



# CALIFORNIA

## HIGHWAY SAFETY IMPROVEMENT PROGRAM

### 2024 ANNUAL REPORT



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## **Disclaimer**

### ***Protection of Data from Discovery Admission into Evidence***

23 U.S.C. 148(h)(4) states “Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for any purpose relating to this section[HSIP], shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location identified or addressed in the reports, surveys, schedules, lists, or other data.”

23 U.S.C. 407 states “Notwithstanding any other provision of law, reports, surveys, schedules, lists, or data compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential accident sites, hazardous roadway conditions, or railway-highway crossings, pursuant to sections 130, 144, and 148 of this title or for the purpose of developing any highway safety construction improvement project which may be implemented utilizing Federal-aid highway funds shall not be subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.”

## Executive Summary

Safety is the top most priority for California Department of Transportation (Caltrans). It has adopted Director's Policy – Road Safety (DP-36) with a vision of eliminating fatalities and serious injuries on California's roadways by 2050 through adoption of the Safe System approach. The federal aid Highway Safety Improvement Program (HSIP) under 23.U.S.C. 148(b) supports DP-36 and is integral to achieving its safety goal.

Caltrans' HSIP Annual Report 2024 briefly describes the role of two of the three key components of California HSIP: California Strategic Highway Safety Plan 2020-2024 (SHSP); and Program of Highway Safety Improvement Projects including projects on the state and non-state highway system.

California SHSP is a statewide-coordinated safety plan that provides a comprehensive framework for reducing fatalities and serious injuries on all public roads. It identifies California's key safety needs and guides investment decisions towards strategies and countermeasures with the most potential to save lives and prevent injuries.

Within the SHSP framework, Caltrans' program of state highway safety improvement projects is governed by structured safety network screening processes; formal investigation procedures; and well-defined safety project development and approval processes. Within the same framework, Caltrans administers California's non-state highway safety program through well-defined, equitable and transparent processes.

Caltrans' state highway safety improvement projects are initiated through a series of periodic network screening programs. These include facility and roadway condition based programs (Table C and Wet Table C) and SHSP safety challenge area-based programs such as Run Off Road; Cross Over Collision, Pedestrian Safety, Bicyclist Safety and Wrong Way Driver Prevention Monitoring Programs. Caltrans districts investigate the screened locations, select countermeasures, and develop safety projects for consideration under HSIP and other state funded programs.

Caltrans biennially invites statewide local agencies to submit applications for local road safety projects meeting the project selection criteria aligned with the SHSP challenge areas. The most recent call for projects concluded in September 2024 in the form of Cycle 12 Call for Projects where it invited applications under two program categories namely Benefit Cost Ratio (BCR) and Set-Aside categories. Caltrans expects to administer \$300 million in safety funds including federal-aid HSIP funds with approximately \$252 million under the BCR category and \$48 million under the Set-Aside category. The Set-Aside category is comprised of five sub-categories namely Guardrail Upgrades, Pedestrian Crossing Enhancements, Installing Edgelines, Bike Safety Improvement; and a special sub-category called Tribes to enable tribal communities to equitably compete for all these funding sub-categories.

In 2024, California HSIP (23 U.S.C. 148) programmed \$681,086,358 worth of safety projects and obligated a total of \$489,807,303 for both the state and non-state highway network.

In addition to direct investment in safety improvements, Caltrans is reviewing and updating the department wide policies and systems to better incorporate safety at every stage of the infrastructure project lifecycle. It is update its traffic and safety database Transportation System Network that will enhance the safety investigation and project development processes. It is supporting proactive consideration of safety in the local road infrastructure through new policies and guidelines such as the recently issued Local Development Review (LDR) Cross- Programmatic Procedure Clarifications memo.

Caltrans continues to advocate for new legislation to strengthen all elements of the Safe System approach. As a result, California legislature has adopted Assembly Bills AB43 and AB1938 that will grant greater flexibility to the local agencies in setting speed limits on certain segments of the local road network.

## 2024 California Highway Safety Improvement Program

Caltrans' leadership in highway safety is being recognized at the national level with some noteworthy awards listed below.

2023 National Roadway Safety Award, a biennial award sponsored by FHWA and the Roadway Safety Foundation, for HM-4 Safety Program in the Program Planning, Development, and Evaluation category.

American Planning Association (APA) California Chapter, Sacramento Valley Section's Award of Merit for Best Practices for the 2020 – 2024 California Strategic Highway Safety Plan.

APA California Chapter, Northern Section's Award of Merit for Transportation Planning for the Steering Committee and Executive Leadership's efforts on the 2020-2024 California Strategic Highway Safety Plan.

Annual AASHTO President's Award for Road Safety for laying the foundation for an organizational cultural change through establishment of a total of 26 Safe System Leads across Caltrans districts and major divisions; and identifying more than 150 actions to institutionalize the Safety System Approach in policies, procedures, and practices throughout the life cycle of all Caltrans projects in the form of Road Safety Action Plans (RSAP 2023 -2024).

Caltrans will continue to evaluate its highway safety efforts and incorporate findings, including insights from this HSIP Annual Report into future programs to achieve its vision of eliminating fatal and serious injuries on California's roadways by 2050.

## Introduction

The Highway Safety Improvement Program (HSIP) is a core Federal-aid program with the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads. As per 23 U.S.C. 148(h) and 23 CFR 924.15, States are required to report annually on the progress being made to advance HSIP implementation and evaluation efforts. The format of this report is consistent with the HSIP Reporting Guidance dated December 29, 2016 and consists of five sections: program structure, progress in implementing highway safety improvement projects, progress in achieving safety outcomes and performance targets, effectiveness of the improvements and compliance assessment.

## Program Structure

### *Program Administration*

#### **Describe the general structure of the HSIP in the State.**

Caltrans' Division of Safety Programs administers the Highway Safety Improvement Program (HSIP) for the State Highway System (SHS) and the Division of Local Assistance administers the HSIP funds for local and tribal roads.

#### **Where is HSIP staff located within the State DOT?**

Other-Headquarters and District Division of Safety Programs and Division of Local Assistance

#### **How are HSIP funds allocated in a State?**

- Central Office via Statewide Competitive Application Process
- Formula via Districts/Regions
- SHSP Emphasis Area Data
- Other-Funds Set Aside

#### **Describe how local and tribal roads are addressed as part of HSIP.**

The Caltrans Division of Local Assistance (DLA) uses an in-house HSIP application benefit-cost tool, called HSIP Analyzer, to provide a consistent, data-driven methodology for ranking local roadway (non-State owned and operated) project applications on a statewide basis. DLA also provides the Local Roadway Safety Manual for California local road owners and directly incorporates information from UC Berkeley's Transportation Injury Mapping System web site to assist applicants applying for local HSIP funds. These tools and resources encourage local agencies to proactively analyze their roadway networks for the highest crash locations to develop and submit applications with the greatest chance of reducing fatalities and serious injuries using low cost proven systemic countermeasures. The DLA HSIP application process is also open and available to the tribes that would like to submit an application for HSIP funds. DLA also provides set aside funding for low-cost systemic countermeasures where crash data are not required as part of the application. Funding is limited for each set aside and one application for each set aside per agency. For Local HSIP Cycle 12, the set aside countermeasures were, installing edge lines, guardrail upgrades, pedestrian crossing enhancements and bicycle safety improvements and tribal governments had their own funding set aside. For the tribal government set aside, they were able to select any of the set asides to install on their tribal roads.

To encourage the Local Public Agencies (LPAs) analyze their roadway network, take a proactive approach to addressing safety needs and demonstrate agency responsiveness to safety challenges, DLA requires the

## 2024 California Highway Safety Improvement Program

applicants have completed a Local Roadway Safety Plan (LRSP) or its equivalent in order to submit applications starting from HSIP Cycle 11.

### **Identify which internal partners (e.g., State departments of transportation (DOTs) Bureaus, Divisions) are involved with HSIP planning.**

- Design
- Districts/Regions
- Maintenance
- Operations
- Planning
- Traffic Engineering/Safety
- Other-Division of Research, Innovation, and System Performance

### **Describe coordination with internal partners.**

We continually coordinate with our internal partners continually prioritizing safety, reflecting the pivot in safety culture with the adoption of the 4 Pillars of Traffic Safety. This coordination and 4 Pillars of Traffic Safety is a new approach to traffic safety and aims to reduce risk by accommodating predictable human error, rather than focusing on improving driver behavior. Through strong internal coordination, Caltrans looks to accomplish zero fatalities and serious injuries by 2050 using the guiding principles of the 4 Pillars of Traffic Safety.

The HSIP team aligns with the 2020-2024 California Strategic Highway Safety Plan (SHSP) through supporting activities for the 4 Pillars of Traffic Safety. integrate equity, implement a Safe System Approach, double down on what works, and accelerate advanced technologies.

By leveraging proven practices, accelerating advanced technology, leading safety culture change, and advancing delivery of Safety enhancements, these plans have a common goal to reduce fatalities and serious injuries.

Caltrans Division of Local Assistance (DLA) also reports on HSIP improvement projects with standardized Proven Safety Countermeasures (PSC) used by local agencies. Caltrans DLA Headquarters works closely with Caltrans Districts in receiving applications, monitoring the delivery of local HSIP projects, and answering questions the local agency may have related to all aspects of the HSIP program.

Caltrans Headquarters analyzes crash data and produces annual reports for multiple crash monitoring programs along the SHS. These monitoring programs screen the network to identify locations to be investigated by the districts.

### **Identify which external partners are involved with HSIP planning.**

- FHWA
- Local Government Agency
- Local Technical Assistance Program
- Regional Planning Organizations (e.g. MPOs, RPOs, COGs)
- Tribal Agency
- Other-Emergency Response Team
- Other-Local HSIP Advisory Committee

### **Describe coordination with external partners.**

In addition to working with local agencies directly, Local HSIP program has also established Local HSIP Advisory Committee to support the goal of reducing fatalities and serious injuries on all public roadways in California. The committee comprises members from cities, counties, RTPAs/MPOs, Caltrans and the FHWA. The committee provides high-level balanced strategic guidance to California's Local HSIP and acts as a bridge between Local HSIP and local agencies. The committee meets approximately six times annually.

