SALINAS VISION ZERO
ACTION PLAN

VISION ZERO
Safe Streets for Salinas

SALINAS
INTRODUCTION

The City of Salinas will work collaboratively in a data-driven effort to eliminate traffic-related fatalities and serious injuries.

To help achieve this goal, the City developed this Action Plan. The Plan uses historic crash data to pinpoint the factors contributing to traffic-related deaths and serious injuries, and identifies countermeasures to address those factors.

Vision Zero is an international traffic safety philosophy that rejects the notion that traffic crashes are simply “accidents”, but instead preventable incidents that can and must be systematically addressed. Through Vision Zero, the City of Salinas and its partners are committed to working together, supported by a comprehensive data-driven process to create safer streets and bring the number of people killed or seriously injured down to zero.

Through Vision Zero, Salinas approaches transportation safety differently; not only addressing site specific improvements but taking a systematic and holistic approach to our transportation environment.

Tackling such a complex challenge requires reaching across multiple disciplines, working together to evaluate data differently, and investing financial and staff resources in transportation safety.
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LETTER FROM THE LATE MAYOR

To the Salinas community,

As the City continues to grow, addressing traffic safety in Salinas becomes even more critical. We want to ensure that all users of our public streets, pedestrians, bicyclists, transit users, drivers and those with mobility impairments can travel safely, no matter how they choose to travel or where they are going.

One death on a City street is one too many. I am pleased to present the City of Salinas Vision Zero Action Plan, which is committed to eliminating traffic fatalities and serious injuries on our City streets. Crashes are unacceptable and are often preventable through enforcement, education and engineering.

The City is undertaking an effort to develop a Vision Zero Action Plan, a data-driven and comprehensive process to achieve a goal of zero severe injuries and fatalities on our streets. The commitments outlined in this plan, and the actions the City will undertake to achieve them, will help strengthen and provide more opportunities for residents to prosper in a healthy, sustainable, and safe community.

Achieving Vision Zero is critically important. I am grateful to the City Council for its leadership, the hard work of City Staff and our community’s participation in the planning process to make our community even stronger, and above all, a safer City.

Respectfully,
City of Salinas Late Mayor
Joe Gunter
A CALL TO ACTION

Between 2009 and 2018, sixty-two (62) lost their lives while traveling on Salinas streets. Included in these fatalities were people walking and cycling. These individuals are from all neighborhoods of Salinas, and they cross geographic and demographic boundaries. These deaths have resulted in tragic personal loss for family and friends and significantly impact the Salinas community.

Tragedies and fatalities caused by vehicle collisions can be prevented by taking a proactive approach that prioritizes traffic safety. The loss of life extends beyond personal loss to deep community impacts, it includes personal economic costs and emotional trauma to those suffering; and significant taxpayer spending on emergency response and long-term healthcare costs. Without safe streets there is no true freedom of mobility, and as a result we compromise our public health with increasing sedentary diseases and higher carbon emissions.

Traditionally, traffic-related deaths and severe injuries have been considered inevitable. Culturally we often hear of traffic-related deaths and severe injuries which have resulted from traffic “accidents”, seemingly to suggest that these occurrences are an inevitability for which no preventable solutions exist. However, vehicle collisions are often the result of individual decisions, driver behavior or the physical environment and the reality is that many of the incidents are preventable and are not inevitable.

CRASHES
not
ACCIDENTS
TRAVEL AND COLLISION BY MODE

- All Collisions: 91%
  - KSI Collisions: 38%
  - Fatal Collisions: 51%
  - Severe Injury Collisions: 12%

SHARE OF VICTIMS WHO WERE KILLED OR SEVERELY INJURED BY MODE

- Vehicle: 98%
- Bicycle: 92%
- Pedestrian: 79%

Legend:
- Killed or Seriously Injured
- Not Killed or Seriously Injured
A FOCUS ON FATALITIES AND SEVERE INJURIES

Focusing on fatal and severe injury collisions in Vision Zero acknowledges the outsized impact of these crashes. Fatal and severe injuries resulting from a traffic crash can result in multiple types of catastrophic impacts including permanent disability, lost productivity and wages, ongoing medical expenses, and emotional suffering. The City’s effort on making improvements that target prevention of fatal and severe injury collisions support the greatest benefit to fulfill the City’s commitments to health and safety.
WHAT IS VISION ZERO?

Vision Zero is a strategy to eliminate all traffic fatalities and severe injuries while increasing safe, healthy, equitable mobility for all. It is a policy that acknowledges that traffic deaths are preventable. A Vision Zero Action Plan sets a goal of eliminating traffic fatalities and severe injuries with clear measurable strategies. The strategy is a multidisciplinary approach that brings together a diverse set of stakeholders to address the complex problem of traffic safety and to achieve the shared goal of zero fatalities and severe injuries.

Vision Zero is a significant departure from the traditional approach to traffic safety in two major ways:

1. Vision Zero recognizes that people will sometimes make mistakes and integrates human failure in its approach. Traffic safety becomes the priority over other transportation considerations to ensure those mistakes do not result in fatalities or severe injuries.

2. Vision Zero is a multidisciplinary approach, bringing together different stakeholders to address the complex problem of traffic safety. Vision Zero acknowledges that many factors contribute to safe mobility including roadway design, traffic speeds, behaviors, technology, and policies. Vision Zero sets clear goals to achieve the shared goal of zero fatalities and severe injuries.
WHY VISION ZERO?

The City of Salinas is willing to do what is necessary to work towards the goal of eliminating traffic deaths and serious injuries. Only by changing the approach to transportation safety with bold interventions can the City improve one of its largest preventable public health crises.

The City of Salinas is regularly working to increase the availability of safe and comfortable multi-modal transportation choices, reduce carbon emissions, improve public health through increased physical activity, and improve quality of life for all. The adoption of the Vision Zero policy and Action Plan provides the road map to make City streets safe for all transportation modes.
SPEED KILLS

A major component of Vision Zero is the recognition that speeding kills and has an outsized impact on collision severity. In the City of Salinas 53% of all collisions and 66% of KSI collisions occur on city streets where the posted speed is 35 mph and greater. Reduction of traffic speed can be accomplished when streets are designed to reflect a range of different modes of transportation. Along with street design, public education, and targeted enforcement efforts will assist in reducing the number of people being killed or severely injured throughout the streets of Salinas.

(AARP Impact Speed and a Pedestrian’s Risk of Severe Injury or Death 2011, p. 1)
VISION ZERO

STATEMENT

Traffic safety impacts our community, neighborhoods, health, and quality of life. No fatality or serious injury is acceptable on City streets because traffic collisions are preventable and can be addressed through education, enforcement, and engineering.

VISION ZERO
Safe Streets for Salinas

Guiding Principles

- Public safety is paramount and the top priority. Safety takes precedence over travel delays, speeds, congestion, and convenience.

- Traffic deaths and serious injuries are preventable and unacceptable.

- Actions towards Vision Zero is a culture change requiring a comprehensive, collaborative, and equitable approach through education, enforcement, and engineering.

- Data driven analysis will lead to influence actions towards Vision Zero.

- Vision Zero will be ongoing, and will routinely measure the performance against the Vision Zero Action Plan objectives every 5 years.

- Provide safety for vulnerable users, such as pedestrians and bicyclists.
VISION ZERO RESOLUTION

Background

A. Traffic safety impacts our community, neighborhoods, health, and quality of life in Salinas.

B. Between 2009-2018 sixty-two (62) individuals died in traffic collisions in Salinas.

C. Collisions where someone was killed or seriously injured while walking or biking on Salinas streets has increased by 66%*.

D. Although annual traffic collisions have decreased by 27%, there is a 7% increase in the number of KSI collisions*(see page B2 in the Technical Appendix)

Resolution

On February 11, 2020 the Salinas City Council approved a Resolution (No. 21790) adopting a Vision Zero Policy, specifically: A clear goal of eliminating traffic fatalities and severe injuries on City streets.

- Human life is our highest priority. Traffic deaths and serious injuries are preventable, and a public health issue that must be addressed.
- Fatal and serious injuries on Salinas streets can be addressed through engineering, enforcement, and education.
- Salinas Vision Zero is a collaborative effort to eliminate traffic fatalities and serious injuries.
- Actions towards Vision Zero will be data driven based on available collision data.
- Evaluation of reaching the goal to eliminate traffic fatalities and serious injuries will be ongoing, measuring performance against the Vision Zero Plan objectives. The Vision Zero Action Plan will be updated every 5 years.

*Comparing 2009 and 2018 data
CRASH TRENDS

Study Methodology

Vision Zero is a data-driven process. While developing the Action Plan, the City analyzed traffic collisions that occurred on City streets focusing primarily on fatalities or severe injuries for the years 2009 through 2018. This granted the City access to identify historic collision trends and high-risk locations. This information is utilized to provide the primary data to support key analyses.

High Injury Network

The City developed a High Injury Network, which identifies roadways with the highest level of fatal and severe injury traffic collisions for pedestrians, bicyclists, and motorists. There are 305 centerline miles of roadway within Salinas, but KSI collisions do not occur on the majority of the roads. By developing the HIN, the City is able to focus safety improvements on priority corridors where the most serious traffic collisions occur with the most frequency.

75% of Salinas elementary, middle, and high schools are within a quarter of a mile of the High Injury Network.

53% of all crashes occur on the HIN, which accounts for 12% of Salinas roadways.
CRASH STATISTICS

SHARE OF COLLISIONS THAT OCCURRED AT INTERSECTIONS

76% Occur at Intersections

SHARE OF COLLISIONS BY TIME OF DAY

PEDESTRIAN LOCATION AT TIME OF COLLISION

- ALL PED COLLISIONS:
  - Crossing at Marked Crosswalk: 5%
  - Crossing at Unmarked Crosswalk: 33%
  - Crossing in Road: 20%
  - Not in Road: 42%

- KSI PED COLLISIONS:
  - Crossing at Marked Crosswalk: 4%
  - Crossing at Unmarked Crosswalk: 54%
  - Crossing in Road: 15%
  - Not in Road: 27%
The City developed ten collision profiles to represent the top patterns of KSI collisions occurring throughout the City of Salinas over a ten-year period (2009-2018). These collision profiles represent different types of collision characteristics, such as speed related, location of pedestrian at collision, broadside involvement with bicycle, or alcohol involved related collisions.

In the following pages the ten collision profiles are presented with details and key countermeasures. There are three key countermeasures per collision profile directed to address the trend and minimize its effect on collisions.

