The Transportation Performance Management Topic Videos series, produced by the Federal Highway Administration (FHWA), provides State Departments of Transportation, Metropolitan Planning Organizations, operators of public transportation, and other interested parties guidance for implementing Transportation Performance Management (TPM).

The Federal Highway Administration (FHWA) has established applicability determination processes for the performance measures related to the Congestion Mitigation and Air Quality Improvement (CMAQ) Program: Traffic Congestion and On-Road Mobile Source Emissions.

The applicability determination processes arise from the Federal transportation performance management rule related to system performance, also known as PM3.

The applicability determinations describe whether State Departments of Transportation (DOTs) or Metropolitan Planning Organizations (MPOs) are subject to that performance measure. You may be wondering what steps and information go into the applicability determination process, as well as how the determinations affect you as a DOT or MPO.

In this video, we will focus on the applicability determination for the Traffic Congestion performance measure—for both State DOTs and MPOs. If you’re interested in information about the applicability determination for the On-Road Mobile Source Emissions performance measure, please review the video on that topic.

We’ll provide answers to these questions:

• How is applicability determined for the Traffic Congestion performance measure?

• What actions are required from State DOTs and MPOs if the Traffic Congestion performance measure applies?

• How does the determination fit in with planning and the Transportation Performance Management (TPM) timeline for State DOTs and MPOs?

Let’s begin with a few key definitions.

The first key term is “Urbanized Area,” often referred to as a UZA. The FHWA defines UZAs as census-designated urban areas with 50,000 residents or more.

A “Metropolitan Planning Area,” or MPA, is the boundary in which the metropolitan transportation planning process must be carried out by MPOs.
Next we have “HPMS,” which stands for the Highway Performance Monitoring System. The FHWA defines HPMS as “a national level highway information system that includes data on the extent, condition, performance, use and operating characteristics of the nation’s highways.” HPMS contains information on all public roads, including their classification by type.

The last key term is “Nonattainment or Maintenance.” These are status designations related to the Environmental Protection Agency (EPA’s) determination of an area’s air quality. Nonattainment Area refers to a geographic area with monitored air quality that does not meet the National Ambient Air Quality Standards (or NAAQS) for specified air pollutants. Maintenance Area refers to a former Nonattainment Area that has taken successful measures to improve the air quality, and which has then been redesignated as an Attainment Area but remains subject to a maintenance plan.

Now that we’ve defined these key terms, let’s move on to the applicability determination.

Question 1...

How is applicability determined for the traffic congestion performance measure?

The FHWA determines applicability of the traffic congestion measure slightly differently for State DOTs and MPOs. To determine the applicability for State DOTs, FHWA asks two key questions.

1. Does the State contain road mileage that is both designated as NHS (National Highway System) and is in an Urbanized Area that meets the current population threshold? and
2. Does the boundary of that Urbanized Area contain any part of a Nonattainment or Maintenance Area for ozone, carbon monoxide, or particulate matter?

The FHWA will use HPMS data to determine road segments that are part of the NHS, census data to determine population, and information from 40 CFR part 81 to determine nonattainment or maintenance status.

For the first performance period (which runs from January 1, 2018 to December 31, 2021), the population threshold is Urbanized Areas with populations greater than 1 million. For the second performance period and beyond, the measures apply to Urbanized Areas with a population greater than 200,000.

Now let us look at how FHWA determines the congestion performance area applicability for MPOs. The FHWA asks two questions:

1. Does the Metropolitan Planning Area (MPA) overlap with both an Urbanized Area that meets the current population threshold and a Nonattainment or Maintenance Area? and
2. Does any roadway designated as NHS cross any part of the overlap of these three areas?

The same population thresholds apply for MPOs as for States: 1 million in the first performance period, and 200,000 starting in the second performance period.

Any State DOT or MPO that meets the outlined criteria is included on FHWA’s applicability list for the congestion measures for that performance period.

