

# SUNNYVALE VISION ZERO



## Draft Final Report

Presented to Sunnyvale BPAC  
June 20, 2019

**The City of Sunnyvale's Vision Zero Plan  
works towards a goal of zero fatalities  
and serious injuries on its streets.**

The Plan builds on the City's previous successes in maintaining a safe environment and on the strong foundation of its Safe Routes to School (SR2S), Pedestrian, and Bicycle Programs.

# Vision Zero Overview

- 1.** Vision Zero takes a **“safety first”** approach, prioritizing traffic safety over other transportation considerations.
- 2.** Vision Zero acknowledges that traffic deaths and serious injuries are **preventable**.
- 3.** Vision Zero is a **multidisciplinary approach** that brings together a diverse set of stakeholders to address the complex problem of traffic safety.

# Vision Zero in Sunnyvale

## Vision Statement

Sunnyvale Vision Zero is a community-driven and data-driven initiative to eliminate preventable traffic fatalities and serious injuries. In the coming years, Sunnyvale will aim to reduce collisions through improved transportation infrastructure and programming, achieving a **50 percent reduction in fatalities and serious injuries by 2029** and continued progress towards zero in the ten years that follow.



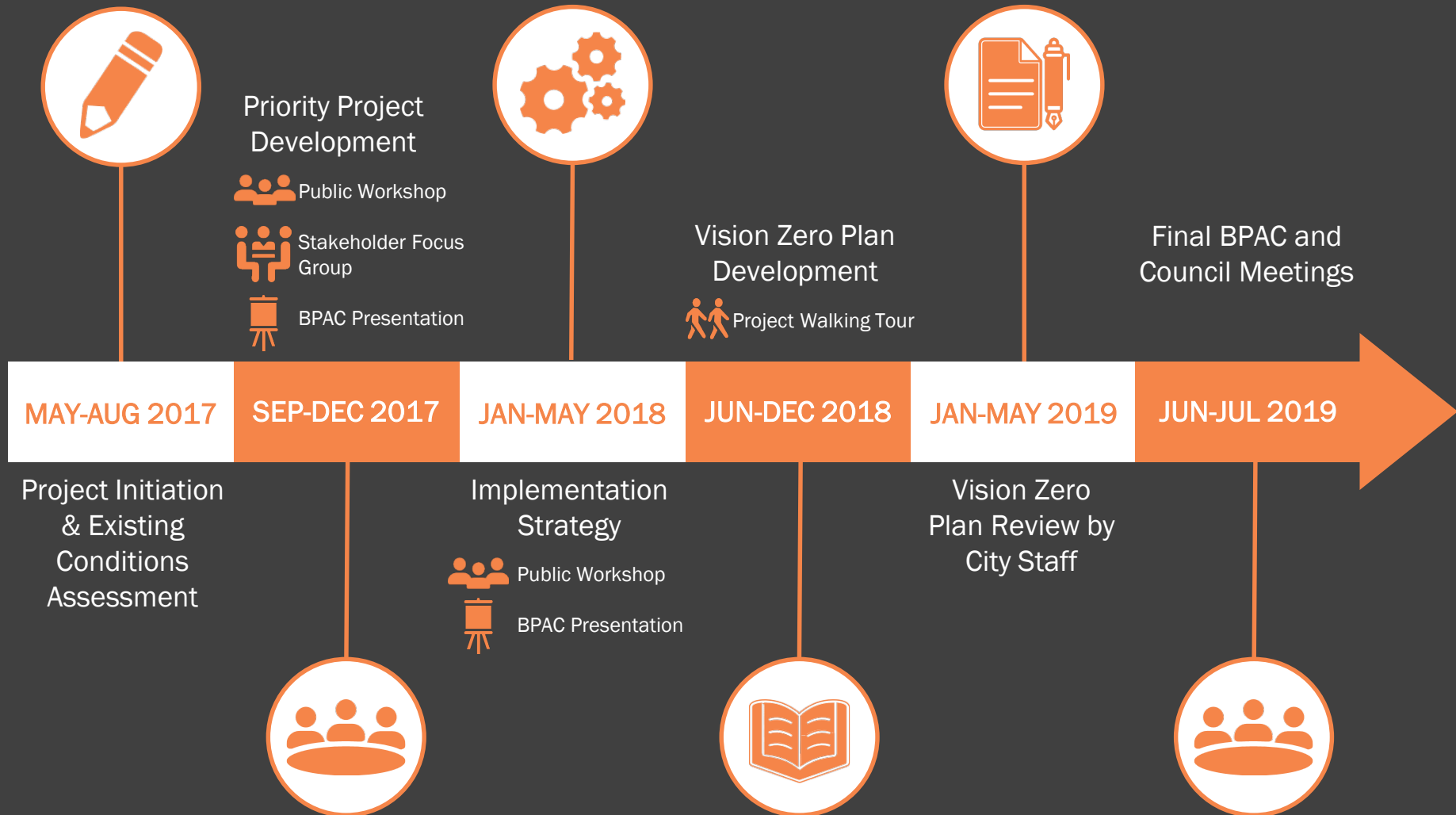
# Vision Zero in Sunnyvale

## Guiding Principles

1. Traffic deaths are unacceptable and preventable.
