APPENDIX B

State DOT Financial, and General and Procedural Guidance used in developing the program, and SEPTA's Financial Capacity Analysis and TAM Plan

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PENNSYLVANIA 2023 TRANSPORTATION PROGRAM FINANCIAL GUIDANCE

INTRODUCTION

One of the first crucial steps in the biennial update of Pennsylvania's 12-Year Program (TYP), Statewide Transportation Improvement Program (STIP) and each regional Transportation Improvement Program (TIP) is the development of Financial Guidance. The purpose of this document is to describe the available revenues and funding distribution strategies that form the foundation in developing the next update of these programs, hereafter referred to as the Program.

Financial Guidance is developed by a collaboration of representatives from Metropolitan Planning Organizations (MPOs), Rural Planning Organizations (RPOs), the Federal Highway Administration (FHWA) and PennDOT, collectively known as the Financial Guidance Work Group.

The Financial Guidance Work Group is directed by principles that Financial Guidance must be based on:

- A cooperative effort
- A long-term strategic viewpoint
- A Commonwealth perspective
- Existing and readily available data
- Statewide and regional needs-based decision-making
- Responsiveness to near-term issues and priorities
- Coordination with other agencies and initiatives.

2023 TRANSPORTATION PROGRAM UPDATE

The Financial Guidance Work Group reached general agreement on draft financial guidance components on June 15, 2021 with the following recommendations:

- The National Highway Performance Program (NHPP), Surface Transportation Block Grant Program (STP), Off-System Bridge (BOF) and State Highway and Bridge funds will utilize the new formulas established during the 2021 Program Update for all twelve years of the Program that reflect Transportation Performance Management (TPM) requirements and an asset management philosophy based upon lowest life cycle costs.

- The Highway Safety Improvement Program (HSIP) will utilize a new formula while maintaining existing program set-asides and base funding allocations.

- Remaining funding categories will utilize existing formulas.

- State Highway and Bridge Funds reflect estimated revenues to the Motor License Fund.

- State Transit funding is based on estimated revenues to the Public Transportation Trust Fund.

- The Interstate Management Program will continue to be managed with an enhanced level of funding.

- The Statewide Program will continue to cover 50% of the costs of the Rapid Bridge Replacement (RBR) program with the remaining 50% coming from each region's percent share of RBR associated deck area. The source of the regional share is split evenly between state bridge funding and state highway (capital) funding. These funds are deducted from each region's distribution and are reserved in a separate item for the Statewide Program.

The MPOs, RPOs, FHWA and the Department achieved consensus to move forward with the *Pennsylvania 2023 Transportation Program Financial Guidance* and *Pennsylvania 2023 Transportation Program General and Procedural Guidance* at the Planning Partners Meeting, on June 29, 2021.

Following enactment of the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL) on November 15, 2021, the Financial Guidance Work Group reconvened on November 18, 2021 and December 1, 2021 with additional or updated recommendations:

- Existing formulas and data will continue to be utilized.

- Anticipated available federal highway, bridge and transit funds will reflect IIJA/BIL authorized amounts for the first four years then remain flat for the remaining eight years of the Program.

- The set-aside for the Highway Safety Improvement Program will be increased to $40 million.

- Bridge Formula Investment Program funds will be distributed based upon a formula using STP and NHPP bridge themes and data.

- Due to time constraints with the 2023 Program update and the lack of full year appropriations and guidance for the new Carbon Reduction and PROTECT formula fund programs, all funds will be held in a statewide line item, until further guidance is provided from FHWA. Any necessary updates to the program will take place after adoption in October 2022.

- Due to time constraints with the 2023 Program update and the lack of full year appropriations and information from the Federal Transit Administration (FTA), the transit portion of the financial guidance remains unchanged. When FTA updates full year appropriations, it will be communicated with transit agencies and planning partners. Any necessary updates to the program will take place after adoption in October 2022.

FUNDING

Pennsylvania's 2023 Transportation Program will include all Federal and State capital funding that is expected to be available over the next twelve years. This includes:

- All anticipated federal highway and bridge funding apportionments or allocations to the Commonwealth
- State Appropriation 581 funding for highway capital projects
- State Appropriations 185 (state owned) and 183 (locally owned) funding for bridge capital projects
- Estimated federal and state transit funding

The funding distribution tables that comprise the Appendices establish the annual funding constraint for each MPO and RPO and the Statewide and Interstate Programs in accordance with the requirements for fiscal constraint included in the *General and Procedural Guidance*. Projects and funding will be assigned to the appropriate years based upon project readiness, schedules, estimated funding availability and expected expenditure of funds (cash flow). Certain categories of discretionary, earmarked and maintenance funding are not included in the funding distribution tables and are considered to be additional funds to the program.

Highway and Bridge Funding Distribution

The distribution of federal funds is provided through formulas and policy decisions that were determined during meetings of the Financial Guidance Work Group. This guidance continues to assume the practice of programming to the authorization level rather than a lower obligation level. Program funding levels and implementation funding levels may differ due to the annual federal obligation limitation and the state budget.

- **National Highway Performance Program (NHPP)**:
  - The **Interstate Management Program** will continue to be managed on a statewide basis with the programming of funds occurring centrally by the Department of Transportation in accordance with the Transportation Asset Management Plan (TAMP) and Performance Based Planning and Programming. An amount equal to 26/55^{ths} of available NHPP funds were set-aside for the Interstate Management Program in the first year of the 2021 Program. An additional $50 million is provided for Interstates in each subsequent year until a total of $1 billion is realized by year 2028 of the TYP.
  - Twenty percent of the balance of NHPP funds remaining after these additional funds for the Interstate System are set-aside will be held in a statewide reserve to advance projects on the National Highway System (NHS) in accordance with the TAMP and performance management principles.
  - An average of $7.5 million per year will be reserved for State and Local Bridge Inspection.
  - Remaining funds will be distributed amongst MPOs and RPOs for bridges and highways on the NHS based upon the regional share of these factors:

2023 through 2034	
40% Bridge > 20 feet	3/4 Deck Area All Bridges (30%)
	1/4 Bridge AMF (10%)
60% Highway	1/4 Lane Miles (15%)
	1/4 VMT (15%)
	1/4 Truck VMT (15%)
	1/4 Pavement AMF (15%)

- AMF represents an Asset Management Factor. The factor considers necessary treatment needs to maintain existing pavements and bridges in a state of good repair consistent with Pennsylvania's TAMP. More information on the AMF is included in Appendix 7.

- **Surface Transportation Block Grant Program (STP, STN, STR)**:
  - Twenty percent of STP funding will be held in reserve at the discretion of the Secretary of Transportation. Funding will be utilized to offset the impact of high cost projects or programs ("spikes") which are beyond a region's allocation, or other statewide priorities.
  - An average of $17 million per year will be reserved for State and Local Bridge Inspection, Environmental Resource Agencies, and other related statewide line items.
  - Remaining funds will be distributed to MPOs and RPOs based upon the regional share of these factors:

2023 through 2034	
40% Bridge > 20 feet	Deck Area All Bridges (40%)
60% Highway	1/2 Lane Miles (30%)
	1/4 VMT (15%)
	1/4 Truck VMT (15%)

- **Surface Transportation Block Grant Program-Urban (STU)**:
  - Funding is allocated to each MPO with populations greater than 200,000 based on current federal formula. The federal formula sub-allocates STP funds within each state between urbanized areas with populations greater than 200,000 and the rest of the state in proportion to their relative share of the total state population as well as the total state urbanized area population in proportion to all other states total urbanized area population.
  - The sub-allocation formula is currently based on the 2010 Federal Census.

- **Off System Bridges (BOF):**
  - Funding for minor collector and local functional class bridges will utilize the following formula:

2023 through 2034
Deck Area All Bridges (100%)

  - Bridge data utilized in this formula include state and locally owned bridges over 20 feet in length.
  - Funding for off-system bridges comes from Surface Transportation Block Grant Program and the Bridge Formula Investment Program set-asides.

- **Bridge Formula Investment Program (BRIP):**
  - Funding for the replacement, rehabilitation, preservation, protection or construction of highway bridges over 20 feet in length will be distributed to MPOs, RPOs and the Interstate Program based upon the share of these factors:

2023 through 2034	
40% STP Bridges	Deck Area Non-NHS State and Local Bridges > 20 Feet
60% NHS Bridges	¾ Bridge Deck Area NHS and Interstate Bridges > 20 Feet
	¼ Bridge AMF

- **Highway Safety Improvement Program (HSIP)**:
  - $40 million in funding for this program will be reserved statewide for various safety initiatives.
  - $12 million is divided evenly amongst the urban and rural regions to provide a $500,000 base amount of funding as a means to address systemic safety projects.
  - The remaining funding will be allocated to MPOs and RPOs based on a 39:1 crash severity weighting for all reportable crashes. The ratio is based on the cost of fatal and injury crashes compared to property damage only crashes.

- **Congestion Mitigation and Air Quality (CMAQ):**
  - In accordance with agreements reached in conjunction with Pennsylvania Act 3 of 1997, $25 million is reserved each year in federal funds to flex to transit in accordance with agreements reached in conjunction with the enactment of Pennsylvania Act 3 of 1997. CMAQ funding will comprise more than $23 million of this reservation. Remaining funds will be from the STP category.
  - Remaining funding is distributed to air quality non-attainment and maintenance areas according to factors which consider each county's air quality classification. Previous "insufficient data" and "orphan maintenance" (as currently defined for the 1997 ozone NAAQS maintenance areas) counties no longer receive CMAQ funding.

- **National Highway Freight Program (NFP):**
  - Funding for this program will be allocated to the Interstate Management Program.

- **Surface Transportation Block Grant Program Set-Aside (former Transportation Alternatives Program) (TAP, TAU):**
  - Federal Law requires that 59% of the funds are sub-allocated by population and 41% are available to any area of the state. Part of the 59% sub-allocated by population is assigned, by federal formula, to regions with populations greater than 200,000 (TAU). The remaining funds sub-allocated by population and the 41% available to any area of the state (TAP) are held in statewide reserve as mandated by regulations that prohibit the regional distribution of funds and require a statewide competitive process for selection of projects.

- **Railway-Highway Crossings, Section 130 (RRX)**:
  - Funding for this program will continue to be managed on a statewide basis with the programming of funds occurring centrally by PennDOT.
  - Centralized management of this program allows for a formalized project selection process and promotes the higher utilization of funding and the ability to initiate higher costs projects.

- **Carbon Reduction Program (CRP, CRPU):**
  - Funds will be held in a statewide line item pending further guidance from FHWA.
  - 65% of apportioned funds are sub-allocated by population. Part of the sub-allocation is assigned, by federal formula, to regions with populations greater than 200,000 (CRPU).

- **Promoting Resilient Operations for Transformative, Efficient and Cost-saving Transportation (PROTECT) formula program (PRTCT):**
  - Funds will be held in a statewide line item pending further guidance from FHWA.

- **Highway (Capital) Funding (State)**:
  - Act 89 of 2013 requires 15% of available state highway and bridge funds be held in reserve for use at the discretion of the Secretary of Transportation.
  - $25 million per year in State Highway (Capital) funds for transportation improvements associated with economic development opportunities are reserved for the **Transportation Infrastructure Investment Fund (TIIF)**. Decisions on how to utilize this funding will be at the discretion of the Secretary of the Department of Transportation in consultation with the Department of Community and Economic Development and Governor.
  - An average of $31 million per year will be reserved for State and Local Bridge Inspection, Environmental Resource Agencies, and other related statewide line items.
  - Remaining state highway funds will be distributed based upon the regional share of these factors:

2023 through 2034
1/4 VMT (25%)
1/4 Truck VMT (25%)
1/2 Lane Miles (50%)

- **Bridge Funding (State)**:
    - Bridge funding will be allocated to MPOs and RPOs based upon the regional share of these factors:

2023 through 2034
Deck Area All Bridges (100%)

    - Bridge data utilized in this formula include state-owned bridges over 8 feet in length and local-owned bridges over 20 feet in length.

The following funding categories have limitations on how and where they may be used and will be considered as additional funds to the Transportation Program. The tables that are included in the appendices of this document do not include these funding sources.

- **Special Federal Funding (SXF)**:
    - This funding is earmarked for specific projects that were authorized by federal legislation.

- **Appalachia Development Highway (APD/APL)**:
    - Federal funds from SAFETEA-LU, recent appropriations legislation and the IIJA/BIL may only be used for eligible capital improvements on routes that have been designated as Appalachia highway corridors and which are included in the most recent Appalachia Development Highway System (ADHS) Cost to Complete Estimate. Funding may also be utilized for Local Access Road projects which are identified and approved in coordination with the Department of Community and Economic Development (DCED) and the Appalachian Regional Commission (ARC).

- **National Electric Vehicle Infrastructure Formula Program (EV):**
    - Federal funds for the deployment of electric vehicle charging infrastructure are required to be used along designated Alternative Fuel Corridors in accordance with the State EV Infrastructure Deployment Plan and will be allocated to the Statewide program.

- **All Discretionary Federal Funding**:
    - Funding awards and allocations through the Federal Discretionary Programs that are determined by the United States Department of Transportation. Examples of this type of funding programs could include, but are not limited to:
        - Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
        - Infrastructure for Rebuilding America (INFRA)
        - Advanced Transportation and Congestion Management Technologies deployment (ATCMTD)

- **Discretionary State Funding:**
  - The decision to include funding associated with state discretionary programs including, but not limited to, the Multimodal Transportation Fund (MTF), Green-Light-Go (GLG) and Automated Red Light Enforcement (ARLE) will be a PennDOT decision based on funding availability and project awards.

- **State Maintenance Funding:**
  - State Appropriations 582 (Maintenance) and 409 (Expanded Maintenance Program) funding is used for highway maintenance activities. It is allocated to individual PennDOT County Maintenance Offices under a formula established by the State General Assembly. This funding may serve as matching funds for Federally Funded Highway Restoration and Preservation projects and, in such cases, will represent additional funding for the Transportation Program. The decision to include any state Appropriations 582 and 409 funding in the Program will be a PennDOT decision based on an assessment of project priorities and funding availability within the individual counties.

- **Appropriation 179**:
  - Since 2014, this funding, established by Act 26 of 1991, is provided to Counties directly through liquid fuel payments. A limited amount of funding remains available for previously approved county-owned bridge projects in underprivileged counties.

- **Local and Private Funding:**
  - Local and private funding is not included in the tables and can be considered additional funding above that which is shown, if documentation supports the funds are reasonably expected to be available.

- **Turnpike Funding:**
  - The Pennsylvania Turnpike Commission (PTC) receives funding from a variety of sources, including toll revenues, state funding earmarked in Act 26 of 1991, Act 3 of 1997 and Act 89 of 2013, and special federal funding earmarked by Congress. These funds are not reflected in this financial guidance. The authority for the programming of projects using these funding sources rests with the PTC. The PTC does implement projects that qualify for regular federal funds. If the PTC desires to pursue regular federal funding, projects will be presented for consideration with other state and local projects within the appropriate planning region. However, all regionally significant Turnpike projects, regardless of the funding source, should be included on regional TIPs as required by statewide planning regulations.

Public Transit Funding Distribution

Funding sources for transit improvements in Pennsylvania are federal, state, and local monies. Federal funding assumptions are based on FFY 2021 via the FAST Act.

As part of an agreement between the Commonwealth and the transit community during the enactment of Act 3 of 1997, a total of $25 million per year in federal highway funding is flexed

to transit agencies for their projects. This funding is reserved in the highway financial guidance discussed previously. Federal and state funding, which is available for public transit programming, is included in Appendices 3 through 5. Federal funding is based on most recent FAST Act authorizations only and is held flat through the period. Federal funding includes a mix of urban formula, fixed guideway, seniors and persons with disabilities, rural formula, and bus project funding. Additional federal fund authorizations are not included in the tables.

State funding for transit programs is provided for in Act 44 of 2007 as amended by Act 89 of 2013. Act 44 of 2007 established the Public Transportation Trust Fund (PTTF) to fund public transportation programs and projects. Public transportation funds are derived from the following sources: Turnpike, Sales and Use Tax, Public Transportation Assistance Fund (PTAF), Capital Bond Funds, Lottery, transfers from the Motor License Fund that are not restricted to highway purposes and various fines. These funds are deposited into the PTTF.

Note:

In FY 2022/2023, the Public Transportation law shifts funding sources as follows:

- The PTC contribution is reduced to $50 million and;
- $450 million in motor vehicle sales tax is deposited into the PTTF.

Because this shift would divert funding from the PA General Fund, there remains some uncertainly as to whether this will be the ultimate funding solution.

PUBLIC TRANSPORTATION FUNDING PROGRAMS

Act 44, as amended, authorizes six major public transportation programs:

- **Operating Program (Section 1513)** – Operating funds are allocated among public transportation providers based on:
    1. The operating assistance received in the prior fiscal year plus funding growth.
    2. Funding growth over the prior year is distributed on four operating statistics:
        a. Total passengers
        b. Senior passengers
        c. Revenue vehicle miles
        d. Revenue vehicle hours

  The local match requirement is 15% of state funding or 5% growth in local match, whichever is less. Act 44 also includes performance criteria for the evaluation of public transportation services. This program also provides for free transit for seniors on any fixed route service.

- **Asset Improvement Program for Capital projects (Section 1514) –** The Asset Improvement Program is the program into which funds are deposited for the public transportation capital program. Source funding includes Turnpike funds, other fees, and Capital Bond funds. In accordance with Act 89 provisions, PennDOT receives a discretionary set aside equal to 5% of available funding. The balance is allocated to SEPTA (69.4%), Port Authority (22.6%) and the remainder (8%) to all other transit systems. These funds require a local match equal to 3.33% of the state grant.

- **Capital Improvement Program (Section 1517)** – While still included as a capital program in the public transportation legislation, no new funding was deposited in this program after December 31, 2013. Since the creation of Act 89, capital funding was included as part of Section 1514 – Asset Improvement.

- **Alternative Energy Capital Investment Program (Section 1517.1) –** The Alternative Energy program is used to implement capital improvements conversion to an alternative energy source, in most cases Compressed Natural Gas (CNG). If the Department has projects to fund in the program, funding is transferred from Section 1514 prior to distributing Section 1514 funding as outlined previously.

- **New Initiatives Program (Section 1515)** – This program provides the framework to advance new or expansion of existing fixed guideway systems. Act 44 specifies criteria that must be met to receive funding under this program. The local match is established at 3.33% of the state funding. **NOTE:** No funding has been available for this program since it has not been appropriated by the legislature.

