



MODESTO SAFE STREETS FOR ALL

Safety Task Force Kick-Off Meeting
September 30, 2024



OPENING REMARKS

Setting the Stage for Safety Change



Role of the Task Force

The Safety Task Force (STF) will oversee the development of Modesto's Safe Streets for All Program along with its implementation and monitoring. The STF will help achieve the following:

- Break down siloes and collaborate across disciplines
 - Incorporate diverse perspectives and expertise
 - Build momentum and capacity
 - Create safety champions at the highest levels of leadership
-



Task Force Introductions

- Please share your name, organization, and role
 - What's your favorite street in Modesto?
-



SAFE SYSTEM APPROACH

Context and Overview

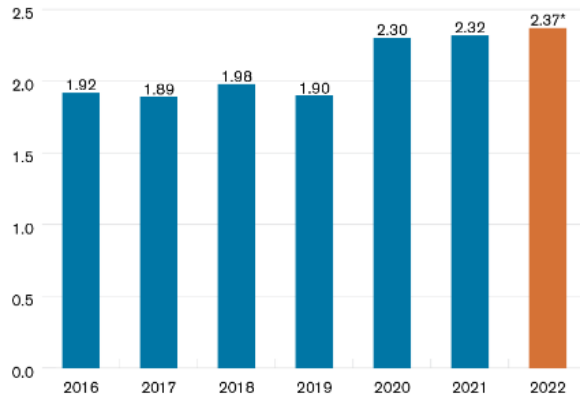


National Safety Context

Pedestrian Fatality Rate Increased Yet Again in 2022

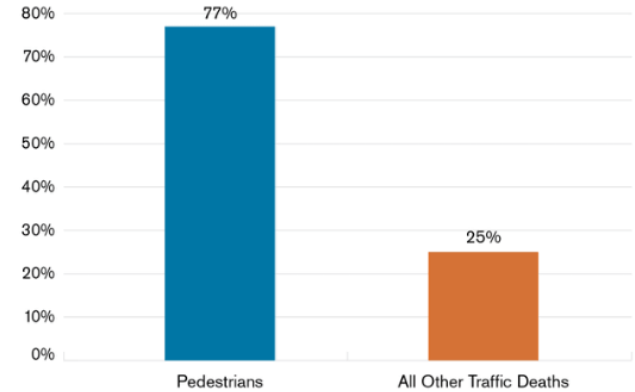
U.S. Pedestrian
Fatality Rate
per One
Billion VMT

* Projected



Pedestrian Deaths Are Increasing Faster Than All Other Traffic Fatalities

Percent Increase
in Number of
Traffic Deaths,
2010-2021

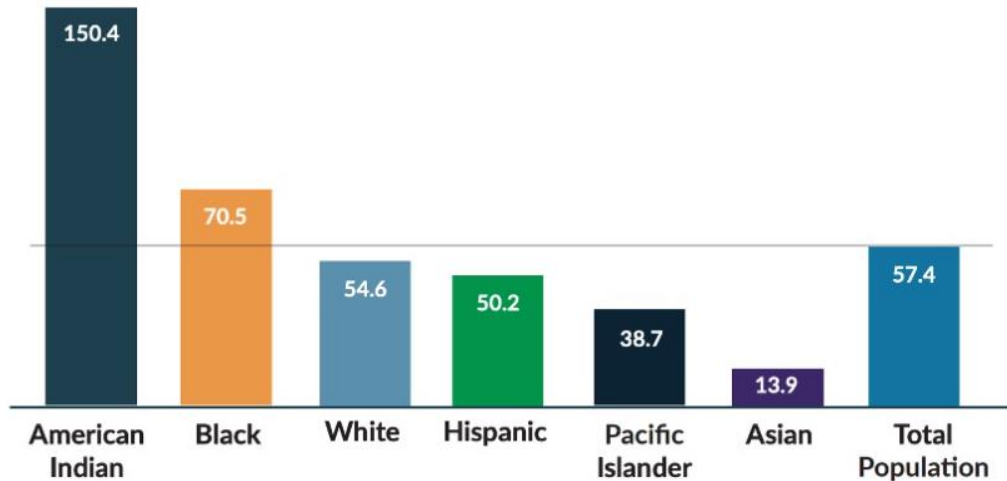




National Safety Context

And disproportionately for equity priority communities

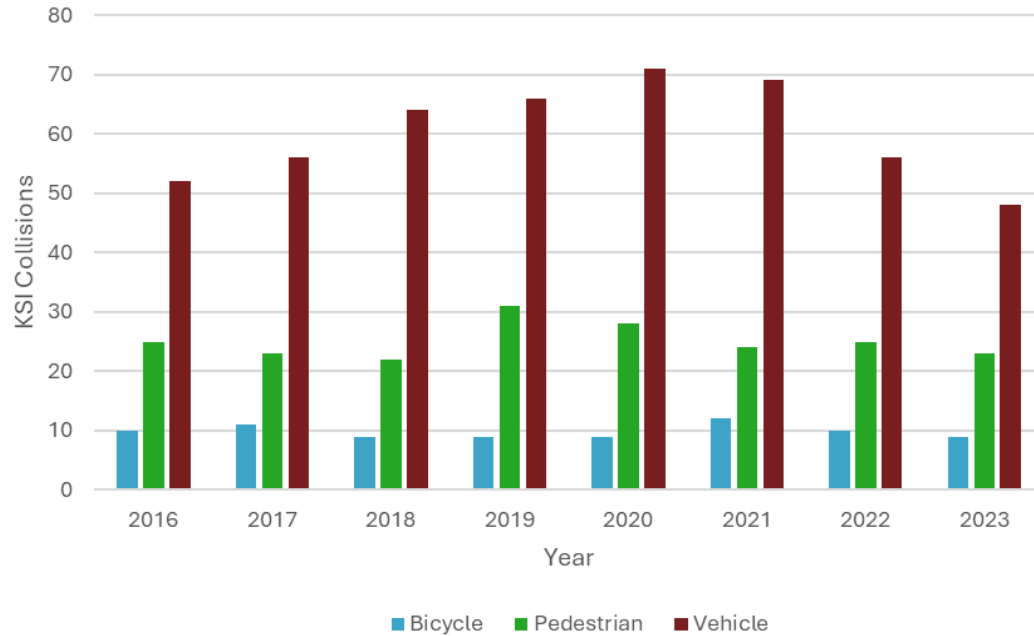
Total U.S. Traffic Deaths per 100,000, 2016-2020



