



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

February 15, 2023

Dear Planning Partners:

The Moving Ahead for Progress in the 21st Century Act (MAP-21) and Fixing America's Surface Transportation (FAST) Act established a series of performance measures to ensure effective use of Federal transportation funds. Title 23 Part 490 of the Code of Federal Regulations (23 CFR 490) establishes measures to assess the conditions of pavement and bridges on the National Highway System (NHS), which are collectively referred to as the **PM-2** measures. 23 CFR 490.105 establishes measures to assess NHS travel reliability and the effectiveness of the Congestion Mitigation and Air Quality Improvement (CMAQ) Program. These measures are collectively referred to as the **PM-3** measures. More information on Transportation Performance Management (TPM) is available at <https://www.fhwa.dot.gov/tpm/>.

PM-2 Performance Measures include:

- Percentage of pavements on the Interstate System in Good condition
- Percentage of pavements on the Interstate System in Poor condition
- Percentage of pavements on the NHS (excluding the Interstate System) in good condition
- Percentage of pavements on the NHS (excluding the Interstate System) in Poor condition
- Percentage of NHS bridge deck area classified as in good condition
- Percentage of NHS bridge deck area classified as in poor condition

PM-3 Performance Measures include:

- Percent of Person-miles Traveled on the Interstate System that are Reliable
- Percent of Person-miles Traveled on the Non-Interstate NHS that are Reliable
- Interstate System Truck Travel Time Reliability Index
- Annual Hours of Peak-Hour Excessive Delay (PHED) per Capita
- Percent Non-Single Occupant Vehicle (SOV) Travel
- On-Road Mobile Source Emissions Reduction for CMAQ-funded Projects

On December 16th, the Pennsylvania Department of Transportation (PennDOT) submitted to the Federal Highway Administration (FHWA) two sets of electronic Performance Management Forms (PMFs) that summarize the targets and associated progress related to the PM-2 and PM-3 measures for the following performance periods:

Performance Period	Submittal Name	Purpose of Submittal
2018-2021 (4-year)	Full Period Performance Report	<ul style="list-style-type: none">Assess performance against the 4-year targetsAddress freight reliability requirements including inclusion of bottleneck report and strategies
2022-2025 (4-year)	Baseline Performance Report	<ul style="list-style-type: none">Provide baseline performance metricsProvide 2-year and 4-year performance measure targets for applicable regions

Attachment 1 (includes two tables: A&B) - provides a summary of the 2018-2021 full performance period performance and targets for the PM-2 and PM-3 measures. This information is being provided to the MPOs/RPOs for inclusion in future Transportation Improvement Program (TIP) and Long-Range Transportation Plan (LRTP) documentation. No additional actions are required by the MPOs/RPOs for items related to the 2018-2021 performance period.

Attachment 2 (includes two tables: A&B) - provides a summary of the 2022-2025 baseline period baseline values and targets for the PM-2 and PM-3 measures as established by PennDOT. Note that targets for the PM-3 PHED and Non-SOV congestion measures were established through a coordinated effort between PennDOT and the applicable MPOs in each urbanized area. Federal regulations require that MPOs establish targets for the remaining PM-2 and PM-3 measures within 180 days of the PennDOT established targets (by June 14, 2023), either by agreeing to plan and program projects in support of PennDOT targets, or by committing to their own quantifiable targets. PennDOT is requesting that Rural Planning Organizations (RPOs) also establish targets by June 14, 2023, by agreeing to support the PennDOT targets or setting their own.

To ensure compliance with 23 U.S.C. §134, please respond to this letter by selecting an option for PM-2 and PM-3 measures and clicking the "SUBMIT" button below before June 14, 2023.

Please select one of the following options for PM-2 measures:

- The MPO/RPO decision-making body agrees to support the state PM-2 targets by planning and programming projects that contribute to meeting or making significant progress toward the established PennDOT performance targets. See **Attachment 2 (A&B)** enclosures for statewide baseline and target values for the 2022-2025 performance period.
- The MPO/RPO decision-making body commits to establishing their own quantifiable targets for the 2022-2025 performance period and has attached their methodology. MPOs/RPOs that establish their own targets will report the

methodology used to develop them.

