Transportation Performance Management

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## Change Log

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1. Purpose

The Transportation Performance Management, State Biennial Performance Reporting Guide: 2020 Mid Performance Period Progress Report is a guide to assist State Departments of Transportation (DOT) in meeting the National Performance Management reporting requirements in 23 CFR part 490 for the following performance measure areas: pavements (four measures), bridges (two measures), travel time reliability (two measures), freight movement (one measure), traffic congestion (two measures), and on-road mobile source emissions performance measure (one measure). Table 2 provides a summary of the program areas, measure areas, and measures addressed in this document. The performance management area of safety (five measures) is not included in this guide. Safety performance measures information is reported via the Highway Safety Improvement Program (HSIP) process.¹

This document also serves as a resource to Federal Highway Administration (FHWA) Division Offices and will assist with their review and evaluation of the 23 CFR part 490 reporting requirements. All State DOTs are required to submit their biennial reports through an electronic reporting template provided by the FHWA.² The FHWA developed the Performance Management Form (PMF) as the reporting portal for State DOTs. The PMF is housed within the User Profile and Access Control System (UPACS)³ and is part of the Policy Information Data Portal (PIDP). All State DOTs are meeting the reporting requirements of 23 CFR 490.107 by using the PMF portal.

In addition to this reporting guide, “The Performance Management Form (PMF) Input Fields: Mid Performance Period (MPP) Progress Report Due October 1, 2020” lists all of the PMF input fields in the 2020 Mid Performance Period (MPP) Progress Report and is posted on the Transportation Performance Management (TPM) Guidance website under Reporting.⁴ These documents are intended to be used together along with the TPM Frequently Asked Questions⁵ and other resources available on the TPM website.⁶ The FHWA uses the information reported in the PMF to tell each State’s performance story on the TPM website.

¹ Highway Safety Improvement Program Report Guidance https://safety.fhwa.dot.gov/hsip/reports/
² 23 CFR 490.107(a)(3)
³ The UPACS portal for submitting the PMF is only accessible using the Internet Explorer or Chrome software applications. https://proxy-p.fhwa.dot.gov/upacsp/tm?transName=MenuSystem&action=buildHTML
⁵ Frequently Asked Questions https://www.fhwa.dot.gov/tpm/faq.cfm
⁶ TPM Website https://www.fhwa.dot.gov/TPM/index.cfm
2. PMF Roles and Access

The UPACS and PMF portals are only accessible using the Internet Explorer 10, Internet Explorer 11, or Chrome web browsers.

2.1 PMF Roles

The four PMF user roles and related access rights are summarized in Table 1.

Table 1: PMF User Roles

<table>
<thead>
<tr>
<th>Roles</th>
<th>Permissions</th>
<th>Assigned to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form Owner (FO)</td>
<td>The Form Owner has the highest access rights and can do everything necessary in the PMF submission cycle. The Form Owner can also grant/remove permissions to everyone in this role and below.</td>
<td>FHWA HQ Users</td>
</tr>
<tr>
<td>Form Reviewer (FR)</td>
<td>The Form Reviewer can view the submitted form data, add comments on the form data, return the form to State DOTs asking for revision(s), and recommend acceptance to the Form Owner.</td>
<td>FHWA Division Office Users</td>
</tr>
<tr>
<td>Form Administrator (FA)</td>
<td>The Form Administrator initiates, fills out, edits, and submits the form for review. The Form Administrator can grant/remove permissions for other Form Administrators and Form Users.</td>
<td>State DOT User</td>
</tr>
<tr>
<td>Form User (FU)</td>
<td>The Form User can only fill out and edit the form.</td>
<td>State DOT User</td>
</tr>
</tbody>
</table>

2.2 Identifying Users of the PMF

Each FHWA Division Office will identify a TPM Point of Contact (POC) and an alternate(s) as Form Reviewers. The Form Reviewers will be responsible for overseeing the biennial reporting required by 23 CFR 490.107, which includes submittal in the PMF portal of the MPP Progress Report. They should be familiar with TPM requirements and be part of the Division Office’s efforts to work with State DOTs and metropolitan planning organizations (MPO) personnel in the implementation of the TPM requirements. The Form Reviewers will be expected to aid the State DOTs in submitting reports via the PMF, review the submitted data, and work with the State DOTs to resolve any issues. These individuals should work with other Division Office staff as needed to fulfill their responsibilities.

Each State DOT should identify two Form Administrators to initiate the form, fill out, edit, and submit the form for FHWA review. The State DOT will also identify up to six Form Users that will have the permission to fill out an edit in the form. The Form Reviewers will aid the State DOTs in obtaining access to the PMF. The State DOT should consider developing internal processes regarding the roles and responsibilities of those with PMF access, and how they will review and validate all data and text before the form is submitted to FHWA by a State DOT Form Administrator.
2.3 Obtaining Access to the PMF for State DOTs

For security reasons, the PMF portal is within FHWA’s UPACS. The PMF and other database storage, viewing, and retrieval features are behind the UPACS firewall. In addition to UPACS identification and access, State DOTs need Operational Research Consultants (ORC) credentials to gain PMF access.

The FHWA’s ORC and UPACS Registration Procedures must be used to obtain access for State DOT employees. The ORC registration process and the UPACS registration process are independent. It is recommended that State DOT employees apply for ORC Level 2 credentials first as this process can take up to six weeks after the application is submitted. Once ORC credentials are received, the State DOT employee needs to register for a UPACS account. Questions about this process should be directed to the Division TPM POC and UPACS Administrator in each State.

Once ORC credentials are approved and a UPACS identification is obtained, the new Form Administrator or Form User will need “access rights” to use the PMF application. Requests for PMF access or removal should be sent to TPMreporting@dot.gov with the subject line: “[INSERT STATE] PMF Access”. In the body of the email, include the user’s: 1. Full name, 2. Email, 3. Organization, 4. UPACS ID, 5. Level of access (PMF role: Form Administrator or Form User) required, 6. State to be accessed, and 7. Attach the notification of ORC credential approval email sent from CSP_DoNotReply@orc.com. The FHWA TPM Team will grant PMF access. The Form Administrator or Form User will receive an email with the subject line: “User form/role/states access has changed” stating the person has access to the PMF and the user level assigned.

A State DOT Form Administrator has the ability to grant and remove permissions for any other Form Administrator or Form User in that State. The PMF User Guide walks Form Administrators through the process of assigning or removing permissions at this level.

3. TPM Concepts Related to the PMF and Reporting Process

3.1 Measures

Seventeen performance measures are contained in 23 CFR part 490. The PMF collects the State DOT Biennial Reporting requirements for the 12 measures shown in Table 2. The reporting requirements under 23 CFR 490.213 for the five safety performance measures are not reported through the PMF. The safety measures are reported via the HSIP process and information can be found in the Highway Safety Improvement Program Report Guidance.

