

Staff Report

TO: Town of Loomis Planning Commission

FROM: Merrill Buck, Town Engineer

DATE: July 26, 2022

RE: Local Road Safety Plan (LRSP) Presentation

Requested Action:

Staff recommends that the Planning Commission receive a presentation on the Town's Draft Local Road Safety Plan (LRSP) and provide feedback to the project team.

Background:

Approximately every two years, federal transportation project grant funding is made available under the Highway Safety Improvement Program (HSIP). The purpose of this program is to fund projects that will achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned, local public roads. Under the recently announced HSIP Cycle 11, with applications due September 12, 2022, agencies are required to have completed a Local Roadway Safety Plan (LRSP) in order to apply. The Town of Loomis is therefore in the process of developing a LRSP for Council adoption, so as to be eligible to apply for HSIP funding.

A LRSP starts by compiling accident data within a community to create a location-based display of that data on a map. Clusters of accidents will often form patterns, which can help flag problem areas, thereby leading to the consideration of potential countermeasures, that could be implemented to address the safety concern.

Stakeholders such as police and fire safety personnel; state, county and local government transportation officials; school district staff; local representatives; and community members at large, all play a key role in validating and steering the LRSP's development and implementation.

On July 20, 2022, staff held a meeting with some of the stakeholders listed above and received quite a bit of good input on the draft plan in terms of how it can be more effective and collaborative. Strategies were also discussed for scoping applications for potential transportation grant opportunities, such as the HSIP or Active Transportation Program (ATP) grants. Presenting the LRSP to the Planning Commission, allows for further development of the plan through Commissioner and local community input.

The draft LRSP represents a starting point for Loomis, funded with \$16,000 in local funds, to meet the minimum criteria necessary to be eligible to apply for the HSIP grant. Many agencies have been successful at securing grant funds to create or update their LRSPs, and so Loomis will look to do the same in the future. With more funding, the plan can be expanded to include consideration of specific improvements as countermeasures at specific locations, along with a prioritization matrix for completing the recommended improvements. Instead of just seeing that there's a problem, an expanded plan can provide an assessment and preliminary design for how to best address the problem. These can then be bundled more easily into projects for possible LRSP implementation grants.

The LRSP is intended to be a dynamic document, updated regularly. Typically, this is done in conjunction with the availability of new accident data on a yearly basis.

The draft LRSP has been prepared by Wood Rodgers and is attached for review. Wood Rodgers will be presenting a PowerPoint overview of the plan at the meeting, will answer any questions, and will receive feedback from the Commission.

CEQA Requirements

The proposed discussion of the LRSP is not subject to review under the CEQA pursuant to Section 15061(b)(3), which exempts administrative items.

Attachments:

A. Draft Report - Local Road Safety Plan (LRSP)

Loomis, CA

LOCAL ROAD SAFETY PLAN

DRAFT REPORT

Prepared For:
Town of Loomis

Prepared By



3301 C Street, Building 100-B Sacramento, CA 95816 (916) 341-7760

July 2022

I INTRODUCTION

The Town of Loomis is committed to improving transportation safety, and as such is in the process of implementing the Town of Loomis Local Road Safety Plan (LRSP). A LRSP provides a framework for identifying, analyzing, and prioritizing roadway safety improvements on local roads and provides a prioritized list of issues, actions, and improvements that can be used to reduce fatalities and serious injuries on the local roadway network. LRSPs serve a valuable role as according to the Federal Highway Administration (FHWA) over 80% of all public roads are operated by local or rural governments and approximately 56% of all fatalities occur on those local roads. LRSPs have been proven to reduce fatalities on local roads in jurisdictions that have implemented them.

The purpose of this document is to present transportation safety needs and strategies for the Town of Loomis. Implementation of the plan aims to improve transportation safety for Town residents and visitors. As part of an ongoing effort to make safety improvements, this LRSP is being developed with input from several safety partners. The plan should be viewed as a living document that can be updated to reflect changing local needs and priorities. In the past 5 years, 1% of collisions on Town roadway facilities have resulted in fatalities. The Town is targeting zero fatalities over the next 5 years. This LRSP has been prepared according to FHWA and Caltrans guidelines. An outline of the elements that make up this LRSP is described below and depicted in **Figure 1-1**.

