City of Lafayette Vision Zero and Local Road Safety Plan



Transportation and Circulation Commission Meeting & LRSP Task Force Joint Meeting

June 19, 2023



Introduction and Background

Local Road Safety Plan (LRSP) Overview

- Focuses on safety on locally-owned roads in Lafayette
- This Plan follows <u>FHWA</u>
 <u>LRSP guidance</u>
- 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





APPROACH

Zero is our goal. A Safe System is how we get there.

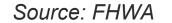


Source: FHWA

The Safe System Approach

All <u>principles and</u>
 elements should be applied
 in every transportation
 decision that is made in
 Lafayette

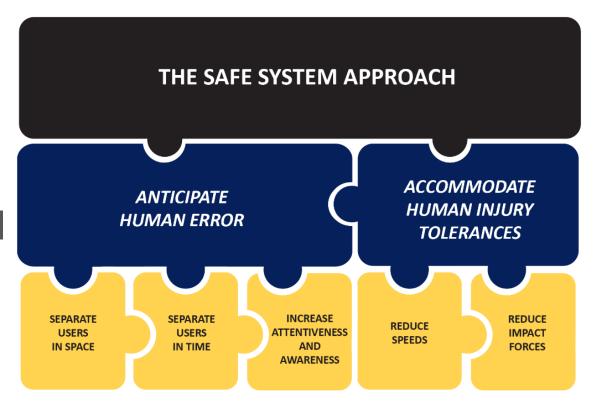






The Safe System Approach

 A decision <u>framework</u> to ensure that if a crash occurs, it won't result in fatal or serious injury



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



LRSP Goals

- LRSP Task Force
 - Brought together interdisciplinary stakeholders
 - Identified Goals and Objectives
 - Continued to provide guidance on LRSP analyses and recommendations

GOAL 1: Engage

GOAL 2: Promote a safety culture

GOAL 3: Implement a data-driven approach

GOAL 4: Prioritize roadway safety actions

GOAL 5: Safer roadways for all



Related Plans in Lafayette

CHAPTER II

CIRCULATION

Although Lafayette experiences a significant amount of regionally-generated through traffic, it is important to achieve a balance between the potentially conflicting goals of improving traffic flow and maintaining and enhancing the City's quality of life and sense of place, particularly in the Downtown Core.

The basic concept of the Circulation Chapter is to make the existing system work as efficiently The basic concept or the Circulated Calipser is to make the Ostonia gystemi work as entracting as possible. This position is based on the assumptions that 1) No substantial expansion of the system or its capacity is envisioned, and 2) Traffic levels within the city are influenced by land use decisions outside the city's control—with significant traffic load generated by the Town of

At the center of the city's traffic congestion is the Laflayette "Y" formed by Moraga Road, Mt. Dublio Boulevard, Oak Hill Road and First Street. The Plan envisions no change to the configuration or overall captor; of these severes and their intersections. The traffic signals that control raffic through the "Y" and along Mt Dublio Boulevard will be designed to balance the most of velocitate traffic and podestrates. In areas xoay from these intersections, the balance

PUBLIC PARTICIPATION

Traffic is a highly sensitive issue in Lafayette. Citizen involvement and participation in the circulation planning process will enable residents to let the City know of their needs, share their does, and bring about positive change that would benefit the commentity at large. It is important that the public is fully informed and participates in discussions about proposed chapeans to the croud-term assets men.

