CITY OF CUPERTINO
VISION ZERO ACTION PLAN

COMMUNITY MEETING

OCTOBER 4, 2023

PURPOSE OF TODAY'S MEETING

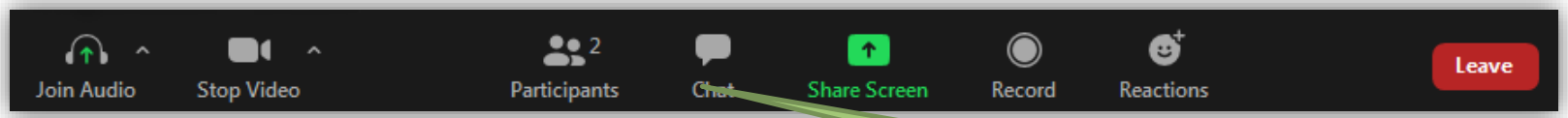
- Introductions
- What is Vision Zero?
- Goals & Process of Vision Zero
- Collision Analysis and Trends
- High Injury Network
- Profiles and Countermeasures
- Open Discussion
- Next Steps

HOW TO USE ZOOM

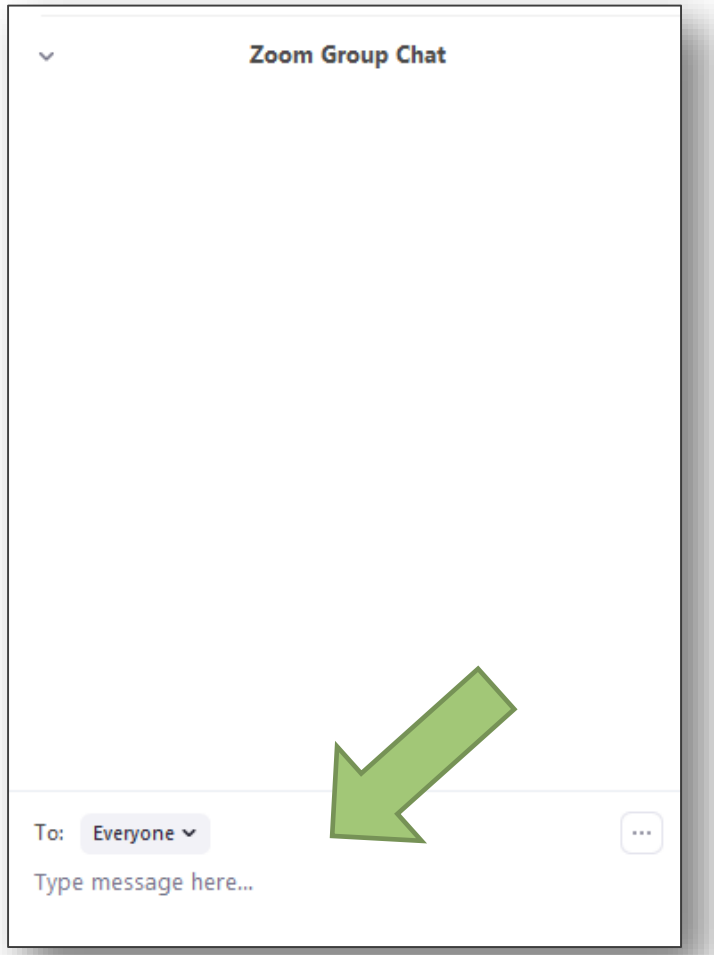
Free Zoom app

This meeting is being recorded

How to send us your questions and feedback?



Use the chat feature to send us your questions



INTRODUCTION

City of Cupertino:

- David Stillman, Transportation Manager
- Prashanth Dullu, Assistant Engineer

TJKM Transportation Consultants:

- Ruta Jariwala, Principal Engineer
- Mark Doty, Project Manager
- Gary W. Schatz, Senior Planner
- Devyani Padubidri, Assistant Transportation Planner

