15%	100%	Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs	1 broadside collision due to Auto R/W violation.
						NS07	25%	100%	Upgrade intersection pavement markings	1 broadside collision due to Auto R/W violation. The pavement markings are old and faded. There are no centerline markings for major and minor streets on the approaches to the intersection.
						NS11	20%	90%	Improve sight distance to intersection (Clear Sight Triangles)	1 broadside collision due to Auto R/W violation. Preliminary review showed fences may be blocking sight distance on south west corner of the intersection.
						-	-	-	Re-evaluate parking near intersection	Parked cars near the intersection may be blocking sight distance at intersection.
H ST / 8TH ST	TWSC	7	2	Sideswipe (1), Other/unknown (1)	Unsafe Starting/Backing (1), Unknown (1)	NS06	15%	100%	Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs	The sideswipe collision involved vehicles approaching from the stop-controlled approach.
						NS07	25%	100%	Upgrade intersection pavement markings	Minor street approaches do not have centerline striping.
						-	-	-	Re-evaluate parking near intersection	Parked cars near the intersection may be too close to the intersection.
						-	-	-	Re-evaluate stop sign location	Currently, the stop sign on the west leg (eastbound approach) is blocked by a power pole.
GARY ST / BECKY CT	Uncontrolled	11	1	Overtuned (1)	Unsafe Speed (1)	R22	15%	100%	Install/Upgrade signs with new fluorescent sheeting (regulatory or warning)	The school warning sign is outdated.
						R26	30%	100%	Install dynamic/variable speed warning signs	Collision near the intersection was due to unsafe speed. Approach to the intersection is in a School Zone.
						-	-	-	Speed Enforcement	Collision near the intersection was due to unsafe speed. Approach to the intersection is in a School Zone.
A ST / ESSEX ST	TWSC	1	1	Hit-Object (1)	Unsafe Speed (1)	-	-	-	Speed Enforcement	Collision at the intersection was due to unsafe speed.
BREEN ST / COOLIDGE AVE	TWSC	1	1	Hit-Object (1)	Unsafe Speed (1)	NS11	20%	90%	Improve sight distance to intersection (Clear Sight Triangles)	Preliminary review showed vegetation growth blocking the southbound approach's sight distance. The stop sign is also being blocked by vegetation growth.
						-	-	-	Speed Enforcement	Collision at the intersection was due to unsafe speed.

Segment Projects

From 2016 to 2020 a total of 8 collisions were reported on City roadway segments (non-intersection related). Priority segments and their crash characteristics for the City are displayed in Table 8 below. The countermeasures recommended for these locations are presented in Table 9.

Table 8: Priority Segments Characteristics

Primary Road	Limits	Length (mi)	Crash Characteristics											
			Total Crashes	Top Type of Collision (Number of Collisions)	Top Violation Category (Number of Collisions)	Fatal + Severe Injury	% Night	Wet	Pedestrian	Pedestrian Not in Crosswalk	Bicycle	Ran Off Road	Involv. w/Fixed Object	Alcohol Involved
E Cooper Ave	Cemetery Rd to US 101	0.13	1	Broadside (1)	Automobile Right of Way (1)	0	0	0	0	0	0	0	0	0
US 101	Front St to Elk Valley Rd	0.41	4	Broadside (2)	Automobile Right of Way (1), Unsafe speed (1), Unsafe starting or backing (1)	1	0	1	1	1	0	1	1	0
US 101	E Cooper Ave to 9 th St	0.41	4	Sideswipe (1)	Unsafe lane change (1)	0	0	0	0	0	0	0	0	0

Table 9: Recommended Countermeasures for Priority Segments

Segment	Relative Severity (EPDO)	Total Crashes	Top Type of Collision	Length	Countermeasure Number	CRF	Funding Eligibility	Recommended Countermeasures	Reasoning
City Jurisdiction									
E COOPER AVE FROM CEMETERY RD TO US 101	1	1	Broadside (1)	0.13	-	-	-	No Countermeasure Proposed	The single collision at this segment was driveway related.
Caltrans Jurisdiction									
US 101 FROM FRONT ST TO ELK VALLEY RD	547	4	Broadside (2)	0.41	R34PB	80%	90%	Install sidewalk/pathway (to avoid walking along roadway) between N Street and Front Street	There was a fatal pedestrian collision in this segment. US 101 between N Street and Front Street does not currently have sidewalks.
					R35PB	35%	90%	Install/upgrade pedestrian crossing (with enhanced safety features)	There was a fatal pedestrian collision in this segment.
					-	-	-	Pedestrian Education campaign	Pedestrian vs vehicle collision was due to pedestrian crossing street not at crosswalk.
					-	-	-	DUI Enforcement	Fatal pedestrian collision was alcohol related.
US 101 FROM E COOPER AVE TO 9TH ST	1	1	Sideswipe (1)	0.24	-	-	-	No Countermeasure Proposed	The single collision at this segment was a sideswipe.

Systemic Countermeasures

When selecting countermeasures, just focusing on locations with current collision issues is a reactive approach to roadway safety planning. A reactive approach targets recent hot-spots and specific problems that are associated with these locations. As a result, locations with low traffic volumes but similar safety issues as hot spot locations, are not addressed. To mitigate collisions in both a reactive and proactive approach, Caltrans’ Local Roadway Safety Manual suggests agencies utilize a comprehensive approach that includes systemic and hot spot location improvements in developing a safety plan.

There are six Citywide Recommended Countermeasures that include adding intersection lighting, installing additional intersection warning/regulatory signs, upgrading intersection pavement markers, installing or upgrading pedestrian crossings at uncontrolled locations, enhanced pedestrian safety features, install or upgrade signs with new florescent sheeting, and installing sidewalks or pathways. More information can be seen in **Table 10** below.