Effective public participation depends on several key factors. The public must receive clearly written information early in the planning process. The format chosen, whether small neighborhood workshops or community wide town hall meetings, should reflect the amount of

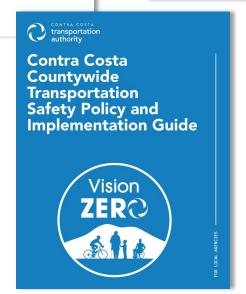
CIRCULATION CHAPTER

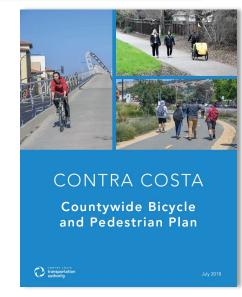
City of Lafayette Master Walkways Plan



Adopted June 28, 1999 Appendices Revised February 27, 2006 Project List Updated March 10, 2008; July 14, 2014; October 26, 2015







CITY OF LAFAYETTE BIKEWAYS MASTER PLAN

Adopted September 25, 2006

Prepared by Alta Planning + Design August 18 2006

COMMISSION AGENDA ITEM 10a

MTC Resolution No. 4400: Regional Safety / Vision Zero (VZ) Policy Recommendation for adoption of MTC Resolution No. 4400: Regional Safety/Vision Zero (VZ) Policy.

Traffic safety is a significant transportation challenge globally, nationally, and regionally, in the United States, over 30,000 people are killed annually in traffic collisions. These traffic deaths disreportationally affect those in communities of color, low-success communities, youth, the olderly and those walking and bining. The lot of MFOs in addressing traffic safety is receiving increasing attention as local or MFOs in distortions across the country acknowledge the traget and preventable loss of fives on our randowny and are adoptived. Yet goals and princeples.

Over 400 failulines and 2,000 sensors imprises occur on Bip. Area mode each year of the sold mobility in the region. While Bip. Area cincle have exacted to control the treat for too after mobility in the region. While Bip. Area cincle have exacted to control the treat for failulines and sensors superies. MTC and to motive and facilities can describe storage experiences in the control of the failules of avaitatee resources to support term. Audinonany, rederal guiudance requires MLC to adopt regional targets for road safety on an annual basis, and MTC has adopted three rounds of regional safety targets to date. Data-driven regional safety efforts will help us make progress in meeting our "Towards Zero Deaths" targets for fatalities and serious injuries by 2030.

The MTC Regional Safety/VZ Policy establishes a region-wide policy of intent to In MIL (Regness Sately) V. Policy establishes a regner-wide policy of initial to work with our partiest regneries to reconcuping and support actions to usuals eliminate which will be supported by the properties of the properties of the properties of the properties of that MIC is uniquely positioned to facilitate region-wide safety planning and confination, MIC is attractly equired to adopt safety performance measures and targets, and this policy will augment this responsibility by providing assistance to local jurisdictions towards our regional safety goals. The policy establishes a framework of principles and actions to guide MIC staff in working towards the policy goal as a summarted below:

- Provide regional leadership to promote safety, engaging and incentivizing leadership across jurisdictions to prioritize safety and work towards aligning funding policy with safety goals
- funding policy with safety goals.

 2. Apply a data driven approach to inform safety policy and strategic use of available funds and resources. Regional safety data will be boused at MTC so that local jurisdictions can benefit from consistent and reliable data.

 3. Promote equity in regional safety policies by considering and analyzing impacts on communities of concern and protecting valuerable readway users,
- such as pedestrians and bicyclists.

 Support beneficial safety policies and legislation that target evidence-based solutions to safety problems.

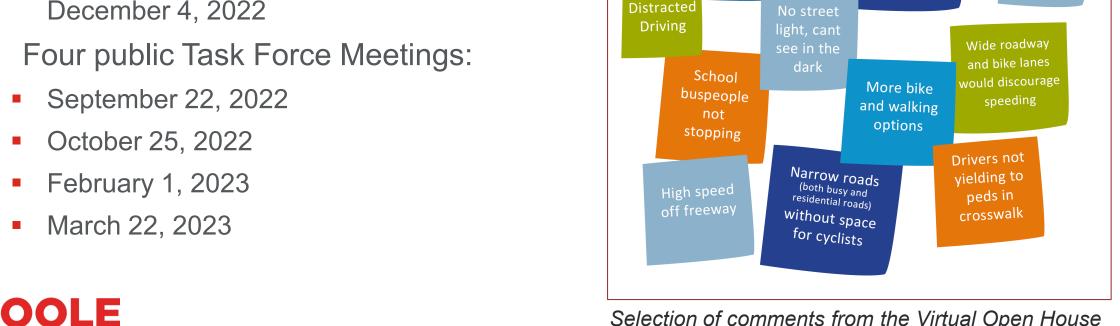




What Goes Into A Local Road Safety Plan?