- **Programs of Statewide Significance (Section 1516)** – Programs such as Persons with Disabilities, Welfare to Work, intercity bus and rail service, as well as technical assistance and demonstration projects, are funded using a dedicated portion of PTTF. The match requirement varies by program.

In addition to the programs authorized by Act 44, as amended, the State Lottery Law authorizes the Reduced Fare Shared-Ride Program for Senior Citizens (**Shared-Ride Program)**. Lottery Funds are used to replace 85% of the fare for senior citizens 65 and older on shared ride, advanced reservation, curb to curb transportation services.

The funding in the transit tables is for planning purposes only. The actual Federal and State funding that is ultimately available each year will be determined during the annual appropriations and budgeting processes. For the purposes of this document, we have assumed that funding shifts from the General Fund via the Vehicle Sales Tax will occur in FY 2022/23.

The information in these documents is based on the availability of these funds and is subject to change based on changes in available funding amounts and/or legislative updates.

Appendix 1: Available Funds
2023 Financial Guidance FINAL
Highway and Bridge Funds ($000)

Federal Funds	2023	2024	2025	2026	Total
National Highway Performance Program (NHPP)*	1,172,758	1,196,213	1,220,137	1,244,540	4,833,648
Surface Transportation Block Grant Program (STP)*	570,531	581,941	593,580	605,452	2,351,505
Highway Safety Improvement Program (HSIP)*	125,942	128,604	131,320	134,090	519,956
Congestion Mitigation and Air Quality (CMAQ)*	113,817	116,093	118,415	120,784	469,110
National Highway Freight Program*	56,879	58,016	59,177	60,360	234,432
Railway-Highway Safety Crossings (RRX)	7,184	7,184	7,184	7,184	28,737
Carbon Reduction Program (CRP)	64,634	65,672	66,731	67,811	264,848
PROTECT Formula Program (PRTCT)	73,493	74,674	75,878	77,106	301,151
Bridge Formula Program (BRIP)	327,179	327,179	327,179	327,179	1,308,714
Subtotal -- Federal Funds	**2,374,289**	**2,415,232**	**2,456,993**	**2,499,589**	**9,746,102**

State Funds	2023	2024	2025	2026	Total
State Highway (Capital)	479,000	508,000	516,000	555,000	2,058,000
State Bridge	282,000	277,000	277,000	276,000	1,112,000
Subtotal -- State Funds	**761,000**	**785,000**	**793,000**	**831,000**	**3,170,000**
Grand Total	**3,135,289**	**3,200,232**	**3,249,993**	**3,330,589**	**12,916,102**

*numbers reflect 2% set-aside for Statewide Planning and Research

Federal and State Funds Subject to Distribution via Base Allocation Formulas ($000)

National Highway Performance Program	2023	2024	2025	2026	Total
NHPP Apportionment	1,172,758	1,196,213	1,220,137	1,244,540	4,833,648
Enhanced Interstate Management	**250,947**	**300,947**	**350,947**	**400,947**	**1,303,788**
Remaining	921,811	895,266	869,190	843,593	3,529,860
20% Statewide Reserve	**184,362**	**179,053**	**173,838**	**168,719**	**705,972**
Less Local Bridge Inspection	6,152	7,998	7,998	7,998	30,145
Less Interstate Management Traditional	**317,378**	**317,378**	**317,378**	**317,378**	**1,269,512**
NHPP Funds to Distribute	**413,919**	**390,837**	**369,977**	**349,499**	**1,524,232**

Surface Transportation Block Grant Program	2023	2024	2025	2026	Total
STP Apportionment	570,531	581,941	593,580	605,452	2,351,505
Less Transportation Alternatives (10%)	47,404	48,352	49,319	50,305	195,379
Less STP-Urban Mandatory Distribution	**178,760**	**182,336**	**185,982**	**189,702**	**736,780**
Less Set-Aside for Off-System Bridges	**98,396**	**98,396**	**98,396**	**98,396**	**393,582**
Less Transit Flex	1,745	1,745	1,745	1,745	6,979
Miscellaneous Inspection/Inventory/Training	8,552	10,398	10,398	10,398	39,745
Less Environmental Resource Agencies	3,312	3,415	3,518	3,623	13,868
Less Oversight and Management	2,000	2,000	2,000	2,000	8,000
Remaining STP	*230,362*	*235,301*	*242,224*	*249,284*	*957,171*
Less Spike (20% of Remaining STP)	46,072	47,060	48,445	49,857	191,434
STP Funds to Distribute	**184,290**	**188,241**	**193,779**	**199,427**	**765,737**

Highway Safety Improvement Program	2023	2024	2025	2026	Total
HSIP Apportionment	125,942	128,604	131,320	134,090	519,956
Less Base of $500K to each MPO/RPO	**12,000**	**12,000**	**12,000**	**12,000**	**48,000**
Less Statewide Reserve	**40,000**	**40,000**	**40,000**	**40,000**	**160,000**
HSIP Funds to Distribute	**73,942**	**76,604**	**79,320**	**82,090**	**311,956**

Congestion Mitigation and Air Quality	2023	2024	2025	2026	Total
CMAQ Apportionment	113,817	116,093	118,415	120,784	469,110
Less Transit Flex	23,255	23,255	23,255	23,255	93,021
CMAQ Funds to distribute	**90,562**	**92,838**	**95,160**	**97,528**	**376,089**

National Highway Freight Program	2023	2024	2025	2026	Total
Interstate Program	**56,879**	**58,016**	**59,177**	**60,360**	**234,432**

Transportation Alternatives	2023	2024	2025	2026	Total
Transportation Alternatives Apportionment	47,404	48,352	49,319	50,305	195,379
Less Recreational Trails	1,991	1,991	1,991	1,991	7,965
Mandatory Distribution for Urban Areas	**16,647**	**16,994**	**17,349**	**17,710**	**68,700**
TAP Funds -- Statewide Competitive Program	**28,766**	**29,366**	**29,979**	**30,604**	**118,714**

Railway-Highway Safety Crossings	2023	2024	2025	2026	Total
Statewide Program	**7,184**	**7,184**	**7,184**	**7,184**	**28,737**

Bridge Formula Program	2023	2024	2025	2026	Total
Special Bridge Formula Program Apportionment	327,179	327,179	327,179	327,179	1,308,714
15% Off System Bridge Funds to Distribute	**49,077**	**49,077**	**49,077**	**49,077**	**196,307**
Special Bridge Formula Funds to Distribute	**278,102**	**278,102**	**278,102**	**278,102**	**1,112,407**

Carbon Reduction Program	2023	2024	2025	2026	Total
Carbon Reduction Apportionment	64,634	65,672	66,731	67,811	264,848
Carbon Reduction Program	**64,634**	**65,672**	**66,731**	**67,811**	**264,848**

PROTECT Formula Program	2023	2024	2025	2026	Total
PROTECT Formula Program	**73,493**	**74,674**	**75,878**	**77,106**	**301,151**

Appendix 1: Available Funds
2023 Financial Guidance
Highway and Bridge Funds ($000)

State Funds	2023	2024	2025	2026	Total
State Highway (Capital)	479,000	508,000	516,000	555,000	2,058,000
State Bridge	282,000	277,000	277,000	276,000	1,112,000
Total State Funds (for Discretionary Calculation)	761,000	785,000	793,000	831,000	3,170,000
Mandatory 15% Discretionary (Highway Funds)	**114,150**	**117,750**	**118,950**	**124,650**	**475,500**

State Highway (Capital)	2023	2024	2025	2026	Total
Highway (Capital) After Discretionary Set-Aside	364,850	390,250	397,050	430,350	1,582,500
Less Environmental Resource Agencies	828	854	879	906	3,467
Less State Bridge Inspection	25,886	26,663	27,463	28,287	108,299
Less Oversight and Management	3,400	3,400	3,400	3,400	13,600
Less TIIF (Economic Development)	25,000	25,000	25,000	25,000	100,000
State Highway (Capital) Funds to Distribute	**309,736**	**334,333**	**340,308**	**372,757**	**1,357,134**

State Bridge	2023	2024	2025	2026	Total
State Bridge Funds to Distribute	**282,000**	**277,000**	**277,000**	**276,000**	**1,112,000**

Total Distributed/Statewide Reserve	3,125,222	3,186,799	3,236,510	3,317,047	12,865,578

Amounts in **Bold** are further reflected on the regional distribution charts.

Appendix 2: FFY 2023 -- Highway/Bridge Base Funding Allocation ($000)

Region	NHPP	STP	State Highway (Capital)	State Bridge	Off System Bridges (BOF)	HSIP	Highway Freight Program	Rail Highway Safety	CMAQ	STP TAP Set-Aside	STP-Urban	Carbon Reduction	PROTECT	Bridge Formula Program (BRIP)	Total
DVRPC	121,609	27,899	43,021	38,354	18,698	24,528	0	0	39,553	7,932	85,174	0	0	41,313	448,080
SPC	93,590	38,926	45,969	49,056	34,128	13,550	0	0	22,909	3,657	39,272	0	0	52,795	393,854
Harrisburg	23,190	8,533	11,130	10,690	6,913	3,897	0	0	4,968	938	10,067	0	0	11,432	91,758
Scranton/WB	17,218	7,168	8,494	8,712	5,382	4,142	0	0	0	805	8,641	0	0	8,584	69,145
Lehigh Valley	19,691	6,836	9,906	7,581	5,514	5,224	0	0	6,386	1,333	14,320	0	0	7,848	84,638
NEPA	8,306	7,844	8,319	4,458	5,291	3,292	0	0	536	0	0	0	0	5,055	43,101
SEDA-COG	19,685	9,795	12,409	12,650	9,239	2,377	0	0	0	0	0	0	0	12,018	78,172
Altoona	3,167	2,345	2,293	2,674	2,297	1,302	0	0	0	0	0	0	0	2,472	16,550
Johnstown	6,765	2,524	3,642	3,328	2,106	1,133	0	0	1,418	0	0	0	0	3,005	23,920
Centre County	4,634	2,065	2,711	1,955	1,356	1,117	0	0	0	0	0	0	0	1,969	15,806
Williamsport	5,467	3,370	3,734	4,001	3,152	1,084	0	0	0	0	0	0	0	3,749	24,558
Erie	5,537	3,744	4,820	3,376	2,703	2,096	0	0	0	0	0	0	0	3,013	25,288
Lancaster	15,401	8,532	10,283	7,903	6,712	3,820	0	0	5,125	848	9,105	0	0	7,827	75,556
York	6,062	5,953	7,963	3,551	3,478	2,930	0	0	4,291	489	5,256	0	0	3,509	43,483
Reading	15,658	5,183	7,899	6,246	4,043	3,331	0	0	4,059	562	6,031	0	0	6,743	59,755
Lebanon	2,006	1,915	2,526	1,372	1,372	1,363	0	0	1,318	0	0	0	0	1,265	13,137
Mercer	1,895	3,031	3,317	2,424	2,575	1,128	0	0	0	83	894	0	0	2,319	17,667
Adams	3,759	1,897	2,813	1,075	1,361	1,046	0	0	0	0	0	0	0	1,304	13,256
Franklin	1,939	2,625	3,097	1,475	1,712	1,330	0	0	0	0	0	0	0	1,458	13,635
Total Urban	**375,579**	**150,183**	**194,348**	**170,880**	**118,033**	**78,689**	**0**	**0**	**90,562**	**16,647**	**178,760**	**0**	**0**	**177,677**	**1,551,358**
Northwest	10,189	8,375	10,365	6,677	6,672	1,713	0	0	0	0	0	0	0	6,816	50,808
N. Central	9,017	7,911	9,333	5,808	6,302	1,611	0	0	0	0	0	0	0	6,191	46,173
N. Tier	10,140	8,729	11,422	8,563	8,094	1,492	0	0	0	0	0	0	0	8,388	56,829
S. Alleghenies	8,993	7,360	8,667	7,784	7,124	1,634	0	0	0	0	0	0	0	7,659	49,222
Wayne County	0	1,732	2,125	948	1,247	802	0	0	0	0	0	0	0	941	7,795
Total Rural	**38,340**	**34,107**	**41,912**	**29,780**	**29,440**	**7,253**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29,994**	**210,826**
Interstate Program	568,325	0	57,918	65,782	0	0	56,879	0	0	0	0	0	0	70,430	819,334
Statewide Program	0	0	0	0	0	0	0	7,184	0	28,766	0	64,634	73,493	0	174,077
Statewide Reserve	184,362	0	114,150	0	0	40,000	0	0	0	0	0	0	0	0	338,512
RBR Regional Share	0	0	15,558	15,558	0	0	0	0	0	0	0	0	0	0	31,115
GRAND TOTAL	**1,166,606**	**184,290**	**423,886**	**282,000**	**147,472**	**125,942**	**56,879**	**7,184**	**90,562**	**45,412**	**178,760**	**64,634**	**73,493**	**278,102**	**3,125,222**

State Highway and State Bridge fund regional distributions do not include funds distributed but reserved for the Rapid Bridge Replacement (RBR) Program; Off-System Bridges include set-asides from the Surface Transportation Block Grant Program and the Bridge Investment Program

Appendix 2: FFY 2024 -- Highway/Bridge Base Funding Allocation ($000)

Region	NHPP	STP	State Highway (Capital)	State Bridge	Off System Bridges (BOF)	HSIP	Highway Freight Program	Rail Highway Safety	CMAQ	STP TAP Set-Aside	STP-Urban	Carbon Reduction	PROTECT	Bridge Formula Program (BRIP)	Total
DVRPC	114,828	28,497	46,455	37,669	18,698	25,394	0	0	40,547	8,097	86,877	0	0	41,313	448,374
SPC	88,372	39,760	49,993	48,082	34,128	14,020	0	0	23,485	3,733	40,058	0	0	52,795	394,426
Harrisburg	21,897	8,715	12,062	10,487	6,913	4,019	0	0	5,092	957	10,269	0	0	11,432	91,844
Scranton/WB	16,258	7,321	9,186	8,552	5,382	4,273	0	0	0	821	8,814	0	0	8,584	69,192
Lehigh Valley	18,593	6,982	10,749	7,431	5,514	5,394	0	0	6,546	1,361	14,606	0	0	7,848	85,025
NEPA	7,842	8,012	9,076	4,352	5,291	3,392	0	0	550	0	0	0	0	5,055	43,570
SEDA-COG	18,587	10,005	13,435	12,414	9,239	2,445	0	0	0	0	0	0	0	12,018	78,143
Altoona	2,990	2,395	2,484	2,624	2,297	1,331	0	0	0	0	0	0	0	2,472	16,594
Johnstown	6,388	2,579	3,937	3,267	2,106	1,156	0	0	1,453	0	0	0	0	3,005	23,889
Centre County	4,375	2,109	2,949	1,914	1,356	1,139	0	0	0	0	0	0	0	1,969	15,811
Williamsport	5,162	3,443	4,047	3,926	3,152	1,105	0	0	0	0	0	0	0	3,749	24,583
Erie	5,228	3,824	5,206	3,315	2,703	2,153	0	0	0	0	0	0	0	3,013	25,442
Lancaster	14,542	8,715	11,161	7,745	6,712	3,939	0	0	5,254	866	9,288	0	0	7,827	76,048
York	5,723	6,081	8,623	3,480	3,478	3,018	0	0	4,399	500	5,361	0	0	3,509	44,173
Reading	14,784	5,294	8,538	6,132	4,043	3,432	0	0	4,161	573	6,151	0	0	6,743	59,853
Lebanon	1,894	1,956	2,729	1,347	1,372	1,394	0	0	1,351	0	0	0	0	1,265	13,308
Mercer	1,790	3,095	3,586	2,380	2,575	1,151	0	0	0	85	912	0	0	2,319	17,893
Adams	3,550	1,938	3,074	1,046	1,361	1,066	0	0	0	0	0	0	0	1,304	13,339
Franklin	1,831	2,681	3,355	1,446	1,712	1,359	0	0	0	0	0	0	0	1,458	13,841
Total Urban	**354,635**	**153,403**	**210,643**	**167,609**	**118,033**	**81,181**	**0**	**0**	**92,838**	**16,994**	**182,336**	**0**	**0**	**177,677**	**1,555,349**
Northwest	9,621	8,555	11,249	6,542	6,672	1,757	0	0	0	0	0	0	0	6,816	51,211
N. Central	8,514	8,080	10,165	5,679	6,302	1,651	0	0	0	0	0	0	0	6,191	46,583
N. Tier	9,575	8,916	12,407	8,390	8,094	1,528	0	0	0	0	0	0	0	8,388	57,297
S. Alleghenies	8,492	7,518	9,437	7,623	7,124	1,675	0	0	0	0	0	0	0	7,659	49,528
Wayne County	0	1,769	2,303	929	1,247	813	0	0	0	0	0	0	0	941	8,002
Total Rural	**36,202**	**34,838**	**45,560**	**29,163**	**29,440**	**7,424**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29,994**	**212,621**
Interstate Program	618,325	0	62,518	64,615	0	0	58,016	0	0	0	0	0	0	70,430	873,905
Statewide Program	0	0	0	0	0	0	0	7,184	0	29,366	0	65,672	74,674	0	176,896
Statewide Reserve	179,053	0	117,750	0	0	40,000	0	0	0	0	0	0	0	0	336,803
RBR Regional Share	0	0	15,613	15,613	0	0	0	0	0	0	0	0	0	0	31,225
GRAND TOTAL	**1,188,215**	**188,241**	**452,083**	**277,000**	**147,472**	**128,604**	**58,016**	**7,184**	**92,838**	**46,360**	**182,336**	**65,672**	**74,674**	**278,102**	**3,186,799**

State Highway and State Bridge fund regional distributions do not include funds distributed but reserved for the Rapid Bridge Replacement (RBR) Program; Off-System Bridges include set-asides from the Surface Transportation Block Grant Program and the Bridge Investment Program

Appendix 2: FFY 2025 -- Highway/Bridge Base Funding Allocation ($000)

