Town of Atherton

LOCAL ROADWAY SAFETY PLAN DRAFT MARCH 2024

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GLOSSARY OF TERMS

Countermeasures are engineering infrastructure improvements that can be implemented to reduce the risk of collisions.

Emphasis Areas represent types of roadway users, locations, or collisions with safety issues identified based on local trends that merit special focus in the Town's approach to reducing fatal and severe injury collisions.

Local Roadway Safety Plans, or LRSPs, are documents that provide local-level assessments of roadway safety and identify locations and strategies to improve safety on local roadways.

Crash Severity is defined by the guidelines established by the Model Minimum Uniform Crash Criteria (MMUCC, Fifth Edition) and is a functional measure of the injury severity for any person involved in the crash.

- Fatal Collision [K] is death because of an injury sustained in a collision or an injury resulting in death within 30 days of the collision.
- Severe Injury [A] is an injury other than a fatal injury which results in broken bones, dislocated or distorted limbs, severe lacerations, or unconsciousness at or when taken from the collision scene. It does not include minor laceration.
- Other Visible Injury [B] includes bruises (discolored or swollen); places where the body has received a blow (black eyes and bloody noses); and abrasions (areas of the skin where the surface is roughened or blotchy by scratching or rubbing which includes skinned shins, knuckles, knees, and elbows).
- **Complaint of Pain [C]** classification could contain authentic internal or other non-visible injuries and fraudulent claims of injury. This includes: 1. Persons who seem dazed, confused, or incoherent (unless such behavior can be attributed to intoxication, extreme age, illness, or mental infirmities). 2. Persons who are limping but do not have visible injuries; 3. Any person who is known to have been unconscious because of the collision, although it appears he/she has recovered; 4. People who say they want to be listed as injured do not appear to be so.
- **Property Damage Only [O]** Collision is a noninjury motor vehicle traffic collision which results in property damage.

Highway Safety Improvement Program (HSIP) is one of the nation's core federal-aid programs. Caltrans administers HSIP funds in the state of California and splits the state share of HSIP funds between State HSIP (for state highways) and local HSIP (for local roads). The latter is administered through a call for projects biennially.

Primary Collision Factors (PCFs) convey the violation or underlying causal factor for a collision. Although there are often multiple causal factors, a reporting officer at the scene of a collision indicates a single relevant PCF related to a California Vehicle Code violation.

Safe Streets for All (SS4A) is a federal discretionary grant program created by the 2021 Bipartisan Infrastructure Law with \$5 billion in appropriated funds for 2022 through 2026.

Safe System Approach is a layered method for roadway safety promoted by the FHWA. This approach uses redundancies to anticipate mistakes and minimize injury. For more, visit https://safety.fhwa.dot.gov/zerodeaths/docs/FHWA_SafeSystem_Brochure_V9_508_200717.pdf.

Safety Partners are agencies, government bodies, businesses, and community groups that the Town can work with to plan, promote, and implement safety projects.

Strategies are non-engineering tools that can help address road user behavior, improve emergency services, and build a culture of safety.

Systemic safety defines an analysis and improvement approach based on roadway and environmental factors correlated with crash risk (rather than targeting locations solely on documented crash history). The approach takes a broad view to evaluate risk across an entire roadway system.

INTRODUCTION

This chapter serves as a standalone local roadway safety plan (LRSP) for the Town of Atherton. It was developed concurrently with the Countywide LRSP; therefore, some discussion will refer back to the Countywide LRSP to avoid redundancy.

However, because every community has unique safety challenges, this LRSP includes individually tailored emphasis areas, crash trends, prioritized project lists, project scope recommendations, Safe System-aligned recommendations, and implementation/monitoring recommendations. A living document, this LRSP is designed to be flexible and responsive to evolving community needs. The Town will revisit and update this LRSP at least every five years.

The Town of Atherton has a 2023 population of 6,678 per California Department of Finance. The town has 51 total centerline miles per Caltrans 2022 California Public Road Data. From 2018 through 2022, there were 121 reported crashes on surface streets in the Town and 4 fatal/severe injury crashes. Pedestrians were involved in 10 percent of all reported crashes and 50 percent of fatal/severe injury crashes. Bicyclists were involved in 21 percent of all reported crashes and no fatal/severe injury crashes. Of reported at-grade crashes, 36 (30 percent) occurred on or along state highways. The LRSP provides Safe System-aligned strategies tailored to Atherton's crash history and local priorities, as well as performance measures to evaluate progress.

This LRSP was informed by technical analysis as well as from input from key stakeholders and the general public. The following sections describe the plan development and recommendations.

Contents

This LRSP provides the following:



Upon Council adoption and affirmation of the plan's vision and goals in 2024, this plan will be posted online by the Town for public viewing.

VISION & GOALS

The Town of Atherton's vision for roadway safety is:

- Reduce fatal and severe injury crashes to zero by 2050.
- Promote a culture of roadway safety in Atherton's departments, educational institutions, and residents.

To support this vision, the Town has established the following goals:

- 1. Regularly review crash history and community needs to identify and prioritize opportunities to reduce crash risk for roadway users of all ages and abilities.
- 2. Implement safety countermeasures systemically and as part of all projects to target emphasis areas and underserved communities.
- 3. Promote plan recommendations with identified safety partners to incorporate roadway safety through safety projects and educational campaigns in Atherton.
- 4. Provide opportunities for community engagement to identify issues and inform safety solutions across the community.
- 5. Embrace the Safe System approach to promote engineering and non-engineering strategies in the community.
- 6. Identify opportunities to incorporate social equity into safety improvements.
- 7. Monitor implementation of the Atherton LRSP to track progress towards goals.