2. Transportation options should be safe for all users, for all modes of transportation, in all communities, and for people of all ages and abilities.
3. Safety takes priority over efficiency.
4. Actions toward Vision Zero should embody a quantitative, collaborative, and equitable approach.
5. Human error is inevitable and unpredictable; the transportation system should be designed to anticipate error and minimize injury severity.
6. Speed is a fundamental predictor of collisions severity survival. The transportation system should be designed for speeds that safely accommodate all modes of travel.
7. Ongoing evaluation should measure performance against the Sunnyvale Vision Zero Plan objectives.

# Progress Update

## Project Timeline



# Progress Update

## Community Engagement

### Phase 1 – Fall 2017



Workshop

160 Comments



Webmap

1,542 Comments



Online Survey

385 Participants



BPAC Meeting

City Stakeholders  
and Community



Focus Group

City and County  
Stakeholders

### Phase 2 – Spring 2018



Workshop

153 Comments



Online Survey

75 Participants



BPAC Meeting

City Stakeholders  
and Community

### Phase 3 – Fall 2018



Walking Tours

3 Priority Project  
Locations



# Plan Elements



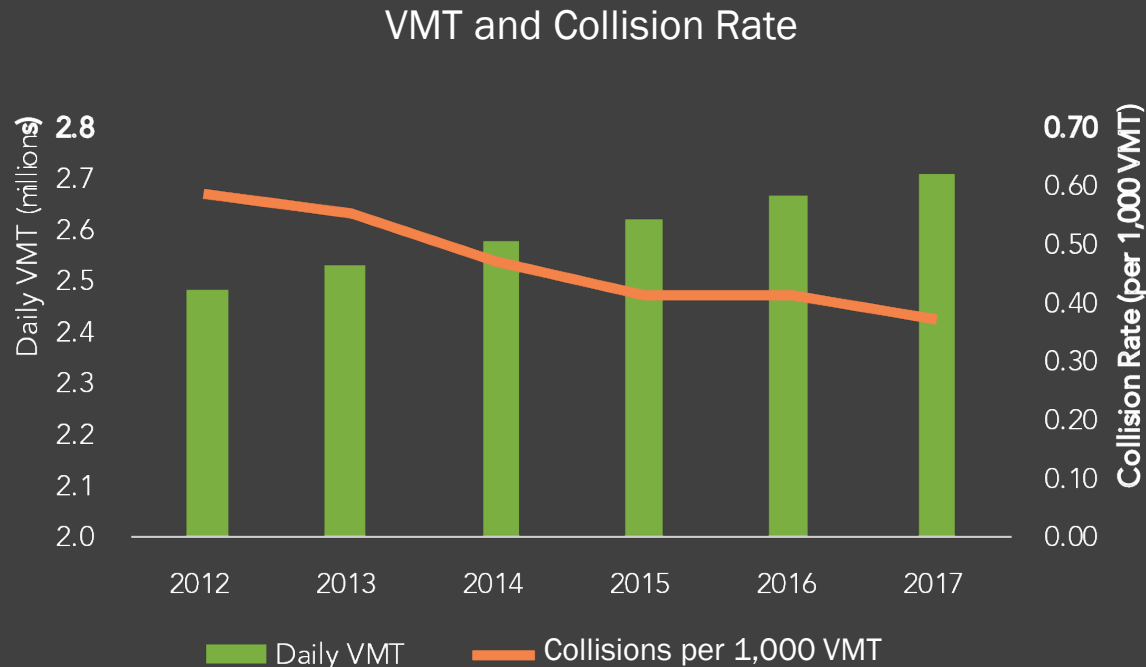
- A Call to Action to Make Sunnyvale's Streets Safer
- About Vision Zero
- Vision Statement & Guiding Principles
- Building on Prior Investments in Sunnyvale
- Building Blocks of Vision Zero in Sunnyvale
- Countermeasure Toolbox and Collision Profiles
- Action Plan