Source: U.S. traffic deaths disproportionately affect Black and American Indian people. Source: U.S. Census Bureau, 2016-2020 American Community Survey 5-Year Estimates; Fatality Analysis Reporting System (FARS): 2016-2020 Final File and 2021 Annual Report File (ARF)



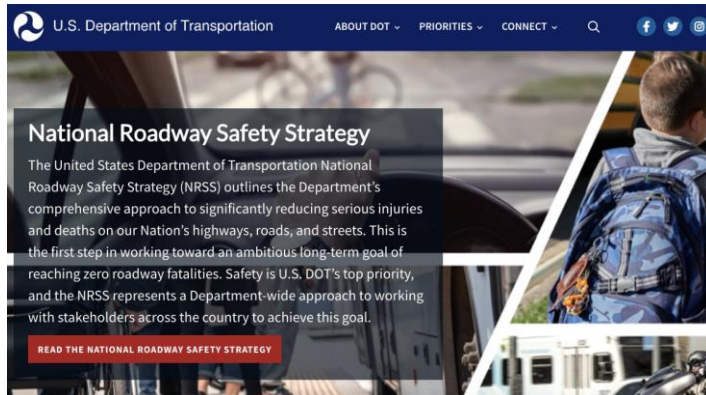
Local Crash History





National Commitment

Critical USDOT Leadership is acknowledging and addressing this



U.S. Department
of Transportation

National Roadway Safety Strategy

United States Department of Transportation | January 2022



State Commitment

Caltrans has also aligned with the Safe System Approach

State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

Memorandum

To: DEPUTY DIRECTORS
DISTRICT DIRECTORS
DIVISION CHIEFS

Date: January 16, 2024

From:

LISA RAMSEY *Lisa Ramsey*
Acting Chief
Division of Design

Subject: **DESIGN INFORMATION BULLETIN-94 COMPLETE STREETS: CONTEXTUAL DESIGN GUIDANCE**

Caltrans recognizes the importance of Complete Streets in supporting our mission to provide a safe and reliable transportation network that serves all people and respects the environment. In the 2021 Director's Policy on Complete Streets (DP-37), the California Department of Transportation (Caltrans) committed to the design and development of comfortable, convenient, and connected complete streets facilities for people walking, biking, and taking transit or passenger rail. This Design Information Bulletin (DIB) is issued in accordance with DP-37 and is effective immediately. DIB-94 represents the latest significant step in the implementation of that policy and meets a critical need by providing new flexibility in the design of context-sensitive facilities that serve travelers of all ages and abilities.

California Department of Transportation

Director's Policy

Number: DP-36

Effective Date: February 15, 2022

Supersedes: New

Responsible Program: Division of Safety Programs

Title Road Safety

Policy

California Department of Transportation (Caltrans) has a vision to eliminate fatalities and serious injuries on California's roadways by 2050 and provide safer outcomes for all communities. To realize this vision Caltrans commits to:

- A safety first mindset prioritizing road safety.
- Prioritize the elimination of fatal and serious injury crashes through our existing safety improvement programs along with development and implementation of new programs to enhance the safe use of our roadways.
- Eliminating race-, age-, ability- and mode-based disparities in road safety outcomes.

Background

Caltrans has a vision of zero road fatalities and serious injuries by 2050, as committed to in the:



Safe System Approach

The Safe System approach aims to eliminate fatal and serious injuries for all road users by:



Accommodating human mistakes

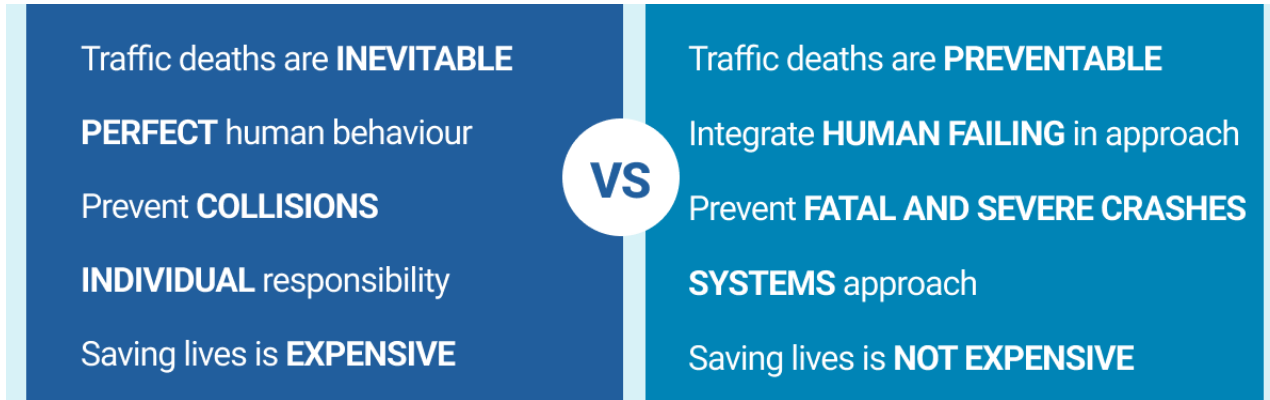


**Keeping impacts on the human body
at tolerable levels**

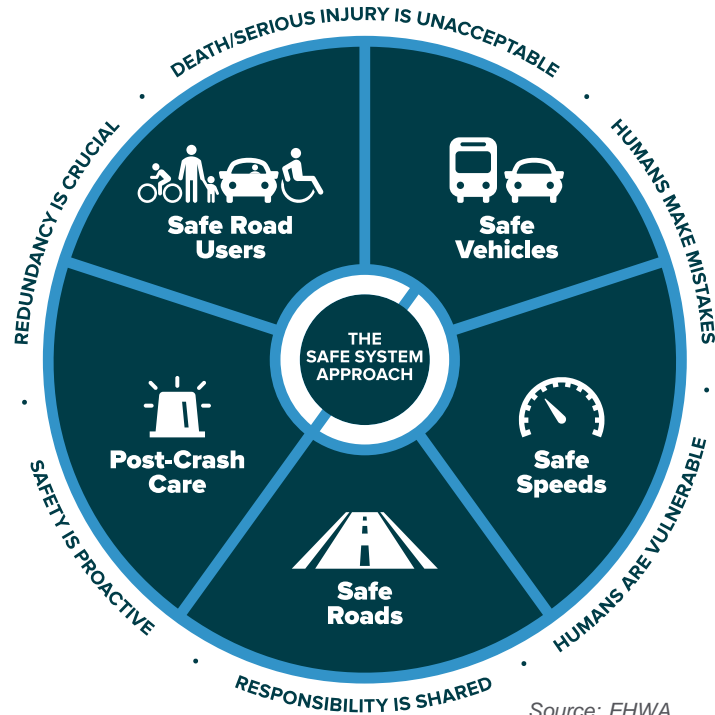


Safe System Approach

The Safe System Approach is a Paradigm Shift



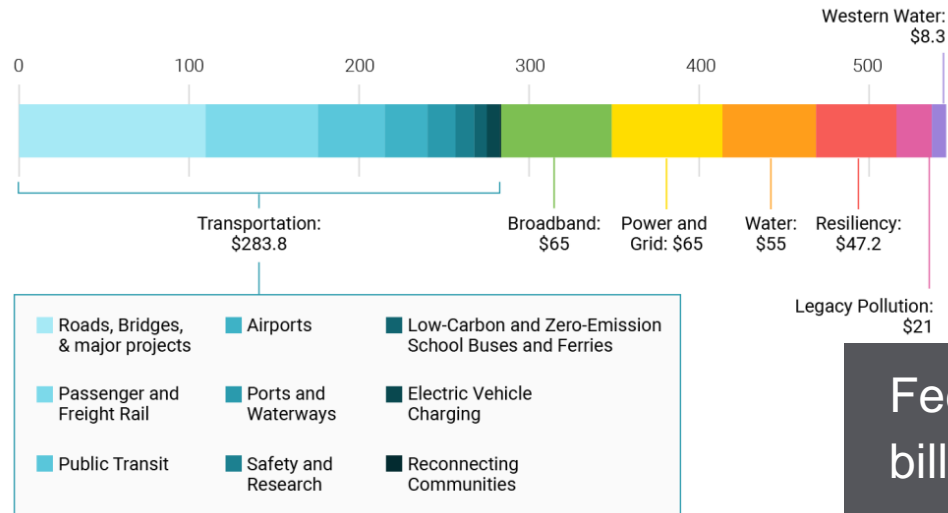
Safe System Approach



Source: FHWA



Safe Streets and Roads for All (SS4A) Program



S | S
— | —
4 | A

Federal infrastructure law established \$5 billion for Safe Streets & Roads for All grant program over 5 years (2022-2027) to support the **National Roadway Safety Strategy**.



