Los Gatos Local Roadway Safety Plan

Prepared for:
The Town of Los Gatos

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FEHR PEERS

Attachment 1

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Introduction

The Town of Los Gatos is committed to prioritizing safety and eliminating traffic related deaths and serious injuries on Town streets. This Local Roadway Safety Plan (LRSP) proactively evaluates locations with relatively high numbers of collisions (hot spots) and collision trends throughout the Town to identify the proven countermeasures that can be implemented through the current and future Capital Improvement Plan (CIP). This section defines the Safe System approach, an idea which underlies this LRSP, and provides background on Los Gatos.

What is an LRSP?

The LRSP requires each State to have a Strategic Highway Safety Plan (SHSP) that establishes goals, objectives, and emphasis (or challenge) areas to reduce traffic accident fatalities and serious injuries on all public roads using a data-driven approach. An LRSP provides a framework for agencies to proactively and systematically identify and address unique safety issues prevalent in their jurisdiction by facilitating partnerships with key stakeholders in the community.

The LRSP process offers an opportunity to learn from many perspectives – from collision hot spot data to feedback on perceived safety issues to contextual patterns in hot spot data that may be similar systemically – to develop and prioritize a list of meaningful and grant-competitive safety projects for Los Gatos. This study also sets up a process for multi-disciplinary collaboration, transparency, and accountability that can last far beyond this effort.

Safe System Approach

Each day, people are killed and seriously injured on California roads. Crashes can irreversibly change the course of human lives, touching victims, their families and loved ones, and society as a whole. Through collective action on the part of all roadway system stakeholders—from system operators, vehicle manufacturers, to law enforcement and everyday users—the Town of Los Gatos can move to a Safe System approach that anticipates human mistakes, with the goal of eliminating fatalities and serious injuries for all road users.



A Safe System acknowledges the vulnerability of the human body – in terms of the amount of kinetic energy transfer a body can withstand – when designing and operating a transportation network to minimize serious consequences of crashes.

According to the World Health Organization, the goal of a Safe System is to ensure that if crashes occur, they "do not result in serious human injury." A Safe System approach addresses the five elements of a

safe transportation system – safe road users, safe vehicles, safe speeds, safe roads, and post-crash care – in an integrated manner, through a wide range of interventions.

The Safe System approach to road safety started internationally as part of the Vision Zero proclamation that, from an ethical standpoint, no one should be killed or seriously injured on the road system. It is founded on the principle that people make mistakes, and that the road system should be adapted to anticipate and accommodate human mistakes and the physiological and psychological limitations of humans. Countries that have adopted the Safe System approach have had significant success reducing highway fatalities, with reductions in fatalities between 50 and 70%.

The Institute of Transportation Engineers (ITE) and the Road to Zero Coalition's Safe System Explanation and Framework articulate that to anticipate human mistakes, a Safe System seeks to:

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

Creating a Safe System means shifting a major share of the responsibility from road users to those who design the road transport system. "Individual road users have the responsibility to abide by laws and regulations" and do so by exhibiting due care and proper behavior on the transportation system. While road users are responsible for their own behavior, this is a shared responsibility with those who design, operate, and maintain the transportation network: including the automotive industry, law enforcement, elected officials, and government bodies. In a Safe System, roadway system designers and operators take on the highest level of ethical responsibility. This report is organized by the Safe System key principles to encompass the full range of safety stakeholders and facilitate cross-disciplinary collaboration and accountability. This is consistent with the methods outlined in the United States Department of Transportation (USDOT) National Roadway Safety Strategy and the Caltrans commitment to a Safe System approach to achieving Vision Zero goals.

Background

This is the first comprehensive safety plan for the Town of Los Gatos, but builds upon numerous related transportation planning and engineering efforts. This LRSP provides the Town and its major stakeholders with a blueprint for a safe and more accessible community. This LRSP will assist the Town when it applies for safety infrastructure funding sources. For example, the Cycle 11 Highway Safety Improvement Program (HSIP) funding cycle anticipated in 2022 will require an LRSP for an agency to be eligible to apply for funds.

About Los Gatos

The Town of Los Gatos is home to approximately 33,529 people (2020 US Census). The Los Gatos population is 72.3% white, 14.8% Asian, 7.9% Latino, 0.9% Black and 4.1% two or more races. Approximately 3.8% of Los Gatos residents are in poverty, with a town-wide median income of $155,860.

Safety Partners

The Town has engaged stakeholders in representing a Safe System Approach of shared responsibility to address the unique traffic safety concerns in Los Gatos. The assembled team of Safety Partners for the LRSP included representatives from the Town of Los Gatos along with the following local and regional partners:

Los Gatos Complete Streets and Transportation Commission

The Complete Streets and Transportation Commission advises the Town Council in matters pertaining to current trends and experiences in enhancing all modes of travel; integration of Town transportation infrastructure, including bike and pedestrian pathways, with neighboring jurisdictions; reviewing relevant grant applications; prioritizing transportation around schools, including enhancing safe routes to schools efforts; reviewing and updating Town master plans, including the *Bicycle and Pedestrian Master Plan* and others as relevant; and related topics as directed by the Town Council or requested by Town staff; and review policies and procedures on streets and trails.

Los Gatos Union School District

The Los Gatos Union School District serves children grades kindergarten through eighth grade and provides equitable learning opportunities.

Los Gatos-Monte Sereno Safe Routes to School

Los Gatos-Monte Sereno Safe Routes to School (SR2S) is a nonprofit organization that provides education and encouragement efforts to eight schools in the Town of Los Gatos and the City of Monte Sereno. SR2S strives to build a collaborative community to support students using alternative transportation (walking, biking, skating and scooting) to and from school with the goal to encourage lifelong healthy habits and create a more livable environment for the community.

Los Gatos Police Department

Police officers provide valuable insight into behaviors they observe on the roads, and are important partners in safety conversations so that jurisdictions can focus enforcement time on behaviors most closely associated with injuries and fatalities. The Los Gatos police department also leads and participates in traffic safety education programs.

Police Department Meeting

The project staff and police department met on April 2, 2021 to discuss recent safety efforts in Los Gatos and hotspot collision locations, a few key findings were:

1. Feedback on Key Collision Locations

   a. Focused on major corridors, particularly Highway 9 (Los Gatos Saratoga Road) at busier cross streets
   b. Turns along Los Gatos Boulevard and Winchester Boulevard
   c. School crossing locations

2. Common Collision Factors

   a. Left turns, speeding, right of way violations
   b. Distractions

3. Unreported Collision Occurrences

   a. Bicyclist crashes not involving vehicles
   b. Crashes occurring in rural/mountain areas

Vision

At the start of the LRSP preparation, the project team developed the Los Gatos road safety vision statement and solicited feedback from the Complete Streets and Transportation Commission. The commissioners acknowledged that ending all traffic-related deaths and injuries on Town streets was a challenging and aspirational vision, but to work towards anything less (e.g. reduce fatalities and serious injuries) did not feel appropriate because even one fatality or serious injury was unacceptable. Therefore, the project team determined that the Town should strive to eliminate traffic-related deaths and injuries to create a strong vision which shifts roadway safety culture in the Town, while also acknowledging the challenging nature of achieving the vision. The Town's vision statement sets a concise yet comprehensive goal to guide the Town's investments in infrastructure, education, emergency services, and enforcement.

Vision Statement

"The Town is fully committed to ending traffic-related deaths and injuries on Town streets. By taking a Safe System approach, the Town will use targeted enforcement, improved street design, and public collaboration to achieve meaningful results in preventing traffic collisions."

Supporting Efforts

In recent years, the Town's efforts to improve safety have been most visible through a range of plans and programs. This section describes plans, engagement, and recent efforts supporting safety within the Town of Los Gatos.

Plans

Draft General Plan 2040: This planning effort reflects the Town's strong commitment to environmental sustainability, community health, and social equity. During the preparation of the 2040 General Plan, the community requested that the General Plan address climate change and increased risk of wildfire; lessons learned from the COVID-19 pandemic; and justice, equity, diversity, and inclusion. The update process was also tasked with planning for new homes for all incomes to meet the Town's fair share of the Bay Area's housing need.

Traffic Around School Study 2016: Implemented to help make walking and bicycling the preferred mode of travel to school. It identifies preferred corridors for walking and bicycling to school and forms plans to improve these corridors. It identifies priority corridors for improvements and evaluates existing education and enforcement of safe bicycle riding and driving behaviors.