The California SHSP is comprised of three main groups: Executive Leadership (EL), Steering Committee (SC), and 16 Challenge Area Teams. The EL provides direction and approval on SHSP policies and procedures and engages support from multiple agency executives. The SC establishes the strategies and processes to implement the SHSP and provides oversight for the Challenge Area Teams. The Challenge Area Teams evaluate relevant data and track best practices related to their area and are responsible for the development and completion of actions in the implementation plan. Hundreds of safety stakeholders representing public and private agencies and organizations participate in the SHSP. These include the following:

- State and federal agencies involved in transportation, public health and safety, and enforcement
- Public and private partners
- City, county, regional, and tribal organizations
- First responders and Emergency Medical Services (EMS)
- Advocates
- Interested citizens

The 16 Challenge Areas are categorized into High Priority and Focus Areas. The regularly scheduled team meetings provide the opportunity to connect and develop partnerships with other dedicated safety champions. Sharing technical knowledge and best practices, team members advance local, regional, and statewide safety initiatives.

### ***Program Methodology***

#### **Does the State have an HSIP manual or similar that clearly describes HSIP planning, implementation and evaluation processes?**

Yes

Caltrans HSIP Guidelines 2022 are uploaded

#### **Select the programs that are administered under the HSIP.**

- Bicycle Safety
- Local Safety
- Roadway Departure
- Wrong Way Driving
- Other-Systemic Pedestrian State Highway System
- Other-Pedestrian HCCL State Highway System
- Other-Bicyclist Systemic Safety Improvement Program
- Other-Systemic Wrong Way



## 2024 California Highway Safety Improvement Program

- Other-Crossover Crash Monitoring Program

### **Program: Bicycle Safety**

***Date of Program Methodology: 4/20/2018***

***What is the justification for this program?***

- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety
- Other-High Crash Concentration Location

***What is the funding approach for this program?***

Competes with all projects

***What data types were used in the program methodology?***

| Crashes   | Exposure  | Roadway   |
|---|---|---|
| <ul style="list-style-type: none"><li>• Other-Fatal and injury crashes only</li></ul> | <ul style="list-style-type: none"><li>• Volume</li><li>• Lane miles</li></ul> | <ul style="list-style-type: none"><li>• Functional classification</li></ul> |

***What project identification methodology was used for this program?***

- Crash frequency
- Crash rate

***Are local roads (non-state owned and operated) included or addressed in this program?***

No

***Are local road projects identified using the same methodology as state roads?***

***How are projects under this program advanced for implementation?***

- Other-Bicyclist Safety Improvement Monitoring Report

***Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).***

**Rank of Priority Consideration**

Other-meet minimum criteria: 100

**Program: Local Safety**

***Date of Program Methodology: 1/1/2015***

***What is the justification for this program?***

- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety

***What is the funding approach for this program?***

Other-Competes with all other safety projects and set-aside funding

***What data types were used in the program methodology?***

Crashes

Exposure

Roadway

- All crashes

***What project identification methodology was used for this program?***

- Crash frequency
- Other-Systemic approach

***Are local roads (non-state owned and operated) included or addressed in this program?***

Yes

***Are local road projects identified using the same methodology as state roads?***

No

***Describe the methodology used to identify local road projects as part of this program.***

Local Agencies take the lead in identifying projects within their own jurisdictions based on Local HSIP guidance

***How are projects under this program advanced for implementation?***

- Competitive application process

***Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).***

**Rank of Priority Consideration**

Ranking based on B/C:1

Available funding:2

Other-set aside:1

## Program: Roadway Departure

***Date of Program Methodology: 12/21/2022***

***What is the justification for this program?***

- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety

***What is the funding approach for this program?***

Other-Funding set aside within HSIP funds

***What data types were used in the program methodology?***

| Crashes   | Exposure  | Roadway   |
|---|---|---|
| <ul style="list-style-type: none"><li>• Fatal and serious injury crashes only</li><li>• Other-Wet fatal and serious injury crashes only</li></ul> | <ul style="list-style-type: none"><li>• Volume</li><li>• Lane miles</li></ul> | <ul style="list-style-type: none"><li>• Functional classification</li><li>• Roadside features</li></ul> |

***What project identification methodology was used for this program?***

- Crash frequency
- Crash rate
- Other-Run Off Road Crash Monitoring Program Report

***Are local roads (non-state owned and operated) included or addressed in this program?***

No

***Are local road projects identified using the same methodology as state roads?***

***How are projects under this program advanced for implementation?***

- Other-Run Off Road Crash Monitoring Program Report

***Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).***

Relative Weight in Scoring

Other-see below:100

Total Relative Weight:100

**Program: Wrong Way Driving**

***Date of Program Methodology: 1/15/1985***

***What is the justification for this program?***

- Addresses SHSP priority or emphasis area

***What is the funding approach for this program?***

Other-Funding set-aside within HSIP funds

***What data types were used in the program methodology?***

| Crashes   | Exposure  | Roadway   |
|---|---|---|
| <ul style="list-style-type: none"><li>• Fatal and serious injury crashes only</li></ul> | <ul style="list-style-type: none"><li>• Volume</li><li>• Lane miles</li></ul> | <ul style="list-style-type: none"><li>• Functional classification</li></ul> |

***What project identification methodology was used for this program?***

- Crash frequency
- Crash rate

***Are local roads (non-state owned and operated) included or addressed in this program?***

No

***Are local road projects identified using the same methodology as state roads?***

***How are projects under this program advanced for implementation?***

- Other-Wrong Way Safety Improvement Monitoring Report

***Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).***

Relative Weight in Scoring

Other-crash frequency and crash rate:100

Total Relative Weight:100

**Program: Other-Systemic Pedestrian State Highway System**

***Date of Program Methodology: 9/11/2020***

***What is the justification for this program?***

- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety

***What is the funding approach for this program?***

Other-Funding set aside within HSIP funds

***What data types were used in the program methodology?***

| Crashes   | Exposure  | Roadway   |
|---|---|---|
| <ul style="list-style-type: none"><li>• Other-Fatal and Injury crashes only</li></ul> | <ul style="list-style-type: none"><li>• Volume</li><li>• Population</li><li>• Other-Disadvantaged Community</li><li>• Other-Employment Data</li></ul> | <ul style="list-style-type: none"><li>• Other-Intersections on the State Highway System</li><li>• Other-Number of Lanes on Mainline and Cross Street</li><li>• Other-Control Features</li></ul> |

***What project identification methodology was used for this program?***

- Crash frequency
- Probability of specific crash types

***Are local roads (non-state owned and operated) included or addressed in this program?***

No

***Are local road projects identified using the same methodology as state roads?***

***How are projects under this program advanced for implementation?***

- Other-Systemic Locations to be incorporated into existing SHOPP projects

***Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).***

**Relative Weight in Scoring**

Other-See Below:100

Total Relative Weight:100

**Program: Other-Pedestrian HCCL State Highway System**

***Date of Program Methodology:7/31/2020***

***What is the justification for this program?***

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- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety

### ***What is the funding approach for this program?***

Other-Funding set aside within HSIP funds

### ***What data types were used in the program methodology?***

| Crashes   | Exposure   | Roadway   |
|---|--|---|
| <ul style="list-style-type: none"><li>• Other-Fatal and Injury crashes only</li></ul> | <ul style="list-style-type: none"><li>• Population</li><li>• Other-Disadvantaged Community</li><li>• Other-Employment Data</li></ul> | <ul style="list-style-type: none"><li>• Other-Pedestrian-Related High Crash Concentration Locations (HCCLs)</li></ul> |

### ***What project identification methodology was used for this program?***

- Crash frequency
- Other-Pedestrian Related HCCL

### ***Are local roads (non-state owned and operated) included or addressed in this program?***

No

### ***Are local road projects identified using the same methodology as state roads?***

### ***How are projects under this program advanced for implementation?***

- Other-Pedestrian Safety Improvement Monitoring Program

***Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).***

#### **Relative Weight in Scoring**

Other-See Below:100

Total Relative Weight:100

### **Program: Other-Bicyclist Systemic Safety Improvement Program**

***Date of Program Methodology:12/2/2022***

### ***What is the justification for this program?***

- Addresses SHSP priority or emphasis area
- FHWA focused approach to safety

***What is the funding approach for this program?***

Other-Funding set-aside within HSIP funds

***What data types were used in the program methodology?***

| Crashes   | Exposure   | Roadway  |
|---|--|--|
| <ul style="list-style-type: none"><li>Fatal and serious injury crashes only</li></ul> | <ul style="list-style-type: none"><li>Volume</li><li>Population</li><li>Other-Disadvantage Community</li></ul> | <ul style="list-style-type: none"><li>Other-median presences, barrier type</li><li>Other-one travel lane in each direction</li></ul> |

***What project identification methodology was used for this program?***

- Crash frequency
- Probability of specific crash types

***Are local roads (non-state owned and operated) included or addressed in this program?***

No

***Are local road projects identified using the same methodology as state roads?***

***How are projects under this program advanced for implementation?***

- Other-Systemic locations to be incorporated into SHOPP projects

***Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).***

**Relative Weight in Scoring**

Other-See below:100

Total Relative Weight:100

**Program: Other-Systemic Wrong Way**

***Date of Program Methodology:3/16/2021***

***What is the justification for this program?***

- Addresses SHSP priority or emphasis area

***What is the funding approach for this program?***

Other-Funding set-aside within HSIP funds

***What data types were used in the program methodology?***

**Crashes**

- All crashes

**Exposure**

- Volume
- Lane miles

**Roadway**

- Functional classification

***What project identification methodology was used for this program?***

- Other-Wrong Way Notification

***Are local roads (non-state owned and operated) included or addressed in this program?***

No

***Are local road projects identified using the same methodology as state roads?***

***How are projects under this program advanced for implementation?***

- Other-All projects meeting established criteria can be programmed

***Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).***

**Relative Weight in Scoring**

Other-All projects meeting established criteria :100

Total Relative Weight:100

**Program: Other-Crossover Crash Monitoring Program**

***Date of Program Methodology:1/15/2019***

***What is the justification for this program?***

- Addresses SHSP priority or emphasis area

***What is the funding approach for this program?***

Other-Funding set-aside within HSIP funds

***What data types were used in the program methodology?***

**Crashes**

- Fatal and serious injury crashes only

**Exposure**

- Volume
- Lane miles

**Roadway**

- Functional classification



***What project identification methodology was used for this program?***

- Crash frequency
- Crash rate

***Are local roads (non-state owned and operated) included or addressed in this program?***

No

***Are local road projects identified using the same methodology as state roads?***

***How are projects under this program advanced for implementation?***

- Other-All projects meeting established criteria can be programmed

***Select the processes used to prioritize projects for implementation. For the methods selected, indicate the relative importance of each process in project prioritization. Enter either the weights or numerical rankings. If weights are entered, the sum must equal 100. If ranks are entered, indicate ties by giving both processes the same rank and skip the next highest rank (as an example: 1, 2, 2, 4).***