- Stakeholder engagement representing the four "E's" (Engineering, Enforcement, Education, and Emergency Medical Services) as well as collaboration among municipal, county, state, and/or federal entities to leverage expertise and resources.
- Use of existing safety data for the identification of collision locations, severity, factors, types, and time of day, along with corresponding recommended proven safety countermeasures.
- Selection and prioritization of proven safety countermeasures.
- Plan and schedule for implementation and evaluation of selected countermeasures.





Figure 1-1. Local Road Safety Plan - Your Map to Safer Roadways

Source: Federal Highway Administration

2 VISION AND GOALS

The Town of Loomis LRSP will be anchored by a clear Vision, Mission, and Goal. The vision represents what the LRSP aims to accomplish, while the mission is the means of getting there. Fulfilling both of these provides the Town the best opportunity of reaching its goal. The vision, mission, and goal listed on the following page are based on the California Safe Roads 2020-2024 Strategic Highway Safety Plan (SHSP) and can be customized based on Town needs.

Support for transportation safety is also identified in several Town documents including the Town of Loomis General Plan.

VISION Safe public roads across the Town

The vision emphasizes that safety on all public roads across the Town is critical to serve the needs of the diverse population and system of the Town of Loomis.

MISSION

Ensure safety for all modes of travel on the Town of Loomis' public roads

The mission expands on the vision by acknowledging that safety on all public roads includes all modes of travel. The Town of Loomis has an active and diverse population that utilizes a variety of modes that share common space on public roads.

GOAL

Move toward zero fatalities and serious injuries

Expanding the national Toward Zero Deaths (TZD) goal, the goal encourages setting realistic and achievable steps for the Town of Loomis to move toward zero fatalities and serious injuries.

3 SAFETY PARTNERS

Safety partners are a vital resource for acquiring and analyzing data, selecting emphasis areas, developing safety strategies, and implementing this LRSP. The following list of partners will be involved in the implementation of this Plan:

- Town of Loomis
- Placer County
- Placer County Transportation Planning Agency (PCTPA)
- Caltrans
- California Highway Patrol (CHP)
- Placer County Sherriff's Office
- South Placer Fire District
- Loomis Union School District
- Placer Union High School District
- Placer County Transit
- Citizens

The first LRSP stakeholder meeting is scheduled for July 20, 2022.

4 PROCESS

This LRSP is being developed by requesting input from all stakeholders identified above, reviewing

safety projects in the Loomis General Plan, analyzing collision data from the Placer County Sheriff Department, identifying new strategies for improving safety, and developing a set timeline for implementation of those strategies. This section will be updated as the LRSP progresses.

5 EXISTING EFFORTS

The Town of Loomis has already identified some safety projects and strategies in their currently underway General Plan Update. In addition, recent improvements along Taylor Road were implemented to address potential safety issues. This section will be updated as the LRSP progresses.

6 DATA SUMMARY

The Statewide Integrated Traffic Records System (SWITRS) was used to obtain collision data for incidents that occurred on Town roadway facilities over the past five years (2017 to 2021). SWITRS is a database that processes data gathered from a collision scene, including collision date, location, severity, type, and other factors present at the scene of a collision.

A total of 210 collision were recorded on Town of Loomis roadway facilities between 2017 and 2021. **Tables 6-1** through **6-6** display various summaries of the Town's five-year collision history.