2018 Student Travel Survey: This survey was designed to better understand students' and parents' opinions of what improvements would be beneficial to the students who walk or bike to school and what concerns they might have about using these modes. Parents of elementary through high school students were given the questionnaire.

Connect Los Gatos Community Engagement Plan: Adopted by Town Council in 2021, outlines resources that will be used to engage with the community to communicate about active transportation projects that will provide improved connectivity. The goal of the plan is to promote community knowledge and engagement of these projects.

2020 Community Survey: To engage with the community and raise awareness of the Connect Los Gatos Plan, the survey was opened to the public in 2020. The goal was to provide a more robust background to the Bike and Pedestrian Plan Update through improving understanding of how residents currently use the streets and hearing suggestions for improvements for safer bicycling and walking.

2020 Bicycle and Pedestrian Master Plan Update: The Plan identifies the needs for bicycle and pedestrian improvements and prioritizes the projects through a public process. It includes a benchmarking analysis of programs, policies, and practices for pedestrian and bicyclist safety. The Plan focuses on improving walking and bicycle safety and accessibility and was adopted by the Town Council in 2020.

Engagement and Safety Partners

Community engagement for this project followed the framework identified in the Connect Los Gatos Community Engagement Plan adopted by Town Council in March 2020. A key step in addressing safety issues is hearing from local officials, key stakeholders, and the general public. Working through a collaborative process, the Town can create effective solutions by considering and coordinating with the general public, engineering, enforcement, education, and emergency service strategies. The project team deployed the following tools that are most appropriate for the Town-wide planning effort:

- Project website www.losgatosca.gov/ConnectLG with all relevant project background information, updates, and staff contact information
- Regular updates at the Complete Streets and Transportation Commission meetings, open to the public.
- Formed a group of Safety Partners for input and participation
- Farmers' Market pop up event
- Online community survey

Safety Partners Meeting

Los Gatos held several safety partners meetings to discuss the safety vision, priorities, existing conditions, and draft collision risk profiles in Los Gatos.

LRSP Survey Report

The Town has been continually working to develop better programs for safe, more connected streets. This program, "Connect Los Gatos," is a public engagement initiative that promotes bicycle and pedestrian projects that are all part of a big picture effort to provide connected multi-modal routes through the Town. These projects improve current conditions for pedestrians and cyclists by providing sidewalks, enhancing bike paths and lanes, and incorporating smart street safety design features. The survey was online from November 4, 2021 to December 3, 2021. The main objectives the Town sought to achieve through the LRSP Survey were:

- Gaining a greater understanding of the problems people face on the roads
- Learning how the community travels
- Building support for the Connect Los Gatos Programs
- Helping inform the LRSP development

Figure 1 highlights the primary safety concerns of the residents who completed the survey, while the broader survey responses are shown in Appendix A. The respondents provided valuable feedback on top priorities as well as specific locations of concern. Some of the top priorities listed by residents were improving intersection crossing safety, reducing speeding, enforcing stop signs, and improving biking and walking infrastructure. Los Gatos Boulevard, Blossom Hill Road, Lark Avenue, Highway 9 (Los Gatos Saratoga Road) and Kennedy Road were identified as key locations of concern.

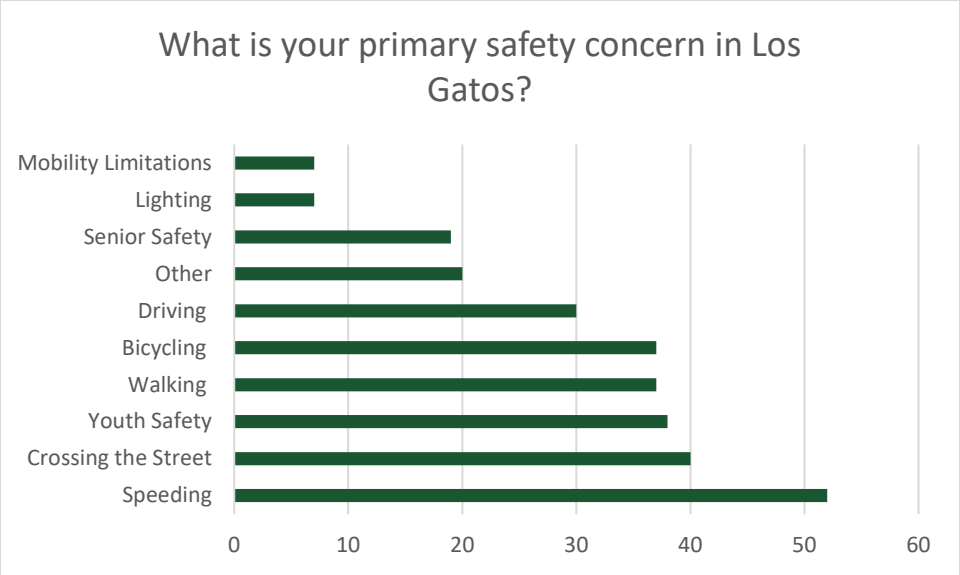


Figure 1: What is your primary safety concern in Los Gatos?

Farmers' Market Pop Up Event

Information pertaining to the development of the LRSP was shared at the Los Gatos Farmers' Market on September 26, 2021 and October 17, 2021. The first event focused on sharing findings of the collision and safety analyses conducted for the LRSP, while the second invited community members to provide feedback on identified collision trends, potential priority locations, and their areas of concern.

Walking Audits

Walking Audits were held on January 25, 2022 with the Los Gatos stakeholders. The group walked along two Emphasis Area locations in Los Gatos. The group discussed potential countermeasures on Los Gatos Boulevard from Los Gatos Almaden to Lark Avenue and Tait Avenue from Los Gatos Saratoga to Main Street.

Commission Meetings

Throughout the Los Gatos LRSP project, a series of presentation were given to the Commission. The presentation materials delivered in these meetings are included in **Appendix B**.

Infrastructure Improvements

In recent years, the Town has completed several bicycle and pedestrian projects that were designed to support safety within the Town:

Blossom Hill Road Class IV Bike Lanes

The first Class IV bike lanes were implemented in 2019, providing separated lanes to improve bicycling safety for school students and other bicyclists on Blossom Hill Road west of Los Gatos Boulevard.

Highway 9/Massol Avenue Intersection Safety Improvements

The project upgraded the flashing beacon with a Rectangular Rapidly Flashing Beacon (RRFB), added "shark teeth" yield lines at the eastbound and westbound approaches, constructed landscaped median island on Highway 9 (Los Gatos Saratoga Road) west of the intersection, installed green bike lanes on Highway 9 (Los Gatos Saratoga Road), and added street lights. The improvements were completed in 2021.

Winchester Boulevard Class IV Bike Lanes

This project, completed in 2021, installed separated Class IV bike lanes between Blossom Hill Road and Albright Way, removed one of the northbound lanes, and constructed ADA curb ramps at multiple intersections.

The Town continues to design and implement bicycle and pedestrian improvements in a program branded as Connect Los Gatos. These projects were identified and prioritized in the 2020 *Bicycle and Pedestrian Master Plan Update*. The program will expand access and improve safety for key community destination points. Connect Los Gatos is aimed at making it easier and safer for all to bike and walk in Los Gatos. This section provides details on the Connect Los Gatos projects under design.

Los Gatos Creek Trail Connector to Highway 9 (Los Gatos - Saratoga Road)

This project will construct bike and pedestrian connectors to the Los Gatos Creek Trail at Highway 9. Two connectors will be constructed to allow access to the trail from both the north and south sides of Highway 9. A pedestrian and bicycle bridge crossing the creek will be constructed along the south side of Highway 9. On the north side of Highway 9, the existing unofficial path will be replaced with an ADA-accessible Class I path to connect Highway 9 and the Trail.

Highway 17 Bicycle Pedestrian Overcrossing Project

This project will provide a separate bicycle and pedestrian overcrossing (BPOC) just south of the existing Blossom Hill Road bridge. This bicycle and pedestrian overcrossing aims to improve bicycle and pedestrian safety and comfort across Highway 17, improve safe biking and walking routes to school, and promote more biking and walking trips.

Shannon Road Complete Streets

The current plan for the project is to construct sidewalks and Class II bike lanes on both sides of Shannon Road between Los Gatos Blvd. and Cherry Blossom Lane. The project would involve installation of a new curb, gutter, sidewalk, Class II bike lanes, and ADA curb ramps on Shannon Road within the project limits. The work scope may also include some modification to the storm drainage system.