**Rank of Priority Consideration**

Other-All projects meeting established criteria:100

**What percentage of HSIP funds address systemic improvements?**

60

**HSIP funds are used to address which of the following systemic improvements?**

- Add/Upgrade/Modify/Remove Traffic Signal
- Cable Median Barriers
- Clear Zone Improvements
- High friction surface treatment
- Horizontal curve signs
- Install/Improve Lighting
- Install/Improve Pavement Marking and/or Delineation
- Install/Improve Signing
- Pavement/Shoulder Widening
- Rumble Strips
- Safety Edge
- Upgrade Guard Rails
- Wrong way driving treatments

For Local HSIP 52.5% of HSIP local funds address the following systemic improvements:

Install/Improve Lighting

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Install/Improve Pavement Marking and/or Delineation

Install/Improve Signing

Pedestrian Countdown Heads/Crossing Upgrades

Upgrade Guard Rails/End Treatment

Upgrade Traffic Control Device

Upgrade/Modify/Remove Traffic Signal

### **What process is used to identify potential countermeasures?**

- Crash data analysis
- Data-driven safety analysis tools (HSM, CMF Clearinghouse, SafetyAnalyst, usRAP)
- Engineering Study
- Road Safety Assessment
- SHSP/Local road safety plan
- Stakeholder input
- Other-Benefit Cost Ratio

### **Does the State HSIP consider connected vehicles and ITS technologies?**

Yes

### **Describe how the State HSIP considers connected vehicles and ITS technologies.**

Caltrans is currently researching and reviewing connected vehicles and ITS technologies. This includes existing studies at Caltrans as well as participating in the SHSP Emerging Technologies Challenge Area team, which is a new challenge area in the 2020-2024 California SHSP, for which Caltrans has designated a challenge area co-lead. Some examples of Caltrans' ongoing efforts are the establishment of a Smart Infrastructure Office to work on the Caltrans Statewide Connected and Automated Vehicle Implementation Plan, research on using near-miss technology to collect and evaluate traffic safety and research on the use of LIDAR to assess sight distance on highways. When the State HSIP has data on the application of emerging technologies, the state will incorporate these technologies into the HSIP.

Caltrans is also working with UC-Davis on an additional SHSP action item for Emerging Technologies. This action item is to demonstrate the effectiveness and reliability of Bosch Mobile Device App for Wrong Way Driver Detection and Warning with a pilot test under way by researchers in California.

### **Does the State use the Highway Safety Manual to support HSIP efforts?**

Yes

### **Please describe how the State uses the HSM to support HSIP efforts.**

The HSM guidance goal is to support the integration of predicted roadway safety performance considerations throughout the highway transportation planning and project development process. The HSM guidance is intended to supplement the information on which project decisions are currently based and is not intended to act as the only factor driving project decisions nor does it include every situation.

**Describe other aspects of the HSIP methodology on which the State would like to elaborate.**

Local HSIP and State highway HSIP use the cost/benefit methodology as a qualifying criterion for HSIP funds with some differences. For State highway HSIP, the benefit/cost tool is called the traffic safety index. It is used for projects at spot locations. Local HSIP utilizes the benefit/cost methodology for both spot and systemic type of projects. The Local HSIP also utilizes set-asides for low-cost countermeasures. These set-asides do not require crash data to receive HSIP funding but are limited to a maximum dollar amount per agency and are limited to specific low-cost countermeasures. For cycle 12, which is the current call for Local HSIP projects, pedestrian crossing enhancements, bicycle safety improvements, edge line striping, guardrail upgrades, and tribal roads are set-aside categories that local agencies can select from.

## Project Implementation

### *Funds Programmed*

#### Reporting period for HSIP funding.

State Fiscal Year

2024 HSIP Annual Report, reporting period for HSIP funding is State Fiscal Year Period, July 1, 2023, through June 30, 2024.

#### Enter the programmed and obligated funding for each applicable funding category.

| FUNDING CATEGORY                               | PROGRAMMED    | OBLIGATED     | % OBLIGATED/PROGRAMMED |
|--|---------------|---------------|------------------------|
| HSIP (23 U.S.C. 148)                           | \$681,086,358 | \$489,807,303 | 71.92%                 |
| HRRR Special Rule (23 U.S.C. 148(g)(1))        | \$31,287,613  | \$31,287,613  | 100%                   |
| VRU Safety Special Rule (23 U.S.C. 148(g)(3))  | \$41,136,798  | \$41,136,798  | 100%                   |
| Penalty Funds (23 U.S.C. 154)                  | \$0           | \$0           | 0%                     |
| Penalty Funds (23 U.S.C. 164)                  | \$0           | \$48,344,245  | 0%                     |
| RHCP (for HSIP purposes) (23 U.S.C. 130(e)(2)) | \$0           | \$0           | 0%                     |
| Other Federal-aid Funds (i.e. STBG, NHPP)      | \$0           | \$64,887,005  | 0%                     |
| State and Local Funds                          | \$0           | \$0           | 0%                     |
| Totals   | \$753,510,769 | \$675,462,964 | 89.64%                 |

HSIP (23 U.S.C. 148) is for both the State and Local HSIP programs.

#### How much funding is programmed to local (non-state owned and operated) or tribal safety projects?

\$153,336,757

#### How much funding is obligated to local or tribal safety projects?

\$85,101,101

#### How much funding is programmed to non-infrastructure safety projects?

\$0

**How much funding is obligated to non-infrastructure safety projects?**

\$0

**How much funding was transferred in to the HSIP from other core program areas during the reporting period under 23 U.S.C. 126?**

0%

**How much funding was transferred out of the HSIP to other core program areas during the reporting period under 23 U.S.C. 126?**

0%

**Discuss impediments to obligating HSIP funds and plans to overcome this challenge in the future.**

No impediments to discuss. In previous annual reports, strategies were noted to improve delivery for Local HSIP and continue to be the standard practice to keep the on-time delivery at greater than 90%.

General Listing of Projects

List the projects obligated using HSIP funds for the reporting period.

| PROJECT NAME                          | IMPROVEMENT CATEGORY | SUBCATEGORY | OUTPUTS | OUTPUT TYPE | HSIP PROJECT COST(\$) | TOTAL PROJECT COST(\$) | FUNDING CATEGORY | LAND USE/AREA TYPE | FUNCTIONAL CLASSIFICATION | AADT | SPEED OR SPEED RANGE | OWNERSHIP | METHOD FOR SITE SELECTION | SHSP EMPHASIS AREA | SHSP STRATEGY |
|---------------------------------------|----------------------|-------------|---------|-------------|-----------------------|------------------------|------------------|--------------------|---------------------------|------|----------------------|-----------|---------------------------|--------------------|---------------|
| Please see attached list for projects |                      |             |         |             | \$0                   |                        |                  |                    |                           | 0    |                      |           |                           |                    |               |

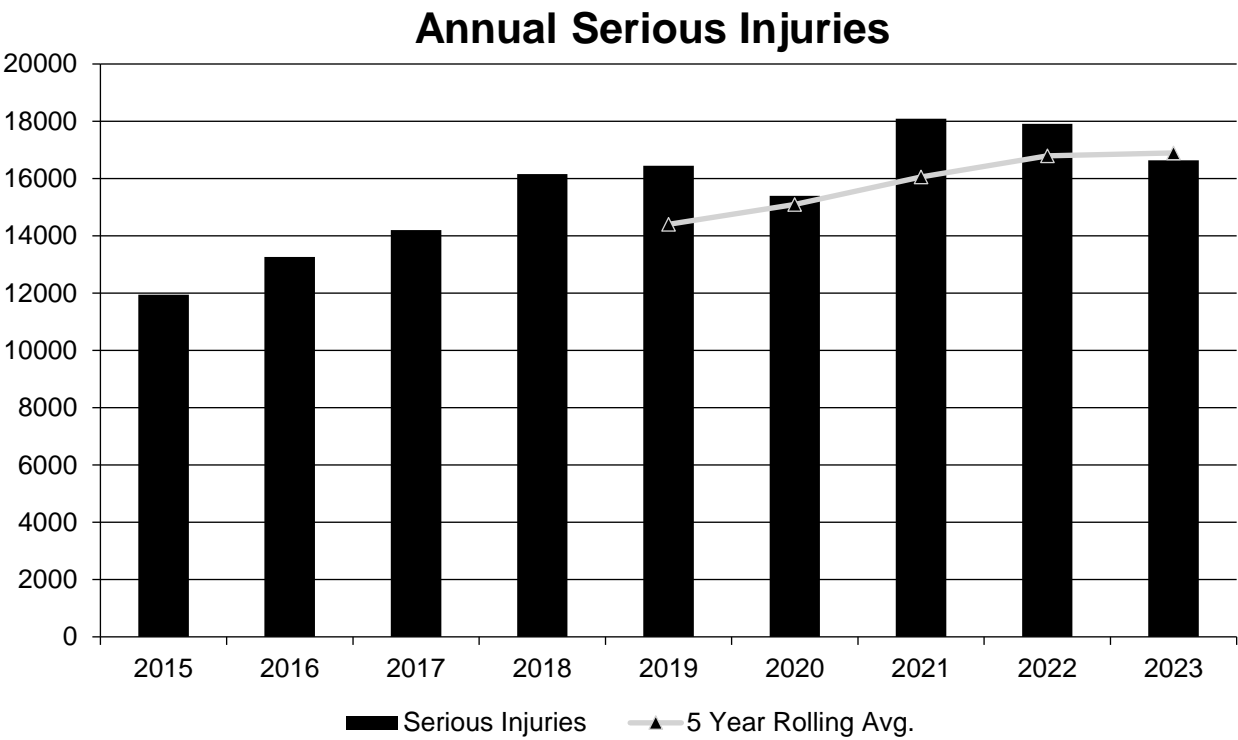
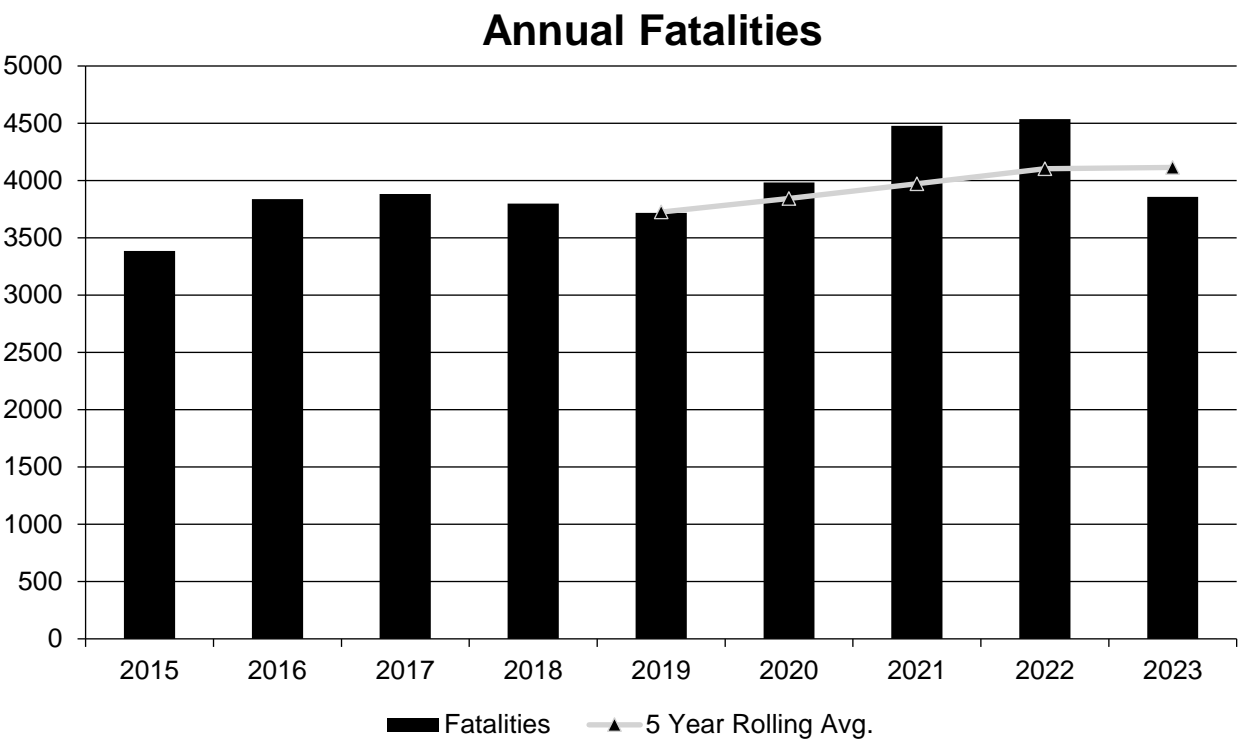
Attached are the HSIP Local and HSIP State projects