Table 10: Systemic Countermeasures

Location	Location Description	Countermeasure Number	CRF	Funding Eligibility	Recommended Countermeasures	Reasoning
Intersections	Citywide	NS01	40%	100%	Add intersection lighting	Some intersections in the City do not have intersection lighting on all approaches. A Citywide lighting adequacy study is recommended. City's Economic Development Strategic Action Plan project 6M recommends undergrounding utility wire; roadway lighting needs can be incorporated with this effort.
Two-way Stopped Controlled Intersections (TWSC)	Citywide	NS06	15%	100%	Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs	The City has many TWSC intersections. All intersection collisions at the City happened at TWSC intersections.
Two-way Stopped Controlled Intersections (TWSC)	Citywide	NS07	25%	100%	Upgrade intersection pavement markings	Pavement markings including stop pavement markings, school zone pavement markings and lane markings at intersections are faded and need to be replaced.
Intersections	Citywide	NS20PB	25%	100%	Install pedestrian crossing at uncontrolled locations (new signs and markings only)	Some intersections in the City do not have crosswalks. New crosswalks can be added along school routes and major pedestrian traffic areas.
Pedestrian Crossings	Citywide	NS21PB	35%	100%	Install/upgrade pedestrian crossing at uncontrolled locations (with enhanced safety features)	Pedestrians are an identified challenge/emphasis area for the LRSP. Midblock and intersection crosswalks in the City do not have modern safety features. Some of these crosswalks are school crosswalks. Crossing improvements are set-aside funded in the HSIP process. Therefore, pedestrian crossing improvements can qualify for improvements without meeting B/C ratio requirements.
Roadways	Citywide	R22	15%	100%	Install/Upgrade signs with new florescent sheeting (regulatory or warning)	Signs throughout the City are faded.
Roadways	Citywide and along US 101 Segments	R34PB	80%	90%	Install sidewalk/pathway (to avoid walking along roadway)	Most City roadways do not have paved sidewalks or proper curb ramps. Some US 101 segments are also lacking sidewalks.
Roadways	Along US 101 Segments	R35PB	35%	90%	Install/upgrade pedestrian crossing (with enhanced safety features)	There was a fatal pedestrian collision on the US 101 segment. Potential location for new midblock crossing needs to be evaluated.

One of the roadways that is identified in City's Economic Development Strategic Action Plan is Front Street. Phase 1 of Front Street Improvements is already constructed between B Street to G Street. The City is in the process of acquiring funding for Phase 2 of the project. Currently, the unimproved segment of Front Street is 4-lane roadway with a painted median leading to a long pedestrian crossing distance. Systemic countermeasures mentioned above can be implemented to reduce collision risks. There are some limitations to the application of Countermeasure R22 – Install/Upgrade signs with new florescent sheeting as mentioned in the LRSM:

This CM only applies to crashes occurring within the influence area of the new/upgraded signs. This CM is not intended for maintenance upgrades of street-name, parking, guide, or any other signs without a primary focus on roadway safety. This CM is not eligible unless it is done as part of a larger sign audit project, including the study of:

- 1) the existing signs' locations, sizes, and information per MUTCD standards,
- 2) missing signs per MUTCD standards, and
- 3) sign retroreflectivity.

The overall sign audit scope (or a special exception from the HSIP program manager) must be documented in the Narrative Questions in the application. Based on the scope of the project/audit, it may be appropriate to combine other CMs in the B/C calculation.

Pedestrian crossing enhancements and bicycle safety improvements are fundable through set-aside funding in the HSIP grant program. Improvements for these can qualify for funding without having prior collision history. Systemic countermeasures regarding pedestrian crossings (NS20PB, NS21PB, NS22PB and R35PB) can be implemented at crossing locations at schools, downtown, and other mid-block locations.

Projects Suggested through Public Input





The interactive map tool on the public website for the plan gathered many suggestions from residents of the County for areas of improvement. These suggestions were summarized and are shown in **Table 11** below.

Table 11: Project Recommendations from Public Outreach

Suggestion	Location (*Location is either fully/partially not in City jurisdiction)
Improve Pavement Quality	Front Street
	K Street
	West Harding Street*
	2nd Street at A Street
	E Essex Street
	8th Street
	5th Street east of M (Hwy 101)
	Highway 101 side streets
	Wendell Street at W 8th Street
Improve Vegetation Maintenance	E Essex Street
Improve Turning	E Cooper Avenue
	H Street from 9th Street to Pacific Avenue
	H Street at Pacific Avenue*
	Arlington Drive at W Washington Blvd*
Install/ Upgrade pedestrian facilities	H Street at Pacific Avenue*
	H Street from 9th Street to Pacific Avenue
	3rd Street at G Street
	A Street
	Highway 101 at Cooper Avenue
	10th Street at B Street
Evaluate speed limit and/or implement speed mitigation measures	H Street from 9th Street to Pacific Avenue
	9th Street at D Street
	Highway 101 at Cooper Avenue
Improve Signage	Citywide
	A Street between E Condor Street and 10th Street
Improve Lighting	I Street from Front Street to 3rd Street
	Pacific Avenue*
	Wendell Street at W 8th Street

6.2 Non-Engineering Strategies

A comprehensive approach to selecting countermeasure recognizes that not all safety issues can be addressed through infrastructure improvements. The comprehensive approach to safety involves the 5 E’s of traffic safety. Besides engineering safety countermeasures, it is important to recommend safety countermeasures to coincide with the other safety E’s.

Strategy Type	Recommended Strategy
 Education	Bicycle and pedestrian safety campaigns
	Driver education and distracted driving campaigns
	Continue Safe Routes to School maps and outreach at schools
	Social media blasts with quick education tools for all users
	Dangers of speeding/speed management campaigns
 Emerging Technologies	Bicycle detection
	Upgraded controllers for flashing yellow arrows and leading pedestrian intervals
	Install touchless Accessible Pedestrian Signals
	Changeable message signs
 Enforcement	Targeted speed enforcement
	DUI saturation patrols
	Increasing number of traffic enforcement officers
	Distracted driving enforcement
 Emergency Response	Consider emergency vehicle pre-emption at signalized intersections
	Improvements to roadways to increase access, reduce congestion, and potentially shorten response times

7. Prioritize and Incorporate Strategies

7.1 Funding Sources

Funding opportunities can come through grant funding such as HSIP, Active Transportation Program (ATP), and other state and federally funded grants. It should be noted that the Active Transportation Program (ATP) funding is very competitive and typically awarded for larger projects in high-density communities but does consider disadvantaged communities. With these constraints, it may be difficult for the City of Crescent City to submit a competitive project. Crescent City can also look for opportunities to incorporate safety enhancements with the Capital Improvement Program. However, it is noted that funding is very limited and typically used from roadway paving.