Kennedy Road Sidewalk and Class II Bike Lane

The Town is considering options to improve this street to provide a safer environment for all. The improvements will include new sidewalks, new Class II bike lanes on both sides, ADA upgrade at curb ramps, and intersection improvements for better biking and walking.

Winchester Boulevard Complete Streets

This project will provide Complete Streets improvements, including removal of an automobile lane, separated bike lanes, new or upgraded pedestrian crossings, new sidewalks to fill the gaps, sidewalk improvements, pedestrian refuge islands, ADA upgrade to all bus stops, landscaped median islands, and intersection modifications for safer biking and walking. By making Winchester Boulevard better accommodating of users of all ages and abilities traveling by a variety of modes, the Town hopes to improve safety and connections for motorists, bicyclists and pedestrians and to encourage more bicycling and walking trips.

Blossom Hill Road Traffic Calming

This project focuses on a stretch of Blossom Hill Road between Camelia Terrace and Hillbrook Drive. Although the Town has invested significantly in this roadway, most recently with upgrades to the pedestrian crossing at Hillbrook Drive and prior to that with improvements along Blossom Hill Park frontage, the roadway continues to experience heavy use. Residents have expressed concerns about vehicle speeds and driver behavior in this corridor with special focus on the school and park as areas where children use the sidewalks, crosswalks, and pathways.

Safety Analysis

Chapter 2 of Caltrans' *Local Roadway Safety Manual (LRSM)* instructs safety practitioners to "consider a wide range of data sources to get an overall picture of the safety needs." Crash data and contextual data were collected and analyzed as part of this plan, as well as anecdotal input from Town staff, Safety Partners, and community stakeholders.

This section summarizes the results of a broad collision analysis for the Town of Los Gatos, which will inform the project prioritization and countermeasures for the Town. This analysis considers injury collisions from 2015 through 2019 available through the Transportation Injury Mapping System (TIMS). TIMS was created by the Safe Transportation Research and Education Center (SafeTREC). It reports injury collisions utilizing data from the Statewide Integrated Traffic Records System (SWITRS).

Collision Data Source

Collision data for the five-year period spanning January 1, 2015 through December 30, 2019 – the five most recent years of data available at the time the project was undertaken – was collected from TIMS. TIMS provides geocoded access to California crash data using the SWITRS data for injury and fatal collisions. SWITRS is collected and maintained by the California Highway Patrol (CHP) and contains all crashes that were reported to CHP from local and governmental agencies, including collision and citation reports collected by public safety officers in the Town. The California LRSM recommends the use of TIMS data for collision analysis, and the Safe System Approach focuses on specifically analyzing and eliminating collisions where involved parties are killed or seriously injured (known as KSI collisions).

In general, collision databases have been found to have certain reporting biases, including:

- Collision involving people walking, on bicycles, or on motorcycles are less likely to be reported than collisions with people driving
- Property damage collisions are less likely to be reported compared to more severe collisions
- Younger victims are less likely to report collisions
- Alcohol-involved collisions may be under-reported
- Race, income, immigration status, and English proficiency may also impact reporting, but there is limited research on these factors

Bicycle data, roadway characteristic data (centerlines, medians), sidewalk data, crosswalk data, and intersection control data were collected for the project through analysis of aerial imagery and verification of field conditions.

The collected data was spatially referenced and mapped in ArcGIS. Each collision was assigned to the nearest intersection within 250 feet, or the nearest roadway segment if no intersection was within range. A raw count of crashes was calculated for each intersection and roadway segment, and intersection

collisions were separated by signalized and unsignalized locations. Roadway characteristic data were similarly spatially referenced as part of the analysis.

Collision Analysis Summary

This section summarizes the 5-year collision history for injury collisions occurring in the Town of Los Gatos from 2015 through 2019.

Injury Collision Trends

Approximately 481 injury collisions occurred within public right-of-way between January 1, 2015 through December 30, 2019 according to reported data. Of these, 135 (28%) involved a pedestrian or bicyclist. A total of 31 Collisions resulted in a fatality or severe injury. Figure 2 displays all Townwide collision activity for the five-year study period using data processed through TIMS.

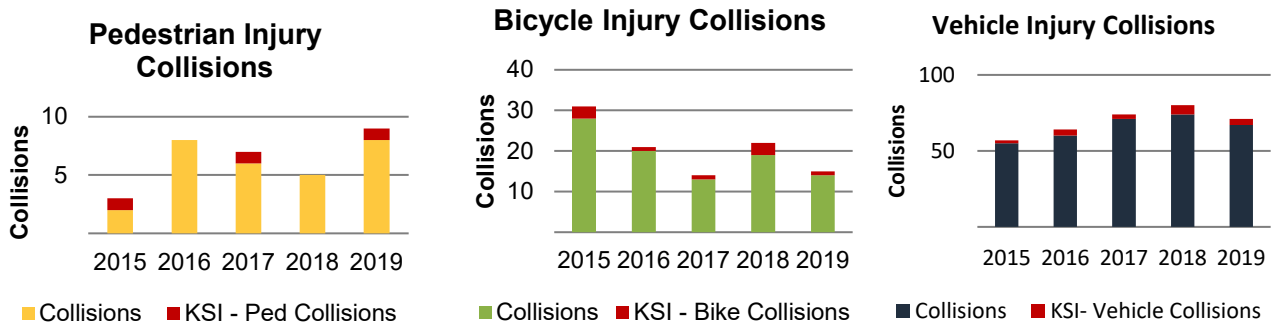


Figure 2: Collision Severity by Mode

Injury Collision Severity

Vulnerable road users, including bicyclists and pedestrians, are more susceptible to fatal or severe injury collisions. Broken down by collision mode, motor vehicle collisions accounted for 66% of injury collisions but 53% of fatal collisions. By contrast, pedestrian-involved collisions made up 8% of injury collisions but 12% of fatal collisions. Bicycle collisions made up 26% of injury collisions and 35% of fatal collisions. The bicycle and pedestrian collisions are disproportionately high in Los Gatos.

Injury Collisions by Type

Collision types describe how a crash is reported by law enforcement based upon the parties who were involved and generally describes the way contact was made between the involved parties, shown in Figure 3.

- Vehicle-Pedestrian collisions are any crash involving both a motor vehicle and a pedestrian.
- Vehicle-Bicycle collisions are any collision involving both a motor vehicle and a bicyclist.
- An Overturned collision is any type of crash that results in at least one vehicle rotating 90 degrees or more side-to-side or end-to-end (also known as a "rollover.")

- A Head-on collision is between two vehicles where the primary point of contact was the front of both vehicles.
- Hit Object collisions are between a vehicle and non-vehicular object in or near the roadway.
- Sideswipe collisions are between vehicles, typically traveling the same direction, where the primary point of contact was the side of the vehicles.
- A Rear-end collision is between two vehicles traveling in the same direction where the front of one vehicle contacts the rear of another.
- Broadside collisions are between vehicles on conflicting paths where the front of one vehicle contacts the side of another.
- Unknown/Other collisions describe any reported collision that was not consistent with one of the primary collision types above or where collision type was not coded into the collision database.

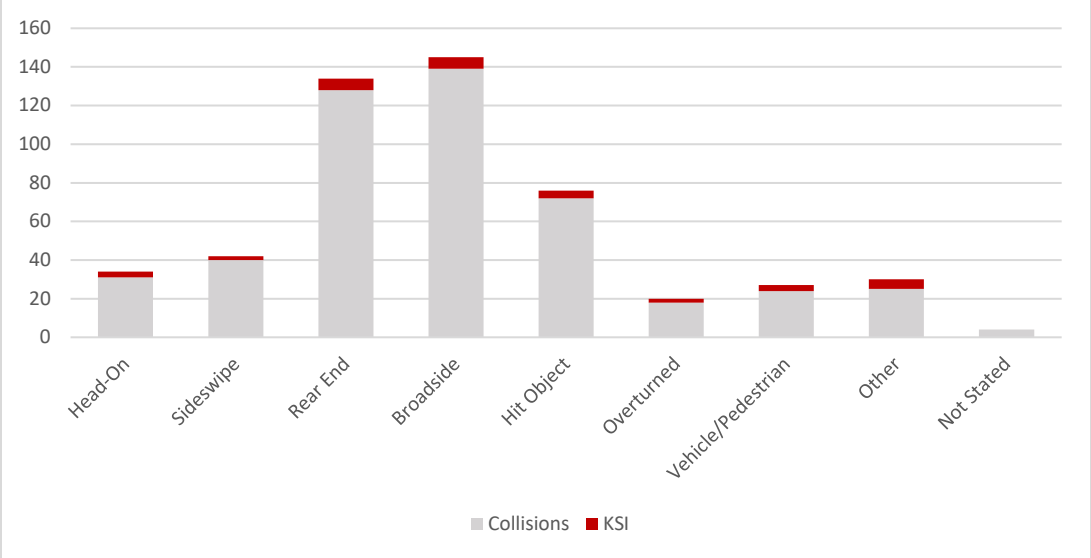


Figure 3: Collision Severity by Type

The primary injury collisions by type in Los Gatos are Broadside, Rear End, and Hit Object.