## Safety Performance

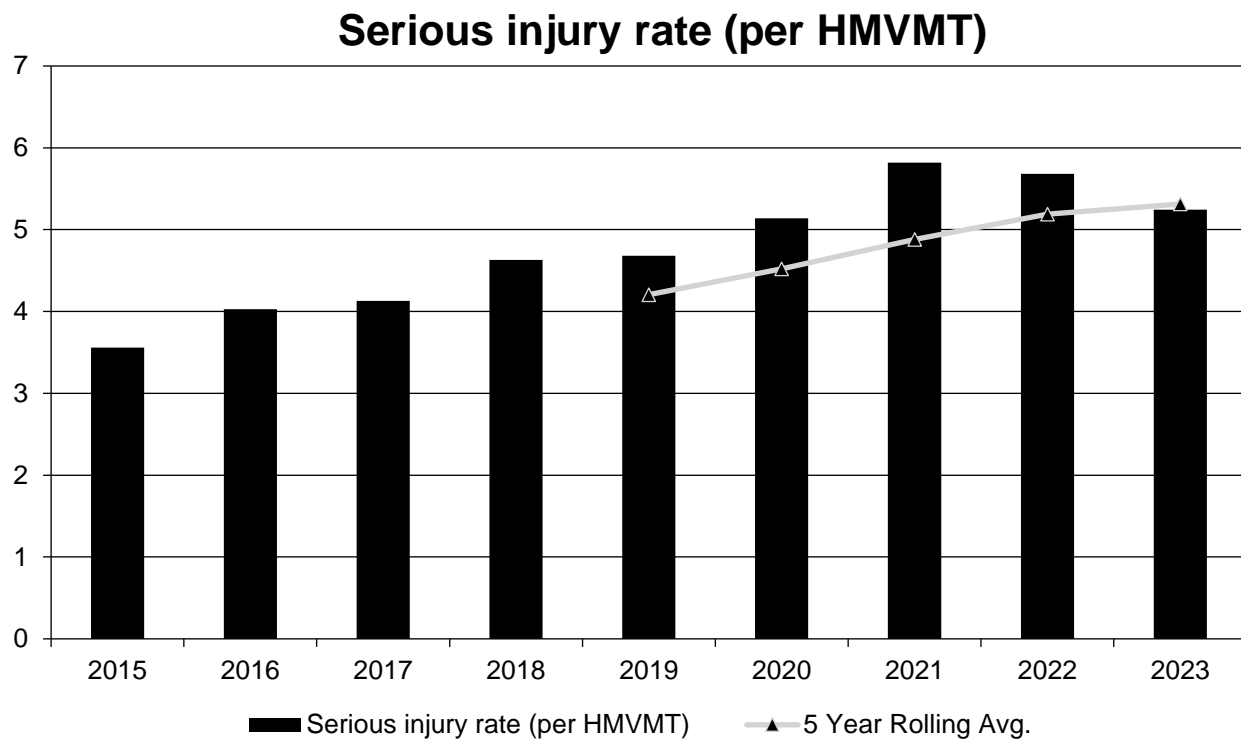
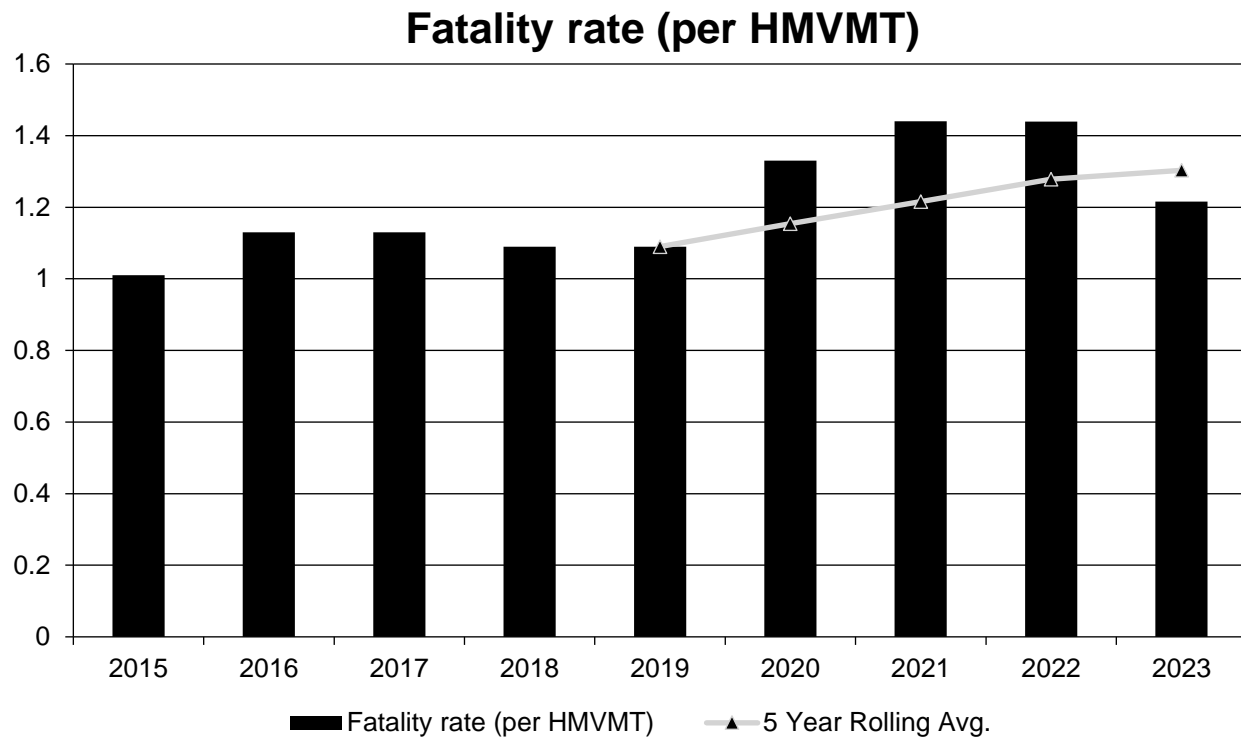
### *General Highway Safety Trends*

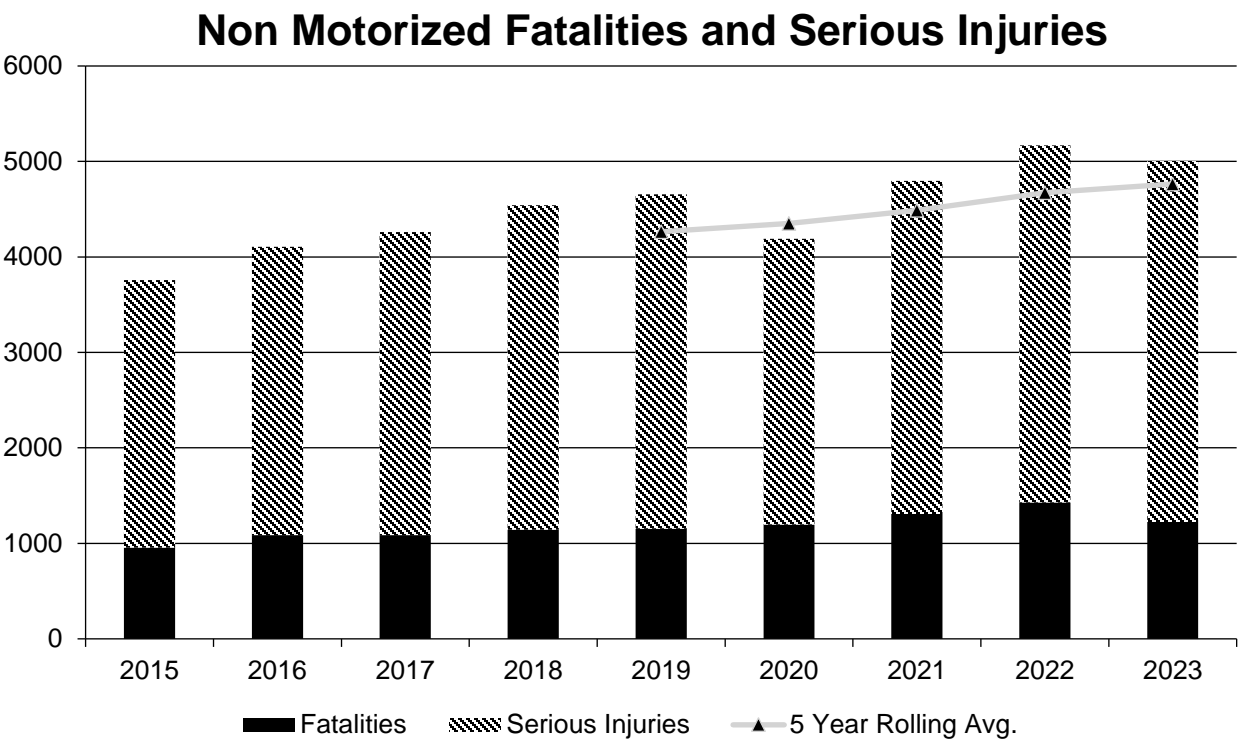
Present data showing the general highway safety trends in the State for the past five years.

