

2023-2026 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

TRANSPORTATION PERFORMANCE MANAGEMENT





Northeastern Pennsylvania Metropolitan Planning Organization (MPO) Summary of Transportation Performance Management for 2023-2026 Transportation Improvement Program

INTRODUCTION

The Northeastern Pennsylvania Alliance (NEPA), in conjunction with the Northeastern Pennsylvania Metropolitan Planning Organization (NEPA MPO) Technical Planning Committee and Policy Board, has developed its 2023-2026 Transportation Improvement Program (TIP). The TIP identifies the region's highest priority transportation projects, develops a multi-year program of implementation and identifies available federal and non-federal funding for the programmed project phases. The TIP shows the estimated cost of each project and a projected schedule for completion of the project. The TIP covers a four-year period of investment, must be fiscally-constrained, and is updated every two years through a cooperative effort of local, state and federal agencies, including participation by the general public.

BACKGROUND

The Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Fixing America's Surface Transportation (FAST) Act include performance management requirements. Performance-based planning will ensure that the Pennsylvania Department of Transportation (PennDOT) and the Metropolitan Planning Organizations (MPOs) collectively invest Federal transportation funds efficiently towards achieving national goals. In Pennsylvania, the Rural Planning Organizations (RPOs) follow the same requirements as MPOs.

Transportation Performance Management (TPM) is a strategic approach that uses data to make investment and policy decisions to achieve national performance goals. 23 CFR 490 outlines the national performance goals for the federal-aid program. It establishes the seven goal areas: safety, infrastructure condition, congestion reduction, system reliability, freight, environmental sustainability and reduced project delivery delay.

SAFETY PERFORMANCE MEASURES (PM-1)

The FHWA final rule for the *National Performance Management Measures: Highway Safety Improvement Program* (Safety PM) and *Highway Safety Improvement Program* (HSIP) were published in the Federal Register (81 FR 13881 and 81 FR 13722) on March 15, 2016 and became effective on April 14, 2016.

The Safety PM, also referred to as PM-1, Final Rule supports the HSIP, as it establishes safety performance measure requirements for carrying out the HSIP and to assess fatalities and serious injuries on all public roads.

The Safety PM Final Rule establishes five performance measures as the five-year rolling averages to include:

- Number of Fatalities
- Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT)



- Number of Serious Injuries
- Rate of Serious Injuries per 100 million VMT
- Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries

The Pennsylvania Department of Transportation (PennDOT) is required to establish these targets by August 31st each year. The 2022 targets found in Table 1 of the enclosure are consistent with the fatality and serious injury reduction goals of the Strategic Highway Safety Plan.

Metropolitan Planning Organization (MPOs) are required to establish targets within 180 days of PennDOT establishing its targets by agreeing to plan and program projects in support of the PennDOT targets, or by establishing their own quantifiable targets. On November 16, 2021, the NEPA MPO approved supporting Pennsylvania's Statewide Safety Performance Measure Targets.

The following shows the CY 2022 Statewide Targets established based on 1% reduction of five-year average (2016-2020) and aggregated supporting regional NEPA MPO Targets:

Safety Performance Measure	Baseline (2016-2020)	Statewide Target (2018-2022)	NEPA MPO Target (2018-2022)	
Number of fatalities	1,140.6	1,113.7	52.9	
Fatality Rate	1.157	1.205	1.335	
Number of serious injuries	4,445.6	4,490.8	205.6	
Serious Injury Rate	4.510	4.860	5.190	
Number of non-motorized fatalities and serious injuries	761.2	730.1	20.0	

^{*}Future VMT estimated to be 0.5% higher starting in 2021.

The NEPA MPO FFY 2023-2026 TIP includes road safety improvement projects that are intended to improve the performance of the roadway system relative to the five federal safety performance measures.

To ensure planned HSIP projects achieve a significant reduction of traffic fatalities and serious injuries on all public roads, the NEPA MPO worked with District 4-0 and District 5-0 to identify safety projects to include in the FFY 2023-2026 TIP. The districts identified the top crash locations in the NEPA MPO region and developed projects to improve safety on those roadways.