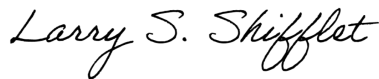
Please select one of the following options for PM-3 measures:

- The MPO/RPO decision-making body agrees to support the state PM-3 targets by planning and programming projects that contribute to meeting or making significant progress toward the established PennDOT performance targets. See **Attachment 2 (A&B)** enclosures for statewide baseline and target values for the 2022-2025 performance period.
- The MPO/RPO decision-making body commits to establishing their own quantifiable targets and has attached their methodology. MPOs/RPOs that establish their own targets will report the methodology used to develop them.

Concurrence: _____ Date: _____
Authorized MPO/RPO Representative

Should you have any questions, please contact Casey Markey, Transportation Planning Manager, at 717.787.1251 or via email at cmarkey@pa.gov.

Sincerely,



Larry S. Shifflet
Deputy Secretary for Planning

Sincerely,



Melissa J. Batula, P.E.
Deputy Secretary for Highway Administration

ATTACHMENT 1:

2018-2021 Full Performance Period Performance Summary

Attachment 1A: PM-2 and PM-3 4-Year Performance Assessment for 2018-2021 Performance Period

Measure Category	Performance Measure	Urbanized Area*	2021 4-Year Performance	2021 4-Year Target	Target Met
PM-2	Percentage of Pavements of the Interstate System in Good Condition	Statewide	68.8%	60.0%	Yes
	Percentage of Pavements of the Interstate System in Poor Condition	Statewide	0.4%	2.0%	Yes
	Percentage of Pavements of the Non- Interstate NHS in Good Condition	Statewide	49.0%	33.0%	Yes
	Percentage of Pavements of the Non- Interstate NHS in Poor Condition	Statewide	15.2%	5.0%	Yes
	Percentage of NHS Bridges Classified as in Good Condition	Statewide	27.5%	26.0%	Yes
	Percentage of NHS Bridges Classified as in Poor Condition	Statewide	4.4%	6.0%	Yes
PM-3	Percent of the Person-Miles Traveled on the Interstate That Are Reliable	Statewide	92.8%	89.5%	Yes
	Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable	Statewide	92.6%	87.4%	Yes
	Truck Travel Time Reliability (TTTR) Index	Statewide	1.30	1.40	Yes
	Annual Hours of Peak Hour Excessive Delay Per Capita:	Philadelphia	13.1	17.2	Yes
		Pittsburgh	9.3	11.8	Yes
	Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel:	Philadelphia	30.6%	28.1%	Yes
		Pittsburgh	27.6%	24.4%	Yes
	Total Emission Reductions (kg/day): PM2.5	Statewide	269.080	20.490	Yes
	Total Emission Reductions (kg/day): NOx	Statewide	1644.620	612.820	Yes
	Total Emission Reductions (kg/day): VOC	Statewide	360.220	201.730	Yes
Total Emission Reductions (kg/day): PM10	Statewide	0.000	0.000	Yes	
Total Emission Reductions (kg/day): CO	Statewide	3791.360	250.000	Yes	

* Urbanized areas are based on 2010 CENSUS urbanized area boundaries ([2010 Census Urban Area Reference Maps](#))

Attachment 1B: Reliability Performance by MPO/RPO 2018-2021

(Green Highlighted Cells = Better than Target; Red Highlighted Cells = Worse than Target)

Area (MPO/RPO)	Interstate Reliability					Non-Interstate Reliability					Truck Travel Time Reliability Index				
	2017 Baseline	2018	2019	2020	2021	2017 Baseline	2018	2019	2020	2021	2017 Baseline	2018	2019	2020	2021
Statewide Total	89.8%	89.6%	89.9%	96.2%	92.8%	87.4%	88.2%	88.4%	92.6%	92.6%	1.34	1.39	1.36	1.23	1.30
Statewide Target	89.5% 2 & 4-Year Target					87.4% 4-Year Target					1.40 2 & 4-Year Target				

Targets only Apply to Statewide Total - MPO Numbers Provided for Information Purposes Only