PLAN DEVELOPMENT

Existing Safety Efforts

This LRSP relies on the Town of Atherton's solid foundation of plans, policies, and programs that support safe, equitable mobility in the city. For a list of Atherton's existing initiatives and ongoing efforts to build a Safe System, see Table 1:

Program Name	Program Description	Safe System Elements
San Mateo C/CAG Safe Routes to School (SR2S) Program Guide	The SR2S program works to make it easier and safer for students to walk and bike to school. C/CAG partners with the County Office of Education to increase biking and walking and safe travel to school. Annual reports summarize schools' participation.	Safe Roads Safe Speeds Safe Road Users
Bicycle and Pedestrian Master Plan	The Town's Bicycle and Pedestrian Master Plan outlines identified needs and active transportation routes.	Safe Roads Safe Road Users
Neighborhood Traffic Management Plan	The Town's Neighborhood Traffic Management Plan outlines neighborhood traffic calming measures and programs to reduce travel speeds and cut-through traffic with an intent to improve safety for all modes of travel.	Safe Roads Safe Road Users

Table 1. Town of Atherton Safety Policies, Plans, Guidelines, Standards, and Programs

Program Name	Program Description	Safe System Elements
Alameda de las Pulgas Traffic and Safety Improvements	The Town is currently preparing project plans for Alameda de las Pulgas Drive, which project will include a traffic signal and reconfiguration at Atherton Avenue, signalization at Cam al Lago, pedestrian crossing improvements at Stockbridge, and relocation of a midblock pedestrian signal between Cam al Lago and Mills Avenue.	Safe Roads
El Camino Real Complete Streets Gap Closure Planning Study	The Town is currently working with the San Mateo County Transportation Authority on a planning study for El Camino Real to identify active transportation improvements on the roadway between Selby and Valparaiso.	Safe Roads

Safety Partners

A variety of agency staff and community partners were involved throughout the development of this LRSP and played an integral role in identifying priorities, providing local context, and reviewing the existing conditions analysis. Many of the strategies identified in this plan will require coordination with these partners and their



support of the Town of Atherton's effort to create a culture of roadway safety. While additional partners may be identified in the future, those involved in development of the LRSP include:

- City/County Association of Governments of San Mateo County (C/CAG)
- County Public Health
- Office of Sustainability
- San Mateo County Office of Education (SMCOE)
- San Mateo County Transportation Authority (SMCTA)
- California Highway Patrol
- Metropolitan Transportation Commission (MTC)
- Silicon Valley Bicycle Coalition (SVBC)
- Caltrans
- Atherton Police Department

Community Engagement and Input

This LRSP includes community members' experiences and concerns gathered from project team hosted pop-up events and an interactive webmap.

ENGAGEMENT TIMELINE AND EVENTS

The project team hosted a series of public engagement events countywide to support the concurrent development of the Countywide LRSP and of the Town's plan. These events focus on jurisdiction-specific issues and on countywide concerns. The table below lists the events, organized by themed engagement phases, and is followed by the community input themes we heard.

Table 2. C/CAG Public Engagement Events

Date	Event	Location	
August 10, 2023	Countywide Virtual Kickoff meeting – Sharing the purpose and timing of the plan	Virtual meeting (recorded and posted to plan website)	
August 16, 2023	Phase 1 Pop-up/Tabling Event Shared crash data	East Palo Alto	
August 19, 2023	analysis; received input on locations and safety concerns	Half Moon Bay Farmers Market	
August 20, 2023		Foster City Summer Days	
August 27, 2023		San Carlos Block Party	
December 17, 2023	Phase 2 Pop-up/Tabling Event	Belmont Farmers' Market	
December 20, 2023	Shared draft prioritized locations and types of engineering recommendations; received	Woodside Public Library	
January 9, 2024	comments on locations and votes/input on types	Colma BART Station	
January 16, 2024	 of treatments and desired locations 	Atherton Library	
January 18, 2024		Brisbane Farmers' Market	
February 7, 2024	_	Portola Valley Bicycle, Pedestrian, and Traffic Safety Committee Meeting	

ONLINE MAP SURVEY

The project team made an online countywide webmap tool and survey available during August and September 2023 for the public to provide comments and respond to questions to guide the plan's development (see Figure 2. Online Map Survey Tool). Respondents were able to record location-specific feedback, associate a travel mode, and leave a detailed comment pertaining to a safety concern.

Countywide, there were a total of 528 comments recorded by 352 respondents. There were two comments made within the Town of Atherton. The comments included the following:

- Request to provide modal filters: to allow only bicycles and pedestrians on certain streets.
- Noted locations include Selby Lane at Stockbridge Avenue, and Barry Lane.

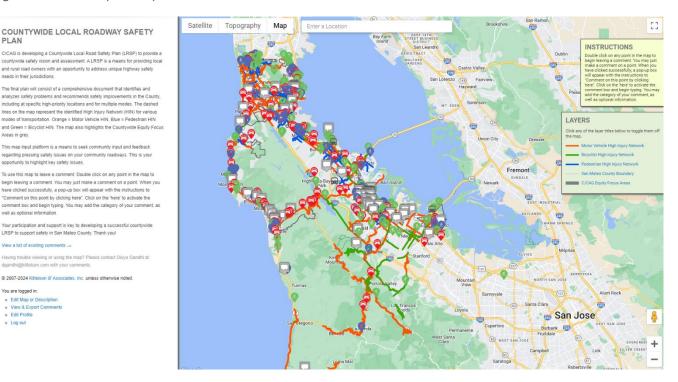
The comments received are provided in Appendix A. The project team also identified common themes in the responses made countywide which may be relevant to the Town. Those are presented in the Community Engagement section of the Countywide LRSP.

Figure 2. Online Map Survey Tool

PLAN

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PHASE 2 COMMUNITY ENGAGEMENT FEEDBACK

The project team held an event at the Atherton Library in January as part of Phase 2, which provided the project team with input on specific location concerns, general traffic safety/behavioral concerns, and opinions on specific engineering treatments or strategies. Comments received are provided in Appendix B. The following themes were identified:

Pedestrian Comments

- Desire for pedestrian facilities, such as sidewalks, curb ramps, crosswalks, and pedestrian signals, to • make walking safer and more comfortable, especially along El Camino Real and in the neighborhood east of Middlefield Road
- Desire for better pedestrian crossings over the Caltrain rail tracks

• Concern that drivers are running through stop signs and red signals, specifically along Isabella Avenue and at El Camino Real / Fair Oaks Lane and Maple Avenue / Dinkelspiel Station Lane

Bicycle Comments

- Concerns that there is not enough separation between bicyclists and drivers along El Camino Real. [There are no bike lanes on El Camino Real.]
- Concerns of poor visibility—due to curved roads, inadequate lighting, and parked cars at corners—that makes biking unsafe

Motor Vehicle Comments

- Desire for lighting to improve visibility along roadways
- Concerns over traffic and congestion in Atherton
- Concerns over blind corners and site line issues, especially along El Camino Real and at the Fair Oaks Lane / Dinkelspiel Station Lane intersection.