Based on this process, the following regional NEPA MPO projects were included in the FFY 2023-2026 TIP to help achieve a significant reduction of traffic fatalities and serious injuries on all public roads:

Project	Improvement Focus		
NEPA High Friction Surface	Apply a high friction surface treatment to		
	various sites within Carbon, Monroe and		
	Schuylkill counties		
Safety Improvements High Friction	Apply safety improvements to various sites in		
Surface/Signs	Pike County		
I-84 Median Cable Barrier	Cable Median Barrier Installation on I-84 in		
	Westfall Township, Pike County		
Schafer School House Road Project	Median closure and signal removal		



Project	Improvement Focus
2023 Signal Backplate Updates	Signal Backplate Updates on SR 715 in
	Monroe County
209 Mount Nebo to Holy Cross	Corridor safety improvements on US 209
	from Mount Nebo to Holy Cross Road in
	Monroe County
209 Municipal Drive to Portuguese Lane	Corridor Safety improvements on US 209
	from Municipal Drive to Portuguese Lane in
	Monroe County
209 Holy Cross to Hollow Road	Corridor safety improvements including
	relocated intersection and possible turning
	lanes on US 209 from Holy Cross Road to
	Hollow Road in Monroe County
SR 739 Shoulder Widening	Edge line rumble strips and shoulder
	widening on SR 739 in Pike County
SR 590 Safety Improvements	Install signing, pavement markings, guiderail
	updates, high friction surface treatments on
	SR 590 in Pike County

BRIDGE AND HIGHWAY PERFORMANCE MEASURES (PM-2)

Title 23 Part 490 of the Code of Federal Regulations (23 CFR 490) establishes measures to assess pavements on the National Highway System (NHS), bridges carrying the NHS, and pavements on the Interstate, which are collectively referred to as the PM-2 measures.

PM-2 Performance Measures include:

- 1) Percentage of pavements on the Interstate System in Good condition
- 2) Percentage of pavements on the Interstate System in Poor condition
- 3) Percentage of pavements on the NHS (excluding the Interstate System) in Good condition
- 4) Percentage of pavements on the NHS (excluding the Interstate System) in Poor condition
- 5) Percentage of NHS bridge deck area classified as in Good condition
- 6) Percentage of NHS bridge deck area classified as in Poor condition

Information about the Statewide PM-2 Goals are included in Appendix A. On December 20, 2020, the NEPA MPO approved supporting Pennsylvania's Statewide Bridge and Highway Performance Measure Targets.

Preserving Pennsylvania's pavement and bridges is a critical part of the strategic investment strategy for Pennsylvania's transportation network at the State and Federal level. System preservation is another goal area of PA On Track's strategic framework. With limitations on available resources, the preservation of pavement and bridge assets using sound asset management practices is critical. Asset management is a key piece of FHWA's TPM program and is a vital force behind infrastructure performance. TPM is the approach to managing transportation system performance outcomes, while asset management is the application used to manage the condition of the infrastructure assets.

PennDOT's Transportation Asset Management Plan (TAMP), required by 23 U.S.C. 119 and 23 CFR 515.13(b)(2), formally defines its framework for asset management, which is a data-driven approach coupled



with a risk-based methodology. It outlines the investment strategies for infrastructure condition targets and documents asset management objectives for addressing risk, maintaining the system at the desired state of good repair, managing to Lowest Life Cycle Costs (LLCC), and achieving national and state transportation goals identified in 23 U.S.C. 150(b). The TAMP is developed by PennDOT Bureau of Maintenance and Operations (BOMO) Asset Management Division in consultation with PennDOT Executive leadership, Center for Program Development and Management (CPDM), Bureau of Planning and Research (BPR), PennDOT Districts, the Pennsylvania Turnpike Commission (PTC), the MPOs/RPOs and FHWA/FTA.

The TAMP projects the levels of future investment necessary to meet the asset condition targets and contrasts them with expected funding levels. This helps PennDOT to make ongoing assessments and to reevaluate data associated with its investment decisions for this Program update as well as future updates. Analyses done during the development of the TAMP were utilized to establish the current Pavement and Bridge Condition Performance Measure (PM2) targets.

With each program update, PennDOT has made substantial advances in its asset management tools and practices. A risk-based, data-driven approach to project selection helps ensure that the right projects are prioritized, and the transportation system is managed optimally to the lowest practical life-cycle cost. PennDOT's Pavement Asset Management System (PAMS) and Bridge Asset Management System (BAMS) are the foundations for this asset management approach. Information from these systems informs the development of the TAMP.

As part of its asset management strategy, PennDOT strives to maintain as many highway and bridge assets as possible in a state of good repair. Within its asset management framework, it was necessary for PennDOT to transition away from a "worst-first" programming methodology to a true overall risk-based prioritization and selection of projects for its system assets based on LLCC. "Worst-first" prioritization focuses work on the poorest condition assets at the expense of rehabilitation and preventative maintenance on other assets in better condition. PennDOT's revised strategy reflects its asset management motto and guiding principle: "The right treatment at the right time." This is reflective of Federal TAMP requirements that are centered on investing limited funding resources in the right place at the right time to produce the most cost-effective life cycle performance for a given investment. This methodology will allow PennDOT to manage assets to both specific targets and to the lowest practical life-cycle cost and help it to make progress toward achieving its targets for asset condition and performance.