Each HSIP cycle has available project funding for Benefit to Cost Ratio (BCR) and funding set-aside projects. BCR projects use expected benefit and estimated cost to determine eligibility and likelihood for receiving funding. The expected benefit is determined using the crash history and the predicted collision reduction from the recommended countermeasures. Since there were a limited number of collisions within the City and the majority were low-severity, it is unlikely any of the projects could meet the minimum BCR for the majority of HSIP funding. However, HSIP also provides funding set-aside projects that do not require a collision history. Per HSIP Cycle 11

call for projects released May 9, 2022, set-aside funding categories include guardrail upgrades, pedestrian crossing enhancements, installing edgelines, bike safety improvements, and tribes.

For funding for the non-engineering strategies, the California Office of Traffic Safety has resources that can be used by the City to help in traffic safety education for residents. Some campaigns highlighted in their website include impaired driving, distracted driving, pedestrian & bicycle safety, and speeding. The website provides educational materials, safety tips, facts, and resources to use in educating the public on traffic safety.

7.2 Prioritized Projects

As there were a limited number of collisions in the City with overall low-severity, it is difficult to prioritize specific intersection and segment projects. As such, it is recommended that the City focus on systemic countermeasures in order to improve overall safety. Based on stakeholder, public, and City recommendations, the following is a prioritized list of systemic countermeasures for the City.

1. Upgrade intersection pavement markings.
2. Install/upgrade larger or additional stop signs or other intersection warning/regulatory signs.
3. Install/upgrade pedestrian crossing (with enhanced safety features).
4. Install sidewalk/pathway (to avoid walking along roadway).

Pedestrian crossing enhancements and bicycle safety improvements are fundable through set-aside funding in the HSIP grant program. Improvements for these can qualify for funding without having prior collision history. Systemic countermeasures regarding pedestrian crossings can be implemented at crossing locations at schools, downtown, and other mid-block locations.

8. Evaluation Process

To evaluate the success of this plan, yearly collision analysis, along with requests for public feedback, can take place and be compared to the established goals.

Goal 1: Create a safe, livable, healthy, and welcoming community by developing a roadway safety plan that targets Crescent City's transportation and roadway safety needs

Measure of success: A Local Road Safety Plan developed with stakeholder and community engagement that is updated and adopted every 5 years.

Goal 2: Reduce fatal and injury collisions Citywide by increased maintenance, grant funded projects, and increased education and enforcement

Measure(s) of success: A downward trend of fatal and injury collisions as a result of safety improvement projects and/or education and enforcement efforts. Obtain grant funds including a potential HSIP grant for recommended safety countermeasures. Increased education and enforcement including collaboration with CHP, the Crescent City Police Department and the Del Norte County Sherriff's Office to increase enforcement in areas with speeding violations or areas of concern.

Goal 3: Identify cost-effective countermeasures and safety investments that can be applied systemically (i.e., flashing yellow arrow, retroreflective backplates, leading pedestrian interval, etc.)

Measure of success: Develop a list of countermeasures that can be implemented City wide and can easily be included in grant funding applications.

Goal 4: Reduce hit object and lane departures collisions by implementing safety countermeasures and strategies

Measure of success: A measured reduction in hit object and lane departure collisions. To achieve this reduction: paint all pavement markings every other year where pavement markings are not thermoplastic or epoxy. Where pavement markings are thermoplastic or epoxy, rehabilitate pavement markings every ten years or as needed.

Goal 5: Improve multimodal transportation safety by expanding the City’s opportunities for non-motorized transportation infrastructure

Measure of success: Implement SB 743 to mitigate vehicle miles generated by development and promote improvements to active transportation facilities including bike trail and pedestrian path construction.

Goal 6: Improve safety around schools by increasing multimodal infrastructure, enhanced crossings, and education and enforcement

Measure of success: Encourage each school site from elementary to high school to develop and implement a school route plan for pedestrians consistent with the California Manual on Uniform Traffic Control Devices. Additionally, include provisions in the school route plan for active transportation users.

Goal 7: Reduce speeding and improper turning related collisions through engineering, enforcement, emerging technologies, and education strategies

Measure of Success: Within 5 years after implementing speed management strategies outlined in this plan, “Unsafe Speed” and “Improper Turning” will report less collisions.

9. Next Steps

The City of Crescent City plans to present the Local Road Safety Plan to the City Council for adoption in June 2022. This safety plan will be a living document and will guide the City’s roadway safety needs for at least the next five years. It will be updated as needed and the goals will be monitored.

10. References

Recent/Planned Projects

- City of Crescent City Front Street Storm Drain Project
<https://www.crescentcity.org/departments/PublicWorks>
- City of Crescent City Sunset Circle Multi-Use Trail Project.

Traffic Data

- City of Crescent City Collision Data, Statewide Integrated Traffic Records System, 2011-2020.
- City of Crescent City Collision Data, Transportation Injury Mapping System, 2011-2020.

