City of Blue Lake
Local Road Safety Plan

Prepared for:

City of Blue Lake

June 2022

021031

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Reference: 021031

June 21, 2022

Amanda Mager, City Manager
City of Blue Lake
111 Greenwood Road| PO Box 458
Blue Lake, CA, 95525

Subject: Local Road Safety Plan, City of Blue Lake, California

Dear Amanda Mager:

The attached local road safety plan provides a road map to improving safety for commuters within Blue Lake. This is a living document, which should be updated every five years to stay compliant with funding requirements associated with HSIP funding.

Sincerely,

SHN

Mike Foget, PE
City Engineer

Jared Goebel
Staff Engineer

Justin Delgado
Staff Planner

MKF:JWG:JD: lam

Enclosure: Local Road Safety Plan
c. w/Encl.: Tom Mattson, Humboldt County Public Works Director

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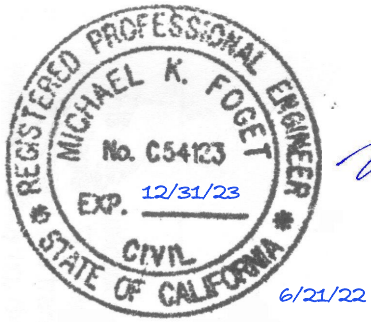

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June 2022

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Executive Summary

The City of Blue Lake, in collaboration with SHN, has instituted a local road safety plan (LRSP). The LRSP provides an action plan to address safety concerns and problematic areas of the City's commuter network. Using a systematic, data-driven process, areas of concern and the factors that lead to hazardous conditions are identified and recommendations for low-cost countermeasures are subsequently provided.

In addition to analyzing incident records, multiple efforts to reach out to the community were undertaken. These included:

- Two working meetings with stakeholders from organizations identified by SHN and City staff
- Initiating public surveys to collect information on incidents and near misses
- Holding a site walk with a County of Humboldt representative and Blue Lake's City Manager to discuss cooperation for improvements to Blue Lake Boulevard

In accordance with procedures outlined in the Federal Highway Administration's "Developing Safety Plans: A Manual for Local Rural Road Owners," after reviewing incident data and holding discussions with City staff and stakeholders, the following challenge areas were selected:

- Bicyclists
- Pedestrians
- Commercial Vehicles
- Impaired Driving
- Intersections
- Speed Management/Aggressive Driving

In addition to selecting challenge areas, stakeholders were able to certify vision, mission, and goal statements to help guide the LRSP process. In order for the LRSP to remain a useful tool for improving road safety, it is suggested that it be a living document, updated at least every five years.

After analyzing data from law enforcement records, public surveys, online reporting resources (Street Story), and public works records, staff applied four different strategies aimed at improving road safety.

1. Engineering: Apply low-cost countermeasures with proven crash-reduction factors based on accident causal factors or roadway characteristics.
2. Education: Provide education on road safety hazards, communication deficiencies, and safe behaviors to agencies and the public.
3. Enforcement: Assist law enforcement with conducting targeted patrols designed to reduce speeding and driving under the influence (DUI), especially in sensitive areas (school zone, high pedestrian areas, etc.). The City should ensure racial equity concerns are addressed prior to implementation.
4. Emergency Response: Assist emergency responders by ensuring easy access to sites and improving communication between agencies to prevent future traffic incidents. In places where a conflict with roadway user's safety and emergency accessibility exists, a priority should be placed on safety.

Countermeasures/Strategies

Based on the findings of the crash data analysis and discussions with city staff and stakeholders related to the selected challenge areas stated above, recommendations worthy of consideration for engineering countermeasures at spot locations are presented in Table E1.

Table E1. Spot Countermeasure Recommendations
City of Blue Lake, CA LRSP, Blue Lake, CA

Location	Recommendation
Blue Lake Boulevard/Greenwood Road	• Enhance signage and pavement markings to improve awareness and reduce speeds near the intersection. • Install mountable island at the stop approach centerline to reduce instances of improper turning. • Explore methods of reducing posted speed limit.
Blue Lake Boulevard/Acacia Drive/Buckley Road	• Reorient intersection and restrict left turns from Acacia Drive. • Remove large trees (within City right-of-way, or coordinate with landowners) to improve sight distance for vehicles entering Blue Lake Boulevard.
G Street Segment (1st to 2nd Avenue)	• Install a mini-roundabout at G Street and 2nd Avenue. • Enhance signage and pavement markings. • Implement transverse pavement markings at intersection and pedestrian crossing locations. • Install dynamic speed feedback signs.

The following systemic measures are recommended for consideration to address additional issues observed along Blue Lake Boulevard, the designated Safe Routes to School Path, fire hydrants throughout the City, and Railroad Avenue, the secondary truck route through the City. Table E2 summarizes the recommendations.

Table E2. Systemic Countermeasure Recommendations
City of Blue Lake, CA LRSP, Blue Lake, CA

Location	Recommendation
Fire Hydrant Audit	Perform an audit to locate unprotected fire hydrants and provide mitigation as appropriate.
Blue Lake Boulevard–Vegetation Removal	Assess locations where sight distance is insufficient and remove vegetation/obstructions as appropriate, particularly for roadway users entering onto Blue Lake Boulevard.
Blue Lake Boulevard–Speed Reduction	• Explore means of reducing the posted speed limit including the school zone and locations where residential/business density may qualify as exemptions. • Consider chokepoints/bulb outs at strategic locations to discourage excessive speeds.
G, H, and "I" Streets–Pedestrian Improvements along Safe Routes to School.	Improve pedestrian crossing, pavement markings, and warning signage along the pedestrian corridor including raised crosswalks where appropriate.
Railroad Avenue–Relief of Commercial Traffic Conflicts	• Assess locations where sight distance is insufficient and remove vegetation/obstructions as appropriate to relieve conflicts between commercial traffic and other roadway users. • Consider chokepoints/bulb outs at strategic locations to discourage excessive speeds.

Funding Opportunities

The LRSP is now a required document to be considered eligible to apply for Highway Safety Improvement Program (HSIP) funds. The City of Blue Lake has limited documented collisions, and those reported have critical information missing. This means the minimum criteria to apply for HSIP benefit cost ratio (BCR) funds would likely not be met, and the City should pursue HSIP Cycle 11 set-aside funding (pedestrian crossing enhancements, edge lines, guardrails, tribes). The format of the LRSP is meant to satisfy the requirements for HSIP funding.

Listed below are several sources of funding that should be considered to implement the measures proposed in this report. These include:

- **HSIP**–Low-cost infrastructure improvements typically open in May and closed in September.
- **California Office of Traffic Safety (OTS) Grants**–Non-infrastructure related funding typically due January 31st of each year.
- **Infrastructure Investment and Jobs Act (IIJA)–**Also known as the Bipartisan Infrastructure Law (BIL), was signed into law on November 15, 2021. Safe Streets and Roads for All (SS4A) is the only program relevant to the LRSP implemented thus far. Notice of Funding Opportunities were released mid-May 2022.
- **Active Transportation Program–**Popular but oversubscribed funding source. Cycle 11 2022, deadline for project applications is June 15, 2022.

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Abbreviations and Acronyms

Units of Measure

km/h	kilometers per hour
mph	miles per hour

Additional Terms

AASHTO	American Association of State Highway and Transportation Officials
APR	annual progress report
ATP	Active Transportation Program
ATP	active transportation program
BCR	benefit cost ratio
BIL	Bipartisan Infrastructure Law
BTA	Bicycle Transportation Account
Caltrans	California Department of Transportation
CBD	central business district
CHP	California Highway Patrol
CPBST	Community Pedestrian and Bicycle Safety Training
CTC	California Transportation Commission
DTO	(Caltrans) Division of Traffic Operations.
DUI	driving under the influence
E&TS	engineering and traffic survey
FAST	Fixing America's Surface Transportation
FHWA	Federal Highways Administration
GIS	geographic information system
GPS	global positioning system
GRT	Great Redwood Trail
HSIP	Highway Safety Improvement Program
IIJA	Infrastructure Investment and Jobs Act
LRSP	local road safety plan
MTB	mountain bike
NOFO	Notice of Funding Opportunity
OTS	California Office of Traffic Safety
OTS	California Office of Traffic Safety
PDO	Property Damage Only
RCAA	Redwood Community Action Agency
SafeTREC	Safe Transportation Research and Education Center
SHA	State Highway Account
SHSP	strategic highway safety plan
SRTS	State Safter Routes to School
SS4A	Safe Streets and Roads for All
SSAR	systemic safety analysis report
SSARP	Systemic Safety Analysis Report Program
STIP	State Transportation Improvement Program
SWITRS	Statewide Integrated Traffic Records System
TAC	Transportation Advisory Committee
TAP	Transportation Alternatives Program
TIMS	Transportation Injury Mapping System

Introduction

The City of Blue Lake, in collaboration with SHN, has developed a local road safety plan (LRSP) to improve roadway safety for the many pedestrians, bicyclists, motorists, and others who use the City's roadways. The LRSP process, which has been developed by the Federal Highway Safety Administration, is a data-centric, systematic approach that efficiently identifies areas of concern, diagnoses safety issues in those areas, and provides recommendations for low-cost counter measures to mitigate safety risks (Caltrans, 2022). A roadmap of the process, which has been broken down into six steps, is illustrated below in Figure 1.

Figure 1. Local Road Safety Plan "Roadmap" (FHWA, 2021)

Explicitly, the six-step process is as follows:

Step 1: Establish Leadership
Step 2: Gather and Analyze Safety Data
Step 3: Determine Emphasis Areas
Step 4: Identify Strategies
Step 5: Prioritize and Incorporate Strategies
Step 6: Evaluate and Update the LRSP

The City of Blue Lake conducted two stakeholder meetings intended to gain targeted input from relevant parties within the City. Additionally, the City published two public surveys intended to capture unreported accidents and near misses experienced by City residents. A site visit was also completed to assess conditions in areas identified through crash data and public surveys. This included Tom Mattson, Director of the Humboldt County Department of Public Works, which shares jurisdiction for the primary collector within the City, Blue Lake Boulevard. Through this outreach, engagement, and data analysis, the City of Blue Lake and SHN have initiated a living document, which will continue to be updated as the City and its road safety needs change over time.

This report begins by summarizing the approach taken in the development of the LRSP and provides a brief description of previous efforts the City has undertaken to improve roadway safety, our community outreach efforts, and development of vision and goals for this process. Following the vision and goals, a summary of the methodology used to collect data and the results of the analysis is provided. A synopsis of the decisions made to address issues identified during the process including strategies and countermeasures follow, along with metrics for successful implementation and plans for moving forward.

Background

Purpose and Need

According to the U.S. Department of Transportation National Highway Traffic Safety Administration, in 2017 there were 34,247 fatal motor vehicle traffic crashes. 15,565 or 45 percent of those crashes occurred in rural areas (U.S. Department of Transportation National Highway Traffic Safety Administration, 2019). Of those crashes, 15,565 or 45 percent occurred in rural areas. It was estimated in 2017 by the American Community Survey from the U.S. Census Bureau that only 19 percent of the U.S. population lived in rural areas. The City of Blue Lake is located in a rural portion of Humboldt County, and the City itself has a mix of roadways that share characteristics with both rural and urban areas. In 2019, there was a fatal motor vehicle crash that occurred along Blue Lake Boulevard.

Based on the most recent census data, the City of Blue Lake has a population of 1,277 but serves a much broader population, which exists on the outskirts of the City, including the communities of Glendale and Korbel. The City often receives vehicle traffic from surrounding population hubs (Eureka, Arcata, McKinleyville, etc.) whose residents travel to Blue Lake for recreational or entertainment opportunities (Mad River access, Hatchery Ridge mountain bike [MTB] trails, etc.), Mad River Brewing Co., Blue Lake Parks and Recreation facilities, Dell'Arte Physical Theater, or the nearby Blue Lake Casino and Hotel. Multiple logging companies and gravel mining operations also use the City's roadways to export goods to other areas of the County, which, at times, leads to a challenging dynamic between commercial vehicles and other roadway users. Due to the complex, multi-use nature of the City's roadways, numerous issues concerning safe pedestrian and bicyclist travel have been identified by the City, along with local concerns pertaining to excessive speeds and impaired driving. This LRSP report aims to alleviate these concerns by providing a clear map to the creation of a safe, multimodal experience for all who travel within the City.

Methodology

The State of California is required by federal regulations to have a strategic highway safety plan (SHSP), whose intent is to use data driven analysis to coordinate statewide efforts aimed at reducing accident fatalities and serious injuries on public roadways. California recognizes the importance of local efforts to assist in achieving SHSP goals. The local road safety plan is viewed as the preferable framework though which local jurisdictions can identify and analyze road safety problems and recommend appropriate countermeasures to improve road safety. A community's preparation of an LRSP facilitates the development of local partnerships, prioritizes locations of concern, establishes a list of improvements, and ultimately contributes to the statewide plan.

The California Department of Transportation (Caltrans) administers the local highway safety improvement program (HSIP). Caltrans's goal for the HSIP program is to reduce fatalities and serious injuries on California roadways. This is achieved by awarding funding to qualified applicants for countermeasures aimed at roadway safety improvements. Caltrans announced that for the first time, HSIP Cycle 11 and on, will require an agency to have an adopted LRSP or its equivalent (systemic safety analysis report [SSAR] or vision zero action plan) to be considered eligible to receive funding (Caltrans, 2021).

The Federal Highways Administration's (FHWA) local road safety plan process and guidance was followed by the City of Blue Lake and SHN in the creation of this plan. Each step of the process is outlined in Figure 2.

Figure 2. The LRSP Development Process (Federal Highway Administration, 2021)

Standards and Guidelines

In developing the City of Blue Lake LRSP, the following standards and guidelines were followed:

- "Developing Safety Plans, A Manual for Local Rural Road Owners," Federal Highway Administration, 2012.
- 2018 American Association of State Highway and Transportation Officials (AASHTO) "A Policy on Geometric Design of Highways and Streets"
- 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.
- "Local Road Safety Plan Do-It-Yourself," Federal Highway Administration, January 2021
- "Proven Safety Countermeasures Initiative," Federal Highway Administration, February 2022.

Current Improvement/Assessment Projects

The following section provides a summary background for prior projects and studies undertaken by the City to improve safety and access for commuters of all types.

Blue Lake Truck Route

The City of Blue Lake, with the assistance of SHN, initiated the Blue Lake Truck Route project to improve roadway safety along the primary transportation corridor within city limits, which includes Greenwood Road, Railroad Avenue, and Hatchery Road up to the Mad River Bridge. After conducting preliminary investigations into the existing route, a city council meeting was held in February of 2021, which included the implementation of a public survey. Once feedback provided by the public and city officials was processed, a conceptual layout of the improvements was generated. A conceptual layout can be seen in Appendix 1.

The project is divided into three phases for the purposes of funding:

1. Greenwood Road
2. Railroad Avenue
3. Hatchery Road

In October 2021, the Transportation Advisory Committee (TAC) approved funding through the State Transportation Improvement Program (STIP) for the Greenwood Road segment of the project. Planned improvements include roadway resurfacing and crosswalk improvements, all of which are meant to promote safer, more efficient pedestrian travel while alleviating congestion near Blue Lake Union Elementary School.

Recommendations to Improve Pedestrian & Bicycle Safety in City of Blue Lake

In June 2017, California Walks and University of California at Berkeley's Safe Transportation Research and Education Center (SafeTREC), at the invitation of the City of Blue Lake, facilitated a pedestrian and bicycle safety action-planning workshop. The workshop consisted of an overview of multidisciplinary approaches to improve pedestrian and bicycle safety, walk and bike-ability assessments along two key routes, and small group action-planning discussions to facilitate the development of community-prioritized recommendations to inform Blue Lake's active transportation efforts. This report can be accessed through the Community Pedestrian and Bicycle Safety Training (CPBST) Program geographic information system (GIS) map, through navigating to the Berkeley SafeTREC website and accessing the Community Pedestrian and Bicycle Safety Training Program page, or by contacting the City of Blue Lake directly.

This report identified improvement areas within the City and engaged the community to identify and assess those issues. Interested parties are encouraged to read the full report, which can be found at the City of Blue Lake. A summary of recommendations provided to the City include:

- Conduct a City-wide sidewalk and lighting audit.
- Develop and implement a bicycle network.
- Reduce and/or eliminate conflict zones near Greenwood Road and Blue Lake Boulevard.
- Organize a community clean-up program.
- Engage truck driving companies and truck drivers.
- Installing gateway treatments at City entry points.
- Establish a neighborhood speed watch program.

Blue Lake Rancheria Workshop

In October of 2019, California Walks and University of California at Berkeley's Safe Transportation Research and Education Center (SafeTREC), at the invitation of the City of the Blue Lake Rancheria Tribal Government, facilitated a CPBST. The CPBST planning process consisted of assembling a planning committee, reviewing and analyzing existing plans and data, conducting a CPBST site visit, conducting a CPBST workshop, and implementing CPBST actions. This report can be accessed using the CPBST Program GIS map, through navigating to the Berkeley SafeTREC website and accessing the Community Pedestrian and Bicycle Safety Training Program page, or by contacting the City of Blue Lake directly.

Interested parties are encouraged to read the full report, but a summary of recommendations provided to the Blue Lake Rancheria Tribe include:

- Community walks around the Rancheria and nearby communities
- A walking school bus, a supervised group of children walking to and from school together, for children who walk from the Rancheria to Blue Lake Elementary School"
- A pedestrian, bicyclist, and driver education safety campaign on the dangers and consequences of driving under the influence
- Actively trimming bushes in the Rancheria parking lot area that obscure visibility for pedestrians and drivers
- Evaluating the conversion of perpendicular parking stalls in the Rancheria parking lot to angled parking stalls

Hatchery Road Walkability Assessment

In February of 2018, Hatchery Road residents, Blue Lake residents, Redwood Community Action Agency (RCAA), County of Humboldt, and the City of Blue Lake collaborated on a walkability assessment along Hatchery Road. RCAA was contracted by the County of Humboldt for the community walk, observation, holding a workshop, producing a walkability assessment report, and assisting with community coordination with the County. Many recommendations for possible roadway improvements were suggested by RCAA. These were broken down into short-term, mid-term, and long-term infrastructure recommendations. The hatchery road walkability assessment is attached in Appendix 1.

Annie and Mary Rail Trail

The City of Blue Lake segment of the Annie and Mary Rail Trail is part of a larger project intended to connect the cities of Arcata and Blue Lake through the Arcata-Mad River rail corridor. The trail will eventually be the northern tip of the proposed Great Redwood Trail (GRT), a 320-mile-long trail stretching from Marin to Humboldt County.

The Blue Lake segment was implemented in 2021 as a Class 1, non-motorized, multi-use path providing pedestrians, bicyclists, and horseback riders a corridor through the City buffered from vehicular traffic along South Railroad Avenue. The project was funded through Caltrans' Active Transportation Program (ATP). The segment runs from H Street west through the heart of the City and terminates at Chartin Road. Since its implementation, pedestrian and bicyclist use has been high, and reports from citizens have been favorable.

Stakeholders

Development of Working Group

The City of Blue Lake, in partnership with SHN, created a LRSP Stakeholder Working Group whose knowledge regarding transportation, safety, or quality of life in the community were critical in the LRSP's development. This working group was tasked with assisting in the creation and confirmation of the vision, mission, and goals for the report as well as reviewing incident documentation and countermeasure proposals.

The Stakeholder Working Group is split into two groups, those that attended at least one of the working group meetings, and those that were consulted outside of the two official working group meetings:

Group 1 (attended at least one meeting):

- City of Blue Lake (Amanda Mager)
- SHN (Mike Foget, Jared Goebel, Justin Delgado)
- Blue Lake Union Elementary School District (Deann Waldvogel and Dan Orlandi)
- Humboldt County Supervisors (Steve Madrone and Mike Wilson)
- Green Diamond Resource Company (Gary Rynearson)
- Friends of the Annie and Mary (Ingrid Kosek)
- Humboldt County (Tom Mattson)
- North Fork Lumber Company (Russell Dorvall)

Group 2 (consulted outside of two official meetings):

- Caltrans District 1 (Rachel Barry and Mark Mueller)
- Green Diamond Resource Company (Gary Rynearson)
- North Fork Lumber Company (Russell Dorvall)
- SHN (Jared Goebel, Justin Delgado, Mike Foget, Jared O'Barr, and Garry Rees)
- City of Blue Lake (Amanda Mager and Glenn Bernald)
- Humboldt County (Tom Mattson)

Group 2 stakeholders were not consulted outside of set meetings due to special privileges, but rather out of desire or unique circumstance. Caltrans District One was consulted on multiple occasions to provide support clarifying the LRSP process and procedures, data collection deficiencies, guidance for setting speed limits, and funding timelines

Green Diamond Resource Company and North Fork Lumber Company met with the City of Blue Lake and SHN to express their shared concerns regarding hazards specifically related to their trucks, collaborating with the City to mobilize Humboldt County on issues, and being good community partners. SHN, the City of Blue Lake, and Humboldt County coordinated a site walk to look at issues relating to road safety along Blue Lake Boulevard. SHN and the City of Blue Lake staff corresponded on numerous occasions to exchange information, schedule meetings, etc.

Stakeholder Working Group Meetings

The City of Blue Lake and SHN hosted two meetings with the stakeholder working group. The first meeting was virtual and the second was in person; their dates and times were as follows:

- October 6, 2021- 4:00 p.m. to 5:30 p.m.
    a) Introduced the LRSP concept, process, and purpose, outlined the unique difficulties facing Blue Lake and the LRSP, and articulated why this document is important.
- April 19, 2022- 5:30 p.m. to 7:00 p.m.
    b) Presented vision, mission, goals, final data results, and analysis; covered possible countermeasures for identified locations; collected comments; and covered timeline for document publication.

Appendix 2 presents the two presentations given to the stakeholder working groups. Additionally, the stakeholder working group was invited to provide feedback and comments on the draft local road safety plan document before its finalized version was presented to the City of Blue Lake City Council.

A New Approach

Vision Zero

FHWA partners with other federal U.S. Department of Transportation branches, state departments of transportation (Caltrans), and external organizations to advance the departments goal of reducing transportation related fatalities and serious injuries. In recent years, FHWA has dramatically shifted its approach to traffic safety (Figure 3). In partnership with the Vision Zero Network, FHWA is departing from the status quo in two significant ways:

1. "Vision Zero recognizes that people will sometimes make mistakes, so the road system and related policies should be designed to ensure those inevitable mistakes do not result in severe injuries or fatalities. This means that system designers and policymakers are expected to improve the roadway environment, policies (such as speed management), and other related systems to lessen the severity of crashes." (Vision Zero Network, 2021)
2. "Vision Zero is a multidisciplinary approach, bringing together diverse and necessary stakeholders to address this complex problem. In the past, meaningful, cross-disciplinary collaboration among local traffic planners and engineers, policymakers, and public health professionals has not been the norm. Vision Zero acknowledges that many factors contribute to safe mobility -- including roadway design, speeds, behaviors, technology, and policies -- and sets clear goals to achieve the shared goal of zero fatalities and severe injuries." (Vision Zero Network, 2021)

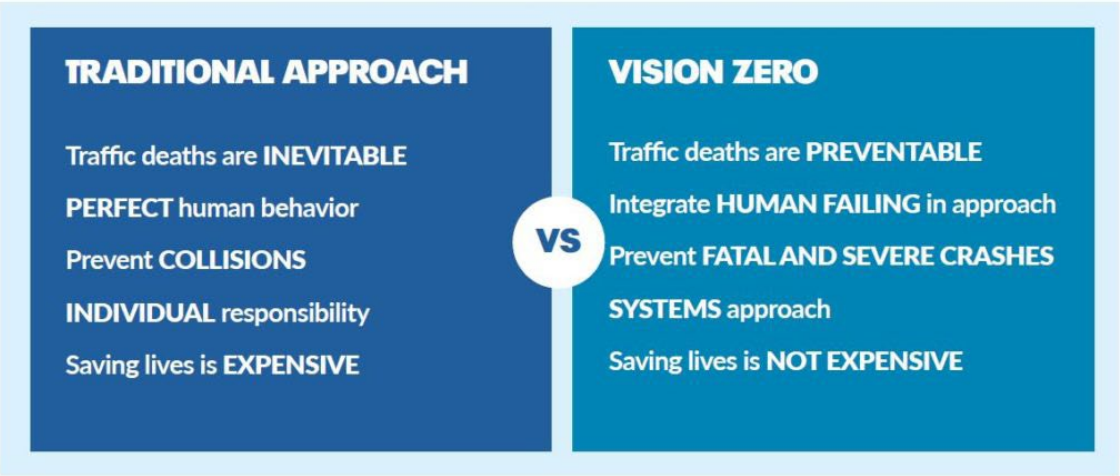

Figure 3. Traditional Approach vs. Vision Zero
(Vision Zero Network, 2021)

Safe System Approach

In an effort to achieve the goals established by Vision Zero, FHWA and its partner agencies developed the Safe System approach. The approach was founded on the idea that humans make mistakes, and that human anatomy limits our abilities to tolerate crash impacts. Six principles form the basis of the Safe System approach: deaths and serious injuries are unacceptable, humans make mistakes, humans are vulnerable, responsibility is shared, safety is proactive, and redundancy is crucial (Figure 4).

Figure 4. Safe System Approach
(Federal Highway Administration, 2022)

The Five Es

Improving safety on the streets of the City of Blue Lake is achieved through application of strategies intended to combat or prevent safety deficiencies. The State of California's 2020-2024 Strategic Highway Safety Plan lists five overarching strategies (Figure 5) aimed at improving road safety:

1. Education: Educate all road users on safe behaviors.
2. Enforcement: Enforce actions that reduce high-risk behavior.
3. Engineering: Apply effective and/or innovative countermeasures.
4. Emergency Response: Improve emergency response times and actions.
5. Emerging Technologies: Apply emerging technologies to roadway, vehicle, and user.

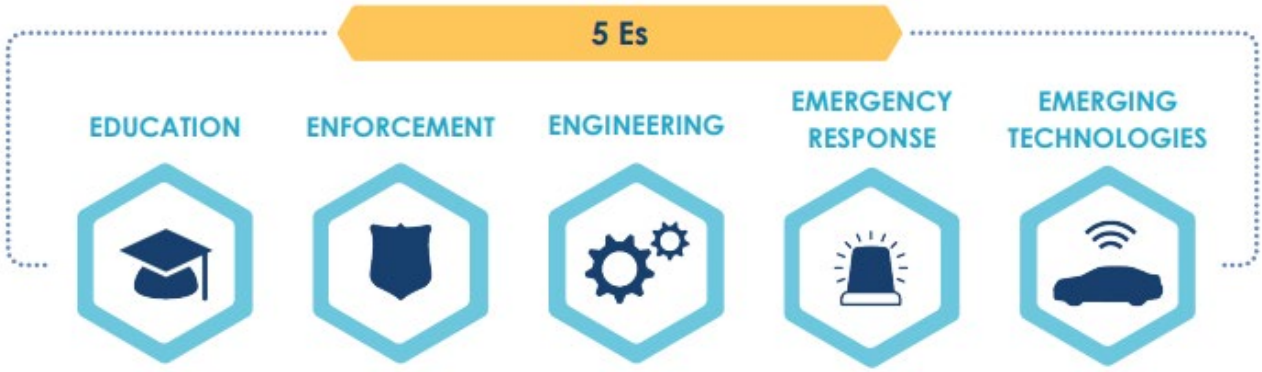

Figure 5. The Five Es
(California Department of Transportation, 2020)

Due to several factors including resources, size, and characteristics, the City of Blue Lake has focused countermeasure efforts on education, enforcement, engineering, and emergency response. This does not mean that emerging technology is ignored as a road safety strategy, rather it has been incorporated into the other four strategies where applicable.

Vision, Mission, and Goals

Vision Statement

A vision statement is an idealized future description of success. This phrase will serve as a trigger to the rest of the vision in the mind of everyone that reads it, Our Vision Statement is as follows:

- Ensure that users of all modes of transportation can safely travel within the City of Blue Lake.

Mission Statement

The mission is the doing component. A mission statement describes what an agency is going to do to achieve its vision. It should energize and focus the City of Blue Lake and its partners on something that everyone can work towards to achieve. Our mission statement is as follows:

- Eliminate traffic hazards though simple, safe, cost-effective methods, to improve the quality of life of transportation users within the City of Blue Lake.

Goals

Creating plan goals to supplement the vision and mission establishes areas of focus to work toward, and creates outputs and outcomes that are measurable.

- Eliminate all traffic fatalities by 2035.
- Reduce problematic pedestrian and vehicle interactions by 25 percent by 2030.
- Improve visibility and sightlines to reduce traffic incidents and near-misses.
- Reduce Impaired driving incidents by 50 percent by 2035.
- Improve partnership with Humboldt County on roads connecting to the City of Blue Lake.
- Collaborate with the school district to ensure safe routes to and from school.
- Work with the Humboldt County Sheriff's Department to foster effective patrols.
- Develop or promote a robust database to help identify areas of concern and the factors that contribute to dangerous travel.
- Improve the City's chances to get outside funding for road improvements and safer commutes.

Challenge Areas

The State of California has identified multiple challenge areas for the 2020-2024 SHSP to focus improvements on, with several listed as high priority. Figure 6 displays these areas of focus.

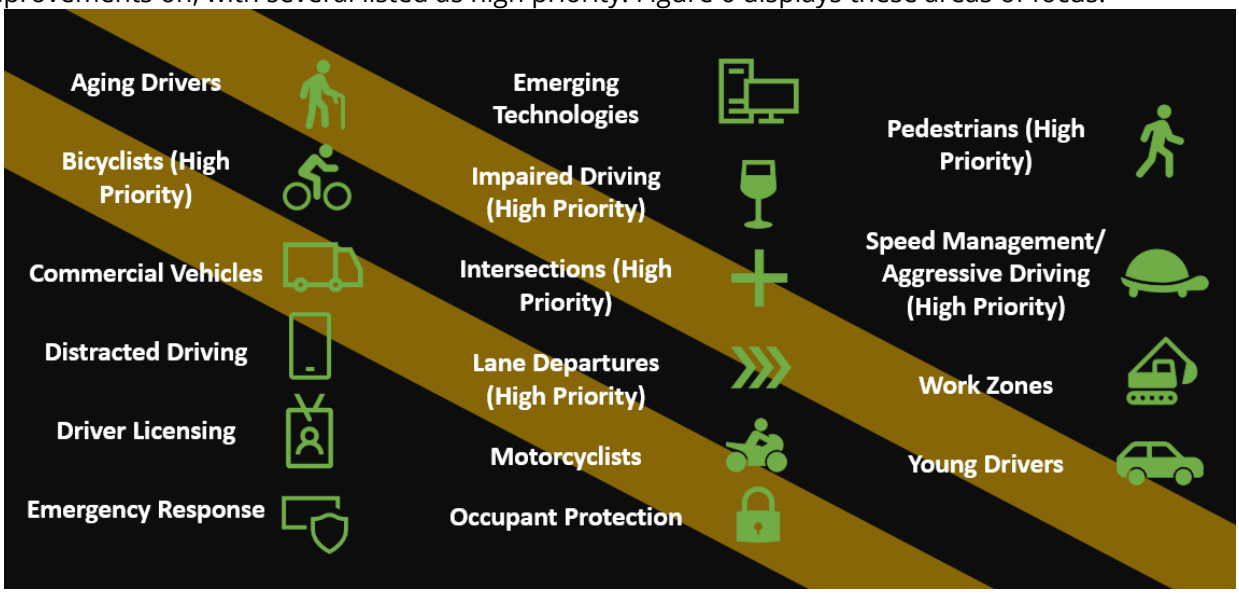

Figure 6. Challenge Areas Identified as Part of the State of California's 2020-2024 SHSP Meant to Prioritize Improvements

Of the State's priority challenge areas, the City of Blue Lake and its stakeholders have identified the following challenge areas to address during the LRSP process, several of which are rated as "high priority" by the State.

- Bicyclists
- Pedestrians
- Commercial Vehicles
- Impaired Driving
- Intersections
- Speed management/Aggressive Driving

Collision/Near Miss Analysis

Project Extent

The formation of a local road safety plan is dependent on data to provide insight into not only the locations and frequency of accidents, but also the causal factors that contribute to them. Identifying these elements helps prioritize the locations where improvements are most needed and assists in the selection of cost-effective countermeasures to mitigate risk.

To perform the data analysis, identification of the study's extents was required. The study area, which is displayed in Figure 7, includes Blue Lake Boulevard from the roundabout at Chartin Road and extends east to the intersection with Railroad Avenue. Notably, jurisdiction for Blue Lake Boulevard is shared between the City and County. At the southern end, the study's extents terminate on Hatchery Road at the bridge crossing Mad River and extends west to follow the boundary between the City and the adjacent Rancheria at Chartin Road.

Data Collection

To determine areas of concern and the factors leading to hazardous conditions, there are several potential data sources that can be examined in the LRSP process. These include public databases populated using law enforcement reports as well as the direct sourcing of additional law enforcement records such as traffic violations. Public surveys and Public Works Department records can also be used to provide further insight into community concerns and the factors that may contribute to collisions and other hazardous conditions.

Databases and Public Entity Records

Three databases were searched during the analysis phase of this project. These included:

1. Statewide Integrated Traffic Records System (SWITRS)
2. Transportation Injury Mapping System (TIMS; UC Berkeley, 2021)
3. Street Stories

Both SWITRS and TIMS use law enforcement records. By law, California law enforcement agencies are required to report incidents to the California Highway Patrol (CHP), a policy that began to be rolled out in 2018; CHP then processes and uploads this data to SWITRS (NASCIO, 2019). The TIMS database subsequently obtains these records and provides maps and statistical tools for local agencies to examine and process this data in a meaningful way.

Unlike SWITRS and TIMS, Street Stories is a tool the permits non-law enforcement entities and individuals to report the location of an incident or near miss and leave comments related to the event.

A search of the three databases listed above for 2015-2020 provided only three collisions within the project extents. All three collisions were located along Blue Lake Boulevard, for which the City shares jurisdiction with Humboldt County. Incident reports were not located on SWITRS or TIMS for incidents within the City limits. Although three incidents were noted in Street Stories, all of these were located outside of the study's extents on Blue Lake Rancheria land.

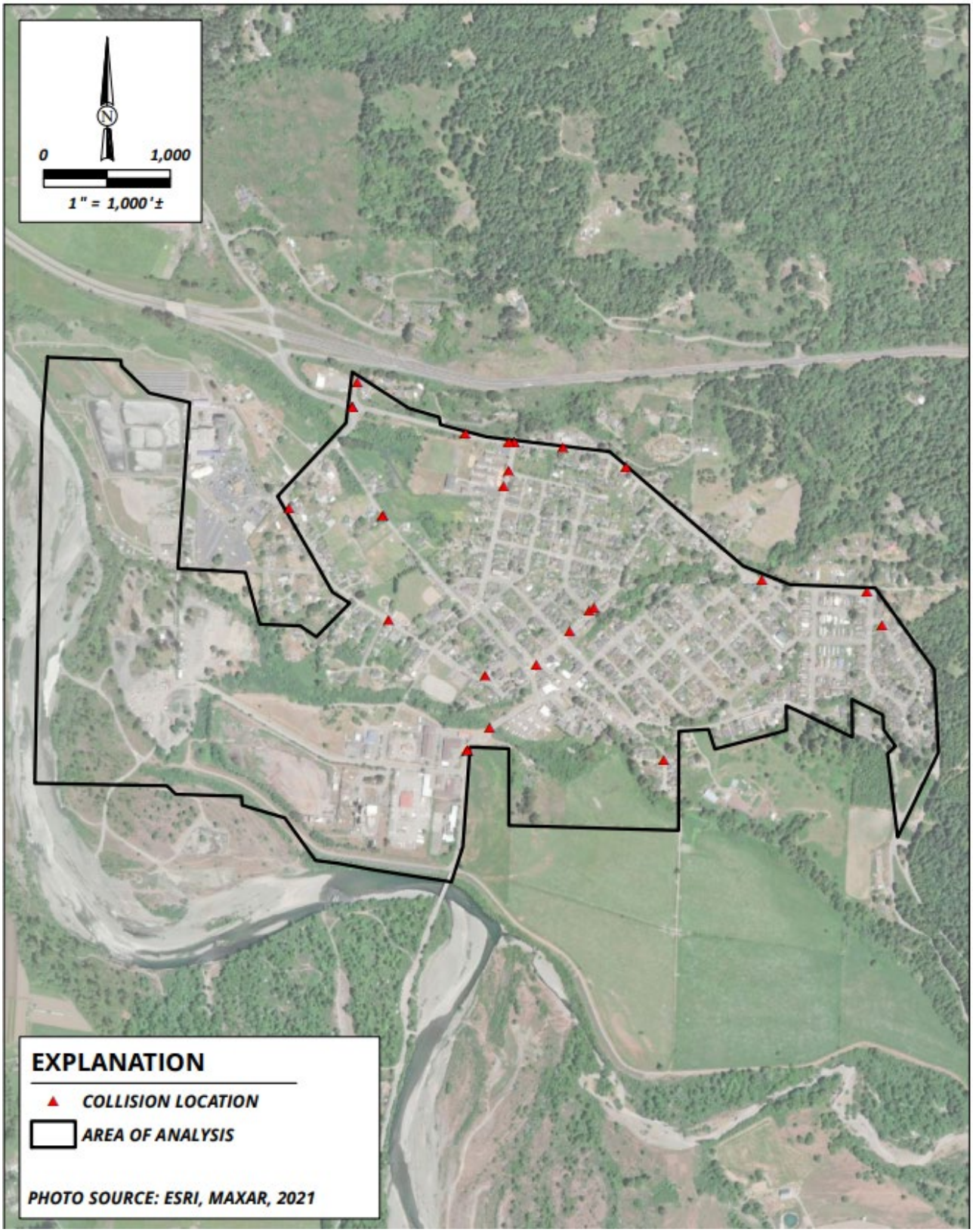

Figure 7. Extent of Analysis

After processing the initial data, correspondence with the City's Public Works Department and the Humboldt County Sheriff's Office, which contracts with the City to provide law enforcement, indicated that several other collisions and traffic-related property damage had occurred within city limits. Thus, additional efforts were undertaken to derive data from other known collisions.

Correspondence with the Humboldt County Sheriff's Office resulted in a list of collisions that occurred between 2018-2021, including dates and locations. Public Works staff were also able to provide known collisions and property damage from their records over the past five years. These included vehicular damage to signs and fire hydrants, as well as other known collisions missing from law enforcement records.