Based on this process, the following regional NEPA MPO projects were included in the FFY 2023-2026 TIP to address bridge and pavement conditions on the NHS:

Roadway	Project Type	Project Name	Improvement Focus
Various	Line Item	NEPA Highway and	National Highway Performance
		Bridge Line Item	Program based reserve line item
Various	Highway	TOC Operator NEPA	Funding for operator in Traffic
			Operations Center in District 5-0 for
			NEPA region
SR 6	Bridge	SR 6 over Delaware River	Rehabilitation/replacement on SR 6
			(Pennsylvania Avenue) over the
			Delaware River
SR 33	Highway	PA 33 Betterment	Restoration of PA 33 from US 209
			to Interstate 80



Roadway	Project Type	Project Name	Improvement Focus
SR 33	Highway	PA 33 Resurfacing	Resurfacing of the southbound lanes of Route 33 from the Northampton County line to the Saylorsburg Exit
SR 61	Highway	SR 61 Resurface Pottsville to Schuylkill Haven	Restoration of PA 61 from Pottsville to Schuylkill Haven
SR 61	Highway	SR 61 Resurface Walmart Plaza to 1004 Intersection	Roadway restoration on State Route 61 from Walmart Plaza to 1004 (Mill Creek) Intersection
SR 61	Highway	61 St. Clair to Frackville Reconstruction	Reconstruction of PA 61 starting in St. Clair Borough and ending in Frackville Borough
SR 209/SR 33	Bridge	209 & 33 over Appenzell Creek	Replacement or rehabilitation of the bridge carrying US Route 209 and 33 North Bound over Appenzell Creek
SR 209	Highway	Jim Thorpe Preventative Maintenance	Rehabilitation of a masonry retaining wall supporting US Route 209
SR 209	Highway	Hamilton West Resurface- Sciota	Resurfacing of Hamilton West (State Route 209) from east of Lesh Road to PA 33
SR 248	Highway	PA 248 PM Wall	Retaining Wall Repairs on SR 248 South of Palmerton
SR 309	Highway	309 Restoration- Ben Titus to Lofty Hill	Resurfacing of PA 309 from Ben Titus Road to Lofty Hill in Rush Township
SR 309	Highway	309 Project 895 to 443	Resurfacing of PA 309 from SR 895 to SR 443 in Schuylkill County
SR 309	Bridge	309 o/ RBMNRR	Replacement or rehabilitation of SR 309 over Reading Blue Mountain Northern RR in Rush Township

CONGESTION MITIGATION AND AIR QUALITY PERFORMANCE MEASURES (PM-3)

23 CFR 490.105 establishes measures to assess the performance of the NHS, freight movement on the Interstate, and the Congestion Mitigation and Air Quality Improvement (CMAQ) Program. These measures are collectively referred to as the PM-3 measures.

PM-3 Performance Measures include:

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



Information about the Statewide PM-3 Goals are included in Appendix A. On December 20, 2020, the NEPA MPO approved supporting Pennsylvania's Statewide NHS performance, freight movement on the Interstate, and the Congestion Mitigation and Air Quality Improvement (CMAQ) Performance Measure Targets.

The PM-3 Targets were established using historic trends for each measure in combination with regional mobility goals established in the statewide and regional LRTPs. At this time, limited historical information may hinder the assessment of trends for the traffic congestion and reliability measures. The assessment of trends may also include the evaluation of data used within the Congestion Management Plan (CMP), Transportation Systems Management and Operations (TSMO), and CMAQ processes.

Historically, District 5-0's's process involved the Traffic Unit generating a list of congested corridors from one of their databases, which are then ranked based upon the delay costs assigned to each corridor. District 5-0 staff and the MPO leadership would discuss the prioritization of the projects which were then presented to the MPO committees for approval and ultimate inclusion in the regional TIPs.