Region	NHPP	STP	State Highway (Capital)	State Bridge	Off System Bridges (BOF)	HSIP	Highway Freight Program	Rail Highway Safety	CMAQ	STP TAP Set-Aside	STP-Urban	Carbon Reduction	PROTECT	Bridge Formula Program (BRIP)	Total
DVRPC	108,699	29,335	47,289	37,669	18,698	26,276	0	0	41,561	8,266	88,615	0	0	41,313	447,720
SPC	83,655	40,930	50,966	48,073	34,128	14,499	0	0	24,072	3,811	40,859	0	0	52,795	393,789
Harrisburg	20,729	8,972	12,287	10,486	6,913	4,144	0	0	5,220	977	10,474	0	0	11,432	91,634
Scranton/WB	15,390	7,537	9,355	8,551	5,382	4,407	0	0	0	839	8,990	0	0	8,584	69,035
Lehigh Valley	17,601	7,188	10,953	7,429	5,514	5,568	0	0	6,710	1,390	14,898	0	0	7,848	85,098
NEPA	7,424	8,248	9,258	4,350	5,291	3,495	0	0	564	0	0	0	0	5,055	43,684
SEDA-COG	17,595	10,300	13,684	12,413	9,239	2,514	0	0	0	0	0	0	0	12,018	77,762
Altoona	2,831	2,466	2,531	2,624	2,297	1,360	0	0	0	0	0	0	0	2,472	16,580
Johnstown	6,047	2,654	4,008	3,267	2,106	1,179	0	0	1,490	0	0	0	0	3,005	23,755
Centre County	4,142	2,172	3,006	1,913	1,356	1,162	0	0	0	0	0	0	0	1,969	15,719
Williamsport	4,887	3,544	4,122	3,925	3,152	1,126	0	0	0	0	0	0	0	3,749	24,506
Erie	4,949	3,937	5,299	3,315	2,703	2,212	0	0	0	0	0	0	0	3,013	25,428
Lancaster	13,766	8,971	11,373	7,744	6,712	4,061	0	0	5,385	884	9,473	0	0	7,827	76,197
York	5,418	6,260	8,783	3,480	3,478	3,107	0	0	4,509	510	5,468	0	0	3,509	44,522
Reading	13,995	5,450	8,693	6,132	4,043	3,536	0	0	4,265	585	6,274	0	0	6,743	59,718
Lebanon	1,793	2,014	2,778	1,347	1,372	1,426	0	0	1,385	0	0	0	0	1,265	13,379
Mercer	1,694	3,187	3,651	2,380	2,575	1,174	0	0	0	87	930	0	0	2,319	17,996
Adams	3,360	1,995	3,137	1,045	1,361	1,086	0	0	0	0	0	0	0	1,304	13,288
Franklin	1,733	2,760	3,417	1,445	1,712	1,390	0	0	0	0	0	0	0	1,458	13,915
Total Urban	**335,707**	**157,916**	**214,590**	**167,589**	**118,033**	**83,722**	**0**	**0**	**95,160**	**17,349**	**185,982**	**0**	**0**	**177,677**	**1,553,725**
Northwest	9,107	8,806	11,462	6,541	6,672	1,801	0	0	0	0	0	0	0	6,816	51,206
N. Central	8,060	8,318	10,366	5,677	6,302	1,692	0	0	0	0	0	0	0	6,191	46,606
N. Tier	9,064	9,178	12,645	8,388	8,094	1,564	0	0	0	0	0	0	0	8,388	57,321
S. Alleghenies	8,039	7,739	9,623	7,621	7,124	1,717	0	0	0	0	0	0	0	7,659	49,522
Wayne County	0	1,821	2,346	928	1,247	824	0	0	0	0	0	0	0	941	8,108
Total Rural	**34,270**	**35,863**	**46,443**	**29,155**	**29,440**	**7,598**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29,994**	**212,763**
Interstate Program	668,325	0	63,635	64,615	0	0	59,177	0	0	0	0	0	0	70,430	926,182
Statewide Program	0	0	0	0	0	0	0	7,184	0	29,979	0	66,731	75,878	0	179,772
Statewide Reserve	173,838	0	118,950	0	0	40,000	0	0	0	0	0	0	0	0	332,788
RBR Regional Share	0	0	15,640	15,640	0	0	0	0	0	0	0	0	0	0	31,280
GRAND TOTAL	**1,212,140**	**193,779**	**459,258**	**277,000**	**147,472**	**131,320**	**59,177**	**7,184**	**95,160**	**47,327**	**185,982**	**66,731**	**75,878**	**278,102**	**3,236,510**

State Highway and State Bridge fund regional distributions do not include funds distributed but reserved for the Rapid Bridge Replacement (RBR) Program; Off-System Bridges include set-asides from the Surface Transportation Block Grant Program and the Bridge Investment Program

Appendix 2: FFY 2026 -- Highway/Bridge Base Funding Allocation ($000)

Region	NHPP	STP	State Highway (Capital)	State Bridge	Off System Bridges (BOF)	HSIP	Highway Freight Program	Rail Highway Safety	CMAQ	STP TAP Set-Aside	STP-Urban	Carbon Reduction	PROTECT	Bridge Formula Program (BRIP)	Total
DVRPC	102,682	30,190	51,819	37,531	18,698	27,176	0	0	42,595	8,438	90,387	0	0	41,313	450,830
SPC	79,025	42,123	56,278	47,863	34,128	14,988	0	0	24,671	3,891	41,676	0	0	52,795	397,438
Harrisburg	19,581	9,233	13,516	10,444	6,913	4,271	0	0	5,350	997	10,684	0	0	11,432	92,421
Scranton/WB	14,538	7,756	10,269	8,519	5,382	4,543	0	0	0	856	9,170	0	0	8,584	69,618
Lehigh Valley	16,627	7,397	12,066	7,397	5,514	5,745	0	0	6,877	1,419	15,196	0	0	7,848	86,085
NEPA	7,013	8,488	10,257	4,325	5,291	3,599	0	0	578	0	0	0	0	5,055	44,606
SEDA-COG	16,621	10,600	15,039	12,364	9,239	2,584	0	0	0	0	0	0	0	12,018	78,464
Altoona	2,674	2,538	2,783	2,614	2,297	1,390	0	0	0	0	0	0	0	2,472	16,767
Johnstown	5,712	2,732	4,396	3,255	2,106	1,203	0	0	1,527	0	0	0	0	3,005	23,935
Centre County	3,912	2,235	3,320	1,904	1,356	1,185	0	0	0	0	0	0	0	1,969	15,881
Williamsport	4,616	3,647	4,534	3,909	3,152	1,148	0	0	0	0	0	0	0	3,749	24,757
Erie	4,675	4,051	5,808	3,303	2,703	2,272	0	0	0	0	0	0	0	3,013	25,825
Lancaster	13,004	9,233	12,532	7,710	6,712	4,186	0	0	5,519	902	9,663	0	0	7,827	77,288
York	5,118	6,442	9,654	3,464	3,478	3,198	0	0	4,622	521	5,578	0	0	3,509	45,584
Reading	13,221	5,609	9,535	6,109	4,043	3,642	0	0	4,372	597	6,400	0	0	6,743	60,271
Lebanon	1,694	2,073	3,046	1,342	1,372	1,458	0	0	1,419	0	0	0	0	1,265	13,668
Mercer	1,600	3,279	4,005	2,371	2,575	1,198	0	0	0	89	949	0	0	2,319	18,384
Adams	3,174	2,053	3,482	1,037	1,361	1,106	0	0	0	0	0	0	0	1,304	13,518
Franklin	1,637	2,840	3,758	1,439	1,712	1,421	0	0	0	0	0	0	0	1,458	14,265
Total Urban	**317,126**	**162,519**	**236,096**	**166,899**	**118,033**	**86,314**	**0**	**0**	**97,528**	**17,710**	**189,702**	**0**	**0**	**177,677**	**1,569,604**
Northwest	8,603	9,063	12,628	6,511	6,672	1,847	0	0	0	0	0	0	0	6,816	52,140
N. Central	7,614	8,560	11,465	5,647	6,302	1,733	0	0	0	0	0	0	0	6,191	47,514
N. Tier	8,562	9,446	13,945	8,350	8,094	1,601	0	0	0	0	0	0	0	8,388	58,386
S. Alleghenies	7,594	7,964	10,640	7,586	7,124	1,759	0	0	0	0	0	0	0	7,659	50,326
Wayne County	0	1,874	2,580	924	1,247	836	0	0	0	0	0	0	0	941	8,402
Total Rural	**32,373**	**36,908**	**51,259**	**29,019**	**29,440**	**7,776**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29,994**	**216,769**
Interstate Program	718,325	0	69,703	64,382	0	0	60,360	0	0	0	0	0	0	70,430	983,200
Statewide Program	0	0	0	0	0	0	0	7,184	0	30,604	0	67,811	77,106	0	182,705
Statewide Reserve	168,719	0	124,650	0	0	40,000	0	0	0	0	0	0	0	0	333,369
RBR Regional Share	0	0	15,700	15,700	0	0	0	0	0	0	0	0	0	0	31,400
GRAND TOTAL	**1,236,542**	**199,427**	**497,407**	**276,000**	**147,472**	**134,090**	**60,360**	**7,184**	**97,528**	**48,314**	**189,702**	**67,811**	**77,106**	**278,102**	**3,317,047**

State Highway and State Bridge fund regional distributions do not include funds distributed but reserved for the Rapid Bridge Replacement (RBR) Program; Off-System Bridges include set-asides from the Surface Transportation Block Grant Program and the Bridge Investment Program

Appendix 2: Total FFY 2023-2026 -- Highway/Bridge Base Funding Allocation ($000)

Region	NHPP	STP	State Highway (Capital)	State Bridge	Off System Bridges (BOF)	HSIP	Highway Freight Program	Rail Highway Safety	CMAQ	STP TAP Set-Aside	STP-Urban	Carbon Reduction	PROTECT	Bridge Formula Program (BRIP)	Total
DVRPC	447,818	115,921	188,583	151,224	74,792	103,374	0	0	164,255	32,733	351,053	0	0	165,250	1,795,004
SPC	344,641	161,739	203,206	193,075	136,513	57,058	0	0	95,137	15,093	161,865	0	0	211,179	1,579,506
Harrisburg	85,397	35,453	48,995	42,107	27,653	16,330	0	0	20,629	3,869	41,494	0	0	45,730	367,658
Scranton/WB	63,403	29,782	37,303	34,334	21,527	17,366	0	0	0	3,321	35,615	0	0	34,338	276,989
Lehigh Valley	72,512	28,403	43,674	29,838	22,055	21,930	0	0	26,518	5,503	59,020	0	0	31,392	340,846
NEPA	30,585	32,591	36,911	17,484	21,163	13,778	0	0	2,228	0	0	0	0	20,221	174,960
SEDA-COG	72,488	40,700	54,567	49,841	36,955	9,919	0	0	0	0	0	0	0	48,070	312,542
Altoona	11,662	9,744	10,091	10,536	9,189	5,384	0	0	0	0	0	0	0	9,887	66,492
Johnstown	24,911	10,489	15,983	13,117	8,422	4,672	0	0	5,887	0	0	0	0	12,018	95,500
Centre County	17,063	8,581	11,986	7,686	5,422	4,603	0	0	0	0	0	0	0	7,876	63,217
Williamsport	20,133	14,004	16,438	15,761	12,609	4,463	0	0	0	0	0	0	0	14,996	98,404
Erie	20,388	15,556	21,133	13,309	10,812	8,732	0	0	0	0	0	0	0	12,053	101,982
Lancaster	56,714	35,450	45,349	31,102	26,848	16,006	0	0	21,283	3,499	37,529	0	0	31,307	305,088
York	22,321	24,736	35,024	13,975	13,914	12,254	0	0	17,822	2,020	21,663	0	0	14,035	177,762
Reading	57,658	21,535	34,665	24,620	16,172	13,942	0	0	16,857	2,318	24,856	0	0	26,974	239,597
Lebanon	7,387	7,958	11,079	5,407	5,489	5,640	0	0	5,473	0	0	0	0	5,060	53,493
Mercer	6,980	12,592	14,558	9,554	10,300	4,651	0	0	0	344	3,685	0	0	9,275	71,940
Adams	13,843	7,882	12,507	4,203	5,446	4,303	0	0	0	0	0	0	0	5,217	53,402
Franklin	7,141	10,905	13,626	5,805	6,848	5,500	0	0	0	0	0	0	0	5,830	55,656
Total Urban	**1,383,046**	**624,022**	**855,676**	**672,978**	**472,131**	**329,906**	**0**	**0**	**376,089**	**68,700**	**736,780**	**0**	**0**	**710,709**	**6,230,036**
Northwest	37,521	34,800	45,705	26,272	26,688	7,118	0	0	0	0	0	0	0	27,262	205,365
N. Central	33,205	32,869	41,330	22,811	25,209	6,687	0	0	0	0	0	0	0	24,764	186,876
N. Tier	37,341	36,269	50,420	33,691	32,376	6,186	0	0	0	0	0	0	0	33,551	229,833
S. Alleghenies	33,118	30,581	38,366	30,615	28,497	6,784	0	0	0	0	0	0	0	30,637	198,598
Wayne County	0	7,197	9,353	3,729	4,989	3,275	0	0	0	0	0	0	0	3,763	32,307
Total Rural	**141,185**	**141,715**	**185,174**	**117,117**	**117,759**	**30,051**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**119,978**	**852,979**
Interstate Program	2,573,300	0	253,774	259,395	0	0	234,432	0	0	0	0	0	0	281,721	3,602,622
Statewide Program	0	0	0	0	0	0	0	28,737	0	118,714	0	264,848	301,151	0	713,449
Statewide Reserve	705,972	0	475,500	0	0	160,000	0	0	0	0	0	0	0	0	1,341,472
RBR Regional Share	0	0	62,510	62,510	0	0	0	0	0	0	0	0	0	0	125,020
GRAND TOTAL	**4,803,504**	**765,737**	**1,832,634**	**1,112,000**	**589,890**	**519,956**	**234,432**	**28,737**	**376,089**	**187,414**	**736,780**	**264,848**	**301,151**	**1,112,407**	**12,865,578**

State Highway and State Bridge fund regional distributions do not include funds distributed but reserved for the Rapid Bridge Replacement (RBR) Program; Off-System Bridges include set-asides from the Surface Transportation Block Grant Program and the Bridge Investment Program

Appendix 2: FFY 2027 -- Highway/Bridge Base Funding Allocation ($000)

Region	NHPP	STP	State Highway (Capital)	State Bridge	Off System Bridges (BOF)	HSIP	Highway Freight Program	Rail Highway Safety	CMAQ	STP TAP Set-Aside	STP-Urban	Carbon Reduction	PROTECT	Bridge Formula Program (BRIP)	Total
DVRPC	90,931	30,190	51,818	37,531	18,698	27,176	0	0	42,595	8,438	90,387	0	0	41,313	439,077
SPC	69,980	42,123	56,262	47,847	34,128	14,988	0	0	24,671	3,891	41,676	0	0	52,795	388,362
Harrisburg	17,340	9,233	13,514	10,442	6,913	4,271	0	0	5,350	997	10,684	0	0	11,432	90,176
Scranton/WB	12,874	7,756	10,268	8,518	5,382	4,543	0	0	0	856	9,170	0	0	8,584	67,952
Lehigh Valley	14,724	7,397	12,064	7,394	5,514	5,745	0	0	6,877	1,419	15,196	0	0	7,848	84,177
NEPA	6,210	8,488	10,253	4,321	5,291	3,599	0	0	578	0	0	0	0	5,055	43,795
SEDA-COG	14,719	10,600	15,037	12,363	9,239	2,584	0	0	0	0	0	0	0	12,018	76,559
Altoona	2,368	2,538	2,782	2,613	2,297	1,390	0	0	0	0	0	0	0	2,472	16,461
Johnstown	5,058	2,732	4,396	3,255	2,106	1,203	0	0	1,527	0	0	0	0	3,005	23,281
Centre County	3,465	2,235	3,319	1,903	1,356	1,185	0	0	0	0	0	0	0	1,969	15,432
Williamsport	4,088	3,647	4,534	3,909	3,152	1,148	0	0	0	0	0	0	0	3,749	24,227
Erie	4,140	4,051	5,808	3,303	2,703	2,272	0	0	0	0	0	0	0	3,013	25,289
Lancaster	11,516	9,233	12,529	7,707	6,712	4,186	0	0	5,519	902	9,663	0	0	7,827	75,794
York	4,532	6,442	9,653	3,463	3,478	3,198	0	0	4,622	521	5,578	0	0	3,509	44,996
Reading	11,708	5,609	9,534	6,108	4,043	3,642	0	0	4,372	597	6,400	0	0	6,743	58,757
Lebanon	1,500	2,073	3,046	1,342	1,372	1,458	0	0	1,419	0	0	0	0	1,265	13,474
Mercer	1,417	3,279	4,004	2,370	2,575	1,198	0	0	0	89	949	0	0	2,319	18,201
Adams	2,811	2,053	3,481	1,036	1,361	1,106	0	0	0	0	0	0	0	1,304	13,152
Franklin	1,450	2,840	3,757	1,439	1,712	1,421	0	0	0	0	0	0	0	1,458	14,076
Total Urban	**280,831**	**162,519**	**236,059**	**166,863**	**118,033**	**86,314**	**0**	**0**	**97,528**	**17,710**	**189,702**	**0**	**0**	**177,677**	**1,533,236**
Northwest	7,619	9,063	12,626	6,509	6,672	1,847	0	0	0	0	0	0	0	6,816	51,151
N. Central	6,742	8,560	11,461	5,644	6,302	1,733	0	0	0	0	0	0	0	6,191	46,635
N. Tier	7,582	9,446	13,942	8,347	8,094	1,601	0	0	0	0	0	0	0	8,388	57,400
S. Alleghenies	6,725	7,964	10,636	7,582	7,124	1,759	0	0	0	0	0	0	0	7,659	49,450
Wayne County	0	1,874	2,580	924	1,247	836	0	0	0	0	0	0	0	941	8,401
Total Rural	**28,668**	**36,908**	**51,245**	**29,005**	**29,440**	**7,776**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29,994**	**213,036**
Interstate Program	768,325	0	69,703	64,382	0	0	60,360	0	0	0	0	0	0	70,430	1,033,200
Statewide Program	0	0	0	0	0	0	0	7,184	0	30,604	0	55,088	62,639	0	155,515
Statewide Reserve	158,719	0	124,650	0	0	40,000	0	0	0	0	0	0	0	0	323,369
RBR Regional Share	0	0	15,750	15,750	0	0	0	0	0	0	0	0	0	0	31,500
GRAND TOTAL	**1,236,542**	**199,427**	**497,407**	**276,000**	**147,472**	**134,090**	**60,360**	**7,184**	**97,528**	**48,314**	**189,702**	**55,088**	**62,639**	**278,102**	**3,289,857**

State Highway and State Bridge fund regional distributions do not include funds distributed but reserved for the Rapid Bridge Replacement (RBR) Program; Off-System Bridges include set-asides from the Surface Transportation Block Grant Program and the Bridge Investment Program

Appendix 2: FFY 2028 -- Highway/Bridge Base Funding Allocation ($000)