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7 The URL for UPACS is https://fhwaapps.fhwa.dot.gov/upacsp/
9 Visit the UPACS login page (see footnote), on the blue ribbon on top of the page, click “UPACS Administrators” for a listing of contacts by State.
10 The PIDP Administration Manual, User Guide is housed behind UPACS as part of the PMF form. To access, log into the PMF and select “Help” in the top right portion of the screen.
Table 2: Program Areas, Measure Areas, and Performance Measures in the PMF

<table>
<thead>
<tr>
<th>Program Area</th>
<th>Measure Area</th>
<th>Performance Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Percentage of pavements of the Interstate System in Poor condition [23 CFR 490.307(a)(2)]</td>
</tr>
<tr>
<td></td>
<td>Condition of pavements on the non-Interstate National Highway System (NHS) [23 CFR 490.105(c)(2)]</td>
<td>Percentage of pavements of the non-Interstate NHS in Good condition [23 CFR 490.307(a)(3)]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage of pavements of the non-Interstate NHS in Poor condition [23 CFR 490.307(a)(4)]</td>
</tr>
<tr>
<td></td>
<td>Condition of bridges on the NHS [23 CFR 490.105(c)(3)]</td>
<td>Percentage of NHS bridges classified as in Good condition [23 CFR 490.407(c)(1)]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage of NHS bridges classified as in Poor condition [23 CFR 490.407(c)(2)]</td>
</tr>
<tr>
<td>NHS Travel Time Reliability [23 CFR 490.105(c)(4)]</td>
<td>Percentage of person-miles traveled on the Interstate that are reliable [23 CFR 490.507(a)(1)]</td>
<td>Percentage of person-miles traveled on the non-Interstate NHS that are reliable [23 CFR 490.507(a)(2)]</td>
</tr>
</tbody>
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3.2 Key Dates

“The Performance Measures and Asset Management Plan - Key Implementation Date” document listing the key dates for the first performance period is on the TPM website. It includes the dates the rules became effective, when data must be submitted, and the date FHWA will extract various data. State DOTs, MPOs, and Division Offices can use this document to keep track of required actions and due dates.

3.3 Target Establishment

3.3.1 State DOT

State DOTs are required to establish 2-year and 4-year targets for each applicable measure. State DOTs have the option to adjust their 4-year targets as part of their MPP Progress Reports. The required targets are established for one of three geographic areas: Statewide, an individual urbanized area (UZA), or all Nonattainment and Maintenance areas for Congestion Mitigation and Air Quality Improvement Program (CMAQ) criteria pollutants. For each applicable UZA, the State DOT(s) and MPO(s) must have a single unified target for the

<table>
<thead>
<tr>
<th>Program Area</th>
<th>Measure Area</th>
<th>Performance Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Highway Freight Program (NHFP)</td>
<td>Freight movement on the Interstate System [23 CFR 490.105(c)(6)]</td>
<td>Truck Travel Time Reliability (TTTR) Index [23 CFR 490.607]</td>
</tr>
<tr>
<td>Congestion Mitigation and Air Quality Improvement Program (CMAQ)</td>
<td>Traffic congestion [23 CFR 490.105(c)(7)]</td>
<td>Annual Hours of Peak-Hour Excessive Delay (PHED) Per Capita [23 CFR 490.707(a)]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percent of non-Single Occupancy Vehicle (Non-SOV) Travel [23 CFR 490.707(b)]</td>
</tr>
<tr>
<td></td>
<td>On-road mobile source emissions [23 CFR 490.105(c)(8)]</td>
<td>Total Emissions Reduction for applicable criteria pollutants [23 CFR 490.807]</td>
</tr>
</tbody>
</table>

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12 The Performance Measures and Asset Management Plan - Key Implementation Date
13 23 CFR 490.105(a)
14 23 CFR 490.105(d)
CMAQ Traffic Congestion Measures, Annual Hours of Peak Hour Excessive Delay Per Capita
Annual Hours of Peak Hour Excessive Delay Per Capita (PHED) and Percent of non-Single
Occupancy Vehicle Travel (Non-SOV).\textsuperscript{15}

Targets should be set at a level that is expected to be achievable. State DOTs are
encouraged to review FHWA’s Measure Computation Procedures documents\textsuperscript{16} which are used
to determine baseline and actual performance.

State DOTs and MPOs can elect to define their own unique measures in addition to
those defined and required by 23 CFR part 490. The State DOTs and MPOs are required to
report on only those measures required by 23 CFR part 490; any measures beyond what is
required does not need to be reported to FHWA.

3.3.2 MPO
The MPO targets are not included in the PMF. However, for the unified targets
applicable to the CMAQ traffic congestion performance measures (PHED and Non-SOV) the
MPOs and State DOTs must work together to establish a single unified 2-year target and 4-
year target for each applicable UZA.\textsuperscript{17} The State DOTs then reports these targets to FHWA in
the PMF, and the target reported should be the same target established by any applicable
MPO.

3.4 Performance Period
A performance period covers four years and defines the data collection and analysis
periods for each measure.\textsuperscript{18} The performance period follows the calendar year and the first
performance period began January 1, 2018, and ends on December 31, 2021,\textsuperscript{19} with the
exception of the CMAQ emissions reduction measure. For that measure, the performance
period follows the Federal Fiscal Year, and the first performance period began on October 1,
2017, and ends on September 30, 2021.\textsuperscript{20} The first two performance periods are illustrated in
Appendix A.

3.5 State DOT Performance Reporting Overview
The State DOT Biennial Performance Reports are all due October 1, 2020. Starting
October 1, 2018, State DOTs were required to report on an ongoing two-year frequency.\textsuperscript{21} In
2020 the State DOT Biennial Performance Report due is the MPP Progress Report.

\textsuperscript{15} 23 CFR 490.105(e)(8)(iii)
documents: 1) FHWA Computation Procedure for the Bridge Condition Measures, 2) FHWA Computation
Procedure for the Pavement Condition Measures, 3) FHWA Computation Procedure for Travel Time Based and
Percent Non-Single Occupancy Vehicle (non-SOV) Travel Performance Measures, 4) Computation Guidance for
Congestion Mitigation and Air Quality Improvement (CMAQ) Program Total Emissions Reduction Measure
\textsuperscript{17} 23 CFR 23 CFR 490.105(d)(2)
\textsuperscript{18} 23 CFR 490.105(e)(4)
\textsuperscript{19} 23 CFR 490.105(e)(4)(i)(A)
\textsuperscript{20} 23 CFR490.105(e)(4)(i)(B)
\textsuperscript{21} 23 CFR 490.107(b)
The first performance period includes unique requirements to accommodate the phase-in of various requirements in 23 CFR part 490. Section 4.4 discusses how these requirements are addressed in the PMF.

### 3.5.1 Baseline Performance Period Report

The Baseline Performance Period (BPP) Report establishes the baselines, and 2-year and 4-year targets (as applicable) for each measure, and is due on October 1 of the first year in a performance period. 22 The first BPP report was due October 1, 2018.

### 3.5.2 Mid Performance Period Progress Report

The MPP Progress Report is focused on the progress the State DOT has made toward the 2-year targets set in the BPP Report. The MPP Progress Report includes the actual condition/performance derived from the latest data collected through the midpoint of the performance period for each State DOT reported target. 23 This is also the State DOT’s opportunity to reevaluate its 4-year targets and report adjusted target. 24 The MPP Progress Report is due to FHWA by October 1 of the third year in a performance period. The first MPP Progress Report is due October 1, 2020. 25 This document is a guide for the 2020 MPP Progress Report submitted in the PMF.

