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**PENNSYLVANIA'S 2023
TRANSPORTATION PROGRAM
GENERAL AND PROCEDURAL
GUIDANCE**

2023 Transportation Program General and Procedural Guidance

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INTRODUCTION

The purpose of this General and Procedural Guidance document is to meet federal and state requirements for the development and documentation of the Pennsylvania 2023-2026 Statewide Transportation Improvement Program (STIP) and the regional Transportation Improvement Programs (TIPs). This includes, but is not limited to, [23 USC Section 134](#), [23 USC Section 135](#), [23 CFR 450.200](#), [23 CFR 450.300](#), and [23 CFR 490](#), as well as [PA Consolidated Statute \(CS\) Title 74](#) and [PA Code Title 67](#). As referenced in the [Pennsylvania FFY 2021-2024 STIP Federal Planning Finding](#), these regulations guide the development process of the 2023 Transportation Program within the context of multiple inter-related, intergovernmental planning functions. The [Moving Ahead for Progress in the 21st Century](#) (MAP-21) Act required the use of a performance-based approach to transportation planning which was continued under the Fixing America's Surface Transportation (FAST) Act. Performance-Based Planning and Programming (PBPP) refers to the application of performance management within the planning and programming process to achieve the desired performance outcomes for Pennsylvania's transportation system.

The Pennsylvania Department of Transportation (PennDOT) undertakes these activities together with other agencies, stakeholders, and the public to ensure that transportation investment decisions align with established targets and goals. These activities are carried out as part of a cooperative, continuing, and comprehensive (3C) planning process which guides the development of many PBPP documents, including:

- Statewide and Regional Long Range Transportation Plans (LRTPs)
- 12-Year Transportation Program (TYP)
- State Transportation Improvement Program (STIP)
- Regional Transportation Improvement Programs (TIPs)
- Transportation Asset Management Plan (TAMP)
- Transit Asset Management (TAM) Plans
- Pennsylvania Strategic Highway Safety Plan (SHSP)
- Comprehensive Freight Movement Plan (CFMP)
- Congestion Mitigation and Air Quality (CMAQ) Performance Plan(s)
- Congestion Management Process (CMP)

This guidance document is a collaborative product jointly developed by PennDOT [PennDOT Executives, the Center for Program Development and Management (CPDM), Bureau of Maintenance and Operations (BOMO), Bureau of Project Delivery (BPD), Bureau of Public Transportation (BPT), Bureau of Equal Opportunity (BEO), and Engineering Districts], the Metropolitan Planning Organizations (MPOs) and Rural Planning Organizations (RPOs), and Federal Partners, including the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA).

This guidance reflects the performance-based planning approach to transportation planning, underscores the importance of the 3C process and identifies opportunities for collaboration. This guidance also lays out requirements for the documentation of the TIP development process and describes how project selection and prioritization will support Transportation Performance Management (TPM). With these changes, the regional TIPs will continue to evolve into more narrative-based planning documents, similar to the regional LRTPs.

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This document will oversee the development process of the 2023 Transportation Program (STIP, TIPs, and TYP) and demonstrate the implementation of the TAMP. The transportation planning process is by its very nature fluid and subject to change. By working closely together, PennDOT, the MPOs/RPOs, and FHWA/FTA will strive to continuously improve the program development process. Therefore, this guidance document will be updated every two years to reflect changes in state or federal legislation, regulation, or policy. This document includes numerous hyperlinks that support program development.

REQUIREMENTS

This guidance document provides references and links included in the text as support tools that users may find helpful in developing a broader understanding of the program development process.

The planning context for program development is a complex process that involves multiple elements, including planning and programming rules and regulations, transportation plans, data systems, and other programs that support and inform the program development process. To help understand the complex planning requirements for all stakeholders, PennDOT, in cooperation with the MPOs/RPOs and FHWA/FTA, developed the [Guidebook for Pennsylvania's MPOs and RPOs](#). This guidebook provides a core source of information for planning and programming in Pennsylvania, including an initial documentation of roles, responsibilities, and requirements.

The initial part of the program development process is the update of the Financial Guidance and General and Procedural Guidance documents. Representation from PennDOT Central Office, PennDOT Districts, the MPOs/RPOs, and FHWA/FTA participate in work groups to update these documents. These two documents are the foundation of the program update process. The 2023 Transportation Program development schedule is available in Appendix 1.

[PA Act 120 of 1970](#), enacted from Senate Bill 408, created PennDOT and the State Transportation Commission (STC). The STC is a 15-member body, chaired by the Pennsylvania Secretary of Transportation, which serves as the Board of Directors to PennDOT. The STC provides policy driven direction with respect to the development of Pennsylvania's TYP. PennDOT and STC work together with the MPOs/RPOs to develop several transportation planning documents, including the TYP. To satisfy the requirements of Act 120, PennDOT must prepare, update, and submit Pennsylvania's TYP to the STC for approval every two years.

The TYP is the Commonwealth's official transportation program and is a multimodal, fiscally constrained program of transportation improvements spanning a 12-year period. The TYP is divided into three four-year periods, with the first four years corresponding to the STIP and the regional TIPs. The TYP must be consistent with federal programming documents, such as the statewide and regional LRTPs.

12-Year Program Cycle for Federal Fiscal Year (FFY) 2023-2034

FFY 2023	FFY 2024	FFY 2025	FFY 2026	FFY 2027	FFY 2028	FFY 2029	FFY 2030	FFY 2031	FFY 2032	FFY 2033	FFY 2034
1 st Four Years (STIP/TIPs)				2 nd Four Years				3 rd Four Years			
← TYP →											
← TAMP →											

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Pennsylvania is required under [49 USC 5304\(g\)](#) and [23 USC 135\(g\)](#) to develop a STIP. Pennsylvania's STIP is a fiscally constrained four-year program of highway, bridge, and transit projects. The STIP is developed in cooperation with the MPOs/RPOs and public transportation agencies in the state and is consistent with the regional TIPs. The transportation projects on the STIP are consistent with the statewide and regional LRTPs. All projects that use Federal-aid funds must be listed in the STIP.

The STIP is the entire transportation program for the Commonwealth, which includes the Interstate and Statewide programs as well as the regional TIPs:



The Pennsylvania STIP is comprised of 26 individual TIPs:

- MPO TIPs (19)
- RPO TIPs (4)
- Independent County TIP (1)
- Statewide Items TIP (1)
- Interstate Management (IM) Program TIP (1)

PennDOT is responsible for statewide planning, while the MPOs/RPOs are responsible for transportation planning in their regions. Federal planning requirements [49 USC 5303\(j\)](#) and [23 USC 134\(j\)](#) require each MPO to develop a TIP at the local level. In Pennsylvania, the TIP is the first four years of the TYP. PennDOT has developed agreements with RPOs that position them as equals to MPOs. Therefore, in Pennsylvania, RPOs are held to the same requirements as MPOs with regards to the planning and programming process, which includes the development of individual TIPs, Statewide Items TIP, and Interstate Management (IM) Program TIP. PennDOT takes the lead in developing the independent county TIP. Each MPO/RPO TIP is a fiscally constrained program of upcoming transportation projects that reflect regional and local priorities over the next four years. Federal law requires TIPs to be updated at least every four years. In Pennsylvania the STIP/TIPs are updated every two years during the TYP process, based on the requirements of Act 120.

Within Pennsylvania, the characteristics of the PennDOT Engineering Districts and MPOs/RPOs vary greatly, between the land area and population of the region, the number of transportation resources present, and the staff available to support operations. PennDOT, the MPOs/RPOs, transit agencies, and FHWA/FTA recognize this and agree to work cooperatively to meet the federal and state program requirements.

The STIP and MPO/RPO TIPs are developed based upon mutual trust, data sharing, open communication and coordination at each program development step, which results in a consensus between PennDOT, the MPOs/RPOs, FHWA/FTA, and other interested stakeholders regarding the most effective use of

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limited transportation resources. To kick off this process, PennDOT and FHWA/FTA recommend that MPOs/RPOs and PennDOT Engineering Districts schedule an early coordination meeting at the beginning of the TIP development process to discuss and agree upon roles and responsibilities, overall schedule, and key deadlines. PennDOT CPDM liaisons and FHWA/FTA planning staff are available to participate and assist, as needed. PennDOT and FHWA/FTA have developed a new coordination worksheet to aid this discussion. The **worksheet** can be found in the [2023 General and Procedural Guidance Support Documents](#) folder in SharePoint.

Each MPO/RPO, in coordination with their PennDOT CPDM representatives and their PennDOT District(s), will document the process used for regional TIP development. This documentation should include the project selection process, a description of the anticipated effect of the TIP toward achieving the performance targets, the individual roles and responsibilities of the MPO/RPO, PennDOT District(s) and Central Office, and a timeline. **Examples** can be found in the [2023 General and Procedural Guidance Support Documents](#) folder in SharePoint.

The project selection documentation described above is integral to the process and should be submitted in draft form with the draft list of projects in accordance with the 2023 Transportation Program development schedule available in Appendix 1. This will allow for early coordination with PennDOT Districts, CPDM, FHWA, and FTA for review and feedback prior to the draft TIP public comment period.

Public Participation

Public outreach is a key component of updating the Program. The release of the [2021 Transportation Performance Report](#) (TPR) by the STC on February 18, 2021 was the official start of the 2023 Program update process in Pennsylvania. PennDOT, the STC and the MPOs/RPOs welcomed the public to review the TPR prior to providing input and feedback on transportation priorities to help identify projects for the 2023 Program. The 2023 TYP update open public comment period took place from March 1 to April 14, 2021. During this comment period, the public was encouraged to take an online transportation survey to share their transportation priorities and concerns on STC's [Public Outreach](#) page and attend an [Online Public Meeting](#) hosted by the Secretary of Transportation, who is also STC Chair. During the Public Meeting, the findings of the 2021 TPR were presented and the public was given the opportunity to ask questions.

To increase public participation and gather as much feedback as possible, PennDOT, the STC and the MPOs/RPOs reinforced this public outreach effort by informing stakeholders and the public about the Transportation Survey and encouraging participation through both social and traditional media.

The public feedback collected through the transportation survey will be used to shape the 2023 TYP as well as the 2045 LRTP and the CFMP. Feedback was also shared with the BPT, Districts and MPOs/RPOs, who will consider these results in their project selection process for the TIP. The same process is utilized for the respective regional portions of the Program. STC's [How It Works](#) describes how PennDOT, the STC and the Transportation Advisory Committee (TAC) use a variety of tools including programs, plans and reports to complete the TYP Update Planning Process.

An integral part of the program development process involves meaningful public outreach and involvement. A Public Participation Plan (PPP) is a key element to ensure that all transportation related

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activities are communicated and involve all members of the public, including traditionally underserved and protected populations. PennDOT Central Office, in coordination with the MPOs/RPOs and FHWA/FTA, develops and utilizes a [Statewide PPP](#) in accordance with [23 CFR 450.210](#).

FHWA provides guidance to the MPOs/RPOs regarding [public involvement](#) requirements. The MPOs/RPOs are responsible for developing their own regional PPPs that outline the processes by which they ensure adequate involvement and input from various stakeholders, including elected officials, transportation agencies and service providers, businesses, special interest groups, disadvantaged populations, and the public. The MPOs/RPOs must post their own regional PPPs on their respective websites. The MPO/RPO PPPs must specifically identify how the MPOs/RPOs will notify the public of meetings, ensure access to meetings, and demonstrate how they will consider and respond to public input.

Title VI

As a recipient of federal funding, MPOs and RPOs must be in compliance with Title VI as outlined in the Code of Federal Regulations (CFR) [49 CFR § 21](#) (Nondiscrimination In Federally-Assisted Programs Of The Department Of Transportation - Effectuation Of Title VI Of The Civil Rights Act Of 1964) and the [FTA Circular 4702.1B](#) (Title VI Requirements and Guidelines for Federal Transit Administration Recipients). The FTA Circular 4702.1B requires that MPOs/RPOs (sub-recipients of federal funds) document their compliance by creating and submitting an approved Title VI Program document to PennDOT (the primary recipient). MPOs and RPOs should continue to coordinate with PennDOT through the Bureau of Equal Opportunity (BEO), Bureau of Public Transportation (BPT), and CPDM as well as with FTA and FHWA, as needed, for guidance, resources, and assistance in maintaining compliance. Recently, FTA Region III shared resources on the FTA Circular 4702.1B requirements for MPOs/RPOs along with a document of PennDOT's efforts to meet these requirements. To learn more about Title VI and the overarching requirements of this and related statutes and authorities, please refer to PennDOT's [Title VI webpage](#) which addresses the full scope of the Department's civil rights obligations. Resources referenced above are available in the [Title VI folder](#) on SharePoint.

Planning processes must comply with [Title VI of the Civil Rights Act of 1964](#) that prohibits exclusion from participation in, denial of the benefits of, and discrimination under federally assisted programs on grounds of race, color, or national origin. Furthermore, PennDOT must comply with other federal and Commonwealth statutes and authorities that prohibit discrimination based on an individual or group's sex, age, religious creed, and/or disability. [PennDOT's Title VI Compliance and Implementation Plan](#) defines the policies and procedures by which the Department administers its Title VI activities and ensures its programs comply with Title VI requirements both within PennDOT and among its federal-aid sub-recipients.

PennDOT BEO, in coordination with PennDOT CPDM and FHWA, has crafted a template that can be used by the MPOs/RPOs as a general Title VI policy statement and complaint procedural notice. MPOs/RPOs that already maintain a Title VI Policy statement that addresses the principle points articulated in this template may maintain their existing statements or choose to modify this template to meet their organizational needs. Any Title VI statement should include the organization's name and Title VI Coordinator contact information. The Title VI Coordinator should be fully versed in the organization's

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complaint and accommodation procedures and designated as the point of contact for public concerns and requests.

It is recommended that this [Title VI template](#) or a comparable statement be applied as an appendix or preface to the TIP document that is made available for public comment. Additionally, it is recommended to apply this template or a comparable statement to other publicly facing documents and communications, including the MPO/RPO PPP and respective websites.