Countermeasures Comments

- Desire for lane or road narrowing, specifically along Atherton Avenue and El Camino Real and side, and a desire to do more to improve safety
- Concerns that bike lane improvements are dangerous to drivers

CRASH DATA & TRENDS

This section provides an overview of the five years of crash data used for this analysis. The data were downloaded from the Transportation Injury Mapping System¹ (TIMS) Crash database representing the full years 2018 through 2022. TIMS is a commonly used data source for safety plans. This analysis includes only crashes for which some level of injury is reported and excludes property damage only (PDO) crashes. We removed crashes along grade-separated freeways from the dataset, but we retained crashes that occur along at-grade State Highway facilities and those that occurred within the influence area of freeway ramp terminal intersections.

The crash records used provide the best available data for analysis but do not account for crashes that go unreported or for near-miss events. This plan includes recommendations that would improve jurisdictions' ability to capture one or both of those elements and enhance future crash analyses.

The discussion that follows provides a high-level overview of crash trends that informed the plan recommendations. For a more complete description of trends and findings, refer to Appendix C.

Emphasis Areas

The project team analyzed crash data in Atherton and compared countywide trends to establish emphasis areas. Emphasis areas are crash dynamic, behavioral, or road user characteristics that the Town can focus on to maximize fatal and severe injury reduction on local roads.

A review of crash data and input led to the development of the following emphasis areas for the Town of Atherton:

1. **Pedestrian and bicyclist safety.** Countywide, pedestrians were involved in 13 percent of all injury crashes but 23 percent of fatal/severe injury crashes, showing a disproportionate involvement in the most severe outcomes. Similarly, bicyclists were involved in 13 percent of all injury crashes but 20 percent of fatal/severe injury crashes. In Atherton, pedestrians were involved in 50 percent of fatal/severe injury crashes, higher than their overall share of all injury crashes (10 percent). Bicyclists were involved in 21

¹ Transportation Injury Mapping System, <u>http://tims.berkeley.edu</u>

percent of all reported injury crashes. None of the bicyclist-involved crashes resulted in fatality or severe injury.

- 2. **Nighttime/low light safety.** Countywide, crashes occurring in dark conditions—especially in dark, unlit conditions—are more severe than those that occur in daylight. Motor vehicle crashes in dark, unlit conditions have about double the average severity when they occur compared to crashes in daylight. In Atherton, one of the four fatal/severe injury crashes occurred in dark conditions.
- 3. **Unsignalized intersections on arterials/collectors.** Countywide, crashes for all modes most frequently occurred at the intersection of higher order and lower order roadways most commonly along arterial and collector roadways. Pedestrian and bicyclist crashes most frequently occur at unsignalized intersections.
- 4. Vulnerable age groups (youth and aging). Countywide across all modes, crash victims between the 15 to 34 years old are more likely to be injured including F/SI as a result of traffic safety than other groups. Victims between the ages 50 69 and 75 to 84 are also more likely to be severely injured than other groups. In Atherton, 9 crashes or 7 percent of all reported injury crashes involve at fault drivers who are under 30 years old.
- 5. **Motor vehicle speed related roadway segment crashes.** Countywide, motor vehicle crashes were more severe along roadway segments than at any other location type; unsafe speed was the most commonly cited the primary crash factor (27 percent of all injury crashes and 23 percent of fatal/severe injury crashes). In Atherton, "Too fast for conditions" was the top-cited violation among reported injury crashes (37 percent).
- 6. **High speed roadways (35+mph).** Countywide, crashes on roadways with posted speeds 40mph or higher had an average crash severity per mile 13 times higher than along roadways with posted speeds of 25 mph or less.

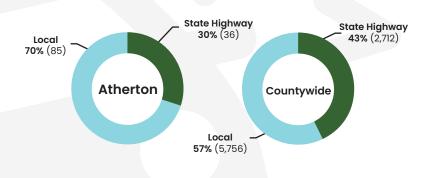
The next pages present summary findings from a crash data review that compares the Town of Atherton to countywide trends in these emphasis areas. It includes summary statistics related to the above-cited emphasis areas but also shows:

- The share of local crashes that occurred on or at a State Highway facility compared to Countywide levels.
- The most frequently reported local crash types compared to Countywide levels.
- The share of bicyclist and motor vehicle crashes among all injury crashes and among F/SI crashes. Countywide and locally, bicyclist crashes account for a higher share of F/SI crashes than among all injury levels.
- The share of local and Countywide crashes occurring in dark conditions for crashes of all injury levels and for F/SI crashes (organized by mode).
- Reported pedestrian and bicyclist crashes summarized by the most common preceding movements countywide, with a comparison of those movements' share of local crashes to Countywide shares.
- The local and Countywide share of crashes involving drugs or alcohol and involving drivers under age 30.

Atherton–Crash History

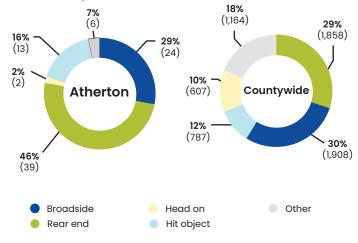
Total Crashes

In Atherton, 121 fatal and injury crashes were reported on at-grade facilities between 2018 – 2022, where:



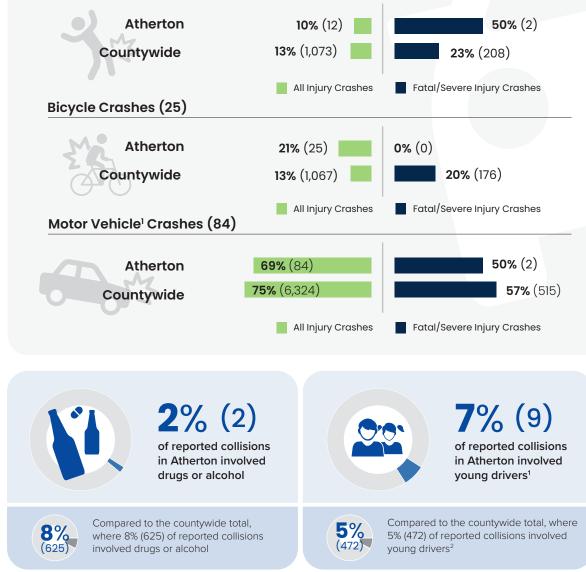
Most Frequent Collision Types

Broadside, rear-end, head-on, and hit-object crashes were the most common crash types in the region. Here is how Atherton compares:



Mode Involvement

Pedestrian Crashes (12)



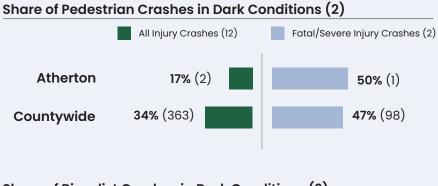
1. Motor crashes include motor vehicles and motorcyclists.

2. Young driver crashes are crashes that involve at fault drivers who are under 30 years old.

Atherton—Crash History

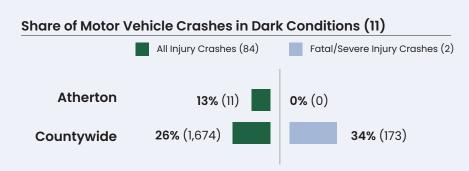
Dark Conditions

Crashes reported in nighttime conditions were found to be more severe especially in dark, unlit conditions. Here is how Atherton compares to Countywide crashes:

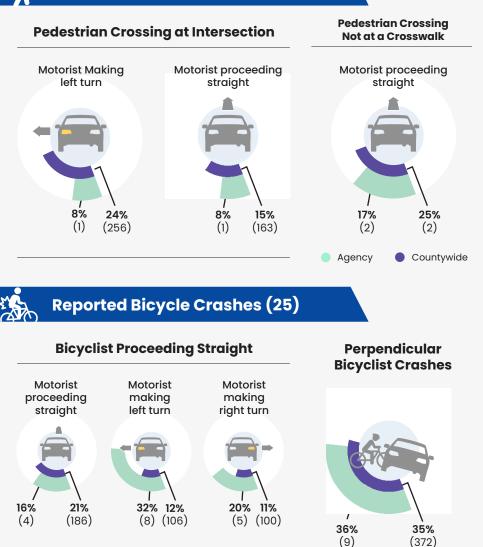


Share of Bicyclist Crashes in Dark Conditions (2)





Reported Pedestrian Crashes (12)



Agency

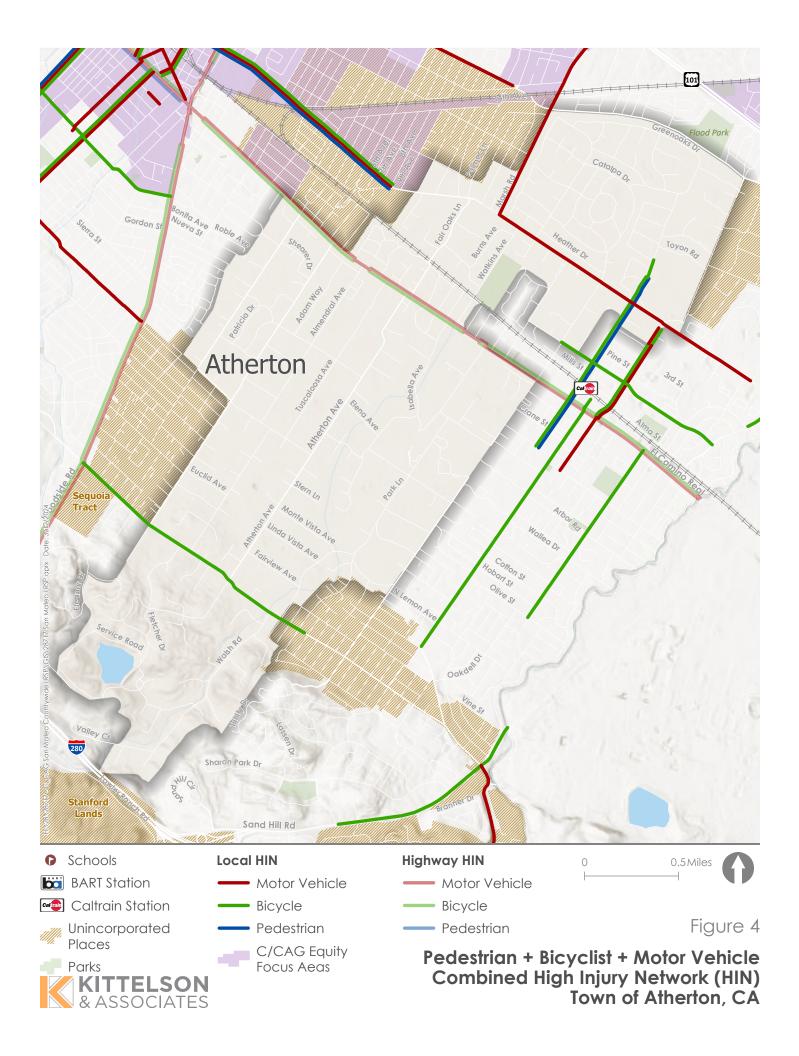
Countywide

Countywide High Injury Network

In addition to the systemic analysis findings, the analysis included countywide spatial analysis to identify a countywide high injury network for each travel mode (pedestrians, bicyclists, and motor vehicles). The countywide HIN results were folded into the subsequent regional and local prioritization (described in the next section). Additionally, the characteristics of the HIN and crashes along them were identified as risk factors and incorporated into emphasis areas and into a systemic portion of the prioritization process. Table 3 and Figure 4 show the HIN segments identified within the Town.