Kinetic Energy Risk

The Core Problem: Kinetic Energy Risk

- Exposure
- Likelihood
- Severity





Safe System Pyramid

INDIVIDUAL
EFFORT



POPULATION
HEALTH IMPACT

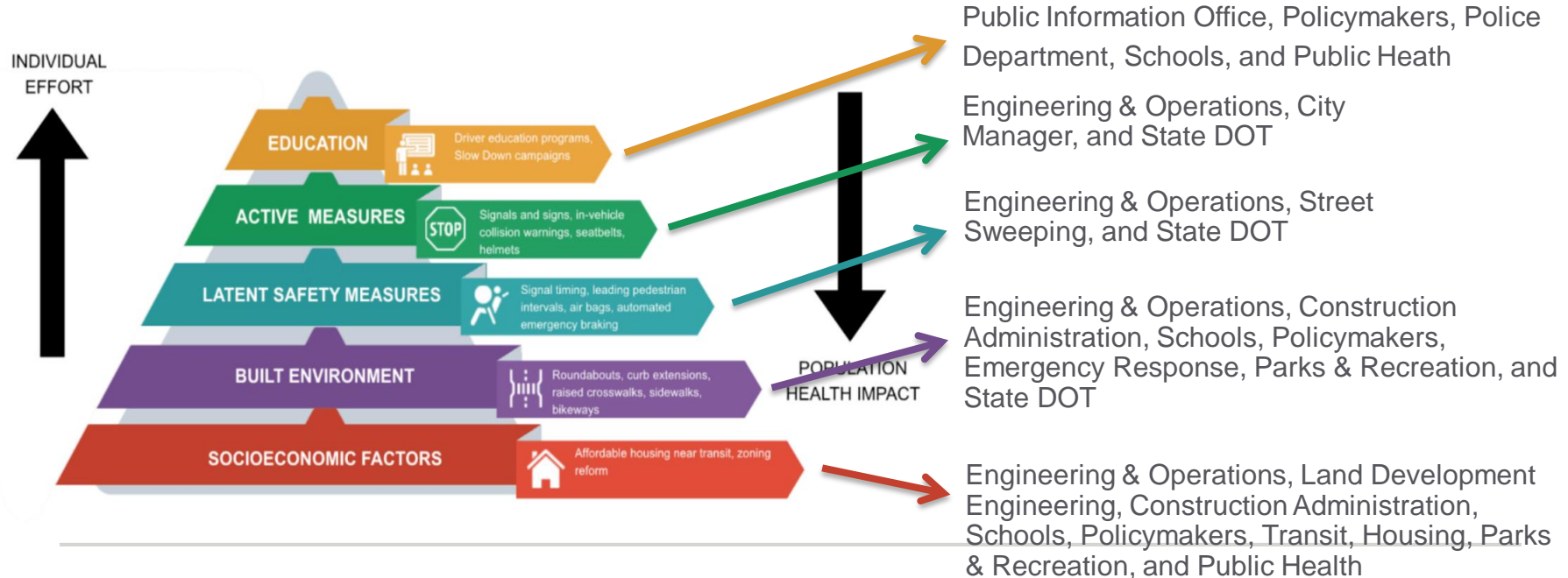


- Concept and Development
- Hierarchy of Strategies: Effort vs. Impact
- Public Health-Based Intervention Framework



Safe Streets and Roads for All (SS4A) Program

The Safe Systems Pyramid – Stakeholders

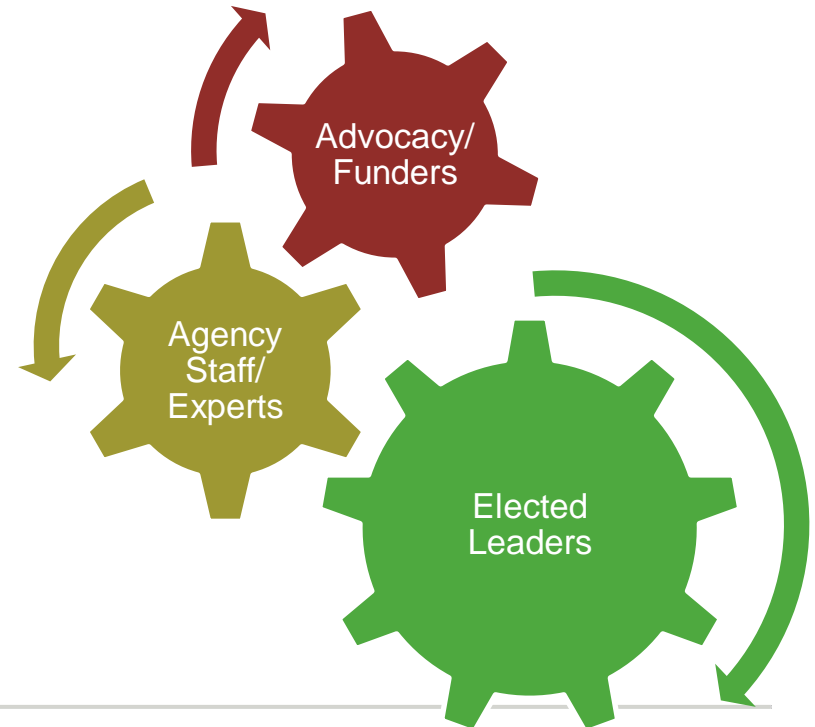




Modesto Safe Streets for All Task Force

Focusing on change management means:

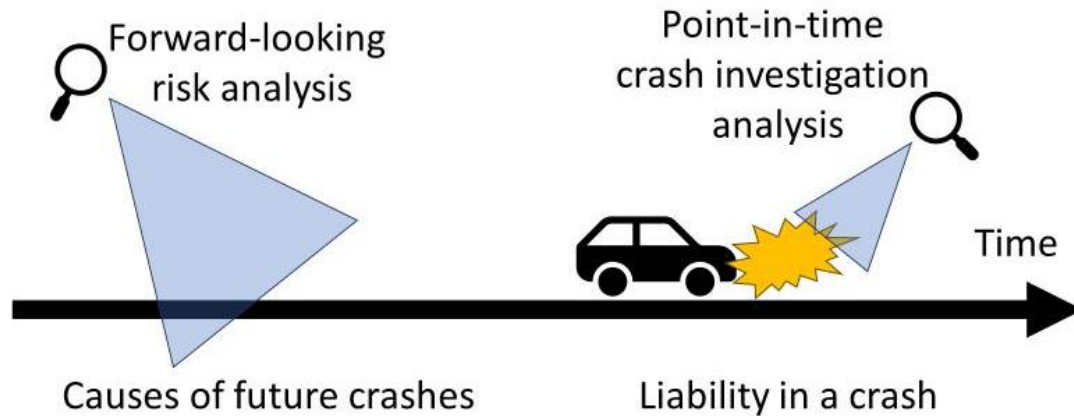
- ✓ Learning from epidemiologists
- ✓ Forming the “magic triangle”
- ✓ Getting out of our own way