### 3.5.3 Full Performance Period Progress Report

The Full Performance Period (FPP) Progress Report is focused on the progress the State DOT has made toward achieving the 4-year targets. 26 State DOTs will report the actual condition/performance derived from the latest data collected through the end of the performance period. 27 The FPP Progress Report is due to FHWA by October 1 of the first year following the completion of a performance period. 28 The first FPP Progress Report is due October 1, 2022.

While the State DOT is preparing the FPP Progress Report and closing out the 4-year performance period, it will also be preparing the BPP Progress Report for the second performance period, also due October 1, 2022. The State DOT will be able to submit both reports simultaneously in the PMF due October 1, 2022.

The FHWA plans to update this document to include further details the FPP Progress Report as that reporting deadline approach.

### 3.6 MPO Performance Reporting Requirements

The MPOs are not required to report their targets or progress to FHWA via the PMF. 29

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22 23 CFR 490.107(b)(1)
23 23 CFR 490.107(b)(2)(ii)(A)
24 23 CFR 490.107(b)(2)(ii)(E)
25 23 CFR 490.107(b)(2)(i)
26 23 CFR 490.107(b)(3)(ii)(B)
27 23 CFR 490.107(b)(3)(ii)(A)
28 23 CFR 490.107(b)(3)(i)
29 Guidance on MPO reporting is available on the TPM website under FAQs on Target Setting and Planning Requirements. https://www.fhwa.dot.gov/tpm/faq.cfm#targ
The MPOs serving a Transportation Management Area (TMA) and required to establish targets for the Total Emissions Reduction measure, as specified in 23 CFR 490.105(f)(6)(iii), must develop a CMAQ Performance Plan\textsuperscript{30} and submit it to their State DOT. The State DOT then submits this plan to FHWA via the PMF as part of its ongoing biennial reporting.\textsuperscript{31}

3.7 FHWA Measure and Baseline Calculation

The FHWA’s method of calculating the measures for the purposes of determining baseline data, actual condition/performance, minimum condition/performance, and significant progress, as applicable to each measure and individual State, is intended to be transparent. The FHWA has prepared Measure Computation Procedure documents that detail the data used and calculation processes.\textsuperscript{32}

3.8 Significant Progress Determinations

As shown in Appendix A, FHWA will determine whether a State DOT has made significant progress toward meeting the targets for each of the eight National Highway Performance Program (NHPP) measures and the Freight measure after the State DOT submits its MPP and FPP progress reports. See Appendix B for a listing of the NHPP and NHFP measures that will be assessed for significant progress. The CMAQ measures (PHED, Non-SOV Travel, and Total Emissions Reduction measures) are not subject to a significant progress determination.

The FHWA will not assess significant progress for MPO targets.

3.9 Minimum Condition and Penalties

The determination of minimum condition, per 23 CFR 490.315 and 490.411, and the application of any penalties,\textsuperscript{33} is outside the scope of the State Biennial Performance Report requirements and is therefore not part of the PMF.

\textsuperscript{30} 23 USC 149(l) and 23 CFR 490.107(c)(3). See FHWA’s CMAQ Performance Plan Guidebook: https://www.fhwa.dot.gov/environment/air_quality/cmaq/measures/performance_plan/
\textsuperscript{31} 23 CFR 490.107(b)(2)(ii)(I) and 23 CFR 490.107(b)(3)(ii)(H)
\textsuperscript{33} 23 CFR 490.317 and 490.413.
4. Mid Performance Period Progress Report PMF Content

A listing of all the input fields in the PMF for the MPP Progress Report is posted on the TPM website.34

The PMF has nine tabs, which can be seen in Figure 1 below. The PMF adapts for each individual State DOT based on the applicability of the measure. All State DOTs will see the first six tabs. A State DOT will only have a PHED, Non-SOV, and/or Emissions tab if those measures are applicable.

1. Overview
2. Attachment
3. Pavement
4. Bridge
5. Reliability
6. Freight
7. PHED
8. Non-SOV
9. Emissions

Figure 1: PMF Tabs

4.1 General Features that Apply Throughout the PMF
4.1.1 Phase-In Requirements During First Performance Period
Some elements of the TPM requirements are not applicable in the first performance period to allow for a smooth transition, including new data to be collected and reported. In addition, due to the individual effective dates of each rule, some due dates do not align during the first performance period, such as those related to the initial CMAQ Performance Plan.

These phase-in requirements are reflected in the PMF and noted in the discussion in Section 4.4 for each applicable tab.

4.1.2 General Comments and Context
The State DOT will have the option on the Overview Tab and each measure area tab to provide any general comments that may assist FHWA in its review. The State DOT can provide greater context for its targets and current performance, provide additional background detail or clarification, note any assumptions, or discuss complications. The provided text may be shared by FHWA verbatim online.

4.1.3 Prepopulated Values Carried Over from the 2018 Baseline Performance Period Report
The FHWA will prepopulate a State DOT’s MPP Progress Report in the PMF with values provided by that State DOT in the 2018 BPP Report by September 1, 2020. For applicable measures, the prepopulated values will include the baseline data, 2-year targets, and 4-year targets. 

4.1.4 Prepopulated 2-year Actual Condition/Performance
The FHWA also will prepopulate the actual condition/performance for applicable measures derived from the latest data collected through the midpoint of the performance period using the data and processes outlined in the Measure Computation Procedures documents. The FHWA intends to prepopulate the relevant fields by September 1, 2020 to provide the opportunity for State DOTs to view the data and consider it in their reporting. Should State DOTs require this information sooner, they are encouraged to use 23 CFR part 490 and the Measure Computation Procedures documents to perform their own calculations.

4.1.5 2-year Progress in Achieving Performance Targets
The State DOTs will be asked to provide a discussion of progress toward achieving each established 2-year for applicable measures. At a minimum, the discussion shall compare the actual 2-year condition/performance with the respective 2-year target and document in the discussion any reasons for differences in the actual and target values.

4.1.6 Target Adjustment
The State DOTs may provide adjusted a 4-year target to replace an established 4-year target. The State DOTs shall coordinate with relevant MPOs when adjusting their 4-year target(s). Any adjustments made to 4-year targets established for the CMAQ Traffic Congestion measures shall be agreed upon and made collectively by all State DOTs and MPOs.

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35 23 CFR 490.107(b)(1)(ii)(A)
36 23 CFR 490.107(b)(1)(ii)(B)
37 23 CFR 490.107(b)(2)(ii)(A)
39 23 CFR 490.107(b)(2)(ii)(B)
40 Ibid
41 23 CFR 490.105(e)(6)
that include any portion of the National Highway System (NHS) in the respective UZA applicable to the measures.