Primary Injury Collision Factors

Primary Collision Factors (PCFs) describe the primary reason(s) for a crash reported by law enforcement based upon citations or violations of the California Vehicle Code (CVC) shown in Figure 4.

- Auto Right-of-Way (R/W) Violation refers to a driver infringing upon the right-of-way of another party in violation of CVC 21800-21809.
- Improper Turning identifies a collision where a party made a left or right turn in violation of CVC 22100-22113.
- Unsafe Speed refers to a collision where a party is identified to be traveling at a speed exceeding that deemed reasonable or prudent for conditions in violation of CVC 22350.

- Traffic Signals and Signs describes a party disobeying a traffic control device such as a traffic signal or roadside sign in violation of CVC 38280-38302.
- Following Too Closely refers to a driver of a motor vehicle driving behind another vehicle at distance that is too short to be reasonable or prudent for conditions in violation of CVC 21703.
- Driving Under Influence identifies a collision where a driver is found to have been operating a vehicle while impaired by a substance – typically alcohol – in violation of CVC 23152.
- Unsafe Lane Change describes a collision where a party moves between two lanes or deviates course in a hazardous manner and/or without signaling appropriately in violation of CVC 22107.
- Unsafe Starting or Backing refers to a driver unsafely beginning movement of a stopped vehicle or backing a vehicle onto a roadway in violation of CVC 22106.
- Unknown/Other refers to a collision for which the primary cause was either not reported or was not consistent with any of the CVC violations described above.

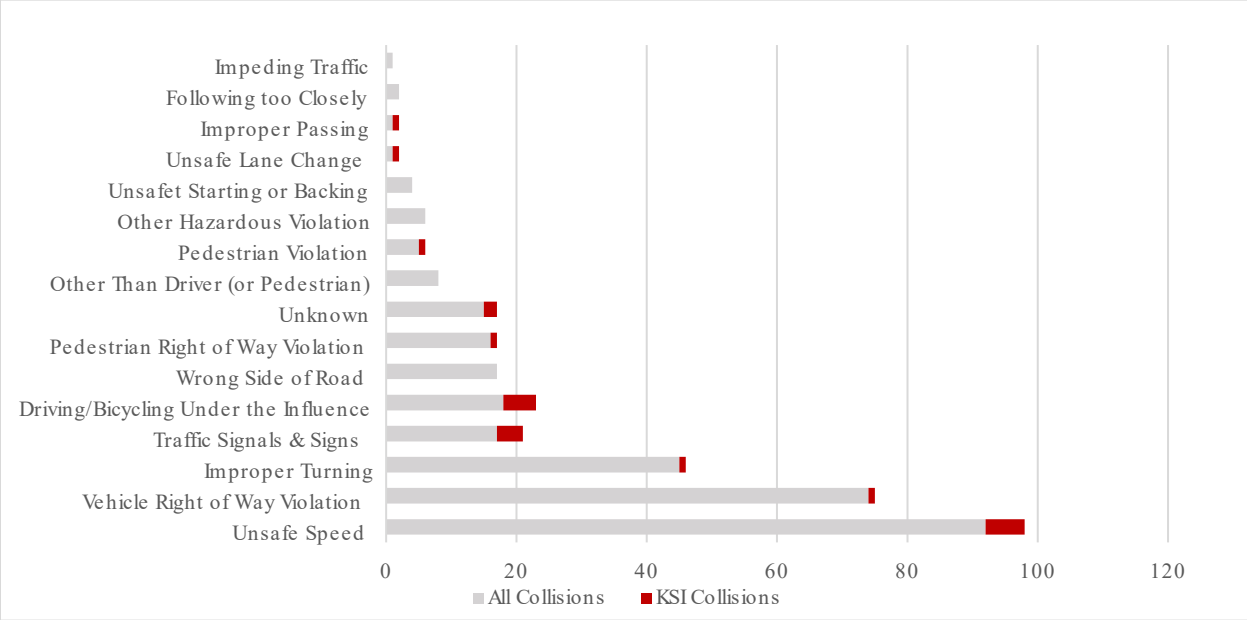


Figure 4: Collision Severity by Primary Collision Factor

Identifying the outcomes of the collision (the injuries or type of damage which occurred) is a key part of assessing the environment and safety factors around the site of the collision. The major Primary Collision Factors in Los Gatos for injury collisions are Unsafe Speed, Vehicle Right of Way Violations, and Improper Turning.

Collision Trends in Los Gatos

This analysis identified several collision trends and risk factors in Los Gatos, including:

- Drugs or alcohol increased the likelihood that a collision will be more severe
- A much larger share of collisions occurred with ages 60 and older
- People walking and biking were more likely to be fatally or severely injured

Hot Spot Analysis

Following conventional collision mapping processes, the top intersections and corridors where collisions occurred in the 5-year analysis period were identified. The locations of fatal and severe injury (KSI) collisions were overlaid to reveal where the most severe collisions occurred and if there was overlap with the collision hotspots.

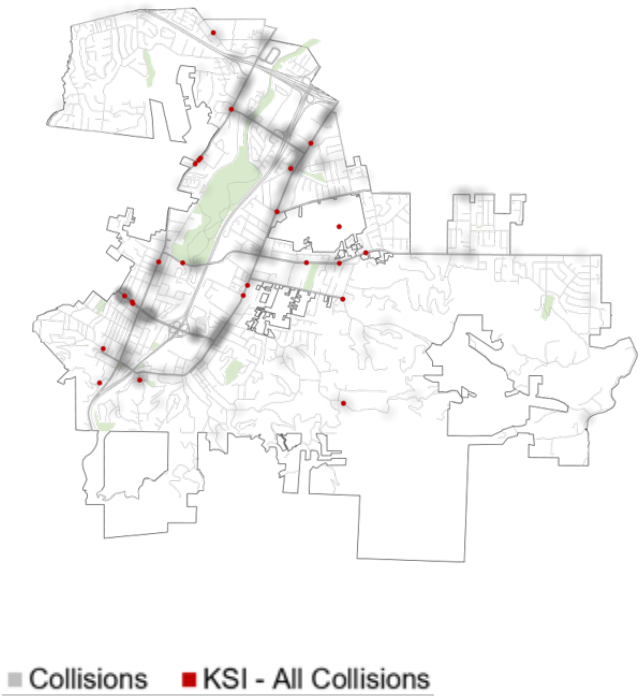
Killed or Severely Injured Collision (KSI)

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

- Broken bones
- Dislocated or distorted limbs
- Severe lacerations
- Unconsciousness at or when taken from the collision scene

Throughout this plan, the acronym KSI is used to denote collisions where someone was killed or severely injured. **Figure 5** shows the collision hot spot locations and KSIs in the Town. See **Appendix C** for KSIs in Los Gatos.