Table 6-1. Total Collisions

Year	# Of Collisions	%
2017	52	25%
2018	54	26%
2019	32	15%
2020	19	9%
2021	53	25%
Total	210	·

Table 6-2. Collision Severity

Category	# Of Collisions							
	2017	2018	2019	2020	2021	Total	%	
Fatal	0	1	1	0	0	2	1%	
Injury (Severe)	1	0	3	1	3	8	4%	
Injury (Other Visible)	7	7	3	2	7	26	12%	
Injury (Complaint of Pain)	4	4	4	0	5	17	8%	
Property Damage Only (PDO)	40	42	21	16	38	157	75%	

As shown in **Table 6-2**, two fatal collisions occurred within the five-year collision history, approximately 1% of total collisions. 24% of collisions involved injuries and 75% of all collisions involved property damage only.

Table 6-3. Collision Factor

Tabi	# Of Collisions						
Category	2017	2018	2019	2020	2021	Total	%
Driving or Bicycling Under the Influence of Alcohol or Drug	9	4	4	2	7	26	12%
Impeding Traffic	0	0	0	0	0	0	0%
Unsafe Speed	16	16	3	4	10	49	23%
Following Too Closely	7	4	4	1	3	19	9%
Wrong Side of Road	1	3	3	1	3	11	5%
Improper Passing	1	1	1	1	2	6	3%
Unsafe Lane Change	0	0	1	0	1	2	1%
Improper Turning	6	16	5	4	10	41	20%
Automobile Right of Way	5	4	9	0	2	20	10%
Pedestrian Right of Way	0	0	0	0	2	2	1%
Pedestrian Violation	0	0	0	0	0	0	0%
Traffic Signals and Signs	4	2	2	1	2	11	5%
Hazardous Parking	0	0	0	0	0	0	0%
Lights	0	0	0	0	0	0	0%
Brakes	0	0	0	0	0	0	0%
Other Equipment	0	0	0	0	0	0	0%
Other Hazardous Violation	0	0	0	0	0	0	0%
Other Than Driver (or Pedestrian)	0	1	0	1	0	2	1%
Unsafe Starting or Backing	0	2	0	2	2	6	3%
Other Improper Driving	1	0	0	0	0	1	0%
Pedestrian or "Other" Under the Influence of Alcohol or Drug	0	0	0	0	0	0	0%
Fell Asleep	0	0	0	0	0	0	0%
Unknown	2	0	0	1	6	9	4%
Not Stated	0	1	0	1	3	5	3%

As shown in **Table 6-3**, Unsafe Speed and Improper Turning were the primary collision factors within the Town, followed by Driving or Bicycling Under the Influence and Automobile Right of Way.

Table 6-4. Collision Type

Category	# Of Collisions							
Category	2017	2018	2019	2020	2021	Total	%	
Head-On	3	4	1	2	4	14	7%	
Sideswipe	10	9	4	3	8	34	16%	
Rear End	16	14	8	3	11	52	25%	
Broadside	10	5	11	2	9	37	18%	
Hit Object	8	18	7	7	13	53	25%	
Overturned	2	2	0	1	2	7	3%	
Vehicle/Pedestrian	1	1	0	1	3	6	3%	
Other	0	1	1	0	1	3	1%	
Not Stated	2	0	0	0	2	4	2%	

As shown in **Table 6-4**, Rear End and Hit Object were the most common types of collisions, making up 50% of collisions in the Town. Note that Hit Object collision types are typically due to roadway departure. Broadside and Sideswipe were the second most common collision types.

Table 6-5. Collision Type - Vehicle Involved With

Catalana	# Of Collisions						
Category	2017	2018	2019	2020	2021	Total	%
Non-Collision	0	0	0	1	0	1	0%
Pedestrian	0	0	0	1	3	4	2%
Other Motor Vehicle	32	26	20	8	26	112	53%
Motor Vehicle on Other Roadway	1	1	0	0	1	3	1%
Parked Motor Vehicle	6	5	3	1	6	21	10%
Train	0	0	0	0	0	0	0%
Bicycle	0	0	2	0	1	3	1%
Animal	0	0	0	0	0	0	0%
Fixed Object	12	21	7	6	16	62	30%
Other Object	1	1	0	2	0	4	2%
Not Stated	0	0	0	0	0	0	1%

Table 6-5 shows that 53% of collisions involved another vehicle and 30% involved a fixed object. There were 4 total collisions involving a pedestrian and 3 total collisions involving a bicycle in the last five years.