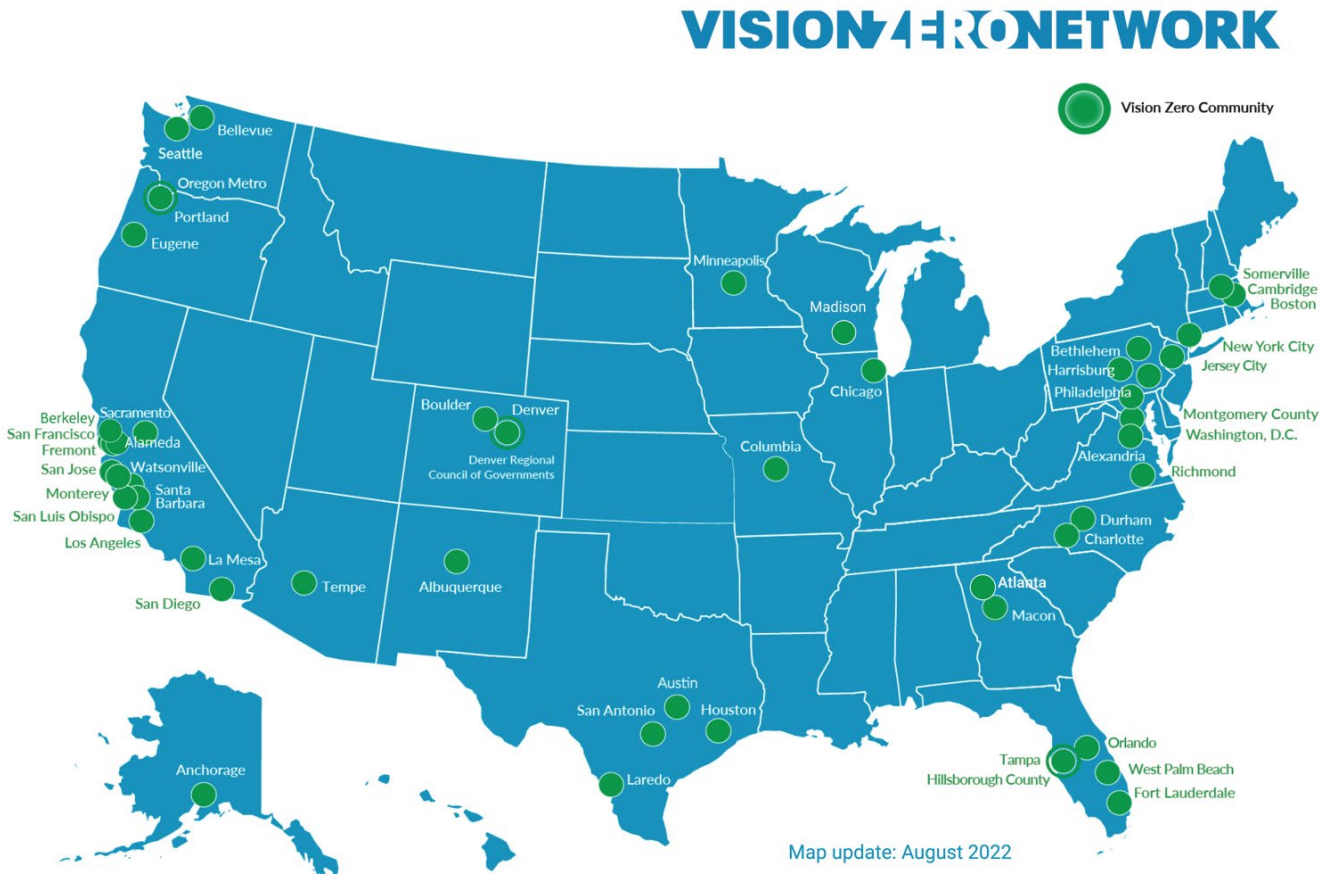
FROM LRSP → VISION ZERO

- In 2022 the City of Cupertino developed its Local Roadway Safety Plan (LRSP)
- It identified safety projects and developed a countermeasure toolbox
- Stakeholder and community input was crucial in shaping the LRSP.
- Building on past planning efforts, **LRSP insights help inform Vision Zero.**

EXISTING STREET SAFETY EFFORTS

- Local Roadway Safety Plan (LRSP) (2022)
- Bollinger Road Corridor Safety Study (2021)
- Transportation Study Guidelines (2021)
- Neighborhood Traffic Calming Program (2020)
- Parks and Recreation System Master Plan (2020)
- Pedestrian Transportation Plan (2018)
- Safe Routes to the School Program and City of Cupertino School Walk Audit Report (2016–2017)
- 2016 Bicycle Transportation Plan (2016)
- General Plan 2040 Chapter 5: Mobility Element (2015)
- VTP2040: The Long-Range Transportation Plan for Santa Clara County
- Santa Clara County Safe Routes to School Coordinator Manual (2014)

WHAT IS VISION ZERO?



Cities that have adopted Vision Zero (Source: Vision Zero Network)

- Vision Zero combines a belief in **zero traffic fatalities with proactive strategies for safer roads.**
- It stems from a deep belief that no one should endure death or severe injury on our streets, extending that value to all individuals.
- Vision Zero's comprehensive strategy aims to **eliminate fatal and severe injury crashes, promoting safe, equitable mobility for everyone.**
- This approach prioritizes safety and **inclusivity in road planning** and design, regardless of age, ability, identity, or mode of travel.
- Originating in Sweden, Vision Zero has seen success in Europe and is **gaining momentum in various U.S. jurisdictions.**

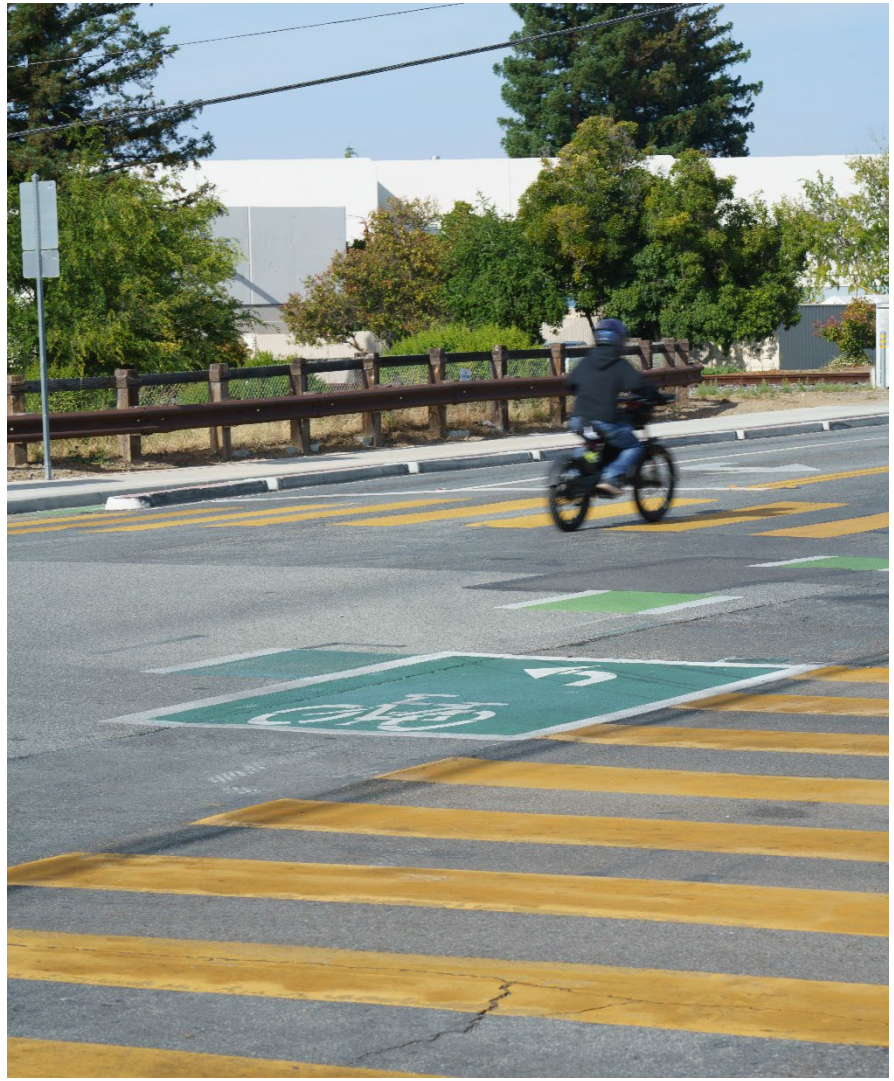
SAFE SYSTEMS APPROACH

Principles:

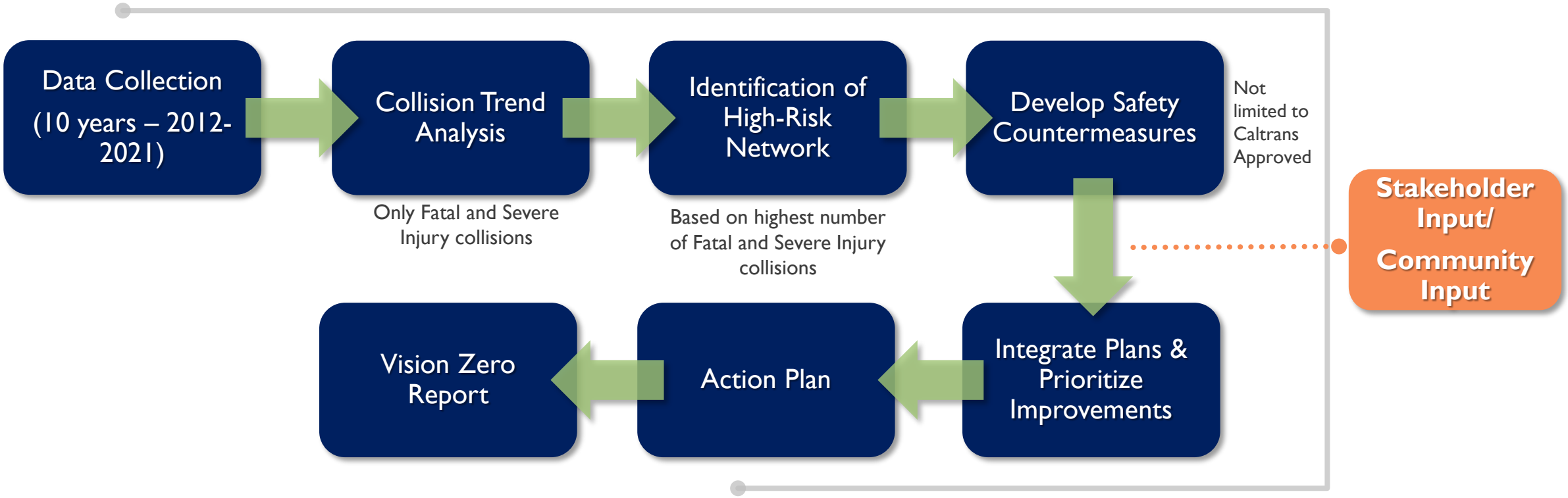
- Deaths and serious injuries are unacceptable
- Humans make mistakes
- Humans are vulnerable
- Responsibility is shared
- Safety is proactive
- Redundancy is crucial

BENEFITS OF VISION ZERO

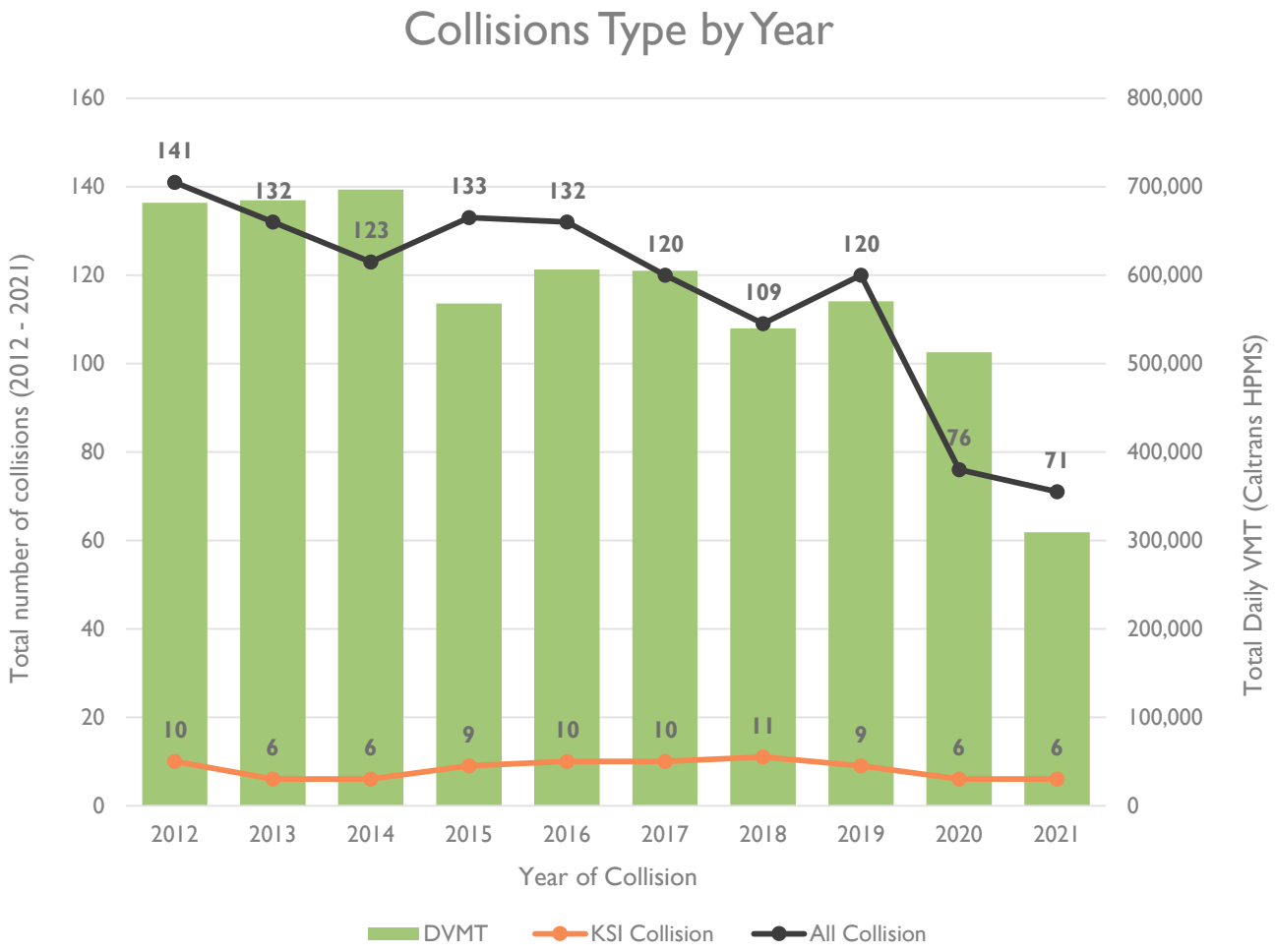
- Data driven approach to identify, analyze, and prioritize roadway safety improvements
- Considers stakeholder and community feedback to identify additional traffic safety related concerns
- Allows the City to implement a systemic approach to address collisions
- Tailored to the City's and Community specific traffic safety needs – based on the data
- Implementation: City is eligible to apply for grants (OBAG and Safe Streets for All (SS4A))



VISION ZERO PROCESS



WHY DOES CUPERTINO NEED VISION ZERO ?