Upstream Interventions

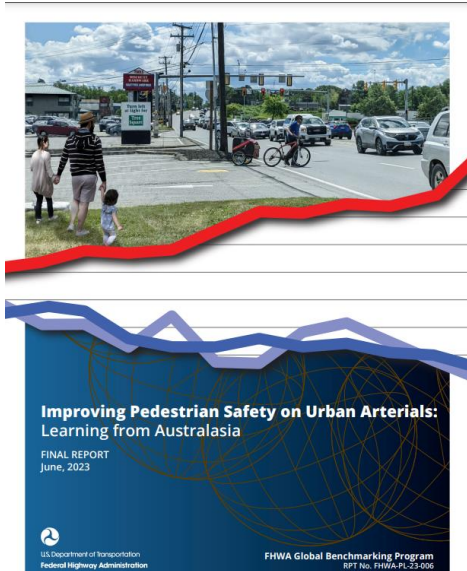
How Should We Focus on Prevention?



Flipping the 'E' to a 'W'

- Introduction to the 'Ws' of Safety
 - Who, Where, Why, When, What, Which
- Extending the Collision Timeline to Understand Root Causes

Movement & Place Framework

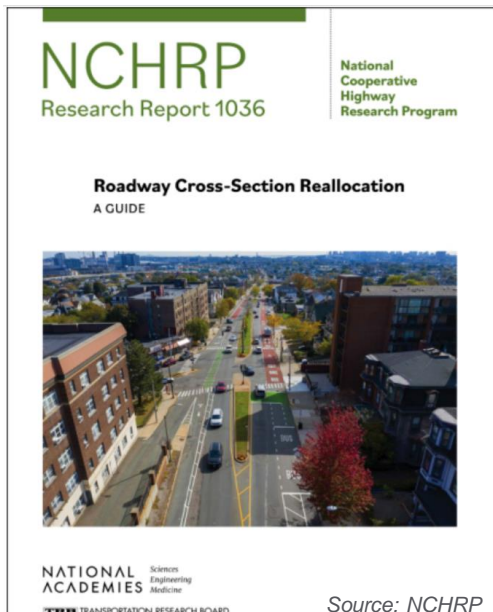


Source: FHWA



Source: Transport for New South Wales (2016).

Complete Streets Tradeoffs



Source: NCHRP

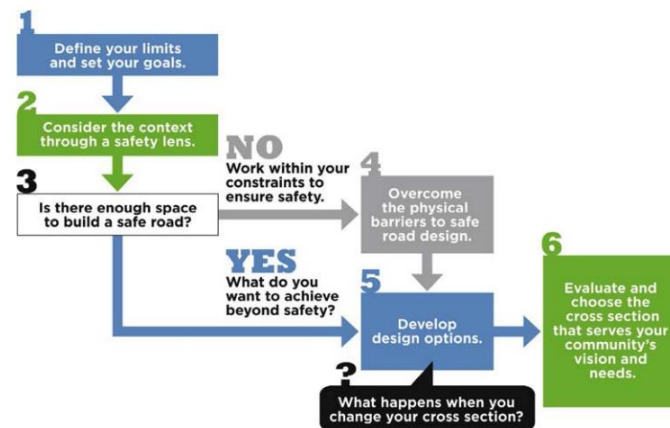


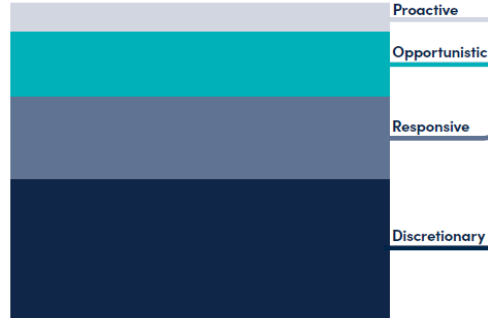
Figure S-1. Decision-Making Framework for Roadway Cross Sections.

Copyright National Academy of Sciences. All rights reserved.



Funding Strategies

Existing Spending



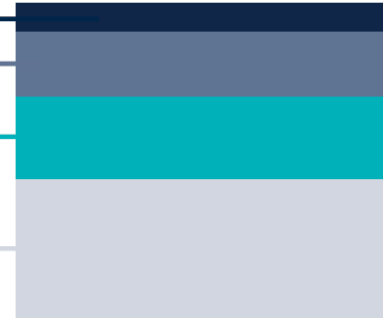
PROACTIVE FUNDING
SOURCES INCLUDE SAFE STREETS FOR ALL GRANTS, SAFE ROUTES TO SCHOOL GRANTS, HIGHWAY SAFETY IMPROVEMENT PLAN (SYSTEMIC FOCUSED), AND CAPITAL SPENDING PLAN (CSP).