Tribal Consultation

Although there are no areas in Pennsylvania currently under the jurisdiction of Tribal governments, PennDOT recognizes the importance of tribal consultation and considers federally recognized Tribes and Nations to be interested parties. Therefore, PennDOT and MPOs/RPOs shall consult with federally recognized Tribes and Nations that have regions of interests in Pennsylvania to provide opportunities for review and comment on key planning documents, such as the TIP, LRTP, and PPP. For the 2023 TIP update, this includes notifying Tribes and Nations of the opportunity to participate in any TIP public meetings and review the draft TIP during the public comment period. However, this effort to consult with individual Tribes and Nations needs to be a separate public involvement effort that occurs during the public comment period. The consultation letter to inform the Tribes and Nations of the public involvement opportunity should be specific and tailored to the individual Tribe or Nation that maintains an area of interest within the boundaries of each respective planning partner and should not be included in mass email alerts/notices to the general public. Because of the importance of government-to-government consultation with Tribes and Nations, the letter should come directly from PennDOT or the MPO/RPO staff and cannot be sent by a consultant.

Please note that some of the Tribes and Nations accept email correspondence while others may require a paper copy of documents. For the Tribes and Nations that require paper copies, please include a printed version of the TIP with the consultation letter to reduce any barriers to participation, and freedom for review, and comment. A **list** of federally-recognized Tribes and Nations contacts as well as a **sample coordination letter** are available in the [Tribal Coordination folder](#) in SharePoint.

Self-Certification

All Pennsylvania's MPOs are required by [23 CFR 450.336\(a\)](#) to complete self-certification resolutions concurrent with their TIP updates, which state that the metropolitan transportation planning process is being carried out in accordance with all applicable requirements. These self-certification resolutions are part of the TIP submission documentation sent to PennDOT CPDM. Non-TMA MPOs, metropolitan areas with populations less than 200,000 as deemed by the US Census, and RPOs must include documentation to indicate compliance as part of their TIP submissions. MPOs that are in Transportation Management Areas (TMAs), metropolitan areas with populations exceeding 200,000 as deemed by the US Census, are required to have Federal certification reviews performed by FHWA/FTA every four years, in accordance with [23 CFR 450.336\(b\)](#). Based on the higher level of oversight by FHWA/FTA, the TMA MPOs aren't asked to provide the additional compliance documents because those materials are reviewed as part of the Federal certification review process. The regulatory requirements and citations to include in the Self-Certification resolution can be found at [23 CFR 450.336](#). **Examples** of self-certification resolutions

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and documentation can be found in the [2023 General and Procedural Guidance Support Documents](#) folder in SharePoint.

Project Selection

To the maximum extent practicable, project selection, evaluation, and prioritization should be a clear and transparent process. To kick off this process, PennDOT and FHWA/FTA recommend that MPOs/RPOs and PennDOT Districts schedule an early coordination meeting at the beginning of the TIP development process to discuss and agree upon roles and responsibilities, overall schedule, and key deadlines. PennDOT CPDM liaisons and FHWA/FTA planning staff are available to participate and assist, as needed. PennDOT and FHWA/FTA have developed a new coordination worksheet to aid this discussion. The **worksheet** can be found in the [2023 General and Procedural Guidance Support Documents](#) folder in SharePoint.

PennDOT District and CPDM staff will work with the MPOs/RPOs to document the project identification, prioritization, and selection process used for the highway/bridge portion of the Program. The MPOs/RPOs will work with public transit agencies in their regions to document the project identification, prioritization, and selection process used for the public transit portion of the Program. These project selection processes will vary by District, MPO/RPO, and public transit agency, but should reflect the key elements established in this guidance, be documented in the regional TIP development process mentioned above, and be included as part of the MPO/RPO TIP submissions. A draft version of the regional project selection documentation should be submitted to PennDOT CPDM with the draft list of projects in accordance with the 2023 Transportation Program development schedule available in Appendix 1. This will allow for early coordination with PennDOT Districts, CPDM, FHWA, and FTA for review and feedback prior to the draft TIP public comment period.

PennDOT District and MPO/RPO staff will work together to identify candidate projects for the highway/bridge portion of the 2023 Program. Initial focus should be placed on carryover projects which must be carried forward onto the 2023 Program from a previous Program. These include:

- Projects that are still advancing through the project delivery process
- Projects with unforeseen cost increases
- Projects with anticipated Advance Construct (AC) conversions

Highway/bridge carryover project scopes, costs, and schedules will be reviewed and updated based on information obtained through project management and from local input/outreach sources such as the STC Public Survey, MPO/RPO public involvement, [PennDOT Connects](#) (PennDOT's municipal outreach policy), and Environmental Justice analysis. PennDOT Districts must ensure that timely and accurate project information is input into [PennDOT's Multimodal Project Management System](#) (MPMS) and share this information with the MPOs/RPOs and PennDOT CPDM. Project public narratives and MPMS data entry should follow [Pub 227](#) and strike-off letters available in the [2023 General and Procedural Guidance Support Documents](#) folder in SharePoint.

Clear and understandable project descriptions guarantee that details including the location and scope of work are easily understood by the public and will even reduce potential confusion during TIP Negotiations, Air Quality Conformity, federal funds eligibility review, and funds obligation. As the project

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progresses, it is important to update the project description to reflect changes in scope and/or alternatives analysis.

PennDOT District staff and MPO/RPO staff should then cooperatively meet to evaluate highway/bridge project ideas or additional needs that have been identified through the TPM process and informed by the TAMP, transportation performance measures, the statewide and regional LRTPs, and the local input/outreach sources mentioned above. PennDOT CPDM will ensure that adequate coordination meetings are occurring and appropriately documented for the STIP/TIP submission.

The MPO/RPO's in consultation with the Engineering Districts, should consider cross asset optimization of these multiple project focus areas when considering whether or not to adopt the statewide targets that have been established. Tools like OneMap and other GIS based applications may be utilized to assist with analyzing these various performance areas.

Based upon this continued coordination throughout the TIP development process, PennDOT District staff will create project scopes, costs, and schedules in MPMS for the mutually agreed-upon new projects. To allow for open discussion and collaboration, cooperative discussions about candidate projects under consideration should occur between the MPOs/RPOs and the Districts prior to preparation of a fiscally constrained project list.

PennDOT Connects

Overarching guidance for PennDOT's project development and delivery process is provided by [Design Manual Part 1A](#) (DM1A). It provides guidance on the collection, validation, sharing and documentation of the information necessary to advance a project. As detailed in DM1A, new projects must follow the PennDOT Connects collaborative planning process approach in Appendix 2. The local government outreach and collaboration achieved through the [PennDOT Connects policy](#) leads to positive outcomes, including clearer scopes of work and more accurate schedules and budgets when projects are programmed. This information is carried forward into the scoping and environmental review processes. PennDOT Connects collaboration may occur throughout the planning process. However, PennDOT Connects Project Initiation Forms (PIFs) should be completed for new TIP projects prior to programming. Additional guidance is currently being developed to address PennDOT Connects scalability for projects funded outside of Financial Guidance.

PennDOT Connects identifies community needs and contextual concerns early in project planning through a collaborative process. It is also a mechanism where PennDOT and the MPOs/RPOs can hold discussions on emerging topics like Environmental Justice in the state's transportation programs. PennDOT and the MPO/RPOs coordinate with local governments to identify opportunities to incorporate community-related features into potential projects prior to adding those projects to the Program. However, this is only the beginning of the PennDOT Connects collaborative approach. While community-focused project features are identified in planning, it is often not until the Preliminary Engineering (PE) process is conducted that a determination can be made on whether these features can reasonably be incorporated into the project. Issues such as environmental impacts and other design considerations, such as right-of-way and utilities, are all considerations that factor into decision-making entering the final design of a project. Local governments must be kept informed throughout the decision-making processes involved in project development and delivery.

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The identification and consideration of cultural resources is one aspect of PennDOT Connects collaboration that can be particularly valuable. “Cultural resources” is a term that is typically used synonymously with the term “historic properties”, which are defined in the [National Historic Preservation Act of 1966](#) (NHPA) ([54 USC § 300308](#)) as buildings, sites, districts, structures and objects included in, or eligible for inclusion in, the National Register of Historic Places. [Section 106](#) of the NHPA requires that federal agencies consider the effects of their actions on historic properties following the Advisory Council on Historic Preservation’s implementing regulations at [36 CFR 800](#). Identifying historic properties present, or likely present, in a project area during project planning provides the best means for protecting and preserving cultural properties important to Pennsylvania’s communities and benefits the efficiency and utility of the Section 106 process. As part of the PennDOT Connects process, the MPOs/RPOs and PennDOT Districts should discuss if cultural resources are present, or likely present, in the project area. Collaboration with the State Historic Preservation Officer (SHPO) and/or the PennDOT District Cultural Resource Professionals (District archaeologist and District architectural historian) may also inform the process. Pennsylvania’s [Statewide Historic Preservation Plan for 2018-2023](#) outlines a five-year plan for collaboration on historic preservation that should be considered as part of project planning.

Long Range Transportation Plans

PA On Track is Pennsylvania’s current [L RTP](#) and [CFMP](#). They were developed with the cooperation and input from dozens of state, regional and local transportation agencies. PA On Track sets goal areas that include system preservation, safety, personal and freight mobility, and investment. Pennsylvania’s Statewide LRTP and CFMP are currently being updated for 2045 to meet the [federal requirement](#) to update the State Freight Plans every five years.



Pennsylvania MPOs and RPOs are required to have their own regional LRTPs. They are maintained and updated as needed in accordance with the current federal transportation legislation requirements - at least every four years in air quality nonattainment and maintenance areas and at least every five years in attainment areas. PennDOT provides guidance to MPOs/RPOs in the development of regional LRTPs in its [Developing Regional Long Range Plans](#), PennDOT Publication (PUB) 575, which is currently being updated. PennDOT has also created [Freight Planning Guidance](#) (PUB 790).

The regional LRTPs are consistent with the goals laid out in the statewide LRTP, are based on extensive public and stakeholder involvement, and include a list of fiscally constrained projects that support

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regional goals and objectives. These projects are prioritized with a strong emphasis on preservation and operating efficiency of the existing infrastructure for all modes to ensure consistency between regional L RTPs, comprehensive plans, and regional TIPs. The MPOs/RPOs shall make their regional L RTPs available on their websites.

Transportation Performance Management

Transportation Performance Management (TPM) requirements are a key component of the project decision making process. TPM planning requirements were established by the [Moving Ahead for Progress in the 21st Century](#) (MAP-21) Act and reaffirmed in the [Fixing America's Surface Transportation](#) (FAST) Act. Under these rules, PennDOT and its MPOs/RPOs are required to establish targets related to safety, bridge and pavement condition, air quality, freight movement, public transportation asset management and safety, and the performance of the National Highway System, and to use performance measures to track their progress toward meeting these targets.

Information on TPM rules and other resources on performance management are available on [FHWA's Transportation Performance Management](#) webpage and through [FTA's Performance Based Planning](#) webpage. Additional information on PBPP can be found on FHWA's [Performance Based Planning and Programming Guidebook](#) and is illustrated in the flowchart shown below.



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The [TPM Resource Toolbox](#) has been created to support PennDOT and the MPOs/RPOs with the integration of the federal performance measures in the transportation planning process. The toolbox includes:

- Ability to ask questions for which PennDOT will work to create formal responses
- Handouts to provide further guidance in TPM implementation
- Examples of noteworthy practices and select case studies
- Key contacts and resources
- Ways to communicate the TPM measures to the public

PennDOT and the MPOs/RPOs are required to comply with [23 USC 150](#), which provides strategies for the most efficient investment of Federal transportation funds by refocusing on national transportation goals, increasing the accountability and transparency of the Federal-aid highway program, and improving project decision making through PBPP.

[23 CFR 450.314\(h\)](#) requires PennDOT, MPOs/RPOs, and public transit agencies to create jointly agreed-upon written provisions for how they will cooperatively develop and share information related to five key elements of PBPP:

- Transportation performance data
- Selection of performance targets
- Reporting of performance targets
- Reporting of performance to be used in tracking critical outcomes for each region
- Collection of data for the State asset management plan for the National Highway System (NHS)

PennDOT, in cooperation with its MPOs/RPOs, developed the [Pennsylvania Transportation Performance Management Performance-Based Planning and Programming Procedures](#) document to serve as Pennsylvania's jointly-written provisions for the highway/bridge PBPP roles and responsibilities. It also more fully documents the roles for PennDOT and the MPOs/RPOs regarding target setting coordination, data collection, data analysis and reporting. To ensure compliance with [23 CFR 450.314](#), the MPOs/RPOs have provided written acknowledgement that the Pennsylvania PBPP written provisions were cooperatively developed and agreed-upon with PennDOT.

MAP-21 established three categories of performance measures, which are collectively referred to as the PM1, PM2, and PM3 measures:

- PM1 – measures of safety performance
- PM2 – measures for the condition of NHS pavements, Interstate pavements, and bridges carrying the NHS
- PM3 – measures for the performance of the NHS, freight movement on the Interstate, and the CMAQ Program

The PM1, PM2, and PM3 measures each have multiple targets. Based on the jointly-written provisions, the statewide targets for the above measures were set in coordination between PennDOT and the MPOs/RPOs. Currently, all MPOs/RPOs have adopted PennDOT's statewide targets. Documentation on the currently approved targets is available on [PennDOT's Transportation Performance Management SharePoint](#) page.

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Public Transit Agencies are also required by FTA to develop performance targets related to asset management and safety. These targets are discussed in more detail in the Transit section below.

In accordance with [23 CFR 450.218\(q\)](#), PennDOT CPDM, BPT and BOMO will describe in the STIP documentation how the Statewide Program of projects contributes to the achievement of the performance targets identified in the state performance-based plans, linking investment priorities to those targets. The narrative will document the PBPP objectives, investment strategies, performance measures and targets from the performance-based plans that are being implemented through the Program of projects in the STIP.