Figure 2: Injury Collisions and KSI Collisions in Los Gatos



The key collision locations and corridors identified through this hotspot analysis and Figure 6 are:

Key Collision Locations

a. Los Gatos Saratoga Rd and Massol Ave/Montgomery St
b. Los Gatos Saratoga Rd and University Ave
c. Los Gatos Saratoga Rd and Los Gatos Blvd
d. Los Gatos Saratoga Rd and Alberto Way
e. Winchester Blvd and Lark Ave
f. Los Gatos Blvd and Blossom Hill Rd
g. Blossom Hill Rd and Cherry Blossom Lane

Key Collision Corridors

a. Los Gatos Blvd: SR-85 to Simons Way
b. Los Gatos Saratoga Rd: Montgomery St to Los Gatos Blvd
c. Blossom Hill Rd: Roberts Rd to Hillbrook Dr
d. Santa Cruz Ave: Blossom Hill Rd to Wood Rd
e. University Ave: Vasona Oaks Dr to Lark Ave
f. Lark Ave: Winchester Blvd to Los Gatos Blvd

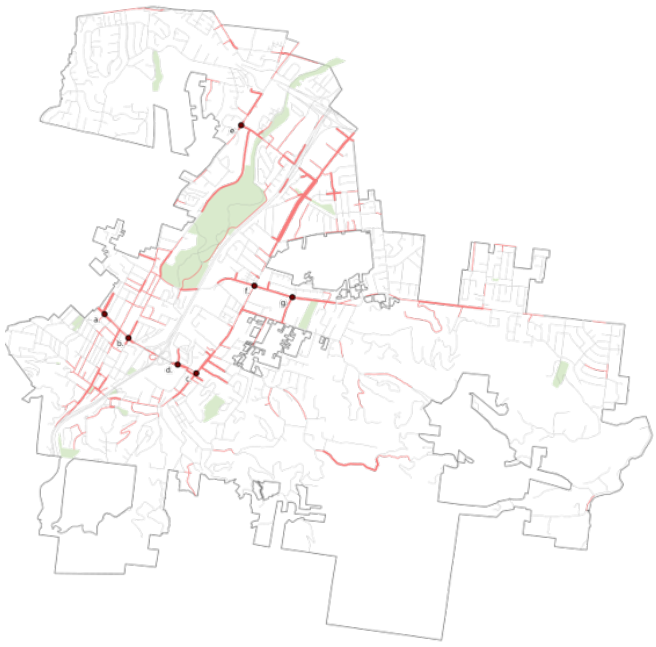


Figure 3: Key Collision Locations and Corridors

Systemic Analysis

Systemic analysis is a proactive safety approach that focuses on evaluating an entire roadway network using a defined set of criteria. It looks at collision history on an aggregate basis to identify high-risk roadway characteristics in addition to looking at high collision locations. By merging adjacent road and intersection features with collision data, relationships can be uncovered between contextual factors and the risk of frequent and severe collisions. This systemic process relied on a two-fold approach to identify key safety issues and locations to prioritize hot spot analysis and development of collision types.

Collision Typing

In developing systemic analysis, it is important to understand the relationship between collisions and the contexts in which they occurred. A systemic matrix illustrating the number of collisions at the intersection of a collision characteristic (e.g. location of pedestrian) and a contextual characteristic (e.g. posted speed of roadway) was identified. Each combination of a collision characteristic and a contextual characteristic represents a collision type. The highest occurring collision types and collision types with the largest share of severe collisions were mapped and considered for further study. This process evaluates risk across the entire roadway system, rather than only managing risk at certain locations where collisions have occurred.

Systemic Matrices

Collision data was paired with geographic roadway and other contextual data to develop collision types using a series of systemic matrices. Outputs from the collision analysis were used to populate a set of matrices that allow us to look at crosstabs (collision data in rows and geographic data in columns) for

collisions across the entire roadway network. The matrices allowed for identification of the combinations of factors that contributed to a high number of all collisions, and combinations that led to a high number of fatal and severe collisions. Matrices were created for each mode, as well as for the most severe collisions. From these matrices, we identified a set of collision types that represent the most frequent and most severe collision types across a broad range of roadway contexts within Los Gatos.

The result of the systemic analysis was the identification of Town-wide collision profiles shown in the subsequent chapter.

Collision Risk Profiles and Countermeasure Toolbox

This chapter presents profiles identified through the hotspot and systemic analyses as well as key safety countermeasures applicable to different roadway contexts across Los Gatos.

Collision Risk Profiles

Based upon the analysis of collision history, collision rates, and contextual factors, collision profiles or typologies can be identified. These profiles describe roadway characteristics and/or driver behaviors that are found to be leading to collisions and can therefore be used in a systemic methodology to proactively identify locations which have similar contexts but may have experienced fewer collisions in the past.

The systemic analysis combined collision history with contextual data on roadway characteristics as well as input from local stakeholders to produce a set of 10 collision profiles to highlight the most common and severe collision patterns in Los Gatos, shown in Table 1:

Table 1: Collision Risk Profiles

Collision Risk Profile	Description	Factors	Number of Collisions	Potential Countermeasures
Age 60+ Involvement	Collisions involving people age 60 or older	Pedestrians, bicyclists and/or vehicles involved parties, involved party age 60+	82 Injury (21%), 6 KSI (20%)	Curb Extensions, Extended Pedestrian Crossing Time, Raised Crosswalks, Speed Tables, Pedestrian Refuge Island and Median, Signing and Striping Improvements, Enhanced Bicycle Facility, New Sidewalk, Retroreflective Backplates for Signals, Daylighting Intersections
Unmarked Pedestrian Crossing	Pedestrians who are crossing outside of crosswalks involved in collisions	Pedestrians and vehicles both involved parties, location has unmarked crosswalk	10 Injury (3%), 3 KSI (10%)	Curb Extensions, Pedestrian Refuge Island and Median, Flashing Beacons, High Visibility Crosswalk
Failure to Yield to Pedestrians in Crosswalk	Pedestrians who are crossing at crosswalks involved in collisions	Pedestrians and vehicles both involved parties, location has marked crosswalk (midblock or at intersection, signalized or unsignalized)	16 Injury (4%)	Curb Extensions, Pedestrian Refuge Island and Median, Flashing Beacons, Leading Pedestrian Interval, High Visibility Crosswalk

Walking or Bicycling on a Major Roadway	Pedestrians or bicyclists involved in collisions along arterials such as Los Gatos Boulevard, Santa Cruz Avenue, and Blossom Hill Road	Pedestrians and/or bicyclists involved parties, location is classified as arterial	87 Injury (22%), 7 KSI (23%)	Enhanced Bicycle Facility, New Sidewalk, Enhanced Sidewalk (e.g. buffer), Roadway and Intersection Safety Lighting, Pedestrian Signal Improvements, Pedestrian Refuge Island and Median
Bicyclists at Stop Signs	Cyclists at stop signs who are involved in collisions with vehicles	Bicyclists and vehicles both involved parties, location is unsignalized intersection with stop control	38 Injury (10%), 3 KSI (10%)	Enhanced Bicycle Facility, Curb Extensions, Signing and Striping Improvements, Parking Restrictions
Midblock Bicycle Conflict	Cyclists who are involved in collisions with vehicles away from an intersection	Bicyclists and vehicles involved parties, location is not intersection	31 Injury (8%), 4 KSI (13%)	Enhanced Bicycle Facility, Roadway and Intersection Safety Lighting, Pedestrian Crossing Enhancements
Speed Related Conflict	Vehicles involved in collisions where speed is identified as a contributing factor	Unsafe speed identified	116 Injury (30%); 5 KSI (16%)	Vehicle Speed Feedback Sign, Traffic Calming (Speed Humps or Raised Crosswalks), Protected Bikeway, Lane Reduction or Narrowing
Broadside Unsignalized Vehicle	Vehicle colliding with the side of another vehicle at unsignalized intersection	Vehicles are the involved party, collision type is broadside, location is unsignalized intersection	22 Injury (6%); 1 KSI (3%)	Signing and Striping Improvements, Parking Restrictions, Turn Restrictions/Medians, Lane Reduction, Modified Intersection Control (All-way Stop or Signalization)
Red Light Violation	Vehicles running red lights at signalized intersections	Vehicle is involved party, location is signalized intersection, violation is traffic signals and signs violation	17 Injury (4%), 1 KSI (3%)	Advance Dilemma-zone Detection, Signal Timing and Phasing Improvements, Signal Equipment Upgrades, Education & Compliance
Driving Under the Influence	Drivers driving under the influence of alcohol or drugs	Vehicle is involved party, at least one party was under influence of drugs or alcohol	25 Injury (6%), 5 KSI (16%)	Education, Enforcement, Vehicle Speed Feedback Sign, Traffic Calming (Speed Hump or Raised Crosswalk)

Note: Because an individual collision may be categorized under multiple profiles, the values in the table do not sum to 100%. Cells without a percentage KSI represent profiles where zero KSI collisions occurred for a given mode.

Safety Countermeasures Toolbox

This section presents key safety countermeasures applicable in different roadway contexts across Los Gatos. The countermeasures associated with the collision risk profiles are described further, including engineering countermeasures, Safe System elements, and non-engineering countermeasures.

Many of the countermeasures are Caltrans-approved, with an associated Crash Reduction Factor (CRF) and crash type (i.e., all modes, bicycle and pedestrian crashes only, etc.) as outlined in the 2020 California LRSM. The higher the CRF (100% being the highest), the greater the expected reduction in crashes. Countermeasures not in the LRSM are scored on a "low-medium-high" AVAILABILITY OF RESEARCH scale based on proven safety studies; otherwise, denoted as "N/A" when limited safety studies are available. The higher the AVAILABILITY OF RESEARCH rating, the greater the expected reduction in crashes.