Public Surveys

In an effort to engage the public, the City of Blue Lake and SHN created two public surveys (Appendix 3), one for accidents, and one for near misses. These surveys were posted on the City's Facebook page, website, and local newspaper (Mad River Union), and were distributed at the first stakeholder meeting. These surveys were open for approximately two months. Additionally, flyers advertising these surveys were distributed using email to interested parties and hung in city buildings (Appendix 3).

The public survey asked respondents to report incidents and near misses between 2015-2020. Users were able to provide location, approximate dates, and the factors they felt led to unsafe conditions including driver actions, weather, and suggestions as to how to make improvements.

After the closing of the survey, one additional incident was reported along with 15 near misses, many of which were reported to occur routinely. Notably, some responses to these surveys were excluded from this report because the locations of reports were not within study's extents.

Collisions

The following sections provide a summary of the data analysis performed on known collisions. Because certain funding sources require data to be sourced from law enforcement records, two analyses were performed—an analysis on law enforcement records exclusively, and an analysis of the total dataset, which included public works and survey information. Due to the limited information provided through these records, care was taken to avoid duplicate records by excluding incidents where the potential for duplication existed. Figure 8 (on the next page) provides a heat map indicating the most problematic areas highlighted during the analysis. Numbers shown in white throughout the map indicate the frequency of incidents reported at a specific location.

Law Enforcement Records Analysis

The following section summarizes the law enforcement records used in the LRSP process and is broken down by source. Original documentation can be found in Appendix 4. As stated in the preceding section, no collisions within the city limits were identified in the SWITRS database.

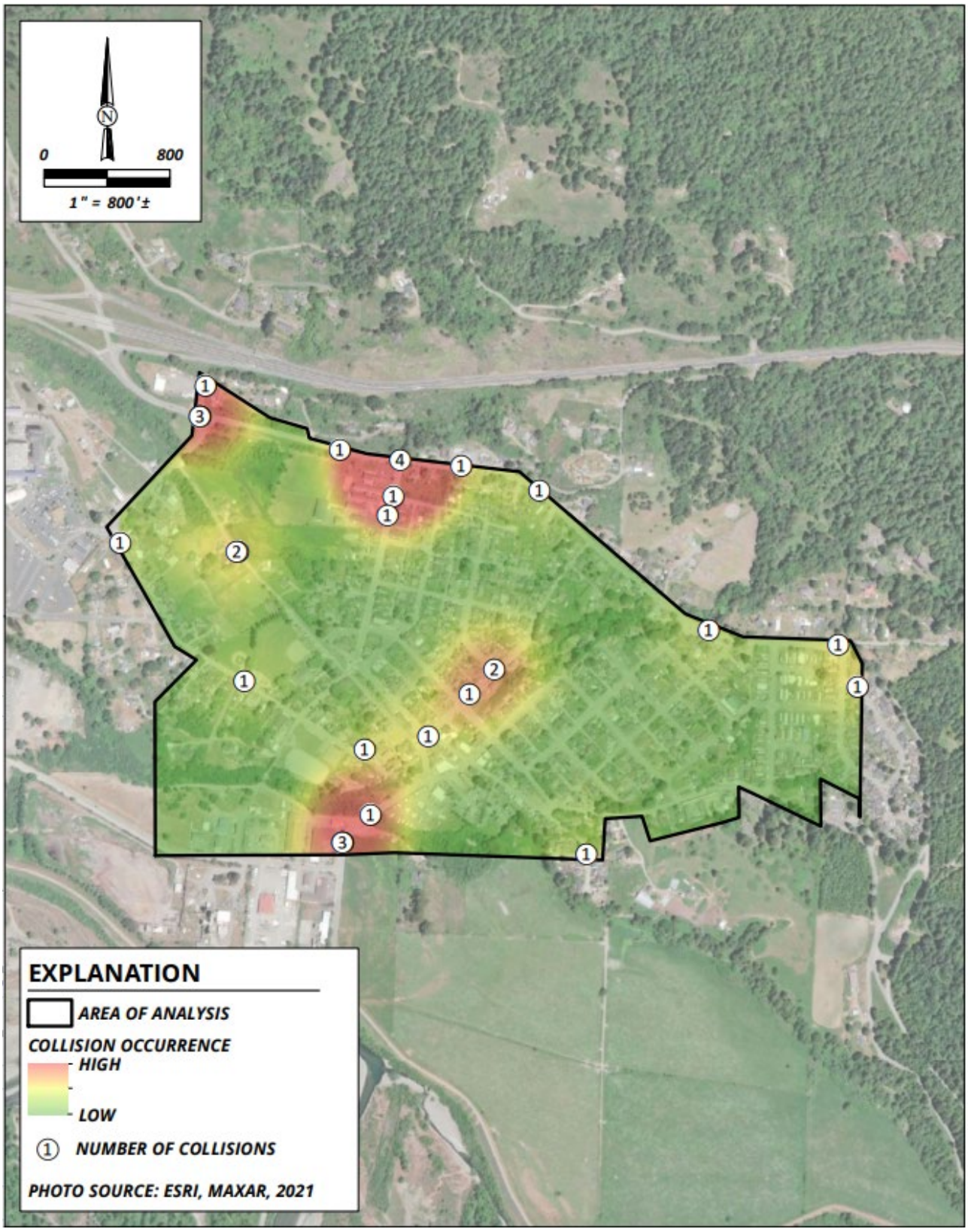

Figure 8. Collision Analysis

TIMS

Three incidents were reported on the Transportation Injury Mapping System (TIMS) database when queried between 2015-2020, the most recent 5-year dataset available. A summary of relevant details from each incident is provided in Table 1.

Table 1. TIMS[a] Database Records 2015-2020 Within The Project Extent City of Blue Lake LRSP, Blue Lake, CA

TIMS ID	Date	Intersection	Proximity	Primary Collision Factor	Notes
90019976	9/13/2015	BL Boulevard and Chartin Road	181 feet East	Improper Turning	Proceeding straight; Minor Injury
90090251	1/3/2016	BL Boulevard and Greenwood Road	21 feet West	DUI[b]	Making left turn; Possible Injury
91062620	5/1/2019	Bl Boulevard and Davis Street	50 feet East	DUI	Ran off road; Fatal; No alcohol involved

[a] TIMS: Transportation Injury Mapping System
[b] DUI: driving under the influence

Humboldt County Sherriff's Office

The Humboldt County Sheriff's Office provided a list of traffic incidents occurring between 2018 and 2021. Although locations from each incident were provided, the proximity to the intersection listed could not be derived from the details provided. Thus, incidents located at intersections listed in Table 2 should be assumed to occur at or near the intersection listed, but exact location is indeterminable.

Table 2. HCSO[a] Records 2018-2021 within the Project Extent City of Blue Lake LRSP, Blue Lake, CA

ID	Date	Location
1810200058	10/20/2018	311 G Street
1810290012	10/29/2018	171 Gely Street
1812230057	12/23/2018	Blue Lake Boulevard and Chartin Way
1904070018	4/7/2019	Blue Lake Boulevard and Buckley Road
1904210018	4/21/2019	Blue Lake Boulevard and Greenwood Road
2001090004	1/9/2020	Blue Lake Boulevard and Greenwood Road
2001090005	1/9/2020	Blue Lake Boulevard and Greenwood Road
2010070063	10/7/2020	295 Blue Lake Boulevard
2103150037	3/15/2021	631 Greenwood Road
2105180188	12/23/2018	Blue Lake Boulevard and Chartin Road
2107110005	7/11/2021	Blue Lake Boulevard Roundabout

[a] HCSO: Humboldt County Sheriff's Office

Data was divided into three regions:

1) incidents occurring along Blue Lake Boulevard,
2) incidents occurring along Hatchery Road, and
3) incidents occurring throughout the remaining areas of the City excluding Blue Lake Boulevard and Hatchery Road. Figure 9 summarizes the results of the analysis performed on law enforcement data provided to SHN.

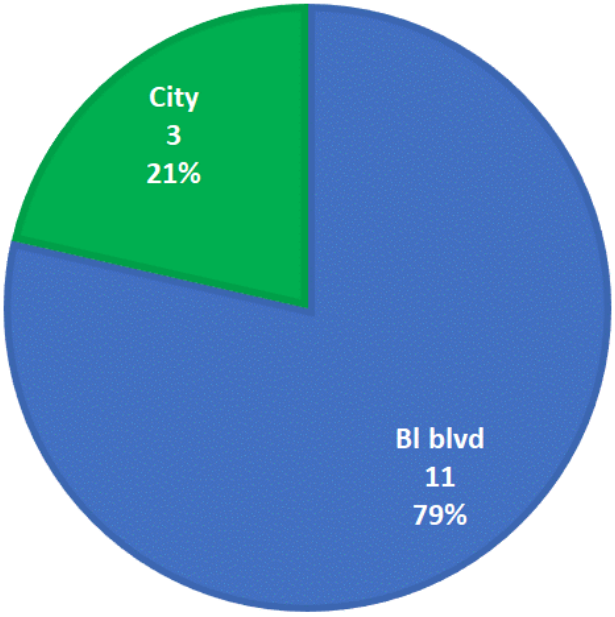

Figure 9. Region of Collisions Provided in Law Enforcement Records
No Incidents in the Hatchery Road Region Were Located in Law Enforcement Records

Other Data Sources

Public Works

Several incidents were also noted by the City of Blue Lake Public Works Department. These included known traffic incidents as well as multiple instances of property damage, including signage and damage to fire hydrants. Table 3 summarizes the information provided for analysis. The source document provided by Public Works can be found in Appendix 5.

Table 3. Public Works Incident Reports Within the Project Extent
City of Blue Lake LRSP, Blue Lake, CA

Location	Type of Incident
Hatchery Road	Sign Hit
Hatchery Road	Sign Hit
Railroad and G Street	Sign Hit
G Street (near 2nd Avenue)	Sign Hit
Greenwood Road and C Street	Sign Hit
Chartin Road	Fire Hydrant Hit
Chartin Way	Fire Hydrant Hit
Redwood Avenue and Piersall Avenue	Fire Hydrant Hit

Table 3. Public Works Incident Reports Within the Project Extent
City of Blue Lake LRSP, Blue Lake, CA

Location	Type of Incident
Hatchery Road	Fire Hydrant Hit
Hatchery Road	Fire Hydrant Hit
S. Railroad Ave	Known Collision
S. Railroad Ave	Known Collision
Blue Lake Boulevard near "I" Street	Known Collision
Chartin Road	Known Collision
Park Avenue and Acacia Drive	Known Collision

Public Survey

Only one incident was noted through the use of the public surveys. This incident occurred on G Street near the post office (between 1st and 2nd Avenues) and resulted in the death of a pet.

Total Collision Dataset

Figure 10 provides a comparison of law enforcement records with the entire dataset, including those sourced from law enforcement, public databases, public works records, and public surveys. Notably, several collisions highlighted by other sources are missing from law enforcement records, which could lead to a misappropriation of resources if not reconciled.

Collision Outcomes

Collision outcomes are important when seeking funding for road improvements because they help establish the justification for proposed projects. Based on the American Association of State Highway and Transportation Officials (AASHTO) "2010 Highway Safety Manual," outcomes are categorized as follows:

- Fatal
- Disabling Injury
- Evident Injury
- Fatal/Injury
- Possible Injury
- Property Damage Only (PDO)

For each category, associated costs are applied to the number of incidents to determine a cost benefit relationship. However, from the results of this data analysis, several sources of collision data did not contain information regarding the outcomes of the incidents listed. Thus, for 50% of the collisions, no known outcome could be attributed to the incident, rendering it impossible to establish the BCR required by some funding agencies.

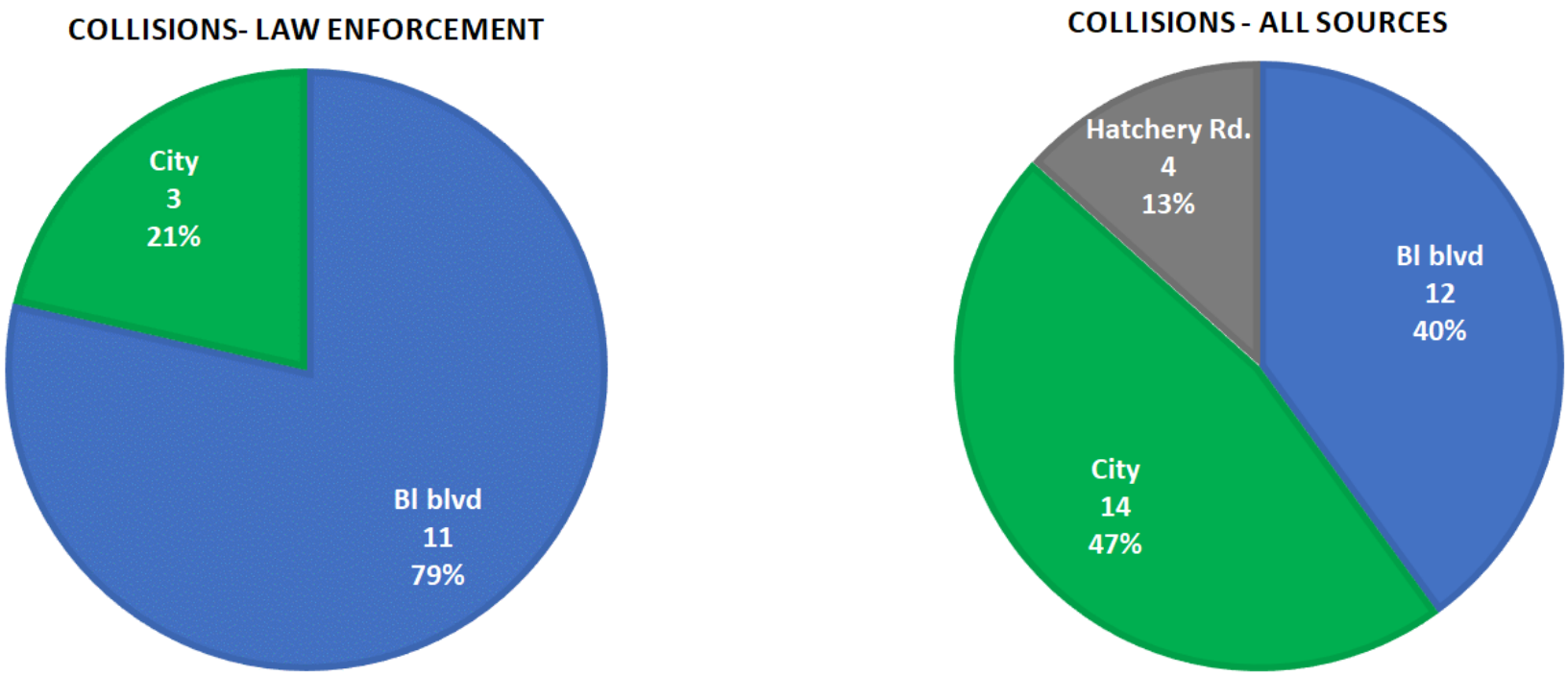

Figure 10. Comparison of Collision Data Analysis from law Enforcement Records (Left) and the Total Dataset (Right), which Includes Law Enforcement, Public Works, and Survey Data

Although incidents reported by the Public Works Department may have resulted in injuries, where data provided by the department identified signage or fire hydrants damage, property damage was recorded as an outcome. Figure 11 summarizes the findings.

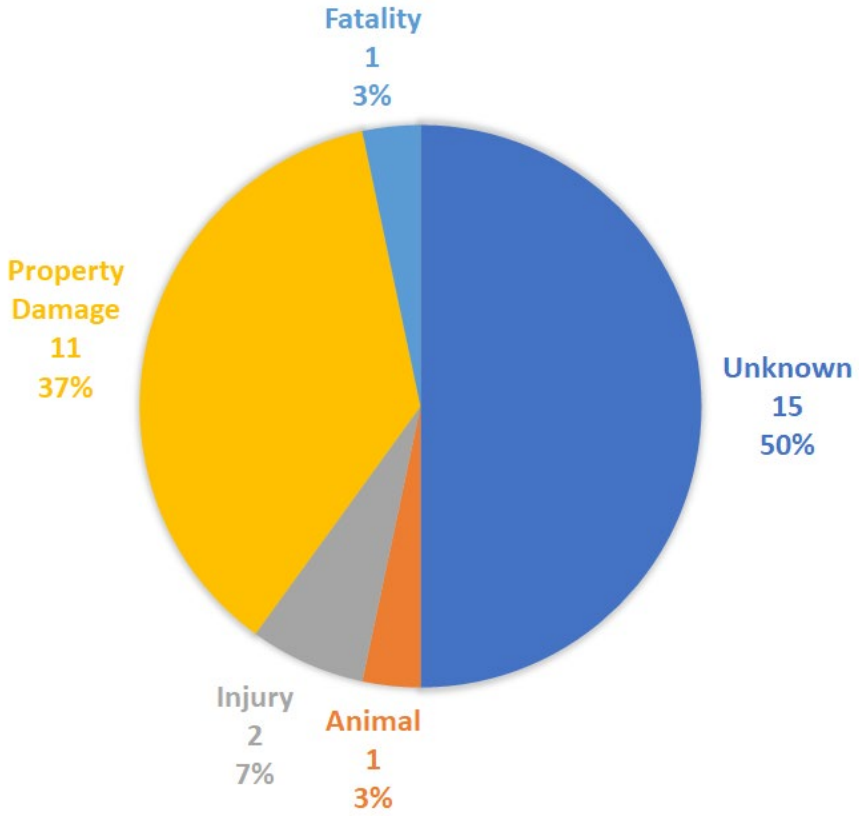

Figure 11. Collision Outcomes Including All Data Sources Used in the LRSP Process

Near Misses Survey Results

The majority of reports regarding near misses occurred along Blue Lake Boulevard. A summary of the survey results can be found in Appendix 6. Figure 12 provides a breakdown of the near misses reports by region. It should be noted that although pet fatalities do not have an associated cost based on the Caltrans "Highway Design Manual," this outcome was reflected in Figure 12.

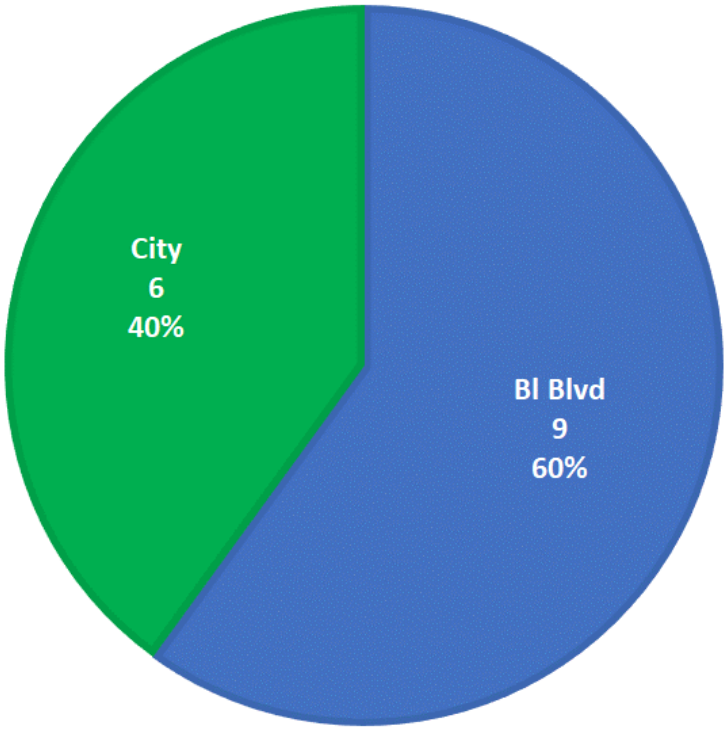

Figure 12. A Summary of Public Survey Information Pertaining to Near Misses Sourced During the LSRP Process

Figure 13 illustrates the frequency of near miss reports at specific locations throughout the project extent. The most frequently reported near misses occurred at two intersections along Blue Lake Boulevard, namely, Greenwood Road and the Acacia Drive/Buckley Road intersection. In both of these cases, issues were noted by respondents as occurring on a routine basis. For other parts of the City, complaints were reported in the area of the safe routes to school passage and along Chartin Road, where some recent improvements have been made, including modifying traffic flow from two-way to one-way, and the addition of speed tables and striping.

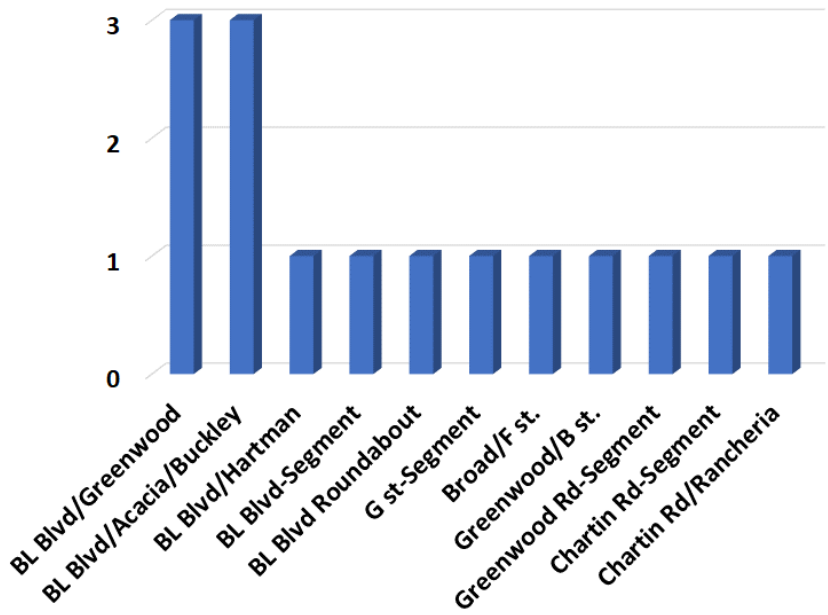

Figure 13. A Summary of Public Survey Near Miss Locations Sourced During the LSRP Process

Causal Factors

In addition to lacking collision outcomes for many of the data considered in this analysis, causal factors were also excluded from the collision reports in many cases, with the exception of data provided through TIMS. Thus, the factors provided in public surveys were used to further elucidate potential reasons incidents and near misses may be occurring.

Notably, in some cases the causal factors selected by survey respondents did not match the formal definition of the violation based on the description provided in the comments section of the survey. In those cases, staff adjusted data to reflect compliance with formal definitions.

Along Blue Lake Boulevard, unsafe speeds and poor visibility were the factors most commonly mentioned in the surveys. Impaired driving (DUI) and improper turning were also frequently noted in the data. Many of the additional factors including impeding traffic, vehicle right-of-way, and improper passing, which includes entering the opposing lane to pass, were related to congestion during school drop-off and pick-up times.

Figure 14 provides a breakdown of the factors listed by survey respondents and the TIMS database, the two sources where causal factors were listed. Although survey respondents provided details on weather conditions experienced during the complaints, in most cases, respondents reported that hazards existed during "all weather" including clear weather, indicating weather conditions were not primarily responsible for the hazards.

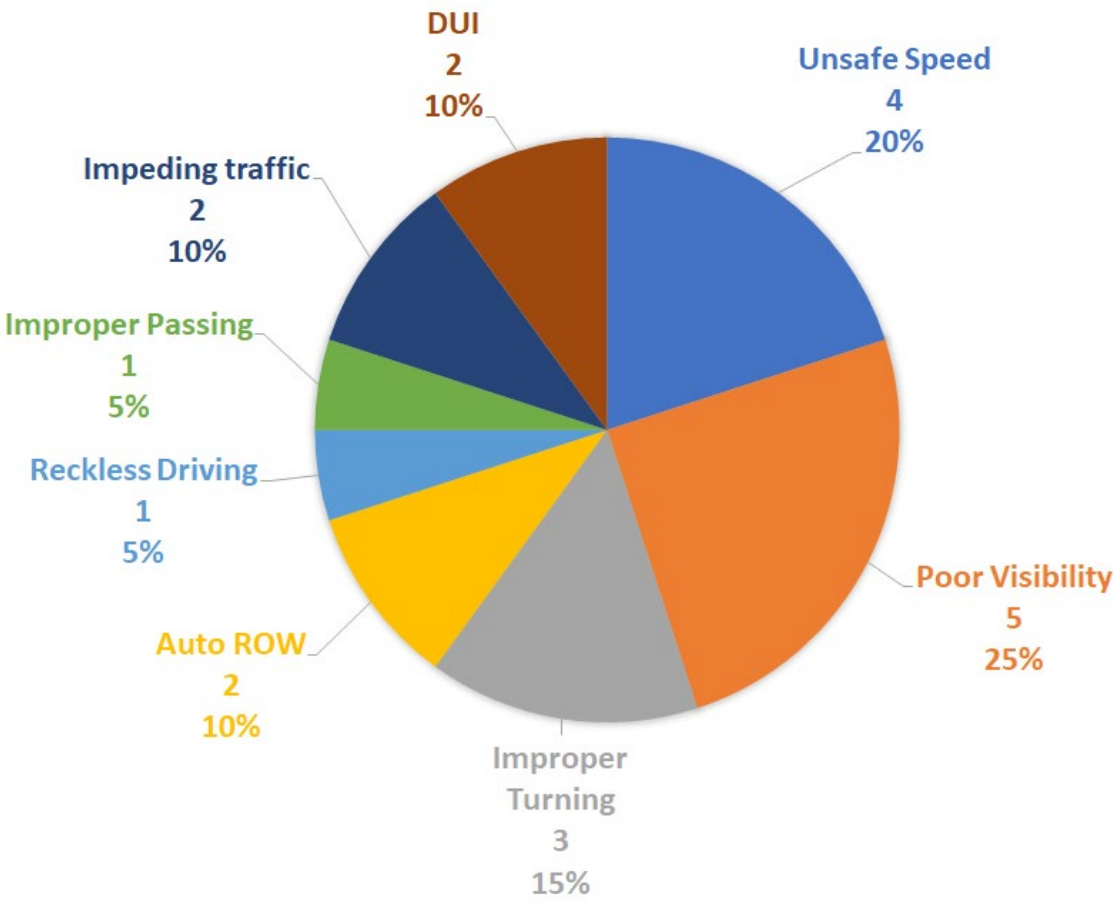

Figure 14. Causal Factors Provided Through TIMS and Public Surveys for Incidents and Near Misses Along Blue Lake Boulevard

Within the City, unsafe speeds were the most frequently listed factor by survey respondents. These complaints were focused along the designated Safe Routes to School path including G Street, the F and Broad Streets intersection, and Greenwood Road. Complaints of unsafe speeds, pedestrian right-of-way, and improper turning were also noted along Chartin Road, including the segment adjacent to Perigot Park.

Figure 15 provides a breakdown of the factors listed by survey respondents for locations within the City, excluding Blue Lake Boulevard and Hatchery Road.

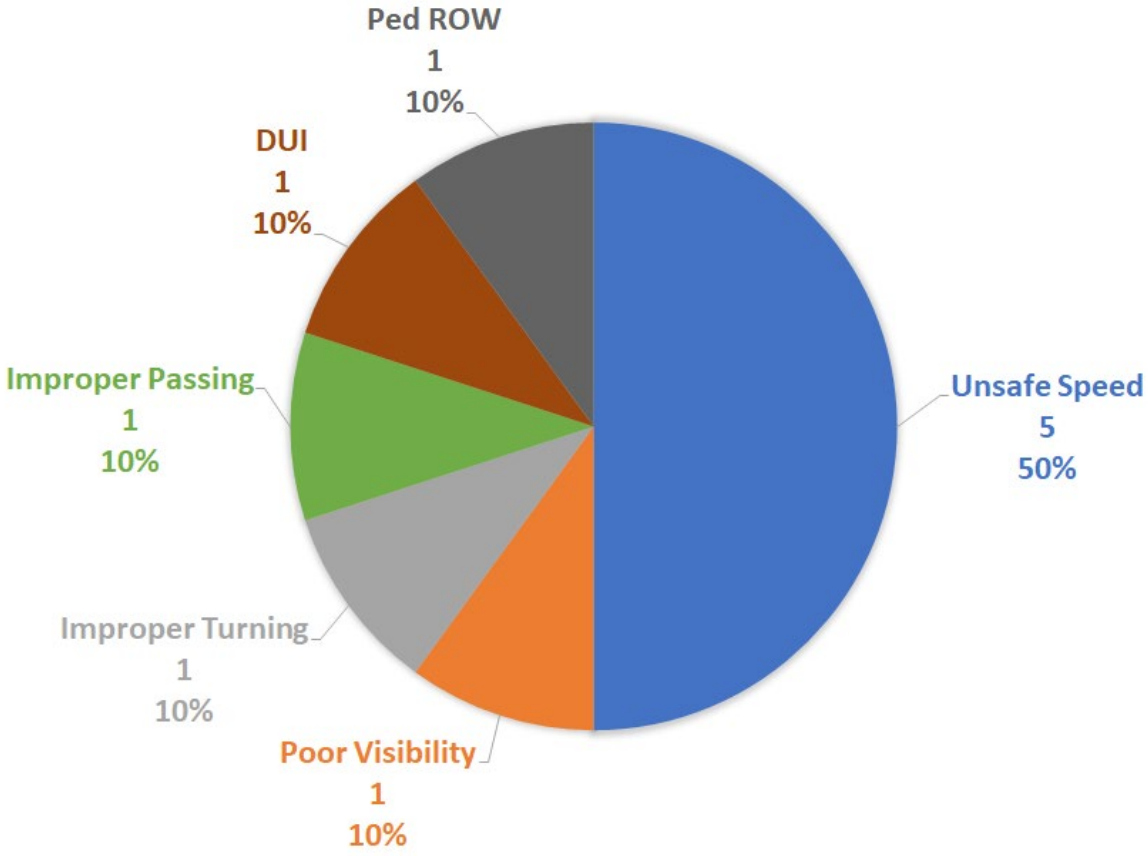

Figure 15. Causal Factors Provided Through Public Surveys for Incidents and Near Misses Within City Limits, Excluding Reports Along Blue Lake Boulevard and Hatchery Road

Site Walk

On March 11, 2022, representatives from SHN, the City of Blue Lake, and Humboldt County conducted a site walk in Blue Lake. The purpose of this walk was to observe areas of interest established during the study to better identify contributing factors and discuss locations of concern that were not identified in the data, but where challenge areas went unaddressed, and improvements could be made systemically. The team focused on Blue Lake Boulevard because of the shared jurisdiction between Humboldt County and the City of Blue Lake and the frequency of reports occurring along that roadway. The walk also included a portion of the Safe Routes to School passage through the heart of the City including G, H, and "I" Streets**.** and ended along the newly implemented Annie and Mary Rail Trail segment.

The walk was initiated at the Greenwood Road intersection with Blue Lake Boulevard. Team members identified the potential to add warning signage approaching the intersection. There have been long standing discussions regarding lowering the speed limit along the portion of Blue Lake Boulevard bordering city limits, and this topic was discussed in further detail to assess whether collaboration between the City and the County could achieve a desirable outcome. Additionally, team members noted the potential for sight distance impairment.

Figure 16 provides images taken from the stop bar on Greenwood Road.

Figure 16. Site Walk Images Taken From the Stop Bar on Greenwood Road Facing Blue Lake Boulevard to the West (Left) and East (Right)

The walk continued east along Blue Lake Boulevard. At several locations, issues with sight impairment were noted. This included locations where potential conflicts were observed at numerous driveways and intersections due to parked cars. Multiple locations where vegetation may be limiting sight distance were also noted. At some locations, road geometry was observed to be limiting sight distance**.** Figure 17 provides an illustration of one area located near Davis Street where both vertical grades and horizontal curves are simultaneously encountered without warning signage of the upcoming hazard. Notably, these images correspond to the vicinity of the only reported fatality.

Figure 17. Site Walk Images Taken Along Blue Lake Boulevard Facing West (Left) and East (Right) Near Davis Street.

Impaired Sight Distance Was Observed in Both Directions and a Lack of Warning Signage Was Noted.

The walk along Blue Lake Boulevard terminated at the Acacia/Buckley intersection, a problematic area highlighted through collision data and the near miss surveys. Restrictive sight distance was noted from the stop bar on Acacia Drive as can be seen in Figure 18, particularly from the eastern approach.

Figure 18. Site Walk Images Taken From the Stop Bar on Acacia Drive Facing Blue Lake Boulevard to the West (Left) and East (Right). Impaired Sight Distance was Observed in Both Directions.

The site walk continued along the Safe Routes to School path as it crossed G, H and "I" Streets. Although collisions and near misses were only reported on G Street, during the site walk, similar geometry and traffic conditions were also noted at H and "I" Streets, making them good candidates to apply systemic countermeasures similar to those suggested for G Street. Roadway width, which increases the crossing distance for pedestrians, the presence of on-street parking, and a lack of warning signage as vehicles approached the crosswalks were noted, all risk factors listed by FWHA as qualifying to address systemically.

Figure 19 provides images taken during the site walk of H and "I" Streets. Note the width of the roadways and lack of pavement markings as well as the vertical curve encountered on H Street near the pedestrian crossing, from which the image was taken.

Figure 19. Site Walk Images Taken at the Crosswalks on "I" (Left) and H (Right) Streets. Potential risk factors were noted including wide lanes, the presence of on-street parking, and issues related to pedestrian crossing such as crossing distance and a lack of warning signage.

Strategies

The following sections offer strategies and countermeasures to address the findings of the data analysis and stakeholder concerns related to challenge areas selected by stakeholders. The section begins by providing suggestions from public survey respondents at the locations of their reports and is followed by engineering countermeasures for both spot improvements and proactive, systemic improvements that can be applied to address challenge areas not otherwise addressed in spot improvements. This is followed by recommendations for non-engineering strategies, including potential methods to improve data collection and collaboration between agencies, recommendations for education campaigns, and suggestions for law enforcement strategies.

Public Strategy Suggestions

In the surveys submitted by the public, respondents were provided the option to suggest strategies to mitigate the incident they witnessed or experienced. Their suggestions were limited to:

- Engineering (Infrastructure change, alter road, signage, etc.)
- Education (Outreach to drivers, pedestrians, etc.)
- Enforcement (Increase law enforcement presence or frequency, DUI checkpoints, etc.)
- Emergency response (Improvement in response time, basic local medical training, etc.)
- Other (Please specify)

In the subsequent question asking if the respondents had any comments, some respondents left more detailed descriptions of their suggested road safety strategies. Their responses are listed in Table 4.

Table 4. Survey Response Suggestions for Countermeasures by Location
City of Blue Lake LRSP, Blue Lake, CA

Location	Countermeasure Suggestion
Perigot Park	Engineering and Enforcement
G Street (by Post Office)	Engineering
Acacia/ Buckley and Blue Lake Boulevard	Enforcement and Engineering
Greenwood Road and Blue Lake Boulevard	Engineering
Chartin Road and Rancheria Road	Engineering: Sidewalk
Broad and F Street	Engineering: roundabout
Hartman and Blue Lake Boulevard	Education
490 Blue Lake Boulevard	Engineering
Roundabout	Engineering: Signage
Blue Lake Boulevard and Greenwood Road	Education
Blue Lake Boulevard and Greenwood Road	Enforcement
Greenwood Road and B street	Enforcement
Greenwood Road	Other
Blue Lake Boulevard and Buckley Road/Acacia Drive	Engineering
G Street by Post Office	Engineering

Engineering Strategies

This section provides recommendations for engineering-related countermeasures at locations of concern identified through data analysis, the aforementioned site walk, and stakeholder discussions regarding challenge areas. For spot improvements, specific locations are each addressed separately. Recommendations for systemic improvements are subsequently provided.

Greenwood Road/Blue Lake Boulevard Intersection

The intersection of Greenwood Road and Blue Lake Boulevard was the most frequently reported location identified during the data analysis. Numerous causal factors were listed in the surveys, some of which were related to congestion during school pick-up and drop-off times, including impeding traffic; impaired sight distance; automobile right-of-way; and improper passing, where vehicles used the oncoming traffic lane to maneuver around stopped vehicles. DUI and improper turning were also noted in the TIMS data.

Recommended countermeasures deserving of consideration for this intersection include enhancements to signage and pavement markings at the intersection, which enhance awareness of the upcoming intersection and could reduce the tendency for improper passing as well as discouraging excessive speeds. The installation of a mountable median at the stop approach on Greenwood Road could also reduce instances of improper turning; however, rights-of-way must be considered to determine feasibility. A general illustration of some of these low-cost countermeasures is provided below in Figure 20 (transverse markings, which are transverse bars or chevrons spaced and arranged to give drivers the perception that they are speeding up, are not shown in the figure).

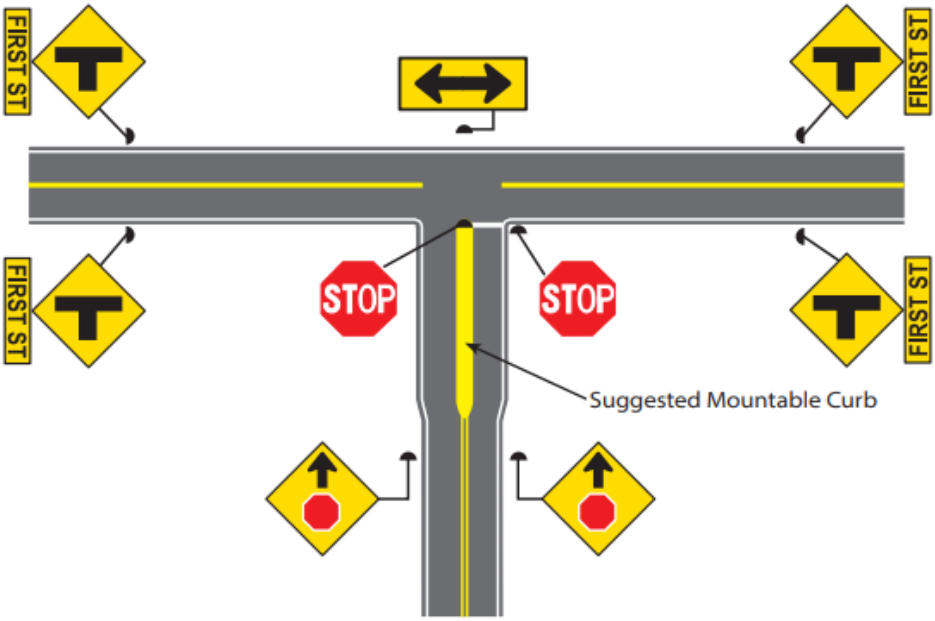

Figure 20. General Illustration of Low-Cost Signage and Pavement Marking Improvements. Street names in Figure are provided as example only. Signage will be specific to intersection.
(FHWA, 2020)

Notably, some improvements for this intersection have been planned as part of the Blue Lake Truck Route Improvement Project, including a mountable curb on the west side of Greenwood Road as well as chokers installed just south of the intersection. See Appendix 1 for conceptual layouts.