Similarly, in accordance with [CFR 450.326\(d\)](#), the MPOs/RPOs, in coordination with PennDOT Districts and transit agencies, will describe in their TIP documentation how their regional programs contribute to the achievement of their performance targets in the regional performance-based plans, again linking investment priorities to those targets. The narratives should document the PBPP objectives, investment strategies, performance measures and targets from the performance-based plans that are being implemented through the program of projects in the MPO/RPO TIPs.

The narrative descriptions in the STIP/TIPs should also include a description of how the other performance-based plans are being implemented through the STIP and TIPs. For example, the narrative should describe how the objectives, investment strategies, performance measures and targets from the [PennDOT TAMP](#), [Pennsylvania SHSP](#), the [Highway Safety Improvement Program](#) (HSIP), the [Pennsylvania CFMP](#), TMA CMAQ Performance Plans (see [23 U.S.C. 149\(l\)](#)), regional [CMP](#) plans, transit asset management plans, and other performance-based plans are being implemented through the program of projects in the STIP/TIPs. As part of the regional TIP development process, the MPOs/RPOs and Districts must also document the differences between the PennDOT asset management system treatment and funding level recommendations and their selected projects as part of their TIP submissions. They must also document the coordination with the PennDOT District(s) and Central Office that occurred as part of this decision-making process. This information will be used by PennDOT BOMO AMD to improve future asset management system recommendations.

The narrative should specifically describe these linkages and answer the following questions:

- How were the projects included in the STIP/TIPs selected/prioritized?
- What is the anticipated effect of the STIP/TIP towards the achievement of the performance targets?
- How are the STIP/TIPs consistent with the other performance-based planning documents?

Documentation of how the TIP supports achievement of the performance targets should be incorporated into the project selection and program development narrative submitted by MPOs/RPOs. This information is critical to the TIP development process and should be submitted to PennDOT CDPM in draft form with the draft list of projects in accordance with the 2023 Transportation Program development schedule available in Appendix 1. This will allow for early coordination with PennDOT Districts, CPDM, FHWA, and FTA for review and feedback prior to the draft TIP public comment. Additional **template tools** and **examples** will be made available in the [2023 General and Procedural Guidance Support Documents](#) folder in SharePoint as well as the [TPM Resource Toolbox](#).

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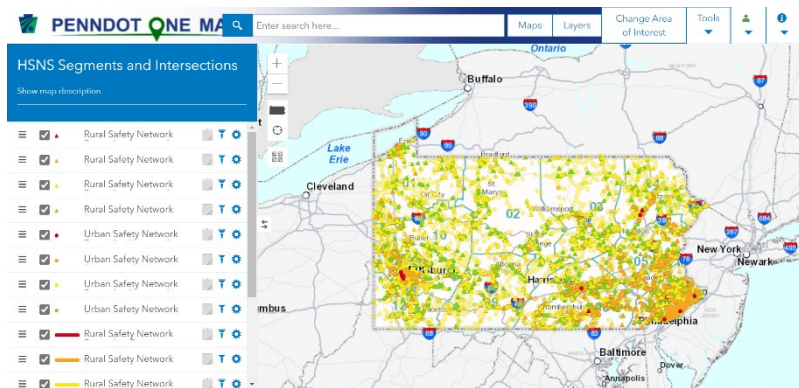
Safety

Safety is a primary focus of strategic investments for Pennsylvania's transportation network at the State and Federal level. Safety is one of seven themes from PennDOT's Strategic Plan, one of the four goal areas of PA On Track's strategic framework, and one of three strategies in Pennsylvania's Transportation Asset Management Plan (TAMP). Safety is the USDOT's top priority and identified as FHWA's number one objective in the FHWA FY [2019-2022 Strategic Plan](#). Safety Performance Management is also part of FHWA's overall TPM program. The [Safety Performance Management Final Rule](#) establishes safety performance measure requirements for carrying out the HSIP.

To establish the current Safety Performance Measure (PM1) targets, PennDOT BOMO reviewed the State's crash and fatality data and evaluated it for overall trends, comparing these trends to what could be observed at the national and state level. PennDOT evaluated how these trends affected the Pennsylvania SHSP goals and the [National Toward Zero Death initiative](#). PennDOT BOMO and CPDM shared the statewide data with the Engineering Districts and MPOs/RPOs.

The purpose of HSIP funding is to achieve a significant reduction in traffic fatalities and serious injuries on public roads, including non-State-owned public roads. This directly ties to achieving the targets established under PM1. Projects using HSIP funding will be coordinated between the regional MPO/RPO and PennDOT [District, BOMO, and CPDM staff]. These projects must be consistent with the strategies from the SHSP.

All projects utilizing HSIP funds shall be evaluated based on Benefit/Cost (B/C) analysis, Highway Safety Manual (HSM) analysis, fatal and injury crashes, application of systemic improvements, improvements on high risk rural roads, and deliverability. Specifically, as part of PennDOT's HSIP application process, a data-driven safety analysis in the form of B/C analysis or HSM analysis is required. Performing this analysis early in the planning process will help ensure projects selected for inclusion in the TIP will support the fatality and serious injury reductions goals established under PM1. As a **minimum**, HSIP projects shall have a 1:1 return on the safety funding investment. MPOs/RPOs and PennDOT Districts are encouraged to select projects for inclusion in the TIP that will result in the highest B/C ratio as this supports a greater potential for reduction in fatalities and suspected serious injuries.



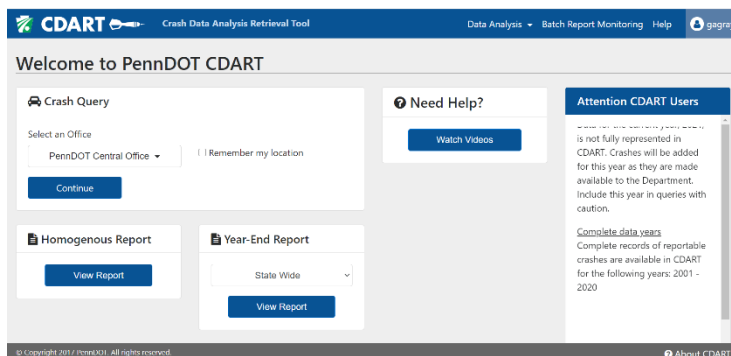
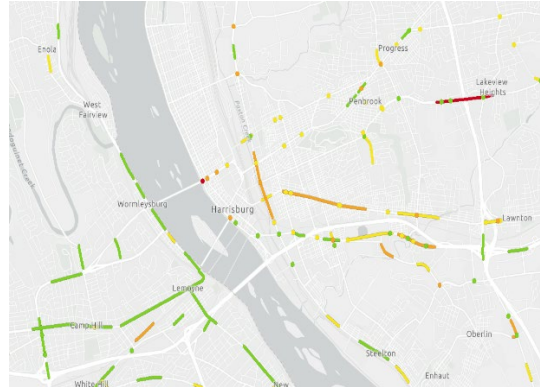
The process for selecting safety projects for inclusion in the TIP should begin with the Network Screening Evaluation that the Department has performed on a statewide basis. Selecting locations with an excess crash frequency greater than zero from this network screening is key to identifying locations with a high potential to improve safety. This

evaluation has been mapped and is included in [PennDOT's OneMap](#) to ease use by our partners. This GIS layer contains both urban and rural locations that represent both intersections and roadway segments. At the current time this is not all inclusive for every road in Pennsylvania. Locations not currently

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evaluated may be considered by performing the same type of excess crash frequency evaluation the Department utilizes. The difference in the expected number of crashes and predicted number of crashes is computed as an 'excess crash frequency'. A positive excess crash frequency shows a potential for safety improvement, while a negative excess crash frequency indicates there are fewer expected crashes than predicted. The greater the difference between the expected number of crashes and the predicted number of crashes (excess crash frequency), the greater the potential for safety improvement. If the expected number of crashes is fewer than the predicted number of crashes, the excess crash frequency will be negative, and it is assumed there is little room for safety improvement. Use of the [Highway Safety Manual](#) and [PUB 638A](#) will assist in performing this evaluation manually.

Locations in OneMap are color coded to easily identify potential safety project locations. The locations identified in yellow, orange, or red have an increasing potential for improving safety with the red locations having the greatest opportunity to improve safety. Locations in green are locations that are already performing safely statistically and are included so that partners understand that there may be limited improvement of safety by selecting one of these locations for inclusion on the TIP.

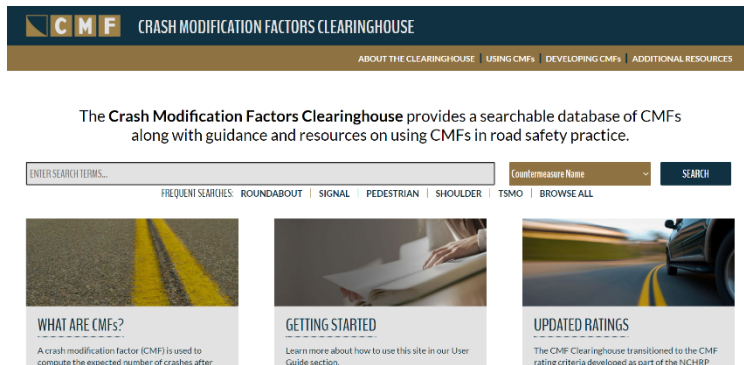


Once safety candidate location(s) have been prioritized for further analysis using the network screening, an assessment of the type of project that needs to be done to address the safety needs should be performed. This analysis must be performed so that project delivery and funding level considerations can be factored into TIP development. Through crash data, the MPO/RPO's and

Engineering Districts can get an idea of whether the safety needs can be addressed by using [proven countermeasures](#) or whether a more significant infrastructure improvement is necessary. To assist in this, partners can use one of two systems:

- (1) [Crash Data Analysis Retrieval Tool](#) (CDART)
- (2) [Pennsylvania Crash Information Tool](#) (PCIT)

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Once this analysis has been performed, data should be used by the Engineering Districts and planning partners to assist MPO/RPO's in evaluating different factors to address the safety concern. By starting with the [Crash Modification Factors Clearinghouse](#) the Engineering Districts can help narrow down treatments that are applicable to a given location and dataset. MPO/RPO's should use this information to assess

the complexity of the project needed. For example, can a situation involving roadway departure crashes be addressed by the addition of curve warning signs and high friction surface treatments or do a series of curves in the roadway need removed. Obviously the more complex the solution is the greater the funding levels will be, but it also increases other project delivery aspects like environmental clearances and right-of-way impacts. Both areas can affect how much funding is tied to a given year on the TIP as well as the total number of years the project will need carried on the TIP to reach completion. All of these factors are important considerations when selecting safety projects because delivery of safety that have the greatest potential for return on reduction in crashes is key to the Commonwealth achieving its established safety performance targets.

These analysis options are explored in more detail at the following locations:

- [Highway Safety Benefit-Cost Analysis Guide](#)
- [Highway Safety Benefit-Cost Analysis Tool: Reference Guide](#)
- [HSM Analysis \[Crash Modification Factor \(CMF\) Clearinghouse\]](#)

Guidance on performing a data-driven safety analysis can be found in the following locations:

- [PUB 638 – District Highway Safety Guidance Manual](#)
- [PUB 638A – Pennsylvania Safety Predictive Analysis Methods Manual](#)
- [PennDOT Safety Website](#)
- [AASHTO Highway Safety Manual](#)
- [FHWA Crash Costs for Highway Safety Analysis](#)
- [FHWA Countermeasure Service Life Guide](#)

More information on HSIP project eligibility and requirements, including federal share pro rata, can be found at the following links:

- [FHWA – Project Eligibility](#)
- [FHWA – Eligibility Guidance](#)
- [23 USC 120 – Federal Share Payable](#)
- [23 USC 148 – Highway Safety Improvement Program](#)

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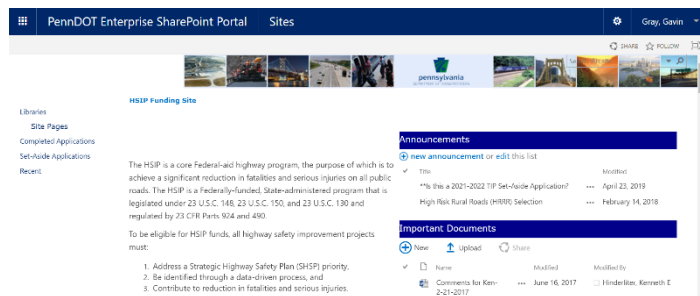
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The [SharePoint HSIP funding site](#) provides a single point of communication for all HSIP eligibility and funding requests.

Applications submitted through this process will document all the processes discussed earlier in this section. Project applications can be initiated either by an MPO/RPO or an Engineering District. The applications are reviewed through an approval workflow

involving the PennDOT Engineering District, BOMO safety and CPDM staff. To ensure that there are no conflicts between the approved TIP and safety performance measures this application should be created as early in the planning process as possible. Failure to do this could result in projects being included in the TIP that do not meet the minimum 1:1 benefit cost ratio for utilization of HSIP funding. The HSIP projects should be continually monitored by the MPOs/RPOs, PennDOT Engineering Districts, CPDM, BOMO, and FHWA to ensure approved applications match any TIP adjustments. If situations arise where either the MPOs/RPOs or Engineering Districts believe additional funding is needed for the safety project an amendment shall be processed through this HSIP SharePoint system to ensure that the 1:1 benefit cost ratio can be maintained at the increased funding level. These HSIP application amendments shall be initiated by either the MPOs/RPOs or the Engineering Districts in conjunction with any TIP adjustments. This approach will not only ensure that Pennsylvania is working towards the SHSP goals but will also allow the PennDOT Districts and MPOs/RPOs to quantify the safety improvements of the selected projects relative to the safety performance targets. It will also assist in ensuring that delivery and funding issues do not arise during the project development process.