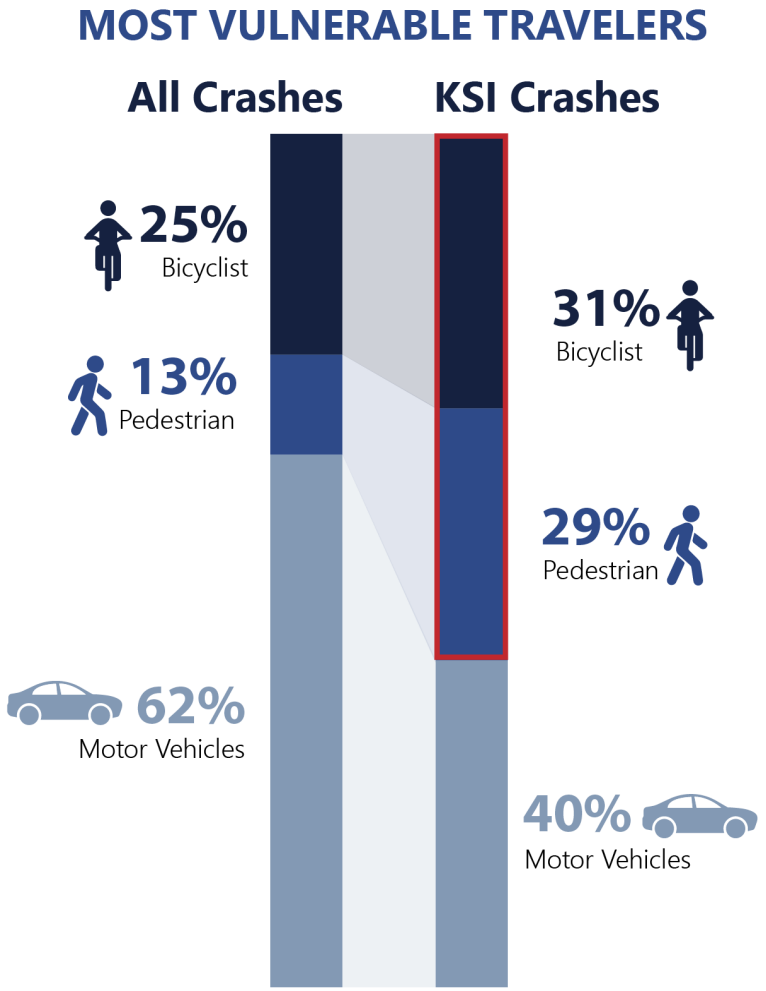
KSI: Killed and Severe Injury

- With **one crash every three days**, Cupertino's road safety is a growing concern, especially for **vulnerable users.**
- Despite traffic signals, **intersections pose a risk of fatal and severe injuries**, emphasizing the need for a comprehensive strategy.
- Cupertino's Vision Zero plan aims to **create safer streets through various measures, prioritizing safety for all.**
- The goal is to eliminate traffic fatalities and severe injuries, as they are preventable incidents with **no acceptable loss of life.**

WHY DOES CUPERTINO NEED VISION ZERO ?

Pedestrians and cyclists constitute 60% of severe and fatal crashes. Risk of serious crashes persists at intersections, despite traffic signals.

- **Comprehensive Safety Strategy:** Vision Zero prioritizes safe streets, infrastructure improvements, lower speed limits, public education, and law enforcement.
- **Safer Streets for All:** Cupertino aims to create safer streets and reduce traffic-related fatalities and injuries, acknowledging that no loss of life is acceptable.



Pedestrians and bicyclists are involved in 38% of all crashes, but account for **60%** of serious injuries or fatalities.

COLLISION ANALYSIS

COLLISION TRENDS (2012 – 2021)

Cupertino saw **1157** collisions between 2012 and 2021 including **83** KSI Collisions

88% of pedestrian and bicycle KSI collisions occurred at intersections

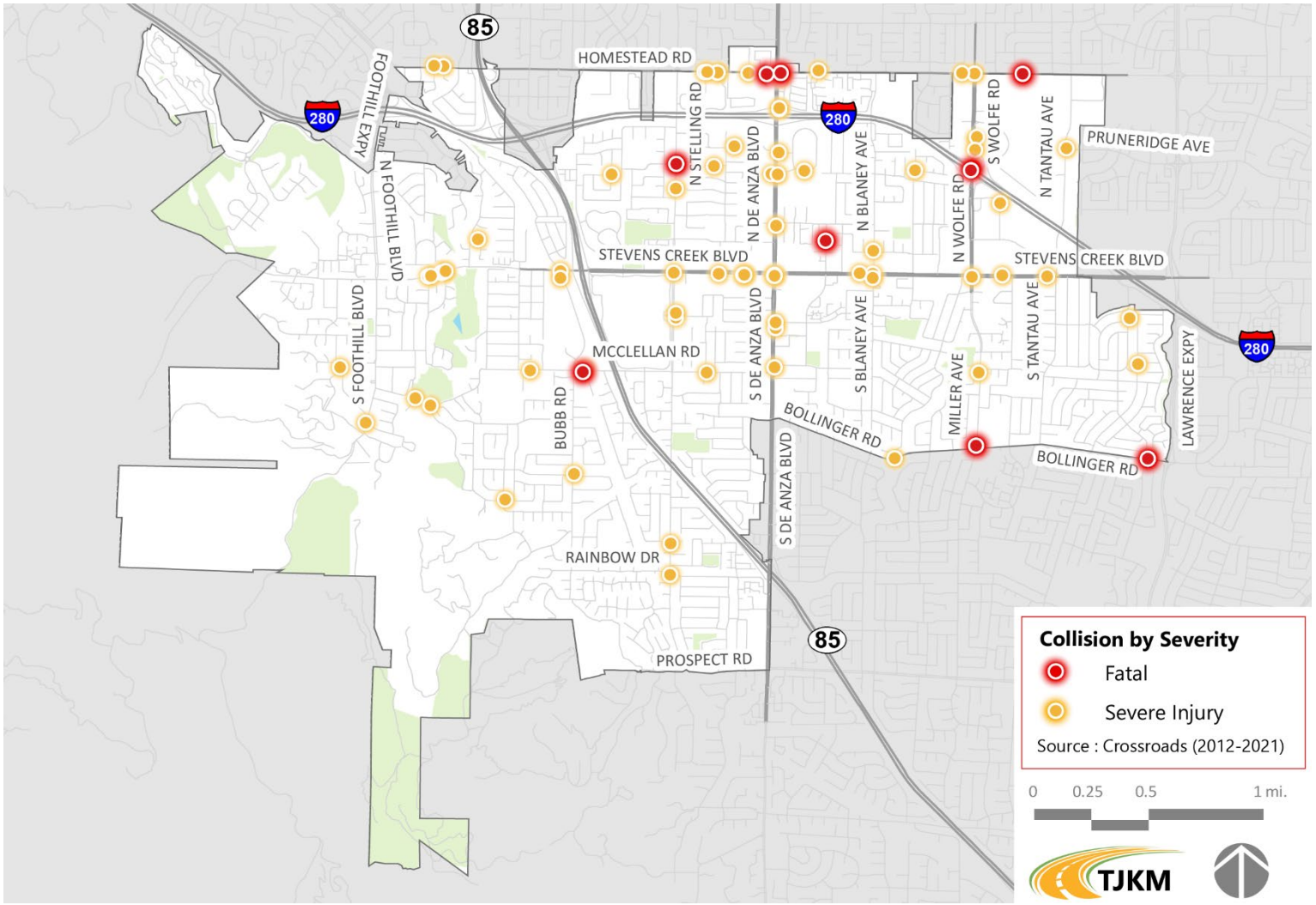
Victims between 25 - 64 years represent **58%** of KSI collisions involving pedestrian and bicycists