| PERFORMANCE MEASURES                     | 2015   | 2016   | 2017   | 2018   | 2019   | 2020   | 2021   | 2022   | 2023   |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Fatalities                               | 3,387  | 3,837  | 3,884  | 3,798  | 3,719  | 3,982  | 4,477  | 4,537  | 3,858  |
| Serious Injuries                         | 11,950 | 13,258 | 14,201 | 16,158 | 16,443 | 15,392 | 18,084 | 17,916 | 16,638 |
| Fatality rate (per HMVMT)                | 1.010  | 1.130  | 1.130  | 1.090  | 1.090  | 1.330  | 1.440  | 1.439  | 1.216  |
| Serious injury rate (per HMVMT)          | 3.560  | 4.030  | 4.130  | 4.630  | 4.680  | 5.140  | 5.818  | 5.683  | 5.244  |
| Number non-motorized fatalities          | 955    | 1,088  | 1,085  | 1,143  | 1,154  | 1,196  | 1,309  | 1,429  | 1,224  |
| Number of non-motorized serious injuries | 2,803  | 3,017  | 3,175  | 3,399  | 3,503  | 2,995  | 3,487  | 3,741  | 3,782  |









The 2022 data above is now final.

The 2023 data is still preliminary and will be until July of 2025.

The 2023 AVMT used is still preliminary and subject to change as FHWA is still reviewing the 2023 HPMS submittal.

**Describe fatality data source.**

FARS

FARS data was used through year 2021.

SWITRS data was used for 2022 and 2023.

**To the maximum extent possible, present this data by functional classification and ownership.**

| Year 2018                                   |                                 |                                       |                                      |  |
|---|---------------------------------|---------------------------------------|--------------------------------------|--|
| Functional Classification                   | Number of Fatalities (5-yr avg) | Number of Serious Injuries (5-yr avg) | Fatality Rate (per HMVMT) (5-yr avg) | Serious Injury Rate (per HMVMT) (5-yr avg) |
| Rural Principal Arterial (RPA) - Interstate |                                 |                                       |                                      |  |

## 2024 California Highway Safety Improvement Program

| <b>Functional Classification</b>                                | <b>Number of Fatalities<br/>(5-yr avg)</b> | <b>Number of Serious<br/>Injuries<br/>(5-yr avg)</b> | <b>Fatality Rate<br/>(per HMVMT)<br/>(5-yr avg)</b> | <b>Serious Injury Rate<br/>(per HMVMT)<br/>(5-yr avg)</b> |
|---|--|--|---|---|
| Rural Principal Arterial (RPA) - Other Freeways and Expressways |  |  |   |   |
| Rural Principal Arterial (RPA) - Other                          |  |  |   |   |
| Rural Minor Arterial  |  |  |   |   |
| Rural Minor Collector   |  |  |   |   |
| Rural Major Collector   |  |  |   |   |
| Rural Local Road or Street                                      |  |  |   |   |
| Urban Principal Arterial (UPA) - Interstate                     |  |  |   |   |
| Urban Principal Arterial (UPA) - Other Freeways and Expressways |  |  |   |   |
| Urban Principal Arterial (UPA) - Other                          |  |  |   |   |
| Urban Minor Arterial  |  |  |   |   |
| Urban Minor Collector   |  |  |   |   |
| Urban Major Collector   |  |  |   |   |
| Urban Local Road or Street                                      | 0  | 0  | 0   | 0   |

## 2024 California Highway Safety Improvement Program

### Year 2021

| Roadways  | Number of Fatalities<br>(5-yr avg) | Number of Serious<br>Injuries<br>(5-yr avg) | Fatality Rate<br>(per HMVMT)<br>(5-yr avg) | Serious Injury Rate<br>(per HMVMT)<br>(5-yr avg) |
|---|------------------------------------|---|--|--|
| State Highway Agency  | 4,477                              | 17,770                                      | 1.44                                       | 5.82   |
| County Highway Agency   |                                    |   |  |  |
| Town or Township Highway Agency                                 |                                    |   |  |  |
| City or Municipal Highway Agency                                |                                    |   |  |  |
| State Park, Forest, or Reservation Agency                       |                                    |   |  |  |
| Local Park, Forest or Reservation Agency                        |                                    |   |  |  |
| Other State Agency  |                                    |   |  |  |
| Other Local Agency  |                                    |   |  |  |
| Private (Other than Railroad)                                   |                                    |   |  |  |
| Railroad  |                                    |   |  |  |
| State Toll Authority  |                                    |   |  |  |
| Local Toll Authority  |                                    |   |  |  |
| Other Public Instrumentality (e.g. Airport, School, University) |                                    |   |  |  |
| Indian Tribe Nation   |                                    |   |  |  |

Data is not available at this time through Caltrans or California Highway Patrol.

### Provide additional discussion related to general highway safety trends.

The preliminary results for 2023 general highway data shows a slight decrease in fatal, serious injuries, and motorized fatalities for that year. This may be an inflection point in the crash trend.

Caltrans continues to shift our safety paradigm by changing the organization, conversation, and the way we work. Safety is a shared responsibility, and we seek to reverse the trend and move toward the long-term goal of zero fatalities and serious injuries on all California roads by 2050.

## 2024 California Highway Safety Improvement Program

Caltrans is working to implement the Safe System Approach (SSA) through implementing a new Director's Policy on Road Safety. The SSA to road safety is a fundamental shift in how we define the safety challenges, implement safety interventions, and evaluate progress. These include reframing core principles of our traditional safety approach in several ways. The SSA aims to eliminate fatal and serious injuries for all road users through a holistic view of the roadway system by affirming that fatal and serious injuries on the roadways can be prevented when safety is prioritized across all components of the road system. Caltrans' Division of Safety Programs has undertaken several initiatives to address several components of SSA: safe roads, safe speeds, and safe road use. For example, the ongoing Proactive Safety programs (Pedestrian Safety, Bicyclist Safety, and Wrong Way Driver) have embraced and implemented the principles of SSA.

The 2025-2029 California Strategic Highway Safety Plan, now under development, is considering implementing the SSA through the following actions recommended in the recent SHSP Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis:

- Adopt SSA Principles and promote a safety culture
- Identify and assign stakeholders to each SSA element (total of five)
- Ensure strategies within each of the 16 Challenge (Emphasis) Areas reflect the SSA principles
- Adopt a framework assessing SSA alignment and document strategy outcomes serving as key performance indicators
- Organize SHSP actions by SSA elements within each Challenge Area
- Explore ways to identify underlying system challenges to achieve safety goals
- Dedicate additional resources for developing, implementing, and evaluating safety initiatives

The SHSP Executive Leadership will consider these proposed actions and provide direction on next steps at the Executive Leadership Meeting.

### ***Safety Performance Targets***

#### **Safety Performance Targets**

#### **Calendar Year 2025 Targets \***

***Number of Fatalities:4048.6***

***Describe the basis for established target, including how it supports SHSP goals.***

NHTSA and FHWA regulations require States to submit identical targets for three common performance measures (total number of fatalities, rate of fatalities, and total number of serious injuries) in both NHTSA's triennial Highway Safety Plan (HSP) and FHWA's Highway Safety Improvement Plan annual report. Although FHWA waived this requirement for FY 2025, Caltrans chose to align the target for number of fatalities with the HSP.

Caltrans took the following steps to calculate the 2025 target. NHTSA required the target setting methodology to show either a constant or an improved target in the HSP for calendar year 2026. OTS set the 2026 five-year rolling average target equal to the 2021 five-year rolling average (FARS data for calendar years 2017 to 2021) to show a constant target. OTS then used the average annual change to calculate the annual values for 2022, 2023, 2024 and 2025. It was determined that an annual decrease of 2.84%, based on the annual count for the number of fatalities, would achieve the constant 2026 target. The 2025 target is based on the five-year rolling average of the annual counts for calendar years 2021, 2022, 2023, 2024, and 2025.

The 2.84% annual reduction in the number of fatalities supports the goal of the California Strategic Highway Safety Plan (SHSP) to move toward zero fatalities and serious injuries. The HSIP funds safety capital

## 2024 California Highway Safety Improvement Program

improvement projects with state and federal funds to address both site-specific and systemic safety challenges on California's roadways.

### ***Number of Serious Injuries:16630.5***

#### ***Describe the basis for established target, including how it supports SHSP goals.***

NHTSA and FHWA regulations require States to submit identical targets for three common performance measures (total number of fatalities, rate of fatalities, and total number of serious injuries) in both NHTSA's triennial Highway Safety Plan (HSP) and FHWA's Highway Safety Improvement Plan annual report. Although FHWA waived this requirement for FY 2025, Caltrans chose to align the target for number of serious injuries with the HSP.

Caltrans took the following steps to calculate the 2025 target. NHTSA required the target setting methodology to show either a constant or an improved target in the HSP for calendar year 2026. OTS set the 2026 five-year rolling average target equal to the 2021 five-year rolling average (using SWITRS data for calendar years 2017 to 2021) to show a constant target. OTS then used the average annual change to calculate the annual values for 2022, 2023, 2024 and 2025. It was determined that an annual decrease of 3.69%, based on the annual count for the number of serious injuries, would achieve the constant 2026 target. The 2025 target is based on the five-year rolling average of the annual counts for calendar years 2021, 2022, 2023, 2024, and 2025.

The 3.69% annual reduction in the number of serious injuries supports the goal of the California Strategic Highway Safety Plan (SHSP) to move toward zero fatalities and serious injuries. The HSIP funds safety capital improvement projects with state and federal funds to address both site-specific and systemic safety challenges on California's roadways.

### ***Fatality Rate:1.260***

#### ***Describe the basis for established target, including how it supports SHSP goals.***

NHTSA and FHWA regulations require States to submit identical targets for three common performance measures (total number of fatalities, rate of fatalities, and total number of serious injuries) in both NHTSA's triennial Highway Safety Plan (HSP) and FHWA's Highway Safety Improvement Plan annual report. Although FHWA waived this requirement for FY 2025, Caltrans chose to align the target for fatality rate with the HSP.