Plans/Manuals/Articles

- “Developing Safety Plans, A Manual for Local Rural Road Owners”, Federal Highway Administration, March 2012, http://safety.fhwa.dot.gov/local_rural/training/fhwasa12017/.
- 2020-2024 California’s Strategic Highway Safety Plan (SHSP), “California Safe Roads: 2020-2024 Strategic Highway Safety Plan”, Caltrans.
- “Local Roadway Safety, A Manual for California’s Local Road Owners”, Caltrans, Version 1.5, April 2020
- “Highway Safety Manual”, American Association of State Highway Officials (AASHTO), 1st Edition, 2014 supplement.
- “California Manual of Uniform Traffic Control Devices (CA MUTCD)”, Revision 5, 2014.
- County of Del Norte and City of Crescent City, Final Regional Systemic Safety Analysis Report. June 25, 2019.
- City of Crescent City Economic Development Strategic Action Plan, Adopted June 2021.

Websites

- California Department of Transportation, “Strategic Highway Safety Plan (SHSP)”, <https://dot.ca.gov/programs/safety-programs/shsp>.
- California Department of Transportation, “Local Roadway Safety Plan (LRSP) and Systemic Safety Analysis Report Program (SSARP)”, <https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/highway-safety-improvement-program/local-roadway-safety-plans>.
- California Department of Transportation, “HSIP Cycle 10”, <https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/highway-safety-improvement-program/apply-now>.
- County of Del Norte Local Road Safety Plan, <https://lrsp.mysocialpinpoint.com/delnorte>.
- Institute of Transportation Engineers, <https://www.ite.org/technical-resources/topics/safe-systems/>.

Surveys

- Local Road Safety Plan Project Survey, <https://lrsp.mysocialpinpoint.com/delnort>

APPENDIX A – STAKEHOLDER AND PUBLIC INPUT



Agenda

December 06, 2021

Project	Del Norte Local Roadway Safety Plan / Crescent City Local Roadway Safety Plan	From	Kathryn Kleinschmidt
Subject	Stakeholder Working Group Meeting #1	Tel	+1 805 858-3147
Date/Time	December 6, 2021 from 1 p.m. to 3 p.m.	Project no.	12565978 / 12559663

1. Introductions

- a. Background on stakeholder working group
- b. Facilitators
- c. Safety Champion/Project Manager for the City/County
- d. LRSP Stakeholder Working Group members
 - i. Role and interest in serving on this committee

2. Background

- a. Purpose of the LRSP
 - i. Focused Challenge Areas per Strategic Safety Highway Plan
 - ii. Engages stakeholders representing all E's and other local community stakeholders (neighboring jurisdictions, advocacy groups, and officials) in developing a plan of action to increase safety and create a prioritized list of projects
- b. LRSP Process
- c. Plan updates
 - i. Living document that is updated as needed
 - ii. Official update every 5 years
 - iii. LRSP schedule for completion

3. Safety Projects

- a. County of Del Norte
 - i. Elk Valley Cross Road Corridor Plan
 - ii. Elk Valley Road Multimodal Corridor Plan
- b. City of Crescent City
 - i. Front Street Project
 - ii. Sunset Circle Multi-Use Trail Project

4. Data Analysis

- a. Collision Data (2011-2020)
 - i. All Collisions in the County and the City
 1. Intersection vs. Segment
 2. Hot Spot Locations
 3. Severity
 4. Collision Type
 - ii. Fatal and Severe Injury Collision Locations
 - iii. Top Violation Categories
 - iv. Pedestrian Collisions

- v. Bicycle Collisions
- b. Top ranking intersections and segments
- c. Identify the approach to evaluating collisions (spot, systemic, or comprehensive).
 - i. Currently using a comprehensive approach
 - ii. Implement low-cost safety countermeasures systemically

5. Guiding Principles

- a. Identify a vision, goals, and mission statement for the LRSP
 - i. LRSP needs a vision, goals, and mission statement to guide the document
 - ii. Identify countermeasures to correlate to emphasis area
 - 1. Engineering, Enforcement, Emergency Response, Education, and Emerging Technologies (5Es)

6. Other Items to Discuss

- a. Public Outreach
- b. Next Meeting
 - i. Action Items
 - 1. Complete survey for Vision, Mission, and Goals
 - 2. Provide feedback on meeting topics
 - 3. Participate in the public website
 - 4. Share the public website

Agenda

December 08, 2021

Project	Del Norte Local Roadway Safety Plan / Crescent City Local Roadway Safety Plan	From	Kathryn Kleinschmidt
Subject	Stakeholder Working Group Meeting #1	Tel	+1 805 858-3147
Date/Time	December 8, 2021 from 2 p.m. to 4 p.m.	Project no.	12565978 / 12559663

1. Introductions

- a. Background on stakeholder working group
- b. Facilitators
- c. Safety Champion/Project Manager for the City/County
- d. LRSP Stakeholder Working Group members
 - i. Role and interest in serving on this committee

2. Background

- a. Purpose of the LRSP
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 - 4. Share the public website

Agenda

February 07, 2022

Project	Del Norte Local Roadway Safety Plan / Crescent City Local Roadway Safety Plan	From	Kathryn Kleinschmidt
Subject	Stakeholder Working Group Meeting #2	Tel	+1 805 858-3147
Date/Time	February 7, 2022 from 2 p.m. to 4 p.m.	Project no.	12565978 / 12559663

1. Introductions

- a. Facilitators
- b. Safety Champion/Project Manager for the County/City
- c. LRSP Stakeholder Working Group members

2. 1st Meeting Summary

- a. Meeting summary
 - i. Challenge/emphasis areas
 - ii. Sample mission, vision, and goals
 - iii. Collision analysis from past 10 years
- b. Guiding principles
 - i. Finalize mission, vision, and goals

3. Recent Developments

- a. Public website engagement
 - i. Overall engagement
 - ii. Summarized interactive map comments
 - iii. Summarized survey results

4. Safety Countermeasures

- a. Methodology
- b. Countermeasures for County roadways
 - i. Recent projects
 - ii. Priority locations
 1. Intersection countermeasures
 2. Segment countermeasures
 - iii. Systemic countermeasures
 - iv. Non-engineering strategies
 - v. Public suggestions
- c. Countermeasures for City roadways
 - i. Recent projects
 - ii. Priority locations
 1. Intersection countermeasures
 2. Segment countermeasures
 - iii. Systemic countermeasures
 - iv. Non-engineering strategies
 - v. Public suggestions

5. Next Steps

- a. Provide feedback on meeting topics
- b. Public meeting on February 15, 2022 at 5 p.m.
- c. Draft LRSP document



Local Roadway Safety Plan

Request for Public Input:

We want to hear from you! Provide your input on the safety of the roadways in our community and learn more about the Local Roadway Safety Plan (LRSP) by visiting the following link before January 31, 2022.

lrsp.mysocialpinpoint.com/delnorte

For further information, contact:

County of Del Norte

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City of Crescent City

Jon Olson, PE
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**Want to participate in helping to
make **YOUR** local roads safer?**

Scan this QR code to access the LRSP website, which includes an interactive map, a survey, and project details.