<table>
<thead>
<tr>
<th>Collision Profile</th>
<th>% of All KSI (# of All KSI)</th>
<th>% of Auto KSI (# of Auto KSI)</th>
<th>% of Bicycle KSI (# of Bicycle KSI)</th>
<th>% of Pedestrian KSI (# of Pedestrian KSI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian Action</td>
<td>38.63% (129)</td>
<td>-</td>
<td>-</td>
<td>100% (129)</td>
</tr>
<tr>
<td>Broadside</td>
<td>27.55% (92)</td>
<td>40.25% (68)</td>
<td>55.56% (20)</td>
<td>3.11% (4)</td>
</tr>
<tr>
<td>Alcohol Involved</td>
<td>23.06% (77)</td>
<td>25.45% (43)</td>
<td>13.89% (5)</td>
<td>22.49% (29)</td>
</tr>
<tr>
<td>Pedestrian Violation</td>
<td>19.77% (66)</td>
<td>-</td>
<td>-</td>
<td>51.17% (66)</td>
</tr>
<tr>
<td>Auto R/W Violation</td>
<td>17.67% (59)</td>
<td>27.23% (46)</td>
<td>25% (9)</td>
<td>3.11% (4)</td>
</tr>
<tr>
<td>Head-On</td>
<td>12.28% (41)</td>
<td>19.53% (33)</td>
<td>2.78% (1)</td>
<td>5.43% (7)</td>
</tr>
<tr>
<td>Unsafe Speed</td>
<td>9.29% (31)</td>
<td>15.39% (26)</td>
<td>5.56% (2)</td>
<td>2.33% (3)</td>
</tr>
<tr>
<td>Rear-End</td>
<td>8.09% (27)</td>
<td>14.22% (24)</td>
<td>5.56% (2)</td>
<td>0.78% (1)</td>
</tr>
<tr>
<td>Improper Turning</td>
<td>8.09% (27)</td>
<td>11.85% (20)</td>
<td>13.89% (5)</td>
<td>1.56% (1)</td>
</tr>
<tr>
<td>Broadside Involved with Bicycle</td>
<td>5.99% (20)</td>
<td>-</td>
<td>55.56% (20)</td>
<td>-</td>
</tr>
<tr>
<td>Total of KSI Collisions</td>
<td>334</td>
<td>169</td>
<td>36</td>
<td>129</td>
</tr>
</tbody>
</table>
PROFILE 1: Pedestrian Action

FACTORs

- Pedestrian collisions
- Definition: Collisions occurred midblock or intersections at unmarked or marked crosswalks

STATS

129 KSI Collisions
- Accounts for 39% of all KSI Collisions

Pedestrian-Activated Crosswalk Warning Beacon

High Visibility Crosswalks

Pedestrian Hybrid Beacon

KSI Pedestrian Collisions
- Crossing at Marked Crosswalk
- Crossing at Unmarked Crosswalk
- Crossing in Road
- Not in Road
- High-Injury Network
PROFILE 2: Broadside Collisions

92 KSI Collisions
• Accounts for 28% of all KSI Collisions
• 30% of these collisions occurred at a signalized intersection

FACTORS
• Collision Type was reported as “Broadside”
• Definition: When one motor vehicle impacts another vehicle or bicycle close to an angle of 90 degrees

STATS

COUNTERMEASURES

Reduce Parking at Intersections

Intersection Control

Raised Median and Street Trees

Map showing locations of KSI Vehicle Collisions, at Traffic Signal, KSI Vehicle Collisions, Not at Traffic Signal, and High Injury Network.
PROFILE 3: Alcohol Involved Collisions

FACTORS
- Sobriety as reported by officer included HBD (Had Been Drinking)

STATS
- 77 KSI Collisions
- Accounts for 23% of all KSI collisions and 22% of KSI pedestrian collisions

Traffic Education and Outreach

Enforcement

SALINAS POLICE

COUNTERMEASURES
PROFILE 4:
Pedestrian Violation Collisions

**FACTORS**
- Definition: Pedestrian collisions

**STATS**
- 66 KSI Collisions
  - Accounts for 20% of all KSI collisions and 51% of KSI pedestrian collisions

Traffic Education and Outreach

Accessible Pedestrian Signal

High Visibility Crosswalks
PROFILE 5:
Auto R/W Violation Collisions

FACTORS
• Cause was reported as "Auto R/W Violation"

STATS
59 KSI Collisions
- Accounts for 18% of all KSI Collisions

Raised Median and Street Trees

Intersection Control

Lane Reduction

KSI Pedestrian Collisions
KSI Bicycle Collisions
KSI Vehicle Collisions
High Injury Network
PROFILE 6: Head-On Collisions

41 KSI Collisions
- Accounts for 12% of all KSI Collisions
- 29% of these collisions occurred at a signalized intersection

FACTORs:
- Collision Type was reported as “Head-On”
- Collisions at signalized intersections were 100ft or less of the intersection

Vehicle Speed Feedback Sign

Raised Median

Intersection Control

COUNTERMEASURES

STATS:

KSI Vehicle Collisions, at Traffic Signal
KSI Vehicle Collisions, Not at Traffic Signal
High Injury Network
PROFILE 7: Unsafe Speed Collisions

FACTORS

Vehicle Speed Feedback Sign

STATS

31 KSI Collisions

Accounts for 9% of all KSI Collisions

Lane Reduction

Enforcement
PROFILE 8:
Rear-End Collisions

FACTORS
- Collision Type was reported as “Rear-End”

STATS
- 27 KSI Collisions
- Accounts for 8% of all KSI Collisions

COUNTERMEASURES
- Adaptive Traffic Signal Control
- Signal Timing and Phasing Improvements
- Enforcement
PROFILE 9: Improper Turning Collisions

FACTORS

- Cause was reported as "Improper Turning"

STATS

27 KSI Collisions
- Accounts for 8% of all KSI Collisions

COUNTERMEASURES

Lane Reduction

Intersection Control

Raised Median and Street Trees

MAP ELEMENTS:
- KSI Pedestrian Collisions
- KSI Bicycle Collisions
- KSI Vehicle Collisions
- High Injury Network
PROFILE 10: Broadside Involved with Bicycle

FACTORS

• Collision Type was reported as "Broadside"

STATS

20 KSI Collisions

• Accounts for 6% of all KSI collisions and 56% of KSI bicycle collisions
• 25% of these collisions occurred at a signalized intersection

COUNTERMEASURES

Protected Bike Lane

Reduce Parking at Intersections

Raised Median

KSI Bicycle Collisions, at Traffic Signal
KSI Bicycle Collisions, Not at Traffic Signal
High Injury Network
EXISTING EFFORTS

The City, alongside with developing this action plan and adopting the Vision Zero policy, is working on projects that aim to accomplish the goal of eliminating fatalities and severe injuries in Salinas streets. Those projects include, but not limited to, Bardin Road Safe Routes to School, Downtown Complete Streets, and Alvin Drive Safe Routes to School. In addition, the City has developed other Plan documents with focus similar to Vision Zero such as the Chinatown Revitalization Plan and the Alisal Vibrancy Plan. Safe Routes to School is a program tailored towards providing safe walkable and biking paths with designed countermeasures related to effectively reducing KSI collisions on City streets.

Bardin Road Safe Routes to School: A “Complete Streets” project that includes a dual roundabout system, buffered bike lanes, pedestrian crossing enhancements, pedestrian path improvements, and a road diet. Project limits are Bardin Rd.-Williams Rd. to Sconberg Pkwy., E. Alisal St.-Tampa St. to Bardin Rd., and a portion of Alisal Rd. east of city limits.

Downtown Complete Streets: A “Complete Streets” project that includes the enhancement for usability of streets for all users, pedestrian, transit users, bicyclists and drivers. Project includes an enhanced signal system. Project limits are Alisal St.-Blanco Rd. to Front St., Lincoln Ave.-Alisal St. to W. Market St.(SR183)

Alvin Drive Safe Routes to School: This project includes a multi-modal “complete street” corridor that provides improvements to bicycle and pedestrian facilities. A road diet is planned on Alvin Dr. - Main St. to Natividad Rd. Bicycle facilities on Maryal Dr., Linwood Dr., Chaparral St. In addition, it provides pedestrian ramps and crosswalk at key locations.
Chinatown Revitalization Plan: This plan proposes many goals such as, upgrading sidewalks and pedestrian crossings, new bike lanes, and improving bus service. The goals aim to provide a pedestrian-friendly environment and promote walkability.

Alisal Vibrancy Plan: The Alisal Vibrancy Plan will create safe, livable, and inviting environments for pedestrians, bicyclists, motorists, and public transit users of all ages and abilities. Directing investments to improve sidewalks, bicycle facilities, and pedestrian crossings will increase the mobility of residents, including youth and people without cars.

Salinas Safe Routes to School: The goal of the project is to improve safety for students biking and walking to 44 schools in Salinas. Proposed recommendations would include infrastructure recommendations such as new sidewalks, improved crosswalks, and signage, as well as, program recommendations such as bike and pedestrian safety education, crossing guards, drop-off zone management, and school carpooling.
The City’s collision trends and collision profiles allow the City of Salinas to begin taking action towards eliminating fatal and severe injury collisions. The compiled collision data is plotted on a map to identify locations where collisions or specific collision types occur at the highest frequencies. This approach allows the City to focus on these Emphasis Areas, listed below, in the network to address high priority crash types and risk factors. The City will work towards accomplishing this goal through targeted investments strategically tailored and directed towards the High Injury Network, as well as the Emphasis Areas identified below. The City will continue to implement recommendations from the Action Plan and its updates until we achieve the Vision Zero goal of eliminating all fatalities and severe injuries on Salinas streets.

The technical appendix includes the descriptions and recommendations for each of the Emphasis Areas. The recommendations for each of the locations will be improvements that the City has put together to effectively minimize the number of fatal and severe injuries throughout the City of Salinas.

**Emphasis Areas**

**High Collision Corridors:**
Focuses on prioritizing where high number of KSI collisions have occurred on corridors.

**High Collision Intersections:**
Focuses on prioritizing where high number of KSI collisions have occurred on intersections.

**Pedestrian Involved Intersections:**
Focuses on prioritizing where high number of pedestrian KSI collisions have occurred.

**Bicycle Involved Corridors:**
Focuses on prioritizing where high number of bicycle KSI collisions have occurred

**Alcohol Involved Corridors:**
Focuses on prioritizing corridors where high number of KSI collisions occurred with some amount of alcohol involved from any party.

