

City of Lafayette Vision Zero and Local Road Safety Plan

City Council Meeting

July 24, 2023



Introduction and Background



Local Road Safety Plan (LRSP) Overview

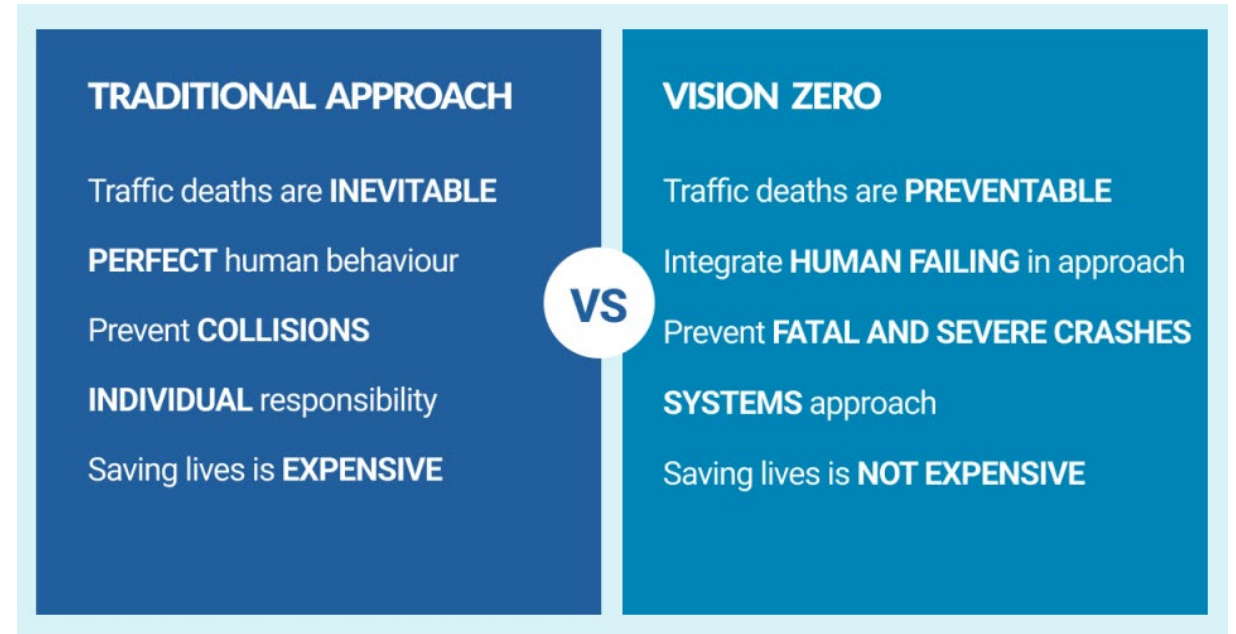
- Focuses on safety on locally-owned roads in Lafayette
- This Plan follows [FHWA LRSP guidance](#)
- Sets the City up to apply for Caltrans HSIP, USDOT SS4A, and other funding!



Source: FHWA

Vision Zero

- A shared goal of reaching zero roadway deaths and serious injuries
- City of Lafayette adopted a Vision Zero resolution in 2021



Source: Vision Zero Network

The LRSP Task Force proposed a 2033 goal to reach Vision Zero in Lafayette

The Safe System Approach

- All principles and elements should be applied in every transportation decision that is made in Lafayette



