



August 15, 2022

To: Transportation Planning Committee
From: Kelly Clarke
Subject: Federal Performance Based Planning and Programming

Action Recommended: Discussion and Recommendation to MPC

Background

MAP 21 and the FAST Act transportation bills required a Performance Based Planning and Programming (PBPP) framework of states and Metropolitan Planning Organizations (MPOs) to be achieved by integrating goal-oriented performance measures and targets into transportation plans and Transportation Improvement Programs (TIPs). Central Lane MPO addressed the PBPP requirements by establishing regional performance measures in the 2045 Regional Transportation Plan and the Metropolitan Transportation Improvement Program (MTIP). Those regional measures (Attachment 1) are tied to the RTP goals and intended to measure RTP outcomes over time.

The federal legislation also required the United States Department of Transportation (USDOT) to establish federal transportation performance measures related to safety, pavement and bridge condition, system performance and Congestion Mitigation and Air Quality (CMAQ) funded projects. States and MPOs must also integrate the federal measures into RTPs and MTIPs. Accordingly, Central Lane MPO coordinated with the Oregon Department of Transportation (ODOT) on target setting for each measure for the first reporting cycle of 2018-2021 and the Metropolitan Policy Committee (MPC) signed a Resolution to support the state targets at their November 1, 2018 meeting.

The time has come, per federal regulatory timelines, to:

1. Review the state targets for the 2022-2026 reporting cycle; and
2. Address the last two remaining performance measures and targets from the MAP 21 and FAST Act legislation.

The remainder of this memo presents ODOT's statewide targets for federal pavement and bridge condition, and system performance measures for the 2022 through 2026 reporting cycle; and the proposed targets for the two remaining performance measures; which are:

- Annual Hours of Peak Hour Excessive Delay Per Capita
- Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel

Performance Measures and Targets for 2022 through 2026 Reporting Cycle

ODOT established statewide targets (Table 1) for the following federal performance measure areas based upon the calculation methodologies and data sets required by FHWA rulemaking:

1. Pavement Condition
 - a. Percentage of pavements of the Interstate System in good condition

- b. Percentage of pavements of the Interstate System in poor condition
- c. Percentage of pavements of the non-Interstate National Highway System (NHS) in good condition
- d. Percentage of pavements of the non-Interstate NHS in poor condition
- 2. Bridge Condition
 - a. Percentage of NHS bridges by deck area classified as in good condition
 - b. Percentage of NHS bridges by deck area classified as in poor condition
- 3. National Highway System Performance
 - a. Percent of the person-miles traveled on the Interstate that are reliable (Interstate Travel Time Reliability measure)
 - b. Percent of person-miles traveled on the non-Interstate NHS that are reliable (Non-Interstate Travel Time Reliability measure)
 - c. Truck Travel Time Reliability Index (Freight Reliability measure)
- 4. Congestion Mitigation and Air Quality- On-Road Mobile Source Emissions
 - a. Total emissions reduction of PM-10 from funded CMAQ projects

Table 1: Federal Performance Measures and Statewide Targets for the 2022 Through 2026 Reporting Cycle

FAST Act Federal Performance Measures	Base Line 2022	Statewide 2-Year Target 2024	Statewide 4-Year Target 2026
Percentage of Pavements of the Interstate System in Good Condition	57.7%*	50.0%	50.0%
Percentage of Pavements of the Interstate System in Poor Condition	0.2%*	0.5%	0.5%
Percentage of Pavements of the Non-Interstate NHS in Good Condition	33.5%	30.0%	30.0%
Percentage of Pavements of the Non-Interstate NHS in Poor Condition	2.9%	5.0%	5.0%
Percentage of NHS Bridges Classified as in Good Condition	13.5%	11.4%	10.0%
Percentage of NHS Bridges Classified as in Poor Condition	1.8%	2.4%	3.0%
Percent of the Person-Miles Traveled on the Interstate That Are Reliable	78%	78%	78%
Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable	78%	78%	78%
Truck Travel Time Reliability (TTTR) Index	1.45	1.45	1.45
Total Emissions Reduction of PM-10 from Funded CMAQ Projects	1115.03 kg/day	46.13 kg/day	92.25 kg/day

CLMPO staff recommends supporting the state targets through the 2026 reporting cycle. By supporting the state targets, CLMPO will continue to support the state in working towards the measures identified in the federal legislation and the state will continue to quantify and report on these measures statewide (including within the CLMPO area).

