

Performance Management 3
Target Setting Whitepaper 2022-2026
Second Performance Period – Year 1

On January 18, 2017, the Federal Highway Administration (FHWA) published a final rule in the Federal Register (82 FR 5970) that established performance measures that State Departments of Transportation (DOTs) and Metropolitan Planning Organizations (MPOs) will use to report on the performance of the Interstate and Non-Interstate National Highway System (NHS) to carry out the National Highway Performance Program (NHPP); freight movement on the Interstate system to carry out the National Highway Freight Program (NHFP); and traffic congestion and on-road mobile source emissions for the purpose of carrying out the Congestion Mitigation and Air Quality Improvement (CMAQ) Program. The rule addressed requirements established by the Moving Ahead for Progress in the 21st Century Act (MAP-21), and included six national performance measures related to System Performance, as follows:

- Percent of Reliable Person-Miles Traveled on the Interstate;
- Percent of Reliable Person-Miles Traveled on the Non-Interstate NHS;
- Percentage of Interstate System Mileage Providing Reliable Truck Travel Time (Truck Travel Time Reliability Index);
- Total Emissions Reductions by Applicable Pollutants under the CMAQ Program;
- Annual Hours of Peak-Hour Excessive Delay Per Capita (PHED); and
- Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel.

Federal regulations require State Departments of Transportation (State DOTs) to establish and report annual targets related to each of these six performance measures by June 16th every two years. MPOs shall establish a target six months after State DOTs establish targets (December 16th) by either: 1) Agreeing to plan and program projects so that they contribute toward the accomplishment of the State DOT system performance target for that performance measure; or 2) Committing to a quantifiable target for that performance measure for their metropolitan planning area. In addition, State DOTs and MPOs with NHS mileage in applicable urbanized areas must agree to single, unified PM3 targets for the PHED and Non-SOV performance measures.

State DOTs may adjust an established 4-year target in the Mid-Performance Period Progress Report, and shall coordinate with relevant MPOs when adjusting their 4-year target(s). Any adjustments made to 4-year target established for the CMAQ Traffic Congestion measure shall be agreed upon and made collectively by all State DOTs and MPOs that include any portion of the NHS in the respective urbanized area applicable to the measures.

In preparation for PM3's 2022 target-setting effort, coordination between the California Department of Transportation (Caltrans) and MPOs occurred via guidance from two PM3 Target Setting Engagement workshops held on August 10, 2022 and on October 19, 2022. Both virtual workshops included members from MPOs, RTPAs, and Caltrans at both meetings. The information provided by the MPOs via these workshops and meetings was used to collaboratively establish targets for four of the performance measures, and individual discussions and email correspondences were held with each MPO with an urbanized area over 200,000 population to establish single, unified targets for two of the performance measures.

The outreach efforts included innovative collaborative tools for establishing the initial targets. The virtual August and October 2022 Target Setting Engagement Session workshops allowed participants to use Poll Everywhere to vote on proposed target scenarios. Workshop participants were given draft baseline numbers for each of the performance measures, and then given three target scenarios: 1) Setting targets above the existing baseline number (high); 2) Maintaining the existing baseline number (Medium); and 3) Setting targets below the existing baseline number (low). Next, the participants were provided a specific Poll Everywhere link to vote on which target setting direction they supported. Finally, these results were used to prepare draft targets for the 2022-2026 Biennial Performance Period report. These targets are listed below in Table 1.

Another tool used for setting the initial targets was the “NPMRDS Analytics” web-based tool provided by Regional Integrated Transportation Information System (RITIS). Caltrans was provided access to this tool as a participant in a Transportation Performance Management Pooled- Fund Study. This tool has been vital in establishing four of the six initial performance measure targets because it provided a simple, easy-to-use analysis of the National Performance Management Research Data (NPMRDS) data.

For example, the three reliability measures (Interstate, Non-Interstate NHS, and Freight) and the PHED measure all required use of the NPMRDS data. This NPMRDS data provided the baseline information for most of the performance measure calculations and was used to establish statewide targets.

Final targets were ultimately established based on an iterative process and much coordination between Caltrans, MPOs, CALCOG, and the California State Transportation Agency.