Community Engagement

- Virtual Open House
 - December 1, 2022
- Web Map Survey
 - October 24, 2022 December 4, 2022



Running

red lights

Lack or

inadequate

walkways

Selection of comments from the Virtual Open House

Lower

speed

Rolling

stops,

not fully

stopping

Speed

humps

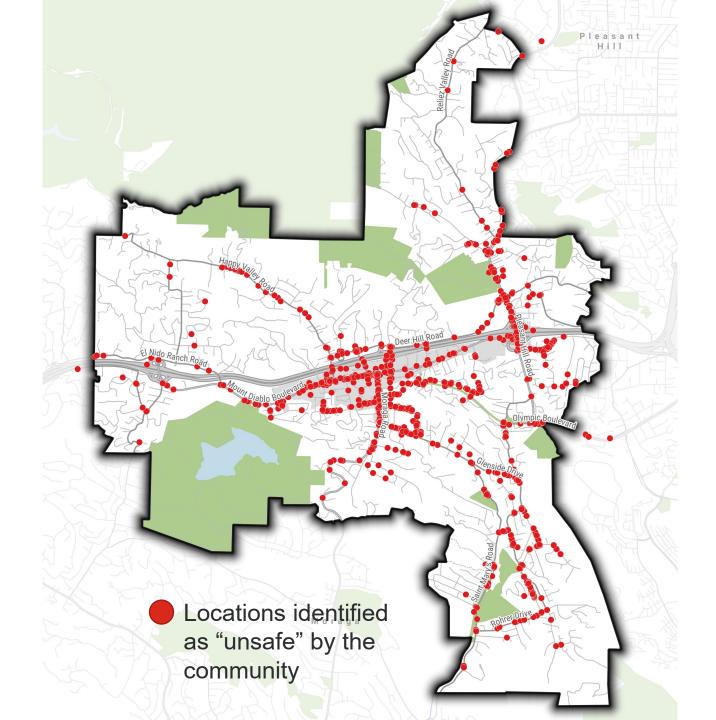
around



Web Map Results

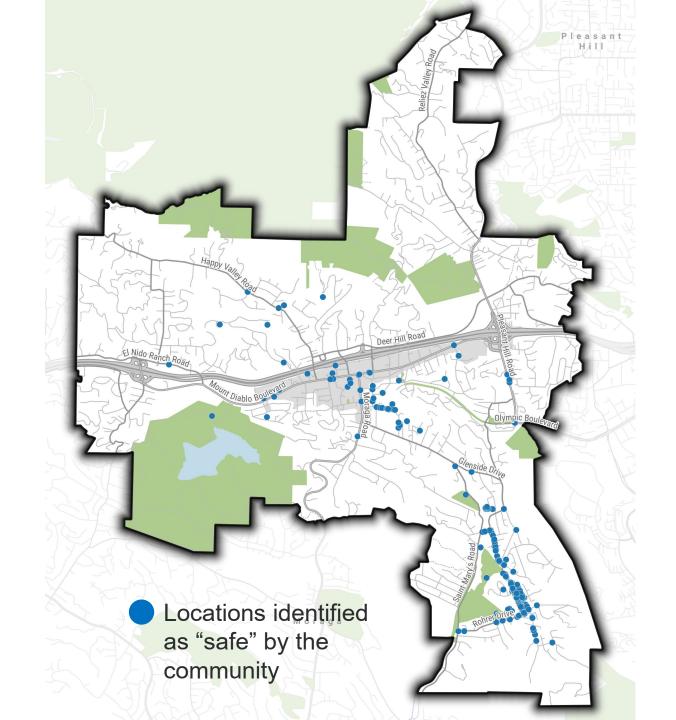
- Locations where respondents felt roadway conditions were unsafe
 - 1,200 points
 - Most cited location:
 - Mt. Diablo Blvd and Moraga Rd