Pennsylvania sets aside \$35 million of HSIP funds per FFY to advance projects statewide. The HSIP set-aside is managed as a statewide program by PennDOT CPDM in coordination with BOMO. Projects are evaluated, ranked, and selected based on their potential significant safety return on investment and their deliverability. The remainder of the state's HSIP authorization is allocated regionally. Each MPO/RPO receives a base funding level of \$500,000 for supporting low cost safety improvements and systemic safety. The remaining HSIP funding is allocated at a 39:1 ratio based on actual crash data. It should be noted however that the allocated HSIP funding can still be utilized for systemic safety treatments because it has been determined that these types of projects have a much greater return on the safety investment in Pennsylvania. Further documentation on this process is included in the Financial Guidance Document.



Pavement and Bridge Asset Management

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 [TAMP](#), required by [23 USC 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

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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 USC 150\(b\)](#). The TAMP is developed by PennDOT BOMO's Asset Management Division (AMD) in consultation with PennDOT Executive leadership, CPDM, Bureau of Planning and Research (BPR), PennDOT Districts, the Pennsylvania Turnpike Commission (PTC), the MPOs/RPOs and FHWA.

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. Step by step guidelines on utilizing PAMS and BAMS to review treatments and develop projects can be found in the [TPM Resource Toolbox](#).

PennDOT's asset management systems forecast condition and investment needs by asset class and work type using deterioration models and cost matrices developed for PennDOT infrastructure and based on historical data. PennDOT has developed both predictive and deterministic models that support multi-objective decision-making based on current average work costs and estimated treatment lifespans. These models allow PennDOT to predict infrastructure investment needs and future conditions under a range of scenarios.

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, per [23 CFR 515.9 \(d\)\(1\)](#). PennDOT defines its desired state of good repair as meeting the FHWA minimum condition thresholds for pavements and bridges: no more than 5 percent of NHS Interstate lane-miles shall be rated in poor condition ([23 CFR part 490.315\(a\), Subpart C](#)) and no more than 10 percent of total NHS bridge deck area shall be rated as poor ([23 USC 119\(f\)\(1\)](#)). However, the ability to achieve these condition thresholds is funding dependent.

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, per [23 CFR 515.7](#) and [23 CFR 515.9](#).

PennDOT will use its PAMS and BAMS systems to assist with prioritizing preservation activities to extend asset life. 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

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condition and performance. Implementation of these improved asset management practices should be implemented on all state and local networks.

The bridge condition classification of poor has replaced the previous structurally deficient (SD) condition ranking. The SD ranking was a major component of PennDOT's old Bridge Risk Score, which was not a prioritization tool for network level risk. Rather, it was a combination of project level risk and structure condition that was only applied to a small subset of the overall bridge population. PennDOT has developed a new Bridge Risk Score to assist in prioritizing preservation, rehabilitation, and replacement. It does not include condition in the calculation so that risk can be addressed independently and provides each bridge structure with a score in the same scale in relation to the network. BAMS utilizes the new risk score to prioritize bridges within a LLCC-based work selection. The software looks at all possible work for a given year, determines the best projects based on LLCC logic, and then prioritizes based on the new Risk Score.

PAMS and BAMS outputs are the basis for determining project programming to achieve LLCC. PennDOT Districts should work with MPO/RPOs to generate the lists of recommended treatments by work type (such as highway resurfacing and bridge rehabilitation), based on LLCC and condition projections derived from PennDOT's PAMS and BAMS. PennDOT BOMO-Asset Management will provide any necessary support. Step by step **guidelines** on utilizing PAMS and BAMS to review treatments and develop projects can be found in the [TPM Resource Toolbox](#). For the 2023 Program Update, as we integrate PAMS and BAMS into TIP and TYP Development, AMD will provide the PAMS and BAMS outputs. The PAMS and BAMS outputs for the 2023 program are available in the [PAMS-BAMS Runs folder](#) in SharePoint. PAMS and BAMS outputs will define recommended treatments, but not necessarily complete project scopes and limits. These outputs will serve as a guide to assist in the prioritization and selection of new projects to be considered for the program.

While the TAMP and PM2 measures currently only focus on the NHS, PennDOT and the MPOs/RPOs must ensure that projects are selected and prioritized for the entire state-owned and locally owned Federal-aid network. In coordination with PennDOT Districts, the MPOs/RPOs should consider and document how the following was utilized as part of their program development process:

- regional highway and bridge system assets
- existing conditions on the NHS
- projected future conditions on the NHS
- development of strategies/priorities to continue to improve the system at the LLCC
- planning and programming of projects as part of fiscal constraint

The TAMP is a living document. It is meant to evolve over time as conditions, funding availability, risks, constraints, and federal laws or requirements change. Future updates of Pennsylvania's TAMP will consider expanding the pavement and bridge inventory to include non-NHS pavements and bridges as well as additional NHS and non-NHS assets, once the data to fully analyze these assets becomes available.

As Pennsylvania transitions to LLCC, projects currently included in the STIP/TIPs, TYP and LRTPs will need to be reviewed, evaluated, and prioritized to reflect current asset condition data and funding levels as well as shifting needs, including unanticipated changes in demand and impacts related to extreme weather events. PennDOT BOMO will work with PennDOT CPDM, PennDOT Districts and the

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MPOs/RPOs to recommend the prioritization of specific bridge projects over specific roadway projects and vice versa to prevent bridge or pavement conditions from falling below FHWA minimum condition thresholds. This prioritization will be undertaken using a combination of advanced asset management tools, professional engineering judgment by Central Office and District personnel, and local MPO/RPO input. Flexible Federal and State funding may need to be utilized to help achieve NHS performance targets, if available. This will be based on coordination between PennDOT BOMO AMD, PennDOT CPDM and the MPOs/RPOs, in consideration of other required performance measures and state initiatives.

As part of the regional TIP development process mentioned above, the MPOs/RPOs and PennDOT Districts must document the differences between the PennDOT asset management system treatment and funding level recommendations and their selected projects as part of their TIP submissions. They must also document the coordination with the PennDOT District(s) and Central Office that occurred as part of this decision-making process. This information will be used by PennDOT BOMO AMD to improve future asset management system recommendations.

System Performance

Pennsylvania's transportation system is critical to the efficient movement of people and goods. State and Federal initiatives are in place to maintain and improve system mobility. Personal and Freight Mobility is another goal area of PA On Track's strategic framework. Improving reliability and traffic flow are also part of FHWA's overall TPM program. [FHWA's System Performance/Freight/CMAQ Final Rule](#) established performance measure requirements for system performance, freight, and congestion, known as the PM3 measures.

The PM3 measures are used by PennDOT and the MPOs/RPOs to evaluate the system reliability of the Interstate and non-Interstate NHS to help carry out the National Highway Performance Program (NHPP), to assess goods movement on the Interstate NHS to help implement the National Highway Freight Program (NHFP), and to measure traffic congestion and on-road mobile source emissions on the NHS to help carry out the Congestion Mitigation and Air Quality (CMAQ) program.

The current PM3 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 CMP, Transportation Systems Management and Operations (TSMO), and CMAQ processes.

Data for the reliability and delay measures are taken from the National Performance Management Research Data Set (NPMRDS). This data set includes average travel times on the National Highway System (NHS) for use in performance measures and management activities. This data set is available to MPOs and PennDOT and more information can be found on the FHWA [Operations Performance Measurement](#) website. The NPMRDS is part of the Regional Integrated Transportation Information System (RITIS) which is the current platform for reporting the PM3 travel time measures. RITIS provides a portfolio of analytical tools and features for summarizing the measures and evaluating trends. The [CENSUS American Community Survey](#) (ACS) and [FHWA CMAQ Public Access System](#) provide the data sources for the Non-Single Occupant Vehicle (SOV) and emission measures, respectively. The VMT are

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derived from the Highway Performance Monitoring System (HPMS). Segment-level metrics for the reliability and delay measures are also submitted by PennDOT to HPMS annually.

PennDOT BOMO will review the State's reliability and delay data and evaluate it for overall trends and provide PennDOT CPDM with statewide data to share with the MPOs/RPOs. PennDOT BOMO and CPDM will work together to develop additional regional performance measure summaries to share with the MPOs/RPOs to aid in regional target assessment and progress. This may consist of tables or online maps of travel congestion and reliability measures.

With support from the MPOs/RPOs, PennDOT CPDM and BOMO will monitor the road network for significant changes in the reliability metrics from year to year. Monitoring the network will help identify such projects as capacity enhancements or traffic signal coordination projects on primary roadways. These project impacts will help assess the benefits of historic funding and the potential benefits of future investments on traffic congestion and reliability. Identifying project impacts will require the evaluation of performance measures before construction, during construction and after project completion.

PennDOT and the MPOs/RPOs should program projects that address congestion and reliability issues identified in the (Regional Operations Plans) ROPs, CMPs, and L RTPs in order to support progress towards achievement of the PM3 targets. Methods for PM3 for integration will remain flexible for each agency.

Transportation Systems Management and Operations

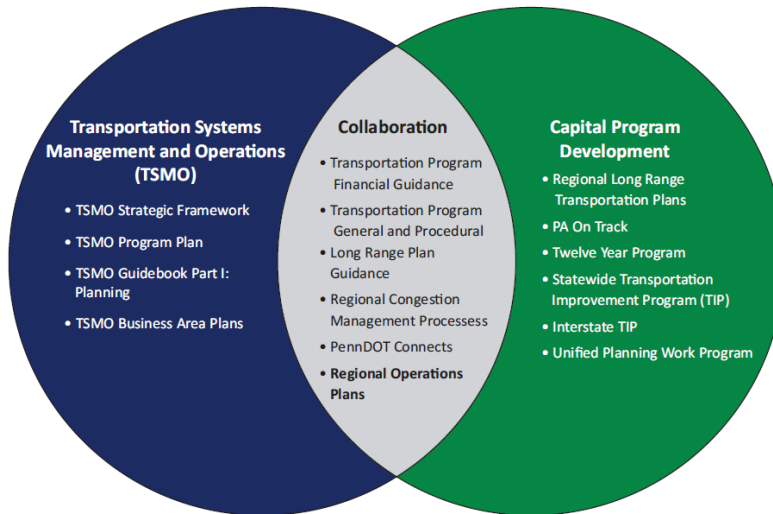
The mission of [PennDOT's TSMO Program](#) is to move people and goods from Point A to Point B, as efficiently, safely, and reliably as possible. TSMO is a way to address the reliability, mobility, and congestion of roadways by using operations-focused strategies instead of building extra capacity. Higher reliability means more consistent travel times on NHS roadways. TSMO strategies must first be considered before the implementation of a capacity-adding project. TSMO strategies may be implemented through independent projects or as part of other projects. All projects must consider impacts to the PM3 performance measures to ensure that the targets are being met.

Significant causes of congestion and unreliable travel are non-recurring events, such as crashes, and transportation network disruptions, such as severe weather and other special events. TSMO enables agencies to target the underlying operational causes of congestion and unreliable travel through innovative solutions that typically cost less and are quicker to implement than adding capacity. TSMO expands the range of mobility choices available to system users, including shared mobility and nonmotorized options. The connection between TSMO and planning is increasingly critical as connected and automated vehicles, advances in intelligent transportation systems (ITS), and other developing technologies impact transportation networks.

PennDOT has developed a [TSMO Guidebook](#) (PUB 851) on how to implement its approach to integrating TSMO into planning and programming and how to connect operations-related planning efforts with other Pennsylvania planning efforts. Stakeholders should consider the applicability of TSMO solutions for every project as part of the design process outlined in PennDOT's DM1 manual.

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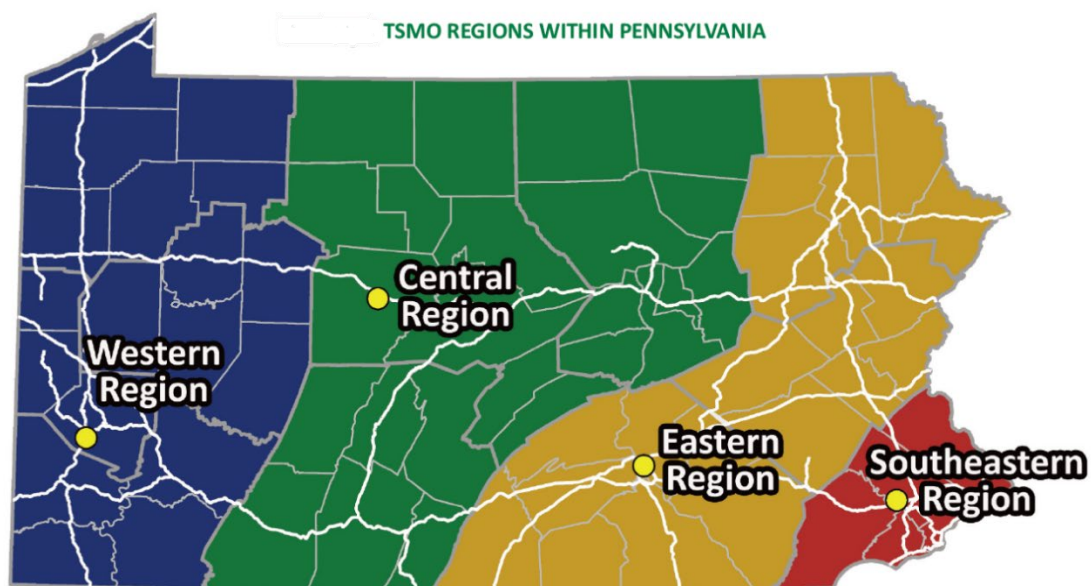
TSMO Relationship with the Planning Process



TSMO projects should be consistent with [FHWA operations guidance](#), as well as Regional Operations Plans (ROPs) and ITS Architectures. ROPs play a significant role in regional LRTP and TIP/TYP processes by helping to prioritize projects that incorporate TSMO solutions. Keeping ROPs up to date is critical to ensure that they maintain the proper role in implementing TSMO-related projects in a systematic manner, rather than through ad-hoc additions to other capital projects.

Through the ROP development and update process, the existing ITS and Operations infrastructure needs, visions and goals are identified to prioritize future operations-focused projects and performance measures that are in harmony with regional, state and federal policies.