Roadway name	All County Jurisdiction(s) including this HIN Roadway	Total Length, all jurisdictions included (mi)	Motor Vehicle HIN	Bicyclist HIN	Pedestrian HIN
Oak Grove Ave	Atherton, Menlo Park	1.2		x	x
Ravenswood Ave	Atherton, Menlo Park	0.6	X	x	x
Middlefield Rd	Atherton, Menlo Park, Redwood City, Unincorporated	3.8	x	x	x
Marsh Rd	Atherton, Menlo Park, Unincorporated	1.3	x		
El Camino Real	San Carlos, Atherton, Menlo Park, Redwood City, Millbrae, San Bruno, Belmont, San Mateo, Burlingame, South San Francisco, Colma, Unincorporated	23.5	x	x	x
Alameda de las Pulgas	San Carlos, Atherton, Redwood City, Belmont, San Mateo, Unincorporated	6.7	x	x	X

Table 3. Countywide HIN Segments in Atherton



PROJECT IDENTIFICATION & PRIORITIZATION

Methodology

Using the results of the crash data analysis and adding a focus on social equity, the project team identified priority locations for the Town to target for future safety improvements. The prioritization used three equally weighted factors to prioritize locations for safety projects:

- **Crash history** used to identify the locations with the highest reported five-year crash frequency and severity.
- **Social equity** used to identify locations where projects would benefit disadvantaged populations and align with future grant funding opportunities that emphasize social equity.
- **Systemic factors** used to identify locations that have roadway and land use characteristics associated with crash frequency and severity. Using systemic factors emphasizes a proactive rather than purely reactive approach. Each factor was weighted relative to the other factors based on the average severity of relevant crashes (for example, if pedestrian crashes on arterials/collectors were overall twice as severe as pedestrian crashes at unsignalized intersections overall, then the former would be weighted twice the latter).

Each factor is comprised of multiple criteria and overlaid on jurisdictions' roadway data to identify locations for future safety projects. The prioritization process was conducted three times, one for each travel mode. The weighting scheme for each mode is presented in the three figures below (Figure 4, Figure 5, and Figure 6). The resulting scores are sorted per jurisdiction, so that Atherton's prioritized locations are compared to themselves rather than to other County jurisdictions.

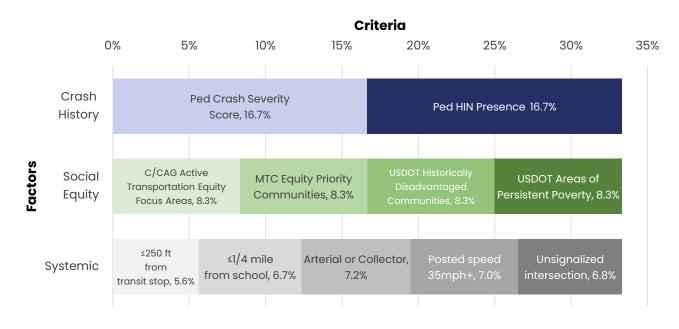


Figure 4. Pedestrian Prioritization Factor/Criteria Weighting (Sum to 100 Percent)

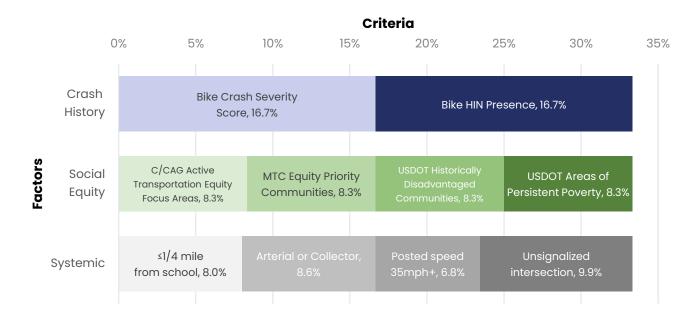
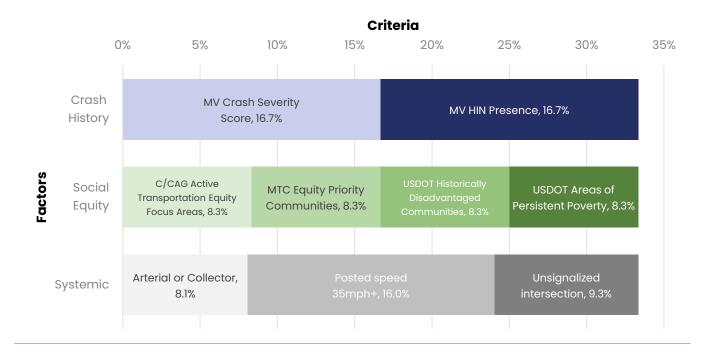


Figure 5. Bicycle Prioritization Factor/Criteria Weighting (Sum to 100 Percent)

Figure 6. Motor Vehicle Prioritization Factor/Criteria Weighting (Sum to 100 Percent)



Social Equity

Social equity is a critical consideration for project prioritization, and emphasizing social equity within a project prioritization process helps to promote infrastructure spending and improvements in disadvantaged and/or disinvested neighborhoods. We considered and included multiple local, regional, and national datasets for social equity prioritization to reflect different measures available and because available funding opportunities use different indicators. Ultimately the prioritization included measures accounting for all of the following indicators:

- C/CAG Active Transportation Equity Focus Areas
- MTC Equity Priority Communities
- USDOT Historically Disadvantaged Communities
- USDOT Areas of Persistent Poverty

Layering in these four indicators allows the prioritization to identify more locations that may meet the criteria for just one of these indicators while still elevating locations that show up in multiple or all indicators. The raw scoring data also equips the Town to understand which locations meet which measures.

Results

The prioritization resulted in the following top locations. For more details (including the scores of each location), consult Appendix D. Figure 7 also shows the locations.