Source: FHWA

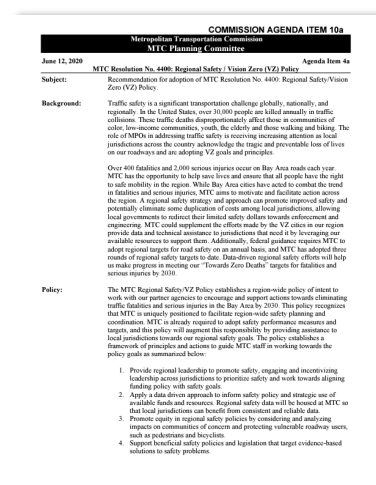
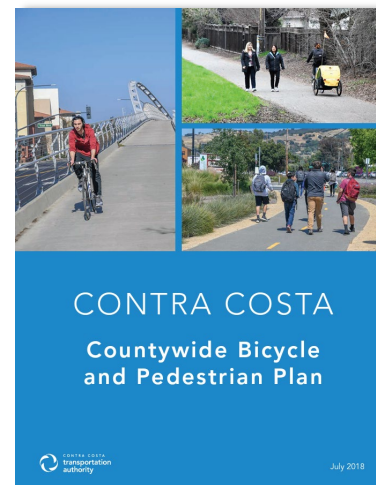
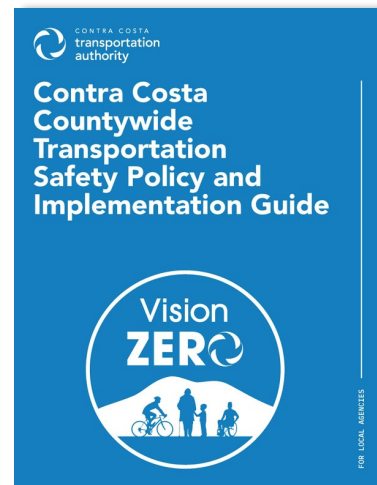
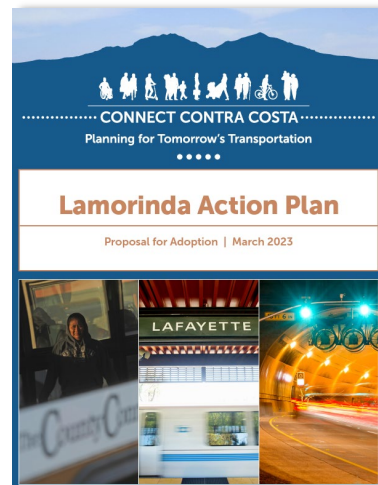
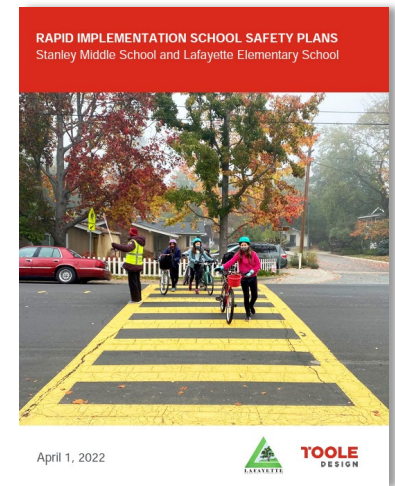
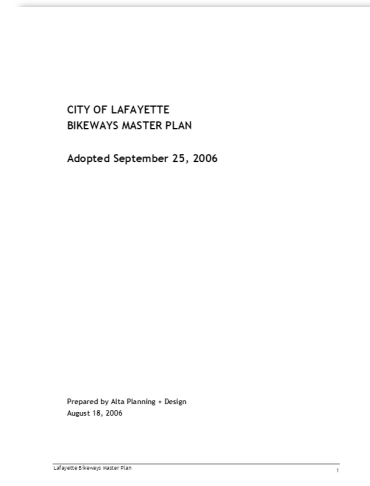
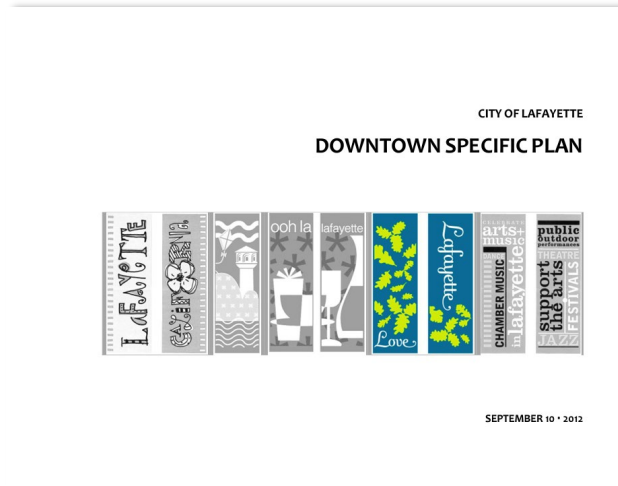
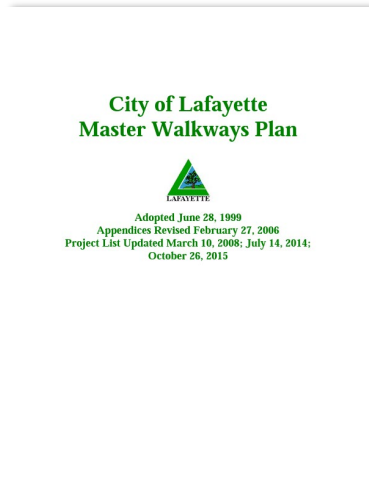
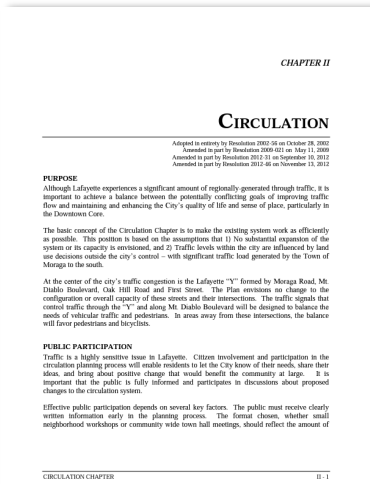
The Safe System Approach

- A decision framework to ensure that if a crash occurs, it won't result in a death or serious injury



Source: Toole Design Group based on ITE Safe System Approach Framework

Related Plans in Lafayette



What Goes Into A Local Road Safety Plan?