Region	NHPP	STP	State Highway (Capital)	State Bridge	Off System Bridges (BOF)	HSIP	Highway Freight Program	Rail Highway Safety	CMAQ	STP TAP Set-Aside	STP-Urban	Carbon Reduction	PROTECT	Bridge Formula Program (BRIP)	Total
DVRPC	82,180	30,190	51,817	37,530	18,698	27,176	0	0	42,595	8,438	90,387	0	0	41,313	430,324
SPC	63,246	42,123	56,243	47,828	34,128	14,988	0	0	24,671	3,891	41,676	0	0	52,795	381,589
Harrisburg	15,671	9,233	13,511	10,439	6,913	4,271	0	0	5,350	997	10,684	0	0	11,432	88,503
Scranton/WB	11,635	7,756	10,267	8,517	5,382	4,543	0	0	0	856	9,170	0	0	8,584	66,712
Lehigh Valley	13,307	7,397	12,061	7,392	5,514	5,745	0	0	6,877	1,419	15,196	0	0	7,848	82,755
NEPA	5,613	8,488	10,248	4,316	5,291	3,599	0	0	578	0	0	0	0	5,055	43,188
SEDA-COG	13,302	10,600	15,035	12,360	9,239	2,584	0	0	0	0	0	0	0	12,018	75,138
Altoona	2,140	2,538	2,782	2,613	2,297	1,390	0	0	0	0	0	0	0	2,472	16,232
Johnstown	4,571	2,732	4,396	3,255	2,106	1,203	0	0	1,527	0	0	0	0	3,005	22,793
Centre County	3,131	2,235	3,318	1,902	1,356	1,185	0	0	0	0	0	0	0	1,969	15,096
Williamsport	3,695	3,647	4,533	3,908	3,152	1,148	0	0	0	0	0	0	0	3,749	23,832
Erie	3,741	4,051	5,808	3,303	2,703	2,272	0	0	0	0	0	0	0	3,013	24,891
Lancaster	10,408	9,233	12,526	7,704	6,712	4,186	0	0	5,519	902	9,663	0	0	7,827	74,680
York	4,096	6,442	9,652	3,462	3,478	3,198	0	0	4,622	521	5,578	0	0	3,509	44,557
Reading	10,581	5,609	9,534	6,108	4,043	3,642	0	0	4,372	597	6,400	0	0	6,743	57,629
Lebanon	1,356	2,073	3,045	1,342	1,372	1,458	0	0	1,419	0	0	0	0	1,265	13,330
Mercer	1,281	3,279	4,004	2,370	2,575	1,198	0	0	0	89	949	0	0	2,319	18,064
Adams	2,540	2,053	3,479	1,034	1,361	1,106	0	0	0	0	0	0	0	1,304	12,878
Franklin	1,310	2,840	3,756	1,438	1,712	1,421	0	0	0	0	0	0	0	1,458	13,936
Total Urban	**253,806**	**162,519**	**236,016**	**166,819**	**118,033**	**86,314**	**0**	**0**	**97,528**	**17,710**	**189,702**	**0**	**0**	**177,677**	**1,506,124**
Northwest	6,886	9,063	12,623	6,506	6,672	1,847	0	0	0	0	0	0	0	6,816	50,411
N. Central	6,094	8,560	11,457	5,639	6,302	1,733	0	0	0	0	0	0	0	6,191	45,976
N. Tier	6,853	9,446	13,938	8,343	8,094	1,601	0	0	0	0	0	0	0	8,388	56,662
S. Alleghenies	6,078	7,964	10,632	7,578	7,124	1,759	0	0	0	0	0	0	0	7,659	48,794
Wayne County	0	1,874	2,579	923	1,247	836	0	0	0	0	0	0	0	941	8,401
Total Rural	**25,909**	**36,908**	**51,229**	**28,989**	**29,440**	**7,776**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29,994**	**210,245**
Interstate Program	805,555	0	69,703	64,382	0	0	60,360	0	0	0	0	0	0	70,430	1,070,430
Statewide Program	0	0	0	0	0	0	0	7,184	0	30,604	0	55,088	62,639	0	155,515
Statewide Reserve	151,273	0	124,650	0	0	40,000	0	0	0	0	0	0	0	0	315,923
RBR Regional Share	0	0	15,810	15,810	0	0	0	0	0	0	0	0	0	0	31,620
GRAND TOTAL	**1,236,542**	**199,427**	**497,407**	**276,000**	**147,472**	**134,090**	**60,360**	**7,184**	**97,528**	**48,314**	**189,702**	**55,088**	**62,639**	**278,102**	**3,289,857**

State Highway and State Bridge fund regional distributions do not include funds distributed but reserved for the Rapid Bridge Replacement (RBR) Program; Off-System Bridges include set-asides from the Surface Transportation Block Grant Program and the Bridge Investment Program

Appendix 2: FFY 2029 -- Highway/Bridge Base Funding Allocation ($000)

Region	NHPP	STP	State Highway (Capital)	State Bridge	Off System Bridges (BOF)	HSIP	Highway Freight Program	Rail Highway Safety	CMAQ	STP TAP Set-Aside	STP-Urban	Carbon Reduction	PROTECT	Bridge Formula Program (BRIP)	Total
DVRPC	82,180	30,190	51,817	37,529	18,698	27,176	0	0	42,595	8,438	90,387	0	0	41,313	430,323
SPC	63,246	42,123	56,233	47,818	34,128	14,988	0	0	24,671	3,891	41,676	0	0	52,795	381,569
Harrisburg	15,671	9,233	13,510	10,438	6,913	4,271	0	0	5,350	997	10,684	0	0	11,432	88,500
Scranton/WB	11,635	7,756	10,267	8,517	5,382	4,543	0	0	0	856	9,170	0	0	8,584	66,711
Lehigh Valley	13,307	7,397	12,059	7,390	5,514	5,745	0	0	6,877	1,419	15,196	0	0	7,848	82,751
NEPA	5,613	8,488	10,246	4,313	5,291	3,599	0	0	578	0	0	0	0	5,055	43,182
SEDA-COG	13,302	10,600	15,034	12,359	9,239	2,584	0	0	0	0	0	0	0	12,018	75,136
Altoona	2,140	2,538	2,782	2,613	2,297	1,390	0	0	0	0	0	0	0	2,472	16,231
Johnstown	4,571	2,732	4,396	3,254	2,106	1,203	0	0	1,527	0	0	0	0	3,005	22,793
Centre County	3,131	2,235	3,318	1,901	1,356	1,185	0	0	0	0	0	0	0	1,969	15,095
Williamsport	3,695	3,647	4,533	3,908	3,152	1,148	0	0	0	0	0	0	0	3,749	23,831
Erie	3,741	4,051	5,808	3,302	2,703	2,272	0	0	0	0	0	0	0	3,013	24,891
Lancaster	10,408	9,233	12,525	7,703	6,712	4,186	0	0	5,519	902	9,663	0	0	7,827	74,676
York	4,096	6,442	9,651	3,461	3,478	3,198	0	0	4,622	521	5,578	0	0	3,509	44,555
Reading	10,581	5,609	9,534	6,108	4,043	3,642	0	0	4,372	597	6,400	0	0	6,743	57,628
Lebanon	1,356	2,073	3,045	1,341	1,372	1,458	0	0	1,419	0	0	0	0	1,265	13,329
Mercer	1,281	3,279	4,004	2,370	2,575	1,198	0	0	0	89	949	0	0	2,319	18,063
Adams	2,540	2,053	3,478	1,033	1,361	1,106	0	0	0	0	0	0	0	1,304	12,875
Franklin	1,310	2,840	3,756	1,438	1,712	1,421	0	0	0	0	0	0	0	1,458	13,935
Total Urban	**253,806**	**162,519**	**235,992**	**166,795**	**118,033**	**86,314**	**0**	**0**	**97,528**	**17,710**	**189,702**	**0**	**0**	**177,677**	**1,506,076**
Northwest	6,886	9,063	12,621	6,504	6,672	1,847	0	0	0	0	0	0	0	6,816	50,408
N. Central	6,094	8,560	11,454	5,636	6,302	1,733	0	0	0	0	0	0	0	6,191	45,971
N. Tier	6,853	9,446	13,936	8,341	8,094	1,601	0	0	0	0	0	0	0	8,388	56,658
S. Alleghenies	6,078	7,964	10,630	7,576	7,124	1,759	0	0	0	0	0	0	0	7,659	48,790
Wayne County	0	1,874	2,579	923	1,247	836	0	0	0	0	0	0	0	941	8,400
Total Rural	**25,909**	**36,908**	**51,220**	**28,980**	**29,440**	**7,776**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29,994**	**210,228**
Interstate Program	805,555	0	69,703	64,382	0	0	60,360	0	0	0	0	0	0	70,430	1,070,430
Statewide Program	0	0	0	0	0	0	0	7,184	0	30,604	0	55,088	62,639	0	155,515
Statewide Reserve	151,273	0	124,650	0	0	40,000	0	0	0	0	0	0	0	0	315,923
RBR Regional Share	0	0	15,843	15,843	0	0	0	0	0	0	0	0	0	0	31,685
GRAND TOTAL	**1,236,542**	**199,427**	**497,407**	**276,000**	**147,472**	**134,090**	**60,360**	**7,184**	**97,528**	**48,314**	**189,702**	**55,088**	**62,639**	**278,102**	**3,289,857**

State Highway and State Bridge fund regional distributions do not include funds distributed but reserved for the Rapid Bridge Replacement (RBR) Program; Off-System Bridges include set-asides from the Surface Transportation Block Grant Program and the Bridge Investment Program

Appendix 2: FFY 2030 -- Highway/Bridge Base Funding Allocation ($000)

Region	NHPP	STP	State Highway (Capital)	State Bridge	Off System Bridges (BOF)	HSIP	Highway Freight Program	Rail Highway Safety	CMAQ	STP TAP Set-Aside	STP-Urban	Carbon Reduction	PROTECT	Bridge Formula Program (BRIP)	Total
DVRPC	82,180	30,190	51,816	37,528	18,698	27,176	0	0	42,595	8,438	90,387	0	0	41,313	430,322
SPC	63,246	42,123	56,213	47,798	34,128	14,988	0	0	24,671	3,891	41,676	0	0	52,795	381,529
Harrisburg	15,671	9,233	13,508	10,435	6,913	4,271	0	0	5,350	997	10,684	0	0	11,432	88,495
Scranton/WB	11,635	7,756	10,266	8,516	5,382	4,543	0	0	0	856	9,170	0	0	8,584	66,709
Lehigh Valley	13,307	7,397	12,056	7,387	5,514	5,745	0	0	6,877	1,419	15,196	0	0	7,848	82,745
NEPA	5,613	8,488	10,241	4,308	5,291	3,599	0	0	578	0	0	0	0	5,055	43,172
SEDA-COG	13,302	10,600	15,032	12,357	9,239	2,584	0	0	0	0	0	0	0	12,018	75,131
Altoona	2,140	2,538	2,781	2,612	2,297	1,390	0	0	0	0	0	0	0	2,472	16,230
Johnstown	4,571	2,732	4,395	3,254	2,106	1,203	0	0	1,527	0	0	0	0	3,005	22,793
Centre County	3,131	2,235	3,316	1,900	1,356	1,185	0	0	0	0	0	0	0	1,969	15,092
Williamsport	3,695	3,647	4,532	3,907	3,152	1,148	0	0	0	0	0	0	0	3,749	23,830
Erie	3,741	4,051	5,807	3,302	2,703	2,272	0	0	0	0	0	0	0	3,013	24,890
Lancaster	10,408	9,233	12,521	7,699	6,712	4,186	0	0	5,519	902	9,663	0	0	7,827	74,670
York	4,096	6,442	9,649	3,459	3,478	3,198	0	0	4,622	521	5,578	0	0	3,509	44,552
Reading	10,581	5,609	9,533	6,107	4,043	3,642	0	0	4,372	597	6,400	0	0	6,743	57,627
Lebanon	1,356	2,073	3,045	1,341	1,372	1,458	0	0	1,419	0	0	0	0	1,265	13,329
Mercer	1,281	3,279	4,004	2,370	2,575	1,198	0	0	0	89	949	0	0	2,319	18,063
Adams	2,540	2,053	3,476	1,031	1,361	1,106	0	0	0	0	0	0	0	1,304	12,871
Franklin	1,310	2,840	3,755	1,437	1,712	1,421	0	0	0	0	0	0	0	1,458	13,934
Total Urban	**253,806**	**162,519**	**235,946**	**166,750**	**118,033**	**86,314**	**0**	**0**	**97,528**	**17,710**	**189,702**	**0**	**0**	**177,677**	**1,505,985**
Northwest	6,886	9,063	12,618	6,501	6,672	1,847	0	0	0	0	0	0	0	6,816	50,402
N. Central	6,094	8,560	11,450	5,632	6,302	1,733	0	0	0	0	0	0	0	6,191	45,962
N. Tier	6,853	9,446	13,932	8,336	8,094	1,601	0	0	0	0	0	0	0	8,388	56,650
S. Alleghenies	6,078	7,964	10,625	7,572	7,124	1,759	0	0	0	0	0	0	0	7,659	48,781
Wayne County	0	1,874	2,579	923	1,247	836	0	0	0	0	0	0	0	941	8,399
Total Rural	**25,909**	**36,908**	**51,203**	**28,963**	**29,440**	**7,776**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29,994**	**210,194**
Interstate Program	805,555	0	69,703	64,382	0	0	60,360	0	0	0	0	0	0	70,430	1,070,430
Statewide Program	0	0	0	0	0	0	0	7,184	0	30,604	0	55,088	62,639	0	155,515
Statewide Reserve	151,273	0	124,650	0	0	40,000	0	0	0	0	0	0	0	0	315,923
RBR Regional Share	0	0	15,905	15,905	0	0	0	0	0	0	0	0	0	0	31,810
GRAND TOTAL	**1,236,542**	**199,427**	**497,407**	**276,000**	**147,472**	**134,090**	**60,360**	**7,184**	**97,528**	**48,314**	**189,702**	**55,088**	**62,639**	**278,102**	**3,289,857**

State Highway and State Bridge fund regional distributions do not include funds distributed but reserved for the Rapid Bridge Replacement (RBR) Program; Off-System Bridges include set-asides from the Surface Transportation Block Grant Program and the Bridge Investment Program

Appendix 2: Total FFY 2026-2030 -- Highway/Bridge Base Funding Allocation ($000)

Region	NHPP	STP	State Highway (Capital)	State Bridge	Off System Bridges (BOF)	HSIP	Highway Freight Program	Rail Highway Safety	CMAQ	STP TAP Set-Aside	STP-Urban	Carbon Reduction	PROTECT	Bridge Formula Program (BRIP)	Total
DVRPC	337,471	120,761	207,267	150,118	74,792	108,705	0	0	170,381	33,754	361,548	0	0	165,250	1,730,046
SPC	259,718	168,492	224,950	191,292	136,513	59,953	0	0	98,685	15,563	166,704	0	0	211,179	1,533,049
Harrisburg	64,354	36,934	54,043	41,754	27,653	17,084	0	0	21,399	3,990	42,735	0	0	45,730	355,674
Scranton/WB	47,780	31,026	41,067	34,067	21,527	18,174	0	0	0	3,424	36,680	0	0	34,338	268,083
Lehigh Valley	54,644	29,588	48,240	29,563	22,055	22,978	0	0	27,507	5,675	60,785	0	0	31,392	332,429
NEPA	23,048	33,952	40,988	17,257	21,163	14,397	0	0	2,311	0	0	0	0	20,221	173,337
SEDA-COG	54,626	42,400	60,137	49,439	36,955	10,336	0	0	0	0	0	0	0	48,070	301,964
Altoona	8,788	10,151	11,127	10,450	9,189	5,562	0	0	0	0	0	0	0	9,887	65,154
Johnstown	18,773	10,927	17,583	13,018	8,422	4,813	0	0	6,106	0	0	0	0	12,018	91,659
Centre County	12,858	8,939	13,271	7,607	5,422	4,740	0	0	0	0	0	0	0	7,876	60,714
Williamsport	15,172	14,589	18,131	15,631	12,609	4,592	0	0	0	0	0	0	0	14,996	95,720
Erie	15,364	16,206	23,230	13,210	10,812	9,086	0	0	0	0	0	0	0	12,053	99,961
Lancaster	42,739	36,930	50,102	30,813	26,848	16,743	0	0	22,076	3,608	38,651	0	0	31,307	299,819
York	16,821	25,768	38,605	13,845	13,914	12,793	0	0	18,486	2,083	22,310	0	0	14,035	178,660
Reading	43,451	22,434	38,135	24,431	16,172	14,570	0	0	17,486	2,390	25,599	0	0	26,974	231,642
Lebanon	5,566	8,291	12,182	5,366	5,489	5,832	0	0	5,677	0	0	0	0	5,060	53,462
Mercer	5,260	13,118	16,016	9,480	10,300	4,790	0	0	0	354	3,796	0	0	9,275	72,390
Adams	10,432	8,211	13,913	4,133	5,446	4,424	0	0	0	0	0	0	0	5,217	51,776
Franklin	5,381	11,361	15,025	5,751	6,848	5,684	0	0	0	0	0	0	0	5,830	55,880
Total Urban	**1,042,248**	**650,076**	**944,013**	**667,227**	**472,131**	**345,255**	**0**	**0**	**390,114**	**70,841**	**758,808**	**0**	**0**	**710,709**	**6,051,422**
Northwest	28,275	36,253	50,487	26,019	26,688	7,387	0	0	0	0	0	0	0	27,262	202,372
N. Central	25,023	34,241	45,822	22,550	25,209	6,934	0	0	0	0	0	0	0	24,764	184,544
N. Tier	28,140	37,783	55,748	33,366	32,376	6,406	0	0	0	0	0	0	0	33,551	227,370
S. Alleghenies	24,957	31,857	42,523	30,308	28,497	7,036	0	0	0	0	0	0	0	30,637	195,816
Wayne County	0	7,498	10,317	3,692	4,989	3,342	0	0	0	0	0	0	0	3,763	33,601
Total Rural	**106,396**	**147,632**	**204,897**	**115,937**	**117,759**	**31,105**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**119,978**	**843,703**
Interstate Program	3,184,990	0	278,811	257,529	0	0	241,441	0	0	0	0	0	0	281,721	4,244,492
Statewide Program	0	0	0	0	0	0	0	28,737	0	122,414	0	220,352	250,556	0	622,058
Statewide Reserve	612,536	0	498,600	0	0	160,000	0	0	0	0	0	0	0	0	1,271,136
RBR Regional Share	0	0	63,308	63,308	0	0	0	0	0	0	0	0	0	0	126,615
GRAND TOTAL	**4,946,170**	**797,708**	**1,989,629**	**1,104,000**	**589,890**	**536,360**	**241,441**	**28,737**	**390,114**	**193,255**	**758,808**	**220,352**	**250,556**	**1,112,407**	**13,159,426**