Table 4. Priority Locations

ID	Location	Corridor/ Intersection	State Highway?	Motor Vehicle Emphasis	Bicycle Emphasis	Pedestrian Emphasis
1	El Camino Real and Columbia Ave*,**	Intersection	Yes	x	X	X
2	Loyola Ave and El Camino Real*,**	Intersection	Yes	x	X	X
3	El Camino Real and 5th Ave*,**	Intersection	Yes	x	X	x
4	Amherst Ave and El Camino Real*,**	Intersection	Yes	x	X	x
5	El Camino Real and Berkshire Ave*,**	Intersection	Yes	x	X	
6	El Camino Real and Stockbridge Ave	Intersection	Yes	x	X	x
7	Selby Ln and El Camino Real*,**	Intersection	Yes	x	X	X
8	Wilburn Ave and El Camino Real	Intersection	Yes	X	X	
9	El Camino Real and Almendral Ave	Intersection	Yes	x		
10	Alameda de las Pulgas and Stockbridge Ave*	Intersection	No	x	x	

ID	Location	Corridor/ Intersection	State Highway?	Motor Vehicle Emphasis	Bicycle Emphasis	Pedestrian Emphasis
11	Robert S Dr and Valparaiso Ave***	Intersection	No	x		
12	Glenwood Ave and Laurel St***	Intersection	No	x	x	x
13	Valparaiso Ave and Lee Dr	Intersection	No	x		x
14	Elder Ave and Atherton Oaks Ln	Intersection	No	x		
15	Park Ln and Valparaiso Ave***	Intersection	No	x		
16	Middlefield Rd and Ravenswood Ave***	Intersection	No	x		x
17	Middlefield Rd and Ringwood Ave***	Intersection	No	x		x
18	Middlefield Rd and Encina Ave*	Intersection	No	x		x
19	El Camino Real and Spruce Ave***	Intersection	Yes	x		
20	Middlefield Rd and Palmer Ln	Intersection	No	x		
21	Middlefield Rd and Watkins Ave	Intersection	No	x		
22	Middlefield Rd and Oak Grove Ave	Intersection	No			x
23	Oak Grove Ave and Oak Grove Ave	Intersection	No		X	x
24	Alameda de las Pulgas and Walsh Rd	Intersection	No		X	x
25	Lane PI and Middlefield Rd	Intersection	No			x
26	De Bell Dr and Middlefield Rd	Intersection	No			X
27	Middlefield Rd and San Benito Dr	Intersection	No			x
28	Callado Way and Alameda de las Pulgas	Intersection	No		X	
29	Fletcher Dr And Alameda De Las Pulgas	Intersection	No		X	
30	Alameda De Las Pulgas and Atherton Ave	Intersection	No		x	
31	El Camino Real and Isabella Ave	Intersection	Yes		x	

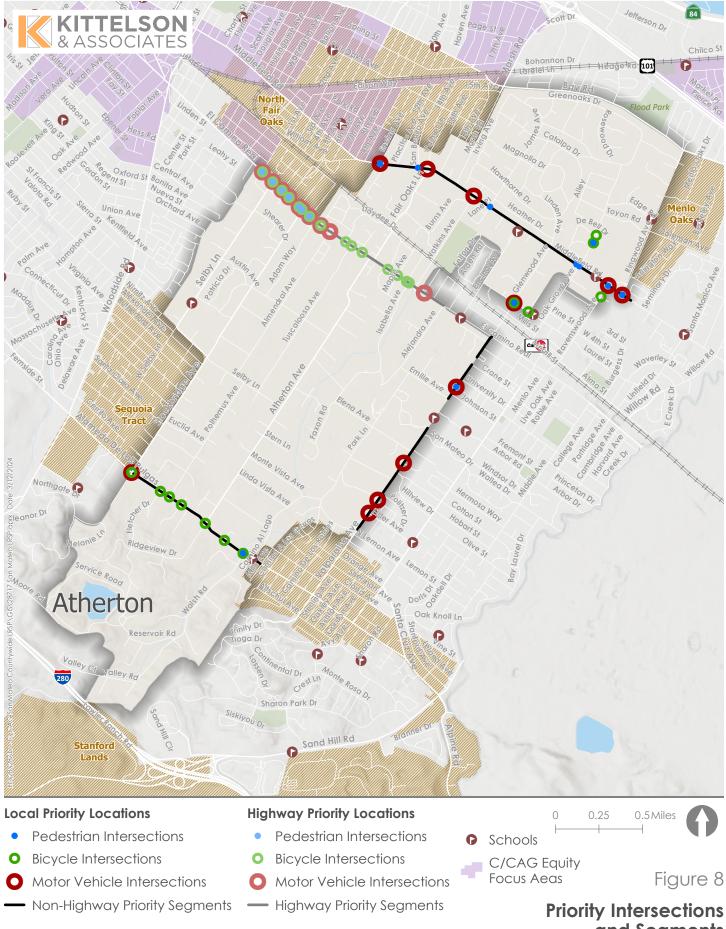
ID	Location	Corridor/ Intersection	State Highway?	Motor Vehicle Emphasis	Bicycle Emphasis	Pedestrian Emphasis
	El Camino Real and			Emphasis		LIIIPIIdaia
32	Ashfield Rd	Intersection	Yes		X	
33	Maple Ave and El Camino Real	Intersection	Yes		x	
34	El Camino Real and Walnut Ave	Intersection	Yes		X	
35	Alameda De Las Pulgas and Polhemus Ave	Intersection	No		X	
36	Alameda De Las Pulgas and Karen Way	Intersection	No		X	
37	El Camino Real and Tuscaloosa Ave	Intersection	Yes		X	
38	El Camino Real and Redwood Way	Intersection	Yes		X	
39	El Camino Real and Lloyden Dr	Intersection	Yes		X	
40	Oak Grove Ave and de Bell Dr	Intersection	No		X	
41	El Camino Real, Berkshire Ave to Spruce Ave (E to W town limits)****	Corridor	Yes	X	x	x
42	Alameda de las Pulgas, Stockbridge Ave to Cam Al Lago (E to W town limits)****	Corridor	No	X	X	x
43	Valparaiso Ave, Camino por los Arboles to Victoria Dr*	Corridor	No	X		x
44	Middlefield Rd, Encina Ave to Ringwood Ave	Corridor	No	x		x

^{*}Intersection is shared jurisdictionally with Unincorporated San Mateo County.

**Roadway is Caltrans jurisdiction.

***Intersection is shared jurisdictionally with Menlo Park.

****The Town is currently preparing a study on this corridor (see Table 1).



and Segments Town of Atherton, CA



IMPROVEMENTS – ENGINEERING, POLICY & PROGRAMS

This section presents Safe System-aligned recommendations that can create levels of redundancy for traffic safety in the Town of Atherton. First is a table of engineering countermeasures proven to reduce fatal and severe injury crashes. The countermeasures align to the crash types as listed in the table. Complementing those countermeasures is a holistic set of policy and programmatic recommendations that will help align Town departments and partners in pursuit of the plan's vision and goals.