Adams	Not Applicable					86.2%	89.8%	93.4%	95.8%	91.4%	Not Applicable				
Altoona	100.0%	100.0%	100.0%	100.0%	100.0%	82.7%	83.9%	84.4%	87.9%	90.0%	1.21	1.25	1.18	1.12	1.15
Centre	100.0%	100.0%	100.0%	100.0%	100.0%	91.3%	93.2%	94.9%	97.2%	96.3%	1.13	1.33	1.15	1.17	1.22
DVRPC	65.5%	66.0%	66.6%	90.6%	83.5%	81.2%	82.6%	83.2%	94.2%	93.1%	2.01	2.04	1.99	1.54	1.62
Erie	100.0%	100.0%	100.0%	100.0%	100.0%	83.8%	86.7%	88.2%	91.1%	84.5%	1.25	1.23	1.29	1.16	1.15
Franklin	100.0%	100.0%	100.0%	100.0%	100.0%	93.8%	96.5%	94.6%	95.6%	92.7%	1.08	1.11	1.09	1.09	1.11
Harrisburg	91.3%	92.7%	92.4%	99.7%	96.0%	91.0%	92.4%	90.3%	95.7%	94.9%	1.32	1.33	1.31	1.18	1.29
Johnstown	Not Applicable					93.0%	94.5%	95.6%	96.3%	96.6%	Not Applicable				
Lancaster	100.0%	100.0%	100.0%	100.0%	100.0%	95.2%	95.3%	92.1%	97.0%	95.2%	1.09	1.12	1.17	1.11	1.14
Lebanon	100.0%	100.0%	100.0%	100.0%	100.0%	97.5%	97.7%	95.4%	98.3%	93.8%	1.12	1.14	1.15	1.07	1.13
Lehigh Valley	100.0%	100.0%	99.5%	100.0%	100.0%	86.4%	84.6%	85.4%	95.7%	88.7%	1.32	1.34	1.35	1.14	1.30
NEPA	100.0%	100.0%	99.9%	100.0%	100.0%	91.9%	90.9%	93.1%	93.1%	93.2%	1.26	1.25	1.28	1.17	1.23
North Central	100.0%	100.0%	100.0%	100.0%	100.0%	93.0%	95.7%	95.6%	94.4%	93.9%	1.10	1.11	1.50	1.17	1.17
Northern Tier	100.0%	100.0%	100.0%	100.0%	100.0%	98.8%	99.1%	94.7%	97.6%	95.2%	1.24	1.17	1.18	1.13	1.16
Northwest	100.0%	100.0%	100.0%	100.0%	93.3%	87.5%	91.5%	91.8%	85.3%	82.0%	1.18	1.32	1.17	1.13	1.46
Reading	100.0%	100.0%	100.0%	100.0%	100.0%	93.2%	94.2%	95.0%	95.4%	94.3%	1.12	1.38	1.19	1.12	1.19
S. Alleghenies	100.0%	100.0%	100.0%	100.0%	100.0%	95.9%	96.7%	94.2%	96.8%	93.1%	1.11	1.13	1.16	1.12	1.15
Scranton	98.3%	98.3%	98.2%	100.0%	100.0%	87.4%	90.3%	90.1%	93.5%	92.1%	1.39	1.28	1.35	1.24	1.24
SEDA-COG	100.0%	100.0%	100.0%	100.0%	96.0%	95.7%	96.4%	96.2%	97.5%	94.3%	1.11	1.11	1.12	1.11	1.24
SPC	92.9%	91.6%	92.1%	98.0%	95.9%	87.0%	87.7%	88.9%	93.8%	93.8%	1.42	1.49	1.46	1.29	1.32
SVTS	99.3%	99.2%	100.0%	100.0%	100.0%	95.1%	96.7%	95.9%	95.3%	95.8%	1.18	1.59	1.14	1.13	1.23
Wayne	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	1.11	1.12	1.17	1.15	1.16
Williamsport	100.0%	100.0%	100.0%	100.0%	100.0%	98.4%	98.3%	97.4%	98.7%	97.5%	1.16	1.18	1.19	1.14	1.16
York	100.0%	97.5%	94.9%	100.0%	100.0%	90.0%	89.6%	90.7%	93.8%	93.4%	1.22	1.32	1.28	1.15	1.17

ATTACHMENT 2:

2022-2025 Baseline Period Targets Established by PennDOT

Attachment 2A: PM-2 and PM-3 Baseline and Target Values for 2022-2025 Performance Period

Measure Category	Performance Measure	Urbanized Area*	2021 Baseline	2023 2-Year Target	2025 4-Year Target	
PM-2	Percentage of Pavements of the Interstate System in Good Condition	Statewide	68.8%	69.0%	65.0%	
	Percentage of Pavements of the Interstate System in Poor Condition	Statewide	0.4%	2.0%	2.0%	
	Percentage of Pavements of the Non- Interstate NHS in Good Condition	Statewide	37.2%	31.0%	29.0%	
	Percentage of Pavements of the Non- Interstate NHS in Poor Condition	Statewide	1.5%	6.0%	6.5%	
	Percentage of NHS Bridges Classified as in Good Condition	Statewide	27.5%	28.0%	28.0%	
	Percentage of NHS Bridges Classified as in Poor Condition	Statewide	4.4%	7.5%	7.5%	
PM-3	Percent of the Person-Miles Traveled on the Interstate That Are Reliable	Statewide	92.8%	89.5%	89.5%	
	Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable	Statewide	92.6%	88.0%	88.0%	
	Truck Travel Time Reliability (TTTR) Index	Statewide	1.30	1.40	1.40	
	Annual Hours of Peak Hour Excessive Delay Per Capita:	Allentown--		7.1%	8.4%	8.4%
		Harrisburg		7.2%	9.1%	9.1%
		Lancaster,		3.3%	3.7%	3.7%
		Philadelphia		13.1%	15.2%	15.1%
		Pittsburgh, PA		9.3%	10.5%	10.5%
		Reading, PA		6.3%	6.5%	6.5%
York, PA			5.0%	6.4%	6.4%	

Measure Category	Performance Measure	Urbanized Area*	2021 Baseline	2023 2-Year Target	2025 4-Year Target
	Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel:	Allentown	20.4%	18.6%	18.6%
		Harrisburg	21.3%	20.2%	20.2%
		Lancaster	20.5%	21.9%	21.9%
		Philadelphia	30.6%	30.0%	30.0%
		Pittsburgh	27.6%	27.0%	27.0%
		Reading	22.8%	20.2%	20.2%
		York	18.4%	15.8%	15.8%
PM-3	Total Emission Reductions (kg/day): PM2.5	Statewide	269.080	18.000	36.000
	Total Emission Reductions (kg/day): NOx	Statewide	1644.620	392.000	785.000
	Total Emission Reductions (kg/day): VOC	Statewide	360.220	46.000	93.000
	Total Emission Reductions (kg/day): PM10	Statewide	0.000	0.000	0.000
	Total Emission Reductions (kg/day): CO	Statewide	3791.360	0.000	0.000

* Urbanized areas are based on 2010 CENSUS urbanized area boundaries ([2010 Census Urban Area Reference Maps](#))

Attachment 2B: PM-2 and PM-3 Target Setting Notes

Measure Category	Performance Measure	Target Setting Notes
PM-2	Percentage of Pavements of the Interstate System in Good Condition	Planned and programmed projects were considered while establishing targets. Expected improvement from these projects is projected, as is anticipated deterioration on "untouched" pavements. Adequate funding is available and appropriate projects are programmed in the short term in order to result in investment that maintains a state of good repair.
	Percentage of Pavements of the Interstate System in Poor Condition	Planned and programmed projects were considered while establishing targets. Expected improvement from these projects is projected, as is anticipated deterioration on "untouched" pavements. Adequate funding is available and appropriate projects are programmed in the short term in order to result in investment that maintains a state of good repair.
	Percentage of Pavements of the Non- Interstate NHS in Good Condition	Planned and programmed projects were considered while establishing targets. Expected improvement from these projects is projected, as is anticipated deterioration on "untouched" pavements. Adequate funding is available and appropriate projects are programmed in the short term in order to result in investment that maintains a state of good repair. However, we forecast a decrease in the percentage in good condition which will continue in the future if our funding levels remain constant.
	Percentage of Pavements of the Non- Interstate NHS in Poor Condition	Planned and programmed projects were considered while establishing targets. Expected improvement from these projects is projected, as is anticipated deterioration on "untouched" pavements. Adequate funding is not available to result in investment that maintains what we previously defined as a state of good repair, which is no more than 5% in poor condition. This increase in the percentage in poor condition will continue in the future if our funding levels remain constant.
	Percentage of NHS Bridges Classified as in Good Condition	Planned and programmed projects were considered while establishing these targets. Expected improvement from these projects is projected, as well as anticipated deterioration. Short term flat forecasts are largely the resultant of the BIL/IIJA funding.
	Percentage of NHS Bridges Classified as in Poor Condition	Our internal data notes an actual of 4.5 vs the 4.4 value shown. Projected poor targets are based off of IIJA/BIL investment dollars applied to LLCC based investment decisions that