4.1.7  **Target Adjustment Discussion**
If the State DOT adjusts a 4-year target, it shall include a discussion on the basis for the adjustment and how the adjusted target supports expectations documented in long range plans, such as the State asset management plan and the long-range statewide transportation plan. 42 The State DOT may only adjust a 4-year target at the midpoint and by reporting the change in the MPP Progress Report in the PMF.43

4.1.8  **2-year Significant Progress Discussion for the National Highway Performance Program (NHPP) Targets and the National Highway Freight Program (NHFP) target.**
The State DOTs shall discuss the progress they have made toward the achievement of all 2-year targets established for the NHPP measures44 and the Freight Reliability measure.45 This discussion should document a summary of prior accomplishments and planned activities that will be conducted during the remainder of the performance period to make significant progress toward that achievement of 4-year targets for applicable measures.46

4.1.9  **Extenuating Circumstances**
The State DOTs may document extenuating circumstances for FHWA’s consideration in the assessment of progress toward the achievement of NHPP and NHFP 2-year targets.47 The FHWA has defined extenuating circumstances as: 48

- Natural or man-made disasters that caused delay in NHPP or NHFP project delivery,
- Natural or man-made disasters that caused extenuating delay in data collection,
- Natural or man-made disasters that caused damage/loss of data system,
- Sudden discontinuation of Federal government furnished data due to natural and man-made disasters,
- Sudden discontinuation of Federal government furnished data due to lack of funding,
- New law and/or regulation directing State DOTs to change metric and/or measure calculation.

Should extenuating circumstances apply, the State DOT will provide an explanation of the extenuating circumstances beyond its control that prevented it from making significant progress toward the achievement of a 2-year target.49

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42 23 CFR 490.107(b)(2)(ii)(E)
43 Ibid
44 23 CFR 490.105(c)(1) through (5)
45 23 CFR 490.105(c)(6)
46 23 CFR 490.107(b)(2)(ii)(F)
47 23 CFR 490.107(b)(2)(ii)(G)
48 23 CFR 490.109(e)(5)
49 23 CFR 490.107(b)(2)(ii)(G)
4.1.10 Adjusted Unified Targets for Multi-State Urbanized Areas (UZA) for CMAQ Traffic Congestion Measures

If a multistate UZA is required to establish a unified target for the PHED or Non-SOV measure, all applicable MPOs and State DOTs must collectively establish only one 2-year target and 4-year target for the entire UZA for each applicable measure.\(^{50}\)

When a unified target is required for an UZA that crosses state boundaries, all State DOTs associated with that area must report the same data in the PMF. However, each State DOT will be able to independently enter data in the PMF pertaining to adjusting an unified target. If there is conflict among State DOTs’ entered data, FHWA Division Offices and Headquarters will work with State DOTs to resolve their PMF submittals during the review process.

4.2 Overview Tab

In this tab, the State DOT will document how the established targets support expectations documented in longer range plans, such as the State DOT’s asset management plan required by 23 U.S.C. 119(e).\(^{51}\) The State DOT will provide contact information for the submittal on this tab as well.

4.3 Attachment Tab

The Attachment Tab will accept all file types. Each attached file cannot exceed 50 MB in size.

The State DOT will provide applicable required documents on this tab as well as any additional documents that the State DOT has chosen to provide FHWA to support its submittal. For optional supplementary information, State DOTs are asked to provide a weblink, accessible without a password. The Attachment Tab is shown in Figure 2. As part of the document upload process, State DOTs have the option to select the measure that relates to the attachment. For example, if the State DOT uploads additional material to support the information on the Bridge Tab, the State DOT can choose “Bridge” from the dropdown list.

The PMF requires uploading of two attachments to the Attachment Tab. The first are documents to meet the freight bottleneck reporting requirement.\(^{52}\) If a State has prepared a State Freight Plan under 49 U.S.C. 70202 within the previous 2 years, then the State Freight Plan may serve as the basis for addressing congestion at truck freight bottlenecks. If the State Freight Plan has not been updated since the previous State Biennial Performance Report (in this case the 2018 BPP), then an updated analysis of congestion at truck freight bottlenecks must be completed.\(^{53, 54}\)

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\(^{50}\) 23 CFR 490.105(d)(2), 23 CFR 490.105(e)(8)(iii)(A) and 23 CFR 490.105(f)(5)(iii)(A)

\(^{51}\) 23 CFR 490.107(b)(2)(ii)(C)

\(^{52}\) 23 CFR 490.170(b)(2)(ii)(D)

\(^{53}\) 23 CFR 490.107(b)(2)(ii)(D)

The second required attachment only applies to State DOTs that contain an MPO required to develop a CMAQ Performance Plan.55, 56 While the MPO must develop a CMAQ Performance Plan, the State DOT is required to submit it to FHWA as part of its ongoing biennial reporting.57 The Emissions Tab is prepopulated with the MPOs required to submit these documents for each State.

Figure 2: Attachment Tab

4.4 Discussion of Performance Measure Tabs

Each performance measure tab provides space for the State DOT to enter required and optional information the given measures. As discussed in Sections 4.1.3 and 4.1.4, prepopulated values will be on the tab where appropriate.

4.4.1 Pavement Tab

For the first performance period only, baseline and 2-year targets are not required for the Pavements on the Interstate System measures.58

For the first performance period only, baseline information and statewide performance targets for pavements on the non-Interstate NHS will be based on an overall condition using International Roughness Index (IRI), or Present Serviceability Rating (PSR) if necessary.59 The IRI only data is to be used for all non-Interstate NHS roadways whenever possible. The PSR can only be used where IRI data collection may not be possible (i.e., road sections where speed is less than 40 mph). In the second performance period, overall condition will be based on full distress and IRI.60

55 23 CFR 490.105(f)(6)(iii) and 23 CFR 490.107(c)(3)
56 CMAQ Program: A Guidebook for Preparing Performance Plans for MPOs, 2018
https://www.fhwa.dot.gov/environment/air_quality/cmaq/measures/performance_plan/
57 23 CFR 490.105(f)(6)(iii)
58 23 CFR 490.105(e)(7)
59 23 CFR 490.313(e)
60 Additional detail on the phase-in is available at: https://www.fhwa.dot.gov/tpm/guidance/qa_phasein.pdf
However, during the 2018 BPP Report, FHWA learned that some State DOTs establish targets based on the “full-distress plus IRI” data and not solely on the IRI component (thereby expediting the transition period).

The PMF form Pavement Tab questions for non-Interstate NHS measures accommodates States that used IRI only to establish their targets and States that used “full-distress plus IRI.” For further explanation see the “Performance Management Form (PMF) Input Fields: Mid Performance Period (MPP) Progress Report Due October 1, 2020” page 10-12\(^61\) and the pavement guidance documents on the TPM website, Guidance>Pavements.\(^62\)

4.4.2 Bridge Tab

Reporting requirements are as documented in the PMF form. No additional guidance is provided.

4.4.3 Reliability Tab

For the first performance period only, baseline and 2-year targets are not required for the non-Interstate NHS Travel Time Reliability measure.\(^63\)

4.4.4 Freight Tab

This tab reminds users to confirm that they have uploaded to the Attachment Tab the required listing of Freight bottlenecks within the State.\(^64\)

4.4.5 PHED Tab

A State DOT will only see the PHED Tab if the measure is applicable to that State.

For the first performance period only, the PHED measure is applicable to UZAs with a population over 1 million in Nonattainment or Maintenance for any of the criteria pollutants under the CMAQ program.\(^65\) For all other performance periods, the measure is applicable based on a population of over 200,000.\(^66\)

For the first performance period only, baseline and 2-year targets are not required for the PHED measure.\(^67\)

4.4.6 Non-SOV Tab

A State DOT will only see the Non-SOV Tab if the measure is applicable to that State.

