

STAFF REPORT



MEETING DATE:	December 14, 2023
SUBJECT:	Update on Safety, Pavement and Bridge Condition, and System Performance Targets for the Shasta Region
AGENDA ITEM:	7-8
STAFF CONTACT:	Mehdi Moeinaddini, Associate Transportation Planner

SUMMARY:

As part of the federal Performance-Based Planning and Programming mandate, the Federal Highway Administration (FHWA) has established three performance management (PM) focus areas, including Safety (PM1), Pavement and Bridge Condition (PM2), and System Performance (PM3). Progress reports have been provided to Caltrans over the past year. Staff will provide an update on both the targets and current progress in the Shasta Region.

STAFF RECOMMENDATION:

It is recommended that the board of directors receive an update on federal safety performance targets.

DISCUSSION:

Background – States and metropolitan regions receiving federal highway and transit funding are required to participate in performance-based transportation planning and programming. Through a series of rulemakings, the FHWA and Federal Transit Administration (FTA) have established national performance measures for safety (PM1); pavement and bridge condition (PM2); and system performance (PM3). States and metropolitan regions must develop and adopt numerical performance targets that support these federal policy priorities. In December 2017, the board of directors adopted statewide performance measure targets and authorized the executive director to reaffirm these performance targets annually so long as there are no major changes and no compelling reason to develop regional targets. SRTA must show how investment priorities in the Regional Transportation Improvement Program (RTIP) are linked to the federal performance measures.

Performance Progress Report – The following updates are provided for informational purposes:

Safety (PM1) – SRTA supports the statewide safety targets set by Caltrans rather than establishing region-specific numerical targets. Caltrans and the Office of Traffic Safety (OTS), with input from MPOs, jointly developed statewide PM1 targets. To comply with new requirements, Caltrans and OTS agreed on a target-setting method that would reflect targets that remained constant when comparing the 2026 five-year rolling average with the 2021 five-year rolling average. This was achieved by setting the 2026 five-year rolling average target equal to the 2021 five-year rolling average and using the average annual change to calculate the annual 2022, 2023, 2024, 2025, and 2026 values. Since Caltrans continues to report performance measures and targets annually, targets are available through 2024.

Table 1 shows the current statewide safety performance targets recently set for 2024, while Table 2 provides a five-year history for the Shasta Region. National 2022 safety data has not finished its review

period and is not currently available. The regional data matches with statewide trends which have seen increases in incidents in recent years. The Shasta Region represents a statistically small portion of statewide measures and has limited resources; however, SRTA staff will continue to coordinate with Caltrans D2 and other regional agencies, within available resources, to identify ways to increase safety and support the realization of statewide safety performance targets. It is important that regional partners consider ways to address safety, to the extent practical, in their plans, programs, and projects.

Table 1: Caltrans' 2024 Statewide PM1 Targets

Performance Measure	5-Year Rolling Average	Data Source
Number of Fatalities	4,080.6	FARS
Rate of Fatalities (per 100M VMT)	1.300	FARS & HPMS
Number of Serious Injuries	16,628.1	SWITRS
Rate of Serious Injuries (per 100M VMT)	4.918	SWITRS & HPMS
Number of Non-Motorized Fatalities and Severe Injuries	4,380.5	FARS & SWITRS

Table 2: Most Current Shasta Region PM1 Data Available

Performance Target	2017	2018	2019	2020	2021
Number of Fatalities	30	32	35	40	39
Rate of Fatalities (per 100M VMT)	1.555	1.638	1.635	2.264	2.087
Number of Serious Injuries	116	97	135	124	164
Rate of Serious Injuries (per 100M VMT)	6.015	4.965	6.307	7.018	8.777
Number of Non-Motorized Fatalities	4	6	3	7	12
Number of Non-Motorized Severe Injuries	15	13	14	14	11

Pavement and Bridge Condition (PM2) – As part of the 2022 update to the statewide Transportation Asset Management Plan (TAMP), Caltrans created a Performance Target Analysis Tool (PTAT) to assist in collecting data and developing 4-year and 10-year goals for pavement and bridge asset conditions on the National Highway System (NHS). For the Shasta Region, PM2 standards only apply to nine lane-miles and three bridges all on Cypress Avenue between State Route 273 and Churn Creek Road. The city of Redding and Caltrans regularly inspect the facility conditions for any significant defects or maintenance needs. Table 3 summarizes the current conditions of those facilities, based on available data, compared to existing statewide targets.

Table 3: Shasta Region Existing Condition and Target Percentages for PM2

Performance Measure	Confirm ¹	4-Year Target ²	10-Year Target ²
Non-interstate NHS pavement in 'Good' condition	0%	1.1%	2.8%
Non-interstate NHS pavement in 'Fair' condition	78.7%	77.6%	71.5%
Non-interstate NHS pavement in 'Poor' condition	21.3%	21.3%	25.7%
NHS bridges in 'Good' condition	2.6%	2.6%	2.5%
NHS bridges in 'Fair' condition	97.4%	95.2%	91.9%
NHS bridges in 'Poor' condition	0%	2.3%	5.6%

¹ <https://dot.ca.gov/programs/asset-management/california-transportation-asset-management-plan/national-highway-system-performance-and-financial-data> (2019)

² California Department of Transportation. 2022 Transportation Asset Management Plan (TAMP)

PM3 – SRTA supports the statewide NHS performance and interstate system freight movement performance targets set by Caltrans (Table 4). Table 5 shows that regionally individuals can rely on travel time information overall.

Table 4: Caltrans' 2023 Statewide PM3 Targets

Performance Measure	2022 Baseline	2-Year Target	4-Year Target
Percent of Reliable Person-Miles Traveled on the Interstate	73.8%	74.3%	74.8%
Percent of Reliable Person-Miles Traveled on the Non-Interstate NHS	83.7%	84.2%	84.7%
Percent of Interstate System Mileage Providing Reliable Truck Travel Time ¹	1.60%	1.60%	1.60%

¹The Truck Travel Time Reliability Index is a commonly used indicator and ranges from 0 to 2. A value of 1.0 represents consistent and reliable travel times, values below 1.0 indicate more reliable travel times than average, and values above 1.0 suggest less reliable travel times than average. For instance, a value of 1.2 might indicate that travel times are 20% less reliable than the average.

Table 5: Most Current Shasta Region PM3 Data Available

Reliable Person-Miles Traveled on the Interstate	100%
Reliable Person-Miles Traveled on the Non-Interstate NHS	91.2%
Interstate System Mileage Providing Reliable Truck Travel Time	1.14%

Source: 2022 National Performance Management Research Data Set (NPMRDS)

ALTERNATIVES:

This is an informational item. The board of directors may request additional information for a presentation at the next board meeting.

OTHER AGENCY INVOLVEMENT:

Caltrans headquarters works with OTS and metropolitan planning organizations across the state to develop annual statewide performance measures and provides the underlying data and methodology used to arrive at state targets. Staff works with Caltrans and applicable local jurisdictions to track and report performance measure data.

FISCAL IMPACT:

SRTA and local agencies may allocate regional and local funds as they see fit, in accordance with funding program guidelines, and continue to apply for federal and state funds. Should the state not meet its performance targets several years in a row, Caltrans and the California Transportation Commission may be required to direct more federal resources toward related projects in areas where targets are not being met.