55% of pedestrian and bicycle KSI collisions occurred at signalized intersections

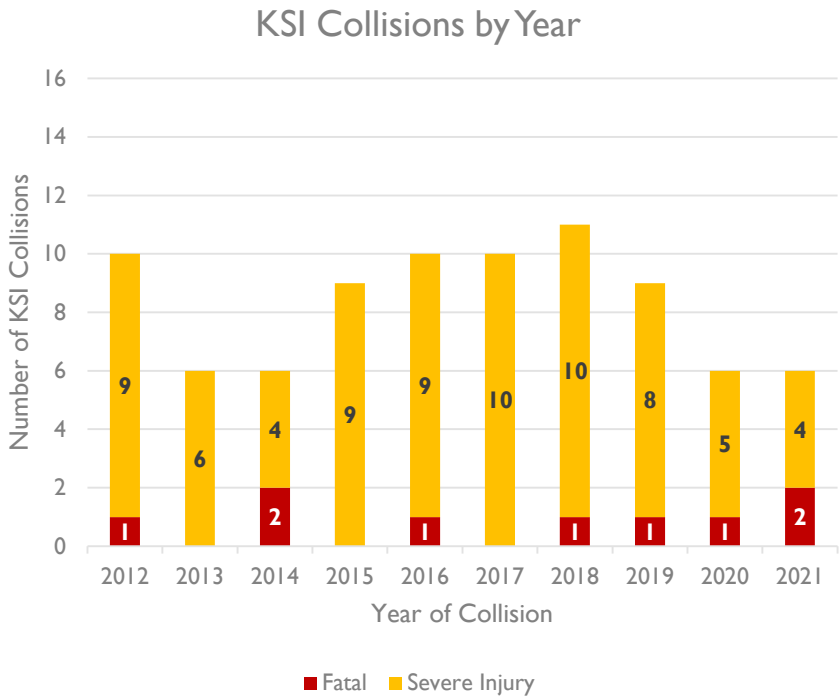
36% of all collisions involved pedestrian and bicycle yet pedestrian and bicycle collisions comprise **60%** of KSI collisions

Pedestrian and bicycle KSI collisions were most likely to occur in the late afternoon or evening. **56%** of the collisions occur between 4 P.M. and 10 P.M.

FOCUSING ON FATALITIES AND SEVERE INJURIES



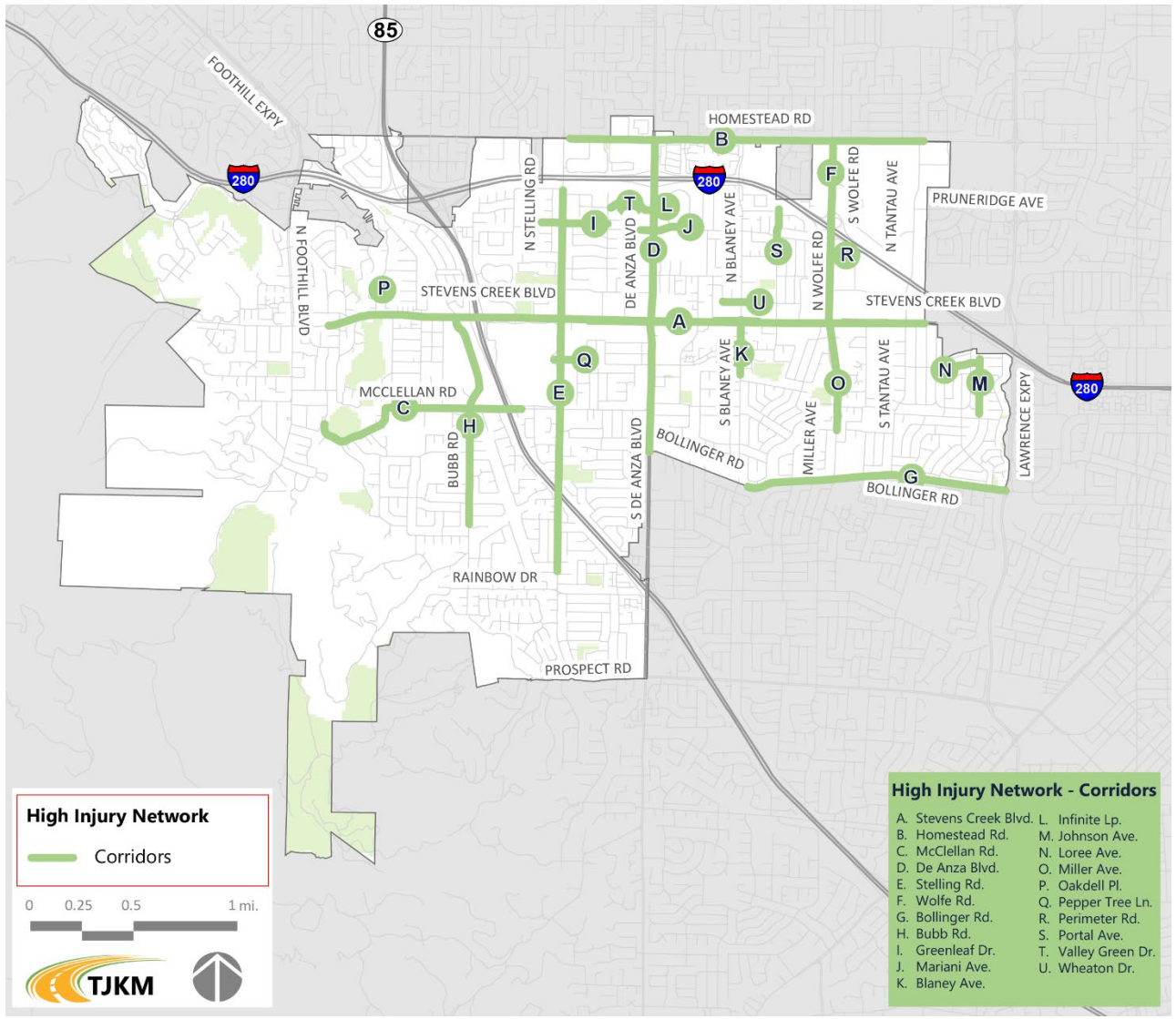
All Killed and Severe Injury Collisions (2012-2021)



- Between 2012 and 2021 there were **nine** fatalities and **74** severe injuries reported.