## Plan Elements



# Building on Prior Investment

Between 2012 and 2017, Sunnyvale's daily vehicle miles traveled (VMT) increased by **9%**, while the total number of collisions decreased. As a result, the collision rate (collisions per 1,000 VMT) decreased by **37%** between 2012 and 2017.



# Collision Analysis



Sunnyvale saw **6,244** collisions between 2012 and 2016, including **91** KSI collisions



**11%** of KSI collisions involved drivers under the influence of alcohol or drugs



Only **10%** of all collisions involved bicyclists or pedestrians, yet bicyclist and pedestrian collisions comprised **56%** of KSI collisions



**72%** of pedestrian KSI collisions occurred at intersections



**60%** of KSI collisions occurred on roadways with speed limits greater than **35** miles per hour

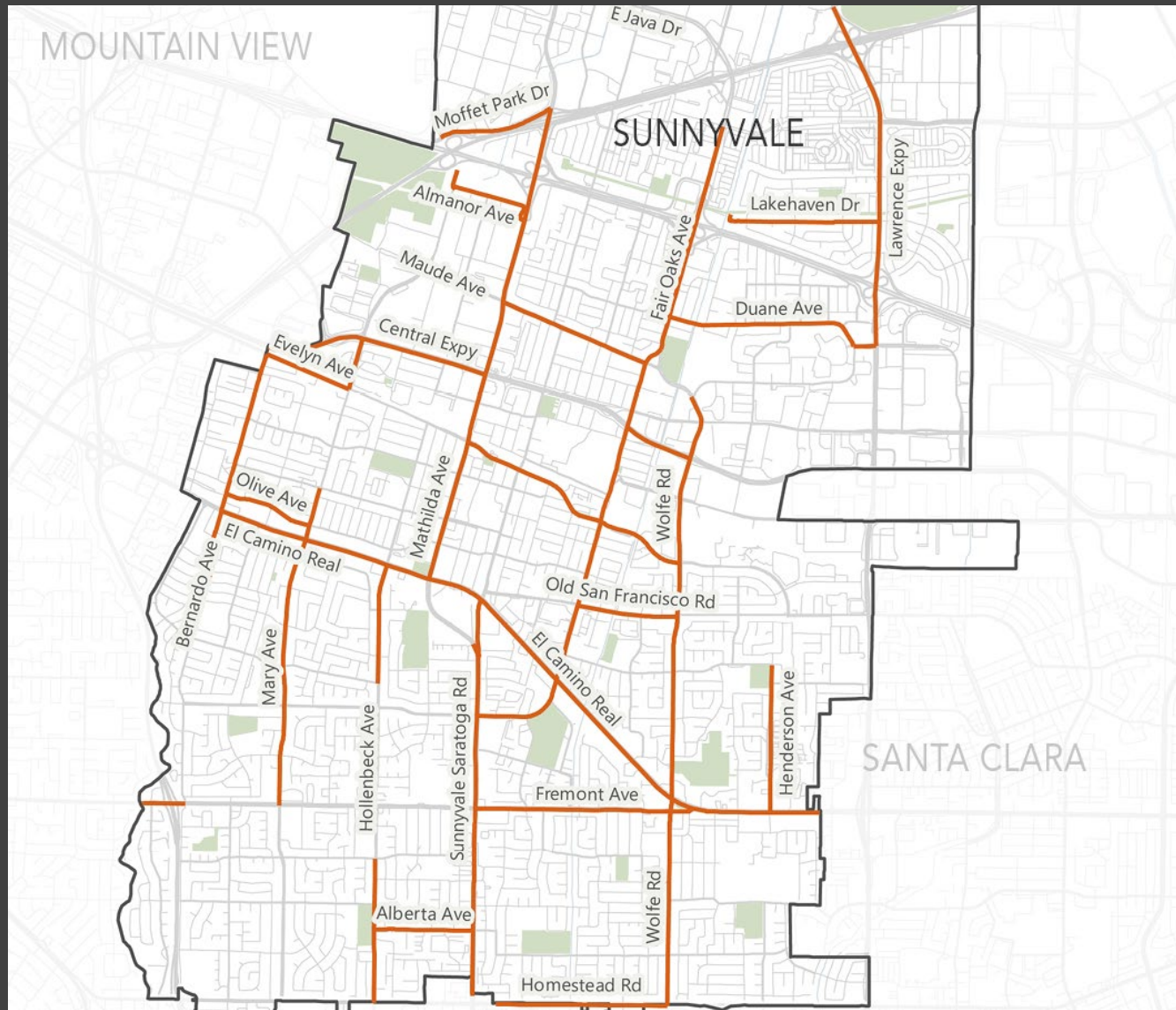


**7%** of all collisions and **4%** of KSI collisions occurred on expressways



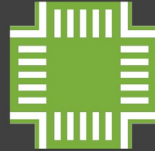
KSI collisions were most likely to occur in the late afternoon or early evening. **51%** of collisions occur between 3 PM and 9 PM.

# High Injury Network





# Countermeasure Toolbox



## ROADWAY DESIGN



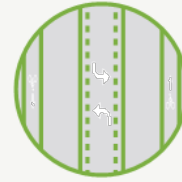
### BULB OUTS AND CURB EXTENSIONS

Raised devices that reduce the corner radius or narrow the roadway to reduce speeds of turning vehicles, improve sight lines, and shorten crossing distances.

**EFFICACY:** ● ● ○

**COST:** ● ● ○

**COMPLEXITY:** ● ○ ○



### LANE REDUCTION

Reduction in number of travel lanes, often paired with a center turn lane and/or bicycle lanes.