First New Performance Measure and Target: Annual Hours of Peak Hour Excessive Delay Per Capita

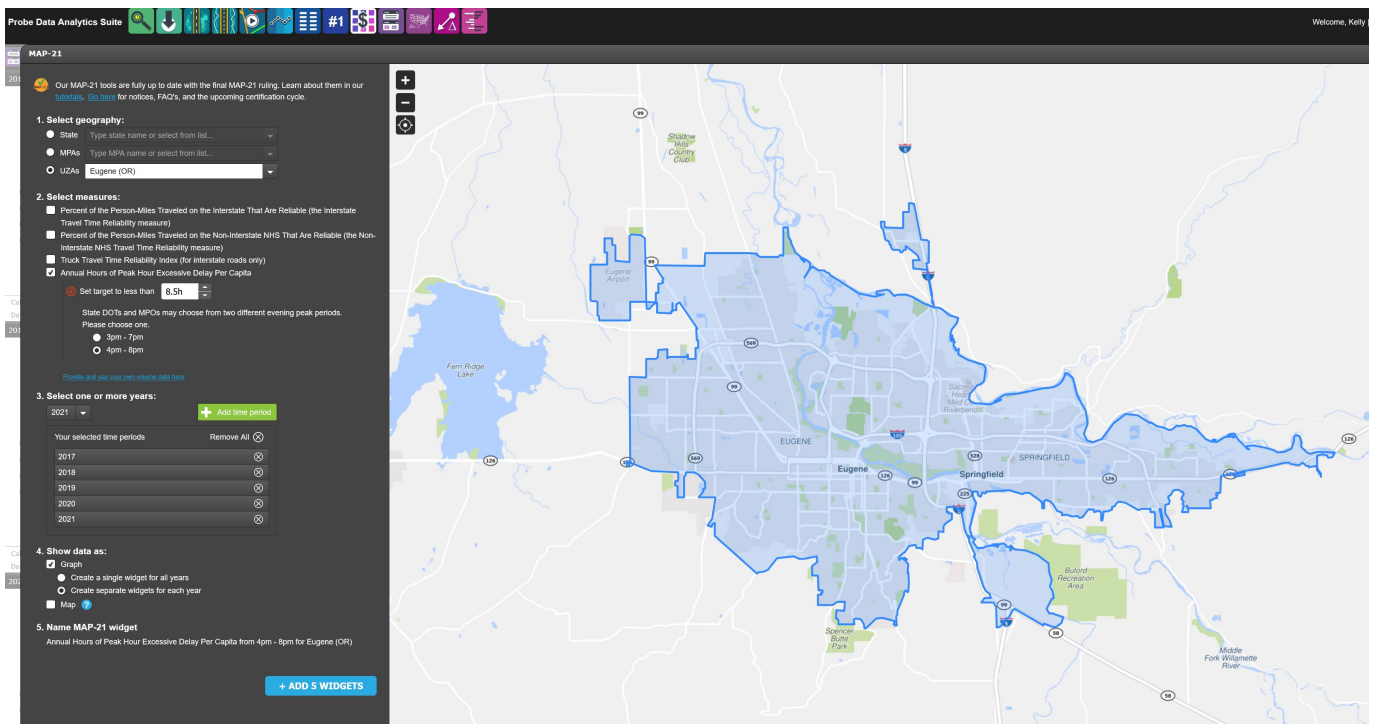
The annual hours of peak hour excessive delay (PHED) per capita performance measure will measure traffic congestion on the NHS. Per Federal Highway Administration guidance, the threshold for excessive delay will be based on the travel time at 20 miles per hour or 60% of the posted speed limit travel time, whichever is greater, and will be measured in 15-minute intervals.

This measure initially applied to urbanized areas of more than 1 million people that are also in nonattainment or maintenance areas for ozone, carbon monoxide or particulate matter. In the second performance period (which we are now preparing for), the population threshold changes to more than 200,000. States and MPOs, including CLMPO) with NHS mileage within an applicable urbanized area must coordinate on a single, unified target. PHED is measured using a data platform called RITIS. It will be a target specific to the CLMPO area given the applicability related to MPO size and maintenance status but it is also a component of the state's official Federal Performance Measures, targets, and reports.

The method in the RITIS platform to determine the PHED target is:

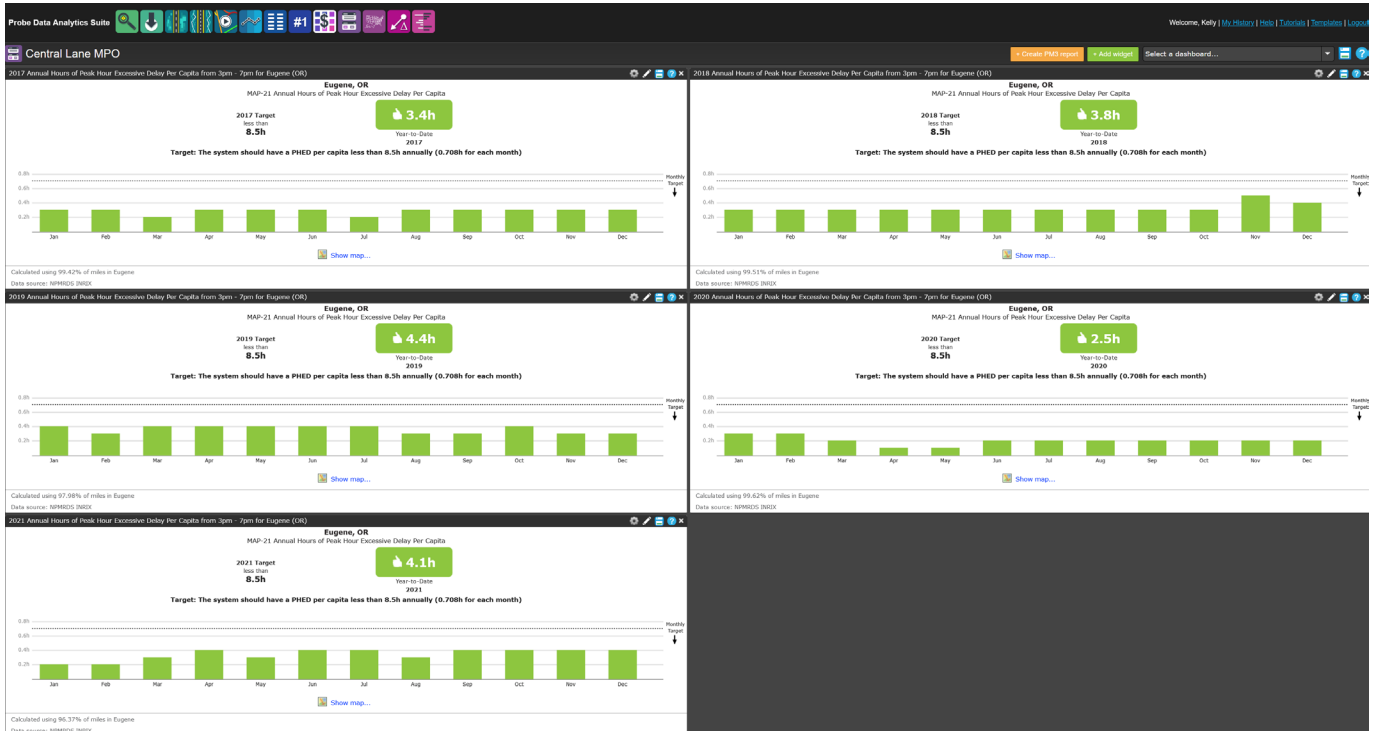
1. Select a target for Annual Hours of Peak Hour Excessive Delay Per Capita. As shown in Graphic 1¹ below, the target is set at less than 8.5 hours annually for the time periods from 2017 through 2021.

Graphic 1: RITIS Display for Target Setting



¹ Graphics in this memo are screenshots and the quality is poor. I will show the RITIS platform on my screen during the TASC meeting for better legibility.

2. Review the monthly hours of peak hour excessive delay per capita as shown in Graphic 2. The way this reads is that excessive delay per capita from each month (shown month to month on the x-axis) is added together and displayed in the green text box at the top of each widget. Each year is under the annual PHED target of 8.5 hours (or spread out over 12 months, no more than 0.708 hours per month).



While CLMPO does have local control in setting the PHED target given its size and maintenance status, this measure will be a component of the state’s official Federal Performance Measures, targets, and reports. Should CLMPO continue to support the state in working towards the measures identified in the federal legislation and listed earlier in this memo, then the PHED measure will be included and CLMPO will support the state in this target as well.

Transportation Advisory Sub-Committee (TASC) Discussion

TASC discussed the following PHED targets at their August 11, 2022 meeting:

- 2024 PHED Target – 8.5 hours
- 2026 PHED Target – 9 hours

These targets are in-line with regional and state policy to accept more congestion versus building additional capacity.

Second New Performance Measure and Target: Percent of Non-Single Occupancy Vehicle Travel

The percent of non-single occupancy vehicle (non-SOV) travel may include travel via carpool, van, public transportation, commuter rail, walking, bicycling, or telecommuting. This measure is intended to help

carry out the CMAQ program by encouraging investments that increase multimodal solutions and vehicle occupancy levels as strategies to reduce both criteria pollutant emissions and congestion.

Similar to the PHED measure, the non-SOV measure initially only applied to urbanized areas of more than 1 million people that are also in nonattainment or maintenance areas for ozone, carbon monoxide or particulate matter. In the second performance period, the population threshold changes to areas of more than 200,000. All States and MPOs with NHS mileage that overlaps within an applicable urbanized area must coordinate on a single, unified target and report on the measures for that area.