Web Map Results

- Locations where respondents felt roadway conditions were safe
 - 275 points





Engagement Key Takeaways

- Roadway factors of concern:
 - Dangerous intersections, lack of visibility at uncontrolled locations
 - Speeding and high posted speed limits
 - Safety needs for pedestrians and bicyclists (more sidewalks/separation from vehicles, improved crossings)



Engagement Key Takeaways

- Unsafe roadway behaviors identified:
 - Speeding
 - Distracted driving/walking
 - Roadway users not following or knowing rules of the road



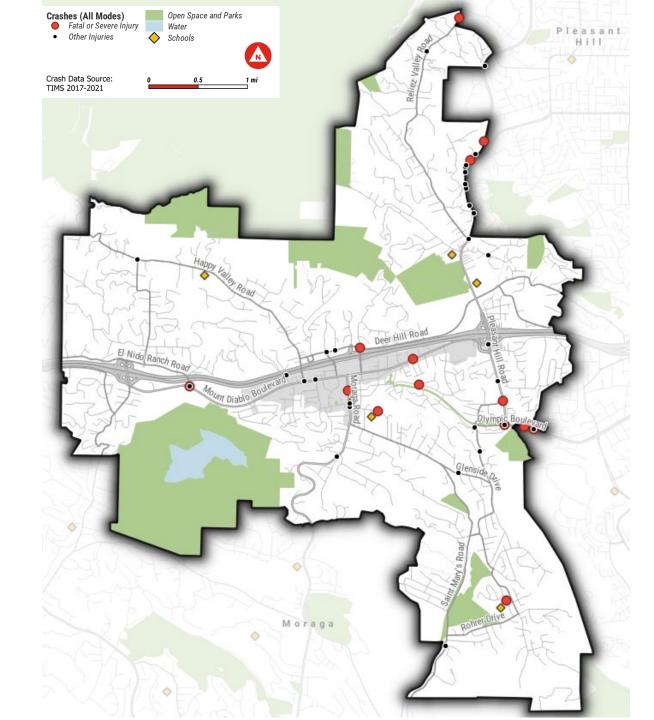
Engagement Key Takeaways

- Key locations of concern:
 - Downtown (Mt. Diablo Blvd/Moraga Rd)
 - Near schools
 - Winding roads, such as Happy Valley Rd
 - Streets near bus stops and BART



Crash Analysis

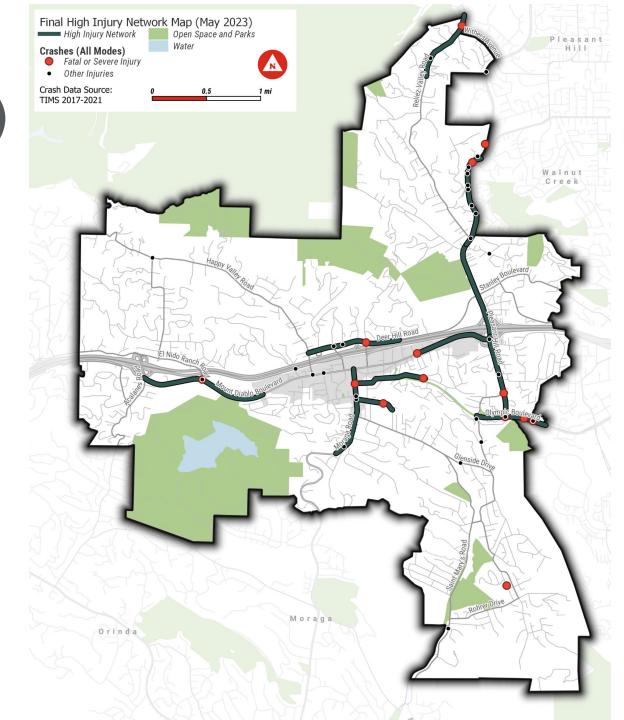
- 47 total crashes (2017-2021)
 - 14 fatal or severe (KA) crashes