Local Roadway Safety Plan

Join Us for a Public Meeting!

To discuss details about the Local Roadway Safety Plan

Short presentation followed by a Q&A

February 15, 2022 at 5:00 PM

Join online: <https://us02web.zoom.us/j/86143469603>

Or use the Zoom Webinar ID: 861 4346 9603

Or call: (669) 900 6833

Note: For call-in only attendees, you can mute/unmute by pressing *6 and raise your hand by pressing *9.

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ID	Created on	Type	Comment	Up Votes	Down Votes	Latitude	Longitude	View on map	Within City?	Location
4	12/22/2021 8:01	Driving Comment	Front Street from H St. to Hwy 101 north needs to be fixed. Too many potholes and dips in the road. I wonder what tourists think of this road that leads to the Battery Point Lighthouse and Beachfront Park??	15	0	41.751409	-124.194689	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/267027	Crescent City	Front Street
5	12/22/2021 8:05	Driving Comment	K Street from Front Street to Third Street. The roadway has many dips and potholes and needs to be fixed. This would help drivers and parade entries in our many parades that travel down K Street.	6	0	41.752492	-124.194067	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/267029	Crescent City	K Street
6	12/22/2021 8:17	Driving Comment	West Harding Street between El Dorado Street and Northcrest Drive. Many, many potholes, broken asphalt, crack sealing that just needs to be replaced with releveled surface and new asphalt or asphalt/concrete. When cars are parked along the side of the street, through traffic CANNOT avoid the potholes, etc. which isn't good for one's car alignment or tires.	7	0	41.767315	-124.201502	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/267030	Crescent City	West Harding Street
17	12/27/2021 18:06	Driving Comment	Please finish Front St. It's a rough road. It needs to be leveled out and resurfaced. For a city street that's terrible.	13	0	41.751753	-124.193187	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/267558	Crescent City	Front Street
18	12/27/2021 18:10	Driving Comment	Second & A street needs to be fixed. The surface of the road is in very bad condition.	7	0	41.747832	-124.203379	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/267559	Crescent City	2nd Street at A Street
19	12/30/2021 17:26	Driving Comment	big pothole on E Essex. bushes at curb obstructing view of vehicles turning onto A street from E. Essex	2	0	41.755661	-124.210181	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/268320	Crescent City	E Essex Street
20	12/30/2021 17:27	Driving Comment	people pulling out of starbucks, and homedepot almost cause accident every time I drive down cooper...	4	0	41.761695	-124.198487	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/268321	Crescent City	E Cooper Avenue
21	12/30/2021 17:29	Driving Comment	how come front street only got repaved in front of sea quake? the whole street needs work	13	0	41.750076	-124.197006	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/268322	Crescent City	Front Street
23	1/4/2022 23:28	Driving Comment	Drivers use H St., from 9th through the turn onto Pacific and from Pacific to the stop sign at 9th as a super speedway with nothing in the way to slow them down. There is a LOT of pedestrians in this area, especially during sporting events. I have witnessed many near misses with a speeding vehicle involving Children and adults. I believe there should be a three way stop at the junction of Pacific/H St/ Meridian. Also allowing east bound traffic on Pacific to turn left on Meridian .	4	2	41.756851	-124.202478	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/268955	Crescent City	H Street from 9th Street to Pacific Avenue
24	1/4/2022 23:38	Driving Comment	I believe there should be a three way stop at the junction of Pacific/H St/ Meridian. Also allowing east bound traffic on Pacific to turn left (north) on Meridian. Making access to Cooper-highway more convenient. Also, This would decrease speeding drivers from taking these turns too fast and would eliminate the "Pacific/H St speedway. Also would increase safety for the many pedestrians in this area, especially during the multitude of sporting events at the ball park and gym.	2	2	41.758028	-124.203701	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/268956	Crescent City	H Street at Pacific Avenue*
25	1/4/2022 23:41	Pedestrian Comment	Please see comments for driving in same location	1	0	41.757923	-124.203508	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/268957	Crescent City	H Street at Pacific Avenue*
26	1/4/2022 23:43	Pedestrian Comment	Please see driving comment for same location	0	0	41.757059	-124.202628	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/268958	Crescent City	H Street from 9th Street to Pacific Avenue