Based upon severe fiscal pressures, the process and discussions quickly came to a quick conclusion that the region's CMAQ funding be applied on the 2023-2026 TIP as follows:

Project	Improvement Focus		
Delaware Ave Signal Improvements	Traffic Signal Improvements on Delaware		
	Avenue in Palmerton		
CMAQ Line Item Reserve	Reserve funds for Congestion Mitigation and		
	Air Quality (CMAQ) eligible projects in		
	Carbon County		

The above project funding determinations were based upon discussions that occurred during a review of the current TIP and ongoing project funding needed to maintain current project schedules into the 2021-2024 TIP. The use of Congestion Mitigation Air Quality (CMAQ) funding was discussed with MPO representatives of Carbon County, NEPA MPO staff, PennDOT District 5-0 and Central Office representatives on October 29, 2019 at one of several 2021 TIP development meetings conducted with the PennDOT District 5-0 staff. It was decided to apply CMAQ funding toward the Delaware Avenue (Palmerton) Improvements as a priority project and address Carbon County's other congestion needs by developing potentially CMAQ eligible projects during the time leading into the next TIP update. Congestion issues in Jim Thorpe Borough, Palmerton Borough and Lehighton Borough were discussed, and the potential to develop CMAQ eligible projects in these areas were recognized for possible funding consideration during the 2025-2028 TIP Update. This project scenario is presented in the CMAQ Project Selection Process Excel Sheet.

TRANSIT PERFORMANCE MEASURES

In July 2016, FTA issued a final rule requiring transit agencies to maintain and document minimum Transit Asset Management (TAM) standards, policies, procedures, and performance targets. The TAM rule applies to all recipients of Chapter 53 funds that either own, operate, or manage federally-funded capital assets used in providing public transportation services. The TAM rule divides transit agencies into two categories based on size and mode:



Tier I

- Operates Rail Fixed Guideway (Section 5337) **OR**
- Operates over 100 vehicles across all fixed route modes **OR**
- Operates over 100 vehicles in one non-fixed route mode

Tier II

- Urban and Rural Public Transportation (Section 5307, 5310, and 5311 eligible) OR
- Operates up to and including 100 vehicles across all fixed route modes **OR**
- Operates up to and including 100 vehicles in one non-fixed route mode

The NEPA MPO region is served by three Tier II public transportation providers- Carbon County Community Transportation (CCCT) which is operated by Lehigh and Northampton Transportation Authority (LANTA), Monroe County Transportation Authority (MCTA) and Schuylkill Transit System (STS).

The TAM rule requires states to participate and/or lead the development of a group plan for recipients of Section 5311 and Section 5310 funding (Tier II), and additionally allows other Tier II providers to join a group plan at their discretion. CCCT, MCTA and STS all elected to participate in the PennDOT Group Plan.

The TAM process requires agencies to annually set performance measure targets and report performance against those targets. Required measures are:

- Rolling Stock Percentage past the Useful Life Benchmark (ULB) (age only)
- Equipment Percentage of service vehicles past the ULB (age only)
- Facilities Percentage of passenger/parking and admin/maintenance facilities that are below a 3 on the Transit Economic Recovery Model (TERM) Scale
- Infrastructure Percentage with performance restrictions (fixed-guideway only)

Performance targets, and how those targets translate into project prioritization, is the focus of TAM plans. The Pennsylvania Group Plan is available on PennDOT's website at https://www.penndot.gov/Doing-Business/Transit/InformationandReports/. The group plan is updated annually with new targets as well as the current performance of the group.

All transit agencies are required to utilize Pennsylvania's transit Capital Planning Tool (CPT) as part of their capital planning process and integrate it into their TAM process. The CPT is an asset management and capital planning application that works as the central repository for all Pennsylvania transit asset and performance management activities.

Transit agencies update CPT data annually to provide a current picture of asset inventory and performance. From this data, PennDOT Bureau of Public Transportation (BPT) updates performance targets for both the statewide inventory of Tier II agencies and for each individual agency in the plan based on two primary elements: the prior year's performance and anticipated/obligated funding levels. PennDOT BPT then reports this information to FTA and shares it with the MPOs/RPOs, along with investment information on priority capital projects anticipated for the following year. Agencies that are Tier I or non-participating Tier II use similar CPT data to set independent TAM performance targets and report these directly to the MPOs/RPOs.



Consistent with available resources and in coordination with the PennDOT BPT, transit agencies are responsible for submitting projects consistent with the CPT for the development of the transit portion of the Program. This will ensure that projects identified on the TIP are consistent with the TAM approach and respective TAM plans. PennDOT CPDM will update this project information in the Multi-modal Project Management System (MPMS) and share it with the MPOs/RPOs, PennDOT BPT, and the transit agencies.