Task Force

- Task Force brought together multiple agencies to provide multidisciplinary subject matter expertise and identify community priorities for roadway safety in Lafayette
- Held four meetings
 - September 22, 2022
 - October 25, 2022
 - February 1, 2023
 - March 22, 2023
- Task Force members included representatives from:
 - City of Lafayette Engineering and Public Works
 - Lafayette City Council
 - Contra Costa Transportation Authority
 - Lafayette and Acalanes School Districts
 - 511 Contra Costa
 - Contra Costa Fire Protection District
 - Lafayette Police Department
 - Contra Costa Health Services
 - Lafayette Chamber of Commerce
 - Community members (x2)

Community Engagement

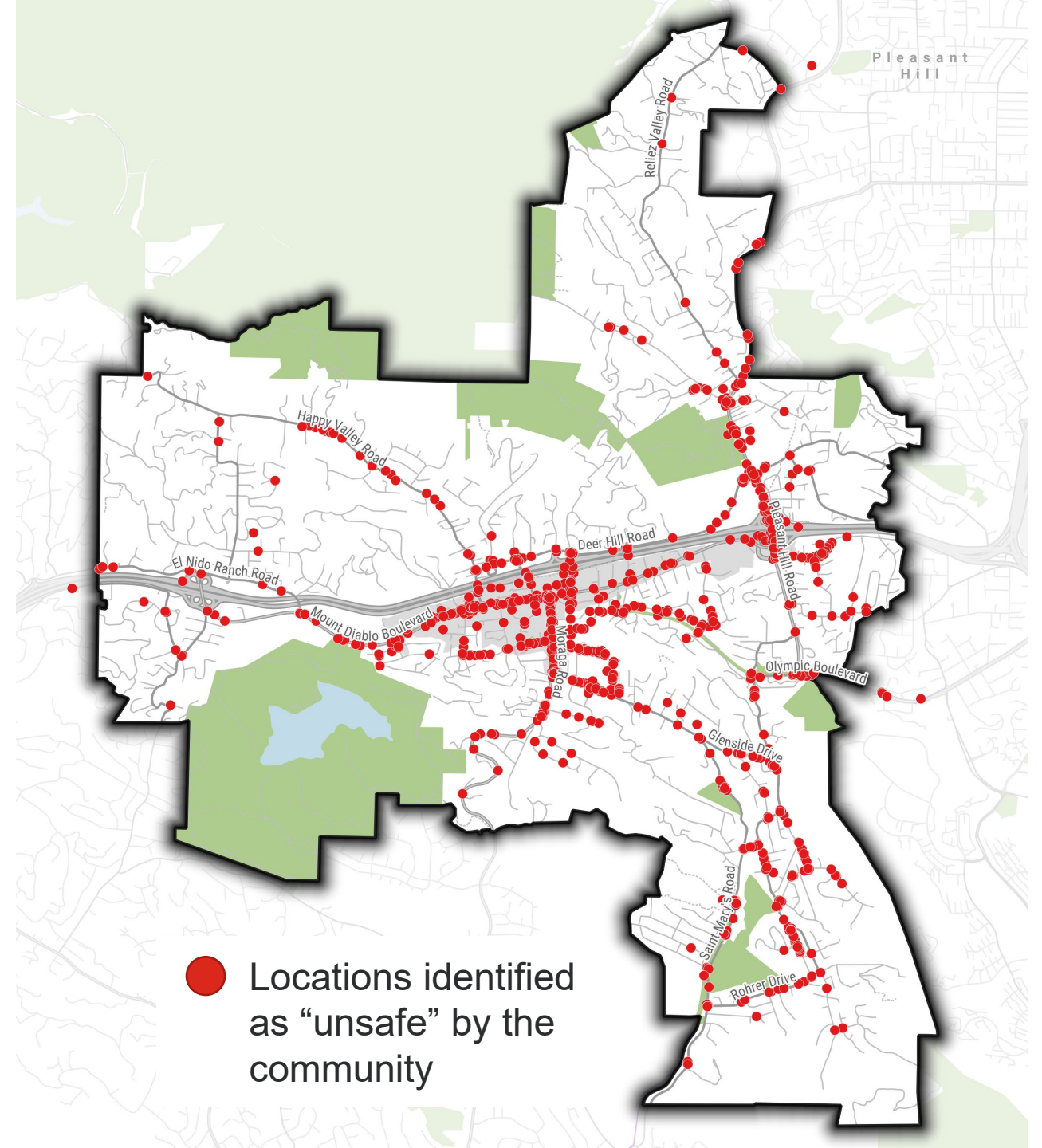
- Virtual Open House
 - December 1, 2022
- Web Map Survey
 - October 24, 2022 – December 4, 2022
- Four public Task Force Meetings