Table 6-6. Collision Times of Day

Category	# Of Collisions						
	2017	2018	2019	2020	2021	Total	%
Daylight	38	38	25	14	35	150	71%
Dusk - Dawn	3	1	3	1	6	14	7%
Dark - Street Lights	7	6	2	3	4	22	10%
Dark - No Street Lights	4	8	1	1	7	21	10%
Dark - Street Lights Not Functioning	0	0	0	0	1	1	0%
Not Stated	0	1	1	0	0	2	2%

Table 6-6 shows that most collisions (73%) occurred during the day.

The five-year collision history also showed that 90% of collisions occurred under dry roadway surface conditions and 10% occurred under wet roadway surface conditions.

6.1 COLLISION LOCATIONS

Figure 6-1 shows a plot of all collisions that occurred on Town facilities over the last five-year period. **Figure 6-2** shows a heatmap of five-year Town collision data. **Figure 6-3** highlights the five intersections and roadway segments with the highest number of collisions over the five-year period. These high incidence locations are also listed below:

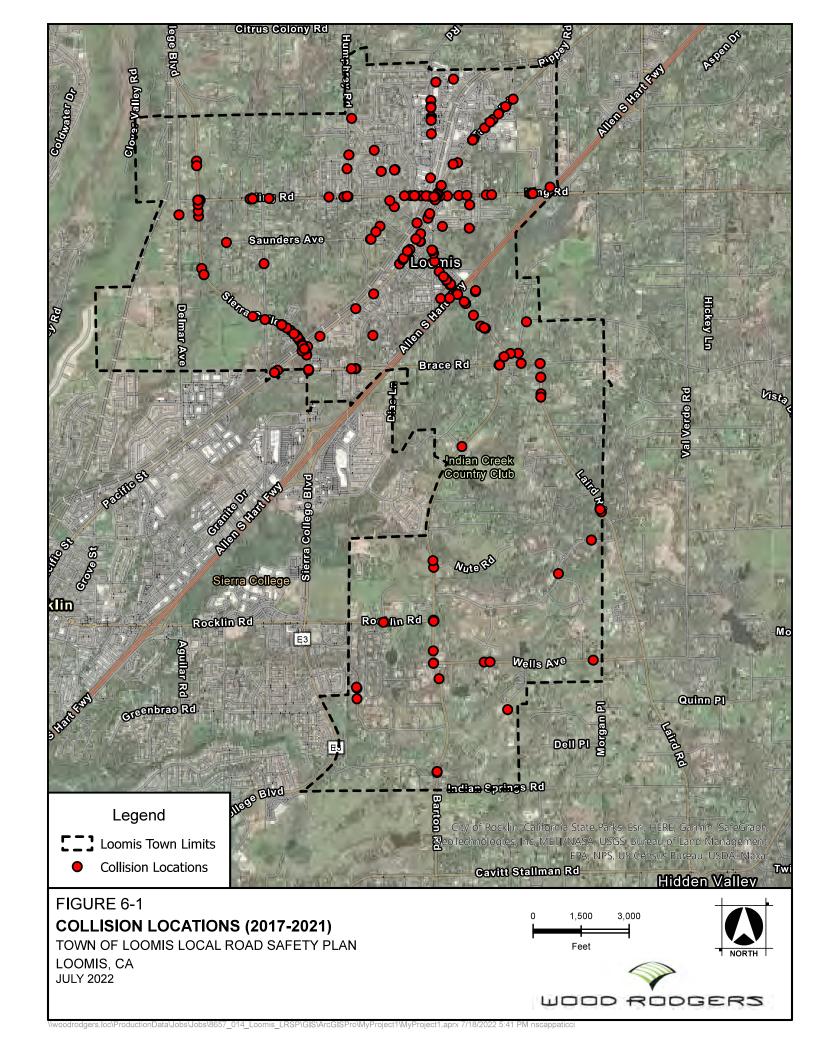
Intersections:

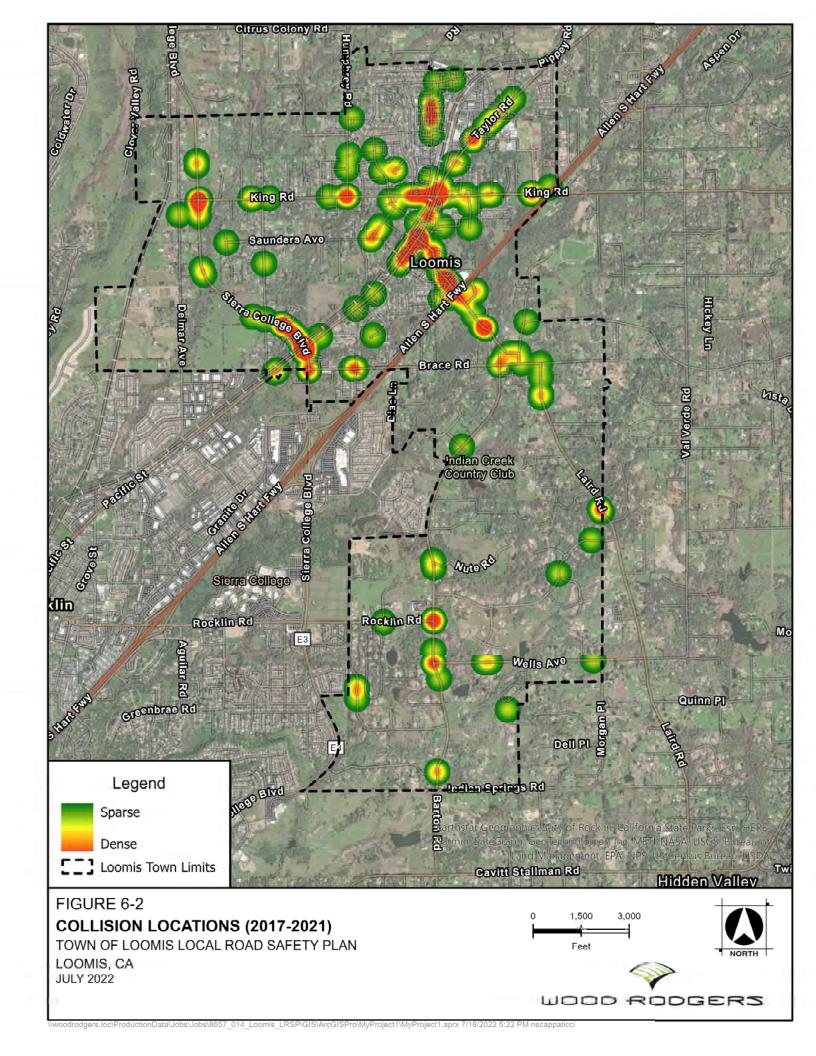
- Sierra College Boulevard & Taylor Road
- Taylor Road & Horseshoe Bar Road
- Taylor Road & King Road
- Sierra College Boulevard & King Road
- Barton Road & Rocklin Road