ID	Created on	Type	Comment	Up Votes	Down Votes	Latitude	Longitude	View on map	Within City?	Location
27	1/4/2022 23:52	Driving Comment	There is no posted speed limit signs anywhere on H St. that I have seen. It is a mix of residential and commercial so is the speed limit 25 or 35? Believe most people drive it at 45mph + going north and south between Pacific and 9th St. my neighbor was hit by a truck while walking her dog. PLEASE, make the needed improvements and chaotic make this area safe for the many pedestrians that travel it daily and especially during the sporting events at the ball field and gym.	2	0	41.755274	-124.201641	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/268959	Crescent City	H Street from 9th Street to Pacific Avenue
28	1/5/2022 0:15	Driving Comment	Each intersection in the city should have street signs identifying the names of the streets that are intersecting . There are too many intersections that are lacking street identification signs. Why? I've never seen a city with so many missing street name signs. I don't believe there is any excuse for this to be overlooked. Please label each intersection with the appropriate identifying signage and while you're at it, add some speed limit signs along these roads. These would be very helpful.	5	1	41.756299	-124.196534	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/268960	Crescent City	Citywide
29	1/5/2022 0:20	Driving Comment	This comment is for all of 8th St. The city should be ashamed by the condition of this road!!! Please take a drive on 8th St and see for yourself. I feel so bad for the residents on this road.	2	0	41.75425	-124.20265	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/268961	Crescent City	8th Street
31	1/5/2022 13:47	Driving Comment	5th Street, east from M Street, needs to be leveled and repaved with attention paid to the steepness of the drainage channel along the curbs and driveways in and out of the Safeway parking lot and Rite Aid parking lot. I am so tired of scraping the bottom front of my vehicle when I exit both parking lots. Especially bad is the roadway and driveway into and out of Safeway, nearest to the Safeway building itself.	6	0	41.756322	-124.193766	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/269103	Crescent City	5th Street east of M (Hwy 101)
32	1/5/2022 15:10	Driving Comment	Unsafe speed...showing off. Offensively and intentional noisy vehicles. No enforcement...children often present.	1	0	41.754107	-124.204972	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/269119	Crescent City	9th Street at D Street
36	1/6/2022 11:59	Driving Comment	"A" Street from 2nd St to Pacific Avenue needs to be repaved! It is a driving hazard!	2	0	41.748187	-124.203563	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/269276	Crescent City	2nd Street at A Street
42	1/6/2022 12:51	Driving Comment	The road is full of potholes and is very hard to drive on.	3	0	41.752851	-124.205858	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/269301	Crescent City	8th Street
45	1/6/2022 13:02	Driving Comment	Drivers coming off Arlington and in and out of DNHS have multiple near misses every school morning. Instead of yielding, a center turning lane could help.	2	0	41.772185	-124.210138	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/269308	Crescent City	Arlington Drive at W Washington Blvd*
47	1/6/2022 13:09	Driving Comment	Street lights have not worked in years. The lighting is terrible and it is unsafe at night.	1	0	41.752143	-124.196525	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/269310	Crescent City	I Street from Front Street to 3rd Street
49	1/6/2022 13:49	Driving Comment	Many of the streets that run parallel to the highway need repaving, not just patching once in a decade.	2	0	41.751025	-124.200697	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/269316	Crescent City	Highway 101 side streets
50	1/6/2022 13:50	Driving Comment	Front street from 101 to H St needs repair so drastically. Why it has been left to a state of such disrepair is appalling.	4	0	41.752324	-124.193546	https://lrsp.mysocialpinpoint.com/delnor-te/map#/marker/269317	Crescent City	Front Street

ID	Created on	Type	Comment	Up Votes	Down Votes	Latitude	Longitude	View on map	Within City?	Location
51	1/6/2022 13:53	Pedestrian Comment	The sidewalk stops for one block each on opposing sides of the street. It makes for poor walkability (I don't want to bit hit by a car or splashed by water when the streets are wet and a car drives too close)	2	0	41.751853	-124.19838	https://lrsp.mysocialpinpoint.com/delnor te/map#/marker/269318	Crescent City	3rd Street at G Street
52	1/6/2022 13:56	Pedestrian Comment	It's very dark at night. Unsafe and scary! This area needs street lamps!	2	0	41.7576	-124.20295	https://lrsp.mysocialpinpoint.com/delnor te/map#/marker/269321	Crescent City	H Street from 9th Street to Pacific Avenue
58	1/6/2022 15:56	Pedestrian Comment	Sidewalks they length of A street are intermittent and not ADA compliant. Placement of electric poles and light poles make it impossible to navigate what little sidewalk there is with a wheelchair. I see folks I. Wheel chair going down the middle of the street. It is a lawsuit waiting to happen. Lots of speeding on A st. Very dangerous to cross.	1	0	41.75389	-124.20898	https://lrsp.mysocialpinpoint.com/delnor te/map#/marker/269364	Crescent City	A Street
73	1/7/2022 9:21	Driving Comment	so dark at night, we need street lights	2	0	41.757871	-124.211383	https://lrsp.mysocialpinpoint.com/delnor te/map#/marker/269454	Crescent City	Pacific Avenue*
75	1/8/2022 19:25	Pedestrian Comment	Have almost been hit several times, crossing Hwy 101 at Cooper. I use the signal, but even when the sign says "WALK," vehicles race through this intersection without even seeing pedestrians.	0	0	41.761647	-124.197425	https://lrsp.mysocialpinpoint.com/delnor te/map#/marker/269704	Crescent City	Highway 101 at Cooper Avenue
79	1/13/2022 22:31	Driving Comment	There are several potholes on this block, including one that is in front of my driveway that is big enough to chew up the front end of my car every time I back out! There is also a faulty streetlamp on this block that is constantly cycling on and off and makes it hard to see and is distracting to drive.	0	0	41.751984	-124.208481	https://lrsp.mysocialpinpoint.com/delnor te/map#/marker/270885	Crescent City	Wendell Street at W 8th Street
80	1/13/2022 22:33	Driving Comment	There is a rather large dip in the road here, and people often race down our block so they can "catch air" bouncing over that dip. It makes it unsafe for kids, pedestrians and people living in our area.	0	0	41.751689	-124.208212	https://lrsp.mysocialpinpoint.com/delnor te/map#/marker/270886	Crescent City	Wendell Street at W 8th Street
81	1/13/2022 22:37	Transit Comment	There is no bus stop sign in front of the church on A street. Just a pole.	0	0	41.753971	-124.209055	https://lrsp.mysocialpinpoint.com/delnor te/map#/marker/270887	Crescent City	A Street between E Condor Street and 10th Street
82	1/13/2022 22:39	Pedestrian Comment	the sidewalk is very uneven here, full of trip hazards	0	0	41.753898	-124.207671	https://lrsp.mysocialpinpoint.com/delnor te/map#/marker/270888	Crescent City	10th Street at B Street