OPPORTUNISTIC FUNDING
SOURCES INCLUDE REPAVING, AGENCY COLLABORATION AND COST SHARING, DEVELOPER CONTRIBUTIONS, AND OTHER CAPITAL PROJECTS (E.G., MAINTENANCE)

RESPONSIVE FUNDING
SOURCES INCLUDE HIGHWAY SAFETY IMPROVEMENT PLAN GRANTS (HOT SPOT FOCUS), AND VISION ZERO HIGH INJURY NETWORK PROJECT FUNDS.

DISCRETIONARY FUNDING
SOURCES INCLUDE ANNUAL CAPITAL PLAN SURPLUS BUDGET (AS APPLICABLE) AND OTHER ANNUAL/ ONGOING FUNDING SOURCES

Future Spending



Source: NDOT



Key Considerations for Plans

Must Include

- Where are the highest risk locations for severe injuries and fatalities
 - Crash data history
 - Community input
 - Kinetic energy risk assessment of conflicts for:
 - Exposure
 - Likelihood
 - Severity
- Who is most affected by these risks?
- What is the most impactful response?

Must Address

- What pivot is needed to do the most impactful things?
 - Funding Policies
 - Design decisions
 - Partnerships with other agencies
- Who are the champions?
- What projects/efforts need to stop for safe system consistency?
- How will accountability be checked?



DISCUSSION



Discussion



1

What about the paradigm shift to a safe system approach resonated with you?



Discussion



- 1 What about the paradigm shift to a safe system approach resonated with you?
 - 2 What barriers or challenges do you anticipate when making this shift?
-



Discussion



- 1 What about the paradigm shift to a safe system approach resonated with you?
 - 2 What barriers or challenges do you anticipate when making this shift?
 - 3 Who else should be on the task force?
-



SAFETY PLANNING IN MODESTO

Review of Past Planning Efforts

Systemic Safety Analysis Report (2021)

PROJECT 9 ADDRESSES SYSTEMIC PROFILES 1 2 3 4 6 8 9 10

OAKDALE ROAD: PHASE 1 CELESTE DRIVE TO LANCEY DRIVE

Existing Conditions

Oakdale Road from Celeste Drive to Lancey Drive connects residential areas to a number of pedestrian generators, including Orchard Elementary, Saint Joseph's Church, and nearby commercial. This stretch of Oakdale Road has experienced a number of pedestrian collisions and is a relatively high-stress facility for pedestrians. The intersection of Celeste Drive and Merle Avenue is complex and right-of-way may not be clear. The northern crossing at this intersection is pushed north such that pedestrians may not be easily visible to westbound traffic. The residential access creates numerous conflict points along the corridor. This project aims to improve pedestrian safety by simplifying potential conflict points along the corridor, enhancing pedestrian visibility, and improving accessibility.

Project Recommendations

- Redesign Oakdale Road/Merle Avenue intersection. Includes moving northern crosswalk south of 8823 Oakdale Road driveway, reducing driveway curb cut, installing protected left turns for the westbound approach, and signage driveway crossing on west side.
- Implement leading pedestrian intervals at the Oakdale Road intersections with Merle Avenue and Lancey Drive.
- Install blank-out no right turn signs on all approaches at Merle Avenue and Oakdale Road, and at Lancey Drive and Oakdale Road.
- Install raised median along Oakdale Road from Merle Avenue to Celeste Drive and restrict lefts out from Celeste Drive onto Oakdale Road.
- Install a new pedestrian crossing on the north leg of Celeste Drive and Oakdale Road with a Pedestrian Hybrid Beacon and median refuge.
- Install new signal interconnect from Oakdale Road to Merle Ave.

4
TARGET MODES
KSI, 2011-2035

\$891,022

TOTAL COST, 90% (\$802,240) HSIP-FUNDED

\$16,955,242

TOTAL BENEFITS

19.02

B/C RATIO

Cost	
Protected left turn phase (where left turns already exist)	\$80,000
Leading Pedestrian Interval (LPI)	\$0,000
Install raised median with directional opening and pedestrian refuge	\$80,000
Upgrade pedestrian crossings (crosswalks, ADA ramps, signage)	\$50,440
Pedestrian Hybrid Beacon (PHB)	\$150,000
Signal timing improvements	\$103,000
Contingency and non-construction costs	\$419,582
Total	\$891,022



- Plan Purpose
 - Identify opportunities for the City to improve safety for all modes
- Plan Components
 - Safety Data Analysis
 - Projects
 - Funding & Implementation



Local Road Safety Plan (2022)

Vision and Goals

Modesto Safety Vision Statement

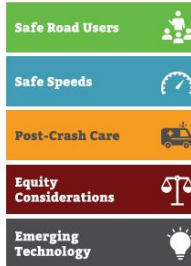
Proactively implement multimodal transportation safety improvements to eliminate fatal and severe injuries throughout the City of Modesto

The Modesto Safety Vision Statement was developed based on work completed through the SSAR, including stakeholder feedback and input from city staff. The city's vision statement sets a concise yet comprehensive framework to guide the city's investments in multimodal safety, education, emergency services, and enforcement.