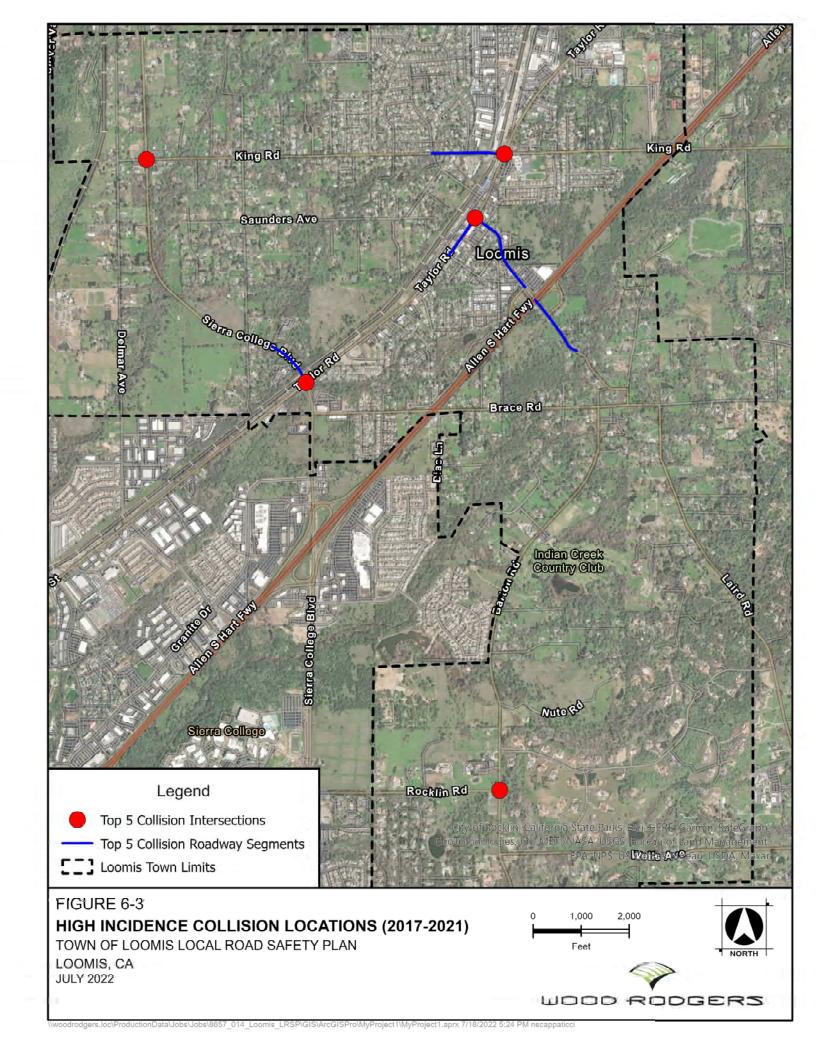
Roadway Segments:

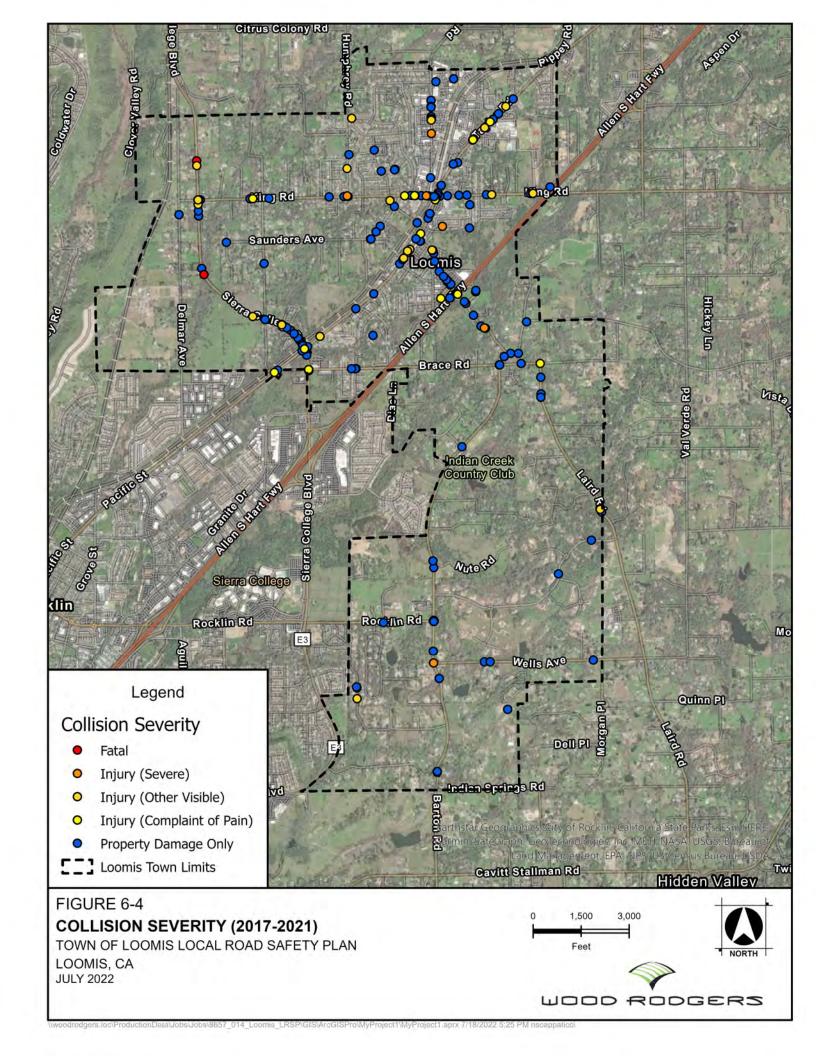
- Sierra College Boulevard between Taylor Road and Loomis Basin Veterinary Clinic Driveway
- Taylor Road between Oak Street and Horseshoe Bar Road
- King Road between Webb Street and Taylor Road
- Horseshoe Bar Road between Taylor Road and I-80 Westbound Ramps
- Horseshoe Bar Road between I-80 Overcrossing and 600 feet south of Evans Drive