Reducing the posted speed limit in the vicinity of this intersection is likely one of the most effective countermeasures that could be undertaken at this location. Details regarding the implementation of a lower speed limit are discussed in a later section pertaining to systemic improvements. A summary of the data and countermeasures for this intersection is presented in Table 5.

Table 5. Summary of Incident Data and Causal Factors for the Intersection of Greenwood Road and Blue Lake Boulevard City of Blue Lake LRSP, Blue Lake, CA

Criterion	Summary
Incident Frequency	• 4 Collisions Reports • 3 Near Miss Reports
Causal Factors	• Impaired Sight Distance • Impeding Traffic • Improper Turning • Improper Passing • DUI[a] • Reckless Driving • Automobile ROW[b]
Recommended Countermeasures for Consideration	• Enhanced pavement marking and signage (see Figure 20 above) • Transverse pavement markings • Mountable Islands

[a] DUI: driving under the influence
[b] ROW: right-of-way

Acacia Drive/Buckley Road/Blue Lake Boulevard Intersection

The intersection of Acacia Drive, Buckley Road, and Blue Lake Boulevard ranked 2nd amongst intersections with reported complaints/incidents along Blue Lake Boulevard, with impaired sight distance and unsafe speeds being the primary factors reported in the surveys. As observed during the site walk, large redwoods located immediately east of the intersection clearly impair sight distance for drivers approaching Blue Lake Boulevard from Acacia Drive. From this direction, logging trucks are frequently encountered, which require extended stopping distances in the event of a conflict due to the size and weight of the vehicles.

There are several potential countermeasures for this intersection worth consideration. Tree removal would substantially improve site distance from the east; however, easements may be required due to the tree's location on private property (see Figure 18). Other countermeasures worth consideration include changes to the orientation and design of the intersection, such as, restricting left turns from Acacia Drive and installing a median to better distinguish the turn channels, or converting the road to one-way traffic. Due to the geometry of the intersection, roundabouts are not recommended in this instance.

Table 6. Summary of incident data and causal factors for the intersection of Acacia Drive, Buckley Road and Blue Lake Boulevard
City of Blue Lake LRSP, Blue Lake, CA

Criterion	Summary
Incident Frequency	• 1 Collision Report • 3 Near Miss Reports
Causal Factors	• Impaired Sight Distance • Unsafe speeds
Recommended Countermeasures for Consideration	• Restrict left turns onto Blue Lake Blvd from Acacia Drive • Convert Acacia Drive to one-way traffic • Reorient intersection with median • Remove large trees west of the intersection

G Street/Hartman Avenue

With the exception of Blue Lake Boulevard, G Street, which turns into Hartman Avenue as it approaches Blue Lake Boulevard from the south, was the area most frequently reported to have safety issues within city limits, with unsafe speeds being reported in the public surveys as the primary factor. The locations of complaints were focused on the segment between 1st and 2nd Avenues, near the post office entrance. However, discussions during the site walk indicated that excessive speeds are frequently encountered along the entire stretch between Railroad Avenue and Blue Lake Boulevard. As observed during the site visit, the width of the road and lack of pavement markings and signage may be contributing to the driver tendency to maintain excessive speeds.

Several countermeasures for speed control are viable candidates for this location, one of which is the installation of a mini-roundabout at the intersection with 2nd Avenue, which is located near many of the reported incidents/near misses. Features can include splitter islands where space permits and a mountable center median for larger vehicles. Figure 21 provides an illustration of this countermeasure, which has been frequently employed in other cities of Humboldt County.

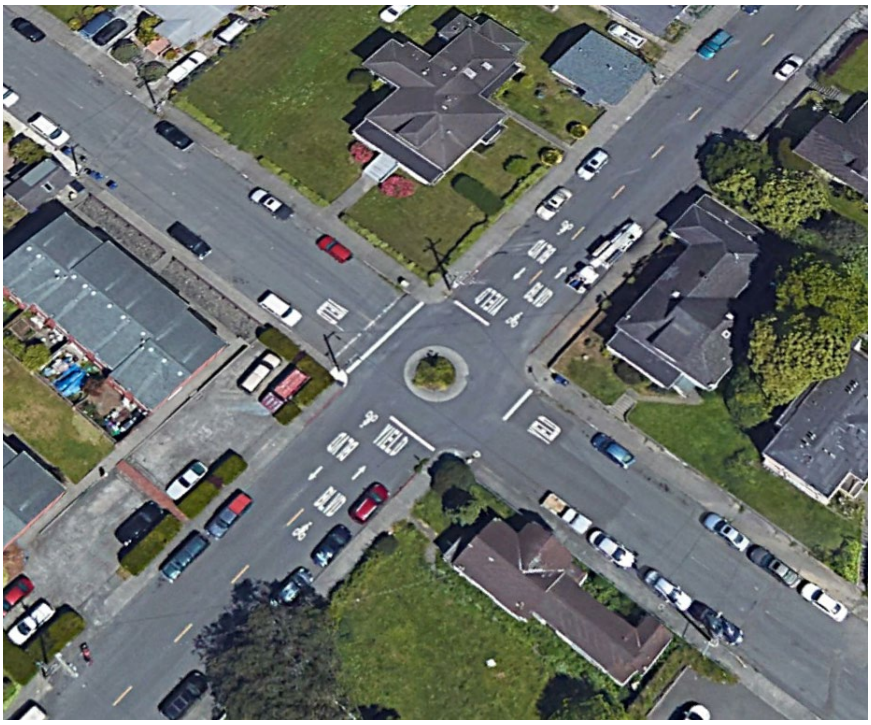

Figure 21. An Example Mini-Roundabout Located on 12th and "I" Streets in Arcata, CA (Google Earth, 2022)

Portable/non-portable speed feedback signs, another commonly employed countermeasure for speed reduction, can provide drivers with a reminder of their speeds relative to the posted speed limit and are also worthy of consideration. Enhanced pavement markings and signage should be considered, which could include a dedicated Class II bike/pedestrian lane on the G Street segment, while also improving the parking and driving edge lines on both sides of the roadway. Transverse pavement markings at intersection or pedestrian crossing approaches are also recommended for consideration, which can further reduce speeds and enhance awareness as drivers approach. These transverse bars or chevrons are arranged and spaced to give drivers the perception that they are speeding up, which can lead to drivers slowing down as they approach intersections and pedestrian crossings. Lastly, while speed humps have been installed in some locations, additional locations along the roadway could be considered.

Table 7. Summary of Incident Data and Causal Factors for G Street
City of Blue Lake LRSP, Blue Lake, CA

Criterion	Summary
Incident Frequency	• 3 Collision Reports • 2 Near Miss Reports
Causal Factors	• Unsafe Speeds
Recommended Countermeasures for Consideration	• Install a mini-roundabout at 2nd Avenue. • Install speed and pedestrian/bicyclist related signage and pavement markings. • Install transverse pavement markings at intersections/ pedestrian crossings. • Install additional speed humps. • Install speed feedback signs.

Systemic Recommendations

Speed Reduction Along Blue Lake Boulevard

Unsafe speeds were reported as a causal factor numerous times by survey respondents on the segments and intersections along Blue Lake Boulevard. Thus, the City should consider the strategic placement of chokepoints/bulb outs along the segment between the roundabout and Acacia Drive. Additionally, road conditions, the school zone near Greenwood Road, residential and business density, and frequent pedestrian/bicycle use all provide potential justifications for the City and County to explore reductions in the posted speed limit along the roadway.

New legislation recently passed in the State of California may open up additional avenues to reducing the posted speed limit over certain segments of the roadway and grants local authorities more control over the establishment of speed limits in certain circumstances. The following section pertaining to the newly passed law, AB 43, provides a brief overview.

California Assembly Bill No. 43 (AB 43)

The State of California sets speed limits according to the regulations and guidance established in the current (2020) California Manual for Setting Speed Limits. Historically, when an agency is setting a speed limit, they are required to conduct an engineering and traffic survey (E&TS). An E&TS is an engineering study of the prevailing speeds, collision history, and roadway conditions not readily apparent to the driver. There are a number of requirements for E&TS established in the manual, the most controversial and well known is the 85th percentile rule.

This rule states;

> "If 100 vehicle speeds are plotted, the 85th percentile speed is determined by looking at the speed of the 15th vehicle down from the top speed. Fifteen percent of the vehicles are travelling faster than this speed, and eighty five percent are travelling at or below this speed."

As a result of this rule, some jurisdictions, including the City of Blue Lake, have been hesitant to conduct the necessary E&TS on roadways (Blue Lake Boulevard) on which they want to lower the speed limit. This is for fear that the actual survey results may determine the speed limits in fact needs to be raised.

On October 8, 2021, California Governor Gavin Newsom signed Assembly Bill No. 43 into law. This bill introduces a new approached to "overruling" the 85th percentile rule by amending how a local authority sets a prima facie speed limit, allowing for 5 miles per hour (mph) speed reduction based on regulations established in AB 43, and a change in the requirements for E&TSs.. Furthermore, the new legislation opens up additional avenues to reduce speed limits under certain circumstances and permits local authorities the ability to maintain previously established speed limits in the case where an ET&S results in a higher speed limit.

Although this bill was signed into law, authorities cannot actually enforce it,

> "...until June 30, 2024, or until the Judicial Council has developed an online tool for adjudicating infraction violations statewide as specified in Article 7 (commencing with Section 68645) of Chapter 2 of Title 8 of the Government Code, whichever is sooner." (California Legislative Information, 2021)

The City of Blue Lake should regularly consult with both Caltrans and Humboldt County Department of Public Works and conduct internet searches to monitor the progress of this bill's implementation, and examples of cities using AB 43 to lower their speed limits.

Sight Distance Improvements Blue Lake Boulevard

Sight distance was repeatedly noted by survey respondents as an issue that led to frequent safety concerns along Blue Lake Boulevard. These issues were confirmed in several locations during the site walk, most notably along the horizontal and vertical curve immediately west of the intersection with Hartman Avenue, the location of the one known traffic fatality identified in our records.

It is, therefore, recommended that a site audit be undertaken along the roadway to identify locations where sight distance is insufficient, particularly for roadway users entering Blue Lake Boulevard. Once identified, steps such as vegetation removal or the installation of warning signage, restricting parking, and enhanced pavement markings (such as chevron signs) should be considered. According to AASHTO's "A Policy on Geometric Design of Highways and Streets," for a posted speed of 35 mph, the required stopping sight distance is 250 feet, while the recommended sight distance to make right and left turns at an intersection is 335 and 390 feet, respectively. Notably, these distances increase when commercial traffic such as logging trucks are considered or where vertical grades are encountered (AASHTO, 2018).

Advisory speed limits may also be deployed to improve reaction times and reduce the required sight distance in locations where changes to the surrounding environment are not feasible, such as segments

where on-street parking occurs or where driveway density may be a factor. Care should be taken to ensure any improvements to sight distance do not promote excessive speeds.

Pedestrian Enhancements on the Safe Route to School
The designated safe route to school passage though the City crosses "I," H, and G Streets, and follows 2nd Avenue through the intersection of F and Broad Streets, before heading north to B Street. Several complaints were noted along G Street near this route and discussions with City staff during the site walk also indicated similar concerns exist on H and "I" Streets, for which road width and a lack of pavement markings are likely contributing to excessive speeds. For H Street, traffic volumes similar to G Street are also encountered due to their serving as a nexus between Blue Lake Boulevard and 1st Avenue.

To address pedestrian concerns, a selected challenge area, it is recommended that countermeasures proposed for G Street could be implemented on H and "I" Streets to achieve similar results. In addition to the enhancement of pavement markings and additional signage, it is recommended that a raised crosswalk at the intersections of 2nd Avenue and H Street be considered.

Fire Hydrants
Five incidents were reported by the Department of Public Works involving fire hydrants being damaged, many of which lack adequate protection from vehicles. It is recommended that an audit of the fire hydrants be undertaken to identify hydrants with inadequate protection and install protective piers or curb protection where applicable.

Commercial Traffic Conflicts Along Railroad Avenue
The segment of Railroad Avenue falling between Hatchery Road and Blue Lake Boulevard serves as a secondary truck route through the City. Due to the selection of commercial traffic as a challenge area, discussions were held with City staff, which indicated that conflicts between commercial traffic and other roadway users are frequently encountered. Although there is limited potential for improvements to intersections along this segment, steps to improve sight distance and awareness are possible, including vegetation removal in the vicinity of Silva Lane and Railroad Avenue, as well as the horizontal bend near Acacia Drive. Low-cost intersection enhancements to pavement markings and signage may also help raise awareness near intersections (see Figure 20).

Non-Engineering Strategies
Non-engineering strategies that include education, enforcement, and emergency response aim to address road safety issues through prevention, deterrence, efficiency, and best practices. Engineering strategies address hazardous road characteristics and conditions, whereas non-engineering strategies focus on behavior, health, documentation, and in general the human component of road safety.

Education
The new vision zero approach acknowledges that human failure cannot be eliminated, and the system must be looked at rather than the individual alone. Education strategies follow this same thought process. Road users, trucks, passenger automobiles, cyclists, and pedestrians all require education for the circulation network within the City of Blue Lake to function safely. Additionally, it is not just roadway users that require education, but also the agencies that serve them. Table 8 displays a series of programs that can be facilitated by the City of Blue Lake, even though in many cases they will not be the lead agency. Traffic safety and strategies to improve it, will require support, collaboration, and

leadership for multiple agencies. These programs are designed to cover a broad scope of issues identified though the LRSP creation process and when implemented in conjunction with one another will improve community engagement, roadway safety, interagency collaboration, and documentation procedures.

Through the LRSP process, a data gap pertaining to law enforcement records was identified. No reports of incidents within the City limits were located through the SWITRS database and the only incidents identified through the TIMS were those listed along Blue Lake Boulevard, where shared jurisdiction with the County of Humboldt exists. It is, therefore, recommended that the City collaborate with Humboldt County Sheriff's office, with which the City contracts for law enforcement services, as well as CHP, to identify solutions that ensure incidents are reported to a database the City can use.

Table 8. Educational Countermeasures Listed by Agency
City of Blue Lake LRSP, Blue Lake, CA

Lead Agency	Program
City of Blue Lake	Program 1.1: Create Annual Progress Report (APR), present as an informational item at a city council meeting, and post for public accessibility annually. It is recommended that this APR include at least the following information: • An annual review of new accidents and near misses reported within the City, and an assessment of data reporting • Evaluate the success of the current local road safety plan (LRSP; are the current vision, mission, goals on track, what programs have been implemented, etc.) • Identify and highlight new or changed road safety issues • Describe current or recently completed strategies aimed at improving road safety (5E's)
	Program 1.2: Host annual meetings with Humboldt County, Humboldt County Sheriff's Office (HCSO), California Highway Patrol (CHP), Caltrans, Blue Lake Rancheria, and Blue Lake Fire to discuss results displayed in the APR and efforts to improve coordination between entities.
	Program 1.3: Regularly announce to the public the importance of inputting near misses, accidents, or road safety hazards they experience into the Street Story platform. These announcements should occur at least twice a year, and at City Council meetings directly after a significant accident occurs in the City.
	Program 1.4: Host annual meetings with the Blue Lake Union Elementary School District to discuss road safety concerns experienced by students.
County of Humboldt	Program 1.5: When hosting road safety events, include targeted outreach to members of the county whose roads are within county jurisdiction, but due to their address or near proximity to a city, may confuse jurisdictional oversight. Additionally, the City of Blue Lake should continue to inform the public of its city limits and refer inquirers to the correct county contact.
	Program 1.6: Coordinate with the City of Blue Lake to host joint road safety public information sessions, community walks, or events.
	Program 1.7: Coordinate with the City of Blue Lake on efforts to improve record keeping procedures of the City, CHP, and HCSO.

Table 8. Educational Countermeasures Listed by Agency
City of Blue Lake LRSP, Blue Lake, CA

Lead Agency	Program
Humboldt County Sheriff's Office	Program 1.8: Collaborate with the City of Blue Lake to host any public road safety events (community walk, speeding awareness, etc.)
Caltrans	Program 1.9: Assist the City in efforts to host public awareness campaigns regarding road safety (driver education, pedestrian education campaign, safe routes to school).
	Program 1.10: Support city efforts to increase awareness about Street Story, provide educational material to the City where available, and coordinate with the City to host a meeting introducing the public to the resource.

Other recommendations for consideration to improve data collection are provided below:

- Improve Public Works Department records database to include exact location (global positioning system [GPS] coordinates if possible), date of the incident, estimated cost of damage, and causal factors (if possible/ witnessed).
- Explore the use of proprietary software, such as Crossroads, which would allow the City to do real-time analyses of traffic incidents. See http://www.crossroadssoftware.com/support/tcdsbrochure.pdf for more information.
- Explore the feasibility of using software such as Social Pinpoint or Street Stories to provide roadway users opportunities to report incidents and near misses as they occur. See https://www.socialpinpoint.com/ and https://safetrec.berkeley.edu/tools/street-story-platform-community-engagement for more information.

Street Story

University of California Berkeley's Safe Transportation Research and Education Center (Berkeley SafeTrec) created a community engagement tool, Street Story. This tool allows residents of the State of California to upload an "incident report" that can detail either an actual event (accident, or near miss), or general information (safe location to travel or hazardous section). Street Story is free for users and is publicly accessible.

Since its creation, more and more localities have been referring their residents to this resource as a method of public engagement. Humboldt County is included in this demographic. Unlike the survey that SHN created to engage the public during the LRSP process, Street Story is available year-round. This means that residents of Blue Lake are able to use their computer or phone directly after an incident to make a report. Use of resources like Street Story allow for fewer reportable accidents, near-misses, or hazards to slip through the cracks of the data collection process. LRSPs are updated every five years. Public engagement regarding the reporting of roadway hazards, near misses, and unreported accidents needs to occur more frequently than just before an update to an LRSP is proposed to occur. Having a resource that consistently allows for input serves to alleviate the chance for an incident to be forgot due to a long time period between occurrence and solicitation for reporting.

Street Story does have flaws. There is not a well-defined prompt that guides users to input information that may be necessary in the process of determining solutions or applicable countermeasures, or

descriptions required for certain funding platforms. However, any report and description provides agencies using the source with valuable insight into public opinion and experiences. Appendix 7 contains a Street Story guide for communities that wish to use and promote the application.

Enforcement

The City of Blue Lake contracts with the Humboldt County Sheriff's Office (HCSO) for law enforcement services. Enforcement is the process of upholding the laws and regulations present within the City. The City of Blue Lake and community members play a significant role in assisting HCSO to established targeted beneficial patrols. Table 9 describes programs designed to improve enforcement efforts in the City and reduce unsafe transportation behavior. Excessive speeds were a frequent complaint by users of Blue Lake Boulevard. Additionally, DUI was a component of two incidents along Blue Lake Boulevard, including the one fatality recorded within the timeframe of data analysis. Additional concerns may exist along Hatchery Road, where multiple incidents of damage to public infrastructure were reported. Importantly, due to concerns pertaining to racial equity, the City and its partners should ensure these concerns are sought out and addressed prior to the implementation of law enforcement countermeasures.

Table 9. Enforcement Countermeasures Listed by Agency
City of Blue Lake LRSP, Blue Lake, CA

Lead Agency	Program
City of Blue Lake	Program 2.1: Coordinate with the HCSO[a] to set up targeted speed, distraction, and DUI[b] enforcement.
	Program 2.2: Communicate road safety concerns from the public to HSCO, so they can be addressed with targeted enforcement
Humboldt County Sheriff's Office	Program 2.3: Work with the City to establish targeted patrols designed to reduce unsafe driving behaviors.
	Program 2.4: Collaborate with the Blue Lake Union Elementary School District to establish targeted patrols designed to increase road safety in school zones (such as patrols on opening day, returning from break, etc.)
	Program 2.5: Work with the City and Blue Lake Rancheria Tribe (Tribal Police) to establish DUI checkpoints or routine stops.

[a] HCSO: Humboldt County Sheriff's Office
[b] DUI: driving under the influence

Emergency Response

Where the previous three strategies have been designed to prevent or reduce the severity of accidents, emergency response largely focuses on what happens after one occurs. Emergency response in rural communities like Blue Lake can present challenges, given that necessary emergency personnel may be located further away from incidents than in urban areas. One of the most common challenges facing emergency service personnel nationwide, is access to the scene of an accident. Additionally, the LRSP team identified incident reporting and documentation as one of the main hurdles currently facing the City.

Table 10 lists programs aimed at continuing to maintain and improve access for emergency services within the City and improve communication between departments. While improvements to emergency accessibility are an important component to overall safety efforts, where roadway users safety and emergency access are in conflict, safety should be prioritized.

Table 10. Emergency Response Countermeasures Listed by Agency, City of Blue Lake LRSP, Blue Lake, CA

Lead Agency	Program
City of Blue Lake	Program 3.1: Host annual meeting with first responders to discuss road accidents in the City, access issues, and other relevant topics.
	Program 3.2: Maintain and improve roadway access for emergency responders.
Humboldt County Sheriff's Office	Program 3.3: Communicate road safety issues, trends, access issues, etc. to the City for their documentation.
	Program 3.4: Coordinate with the City to outline how the department keeps records (what triggers a traffic incident report, where are they kept, where are they supposed to be made accessible, will the City need to pay for access, etc.) .
Blue Lake Volunteer Fire Department	Program 3.6: Communicate road safety issues, trends, access issues, etc. to the City for their documentation.

Implementation

The following sections provide guidelines for evaluating successes and steps for moving forward. A summary of relevant funding source information follows, which includes typical dates for action as well as the general scope of each source.

Evaluation of Success

Evaluating the success of this plan is critical to understanding what adaptations may be necessary in future iterations of the plan. One of the simple ways of evaluating progress for a plan like this, is an annual progress report (APR). This is a process currently required for a City's General Plan and Housing Element. An adaption of this processes for an LRSP could include:

- A yearly collision analysis
- Evaluation of goals
- Tracking of funding applications: those awarded/ their implementation timeline, and unsuccessful applications submitted
- Solicitation of public feedback
- Notes, concerns, etc. that should be included in any future updates to the plan

The LRSP team also identified communication improvement, and a disconnect between entities as being key challenges to the City of Blue Lake. The City of Blue Lake, Humboldt County, Humboldt County Sheriff's Office, California Highway Patrol, Caltrans, Blue Lake Rancheria, and Blue Lake Fire should host at least one meeting annually to discuss this topic. This meeting could take place after the

City completes the LRSP APR, so the findings can be discussed amongst the parties. If this is not possible due to scheduling conflicts, the City can coordinate with individual parties based on need for improved communication.

Moving Forward (Next Steps)

The LRSP document requires consistent revision to remain a valid tool for the community. As of this document's creation, there is no established timeframe requirement for updating the document; however, it is to the benefit of the City if the document is updated at least every five years. Updates should coincide with relevant grant funding cycles for inclusion into their funding pool or overlap with their required application. Treating the LRSP as a living document to be updated regularly allows the City to:

- Evaluate the success of its past approaches to improving road safety; determine if the previous vision, mission, goals achieved; and identify changes that need to be made.
- Identify new or changed road safety issues.
- Account for changes in development (population, road characteristics, commerce, etc.).
- Target funding applications toward roadway improvements/countermeasures that will make the biggest impact for their unique issue.
- Ensure and evaluate documentation for traffic incident reports.
- Identify and improve public access to channels for reporting incidents, near misses, and areas of general concern.

The Highway Safety Improvement Program (HSIP), a federal funding source passed on to states for their distribution to local communities, is perhaps the most significant grant funding pool for road safety improvements (FHWA, 2021). To date (May 2022), in order to qualify for HSIP funds, cities are required to have an adopted LRSP, Systemic Safety Analysis Report Program (SSARP), or Vision Zero Plan. The requirements for LRSPs in this cycle of funding are minimal due to the recent adoption of this requirement. Consistent updating of the LRSP allows a jurisdiction to remain in compliance with any new regulatory requirements that may occur during the life of a plan (Caltrans, 2021).

Funding Opportunities

Local Highway Safety Improvement Program

The Fixing America's Surface Transportation (FAST) Act was signed into law on December 4, 2015, and continued the Highway Safety Improvement Program (HSIP) with only minor changes. The FAST Act confirmed the overall purpose of this program is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads through the implementation of infrastructure-related highway safety improvements.

California's share of HSIP funds is split between the State HSIP for state highways and the Local HSIP for local roads. As of the most recent cycle, in order to apply for the HSIP funds, an agency must have completed its LRSP or an equivalent of the LRSP. Other equivalents of the LRSP may be reviewed and determined on a case-by-case basis. The LRSP or its equivalent must be updated and validated at least every five years. When an agency submits an HSIP funding application, the agency must self-certify that an LRSP or its equivalent has been completed.

Two formats are available to source HSIP funding:

- The Benefit Cost Relationship (BCR) application
- The Set Aside application

The BCR application requires a quantitative assessment of the justification for a project and must be based on a complete record of each incident filed by law enforcement agencies exclusively (AASHTO, 2021). In future updates of the LRSP, it is important that efforts to improve data collection for incidents within the City's jurisdiction are continued to permit the City to seek funding through the method in the future.

Active Transportation Program

The active transportation program (ATP) consolidates existing federal and state transportation programs, including the Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and State Safer Routes to School (SRTS), into a single program. ATP Cycle 6 is predicted to include 650 million dollars, made up of federal, state SB1, and State Highway Account (SHA) funding (Caltrans, 2022 and CTC, 2022).

ATP's call for projects began on March 16, 2022, and the project applications deadline is June 15, 2022. ATP is a well-known, extremely competitive funding program, and as a result, is extremely oversubscribed. Some cities with limited resources and time choose not to pursue this finding source as its application process is arduous with a low percentage of success. As a result of this fact, the California Transportation Commission has created a list of additional programs that fund active transportation projects and elements, which is provided in Appendix 8.

California Office of Traffic Safety Grants

Public entities are eligible to submit applications for funding with California Office of Traffic Safety (OTS). Applications usually close on the 31st of January every year and are for priority program areas. OTS grants focus on emergency services, enforcement, and education funding rather than infrastructure (OTS, 2022). The ten priority areas of concentration for grant funding are as follows:

- alcohol-impaired driving,
- distracted driving,
- drug-impaired driving,
- occupant protection,
- pedestrian and bicycle safety,
- traffic records and roadway safety,
- emergency medical services,
- police traffic services,
- motorcycle safety, and
- public awareness and education.

Infrastructure Investment and Jobs Act

The Infrastructure Investment and Jobs Act (IIJA), also referred to as the Bipartisan Infrastructure Law (BIL), was signed into law on November 15, 2021, by President Biden. This bill provides 550 billion dollars over fiscal years 2022 through 2026 in new federal investment in infrastructure including (but not

limited to) roads, bridges and mass transit. The U.S. Department of Transportation Federal Highway Administration currently has a dedicated webpage for the IIJA that posts funding opportunities when they are released.

As of the time of this LRSP's creation, the only relevant funding program announced on the IIJA website is "Safe Streets and Roads For All" (SS4A). FHWA released a fact sheet on this program that details the program will provide 5-6 billion dollars in grants over the next five years. This funding source is specifically dedicated to supporting the goal of zero deaths and serious injuries on national roadways. The fact sheet provides a general description of what kind of activities will be eligible for funding including but not limited to:

- Development of a Comprehensive Safety Action Plan
- Conducting planning design and development activities in support of an action plan
- Carrying out projects and strategies identified in an action plan; examples include:
    - Implementing improvements
    - Applying low-cost safety treatments (FHWA, 2020)
    - Conducting speed management projects
    - Installing safety enhancements
    - Addressing alcohol-impaired driving
    - Making street design changes
    - Creating safe routes to school and public transit services

A Notice of Funding Opportunity (NOFO) is anticipated to be released in the spring of 2022 (likely May), with award announcements coming at the end of 2022 or early 2023. FWHA published its SS4A webpage in May 2022, where additional information including webinars and resources are posted.

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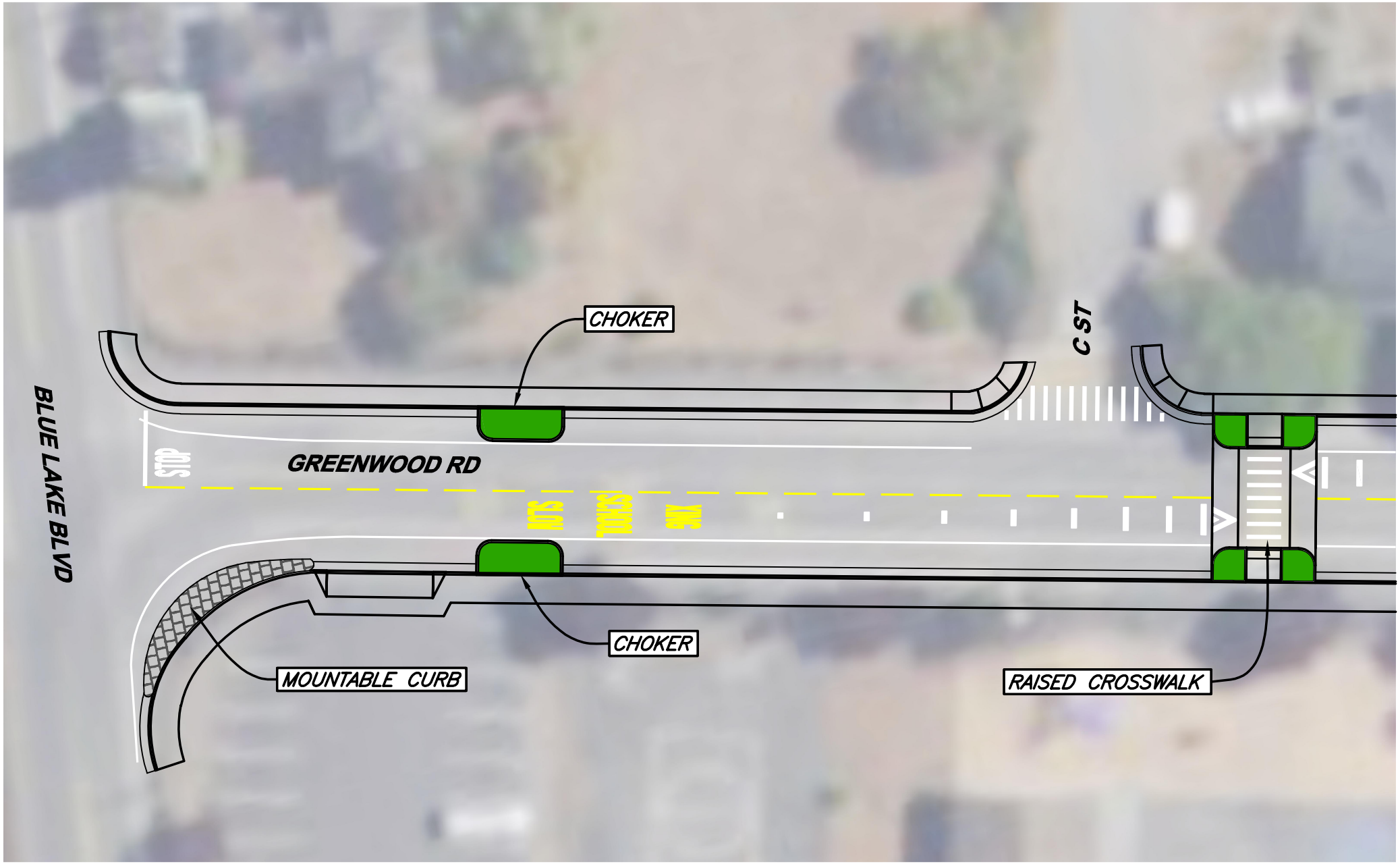
1 Previous Improvements and Studies



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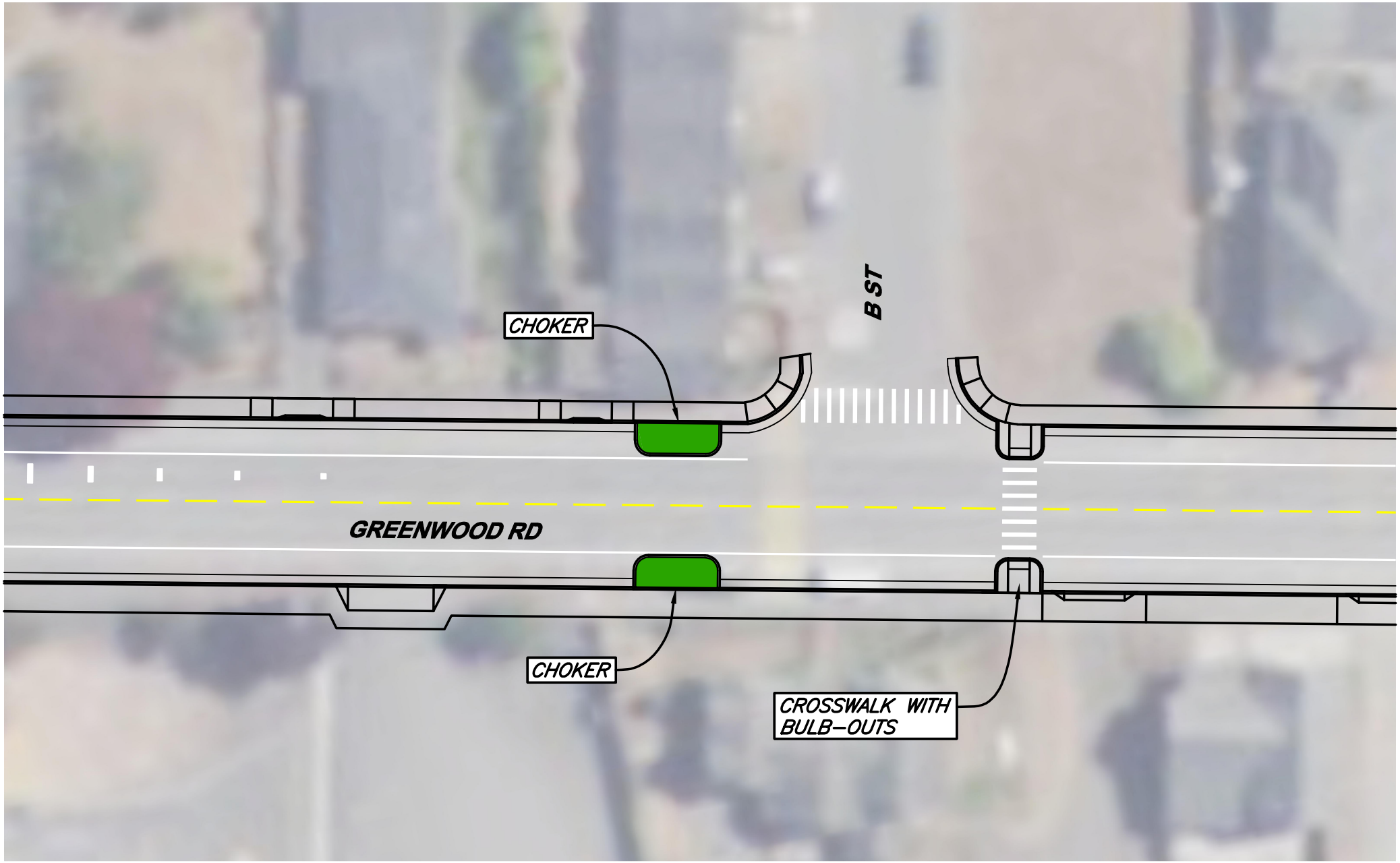

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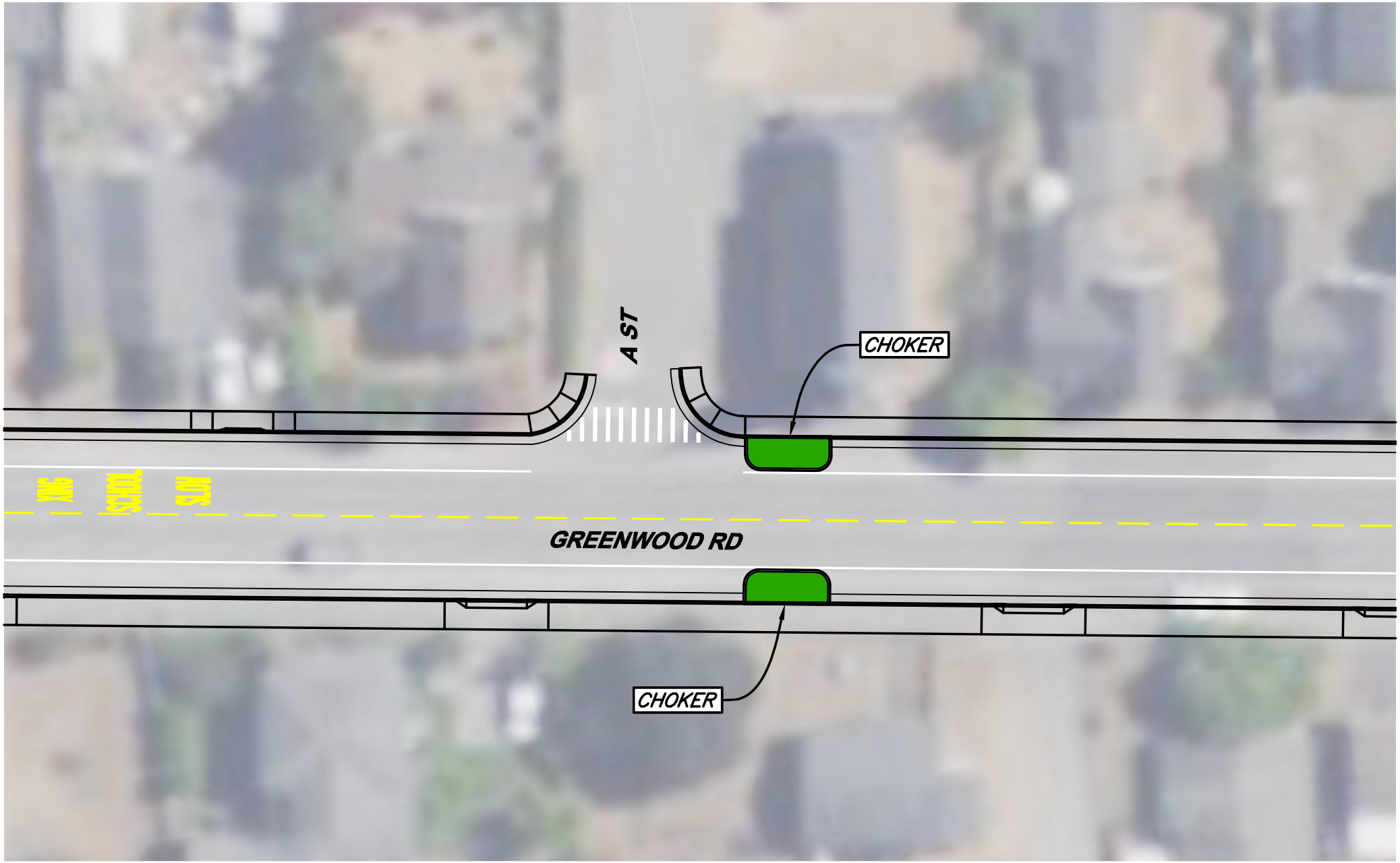