KSI: Killed and Severe Injury

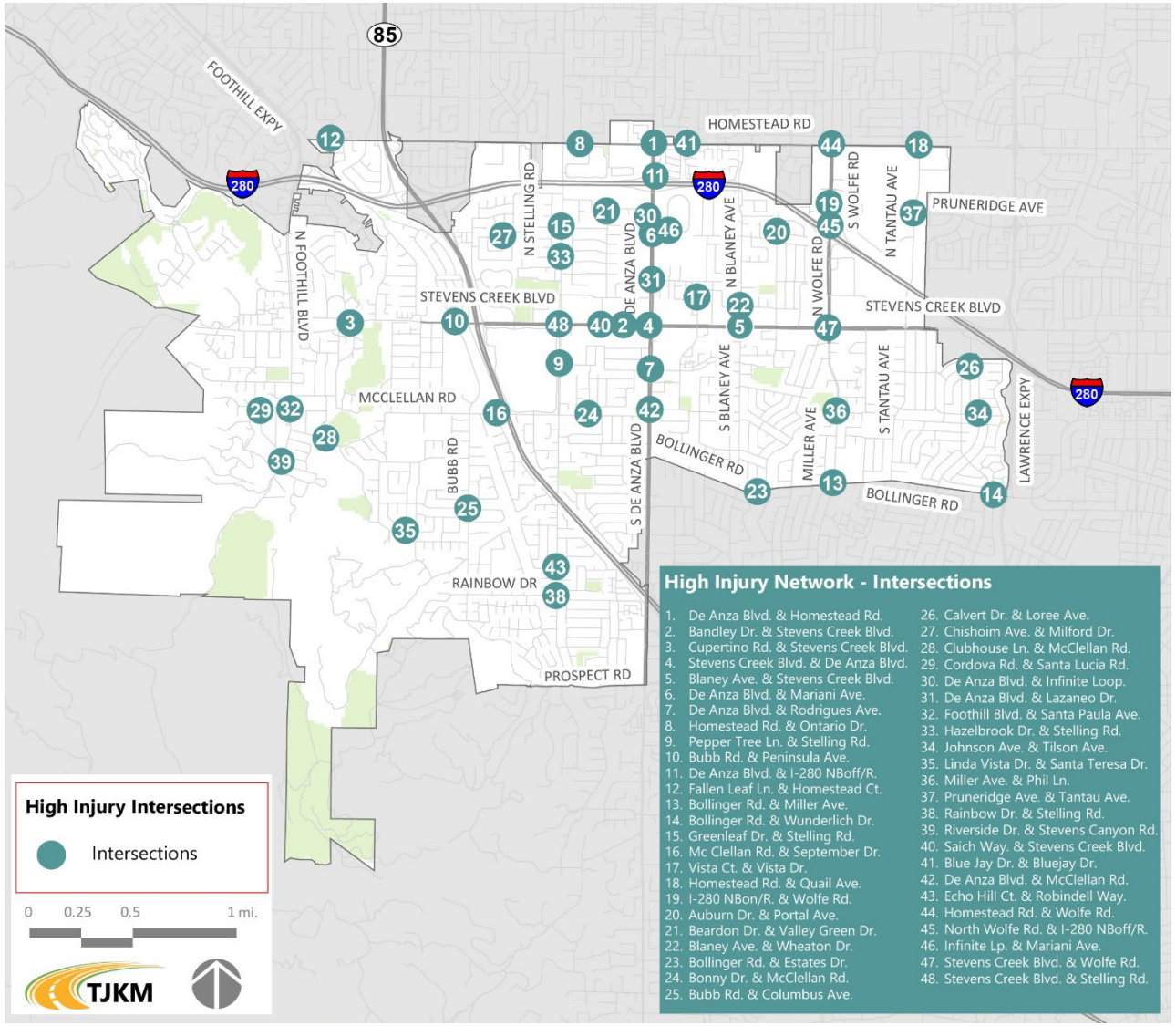
HIGH-INJURY CORRIDORS (2012-2021)



The roadways that had the highest number of collisions include:

- Stevens Creek Boulevard
- Homestead Road
- McClellan Road
- De Anza Boulevard
- Stelling Road
- Wolfe Road
- Bollinger Road

HIGH-INJURY INTERSECTIONS (2012-2021)



The intersections that had fatalities and multiple severe injury crashes are:

- De Anza Boulevard & Homestead Road.
- Bandley Drive & Stevens Creek Boulevard
- Cupertino Road & Stevens Creek Boulevard
- Stevens Creek Boulevard & De Anza Boulevard
- Blaney Avenue & Stevens Creek Boulevard
- De Anza Boulevard & Mariani Avenue
- De Anza Boulevard & Rodrigues Avenue

COLLISION PROFILES

- The City of Cupertino has identified top nine collision profiles that emphasizes the trends observed in crashes resulting in people being killed or seriously injured (KSI).
- These profiles are developed through the analysis of collision data and relevant environmental factors.
- Each profile identifies a collision type that is considered a priority concern.
- Accompanying each profile are safety countermeasures that are most applicable to the specific crash and location context.
- These countermeasures, which include engineering, education, and enforcement strategies, form a toolbox of safety interventions that the City of Cupertino will utilize to implement projects tailored to address unique safety issues.