**EFFICACY:** ● ● ●

**COST:** ● ● ●

**COMPLEXITY:** ● ● ●

# Collision Profiles

## Walking or Bicycling on Major Roadway (Expressway, Arterial, or Collector)

### FACTORS



Pedestrian or bicycle collision



Collision occurred on an expressway, arterial, or collector

### STATS

**43** KSI Collisions

Accounts for **47%** of all KSI collisions

### ADDITIONAL NOTES

**14** of the **43** KSI profile collisions (**33%**) occurred on **El Camino Real**

### Key Countermeasures



Adaptive Pedestrian Signal System



Pedestrian Refuge Island and Median



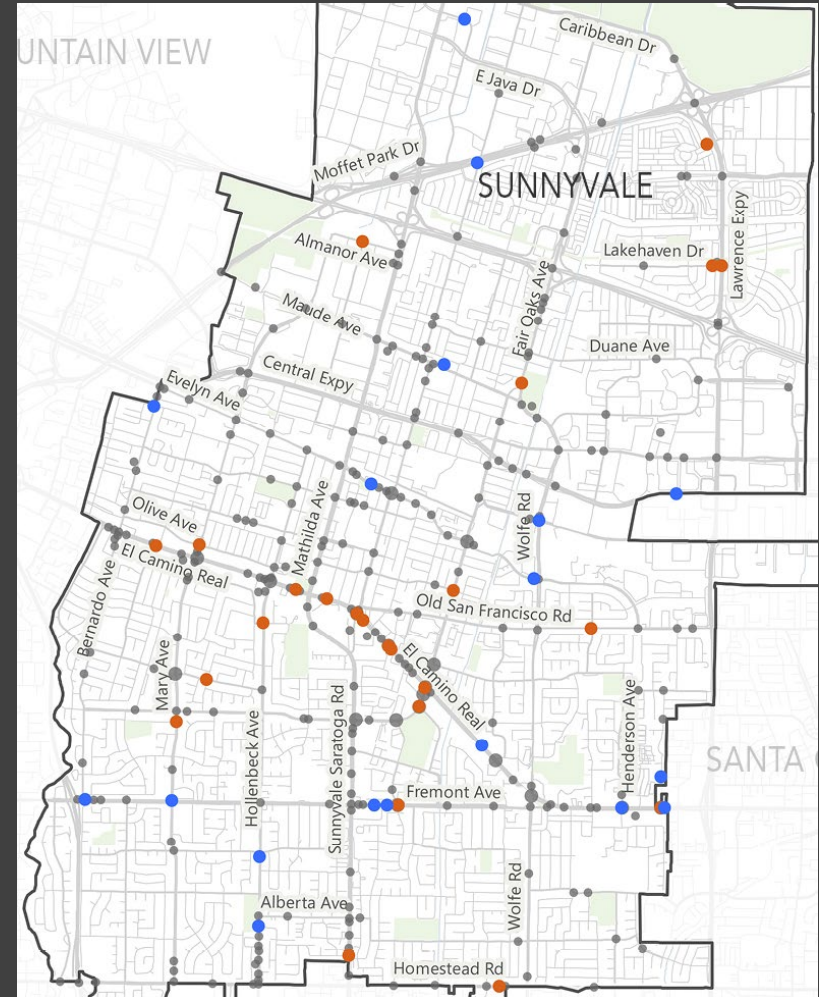
Protected Bikeway



Protected Turns

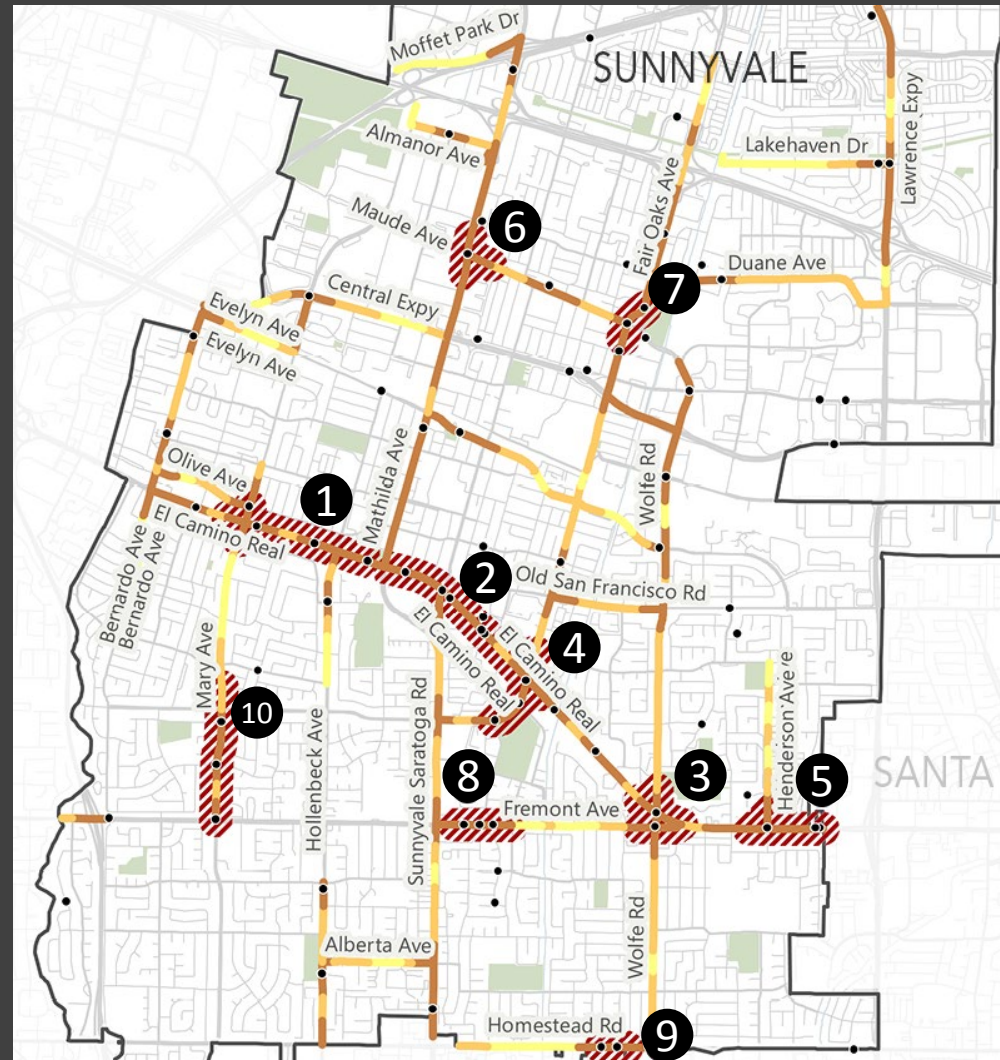


Roadway and Intersection Safety Lighting



1. El Camino Real between S. Mary Avenue and S. Mathilda Avenue
2. El Camino Real between S. Taaffe Street and S. Fair Oaks Avenue
3. El Camino Real, E. Fremont Avenue, and S. Wolfe Road (intersection)
4. Remington Drive/Fair Oaks Avenue between Iris Avenue and Manet Drive
5. El Camino Real between Henderson Avenue and Helen Avenue
6. N. Mathilda Avenue and W. Maude Avenue (intersection)
7. N. Fair Oaks Avenue between Balsam Avenue and E. Taylor Avenue
8. Fremont Avenue between Sunnyvale-Saratoga Road and Floyd Avenue
9. Homestead Road between Heron Avenue and Wolfe Road
10. Mary Avenue between Remington Drive and Fremont Avenue

# Priority Locations



# Implementable Actions

The Implementation Actions are organized into four action areas:



Vision Zero Program Initiatives and Evaluation



Street Design and Operation



Behavioral Change



Vulnerable Road Users





# Implementable Actions



## Vision Zero Program Initiatives and Evaluation

SAFETY STRATEGY			TIMELINE	PROGRESS MEASURES	KEY PARTNERS	CITY RESOURCES
Vision Zero Program Initiation						
A.6	Future Plans	Incorporate Vision Zero safety principles into future City plans and design documents.	Ongoing	Number of plans and policies incorporating Vision Zero	Community Development Department, Department of Public Works	Low



## Street Design and Operation

SAFETY STRATEGY			TIMELINE	PROGRESS MEASURES	KEY PARTNERS	CITY RESOURCES
High Injury Network Infrastructure						
B.1	Priority Locations	Develop designs and secure grant funding for ten priority project locations identified in plan, with a focus on roadway designs to improve safety.	Medium-Term	Number of projects funded	Department of Public Works	High

## **Next Step:**



**Vision Zero Presented to  
City Council for Adoption**

## **Recommendation – Alternative 1:**



**Recommend City Council  
Adopt the Vision Zero Plan**