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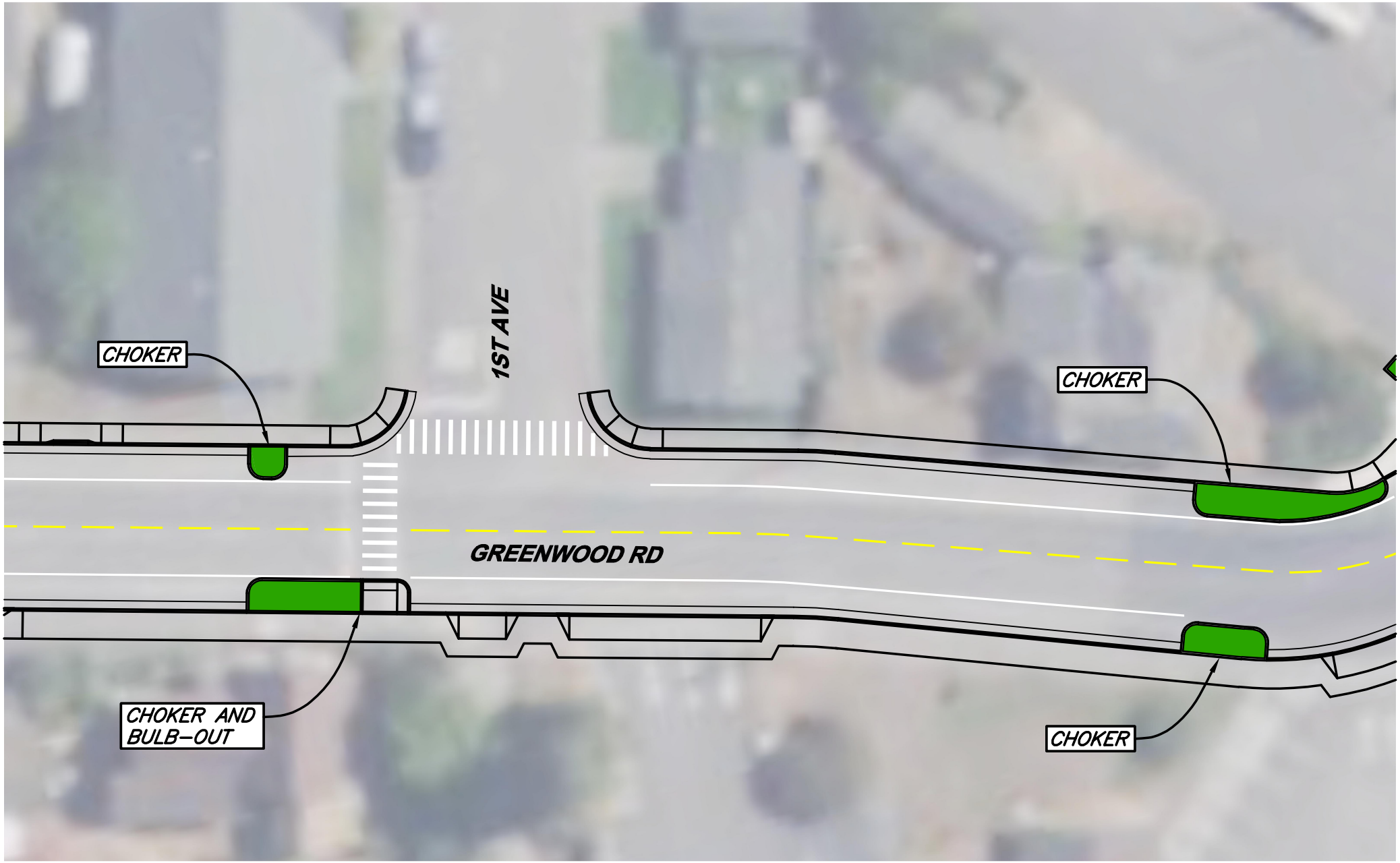

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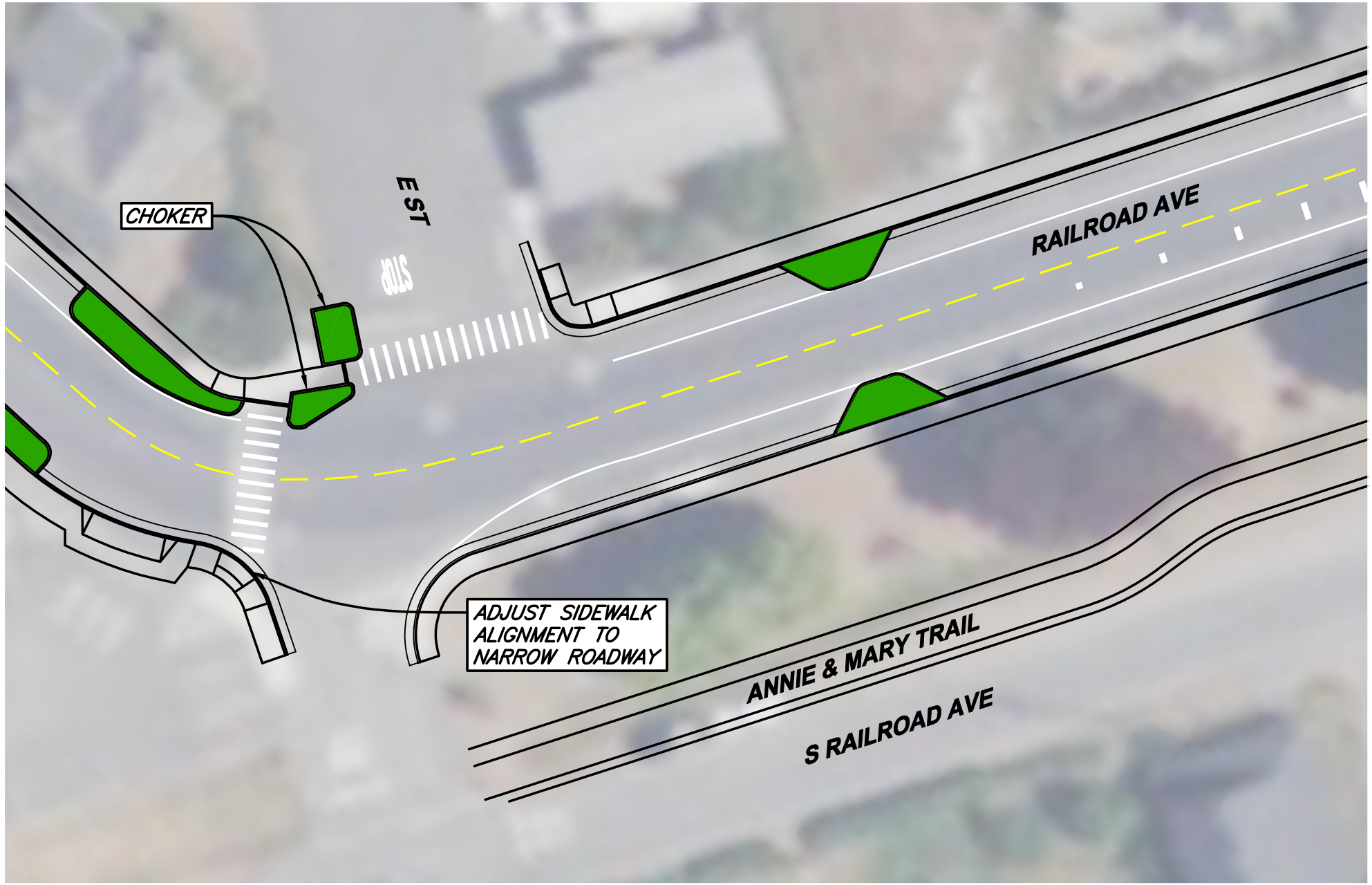

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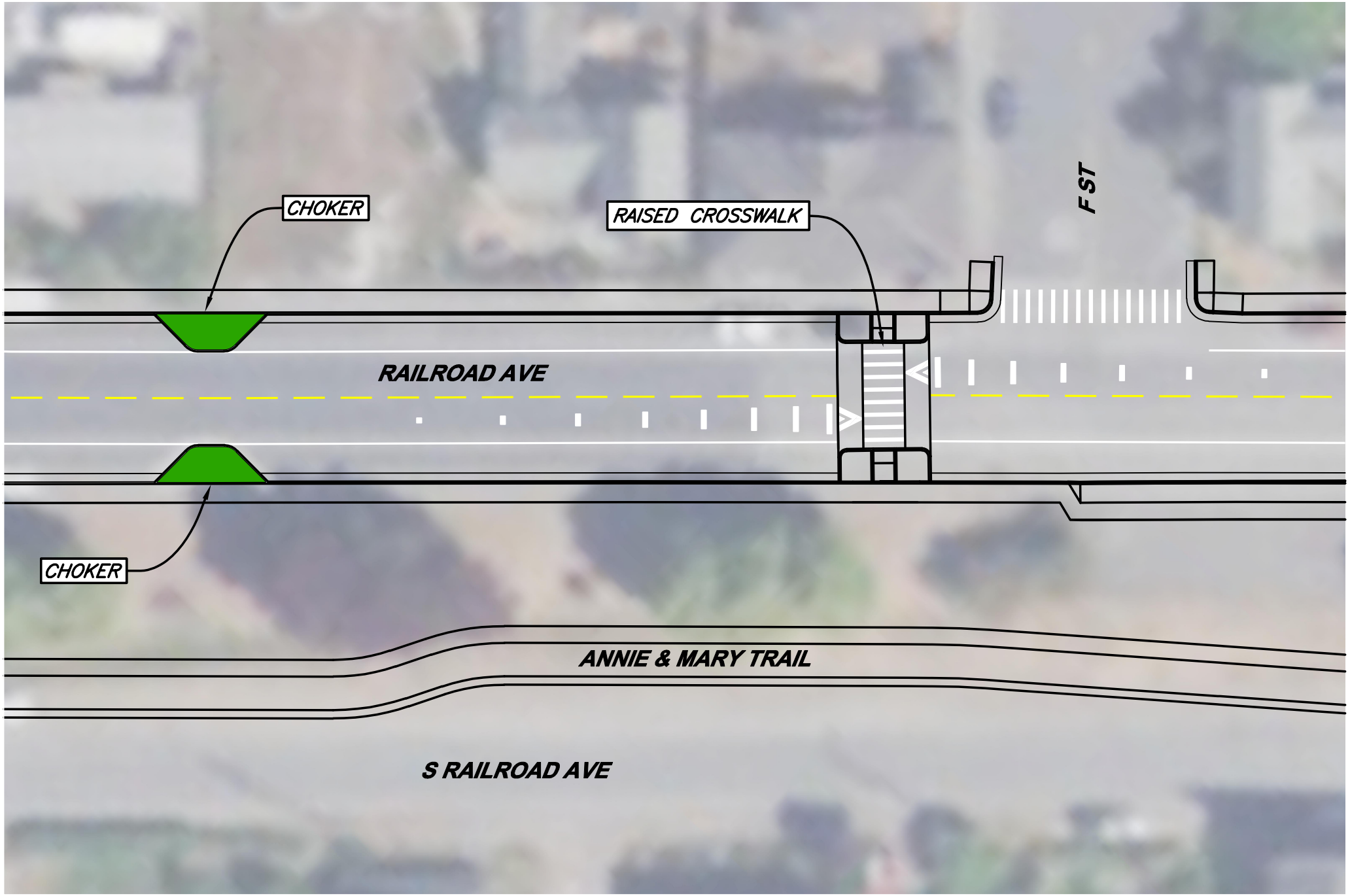

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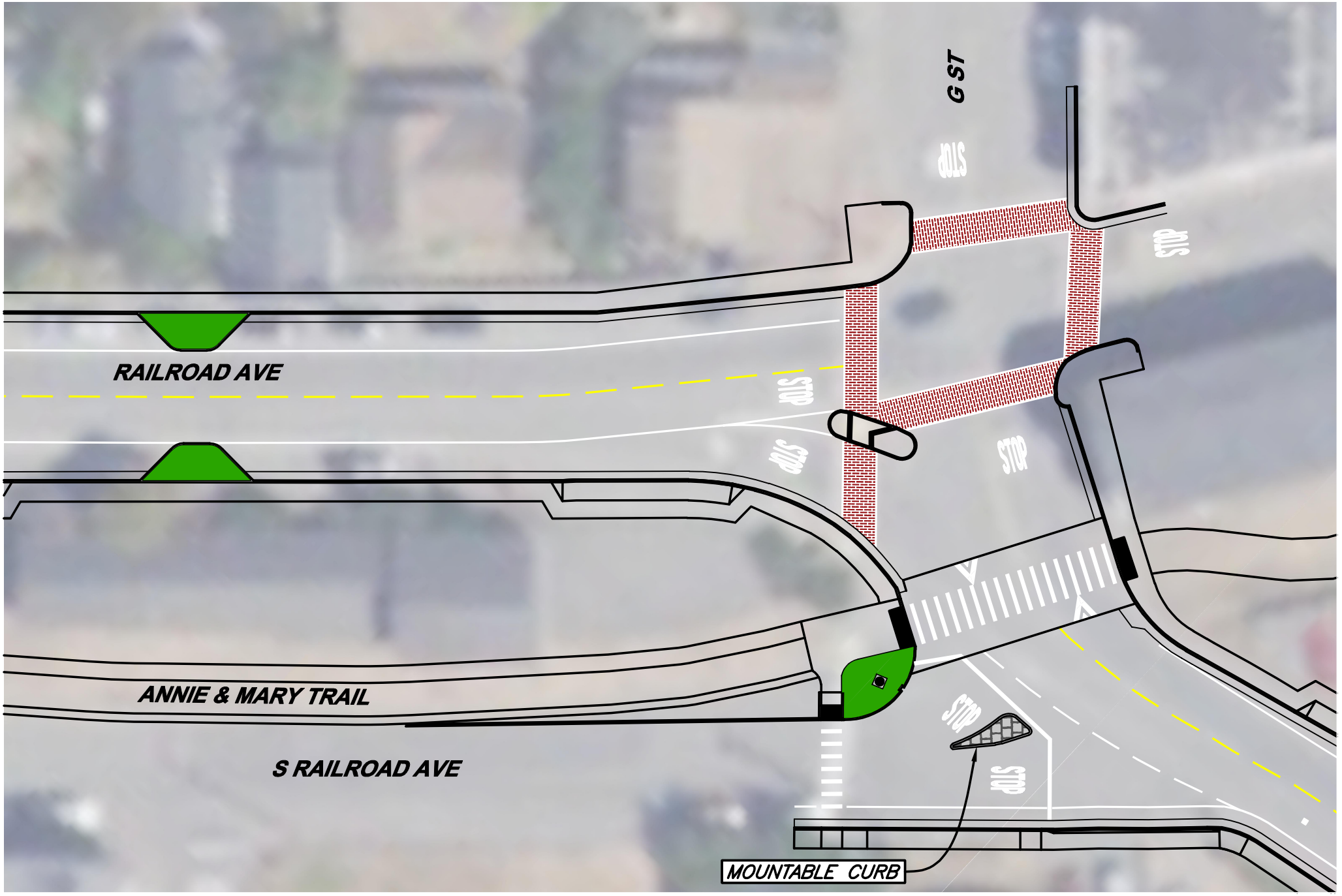

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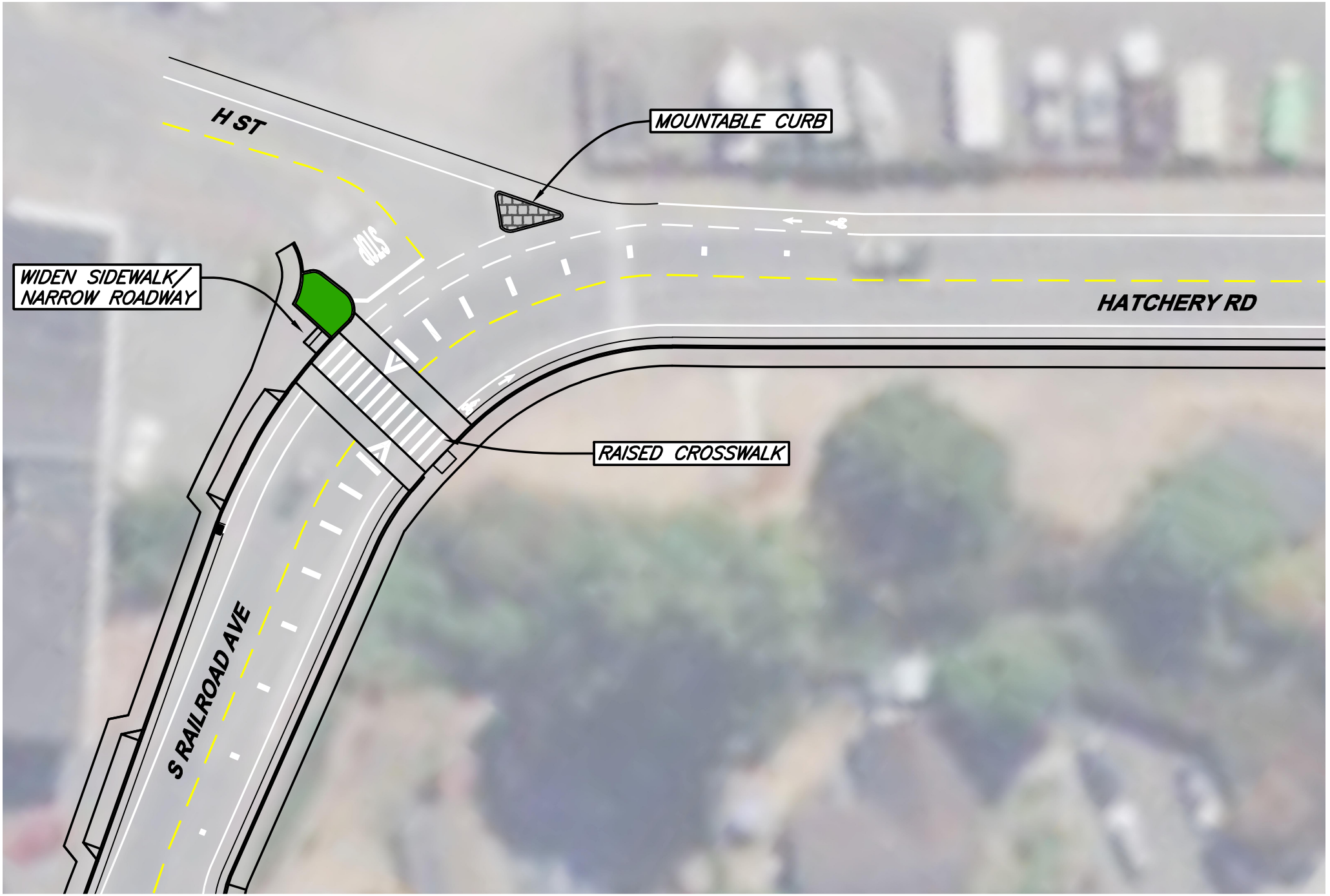

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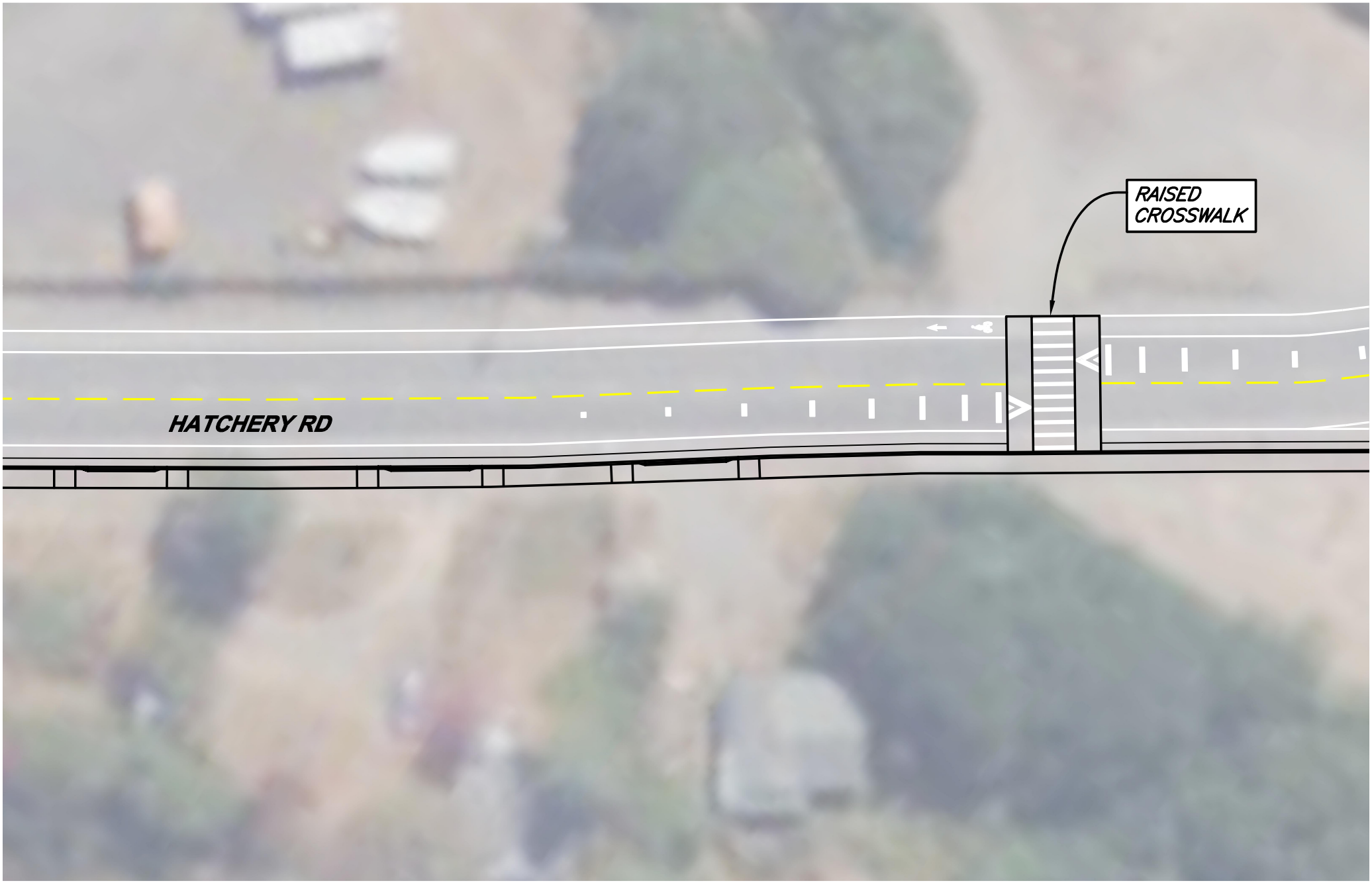

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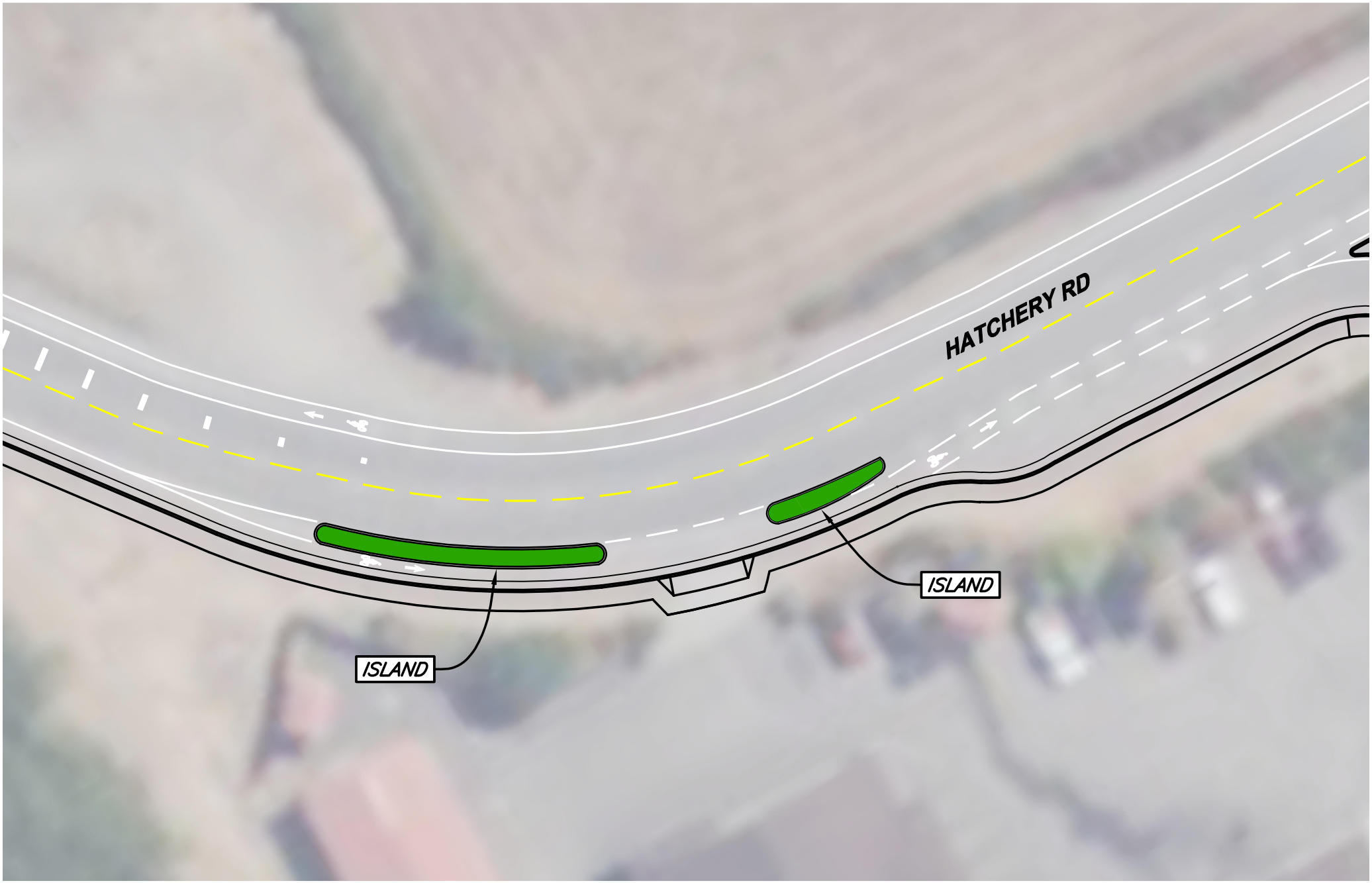

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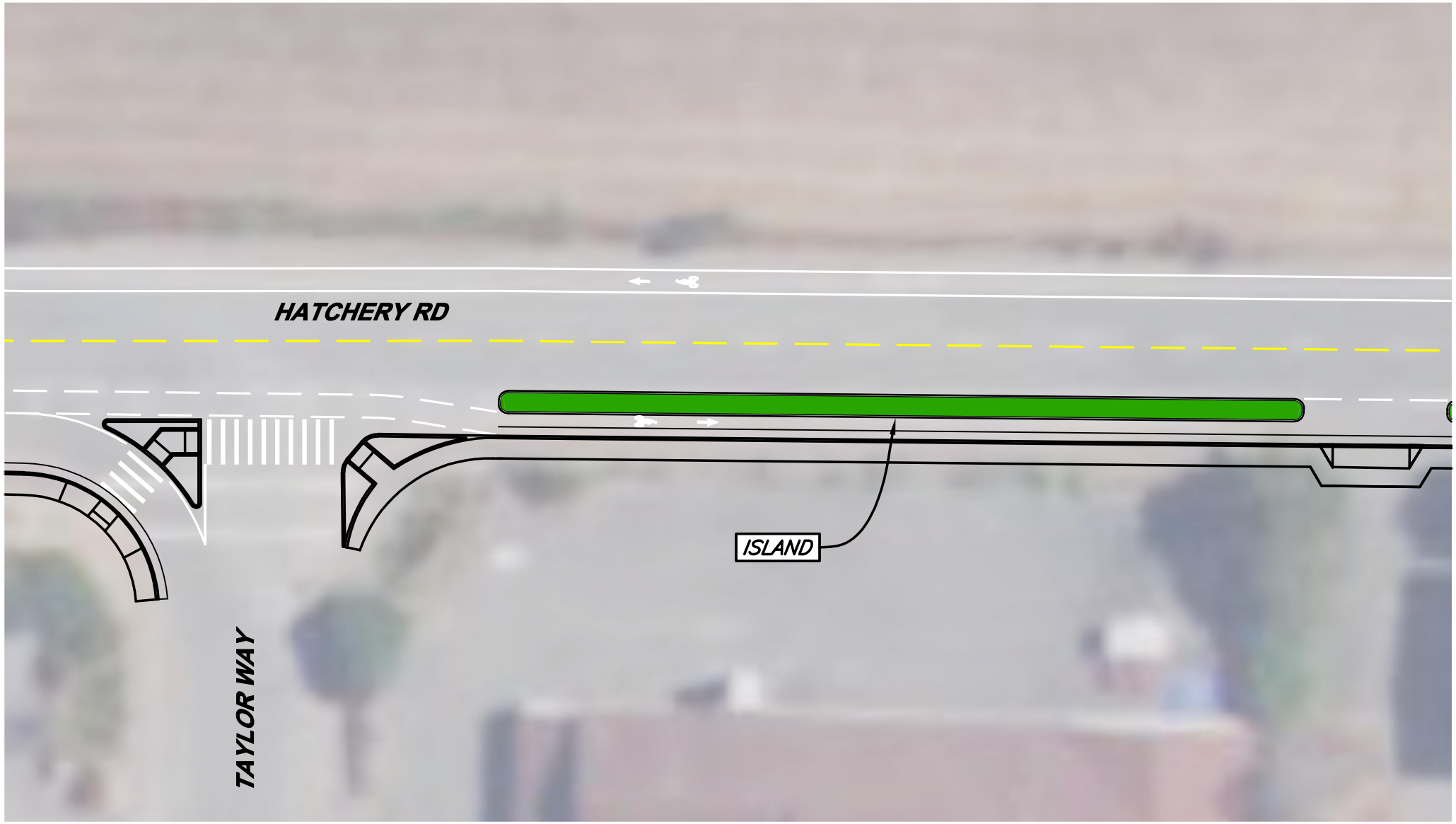

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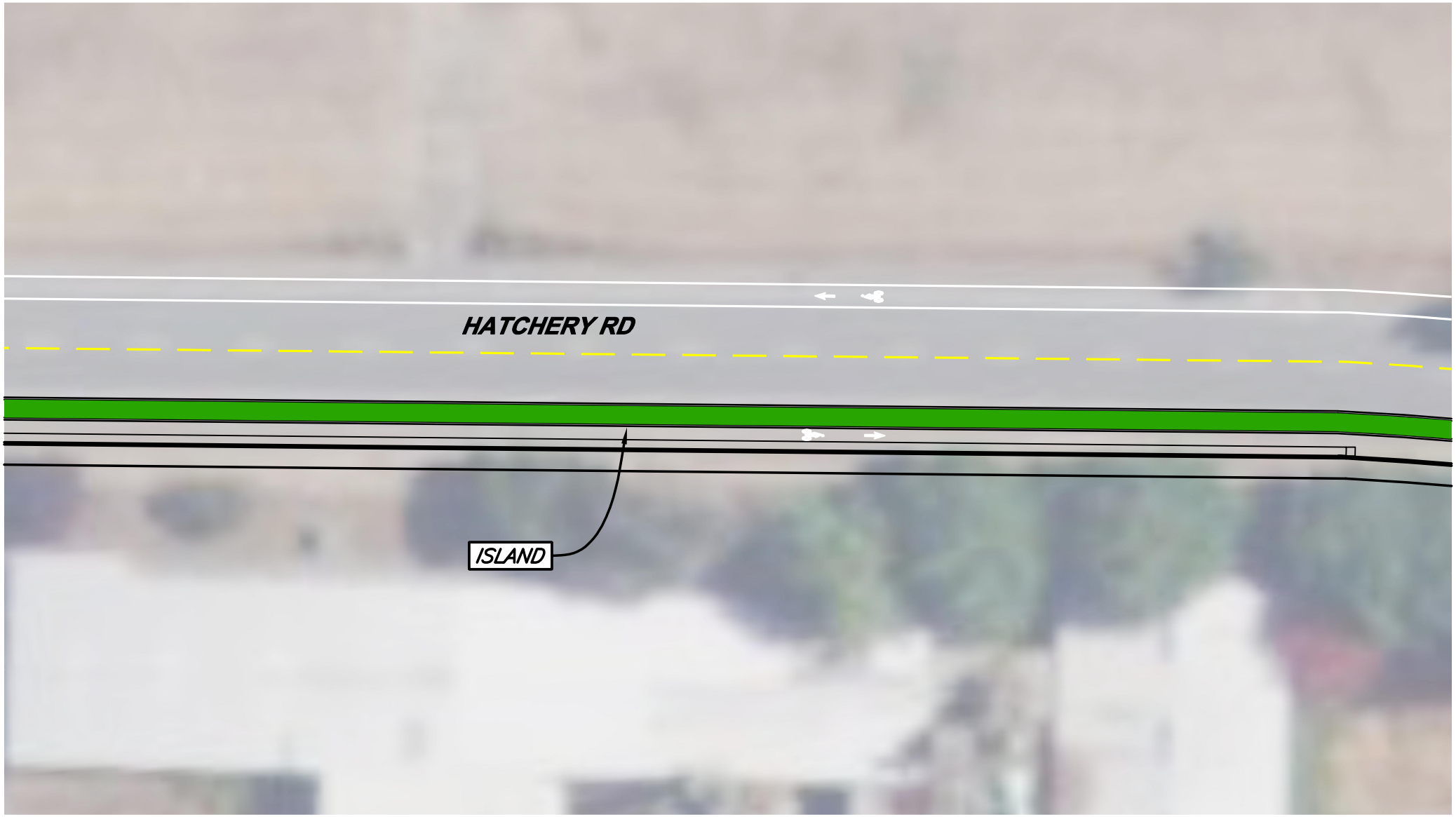

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Hatchery Road Walkability Assessment

February 2018

Hatchery Road & Blue Lake residents with Redwood Community Action Agency, County of Humboldt and City of Blue Lake

Project Background: After several years of reporting safety concerns along Hatchery Road and persistence in following up with County Public Works and the District 3 supervisor, Hatchery Road residents helped cultivate momentum for serious consideration of potential safety improvements for walking and biking along this stretch of roadway. In October 2017, the County District 3 supervisor invited Redwood Community Action Agency (RCAA) to a discussion around safety issues along Hatchery Road as RCAA has supported other local communities with roadway safety assessments. The County prepared a small contract for RCAA to conduct a community walk, observation and workshop, produce a walkability assessment report, and assist with community coordination with the County. The goals of this Hatchery Road Safety Project were to: 1) provide ways for residents and businesses to share concerns and ideas for improving safety for walking and biking along Hatchery Road, 2) produce a walkability assessment report detailing key recommendations, and 3) develop improvement recommendations with County Public Works and support potential next steps.

Existing Conditions:

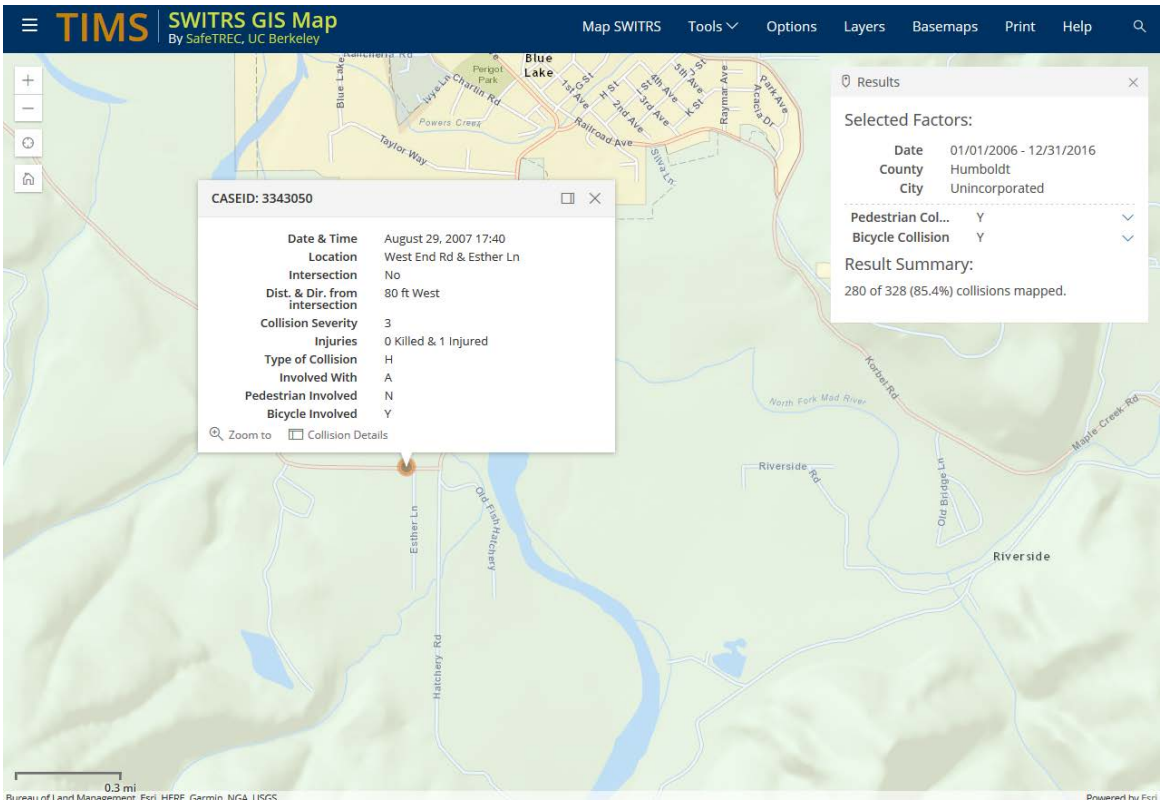
The Hatchery Road area, south of and across the Mad River from the City of Blue Lake, is semi-rural with active agriculture, river access, and residential parcels. Hatchery Road is under County jurisdiction from the bridge over the river and southward, while the roadway is inside Blue Lake city limits from the river levee to Railroad Avenue. While Hatchery Road and West End Road residents are in the unincorporated County, there exists a close affiliation with the City of Blue Lake and its recreation facilities, school, library, businesses, and other key destinations. Likewise, Blue Lake residents often traverse Hatchery Road to access the river, visit the nearby fish hatchery or take long walks/runs.