State Highway and State Bridge fund regional distributions do not include funds distributed but reserved for the Rapid Bridge Replacement (RBR) Program; Off-System Bridges include set-asides from the Surface Transportation Block Grant Program and the Bridge Investment Program

Appendix 2: FFY 2031 -- Highway/Bridge Base Funding Allocation ($000)

Region	NHPP	STP	State Highway (Capital)	State Bridge	Off System Bridges (BOF)	HSIP	Highway Freight Program	Rail Highway Safety	CMAQ	STP TAP Set-Aside	STP-Urban	Carbon Reduction	PROTECT	Bridge Formula Program (BRIP)	Total
DVRPC	82,180	30,190	51,815	37,528	18,698	27,176	0	0	42,595	8,438	90,387	0	0	41,313	430,320
SPC	63,246	42,123	56,195	47,781	34,128	14,988	0	0	24,671	3,891	41,676	0	0	52,795	381,495
Harrisburg	15,671	9,233	13,506	10,433	6,913	4,271	0	0	5,350	997	10,684	0	0	11,432	88,491
Scranton/WB	11,635	7,756	10,265	8,515	5,382	4,543	0	0	0	856	9,170	0	0	8,584	66,707
Lehigh Valley	13,307	7,397	12,054	7,384	5,514	5,745	0	0	6,877	1,419	15,196	0	0	7,848	82,740
NEPA	5,613	8,488	10,236	4,304	5,291	3,599	0	0	578	0	0	0	0	5,055	43,163
SEDA-COG	13,302	10,600	15,030	12,355	9,239	2,584	0	0	0	0	0	0	0	12,018	75,128
Altoona	2,140	2,538	2,781	2,612	2,297	1,390	0	0	0	0	0	0	0	2,472	16,230
Johnstown	4,571	2,732	4,395	3,254	2,106	1,203	0	0	1,527	0	0	0	0	3,005	22,792
Centre County	3,131	2,235	3,315	1,899	1,356	1,185	0	0	0	0	0	0	0	1,969	15,090
Williamsport	3,695	3,647	4,531	3,906	3,152	1,148	0	0	0	0	0	0	0	3,749	23,828
Erie	3,741	4,051	5,807	3,302	2,703	2,272	0	0	0	0	0	0	0	3,013	24,890
Lancaster	10,408	9,233	12,519	7,696	6,712	4,186	0	0	5,519	902	9,663	0	0	7,827	74,664
York	4,096	6,442	9,648	3,458	3,478	3,198	0	0	4,622	521	5,578	0	0	3,509	44,550
Reading	10,581	5,609	9,532	6,107	4,043	3,642	0	0	4,372	597	6,400	0	0	6,743	57,626
Lebanon	1,356	2,073	3,045	1,341	1,372	1,458	0	0	1,419	0	0	0	0	1,265	13,329
Mercer	1,281	3,279	4,004	2,370	2,575	1,198	0	0	0	89	949	0	0	2,319	18,062
Adams	2,540	2,053	3,474	1,029	1,361	1,106	0	0	0	0	0	0	0	1,304	12,868
Franklin	1,310	2,840	3,755	1,436	1,712	1,421	0	0	0	0	0	0	0	1,458	13,932
Total Urban	**253,806**	**162,519**	**235,906**	**166,710**	**118,033**	**86,314**	**0**	**0**	**97,528**	**17,710**	**189,702**	**0**	**0**	**177,677**	**1,505,905**
Northwest	6,886	9,063	12,615	6,498	6,672	1,847	0	0	0	0	0	0	0	6,816	50,396
N. Central	6,094	8,560	11,445	5,627	6,302	1,733	0	0	0	0	0	0	0	6,191	45,953
N. Tier	6,853	9,446	13,928	8,333	8,094	1,601	0	0	0	0	0	0	0	8,388	56,643
S. Alleghenies	6,078	7,964	10,622	7,568	7,124	1,759	0	0	0	0	0	0	0	7,659	48,774
Wayne County	0	1,874	2,578	922	1,247	836	0	0	0	0	0	0	0	941	8,398
Total Rural	**25,909**	**36,908**	**51,188**	**28,948**	**29,440**	**7,776**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29,994**	**210,164**
Interstate Program	805,555	0	69,703	64,382	0	0	60,360	0	0	0	0	0	0	70,430	1,070,430
Statewide Program	0	0	0	0	0	0	0	7,184	0	30,604	0	55,088	62,639	0	155,515
Statewide Reserve	151,273	0	124,650	0	0	40,000	0	0	0	0	0	0	0	0	315,923
RBR Regional Share	0	0	15,960	15,960	0	0	0	0	0	0	0	0	0	0	31,920
GRAND TOTAL	**1,236,542**	**199,427**	**497,407**	**276,000**	**147,472**	**134,090**	**60,360**	**7,184**	**97,528**	**48,314**	**189,702**	**55,088**	**62,639**	**278,102**	**3,289,857**

State Highway and State Bridge fund regional distributions do not include funds distributed but reserved for the Rapid Bridge Replacement (RBR) Program; Off-System Bridges include set-asides from the Surface Transportation Block Grant Program and the Bridge Investment Program

Appendix 2: FFY 2032 -- Highway/Bridge Base Funding Allocation ($000)

Region	NHPP	STP	State Highway (Capital)	State Bridge	Off System Bridges (BOF)	HSIP	Highway Freight Program	Rail Highway Safety	CMAQ	STP TAP Set-Aside	STP-Urban	Carbon Reduction	PROTECT	Bridge Formula Program (BRIP)	Total
DVRPC	82,180	30,190	51,814	37,527	18,698	27,176	0	0	42,595	8,438	90,387	0	0	41,313	430,318
SPC	63,246	42,123	56,174	47,760	34,128	14,988	0	0	24,671	3,891	41,676	0	0	52,795	381,452
Harrisburg	15,671	9,233	13,503	10,430	6,913	4,271	0	0	5,350	997	10,684	0	0	11,432	88,485
Scranton/WB	11,635	7,756	10,264	8,514	5,382	4,543	0	0	0	856	9,170	0	0	8,584	66,705
Lehigh Valley	13,307	7,397	12,051	7,381	5,514	5,745	0	0	6,877	1,419	15,196	0	0	7,848	82,734
NEPA	5,613	8,488	10,231	4,298	5,291	3,599	0	0	578	0	0	0	0	5,055	43,152
SEDA-COG	13,302	10,600	15,027	12,353	9,239	2,584	0	0	0	0	0	0	0	12,018	75,123
Altoona	2,140	2,538	2,780	2,611	2,297	1,390	0	0	0	0	0	0	0	2,472	16,229
Johnstown	4,571	2,732	4,395	3,254	2,106	1,203	0	0	1,527	0	0	0	0	3,005	22,791
Centre County	3,131	2,235	3,314	1,898	1,356	1,185	0	0	0	0	0	0	0	1,969	15,087
Williamsport	3,695	3,647	4,530	3,905	3,152	1,148	0	0	0	0	0	0	0	3,749	23,826
Erie	3,741	4,051	5,807	3,302	2,703	2,272	0	0	0	0	0	0	0	3,013	24,890
Lancaster	10,408	9,233	12,515	7,693	6,712	4,186	0	0	5,519	902	9,663	0	0	7,827	74,657
York	4,096	6,442	9,647	3,457	3,478	3,198	0	0	4,622	521	5,578	0	0	3,509	44,547
Reading	10,581	5,609	9,532	6,106	4,043	3,642	0	0	4,372	597	6,400	0	0	6,743	57,625
Lebanon	1,356	2,073	3,045	1,341	1,372	1,458	0	0	1,419	0	0	0	0	1,265	13,329
Mercer	1,281	3,279	4,003	2,369	2,575	1,198	0	0	0	89	949	0	0	2,319	18,062
Adams	2,540	2,053	3,472	1,027	1,361	1,106	0	0	0	0	0	0	0	1,304	12,864
Franklin	1,310	2,840	3,754	1,436	1,712	1,421	0	0	0	0	0	0	0	1,458	13,931
Total Urban	**253,806**	**162,519**	**235,857**	**166,660**	**118,033**	**86,314**	**0**	**0**	**97,528**	**17,710**	**189,702**	**0**	**0**	**177,677**	**1,505,806**
Northwest	6,886	9,063	12,612	6,495	6,672	1,847	0	0	0	0	0	0	0	6,816	50,389
N. Central	6,094	8,560	11,440	5,622	6,302	1,733	0	0	0	0	0	0	0	6,191	45,943
N. Tier	6,853	9,446	13,924	8,328	8,094	1,601	0	0	0	0	0	0	0	8,388	56,634
S. Alleghenies	6,078	7,964	10,617	7,563	7,124	1,759	0	0	0	0	0	0	0	7,659	48,764
Wayne County	0	1,874	2,578	922	1,247	836	0	0	0	0	0	0	0	941	8,397
Total Rural	**25,909**	**36,908**	**51,170**	**28,930**	**29,440**	**7,776**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29,994**	**210,127**
Interstate Program	805,555	0	69,703	64,382	0	0	60,360	0	0	0	0	0	0	70,430	1,070,430
Statewide Program	0	0	0	0	0	0	0	7,184	0	30,604	0	55,088	62,639	0	155,515
Statewide Reserve	151,273	0	124,650	0	0	40,000	0	0	0	0	0	0	0	0	315,923
RBR Regional Share	0	0	16,028	16,028	0	0	0	0	0	0	0	0	0	0	32,055
GRAND TOTAL	**1,236,542**	**199,427**	**497,407**	**276,000**	**147,472**	**134,090**	**60,360**	**7,184**	**97,528**	**48,314**	**189,702**	**55,088**	**62,639**	**278,102**	**3,289,857**

State Highway and State Bridge fund regional distributions do not include funds distributed but reserved for the Rapid Bridge Replacement (RBR) Program; Off-System Bridges include set-asides from the Surface Transportation Block Grant Program and the Bridge Investment Program

Appendix 2: FFY 2033 -- Highway/Bridge Base Funding Allocation ($000)

Region	NHPP	STP	State Highway (Capital)	State Bridge	Off System Bridges (BOF)	HSIP	Highway Freight Program	Rail Highway Safety	CMAQ	STP TAP Set-Aside	STP-Urban	Carbon Reduction	PROTECT	Bridge Formula Program (BRIP)	Total
DVRPC	82,180	30,190	51,813	37,526	18,698	27,176	0	0	42,595	8,438	90,387	0	0	41,313	430,317
SPC	63,246	42,123	56,162	47,748	34,128	14,988	0	0	24,671	3,891	41,676	0	0	52,795	381,428
Harrisburg	15,671	9,233	13,501	10,429	6,913	4,271	0	0	5,350	997	10,684	0	0	11,432	88,482
Scranton/WB	11,635	7,756	10,263	8,513	5,382	4,543	0	0	0	856	9,170	0	0	8,584	66,704
Lehigh Valley	13,307	7,397	12,049	7,379	5,514	5,745	0	0	6,877	1,419	15,196	0	0	7,848	82,730
NEPA	5,613	8,488	10,228	4,295	5,291	3,599	0	0	578	0	0	0	0	5,055	43,146
SEDA-COG	13,302	10,600	15,026	12,352	9,239	2,584	0	0	0	0	0	0	0	12,018	75,120
Altoona	2,140	2,538	2,780	2,611	2,297	1,390	0	0	0	0	0	0	0	2,472	16,228
Johnstown	4,571	2,732	4,395	3,253	2,106	1,203	0	0	1,527	0	0	0	0	3,005	22,791
Centre County	3,131	2,235	3,313	1,897	1,356	1,185	0	0	0	0	0	0	0	1,969	15,086
Williamsport	3,695	3,647	4,530	3,905	3,152	1,148	0	0	0	0	0	0	0	3,749	23,825
Erie	3,741	4,051	5,807	3,302	2,703	2,272	0	0	0	0	0	0	0	3,013	24,890
Lancaster	10,408	9,233	12,513	7,691	6,712	4,186	0	0	5,519	902	9,663	0	0	7,827	74,653
York	4,096	6,442	9,646	3,456	3,478	3,198	0	0	4,622	521	5,578	0	0	3,509	44,545
Reading	10,581	5,609	9,531	6,106	4,043	3,642	0	0	4,372	597	6,400	0	0	6,743	57,624
Lebanon	1,356	2,073	3,045	1,341	1,372	1,458	0	0	1,419	0	0	0	0	1,265	13,329
Mercer	1,281	3,279	4,003	2,369	2,575	1,198	0	0	0	89	949	0	0	2,319	18,062
Adams	2,540	2,053	3,471	1,026	1,361	1,106	0	0	0	0	0	0	0	1,304	12,861
Franklin	1,310	2,840	3,754	1,435	1,712	1,421	0	0	0	0	0	0	0	1,458	13,930
Total Urban	**253,806**	**162,519**	**235,830**	**166,633**	**118,033**	**86,314**	**0**	**0**	**97,528**	**17,710**	**189,702**	**0**	**0**	**177,677**	**1,505,752**
Northwest	6,886	9,063	12,610	6,493	6,672	1,847	0	0	0	0	0	0	0	6,816	50,385
N. Central	6,094	8,560	11,437	5,619	6,302	1,733	0	0	0	0	0	0	0	6,191	45,937
N. Tier	6,853	9,446	13,921	8,326	8,094	1,601	0	0	0	0	0	0	0	8,388	56,629
S. Alleghenies	6,078	7,964	10,614	7,561	7,124	1,759	0	0	0	0	0	0	0	7,659	48,759
Wayne County	0	1,874	2,577	921	1,247	836	0	0	0	0	0	0	0	941	8,397
Total Rural	**25,909**	**36,908**	**51,160**	**28,920**	**29,440**	**7,776**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29,994**	**210,107**
Interstate Program	805,555	0	69,703	64,382	0	0	60,360	0	0	0	0	0	0	70,430	1,070,430
Statewide Program	0	0	0	0	0	0	0	7,184	0	30,604	0	55,088	62,639	0	155,515
Statewide Reserve	151,273	0	124,650	0	0	40,000	0	0	0	0	0	0	0	0	315,923
RBR Regional Share	0	0	16,065	16,065	0	0	0	0	0	0	0	0	0	0	32,130
GRAND TOTAL	**1,236,542**	**199,427**	**497,407**	**276,000**	**147,472**	**134,090**	**60,360**	**7,184**	**97,528**	**48,314**	**189,702**	**55,088**	**62,639**	**278,102**	**3,289,857**

State Highway and State Bridge fund regional distributions do not include funds distributed but reserved for the Rapid Bridge Replacement (RBR) Program; Off-System Bridges include set-asides from the Surface Transportation Block Grant Program and the Bridge Investment Program

Appendix 2: FFY 2034 -- Highway/Bridge Base Funding Allocation ($000)

Region	NHPP	STP	State Highway (Capital)	State Bridge	Off System Bridges (BOF)	HSIP	Highway Freight Program	Rail Highway Safety	CMAQ	STP TAP Set-Aside	STP-Urban	Carbon Reduction	PROTECT	Bridge Formula Program (BRIP)	Total
DVRPC	82,180	30,190	51,812	37,525	18,698	27,176	0	0	42,595	8,438	90,387	0	0	41,313	430,315
SPC	63,246	42,123	56,140	47,726	34,128	14,988	0	0	24,671	3,891	41,676	0	0	52,795	381,384
Harrisburg	15,671	9,233	13,499	10,426	6,913	4,271	0	0	5,350	997	10,684	0	0	11,432	88,477
Scranton/WB	11,635	7,756	10,262	8,512	5,382	4,543	0	0	0	856	9,170	0	0	8,584	66,701
Lehigh Valley	13,307	7,397	12,045	7,376	5,514	5,745	0	0	6,877	1,419	15,196	0	0	7,848	82,723
NEPA	5,613	8,488	10,222	4,289	5,291	3,599	0	0	578	0	0	0	0	5,055	43,135
SEDA-COG	13,302	10,600	15,024	12,349	9,239	2,584	0	0	0	0	0	0	0	12,018	75,115
Altoona	2,140	2,538	2,779	2,610	2,297	1,390	0	0	0	0	0	0	0	2,472	16,227
Johnstown	4,571	2,732	4,394	3,253	2,106	1,203	0	0	1,527	0	0	0	0	3,005	22,791
Centre County	3,131	2,235	3,312	1,896	1,356	1,185	0	0	0	0	0	0	0	1,969	15,083
Williamsport	3,695	3,647	4,529	3,904	3,152	1,148	0	0	0	0	0	0	0	3,749	23,823
Erie	3,741	4,051	5,807	3,302	2,703	2,272	0	0	0	0	0	0	0	3,013	24,889
Lancaster	10,408	9,233	12,509	7,687	6,712	4,186	0	0	5,519	902	9,663	0	0	7,827	74,646
York	4,096	6,442	9,644	3,454	3,478	3,198	0	0	4,622	521	5,578	0	0	3,509	44,542
Reading	10,581	5,609	9,531	6,105	4,043	3,642	0	0	4,372	597	6,400	0	0	6,743	57,623
Lebanon	1,356	2,073	3,045	1,341	1,372	1,458	0	0	1,419	0	0	0	0	1,265	13,328
Mercer	1,281	3,279	4,003	2,369	2,575	1,198	0	0	0	89	949	0	0	2,319	18,061
Adams	2,540	2,053	3,468	1,023	1,361	1,106	0	0	0	0	0	0	0	1,304	12,857
Franklin	1,310	2,840	3,753	1,435	1,712	1,421	0	0	0	0	0	0	0	1,458	13,929
Total Urban	**253,806**	**162,519**	**235,779**	**166,582**	**118,033**	**86,314**	**0**	**0**	**97,528**	**17,710**	**189,702**	**0**	**0**	**177,677**	**1,505,650**
Northwest	6,886	9,063	12,606	6,489	6,672	1,847	0	0	0	0	0	0	0	6,816	50,378
N. Central	6,094	8,560	11,432	5,614	6,302	1,733	0	0	0	0	0	0	0	6,191	45,926
N. Tier	6,853	9,446	13,917	8,321	8,094	1,601	0	0	0	0	0	0	0	8,388	56,620
S. Alleghenies	6,078	7,964	10,609	7,556	7,124	1,759	0	0	0	0	0	0	0	7,659	48,750
Wayne County	0	1,874	2,577	921	1,247	836	0	0	0	0	0	0	0	941	8,396
Total Rural	**25,909**	**36,908**	**51,141**	**28,901**	**29,440**	**7,776**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29,994**	**210,069**
Interstate Program	805,555	0	69,703	64,382	0	0	60,360	0	0	0	0	0	0	70,430	1,070,430
Statewide Program	0	0	0	0	0	0	0	7,184	0	30,604	0	55,088	62,639	0	155,515
Statewide Reserve	151,273	0	124,650	0	0	40,000	0	0	0	0	0	0	0	0	315,923
RBR Regional Share	0	0	16,135	16,135	0	0	0	0	0	0	0	0	0	0	32,270
GRAND TOTAL	**1,236,542**	**199,427**	**497,407**	**276,000**	**147,472**	**134,090**	**60,360**	**7,184**	**97,528**	**48,314**	**189,702**	**55,088**	**62,639**	**278,102**	**3,289,857**