In addition to the Transit Asset Management Performance, FTA issue a final rule on Public Transportation Agency Safety Plans (PTASP), effective July 19, 2019. The PTASP final rule (49 C.F.R. Part 673) is meant to enhance safety by creating a framework for transit agencies to manage safety risks in their organization. It requires recipients of FTA funding to develop and implement safety plans that support the implementation of Safety Management Systems (SMS). At this time, recipients of only Section 5311 (Formula Grants for Rural Areas) or Section 5310 (Enhanced Mobility of Seniors and Individuals with Disabilities Program) are exempt from the PTASP requirement.

As part of the plan development process, performance targets must be established for the following areas:

- 1. Fatalities,
- 2. Injuries,
- 3. Safety Events, and
- 4. System Reliability.

The Final Rule sets the following deadlines for PTASP compliance:

- July 20, 2020: Transit providers subject to the PTASP final rule are required to have their certified Agency Safety Plans in place, which includes safety performance targets, and share the targets with their MPO and State. For small public transportation providers, a state must certify compliance unless the provider opts to draft and certify its own Agency Safety Plan. In Pennsylvania, all small providers are drafting their own plans based on a PennDOT-provided template.
- January 20, 2021 (or no more than 180 days after receipt of the Agency Safety Plan from public transportation providers): MPOs are required to set their initial transit safety targets.
- **July 20, 2021**: Specific written provisions for the transit safety measure are jointly agreed upon and adopted by the MPO(s), state(s), and providers of public transportation. The MPO reflects the transit safety measures and targets in all Metropolitan Transportation Plans (MTPs) and Transportation Improvement Programs (TIPs) updated or amended after this date.

As a result of the COVID-19 Pandemic, FTA issued a <u>Notice of Enforcement Discretion</u> effectively extending the PTASP compliance deadline from July 20, 2020 to December 31, 2020.



Appendix A



November 18, 2020

Dear Planning Organizations:

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 pavements on the National Highway System (NHS), bridges carrying the NHS, and pavements on the Interstate, which are collectively referred to as the **PM-2** measures. 23 CFR 490.105 establishes measures to assess the performance of the NHS, freight movement on the Interstate, and 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/faq.cfm.

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

In May 2018, the Pennsylvania Department of Transportation (PennDOT) established 2-year and 4-year targets in coordination with Pennsylvania's Planning Partners. All MPO/RPOs agreed to support the PennDOT statewide and regional PM-2 and PM-3 targets established at that time. In June 2019, PennDOT submitted a Transportation Asset Management Plan (TAMP) that published the PM-2 targets along with its plan to achieve them while progressing towards lowest life cycle cost planning and programming. The TAMP is available at:

https://www.penndot.gov/ProjectAndPrograms/Asset-Management/Documents/PennDOT-TAMP.pdf

PennDOT Mid Performance Period Report

PennDOT recently submitted a *Mid Performance Period Progress Report* to the Federal Highway Administration (FHWA) on September 30, 2020. This progress report includes:

- The actual performance derived from the latest data collected through the midpoint of the performance period;
- A discussion of PennDOT's progress toward achieving each established 2-year target;
- A discussion on progress of PennDOT's efforts in addressing congestion at truckfreight bottlenecks within the state:
- Adjustments to the 4-year targets for select performance measures with a discussion of the basis for the adjustment and how the revised targets support expectations in the long-range statewide transportation plan and the TAMP;
- MPO CMAQ performance plans for the Southwestern Pennsylvania Commission (SPC), Delaware Valley Regional Planning Commission (DVRPC) and Lancaster Metropolitan Planning Organization (MPO)s.

The FHWA makes a formal determination of significant progress in the achievement of 2-and 4-year targets. If significant progress is not made, states will be required to document actions to achieve targets in future performance periods. **Attachments 1-3** (addressing both the PM-2 and PM-3 measures) provide a summary of the actual 2-year performance and progress toward achieving the established statewide targets. Additional information is provided on individual MPO/RPO performance for select measures.

Adjustments to 4-Year Performance Targets and Coordination

The *Mid Performance Period Progress Report* offers an opportunity for PennDOT and its Planning Partners to review and adjust the 4-year targets for each of the PM-2 and PM-3 performance measures. All bridge, pavement, reliability, freight and CMAQ emission targets were assessed in coordination between PennDOT and Pennsylvania's MPO/RPOs. The CMAQ congestion and Non-SOV measure targets were reviewed by all relevant state DOT and MPO partners for each urbanized area (e.g. Philadelphia and Pittsburgh areas).

PennDOT has not adjusted any of the PM-2 targets. PennDOT has adjusted the PM-3 targets as summarized in **Table 1**. The adjusted statewide targets were provided in PennDOT's *Mid Performance Period Progress Report* to FHWA. PennDOT provided a presentation on the assessment of PM-2 and PM-3 targets at the September 16th Planning Partners call. The call included a discussion on the target setting process and requested comments on the proposed adjustments to the PM-3 target values. No MPO/RPOs indicated concerns regarding adjustments to the reliability, freight or CMAQ emission targets.