COLLISION PROFILES

Pedestrian & bicyclist within the city are most vulnerable

Unsafe speeds

Driving under influence

Majority of pedestrian and bicyclist collisions occur at intersections

Teenagers biking near schools and parks

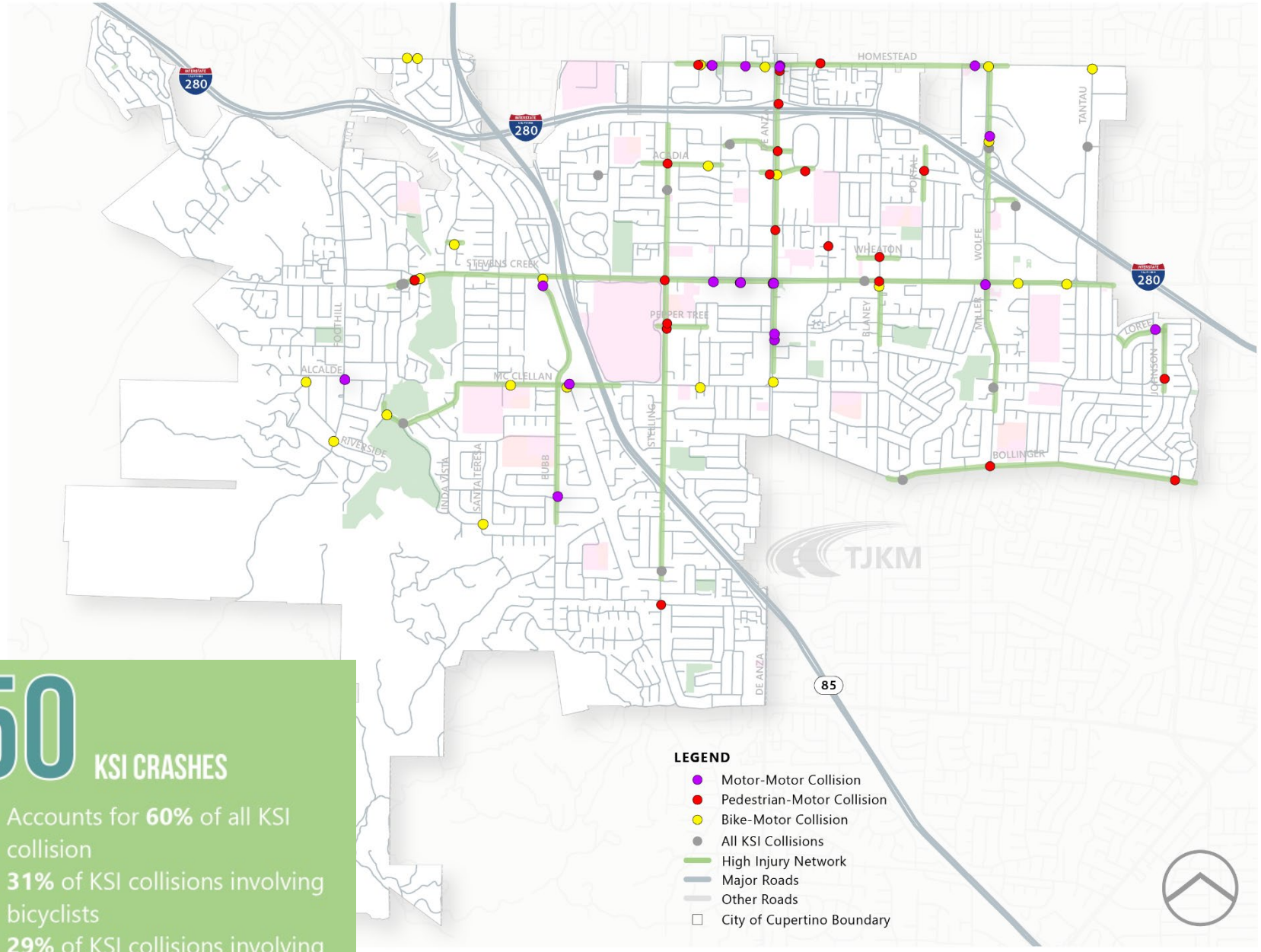
Majority of bicycle collisions are broadside collisions

Pedestrian violation led to majority of pedestrian collisions

Majority of bicycle collision occur due to violation of automobile right-of-way

Collisions near transit stops

Profiles 1 : **PEDESTRIAN & BICYCLIST ARE MOST VULNERABLE**



50 KSI CRASHES

- Accounts for **60%** of all KSI collision
- **31%** of KSI collisions involving bicyclists
- **29%** of KSI collisions involving pedestrian

MARKED CROSSWALKS
Effectively decrease the occurrence of collisions along high risk corridors

EFFICACY: ■■■
COST: ■■□
COMPLEXITY: ■□□

PEDESTRIAN REFUGE ISLANDS
Provide a safe space for pedestrians to pause between traffic

EFFICACY: ■■■
COST: ■■□
COMPLEXITY: ■□□

PROTECTED BIKEWAYS
Segregated lanes shielded by flexible posts, parked cars, and planters for safe bicycle travel separate from vehicle traffic.

EFFICACY: ■■■
COST: ■■■
COMPLEXITY: ■■■

RECTANGULAR RAPID FLASHING BEACON
Offers pedestrians and bicyclists a clear path to cross the street more safely.

EFFICACY: ■■□
COST: ■■□
COMPLEXITY: ■□□

SHARE THE ROAD AWARENESS PROGRAM
Create a Share the Road Awareness Program for motorist, bicyclist and pedestrians that is easily accessible.

EFFICACY: ■■□
COST: ■■□
COMPLEXITY: ■■□

TRAFFIC SAFETY DIVERSION PROGRAM
For bicycle and pedestrian traffic violations providing access to safety courses and programs centered on biking and walking