Other locations of note include the intersections of Humphrey Road & King Road, Barton Road & Wells Avenue, and Sierra College Boulevard & Loomis Basin Veterinary Clinic Driveway; and the roadway segments of Swetzer Road between Swetzer Court and Jetton Lane and Taylor Road between 3363 Taylor Road and 3264 Taylor Road.









7 EMPHASIS AREAS

The following Emphasis Areas describe priority issues that have been identified using collision data from the past five years and provide strategies where there are opportunities to improve. While the development of Emphasis Areas is the primary purpose of this LRSP, additional improvements as requested by the stakeholders and others will be considered and addressed.

7.1 EMPHASIS AREA I: UNSAFE SPEED, REAR-END AND HIT OBJECT COLLISIONS

Unsafe Speed was the top collision factor on Town facilities between 2017 and 2021. Rear End and Hit Object were the top two collision types on Town facilities between 2017 and 2021. Unsafe speed was the primary factor in 50% of Rear End collisions. Unsafe speed was the primary collision factor in 25% of Hit Object type collisions and 87% of Hit object collisions involved a fixed object. Hit Object type collisions often involve departure from a roadway.

Goal for Emphasis Area 1: Reduce Unsafe Speed and Rear-End and Hit Object type collisions on Town facilities.

Strategies for Emphasis Area 1: Enact countermeasures that have been proven to reduce the frequency of collisions due to speeding, as well as Rear-End and Hit-Object type collisions. These measures could include:

- Improved signage
- Increased enforcement
- Address existing non-standard roadway and intersection geometrics

The following facilities would benefit from improved signage and increased enforcement:

- Sierra College Boulevard between Brace Road and King Road, including the intersections of Sierra College Boulevard with Taylor Road and Loomis Basin Veterinary Clinic Driveway
- The intersection of Taylor Road and Horseshoe Bar Road
- Horseshoe Bar Road between I-80 and Brace Road
- King Road between Arcadia Avenue and Taylor Road
- Swetzer Road between Swetzer Court and Jetton Lane
- The intersection of Barton Road and Rocklin Road

Recommended improvements include:

- Installation of speed feedback signs and other warning devices in high concentration areas
- Addition of speed limit striping on roadways
- Manage traffic speeds with signal coordination
- Replace signs or refresh signage where reflectivity levels do not meet minimum requirements
- Consider conducting and advertising periodic speeding checkpoints in high-speed incidence areas.