**Nearby Schools Locations:**
Focuses on prioritizing locations where high number of KSI collisions occurred nearby school
1. East Market Street
2. Williams Road
3. East Laurel Drive
4. East Boronda Road
5. East Alisal Street
6. North Main Street
7. West Laurel Drive
8. North Sanborn Road
9. East Laurel Drive
10. Sanborn Road
HIGH COLLISION INTERSECTIONS

1. North Sanborn Road at Freedom Parkway
2. North Sanborn Road at Garner Avenue
3. Boronda Road at North Main Street
4. North Main Street at Bernal Drive
5. East Laurel Drive at Granada Avenue
6. Williams Road at Del Monte Avenue
7. East Alisal Street at Griffin Street
8. East Market Street at North Madeira Avenue
9. East Laurel Drive at Constitution Boulevard
10. East Market Street at Kern Street
PEDESTRIAN INVOLVED INTERSECTIONS

1. North Sanborn Road at Garner Avenue
2. East Alisal Street at Griffin Street
3. North Main Street at Lamar Street
1. East Market Street
2. West Laurel Drive
3. Natividad Road
1. East Market Street
2. East Laurel Drive
3. Williams Road
1. Martin Luther King, Jr. Elementary
2. Sacred Heart School
3. Alisal High School
IMPLEMENTATION PLAN

Vision Zero implementation will involve a committed Vision Zero Task Force, comprised of City departments, the local community, and partner organizations. The project team has identified a set of key actions to serve as a roadmap towards Vision Zero. Each action is assigned a timeframe and a metric to measure progress. Short-term actions could be implemented within 2 years; medium-term actions could be completed within 2 to 5 years; long-term actions could be implemented within 5 to 10 years; and ongoing actions will be operational changes which will continue to develop over time.

Meeting the City’s Vision Zero goal requires immediate action, yet it allows for feasible implementation with incremental improvements over the years. The actions in this plan should be evaluated and refined on an on-going basis, and their successful implementation depends upon funding availability.

The Implementable Actions are organized into four action areas:

1. Vision Zero Program
   Focuses on bringing Vision Zero to the table
2. Street Design and Operation
   Focuses on designing and implementing based on Vision Zero analyses
3. Behavioral Change
   Focuses on targeting and educating public on street changes
4. Vulnerable Road Users
   Focuses on designing and implementing for bicycle and pedestrian
# VISION ZERO ACTIONS

<table>
<thead>
<tr>
<th>IMPLEMENTATION ACTION</th>
<th>DEPARTMENT/ORGANIZATION</th>
<th>TIMEFRAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Vision Zero Program</td>
<td>City Council, Neighborhood Associations, Public Works Department, Neighborhood Services (LCS)</td>
<td>Ongoing</td>
</tr>
<tr>
<td>1.1 Integrate Vision Zero principles into City, community group, and stake holder meetings</td>
<td>City Council, Public Works Department</td>
<td>Medium-Long</td>
</tr>
<tr>
<td>1.2 Identify permanent dedicated funding sources for Vision Zero implementation and coordination</td>
<td>Community Development Department, Public Works Department</td>
<td>Short</td>
</tr>
<tr>
<td>1.3 Incorporate Vision Zero principles into future City plans, specifically the General Plan Update</td>
<td>Public Works Department</td>
<td>Ongoing</td>
</tr>
<tr>
<td>1.4 Update and publish the Vision Zero Action Plan every five years to measure progress against the goals of the Vision Zero</td>
<td>GIS Division, Public Works Department, City Manager's Office</td>
<td>Short-Medium</td>
</tr>
<tr>
<td>1.5 Provide online, interactive collision data map and website</td>
<td>City Manager's Office, Public Works Department, Police Department</td>
<td>Short-Medium</td>
</tr>
<tr>
<td>1.6 Develop a workshop on how to best communicate traffic collisions and roadway safety concepts</td>
<td>City Manager's Office, Public Works Department, Police Department</td>
<td>Short-Medium</td>
</tr>
</tbody>
</table>
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<th>IMPLEMENTATION ACTION</th>
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<th>TIMEFRAME</th>
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</thead>
<tbody>
<tr>
<td>2. Street Design and Operation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Develop designs and secure grant funding for high priority High Collision Corridors and High Collision Intersections</td>
<td>Public Works Department</td>
<td>Medium-Long</td>
</tr>
<tr>
<td>2.2 Develop a priority list on specific segments from the High Injury Network</td>
<td>Public Works Department</td>
<td>Short-Medium</td>
</tr>
<tr>
<td>2.3 Install low-cost safety improvements that includes new road markings, signs, and minor signal modifications with planned maintenance projects</td>
<td>Public Works Department</td>
<td>Short-Medium</td>
</tr>
<tr>
<td>2.4 Update signal timing and phasing to accommodate for all modes of transportation</td>
<td>Public Works Department, Traffic Division</td>
<td>Short</td>
</tr>
<tr>
<td>2.5 Update City street design standards to reflect complete street principles</td>
<td>Public Works Department</td>
<td>Short</td>
</tr>
<tr>
<td>2.6 Establish internal process for Vision Zero countermeasures to be evaluated and implemented, where feasible, on projects on the HIN</td>
<td>Public Works Department</td>
<td>Medium-Long</td>
</tr>
<tr>
<td>IMPLEMENTATION ACTION</td>
<td>DEPARTMENT/ORGANIZATION</td>
<td>TIMEFRAME</td>
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<tr>
<td>--------------------------------------------------------------------------------------</td>
<td>------------------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>2.7 Require that new development incorporate Vision Zero principles for any new road construction</td>
<td>Community Development Department, Public Works Department</td>
<td>Short</td>
</tr>
<tr>
<td>2.8 Require that any redevelopment contribute to street safety improvements required to meet the demand generated by the project</td>
<td>Community Development Department, Public Works Department</td>
<td>Short-Medium</td>
</tr>
<tr>
<td>2.9 Whenever possible, in new or re-development projects, reduce the number of driveways and access points on arterial streets</td>
<td>Community Development Department, Public Works Department</td>
<td>Ongoing</td>
</tr>
<tr>
<td>3. Behavioral Change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 Launch high-visibility education campaigns against speeding, distracted driving, impaired driving, and other high-risk behaviors. Campaign will focus on HIN corridors</td>
<td>Salinas Police Department, Transportation Agency of Monterey County, County of Monterey</td>
<td>Short-Medium</td>
</tr>
<tr>
<td>3.2 Increase the use of vehicle speed feedback signs to discourage speeding</td>
<td>Public Works Department, Police Department</td>
<td>Short</td>
</tr>
<tr>
<td>3.3 Explore opportunities to expand free or subsized transit fares during holidays and for special events</td>
<td>Monterey-Salinas Transit</td>
<td>Short-Medium</td>
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</tbody>
</table>
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</tr>
</thead>
<tbody>
<tr>
<td>3.4 Develop public promotional campaign to encourage late-night transit, taxi, rideshare, and other services to provide alternatives to impaired driving</td>
<td>Salinas Police Department, County of Monterey</td>
<td>Long</td>
</tr>
<tr>
<td>3.5 Deter impaired driving by targeting education and outreach at or near alcohol-serving establishments</td>
<td>City Manager's Office, Salinas Police Department, County of Monterey</td>
<td>Medium-Long</td>
</tr>
<tr>
<td>3.6 Integrate Vision Zero policies into Police Academy curriculum and in-service Police Officer Training</td>
<td>Salinas Police Department</td>
<td>Long</td>
</tr>
<tr>
<td>3.7 Create targeted enforcement campaigns where collision trends indicate traffic enforcement is needed</td>
<td>Salinas Police Department</td>
<td>Medium-Long</td>
</tr>
<tr>
<td>3.8 Utilize automated enforcement technology where feasible</td>
<td>Salinas Police Department</td>
<td>Long</td>
</tr>
<tr>
<td>3.9 Provide adequate staffing and dedicated funding for the traffic enforcement unit to patrol and enforce traffic regulations on City streets</td>
<td>Salinas Police Department, City Manager’s Office</td>
<td>Ongoing</td>
</tr>
</tbody>
</table>
# VISION ZERO ACTIONS

<table>
<thead>
<tr>
<th>IMPLEMENTATION ACTION</th>
<th>DEPARTMENT/ORGANIZATION</th>
<th>TIMEFRAME</th>
</tr>
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<tbody>
<tr>
<td>4. Vulnerable Road Users</td>
<td></td>
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<tr>
<td>4.1 Install, upgrade or remove pedestrian crossing treatments on the HIN</td>
<td>Public Works Department</td>
<td>Short-Medium</td>
</tr>
<tr>
<td>4.2 Upgrade Pedestrian Push buttons to most recent standards of all traffic signals</td>
<td>Public Works Department</td>
<td>Ongoing</td>
</tr>
<tr>
<td>4.3 Develop targeted education for drivers to increase safety for pedestrian 60+</td>
<td>City Manager's Office, Recreation and Community Services</td>
<td>Short-Medium</td>
</tr>
<tr>
<td>4.4 Upgrade to high-visibility crosswalks near schools</td>
<td>Public Works Department</td>
<td>Short-Medium</td>
</tr>
<tr>
<td>4.5 Develop and implement projects that improve bicycle and pedestrian safety related</td>
<td>Public Works Department</td>
<td>Long</td>
</tr>
<tr>
<td>4.6 Continue building and improving the bikeway and pedestrian network consistent with</td>
<td>Public Works Department</td>
<td>Medium</td>
</tr>
<tr>
<td>the Bicycle Master Plan and Pedestrian Master Plan</td>
<td></td>
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</tr>
</tbody>
</table>
ACKNOWLEDGEMENTS

ELECTED OFFICIALS
Kimbley Craig, Mayor
Council Members
Carla Viviana Gonzalez (District 1)
Tony Barrera (District 2)
Steve McShane (District 3)
Orlando Osornio (District 4)
Christie Cromenees (District 5)
Anthony Rocha (District 6)

CITY OF SALINAS DEPARTMENTS
Public Works Department
Community Development Department
Fire Department
Police Department

VISION ZERO TASK FORCE
Monterey County Health Department
Salinas Police Department
Monterey County Blue Zones Project
Transportation Agency for Monterey County – Technical Advisory Committee
Transportation Agency for Monterey County – Bicycle and Pedestrian Committee
Alisal Union School District
Salinas City Elementary School District
Salinas Union High School District
Santa Rita Union School District
TECHNICAL APPENDIX

A. Summary of Public Engagement

B. Summary of Collision Trends

C. Collision Profiles and Countermeasure Pairing

D. Emphasis Area Cut Out Sheets
A. SUMMARY OF PUBLIC ENGAGEMENT
The City of Salinas posted a survey for the Vision Zero Plan to provide the public the ability to comment on emphasis locations and the issue found within those locations. The survey was posted online and open for public feedback from Late-Sept to end of year 2020.

This section discusses the online survey and the results based on what the City received.