ROPs have been developed for each of Pennsylvania's four TSMO regions to better align the planning of operations with PennDOT's four Regional Traffic Management Centers (RTMC).



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The RTMC manages the ROPs with support from the various MPOs/RPOs in the region. Each ROP identifies the regional approach to traffic operations and sets the stage for regional implementation of TSMO strategies. ROPs will be updated to align with the TIP 4-year cycle. The ROPs will, at a minimum, identify which projects could be undertaken within the next four years, aligning these projects for potential inclusion on the TIP/TYP/LRTP.

The National Highway Freight Program

The National Highway Freight Program (NFP) was authorized under the FAST Act to improve the efficient movement of freight on the National Highway Freight Network (NHFN) and support several important goals, as specified by [23 USC 167](#):

- Investing in infrastructure and operational improvements that strengthen economic competitiveness, reduce congestion, reduce the cost of freight transportation, improve reliability, and increase productivity.
- Improving the safety, security, efficiency, and resiliency of freight transportation in rural and urban areas.
- Improving the state of good repair of the NHFN.
- Using innovation and advanced technology to improve NHFN safety, efficiency, and reliability.
- Improving the efficiency and productivity of the NHFN.
- Improving State flexibility to support multi-State corridor planning and address highway freight connectivity.
- Reducing the environmental impacts of freight movement on the NHFN.

NFP funds are financially constrained to an annual funding level provided as part of Financial Guidance and have strategically been allocated to the IM Program. Pennsylvania's [CFMP](#) must include a list of fiscally constrained NFP funded projects. PennDOT CPDM will prioritize and select projects to utilize NFP funding that are consistent with the CFMP. All projects should consider impacts to truck reliability to support progress towards achieving the performance measures. Factors from the CFMP such as freight bottlenecks and freight efficiency projects, projects identified by MPOs/RPOs, and project schedules and costs will be used in conjunction with asset management principles to prioritize project selection. Initial programming consideration will be given to currently programmed projects without regular obligation. If any changes to the projects and/or NFP funding within the projects are necessary based on the Program update, the CFMP will be updated concurrently.

Congestion Mitigation and Air Quality Program

The purpose of the CMAQ program is to give priority to cost-effective transportation projects or programs that will contribute to attainment or maintenance of the National Ambient Air Quality Standards (NAAQS) for the ozone, carbon monoxide (CO), and particulate matter (PM_{2.5/10}) criteria pollutants. Financial Guidance directs CMAQ funding only to those areas designated as in maintenance or nonattainment of the current NAAQS. Previous "insufficient data" and "orphan maintenance" (as currently defined for the 1997 ozone NAAQS maintenance areas) counties no longer receive CMAQ funding. A map of the transportation conformity areas in Pennsylvania can be found in the [Transportation Conformity folder](#) in SharePoint.

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FHWA and FTA cooperatively developed the CMAQ Interim Program Guidance in November 2013 to assist States and MPOs with administering the CMAQ program. It outlines several key criteria for CMAQ eligibility. Each CMAQ project must meet three basic criteria:

1. it must be a transportation project,
2. it must generate an emissions reduction, and
3. it must be located in or benefit a nonattainment or maintenance area.

In addition, there are types of projects that are ineligible for CMAQ funds even if they include potentially eligible components. These include:

- Projects that add new capacity for SOVs are ineligible for CMAQ funding unless construction is limited to high-occupancy vehicle (HOV) lanes.
- Routine maintenance and rehabilitation projects (e.g., replacement-in-kind of track or other equipment, reconstruction of bridges, stations, and other facilities, and repaving or repairing roads) are ineligible for CMAQ funding as they only maintain existing levels of highway and transit service, and therefore do not reduce emissions.
- Models and Monitors—Acquisition, operation, or development of models or monitoring networks are not eligible for CMAQ funds. As modeling or monitoring emissions, traffic operations, travel demand or other related variables do not directly lead to an emissions reduction, these activities or acquisitions are not eligible.
- General studies that fall outside specific project development do not qualify for CMAQ funding.
- Please review the [Interim Program Guidance](#) for more details on eligibility.

PennDOT CPDM works with the MPOs/RPOs and District Offices to identify projects that may be funded through the CMAQ program, based on CMAQ eligibility requirements and project cost effectiveness. PennDOT CPDM coordinates with FHWA on providing resources and training opportunities to further clarify the eligibility requirements and enhance the CMAQ project selection process.

The CMAQ Interim Program Guidance provides direction on how to develop a CMAQ project selection process to ensure that projects deemed most effective in reducing emissions and congestion are programmed in the TIP. Per the Guidance, “the CMAQ project selection process should be transparent, in writing, and publicly available. The process should identify the agencies involved in rating proposed projects, clarify how projects are rated, and name the committee or group responsible for making the final recommendation to the MPO board or other approving body. The selection process should also clearly identify the basis for rating projects, including emissions benefits, cost-effectiveness, and any other ancillary selection factors such as congestion relief, greenhouse gas reductions, safety, system preservation, access to opportunity, sustainable development and freight, reduced SOV reliance, multimodal benefits, and others.”

The Delaware Valley Regional Planning Commission (DVRPC) and the Southwestern Pennsylvania Commission (SPC) have formal processes to solicit and administer their CMAQ programs that include project identification, screening and selection procedures (including adherence to federal requirements regarding emissions impact quantification, consideration of cost effectiveness measures, and prioritization of projects).

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For CMAQ-eligible areas covered by MPOs that do not have a formal process, namely all areas except DVRPC and SPC, a simplified evaluation, selection, and eligibility determination process such as the one outlined below is recommended to meet this requirement:

- MPO and PennDOT District staff will conduct coordination meetings or conference calls to identify candidate projects for potential CMAQ funding consideration.
- PennDOT CPDM, in coordination with FHWA, has developed an Excel template for MPOs to evaluate candidate CMAQ projects. The template is available in the [CMAQ Project Selection Process folder](#) in SharePoint.
- MPO and PennDOT District staff will select CMAQ projects using the criteria provided in the template. These criteria will include eligibility classification, qualitative assessments of emission benefits (using FHWA's [Cost-Effectiveness Tables](#)), project cost, deliverability/project readiness, and other factors. MPO and PennDOT District staff should use the template to assist in the documentation of their project selection process.
- PennDOT CPDM will review the selected projects to verify their CMAQ eligibility. If requested by PennDOT, FHWA will assist PennDOT in determining CMAQ eligibility or identifying any ineligibility issues or concerns.

Although the eligibility determination process outlined above gives priority to cost-effective projects, all projects ultimately selected for CMAQ funding require a quantitative emission analysis. These emission analyses are used to support project eligibility and provide key inputs to the CMAQ annual report submission to FHWA. PennDOT CPDM will assist PennDOT District and MPO staff in completing the analyses. Available tools for emission analyses include the Pennsylvania Air Quality Off-Network Estimator (PAQONE) tool and the [FHWA CMAQ Emissions Calculator Toolkit](#).

Projects with proposed CMAQ funding are coded as such in MPMS and identified accordingly throughout the project evaluation, selection and program development processes. PennDOT District staff with support from CPDM will enter the CMAQ MPMS fields for emission benefits, analysis date, and project category. As part of the draft TIP review, PennDOT and FHWA/FTA review project eligibility. Once FHWA and FTA approve the STIP, PennDOT CPDM can move forward with obligating projects funded with CMAQ.

PennDOT CPDM prepares an annual report to FHWA using project information from the MPMS system. This information is compiled annually on a nationwide level and is submitted by FHWA to Congress. It provides a list of obligated projects and emissions analyses for those projects, which ensures that only CMAQ-eligible projects are being funded.

The emission analysis results within the annual report are also used for the CMAQ national emission performance measures. As such, all agencies should understand the importance of accurately reflecting CMAQ-funded projects in MPMS and estimating project emission impacts based on the best available tools. PennDOT CPDM will perform quality control checks on the reported CMAQ-funded projects and supporting emission estimates. These activities may include additional coordination with FHWA, PennDOT Districts, and MPOs.

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MAP-21 and the FAST Act require performance measures for State DOTs and MPOs to assess traffic congestion and on-road mobile source emissions for the purpose of carrying out the CMAQ program. There are three performance measures under the CMAQ program:

- Annual Hours of Peak Hour Excessive Delay (PHED) Per Capita;
- Percent of Non-Single Occupancy Vehicle travel, also known as Non-SOV Travel; and
- Total Emissions Reduction

MPOs currently serving an urbanized area population over 1,000,000 that includes an air quality nonattainment or maintenance area must develop a CMAQ Performance Plan. In the CMAQ Performance Plan and its biennial updates, MPOs must report 2 and 4 year targets for the CMAQ measures, describe how they plan to meet their targets, and detail their progress toward achieving the targets over the course of the performance period. The Performance Plan is submitted to PennDOT for inclusion in PennDOT's biennial reports to FHWA. Currently, only the Pittsburgh, Philadelphia and Lancaster MPOs are required to submit CMAQ Performance Plans. For the next performance period covering 2022-2025, all MPOs serving an urbanized population more than 200,000 that include an air quality nonattainment or maintenance area will be required to develop a plan.

Additional FHWA CMAQ resources:

- [Interim Program Guidance Under MAP-21](#)
- [Fast Act – CMAQ Factsheet](#)
- [Project Eligibility](#)
- [CMAQ Performance Measures](#)

Congestion Management Process

Projects that help to reduce congestion will also help to improve air quality. This approach is coordinated with a region's CMP, which helps to identify corridor-based strategies to mitigate traffic congestion reflected in the PHED and percentage of non-single occupant vehicle (SOV) performance measures.

The CMP is a regional planning tool designed to provide a systematic way for helping manage congestion and provide information on transportation system performance. It identifies congested corridors and recommends strategies for congestion mitigation. The CMP includes methods to monitor and evaluate the performance of the multimodal transportation system along with a process for periodic assessment of the effectiveness of implemented strategies.

A CMP is required for the TMAs. It is prepared by the MPO for that area and is a systematic process for managing congestion that brings congestion management strategies to the funding and implementation stages of the project delivery process. The goal of the CMP is to improve the performance and reliability of the multimodal transportation system in the MPO's region.

In TMAs designated as ozone or carbon monoxide non-attainment areas, the CMP becomes even more important. The limited number of capacity-adding projects to be considered for advancement in non-attainment TMAs must be consistent with the region's CMP. Federal law prohibits projects that result in a significant increase in carrying capacity for SOVs from being programmed in such areas unless these projects are addressed in the regional CMP.

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Environmental Justice

Another key consideration in the project selection and prioritization process is Environmental Justice (EJ). [Executive Order 12898](#) requires Federal agencies and Federal aid recipients to adhere to the following core principles:

- To avoid, minimize, or mitigate disproportionately high and adverse human health or environmental effects, including social and economic effects, on minority and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

To develop a single consistent EJ analysis that can be applied statewide, the South Central MPOs in PennDOT District 8 generated a proposed methodology to evaluate the potential impacts of transportation plans and programs on EJ populations. The South Central PA MPO EJ Study, referred to as the [Unified EJ Guide](#), includes several noteworthy practices adopted from MPOs around the country. As part of the 2021 TIP Environmental Justice Committee After Action Review (AAR), some aspects of the Unified EJ Guide will be modified and will be updated by November 2021.

FHWA PA Division and FTA Region III reviewed the MPO Unified Guide, and identified [Core Elements](#) of an effective approach to meet the intent of [Executive Order 12898](#), [Environmental Order 5610.2\(a\)](#), [FHWA Order 6640.23A](#), and FTA's [Environmental Justice Circular 4703.1](#). As part of the 2021 STIP/TIP update, PennDOT and many MPOs/RPOs incorporated this approach into their EJ analysis. For the TIP EJ Analysis, MPOs/RPOs should conduct the following steps:

- Identify low-income and minority populations
- Assess conditions and identify needs
- Develop the draft Program
- Evaluate benefits and burdens of the Program
- Identify and avoid, minimize, or mitigate any disproportionate and adverse impacts

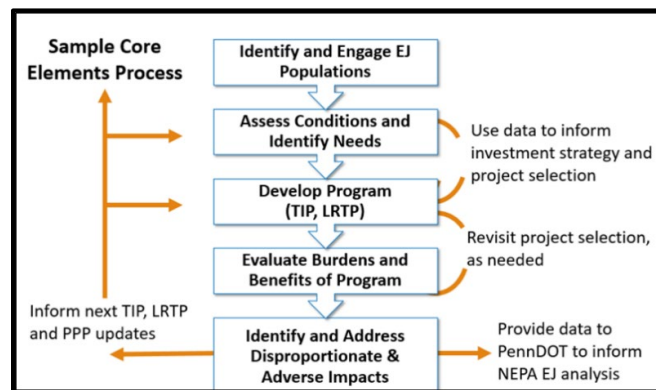
As a continuation of the statewide analysis approach started with the 2021 TIP, Lycoming County Planning Commission will be completing the first two steps (Identification of Low-Income and Minority Populations and assessment of conditions and identification of needs for bridges, pavements and crashes) for all areas of the State for the 2023 TIP update. The results will be made available to each MPO/RPO in the [Environmental Justice folder](#) in SharePoint. MPOs/RPOs should work with the PennDOT Districts and CPDM to review, discuss and interpret the data and document the benefits and burdens analysis. The burdens and benefits analysis and the identification and addressing of disproportionate and adverse impacts will be unique to each area and examples may be found in the Unified EJ Guide.

The EJ analysis should be completed during program development and shared as part of the public comment period documentation. If disproportionately high and adverse impacts are identified, the MPO/RPO should work with PennDOT, FHWA and FTA to develop and document strategies to avoid, minimize or mitigate these impacts. It is important to note that determinations of disproportionately

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high and adverse effects take into consideration the mitigation and enhancement measures that are planned for the proposed action.