The portion of the roadway in the unincorporated County has very limited shoulders, while the portion of the roadway within Blue Lake city limits has a connected asphalt path and bike lanes. Sections of Hatchery Road south of the bridge have revetment between the roadway and the river, and often flood for several days during the winter as the roadway is located in the former Mad River floodplain. This frequent flooding has contributed to deterioration of the roadway, potholes, and a bit of sunken grade just north of West End Road.

The Mad River is a big economic driver for the Blue Lake area. People come to fish, swim, view fish, and park along Hatchery Road to access the river. The closest location to access the Mad River from Blue Lake is an informal access point across private property on the south end of the bridge. A gravel extraction operation is also located along Hatchery Road which generates significant truck traffic on weekday mornings. Occasional oversize trucks also traverse West End Road to Hatchery Road as some oversize trucks cannot fit under the Highway 299 overcrossing at the Blue Lake exit.

There is frequent pedestrian and bicycle travel on Hatchery Road as it serves as a walking destination for many Blue Lake residents, a new mountain biking trail system is being built by Redwood Coast Mountain Bike Association on Green Diamond Resource Company property near the fish hatchery, and Hatchery Road to West End Road is an oft-used alternative route to Highway 299 for bicycling to Arcata. There are no transit services along Hatchery Road.

In the past ten years, there was one reported bicyclist-involved collision in the project area, an injury collision on West End Road near the intersection with Hatchery Road. However, residents have reported numerous near misses with motor vehicles and commercial trucks.

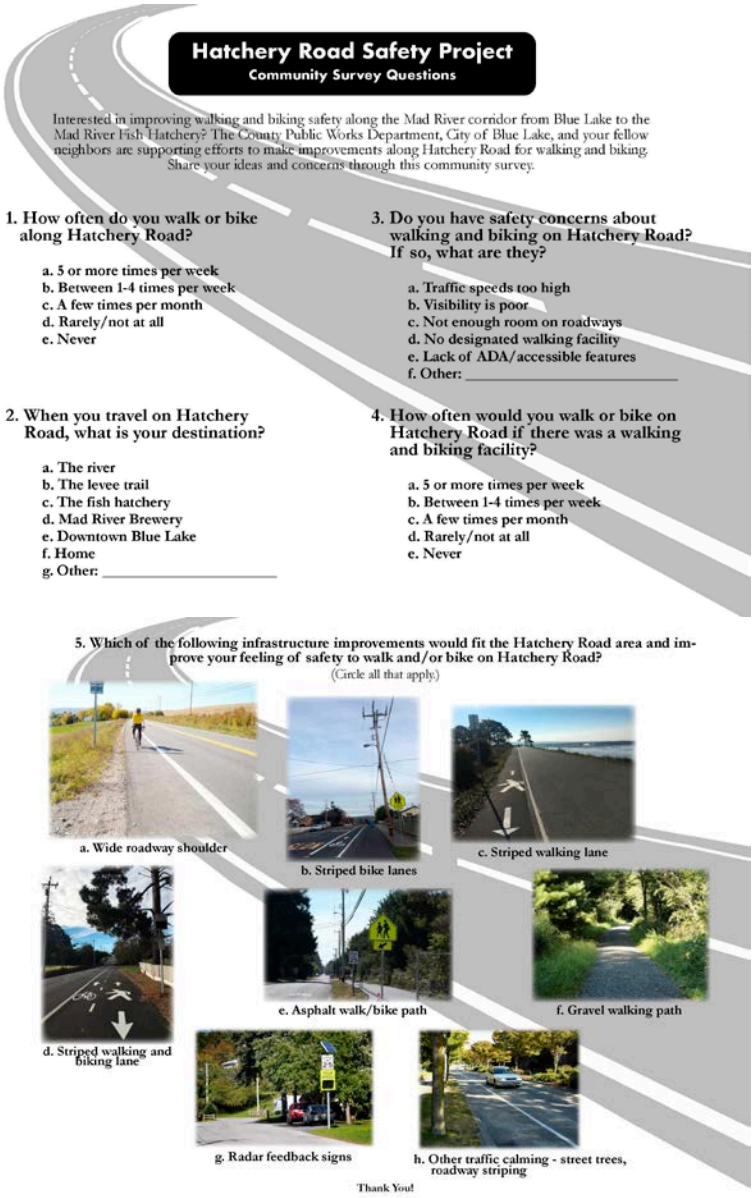


Location of the one reported bicycle or pedestrian collision in the project area (just west of the Hatchery Road/West End intersection) as mapped through the Transportation Injury Mapping System through UC Berkeley.

Community Outreach:

Erica Grey, the Hatchery Road community member who initiated this project, and RCAA staff worked together to plan outreach and community input opportunities for the Hatchery Road Safety Project. A planning team was brought together with Blue Lake city staff, an Old Crows representative, and a Blue Lake planning commissioner to assist with outreach ideas and planning for the community walk & observation.

The group developed a community survey to understand residents' current travel patterns, safety concerns, and preference for infrastructure improvements that would fit the context of their neighborhood. The survey was distributed through community partners, available during tabling and outreach for the Community Walk & Observation and placed online and shared through social media.



Hatchery Road Safety Project
Community Survey Questions

Interested in improving walking and biking safety along the Mad River corridor from Blue Lake to the Mad River Fish Hatchery? The County Public Works Department, City of Blue Lake, and your fellow neighbors are supporting efforts to make improvements along Hatchery Road for walking and biking. Share your ideas and concerns through this community survey.

1. How often do you walk or bike along Hatchery Road?
   a. 5 or more times per week
   b. Between 1-4 times per week
   c. A few times per month
   d. Rarely/not at all
   e. Never

2. When you travel on Hatchery Road, what is your destination?
   a. The river
   b. The levee trail
   c. The fish hatchery
   d. Mad River Brewery
   e. Downtown Blue Lake
   f. Home
   g. Other: _____

3. Do you have safety concerns about walking and biking on Hatchery Road? If so, what are they?
   a. Traffic speeds too high
   b. Visibility is poor
   c. Not enough room on roadways
   d. No designated walking facility
   e. Lack of ADA/accessible features
   f. Other: _____

4. How often would you walk or bike on Hatchery Road if there was a walking and biking facility?
   a. 5 or more times per week
   b. Between 1-4 times per week
   c. A few times per month
   d. Rarely/not at all
   e. Never

5. Which of the following infrastructure improvements would fit the Hatchery Road area and improve your feeling of safety to walk and/or bike on Hatchery Road?
(Circle all that apply.)

a. Wide roadway shoulder
b. Striped bike lanes
c. Striped walking lane
d. Striped walking and biking lane
e. Asphalt walk/bike path
f. Gravel walking path
g. Radar feedback signs
h. Other traffic calming - street trees, roadway striping

Thank You!

Erica led direct outreach to key groups and events within Blue Lake including the Saddle Club, Blue Lake City Council, Old Crows, LOLA, Redwood Coast Mountain Bike Association, the Mad River Grange breakfast and the Blue Lake Planning Commission. Initial outreach to key groups in Blue Lake helped to spread the word about the community walk & observation, input opportunities, and initial safety concerns. RCAA assisted with personal invitations to key stakeholders such Public Works staff, County Public Health, and the Humboldt County Association of Governments. Flyers, PSAs, direct invitations, and other outreach tools were used to advertise for the community workshop.

The Community Walk, Observation & Workshop was held in Blue Lake on the morning of Friday, January 26 to observe firsthand the conditions for walking and biking along Hatchery Road from downtown Blue Lake south towards West End Road, to identify ways to improve safety for all modes of travel, and share ideas for potential improvements. The walk was held on a cold, rainy day but that did not deter participation, as thirty people took part. The local business Logger Bar hosted the workshop and provided a warm, welcoming atmosphere for people to participate in the walk and subsequent workshop. Participants in the workshop noted that many Blue Lake residents knew about the project and participated in the survey. The workshop was very engaging with people voicing ideas and questions both during the walk and workshop.

Community Walk & Observation Attendees:

The Community Walk & Observation and the workshop following was attended by over 30 people. Participants in the walk and workshop included local residents, parents, a child aged 2, local bicyclists, people who routinely walk Hatchery Road every day, Third District County Supervisor Mike Wilson, County Public Works deputy directors Tony Seghetti and Bob Bronkall, RCAA staff, County DHHS Healthy Communities staff, Blue Lake City Councilmember Summer Daugherty, several Blue

Lake Planning Commissioners, City of Blue Lake contract engineer Mike Foget, and Blue Lake Parks and Recreation Director Cameron Mull, and. The workshop helped strengthen relationships between community members and local decision-makers.

Community Walk & Observation Process:

Participants first gathered at the Logger, and RCAA staff led an overview presentation about the project goals, timeline, existing conditions/concerns voiced so far, potential infrastructure solutions to fit the context of Hatchery Road, and the process for the walk and workshop. Attendees then grabbed bright yellow vests, clipboards, and rain coats in preparation for the walk and observation.

RCAA staff led the group on a walk throughout downtown Willow Creek, stopping at key locations and discussing concerns or asking questions about what residents and students experience on a daily basis. The walking route can be seen below. The pages that follow show photographs from the walk and note key observations.

Walk audit participants gathered at the Logger Bar in downtown Blue Lake for an overview of the project and then walked south observing pedestrian and bicycle needs along Hatchery Road from downtown Blue Lake to north of West End Road.

Walk audit participants voiced that the crosswalk across Hatchery Road at H Street has limited sight distance to the north, especially for speeding vehicles. There is also not enough light for pedestrians at this intersection and from H Street to Taylor Way.

The City of Blue Lake owns a gravel parking lot across Hatchery Road from the trail along Powers Creek. This lot could be formalized and developed for parking for recreational access.

The existing asphalt path along Hatchery Road within city limits, though narrow, provides a walking connection from downtown Blue Lake to the river levee trail.

While the bridge over the Mad River is wide, there are no accommodations or signage for pedestrians or bicyclists.

Hatchery Road is used extensively for parking for river access and recreation. Potential walking and biking improvements will need to also include areas for parking.

Hatchery Road has very limited existing roadway shoulders for walking or biking.

The shoulder along much of Hatchery Road, particularly just south of the bridge, is crumbling and has a drop off edge from the pavement to the gravel shoulder. County maintenance crews could back the roadway shoulder with about 18" of additional asphalt to make this edge more safe and usable for pedestrians.

Dumping is a common occurrence along Hatchery Road. K-rail barriers have helped to reduce areas where vehicles can pull in to leave trash.

Flooding frequently occurs on Hatchery Road north of West End Road where the road is close to the Mad River.

Gravel trucks traverse Hatchery Road frequently from the private operation near West End Road. Gravel trucks often speed along Hatchery Road, even after City of Blue Lake staff have spoken with the business owners. In addition the private road to the gravel operation curves into Hatchery Road at a shallow angle without a stop sign.

After the Walk & Observation, participants reconvened at the Logger to write ideas and safety concerns down on a tabletop map of the Hatchery Road area and discuss next steps for the project.

Community input on walking and biking concerns along Hatchery Road are recorded on post-it notes.

The following sections detail the recommendations stemming from the identified concerns of residents and walk audit participants.

Survey Results:

143 people completed the Hatchery Road Safety Project survey, whether online or in-person. 47% of people who completed the survey walk on Hatchery Road weekly. 73% of respondents indicated they would walk on Hatchery Road weekly if there was a dedicated walking and biking facility.

Survey respondents walk on Hatchery Road for multiple reasons. 64% of survey respondents walk on Hatchery Road to access or see the river, and 62% of respondents walk on Hatchery Road to go to the fish hatchery. Over half of survey respondents also walk on the roadway to visit Mad River Brewery or access the levee trail.

Over half of survey respondents indicated that a wider roadway shoulder, asphalt walk/bike path, or gravel walking path would improve their feeling of safety and fit with the Hatchery Road area. Over 30% of survey respondents felt striping a bike/walk facility could also improve their feeling of safety, but others voiced that striping might not fit the rural character of Hatchery Road.

Primary Concerns along Hatchery Road from the Walk and Survey:

- Not enough room on roadway for walking and biking
- No designated walking or biking facility south of the bridge
- Inadequate pedestrian and bicycle facilities within city limits
- Traffic speeds too high
- Sight distance limited in certain areas
- Illegal dumping along Hatchery Road

Recommendations and Action Items:

Following the community walk and observation, the project team then worked with RCAA staff to analyze recommendations and prioritize into short-term, mid-term and long-term categories. Recommendations focused on engineering strategies and potential infrastructure solutions, though non-infrastructure solutions through education or enforcement were also briefly discussed.

Next Steps – Short-term Infrastructure Recommendations

	Action	Who	Timeline
1.	Stripe fog lines and pedestrian lane pavement markings on bridge	County Public Works	Summer 2018
2.	Crosswalk and "Congested Area" signage at levee trail crossing north of the bridge	City of Blue Lake	Summer 2018
3.	Add ~18" backing to the roadway shoulder along Hatchery Road	County Public Works	Summer 2018
4.	Mow back berries along Hatchery Road south of West End Road	County Public Works	Early summer 2018
5.	Shoulder maintenance/sweeping along Hatchery Road from H Street to Taylor Way	City of Blue Lake	Spring 2018
6.	Temporarily place portable radar feedback speed trailer	County Public Works	Summer 2018
7.	Further study potential safety improvements along Hatchery Road within city limits with funding through HCAOG	City of Blue Lake	Fall 2018

Next Steps – Mid-term Infrastructure Recommendations

	Action	Who	Timeline
1.	Widen roadway shoulder south of the bridge to add a paved walking/biking lane along northbound (east) side	Resident RTAP application with County Public Works	2018/19
2.	Formalize parallel parking along Hatchery Road with park off pavement signs	Resident RTAP application with County Public Works	2018/19
3.	Place K-rail or other barriers to reduce areas to drive in and dump trash	Collaboration between Hatchery Road residents, businesses and County	2018/19
4.	Place "Park off pavement" signage along Hatchery Road shoulder	County	2018/19
5.	Limit parking directly adjacent to bridge with AC dike and asphalt backfill to improve sight visibility and safety	Resident RTAP application with County Public Works	2018/19
6.	Place stop sign at Kernen gravel operation driveway at Hatchery Road	County and resident discussion with Kernen	2018
7.	Stop sign at South Railroad/Railroad Avenue intersection	City of Blue Lake	2018/19
8.	Relocate crosswalk at H and Railroad for improved sight distance	City of Blue Lake	2018/19
9.	Add lighting between downtown and Taylor Way business park	City of Blue Lake with PG&E	2019
10.	Shift crosswalk and stop bar forward at Taylor Way/Hatchery Road intersection (either place a pedestrian refuge island to split the crosswalk and have two crosswalks at two slightly different angles or remove right-hand turn lane and extend AC sidewalk out)	City of Blue Lake	2019
11.	Bots dots as traffic calming on Hatchery Road along narrow section north of West End Road	County	2019
12.	Speed study to possibly reduce traffic speeds on Hatchery Road	CHP with County	2019
13.	Improve connection from Hatchery Road bike lanes to the new Annie & Mary Trail	City of Blue Lake	2019/20

Next Steps – Long-term Infrastructure Recommendations

	Action	Who	Timeline
1.	Bulbouts at H and Railroad intersection	City of Blue Lake	
2.	Widen bike lanes (existing are 4' and should be at least 5') on Hatchery Road between H Street and bridge or consider a Class IV bikeway	City of Blue Lake	
3.	Widen asphalt sidewalk along H Street and provide wider spaces to get past obstacles such as utility poles (or relocate sign posts currently in sidewalk)	City of Blue Lake	
4.	Formalize and enhance city-owned gravel parking lot for recreational parking (across Hatchery Road from trail along Powers Creek)	City of Blue Lake	
5.	Gateway to Blue Lake signage and traffic calming at bridge	City of Blue Lake	
6.	Formalize river access and a non-motorized boat launch at parcel by the bridge	Collaboration with private property owner, City and County	
7.	Straighten private driveway intersection to Hatchery Road (Kernen gravel operation road)	Private property owner with County	
8.	Make improvements to reduce flooding on Hatchery Road at and north of West End Road	County Public Works	
9.	Acquire additional right-of-way along Hatchery Road north of West End Road to have widen shoulders for walk/bike lanes	County Public Works	

Next Steps Non-Infrastructure Ideas

- Distribute yellow vests or umbrellas as a community safety effort to increase visibility of pedestrians
- Greater enforcement of speeding, particularly by commercial trucks

Cost-saving infrastructure improvements
During the community walk there was recognition that sidewalks can be a costly improvement and may be a more realistic long-term recommendation. Community members felt that other lower cost walking facilities could meet the need for a designated place for people to safely walk along Hatchery Road.

Several lower cost walking facilities have been implemented in other communities in Humboldt County. One potentially feasible walking facility could be a striped walking lane or striped walking and biking lane. These facilities utilize pavement markings and striping to clearly delineate areas along the roadway shoulder for walking and/or biking. The City of Arcata recently striped a walking lane within the Arcata Marsh and Wildlife Sanctuary to connect two trails, and the County striped a walking and biking lane on McKinleyville Avenue to provide a safe route for students walking and biking to McKinleyville High School.

Arcata Marsh striped walking lane

Striped walking and biking lane on McKineyville Avenue

Following a similar community walkability assessment, an asphalt path was constructed within the public right-of-way of Dows Prairie Road in McKinleyville to fill a gap from Dows Prairie Elementary School and a nearby neighborhood. Dows Prairie School and the Countywide Safe Routes to School Task Force completed a Rural Transportation and Access Partnership (RTAP) application and worked with County Public Works and in-kind contributions from local contractors to construct the path.

Low cost asphalt path along rural Dows Prairie Road.

Funding Opportunities

Rural Transportation and Access Partnership (RTAP)

The RTAP program was created within Humboldt County Public Works to help rural communities overcome transportation challenges and improve access to key destinations via all modes of transportation. The program is a matching program to help address unfunded transportation needs through community partnerships. The RTAP Application and Proposal Guide (available online here: https://www.yumpu.com/en/document/view/24003860/rural-transportation-access-partnership-county-of-humboldt) walks through the proposal requirements. Once a project is approved by the County, staff can typically help with the design and installation while the community would fundraise or seek in-kind donations of materials. Past projects have involved in-kind materials and equipment donations from local contractors. Hatchery Road and Blue Lake residents could consider partnerships with Kernen Construction which has an operation off of Hatchery Road or other local contractors or community members with materials, building equipment, and skills. One successful RTAP project was completed by Dows Prairie School in north McKinleyville, with assistance from the Countywide Safe Routes to School Task Force, and which resulted in an asphalt path separated from the roadway 500 feet in length to connect the school to a nearby neighborhood.

Measure Z

Measure Z, a half-cent sales tax, was passed by Humboldt County voters in November 2014 to pay for maintaining and enhancing public safety services and resources. Some Measure Z funding has been allocated to roads and limited walking and biking improvements in other unincorporated areas. The call for project proposals for Measure Z funding is often in February. Funding for several of the short-term recommendations in this report could be pursued through later Measure Z call for projects, perhaps for fiscal year 2019-2020.

Safety Funding through SB1

With the passage of SB1 in 2017, California will invest $54 billion over the next 10 years to make necessary road safety and public transit improvements to every California city and county. As a result of the passage of SB1, approximately $100 million new dollars will be added to Caltrans' Active Transportation Program (ATP) (see below) annually over the next decade. The Humboldt County Association of Governments (HCAOG), our Regional Transportation Planning Agency, estimates that Humboldt County and its incorporated cities will receive $91.6 million over the next ten years through SB 1. Projects funded by these dollars will improve roadway

conditions and safety for all users and all transportation modes, including repaving and emergency road repairs. Humboldt County is anticipated to receive some funding from SB1 by formula (not competitive) specifically for safety improvements such as improved pedestrian crossings.

Other Grant Opportunities
State and private grant sources could also be considered to fund infrastructure improvements. California's Active Transportation Program (ATP) is administered by the California Transportation Commission and Caltrans as a competitive grant program for walking, biking and trail improvements. A successful application must focus on improving walking and biking opportunities for transportation purposes, and demonstrate safety concerns. The ATP call for projects involves a statewide competition for eligible projects and a set aside of funds competitively available to jurisdictions in small urban and rural regions.

Local grant sources may also be a viable option for a phase of this project. Humboldt Area Foundation (HAF) has several grant programs that support community-led efforts and has a valuable grants database to search for applicable grants. HAF may also have funds specifically to improve community life in the Trinity/Klamath Rivers region. Coast Central Credit Union has a twice-yearly Community Investment Program, and St. Joseph Health also has frequent grants available.

HCAOG Planning Funds
The City of Blue Lake recently requested funds through Humboldt County Association of Government's (HCAOG) Overall Work Program (OWP) to conduct preliminary planning studies (traffic conditions, parcel ownership review, and a road safety audit) on Hatchery Road within city limits. This request has been included as a task in HCAOG's OWP in the amount of $17,500. Starting in fiscal year 2018 (July 2018), the city will be able to further explore safety improvements along Hatchery Road that this community effort discussed within city limits.

Next Steps
The project team and RCAA staff will share the draft Hatchery Road Walkability Assessment with County Public Works and City of Blue Lake staff in early March. The goal of these discussions will be to understand the perspectives of the County and City on the feasibility of recommendations and gain support for viable short-term improvements to pursue. The project team, County, and City can also discuss potential funding pathways for key improvements.

After making any refinements to the draft after meeting with the local jurisdictions, Hatchery Road representatives may choose to present the assessment to the Blue Lake community in spring 2018. The project team will seek input on short, mid and long-term recommendations and gain an understanding of which recommended improvements have the most momentum in the community.

Hatchery Road and Blue Lake residents may choose to work together or with RCAA to apply to RTAP spring 2018 or other funding pathways for selected improvements. The Hatchery Road and Blue Lake community could solicit in-kind or potential matching funds for the RTAP proposal (such as donated time or materials from contractors, community donations, etc). RCAA and Hatchery Road residents will continue to check in with County Public Works to ensure clear communication. Hopefully one or more short-term improvements can be carried out by the community and the County by summer 2018.

Stakeholder Working Group Presentation

2

City of Blue Lake Local Road Safety Plan (LRSP)

City of Blue Lake: Amanda Mager (City Manager)

SHN: Mike Foget, Garry Rees, Jared O'Barr, Jared Goebel, Justin Delgado

What is a Local Road Safety Plan?

- It is the preferred safety process plan for FHWA and Caltrans
- It looks at data-driven collision analysis on local roadways more holistically by evaluating input from key stakeholders.

U.S. Department of Transportation
Federal Highway Administration

Caltrans

What is a Local Road Safety Plan?

- LRSPs include stakeholder engagement that represent the 5 E's of Traffic Safety:
  - Engineering
  - Enforcement
  - Education
  - Emergency Response
  - Emerging Technologies

The LRSP Process

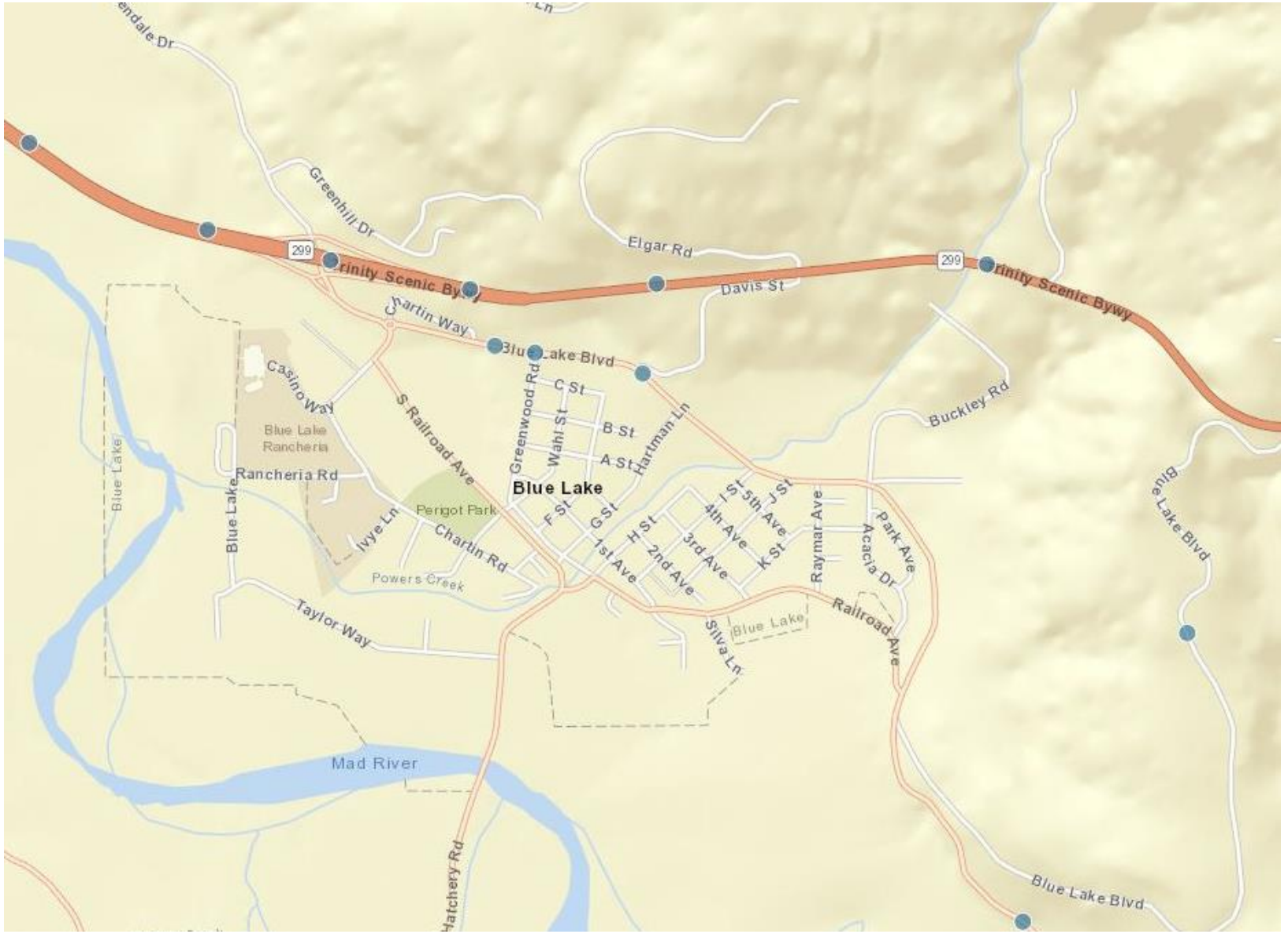
Why is Blue Lake developing a LRSP?

- Aligns with California's Strategic Highway Safety Plan (SHSP)
- Reduce fatalities and injury collisions with low-cost countermeasures.
- LRSP’s are required (2022) in order to apply for Highway Safety Improvement Program (HSIP) funds.

ZERO IS OUR GOAL

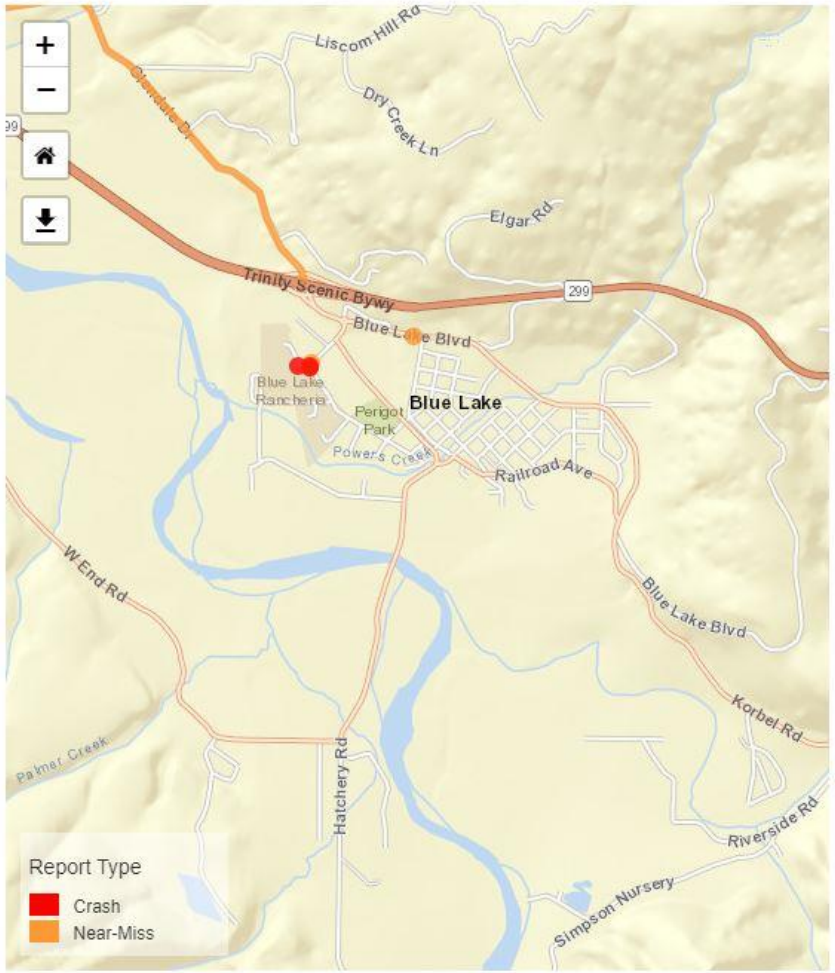
A SAFE SYSTEM IS HOW WE GET THERE

Transportation Injury Mapping System

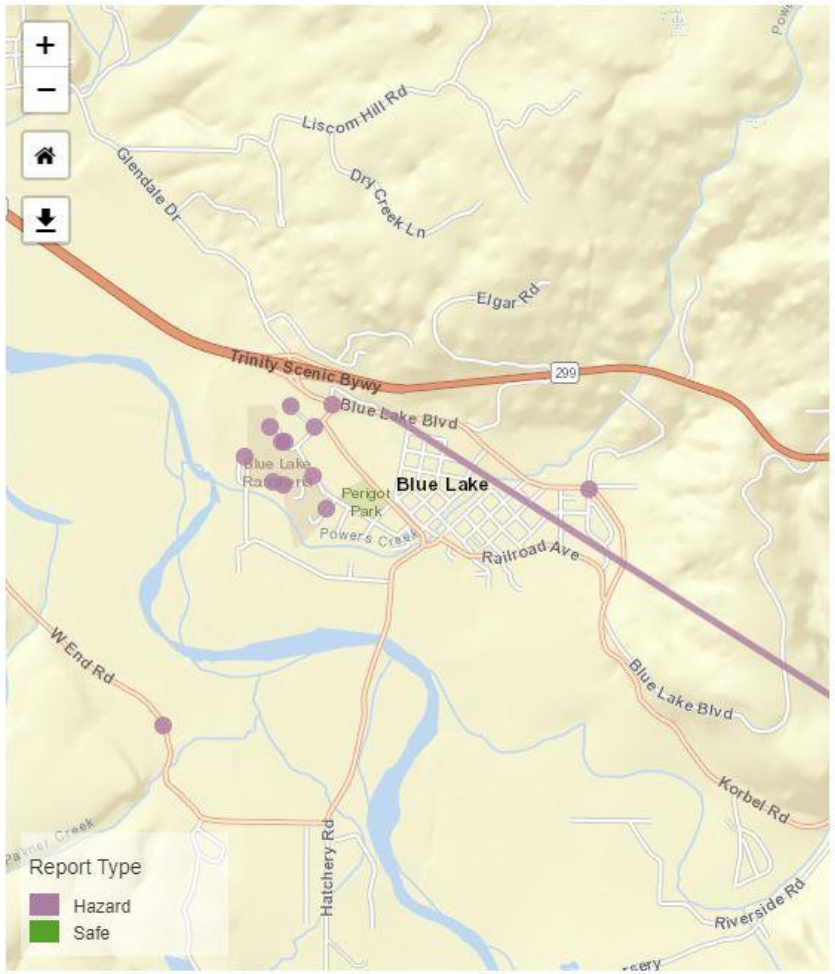


Street Story

Crashes / Near-misses



Hazards / Safe places




NR-no report
NM- near miss
I -incident
SS- Street Story
TIMS- from TIMS
Blue Lake Casino & Hotel
The Play Station 777
BLUE LAKE RANCHERIA
Rancheria Rd
Charlin Way
Blue Lake Blvd
Blue Lake Patriot
Elgar Rd
S Railroad Ave
Greenwood Rd
C St
B St
Broad St
Hatman Ave
Perigot Park
Charlin Rd
Ivye Ln
Hackett Rd
E St
F St
G St
1st Ave
Gety St
Powers Creek
Dell'Arte International
Hatchery Rd
Taylor Way
Mad River Brewing
Six Rivers Portable Toilets
Redwood Ave
Railroad Ave
H St
I St
J Ln
3rd Ave
4th Ave
5th Ave
Evergreen Dr
Evergreen St
Rouss Ct
Blue Lake
Buckley Rd
Buckley Ave
Park Ave
Acacia Dr
Google Earth
©2021 Google
N
1000 ft

Humboldt County Sheriff's Department: Incident Search Results (Oct 2018-Present)

HUMBOLDT COUNTY SHERIFF'S OFFICE

Page 1

Incident Search Results
City is Bluelake or BLUE LAKE, Type is TA

08/11/2021

Date	Inc #	Type	Time	Location	Dispositio	
10/20/2018	1810200058	TA	10:52:50	311 G ST	Cad Documentation Only	20180542
10/29/2018	1810290012	TA	07:12:55	171 GELY ST	Arrest Made	20180593
12/23/2018	1812230057	TA	10:54:41	BLUE LAKE BLVD/CHARTIN W	Report Taken	20180660
01/03/2019	1901030079	TA	13:08:40	STATE HWY 299 OFF RAMP	Referred To Other Agency	
02/18/2019	1902180035	TA	07:26:12	STATE HWY 299/BLUE LAKE	Agency Assist	
04/07/2019	1904070018	TA	02:35:55	BLUE LAKE BLVD/BUCKLEY R	Agency Assist	
04/21/2019	1904210018	TA	02:17:51	GREENWOOD RD/BLUE LAKE B	Agency Assist	
10/19/2019	1910190077	TA	14:12:33	777 CASINO WY	Referred To Other Agency	
11/07/2019	1911070134	TA	17:54:28	1825 STATE HWY 299	Report Taken	
01/07/2020	2001070007	TA	02:19:13	777 CASINO WY	Xfer to CHP	
01/09/2020	2001090004	TA	01:48:13	BLUE LAKE BLVD/GREENWOOD	Deferred To Other Agency	
01/09/2020	2001090005	TA	01:49:35	BLUE LAKE BLVD/GREENWOOD	Deferred To Other Agency	
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10/02/2020	2010020130	TA	15:24:54	STATE HWY 299	Agency Assist	
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10/21/2020	2010210108	TA	15:04:01	777 CASINO WY	Public Assist	
12/31/2020	2012310021	TA	06:54:42	STATE HWY 299/OLD THREE	Agency Assist	
02/13/2021	2102130008	TA	01:31:29	STATE HWY 299	Agency Assist	
03/15/2021	2103150037	TA	08:51:42	631 GREENWOOD RD	Agency Assist	
05/18/2021	2105180188	TA	23:51:52	BLUE LAKE BLVD/CHARTIN R	Arrest Made	202102624
07/11/2021	2107110005	TA	00:39:00	BLUE LAKE BLVD/ROUNDABOU	eport Taken	202103625

Traffic Hazard Incidents

HUMBOLDT COUNTY SHERIFF'S OFFICE

Incident Search Results

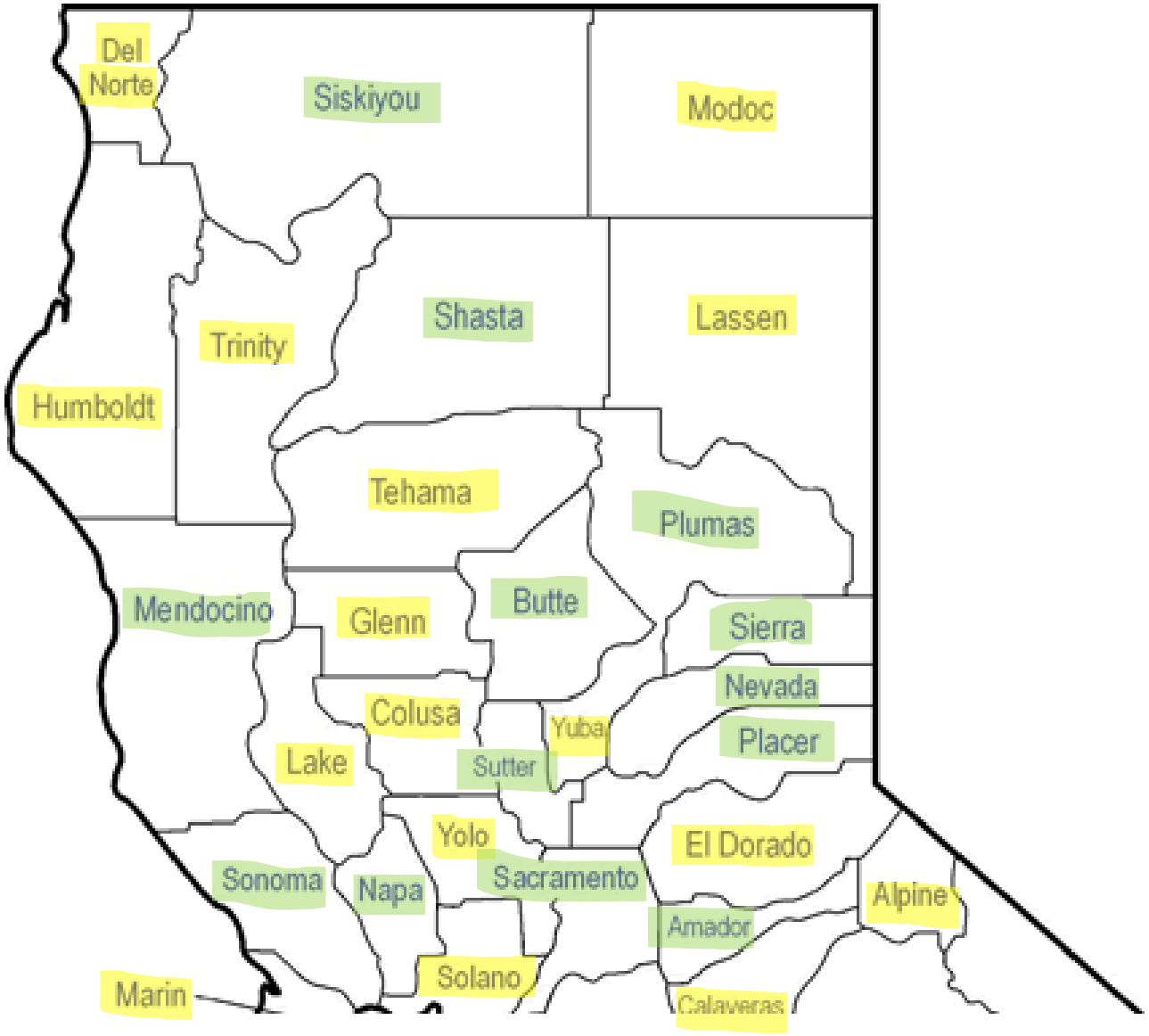
City is Blue Lake or BLUELAKE, Date Between 9/1/2019 and 9/2/2021, Type is TH

Page 1

09/02/2021

Date	Inc #	Type	Time	Location	Dispositio
02/12/2021	2102120074	TH	12:54:04	BLUE LAKE BLVD	Unable to Locate
03/04/2021	2103040116	TH	14:00:57	295 BLUE LAKE BLVD	Gone On Arrival
03/12/2021	2103120116	TH	15:21:47	S RAILROAD AVE	Gone On Arrival

We are not going to be alone in a lack of report data!