Engineering Countermeasures

A complete Safety Countermeasure Toolbox containing 88 countermeasures can be found in **Appendix D**.

Safe System Elements

Making a commitment to zero deaths means addressing every aspect of collision risks through the five elements of a Safe System, shown below. These layers of protection and shared responsibility promote a holistic approach to safety across the entire transportation system. The key focus of the Safe System approach is to reduce death and serious injuries through design that accommodates human mistakes and injury tolerances.

Safe Road Users

The Safe System approach addresses the safety of all road users, including those who walk, bike, drive, ride transit, and travel by other modes.

Safe Vehicles

Vehicles are designed and regulated to minimize the occurrence and severity of collisions using safety measures that incorporate the latest technology.

Safe Speeds

Humans are unlikely to survive high-speed collisions. Reducing speeds can accommodate human injury tolerances in three ways: reducing impact forces, providing additional time for drivers to stop, and improving visibility.

Safe Roads

Designing to accommodate human mistakes and injury tolerances can greatly reduce the severity of collisions that do occur. Examples include physically separating people traveling at different speeds, providing dedicated times for different users to move through a space, and alerting users to hazards and other road users.

Post-Crash Care

When a person is injured in a collision, they rely on emergency first responders to quickly locate them, stabilize their injury, and transport them to medical facilities. Post-collision care also includes forensic analysis at the collision site, traffic incident management, and other activities.

Non-Engineering Countermeasures

Education

Transportation safety education plays an important role in shaping and shifting behavior. Many cities, such as Seattle, Oakland, and Los Angeles, are including community engagement and education to make streets safer for all. For example, the Los Angeles Vision Zero Dignity-Infused Community Engagement (DICE) approach includes partnerships with local nonprofits, paid outreach work for those experiencing barriers to employment, and both large- and small-scale community engagement events.

Community engagement is not a one-size-fits-all model as different communities have different needs. By developing culturally relevant engagement strategies, all participants are invited into conversations about safety. For example, including cultural markers of a local community can be a creative and welcoming way of engaging residents. Also, meeting people "where they are" to gather input on safety issues at local parks can more effectively engage parents and children, rather than expecting families to attend a meeting at a government building. Pop-up engagement conducted by the Town and Safe Routes to School staff at the Los Gatos Farmers' Market as part of the LRSP is an example of such education efforts.

Enforcement

Traffic enforcement can be one part of a multipronged approach to communicating expected behaviors for safe road users, combined with other strategies such as road user education and safe road design. The following sections discuss effective strategies and noteworthy considerations for implementing enforcement-based strategies.

Emergency services

Victims involved in collision have a higher chance of survival if they can quickly receive medical care. In many cases, law enforcement officers and fire department staff are the first responders to arrive at a collision location. In addition to equipping all first responders with the appropriate training, improving response times for Emergency Medical Services (EMS) will help improve collision victims' chances of survival. Additionally, collisions on their own can also put first responders' and other road users' lives at risk due to increased congestion during the collision response, which may lead to secondary collisions.

Los Gatos should work with EMS to provide effective response times while maintaining a safe environment while traveling to the scene of collisions and attending to patients at the scene. Strategies include designing emergency vehicles to be highly visible (e.g., retroreflective striping and chevrons, high-visibility paint, and built-in passive light) and implementing emergency vehicle signal preemption, which allows emergency vehicles to break a normal signal cycle and proceed through an intersection.

Emerging technology

Recent advancements in transportation technology have not only introduced new transportation modes and travel patterns, but have also presented opportunities to better understand travel behavior and encourage safe behavior.

Emphasis Areas

Through the collision and contextual data analysis, a set of safety emphasis areas for the Town were identified. These emphasis areas were selected in collaboration with the Town taking into account community and stakeholder feedback on areas of concern, the number of collisions, and systemic analysis results. A full list of emphasis areas can be found in Table 3: priority emphasis areas table. The emphasis area cutsheets can be found in **Appendix E**, which show the collisions, top injury factors, and proposed countermeasures at each location.

In addition to the quantitative and geographic data analyzed as part of this project, a combination of in-person and virtual (remote using satellite, aerial, and virtual photograph imagery from sources such as Google and Bing) investigations were conducted to better understand existing conditions, constraints, opportunities, and needs at each project location. The combination of data analysis and site investigations were utilized to identify issues and candidate treatments.

Initial Selection of Emphasis Areas

An initial list of twelve intersection and segment emphasis areas was identified using a combination of the number of collisions, the number of KSI collisions, and the systemic analysis results. These locations reflect a variety of contexts, location types, and collision risk profiles. The initial 12 locations are reflected in Table 2.

Table 2: Priority Emphasis Area Initial Selection

Location	*Type*	*Collisions*	*Top Injury Factors*
Blossom Hill Road and Vasona Park Road	Intersection	Total Injury Collisions 5 KSI Collisions 0	Unsafe Speed DUI
Los Gatos Saratoga Rd and Montgomery St	Intersection	Total Injury Collisions 10 KSI Collisions 0	Broadside Driver not yielding Failure to signal
Los Gatos Saratoga Rd and University Ave	Intersection	Total Injury Collisions 8 KSI Collisions 0	Unsafe Speed Broadside Rear end Driver not stopping at line
Winchester Blvd and Lark Ave	Intersection	Total Injury Collisions 3 KSI Collisions 1	Unsafe Speed Driver not stopping at line Rear End

Winchester Blvd and Wimbledon Dr	Intersection	Total Injury Collisions 3 KSI Collisions 0	Unsafe Speed Driver not yielding at crosswalk Improper turning
Los Gatos Blvd and Blossom Hill Road	Intersection	Total Injury Collisions 5 KSI Collisions 0	Unsafe Speed DUI Rear End
Los Gatos Blvd and Garden Hill Drive	Intersection	Total Injury Collisions 5 KSI Collisions 0	DUI Unsafe Speed
Segments			
Tait Avenue: West Main Street to Los Gatos Saratoga Road	Segment	Total Injury Collisions 4 KSI Collisions 1	Unsafe Speed Left Turn Violation Pedestrian crossing outside of crosswalk
North Santa Cruz Avenue: Main Street to Los Gatos Saratoga Road	Segment	Total Injury Collisions 16 KSI Collisions 0	Unsafe Speed Driver not yielding at crosswalk Failure to signal
North Santa Cruz Avenue: Blossom Hill Road to Thurston Street	Segment	Total Injury Collisions 12 KSI Collisions 1	Rear End Failure to Yield Left Turn Violation
Los Gatos Boulevard: Bennett Way to Los Gatos Almaden Road	Segment	Total Injury Collisions 29 KSI Collisions 2	Unsafe Speed Failure to yield Rear End Broadside
Los Gatos Saratoga Rd: Los Gatos Blvd to HWY 17 off ramp	Segment	Total Injury Collisions 10 KSI Collisions 0	Unsafe Speed DUI Rear End Driver not yielding
Blossom Hill Rd: Los Gatos Blvd to Winterbrook Rd	Segment	Total Injury Collisions 13 KSI Collisions 1	Unsafe Speed DUI Improper Turning Driver not yielding or stopping at line
Los Gatos Blvd: Bennett Way to Garden Ln	Segment	Total Injury Collisions 19 KSI Collisions 1	Unsafe Speed Failure to yield Rear End Broadside

Final Emphasis Areas

Upon consultant with stakeholders and Town staff, five final emphasis areas were selected from the initial twelve locations. The selection of these areas took into account recent or planned implementation of safety improvements at some of the locations, including improvements completed at Highway 9 (Los Gatos Saratoga Road) & Massol Avenue and Winchester Boulevard & Lark Avenue intersection as well as designs included in the CIP at the Highway 9 interchange and along Blossom Hill Road.