Table 1: Adjustments to Statewide PM-3 Targets (All Other PM-2 and PM-3 Targets Remain Same as Baseline Report)

Measure	Original Target	Adjusted Target	Basis for Adjustment
Interstate Reliability	89.8%	89.5%	In the baseline report, PennDOT's target was developed to maintain status quo for operations. Based on a review of the first three years of data, there are yearly variations in the reliability measure. PennDOT has identified impacts of construction projects on reliability while work zone traffic restrictions are in effect. PennDOT's 2021 Statewide Transportation Improvement Program (STIP) has an increased focus on interstate highways, which will result in more construction projects. Major projects which will be underway in 2021 include the I-83 widening in Harrisburg, I-95 reconstruction in Delaware and Philadelphia Counties, the Southern Beltway interchange with I-79 near Pittsburgh, and I-81 reconstruction near Carlisle. Smaller projects like bridge rehabilitations also impact reliability when long-term lane closures are required. The target adjustment reflects a desire to maintain the status quo as planned in the baseline report while taking into account year-to-year variability with a multitude of construction scenarios. Other congestion management techniques to improve reliability will need to be planned and are beyond the timeframe of the 4-year target for this performance period.
Truck Travel Time Index	1.34	1.40	The impacts of construction work zones on the freight reliability measure cannot be mitigated prior to the 2021 construction season. PennDOT will continue to monitor data to develop appropriate mitigation strategies to improve freight reliability in future performance periods. The 4-year target is intended to account for anticipated construction projects which will impact 2021 performance and unknown freight impacts due to the COVID-19 pandemic.
CMAQ PM ₁₀ Emissions	17.47	0.00	The original target was set assuming PM10 benefits of CMAQ projects across the entire SPC region. The target should only be for the actual nonattainment/maintenance area which just includes Liberty Clairton. No CMAQ projects are anticipated in this area over the 4-year performance period. The statewide target was adjusted to zero.
CMAQ CO Emissions	1135.40	250.00	The DVRPC region is now in attainment for CO and no longer requires a target. As such, the statewide number is adjusted only to reflect the SPC area.

MPO/RPO Target Establishment

Per federal regulations, the MPO/RPOs must establish targets no later than 180 days after PennDOT adjusts their targets. The MPO/RPOs must establish targets by either:

- Agreeing to plan and program projects so that they contribute toward the accomplishment of the relevant PennDOT target for that performance measure; or
- Committing to a quantifiable target for that performance measure for their metropolitan planning area.

To ensure compliance with 23 U.S.C. §134, please respond to this letter by selecting an option for the adjusted PM-3 measures below before March 29, 2021. <u>Note this action only applies to the measures for which PennDOT has adjusted targets</u>.

applies to the measures for which Pen	nDOT has adjusted targets.
	Planning Organization Name
Please select one of the following o	ptions for the relevant PM-3 measures:
targets by planning and progra	g body agrees to support the adjusted statewide PM-3 mming projects that contribute to meeting or making established PennDOT performance targets.
targets for these measures and	g body commits to establishing their own quantifiable I has attached their methodology. MPOs/RPOs that report the methodology used to develop them and are ennDOT as early as possible.
Concurrence:	Date: ed MPO/RPO Representative
Addionzo	ou wii O/Ni O Nepresentative
Should you have any questions Manager, at 717.787.1251 or cmarkey	s, please contact Casey Markey, Transportation Planning open.gov .
Sincerely,	Sincerely,
Larry S. Shifflet Larry S. Shifflet Deputy Secretary for Planning	Melissa J. Batula, P.E. Deputy Secretary for Highway Administration