Green: **Reports** to SWITRS/TIMS
Yellow: **Does not Report** to SWITRS/TIMS

Image Source: California Department of Education

City of Blue Lake Local Road Safety Plan (LRSP)

City of Blue Lake: Amanda Mager (City Manager)

SHN: Mike Foget, Garry Rees, Jared O'Barr, Jared Goebel, Justin Delgado

Vision

- “A vision statement is an idealized future description of success. This phrase will serve as a trigger to the rest of the vision in the mind of everyone that reads it”

Ensure a transportation system that supports safe, enjoyable, and efficient mobility for all users within the City of Blue Lake.

Ensure that users of all modes of transportation can safely travel within the City of Blue Lake.

Mission

- The mission is the doing component. A mission statement describes what an agency is going to do to achieve its vision. It should focus on something that everyone can work towards to achieve.

Collaboratively adapt the City of Blue Lake's transportation system to reduce traffic accidents, near-misses, and unsafe interactions between users.

Reduce unsafe interactions between transportation users within the City of Blue Lake while encouraging a multimodal transportation system.

Eliminate traffic hazards though simple, safe, cost-effective methods to improve the quality of life of transportation users within the City of Blue Lake.

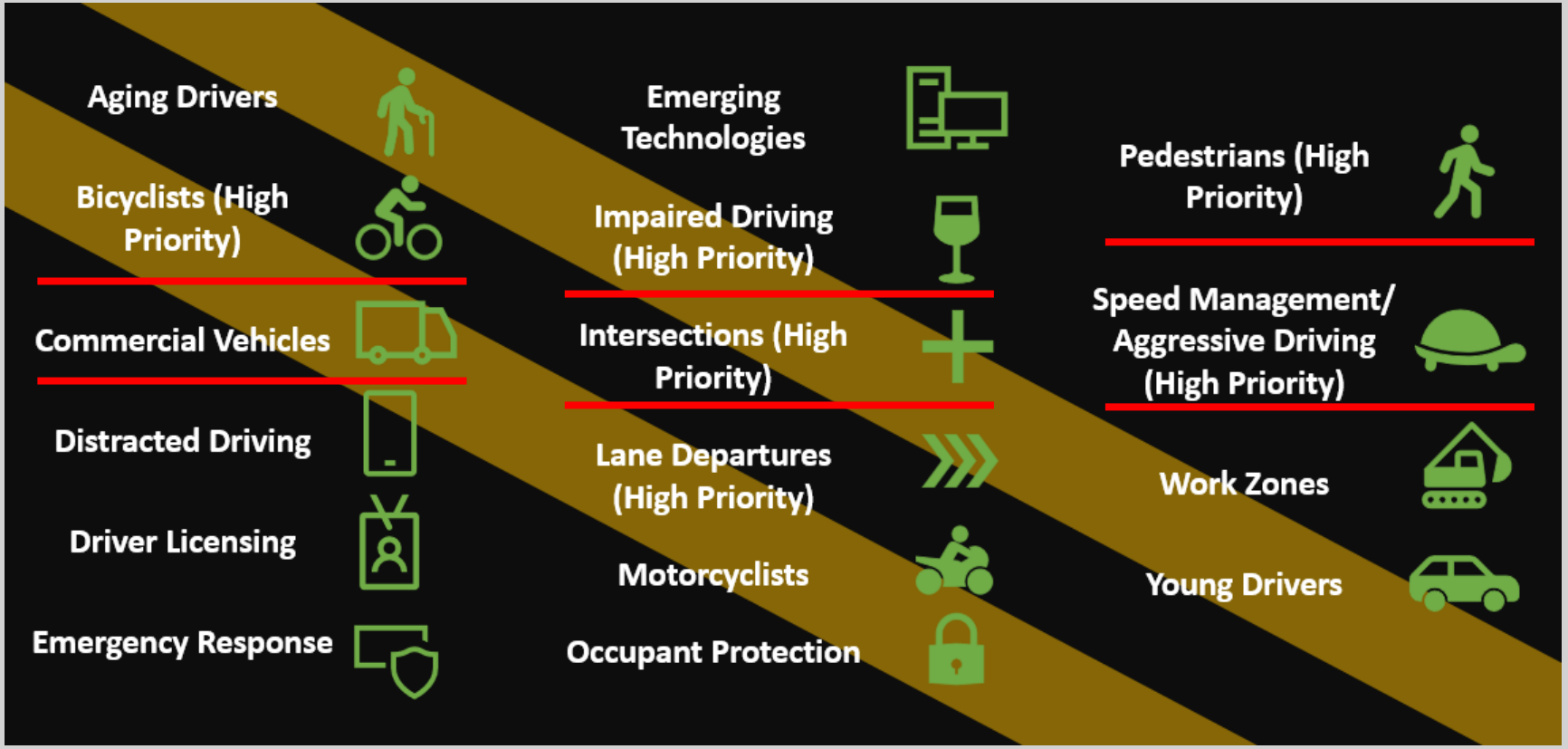
Goals

- Creating plan goals establishes areas of focus to work towards and creates outputs and outcomes that are measurable.

  - *Eliminate all traffic fatalities by 2035*
  - *Reduce problematic pedestrian and vehicle interactions by 25 percent by 2030*
  - *Improve visibility and sightlines to reduce traffic incidents and near-misses*
  - *Reduce Impaired driving incidents by 50 percent by 2035*
  - *Improve partnership with Humboldt County on roads connecting to the City of Blue Lake*
  - *Collaborate with the school district to ensure safe routes to and from school*
  - *Work with the Humboldt County Sheriff's Department to foster effective patrols*
  - *Develop or promote a robust database to help identify areas of concern and the factors that contribute to dangerous travel.*
  - *Better the City's chances to get outside funding for road improvements and safer commutes.*

Challenge Areas

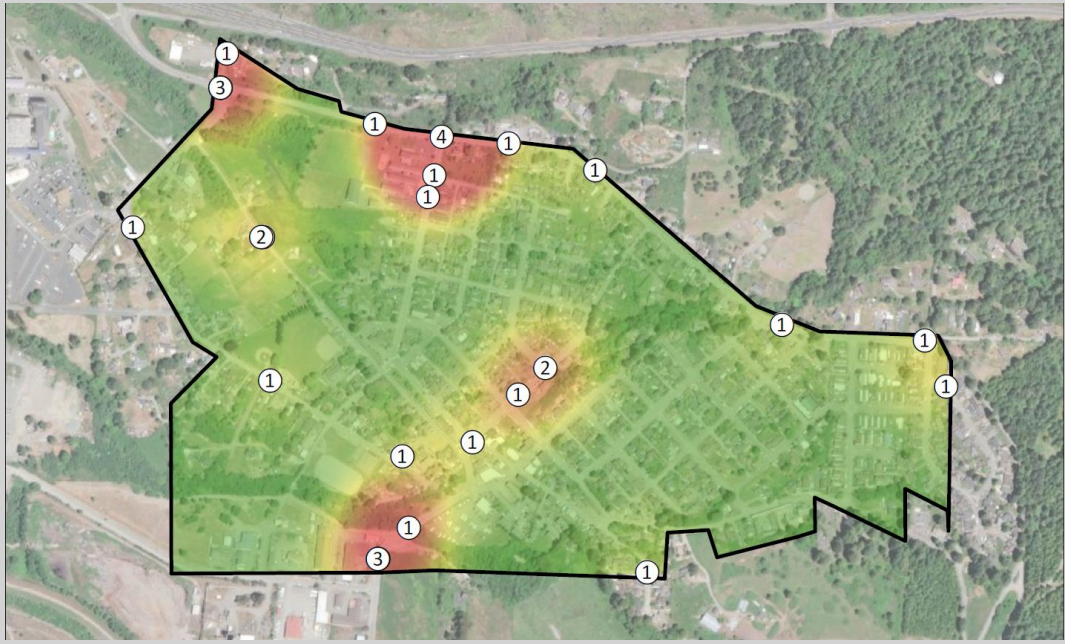
California Strategic Highway Safety Plan (SHSP)



Data Summary

4 Datasets

- **TIMS** (Transportation Injury Mapping System)
  - 3 Accidents-BL Blvd inc. one fatality
- **Sheriff's Traffic Accident List**
  - Provides location and date
  - No other information



- **Public Works Dept.**
  - Missing date and causal factors
  - Locations and some information on incident type
- **Public Surveys**
  - Only one incident; the rest near misses

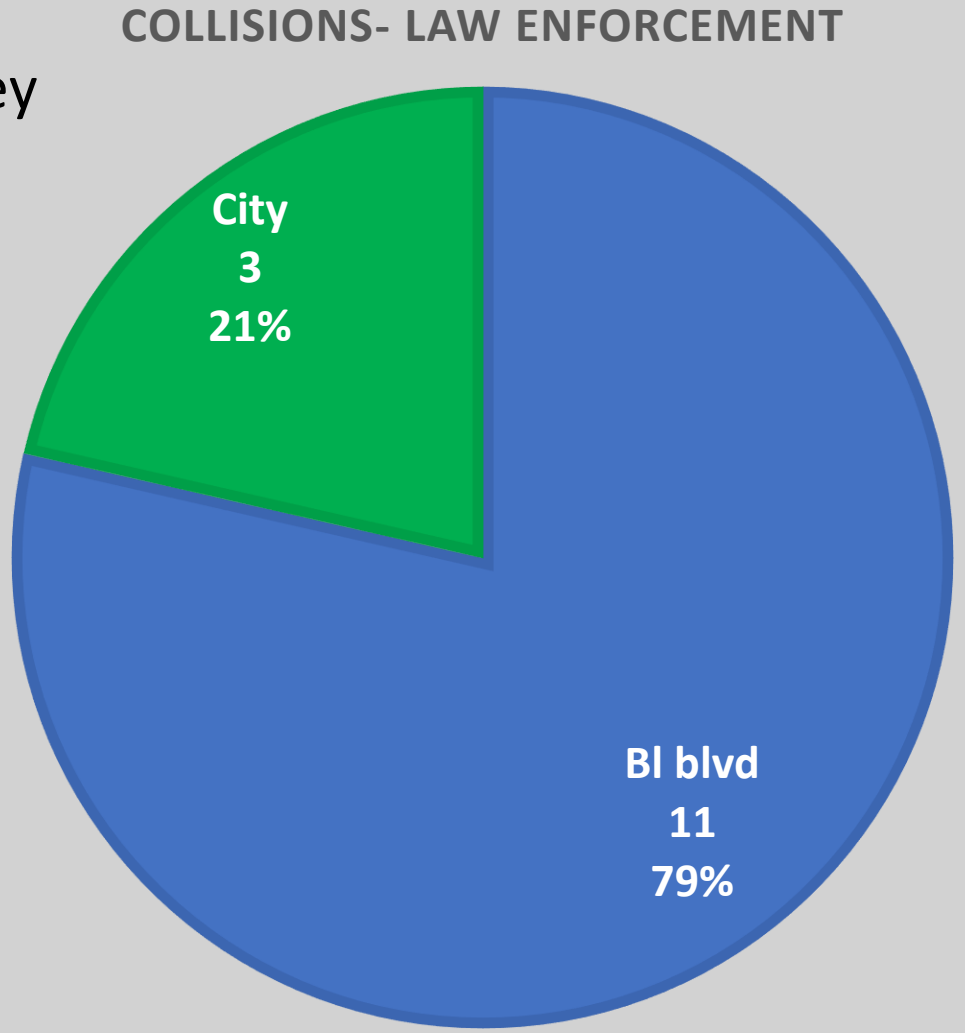
Incomplete Data….Now What?

- Use collision data and near misses for locations
- Use survey data for causal factors

Law Enforcement (LE) Records

3 Categories

- **BL Blvd -** Between roundabout and Acacia/Buckley Intersection
- **Hatchery Rd -** S. Railroad to Bridge
- **City** - Remaining area in city limits



Takeaways from Law Enforcement Traffic Accidents

- Majority of accidents occur on BL Blvd.
- City collisions observed on:
  - Greenwood
  - G St.
  - Gely St.
- 0 Incidents reported along Hatchery Rd.

Collison Records-All Sources

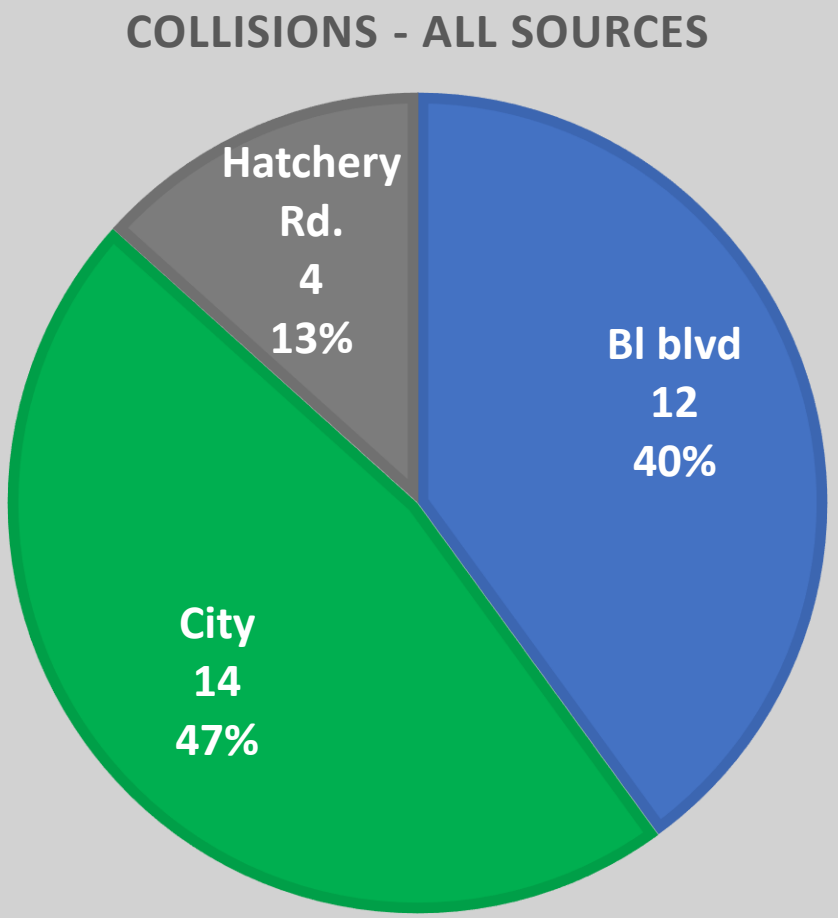
Public Works Dept.

- Many more incidents within the City than law enforcement data indicates

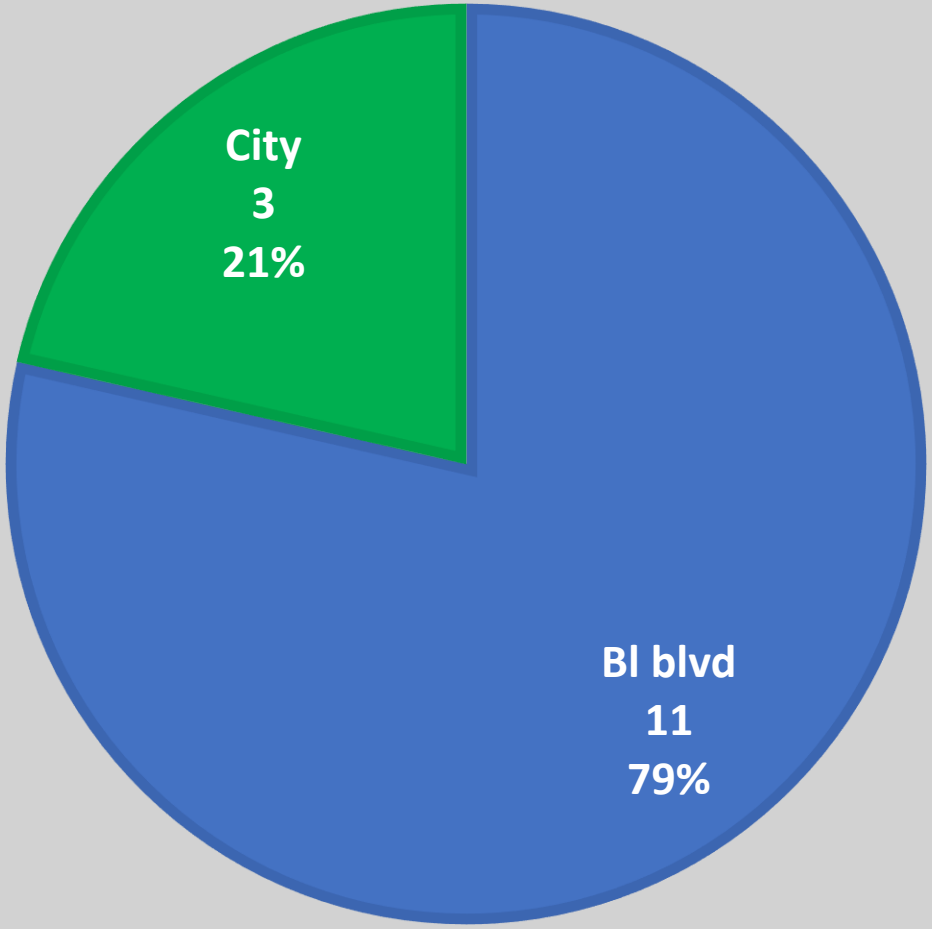
- Several property damage incidents along Hatchery Rd and inner city (signs & hydrants)

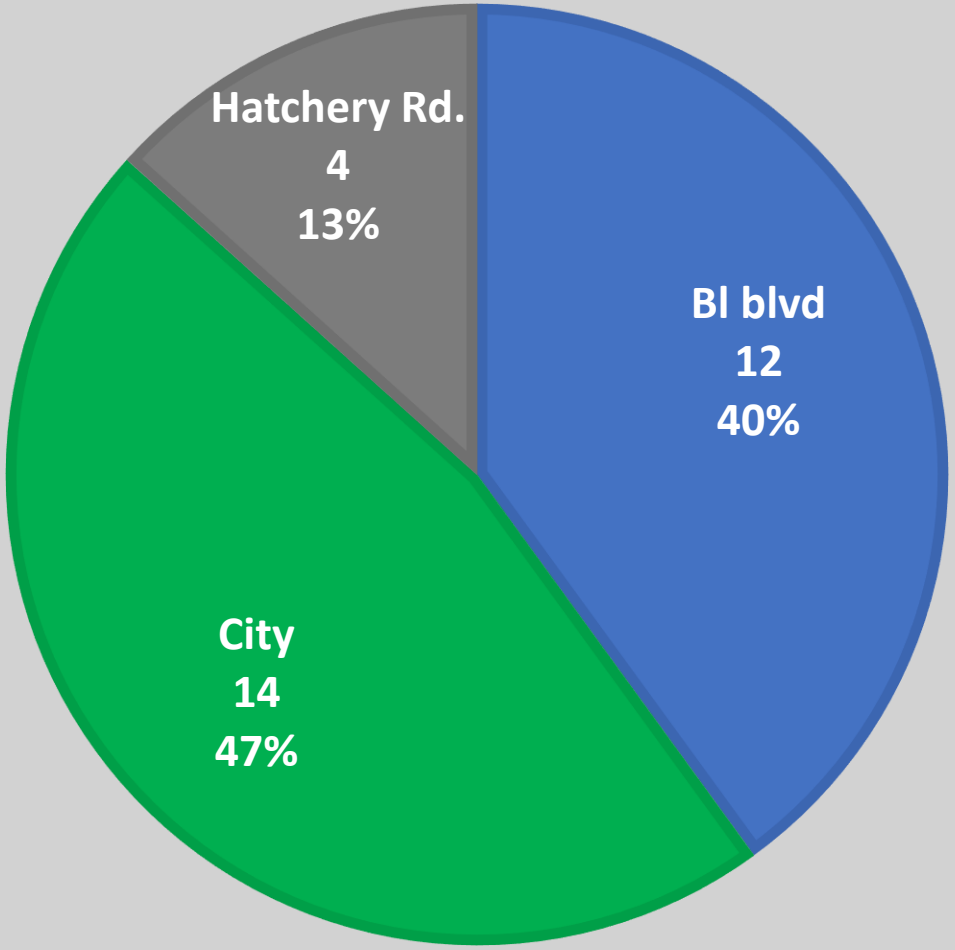
Public Survey

- 1 Incident on G St. near post office.

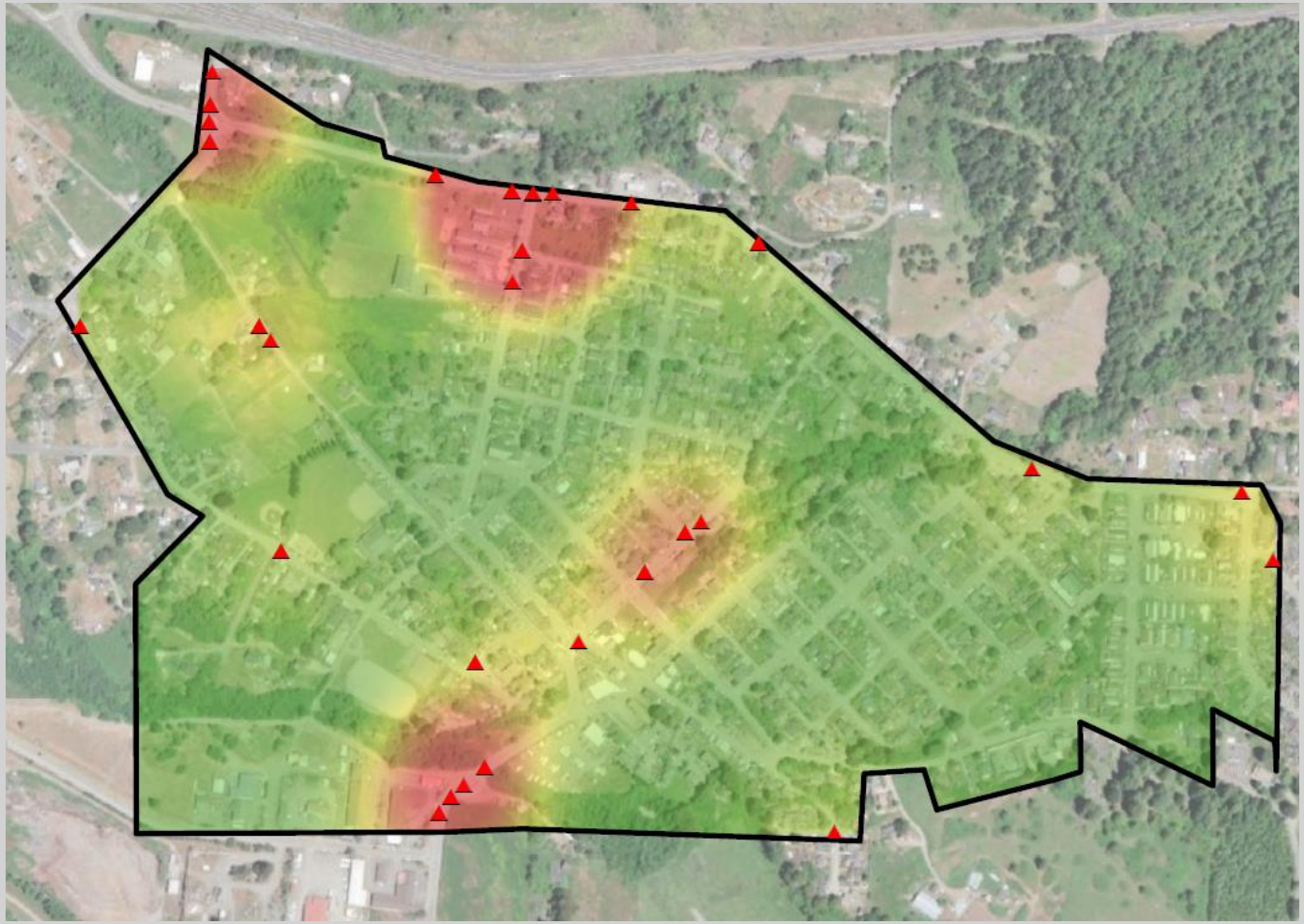


Collison Records-All Sources





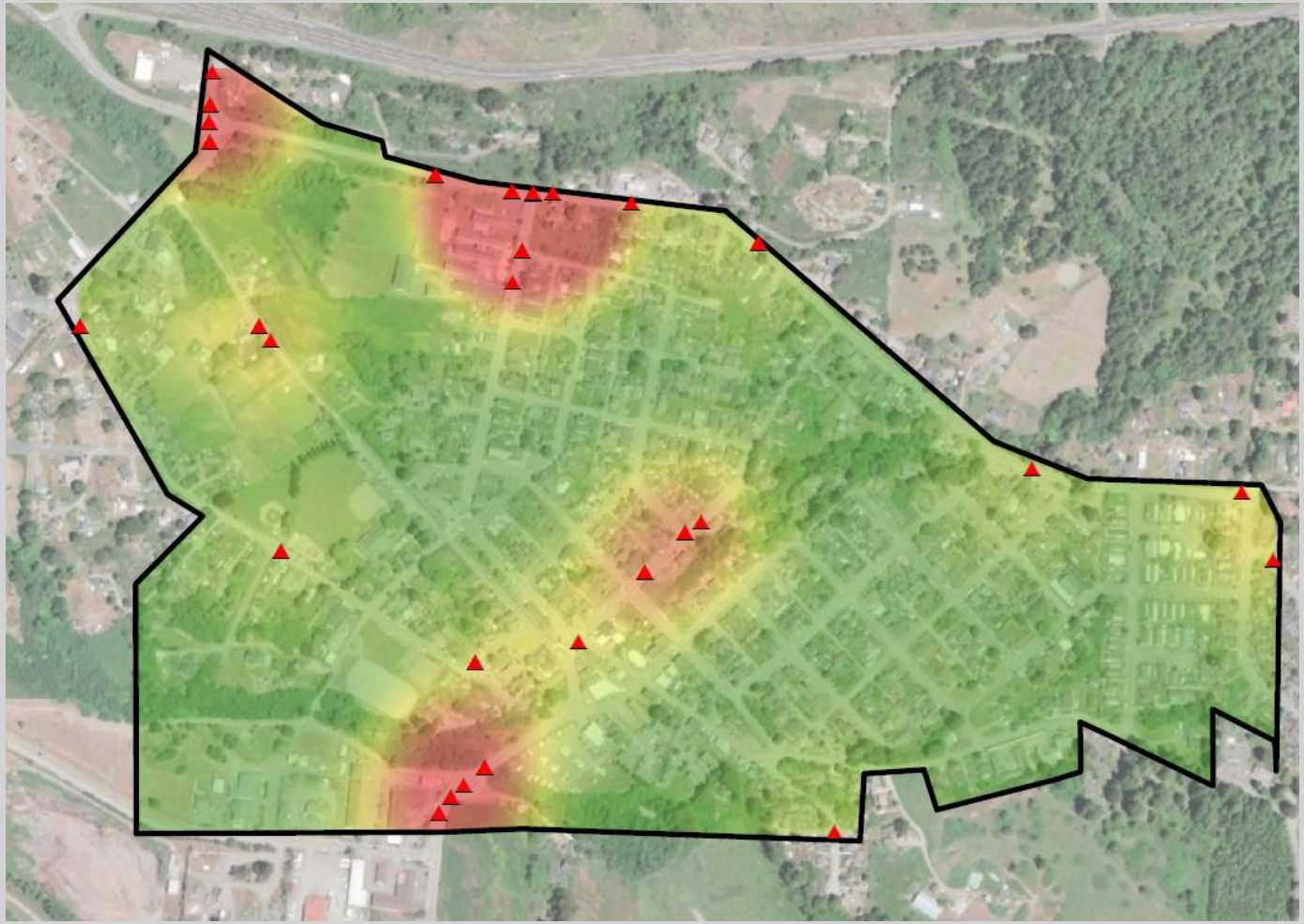
Breakdown of BL BLVD Collisions (all Sources)



Locations

- Greenwood Intersection.
- Acacia/Buckley Intersection.
- Chartin Roundabout

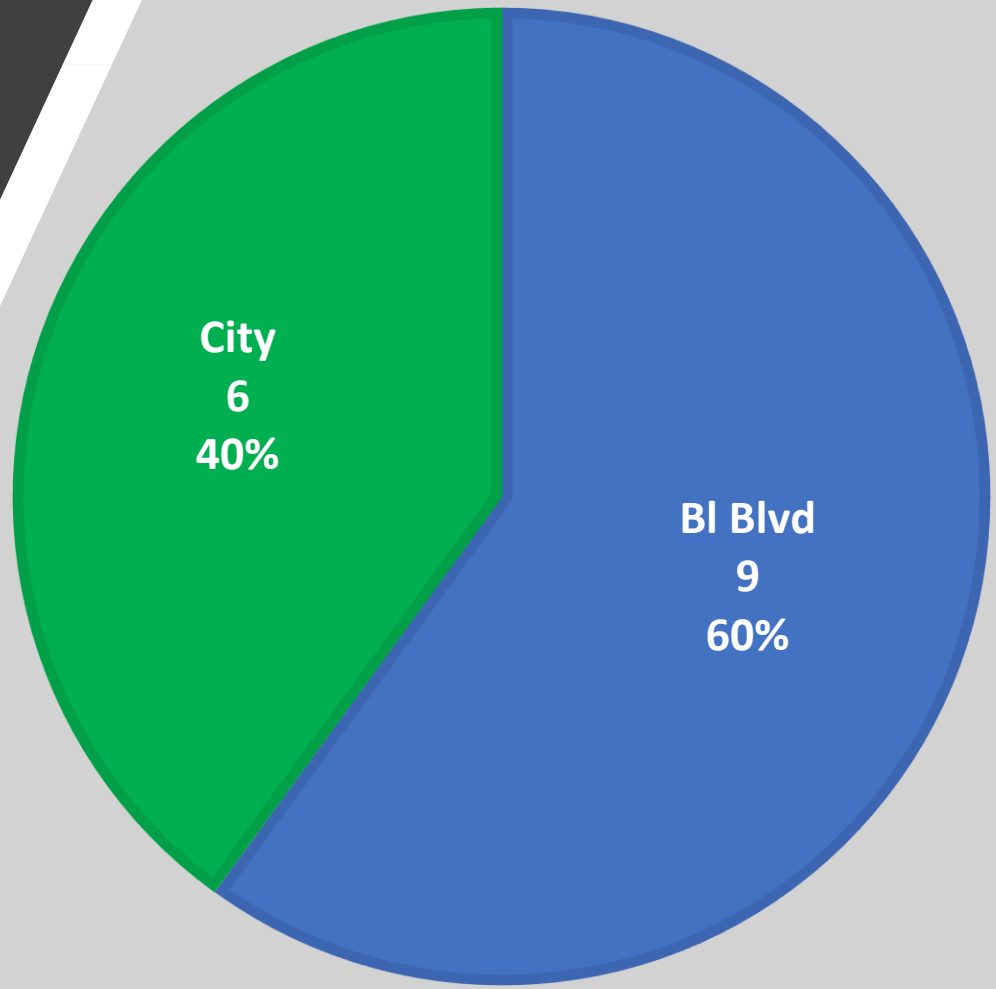
Breakdown of City Street Collisions (all Sources)

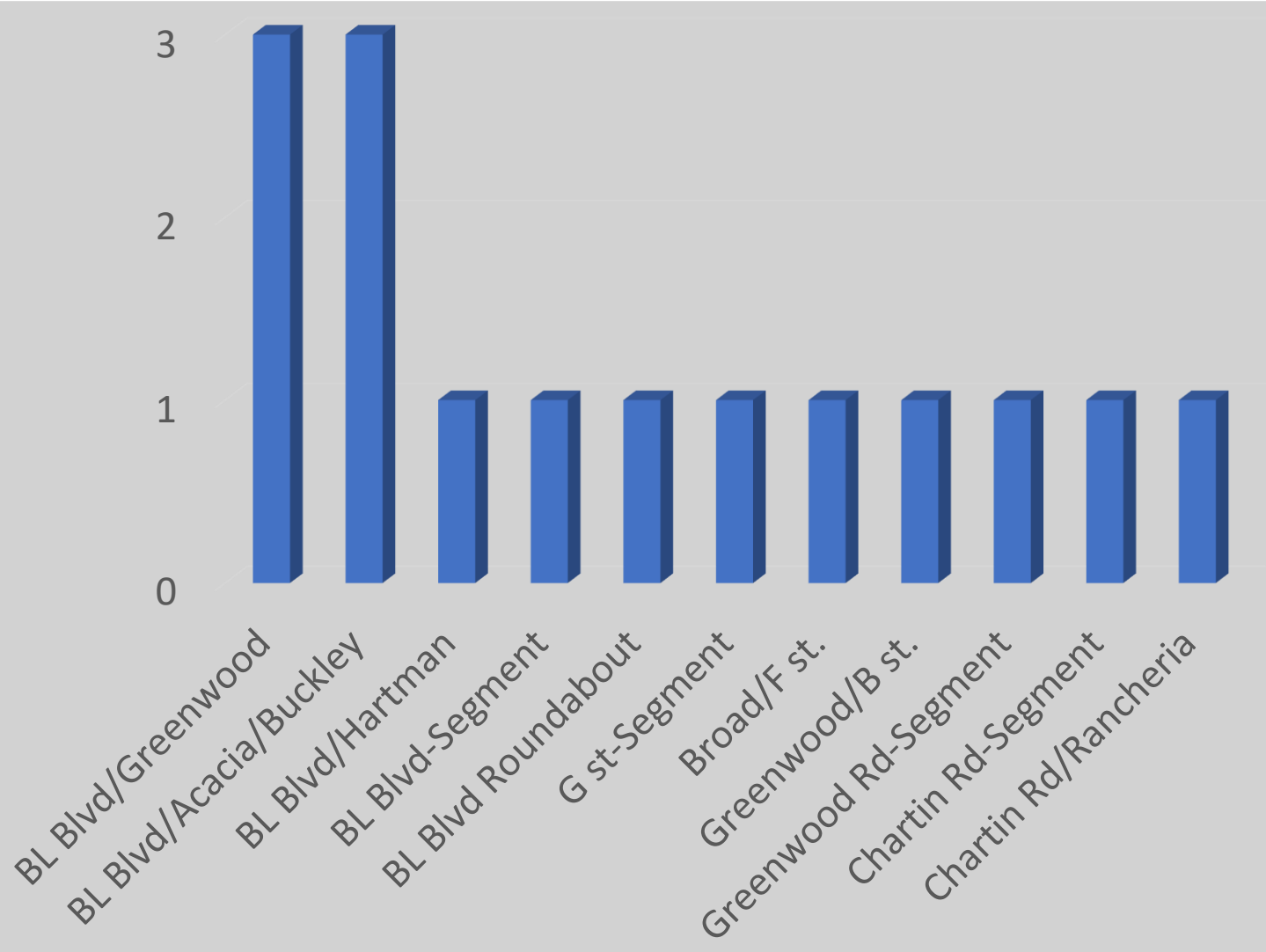


Locations with more than one incident

- Greenwood Ave.
- G st.
- S Railroad Ave
- Chartin Rd.