State Highway and State Bridge fund regional distributions do not include funds distributed but reserved for the Rapid Bridge Replacement (RBR) Program; Off-System Bridges include set-asides from the Surface Transportation Block Grant Program and the Bridge Investment Program

Appendix 2: Total FFY 2031-2034 -- Highway/Bridge Base Funding Allocation ($000)

Region	NHPP	STP	State Highway (Capital)	State Bridge	Off System Bridges (BOF)	HSIP	Highway Freight Program	Rail Highway Safety	CMAQ	STP TAP Set-Aside	STP-Urban	Carbon Reduction	PROTECT	Bridge Formula Program (BRIP)	Total
DVRPC	328,720	120,761	207,254	150,105	74,792	108,705	0	0	170,381	33,754	361,548	0	0	165,250	1,721,270
SPC	252,983	168,492	224,672	191,014	136,513	59,953	0	0	98,685	15,563	166,704	0	0	211,179	1,525,759
Harrisburg	62,686	36,934	54,008	41,719	27,653	17,084	0	0	21,399	3,990	42,735	0	0	45,730	353,936
Scranton/WB	46,541	31,026	41,054	34,054	21,527	18,174	0	0	0	3,424	36,680	0	0	34,338	266,817
Lehigh Valley	53,227	29,588	48,198	29,521	22,055	22,978	0	0	27,507	5,675	60,785	0	0	31,392	330,927
NEPA	22,451	33,952	40,916	17,186	21,163	14,397	0	0	2,311	0	0	0	0	20,221	172,597
SEDA-COG	53,210	42,400	60,107	49,409	36,955	10,336	0	0	0	0	0	0	0	48,070	300,486
Altoona	8,561	10,151	11,120	10,444	9,189	5,562	0	0	0	0	0	0	0	9,887	64,913
Johnstown	18,286	10,927	17,579	13,014	8,422	4,813	0	0	6,106	0	0	0	0	12,018	91,165
Centre County	12,525	8,939	13,254	7,590	5,422	4,740	0	0	0	0	0	0	0	7,876	60,347
Williamsport	14,779	14,589	18,119	15,619	12,609	4,592	0	0	0	0	0	0	0	14,996	95,303
Erie	14,966	16,206	23,228	13,208	10,812	9,086	0	0	0	0	0	0	0	12,053	99,558
Lancaster	41,631	36,930	50,056	30,768	26,848	16,743	0	0	22,076	3,608	38,651	0	0	31,307	298,620
York	16,385	25,768	38,584	13,825	13,914	12,793	0	0	18,486	2,083	22,310	0	0	14,035	178,183
Reading	42,324	22,434	38,127	24,423	16,172	14,570	0	0	17,486	2,390	25,599	0	0	26,974	230,499
Lebanon	5,422	8,291	12,180	5,364	5,489	5,832	0	0	5,677	0	0	0	0	5,060	53,315
Mercer	5,123	13,118	16,013	9,477	10,300	4,790	0	0	0	354	3,796	0	0	9,275	72,247
Adams	10,162	8,211	13,884	4,105	5,446	4,424	0	0	0	0	0	0	0	5,217	51,450
Franklin	5,242	11,361	15,016	5,742	6,848	5,684	0	0	0	0	0	0	0	5,830	55,723
Total Urban	**1,015,223**	**650,076**	**943,371**	**666,585**	**472,131**	**345,255**	**0**	**0**	**390,114**	**70,841**	**758,808**	**0**	**0**	**710,709**	**6,023,113**
Northwest	27,542	36,253	50,443	25,974	26,688	7,387	0	0	0	0	0	0	0	27,262	201,549
N. Central	24,374	34,241	45,754	22,482	25,209	6,934	0	0	0	0	0	0	0	24,764	183,759
N. Tier	27,410	37,783	55,690	33,308	32,376	6,406	0	0	0	0	0	0	0	33,551	226,524
S. Alleghenies	24,310	31,857	42,462	30,248	28,497	7,036	0	0	0	0	0	0	0	30,637	195,047
Wayne County	0	7,498	10,310	3,686	4,989	3,342	0	0	0	0	0	0	0	3,763	33,588
Total Rural	**103,637**	**147,632**	**204,659**	**115,699**	**117,759**	**31,105**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**119,978**	**840,468**
Interstate Program	3,222,220	0	278,811	257,529	0	0	241,441	0	0	0	0	0	0	281,721	4,281,722
Statewide Program	0	0	0	0	0	0	0	28,737	0	122,414	0	220,352	250,556	0	622,058
Statewide Reserve	605,090	0	498,600	0	0	160,000	0	0	0	0	0	0	0	0	1,263,690
RBR Regional Share	0	0	64,188	64,188	0	0	0	0	0	0	0	0	0	0	128,375
GRAND TOTAL	**4,946,170**	**797,708**	**1,989,629**	**1,104,000**	**589,890**	**536,360**	**241,441**	**28,737**	**390,114**	**193,255**	**758,808**	**220,352**	**250,556**	**1,112,407**	**13,159,426**

State Highway and State Bridge fund regional distributions do not include funds distributed but reserved for the Rapid Bridge Replacement (RBR) Program; Off-System Bridges include set-asides from the Surface Transportation Block Grant Program and the Bridge Investment Program

Appendix 3 -- Rapid Bridge Replacement Program -- MPO/RPO Share ($000) (50% A-581)

MPO/RPO	RBR Deck Area	% Share	2023	2024	2025	2026	TIP TOTAL	2027	2028	2029	2030	2031	2032	2033	2034	Total TYP
DVRPC	12,755.5	1.46%	226.89	227.69	228.09	228.97	**911.63**	229.69	230.57	231.04	231.96	232.76	233.74	234.29	235.31	**2,770.99**
SPC	276,302.9	31.59%	4,914.71	4,932.09	4,940.77	4,959.73	**19,747.30**	4,975.52	4,994.48	5,004.74	5,024.49	5,041.86	5,063.19	5,075.03	5,097.15	**60,023.76**
Harrisburg	34,925.0	3.99%	621.23	623.42	624.52	626.92	**2,496.08**	628.91	631.31	632.61	635.10	637.30	639.99	641.49	644.29	**7,587.07**
Scranton/WB	13,629.0	1.56%	242.42	243.28	243.71	244.65	**974.06**	245.42	246.36	246.87	247.84	248.70	249.75	250.33	251.42	**2,960.75**
Lehigh Valley	41,874.0	4.79%	744.83	747.46	748.78	751.65	**2,992.72**	754.05	756.92	758.47	761.47	764.10	767.33	769.13	772.48	**9,096.66**
NEPA	70,903.5	8.11%	1,261.19	1,265.65	1,267.88	1,272.74	**5,067.45**	1,276.79	1,281.66	1,284.29	1,289.36	1,293.82	1,299.29	1,302.33	1,308.00	**15,403.00**
SEDA-COG	30,389.6	3.47%	540.55	542.46	543.42	545.50	**2,171.94**	547.24	549.33	550.45	552.63	554.54	556.88	558.19	560.62	**6,601.81**
Altoona	6,584.4	0.75%	117.12	117.53	117.74	118.19	**470.59**	118.57	119.02	119.26	119.74	120.15	120.66	120.94	121.47	**1,430.39**
Johnstown	3,702.1	0.42%	65.85	66.08	66.20	66.45	**264.59**	66.67	66.92	67.06	67.32	67.55	67.84	68.00	68.30	**804.24**
Centre County	16,835.4	1.92%	299.46	300.52	301.05	302.20	**1,203.22**	303.16	304.32	304.94	306.15	307.21	308.50	309.23	310.57	**3,657.30**
Williamsport	11,654.8	1.33%	207.31	208.04	208.41	209.21	**832.97**	209.87	210.67	211.11	211.94	212.67	213.57	214.07	215.00	**2,531.88**
Erie	2,079.0	0.24%	36.98	37.11	37.18	37.32	**148.59**	37.44	37.58	37.66	37.81	37.94	38.10	38.19	38.35	**451.64**
Lancaster	45,475.8	5.20%	808.90	811.76	813.19	816.31	**3,250.14**	818.91	822.02	823.71	826.96	829.82	833.33	835.28	838.92	**9,879.12**
York	20,394.8	2.33%	362.77	364.05	364.69	366.09	**1,457.61**	367.26	368.66	369.42	370.87	372.16	373.73	374.60	376.24	**4,430.55**
Reading	8,141.2	0.93%	144.81	145.32	145.58	146.14	**581.85**	146.60	147.16	147.46	148.05	148.56	149.19	149.53	150.19	**1,768.59**
Lebanon	1,655.0	0.19%	29.44	29.54	29.59	29.71	**118.28**	29.80	29.92	29.98	30.10	30.20	30.33	30.40	30.53	**359.53**
Mercer	3,586.9	0.41%	63.80	64.03	64.14	64.39	**256.35**	64.59	64.84	64.97	65.23	65.45	65.73	65.88	66.17	**779.21**
Adams	28,042.5	3.21%	498.80	500.57	501.45	503.37	**2,004.19**	504.98	506.90	507.94	509.94	511.71	513.87	515.07	517.32	**6,091.92**
Franklin	8,918.4	1.02%	158.64	159.20	159.48	160.09	**637.40**	160.60	161.21	161.54	162.18	162.74	163.43	163.81	164.52	**1,937.42**
Northwest	44,543.1	5.09%	792.31	795.11	796.51	799.56	**3,183.48**	802.11	805.17	806.82	810.00	812.80	816.24	818.15	821.72	**9,676.50**
N. Central	67,603.4	7.73%	1,202.49	1,206.74	1,208.87	1,213.50	**4,831.60**	1,217.37	1,222.01	1,224.52	1,229.35	1,233.60	1,238.82	1,241.72	1,247.13	**14,686.09**
N. Tier	57,527.4	6.58%	1,023.26	1,026.88	1,028.69	1,032.64	**4,111.47**	1,035.92	1,039.87	1,042.01	1,046.12	1,049.74	1,054.18	1,056.64	1,061.25	**12,497.19**
S. Alleghenies	60,493.3	6.92%	1,076.02	1,079.82	1,081.72	1,085.87	**4,323.44**	1,089.33	1,093.48	1,095.73	1,100.05	1,103.86	1,108.53	1,111.12	1,115.96	**13,141.50**
Wayne	6,618.9	0.76%	117.73	118.15	118.36	118.81	**473.05**	119.19	119.64	119.89	120.36	120.78	121.29	121.57	122.10	**1,437.88**
Total (No IM)	**874,635.9**	**100.00%**	**15,557.50**	**15,612.50**	**15,640.00**	**15,700.00**	**62,510.00**	**15,750.00**	**15,810.00**	**15,842.50**	**15,905.00**	**15,960.00**	**16,027.50**	**16,065.00**	**16,135.00**	**190,005.00**

Rapid Bridge Replacement Program -- MPO/RPO Share ($000) (50% A-185)

MPO/RPO	RBR Deck Area	% Share	2023	2024	2025	2026	TIP TOTAL	2027	2028	2029	2030	2031	2032	2033	2034	Total TYP
DVRPC	12,755.5	1.46%	226.89	227.69	228.09	228.97	**911.63**	229.69	230.57	231.04	231.96	232.76	233.74	234.29	235.31	**2,770.99**
SPC	276,302.9	31.59%	4,914.71	4,932.09	4,940.77	4,959.73	**19,747.30**	4,975.52	4,994.48	5,004.74	5,024.49	5,041.86	5,063.19	5,075.03	5,097.15	**60,023.76**
Harrisburg	34,925.0	3.99%	621.23	623.42	624.52	626.92	**2,496.08**	628.91	631.31	632.61	635.10	637.30	639.99	641.49	644.29	**7,587.07**
Scranton/WB	13,629.0	1.56%	242.42	243.28	243.71	244.65	**974.06**	245.42	246.36	246.87	247.84	248.70	249.75	250.33	251.42	**2,960.75**
Lehigh Valley	41,874.0	4.79%	744.83	747.46	748.78	751.65	**2,992.72**	754.05	756.92	758.47	761.47	764.10	767.33	769.13	772.48	**9,096.66**
NEPA	70,903.5	8.11%	1,261.19	1,265.65	1,267.88	1,272.74	**5,067.45**	1,276.79	1,281.66	1,284.29	1,289.36	1,293.82	1,299.29	1,302.33	1,308.00	**15,403.00**
SEDA-COG	30,389.6	3.47%	540.55	542.46	543.42	545.50	**2,171.94**	547.24	549.33	550.45	552.63	554.54	556.88	558.19	560.62	**6,601.81**
Altoona	6,584.4	0.75%	117.12	117.53	117.74	118.19	**470.59**	118.57	119.02	119.26	119.74	120.15	120.66	120.94	121.47	**1,430.39**
Johnstown	3,702.1	0.42%	65.85	66.08	66.20	66.45	**264.59**	66.67	66.92	67.06	67.32	67.55	67.84	68.00	68.30	**804.24**
Centre County	16,835.4	1.92%	299.46	300.52	301.05	302.20	**1,203.22**	303.16	304.32	304.94	306.15	307.21	308.50	309.23	310.57	**3,657.30**
Williamsport	11,654.8	1.33%	207.31	208.04	208.41	209.21	**832.97**	209.87	210.67	211.11	211.94	212.67	213.57	214.07	215.00	**2,531.88**
Erie	2,079.0	0.24%	36.98	37.11	37.18	37.32	**148.59**	37.44	37.58	37.66	37.81	37.94	38.10	38.19	38.35	**451.64**
Lancaster	45,475.8	5.20%	808.90	811.76	813.19	816.31	**3,250.14**	818.91	822.02	823.71	826.96	829.82	833.33	835.28	838.92	**9,879.12**
York	20,394.8	2.33%	362.77	364.05	364.69	366.09	**1,457.61**	367.26	368.66	369.42	370.87	372.16	373.73	374.60	376.24	**4,430.55**
Reading	8,141.2	0.93%	144.81	145.32	145.58	146.14	**581.85**	146.60	147.16	147.46	148.05	148.56	149.19	149.53	150.19	**1,768.59**
Lebanon	1,655.0	0.19%	29.44	29.54	29.59	29.71	**118.28**	29.80	29.92	29.98	30.10	30.20	30.33	30.40	30.53	**359.53**
Mercer	3,586.9	0.41%	63.80	64.03	64.14	64.39	**256.35**	64.59	64.84	64.97	65.23	65.45	65.73	65.88	66.17	**779.21**
Adams	28,042.5	3.21%	498.80	500.57	501.45	503.37	**2,004.19**	504.98	506.90	507.94	509.94	511.71	513.87	515.07	517.32	**6,091.92**
Franklin	8,918.4	1.02%	158.64	159.20	159.48	160.09	**637.40**	160.60	161.21	161.54	162.18	162.74	163.43	163.81	164.52	**1,937.42**
Northwest	44,543.1	5.09%	792.31	795.11	796.51	799.56	**3,183.48**	802.11	805.17	806.82	810.00	812.80	816.24	818.15	821.72	**9,676.50**
N. Central	67,603.4	7.73%	1,202.49	1,206.74	1,208.87	1,213.50	**4,831.60**	1,217.37	1,222.01	1,224.52	1,229.35	1,233.60	1,238.82	1,241.72	1,247.13	**14,686.09**
N. Tier	57,527.4	6.58%	1,023.26	1,026.88	1,028.69	1,032.64	**4,111.47**	1,035.92	1,039.87	1,042.01	1,046.12	1,049.74	1,054.18	1,056.64	1,061.25	**12,497.19**
S. Alleghenies	60,493.3	6.92%	1,076.02	1,079.82	1,081.72	1,085.87	**4,323.44**	1,089.33	1,093.48	1,095.73	1,100.05	1,103.86	1,108.53	1,111.12	1,115.96	**13,141.50**
Wayne	6,618.9	0.76%	117.73	118.15	118.36	118.81	**473.05**	119.19	119.64	119.89	120.36	120.78	121.29	121.57	122.10	**1,437.88**
Total (No IM)	**874,635.9**	**100.00%**	**15,557.50**	**15,612.50**	**15,640.00**	**15,700.00**	**62,510.00**	**15,750.00**	**15,810.00**	**15,842.50**	**15,905.00**	**15,960.00**	**16,027.50**	**16,065.00**	**16,135.00**	**190,005.00**

Appendix 3: Rapid Bridge Replacement Program -- MPO/RPO Share ($000) Total (A-581 + A-185)