For the first performance period only, the Non-SOV measure is applicable to UZAs with a population over 1 million in Nonattainment or Maintenance for any of the criteria pollutants

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\(^63\) 23 CFR 490.105(e)(7)

\(^64\) 23 CFR 490.107(b)(1)(ii)(E)

\(^65\) 23 CFR 490.105(e)(8)(i)

\(^66\) 23 CFR 490.105(e)(8)(ii)

\(^67\) 23 CFR 490.105(e)(7)
under the CMAQ program. For all other performance periods, the measure is applicable based on a population of over 200,000.

For the first performance period only, baseline and 2-year targets are not required for the Non-SOV measure.

4.4.7 Emissions Tab

This is the only measure in 23 CFR part 490 that requires State DOTs to calculate the baseline and measure, and then report them to FHWA. For guidance on calculating this measure see the Computation Guidance for Congestion Mitigation and Air Quality Improvement (CMAQ) Program Total Emissions Reduction Measure on the TPM website under Guidance.

4.4.8 CMAQ Performance Plan

Within the Emissions Tab, the State DOT is alerted of any MPOs within the State that are required to prepare a CMAQ Performance Plan via Input Field E9. Input Field E10 asks the State DOT to tell FHWA if it uploaded the document to the Attachment Tab via a yes/no drop down. The PMF will accept either response as correct. If the State DOT indicates it did not attach the document, the State DOT can explain why it did not in E10a. Responses such as, “The MPO has not completed the required report” will be sufficient.

In the case of Multi-State MPOs, a single State DOT can submit the MPO’s CMAQ Performance Plan for all States involved. The FHWA believes this minimizes the reporting burden for both State DOTs and MPOs. In this case, any State DOTs not submitting the report can include an explanation in E10a such as, “The required document wasn’t attached to our submittal because [insert STATE] is submitting the report for this MPO.”

5. PMF Submittal

The State DOTs should be preparing data and establishing targets well in advance of their PMF submittal. As part of this process, if the State DOTs are to adjust 4-year target(s), they are required to coordinate with MPOs to the maximum extent practicable to allow for consistent target(s). The Division Offices should be aware of the process the State DOTs and MPOs are using, what they are considering and why, and the decisions adopted. The Division

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68 23 CFR 490.105(e)(8)(i)
69 23 CFR 490.105(e)(8)(ii)
70 23 CFR 490.105(e)(7)
71 23 CFR 490.811(a)
74 23 CFR 490.107(b)(2)(ii)(l)
75 23 CFR 490.105(e)(2) and (f)(2)
Offices will also be monitoring the data that supports TPM such as but not limited to: Highway Performance Monitoring System (HPMS), National Bridge Inventory (NBI), and CMAQ Public Access System submittals.

Following a State DOT’s submission of the PMF, subject matter experts within the FHWA Division offices and Headquarters will work to review each PMF for completeness and accuracy. This review will ensure consistency with all applicable requirements.

5.1 Roles and Responsibilities within the PMF Reporting Process

The following outlines the roles and responsibilities FHWA believes are needed to arrive at an acceptable MPP Progress Report submittal. It is not a comprehensive list of all the TPM related roles and responsibilities.

5.1.1 State DOT
- Identify available/needed data.
- Evaluate historic trends and future projections related to the performance areas.
- Coordinate with MPOs and other relevant agencies on adjusted target selection.
- Consider measures/targets in long range plans.
- Work with Division Offices to ensure accurate, complete and timely submittal of the PMF.
- Collect and submit required data and reports.
- Submit MPP Progress Report on or before October 1, 2020.
- Document extenuating circumstances as applicable.
- Submit any additional reporting requirements related to not achieving significant progress.

5.1.2 FHWA Division Office
- Act as a liaison between State DOT, MPOs, and Headquarters.
  - All TPM questions should go through the Division Office.
- Understand the program requirements and work with the State DOT and MPO(s) to support TPM program delivery.
  - Share TPM supporting documents with the State DOT as they become available.
  - Track Key Dates.76
  - Be familiar with the TPM website and the guidance documents available now and posted in the future.
  - Provide State DOT technical assistance with their PMF development, including how to gain access to UPACS and the PMF, and enter data.
  - Request support and technical assistance as needed from Resource Center and/or Headquarters.

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76 See the TPM Timeline on the FHWA website: [https://www.fhwa.dot.gov/tpm/rule/timeline.pdf](https://www.fhwa.dot.gov/tpm/rule/timeline.pdf)
• Review PMF for consistency and accuracy with program expectations within the State.
  o Monitor the target adjust development process, and the coordination efforts between State DOTs and MPOs.
  o Understand the basis for the targets adopted by the State DOT.
  o Monitor if there are any extenuating circumstances within the State that would prevent a State from meeting its target. See Section 4.1.9 for a list of extenuating circumstances.
  o If resubmittal is appropriate, provide comments to the State DOT within the PMF that provide them with the information needed to revise their submittal.
  o If a State DOT fails to achieve significant progress, monitor the submittal of the additional reporting requirements.

• Continue ongoing efforts to monitor data such as HPMS, NBI, CMAQ Public Access System, and the National Performance Management Research Data Set (NPMRDS), which supports TPM target establishment and reporting.

• Coordinate submittal of any amended MPP Progress Reports as a result of significant progress determinations requirements.\(^\text{77}\)

5.1.3 FHWA Headquarters
• Determine applicability of measures.
• Prepopulate values for the PMF form.
• Determine significant progress for individual NHPP and NHFP targets, where applicable.
• Determine if minimum conditions have been met, and notify the State DOT of any failures and the penalties.
• Notify State DOT via Division Office of significant progress determination.\(^\text{78}\)
• Make targets and performance information publicly available on the TPM website.\(^\text{79}\)
• Develop guidance to support Division Offices and State DOTs with meeting reporting requirements and making or exceeding significant progress.
• Manage PMF user access levels.

5.1.4 FHWA Resource Center
• Provide technical assistance, training, and support.

5.2 PMF Submittal and Acceptance Process

Within the PMF, the State DOT’s first step will be to have a Form Administrator initiate the report. The State DOT can edit and change its report up until it submits the report to FHWA, or the reporting window closes, whichever comes first. The Division Offices and Headquarters

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\(^{77}\) Further guidance will be posted on the TPM website, Guidance [https://www fhwa dot gov/tpm/guidance/](https://www.fhwa.dot.gov/tpm/guidance/)

\(^{78}\) Further guidance will be posted on the TPM website, Guidance [https://www fhwa dot gov/tpm/guidance/](https://www.fhwa.dot.gov/tpm/guidance/)

\(^{79}\) [https://www fhwa dot gov/TPM/index.cfm](https://www.fhwa.dot.gov/TPM/index.cfm)
will be notified via email of the State DOT’s submittal. The Division Office will review the State DOT’s submittal and recommend either revision by the State DOT and resubmittal, or acceptance by Headquarters. The State DOT and Headquarters will be notified via email of the action taken by the Division Office (i.e., either recommending acceptance of the submittal or returning it to the State DOT for further revision). Headquarters will then use the data in the PMF to determine if significant progress has been made on the applicable measures during mid-performance and full performance period reviews. Headquarters will also use the information in the PMF to populate the TPM website.