Caltrans took the following steps to calculate the 2025 target. NHTSA required the target setting methodology to show either a constant or an improved target in the HSP for calendar year 2026. OTS set the 2026 five-year rolling average target equal to the 2021 five-year rolling average (using FARS data for calendar years 2017 to 2021) to show a constant target. OTS then used the average annual change to calculate the annual values for 2022, 2023, 2024 and 2025. It was determined that an annual decrease of 4.61%, based on the annual fatality rate, would achieve the constant 2026 target. The 2025 target is based on the five-year rolling average of the annual counts for calendar years 2021, 2022, 2023, 2024, and 2025.

The 4.61% annual reduction in the fatality rate supports the goal of the California Strategic Highway Safety Plan (SHSP) to move toward zero fatalities and serious injuries. The HSIP funds safety capital improvement projects with state and federal funds to address both site-specific and systemic safety challenges on California's roadways.

### ***Serious Injury Rate:4.770***

#### ***Describe the basis for established target, including how it supports SHSP goals.***

## 2024 California Highway Safety Improvement Program

Since NHTSA required the target setting methodology to show either a constant or an improved target in the Highway Safety Plan's triennial report, Caltrans used the same 3.69% annual decrease as the performance measure for the number of serious injuries.

The 3.69% annual reduction in the serious injury rate supports the goal of the California Strategic Highway Safety Plan (SHSP) to move toward zero fatalities and serious injuries. The HSIP funds safety capital improvement projects with state and federal funds to address both site-specific and systemic safety challenges on California's roadways.

### ***Total Number of Non-Motorized Fatalities and Serious Injuries:4373.3***

### ***Describe the basis for established target, including how it supports SHSP goals.***

Since NHTSA required the target setting methodology to show either a constant or an improved target in the Highway Safety Plan's triennial report, Caltrans used the same percent annual decreases as the performance measure targets for number of fatalities and number serious injuries.

Caltrans took the following steps to calculate the 2025 target. Based on the 2021 annual number of non-motorized fatalities, Caltrans applied the 2.84% annual decrease to calculate annual counts of non-motorized fatalities for calendar years 2022, 2023, 2024, and 2025. Similarly, based on the 2021 annual number of non-motorized serious injuries, Caltrans applied the 3.69% annual decrease to calculate annual counts of non-motorized serious injuries for calendar years 2022, 2023, 2024, and 2025. Caltrans then summed the number of non-motorized fatalities and serious injuries for each calendar year. The 2025 target is based on the five-year rolling average of the annual counts for calendar years 2021, 2022, 2023, 2024, and 2025.

The overall reduction of the number of non-motorized fatalities and serious injuries supports the goal of the California Strategic Highway Safety Plan (SHSP) to move toward zero fatalities and serious injuries. The HSIP funds safety capital improvement projects with state and federal funds to address both site-specific and systemic safety challenges on California's roadways.

### **Describe efforts to coordinate with other stakeholders (e.g. MPOs, SHSO) to establish safety performance targets.**

Since safety targets are applicable to all public roads in the California, regional and local jurisdictions should be collaboratively involved in the safety target setting process. Caltrans is currently preparing for a virtual stakeholder workshop to be held in September 2024 to discuss the 2025 SPMTs with the MPOs and other vested stakeholders.

Previously, Caltrans and the Office of Traffic Safety (OTS) met on April 19, 2023 and May 12, 2023 to discuss target setting methodology options and then to agree on which methodology to use for target setting. The three core safety performance targets (C1 – C3) that Caltrans and OTS must agree upon are included in the HSIP and HSP respectively. Caltrans chose to adopt the same targets as OTS for FY 2025.

### **Does the State want to report additional optional targets?**

No

**Describe progress toward meeting the State's 2023 Safety Performance Targets (based on data available at the time of reporting). For each target, include a discussion of any reasons for differences in the actual outcomes and targets.**

| PERFORMANCE MEASURES                          | TARGETS | ACTUALS |
|---|---------|---------|
| Number of Fatalities                          | 3808.2  | 4114.6  |
| Number of Serious Injuries                    | 15156.2 | 16894.6 |
| Fatality Rate                                 | 1.216   | 1.303   |
| Serious Injury Rate                           | 4.940   | 5.313   |
| Non-Motorized Fatalities and Serious Injuries | 4131.7  | 4764.0  |

The 2023 "Targets" above are from the 2022 HSIP Annual Report. The "Actuals" are from the calculated 5 year rolling average.

### ***Applicability of Special Rules***

**Does the HRRR special rule apply to the State for this reporting period?**

Yes

**Does the VRU Safety Special Rule apply to the State for this reporting period?**

Yes

**Provide the number of older driver and pedestrian fatalities and serious injuries 65 years of age and older for the past seven years.**

| PERFORMANCE MEASURES                                   | 2016 | 2017  | 2018  | 2019  | 2020  | 2021  | 2022  |
|--|------|-------|-------|-------|-------|-------|-------|
| Number of Older Driver and Pedestrian Fatalities       | 540  | 487   | 517   | 522   | 454   | 520   | 561   |
| Number of Older Driver and Pedestrian Serious Injuries | 927  | 1,011 | 1,179 | 1,319 | 1,042 | 1,187 | 1,386 |

A summary of the initiatives that are taking place to address the special rule Older Drivers and Pedestrians, with the SHSP Aging Drivers Challenge Area and the Pedestrian Challenge Area has been uploaded.



## Evaluation

### *Program Effectiveness*

#### How does the State measure effectiveness of the HSIP?

- Benefit/Cost Ratio
- Change in fatalities and serious injuries
- Other-3 year before and after

#### Based on the measures of effectiveness selected previously, describe the results of the State's program level evaluations.

There are three levels of evaluation to determine the effectiveness of overall HSIP Program: (1) Evaluation of Approved Countermeasures, (2) Evaluation of Approved Projects, and (3) Evaluation of various Safety and Monitoring Programs within the HSIP Program. California State DOT, normally, performs at least one level of evaluations annually by comparing fatal and serious injury collision data for 3-year before and 3-year after study.

#### What other indicators of success does the State use to demonstrate effectiveness and success of the Highway Safety Improvement Program?

- HSIP Obligations
- Increased awareness of safety and data-driven process
- Increased focus on local road safety
- More systemic programs
- Other-SHSP Crash Data Dashboard

### *Effectiveness of Groupings or Similar Types of Improvements*

#### Present and describe trends in SHSP emphasis area performance measures.

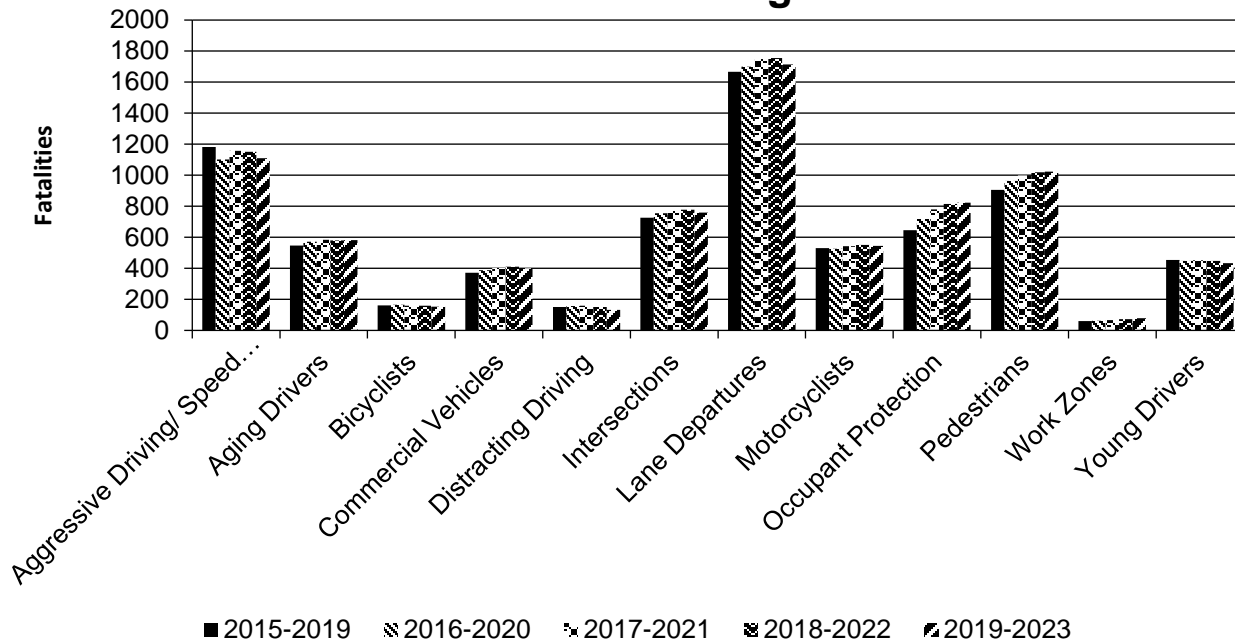
##### Year 2023

| SHSP Emphasis Area                  | Targeted Crash Type | Number of Fatalities (5-yr avg) | Number of Serious Injuries (5-yr avg) | Fatality Rate (per HMVMT) (5-yr avg) | Serious Injury Rate (per HMVMT) (5-yr avg) |
|-------------------------------------|---------------------|---------------------------------|---------------------------------------|--------------------------------------|--|
| Aggressive Driving/Speed Management |                     | 1,109.4                         | 5,246.8                               | 0.34                                 | 1.61                                       |
| Aging Drivers                       |                     | 581.8                           | 2,273.4                               | 0.18                                 | 0.69                                       |
| Bicyclists                          |                     | 154                             | 1,115.8                               | 0.05                                 | 0.34                                       |
| Commercial Vehicles                 |                     | 401                             | 1,063.2                               | 0.12                                 | 0.32                                       |
| Distracting Driving                 |                     | 133.4                           | 681.4                                 | 0.04                                 | 0.21                                       |
| Intersections                       |                     | 760                             | 4,503.8                               | 0.23                                 | 1.38                                       |
| Lane Departures                     |                     | 1,713                           | 7,156.4                               | 0.52                                 | 2.19                                       |