Engineering Countermeasure Toolbox

Table 5. Town of Atherton Countermeasure Toolbox

Countermeasure Name	Applicable Location(s) ¹	Crash Types Applicable	Crash Reduction Factor (If Available)	Cost (if available)²	Systemic Opportunity?
Lighting along high speed corridors*	All	Nighttime	0.4	\$\$	Medium
Improve signal hardware: lenses, back plates with retroreflective borders, mounting, size, and number*	SI	Signalized local/arterial intersections	0.15	\$	Very High
Install raised pavement markers and striping*	SI	Wet, night, all	0.1	\$	High

Countermeasure Name	Applicable Location(s) ¹	Crash Types Applicable	Crash Reduction Factor (If Available)	Cost (if available)²	Systemic Opportunity?
No Right Turn on Red (RTOR)	SI	Pedestrian crashes, signalized local/arterial intersections	N/A	\$	Medium
Install pedestrian crossing*	SI	Pedestrian crashes, signalized local/arterial intersections	0.25	\$-\$\$	High
Install advance stop bar before crosswalk (bicycle box)*	SI	Bicycle crashes, signalized local/arterial intersections	0.15	\$	High
Modify signal phasing to implement a Leading Pedestrian Interval (LPI)	SI	Pedestrian crashes, signalized local/arterial intersections	0.6	\$	High
Convert intersection to roundabout (from stop or yield control on minor road)*	UI	All crashes	Varies	\$\$\$	Low
Covert intersection to mini- roundabout*	UI	All crashes	0.3	\$\$	Low
Install pedestrian crossings (signs and markings only)*	UI	Pedestrians and bicycle	0.25	\$-\$\$\$	High
Install pedestrian crossings (with enhanced safety features like Rectangular Rapid Flashing Beacons)*	UI	Pedestrians and bicycle	0.35	\$-\$\$\$	Medium
Install/upgrade larger or additional STOP signs or other intersection warning or regulatory signs*	UI	Turning crashes related to lack of driver awareness	0.15	\$	High

Countermeasure Name	Applicable Location(s) ¹	Crash Types Applicable	Crash Reduction Factor (If Available)	Cost (if available)²	Systemic Opportunity?
Upgrade intersection pavement markings*	UI	Turning crashes related to lack of driver awareness	0.25	\$	High
Install pedestrian signal or pedestrian hybrid beacon*	UI	Pedestrian and bicycle	0.3	\$\$\$	High
Install buffered or separated bike lanes*	R	Pedestrian and bicycle	0.45	\$-\$\$	High
Install raised pedestrian crossing*	UI	Pedestrian and bicycle	0.35	\$	Medium
Install delineators, reflectors, and/or object marker*	R	All crashes	0.15	\$	High
Install/upgrade signs with new fluorescent sheeting (regulatory or warning)*	R	All crashes	0.15	\$	High
Install dynamic/variable speed warning signs*	R	Driver behavior	0.3	\$	High
Extend pedestrian crossing time	SI	Pedestrian	N/A	\$	High
Pedestrian phase recall	SI	Pedestrian	N/A	\$	High
Bicycle crossing (solid green paint)	UI	Bicycle	N/A	\$	Medium
Curb extensions	UI	All crashes	N/A	\$-\$\$	Low
ADA-compliant directional curb ramps and audible push buttons	SI	Pedestrian	N/A	\$-\$\$	Low
Curb radius reduction	SI, UI	All crashes	N/A	\$\$	Low

*Indicates countermeasure is eligible for California HSIP funding as of the most recent funding cycle

1: UI = Unsignalized Intersection; SI = Signalized Intersection; R = Roadway segments; All = All of the above 2: $= \le$ 50,000; = 200,000; = 200,000; = 200,000

Proposed Policy, Program, and Guidelines Recommendations

In addition to the engineering countermeasures and projects recommended above, the Town aims to promote policies, programs, and standards that foster a culture of safety. The table below defines several policy and program recommendations organized into thematic categories. Implemented in cooperation with partners, these recommendations will deepen the dedication to safety shared throughout the community and round out the Town's Safe System Approach.

Table 5. Town of Atherton Policy and Program Recommendations

Category	Near-Term Recommendations	Long-Term or Ongoing Recommendations
Local Culture Shift (LCS)	LCS1: Transportation Safety Advisory Committee Participation	LCS2: High-Visibility Media Campaign LCS3: Communication Protocol
Local Enforcement Coordination (LEC)		LEC2: Speed Monitoring Awareness Radar Trailer
Local Funding (LF)	LF1: Dedicated Funding	LF2: Equitable Investment LF3: Prioritize Investments
Local Education / Outreach (LEO)		LEO1: Roadway Safety Education in Schools LEO2: Engagement Accessibility LEO3: Educational Materials for New Facilities LEO4: Transportation Safety Campaign LEO5: Safe City Fleet LEO6: Conspicuity Enhancements and Education
Local Planning/ Evaluation (LPE)		LPE1: Annual Review LPE2: Plan Update LPE4: Safe Routes to School LPE8: Speed Limits/Speed Management Plan

NEAR-TERM ACTIONS

LCS1: Transportation Safety Advisory Committee Participation

Actively participate in the newly-formed County Transportation Safety Advisory Committee (TSAC). Bring agenda items as relevant, including but not limited to:

- Safety project updates with every step along the project development process (studies initiated / under way /complete, funding identified, design phases initiated / under way / complete)
- Annual updates to the TSAC regarding implementation progress that may be relevant for C/CAG annual monitoring reporting (e.g., projects on identified priority locations and/or the regional High Injury Network, community engagement efforts and summaries, safety funding applied for / received)

- Opportunities for cross-jurisdiction coordination (e.g., roadways or intersections shared with adjacent jurisdictions or Caltrans)
- Requests for trainings / best practices that could be provided through the TSAC

Lead agency: Town of Atherton Public Works

LF1: Dedicated Funding

Propose ongoing, dedicated funding and staffing for implementation and monitoring of the safety plan, including presiding over the TSAC. This role may be fulfilled by a partial FTE or through staff augmentation. **Lead agency:** Town of Atherton Public Works

LONG-TERM OR ONGOING ACTIONS

LCS3: Communication Protocol

Adopt and develop safety-related communication protocols in coordination with the TSAC. The protocols will promote consistent public communication regarding language usage and statements related to transportation safety. Encourage language in line with Vision Zero and Safe System principles that acknowledges mistakes are inevitable but death and severe injury are preventable. For example, promote use of the word crash rather than accident.