1. Place a point to the location or area of concern

2. Choose concern from list. Select as many as apply to your concern
3. Please describe your safety concern

Based on the descriptions of the safety concerns from the online survey the following categories were identified.
- Speeding
- Channelized Left Turn
- Lighting
- Signage
- Crossing/Crosswalk
- Traffic
- Guide Channelization
- Traffic Education/Enforcement
- Parking
- Intersections/Traffic Signal
- Ped & Bike
- Sight Lines

The four top concerns received on the online survey from the categories above are: Speed (16,38%), Ped/Bike (15,36%), Intersection/Traffic Signal (7,17%), Crossing/Crosswalk (6,14%).
3. Please describe your safety concern contd.

Following are the descriptions of safety concerns of the public:

<table>
<thead>
<tr>
<th>Topics</th>
<th>Description of Safety Concern</th>
<th>Approx. Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>speed</td>
<td>People are driving too fast.</td>
<td>W Alisal St - Capitol St to Lincoln Ave</td>
</tr>
<tr>
<td>speed,bike_lane,crosswalk</td>
<td>The speed on my street is bad. The cars pass fast and we live close to school and have a daycare too, also we went for a bike ride with our family and didn’t have bike lane.</td>
<td>Elwood St - Linwood Dr to Tampico Ave</td>
</tr>
<tr>
<td>traffic_signal,bike_lane,intersection,other</td>
<td>En mi vecindario no respetan el limite de velocidad q es de 25 y los automovilistas pasan como a 65 o 70 como si fueran en el freway y a pasado accidentes en la RIDER AVE. En mis preocupaciones y luego ellos son muy deteriorados.</td>
<td>Rider Ave</td>
</tr>
<tr>
<td>crosswalk</td>
<td>There are two pedestrian crossings on Market St. between Carr and Pearl. These two ped crossing usually used by elementary students. It will be my suggestion to install a pedestrian flashing light with solar power.</td>
<td>Market St @ Carr Ave, Market St @ Pearl St</td>
</tr>
<tr>
<td>speed,other</td>
<td>Many drivers speed 40-45 miles an hour even though it is a residential area and hospital zone. Also, the street desperately needs striping to clearly mark lanes. The speed limit needs to be displayed every few blocks in a 35 mph or 25 mph? As a pedestrian and bicyclist, this street really scares me due to these issues, even when just trying to cross a marked crosswalk.</td>
<td>Romie Ln</td>
</tr>
<tr>
<td>bike_lane,crosswalk</td>
<td>Falta de luces para la gente que cruzan y me colision con el pavimento</td>
<td>E Alisal St near Sanborn Rd</td>
</tr>
<tr>
<td>speed,bike_lane</td>
<td>Many areas in Salinas are unsafe for bicyclists and pedestrians. Non-motorized pathways, trails and roads, properly illuminated and safe, need to be designed to limit accidents and promote healthy living and exercise.</td>
<td>Laurel Dr - Constitution Blvd to Sherwood Dr</td>
</tr>
<tr>
<td>speed,traffic_signal,crosswalk,other</td>
<td>Major, crashes, tires have exploded while people were on bike, rubber and peel out routinely and I’ve seen numerous cars never stopping. And almost running over kids at the crosswalk. It is an accident waiting to occur. Please do something. Speeding cars, not making complete stops. Lotts of cars can use this busy for neighborhood with four traffic. People putting out and doing demos. Large 18 wheelers making W. Bernal Dr @ Lapis Dr illegal a turn and hitting stop signs, getting stuck at least 3 to 5 times per day.</td>
<td></td>
</tr>
<tr>
<td>speed,crosswalk</td>
<td>Cars parked on the street block visibility of people crossing the street. Also, people cross without using the crosswalk.</td>
<td>E Market St - N Madeira Ave to Carr Ave</td>
</tr>
<tr>
<td>crosswalk,other</td>
<td>People cross from the shopping area there without using the crosswalk at the intersection. People will stand on the island between lanes while traffic passes sometimes close enough to where they can be hit by a vehicle. People cross between cars without using the crosswalk.</td>
<td>S Sanborn Rd - E Alisal St to McGowan Dr</td>
</tr>
<tr>
<td>speed,traffic_signal,intersection</td>
<td>velocidad</td>
<td>E Laurel Dr - Constitution Blvd to Sherwood Dr</td>
</tr>
<tr>
<td>speed,traffic_signal,crosswalk,other</td>
<td>My mom got hit and killed by a car. There is a cross walk, but an enhanced crosswalk would be better in this intersection. Beacon lights at the cross walk</td>
<td>E Alisal St @ Skyway Blvd/Quaila St</td>
</tr>
<tr>
<td>speed,traffic_signal,bike_lane,crosswalk,intersection</td>
<td>Why is there no stop sign/traffic signal at this intersection?</td>
<td>W Alisal St @ Capist St</td>
</tr>
<tr>
<td>other</td>
<td>No road lines to direct traffic. Very faded. Street lines. They’re faded- many times people will be driving in the middle because they can’t see that it’s two lanes.</td>
<td>W Laurel Dr - Tyler St to N Main St</td>
</tr>
<tr>
<td>other</td>
<td>North Sanborn Rd is quite dense around that area and has many lanes that makes it unsafe to cross and there should be more cross walks along that street or a roundabout for pedestrians to cross as well. Walkability</td>
<td>N Sanborn Rd @ Gunter Ave</td>
</tr>
<tr>
<td>other</td>
<td>Folks too often Fail to stop at this four-way STOP sign. They drive on, and then zoom through it. I was on a ride along with a Salinas police officer. We sat near the intersection of Inca Way and Cherokee is a marked police car. Within ten minutes we saw (and stopped) two vehicles that ran the STOP sign. - Guess what, both drivers are police officers!!! One from Salcado and the other from Watsonville departments. Inca Way at Cherokee Drive.</td>
<td>Cherokee Dr @ Inca Way</td>
</tr>
<tr>
<td>speed,other</td>
<td>People drive too fast through Borenda at all times. Traffic</td>
<td>Borenda Rd - El Dorado Rd to Nutriidad Rd</td>
</tr>
<tr>
<td>speed</td>
<td>People drive too fast on Borenda Road</td>
<td>Borenda Rd - Independence Blvd to Constitution Blvd</td>
</tr>
<tr>
<td>speed,intersection,other</td>
<td>Merging lane is existing. Causes a lot of confusion for drivers on right lane.</td>
<td>San Juan Grade Rd near Northridge Way</td>
</tr>
<tr>
<td>speed,intersection</td>
<td>Poor lighting along San Juan Grade Rd. This intersection would benefit from a left turn pocket.</td>
<td>San Juan Grade Rd - Northridge Way to Russell Rd</td>
</tr>
</tbody>
</table>
spatial traffic patterns

These locations benefit from a traffic study and recommendations for stopping and pavement markings. Also, could benefit from a road rehabilitation, as the AC is in bad shape. Overall, I will give the intervention a level of service E. Much needed improvements to bring these intersections to a level of service C or above. By making such improvements the collision incidents will potentially decrease. These intersections should be considered a high priority for CIP. AC work and grading.

Borenda Rd @ N Main St

bike lane

The Davis Bike lane is currently filled with debris from the fields. Making it difficult to ride. Should take the required routes. Keep them from being used and possibly fall onto the fast moving traffic on Davis. The city should either require the items owners to sweep the debris or they should be fine for each item. For more, see the community report issued by the city.

Davis Rd - Blanco River Center Ave

spatial traffic

These locations have multiple problems. High traffic for morning commute on both directions, poor visibility at night, no turning lane for Van Buren Ave. or apartment complexes on San Juan grade, poor AC, and spacing area. Lighting

San Juan Grade Rd - Northridge Way to Russell Rd

spatial crash

With the new library opening, there are residents walking to the library that need to cross the busy 4 lane street. Many of these residents are young adults or families with young children.

N Main St @ Norco Dr

intersection

There is an elementary school just away from this intersection and a crosswalk whose drivers just don’t respond. People seemed to relax on the highway and for these town this intersection is back up especially during traffic lanes in the morning and evening. Installing a traffic light on a crosswalk light would help the traffic.

John St @ Wood St

speed

Kids in the neighborhood almost get run over playing due to cars speeding

Eveshaw St

speed

Cars pass too fast.

Norridale Dr - Borenda Rd to Burga Rd

speed,intersection

I see as many people oversleeping along Colridge Drive. Also, they don’t make any effort to use a turn signal and runs a risk without slowing down. Also, there are many cars in the Los Olivos/Keller Street neighborhood that are obvious not home owners. They take the liberty of parking their car in places of someone else’s home without expressed consent from the homeowners. These issues need to be addressed as these are children and adults with special needs living in this neighborhood.

Colridge Drive - Los Olivos Dr to Ridler St

speed

People drive too far too fast.

San Juan Grade Rd - Van Buren Ave to Russell Rd

speed,intersection

Previous 3 Way stop now changed to 2 Way stop. Observed corners of collisions (after collisions occurred) on 2 different days. Another individual we know often drives in the area and has seen multiple near misses of pedestrians as cars drive through West Aliso even when pedestrians have right of way. And also witnessed near collisions as drivers are apparently confused by 4 Way Stop changed to 2 Way. The 4 Way Stop was much safer and we are nowconcerned that it has been changed to 2 Way.

W Aliso St @ Capitel St

speed,intersection

Cars drive thru here, people park their cars overnight near the fields and cross the street to the apartments and bubble park, and have to walk up to 2 blocks to get back on the 2 way road near the entrance. Sandoval Rd.

Russell Rd - N White St to VanBuren Ave

traffic_light

They removed the traffic light about 20 ft up but they failed to move the sign “no turn on red” along with it. So the sign is still hidden behind the light and people are confused whether they have to wait for the light to turn green before they can turn right onto 1035 highway. Please either move the sign up or take it away if it doesn’t apply anymore so that people will stop banking at one where didn’t have it right when the road is clear.

S Sandoval Rd @ Evesh Dr

intersection

I’m on Aliso, Cherrina on my left and cemetery on my right, walking in ten feet off Sitney and the car on my left almost hit me as we turn because the car didn’t red that my lane turns left also. There needs to be a sign with those arrows that show the direction each lane turns up on the traffic light. I don’t know that car knew because there’s no other indication my lane turns left also except for the arrows on the ground which get covered by cars.

Alhambra St @ Sandoval/Ballanco Rd

bike lane

Getting from North Salinas to South Salinas is challenging. Main street does not have speed and the sidewalk either has pedestrians. Shorewood and Forest Market is a little better but still requires crossing multiple lanes of traffic with drivers not used to cars.

Market St - Pinto St to Shorewood Dr

traffic_light

removal 1 way stop signs. Many people cones Aliso St to get in and from County offices there

W Aliso St @ Capitel St

traffic_light

The intersection of Aliso and Capital Streets needs a traffic signal. The 4-way stop was removed and there are a lot of new accidents. It’s really dangerous with several deaths occurring there. Please put in a traffic light!