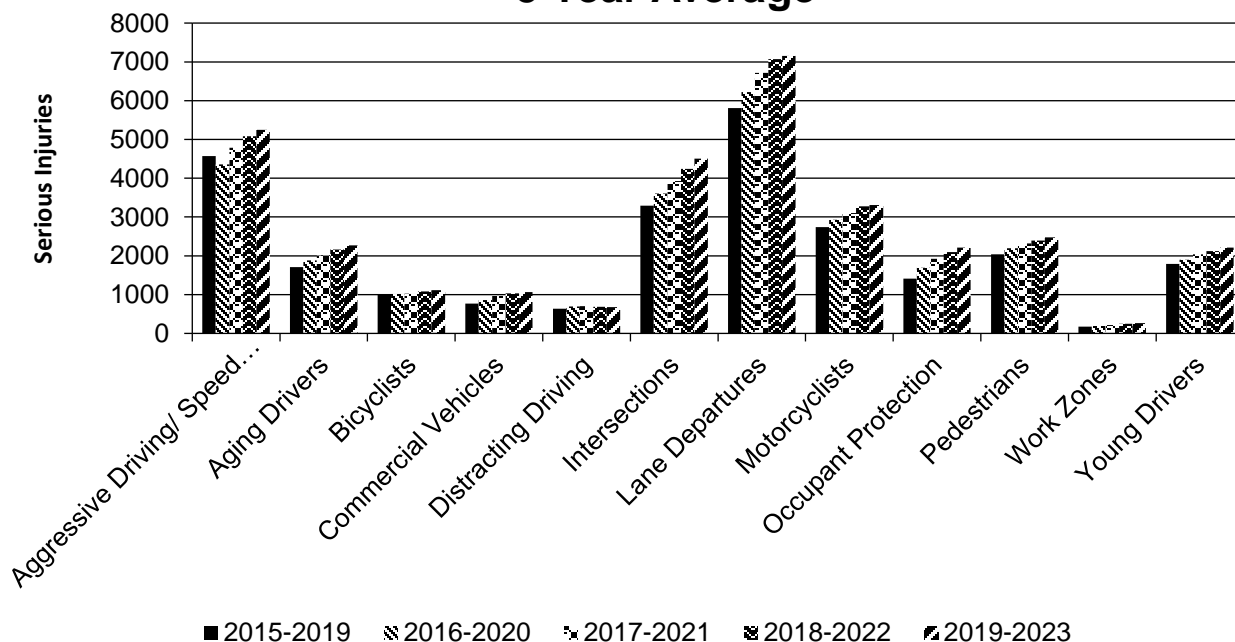
## 2024 California Highway Safety Improvement Program

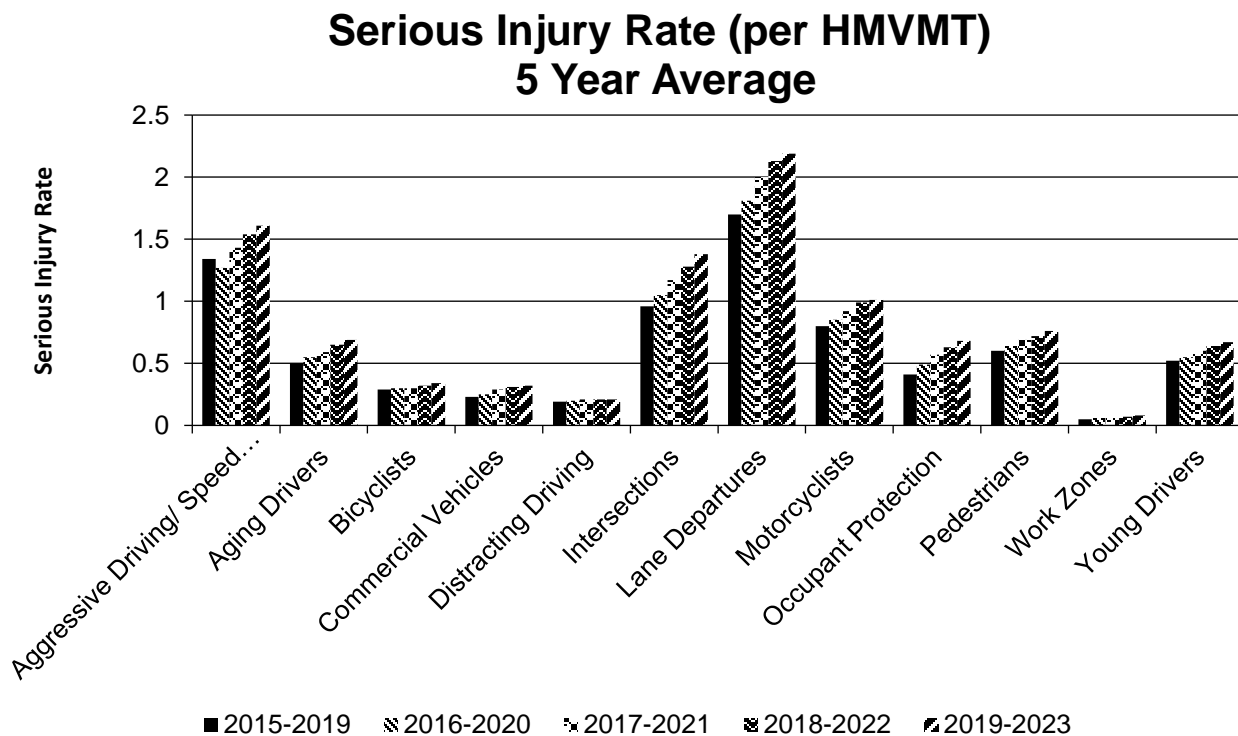
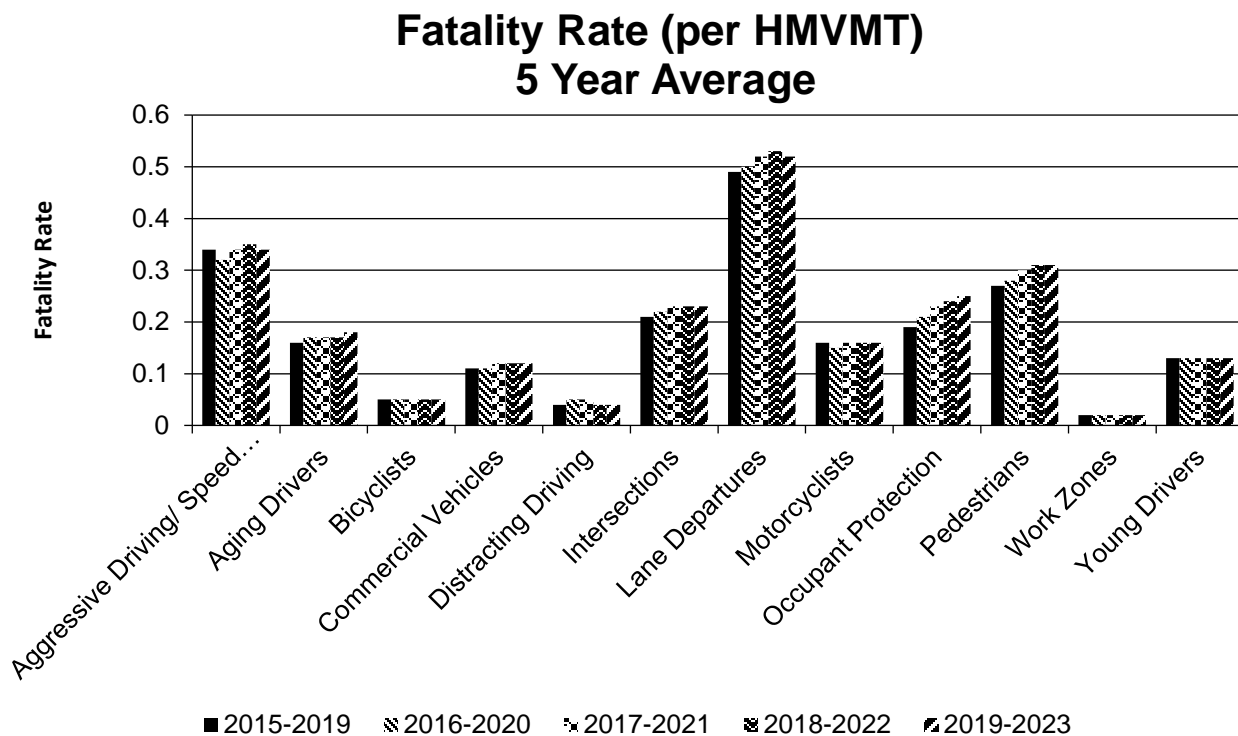
| SHSP Emphasis Area  | Targeted Crash Type | Number of Fatalities (5-yr avg) | Number of Serious Injuries (5-yr avg) | Fatality Rate (per HMVMT) (5-yr avg) | Serious Injury Rate (per HMVMT) (5-yr avg) |
|---------------------|---------------------|---------------------------------|---------------------------------------|--------------------------------------|--|
| Motorcyclists       |                     | 544.4                           | 3,311.2                               | 0.16                                 | 1.01                                       |
| Occupant Protection |                     | 822.8                           | 2,210.2                               | 0.25                                 | 0.68                                       |
| Pedestrians         |                     | 1,023.6                         | 2,473.2                               | 0.31                                 | 0.76                                       |
| Work Zones          |                     | 79.8                            | 263.8                                 | 0.02                                 | 0.08                                       |
| Young Drivers       |                     | 434.4                           | 2,212.6                               | 0.13                                 | 0.67                                       |

## Number of Fatalities 5 Year Average



## Number of Serious Injuries 5 Year Average





***Project Effectiveness***

**Provide the following information for previously implemented projects that the State evaluated this reporting period.**

| LOCATION  | FUNCTIONAL CLASS | IMPROVEMENT CATEGORY | IMPROVEMENT TYPE | PDO BEFORE | PDO AFTER | FATALITY BEFORE | FATALITY AFTER | SERIOUS INJURY BEFORE | SERIOUS INJURY AFTER | ALL OTHER INJURY BEFORE | ALL OTHER INJURY AFTER | TOTAL BEFORE | TOTAL AFTER | EVALUATION RESULTS (BENEFIT/COST RATIO) |
|---|------------------|----------------------|------------------|------------|-----------|-----------------|----------------|-----------------------|----------------------|-------------------------|------------------------|--------------|-------------|---|
| Please attached for a complete list of HSIP previously implemented state and local projects |                  |                      |                  |            |           |                 |                |                       |                      |                         |                        |              |             |   |

A complete list of HSIP previously implemented state and local projects are attached.

Compliance Assessment

What date was the State’s current SHSP approved by the Governor or designated State representative?

03/15/2021

What are the years being covered by the current SHSP?

From: 2020 To: 2024

When does the State anticipate completing its next SHSP update?

2025

The State anticipates completing it's next SHSP update in 2025 and 2028 with the SHSP Implementation Action Plan.