The EJ analysis process should be comprehensive and continuous, with each task informing and cycling back to influence the next stage. The outcomes of the analysis and feedback received in each outreach cycle should be considered by the MPOs/RPOs and PennDOT in future project selection processes and provided to PennDOT District staff to inform the project-level EJ analysis:



Transit

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

A **list** of Pennsylvania's Tier I and II transit agencies is found in the [2023 General and Procedural Guidance Support Documents](#) folder in SharePoint.

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. All required agencies (Section 5311 and 5310) and remaining Tier II systems in Pennsylvania, except for the Centre Area Transportation Authority (CATA), elected to participate in the PennDOT Group Plan.

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

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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 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, transit agencies will be responsible for submitting projects consistent with the CPT for the development of the transit portion of the Program. PennDOT CPDM will update this project information in MPMS and share it with the MPOs/RPOs, PennDOT BPT, and the transit agencies.

FISCAL CONSTRAINT

An early part of the program development process is for PennDOT, FHWA/FTA and the MPOs/RPOs to jointly develop the [2023 Program Financial Guidance](#) document, first through a Work Group, and later through agreement by all parties. This Guidance provides sufficient information to begin identifying projects, performing project technical evaluations, and negotiating and reaching consensus on the fiscally constrained regional programs.

Financial Guidance provides funding levels available for the development of the STIP/TYP for all anticipated federal and state funding sources. Due to the expiration of the FAST Act and uncertainty with the viability of the Highway Trust Fund, anticipated available federal highway, bridge and transit funds reflect zero percent revenue growth from the FAST Act authorized 2020 apportionment levels for the entire twelve years of the Program. State revenues are based on the latest budget estimates for highway and bridge capital appropriations. Allocations are provided to each MPO/RPO for highway and bridge funds based on jointly developed formulas. Allocations are also provided for the IMP, NFP, and Railway-Highway Crossings Program (Section 130/RRX). These continue to be centrally managed statewide programs. In addition, a portion of highway funding is reserved for distribution at the Secretary of Transportation's discretion.

Transit Financial Guidance includes both federal and state resources. Federal funding is based on FAST Act levels. State funding is based on projected funding source revenues and applied by formulas established in [Act 44 of 2007](#), as amended by [Act 89 of 2013](#). In addition, as part of an agreement between the Commonwealth and the transit agencies, a total of \$25 million per year in federal highway funding is reserved to be flexed to the transit agencies.

To program these funds, each transit agency works closely with PennDOT BPT to develop annual consolidated capital applications (CCA) and annual consolidated operating applications (COA). The CCA process includes federal, state, and local funds and prioritizes investments based on asset condition and replacement cycles in the CPT. This process promotes a true asset management approach where the

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assets in most need of replacement and/or rehabilitation are prioritized to receive funding, which allows transit agencies to move these assets toward a state-of-good-repair.

Operating allocations are formula-based, as discussed above, and PennDOT BPT works with agencies annually through the COA process to identify anticipated expenses and revenues and program federal, state, and local funds to meet anticipated operating deficits.

An important part of the project prioritization and selection process is to ensure that the Program of projects meets fiscal constraint, which means that the included projects can reasonably be expected to receive funding within the time allotted for Program implementation. The identified revenues are those that are reasonably anticipated to be available to operate and maintain Federal-aid highways and public transportation in accordance with [23 CFR 450.218\(l\)](#) and [23 CFR 450.326\(j\)](#).

The regional TIP narratives should include reference to the Financial Guidance process and the distribution of funds along with a form of visual documentation to demonstrate regional fiscal constraint. An example of such a visual aid is the fiscal constraint tab from the TIP Checklist.

The regional TIPs shall contain system-level estimates of state and local revenue sources beyond Financial Guidance that are reasonably expected to be available (but typically not programmed) to operate and maintain the Federal-aid highways (as defined by [23 USC 101\(a\)\(6\)](#)) and public transportation (as defined by title [49 USC Chapter 53](#)). PennDOT CPDM will provide **regional estimated totals** for state programs not included in Financial Guidance. When available, they will be placed in the [2023 General and Procedural Guidance Support Documents](#) folder in SharePoint. MPOs/RPOs can work with local stakeholders to identify supplemental information that is readily available. Transit providers will supply estimates of county/city/local revenue sources/contributions. This information should be integrated into the regional TIPs. Statewide information will be included with the STIP.

Line Items

As part of the program development process, PennDOT CPDM, PennDOT Districts and the MPOs/RPOs should consider the inclusion of reserve line items. Every effort should be made as part of the program development process to identify projects for all available funding in the first 2 years of the TIP, to ensure project delivery and maximum utilization of funding. Line items should be used primarily for contingency purposes such as unforeseen project costs, including Accrued Unbilled Costs (AUC), unforeseen AC obligations, and other actions which might occur between program drafting and project initiation. Dedicated line items for specific regional issues such as slides, and sinkholes should be included based on historical needs. Selected project categories that are air quality exempt (e.g. betterment and Section 5310) may also be grouped into regional line items for inclusion in the Program, with project specific listings to be developed later by project sponsors. The excessive use of line items for other purposes is strongly discouraged by PennDOT CPDM and FHWA.

Programming

Projects and phases of projects in the Program must be financially constrained by FFY (October 1 – September 30), with respect to the anticipated available funding and within the bounds of Financial Guidance.

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The STIP/TIPs shall include a project, or a phase of a project, only if full funding can reasonably be anticipated to be available within the time period contemplated for completion of the project, based on the project phase start and end dates. This shall also include the estimated total cost of project construction, which may extend beyond the TIP and into the TYP and LRTP, in accordance with [23 CFR 450.326 \(g\) \(2\), \(i\) and \(j\)](#). Cost estimates prepared during programming are critical in terms of setting funding, schedule, and scope for managing project development. Project cost estimates shall follow guidance provided in PennDOT Estimating Manual [PUB 352](#). All phases of projects that are not fully funded on the TIP will be carried over and shown in the last eight years of the fiscally constrained TYP. For projects to advance beyond the PE phase, the project must be fully funded within the TIP/TYP/LRTP.

Projects/phases of projects should be programmed in the FFY in which the project is anticipated to be obligated/encumbered. Programmed funding should be spread out (cash-flowed) over several fiscal years where applicable, based on the anticipated project schedule and timing of expenditures to maximize available resources.

PennDOT Districts, MPOs/RPOs and transit agencies will work to ensure that all cash flow procedures such as highway AC obligation, public transportation letters of no prejudice, and full funding grant approvals are accounted for in the program development process. AC projects must appear on a TIP in order to be converted into a regular obligation. These AC costs need to be accounted for as part of the program development and management process. PennDOT CPDM, PennDOT Districts and the MPOs/RPOs should plan to carry sufficient federal funding for eligible projects/phases beyond the first two FFYs of the current Program, anticipating that AC conversion will be necessary.

The flexing of federal funds between highway and public transportation projects will be a collaborative decision involving local officials, the MPOs/RPOs, the public transportation agency or agencies, PennDOT, and FHWA/FTA.

The Program must account for inflation using the Year of Expenditure (YOE). The YOE factor should be 3% annually. PennDOT Districts will enter cost estimates in MPMS based on present day costs. MPMS provides calculations to apply the 3% annual YOE factor to this base cost for each year of the program. The amount programmed will be based on the year where funds will be programmed for initial expenditure. The YOE tool can be found under the HWY & BR tab in MPMS.

AIR QUALITY CONFORMITY

Transportation conformity is a process required by [CAA Section 176\(c\)](#), which establishes the framework for improving air quality to protect public health and the environment. The transportation conformity rule ([40 CFR Part 93](#)) provides the policy, criteria, and procedures for demonstrating conformity. The goal of transportation conformity is to ensure that FHWA/FTA funding and approvals are given to highway and transit activities that are consistent with air quality goals.

The Clean Air Act (CAA) requires that regional LRTPs, TIPs and Federal projects conform to the purpose of the State Implementation Plan (SIP). Pennsylvania's SIP is a collection of regulations and documents used to reduce air pollution in areas that do not meet the National Ambient Air Quality Standards (NAAQS). Conformity to a SIP means that such activities will not cause or contribute to any new

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violations of the NAAQS, increase the frequency or severity of NAAQS violations, or delay timely attainment of the NAAQS or any required interim milestone.

Changes to the TIP or LRTP that involve non-exempt and regionally significant projects may or may not require the need for a conformity determination. As such, the interagency consultation process should be used to evaluate events that may trigger a new determination. Other administrative modifications affecting exempt projects, as defined in [23 CFR 450.104](#), do not require public review and comment, a demonstration of fiscal constraint, or a conformity determination.

Areas in maintenance or nonattainment of the current NAAQS for the criteria pollutants are required to demonstrate regional transportation air quality conformity. Per the February 16, 2018 D.C. Circuit decision in *South Coast Air Quality Management District v. EPA (Case No. 15-1115)*, areas that were in maintenance for the revoked 1997 8-hour ozone but were designated in attainment for the 2008 ozone NAAQS must demonstrate transportation conformity without a regional emissions analysis, per [40 CFR 93.109\(c\)](#). A **status table** of the Pennsylvania areas requiring transportation conformity can be found in the [Transportation Conformity folder](#) in SharePoint.

Note, the conformity analyses in the 1997 orphaned ozone areas must be updated every 4 years even though the LRTP is only required to be updated every 5 years. To address this and other timing issues, transportation conformity analyses should typically address both the TIP and LRTP, even if only one program is being updated.

Conformity analyses include all regionally significant transportation projects being advanced, whether the projects are to be funded under [23 USC Chapter 1](#), [23 USC Chapter 2](#), or [49 USC Chapter 53](#), as required in [23 CFR 450.326 \(f\)](#). In addition, conformity analyses should also include regionally significant projects that do not use any federal funding. Regionally significant projects (as defined in [23 CFR 450.104](#)) are transportation projects on a facility which serves regional transportation needs that result in an expansion of roadway capacity or a major increase in public transit service.

Exempt projects, as defined by the federal conformity regulations ([40 CFR 93.126](#) and [40 CFR 93.127](#)), are project types that typically do not have a significant impact on air quality and are exempt from the requirement to determine conformity. The decision on project exemption and/or regional significance status must include an interagency consultation process with federal, state, and local transportation and air quality partners. The consultation process is outlined in each region's Conformity SIP. In specific, consultation should include PennDOT CPDM, FHWA PA Division, EPA Region III, DEP, local air agencies (if applicable) and the regional MPO/RPO.

A transportation conformity determination shows the total emissions projected for the nonattainment or maintenance area, including all regionally significant TIP/LRTP projects. The total emissions must be less than the on-road mobile source emissions limits ("MVEB-Mobile Source Emission Budgets", or "budgets") established by the SIP to protect public health for the NAAQS.

The regional conformity requirement is separate and apart from any conformity requirements that apply to specific projects, typically as part of the [National Environmental Policy Act \(NEPA\) process](#). PennDOT CPDM is responsible for partnering in this process by ensuring that the TIPs (and by extension the STIP) are in conformance. Project-level conformity analyses and screening will be conducted by PennDOT using [PennDOT's Project-Level Air Quality Handbook](#) (PUB 321).

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The completion of a regional TIP or LRTP conformity analysis includes the following key steps:

1. PennDOT CPDM will provide an air quality kick-off meeting / training session before each biennial TIP program cycle. The meeting will provide an overview of the conformity process and identify roles and responsibilities for each agency. Required meeting attendees include PennDOT CPDM, District, and MPO/RPO staff that cover regions in nonattainment or maintenance for the NAAQS. This includes areas that must address the 1997 ozone NAAQS.
2. PennDOT CPDM, PennDOT Districts, the Pennsylvania Turnpike Commission (PTC), and the MPO/RPOs will coordinate on the identification of air quality significant projects to be included in the regional transportation conformity analyses using the PennDOT Project Review and Classification Guidelines for Regional Air Quality Conformity document as found in the [Transportation Conformity folder](#) in SharePoint. PennDOT CPDM and the PennDOT Districts will be responsible for reviewing or developing clear project descriptions and providing regional significance and exempt project coding within PennDOT's Multimodal Project Management System (MPMS). This should be a joint, coordinated effort with the regional MPO and/or RPO. PennDOT CPDM, PennDOT Districts, or MPO/RPO staff will coordinate with PTC to obtain a list of Turnpike projects that may require analysis. The PTC and Interstate (IM) projects should be distributed to the applicable MPOs/RPOs for inclusion in their regional programs.
3. Decisions on project-level air quality significance must also include an interagency consultation process with federal, state, and local transportation and air quality partners. PennDOT's Interagency Consultation Group (ICG) reviews the proposed highway and transit project lists from each MPO/RPO before air quality conformity determination work begins by the MPOs/RPOs and/or PennDOT. The consultation process relies on the project descriptions provided in MPMS. The project descriptions must accurately and completely reflect the project scope and schedule, so that a determination can be made whether the project is regionally significant. This includes facility names, project limits, location, if and how capacity (highway and transit) will be expanded as part of the funded improvements. The consultation process is conducted using PennDOT's [Air Quality](#) SharePoint site, which is maintained by PennDOT CPDM. Typically, a 2-week timeframe should be provided to the ICG for the review of air quality significant projects.
4. PennDOT and the MPOs/RPOs conduct the conformity emission analyses using EPA's approved emission model and available transportation data. If one is available, the MPO/RPO's travel demand model is often the most effective tool to complete the conformity analysis. PennDOT CPDM provides support to the MPOs/RPOs in preparing the latest planning assumptions and completing the conformity analyses.
5. PennDOT and the MPOs/RPOs complete a transportation conformity report that includes the results of the emissions modeling (if applicable) and a list of air quality significant projects. Note: emission modeling is not required for areas only in maintenance for the 1997 orphaned ozone NAAQS. The transportation conformity report should be uploaded to PennDOT's Air Quality SharePoint website and shared with the ICG for review and comment before the public comment period.