The slightly different approach to determining State and MPO applicability is to capture one important difference: if a State has an applicable Urbanized Area in its boundaries but the Nonattainment or Maintenance Area is outside of the State’s boundaries, that State still must meet the required Traffic Congestion measures. An MPO in this same situation has not met the applicability criteria. The FHWA adds these MPOs to a list of MPOs that are encouraged to coordinate with other relevant agencies on the measures.
We now get to the second question for this video...

**What actions are required from State DOTs and MPOs if it is determined that the Traffic Congestion performance measure applies?**

If the Traffic Congestion measure applies, then that agency is required to establish targets for the Traffic Congestion measures for each of the relevant Urbanized Areas. The two measures are the peak-hour-excessive-delay measure and the non-single-occupancy-vehicle measure.

**1. Peak Hour Excessive Delay Measure**

**2. Non-Single Occupancy Vehicle Measure**

- **Two Traffic Congestion Performance Measures**

In most cases, both 2- and 4-year targets must be set. One exception is for the peak-hour-excessive-delay measure in the first performance period. For this first period, only a 4-year target is required.

Unlike for some of the other performance measures, FHWA will not use these targets to assess whether “significant progress” has been achieved.

For MPOs where the Nonattainment or Maintenance Areas are outside the MPA boundary, MPOs should coordinate in the target selection process for traffic congestion measures with the appropriate States, other MPOs, and transit agencies. However, this is not required.

There is an additional requirement just for CMAQ traffic congestion targets. Whereas several performance measures allow MPOs to decide whether to support the State DOT’s target or set their own, all applicable State DOTs and MPOs must establish a single, unified target for each of the Traffic Congestion measures for each applicable Urbanized Area. Thus, all agencies located in the vicinity of the applicable Urbanized Area should be aware of these applicability determinations, know their roles in the target selection process, and follow them.

Finally, what about changes in nonattainment and maintenance status?

If an area is no longer in nonattainment or maintenance for a criteria pollutant on the date one year before the Mid-Performance-Period Progress Report is due, FHWA will revise the applicability determination for the affected States and MPOs. Areas newly designated as nonattainment are not added at the mid-point, but will be considered at the next applicability determination.

The FHWA will revise the applicability list for the mid-point of the performance period to remove any States or MPOs that no longer apply. FHWA will use the EPA Green Book to identify the Nonattainment and Maintenance Areas for the criteria pollutants as of one year before the Mid-Performance-Period Progress Report is due.

That’s it - applicability determination for the Traffic Congestion performance measure. This process ensures that those State DOTs and MPOs where the Traffic Congestion performance measure applies take the appropriate transportation performance management actions. This is one of the ways accountability is built into performance management.

Increasing the accountability and transparency of the Federal-aid highway program helps to promote better project decision-making through performance-based planning and programming. By doing this, you will deliver transportation projects that are necessary, helping to bring greater safety, health, and economic vitality to your community.

Working together, we can provide strategies to improve our nation and people’s lives through great transportation planning.
Additional Resources

Extend your learning through more detailed resources and through interactive learning methods.

TPM Training:
https://www.fhwa.dot.gov/tpm/resources/training.cfm

TPM Website:
http://www.fhwa.dot.gov/tpm/about/index.cfm

General Portal for FHWA Resources:
https://www.fhwa.dot.gov/research/library/

National Highway Institute (NHI) Course Catalogue on Transportation Performance Management:

You may also learn more at:
https://highways.dot.gov/research
http://www.facebook.com/FederalHighwayAdmin
http://www.flickr.com/photos/fhwa
http://www.linkedin.com/company/federal-highway-administration
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This document was created under contract number DTFH61-13-D-0004 by the Federal Highway Administration, U.S. Department of Transportation, and is offered to the public to heighten and focus awareness of Federal-aid requirements within the local public agencies community and reinforces the importance of the necessary policies, procedures, and practices. This companion resource contains the script content for the video production of the same name.