Selection of comments from the Virtual Open House

Web Map Results

- Locations where respondents felt roadway conditions were **unsafe**
- 1,200 visitors / 1,800 inputs
- Most cited location:
 - **Mt. Diablo Blvd and Moraga Rd**

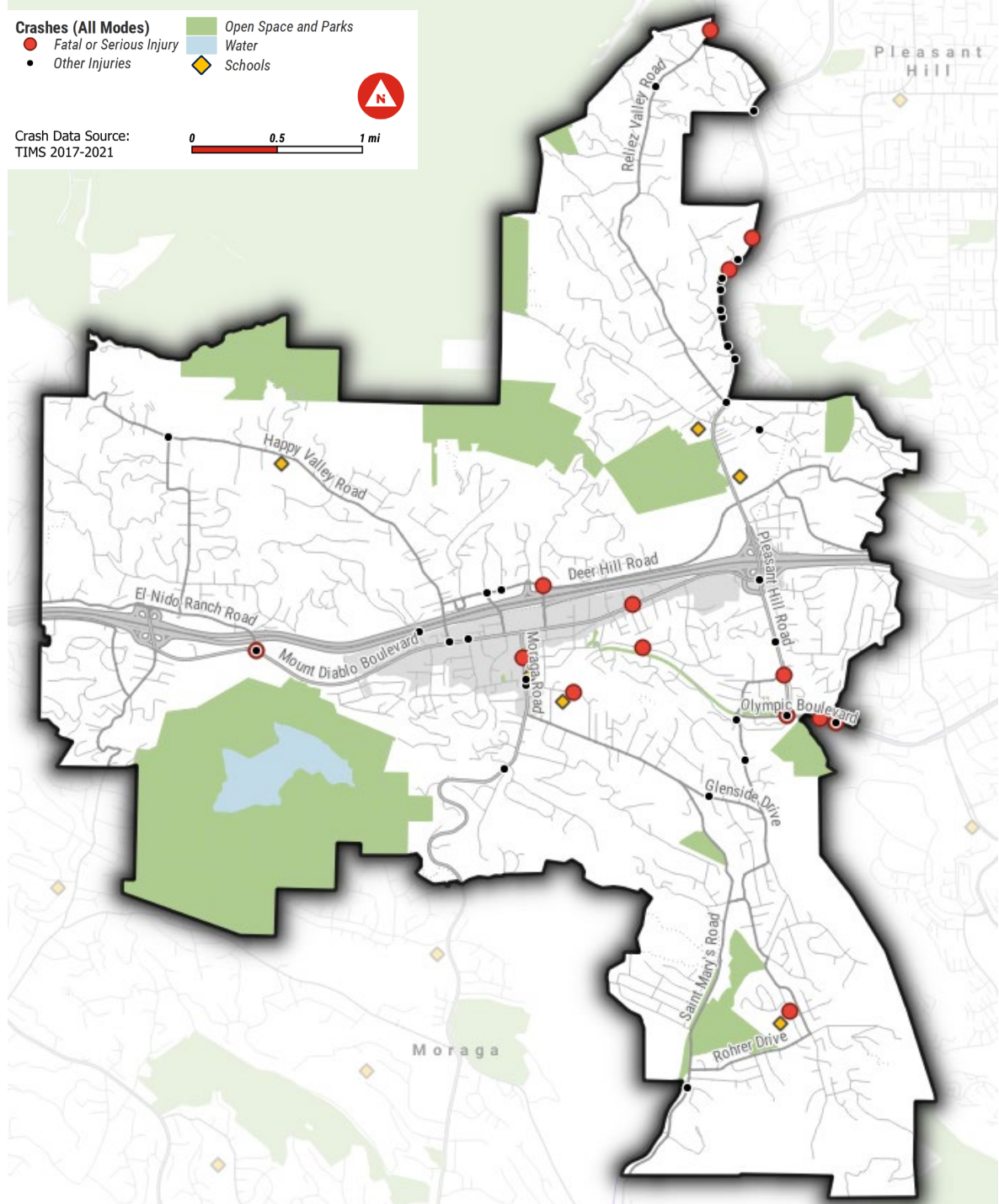


Data-Driven Process



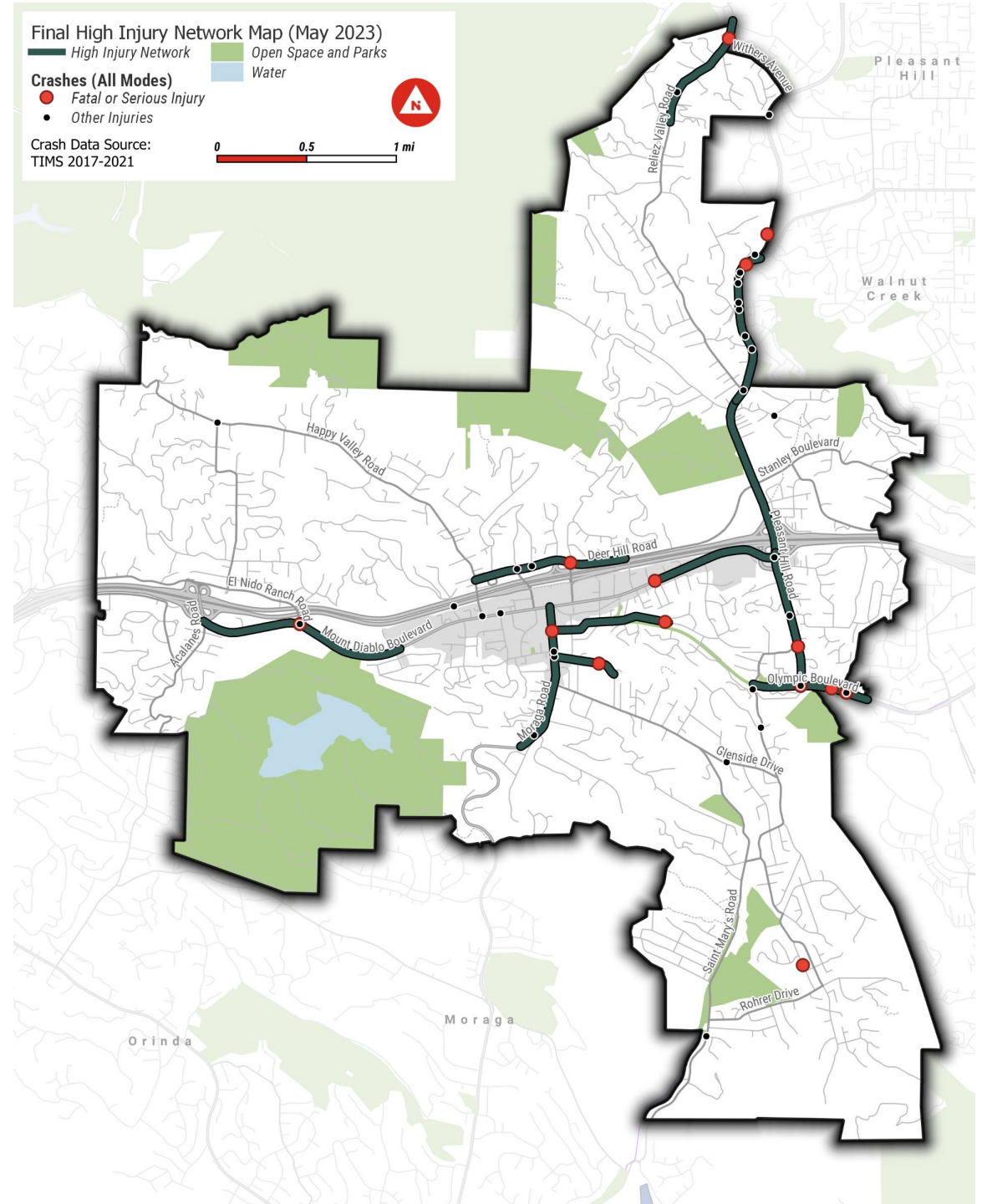
Crash Analysis

- 47 total crashes (2017-2021)
- 14 killed or serious injury crashes (KSI)



High Injury Network (HIN)

- Established through analysis of crash injury severity and density
- Sliding Windows analysis identifies segments with high crash densities



High Injury Networks Segments

HIN Segment	Extent
Olympic Boulevard	between Reliez Station Road and Newell Court
Moraga Road	between Mount Diablo Boulevard and Old Jonas Hill Road
School Street	between Moraga Road and Topper Lane
Reliez Valley Road	between the northern city limit and Sterling Heights Lane
Moraga Boulevard	between Moraga Road and Victoria Avenue
Mount Diablo Boulevard	between Willow Drive and Pleasant Hill Road
Pleasant Hill Road	between Taylor Boulevard and Olympic Boulevard
Deer Hill Road	between Happy Valley Road and Miller Drive
Mount Diablo Boulevard	between Acalanes Road and Risa Road