Breakdown of Near Miss Reports





Collison Outcomes

Fatality

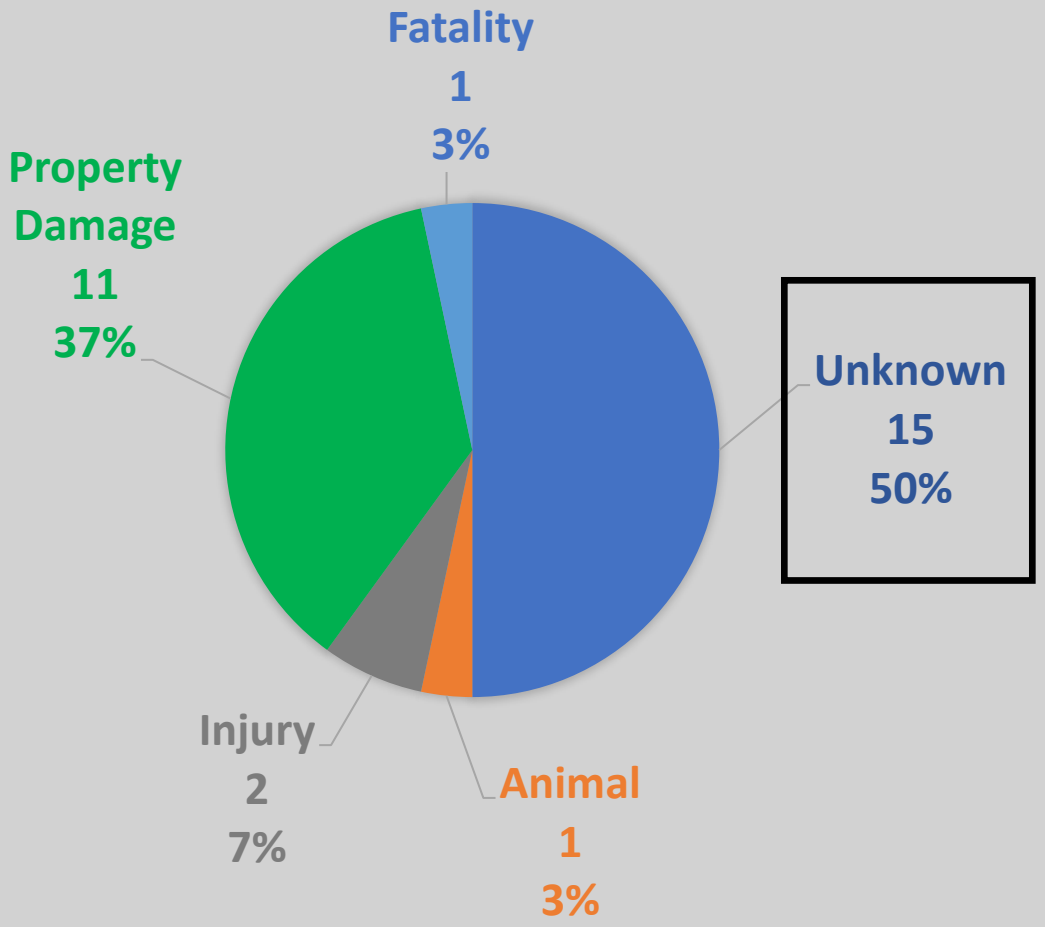
- 2019 Motorcycle left roadway
- Cause: DUI

Property Damage

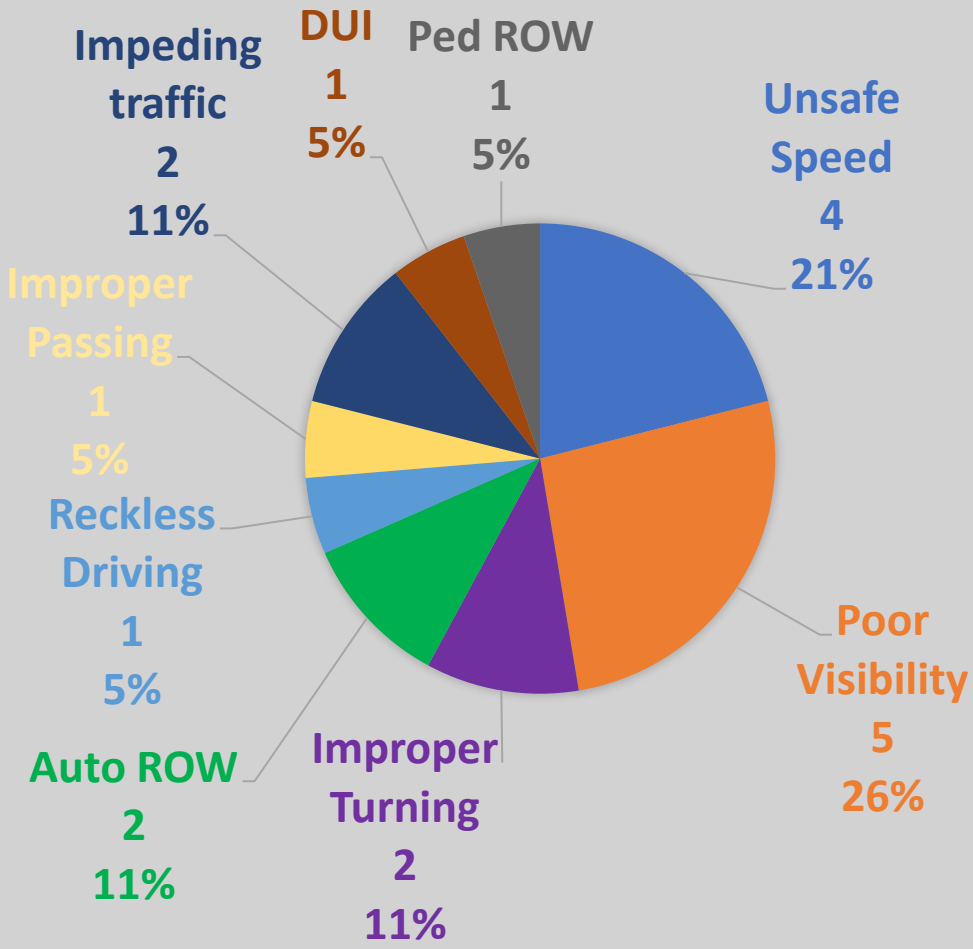
- Public Works Dept.
- Fire hydrants and signs hit

Injuries

- DUI-Greenwood and BL Blvd
- Improper Turning- Greenwood and BL Blvd



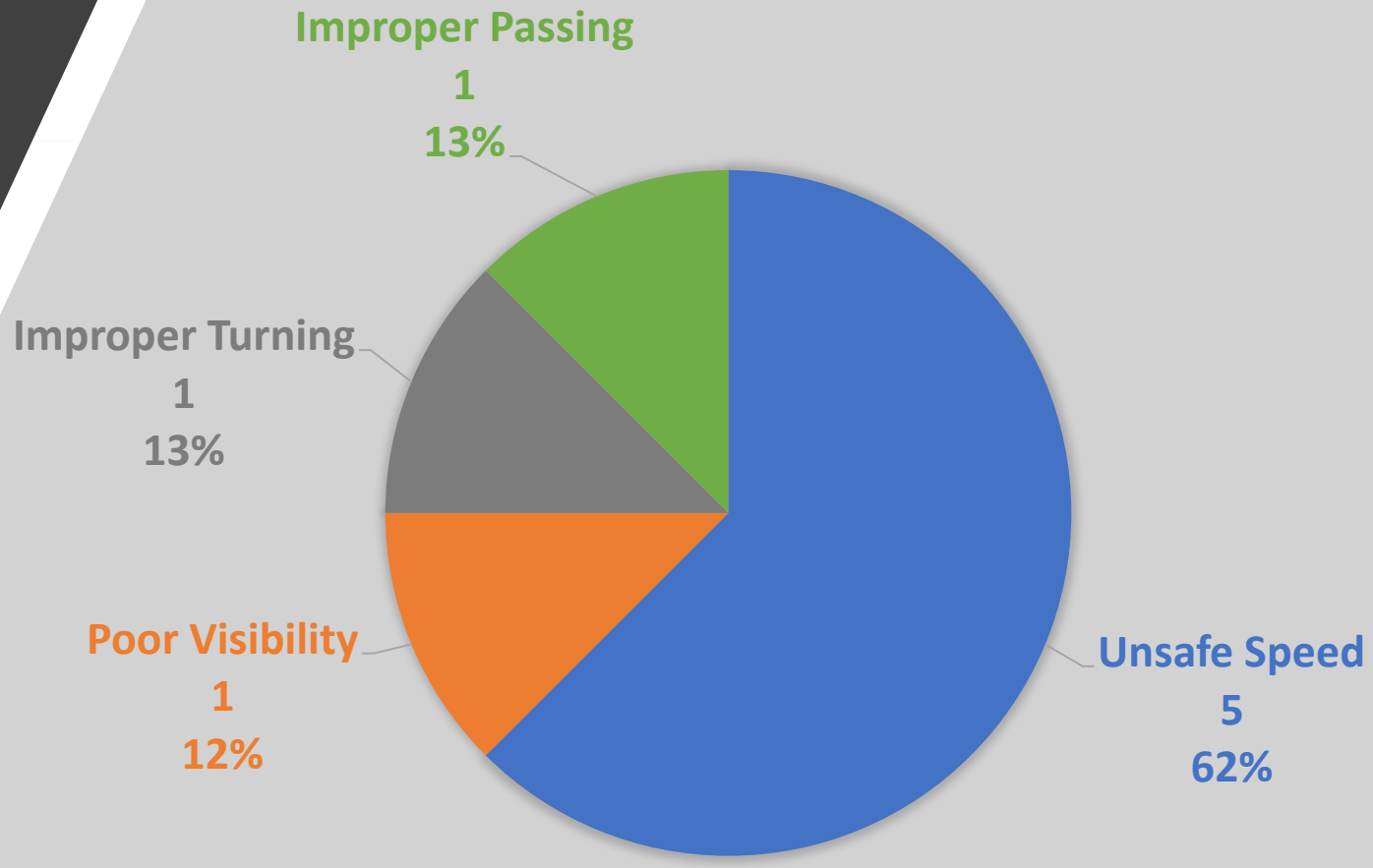
Factors involved in BL Blvd Near Misses



Main Factors

- Poor Visibility
  - Trees
  - Parked cars along BL Blvd.
- Unsafe Speeds
  - Logging trucks repeatedly noted in survey

Factors involved in City Near Misses



Main Factor

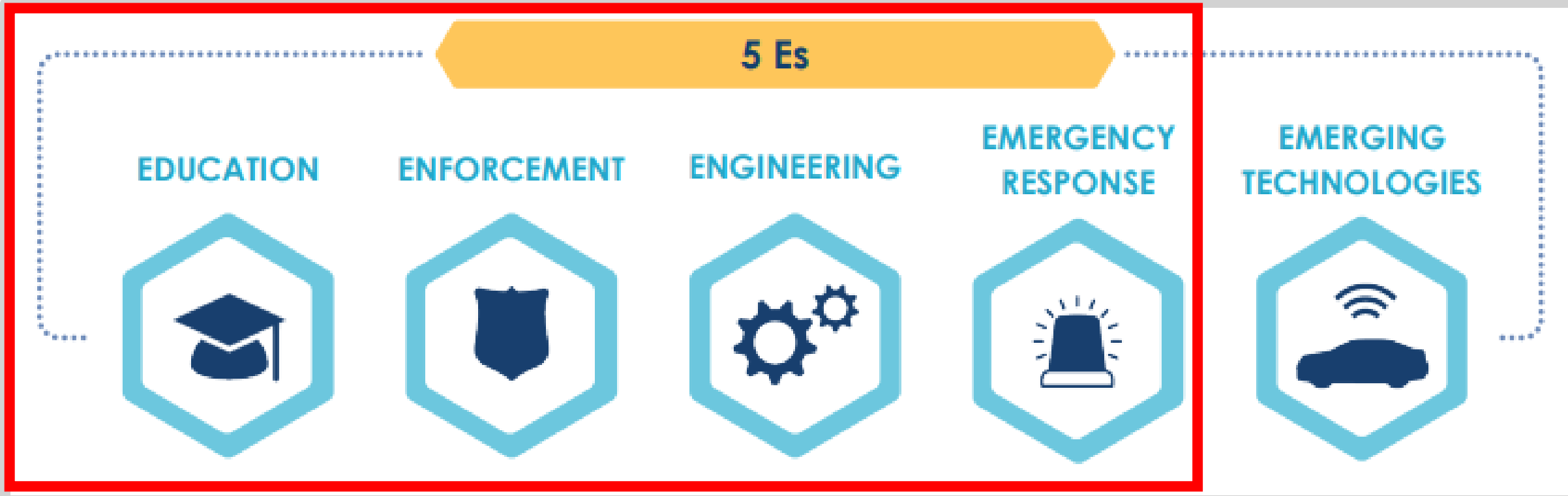
- Unsafe Speeds
  - G St.
  - Broad and F St.
  - Greenwood

Other Noted Areas

- Chartin Rd (Perigot Park)
- Chartin and Rancheria

Strategies

Strategic Highway Safety Plan 2020-2024 strategies for improving road safety



Non-engineering Strategies

- Education, Enforcement, Emergency Response
- Success depends on collaboration between:
  - Governments (City of Blue Lake, County of Humboldt, Blue Lake Rancheria, State of California, etc.)
  - Emergency Services (Humboldt County Sheriff's Office, Blue Lake Volunteer Fire Department, CHP, etc.)
  - Local community members (businesses, residents, etc.)

Education

- **Not just for the public, but agencies as well**
- Education strategies include but are not limited to:
  - Establishing regular (annual, quarterly, etc.) meetings between entities (City, County, Tribe, emergency services, etc.)
  - Host public engagement events, awareness campaigns, or safety assessment walks
  - Consistently publicize resources like Street Story

Enforcement

- **Reliant on community partnerships**
- Enforcement strategies include:
  - Targeted patrols designed to reduce unsafe driving behaviors
  - Coordination with the City and Blue Lake Rancheria (Tribal Police) to establish DUI checkpoints or targeted routine patrols aimed at reducing the number of impaired drivers on local roads
  - Collaborate with the Blue Lake Union Elementary School District to foster effective patrols around schools

Emergency Response

- **Before and after, not just during**
- Emergency response strategies include:
  - Maintain and improve roadway access for emergency responders
  - Coordinate with Public Works, BLFD, HCSO, and CHP on incident documentation and record keeping
  - Meet annually with emergency services and roadway safety practitioners to discuss traffic trends, challenges, etc.

Data Collection Improvements

Potential Databases

- TIMS
- SWITRS
- Street Story
- Crossroads
- Social Pinpoint

Countermeasures For Data Gap

- Coordinate with HCSO and CHP to ensure incidents within the city limits are being reported to preferred databases.
- Evaluate the feasibility of Crossroads Program for in-house data analysis and quicker access to data.
- Maintain a detailed public works database.
- Establish an interactive web-based map through the City's website

Engineering- Priority Projects
Greenwood Ave & Blue Lake Blvd Intersection

Reported Incidents

- 4 Collisions Recorded
- 3 Near Miss Reports

Potential Causal Factors

- Impaired Site Distance
- Impeding Traffic
- Improper Turning
- Improper Passing
- Impaired Driving (DUI)
- Reckless Driving

Possible Counter Measures

- Enhance/Adjust pavement markings & signage
- Speed Reduction in School Zone (Variable or Static)
- Install Roundabout
- Install raised medians if space permits

Engineering

Example of Low-Cost Intersection Countermeasures

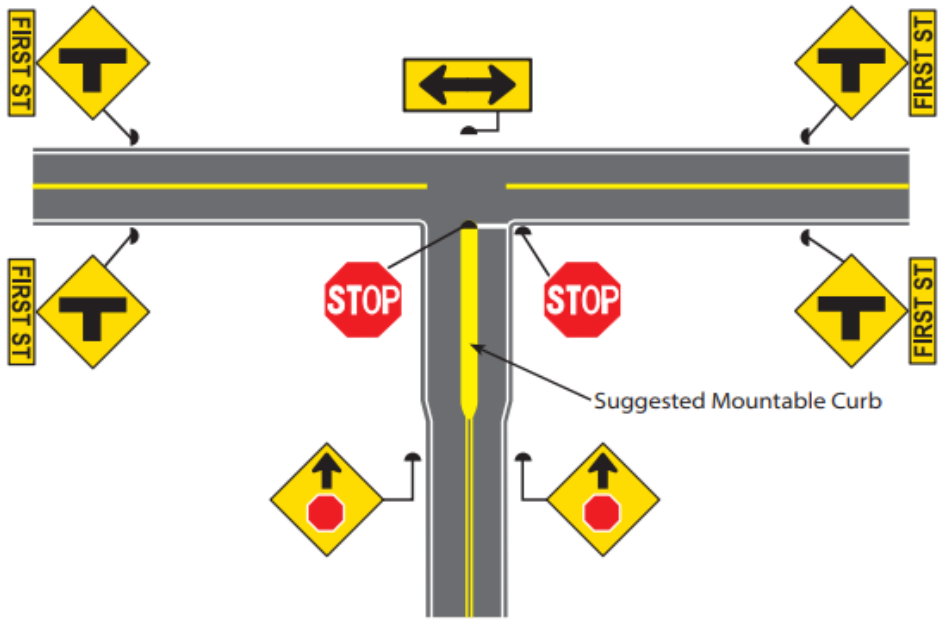


Figure 1: Examples of Basic Low-Cost Countermeasures for Stop-Controlled Intersections – Double Up Oversize Warning Signs, Double STOP Signs, Traffic Island on Stop Approach (if feasible), Street Name Signs, Stop Bars, and Double Warning Arrow at the Stem of T-Intersections

Engineering- Priority Projects
Acacia/Blue Lake Blvd/Buckley Intersection

Reported Incidents

- 1 Collision Recorded
- 3 Near Miss Reports

Potential Causal Factors

- Impaired Site Distance
- Unsafe Speeds

Possible Counter Measures

- Restrict left turns from Acacia Rd.
- Acacia Rd. to one way traffic only
- Install roundabout
- Reorient intersection
- Remove trees along BL Blvd to increase site distance

Engineering – Priority Projects
Blue Lake Blvd Segments

Reported Incidents

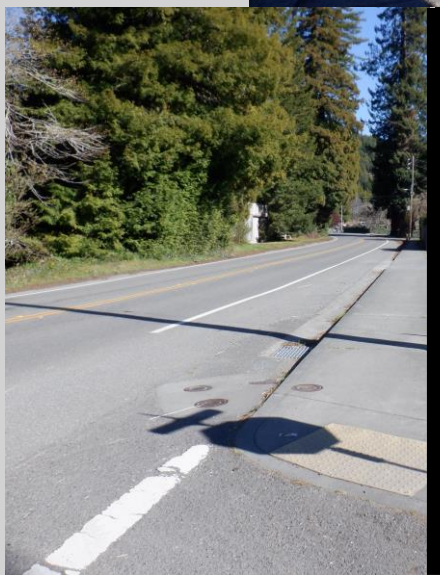
- 4 Collisions Recorded
- 1 Near Miss Reports

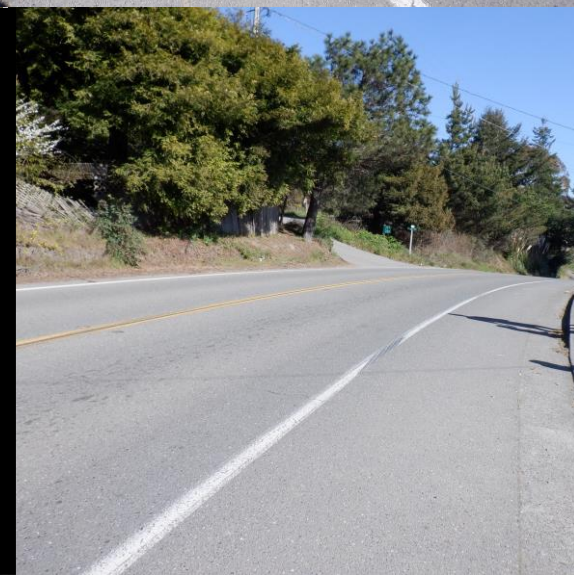
Potential Causal Factors

- Impaired Site Distance
- Unsafe Speeds
- Impaired Driving

Possible Counter Measures

- Initiate speed study to reduce speeds along BL Blvd
- Vegetation removal to permit adequate site distance
- Increase buffers prohibiting parking near intersections
- Enhanced signage to warn of potential upcoming site reducing features (hills, corners, etc.)





Engineering – Priority Projects
G St. & Hartman Ave.

Reported Incidents

- 3 Collisions Recorded
- 2 Near Miss Reports

Potential Causal Factors

- Excessive Speeds

Other noted concerns

- Pedestrian traffic near trail

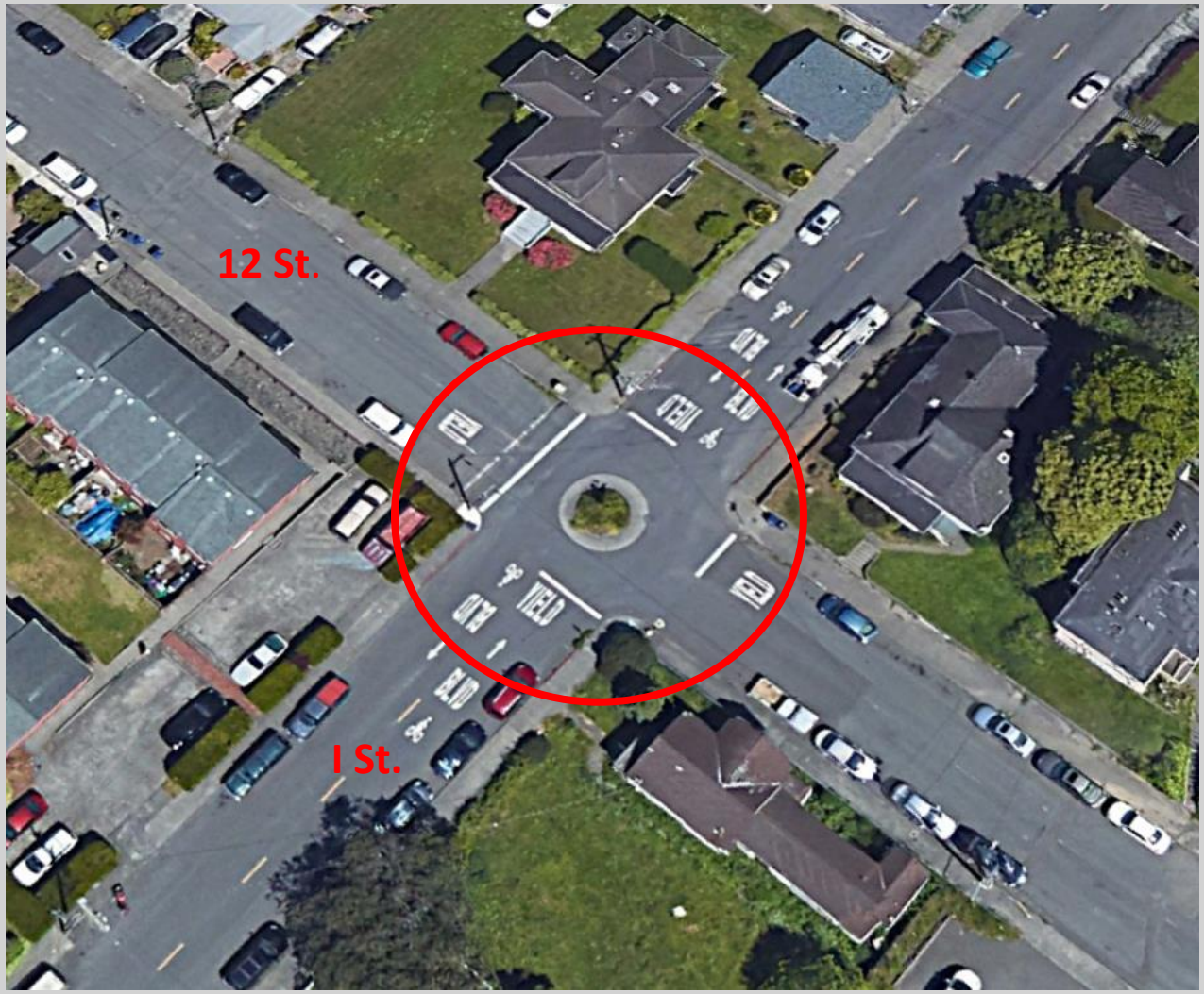
Possible Counter Measures

- Install a mini-roundabout @ 2nd & G St.
- Enhanced speed and pedestrian crossing related signage
- Enhanced signage at Hartman Ave and Blue Lake Blvd
- Convert Hartman Ave. to one way traffic

Engineering – Priority Projects
G St./2nd Ave.

Example
Mini-Roundabout

City of Arcata-
12th and I St.



Engineering

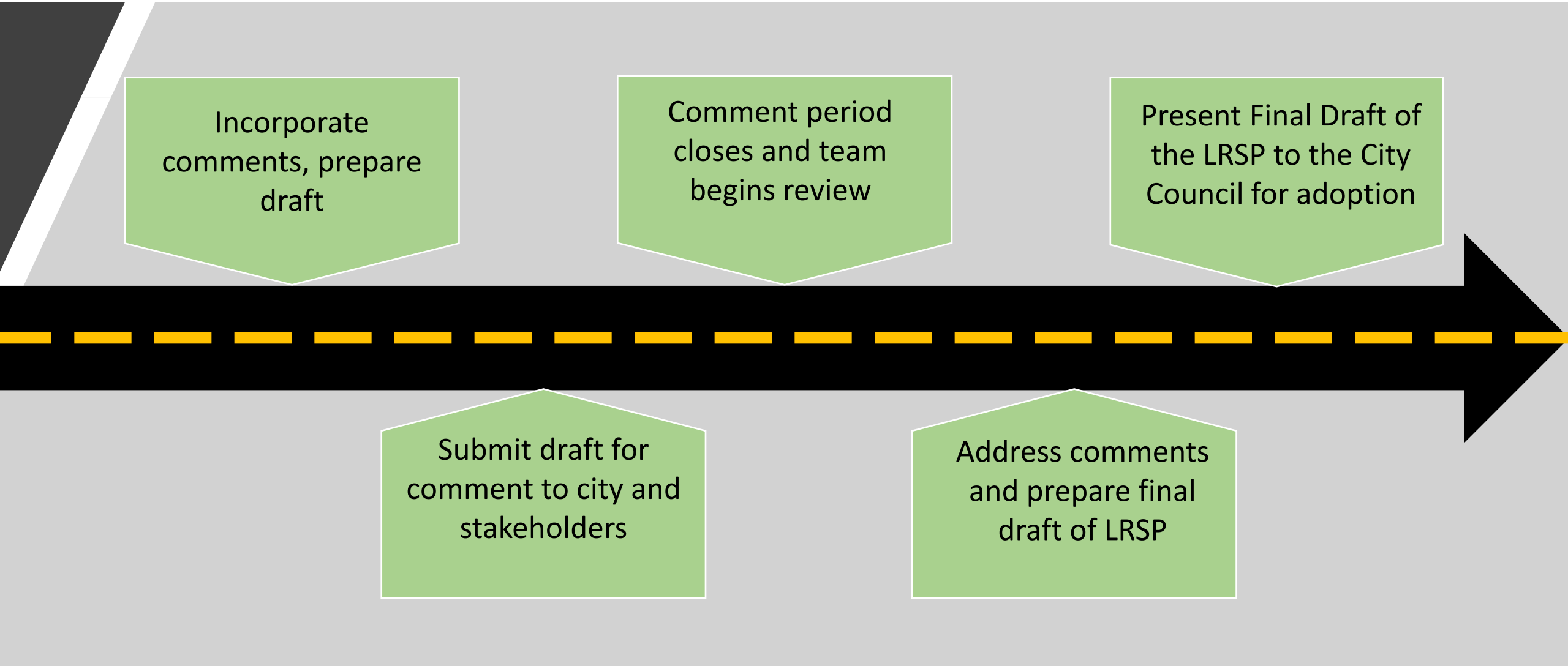
Other Countermeasures

- Install protective piers around fire hydrants or relocate to establish curb protection
- Consider systemic approach for countermeasures at H and I St.- Raised crosswalks, speed controls.
- Consider low-cost intersection controls for other intersections along BL Blvd.
- Safe routes to school- 2nd Ave/F and Broad St.
- Railroad Ave – Address Commercial Traffic Issues

H St.

I St.

Moving Forward



Public Surveys 3

City of Blue Lake
Local Road Safety Plan

The City of Blue Lake is looking for your help!

We are gathering data on traffic incidents and near misses around the City (2015 to present).

Have you experienced an accident or near miss in the City of Blue Lake from 2015 to the present day?

If so, you are encouraged to fill out a survey to document that experience.

Just navigate to the City of Blue Lake website or use the hyperlinks attached below to access the survey.

Filling out one survey will take approximately 5 minutes and the information you provide will help the City identify high risk areas to focus future funding and safety countermeasures towards. Thank you for helping improving road safety for pedestrians, cyclists, and motor vehicles.

We have two types of surveys: One for accidents and one for near misses.

1. Survey number one (https://www.surveymonkey.com/r/GVCG32L) is for those that have been involved in an accident or traffic related incident.
2. Survey number two (https://www.surveymonkey.com/r/G85VQ8K) is for those that have experienced a near miss. Think…
    a. *"A vehicle swerving in the bike lane almost hit me while I was riding my bike"*
    b. *"I woke up and saw a vehicle had driven through my front yard"*
    c. *"A vehicle ran a stop sign in front of me"*

Have questions? Contact:
Amanda Mager (Blue Lake City Manager)
citymanager@bluelake.ca.gov

City of Blue Lake Traffic Incident Report

1. Please state your first and last name. (D*oing so is a certification that all the information provided in this survey is truthful*).

2. Where (Please specify the nearest intersection, with the approximate distance and direction from it) and when (*Please estimate the date and time of day)* did this incident occur?

3. If possible, please provide the estimated longitude and latitude coordinates of the incident? (*This can be found when clicking on a point in google maps. The point description which appears will include these coordinates)*

4. Please select all parties involved in the incident:

- [ ] Motor vehicle
- [ ] Bicycle
- [ ] Pedestrian
- [ ] Truck
- [ ] Motorcycle
- [ ] Other (please specify)
- [ ] Other motor vehicle
- [ ] Motor vehicle on other roadway
- [ ] Parked motor vehicle
- [ ] Animal
- [ ] Fixed object (pole, hydrant, mailbox, etc.)

5. Select the type/types of collision(s)

- [ ] Head-on
- [ ] Sideswipe
- [ ] Rear end
- [ ] Broadside
- [ ] Other (please specify)
- [ ] Collision with object
- [ ] Overturned
- [ ] Vehicle/pedestrian
- [ ] Vehicle/bicycle

6. How severe was the collision?

- ○ Fatal
- ○ Injury-Severe (ambulance or immediate ER trip necessary)
- ○ Injury-Evident (injury clearly visible, but not severe)
- ○ Injury-Possible (complaint of pain, but nothing visible or verifiable)
- ○ Property Damage Only (PDO)

7. What were causal factors in this incident?

- [ ] Unknown
- [ ] Driver, cyclist, or pedestrian under the influence of drugs or alcohol
- [ ] Impeding traffic
- [ ] Unsafe speed
- [ ] Following too closely
- [ ] Wrong side of the road
- [ ] Improper passing
- [ ] Unsafe lane change
- [ ] Improper turning
- [ ] Automobile right of way
- [ ] Other (please specify)
- [ ] Pedestrian right of way
- [ ] Pedestrian violation
- [ ] Traffic signals and signs
- [ ] Hazardous parking
- [ ] Mechanical failure (lights, brakes, etc.)
- [ ] Unsafe starting or backing
- [ ] Fell asleep
- [ ] Animal caused
- [ ] Other than driver or pedestrian (tree in road, powerline down, etc.)

8. What was the weather during the time of the incident?

- ( ) Do not recall
- ( ) Clear
- ( ) Cloudy
- ( ) Raining
- ( ) Other (please specify)
- ( ) Snowing
- ( ) Fog
- ( ) Wind

9. What category of countermeasure would best prevent this incident happening in the future?

- ○ Engineering (*Infrastructure change, alter road, signage, etc.)*
- ○ Education (*Outreach to drivers, pedestrians, etc.)*
- ○ Enforcement (*Increase law enforcement presence or frequency, DUI checkpoints, etc.*)
- ○ Emergency response (*Improvement in response time, basic local medical training, etc*.)
- ○ Other (please specify)

10. Please add any additional comments:

City of Blue Lake Traffic (near miss) Incident Report

1. Please state your first and last name. (D*oing so is a certification that all the information provided in this survey is truthful*).

2. Where (Please specify the nearest intersection, with the approximate distance and direction from it) and when (P*lease estimate the date and time of day)* did this near miss occur?

3. If possible, please provide the estimated longitude and latitude coordinates of the near miss? (*This can be found when clicking on a point in google maps. The point description which appears will include these coordinates)*

4. Please select all parties involved in the near miss:

- [ ] Pedestrian
- [ ] Bicycle
- [ ] Motor vehicle
- [ ] Animal
- [ ] Motor vehicle on other roadway
- [ ] Fixed Object (pole, hydrant, mailbox, etc)
- [ ] Parked motor vehicle
- [ ] Motorcycle
- [ ] Truck
- [ ] Other (please specify)

5. What were causal factor(s) in this near miss:

- [ ] Unknown
- [ ] Driver, cyclist, or pedestrian under the influence of drugs or alcohol
- [ ] Impeding traffic
- [ ] Unsafe speed
- [ ] Following too closely
- [ ] Wrong side of the road
- [ ] Improper passing
- [ ] Unsafe lane change
- [ ] Improper turning
- [ ] Automobile right of way
- [ ] Other (please specify)
- [ ] Pedestrian right of way
- [ ] Pedestrian violation
- [ ] Traffic signals and signs
- [ ] Hazardous parking
- [ ] Mechanical failure (lights, brakes, etc.)
- [ ] Other than driver or pedestrian (tree down, powerline down, etc.)
- [ ] Animal caused
- [ ] Unsafe starting or backing
- [ ] Fell asleep

6. What was the weather at the time of the near miss?

- ( ) Do not recall
- ( ) Clear
- ( ) Cloudy
- ( ) Raining
- ( ) Other (please specify)
- ( ) Snowing
- ( ) Fog
- ( ) Wind

7. What category of countermeasure would best prevent this near miss from happening in the future?

- ○ Engineering (*Infrastructure change, alter road, signage, etc.)*
- ○ Education (*Outreach to drivers, pedestrians, etc.)*
- ○ Enforcement (*Increase law enforcement presence or frequency, DUI checkpoints, etc.*)
- ○ Emergency response (*Improvement in response time, basic local medical training, etc.*)
- ○ Other (please specify)

8. Please add any additional comments:

Law Enforcement Records

4

Date	Inc #	Type	Time	Location	Dispositio
10/20/2018	1810200058	TA	10:52:50	311 G ST	Cad Documentation Only 20180542S
10/29/2018	1810290012	TA	07:12:55	171 GELY ST	Arrest Made 20180S593
12/23/2018	1812230057	TA	10:54:41	BLUE LAKE BLVD/CHARTIN W	Report Taken 20180 6610
01/03/2019	1901030079	TA	13:08:40	STATE HWY 299 OFF RAMP	Referred To Other Agency
02/18/2019	1902180035	TA	07:26:12	STATE HWY 299/BLUE LAKE	Agency Assist
04/07/2019	1904070018	TA	02:35:55	BLUE LAKE BLVD/BUCKLEY R	Agency Assist
04/21/2019	1904210018	TA	02:17:51	GREENWOOD RD/BLUE LAKE B	Agency Assist
10/19/2019	1910190077	TA	14:12:33	777 CASINO WY	Referred To Other Agency
11/07/2019	1911070134	TA	17:54:28	1825 STATE HWY 299	Report Taken
01/07/2020	2001070007	TA	02:19:13	777 CASINO WY	Xfer to CHP
01/09/2020	2001090004	TA	01:48:13	BLUE LAKE BLVD/GREENWOOD	eferred To Other Agency
01/09/2020	2001090005	TA	01:49:35	BLUE LAKE BLVD/GREENWOOD	eferred To Other Agency
03/13/2020	2003130209	TA	21:37:30	STATE HWY 299/OLD STATE	Agency Assist
10/02/2020	2010020130	TA	15:24:54	STATE HWY 299	Agency Assist
10/07/2020	2010070063	TA	12:25:10	295 BLUE LAKE BLVD	No Report
10/21/2020	2010210108	TA	15:04:01	777 CASINO WY	Public Assist
12/31/2020	2012310021	TA	06:54:42	STATE HWY 299/OLD THREE	Agency Assist
02/13/2021	2102130008	TA	01:31:29	STATE HWY 299	Agency Assist
03/15/2021	2103150037	TA	08:51:42	631 GREENWOOD RD	Agency Assist
05/18/2021	2105180188	TA	23:51:52	BLUE LAKE BLVD/CHARTIN R	Arrest Made 202102624
07/11/2021	2107110005	TA	00:39:00	BLUE LAKE BLVD/ROUNDABO	eport Taken 202103625

BerkeleySafeTREC

Crash Details for: Case ID 90019976

Crash Information

County	Humboldt
City	Unincorporated
Date & Time (M/D/Y)	09/13/2015 16:45
Location (Intersection)	Blue Lake Ave & Chartin Rd
Dist. & Dir. from Intersection	181.00 ft East
State Highway	No
Geocoded Location	40.885902, -123.9921409

Type of Crash	E - Hit Object
Motor Vehicle Involved With	I - Fixed Object
Crash Severity	3 - Injury (Other Visible)
PCF Violation Category	08 - Improper Turning
Weather	A - Clear
Alcohol Involved	No

Pedestrian Accident	No	**Bicycle Accident**	No
Motorcycle Accident	No	**Truck Accident**	No

Map View

Street View

Parties: 1

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	East	B - Proceeding Straight

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	2 - Passenger	M - Male	39	6 - Suspected Minor Injury

BerkeleySafeTREC

Crash Details for: Case ID 90090251

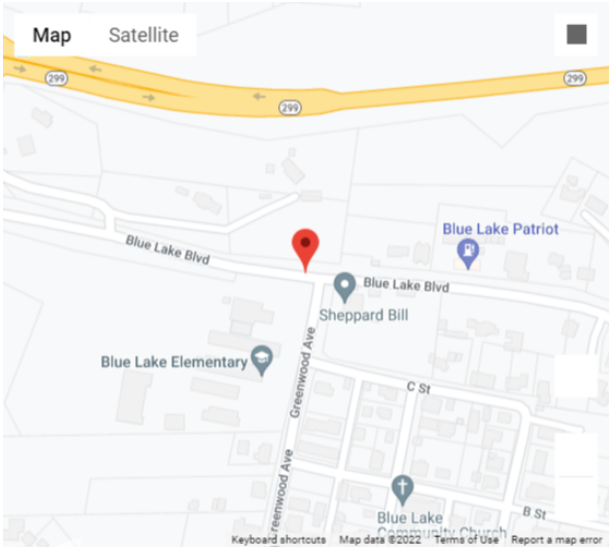
Crash Information

County	Humboldt
City	Unincorporated
Date & Time (M/D/Y)	01/03/2016 17:50
Location (Intersection)	Blue Lake Blvd & Greenwood Rd
Dist. & Dir. from Intersection	21.00 ft West
State Highway	No
Geocoded Location	40.8857547, -123.9908957