In addition to the speed-reduction countermeasures listed above, the following capital improvement projects would provide opportunities to reduce rear end and hit object collisions at high concentration facilities and other locations throughout the Town:

- Construct an undercrossing or overcrossing at the Sierra College Boulevard and Union pacific Railroad crossing.
- Signalize the Sierra College Boulevard and Bankhead Road intersection.
- Swetzer Road Extension between King Road and Sierra College Boulevard.
- Signalization of the Barton Road and Rocklin Road intersection.
- Reconstruct the curve in Larid Road at High Cliff Road to standard

Additional strategies for reducing hit object collisions include assessing the location of fixed objects in high concentration areas and installing median and roadside barriers.

7.2 EMPHASIS AREA 2: IMPROPER TURNING, BROADSIDE AND SIDESWIPE COLLISIONS

Improper Turning was the second most common collision factor on Town facilities between 2017 and 2021. Broadside and Sideswipe were the third and fourth most common collision types on Town facilities between 2017 and 2021. Both collision types mainly occurred at intersections and stretches of roadways with higher speeds and a high concentration of full-access unsignalized driveways or side streets.

Goal for Emphasis Area 2: Reduce Broadside and Sideswipe type collisions on Town facilities.

Strategies for Emphasis Area 2: Reduce Broadside and Sideswipe collisions by implementing:

- Access-control and intersection control improvements
- Vegetation management to improve sight distance at intersections and driveways

The following facilities experience high frequency Broadside and Sideswipe incidents or would benefit from improved sight distance through vegetation management:

- The intersection of Sierra College Boulevard and Taylor Road
- The intersection of Barton Road and Rocklin Road
- King Road between Arcadia Avenue and Boyington Road
- Horseshoe Bar Road between Doc Barnes Drive and I-80 Westbound Ramps
- The intersection of Sierra College Boulevard and Loomis Basin Veterinary Clinic Driveway

The following improvements would provide opportunities to reduce Broadside and Sideswipe collisions at the above locations:

- Boyington Road Extension, terminating at a signalized intersection with Doc Barnes Drive (proposed capital improvement project).
- Signalization of the Barton Road and Rocklin Road intersection (proposed capital improvement project).
- Implement access-control measures on Horseshoe Bar Road between Doc Barnes Drive and I-80 Westbound Ramps and King Road between Arcadia Avenue and Boyington Road. This could include implementing turn restrictions, constructing a median, or providing additional warning signage for oncoming traffic,

- Consider requirements for shared driveways and driveway spacing as apart of redevelopment or new development applications to reduce access points along high incident corridors.
- Maintain clear sight triangles through vegetation management at high incident intersections and roadway curves
- Many of the countermeasures listed in Emphasis Area 1 would also apply here.

7.3 EMPHASIS AREA 3: DRIVING UNDER THE INFLUENCE COLLISIONS

Driving Under the Influence was the third most common collision factor on Town facilities between 2017 and 2021. This collision factor includes collisions that involve either alcohol or drug impairment.

Goal for Emphasis Area 3: Reduce Driving Under the Influence collisions on Town facilities.

Strategies for Emphasis Area 3: Reduce Driving Under the Influence collisions by implementing:

- Engage with local media and local alcohol serving establishments to educate the public
- Increase DUI checkpoints at high frequency locations

The following facilities experience high frequency Driving Under the Influence incidents:

- King Road between Humphrey Road and Taylor Road
- Horseshoe Bar Road between Taylor Road and Brace Road
- Sierra College Boulevard between Bankhead Road and King Road
- Taylor Road between south Town limits and Horseshoe Bar Road

8 EVALUATION AND IMPLEMENTATION

This LRSP is a living document that is recommended to be updated at least every 5 years with the latest data and direct trends. Collision data in the Town can be utilized to evaluate the success of the Plan. The Town of Loomis Public Works will be the primary department responsible for updating this LRSP and may host periodic stakeholder meeting to discuss Plan implementation and strategies for each emphasis area.