The PMF submittal process is outlined in Figure 3. Within Figure 3 the ovals indicate actions that are associated with buttons that must be selected within the PMF. Figure 3 also lists these actions and the responsible parties.
Figure 3: Steps in the PMF Submittal Process

- Initiate
- Edit/Save
- Submit
- Division Review
- Recommend Acceptance
- Data Archived
- Determine Significant Progress

State DOT Actions

Division Office Actions

HQ Actions
5.3 PMF Automated Email Notifications

Users will receive notification emails from no-reply@dot.gov whenever the actions in Table 3 are taken. Users can use these notification emails to track the status of a submittal. Users will also receive notification emails when they are granted access to the PMF, when that access is revoked, or when their role changes. Division Offices will be notified of any role changes to the Form Administrators or Form Users within their State.

Table 3: PMF Actions and Notification Emails

<table>
<thead>
<tr>
<th>Action By</th>
<th>Email: TO</th>
<th>Email: CC (copy)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Initiate</strong></td>
<td>State DOT</td>
<td>Division</td>
</tr>
<tr>
<td><strong>Submit/Resubmit</strong></td>
<td>State DOT</td>
<td>Division</td>
</tr>
<tr>
<td><strong>Recommend</strong></td>
<td>Division</td>
<td>State DOT</td>
</tr>
<tr>
<td><strong>Revision</strong></td>
<td>Division</td>
<td>HQ</td>
</tr>
<tr>
<td><strong>Recommend</strong></td>
<td>HQ</td>
<td>State DOT</td>
</tr>
<tr>
<td><strong>Acceptance</strong></td>
<td>HQ</td>
<td>State DOT</td>
</tr>
</tbody>
</table>

*Functionality available to HQ as the owner of the PMF. However, it will only be used in unique situations and only at the request of the Division Office.

State DOT = Form Admin      Division = Form Reviewer      HQ = Form Owner
5.4 PMF Submittal and Review Timeline

This four-week PMF review period is not intended to be the start of the State DOT and Division Office coordination on TPM issues. Reporting to the PMF is the culmination of a much larger process that includes gathering and analyzing data, projecting future transportation needs and trends, preparing reports, evaluating options, coordinating and establishing targets, and more. The State DOT and the Division Office should be coordinating as much as possible prior to October 1, including review of draft documents such as those that will be submitted for the progress for achieving the 2-year targets and the CMAQ Performance Plan.

5.4.1 PMF Submittal and Review Dates

The following dates apply to the MPP Progress Report in 2020.

- September 1 – PMF is open to users and prepopulated data is available for review.
- No later than October 1 – State DOT submits MPP Progress Report. The State DOTs will not be able to make edits after they submit the report unless FHWA requests that they make revisions.
- No later than October 15 – Division Office review complete.
  - The Division office will use the “Recommend Revision” button to allow the State DOT to make edits to their data after their initial submittal.
  - The Division Office will use the “Recommend Acceptance” button to indicate that its review is complete, and the submittal is ready for HQ Review.
- No later than November 2 – State DOT resubmittal is complete. This includes the second review by the Division Office.
  - The Division Office will use the “Recommend Acceptance” button to indicate their review is complete and the submittal is ready for HQ Review.
- November 2 – PMF Portal is locked. Those with PMF access will be able to view and export the data, but no further submittals or edits will be allowed. The data in the PMF will be extracted and archived. This data will be used to determine significant progress and populate the FHWA website with TPM targets and performance information as well as other purposes.

5.5 Significant Progress Determination

After submittal of the MPP Progress Reports, FHWA Headquarters will determine if significant progress has been made toward the established targets for the five NHPP and the freight measures using the information provided in the PMF. State DOTs that do not supply all of the information needed to determine significant progress toward an individual target will be

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80 23 CFR 490.107(b)(2)(i)
81 October 31 is the expected date to lock the PMF Portal, however when October 31 fall on a weekend, the PMF Portal will lock on the following Monday; in 2020, this is November 2.
determined to have not made significant progress toward achievement of that target.\textsuperscript{82} The Division Office will work with any State DOTs that do not achieve significant progress to ensure any reporting requirements are met. The process for calculating significant progress is outlined in the Measure Computation Process documents \textsuperscript{83} for each applicable measure area.

6. Division Office Review of PMF Submittal

6.1 PMF Review

The PMF portal contains validations that ensure that each required field contains data, but it does not verify the data’s accuracy. The Division Office is responsible for providing this review, and coordinating any revisions with the State DOT. The Division Office must be mindful of the date on which the PMF portal will be locked and ensure the review allows the State DOT time for revisions. The Division Office and State DOT can use the published PMF input fields\textsuperscript{84} to begin discussions before the State DOT submits its report in the PMF.

While the Divisions do not have the authority to approve or reject the State DOT’s data, they have an important role in reviewing the information for clarity and completeness. The list of questions below and the Division Office’s knowledge of unique issues within the State can be used to evaluate the content of the submittal. If the response to any of the questions below is “no,” then the Division Office may need to follow up with the State DOT.

- Was the State DOT’s submittal completed by October 1?
- For each adjusted target entered consistent with the plans and included strategies associated with the performance area?
- For each adjusted target, did the State DOT provide enough data and information as a basis for the adjustment to the target?
- If extenuating circumstance(s) apply as discussed in Section 4.1.9, did the State DOT adequately quantify the impacts that resulted from these circumstances?
- Given the Division Office’s knowledge of the State, has all the expected supporting information been submitted via the Attachment Tab of the PMF?
- Did the State DOT adequately discuss progress in addressing congestion at truck freight bottlenecks within the State?

\textsuperscript{82} 23 CFR 490.109(e)(4)(i)


\textsuperscript{84} Performance Management Form (PMF) Input Fields: Mid Performance Period (MPP) Progress Report Due October 1, 2020: https://www.fhwa.dot.gov/tpm/guidance/pmf_mpp_042020.pdf
If the State DOT submitted a bottleneck list from the State Freight Plan prepared under 49 U.S.C. 70202, was it prepared in the last 2 years? If more than 2 years old, did the State reevaluate and update the list?

- Did the State DOT upload a CMAQ Performance Plan for each MPO required to prepare a plan?

As an additional consideration for the Emission Measure Tab, Division Offices should review the prepopulated values and have a basic understanding the of the Computation Guidance for Congestion Mitigation and Air Quality Improvement (CMAQ) Program Total Emissions Reduction Measure85 and the CMAQ Public Access and the CMAQ Public Access System.86 The FHWA will prepopulate the current estimated emissions reductions for the relevant pollutants from the CMAQ Public Access System. If the State DOT believes a different value is appropriate due to an error, it is directed in the PMF to contact the FHWA Division Office in its State.

Additional considerations for the PHED and Non-SOV Tab, potential conflict of multi-state UZA unified target responses among State DOTs. Conflicts will need to be resolved during the review process.

6.2 Division Office Communications with State DOT During Review

Once a State DOT submits the MPP Progress Report in the PMF, the Division Office will review it and “request revision” or “recommend acceptance.” If the Division Office recommends revisions, the Division Office should provide comments to the State DOT within the PMF portal. The State DOT will not be able to see the Division Office’s comments or make changes to its submittal unless FHWA selects the “request revision” button.