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6. The MPOs/RPOs must provide their regional air quality conformity determination for public review, as specified in their public participation plans and detailed in the Conformity Rule and FHWA's [Conformity Guide](#). MPOs /RPOs that do not perform their own air quality conformity analysis should allow adequate time for completion of air quality conformity analysis by PennDOT's consultants, keeping in mind that the 30-day TIP public comment period, Board approval of the TIP, and final TIP submission to PennDOT CPDM needs to occur in accordance with the 2023 Transportation Program development schedule available in Appendix 1. PennDOT CPDM, FHWA, FTA and EPA verify the completion of air quality testing and analysis as part of the STIP/TIP review process.
7. The MPOs/RPOs must complete all steps of the transportation conformity and program approval process. These steps include (in order):
 - a. Review and brief applicable committees on the conformity report
 - b. Review and brief applicable committees on the TIP and/or LRTP
 - c. Review and brief applicable committees and Board on response to public comments
 - d. Board adoption and approval of the air quality conformity report which includes a summary of the public comment period and any responses to public comments, questions, or concerns.
 - e. Board adoption and approval of a formal air quality resolution. If requested, CPDM can provide assistance in reviewing the air quality resolution.
 - f. Board adoption and approval of the TIP and/or LRTP
 - g. Board adoption and approval of the self-certification resolution

STATEWIDE PROGRAMS

Interstate Program

The Interstate Management (IM) Program is a separate program developed and managed based on statewide needs. From a programming standpoint, the IM Program is fiscally constrained to an annual funding level that is provided as part of Financial Guidance. The IM Program planning and programming responsibilities are handled by PennDOT CPDM, in coordination with other PennDOT Central Office Bureaus, the PennDOT Districts and the MPOs/RPOs.

PennDOT formed an Interstate Steering Committee (ISC) in 2015 to more efficiently manage the significant needs of the statewide Interstate System. The ISC contains representation from PennDOT's CPDM, BOMO, BPD, and Districts and works with FHWA and the MPOs/RPOs on the development and management of the Interstate Program. The ISC assists with project prioritization and re-evaluates projects during Program updates. The ISC meets monthly to assist with the management of the IM Program.

As part of the IM Program update process, the ISC holds District Interstate rides and presentations to get a statewide perspective of the current state of the Interstate System in Pennsylvania. Representatives from the ISC, FHWA, and PennDOT BOMO, CPDM, and Districts ride the entire Interstate System to assess current conditions and review both currently planned and potential projects. PennDOT Districts then provide presentations to the ISC with updates on conditions, challenges, best practices and needs

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in their respective areas. The presentations are provided via web conference so PennDOT Central Office and Districts, the MPOs/RPOs, and FHWA staff can participate.

Initial programming consideration will be given to currently programmed Interstate projects without regular obligation/encumbrance or with AC obligation that need to be carried over from the current Program. Once the financial magnitude of the carry-over projects has been determined, an estimate can be made on the amount of program funds available for new IM projects, with consideration of current project schedules.

The carry-over projects and any new projects will be evaluated based on current field conditions from the Interstate rides and asset management criteria provided by BOMO Asset Management. Project prioritization and selection will be consistent with the Interstate Management Program Guidelines ([Chapter 13 of PUB 242](#)), the TAMP, and system management to the network LLCC. The IM Program project prioritization and selection process will be documented as part of the STIP submission.

Railway-Highway Crossings Program

The Railway-Highway Crossings Program, also referred to as the Section 130 (RRX) Program, is another program developed and managed based on statewide needs. From a programming standpoint, the RRX Program is fiscally constrained to an annual funding level provided by Financial Guidance. The RRX Program planning and programming responsibilities are handled by PennDOT CPDM, based on coordination with PennDOT District and Central Office Grade Crossing Unit engineers, District planning and programming staff, and the MPOs/RPOs.

Initial programming consideration will be given to currently programmed projects without regular obligation/encumbrance or with AC obligation that need to be carried over from the current Program. New projects will be identified by PennDOT Districts in coordination with the MPOs/RPOs. Projects will be prioritized and selected based on locations with the highest hazard rating from the [FRA Web Accident Prediction System](#) and locations with other local or railroad safety concerns, including increased train traffic, near-miss history or antiquated warning devices. Consideration will also be given to the project development process and current project schedules when developing the RRX Program.

Selected projects will be added to regional MPO/RPO programs utilizing a Statewide Line Item from the Program to maintain fiscal constraint. The RRX Program project prioritization and selection process will be documented as part of the STIP submission.

Transportation Alternatives Set-Aside

The Transportation Alternatives Set-Aside of the Surface Transportation Block Grant Program (TA Set-Aside) provides funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, environmental mitigation, trails that serve a transportation purpose, and safe routes to school projects.

The FAST Act further sub-allocates TA Set-Aside funding based upon population. Funds available for any area of the state, urban areas with populations of 5,001 to 200,000 and areas with population of 5,000

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or less are centrally managed by PennDOT. PennDOT Central Office, with coordination and input from PennDOT Districts and the MPOs/RPOs, selects projects through a statewide competitive application process. Projects are evaluated using PennDOT's Core Principles, which are found in [Design Manual 1](#). These Principles encourage transportation investments that are tailored to important local factors, including land use, financial concerns, and overall community context. Project deliverability, safety, and the ability to support EJ principles and enhance local or regional mobility are also considered during project evaluation. The planning and programming responsibilities for these TA Set-Aside funds are handled by PennDOT CPDM, and funding is fiscally constrained to an annual funding level by Financial Guidance.

Selected projects are added to regional MPO/RPO programs utilizing a Statewide Line Item to maintain fiscal constraint. Projects selected under previous application rounds without regular obligation or with AC obligation will be carried over from the current Program. The balance of funds from any carryover projects will remain in a Statewide Line Item on the Statewide Program until there is a new or continuing Federal Authorization that includes updated provisions for the TA Set-Aside program. Additional information about the TA Set-Aside can be found on PennDOT's [TA Set-Aside Funding Site](#).

A separate regional allocation of funding is available for urbanized areas with populations over 200,000. These funds are available for MPOs to administer competitive application rounds to select eligible projects for inclusion on their regional TIPs. Funding is fiscally constrained based on annual funding amounts provided in Financial Guidance. The MPOs/RPOs will coordinate with the PennDOT CPDM TA Set-Aside state coordinator prior to initiating a project selection round.

Spike Funding

Financial Guidance includes a set-aside of several flavors of highway funding reserved for the Secretary of Transportation's discretion. The Secretary's "Spike" funding is fiscally constrained to an annual funding level provided by Financial Guidance. The Spike funding planning and programming responsibilities are handled by PennDOT CPDM, based on direction provided from the Secretary.

Historically, the Secretary of Transportation has selected projects to receive Spike funding in order to offset the impact of high-cost projects, implement special initiatives, or advance statewide priority projects. The Spike funding decisions typically continue previous Spike commitments, with any new project selections aligning with the Department's strategic direction and investment goals. Selected Spike projects are added to the regional MPO/RPO, IMP, or Statewide items TIP, utilizing Statewide Line Items from the Statewide Program to maintain fiscal constraint.

PUBLIC COMMENT

As part of their regional TIP development, the MPOs/RPOs will ensure that their regional highway/bridge and transit TIPs provide the following information:

- Sufficient detailed descriptive material to clarify the design concept and scope as well as the location of the improvement. The MPO/RPO and PennDOT District(s) must collaborate on the information for the public narrative.
- Projects or phases of projects assigned by year (e.g. FFY 2023, 2024, 2025, 2026) should be based upon the latest project schedules and consistent with [23 CFR 450.326\(g\)](#).

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- Detailed project and project phase costs should be delineated between federal, state, and local shares. Each project and its associated phase costs should depict the amount to be obligated/encumbered for each funding category on a per year basis.
- Phase estimates and total costs should reflect YOE in the TIP period, per Financial Guidance.
- The estimated total project cost should be included, which may extend beyond the 4 years of the TIP into the TYP/LRTP.
- There should be identification of the agency or agencies responsible for implementing the project or phase (i.e. the specific Transit agency, PennDOT District(s), MPO/RPO, local government, or private partner). Each MPO/RPO will work with all project administrators to provide any additional information that needs to be included with each project to be listed in their regional Program.

PennDOT CPDM will provide the information above for Statewide-managed programs for the STIP.

The MPO/RPO TIPs, including the MPO/RPO portions of the IM TIP, must be made available for public comment for a minimum of 30 days and in accordance with the procedures outlined in the MPO/RPO PPPs. A formal public comment period for the regional TIPs must be established to gather all comments and concerns on the TIPs and related documents. A separate STIP 15-day public comment period will be established. PennDOT CPDM, PennDOT Districts and the MPOs/RPOs shall make STIP/TIP information (such as technical information and meeting notices) available in electronically accessible formats and means, such as websites and mobile devices.

Joint outreach efforts can result in a more effective program overall and more efficient use of labor across all MPOs/RPOs. Straightforward and comprehensive access to all public documentation (including the draft and final STIP, TIP and TYP project listings) should be made available to all members of the public, including those individuals with LEP. As part of their public outreach, MPOs/RPOs should take advantage of available resources, including translation services, social media tools, other online resources, and local community organizations.

All 2023 Transportation Program guidance documents will available at [Talkpatransportation.com](https://talkpatransportation.com) for program development use by the MPOs/RPOs and other interested parties. PennDOT and MPO/RPO websites shall be used to keep the public well informed, giving them access to the available data used in the Program update, informing them how they can get involved in the TIP update process, giving notice regarding public participation activities, and offering the opportunity for review and comment at key TIP development decision points. To provide a central location for regional public comment opportunities, PennDOT CPDM will post the regional public comment periods and links to the MPO/RPO websites on PennDOT's website. The MPOs/RPOs must post the applicable TIP documents on their regional websites for public review and comment. The table located in the TIP Submission section below outlines the required documents that must be included for public comment.

After the public comment periods have ended, the PennDOT Districts will partner with the MPOs/RPOs to develop responses to the public comments. These responses will be documented as part of the regional TIP submissions that are sent to PennDOT CPDM.

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TIP SUBMISSION

MPOs/RPOs, PennDOT Districts, and CPDM will coordinate in the development of draft lists of projects. PennDOT Districts and CPDM are required to attach draft lists of projects in MPMS as noted on the 2023 Transportation Program development schedule available in Appendix 1. In addition to the project list being attached in MPMS, the MPOs/RPOs should submit a draft version of available TIP development documentation to CPDM which will then share with FHWA, FTA, BPT, and BOMO. This documentation should include the project selection process, a description of the anticipated effect of the TIP toward achieving the performance targets, the individual roles and responsibilities of the MPOs/RPOs, PennDOT Districts and Central Office, and a timeline. This will allow for early coordination with PennDOT Districts, CPDM, FHWA, and FTA for review and feedback prior to the draft TIP public comment period.

Following the draft TIP public comment period and the individual TIPs are approved by the MPOs/RPOs, they must be formally submitted to PennDOT CPDM. The formal submission should include a cover letter and all required documentation, along with the completed TIP Checklist in Appendix 3. The TIP Checklist will be verified by PennDOT CPDM, FHWA and FTA upon review of the TIP Submission package. The MPO/RPO TIP Submission requirements are summarized below:

TIP Submissions Must Include the Following:		Include for Public Review and Comment
1	Cover Letter	
2	TIP Development/Project Selection Process Documentation	✓
3	TIP Development Timeline	✓
4	TPM (PM1, PM2, and PM3) Narrative Documentation	✓
5	Transit Performance Measures Narrative Documentation	✓
6	Highway and Bridge TIP Listing with public narrative	✓
7	Public Transportation TIP Listing with public narrative	✓
8	Interstate TIP Listing with public narrative (regional portion)	✓
9	TIP Financial Constraint Chart	✓
10	Public Transportation Financial Capacity Analysis (MPO Only)	
11	EJ Analysis and Documentation	✓
12	Air Quality Conformity Determination Report (if applicable)	✓
13	Air Quality Resolution (if applicable)	
14	Public Comment Period Advertisement	✓
15	Documented Public Comments received (if applicable)	
16	Title VI Policy Statement	✓
17	TIP Revision Procedures	✓
18	Self-Certification Resolution	
19	List of major projects from the previous TIP that were implemented	
20	List of major regional projects from the previous TIP that were delayed	
21	TIP Checklist	

An electronic version of the regional TIP Submission must be provided to PennDOT CPDM, according to the 2023 Transportation Program development schedule in Appendix 1. The electronic version of the TIP Submission, including the TIP Checklist, should be submitted through [SharePoint](#). PennDOT CPDM

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will verify that the items on the TIP Checklist have been completed and that all required documents have been included along with each TIP submission.

PennDOT CPDM will combine the individual TIPs to create the STIP. The STIP, which is included as the first four years of the TYP, will be submitted by PennDOT CPDM to the STC for their approval at their August 2022 meeting. After STC approval, PennDOT will submit the STIP on behalf of the Governor to FHWA/FTA for their 45-day review period. FHWA/FTA will issue their approval of the STIP, which is contained in the Planning Finding document, by the end of the 45-day period, which should occur before the start of the new 2023 FFY on October 1.

PROGRAM ADMINISTRATION

After adoption, the 2023 Transportation Program must continue to be modifiable based on necessary program changes. Adjustments to the 2023 Program are enacted through procedures for STIP/TIP Modification at both the State and MPO/RPO levels. The Statewide Memorandum of Understanding (MOU), which outlines the procedures for 2023 STIP modifications, is jointly developed by PennDOT, FHWA and FTA. The Statewide MOU sets the overarching principles agreed to between PennDOT and FHWA/FTA. Individual MOUs are then developed and adopted by the MPOs/RPOs, utilizing the Statewide MOU as a reference. The regional MOUs cannot be less restrictive than the Statewide MOU. The new procedures for TIP revision/modification must be part of the public comment period on the draft 2023 Program.

The modification procedures that were approved for the 2021 Program will be used as a starting point for the development of procedures for the 2023 Program. These procedures are required to permit the movement of projects or phases of projects within the STIP/TIP while maintaining year-by-year fiscal constraint. This process helps to ensure that the MPO/RPO TIPs and the STIP are consistent with the TYP and regional LRTPs, and vice versa. PennDOT CPDM will work with FHWA/FTA to develop and implement a streamlined revision process.