APPENDIX B – COLLISION DATA

Year	Primary Road	Secondary Road	Collision Severity	# of Fatalities	# of Injuries	Violation Category	Type of Collision	Pedestrian Involved	Bicycle Involved	Motorcycle Involved
2011	RT 101	N ST	4	0	1	Improper Turning	Broadside		Y	
2011	M ST	4TH ST	4	0	2	Following Too Closely	Rear End			
2011	RT 101	NORTHCREST DR	4	0	1	-	Vehicle/Pedestrian		Y	
2011	9TH ST	H ST	3	0	1	Pedestrian Right of Way	Vehicle/Pedestrian		Y	
2011	H ST	3RD ST	4	0	1	-	Rear End			
2011	M ST	7TH ST	4	0	1	Improper Turning	Sideswipe			
2011	RT 101	COOPER AV	3	0	1	-	Other		Y	
2011	9TH ST	J ST	4	0	2	Following Too Closely	Rear End			
2011	A ST	5TH ST	3	0	1	Unsafe Speed	Rear End			
2011	B ST	BATTERY ST	2	0	1	Unsafe Speed	Vehicle/Pedestrian	Y		
2011	M ST	9TH ST	3	0	1	Traffic Signals and Signs	Sideswipe		Y	
2011	L ST	3RD ST	4	0	1	Automobile Right of Way	Broadside			
2011	6TH ST	WENDELL ST	4	0	1	-	-			
2011	L ST	9TH ST	4	0	2	Traffic Signals and Signs	Broadside			
2011	RT 101	COOPER AV	4	0	2	-	Rear End			
2012	3RD ST	L ST	4	0	1	Other Hazardous Violation	Other		Y	
2012	L ST	5TH ST	4	0	2	Traffic Signals and Signs	Broadside			
2012	L ST	3RD ST	2	0	2	Traffic Signals and Signs	Broadside			
2012	M ST	7TH ST	4	0	1	Following Too Closely	Rear End			Y
2012	NORTHCREST DR	RT 101	0	0	0	Unsafe Starting or Backing	Rear End			
2012	FRONT ST	H ST	3	0	1	Improper Turning	Head-On			Y
2013	WILSON AV	DOUGLAS ST	0	0	0	Unsafe Speed	Broadside			
2013	RT 101	NORTHCREST DR	0	0	0	Unsafe Speed	Hit Object			
2013	5TH ST	C ST	0	0	0	Traffic Signals and Signs	Broadside			
2013	M ST/US 101	FRONT ST	3	0	1	-	Vehicle/Pedestrian	Y		
2015	B ST	FRONT ST	0	0	0	Unsafe Speed	Hit Object			
2015	WILLIAMS DR	UNITED STATES HIGHWAY 101	0	0	0	DUI/BUI	Rear End			
2015	1198 WILLIAMS DRIVE	UNITED STATES HIGHWAY 101	0	0	0	Other Than Driver/Ped	Hit Object			
2016	H ST	8TH ST	4	0	1	-	Sideswipe			
2016	J ST	7TH ST	0	0	0	Automobile Right of Way	Broadside			
2016	US101	ELK VALLEY RD	0	0	0	Automobile Right of Way	Broadside			
2017	RT 101	ELK VALLEY RD	1	1	0	-	Vehicle/Pedestrian	Y		
2017	US-101	HUSTON ST	4	0	1	Unsafe Starting or Backing	Broadside		Y	
2019	US-101	COOPER AVE.	3	0	1	Unsafe Lane Change	Sideswipe			
2019	GARY STREET	BECKY STREET	3	0	1	Unsafe Speed	Overturned			Y
2019	COOPER AVENUE	US-101	0	0	0	Automobile Right of Way	Broadside			

Year	Primary Road	Secondary Road	Collision Severity	# of Fatalities	# of Injuries	Violation Category	Type of Collision	Pedestrian Involved	Bicycle Involved	Motorcycle Involved
2019	H ST	8TH ST	0	0	0	Unsafe Starting or Backing	Other			
2020	US-101 S/B	FRONT ST	0	0	0	Unsafe Speed	Hit Object			
2020	COOLIDGE AVENUE	BREEN STREET	0	0	0	Unsafe Speed	Hit Object			
2020	A ST	W. ESSEX ST.	0	0	0	Unsafe Speed	Hit Object			

APPENDIX C – FIELD RECONNAISSANCE

Crescent City and Del Norte County LRSP Site Visits

Road Segment/Intersection: Highway 101 at Timbers Blvd	Date: 02/23/2022	Time: 10:00
Recommended Countermeasures: None. Site visit based on public comment.		
Notes: Sidewalk is not complete up to intersection. No existing sidewalk along Highway 101 in either direction. No existing turn lanes on Highway 101. Timber Blvd dead ends just west of Dollar General. No cross traffic from east of Highway 101 (property on east side is private and gated).		
Road Segment/Intersection: S. Fred D. Haight Road near house number 465	Date: 02/23/2022	Time: 10:15
Recommended Countermeasures: Install delineators, reflectors, and/or object markers. Install edge-lines and centerlines. DUI enforcement.		
Notes: Narrow to no shoulder. Existing center and side lines are faded. Driveways come out on to main road and irregular intervals. No apparent speed calming measures. Tractor seen on roadway.		
Road Segment/Intersection: Lake Earl Drive at Redwood Elementary School	Date: 02/23/2022	Time: 10:30
Recommended Countermeasures: At Redhawk Lane just north of school: Monitor location over next five years.		
Notes: Two lanes of one way traffic exist through school parking lot. Existing turn lane for northbound traffic on Lake Earl Drive. No separate turn lane for southbound traffic. No sidewalks present on Lake Earl. Existing crosswalk with signage near school parking lot exit to the south. Approximate 6 ft shoulder on either side of Lake Earl near school.		
Road Segment/Intersection: Elk Valley Crossroad at Cunningham Ln (near Sunset HS)	Date: 02/23/2022	Time: 10:50
Recommended Countermeasures: None. Site visit based on public comment.		
Notes: No stop pavement marking on Cunningham Ln. Low visibility turning right onto Elk Valley Crossroad. Narrow shoulders. Visible drainage issues along roadway. High speed traffic observed on Elk Valley Crossroad near Sunset HS. No visible markings or signage for school zone/ intersection.		
Road Segment/Intersection: Kings Valley Road at Highway 199	Date: 02/23/2022	Time: 11:05
Recommended Countermeasures: For Kings Valley Road: New/ upgraded signs. Speed warning signs. Widen shoulder. Install delineators. Install edge lines.		