For clarity, Division Offices should specify the field to which comments are related whenever possible. The Division Offices should consider how to communicate feedback on the submittal so the State DOT is aware of what it must address to develop a complete submittal versus best practices to consider in the future. The comments will fall into one of two categories:

- **Must be addressed** – Required content that is missing from the submittal or incorrect must be addressed to meet the reporting requirements in 23 CFR 490.107. *Ex: The State DOT’s basis for extenuating circumstances does not provide enough information for FHWA to consider it in a significant progress determination.*

- **For consideration** – Comments that provide suggestions on how the State DOT can improve its submittal. *Ex: State DOT could provide additional information that would strengthen its discussion on progress made toward achieving a 2-year target.*

The PMF comment field will not record formatting. If needed, the Division can enter comments in the PMF and then email those same comments to the State DOT with formatting. The PMF is FHWA’s official record demonstrating compliance with performance management reporting requirements, so it is important to transmit any comments via the PMF even if those comments will also be sent via email. Any comments entered in the PMF will automatically be sent to the State DOT staff with PMF Administrative privileges as well as any other Form Reviewers in the State and the Form Owners in Headquarters.87

Given the one-month review and revision window, it is important that the Division Office provide timely review and feedback, and manage the resubmittal timeline. The level of involvement required will vary by State, as will the amount of time appropriate for revision. For example, in a State with minor discrepancies that are likely due to simple entry errors, the Division may want to simply call the State DOT to discuss the issue and the anticipated revision date. The Division Office can then document the expected action and due date in its official comments.

6.3 Division Office Communications with Headquarters

If the data in the PMF is complete and correct on November 2, 2020 and there are no extenuating circumstances, then there is no need to communicate further with Headquarters. See Section 4.1.9 for a discussion of extenuating circumstances.

If the Division has concerns with the TPM process within their State, the State DOT has not remedied known errors, or any other issues arise, the Division Office can contact TPMreporting@dot.gov.

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87 See Table 1 for PMF User Roles
7 TPM PMF Reporting Contact

Any questions related to the TPM PMF can be sent to TPMreporting@dot.gov and you will be directed to the appropriate subject matter expert.
Appendix A: The Mid Biennial Performance Report Timeline

- **Biennial Performance Reports (State DOTs)**
  - Baseline Performance Period Report for 1st Performance Period (Due Oct 1, 2019)
  - Mid Performance Period Progress Report for 1st Performance Period (Due Oct 1, 2020)
  - Full Performance Period Progress Report for 1st Performance Period & Baseline Performance Period Report for 2nd Performance Period (Due Oct 1, 2022)
  - Mid Performance Period Progress Report for 2nd Performance Period (Due Oct 1, 2024)

- **Target Reporting**
  - 2-year and 4-year targets for the 1st Performance Period
  - Adjusted 4-year targets for the 2nd Performance Period (optional)

- **Significant Progress Determination**
  - Significant Progress Determination for 1st Period 2-year targets
  - Significant Progress Determination for 1st Period 4-year targets
  - Significant Progress Determination for 2nd Period 2-year targets

- **Performance Periods**
  - Performance Period for non-emissions measures
  - Performance Period for emissions measures

- **Data Collection**
  - Data Collection for non-emissions measures
  - Data Collection for emissions measures

- **Baseline for 1st Performance Period**
- 2-year Condition / Performance for 1st Performance Period
- 4-year condition / Performance for 1st Performance Period (Baseline for 2nd Period)

- **4-year Performance for 1st Period**

- **2-year Performance for 1st Period**

- **2-year Performance for 2nd Period**

- **4-year Performance for 2nd Period**

- **2-year and 4-year targets for the 2nd Performance Period**

- **Significant Progress Determination for 2nd Period 2-year targets**
## Appendix B: Summary of Measures in the PMF

<table>
<thead>
<tr>
<th>Program Area</th>
<th>Measure Area/PMF Tab</th>
<th>Performance Measures</th>
<th>Measure/Target Applicability</th>
<th>Measure Calculation</th>
<th>Targets</th>
<th>Significant Progress Determination</th>
<th>Minimum Condition Level Determination</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Highway Performance Program (NHPP)</td>
<td>Condition of Pavements on the Interstate System</td>
<td>Percentage of pavements of the Interstate System in Good condition</td>
<td>Mainline highways on the Interstate System</td>
<td>Percentage of the lane-miles of Interstate mainline segments rated as in Good condition (weighted by lane-miles)</td>
<td>State DOTs: 2-year and 4-year targets</td>
<td>State DOTs: subject to determination every two years (FHWA data extraction on June 15)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage of pavements of the Interstate System in Poor condition</td>
<td>Mainline highways on the Interstate System</td>
<td>Percentage of the lane-miles of Interstate mainline segments rated as in Poor condition (weighted by lane-miles)</td>
<td>State DOTs: 2-year and 4-year targets</td>
<td>State DOTs: subject to determination every two years (FHWA data extraction on June 15)</td>
<td>MPOs: Not Applicable</td>
</tr>
<tr>
<td></td>
<td>Condition of Pavements on the NHS (excluding the Interstate)</td>
<td>Percentage of pavements of the non-Interstate NHS in Good condition</td>
<td>Mainline highways on the non-Interstate NHS</td>
<td>Percentage of the lane-miles of non-Interstate NHS mainline segments rated as in Good condition (weighted by lane-miles)</td>
<td>State DOTs: 2-year and 4-year targets</td>
<td>State DOTs: subject to determination every two years (FHWA data extraction on August 15)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Percentage of pavements of the non-Interstate NHS in Poor condition</td>
<td>Mainline highways on the non-Interstate NHS</td>
<td>Percentage of the lane-miles of non-Interstate NHS mainline segments rated as in Poor condition (weighted by lane-miles)</td>
<td>State DOTs: 2-year and 4-year targets</td>
<td>State DOTs: subject to determination every two years (FHWA data extraction on August 15)</td>
<td>MPOs: Not Applicable</td>
</tr>
<tr>
<td>Program Area</td>
<td>Measure Area/PMF Tab</td>
<td>Performance Measures</td>
<td>Measure/Target Applicability</td>
<td>Measure Calculation</td>
<td>Targets</td>
<td>Significant Progress Determination</td>
<td>Minimum Condition Level Determination</td>
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<tr>
<td><strong>Condition of Bridges on the NHS</strong></td>
<td></td>
<td></td>
<td>Bridges carrying the NHS, which includes on- and off-ramps connected to the NHS and State border bridges</td>
<td>Percentage by the deck-area of the bridges carrying NHS classified as in Good condition</td>
<td>State DOTs: 2-year and 4-year targets</td>
<td>State DOTs: subject to determination every two years (FHWA data extraction on June 15)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Bridges carrying the NHS, which includes on- and off-ramps connected to the NHS and State border bridges</td>
<td>Percentage by the deck-area of the bridges carrying NHS classified as in Poor condition.</td>
<td>State DOTs: 2-year and 4-year targets</td>
<td>State DOTs: subject to determination every two years (FHWA data extraction on June 15)</td>
<td>State DOT: subject to determination every year (FHWA data extraction on June 15)</td>
</tr>
<tr>
<td><strong>NHS Travel Time Reliability</strong></td>
<td></td>
<td></td>
<td>Mainline of the Interstate System within a State or each metropolitan planning area</td>
<td>Percentage of the Interstate direction-miles of reporting segments (weighted by person miles traveled) with &quot;LOTTR&lt; 1.5&quot; for all four time periods.</td>
<td>State DOTs: 2-year and 4-year targets</td>
<td>State DOTs: subject to determination every two years (FHWA data extraction on August 15)</td>
<td>Not Applicable</td>
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<td>Mainline of the non-Interstate NHS within a State or each metropolitan planning area</td>
<td>Percentage of the non-Interstate NHS direction-miles of reporting segments (weighted by person miles traveled) with &quot;LOTTR&lt; 1.5&quot;</td>
<td>State DOTs: 2-year and 4-year targets</td>
<td>State DOTs: subject to determination every two years (FHWA data extraction on August 15)</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