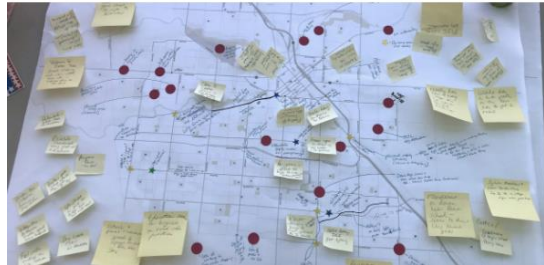
- 1 Implement roadway and intersection improvements that increase the visibility of road users, especially for people walking and biking.
- 2 Enhance roadway crossings, especially near schools and other high pedestrian activity areas, to promote and support safe travel for people walking and biking.
- 3 Increase the number of roadway and intersection improvements that promote safe turning movements of motorists at intersections and along high-speed roadways.
- 4 Encourage people to drive at lower speeds with roadway design improvements and signage.
- 5 Increase multi-jurisdictional collaboration through enhanced technology (such as shared databases) among city agencies, health care, and enforcement on post-crash care.
- 6 Discourage motorists from driving under the influence through educational and enforcement programs, and decrease the severity of DUI collisions through roadway infrastructure improvements.

Counter-measures

The Modesto SSAR provides an in-depth guide on engineering countermeasures for each collision profile, including decision-making frameworks for safety improvements, detailed descriptions of countermeasures with cost estimates, and feasibility and implementation considerations for each engineering countermeasure. The detailed information can be found in Chapter 3 of the SSAR. This section presents additional safety countermeasures to include Road Users and Post Crash Care, supplementing the SSAR's engineering focused countermeasures on roadway design and speed reductions. Vehicle design does not fall within the city's current purview, though they acknowledge opportunities to consider autonomous vehicle planning and ITS technologies with future safety efforts.

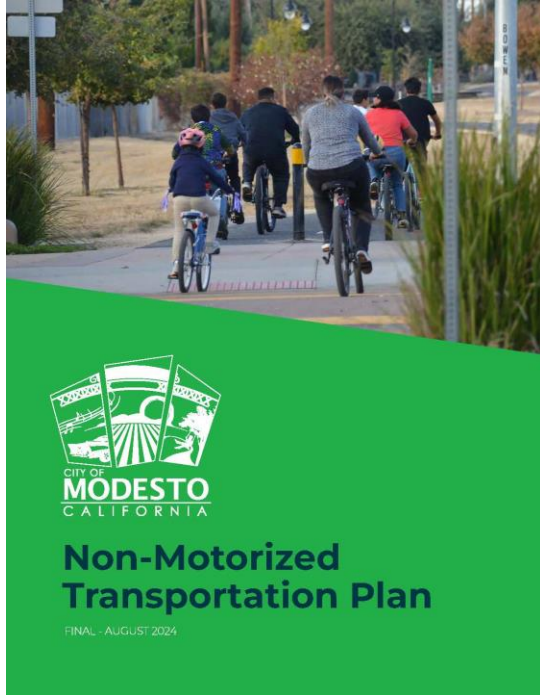


- Plan Purpose
 - Build on the SSAR
- Plan Components
 - Safe System Approach
 - Vision & Goals
 - Other "E's"





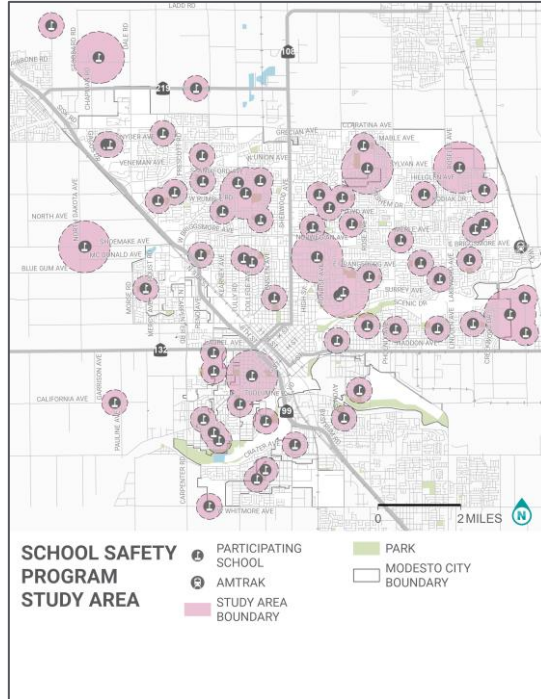
Non-Motorized Transportation Plan (2024)



- Plan Purpose
 - Guiding document to create a transportation system for all roadway users
- Plan Goals
 - Connectivity
 - Safety
 - Accessibility
 - Education and Encouragement
 - Quality of Life
 - Funding and Implementation



School Program Safety Study (2024)



- Plan Purpose
 - Identifies actionable recommendations to improve safety for people walking and biking near 68 schools in and around Modesto
- Plan Focus Area
 - Roadways within $\frac{1}{4}$ mile of elementary and middle schools and $\frac{1}{2}$ mile of high schools.
 - Results are described by High School Catchment Area



MODESTO SAFE STREETS FOR ALL PROGRAM

Project Scope and Goals



Modesto Safe Streets For All Overview

- **Action Plan: Goals**

- Establish funding eligibility
- In-depth, contemporary analysis
- Robust public engagement
- Prioritize investments and implementation

- **Safety Education Campaign: Goals**

- Test strategies
 - Build awareness
 - Change behavior
 - Measure performance
 - Establish scalable public safety campaign
-



Modesto Safe Streets For All: Action Plan

Action Plan Elements	Activities and Deliverables
Leadership Commitment + Goal Setting	<ul style="list-style-type: none">• Support Modesto with commitment language to be adopted by City Council• Help Modesto determine a target date for achieving zero roadway fatalities and serious injuries
Planning Structure	<ul style="list-style-type: none">• Identify stakeholders to serve on the Safety Task Force• Gather Task Force feedback to inform Action Plan development
Safety Analysis	<ul style="list-style-type: none">• Develop a systemic safety analysis• Identify a High Injury Network (HIN)• Prioritize HIN implementation
Engagement + Collaboration	<ul style="list-style-type: none">• Organize a robust community engagement effort• Partner, empower, and collaborate with community leaders and groups• Provide detailed engagement summary reports