The final five emphasis areas reflect a variety of contexts, including a multi-lane arterial corridor, downtown "main street" context, residential neighborhood street, and an intersection with high multimodal demand. This allows the potential countermeasures identified for the final emphasis areas to provide a representative framework for evaluating safety countermeasures at locations throughout the Town as part of future efforts. The five final emphasis areas are (shown in Figure 4):

a. Blossom Hill Rd and Vasona Park Rd
b. Tait Ave: W Main St and Los Gatos Saratoga Rd
c. Santa Cruz Ave: W Main St and Los Gatos Saratoga Rd
d. N Santa Cruz Ave: Blossom Hill Rd and Thurston St
e. Los Gatos Blvd: Bennett Way to Garden Ln

Walking Audits

Walking Audits were held on January 25, 2022 with Town staff and the Safety Partners to discuss potential countermeasures as well as benefits and challenges of implementing various safety projects. The group walked two of the five emphasis areas - Los Gatos Boulevard from Los Gatos Almaden Road to Lark Avenue and Tait Avenue from Highway 9 (Los Gatos Saratoga Road) to Main Street. After the walking audits, adjustments to preliminarily identified countermeasures at each location were identified for consideration in not only those two areas, but also for similar treatments in each of the five emphasis areas. Specific elements discussed during the walk audit and through subsequent collaboration with the Safety Partners included:

- Reevaluation of midblock crosswalk recommendations, especially on multi-lane arterials
- Potential benefit of traffic operation analysis to further evaluate modifications to elements such as corner radii, right-turn islands, or traffic signal operations on busier corridors, particularly for future corridor study that may be developed along Los Gatos Boulevard
- Consideration for pedestrian scale lighting, including at neighborhood locations





Identification of Potential Countermeasures for Priority Emphasis Areas

Table 3 identifies the final Priority Emphasis Areas, with data on the total collisions, KSI collisions, and top injury factors identified. Figure 7 illustrates the locations of these areas.

Table 3: Final Priority Emphasis Areas

#	*Location*	*Collisions*	*Top Injury Factors*
1	Blossom Hill Road and Vasona Park Road	Total Injury Collisions 5 KSI Collisions 0	Unsafe Speed DUI
2	Tait Avenue: West Main Street to Los Gatos Saratoga Road	Total Injury Collisions 4 KSI Collisions 1	Unsafe Speed Left Turn Violation Pedestrian crossing outside of crosswalk
3	North Santa Cruz Avenue: Main Street to Los Gatos Saratoga Road	Total Injury Collisions 16 KSI Collisions 0	Unsafe Speed Driver not yielding at crosswalk Failure to signal
4	North Santa Cruz Avenue: Blossom Hill Road to Andrews Street	Total Injury Collisions 13 KSI Collisions 1	Rear End Failure to Yield Left Turn Violation
5	Los Gatos Boulevard: Bennett Way to Los Gatos Almaden Road	Total Injury Collisions 31 KSI Collisions 2	Unsafe Speed Failure to yield Rear End Broadside

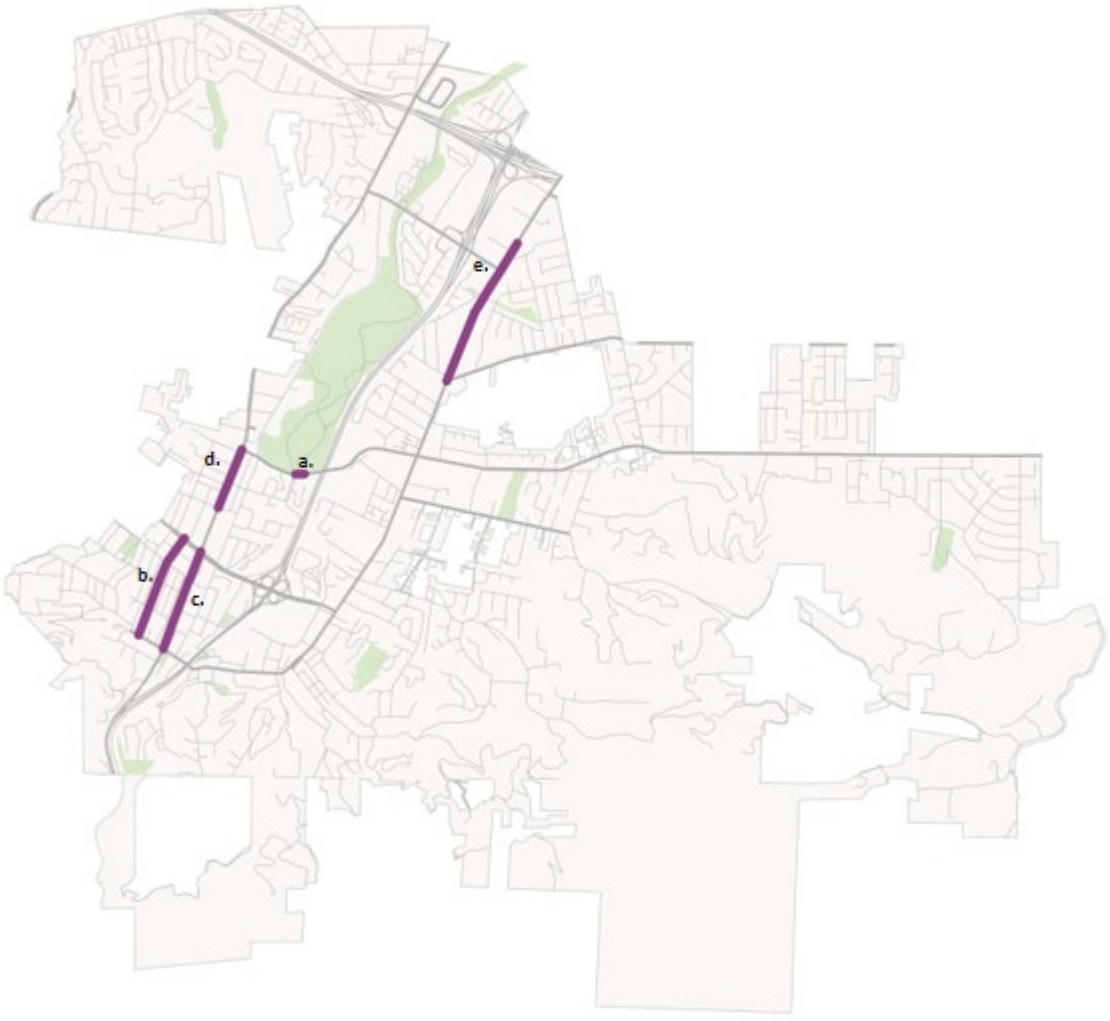


Figure 7: Priority Emphasis Areas

The potential countermeasures at these locations may be suited to a wide variety of approaches for funding and implementation, with opportunities to implement systemic, low-cost, quick-build improvements potentially best suited to funding through the Highway Safety Improvement Program (HSIP). The countermeasures are summarized in Table 4. The emphasis area cutsheets can be found in **Appendix E**, which shows the collisions, top injury factors, and proposed countermeasures at each location.

Table 4: Priority Emphasis Area Countermeasures

#	Location	Signal Timing and Phasing	Signs and Markings	Intersection and Roadway Design	Bikeway Design	Pedestrian Crossings

1	Blossom Hill Road and Vasona Park Road	• Advance Limit Line • Retroreflective Backplates			• Class IV Bikeway Delineators • Extend Green Time for Bikes • Two-Stage Turn Queue Bike Box	• Protected Intersection • Wayfinding • Leading Pedestrian Interval
2	Tait Avenue: West Main Street to Los Gatos Saratoga Road[1]	• Additional Signal Heads • Extend Green Time for Bikes • Extend Pedestrian Crossing Time • Leading Pedestrian Interval • Retroreflective Backplates • Upgrading to 12" signal heads		• Modify channelized rights & reduce corner radii where feasible	• Green Bike Lane Conflict Zone Markings • Two-Stage Turn Queue Bike Box • Evaluate lane reductions to facilitate bikeway improvements	• ADA Ramps & Audible Push Button Upgrades • High-Visibility Crosswalk • Straighten crosswalks
3	North Santa Cruz Avenue: Main Street to Los Gatos Saratoga Road	• Additional Signal Heads • Extend Pedestrian Crossing Time • Leading Pedestrian Interval • Retroreflective Backplates • Upgrading to 12" signal heads		• Reduce corner radii where feasible	• Green Bike Lane Conflict Zone Markings • Two-Stage Turn Queue Bike Box	• ADA Ramps & Audible Push Button Upgrades • High-Visibility Crosswalk • Straighten crosswalks • Provide Yield Limit lines • RRFB • Improve sightlines

[1]Improvements in ii, iii, iv may be pursued in phases with more substantial modifications considered through the LGB Class IV corridor design

4	North Santa Cruz Avenue: Blossom Hill Road to Andrews Street	• Additional Signal Heads • Extend Pedestrian Crossing Time • Leading Pedestrian Interval • Retroreflective Backplates • Upgrading to 12" signal heads		• Modify channelized rights & reduce corner radii where feasible	• Green Bike Lane Conflict Zone Markings • Two-Stage Turn Queue Bike Box • Evaluate lane reductions to facilitate bikeway improvements	• ADA Ramps & Audible Push Button Upgrades • High-Visibility Crosswalk • Straighten crosswalks • Provide Yield Limit lines • RRFB • Improve sightlines
5	Los Gatos Boulevard: Bennett Way to Los Gatos Almaden Road		• Advance Stop Bar • Advance Yield Markings	• Speed Humps or Speed Tables • Paint and Plastic Curb Extension		• Curb Extensions • High-Visibility Crosswalk • Raised Crosswalk • Consider Pedestrian Scale Lighting

Funding, Implementation, and Evaluation Strategies

This chapter identifies funding and implementation considerations that will be important to Town staff as they seek to program and construct safety projects.