Enclosure

Attachment 1: Summary of Performance Measure Targets and 2-Year Performance

Attachment 1: Summary of Performance Measure Targets and 2-Year Performance								
		Performance Measures	2017 Baseline	2-Year (2019) Performance	2-Year Target	4-Year Original Target	4-Year Adjusted Target	
		Percentage of Pavements of the Interstate System in Good Condition		71.5%		60.0%		
		Percentage of Pavements of the Interstate System in Poor Condition		0.4%		2.0%		
	ient ide)	Percentage of Pavements of the Non-Interstate NHS in Good Condition	47.8%	49.0%				
PM-2	Pavement (Statewide)	Percentage of Pavements of the Non-Interstate NHS in Good Condition		37.6%	35.0%	33.0%		
P		Percentage of Pavements of the Non-Interstate NHS in Poor Condition	15.9%	15.2%				
		Percentage of Pavements of the Non-Interstate NHS in Poor Condition		2.0%	4.0%	5.0%		
	Bridge 'Statewide)	Percentage of NHS Bridges Classified as in Good Condition	23.7%	27.0%	25.8%	26.0%		
	Bric (State	Percentage of NHS Bridges Classified as in Poor Condition	5.1%	5.1%	5.6%	6.0%		
	e) tt	Percent of the Person-Miles Traveled on the Interstate That Are Reliable	89.8%	89.9%	89.8%	89.8%	89.5%	
	Reliability (Statewide)	Percent of the Person-Miles Traveled on the Non-Interstate NHS That Are Reliable		88.5%		87.4%		
		Truck Travel Time Reliability (TTTR) Index	1.35	1.36	1.34	1.34	1.40	
	n-SOV	Annual Hours of Peak Hour Excessive Delay Per Capita: Philadelphia		14.6%		17.2%		
	- Delay and Non-SOV (Urbanized Area)	Annual Hours of Peak Hour Excessive Delay Per Capita: Pittsburgh		10.1%		11.8%		
PM-3	ا ج	Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel: Philadelphia	27.9%	28.2%	28.0%	28.1%		
	СМАО	Percent of Non-Single Occupancy Vehicle (Non-SOV) Travel: Pittsburgh	24.8%	25.5%	24.6%	24.4%		
	S	Total Emission Reductions: PM2.5	25.870	143.210	10.760	20.490		
	ission e)	Total Emission Reductions: NOx	971.780	971.050	337.700	612.820		
	Q – Emiss Statewide)	Total Emission Reductions: VOC	302.380	231.780	109.460	201.730		
	CMAQ – Emissions (Statewide)	Total Emission Reductions: PM10	24.780	0.000	9.540		0.000	
	Ö	Total Emission Reductions: CO	1135.400	2969.640	567.700	1135.400	250.000	

(MPO/RPO Performance on PM-2 Measures Provided on PennDOT SharePoint Site)

 $\frac{https://spportal.dot.pa.gov/Planning/ProgramCenter/Performance\%20Reports/Forms/AllItems.aspx}{https://www.penndot.gov/ProjectAndPrograms/Asset-Management/Documents/PennDOT-TAMP.pdf}$

Attachment 2: Summary of MPO/RPO PM-3 Reliability Performance									
Area	Interstate Reliability			Non-Interstate Reliability			Truck Travel Time Reliability Index		
(MPO/RPO)	2017 Baseline	2018	2019	2017 Baseline	2018	2019	2017 Baseline	2018	2019
Statewide Total	89.8%	89.6%	89.9%	87.4%	88.2%	88.4%	1.34	1.39	1.36
Statewide	89.8% -> Adjusted to 89.5%		to 89.5%		87.4%		1.34 -> Adjusted to 1.40		
Target	2 8	& 4-Year Tar	get	4	1-Year Targe	t	2 & 4-Year Target		
Adams	N	ot Applicab	le	86.2%	89.8%	93.4%	Not Applicable		ble
Altoona	100.0%	100.0%	100.0%	82.7%	83.9%	84.4%	1.21	1.25	1.18
Centre	100.0%	100.0%	100.0%	91.3%	93.2%	94.9%	1.13	1.33	1.15
DVRPC	65.5%	66.0%	66.6%	81.2%	82.6%	83.2%	2.01	2.04	1.99
Erie	100.0%	100.0%	100.0%	83.8%	86.7%	88.2%	1.25	1.23	1.29
Franklin	100.0%	100.0%	100.0%	93.8%	96.5%	94.6%	1.08	1.11	1.09
Harrisburg	91.3%	92.7%	92.4%	91.0%	92.4%	90.3%	1.32	1.33	1.31
Johnstown	Not Applicable		93.0%	94.5%	95.6%	Not Applicable		ble	
Lancaster	100.0%	100.0%	100.0%	95.2%	95.3%	92.1%	1.09	1.12	1.17
Lebanon	100.0%	100.0%	100.0%	97.5%	97.7%	95.4%	1.12	1.14	1.15