Table 1

Performance Measure	2021 Baseline Data	2-year Target	4-year Target
Percent of Reliable Person-Miles Traveled on the Interstate ¹ (Medium)	73.8%	74.3% (+0.5%)	74.8% (+1%)
Percent of Reliable Person-Miles Traveled on the Non-Interstate NHS1 (Medium)	83.7%	84.2% (+0.5%)	84.7% (+1%)
Percentage of Interstate System Mileage Providing Reliable Truck Travel Time (Truck Travel Time Reliability Index) ¹ (Low)	1.60	1.60(no proposed change)	1.60 (no proposed change)
Total Emissions Reductions by Applicable Pollutants under the CMAQ Program ²	CMAQ Public Access System Cumulative (2018-2021 for Baseline)	Historical Emission Reduction Trends 2-year Target	Historical Emission Reduction Trends 4-year Target
VOC (kg/day)	2,551.00	2862.00	5724.00
CO (kg/day)	21,771.00	12798.00	25596.00
NOx (kg/day)	7,213.00	4317.00	8635.00
PM10 (kg/day)	3,830.00	2152.00	4305.00
PM2.5 (kg/day)	1,537.00	1830.00	3659.00
* Annual Hours of Peak-Hour Excessive Delay Per Capital	State and MPO must coordinate on a single, unified 2-year 4-year target.		
Sacramento UA (Low)	9.0 Hours	9.0 Hours	9.0 Hours
Antioch UA (Medium)	6.5 Hours	6.5 Hours	6.4 Hours
Concord UA (Medium)	16.0 Hours	15.9 Hours	15.8 Hours
San Jose UA (Medium)	13.7 Hours	13.4 Hours	13.2 Hours
Santa Rosa UA (Medium)	6.6 Hours	6.6 Hours	6.5 Hours
San Francisco-Oakland UA (Medium)	18.3 Hours	17.9 Hours	17.6 Hours
Fresno UA (Medium)	6.5 Hour	6.5 Hours	6.4 Hours
Bakersfield UA (Medium)	9.6 Hours	9.6 Hours	9.5 Hours
Modesto UA (Low)	8.1 Hours	8.1 Hours	8.1 Hours
Stockton UA (Low)	8.0 Hours	8.0 Hours	8.0 Hours
Visalia UA (Medium)	7.3 Hours	7.3 Hours	7.3 Hours
San Diego (Low)	11.9 Hours	11.9 Hours	11.9 Hours
Indio-Cathedral City UA (Low)	6.4 Hours	6.4 Hours	6.4 Hours
Lancaster-Palmdale UA (Low)	4.3 Hours	4.3 Hours	4.3 Hours
Los Angeles-Long Beach-Anaheim UA (Low)	32.7 Hours	32.7 Hours	32.7 Hours
Mission Viejo-Lake Forest-San Clemente UA (Low)	9.4 Hours	9.4 Hours	9.4 Hours
Murrieta-Temecula-Manifee UA (Low)	9.2 Hours	9.2 Hours	9.2 Hours
Oxnard UA (Low)	11.1 Hours	11.1 Hours	11.1 Hours
Santa Barbara UA (Low)	13.4 Hours	13.4 Hours	13.4 Hours
Santa Clarita UA (Low)	11.5 Hours	11.5 Hours	11.5 Hours

Thousand Oaks UA (Low)	7.1 Hours	7.1 Hours	7.1 Hours
Riverside-San Bernardino UA (Low)	16.6 Hours	16.6 Hours	16.6 Hours
Victorville UA (Low)	6.2 Hours	6.2 Hours	6.2 Hours
*Percent of Non-Single Occupancy Vehicle (SOV) Travel ³	State and MPO must coordinate on a single, unified 2-year and 4-year target.		
Sacramento UA (Low)	35.1%	35.1%	35.1%
Antioch UA (Medium)	30.8%	31.8%	32.8%
Concord UA (Medium)	51.1%	52.1%	53.1%
San Jose UA (Medium)	48.6%	49.6%	50.6%
Santa Rosa UA (Medium)	32.5%	33.5%	34.5%
San Francisco-Oakland UA (Medium)	55.4%	56.4%	57.4%
Fresno UA (Medium)	26.9%	27.9%	28.9%
Bakersfield UA (Medium)	20.2%	21.2%	22.2%
Modesto UA (Low)	23.4%	23.4%	23.4%
Stockton UA (Low)	23.6%	23.6%	23.6%
Visalia UA (Medium)	22.8%	23.8%	24.8%
San Diego (Low)	36.2%	36.2%	36.2%
Indio-Cathedral City UA (Low)	25.2%	25.2%	25.2%
Lancaster-Palmdale UA (Low)	23.7%	23.7%	23.7%
Los Angeles-Long Beach-Anaheim UA (Low)	36.7%	36.7%	36.7%
Mission Viejo-Lake Forest-San Clemente UA (Low)	38.6%	38.6%	38.6%
Murrieta-Temecula-Manifee UA (Low)	33.1%	33.1%	33.1%
Oxnard UA (Low)	28.6%	28.6%	28.6%
Santa Barbara UA (Low)	44.7%	44.7%	44.7%
Santa Clarita UA (Low)	32.7%	32.7%	32.7%
Thousand Oaks UA (Low)	35.9%	35.9%	35.9%
Riverside-San Bernardino UA (Low)	25.2%	25.2%	25.2%
Victorville UA (Low)	27.6%	27.6%	27.6%

¹ Source: NPMRDS Analytics Tool (<https://npmrds.ritis.org/analytics/>)

² Source: CMAQ Public Access System (https://fhwaapps.fhwa.dot.gov/cmaq_pub/)

³ Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates

⁴ State must establish target no later than December 16, 2022