MPO/RPO	RBR Deck Area	% Share	2023	2024	2025	2026	TIP TOTAL	2027	2028	2029	2030	2031	2032	2033	2034	Total TYP
DVRPC	12,755.5	1.46%	453.77	455.38	456.18	457.93	**1,823.26**	459.39	461.14	462.09	463.91	465.51	467.48	468.58	470.62	**5,541.98**
SPC	276,302.9	31.59%	9,829.42	9,864.17	9,881.55	9,919.45	**39,494.59**	9,951.05	9,988.95	10,009.49	10,048.98	10,083.73	10,126.37	10,150.07	10,194.29	**120,047.51**
Harrisburg	34,925.0	3.99%	1,242.45	1,246.84	1,249.04	1,253.83	**4,992.16**	1,257.82	1,262.62	1,265.21	1,270.20	1,274.59	1,279.99	1,282.98	1,288.57	**15,174.14**
Scranton/WB	13,629.0	1.56%	484.85	486.56	487.42	489.29	**1,948.12**	490.85	492.72	493.73	495.68	497.39	499.50	500.67	502.85	**5,921.50**
Lehigh Valley	41,874.0	4.79%	1,489.66	1,494.93	1,497.56	1,503.30	**5,985.45**	1,508.09	1,513.84	1,516.95	1,522.93	1,528.20	1,534.66	1,538.25	1,544.96	**18,193.33**
NEPA	70,903.5	8.11%	2,522.38	2,531.30	2,535.75	2,545.48	**10,134.91**	2,553.59	2,563.32	2,568.59	2,578.72	2,587.64	2,598.58	2,604.66	2,616.01	**30,806.01**
SEDA-COG	30,389.6	3.47%	1,081.10	1,084.93	1,086.84	1,091.01	**4,343.87**	1,094.48	1,098.65	1,100.91	1,105.25	1,109.07	1,113.76	1,116.37	1,121.24	**13,203.61**
Altoona	6,584.4	0.75%	234.24	235.07	235.48	236.38	**941.17**	237.14	238.04	238.53	239.47	240.30	241.32	241.88	242.93	**2,860.78**
Johnstown	3,702.1	0.42%	131.70	132.17	132.40	132.91	**529.18**	133.33	133.84	134.11	134.64	135.11	135.68	136.00	136.59	**1,608.48**
Centre County	16,835.4	1.92%	598.92	601.03	602.09	604.40	**2,406.44**	606.33	608.64	609.89	612.29	614.41	617.01	618.45	621.15	**7,314.61**
Williamsport	11,654.8	1.33%	414.62	416.08	416.82	418.41	**1,665.93**	419.75	421.35	422.21	423.88	425.34	427.14	428.14	430.01	**5,063.75**
Erie	2,079.0	0.24%	73.96	74.22	74.35	74.64	**297.17**	74.88	75.16	75.31	75.61	75.87	76.19	76.37	76.71	**903.28**
Lancaster	45,475.8	5.20%	1,617.79	1,623.51	1,626.37	1,632.61	**6,500.29**	1,637.81	1,644.05	1,647.43	1,653.93	1,659.65	1,666.67	1,670.57	1,677.85	**19,758.23**
York	20,394.8	2.33%	725.54	728.11	729.39	732.19	**2,915.22**	734.52	737.32	738.83	741.75	744.31	747.46	749.21	752.47	**8,861.09**
Reading	8,141.2	0.93%	289.62	290.65	291.16	292.27	**1,163.70**	293.21	294.32	294.93	296.09	297.11	298.37	299.07	300.37	**3,537.17**
Lebanon	1,655.0	0.19%	58.88	59.08	59.19	59.42	**236.56**	59.60	59.83	59.95	60.19	60.40	60.65	60.80	61.06	**719.06**
Mercer	3,586.9	0.41%	127.60	128.05	128.28	128.77	**512.71**	129.18	129.67	129.94	130.45	130.90	131.46	131.77	132.34	**1,558.43**
Adams	28,042.5	3.21%	997.61	1,001.13	1,002.90	1,006.74	**4,008.38**	1,009.95	1,013.80	1,015.88	1,019.89	1,023.42	1,027.74	1,030.15	1,034.64	**12,183.85**
Franklin	8,918.4	1.02%	317.27	318.39	318.95	320.18	**1,274.79**	321.20	322.42	323.08	324.36	325.48	326.86	327.62	329.05	**3,874.85**
Northwest	44,543.1	5.09%	1,584.61	1,590.21	1,593.02	1,599.13	**6,366.97**	1,604.22	1,610.33	1,613.64	1,620.01	1,625.61	1,632.48	1,636.30	1,643.43	**19,352.99**
N. Central	67,603.4	7.73%	2,404.98	2,413.48	2,417.73	2,427.01	**9,663.19**	2,434.74	2,444.01	2,449.03	2,458.70	2,467.20	2,477.63	2,483.43	2,494.25	**29,372.19**
N. Tier	57,527.4	6.58%	2,046.53	2,053.76	2,057.38	2,065.27	**8,222.94**	2,071.85	2,079.74	2,084.02	2,092.24	2,099.47	2,108.35	2,113.29	2,122.49	**24,994.39**
S. Alleghenies	60,493.3	6.92%	2,152.04	2,159.65	2,163.45	2,171.75	**8,646.88**	2,178.67	2,186.97	2,191.46	2,200.11	2,207.71	2,217.05	2,222.24	2,231.92	**26,283.00**
Wayne	6,618.9	0.76%	235.47	236.30	236.71	237.62	**946.10**	238.38	239.29	239.78	240.73	241.56	242.58	243.15	244.21	**2,875.77**
Total (No IM)	**874,635.9**	**100.00%**	**31,115.00**	**31,225.00**	**31,280.00**	**31,400.00**	**125,020.00**	**31,500.00**	**31,620.00**	**31,685.00**	**31,810.00**	**31,920.00**	**32,055.00**	**32,130.00**	**32,270.00**	**380,010.00**

The Asset Management Factor (AMF) is a value that is proposed to be added to the National Highway Performance Program (NHPP) distribution formula. This factor will consider necessary treatment needs (by dollar value) consistent with Pennsylvania's Transportation Asset Management Plan (TAMP) to maintain existing pavements and bridges in a state of good repair. For use in the formula, each county/region's dollar value will be divided by the statewide total to produce a ratio of the overall statewide needs.

To calculate the AMF, the Bureau of Maintenance and Operations (BOMO) Asset Management Division will consider the following information.

Pavement:

- Condition Surveys (STAMPP Program):
  - Since 1997, Automated Pavement Distress Condition Surveying program (Videologging)
  - Contractor also collects pavement condition for Local Federal Aid roads
  - Unpaved Roads, Shoulder, Drainage, Guide Rail condition data is collect via manual surveys

- Condition Survey Field Manuals:
  - Publication 336: Pavement (Bituminous & Jointed Concrete)
  - Publication 343: Continuously Reinforced Concrete & Unpaved Roads
  - Publication 33: Shoulder And Guide Rail
  - Publication 73: Storm Water Facility

- Treatments/Dollar Needs:
  - For each segment, the latest condition data is used to determine the appropriate treatment(s) for pavement, shoulder, drainage, and guide rail. Treatments are determined by matrices, with an example as follows:

Bituminous Pavement Fatigue Cracking (High Severity)

% Length Extent	Interstate / NHS Expressway	NHS – NON-Expressway	NON – NHS ≥ 2000 ADT	NON – NHS < 2000 ADT
>0 – 10%	10	10	10	5
11 – 25%	11	11	11	11
26 – 50%	21	11	11	11
51 – 75%	23	11	11	19
> 75%	23	23	23	23

0 - Routine Maintenance	1 - Crack Seal	2 - Spray Patch	3 - Skin Patch
4 - Manual Patch	5 - Manual Patch, Skin Patch	6 - Mechanized Patch	7 - Mill, Manual Patch
8 - Mill, Mechanized Patch	9 - Mill, Mechanized Edge Patch	10 - Base Repair, Manual Patch	11 - Base Repair, Mechanized Patch
12 - Seal Coat	13 - Level, Seal Coat	14 - Widening, Seal Coat	15 - Scratch, Level, Seal Coat
16 - Microsurface/ Thin Overlay	17 - Level, Resurface	18 - Mill, Conc. Patch, Level, Resurface	19 - Level, Resurface, Base Repair
20 - Mill, Level, Resurface	21 - Mill, Level, Resurface, Base Repair	22 - Construct Paved Shoulder	23 - Reconstruction

  - For each segment, the quantities of treatment materials are determined.
  - For each segment, the costs of the treatments are determined.
  - Cost of Treatments = Dollar Needs
  - Dollar Needs are summed for each SR, and County, and expressed as a proportion of the total in the Commonwealth. The District or Planning region totals can also be expressed as a proportion of the total.

Bridges

- Condition Surveys
  - Bridge inspections have been performed through progressive Federal minimum standards since 1971
  - Bridges are inspected every 2 years or less, depending on condition

- Condition Survey Field Manual
  - Publication 100A

- Treatment / Dollar needs
  - For each bridge, the latest condition data is used to determine the appropriate treatment(s) for the structure. Treatments are determined by matrices, with an example as follows:
  - For each bridge, the treatment and cost are determined.
  - Total cost of treatments = Dollar Needs
  - Dollar Needs are summed for each County, and expressed as a proportion of the total in the Commonwealth. The District or Planning region totals can also be expressed as a proportion of the total.

Appendix 5: Financial Guidance Distribution Formula Summary

Category	2023 Financial Guidance	
NHPP	40% Bridge	3/4 Deck Area Non-Interstate NHS Bridges > 20 feet
		1/4 Bridge AMF*
	60% Highway	1/4 Non-Interstate NHS Lane Miles
		1/4 Non-Interstate NHS VMT
		1/4 Non-Interstate NHS Truck VMT
		1/4 Pavement AMF*
	Interstate -- 26/55ths of Apportionment in 2021; $50,000,000 additional in each subsequent year to a maximum of $1 billion for the entire program	
STP	40% Bridge	Deck Area Non-NHS State and Local Bridges > 20 feet
	60% Highway	1/2 Non-NHS Lane Miles
		1/4 Non-NHS VMT
		1/4 Non-NHS Truck VMT
State Highway	1/4 VMT	
	1/4 Truck VMT	
	1/2 Lane Miles	
State Bridge	Deck Area State bridges > 8 feet and Local bridges > 20 feet	
Federal Off-System Bridge	Deck Area State and Local Bridges > 20 feet	
HSIP	39:1 Crash Severity Weighting (Fatal and Injury Crashses versus Property Damage only Crashes) $500,000 base to each Planning Region, $35 million Statewide	
Rail	Statewide Program	
NHFP	Interstate Program	
CMAQ	Population with CMAQ Factor Multiplier Based upon regional air quality classification for non-attainment/maintenance counties	
TAP	Statewide Program; funds designated to urban areas distributed according to federal formula	
STP-Urban	Funds distributed according to federal formula	
Bridge Investment Program	60% NHS Bridges	3/4 Bridge Deck Area NHS and Interstate Bridges > 20 feet
		1/4 Bridge AMF*
	40% STP Bridge	Deck Area Non-NHS State and Local Bridges > 20 feet

* Asset Management Factor

Appendix 6: 2023 Estimated State Transit Funds ($000)

	OPERATOR	Asset * Improvement	Operating # Assistance	Shared Ride @	Total
URBAN	SEPTA	364,290	711,527	15,100	1,090,917
	Krapf's Coach - Chester	0	18	0	18
	Upper Merion	0	19	0	19
	PAAC	118,630	244,850	12,500	375,980
	AMTRAN -- Blair	0	3,316	0	3,316
	BCTA -- Beaver	0	4,195	591	4,786
	CAT -- Dauphin	0	9,437	1,380	10,817
	CATA -- Centre	0	7,631	293	7,924
	CCTA -- Cambria	0	7,527	921	8,448
	COLTS -- Lackawanna	0	7,563	1,946	9,509
	CPTA -- Adams, Columbia, Cumberland, Franklin, Montour, Northumberland, Perry, Snyder, Union and York	0	7,620	5,700	13,320
	EMTA -- Erie	0	10,882	1,216	12,098
	FACT -- Fayette	0	1,326	577	1,903
	HPT -- Hazleton	0	2,175	0	2,175
	LANTA -- Lehigh-Northampton	0	19,085	3,628	22,713
	LCTA -- Luzerne	0	6,412	694	7,106
	Martz	0	13	0	13
	LT -- Lebanon	0	2,157	581	2,738
	MMVTA -- Mid Mon Valley	0	3,173	0	3,173
	MCTA -- Monroe	0	2,233	1,372	3,605
	Pottstown -- Montgomery	0	1,407	0	1,407
	SCTA -- South Central	0	17,665	4,612	22,277
	SVSS -- Shenango Valley	0	868	963	1,831
	WCTA -- Washington	0	1,639	2,215	3,854
	WBT -- Williamsport	0	4,643	0	4,643
	WCTA -- Westmoreland	0	4,351	1,657	6,008
	Unallocated Other Urban Systems	0	0	0	0
	Urban Total	**482,920**	**1,081,732**	**55,946**	**1,620,598**
RURAL	ATA	0	6,001	453	6,454
	BTA -- Butler	0	1,031	0	1,031
	Carbon	0	273	506	779
	CATA -- Crawford	0	1,518	785	2,303
	EMTA -- Endless Mtns.	0	1,149	1,291	2,440
	ICTA -- Indiana	0	1,855	408	2,263
	Mid-County -- Armstrong	0	657	315	972
	Mt. Carmel	0	342	0	342
	NCATA -- New Castle	0	4,783	0	4,783
	STS -- Schuylkill	0	1,747	1,032	2,779
	TAWC -- Warren	0	755	498	1,253
	Rural Total	**0**	**20,111**	**5,288**	**25,399**
Shared-Ride Only	ALLIED COORD. TRANS. (Lawrence Co.)	0	0	420	420
	BLAIR COUNTY SENIOR SERVICES	0	0	1,156	1,156
	BUCKS COUNTY TRANSPORT, INC.	0	0	2,897	2,897
	BUTLER COUNTY	0	0	457	457
	CENTRE COUNTY	0	0	653	653
	CLARION COUNTY	0	0	470	470
	COMMUNITY TRANS OF DELAWARE	0	0	3,012	3,012
	FOREST COUNTY	0	0	358	358
	GREENE COUNTY	0	0	379	379
	HUNTINGDON-BEDFORD-FULTON AAA	0	0	1,159	1,159
	K-CAB (Columbia Co.)	0	0	0	0
	KRAPF'S (Chester Co.)	0	0	2,715	2,715
	MIFFLIN-JUNIATA AA ON AGING	0	0	430	430
	PERRY COUNTY	0	0	0	0
	PIKE COUNTY	0	0	470	470
	SOMERSET COUNTY	0	0	249	249
	STEP (Clinton/ Lycoming)	0	0	1,015	1,015
	SUBURBAN TRANS (Montgomery)	0	0	4,390	4,390
	Susquehanna Co.	0	0	812	812
	UNION-SNYDER TRANS. ALLIANCE	0	0	0	0
	WAYNE COUNTY	0	0	1,147	1,147
	Shared-Ride Total	**0**	**0**	**22,189**	**22,189**
Other Agencies	Bucks County Transport	0	638	0	638
	Chester County TMA	0	929	0	929
	Philadelphia Unemployment Project	0	367	0	367
	Philly Phlash	0	918	0	918
	ACTA	0	668	0	668
	Heritage Health Foundation	0	887	0	887
	Other Agency Total	**0**	**4,407**	**0**	**4,407**
	PennDOT Discretion	27,630	0	0	27,630
	Other Unallocated (Urban/Rural)	41,990	27,656	0	69,646
	GRAND TOTAL	**552,540**	**1,133,906**	**83,423**	**1,769,869**

* Act 89 allocates Asset Improvement funds in the following way - PennDOT 5%, the remaining 95% is distributed as follows - SEPTA 69.4%, PAAC 22.6% and other systems 8%. This projection is for SFY 22-23.

Distribution for all fiscal years is based on FY 2018-19 operating statistics and uses SFY20-21 allocations. Additional operating funding is projected using estimated revenues. The additional funding will be distributed using performance factors from the prior year and is captured on the "Other Unallocated" line, under the 1513 Operating column.

@ Shared Ride allocation in SFY 18-19 equal the actual grants for both the Shared-Ride and PwD Programs. In subsequent years, the FY 18-19 Shared-Ride amounts are prorated based on the reduction of available lottery funding for the program in FY 19-20. PwD amounts remain constant.

Date Prepared: 5/25/2021

Appendix 6: 2024 Estimated State Transit Funds ($000)

	OPERATOR	Asset * Improvement	Operating # Assistance	Shared Ride @	Total
URBAN	SEPTA	369,550	711,527	15,100	1,096,177
	Krapf's Coach - Chester	0	18	0	18
	Upper Merion	0	19	0	19
	PAAC	120,340	244,850	12,500	377,690
	AMTRAN -- Blair	0	3,316	0	3,316
	BCTA -- Beaver	0	4,195	591	4,786
	CAT -- Dauphin	0	9,437	1,380	10,817
	CATA -- Centre	0	7,631	293	7,924
	CCTA -- Cambria	0	7,527	921	8,448
	COLTS -- Lackawanna	0	7,563	1,946	9,509
	CPTA -- Adams, Columbia, Cumberland, Franklin, Montour, Northumberland, Perry, Snyder, Union and York	0	7,620	5,700	13,320
	EMTA -- Erie	0	10,882	1,216	12,098
	FACT -- Fayette	0	1,326	577	1,903
	HPT -- Hazleton	0	2,175	0	2,175
	LANTA -- Lehigh-Northampton	0	19,085	3,628	22,713
	LCTA -- Luzerne	0	6,412	694	7,106
	Martz	0	13	0	13
	LT -- Lebanon	0	2,157	581	2,738
	MMVTA -- Mid Mon Valley	0	3,173	0	3,173
	MCTA -- Monroe	0	2,233	1,372	3,605
	Pottstown -- Montgomery	0	1,407	0	1,407
	SCTA -- South Central	0	17,665	4,612	22,277
	SVSS -- Shenango Valley	0	868	963	1,831
	WCTA -- Washington	0	1,639	2,215	3,854
	WBT -- Williamsport	0	4,643	0	4,643
	WCTA -- Westmoreland	0	4,351	1,657	6,008
	Unallocated Other Urban Systems	0	0	0	0
	Urban Total	**489,890**	**1,081,732**	**55,946**	**1,627,568**
RURAL	ATA	0	6,001	453	6,454
	BTA -- Butler	0	1,031	0	1,031
	Carbon	0	273	506	779
	CATA -- Crawford	0	1,518	785	2,303
	EMTA -- Endless Mtns.	0	1,149	1,291	2,440
	ICTA -- Indiana	0	1,855	408	2,263
	Mid-County -- Armstrong	0	657	315	972
	Mt. Carmel	0	342	0	342
	NCATA -- New Castle	0	4,783	0	4,783
	STS -- Schuylkill	0	1,747	1,032	2,779
	TAWC -- Warren	0	755	498	1,253
	Rural Total	**0**	**20,111**	**5,288**	**25,399**
Shared-Ride Only	ALLIED COORD. TRANS. (Lawrence Co.)	0	0	420	420
	BLAIR COUNTY SENIOR SERVICES	0	0	1,156	1,156
	BUCKS COUNTY TRANSPORT, INC.	0	0	2,897	2,897
	BUTLER COUNTY	0	0	457	457
	CENTRE COUNTY	0	0	653	653
	CLARION COUNTY	0	0	470	470
	COMMUNITY TRANS OF DELAWARE	0	0	3,012	3,012
	FOREST COUNTY	0	0	358	358
	GREENE COUNTY	0	0	379	379
	HUNTINGDON-BEDFORD-FULTON AAA	0	0	1,159	1,159
	K-CAB (Columbia Co.)	0	0	0	0
	KRAPF'S (Chester Co.)	0	0	2,715	2,715
	MIFFLIN-JUNIATA AA ON AGING	0	0	430	430
	PERRY COUNTY	0	0	0	0
	PIKE COUNTY	0	0	470	470
	SOMERSET COUNTY	0	0	249	249
	STEP (Clinton/ Lycoming)	0	0	1,015	1,015
	SUBURBAN TRANS (Montgomery)	0	0	4,390	4,390
	Susquehanna Co.	0	0	812	812
	UNION-SNYDER TRANS. ALLIANCE	0	0	0	0
	WAYNE COUNTY	0	0	1,147	1,147
	Shared-Ride Total	**0**	**0**	**22,189**	**22,189**
Other Agencies	Bucks County Transport	0	638	0	638
	Chester County TMA	0	929	0	929
	Philadelphia Unemployment Project	0	367	0	367
	Philly Phlash	0	918	0	918
	ACTA	0	668	0	668
	Heritage Health Foundation	0	887	0	887
	Other Agency Total	**0**	**4,407**	**0**	**4,407**
	PennDOT Discretion	28,030	0	0	28,030
	Other Unallocated (Urban/Rural)	42,600	56,004	0	98,604
	GRAND TOTAL	**560,520**	**1,162,254**	**83,423**	**1,806,197**

* Act 89 allocates Asset Improvement funds in the following way - PennDOT 5%, the remaining 95% is distributed as follows - SEPTA 69.4%, PAAC 22.6% and other systems 8%. This projection is for SFY 23-24.