88 80th percentile travel time divided by the 50th percentile travel time
89 “AM Peak” - 6:00 a.m. and 10:00 a.m. for every weekday; “Midday” - 10:00 a.m. and 4:00 p.m. for every weekday; “PM Peak” - 4:00 p.m. and 8:00 p.m. for every weekday; and “Weekend” - 6:00 a.m. and 8:00 p.m. for every weekend day.
<table>
<thead>
<tr>
<th>Program Area</th>
<th>Measure Area/PMF Tab</th>
<th>Performance Measures</th>
<th>Measure/Target Applicability</th>
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<th>Targets</th>
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<tr>
<td>National Highway Freight Program (NHFP)</td>
<td>Freight Movement on the Interstate System</td>
<td>Truck Travel Time Reliability (TTTR) Index</td>
<td>Mainline of the Interstate System within a State or each metropolitan planning area</td>
<td>Product sum of each segment’s largest TTTR of the five time periods,(^90) by its length, then dividing the product sum by the total length of Interstate.</td>
<td>State DOTs: 2-year and 4-year targets</td>
<td>State DOTs: subject to determination every two years (FHWA data extraction on August 15)</td>
<td>MPOs: Not Applicable Not Applicable</td>
</tr>
<tr>
<td>Congestion Mitigation and Air Quality Improvement Program (CMAQ)</td>
<td>Traffic Congestion PHED &amp; Non-SOV</td>
<td>Annual Hours of Peak-Hour Excessive Delay (PHED) Per Capita</td>
<td>Mainline of NHS in urbanized areas with a population over 1M/200K,(^91) in Nonattainment or Maintenance for any of the criteria pollutants under the CMAQ program</td>
<td>Annual Hours of Peak-Hour Excessive Delay per Capita = ((\text{Total Peak-Hour Excessive delay})/\text{(total population of urbanized area)})</td>
<td>State DOTs and MPOs: unified 2-year and 4-year targets for each applicable urbanized area.</td>
<td>Not Applicable Not Applicable</td>
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<td>Percent of non-Single Occupancy Vehicle (Non-SOV) Travel</td>
<td>Mainline of NHS in urbanized areas with a population over 1M/200K,(^92) in Nonattainment or Maintenance for any of the criteria pollutants under the CMAQ program.</td>
<td>Percent Non-SOV travel for each urbanized area from ACS Journey to Work data tables or local survey, or local counts reported to FHWA every 2 years in Biennial Performance Report.</td>
<td>State DOTs and MPOs: unified 2-year and 4-year targets for each applicable urbanized area.</td>
<td>Not Applicable Not Applicable</td>
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</tr>
</tbody>
</table>

\(^{90}\) “AM Peak” - 6:00 a.m. and 10:00 a.m. for every weekday; “Midday” - 10:00 a.m. and 4:00 p.m. for every weekday; “PM Peak” - 4:00 p.m. and 8:00 p.m. for every weekday; “Overnight” - 8:00 p.m. and 6:00 a.m. for everyday; and “Weekend” - 6:00 a.m. and 8:00 p.m. for every weekend day.

\(^{91}\) 1 Million population threshold applies to first performance period only, and 200,000 population threshold applies to all subsequent performance periods.

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<tr>
<td>CMAQ Continued</td>
<td>On-road Mobile Source Emissions</td>
<td>Total Emissions Reductions for applicable criteria pollutants</td>
<td>All Nonattainment and Maintenance areas for CMAQ criteria pollutants</td>
<td>Cumulative emission reduction due to all projects for each of the criteria pollutant or precursor for which the area is in nonattainment or maintenance (PM$<em>{2.5}$, PM$</em>{10}$, CO, VOC and NOx) reported to FHWA every 2 years in Biennial Performance Report.</td>
<td>State DOTs: 2-year and 4-year targets MPOs serving UZA with population &gt; 1 million: 2-year and 4-year targets Other MPOs: 4-year target</td>
<td>Not Applicable</td>
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</table>
Appendix C: Resource Links

This is a list of the key resources that support TPM reporting.


- **CMAQ Performance Plan Guidebook:** [https://www.fhwa.dot.gov/environment/air_quality/cmaq/measures/performance_plan/](https://www.fhwa.dot.gov/environment/air_quality/cmaq/measures/performance_plan/)


- **Truck Freight Bottleneck Reporting Guidebook:** [https://www.fhwa.dot.gov/tpm/guidance/hop18070.pdf](https://www.fhwa.dot.gov/tpm/guidance/hop18070.pdf)

- **Frequently Asked TPM Questions:** [https://www.fhwa.dot.gov/tpm/faq.cfm](https://www.fhwa.dot.gov/tpm/faq.cfm)

- **Highway Performance Monitoring System (HPMS) Field Manual used for collecting and preparing data for submittal to FHWA:** [https://www.fhwa.dot.gov/policyinformation/hpms.cfm](https://www.fhwa.dot.gov/policyinformation/hpms.cfm)
  Much of the data used to support TPM target setting comes from the State DOT’s submittal to HPMS.

- **National Bridge Inventory (NBI):** [https://www.fhwa.dot.gov/bridge/nbi.cfm](https://www.fhwa.dot.gov/bridge/nbi.cfm). Much of the data used in relation to the Bridge measure is based on NBI data.

- **National Performance Management Research Data Set (NPMRDS):** [https://ops.fhwa.dot.gov/freight/freight_analysis/perform_meas/vpds/npmrdsfaqs.htm](https://ops.fhwa.dot.gov/freight/freight_analysis/perform_meas/vpds/npmrdsfaqs.htm) This data can be used in calculating the travel time measures.

- **PMF Input Fields:** [https://www.fhwa.dot.gov/tpm/guidance/pmf_mpp_042020.pdf](https://www.fhwa.dot.gov/tpm/guidance/pmf_mpp_042020.pdf)

- **PMF User Guide:** Provides information on the technical aspects of how to input data into the PMF portal, how to review and validate a submittal, and how to assign user permission levels. It is accessed by entering the PMF portal, and selecting “help” in the top right quarter of the screen.

- **TPM Website with additional resources and information, including, but not limited to, Final Rules and Measure Computation Procedures documents:** [https://www.fhwa.dot.gov/tpm/](https://www.fhwa.dot.gov/tpm/)

- **UPACS Portal:** [https://fhwaapps.fhwa.dot.gov](https://fhwaapps.fhwa.dot.gov): The UPACS portal for accessing the PMF portal is only accessible using the Internet Explorer software application.