Engineering Field Visits

- Conducted visits along HIN segments
- Reviewed street conditions, traffic control devices, and noted where safety infrastructure was deficient
- Created Location Profiles for each segment

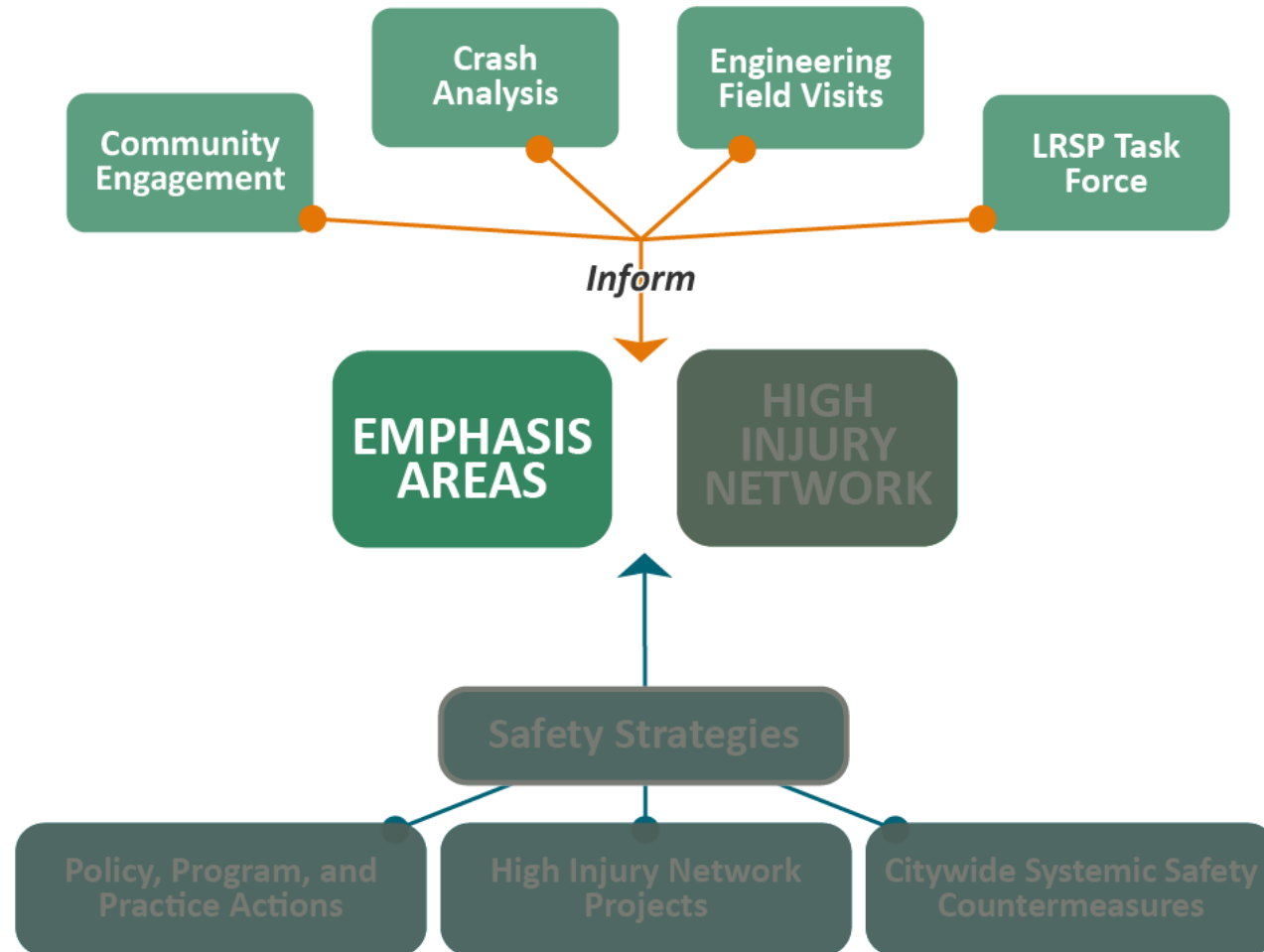


Moraga Rd and Mt. Diablo Blvd

Emphasis Areas



Emphasis Areas



Emphasis Areas



Emphasis Areas

Bus Stops at Intersections

Distracted Driving

Failure to Yield

Improper Turning

Interactions between Bicyclists and Motorists

Interactions between Pedestrians and Motorists

Lane Departure

Speeds

Trail Crossings

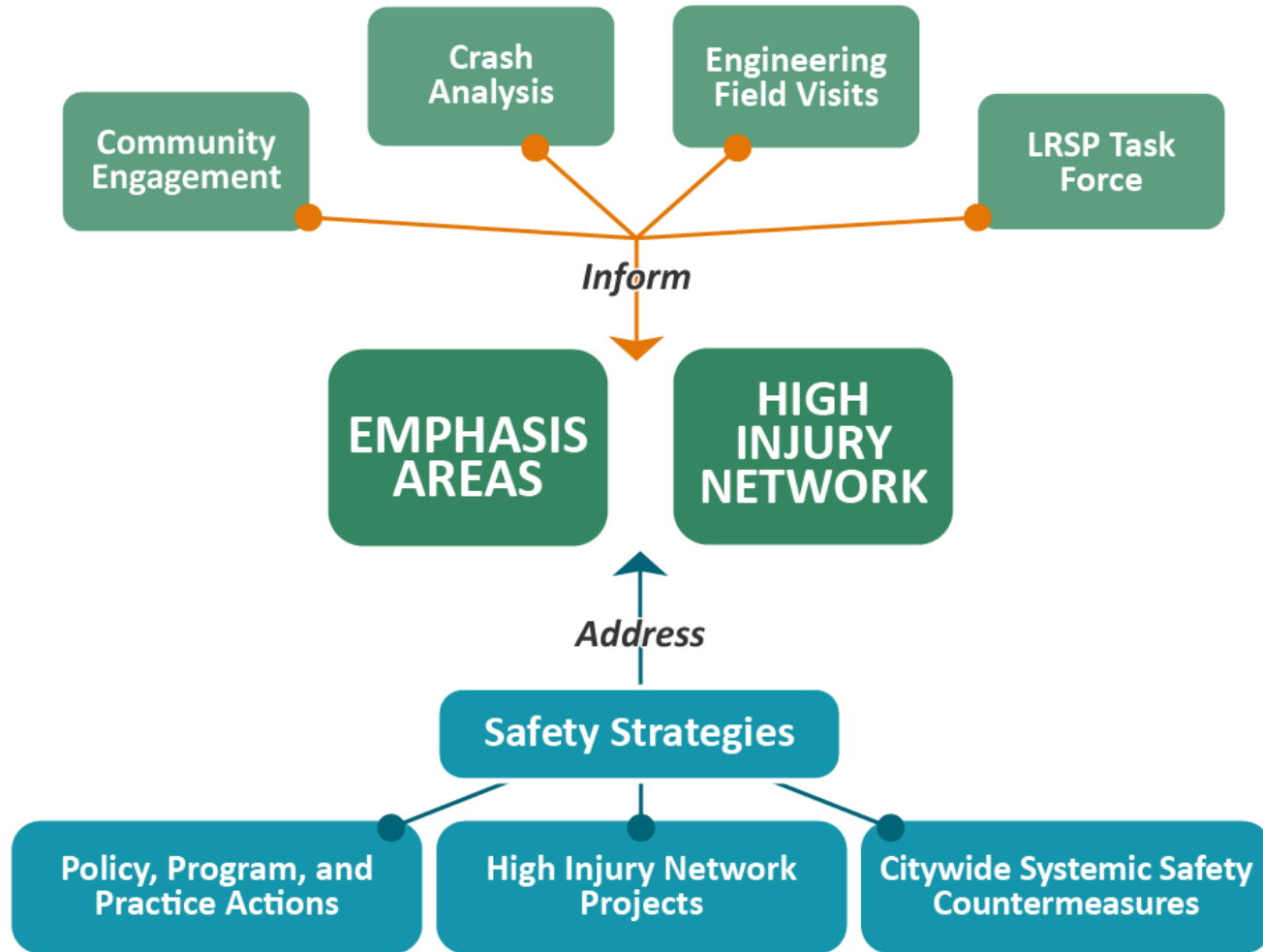
Unsignalized Intersections



Safety Strategies

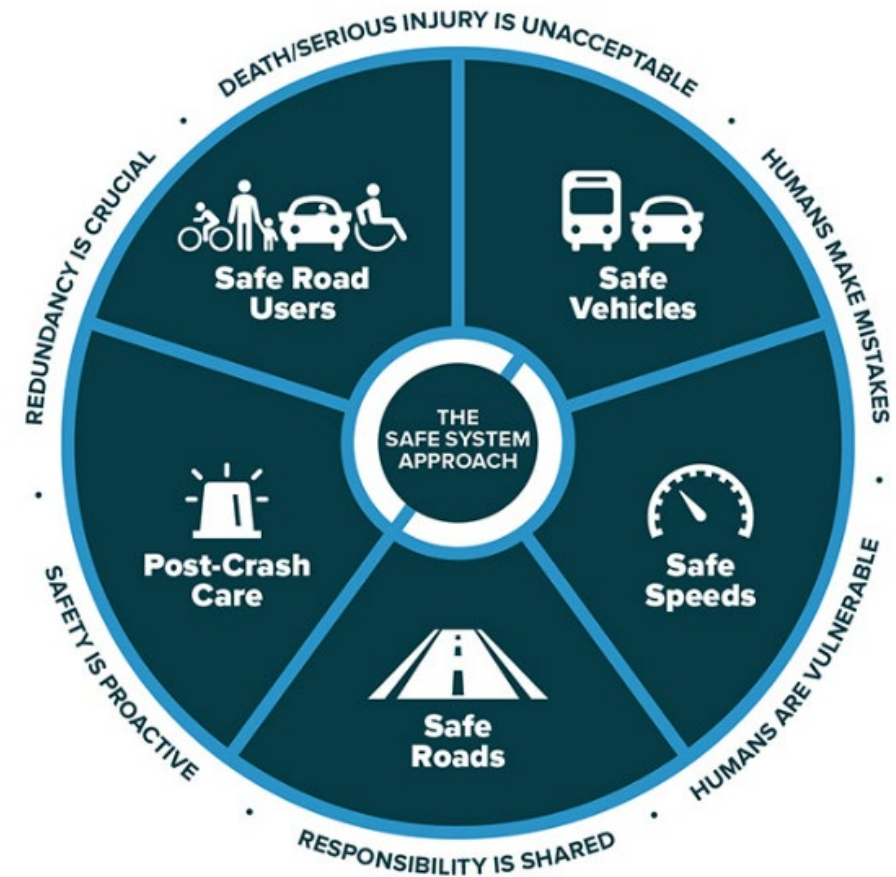


Safety Strategies



Safety Strategies

- Strategies developed through the lens of **The Safe System Approach**
- Draw from LRSP goals, engagement feedback, crash analysis, and emphasis areas



Source: FHWA

Policy, Program, and Practice Actions

- Outlines actions and steps to prioritize roadway safety