Changes to the TIPs and the delivery of completed projects are monitored by PennDOT CPDM, PennDOT Districts and the MPOs/RPOs and are the subject of various program status reports. PennDOT CPDM will track the progress of the highway Program and project implementation and share the findings with the MPOs/RPOs. PennDOT CPDM will send the MPOs/RPOs quarterly progress reports that detail current project obligations that have occurred in the current FFY.

In accordance with [23 CFR 450.334](#), all Pennsylvania MPOs/RPOs, transit agencies, and PennDOT will cooperatively develop an Annual Listing of Obligated Projects for which Federal funds have been obligated in the previous FFY. The listing must include all Federally funded projects authorized or revised to increase obligations in the preceding program year and, at a minimum, include the following for each project:

- the amount of funds requested on the TIP
- Federal funding that was obligated during the preceding year
- Federal funding remaining and available for subsequent years
- sufficient description to identify the project or phase
- identification of the agencies responsible for carrying out the project or phase

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PennDOT CPDM will continue to work with the MPOs/RPOs and transit agencies to assist them in developing the regional obligation reports. The listing of projects must be published on respective MPO/RPO websites annually by December 29 (within 90 calendar days of the end of the previous FFY), in accordance with their public participation criteria for the TIP. CPDM Funds Management will provide an annual listing of Highway/Bridge obligations and PennDOT administered executed transit grants. MPOs/RPOs should work with their respective transit agencies to acquire a list of any additional executed grants in which the agencies were the direct recipient of Federal Transit funding. The MPOs/RPOs should share the Annual Listing of Obligated Projects/Executed Grants with their respective Boards/Committees and post the reports on their websites.

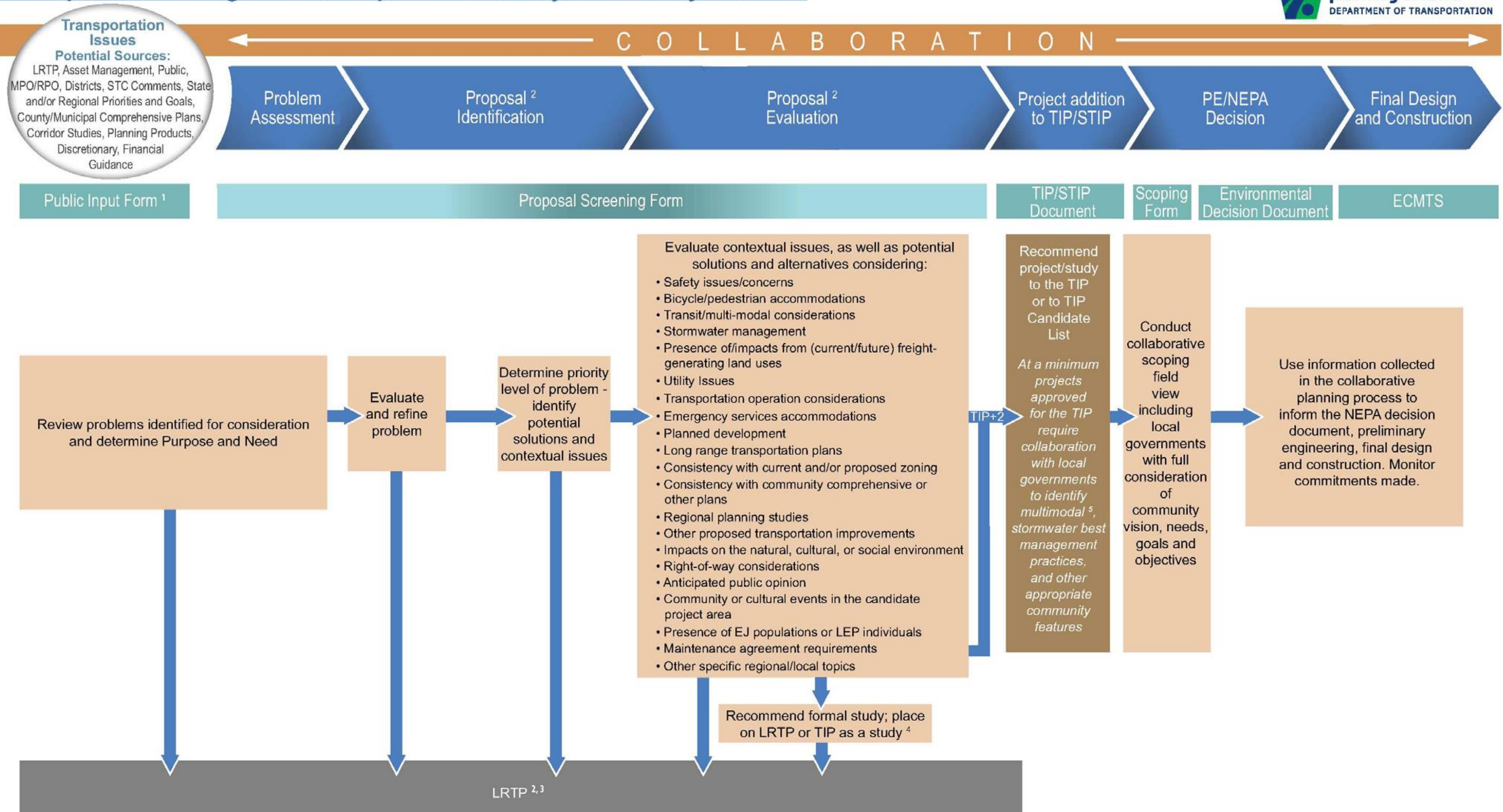
2023 Program Development Schedule

Activity	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
STC releases Transportation Performance Report		2/17																				
STC-TYP public comment period			3/1	4/14																		
STC online public forum			3/23																			
General/Procedural Guidance Work Group Meetings																						
Financial Guidance Work Group Meetings																						
2023 TYP Public Outreach Feedback Provided to STC, MPOs/RPOs and PennDOT to consider for TIP/TYP																						
Spring/Summer Planning Partners Call						6/29																
Draft Interstate carryover projects released																						
BOMO Asset Management provides PAMS/BAMS outputs for the 2023 Program Update																						
Districts, MPOs/RPOs and Central Office hold initial program update coordination meetings																						
Districts, MPOs/RPOs and Central Office meet to coordinate on carryover & candidate projects																						
Project updates are made in MPMS																						
Final Program Update Guidance documents released																						
Interstate Steering Committee Presentations																						
Statewide STIP MOU development/finalization																						
Validation of PennDOT Connects PIF forms conducted for new 2023 TIP projects																						
EJ conditions data (pavement, bridge, safety and transit, if available) made available to MPOs/RPOs																						
Spike decisions released																						
Draft Interstate and Statewide Projects announced																						
Fall Planning Partners Meeting																						
EJ analysis burdens and benefits analysis is conducted by MPOs/RPOs																						
PennDOT completes attaching draft TIP/TYP in MPMS																						
MPO/RPOs submit available Draft TIP documentation to CPDM and FHWA/FTA for review																						

2023 Program Development Schedule

Activity	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22
Final IM and Statewide Program Distributed																						
PennDOT CPDM completes initial review of the preliminary draft TIPs																						
MPOs, RPOs, and PennDOT reach agreement on their respective portions of the program																						
PennDOT CPDM to hold draft program review discussions																						
Interagency air quality consultation																						
Central Office sends Draft TIPs to FHWA for eligibility review																						
MPOs, RPOs and PennDOT conduct air quality conformity analysis																						
STIP Executive Summary Development																						
TIP Public Comment Periods																						
STIP Public Comment Period (15 day)																						
CPDM to review STIP public comments																						
MPOs/RPOs adopt regional TIPs																						
MPOs/RPOs submit regional TIPs to PennDOT CPDM																						
PennDOT CPDM reviews TIP submissions for STIP submittal																						
STC approves TYP																						
PennDOT submits STIP to FHWA/FTA on behalf of Governor																						
FHWA/FTA reviews and approves air quality conformity documents and STIP																						
2023 Program Begins																						

Transportation Program Development and Project Delivery Process



Footnotes:

1. Not required for all proposals.
2. PennDOT and the MPO/RPO may jointly decide to dismiss a proposal at any time if the proposal is determined to be a routine maintenance project or not feasible due to constructability issues.
3. Projects may also be deferred to the LRTP Candidate List or illustrative list.
4. Studies can also be funded through the Unified Planning Work Program (UPWP).
5. Multimodal includes highway, public transit, aviation, rail, freight, and bicycle and pedestrian facilities.

2023-2026 Transportation Program Submission Checklist

Planning Partner: _____

[\[Click Here to View Pop-Up Directions\]](#)

Transportation Management Area: _____

☐ Yes ☐ No

		MPO/RPO to Provide Response Others Check to Indicate Response Verified			
	Information Items <small>Green highlighted items require documentation be submitted.</small>	Response	CPDM	FHWA	FTA
1. Cover Letter:	Cover Letter which documents organization and date of TIP adoption	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Date TIP adopted by Planning Partner:	Meeting Date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. TIP Development:	TIP Development/Project Selection Process Documentation	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	MPO/RPO Specific TIP Development Timeline	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Does the documentation explain the project selection process, roles, responsibilities and/or project evaluation criteria procedures?	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Performance Based Planning and Programming:	PM1 Narrative Documentation (includes established targets and analysis of progress towards targets)	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	PM2 Narrative Documentation (includes established targets and analysis of progress towards targets)	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	PM3 Narrative Documentation (includes established targets and analysis of progress towards targets)	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Transit Performance Measures Documentation	Yes/No/NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	TAMP narrative documentation demonstrates consistency with the TYP/TIP	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Highway-Bridge Program Projects:	Highway and Bridge Listing with public narrative	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Public Transportation Program:	Public Transportation Listing with public narrative	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Interstate & Statewide Program Projects:	Regional Portion of Interstate TIP Listing with public narrative	Yes/No/NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Regional Portion of Statewide TIP Listing (Spike, TAP, RRR, HSIP, other)	Yes/No/NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Financial Constraint:	Complete the tables in the Financial Constraint tab.	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Is the TIP financially constrained, by year and by allocations?	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Were the TIP projects screened against the federal/state funding program eligibility requirements?	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Are estimated total costs to complete projects that extend beyond the TIP years shown in the TYP and LRTP?	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2023-2026 Transportation Program Submission Checklist

Planning Partner: _____

[\[Click Here to View Pop-Up Directions\]](#)

Transportation Management Area: _____

☐ Yes☐ No

		MPO/RPO to Provide Response Others Check to Indicate Response Verified			
	Information Items <small>Green highlighted items require documentation be submitted.</small>	Response	CPDM	FHWA	FTA
8. Public Transportation:	Public Transportation Financial Capacity Analysis (MPO Only)	Yes/No/NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Documentation of Transit Asset Management (TAM) Plan	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Environmental Justice Evaluation of Benefits and Burdens:	EJ Documentation (demographic profile, conditions data, TIP project map, TIP benefits/burdens analysis)	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Was EJ analysis incorporated into your TIP development process?	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Air Quality:	Air Quality Conformity Determination Report	Yes/No/NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Air Quality Resolution	Yes/No/NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Is the area in an AQ non-attainment or maintenance area?	Yes/No/NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Have all projects been screened through an interagency consultation process?	Yes/No/NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Most recent air quality conformity determination date:	Date/NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Do projects contain sufficient detail for air quality analysis?	Yes/No/NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Public Participation Documentation:	Public Comment Period Advertisement	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Public comment period:	Date Range	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Public meeting(s)-Date/Time/Location:	Date/Time/Location	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Public meeting notices contain info about special needs/ADA Compliance?	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	STIP/TIP public involvement outreach activities consistent with Public Participation Plan?	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Were any public comments (written or verbal) received?	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Documentation of Public Comments received	Yes/No/NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Were public comments addressed?	Yes/No/NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Title VI:	Has the MPO included information regarding Title VI and its applicability to the TIP, including the protections against discrimination and the availability of the TIP document in alternative formats upon request?	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. TIP Revision Procedures:	MPO/RPO TIP Modification Procedures (MOU)	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2023-2026 Transportation Program Submission Checklist

Planning Partner: _____

[\[Click Here to View Pop-Up Directions\]](#)

Transportation Management Area: _____

☐ Yes ☐ No

		MPO/RPO to Provide Response Others Check to Indicate Response Verified			
	Information Items <small>Green highlighted items require documentation be submitted.</small>	Response	CPDM	FHWA	FTA
14. MPO/RPO Self-Certification Resolution:	Self-Certification Resolution	Yes/No/NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	For the Non-TMAs, does the self certification contain documentation to indicate compliance?	Yes/No/NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Other Requirements:	List of regionally important projects from the previous TIP that were implemented, and projects impacted by significant delays.	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Does the TIP contain regional system level estimates of state & local revenue sources beyond financial guidance?	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	List of annual obligated projects on website for FFY 2022	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. PennDOT Connects:	Municipal outreach/PIF forms initiated/completed for all TIP projects?	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Long Range Transportation Plan:	Is the TIP consistent with the LRTP?	Yes / No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	LRTP air quality conformity determination date:	Date/NA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	LRTP end year:	Date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Anticipated MPO/RPO LRTP adoption date:	Date	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Completed/Reviewed by:	MPO/RPO:		Date:		
	PennDOT CPDM:		Date:		
	FHWA:		Date:		
	FTA:		Date:		
19. Comments:	<i>Note any noteworthy practices, issues or improvements that should be addressed by the next TIP update, or any other comments/questions here:</i>				

Appendix 3 – TIP Submission Checklist

Financial Constraint Tables

Compare the amount of funds programmed in each year of the TIP against Financial Guidance (FG) allocation, and explain any differences.

[illegible]

Identify the TOTAL amount and TYPES of additional funds programmed above FG allocations (i.e. Spike funds, Earmarks, Local, Other, etc.) by year:

Additional Funding Type	FFY 2023	FFY 2024	FFY 2025	FFY 2026	Comments
Total	\$0	\$0	\$0	\$0	