High Injury Network (HIN)

 Established through analysis of crash injury severity and density





High Injury Networks Segments

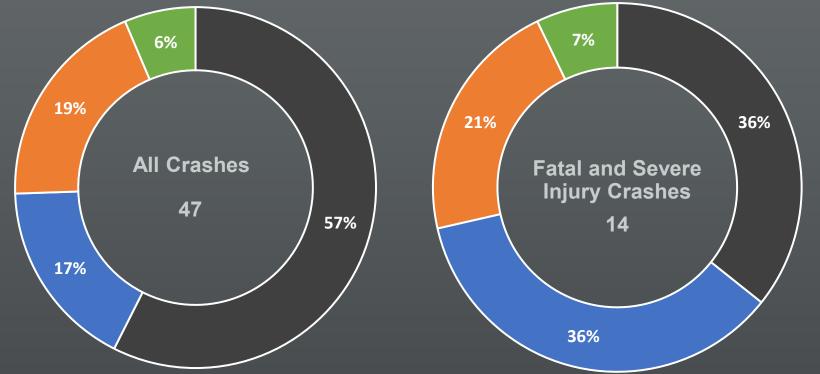
| HIN Segment | Extent | | | | |
|------------------------|---|--|--|--|--|
| Olympic Boulevard | between Reliez Station Road and Newell Court | | | | |
| Moraga Road | between Mount Diablo Boulevard and Old Jonas Hill Road | | | | |
| School Street | between Moraga Road and Topper Lane | | | | |
| Reliez 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 | | | | |