W Aliso St @ Capital St

traffic_light

making a left turns onto Shorewood Dr. from Calle Cibeles is dangerous and confuses drivers. We have already written to the city about this. The intersection is not safe. There should be a traffic signal.

Shorewood Dr @ Ross St/Calle Cibeles

spatial crash

Many vehicles speed through the area of University Avenue making it hard for pedestrians to cross the street and for the children who are waiting to school. Thank you.

University Ave - Central Ave to Ambrose Dr

other

Bellow Covid, the traffic had was to Pedestrians crossing to Alvina, vehicle traffic had to a small. This causes students to get off of the middle of the street and into traffic which can cause an accident. Pedestrian Crossing Bridge

Independence Blvd – Nantucket Blvd to Borenda Rd

spatial crash

If there are many issues in 19360, why was WEST Aliso turned into a single lane traffic but it does not continue into EAST Aliso? What message are we sending to the Hispanic community? Minor traffic/vehicle/pedestrian contacts are only addressable if you live in a 1st tier area.

E Aliso St

spatial,intersection

Usual lane changes, erratic speed, lack of signage to the Constitution & Laurel Intersection.

Laural Dr - Constitution Blvd to Norridale Rd

other

In the residential areas in our schedule there are way to many cars parked in the street to the point that you can’t see the sidewalks or if you pulling out into another street you can’t see unless you pull out into traffic which isn’t safe for anyone. I’ve noticed safety sidewalk isn’t allowed to park on street without a permit, why can’t one resident have the proceed to place as well? To many cars parked on the streets.

Carrier Ave - Ridler Ave to N Sanborn Rd
B. SUMMARY OF COLLISION TRENDS
334 KSI Collisions
Fatal(59) & Severe Injury(275)
between 2009-2018, out of 10,992

COLLISION BY MODE

ALL COLLISIONS
KSI COLLISIONS
FATAL COLLISIONS
SEVERE INJURY COLLISIONS

Fatality
Severe Injury
Non-Severe Injury
Other
All Collisions By Year, 2009-2018
- Bicycle
- Pedestrian
- Vehicle

KSI Collisions By Year, 2009-2018
- Bicycle
- Pedestrian
- Vehicle
SHARE OF VICTIMS WHO WERE KILLED OR SEVERELY INJURED BY MODE

As reported half of KSI Ped Collisions were by Ped at Fault and three-quarters of KSI Bicycle Collisions were by bicyclist at Fault.

KSI COLLISION TYPES
TOP TRENDS, 2009-2018

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</tr>
</thead>
<tbody>
<tr>
<td>Vehicle-Pedestrian</td>
<td>35%</td>
<td>36%</td>
<td>37%</td>
<td>38%</td>
<td>39%</td>
<td>40%</td>
<td>41%</td>
<td>42%</td>
<td>43%</td>
<td>44%</td>
</tr>
<tr>
<td>Broadside</td>
<td>28%</td>
<td>27%</td>
<td>26%</td>
<td>25%</td>
<td>24%</td>
<td>23%</td>
<td>22%</td>
<td>21%</td>
<td>20%</td>
<td>19%</td>
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<tr>
<td>Head-On</td>
<td>12%</td>
<td>13%</td>
<td>14%</td>
<td>15%</td>
<td>16%</td>
<td>17%</td>
<td>18%</td>
<td>19%</td>
<td>20%</td>
<td>21%</td>
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<tr>
<td>Rear-End</td>
<td>8%</td>
<td>7%</td>
<td>6%</td>
<td>5%</td>
<td>4%</td>
<td>3%</td>
<td>2%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
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<tr>
<td>Hit Object</td>
<td>6%</td>
<td>5%</td>
<td>4%</td>
<td>3%</td>
<td>2%</td>
<td>1%</td>
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KSI PRIMARY COLLISION FACTORS
TOP TRENDS, 2009-2018

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</thead>
<tbody>
<tr>
<td>Pedestrian Violation</td>
<td>21%</td>
<td>18%</td>
<td>15%</td>
<td>12%</td>
<td>9%</td>
<td>6%</td>
<td>4%</td>
<td>3%</td>
<td>2%</td>
<td>1%</td>
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<tr>
<td>Auto R/W Violation</td>
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<tr>
<td>Driving Under Influence</td>
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<td>Unsafe Speed</td>
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<td>Ped R/W Violation</td>
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<td>Improper Turning</td>
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<td>Traffic Signals and Signs</td>
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<td>Unknown</td>
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<td>Other</td>
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<tr>
<td>Wrong Side of Road</td>
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</tr>
</tbody>
</table>
POSTED SPEED OF ROADWAYS AND SEVERITY OF COLLISIONS

SHARE OF COLLISIONS BY TIME OF DAY

- KSI Vehicles
- KSI Bike
- KSI Pedestrian
HIGH INJURY NETWORK

High Injury Network accounts for 12% of Salinas roadway & 53% of all crashes
C. COLLISION PROFILES AND COUNTERMEASURE PAIRINGS
<table>
<thead>
<tr>
<th>Countermeasures Categories</th>
<th>Countermeasures</th>
<th>1 Pedestrian</th>
<th>2 Vehicle</th>
<th>3 All modes</th>
<th>4 Pedestrian</th>
<th>5 All modes</th>
<th>6 Vehicle</th>
<th>7 All modes</th>
<th>8 Vehicle</th>
<th>9 All modes</th>
<th>10 Bicycle</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pedestrian Action</td>
<td>Broadside Collisions</td>
<td>Alcohol Involved</td>
<td>Pedestrian Violation</td>
<td>Auto F/W Violation</td>
<td>Head-On Collisions</td>
<td>Unsafe Speed</td>
<td>Rear-End Collisions</td>
<td>Improper Turning</td>
<td>Broadside Involved with Bicycle</td>
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<tr>
<td></td>
<td>New Traffic Signals</td>
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<tr>
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<td>Traffic Signal Heads Visibility</td>
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<td></td>
<td>Pedestrian Countdown Signal Head (City Standards)</td>
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<td>X</td>
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<tr>
<td></td>
<td>Leading Pedestrian Interval</td>
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<td>Pedestrian Hybrid Beacon</td>
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<tr>
<td></td>
<td>Protected Left Turn</td>
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D. EMPHASIS AREAS CUT OUT SHEETS

- Corridors
- Pedestrian Collisions
- Alcohol Involved
- Bicycle Collisions
- Near Schools
COLLISION CORRIDORS
East Market Street, from Sherwood Drive to North Sanborn Road: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percentage</th>
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<tr>
<td>AUTO R/W VIOLATION</td>
<td>28%</td>
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<td>19%</td>
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<tr>
<td>IMPROPER TURNING</td>
<td>11%</td>
</tr>
<tr>
<td>DUI</td>
<td>10%</td>
</tr>
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</table>

NOTABLE COLLISION TYPES

- Broadside
- Head-On
- Other
- Rear-End
- Sideswipe
- Veh-Ped

KSI Collisions
All Collisions

MAPPING TEST

COLLISION TYPES

- Fatality
- Severe Injury
- Other
- Other
East Market Street between Sherwood Drive and Merced Street recommended countermeasures include a lane reduction from 4 lanes to 2 travel lanes with a two-way left turn lane and buffered bike lanes.

East Market Street between Merced Street and Sanborn Road recommended countermeasures include a raised median and street trees. These countermeasures will limit turning maneuvers at driveways and minor roads to reduce collision potential. Other countermeasures include bicycle lanes, protected left phasing at N Madeira Ave, Hebbron Ave, and coordination of all traffic signals along this corridor.

Increased traffic enforcement is recommended.
COLLISION CORRIDORS
Williams Road, from East Alisal Street to East Boronda Road: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS

- AUTO R/W VIOLATION: 27%
- UNSAFE SPEED: 16%
- IMPROPER TURNING: 14%
- DUI: 11%

NOTABLE COLLISION TYPES

- Broadside
- Head-On
- Hit Object
- Other
- Sideswipe
- Veh-Ped

Legend:
- KSI Collisions
- All Collisions

Map showing collision corridors and types.
COLLISION CORRIDORS RECOMMENDATIONS
Williams Road, from East Alisal Street to East Boronda Road: 2009-2018

Williams Road between East Alisal Street to Bardin Road recommended countermeasures include a raised median and a new traffic signal at Williams Rd and Garner Ave. Williams Rd between Bardin Rd and Boronda Rd recommended countermeasures include a raised median and street trees, and adding buffered bike lanes. A pedestrian hybrid beacon is recommended to provide driver visibility of crosswalk location. Increased traffic enforcement is recommended.
COLLISION CORRIDORS
East Laurel Drive, from Natividad Road to North Sanborn Road: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS

- UNSAFE SPEED: 40%
- DUI: 12%

NOTABLE COLLISION TYPES

- Broadside
- Head-On
- Hit Object
- Not Stated
- Veh-Ped

KSI Collisions
All Collisions

COLLISION TYPES
- Fatality
- Severe Injury
- Other

TECHNICAL APPENDIX
East Laurel Drive between Natividad Road and Constitution Boulevard recommended countermeasures include a raised median with street trees and protected bike lanes. An adaptive traffic signal system is recommended to reduce collision potential. To reduce speed throughout the corridor radar feedback signs are recommended to slow down vehicles, and increased traffic enforcement is recommended.
COLLISION CORRIDORS
East Boronda Road, from US 101 to Natividad Road: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS

- UNSAFE SPEED: 44%
- IMPROPER TURNING: 8%
- TRAFFIC SIGNALS & SIGNS: 8%

NOTABLE COLLISION TYPES

- Broadside
- Head-On
- Not Stated
- Rear-End
- Veh-Ped

KSI Collisions
All Collisions
COLLISION CORRIDORS RECOMMENDATIONS
East Boronda Road, from US 101 to Natividad Road: 2009-2018

East Boronda Road between US Highway 101 and Natividad Road recommended countermeasures include roundabouts. The roundabouts are part of an ongoing project that consists of the construction of multiple roundabouts at McKinnon St, El Dorado Dr, and Natividad Rd. The project also includes the installation of buffered bike lanes. An adaptive traffic signal system is recommended to reduce stops and minimize rear-end potential collisions. Increased traffic enforcement is recommended.
COLLISION CORRIDORS
East Alisal Street, from Front Street to North Sanborn Road: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS

- UNSAFE SPEED: 24%
- AUTO R/W VIOLATION: 18%
- IMPROPER TURNING: 11%
- TRAFFIC SIGNAL & SIGNS: 13%

NOTABLE COLLISION TYPES

- Broadside
- Head-On
- Hit Object
- Rear-End
- Veh-Ped

- KSI Collisions
- All Collisions
East Alisal Street between Front Street and Kern Street recommended countermeasures include a raised median with street lighting, protected left turns, and protected bike lanes.