86.4%

91.9%

93.0%

98.8%

87.5%

93.2%

95.9%

87.4%

95.7%

87.0%

95.1%

100.0%

98.4%

90.0%

84.6%

90.9%

95.7%

99.1%

91.5%

94.2%

96.7%

90.3%

96.4%

87.7%

96.7%

100.0%

98.3%

89.6%

85.4%

93.1%

95.6%

94.7%

91.8%

95.0%

94.2%

90.1%

96.2%

88.9%

95.9%

100.0%

97.4%

90.7%

1.32

1.26

1.10

1.24

1.18

1.12

1.11

1.39

1.11

1.42

1.18

1.11

1.16

1.22

1.34

1.25

1.11

1.17

1.32

1.38

1.13

1.28

1.11

1.49

1.59

1.12

1.18

1.32

1.35

1.28

1.50

1.18

1.17

1.19

1.16

1.35

1.12

1.46

1.14

1.17

1.19

1.28

Table Notes:

Lehigh Valley

NEPA

North Central

Northern Tier

Northwest

Reading

S. Alleghenies

Scranton

SEDA-COG

SPC

SVTS

Wayne

Williamsport

York

100.0%

100.0%

100.0%

100.0%

100.0%

100.0%

100.0%

98.3%

100.0%

92.9%

99.3%

100.0%

100.0%

100.0%

100.0%

100.0%

100.0%

100.0%

100.0%

100.0%

100.0%

98.3%

100.0%

91.6%

99.2%

100.0%

100.0%

97.5%

99.5%

99.9%

100.0%

100.0%

100.0%

100.0%

100.0%

98.2%

100.0%

92.1%

100.0%

100.0%

100.0%

94.9%

- The 2- and 4-year reliability targets only apply statewide. MPO/RPO values are provided for informational purposes only.
- At the mid-performance period (2019), Pennsylvania met the established 2-year target for interstate reliability. The state did not meet the 2-year truck travel time reliability index target. Although a 2-year target is not applicable to the non-interstate reliability measure, the mid-performance period data exceeds the 4-year target.
- PennDOT reliability targets were originally developed based on 2017 baseline values. The goal was to maintain
 baseline reliability throughout the four-year performance period. MPO/RPO values indicate areas that maintained
 their regional baseline value (green) or worsened over the baseline (red).

Attachment 3: Summary of MPO/RPO Emission Benefits from CMAQ-Funded Projects

(Listed MPO Targets are Only Included in Relevant MPO CMAQ Performance Plans – PennDOT does not report these targets as part of the Baseline and Mid-Performance Period Reports)

		Emissions (kg/day)						
NA	MADO	2019	2021	2021	2018-2019			
Measure	МРО	2-year Target	Original 4-year Target	Adjusted 4-year Target	Actual 2-year Benefits			
	Statewide	109.46	201.73		231.03			
	DVRPC (PA only)	37.61	69.31		142.79			
	SPC	58.06	107.00		66.76			
VOC Emissions	Lehigh Valley	N/A	N/A		20.19			
Lillissions	Lancaster	N/A	3.60	0.40	0.25			
	Reading	N/A	N/A		0.32			
	NEPA	N/A	N/A		0.72			
	Statewide	337.70	612.82		936.29			
	DVRPC (PA only)	23.42	42.50		652.4			
	SPC	256.11	464.77	250.00	152.55			
NOx Emissions	Lehigh Valley	N/A	N/A		126.64			
LIIIISSIOIIS	Lancaster	N/A	1.03		1.16			
	Reading	N/A	N/A		3.08			
	NEPA	N/A	N/A		0.46			
	Statewide	10.76	20.49		37.87			
	DVRPC (PA only)	1.08	2.06		24.21			
	SPC	7.01	13.35	10.00	6.21			
	Lehigh Valley	N/A	N/A		5.48			
PM _{2.5} Emissions	York	N/A	N/A		1.41			
Lillissions	Harrisburg	N/A	N/A		0.41			
	Lancaster	N/A	0.04		0.06			
	Lebanon	N/A	N/A		0.06			
	Johnstown	N/A	N/A		0.03			
PM ₁₀	Statewide	9.54	17.47	0.00	0.00			
Emissions	SPC	9.54	17.47	0.00	0.00			
60	Statewide	567.70	1135.40	250.00	133.37			
CO Emissions	DVRPC (PA only)	282.74	565.47	Removed Target	N/A			
EIIIISSIUIIS	SPC	284.97	569.93	250.00	133.37			

Table Notes:

- Pollutant Definitions include VOC = Volatile Organic Compounds; NOx = Nitrogen Oxides; PM = Particulate
 Matter for specified size particles; and CO = Carbon Monoxide
- Emission benefits are estimated based on the total CMAQ-funded project emission benefits as reported in FHWA's CMAQ annual database. Project benefits are calculated by PennDOT and Planning Partners using available tools.
- DVRPC is now in attainment for CO and a CO target is no longer required for that region