Crash Analysis - Key Takeaways

People walking, biking, or riding a motorcycle are particularly

vulnerable





Pedestrian

Motorcycle

■ Motor Vehicle

Bicycle

Crash Analysis - Key Takeaways

63% of all bicyclist crashes resulted in a KA

33% of all both pedestrian and motorcycle crashes resulted in a KA

of all motor vehicle crashes resulted in a KA



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



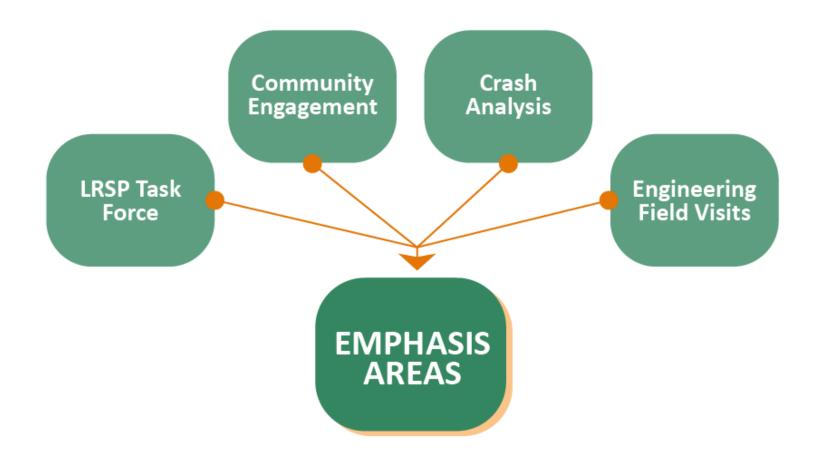
Moraga Rd and Mt. Diablo Blvd





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

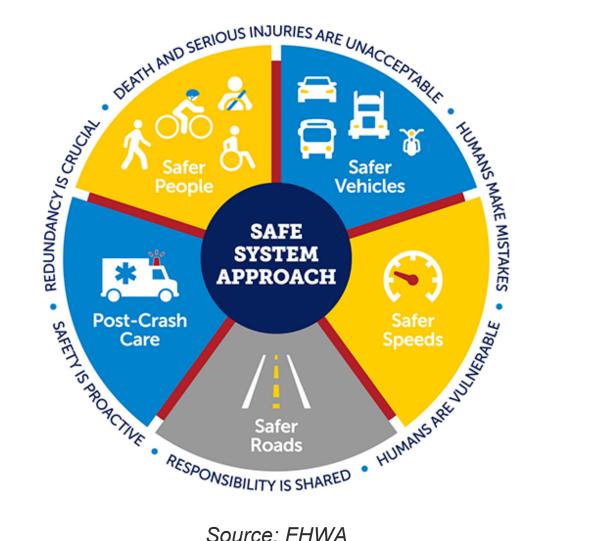
Safety Strategies





Safety Strategies

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







Policy, Program, and Practice Actions

Add suggested additions, clarifications and removal of actions to inform the final Plan – Adobe Cloud document

- 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!



Add suggested additions and clarifications to inform the final Plan – Adobe Cloud document

- Determine the most effective safety countermeasures to be installed to HIN segments
 - Evaluate crash causes, modes involved through the Safe System Approach Framework

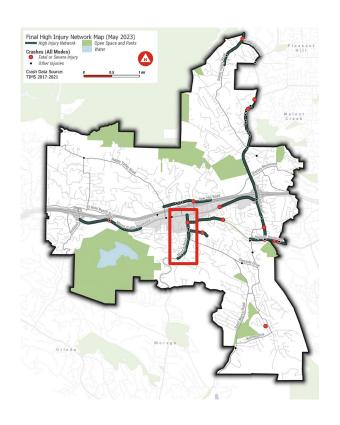
Example: Crash factors identified from Moraga Rd Crashes (2017 – 2021)

| Project | Limits | # of Fatal | # of KSI | Total Crashes | Leading Crash Types | Violation Type | Modes Involved in Crashes | Intersection? | Signalized? |
|----------------|---|---------------|-------------|------------------------|---|-----------------------------|---------------------------------|---------------------|-------------|
| Moraga Road | Mount Diablo Boulevard to Old Jonas Hill Road | 1 | 1 | i Fatai | Ped Crossing in Crosswalk at Intersection, MV Making Left Turn | Fail to yield to pedestrian | 3 Pedestrian Crashes | Moraga Boulevard | Yes |
| | | | | 3 Complaint of Pain | Ped Crossing in Crosswalk at Intersection, MV Making Right Turn | Fail to yield to driver | | Brook Street | |
| | | | | | IINTERSECTION MIV PROCEEDING | Other Improper Driving | | | |
| | | | | | Rear End, Multi-Motor Vehicle | Unsafe passing | 1 Motorist Crashes | Sege | ment |



- Ex: Moraga Road
 - Crash concerns based on crash history:
 - pedestrian crossings at crosswalks
 - vehicle turning
 - failure to yield







- Ex: Moraga Road
 - Crash concerns based on crash history:
 - pedestrian crossings at crosswalks
 - vehicle turning
 - failure to yield

- Possible safety countermeasures from toolbox:
 - High-visibility crosswalks
 - Leading Pedestrian Intervals
 - Curb extensions









- Ex: Moraga Road
 - Review community input and prior planning work for needs and ideas
 - Review chosen safety countermeasures from the SSA framework, refine as necessary

- Implement safety countermeasures along the HIN segment
- Regularly evaluate performance of implemented safety countermeasures: expand to other locations or adjust approach as necessary

Example possible safety countermeasures









Citywide Systemic Roadway Improvements

Add suggested additions, clarifications, and removals to inform the final Plan – Adobe Cloud document

- 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



Public Comment



1'OOLE DESIGN



Thank you

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