Modesto Safe Streets For All: Action Plan

Action Plan Elements	Activities and Deliverables
Equity Considerations	<ul style="list-style-type: none">• Develop an equity analysis• Recommend equity-informed policies, programs, and projects
Policy + Process Changes	<ul style="list-style-type: none">• Assess Modesto's existing safety practices• Benchmark existing practices• Develop a comprehensive recommendation framework
Strategy + Project Selections	<ul style="list-style-type: none">• Identify specific actions• Develop infrastructure, behavioral, and operational safety countermeasures• Develop 10% concept plans
Progress + Transparency	<ul style="list-style-type: none">• Identify evaluation performance measures• Develop a Year 1 Implementation Workplan• Educate community partners and the public on how they can stay involved



Modesto Safe Streets For All: Safety Education Campaign

Proposed Work Scope

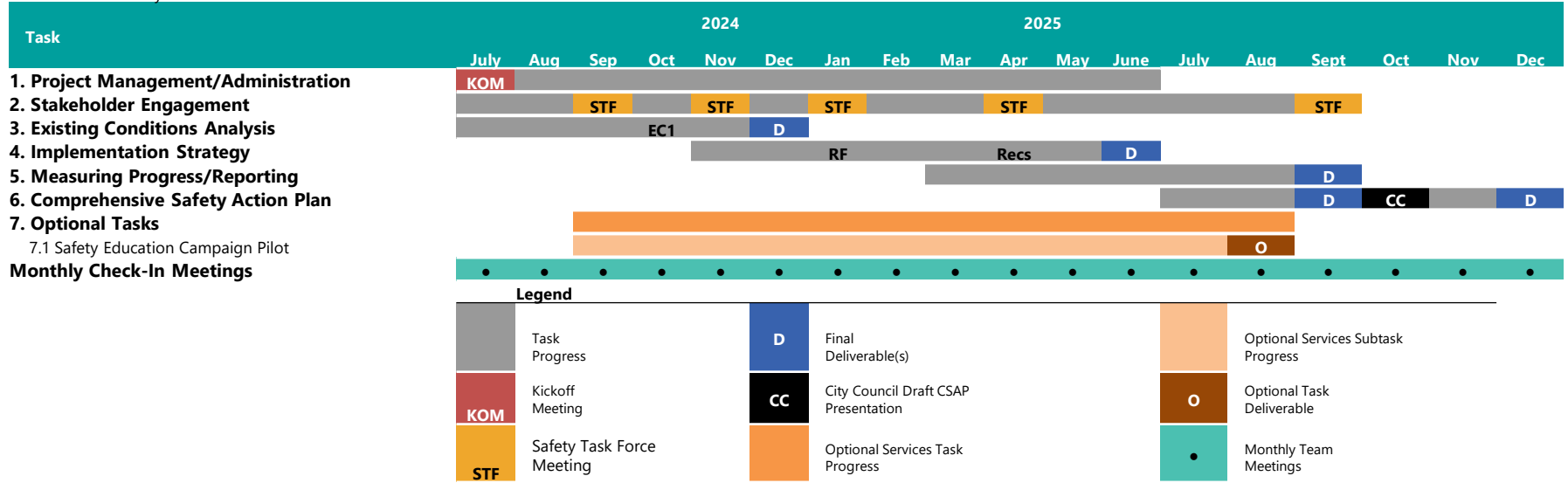
- Review research and develop recommendations
 - Define goals/objectives and “theory of change”
 - Develop marketing plan and campaign concepts
 - Design campaign and produce materials
 - Media procurement and print management
 - Implement, monitor, and optimize campaign
 - Evaluate campaign performance
 - Develop final summary report
-



Modesto Safe Streets For All Program Schedule

Project Schedule

Modesto SS4A Safety Action Plan





Modesto Safe Streets For All Program: Task Force Activities

- Meet five times over the course of the project
 - Review and provide input on key deliverables
 - Help promote public engagement activities
 - Build awareness, momentum, and a culture of safety
 - Support program monitoring and implementation
-



NEXT STEPS



Recent & Upcoming Activities: Fall/Winter 2024

- Stakeholder Engagement Planning and Implementation
 - Develop and launch website and interactive survey map
 - Create collateral material (workshop boards, 2' x 3' printed maps, business cards)
 - Conduct three pop-up workshops and one virtual community workshop
 - Existing Conditions Analysis
 - Develop up to four high-injury networks
 - Create eight collision profiles
 - Conduct a systemic risk analysis
 - Benchmark existing plans/policies
 - Safety Education Campaign Pilot Development
 - Coordinate with findings of existing conditions analysis and recommend campaign focus
 - Conduct information gathering on communication channels, outlets, etc.
 - Develop campaign approach and marketing plan
-



Next Safety Task Force Meeting



Time: Late fall or early winter date for Task Force Meeting #2

Meeting Format: Virtual Meeting

Topic:

- Diving into the data to understand safety trends, areas of priority need, and findings of benchmarking assessment
 - Introduce the Safety Education Campaign Pilot
-



Q&A



CITY OF
MODESTO
CALIFORNIA