East Alisal Street between Kern Street and North Sanborn Road recommended countermeasures include a lane reduction from 5 to 3 lanes and protected bike lanes. The recommended countermeasures for this segment will refine what has been proposed on the Alisal Vibrancy Plan. Included in the Alisal Vibrancy Plan are a designated bus travel lane to serve the transit system, protected bicycle lanes, and pedestrian crossing enhancements. All traffic signals are recommended to be coordinated along this corridor. Increased traffic enforcement is recommended.
COLLISION CORRIDORS
North Main Street, from Market Street to Casentini Street: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS
UNSAFE SPEED 31%
AUTO R/W VIOLATION 9%
TRAFFIC SIGNALS & SIGNS 14%
IMPROPER TURNING 11%

NOTABLE COLLISION TYPES

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<thead>
<tr>
<th>Collision Type</th>
<th>All Collisions</th>
<th>KSI Collisions</th>
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<tr>
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</tr>
<tr>
<td>Head-On</td>
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<tr>
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<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veh-Ped</td>
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</table>

Fatality
Severe Injury
Other
North Main Street (SR183) between Market Street and Casentini Street recommended countermeasures include the installation of buffered bike lanes and the removal of on-street parking. Additionally, a raised median and street trees is recommended to limit left turn movement at minor roads and driveways to reduce collision potential. Traffic signals are recommended to be coordinated throughout the entire corridor.
COLLISION CORRIDORS
West Laurel Drive, from North Davis Road to North Main Street: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS

- Unsafe Speed: 25%
- Traffic Signals & Signs: 19%
- Auto R/W Violation: 12%
- Improper Turning: 10%

NOTABLE COLLISION TYPES

- Broadside
- Head-On
- Not Stated
- Overturned
- Rear-End
- Veh-Ped

KSI Collisions
All Collisions
West Laurel Drive between North Davis Road and North Main Street recommended countermeasures include a raised median and street trees to limit left turn at minor roads and driveways, buffered bike lanes, reduced speed limit for school zone, and vehicle speed feedback signs. All traffic signals are recommended to be coordinated. Increased traffic enforcement is recommended.
COLLISION CORRIDORS
North Sanborn Road, from Del Monte Avenue to East Boronda Road: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS

- AUTO R/W VIOLATION: 46%
- TRAFFIC SIGNALS & SIGNS: 14%
- UNSAFE SPEED: 11%
- IMPROPER TURNING: 8%

NOTABLE COLLISION TYPES

- Broadside
- Head-On
- Hit Object
- Not Stated
- Sideswipe
- Veh-Ped

KSI Collisions
All Collisions

D15
TECHNICAL APPENDIX

SAINAS VISION ZERO
North Sanborn Road between Del Monte Avenue and East Boronda Road recommended countermeasures include a raised median and street trees. A road diet is recommended to be evaluated which could reduce the travel lanes from 4 to 2 lanes and installation of buffered bike lanes. Recommended is one roundabout at Boronda Rd and the consideration of another roundabout at the shopping center entrance. Additionally, a reduced speed limit school zone, vehicle speed feedback sign, and interconnect of traffic signals for improved signal timing and phasing. Intersection control evaluation is recommended at Freedom Pkwy for any possible improvements.
COLLISION CORRIDORS
East Laurel Drive, from North Main Street to Natividad Road: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS
- Improper Turning: 11%
- Auto R/W Violation: 21%
- Unsafe Speed: 25%

NOTABLE COLLISION TYPES
- Broadside
- Not Stated
- Rear-End
- Veh-Ped

KSI Collisions
All Collisions

Fatality
Severe Injury
Other
East Laurel Drive, from North Main Street to Natividad Road: 2009-2018

East Laurel Drive between North Main Street and Natividad Road recommended countermeasures include a raised median and street trees to limit left turn on minor roads and driveways. Traffic signals are recommended to be coordinated, protected left turn phase at Maryal Dr, and protected pedestrian phase at Linwood Dr. The removal of on-street parking is recommended towards the east part of the corridor and the installation of a pedestrian activated crosswalk warning beacon at Tapadero St.
COLLISION CORRIDORS
Sanborn Road, from US Highway 101 to East Laurel Drive: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS

- UNSAFE SPEED: 26%
- AUTO R/W VIOLATION: 18%
- TRAFFIC SIGNALS & SIGNS: 12%

NOTABLE COLLISION TYPES

- Broadside
- Head-On
- Other
- Veh-Ped

KSI Collisions
All Collisions
Sanborn Road between Fairview Avenue and East Laurel Drive recommended countermeasures include a raised median with street trees and buffered bike lanes. Traffic signals are recommended to have protected left turn phases at Circle Dr, Oregon St/Madeira Ave, and all traffic signals should be coordinated. The on-street parking is recommended to be removed. Increased traffic enforcement is recommended.
INTERSECTION COLLISIONS
North Sanborn Road at Freedom Parkway: 2009-2018

NOTABLE COLLISION TYPES

- **Broadside**: 46%
- **Rear-End**: 30%
- **Veh-Ped**: 8%
- **Head-On**: 19%

NOTABLE PRIMARY COLLISION FACTORS

- **Traffic Signals & Signs**: 24%
- **Unsafe Speed**: 8%
- **Auto R/W Violation**: 44%

ocations by Type & Impact

- **Fatality**
- **Severe Injury**
- **Other**
INTERSECTION COLLISIONS RECOMMENDATIONS
North Sanborn Road at Freedom Parkway: 2009-2018

North Sanborn Road at Freedom Parkway recommended countermeasures include signal timing and phasing improvements that provide protected left turn phase, leading pedestrian interval, coordinated signals and traffic control. An intersection control evaluation is recommended. Increased traffic enforcement or automated red-light enforcement is recommended.

NOTABLE PRIMARY COLLISION FACTORS

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<tr>
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NOTABLE COLLISION TYPES

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<td>Protected Left Turns</td>
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| REAR-END |
| Coordinated Traffic Signals |

| VEH-PED |
| Leading Pedestrian Phase |

| HEAD-ON |
| Protected Left Turns |
INTERSECTION COLLISIONS

North Sanborn Road at Garner Avenue: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS

NOTABLE COLLISION TYPES

- Broadside: 30%
- Veh-Ped: 17%
- Rear-End: 22%
- Unsafe Speed: 19%
- Auto R/W Violation: 16%

Collisions by Type & Event:
- Fatality
- Serious Injury
- Other

D23

Salinas Vision Zero

Technical Appendix
INTERSECTION COLLISIONS RECOMMENDATIONS
North Sanborn Road at Garner Avenue: 2009-2018

North Sanborn Road at Garner Avenue recommended countermeasures include protected left turn phasing, reflective backplates for visibility at night, coordinated traffic signal system, and pedestrian refuge island. Increased traffic enforcement or automated red-light enforcement is recommended.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS

TRAFFIC SIGNALS & SIGNS
  Retroreflective Backplate
  Coordinate Traffic Signals

UNSAFE SPEED
  Enforcement

AUTO R/W VIOLATION
  Protected Left Turns

NOTABLE COLLISION TYPES

RECOMMENDATIONS

BROADSIDE
  Protected Left Turns

VEH-PED
  Protected Pedestrian Phase

REAR-END
  Coordinated Traffic Signals

Evaluate Pedestrian Refuge
INTERSECTION COLLISIONS
Boronda Road at North Main Street: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS

NOTABLE COLLISION TYPES

UNSAFE SPEED
37%

REAR-END
49%

BROADSIDE
16%

SIDESWIPE
19%

AUTO R/W VIOLATION
9%

FOLLOWING TOO CLOSELY
8%

COLLISIONS BY TYPE & PART

Fatal

Severe Injury

Other
Boronda Road at North Main Street recommended countermeasures include guide signs and channelization to improve access onto and off US 101. Signal timing, phasing and coordination with other traffic signals is recommended. Increased traffic enforcement or automated red-light enforcement is also recommended.

**NOTABLE PRIMARY COLLISION FACTORS**

**RECOMMENDATIONS**

- Unsafe Speed Enforcement
- Auto R/W Violation
  - Signal Timing and Phasing
- Following Too Closely
  - Enforcement
- Red Light Enforcement

**NOTABLE COLLISION TYPES**

**RECOMMENDATIONS**

- Broadside
  - Enforcement
- Rear-End
  - Coordinated Traffic Signals
- Sideswipe
  - Guide Signs/Channelization
INTERSECTION COLLISIONS RECOMMENDATIONS
North Main Street at Bernal Drive: 2009-2018

North Main Street at Bernal Drive recommended countermeasures include guide signs and channelization to improve access onto and off US101. Signal timing, phasing, and coordination with other traffic signals for a better traffic flow is also recommended. Retroreflective backplate on traffic signal heads for more visibility at night and the installation of advance warning signs to warn motorists of upcoming traffic signal. Recommended are also the increased of traffic enforcement or automated red light enforcement and an intersection control evaluation.

NOTABLE PRIMARY COLLISION FACTORS
RECOMMENDATIONS

UNSAFE SPEED
Enforcement

TRAFFIC SIGNALS & SIGNS
Coordinate Traffic Signals
Signal Timing and Phasing

IMPROPER TURNING
Guide Signs/Channelization

NOTABLE COLLISION TYPES
RECOMMENDATIONS

REAR-END
Advance Warning Signs

SIDESWIPE
Guide Signs/Channelization

BROADSIDE
Red Light Enforcement
INTERSECTION COLLISIONS
East Laurel Drive at Granada Avenue: 2009-2018

NOTABLE COLLISION TYPES

- BROADSIDE: 57%
- AUTO R/W VIOLATION: 48%
- REAR-END: 15%
- SIDESWIPE: 9%
- VEH-PED: 9%

NOTABLE PRIMARY COLLISION FACTORS

- IMPROPER TURNING: 11%
- DUI: 9%
INTERSECTION COLLISIONS RECOMMENDATIONS
East Laurel Drive at Granada Avenue: 2009-2018

East Laurel Drive at Granada Avenue is recommended for an intersection control evaluation. This intersection is part of a corridor improvement in this action plan which recommends a raised median with channelized left turn pockets at this intersection and reduction of on-street parking. Other considerations include the installation of a pedestrian refuge island alongside with the recommended pedestrian signal interconnected with Natividad Rd and Laurel Dr. Increased traffic enforcement and traffic education is also recommended.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS
AUTO R/W VIOLATION
Reduce Street Parking

IMPROPER TURNING
Raised Median

DUI
Traffic Education and Outreach
Enforcement

NOTABLE COLLISION TYPES

RECOMMENDATIONS

VEH-PED
Pedestrian Signal

Pedestrian Refuge

SIDESWIPE
Raised Median

BROADSIDE
Raised Median

REAR-END
Advance Warning Signs
INTERSECTION COLLISIONS
Williams Road at Del Monte Avenue: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS

NOTABLE COLLISION TYPES

- Traffic Signals & Signs: 23%
- Veh-Ped: 17%
- Improper Turning: 20%
- Broadside: 37%
- Rear-End: 17%
- Pedestrian Violation: 13%

COLLISIONS BY TYPE & PART

- Fatality
- Serious Injury
- Other
Williams Road at Del Monte Avenue recommended countermeasures include coordination with other traffic signals along Williams Rd and signal timing and phasing improvements for an improved traffic flow. Protected left turn phasing is recommended to provide safety for motorists making left turns and pedestrians. Additional recommended countermeasures are a pedestrian refuge island median and pedestrian signal. This intersection is part of a corridor improvement on this action plan which recommends a raised median on Williams Rd. Increased traffic enforcement or automated red-light enforcement is also recommended.