Lead agency: C/CAG

Coordinating partners: Town of Atherton Public Works

LCS4: Implement Car-Free Zones

More effectively target resources to pedestrian crash problems in a limited geographic area. Realizing these zones requires upfront analysis and planning, countermeasure development, and implementation. Implementation can focus on addressing particular problems or on increasing general safety in specific areas during windows of peak pedestrian activity. (For example: Friday nights in commercial districts, Sundays on recreational routes/areas, etc.)

Lead agency: Town of Atherton Public Works

LF2: Equitable Investment

Prioritize townwide safety investments in disadvantaged communities. Use the presence of disadvantaged communities (as identified with C/CAG Equity Focus Areas, MTC Equity Priority Communities, USDOT Historically Disadvantaged Communities, and/or USDOT Areas of Persistent Poverty) as a factor to elevate funding for certain projects or other safety-related programs.

Lead agency: Town of Atherton Public Works

LF3: Prioritize Investments

Use the priority locations identified in this plan to determine safety project opportunities to advance for further project development and to identify funding. Identify pathways for improvement for the locations on the list. Continue to engage the community to refine the priorities within the list of identified sites. Lead agency: Town of Atherton Public Works

LEO1: Roadway Safety Education in Schools

- Continue School Travel Fellowship Program to provide the following:
- Technical assistance to schools and planners to implement demonstration projects
- ATP Project Specialist to work with educators to provide technical assistance (bike rodeos, parent engagement workshops and resources, walk and bike audits, and additional support for walk/bike to school encouragement events) to schools in EPCs

Lead agency: SMCOE Coordinating partners: County Public Health, Office of Sustainability, SVBC

LEO3: Educational Materials for New Facilities

Develop and distribute educational materials and/or videos demonstrating how to navigate and interact with newer active transportation facilities (e.g., bike boxes, Pedestrian Hybrid Beacons, separated bike lanes, etc.) Include information about the purpose and goals of this infrastructure. Lead agency: Town of Atherton Public Works

LEO5: Safe City Fleets

Provide educational materials for Town staff who drive Town vehicles and integrate safety awareness training into contracting process with vendors who provide Town services. Other measures include installing safety features (such as pedestrian/obstacle detection and speed tracking) on Town vehicles and reporting on correction plans against unsafe driving.

Lead agency: Town of Atherton Public Works

LPE1: Annual Review

Provide an annual review of plan implementation progress. This review includes an update and presentation to Town Council as well as a written update to the TSAC so that C/CAG may compile county plan implementation status.

Lead agency: Town of Atherton

LPE2: Plan Update

Update the plan within five years of publication. The plan update will revise actions to reflect current crash trends and will integrate technological advancements and changes in best practices as needed. **Lead agency:** Town of Atherton Public Works

LPE4: Safe Routes to School

Continue to participate in school safety assessments at all public and private schools, develop implementation plans for improvements up to one quarter mile from the schools.

Develop a plan and timeline to include all schools in the Town.

Lead agency: SMCOE

Coordinating partners: Town of Atherton Public Works

LPE8: Speed Limits/Speed Management Plan

Per California Assembly Bill 43 (passed in 2021), identify business activity districts, safety corridors, and in areas with high ped/bike activities to implement reduced speeds. To the extent possible, complement the speed reduction with design treatments like those identified in this plan to effect reduced speeds by the desired amount.

Lead agency: Town of Atherton Public Works

IMPLEMENTATION & MONITORING

A key part of achieving Atherton's vision is consistently evaluating roadway safety performance and tracking progress towards the goals. Atherton will develop a process to regularly collect data and information around the performance measures that can be used to assess changes townwide and at the top priority locations.

Implementation actions are organized by plan goals and grouped by time: near-term actions, which Atherton can initiate immediately, and longer-term actions, which may require coordination and additional staff time.

This section identifies recommendations for Atherton and other county-level safety partners to implement the plan. These are aligned with the Safe System Approach and include a framework to measure plan progress over time.

Table 6. Town of Atherton Goals and Measures of Success

GC	DAL	IEASURE OF SUCCESS	
1.	Regularly review crash history and community needs to identify and prioritize opportunities to reduce crash risk for roadway users of all ages and abilities. Review proposed improvement plans to ensure that roadway projects, retrofits, and maintenance projects incorporate complete streets that support multiple modes of travel.	Number of LRSP project locations of project development, reported at Annual and three-year total repor fatal/severe injury crashes, crashe crashes by emphasis areas identi	the agency level ted crashes, es by mode, and
2.	Implement safety countermeasures systemically and as part of all projects to target emphasis areas and underserved communities.	Community engagement included C/CAG-funded safety project dev Number of engagement touchpoi member interactions for safety pla	elopment activities nts and community
3.	Promote plan recommendations with identified safety partners to incorporate roadway safety through safety projects and educational campaigns in Atherton.	Report-backs to the Town Council regarding community engageme information about outreach to dis communities where applicable	nt, including
4.	Provide opportunities for community engagement in roadway capital improvement projects to identify safety solutions.	Distribution at the jurisdiction leve within equity focus areas (C/CAG versus outside these areas	
5.	Identify opportunities to incorporate social equity into safety improvements.	Expansion of SRTS and Roadway S Schools programs to more school	
6.	Embrace the Safe System Approach to promote engineering and non-engineering strategies in the community.	Percent of school district participo roadway safety education opport Number of trainings Town staff ha regarding Safe System elements, practices Improved data availability or main enhance safety analysis and prac	unities ve participated in available tools, or ntenance to
7.	Monitor implementation of the Atherton LRSP to track progress towards goals.	See above in this table	

Town of Atherton

San Mateo C/CAG Countywide LRSP