 - **Actions** are overarching strategies the City should take
 - **Steps** detail how each action is achieved
- Table should be used as a living document to track progress and measures on actions

High Injury Network Projects

- Determine the most effective safety countermeasures to be installed to HIN segments
 - Evaluate crash causes, modes involved through the Safe System Approach Framework
 - Draw project ideas from community input, prior plans
 - Recommend safety countermeasures from the Safety Countermeasure Toolbox

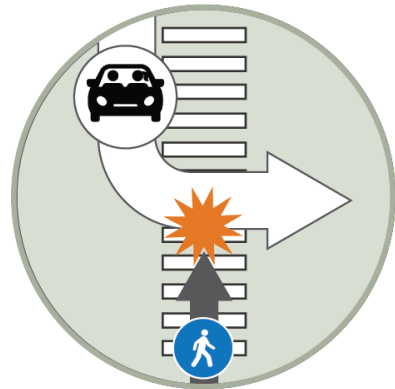
Example: Moraga Road



Moraga Road HIN Example

- Prevailing crash types based on five-year crash history:

- Failure to yield
- Unsafe passing
- Other improper driving



- Selection of recommended safety countermeasures from the Safety Countermeasure Toolbox:

- Curb extensions
- Leading Pedestrian Intervals
- Pedestrian refuge islands
- Prohibit right-turn on red
- Reduce corner radii
- Hard Centerline
- Lighting at segments

Moraga Road HIN Example



- LRSP Community Engagement
 - Most “unsafe” points of any location
 - Suggested solutions
 - More visible signage
 - Hardened centerlines
 - Additional lighting at bus stops
- Rapid Implementation School Safety Plan
 - Suggested solutions
 - Left turn phasing
 - Leading Pedestrian Intervals
 - Enhanced walking and biking facilities

Citywide Systemic Roadway Improvements

- Proven effective safety countermeasures that are beneficial for the overall safety of all road users
- Install everywhere, starting with the HIN
- Informed by:
 - Community feedback (speeding concerns, bike/ped needs)
 - Common crash factors (intersections, turns, speed)

Next Steps

Maintaining the Momentum

- The LRSP describes a safety framework
 - Outlines processes and policies that will shape approach to roadway safety in the city
- Requires ongoing collaboration, data collection and monitoring, and program evaluation
 - Evaluation should inform continued adjustments to countermeasures and safety programs and policies including the LRSP



T'OOLE
DESIGN



Thank you

www.tooledesign.com