Type of Crash	E - Hit Object
Motor Vehicle Involved With	I - Fixed Object
Crash Severity	4 - Injury (Complaint of Pain)
PCF Violation Category	01 - Driving or Bicycling Under the Influence of Alcohol or Drug
Weather	B - Cloudy
Alcohol Involved	Yes

Pedestrian Accident	No	**Bicycle Accident**	No
Motorcycle Accident	No	**Truck Accident**	No

Map View



Street View

Parties: 1

Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	A - Passenger Car/Station Wagon	Yes	West	E - Making Left Turn

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	1 - Driver	M - Male	34	7 - Possible Injury

BerkeleySafeTREC

Crash Details for: Case ID 91062620

Crash Information

County	Humboldt
City	Unincorporated
Date & Time (M/D/Y)	05/01/2019 13:52
Location (Intersection)	Blue Lake Blvd & Davis St
Dist. & Dir. from Intersection	50.00 ft East
State Highway	No
Geocoded Location	40.8852577, -123.9875336

Type of Crash	E - Hit Object
Motor Vehicle Involved With	I - Fixed Object
Crash Severity	1 - Fatal
PCF Violation Category	01 - Driving or Bicycling Under the Influence of Alcohol or Drug
Weather	A - Clear
Alcohol Involved	No

Pedestrian Accident	No	**Bicycle Accident**	No
Motorcycle Accident	Yes	**Truck Accident**	No

Map View

Street View

Parties: 1

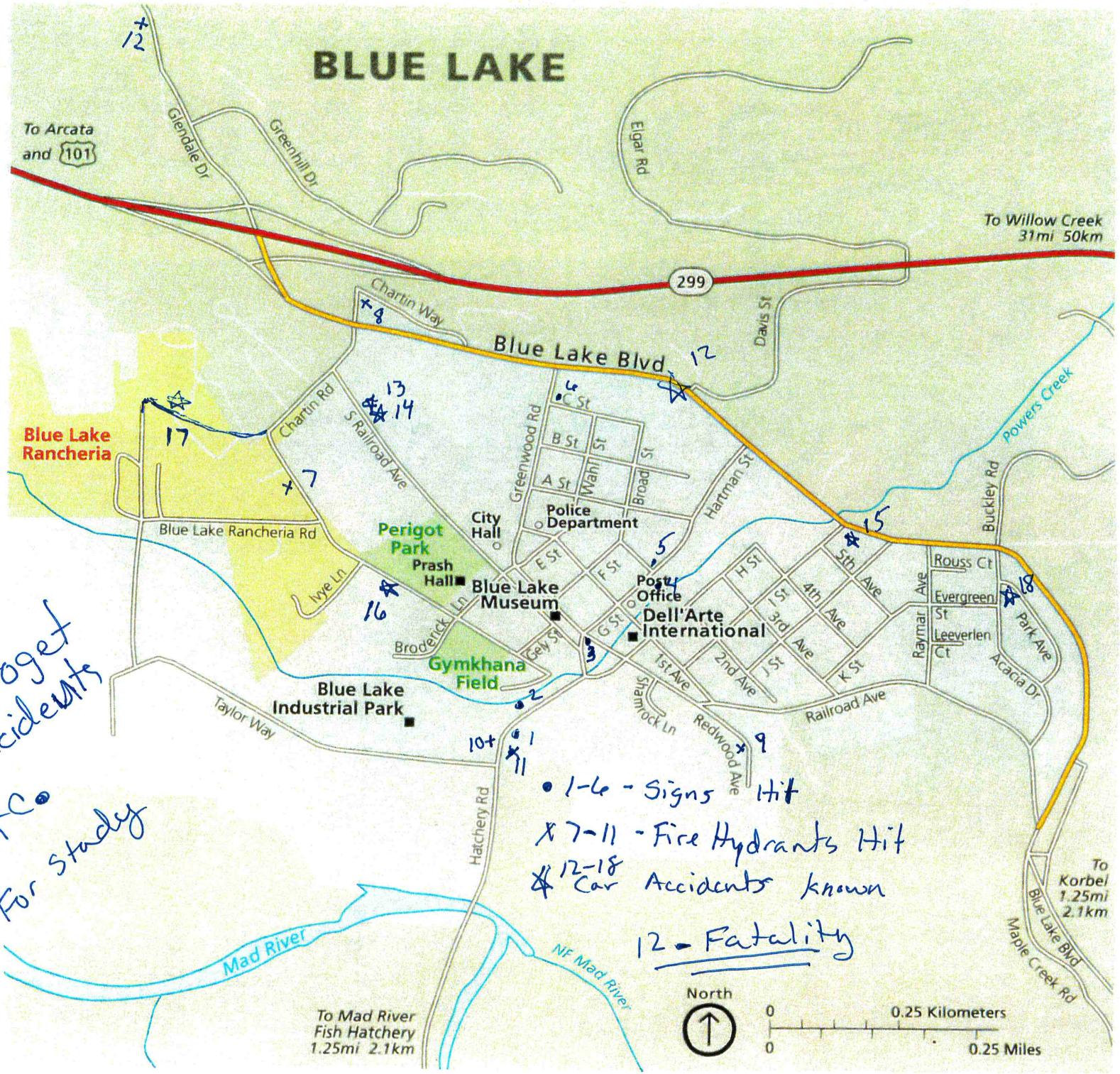
Party Number	Party Type	Statewide Vehicle Type	At Fault	Party Direction	Movement Preceding Collision
1	1 - Driver (including Hit and Run)	C - Motorcycle/Scooter	Yes	East	C - Ran Off Road

Victims: 1

Party Number	Victim Role	Victim Gender	Victim Age	Victim Degree of Injury
1	1 - Driver	M - Male	26	1 - Killed

Public Works Incident Reports within the Project Extent

5



Mike Foget
Know Accidents
Etc.
For study

• 1-6 - Signs Hit
X 7-11 - Fire Hydrants Hit
★ 12-18 Car Accidents known
12 - Fatality

Near Misses Survey Results

6

Public Survey Summary Blue Lake LRSP 2021-2022

Grey indicates report outside of project extent

Near Miss Reports - City of Blue Lake LRSP 2021-2022

Near Miss Report Results	Serial Number	Date	Location	Lat/Long	Involved parties	Causes	Weather	Fix-it-how	Comments
Kim Warvi	NM-001	11-Jul-21	Perigot Park, playground side		Motor Vehicle/child	Drunk/ Pedestrian right of way	clear weather	Engineering plus enforcement	child almost hit
Kim Warvi	NM-002	May-21	Gst, by post office		Ped/ motor vehicle	Speeding	clear weather	Engineering	Car almost hit kid
Charlotte Ferguson	NM-003	Unkown	Corner of Acacia Drive and Blue Lake Blvd		Car versus Car	speeding and cannot see due to trees at intersection	clear weather	Enforcement and engineering	
Kim Wester	NM-004	Jun-21	299 off ramp to Blue Lake Blvd	40.887300,-123.997431	Car versus Car	Auto right of way, traffic signals and sign	clear weather	Engineering	Car nearly rear ended car yeilding to traffic. Possible signage or traffic calming measures on the off ramp
Kim Wester	NM-005	Routinely	299 off ramp to Blue Lake Blvd		Car versus Car	traffic signals	clear weather	Engineering	Cars yield inappropirately
Julie Johnson	NM-006	Routinely	Acacia/ Buckley and Blue lake Blvd		Anything versus vehicle	Unsafe speed	all the time	engineering	Blind corner with speeding cars down Korbel, needs better visibility
Jessica Swanlund	NM-007	4/27/2020 at 3:30pm	Greenwood Ave and Blue Lake Blvd		Anything versus vehicle	Impeding traffic, hazardous parking,wrong side of road	all the time	Engineering	with cars parking, school traffic backed up, it is impossible to see at this intersection
Hall	NM-008	8/14/2021	Chartin and Rancheria		Car versus Car	unsafe speed and improper turning	Do not remember	engineering	narrow road, no sidewalk, and high speeds lead to near daily misses
Crystal Eckhardt	NM-009	3/23/2021 at 7:00am	Bus Stop on Maple Creek Rd.	40.874605, -123.978335	Truck and school bus	Blocked view	No not recall	engineering	Truck driver was contacted and had GPS on his truckindicating he was going 36 mph
Ingrid Kosek	NM-010	unknown	Broad and F Sts.		Ped versus car	unsafe speed	clear weather	engineering	Cars drive too fast, lots of kids around, suggest a traffic circle to slow things down
Andrew Jones	NM-011	Sumer 2020	Hartman and BL BLVD		Bicycle versus car	Wrong side of road/ improper turning/Poor Visibility	clear weather	Education	Cyclist rode on sidewalk and did not see automobile causeing a near incident
Kelly Scott	NM-012	Often	490 Blue Lake BLVD	40.883, -123.985	Anything versus anything	Unsafe speed and hazardous parking/Poor Visibility	do not recall	Engineering	Heavy fast traffic, no enforcement, parked cars can inhibit views prohibiting safe exits from driveways
Rebekah Hamilton	NM-013	often	roundabout		motor vehicle	Unsafe speed/ improper turning/ automobile right of way	all weather	Engineering	Multiple times have almost rear-ended people STOPPING in the roundabout to let those with a yield sign into the roundabout
Rebekah Hamilton	NM-014	17-Oct	Blue Lake BLVD and Greenwood		Motor vehicle	Improper turning/ Automobile right of way	Clear	Education	Driver turning left onto blue lake blvd from greenwood ave did not wait to see if my vehicle was turning right onto greenwood and swiftly pulled out in front of me after waiting a few seconds to check other lanes (i was not turning right onto greenwood but instead going straight)

Public Survey Summary Blue Lake LRSP 2021-2022

Grey indicates report outside of project extent

Near Miss Reports - City of Blue Lake LRSP 2021-2022

Near Miss Report Results	Serial Number	Date	Location	Lat/Long	Involved parties	Causes	Weather	Fix-it-how	Comments
Laurie Lynch	NM-015	1-Sep	Blue Lake Blvd and Greenwood		Motor vehicle/ traffic cones	Unknown/ unsafe speed	Clear	Enforcement	I witnessed the same vehicle (dark gray older model Cadillac sedan with Montana plates) swerve to hit traffic cones lining the fog line on the school side of Greenwood on at least 3 separate days during this time period. They knew they were being watched, as the passenger would hide her face each time they drove past the traffic control team. I took down the license plate and reported it to the school superintendent.
Laurie Lynch	NM-016	18-Oct	Greenwood and BSt	40.884535, -123.991045	Motor vehicle/ schoolc rossing sign	Unsafe speed/ wrong side of road/ impropper passing/ unsafe lane change	clear	Enforcement	The school's traffic control team got the driver to slow down (still above the 15mph marked) in front of the school. However, the driver then swerved into the on-coming lane to go around the school crossing sign and the school bus parked against the curb. Her lane of travel was clear at the time. No other vehicles or pedestrians were involved.
Bethany Cseh	NM-017	Oct 15 morning	Greenwood rd.		motor vehicle/ vehicle parked	Impeding traffic, hazardous parking	clear	Other	The school bus is parked right in front of the crosswalk and this impedes my line of sight and those in the crosswalk. It's incredibly dangerous.
Lynn Jones	NM-018	often	Blue Lake BLVD and Buckley Rd/ Acacia		All vehicle users	Unsafe speed	do not recall	Engineering	Drivers do not slow down on BL Blvd as they re-enter Blue Lake (coming from Korbel), until they are way into the residential area, near the laundromat. This includes empty and full lumber trucks, going 45+ mph as they make the sharp turn into the residential stretch. And people heading out toward Korbel tend to gun it into the turn as they pass Acacia. This corridor is extremely unsafe for children, animals, pedestrians, bikers, cars entering the roadway from the stop signs and the houses nearby that risk one out-of-control vehicle plowing straight through them.
Lori Ann Arias	NM-019	14-Aug-21	Glendale Dr						

Incident Report Results - City of Blue Lake LRSP 2021-2022

Incident Report Results									
Kim Warvi	I-001	Nov-20	Gst, by Post Office		Motor vehicle with Animal	Speeding and wrong side of road	clear weather	Engineering	speeding car killed cat

Street Story Guide 7

Street Story: Starter Guide for Communities and Agencies

This guide includes an explanation about what Street Story is, how to enter information, how organizations can use the tool in community engagement efforts, and how people can use the information collected to improve street safety.

Street Story was created by a team at UC Berkeley's Safe Transportation Research and Education Center (SafeTREC), with city planning, public health, engineering, social welfare and computer science backgrounds. Members of the public, as well as agency and organization representatives and industry experts, provided important input.

1. What is Street Story?

Street Story is a community engagement tool that allows residents, organizations and agencies to collect local information about traffic crashes, near-misses, general hazards and safe locations to travel. Organizations and agencies can use Street Story to collect public input that is part of community needs assessments, transportation plans, grant applications for safety programs or infrastructure, or evaluations.

The platform and the information collected are free to use and publicly accessible.

Street Story includes a survey about roadway experiences and a dataset of community input with maps and tables that can be downloaded. Once the surveys have been completed, organizations and agencies can use the information as part of community needs assessments, transportation safety planning or evaluations.

Street Story data

Street Story collects experiences related to crashes, near-misses, general hazards and safe places to travel. Members of the public can provide information about a safety issue or safe place to travel, and observations about that place, including information about the built environment (sidewalks, roadways, bike lanes, etc.) and type of incident. Participants are able to provide a narrative or description about the incident or location.

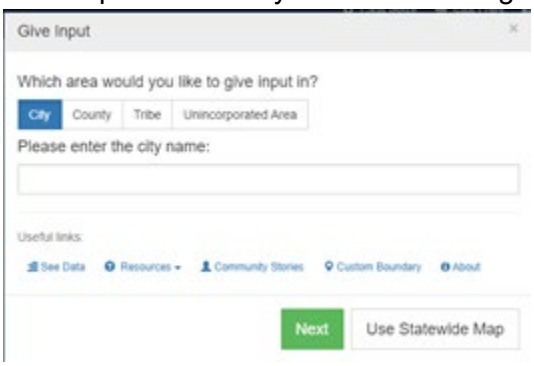
You can view and download Street Story information by going to the “See Data” tab on the platform’s main menu. SafeTREC will post narratives online once we make sure they do not contain identifying information.

2. How does the Street Story platform work?

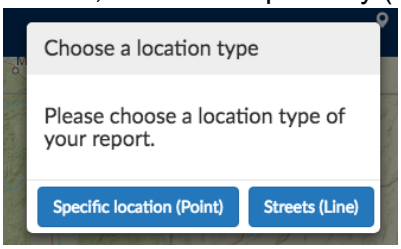
Data Collection

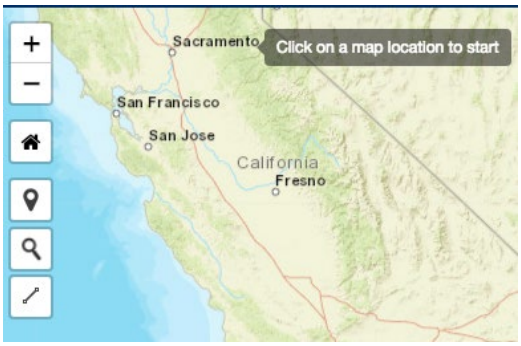
The platform allows people to provide feedback about transportation safety in communities across California. You can give input by following these steps:

a) Go to http://streetstory.berkeley.edu and type the city, county, tribal area, or unincorporated area you would like to give input, and click the “Next” button.

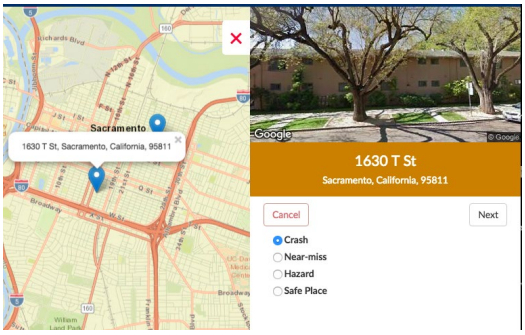


b) Choose whether you would like to give input about a specific location (point) or a stretch of road, sidewalk or pathway (line).





d) Choose the type of report you would like to make, then answer the questions that follow. You can skip any questions you would like to.

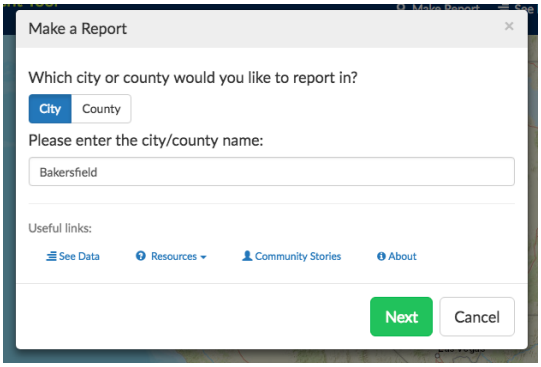


e) Once you have submitted your report, you can choose to answer some questions about yourself. You can skip any questions you choose.

Data Visualizations

You can view data that has been collected in the Street Story platform for a **specific city or county** by following these steps:

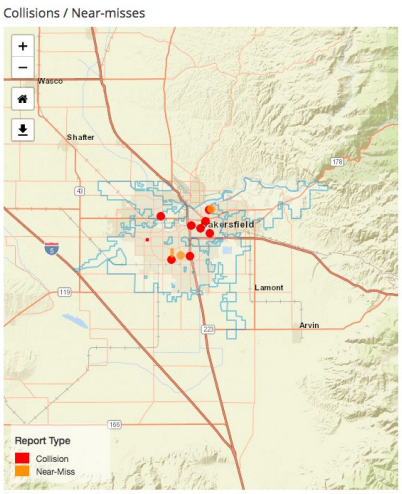
a) Go to http://streetstory.berkeley.edu and type in the city, county, tribal area, or unincorporated area you would like to see data for, and select the “Next” button.

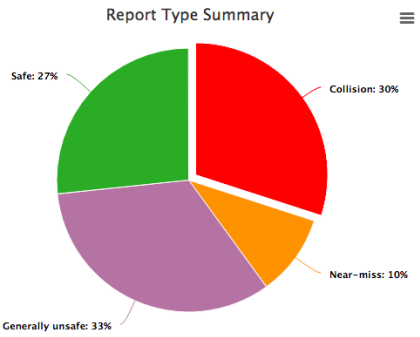


b) When directed to choose a location type, make a selection and in the top right hand corner, select the “See Data” link.

c) You will be directed to the “Reports” page, which will show maps and tables about the Street Story reports made in the city, county, tribal area, or unincorporated area you have selected and the demographics of the people who have made these reports.

d) To download a specific map or table, select the icon in the right upper corner of the visualization or the “download” button on the map.





e) To print or make a pdf of all maps and tables, select “Print” on your internet browser, then follow your browser’s instructions.

3. How can I use Street Story in my organization or agency’s community outreach efforts?

Street Story is designed to be used alongside other community engagement efforts. We recommend taking the following steps to develop community engagement efforts that fit your organization’s needs, and to learn more about innovative community engagement in the “Resources” subsection at the end of this section.

Steps for developing outreach strategies

a) Decide who you want to hear from and what you want to hear about

Before deciding which kinds of community engagement efforts you’re going to take on, define who your focus communities are and what they can teach you. Focus communities can be broad (e.g., everyone travelling through, living, or working within a specific corridor), or they can be very specific (e.g., residents and employees of a retirement home). It may also be helpful to set goals for the number of people you plan to reach and the information you hope to collect through community engagement efforts. To learn more about choosing focus communities and beginning community engagement efforts, see links outlined in the ”Resources” subsection.

Users may enter demographic information, which may help determine whether you are hearing from the groups you intend to reach.

To learn more about choosing focus communities and beginning community engagement efforts, see links outlined in the ”Resources” subsection.

b) Partner with trusted organizations, leaders

When engaging with communities, it is important to partner with community leaders who are known and trusted by their communities.

When using Street Story with partner organizations, here are a few things to think about:

- When talking about Street Story, tell partners that the platform is free to use and the information is both publicly accessible and anonymous.
- You can share postcards and flyers with information about Street Story. These can be downloaded on the Street Story website.
- Consider the most appropriate way to get people involved in using Street Story. For example, you can share the link to the Street Story website then ask people to complete the survey on their phones, or you can provide paper versions of Street Story for people to complete the survey on.

c) Be where your focus communities are

We suggest collecting information at:

- Parking lots or garages
- Grocery and shopping areas
- Senior centers and retirement homes
- Healthcare centers
- Bus stops
- Libraries
- Community centers
- Schools

Prior to an event, check whether the site has Internet access.

Community Event Ideas

There are many different types of events your organization can host or attend to collect meaningful information about your communities’ transportation experiences. Below, we include a few ideas for events that we have incorporated Street Story into.

Walk audit
Plan a walk with a group of 5-15 members, and take notes about locations where people feel safe, unsafe or have experienced a crash or near-miss in the past. After the walk audit, convene at a location where the group can debrief about their experiences and can spend time recording information onto the Street Story website.

Steps:

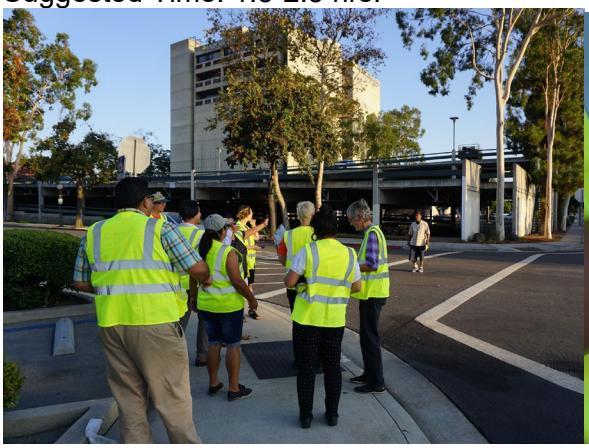
- Introduce Street Story to the group of attendees, including the types of information the group will collect to put into the platform (safe and unsafe locations, crashes or near-misses)

- Complete a short walk around the site (approximately 20-30 minutes is fine), and take notes about locations where attendees feel safe, unsafe or may have experienced a collision or near-miss at in the past
- Return to the meeting location and spend some time talking about observations and recording information collected using the online version
- Review the data collected on the Street Story See Data page (projector and WIFI must be available)

Materials:

- Meeting location with reliable WIFI access
- Computers or tablets
  Note-taking supplies
- Projector (optional)

Suggested Time: 1.5-2.5 hrs.




Community meeting

Hold a meeting where community members can discuss their transportation safety experiences and spend time recording information on the Street Story website. This could occur at a community center, school, library, health center, etc.

Steps:

- Introduce Street Story to the group of attendees, including how your group plans to use the information collected
- Introduce each input category - collision, near-miss, hazard and safe location
- Spend some time (e.g., 20-30 minutes, but this will vary with the size of the group) minutes allowing attendees to record their experiences
- Spend 10 minutes reviewing the data collected on Street Story's See Data page (optional if projector is available)

Materials:

- Location with reliable Wi-Fi access
- Computers or tablets
- Note-taking supplies
- Projector (optional)

Suggested Time: 45-60 min

Community events

Bring Street Story to existing community events. Ask attendees to provide information using a tablet or computer, or hand out flyers with Street Story information and ask attendees to input information on the website at home. You can think about bringing Street Story to events like:

- Farmers Markets
- Bike Rodeos
- Open Streets events
- Health fairs
- Sporting events
- School events
- Block parties
- Digital literacy training workshops
- Cultural events
- County fairs

Prior to an event, check whether the site has Internet access.

Steps:

- Coordinate with event organizers to set up a table at the event
- During the event, ask attendees to provide feedback using a smart phone, tablet or computer, or distribute flyers with Street Story information

Materials:

- Street Story flyers
- Location with reliable Wi-Fi access or paper version (optional)
- Tablet (optional)
- Note-taking supplies

d) Measure how well community engagement efforts work

Guidelines for measuring the effectiveness of community engagement efforts:

- Who are you trying to reach with your engagement activities and how will you know when you are successful?
- What can communities teach you, and how will you integrate this information in your future work?
- How many people do you want to collect information from?

Street Story measures the following:

1. Number of total entries within a jurisdiction.
2. Number of entries into each of the four categories, e.g., collisions, near misses, hazardous places, safe places.
3. Demographics.
4. Whether Street Story participants are first time users.
5. How often participants attend transportation safety-related community meetings in order to show whether Street Story is collecting information from people who are or are not already participating in other community engagement efforts.

This information can be obtained in the “See Data” option on the Street Story website.

Community engagement resources

Here is a selection of resources that have helped us to put this guide together. Feel free to explore further:

- MetroQuest’s 100 Great Community Engagement Ideas: https://metroquest.com/wp-content/uploads/Guidebook-100-Great-Community-Engagement-Ideas.pdf
- Use of Communication Technologies to Enhance Public Involvement in Transportation Projects https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/planning/policy/public-involvement/fdot-bdv29-977-32-rpt.pdf?sfvrsn=9eff0f7b_2

- NACTO's webinar "Public Engagement that Counts" https://nacto.org/event/nacto-webinar-public-engagement-counts/

Ethical considerations

When having conversations about people's experiences, it's important to remember that the participant is in charge, and they can decide how much information they give and when they want to end participation.

Narratives are reviewed prior to posting in order to ensure that no identifying information appears on the platform.

Addressing the digital divide

The digital divide is a term used to describe the social and economic inequity related to access to and use of the internet and technology. When using technology to collect public feedback, it's critical to think about whether groups you are reaching out to have access to and are comfortable using web-based technologies. For more information, visit Pew Research Center's series of articles about the digital divide.

There are a number of ways you can use Street Story with people who do not have access to reliable internet, data plans, smartphones or computers. You can:

- Host community events in areas with free, accessible WIFI.
- Bring devices, like tablets, that connect to the internet to community events.
- Host events at locations that have devices that connect to the internet, like libraries, schools or job centers with publicly available computers.
- Use the paper version of Street Story.

4. How can my organization or agency use Street Story data in transportation safety efforts?

Street Story information is publicly available at an aggregate level at streetstory.berkeley.edu, on the "see data" tab. These maps and tables can be downloaded and used in reports, outreach materials or funding proposals.

Street Story data complements other data sources about street safety, including police-reported collisions (TIMS), hospital-reported collisions, and built environment characteristics.

Street Story data is not a substitute for reporting crashes to the police. To make a crash report, contact 911 or your local law enforcement. To access police-reported collision data, visit SafeTREC's Transportation Injury Mapping System (TIMS platform).

Using the Street Story paper version

Street Story is designed to be used online, but there is also a paper version available in English and Spanish for people who might not have digital access or who feel more comfortable providing information or experiences on paper. For me information about the paper versions, please email us streetstory@berkeley.edu.

Working with youth

People must be 13 years or older to enter information into Street Story.

Stay Connected!

To learn more about Street Story, visit Street Story's program page on the SafeTREC website. To follow SafeTREC on Twitter go to https://twitter.com/UCBSafeTREC. Questions? Please email us at streetstory@berkeley.edu.

Funding Programs for Active Transportation Projects and Elements

8

FUNDING PROGRAMS THAT MAY INCLUDE ACTIVE TRANSPORTATION ELEMENTS

PROGRAM	ADMINISTERING AGENCY	PURPOSE/DESCRIPTION	OVERLAP WITH ATP	ACTIVE TRANSPORTATION			PROJECT EXAMPLES	WEBSITE
				Inf.	NI	Plan		
Sustainable Communities Planning Grants	Caltrans Division of Transportation Planning	The program includes $29.5 million to encourage local and regional planning that furthers state goals, including, but not limited to, the goals and best practices cited in the Regional Transportation Plan Guidelines adopted by the California Transportation Commission.	Eligible Types: ● Active Transportation Plan ● Bike Plan ● Pedestrian Plan ● Safe Routes to School Plan			X	• Safe Routes to School Plan • Active Transportation Plan • Bike/ped Trail/Path Feasibility Study • Complete Streets Plan • Sustainable Communities Plan • Transit-Oriented Development Plan • First/Last Mile Connectivity Plan	https://dot.ca.gov/programs/transportation-planning/regional-planning/sustainable-transportation-planning-grants
Affordable Housing and Sustainable Communities Program (AHSC)	Strategic Growth Council and Department of Housing and Community Development	The Program funds land-use, housing, transportation, and land preservation projects to support infill and compact development that reduce greenhouse gas emissions. The Program included $550M in its latest round. (California Climate Investments)	Eligible Types: ● Bike and pedestrian facilities ● NI Programs - Education *(Must connect with affordable housing component of the grant)*	X	X		• Class I, II, III, & IV bike lanes • Active transportation projects to encourage connectivity to transit networks • Bikeways and sidewalks to affordable housing and transit center • Install dedicated bicycle facilities • Pedestrian facilities such as bulb-outs	https://hcd.ca.gov/grants-funding/active-funding/ahsc.shtml
Urban Greening	California Natural Resources Agency	The Program supports the development of green infrastructure projects that reduce GHG emissions and provide multiple benefits. Must include at least one of the following: ● Sequester and store carbon by planting trees ● Reduce building energy use by strategically planting trees to shade buildings ● Reduce commute vehicle miles traveled by constructing bicycle paths, bicycle lanes or pedestrian facilities that provide safe routes for travel between residences, workplaces, commercial centers, and schools. (California Climate Investments)	Eligible Types: ● Bicycle and pedestrian facilities	X			• Non-motorized urban trails that provide safe routes for both recreation and travel between residences, workplaces, commercial centers, and schools • Projects that expand or improve the usability of existing active transportation routes (e.g., walking or bicycle paths) or create new active transportation routes that are publicly accessible by walking • Complete Green Streets	https://resources.ca.gov/grants/urban-greening
Transformative Climate Communities (TCC)	Strategic Growth Council and Department of Conservation	The Program funds community-led development and infrastructure projects that achieve major environmental, health, and economic benefits in California's most disadvantaged communities. (California Climate Investments)	Eligible Types: ● Bicycle and pedestrian facilities ● Bike share programs *(However must be part of a larger place-based strategy)*	X			• Bike share program • Creating and considering active transportation corridors for better non-motorized connections • Multi-use paths • Urban greening for pedestrian facilities	http://www.sgc.ca.gov/programs/tcc/
Office of Traffic Safety Grant Program	Office of Traffic Safety	The Program provides annual funds to prevent serious injury and death resulting from motor vehicle crashes so	Eligible Types:		X		• Safety education and encouragement • Campaigns to promote safety • SRTS safety programs	https://www.ots.ca.gov/Grants/

PROGRAM	ADMINISTERING AGENCY	PURPOSE/DESCRIPTION	OVERLAP WITH ATP	ACTIVE TRANSPORTATION			PROJECT EXAMPLES	WEBSITE
				Inf.	NI	Plan		
		that all roadway users arrive at their destination safely. Funds can be used for bicycle and pedestrian safety	• NI Programs – education, campaigns					
Clean Mobility Options	Air Resources Board	The Program makes $20 million available for zero-emissions shared mobility projects (such as car sharing, bike sharing, and on-demand sharing) in disadvantaged and low-income communities, including some tribal and affordable housing communities (California Climate Investments)	Eligible Types: • Bike Share • Infrastructure improvement projects	X			• Bikeshare programs • "Quick build" right-of-way safety improvements for bicycles and scooters	http://www.cleanmobilityoptions.org/
Sustainable Transportation Equity Project (STEP)	Air Resources Board	The Program makes $2 million available for planning and capacity building grants. Funding is intended to help low-income and disadvantaged communities identify residents' transportation needs and prepare to implement clean transportation and land use projects. The Program makes $20 million available for one to three implementation block grants to fund clean transportation and land use projects in disadvantaged communities. Funded projects will work together to increase community residents' access to key destinations so they can get where they need to go without the use of a personal vehicle (California Climate Investments)	Eligible Types: • Bike or pedestrian facilities • Active Transportation Plan • Bike Plan • Pedestrian Plan • Safe Routes to School Plan • Capacity Building (NI Programs– education, engagement, demo projects, campaigns)	X	X	X	• New bike routes (Class I, Class II, or Class IV) and supporting infrastructure • Publicly-accessible bike parking, storage, and repair infrastructure (e.g., bike racks, bike lockers, bike repair kiosks) • New walkways that improve mobility/access/safety of pedestrians (non-motorized users) • Street crossing enhancements, including accessible pedestrian signals • Plans	https://ww3.arb.ca.gov/msprog/ict/opportunitiesgov/step.htm
Transit and Intercity Rail Capital Program (TIRCP)	CalSTA and Caltrans Division of Rail and Mass Transportation	The TIRCP provides grants from the Greenhouse Gas Reduction Fund (GGRF) to fund transformative capital improvements that will modernize California's intercity, commuter, and urban rail systems, and bus and ferry transit systems, to significantly reduce emissions of greenhouse gases, vehicle miles traveled, and congestion.	Eligible Types: • First/Last Mile • NI Education and Outreach • Bicycle and pedestrian facilities at Transit sites	X	X	X	• Pedestrian and bike trail • First/last mile connections via bike lanes and separated paths • Bike share programs • Bike parking facilities • Plans	https://calsta.ca.gov/subject-areas/transit-intercity-rail-capital-prog https://dot.ca.gov/programs/rail-and-mass-transportation/transit-and-intercity-rail-capital-program
Local Partnership Program (LPP)	California Transportation Commission	The primary objective of this program is to provide funding to counties, cities, districts, and regional transportation agencies in which voters have approved fees or taxes dedicated solely to transportation improvements or that have imposed fees, including uniform developer fees, dedicated solely to transportation improvements. Funding includes $200M/year to improve aging Infrastructure, Road Conditions, Active Transportation, Transit and rail, Health and Safety Benefits	Eligible Types: • Bicycle and pedestrian facilities	X			• Close sidewalk gap, install class II bike lanes and cycle track, curb extensions, pedestrian enhancements, improvements to lighting and signage • Construct 4 single-lane and 1 multi-lane roundabouts, and improvements to street, pedestrian and bicycle facilities • Expressway pedestrian overcrossing	https://catc.ca.gov/programs/sb1/local-partnership-program

PROGRAM	ADMINISTERING AGENCY	PURPOSE/DESCRIPTION	OVERLAP WITH ATP	ACTIVE TRANSPORTATION			PROJECT EXAMPLES	WEBSITE
				Inf.	NI	Plan		
Local Streets and Roads (LSR) Program	California Transportation Commission	The purpose of the program is to provide approximately $1.5 billion per year to cities and counties for basic road maintenance, rehabilitation, and critical safety projects on the local streets and roads system.	Eligible Types: ● Complete Streets Components ● Safety Projects ● Bike Lanes	X			• Implement enhanced crosswalk signing and striping • Create safety separation between motorists, bicyclists and pedestrians • Design and construction of school access and safety improvements to six schools (SRTS)	https://catc.ca.gov/programs/sb1/local-streets-roads-program
Solutions for Congested Corridors (SCCP)	California Transportation Commission	The purpose of the program is to provide funding to achieve a balanced set of transportation, environmental, and community access improvements to reduce congestion throughout the state. This statewide, competitive program makes $250 million available annually for projects that implement specific transportation performance improvements and are part of a comprehensive corridor plan by providing more transportation choices while preserving the character of local communities and creating opportunities for neighborhood enhancement.	Eligible Types: ● Bike Lanes ● Ped Improvements	X			• Construct Class I and Class II bikeways • Pedestrian improvements and plaza at a transit station • Intersection improvements	https://catc.ca.gov/programs/sb1/solutions-for-congested-corridors-program
Highway Safety Improvement Program (HSIP)	Caltrans Local Assistance/ FHWA	The Program funds work on any public road or publicly owned bicycle or pedestrian pathway or trail, or on tribal lands for general use of tribal members, that improves the safety for its users. Project maximum funding- $10M. Solicitation varies from annually to semi-annually.	Eligible Types: ● Safety projects on Bike facilities ● Safety projects on Ped facilities	X		X	• Install hybrid pedestrian signals • Improve pedestrian and bicycle safety at locations with uncontrolled crossings • Plans	https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/highway-safety-improvement-program
State Highway Operations and Protection Program (SHOPP)	Caltrans Office of SHOPP Management	The Office of SHOPP Management is responsible for planning, developing, managing and reporting the four-year SHOPP portfolio of projects. The Program is the State Highway System's "fix it first" program that funds repairs and preservation, emergency repairs, safety improvements, and some highway operational improvements on the State Highway System.	Eligible Types: ● Bike & Pedestrian elements *(In the context of facility type, right of way, project scope, and quality of nearby alternative facilities)*	X			• Upgrade sidewalks to ADA compliance • Reconstruct damaged pavement • Add bike lanes to updated corridors • Upgrade pedestrian push buttons, refresh striping, and improve pedestrian and bicycle access	https://dot.ca.gov/programs/transportation-programming/state-highway-operation-protection-program-shopp-minor-program-shopp
State Transportation Improvement Program (STIP)	California Transportation Commission	The STIP is the biennial five-year plan adopted by the Commission for future allocations of certain state transportation funds for state highway improvements, intercity rail, and regional highway and transit improvements. Local agencies should work through their Regional Transportation Planning Agency (RTPA), County Transportation Commission, or Metropolitan Planning Organization (MPO), as appropriate, to nominate projects for inclusion in the STIP.	Eligible Types: ● Bicycle & Pedestrian projects *(Must be eligible for State Highway Account or Federal funds)*	X			• Bike/ped Overcrossing and Access Improvements and bicycle and pedestrian bridge • Class I, II, III, & IV bike lanes • Multi-Use paths • Complete Streets improvements	https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/state-transportation-improvement-program

PROGRAM	ADMINISTERING AGENCY	PURPOSE/DESCRIPTION	OVERLAP WITH ATP	ACTIVE TRANSPORTATION			PROJECT EXAMPLES	WEBSITE
				Inf.	NI	Plan		
Congestion Mitigation and Air Quality Improvement (CMAQ) Program	FHWA	The purpose of the CMAQ program is to provide a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. The program supports surface transportation projects and other related efforts that contribute air quality improvement and provide congestion relief.	Eligible Types: ● Bicycle facilities	X			• Travel Demand Management to promote clean commutes • Public Education and Outreach • Bicycle amenities; Class I, II, III, & IV bike lanes	https://www.fhwa.dot.gov/environment/air_quality/cmaq/

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