

TARGET SETTING

CMAQ

PERFORMANCE MEASURES



In accordance with 23 CFR 490.711 and 490.713, the Federal Highway Administration (FHWA) established performance measures for State Department of Transportations (DOTs) to use in assessing the Congestion Mitigation and Air Quality (CMAQ) Improvement Program for traffic congestion on the National Highway System (NHS). The following is a list of the required performance measures for the CMAQ program.

Performance Measures
Annual Hours of Peak Hour Excessive Delay per Capita (known as the PHED measure)
Percent of Non-Single Occupancy Vehicle (non-SOV) Travel

CONDITION BASED PERFORMANCE MEASURES

- The PHED is to determine traffic congestion levels on the NHS in urbanized areas.
- The annual excessive delay is based on the difference between the actual travel time and the threshold travel time for a roadway segment.
- The threshold for excessive delay is based on the travel time at 20 miles per hour (mph) or 60 percent of the posted speed limit for both of the following time periods:
 - 6:00 AM-10:00 AM Weekdays
 - 3:00 PM-7:00 PM Weekdays or 4:00 PM – 8:00 PM
- The annual excessive delay is then multiplied by the hourly traffic volume and occupancy factor for passenger cars, buses, and combination vehicles. Then the sum of annual excessive delay for all segments is divided by the latest urbanized area population estimates to determine the PHED.
- The Non-SOV measure is directly obtained from the Commuting data in the American Community Survey from the U.S. Census.

TARGET SETTING REQUIREMENTS

State DOTs:

- Must establish targets for Memphis-West Memphis-Marion Urbanized Area.
- Must establish statewide 2- and 4-year targets by May 20, 2018 and report targets by October 1, 2018 in the Baseline Performance Period Report.
- May adjust the 4-year targets at the Mid Performance Period Progress Report (October 1, 2020).

- State DOTs shall coordinate with relevant State DOTs and MPOs on the selection of the targets for each performance measure.

Metropolitan Planning Organizations (MPOs):

- Shall work with relevant DOTs to set targets for their region.
- Shall report baseline condition/performance and progress toward the achievement of their targets in the system performance report in the metropolitan transportation plan.

Other Information:

- These measures only apply to urbanized areas of more than one million people that are also in nonattainment or maintenance areas for ozone, carbon monoxide or particular matter for the first performance period (January 1, 2018 – December 31, 2021).
- In the second performance period beginning on January 1, 2022, the population threshold changes to more than 200,000.
- The PHED and Percent Non-SOV travel measures will be a single target for the Memphis-West Memphis-Marion Urbanized Area.
- The proposed PHED target can be greatly affected by construction jobs that may have not been accounted for.
- Population growth and increasing travel will affect traffic congestion in urban areas.
- The non-SOV measure is a product of the American Community Survey.
- These measures will be not be subject to the significant progress determination.

TARGETS

The targets were set in coordination with the Memphis MPO, West Memphis MPO, Tennessee DOT, and Mississippi DOT. The working group also included members of the Arkansas, Mississippi, and Tennessee FHWA Division Offices as well as the University of Tennessee.

The PHED measure and percent non-SOV targets were developed and approved via a working group. The baseline PHED was 8.42; the 5-year average non-SOV was 17.0 percent. The data for the measures was presented to this working group and pros, cons, and external factors were discussed. The final targets were proposed and approved by the work group. These targets represent conservative estimates based on latest available data.

Performance Targets		
	2-year	4-year
Annual Hours of Peak Hour Excessive Delay per Capita	-	18.81
Percent Non-Single Occupancy Vehicle Travel	16.5%	16.5%