**NOTABLE PRIMARY COLLISION FACTORS**

**RECOMMENDATIONS**

- Traffic Signals & Signs
- Coordinate Traffic Signals
- Signal Timing and Phasing
- Protected Left Turns
- Raised Median
- Pedestrian Refuge
- Protected Pedestrian Phase
- Accessible Pedestrian Signal
- Traffic Education and Outreach
- Enforcement

**NOTABLE COLLISION TYPES**

**RECOMMENDATIONS**

- Veh-Ped
- Pedestrian Refuge
- Protected Pedestrian Phase
- Accessible Pedestrian Signal
- Broadside
- Protected Left Turns
- Rear-End
- Coordinate Traffic Signals
INTERSECTION COLLISIONS
East Alisal Street at Griffin Street: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS

NOTABLE COLLISION TYPES

BROADSIDE 48%
VEH-PED 17%
SIDESWIPE 17%
TRAFFIC SIGNALS & SIGNS 24%
PEDESTRIAN R/W VIOLATION 17%
AUTO R/W VIOLATION 28%
East Alisal Street at Griffin Street recommended countermeasures include protected left turn phasing and coordination for an improved traffic flow. Retroreflective backplate are recommended on traffic signal heads for more visibility at night. It is also recommended to remove the slip lane and add sidewalk where none exist. Furthermore, a pedestrian refuge island and median is recommended to provide a two-stage crossing. The traffic signal is recommended to include accessible pedestrian signals. Increased traffic enforcement or automated red-light enforcement is recommended.

**NOTABLE PRIMARY COLLISION FACTORS**

**RECOMMENDATIONS**
- AUTO R/W VIOLATION
  - Protected Left Turns
- TRAFFIC SIGNALS & SIGNS
  - Retroreflective Backplate
- PEDESTRIAN R/W VIOLATION
  - Accessible Pedestrian Signal

**NOTABLE COLLISION TYPES**

**RECOMMENDATIONS**
- VEH-PED
  - Pedestrian Refuge
  - Protected Pedestrian Phase
  - Bulb Outs and Eliminate Slip Lane

- SIDESWIPE
  - Broadside Signal Timing and Phasing
INTERSECTION COLLISIONS
East Market Street at North Madeira Avenue: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS

NOTABLE COLLISION TYPES

- BROADSIDE: 38%
- VEH-PED: 15%
- HEAD-ON: 19%
- IMPROPER TURNING: 15%
- TRAFFIC SIGNALS & SIGNS: 15%

COLLISIONS BY TYPE & PARS:
- Fatal
- Serious Injury
- Other
East Market Street at North Madeira Avenue recommended countermeasures include a raised median and lane reductions which is part of a corridor recommendation on this action plan. Protected left turn phasing traffic signals timing and signal coordination is also recommended. Increased traffic enforcement and automated red-light enforcement is also recommended.

**NOTABLE PRIMARY COLLISION FACTORS**

**RECOMMENDATIONS**

- AUTO R/W VIOLATION
  - Raised Median
- IMPROPER TURNING
  - Protected Left Turns
- TRAFFIC SIGNALS & SIGNS
  - Coordinate Traffic Signals
  - Signal Timing and Phasing

**NOTABLE COLLISION TYPES**

**RECOMMENDATIONS**

- BROADSIDE
  - Red Light Enforcement
- VEH-PED
  - Pedestrian Refuge
- HEAD-ON
  - Raised Median
East Laurel Drive at Constitution Boulevard recommended countermeasures include advance warning signs, increase intersection lighting, improved signal timing and coordination. Increased traffic enforcement or automated red-light enforcement is also recommended.

**NOTABLE PRIMARY COLLISION FACTORS**

**RECOMMENDATIONS**

- **UNSAFE SPEED**
  - Enforcement

- **DUI**
  - Traffic Education and Outreach

- **IMPROPER TURNING**
  - Signal Timing and Phasing

**NOTABLE COLLISION TYPES**

**RECOMMENDATIONS**

- **BROADSIDE**
  - Enforcement

- **REAR-END**
  - Coordinate Traffic Signals

- **Signal Timing and Phasing**

- **Advance Warning Signs**

- **HIT OBJECT**
  - Intersection Lighting
INTERSECTION COLLISIONS
East Market Street at Kern Street: 2009-2018

NOTABLE PRIMARY COLLISION FACTORS

NOTABLE COLLISION TYPES
- REAR-END: 33%
- SIDESWIPE: 20%
- BROADSIDE: 29%
- TRAFFIC SIGNALS & SIGNS: 16%
- AUTO R/W VIOLATION: 16%
- UNSAFE SPEED: 24%

COLLISIONS BY TYPE & PARTY
- Fatal
- Severe Injury
- Other
INTERSECTION COLLISIONS RECOMMENDATIONS

East Market Street at Kern Street: 2009-2018

East Market Street at Kern Street recommended countermeasures include a raised median with street trees and a lane reduction that is part of the corridor recommendations in this action plan. No turn on red is recommended on the Kern St slip lane. Additionally, signal timing and phasing improvements and coordination with other traffic signals is recommended. Guide signs and channelization is recommended to improve access onto US 101. Retroreflective backplate on the traffic signal heads are recommended to provide more visibility at night. Increased traffic enforcement or automated red-light enforcement is recommended.

NOTABLE PRIMARY COLLISION FACTORS

RECOMMENDATIONS

UNSAFE SPEED

Raise Median and Street Trees

AUTO R/W VIOLATION

Rear-End

Signal Timing and Phasing

TRAFFIC SIGNALS & SIGNS

Retroreflective Backplate

NOTABLE COLLISION TYPES

RECOMMENDATIONS

SIDESWIPE

No Turn on Red

BROADSIDE

Signal Timing and Phasing

REAR-END

Coordinate Traffic Signals

Guide Signs/Channelization

Red Light Enforcement
PEDESTRIAN INVOLVED COLLISIONS
North Sanborn Road at Garner Avenue: 2009-2018

4 Severe Injuries
9 Other
(63 Total Collisions)

PRIMARY COLLISION FACTORS

- Ped R/W Violation
- Pedestrian Violation
- Traffic Signals and Signs
- Unsafe Speed
- Other

KSI Collisions
All Collisions

0 1 2 3 4 5 6 7 8
North Sanborn Road at Garner Avenue recommended countermeasures include accessible pedestrian signal, protected pedestrian phase, reflective backplates for visibility at night, coordination of traffic signals and pedestrian refuge island. Increased traffic enforcement or automated red-light enforcement is recommended.

**PRIMARY COLLISION FACTORS**

**RECOMMENDATIONS**

- PEDESTRIAN R/W VIOLATION  
  **Accessible Pedestrian Signal**

- PEDESTRIAN VIOLATION  
  **Traffic Education and Outreach**

- TRAFFIC SIGNALS AND SIGNS  
  **Retroreflective Backplate**

- UNSAFE SPEED  
  **Enforcement**

- Protected Pedestrian Phase

- Signal Timing and Phasing

**OTHER**

**RECOMMENDATIONS**

- **Leading Pedestrian Phase**

- **Evaluate Pedestrian Refuge**

- **Protected Left Turns**

- **Coordinate Traffic Signals**
PEDESTRIAN INVOLVED COLLISIONS
East Alisal Street at Griffin Street: 2009-2018

3 Severe Injuries
3 Other
(29 Total Collisions)

PRIMARY COLLISION FACTORS

- Ped R/W Violation
- Pedestrian Violation

Bar chart showing:
- KSI Collisions
- All Collisions
East Alisal Street at Griffin Street recommended countermeasures include protected left turn phasing and coordination for an improved traffic flow. Retroreflective backplate are recommended on traffic signal heads for more visibility at night. It is also recommended to remove the slip lane and add sidewalk where none exist. Furthermore, a pedestrian refuge island and median is recommended to provide a two-stage crossing. The traffic signal is recommended to include accessible pedestrian signals. Increased traffic enforcement or automated red-light enforcement is recommended.

**PRIMARY COLLISION FACTORS**

**RECOMMENDATIONS**

- **PEDESTRIAN R/W VIOLATION**
  - Accessible Pedestrian Signal

- **PEDESTRIAN VIOLATION**
  - Traffic Education and Outreach

**OTHER**

**RECOMMENDATIONS**

- **Pedestrian Refuge**
- **Retroreflective Backplate**
- **Eliminate Slip Lane**
- **Signal Timing and Phasing**
- **Leading Pedestrian Phase**
- **Pedestrian Activated Crosswalk Warning Beacon**
PEDESTRIAN INVOLVED COLLISIONS
North Main Street at Lamar Street: 2009-2018

2 Severe Injuries
3 Other
(23 Total Collisions)

PRIMARY COLLISION FACTORS

- Ped R/W Violation
- Pedestrian Violation
- Unknown

N

KSI Collisions
All Collisions

0.0 0.5 1.0 1.5 2.0

LAMAR ST
N
MAIN ST

COLLISIONS BY TYPE & PARTY
Severe Injury
Other
North Main Street at Lamar Street recommended countermeasures include pedestrian refuge island and median to provide a two-stage crossing. It is recommended to evaluate a pedestrian hybrid beacon or traffic signal at the intersection to stop traffic. A new signal or hybrid beacon would require coordination. Traffic education and outreach as well as increased traffic enforcement is recommended.