Notes:

Narrow shoulders along all roadways. Existing markings are clear but there are a lot of them which makes it difficult to tell where lanes are. Crossing Highway 199 from north to south there is dip before traveling slightly uphill. High speed westbound traffic on Highway 199 (traveling downhill likely increases speed in this area). Kings Valley Road is narrow with limited to no shoulder.

Road Segment/Intersection:

Elk Valley Road at Parkway Drive

Date:

02/23/2022

Time:

11:15

Recommended Countermeasures:

For Parkway Dr: Road segment recently went through safety updates and should be monitored to track improvement.

Notes:

Existing bike lanes on Parkway. Narrow shoulders on Elk Valley Crossroad where it meets Parkway Dr. No merging lane for Elk Valley Crossroad traffic turning left onto Parkway Dr which then merges quickly with Elk Valley Rd traffic turning right onto Parkway (all northbound). No edge lines on small connector between Elk Valley Road and Parkway (connecting with Elk Valley Crossroad).

Road Segment/Intersection:

Parkway Drive at Washington Blvd

Date:

02/23/2022

Time:

11:28

Recommended Countermeasures:

Roundabout or upgrade signs and intersection markings.

Notes:

Existing approximate 5 foot sidewalk by DMV parking lot. Existing bike lanes on Parkway Dr. Center turn land on Parkway before and after intersection. Raised cement/ asphalt island has limited markings or object markers which may make it difficult to see at night. Parkway Dr traffic does not stop.

Road Segment/Intersection:

E. Washington Blvd at Summer Lane

Date:

02/23/2022

Time:

11:45

Recommended Countermeasures:

Improve signal hardware.

Notes:

Traffic coming from ACE and WalMart parking lots. Existing sidewalks along Summer Ln. Crosswalk pavement markings are faded. No sidewalk on south side of E. Washington Blvd (sidewalk to west starting at 785 E. Washington). Push button crosswalk lights with count down timer. Observed limited traffic coming from Summer Lane (mostly vehicles coming out of WalMart parking lot).

Road Segment/Intersection:

E. Washington Blvd at Northcrest Drive

Date:

02/23/2022

Time:

11:55

Recommended Countermeasures:

Improve signal hardware. Provide advanced dilemma zone. Install vehicle/ bicycle detection system.

Notes:

Four way signaled intersection. Push button crosswalks. ADA sidewalks/ curb could be updated to create easier use. Pavement markings are fading.

Road Segment/Intersection: E. Washington at Arlington Drive	Date: 02/23/2022	Time: 12:05
Recommended Countermeasures: None. Site visit based on public comment.		
Notes: Sidewalk does not continue down Arlington to high school. No edge lines present on Arlington Dr. Existing four-way signaled traffic stop. Existing pavement markings are fading/ chipping away. Westbound E. Washington sidewalk stops just after light. No bike lane markings present at intersection.		
Road Segment/Intersection: Butte Street from Keller to E. Macken	Date: 02/23/2022	Time: 12:25
Recommended Countermeasures: At E. Macken: evaluate conversion to all way stop or; upgrade signs and crosswalks.		
Notes: No pavement markings along much of Butte St. No existing curb or sidewalk along majority of roadway. Deep drainage channel along western edge of road. Edge of pavement is deteriorating in some locations (observed near Childs Ave.		
Road Segment/Intersection: H Street at 10 th Street	Date: 02/23/2022	Time: 12:30
Recommended Countermeasures: For H and 8 th : Upgrade signs and pavement markings/ Re-evaluate parking near intersection and stop sign positions.		
Notes: Sidewalk incomplete near 10 th Street. Pavement markings are fading. Uneven sidewalk. Existing parking and street name signs are present.		
Road Segment/Intersection: Front Street	Date: 02/23/2022	Time: 14:30
Recommended Countermeasures: None. Site visit based on public comment.		
Notes: Near E Street: roadway has recently been upgraded. Two lanes of traffic with separated parking along park. Short crosswalk distance. Even pavement with clear markings. Near Play Street: Four lanes of traffic with a center turn lane. Existing crosswalks are long and, in some places, uneven. Uneven pavement with multiple dips in roadway on southwest corner of intersection near park. Pavement markings are fading. Existing sidewalk along park is wide and allows room for multiple users. Street pavement quality is deteriorating.		

Road Segment/Intersection: Elk Valley Road at Howland Hill Road	Date: 02/23/2022	Time: 15:30
Recommended Countermeasures: Install street lighting and improve sight triangles or install a roundabout.		
Notes: Elk Valley traffic does not stop. Stop sign on Howland Hill is faded and likely non-reflective. Pavement markings are faded. No bike lane markings at intersection (existing markings further east on Howland Hill). High speed traffic observed coming off of Elk Valley onto Howland Hill.		
Road Segment/Intersection: Howland Hill Road at Humboldt Road	Date: 02/23/2022	Time: 15:40
Recommended Countermeasures: Install/ upgrade signs. Install/ upgrade pedestrian crossings.		
Notes: Narrow shoulders. Existing sidewalk in front of tribal office does not connect to crosswalk across Howland Hill. No existing intersection lighting. Limited crosswalk signage. Bike lane and crosswalk pavement markings are very faded. No sidewalk along Humboldt Road.		