Measure Category	Performance Measure	Target Setting Notes
		are forecasted to largely be spent on preservation and not on reduction of poor deck area, as was previously custom. Forecasts show a higher, flat target due to a combination of factors, including IIJA/BIL money, adoption of LLCC investment logic and software model maturity level.
PM-3	Percent of the Person-Miles Traveled on the Interstate That Are Reliable	The target as adjusted during the 2020 mid-period report is maintained for this performance period. With no major changes to PennDOT's project selection and implementation strategy in the near-term, it is anticipated that the measure will remain relatively consistent from year-to-year. The target was set using the trends from 2017 to 2021, with a cushion to accommodate yearly fluctuations. The target also considers increased freight and more road construction impacting performance. PennDOT anticipates performance will move closer to the levels seen prior to the COVID-19 pandemic.
	Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable	With no major changes to PennDOT's project selection and implementation strategy in the near-term, it is anticipated that the measure will remain relatively consistent from year-to-year. The target was set using the trends from 2017 to 2021, with a cushion to accommodate yearly fluctuations. The target also considers increased freight and more road construction impacting performance. PennDOT anticipates performance will move closer to the levels seen prior to the COVID-19 pandemic.
	Truck Travel Time Reliability (TTTR) Index	The target as adjusted during the 2020 mid-period report is maintained for this performance period. With no major changes to PennDOT's project selection and implementation strategy in the near-term, it is anticipated that the measure will remain relatively consistent from year-to-year. The target was set using the trends from 2017 to 2021, with a cushion to accommodate yearly fluctuations. The target also considers increased freight and more road construction impacting performance. PennDOT anticipates performance will move closer to the levels seen prior to the COVID-19 pandemic.
	Annual Hours of Peak Hour Excessive Delay Per Capita:	The approach for developing targets for the CMAQ PHED measures included the following <ul style="list-style-type: none"> •Develop conservative targets reflecting that recent trends may not be representative of future conditions. •Uncertainties with COVID-19, inflation, long-term trends for working at home and energy and supply chain disruptions.

Measure Category	Performance Measure	Target Setting Notes
		<ul style="list-style-type: none"> •Future funding (e.g. IJJA) may initiate more project construction activities impacting congestion. •Generalized approach for target determination Average 2018 and 2019 PHED values. •Assume same values for 2-year and 4-year targets. 4-year targets can be updated at the midterm report
	<p>Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel:</p>	<p>The approach for developing targets for the CMAQ Non-SOV measure included the following</p> <ul style="list-style-type: none"> • Develop conservative targets reflecting that recent trends may not be representative of future conditions. • Uncertainties with COVID-19, inflation, long-term trends for working at home and energy and supply chain disruptions. Expectations of future higher work-at-home percentages than pre-pandemic conditions. •Note that COVID impacts on work-at-home and transit commuting in 2020-2021 will be included in future ACS 5-year estimates throughout performance period. •Generalized approach for target determination Average non-SOV 5-year ACS values for end year periods 2016-2020. •Assume same values for 2-year and 4-year targets. 4-year targets can be updated at the midterm report
	<p>Total Emission Reductions (kg/day)</p>	<p>Targets were developed by evaluating historic emission benefits accrued during the 2018-2021 performance period and evaluating CMAQ project emission benefits currently programmed in the FY2023 TIP for "new" CMAQ funded projects. The emission estimates for these two approaches were compared and assessed. The lower of these two values was considering as the more conservative estimate and used for the 4-year target value. The 2-year target was established as 1/2 of the 4-year target.</p>