**PRIMARY COLLISION FACTORS**

**RECOMMENDATIONS**

- PEDESTRIAN VIOLATION
  - Pedestrian Refuge
- PEDESTRIAN VIOLATION
  - Traffic Education and Outreach
- High Visibility Crosswalk
- UNKNOWN
  - Enforcement

**OTHER**

**RECOMMENDATIONS**

- Traffic Signal
- Pedestrian Hybrid Beacon
BICYCLE INVOLVED COLLISIONS
East Market Street, from Sherwood Drive to North Sanborn Road: 2009-2018

1 Fatal
3 Severe Injuries
15 Other
(443 Total Collisions)

PRIMARY COLLISION FACTORS

- Auto R/W Violation
- Driving Under Influence
- Improper Turning
- Pedestrian Violation
- Traffic Signals and Signs
- Unsafe Lane Change
- Wrong Side of Road

KSI Collisions
All Collisions

0 2 4 6 8 10
BICYCLE INVOLVED COLLISIONS RECOMMENDATIONS
East Market Street, from Sherwood Drive to North Sanborn Road: 2009-2018

East Market Street between Sherwood Drive and Merced Street recommended countermeasures include a lane reduction from 4 lanes to 2 travel lanes with a two-way left turn lane and buffered bike lanes. East Market Street between Merced Street and Sanborn Road recommended countermeasures include a raised median and street trees. These countermeasures will limit turning maneuvers at driveways and minor roads to reduce collision potential. Other countermeasures include bicycle lanes, protected left phasing at N Madeira, Hebbron Ave, and coordination of all traffic signals along this corridor. Increased traffic enforcement is recommended.
BICYCLE INVOLVED COLLISIONS
West Laurel Drive, from North Davis Road to North Main Street: 2009-2018

2 Severe Injuries
23 Other (357 Total Collisions)

PRIMARY COLLISION FACTORS

- Auto R/W Violation
- Improper Turning
- Lights
- Other
- Ped R/W Violation
- Traffic Signals and Signs
- Unknown
- Unsafe Speed
- Wrong Side of Road

KSI Collisions
All Collisions
BICYCLE INVOLVED COLLISIONS RECOMMENDATIONS
West Laurel Drive, from North Davis Road to North Main Street

West Laurel Drive between North Davis Road and North Main Street recommended countermeasures include a raised median and street trees to limit left turn at minor roads and driveways, buffered bike lanes, reduced speed limit for school zone, and vehicle speed feedback signs. All traffic signals are recommended to be coordinated. Increased traffic enforcement is recommended.
BICYCLE INVOLVED COLLISIONS
Natividad Road, from Boronda Road to East Laurel Drive: 2009-2018

1 Fatal
1 Severe Injury
12 Other
(307 Total Collisions)

PRIMARY COLLISION FACTORS

- Improper Turning
- Traffic Signals and Signs
- Unknown
- Unsafe Lane Change
- Wrong Side of Road

KSI Collisions
All Collisions

0 1 2 3 4 5 6 7 8
BICYCLE INVOLVED COLLISIONS RECOMMENDATIONS
Natividad Road, from Boronda Road to East Laurel Drive

Natividad Road between East Laurel Drive and Boronda Road recommended countermeasures include consideration of a 6 to 4 lane reduction with protected bike lanes to provide connection to existing bike facilities. It is recommended to reduce the number of median crossing and limit access on minor roads. Signals are recommended to include bicycle detection and improved timing, coordination of traffic signals, and protected left turn phasing.

The corridor is recommended to include vehicle speed feedback sign to warn motorists of high speeds. A roundabout is a planned improvement at Natividad Rd.
ALCOHOL INVOLVED COLLISIONS RECOMMENDATIONS
East Market Street, from Sherwood Drive to North Sanborn Road: 2009-2018

East Market Street between Sherwood Drive and Merced Street recommended countermeasures include a lane reduction from 4 lanes to 2 travel lanes with a two-way left turn lane and buffered bike lanes. East Market Street between Merced Street and Sanborn Road recommended countermeasures include a raised median and street trees. These countermeasures will limit turning maneuvers at driveways and minor roads to reduce collision potential. Other countermeasures include bicycle lanes, protected left phasing at N Madeira, Hebron Ave, and coordination of all traffic signals along this corridor. Increased traffic enforcement is recommended.
ALCOHOL INVOLVED COLLISIONS
East Laurel Drive, from Natividad Road to North Sanborn Road: 2009-2018

Fatal
- Auto R/W Violation
- Driving Under Influence
- Following Too Closely
- Improper Passing
- Improper Turning
- Other
- Other Hazardous Movement
- Other Than Driver or Ped
- Ped R/W Violation
- Pedestrian Violation
- Traffic Signals and Signs
- Unknown
- Unsafe Lane Change
- Unsafe Speed
- Unsafe Starting or Backing
- Wrong Side of Road
- KSI Collisions
- All Collisions

Severe Injuries
- 1
- 5
- 2
- Other: 311 (323 Total Collisions)
ALCOHOL INVOLVED COLLISIONS RECOMMENDATIONS

East Laurel Drive, from Natividad Road to North Sanborn Road: 2009-2018

East Laurel Drive between Natividad Road and Constitution Boulevard recommended countermeasures include a raised median with street trees and protected bike lanes. An adaptive traffic signal system is recommended to reduce collision potential. To reduce speed throughout the corridor radar feedback signs are recommended to slow down vehicles, and increased traffic enforcement is recommended.
ALCOHOL INVOLVED COLLISIONS
Williams Road, from East Alisal Street to East Boronda Road: 2009-2018

Fatal Severe Injuries
- 0 - 2
- 1 - 4
- 0 - 8

Other 410
(425 Total Collisions)

PRIMARY COLLISION FACTORS

- Auto R/W Violation
- Driving Under Influence
- Following Too Closely
- Improper Passing
- Improper Turning
- Other
- Other Hazardous Movement
- Other Improper Driving
- Other Than Driver or Ped
- Ped R/W Violation
- Pedestrian Violation
- Traffic Signals and Signs
- Unknown
- Unsafe Lane Change
- Unsafe Speed
- Unsafe Starting or Backing
- Wrong Side of Road

KSI Collisions All Collisions
ALCOHOL INVOLVED COLLISIONS RECOMMENDATIONS
Williams Road, from East Alisal Street to East Boronda Road: 2009-2018

Williams Road between East Alisal Street to Bardin Road recommended countermeasures include a raised median and a new traffic signal at Williams Rd and Garner Ave. Williams Road between Bardin Road and Boronda Road recommended countermeasures include a raised median and street trees, and adding buffered bike lanes. A pedestrian hybrid beacon is recommended to provide driver visibility of crosswalk location. Increased traffic enforcement is recommended.
NEAR SCHOOLS COLLISIONS
Martin Luther King Jr. Elementary School

Severe Injuries
- Pedestrian: 4
- Bicyclist: 2

Other: 137
(143 Total Collisions)

PRIMARY COLLISION FACTORS

- Auto R/W Violation
- Driving Under Influence
- Following Too Closely
- Improper Passing
- Improper Turning
- Other
- Other Hazardous Movement
- Other Than Driver or Ped
- Ped R/W Violation
- Pedestrian Violation
- Traffic Signals and Signs
- Unknown
- Unsafe Lane Change
- Unsafe Speed
- Unsafe Starting or Backing
- Wrong Side of Road

KSI Collisions
All Collisions

0 5 10 15 20 25 30
Recommended countermeasures near Martin Luther King Jr. Elementary School include traffic education and traffic safety outreach. Recommended infrastructure improvements include improved signal phasing, coordination and leading pedestrian interval. A pedestrian refuge island and median to provide a two-stage crossing. Curb extensions are recommended where feasible. Bike lanes and bike facilities are recommended on N Sanborn Rd. Increased traffic enforcement is recommended.

**PRIMARY COLLISION FACTORS**

**RECOMMENDATIONS**

- DUI  
  Traffic Education and Outreach
  Enforcement

- PEDESTRIAN VIOLATION  
  Traffic Education and Outreach

- TRAFFIC SIGNALS AND SIGNS  
  Retroreflective Backplate  
  Signal Timing and Phasing

**OTHER**

**RECOMMENDATIONS**

- Leading Pedestrian Phase
- Pedestrian Refuge
- High Visibility Crosswalk
- Pedestrian Hybrid Beacon
- Protected Left Turns
- Coordinate Traffic Signals
- Bulb Outs and Curb Extensions
NEAR SCHOOLS COLLISIONS

Sacred Heart School

Severe Injuries

- 4
- 1

Other

- 109

(114 Total Collisions)

PRIMARY COLLISION FACTORS

- Auto R/W Violation
- Driving Under Influence
- Following Too Closely
- Improper Passing
- Improper Turning
- Other
- Other Improper Driving
- Ped R/W Violation
- Pedestrian Violation
- Traffic Signals and Signs
- Unknown
- Unsafe Lane Change
- Unsafe Speed
- Unsafe Starting or Backing
- Wrong Side of Road

KSI Collisions

All Collisions

0 5 10 15 20 25
Recommended countermeasures near Sacred Heart School include traffic education and traffic safety outreach. It is also recommended to eliminate on-street parking and to install buffered bike lanes on W Market St. Additionally, it is recommended to restrict left turn access on W Market St with a raised median. The raised median should include a pedestrian refuge island to provide a two-stage crossing. Increased traffic enforcement is recommended.
NEAR SCHOOLS COLLISIONS
Alisal High School

Severe Injuries
- 1 pedestrian
- 1 bike
- 2 other

Other
- 91 total collisions

(95 Total Collisions)

PRIMARY COLLISION FACTORS

- Auto R/W Violation
- Driving Under Influence
- Following Too Closely
- Improper Turning
- Other
- Other Improper Driving
- Other Than Driver or Ped
- Ped R/W Violation
- Pedestrian Violation
- Traffic Signals and Signs
- Unsafe Lane Change
- Unsafe Speed
- Unsafe Starting or Backing
- Wrong Side of Road

KSI Collisions
All Collisions
Recommended countermeasures near Alisal High School include traffic education and traffic safety outreach. It is recommended to evaluate a lane reduction on Williams Road, street trees, and vehicle speed feedback signs are recommended to reduce speeds. Protected bike lanes are recommended on Williams Road. Increased traffic enforcement is recommended.

**PRIMARY COLLISION FACTORS**

**RECOMMENDATIONS**

- Improper Turning
  - Raised Median

- Pedestrian R/W Violation
  - Accessible Pedestrian Signal

- Pedestrian Violation
  - Traffic Education and Outreach

**OTHER**

**RECOMMENDATIONS**

- Leading Pedestrian Phase
- Pedestrian Refuge
- Pedestrian Hybrid Beacon
- High Visibility Crosswalk
- Protected Bike Lanes
- Bulb Outs and Curb Extensions
- Enforcement
- Vehicle Speed Feedback Sign