EFFICACY: ■■□
COST: ■□□
COMPLEXITY: ■□□

COUNTERMEASURE TOOLBOX

ROADWAY DESIGN

PEDESTRIAN SAFETY

BICYCLIST SAFETY

OPERATIONS AND SIGNAL TIMING

SPEED MANAGEMENT

SIGNAGE AND MARKING

EDUCATION AND PUBLIC AWARENESS

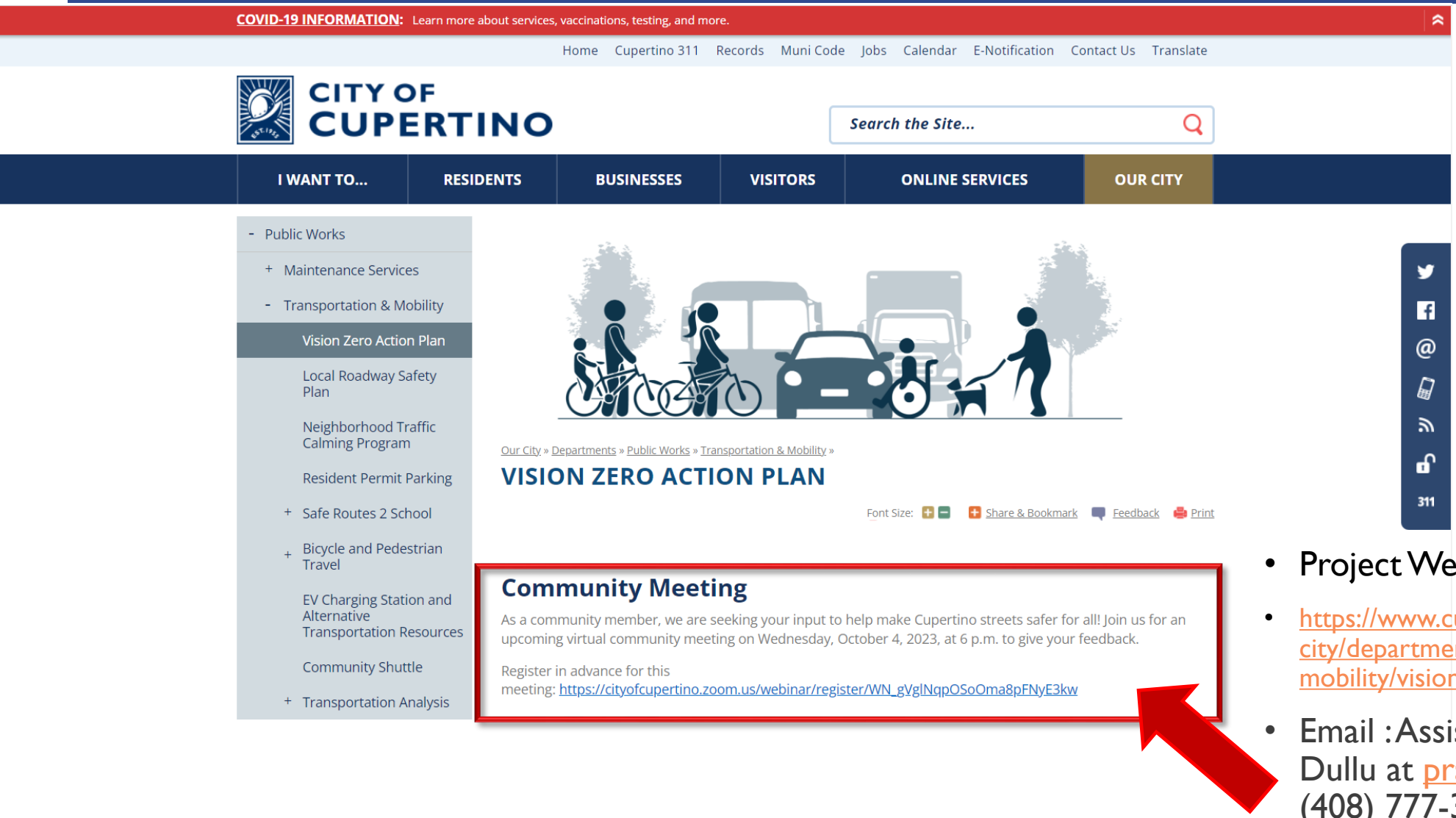
ENFORCEMENT

COLLISION PROFILES – SUMMARY

COLLISION PROFILE	% OF ALL KSI (# OF ALL KSI)	% OF AUTO KSI (# OF AUTO KSI)	% OF BICYCLE KSI (# OF BICYCLE KSI)	% OF ALL PEDESTRIAN (# OF PEDESTRIAN KSI)
1. Pedestrians & Bicyclists are most vulnerable	60% (50)		100% (27)	100% (24)
2. Unsafe Speeds	10% (8)	19% (6)	7% (2)	
3. Improve intersection safety for all	88% (73)	47% (15)	85% (22)	100% (24)
4. Pedestrian code violation	10% (8)			33% (8)
5. Majority of bike collisions are broadside collisions	11% (9)		33% (9)	
6. Teenagers biking and walking near schools and parks	10% (8)		19% (5)	13% (3)
7. Driving under influence	5% (4)			
8. Bicycle collisions & automobile right-of-way violation	7% (6)		22% (6)	
9. Collisions near transit stops	13% (12)	9% (3)	15% (4)	

Please Note: Due to the possibility of a single collision being classified under multiple profiles, the figures in the table do not total up to 100%. In cases where a cell lacks a KSI percentage, it signifies that there were zero KSI collisions recorded for the indicated mode within that particular profile.

STAKEHOLDER AND COMMUNITY OUTREACH



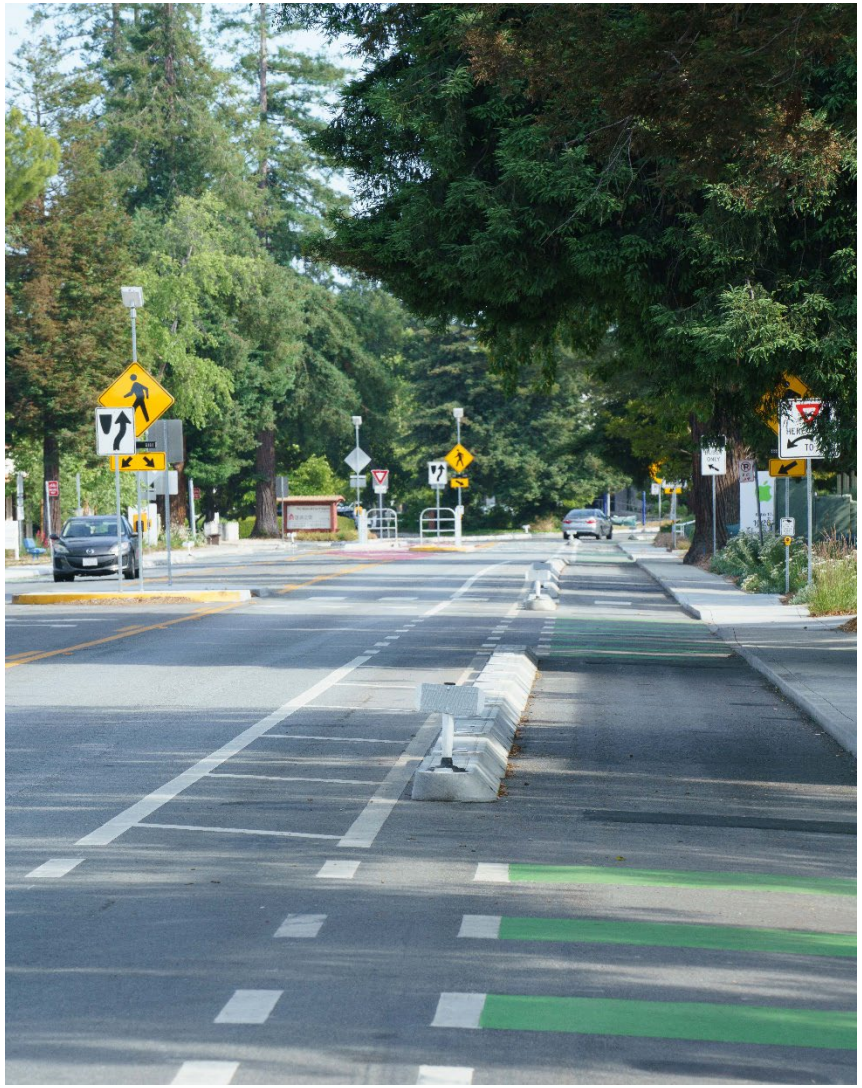
SCAN ME

- Project Website
- https://www.cupertino.org/our-city/departments/public-works/transportation-mobility/vision-zero-action-plan
- Email : Assistant Engineer Prashanth Dullu at prashanthd@cupertino.org or (408) 777-3190

OPEN DISCUSSION

NEXT STEPS

- Identify **Priority Project Locations**
- Identify **Funding Sources**
- Develop an **Implementation Plan**
- **Draft Vision Zero Action Plan**



THANK YOU !

CITY OF CUPERTINO