The 2016-2020, 5-year American Community Survey (ACS) Commuting (Journey to Work) data from the U.S. Census Bureau was used to determine the percent of non-SOV travel. Per the ACS, 69.8% of total workers drove alone. The converse of that is 30.2% met the criteria for non-SOV travel. As such the baseline percent of non-SOV travel is 30.2%.

While CLMPO does have local control in setting the non-SOV target given its size and maintenance status, this measure will be a component of the state's official Federal Performance Measures, targets, and reports. Should CLMPO continue to support the state in working towards the measures identified in the federal legislation and listed earlier in this memo, then the non-SOV measure will be included and CLMPO will support the state in this target as well.

Transportation Advisory Sub-Committee (TASC) Discussion

TASC discussed the following non-SOV targets at their August 11, 2022 meeting:

- 2024 Non-SOV Target – 33%
- 2026 Non-SOV Target – 35%

Summary

If CLMPO chooses to continue supporting ODOT's targets (including the PHED and non-SOV), the MPO will:

- Continue including the performance measures and targets in the RTP and planning towards achieving the target through our performance based planning and programming framework.
- Continue including a description in the MTIP of the anticipated effect of the TIP toward achieving the targets.
- Continue coordinating with ODOT as needed. ODOT will be responsible for calculating these data and reporting to FHWA.

If CLMPO chooses to establish our own targets, the MPO must follow all of the above requirements with these additional requirements:

- Establish targets for each performance measure in coordination with the ODOT Performance Measure Coordinator.
- Follow guidelines and best practices to appropriately set specific targets for the MPO area.
- Develop programs or projects that will contribute towards meeting the target.
- Quantify and report targets to ODOT on an annual basis.

Staff recommends supporting state targets.

ATTACHMENT 1
 Central Lane Metropolitan Planning Organization
 2045 Regional Transportation Plan Performance Measures

Miles Traveled - System-wide number of miles traveled (total and share of overall travel) within the CLMPO area
1. Vehicle Miles Traveled (total, per capita, and per employee)
2. Freight Miles Traveled (total, per capita, and per employee)
3. Transit Miles Traveled (total, per capita, and per employee)
Travel Time – Travel time between key origins and destinations
1. Motor vehicle travel time between key regional origin-destination pairs
2. Freight travel time between key freight origin-destination pairs
3. Transit travel time between key origin-destination pairs
Congested Miles of Travel Network – Miles of congested or severely congested regional corridors
1. Miles of congested regional corridors
2. Miles of severely congested regional corridors
Vehicles Hours of Delay - Magnitude of congestion accounting for both the degree of delay and the volume of delayed traffic at those locations
1. Passenger vehicle hours of delay
2. Truck vehicle hours of delay
Congestion - Locations on the regional roadway network that are congested
1. Locations on the regional roadway network that are congested or severely congested.
Mode Share – Percent of non-drive alone trips
1. Regional mode share for walking, biking, transit, and shared ride usage
2. Daily walking, biking, transit, and shared vehicle person trips
3. Transit trips on congested corridors
System Completeness – Completeness of regional sidewalks and bikeways
1. Mapping of regional pedestrian and bicycle networks completed
2. Mapping of regional pedestrian and bicycle facilities completed within ¼ mile of high frequency transit stops and within equity focused areas
Access to Jobs – Number of jobs accessible within a reasonable travel time
1. Jobs accessible by households within the following commute travel times/distances: 20-minute drive for passenger vehicles, 20-minute travel time for transit riders, ¾-mile distance by walking, 3 ¹ / ₃ -mile distance by biking.
Access to Services - Number of services (food, education, employment, and/or healthcare) accessible within a reasonable travel time
1. Services accessible by households within the following reasonable travel times/distances: 20-minute drive for passenger vehicles, 20-minute total travel time for transit riders, ¾-mile distance by walking, 3 ¹ / ₃ -mile distance by biking
Access to Transit – Number of households within ¼ mile of a high capacity transit stop
1. Number of households within ¼ mile of a high capacity transit stop
Access to High Capacity Transit – Number of households within ¼ mile of a high capacity transit stop
1. Number of households within ¼ mile of a high capacity transit stop (15 minute frequency or less)
Safety – Transportation-related collisions
1. Vehicle, pedestrian, and bicyclist fatal and serious injury crashes
2. Vehicle, pedestrian, and bicyclist fatalities where alcohol is a factor

3. Vehicle fatalities where a passenger is unrestrained

4. Motorcyclist fatalities, helmeted and un-helmeted

5. Fatalities where a driver's age is 20 or under

Transportation-Related Greenhouse Gas Emissions - Support local and state efforts to reduce transportation-related GHG emissions

1. Actions taken to support local and state efforts to achieve a 20% reduction in GHGs by 2040 from light vehicles consistent with the state goal to, by 2050, achieve GHG levels that are at least 75 percent below 1990 levels.