Provide the current status (percent complete) of MIRE fundamental data elements collection efforts using the table below.

\*Based on Functional Classification (MIRE 1.0 Element Number) [MIRE 2.0 Element Number]

| ROAD TYPE       | *MIRE NAME (MIRE NO.)                    | NON LOCAL PAVED ROADS - SEGMENT |           | NON LOCAL PAVED ROADS - INTERSECTION |           | NON LOCAL PAVED ROADS - RAMPS |           | LOCAL PAVED ROADS |           | UNPAVED ROADS |           |
|-----------------|--|---------------------------------|-----------|--------------------------------------|-----------|-------------------------------|-----------|-------------------|-----------|---------------|-----------|
|                 |  | STATE                           | NON-STATE | STATE                                | NON-STATE | STATE                         | NON-STATE | STATE             | NON-STATE | STATE         | NON-STATE |
| ROADWAY SEGMENT | Segment Identifier (12) [12]             | 100                             | 100       |                                      |           |                               |           |                   |           |               |           |
|                 | Route Number (8) [8]                     | 100                             | 100       |                                      |           |                               |           |                   |           |               |           |
|                 | Route/Street Name (9) [9]                | 100                             | 100       |                                      |           |                               |           |                   |           |               |           |
|                 | Federal Aid/Route Type (21) [21]         | 100                             | 100       |                                      |           |                               |           |                   |           |               |           |
|                 | Rural/Urban Designation (20) [20]        | 100                             | 100       |                                      |           |                               |           |                   | 100       |               |           |
|                 | Surface Type (23) [24]                   | 100                             | 10        |                                      |           |                               |           |                   | 10        |               |           |
|                 | Begin Point Segment Descriptor (10) [10] | 100                             | 100       |                                      |           |                               |           |                   | 100       |               |           |
|                 | End Point Segment Descriptor (11) [11]   | 100                             | 100       |                                      |           |                               |           |                   | 100       |               |           |
|                 | Segment Length (13) [13]                 | 100                             | 100       |                                      |           |                               |           |                   |           |               |           |
|                 | Direction of Inventory (18) [18]         | 100                             | 100       |                                      |           |                               |           |                   |           |               |           |
|                 | Functional Class (19) [19]               | 100                             | 100       |                                      |           |                               |           |                   | 100       |               |           |

| ROAD TYPE        | *MIRE NAME (MIRE NO.)                                     | NON LOCAL PAVED ROADS - SEGMENT |           | NON LOCAL PAVED ROADS - INTERSECTION |           | NON LOCAL PAVED ROADS - RAMPS |           | LOCAL PAVED ROADS |           | UNPAVED ROADS |           |
|------------------|---|---------------------------------|-----------|--------------------------------------|-----------|-------------------------------|-----------|-------------------|-----------|---------------|-----------|
|                  |   | STATE                           | NON-STATE | STATE                                | NON-STATE | STATE                         | NON-STATE | STATE             | NON-STATE | STATE         | NON-STATE |
|                  | Median Type (54) [55]                                     | 100                             | 30        |                                      |           |                               |           |                   |           |               |           |
|                  | Access Control (22) [23]                                  | 100                             | 100       |                                      |           |                               |           |                   |           |               |           |
|                  | One/Two Way Operations (91) [93]                          | 100                             | 100       |                                      |           |                               |           |                   |           |               |           |
|                  | Number of Through Lanes (31) [32]                         | 100                             | 100       |                                      |           |                               |           |                   | 100       |               |           |
|                  | Average Annual Daily Traffic (79) [81]                    | 100                             | 80        |                                      |           |                               |           |                   | 50        |               |           |
|                  | AADT Year (80) [82]                                       | 100                             | 80        |                                      |           |                               |           |                   |           |               |           |
|                  | Type of Governmental Ownership (4) [4]                    | 100                             | 100       |                                      |           |                               |           |                   | 100       |               |           |
| INTERSECTION     | Unique Junction Identifier (120) [110]                    |                                 |           | 100                                  | 20        |                               |           |                   |           |               |           |
|                  | Location Identifier for Road 1 Crossing Point (122) [112] |                                 |           | 100                                  | 20        |                               |           |                   |           |               |           |
|                  | Location Identifier for Road 2 Crossing Point (123) [113] |                                 |           | 100                                  | 20        |                               |           |                   |           |               |           |
|                  | Intersection/Junction Geometry (126) [116]                |                                 |           | 100                                  | 20        |                               |           |                   |           |               |           |
|                  | Intersection/Junction Traffic Control (131) [131]         |                                 |           | 100                                  | 20        |                               |           |                   |           |               |           |
|                  | AADT for Each Intersecting Road (79) [81]                 |                                 |           | 100                                  | 20        |                               |           |                   |           |               |           |
|                  | AADT Year (80) [82]                                       |                                 |           | 100                                  | 20        |                               |           |                   |           |               |           |
|                  | Unique Approach Identifier (139) [129]                    |                                 |           | 100                                  | 20        |                               |           |                   |           |               |           |
| INTERCHANGE/RAMP | Unique Interchange Identifier (178) [168]                 |                                 |           |                                      |           | 50                            |           |                   |           |               |           |
|                  | Location Identifier for Roadway at                        |                                 |           |                                      |           | 50                            |           |                   |           |               |           |

| ROAD TYPE                          | *MIRE NAME (MIRE NO.)   | NON LOCAL PAVED ROADS - SEGMENT |           | NON LOCAL PAVED ROADS - INTERSECTION |           | NON LOCAL PAVED ROADS - RAMPS |           | LOCAL PAVED ROADS |           | UNPAVED ROADS |           |
|------------------------------------|---|---------------------------------|-----------|--------------------------------------|-----------|-------------------------------|-----------|-------------------|-----------|---------------|-----------|
|                                    |   | STATE                           | NON-STATE | STATE                                | NON-STATE | STATE                         | NON-STATE | STATE             | NON-STATE | STATE         | NON-STATE |
|                                    | Beginning of Ramp Terminal (197) [187]                              |                                 |           |                                      |           |                               |           |                   |           |               |           |
|                                    | Location Identifier for Roadway at Ending Ramp Terminal (201) [191] |                                 |           |                                      |           | 50                            |           |                   |           |               |           |
|                                    | Ramp Length (187) [177]   |                                 |           |                                      |           | 50                            |           |                   |           |               |           |
|                                    | Roadway Type at Beginning of Ramp Terminal (195) [185]              |                                 |           |                                      |           | 100                           |           |                   |           |               |           |
|                                    | Roadway Type at End Ramp Terminal (199) [189]                       |                                 |           |                                      |           | 100                           |           |                   |           |               |           |
|                                    | Interchange Type (182) [172]  |                                 |           |                                      |           | 100                           |           |                   |           |               |           |
|                                    | Ramp AADT (191) [181]   |                                 |           |                                      |           | 100                           |           |                   |           |               |           |
|                                    |   |                                 |           |                                      |           |                               |           |                   |           |               |           |
|                                    | Year of Ramp AADT (192) [182]                                       |                                 |           |                                      |           | 100                           |           |                   |           |               |           |
|                                    | Functional Class (19) [19]  |                                 |           |                                      |           | 100                           |           |                   |           |               |           |
|                                    | Type of Governmental Ownership (4) [4]                              |                                 |           |                                      |           | 100                           |           |                   |           |               |           |
| Totals (Average Percent Complete): |   | 100.00                          | 88.89     | 100.00                               | 20.00     | 81.82                         | 0.00      | 0.00              | 73.33     | 0.00          | 0.00      |

\*Based on Functional Classification (MIRE 1.0 Element Number) [MIRE 2.0 Element Number]

**Describe actions the State will take moving forward to meet the requirement to have complete access to the MIRE fundamental data elements on all public roads by September 30, 2026.**

The Caltrans Transportation System Network Replacement (TSNR) project is being developed for a new statewide safety database that will not only include MIRE fundamental data element (FDE) but also accommodate other safety related data such as bicycle and pedestrian information.

Caltrans is developing an agreement to establish a collaborative framework between Caltrans and local agencies to share and integrate MIRE FDE data.

Caltrans will contract out with Geographical Information Center at California State University, Chico to develop statewide intersection dataset.

Caltrans will develop data integration methods to merge MIRE FDE data from various sources into MIRE dataset.



## **Optional Attachments**

Program Structure:

hsip-guidelines-2022 (1).pdf

Project Implementation:

#29Local HSIP Programmed Projects FY 23-24 .xlsx

#29 State HSIP Programmed Projects FY 23\_24.xlsx

Safety Performance:

#39 SHSP Actions Aging Drivers and Pedestrians Sept 2024.docx

Evaluation:

#46 State Final Reporting 010\_015 file\_2020\_Before\_After.xlsx

#46LocalRoadsHSIP\_BCR\_2024 ).xlsx

Compliance Assessment:

## Glossary

**5 year rolling average:** means the average of five individuals, consecutive annual points of data (e.g. annual fatality rate).

**Emphasis area:** means a highway safety priority in a State's SHSP, identified through a data-driven, collaborative process.

**Highway safety improvement project:** means strategies, activities and projects on a public road that are consistent with a State strategic highway safety plan and corrects or improves a hazardous road location or feature or addresses a highway safety problem.

**HMVMT:** means hundred million vehicle miles traveled.

**Non-infrastructure projects:** are projects that do not result in construction. Examples of non-infrastructure projects include road safety audits, transportation safety planning activities, improvements in the collection and analysis of data, education and outreach, and enforcement activities.

**Older driver special rule:** applies if traffic fatalities and serious injuries per capita for drivers and pedestrians over the age of 65 in a State increases during the most recent 2-year period for which data are available, as defined in the Older Driver and Pedestrian Special Rule Interim Guidance dated February 13, 2013.

**Performance measure:** means indicators that enable decision-makers and other stakeholders to monitor changes in system condition and performance against established visions, goals, and objectives.

**Programmed funds:** mean those funds that have been programmed in the Statewide Transportation Improvement Program (STIP) to be expended on highway safety improvement projects.

**Roadway Functional Classification:** means the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide.

**Strategic Highway Safety Plan (SHSP):** means a comprehensive, multi-disciplinary plan, based on safety data developed by a State Department of Transportation in accordance with 23 U.S.C. 148.

**Systematic:** refers to an approach where an agency deploys countermeasures at all locations across a system.

**Systemic safety improvement:** means an improvement that is widely implemented based on high risk roadway features that are correlated with specific severe crash types.

**Transfer:** means, in accordance with provisions of 23 U.S.C. 126, a State may transfer from an apportionment under section 104(b) not to exceed 50 percent of the amount apportioned for the fiscal year to any other apportionment of the State under that section.