Funding Opportunities

Although HSIP is a common avenue for funding safety improvements, a variety of additional funding sources can be used to finance safety projects. The Funding Sources Table 5 outlines regional, state, and federal programs related to transportation, air quality, sustainability, and housing that can be utilized to fund associated safety improvements depending on context.

Table 5: Funding Sources

Funding Source	Program Purpose
Congestion Mitigation and Air Quality (CMAQ) Improvement Program	The FAST Act continued the CMAQ program to provide a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas).
Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grant Program	This program supports projects that are "road or bridge projects eligible under title 23, United States Code;" and "intermodal projects." This program replaces the TIGER program.
Highway Safety Improvement Program (HSIP)	California's Local HSIP focuses on infrastructure projects with nationally recognized crash reduction factors (CRFs). Local HSIP projects must be identified on the basis of collision experience, collision potential, collision rate, or other data-supported means.
Active Transportation Program (ATP)	ATP is a statewide competitive grant application process with the goal of encouraging increased use of active modes of transportation. The ATP consolidates existing federal and state transportation programs, including the Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and State Safe Routes to School (SR2S), into a single program with a focus to make California a national leader in active transportation. The ATP administered by the Division of Local Assistance, Office of State Programs.
SB-1 Transportation Funding	The State Transportation Improvement Program (STIP) is the biennial five-year plan for future allocations of certain state transportation funds for state highway improvements, intercity rail, and regional highway and transit improvements.

Santa Clara County 2016 Measure B	A one-half cent sales tax measure in Santa Clara County for transportation improvements to enhance transit, highways, expressways and active transportation through April 1, 2047.
Metropolitan Transportation Commission (MTC) One Bay Area Grant (OBAG) Program	Federally funded program administered by MTC to invest in local street and road maintenance, streetscape enhancements, bicycle and pedestrian improvements, transportation planning, and safe routes to school while advancing regional housing goals.
Caltrans Sustainable Transportation Planning Grant Program	To encourage local and regional planning that furthers state goals, including, but not limited to, the goals and best practices cited in the Regional Transportation Plan Guidelines adopted by the California Transportation Commission.
California Office of Traffic Safety (OTS)	OTS administers traffic safety grants in the following areas: Alcohol Impaired Driving, Distracted Driving, Drug-Impaired Driving, Emergency Medical Services, Motorcycle Safety, Occupant Protection, Pedestrian and Bicycle Safety, Police Traffic Services, Public Relations, Advertising, and Roadway Safety and Traffic Records.
Affordable Housing and Sustainable Communities (AHSC)	The Affordable Housing and Sustainable Communities (AHSC) Program makes it easier for Californians to drive less by making housing, jobs, and key destinations accessible by walking, biking, and transit.

Implementation Strategies

Implementation of the LRSP is a vital step in the process where identified strategies and projects are executed. To successfully implement programs and projects, partnerships, trust, funding and coordination need to be proactively managed. Successful implementation requires sustained and coordinated support from key stakeholders, elected officials and Town staff. Some strategies are outlined below:

Oversight & Accountability

Establishing a committee or Task Force with key officials and stakeholders (in and outside of the Town) that meets bi-annually or quarterly is recommended to facilitate effective delivery of safety projects and programs. Having appointed leadership will be a crucial part of maintaining buy-in and support for the LRSP from not only officials, but the community as well. Leadership could additionally include members from identified LRSP partners. Holding the Town's community development, engineering, and public safety departments accountable is crucial for effective implementation, along with holding County departments accountable as well. Some duties could include conducting briefings and presentations at board and agency meetings, collecting and sharing information on a regular basis and updating a public-facing database (or scorecard) on LRSP goal progress.

Coordination & Partnership

Throughout the lifetime of the LRSP, coordination and partnership amongst diverse stakeholders will be essential for effective delivery of the LRSP. Some strategies include regularly informing leaders and

stakeholders on progress and key milestones, consulting partner agencies early on in the implementation process to gather suggestions and feedback, and finding opportunities for partnership via project bundling (e.g. integrating LRSP projects with pavement resurfacing and maintenance).

Funding

One major hurdle to plan implementation is often funding. As part of an implementation strategy it is recommended that the Town stay up to date on potential grant opportunities and place the most competitive projects forward as grant sources evolve. Additionally, reviewing an updated list of current capital projects to find where LRSP projects could overlap for possible project bundling. See previous section on funding for more details.

Communication

Having continued communication and transparency with stakeholders and community members can allow for greater trust and support of the LRSP's goals. Some strategies include communication across diverse channels (e.g. updated webpage, news, and social media), actively addressing community concerns, publishing updating factsheets on plan progress, and regular public meetings using effective community engagement techniques. An oversight committee or Task Force (as proposed above) could aid with leading efforts on communication and trust-building.

Implementation Actions, Phasing & Sequencing

Implementing countermeasures, projects, and programs identified in the LRSP typically requires an ongoing, long-term commitment from the Town. To facilitate the evaluation and prioritization of funding, it can be desirable to consider the implementation of safety projects through different time horizons.

Near-term implementation efforts may focus on low-cost improvements which can be constructed within five years. These may include systemic improvements such as upgraded traffic signal heads, signal phasing and timing modifications, high-visibility crosswalk markings, and pedestrian visibility enhancements which can be pursued as discrete projects or as system improvements at multiple locations.

Medium-term implementation goals may target the pursuit of progressive safety elements such as those identified in the Countermeasure Toolbox in all capital projects and infrastructure planning efforts already underway. This could include emphasizing safety in projects such as the Highway 17 Bicycle and Pedestrian Overcrossing, Winchester Boulevard Complete Streets, Blossom Hill Road Safety Improvements, and Los Gatos Boulevard corridor improvements.

Long-term goals may focus on further emphasizing safety in future planning and design efforts, including updates to the Bicycle and Pedestrian Master Plan and all capital improvement projects. Future efforts for the Town to consider may also include formalizing the Town's pledge to Vision Zero strategies and values. An ongoing commitment to the inclusion of off-site safety improvements in conjunction with development projects will allow the Town to capitalize on additional funding opportunities.

Evaluation Strategies

Evaluation allows the Town to understand its performance in achieving its safety goals and inform future decision-making accordingly. It provides the basis for determining selection of emphasis or priority areas, countermeasures, and locations to reduce collisions and collision severity.

Update the Plan Regularly

For example, scheduling an update every two years could assist with organizing and directing evaluation efforts. As conditions within the Town and region could change, it will be necessary to update the LRSP in the future.

Identify Target Metrics and Measure Goal Performance in Priority Areas

In order to understand progress and safety conditions, several metrics should be used in LRSP evaluation. Examples of measuring goal performance include monitoring the number of total collisions, specific types of collisions, and/or safety infrastructure improvements installed.

Additional regular measurement of goal progress in priority areas can be performed every year. One example is a safety scorecard. Safety scorecards that are released annually can be a powerful tool for measuring effectiveness, highlighting areas that need further attention and resources, and identifying tasks and deadlines for responsible stakeholder parties.

Continue Engagement of Stakeholders

Efforts around evaluation should include expanding partnership from diverse sources (e.g. officials, agencies, community advocacy groups). Input from identified stakeholders and future partners, along with collected target metrics, could be used to adapt the plan based on community feedback and expert insight as projects and programs are rolled out.

Conduct pre- and post- surveys with community members to measure how their actions and views have shifted after engagement around traffic safety. Local partners can be tasked with disseminating the pre- and post-surveys to residents. Surveys should evaluate whether respondents express a shift in behavior after having participated in traffic safety programming. The metrics for evaluation can also be developed in partnership with local partners to facilitate broader accessibility for the public.

Appendix A: Survey Responses

Appendix B: Los Gatos Existing Conditions Presentation

Appendix C: KSI Collisions

Appendix D: Countermeasure Toolbox

Appendix E: Emphasis Area Cutsheets