Distribution for all fiscal years is based on FY 2018-19 operating statistics and uses SFY20-21 allocations. Additional operating funding is projected using estimated revenues. The additional funding will be distributed using performance factors from the prior year and is captured on the "Other Unallocated" line, under the 1513 Operating column.

@ Shared Ride allocation in SFY 18-19 equal the actual grants for both the Shared-Ride and PwD Programs. In subsequent years, the FY 18-19 Shared-Ride amounts are prorated based on the reduction of available lottery funding for the program in FY 19-20. PwD amounts remain constant.

Date Prepared: 5/25/2021

Appendix 6: 2025 Estimated State Transit Funds ($000)

	OPERATOR	Asset * Improvement	Operating # Assistance	Shared Ride @	Total
URBAN	SEPTA	373,780	711,527	15,100	1,100,407
	Krapf's Coach - Chester	0	18	0	18
	Upper Merion	0	19	0	19
	PAAC	121,720	244,850	12,500	379,070
	AMTRAN -- Blair	0	3,316	0	3,316
	BCTA -- Beaver	0	4,195	591	4,786
	CAT -- Dauphin	0	9,437	1,380	10,817
	CATA -- Centre	0	7,631	293	7,924
	CCTA -- Cambria	0	7,527	921	8,448
	COLTS -- Lackawanna	0	7,563	1,946	9,509
	CPTA -- Adams, Columbia, Cumberland, Franklin, Montour, Northumberland, Perry, Snyder, Union and York	0	7,620	5,700	13,320
	EMTA -- Erie	0	10,882	1,216	12,098
	FACT -- Fayette	0	1,326	577	1,903
	HPT -- Hazleton	0	2,175	0	2,175
	LANTA -- Lehigh-Northampton	0	19,085	3,628	22,713
	LCTA -- Luzerne	0	6,412	694	7,106
	Martz	0	13	0	13
	LT -- Lebanon	0	2,157	581	2,738
	MMVTA -- Mid Mon Valley	0	3,173	0	3,173
	MCTA -- Monroe	0	2,233	1,372	3,605
	Pottstown -- Montgomery	0	1,407	0	1,407
	SCTA -- South Central	0	17,665	4,612	22,277
	SVSS -- Shenango Valley	0	868	963	1,831
	WCTA -- Washington	0	1,639	2,215	3,854
	WBT -- Williamsport	0	4,643	0	4,643
	WCTA -- Westmoreland	0	4,351	1,657	6,008
	Unallocated Other Urban Systems	0	0	0	0
	Urban Total	**495,500**	**1,081,732**	**55,946**	**1,633,178**
RURAL	ATA	0	6,001	453	6,454
	BTA -- Butler	0	1,031	0	1,031
	Carbon	0	273	506	779
	CATA -- Crawford	0	1,518	785	2,303
	EMTA -- Endless Mtns.	0	1,149	1,291	2,440
	ICTA -- Indiana	0	1,855	408	2,263
	Mid-County -- Armstrong	0	657	315	972
	Mt. Carmel	0	342	0	342
	NCATA -- New Castle	0	4,783	0	4,783
	STS -- Schuylkill	0	1,747	1,032	2,779
	TAWC -- Warren	0	755	498	1,253
	Rural Total	**0**	**20,111**	**5,288**	**25,399**
Shared-Ride Only	ALLIED COORD. TRANS. (Lawrence Co.)	0	0	420	420
	BLAIR COUNTY SENIOR SERVICES	0	0	1,156	1,156
	BUCKS COUNTY TRANSPORT, INC.	0	0	2,897	2,897
	BUTLER COUNTY	0	0	457	457
	CENTRE COUNTY	0	0	653	653
	CLARION COUNTY	0	0	470	470
	COMMUNITY TRANS OF DELAWARE	0	0	3,012	3,012
	FOREST COUNTY	0	0	358	358
	GREENE COUNTY	0	0	379	379
	HUNTINGDON-BEDFORD-FULTON AAA	0	0	1,159	1,159
	K-CAB (Columbia Co.)	0	0	0	0
	KRAPF'S (Chester Co.)	0	0	2,715	2,715
	MIFFLIN-JUNIATA AA ON AGING	0	0	430	430
	PERRY COUNTY	0	0	0	0
	PIKE COUNTY	0	0	470	470
	SOMERSET COUNTY	0	0	249	249
	STEP (Clinton/ Lycoming)	0	0	1,015	1,015
	SUBURBAN TRANS (Montgomery)	0	0	4,390	4,390
	Susquehanna Co.	0	0	812	812
	UNION-SNYDER TRANS. ALLIANCE	0	0	0	0
	WAYNE COUNTY	0	0	1,147	1,147
	Shared-Ride Total	**0**	**0**	**22,189**	**22,189**
Other Agencies	Bucks County Transport	0	638	0	638
	Chester County TMA	0	929	0	929
	Philadelphia Unemployment Project	0	367	0	367
	Philly Phlash	0	918	0	918
	ACTA	0	668	0	668
	Heritage Health Foundation	0	887	0	887
	Other Agency Total	**0**	**4,407**	**0**	**4,407**
	PennDOT Discretion	28,350	0	0	28,350
	Other Unallocated (Urban/Rural)	43,090	85,060	0	128,150
	GRAND TOTAL	**566,940**	**1,191,310**	**83,423**	**1,841,673**

* Act 89 allocates Asset Improvement funds in the following way - PennDOT 5%, the remaining 95% is distributed as follows - SEPTA 69.4%, PAAC 22.6% and other systems 8%. This projection is for SFY 24-25.

Distribution for all fiscal years is based on FY 2018-19 operating statistics and uses SFY20-21 allocations. Additional operating funding is projected using estimated revenues. The additional funding will be distributed using performance factors from the prior year and is captured on the "Other Unallocated" line, under the 1513 Operating column.
@ Shared Ride allocation in SFY 18-19 equal the actual grants for both the Shared-Ride and PwD Programs. In subsequent

Date Prepared: 5/25/2021

Appendix 6: 2026 Estimated State Transit Funds ($000)

	OPERATOR	Asset * Improvement	Operating # Assistance	Shared Ride @	Total
URBAN	SEPTA	373,360	711,527	15,100	1,099,987
	Krapf's Coach - Chester	0	18	0	18
	Upper Merion	0	19	0	19
	PAAC	121,580	244,850	12,500	378,930
	AMTRAN -- Blair	0	3,316	0	3,316
	BCTA -- Beaver	0	4,195	591	4,786
	CAT -- Dauphin	0	9,437	1,380	10,817
	CATA -- Centre	0	7,631	293	7,924
	CCTA -- Cambria	0	7,527	921	8,448
	COLTS -- Lackawanna	0	7,563	1,946	9,509
	CPTA -- Adams, Columbia, Cumberland, Franklin, Montour, Northumberland, Perry, Snyder, Union and York	0	7,620	5,700	13,320
	EMTA -- Erie	0	10,882	1,216	12,098
	FACT -- Fayette	0	1,326	577	1,903
	HPT -- Hazleton	0	2,175	0	2,175
	LANTA -- Lehigh-Northampton	0	19,085	3,628	22,713
	LCTA -- Luzerne	0	6,412	694	7,106
	Martz	0	13	0	13
	LT -- Lebanon	0	2,157	581	2,738
	MMVTA -- Mid Mon Valley	0	3,173	0	3,173
	MCTA -- Monroe	0	2,233	1,372	3,605
	Pottstown -- Montgomery	0	1,407	0	1,407
	SCTA -- South Central	0	17,665	4,612	22,277
	SVSS -- Shenango Valley	0	868	963	1,831
	WCTA -- Washington	0	1,639	2,215	3,854
	WBT -- Williamsport	0	4,643	0	4,643
	WCTA -- Westmoreland	0	4,351	1,657	6,008
	Unallocated Other Urban Systems	0	0	0	0
	Urban Total	**494,940**	**1,081,732**	**55,946**	**1,632,618**
RURAL	ATA	0	6,001	453	6,454
	BTA -- Butler	0	1,031	0	1,031
	Carbon	0	273	506	779
	CATA -- Crawford	0	1,518	785	2,303
	EMTA -- Endless Mtns.	0	1,149	1,291	2,440
	ICTA -- Indiana	0	1,855	408	2,263
	Mid-County -- Armstrong	0	657	315	972
	Mt. Carmel	0	342	0	342
	NCATA -- New Castle	0	4,783	0	4,783
	STS -- Schuylkill	0	1,747	1,032	2,779
	TAWC -- Warren	0	755	498	1,253
	Rural Total	**0**	**20,111**	**5,288**	**25,399**
Shared-Ride Only	ALLIED COORD. TRANS. (Lawrence Co.)	0	0	420	420
	BLAIR COUNTY SENIOR SERVICES	0	0	1,156	1,156
	BUCKS COUNTY TRANSPORT, INC.	0	0	2,897	2,897
	BUTLER COUNTY	0	0	457	457
	CENTRE COUNTY	0	0	653	653
	CLARION COUNTY	0	0	470	470
	COMMUNITY TRANS OF DELAWARE	0	0	3,012	3,012
	FOREST COUNTY	0	0	358	358
	GREENE COUNTY	0	0	379	379
	HUNTINGDON-BEDFORD-FULTON AAA	0	0	1,159	1,159
	K-CAB (Columbia Co.)	0	0	0	0
	KRAPF'S (Chester Co.)	0	0	2,715	2,715
	MIFFLIN-JUNIATA AA ON AGING	0	0	430	430
	PERRY COUNTY	0	0	0	0
	PIKE COUNTY	0	0	470	470
	SOMERSET COUNTY	0	0	249	249
	STEP (Clinton/ Lycoming)	0	0	1,015	1,015
	SUBURBAN TRANS (Montgomery)	0	0	4,390	4,390
	Susquehanna Co.	0	0	812	812
	UNION-SNYDER TRANS. ALLIANCE	0	0	0	0
	WAYNE COUNTY	0	0	1,147	1,147
	Shared-Ride Total	**0**	**0**	**22,189**	**22,189**
Other Agencies	Bucks County Transport	0	638	0	638
	Chester County TMA	0	929	0	929
	Philadelphia Unemployment Project	0	367	0	367
	Philly Phlash	0	918	0	918
	ACTA	0	668	0	668
	Heritage Health Foundation	0	887	0	887
	Other Agency Total	**0**	**4,407**	**0**	**4,407**
	PennDOT Discretion	28,320	0	0	28,320
	Other Unallocated (Urban/Rural)	43,040	114,843	0	157,883
	GRAND TOTAL	**566,300**	**1,221,093**	**83,423**	**1,870,816**

* Act 89 allocates Asset Improvement funds in the following way - PennDOT 5%, the remaining 95% is distributed as follows - SEPTA 69.4%, PAAC 22.6% and other systems 8%. This projection is for SFY 25-26.

Distribution for all fiscal years is based on FY 2018-19 operating statistics and uses SFY20-21 allocations. Additional operating funding is projected using estimated revenues. The additional funding will be distributed using performance factors from the prior year and is captured on the "Other Unallocated" line, under the 1513 Operating column.

@ Shared Ride allocation in SFY 18-19 equal the actual grants for both the Shared-Ride and PwD Programs. In subsequent years, the FY 18-19 Shared-Ride amounts are prorated based on the reduction of available lottery funding for the program in FY 19-20. PwD amounts remain constant.

Date Prepared: 5/25/2021

Appendix 6: 2023-2026 Estimated State Transit Funds ($000)

	OPERATOR	Asset * Improvement	Operating # Assistance	Shared Ride @	Total
URBAN	SEPTA	1,480,980	2,846,108	60,400	4,387,488
	Krapf's Coach - Chester	0	72	0	72
	Upper Merion	0	76	0	76
	PAAC	482,270	979,400	50,000	1,511,670
	AMTRAN -- Blair	0	13,264	0	13,264
	BCTA -- Beaver	0	16,780	2,364	19,144
	CAT -- Dauphin	0	37,748	5,520	43,268
	CATA -- Centre	0	30,524	1,172	31,696
	CCTA -- Cambria	0	30,108	3,684	33,792
	COLTS -- Lackawanna	0	30,252	7,784	38,036
	CPTA -- Adams, Columbia, Cumberland, Franklin, Montour, Northumberland, Perry, Snyder, Union and York	0	30,480	22,800	53,280
	EMTA -- Erie	0	43,528	4,864	48,392
	FACT -- Fayette	0	5,304	2,308	7,612
	HPT -- Hazleton	0	8,700	0	8,700
	LANTA -- Lehigh-Northampton	0	76,340	14,512	90,852
	LCTA -- Luzerne	0	25,648	2,776	28,424
	Martz	0	52	0	52
	LT -- Lebanon	0	8,628	2,324	10,952
	MMVTA -- Mid Mon Valley	0	12,692	0	12,692
	MCTA -- Monroe	0	8,932	5,488	14,420
	Pottstown -- Montgomery	0	5,628	0	5,628
	SCTA -- South Central	0	70,660	18,448	89,108
	SVSS -- Shenango Valley	0	3,472	3,852	7,324
	WCTA -- Washington	0	6,556	8,860	15,416
	WBT -- Williamsport	0	18,572	0	18,572
	WCTA -- Westmoreland	0	17,404	6,628	24,032
	Unallocated Other Urban Systems	0	0	0	0
	Urban Total	**1,963,250**	**4,326,928**	**223,784**	**6,513,962**
RURAL	ATA	0	24,004	1,812	25,816
	BTA -- Butler	0	4,124	0	4,124
	Carbon	0	1,092	2,024	3,116
	CATA -- Crawford	0	6,072	3,140	9,212
	EMTA -- Endless Mtns.	0	4,596	5,164	9,760
	ICTA -- Indiana	0	7,420	1,632	9,052
	Mid-County -- Armstrong	0	2,628	1,260	3,888
	Mt. Carmel	0	1,368	0	1,368
	NCATA -- New Castle	0	19,132	0	19,132
	STS -- Schuylkill	0	6,988	4,128	11,116
	TAWC -- Warren	0	3,020	1,992	5,012
	Rural Total	**0**	**80,444**	**21,152**	**101,596**
Shared-Ride Only	ALLIED COORD. TRANS. (Lawrence Co.)	0	0	1,680	1,680
	BLAIR COUNTY SENIOR SERVICES	0	0	4,624	4,624
	BUCKS COUNTY TRANSPORT, INC.	0	0	11,588	11,588
	BUTLER COUNTY	0	0	1,828	1,828
	CENTRE COUNTY	0	0	2,612	2,612
	CLARION COUNTY	0	0	1,880	1,880
	COMMUNITY TRANS OF DELAWARE	0	0	12,048	12,048
	FOREST COUNTY	0	0	1,432	1,432
	GREENE COUNTY	0	0	1,516	1,516
	HUNTINGDON-BEDFORD-FULTON AAA	0	0	4,636	4,636
	K-CAB (Columbia Co.)	0	0	0	0
	KRAPF'S (Chester Co.)	0	0	10,860	10,860
	MIFFLIN-JUNIATA AA ON AGING	0	0	1,720	1,720
	PERRY COUNTY	0	0	0	0
	PIKE COUNTY	0	0	1,880	1,880
	SOMERSET COUNTY	0	0	996	996
	STEP (Clinton/ Lycoming)	0	0	4,060	4,060
	SUBURBAN TRANS (Montgomery)	0	0	17,560	17,560
	Susquehanna Co.	0	0	3,248	3,248
	UNION-SNYDER TRANS. ALLIANCE	0	0	0	0
	WAYNE COUNTY	0	0	4,588	4,588
	Shared-Ride Total	**0**	**0**	**88,756**	**88,756**
Other Agencies	Bucks County Transport	0	2,552	0	2,552
	Chester County TMA	0	3,716	0	3,716
	Philadelphia Unemployment Project	0	1,468	0	1,468
	Philly Phlash	0	3,672	0	3,672
	ACTA	0	2,672	0	2,672
	Heritage Health Foundation	0	3,548	0	3,548
	Other Agency Total	**0**	**17,628**	**0**	**17,628**
	PennDOT Discretion	112,330	0	0	112,330
	Other Unallocated (Urban/Rural)	170,720	283,563	0	454,283
	GRAND TOTAL	**2,246,300**	**4,708,563**	**333,692**	**7,288,555**

* Act 89 allocates Asset Improvement funds in the following way - PennDOT 5%, the remaining 95% is distributed as follows - SEPTA 69.4%, PAAC 22.6% and other systems 8%.

Distribution for all fiscal years is based on FY 2018-19 operating statistics and uses SFY20-21 allocations. Additional operating funding is projected using estimated revenues. The additional funding will be distributed using performance factors from the prior year and is captured on the "Other Unallocated" line, under the 1513 Operating column.

@ Shared Ride allocation in SFY 18-19 equal the actual grants for both the Shared-Ride and PwD Programs. In subsequent years, the FY 18-19 Shared-Ride amounts are prorated based on the reduction of available lottery funding for the program in FY 19-20. PwD amounts remain constant.

Date Prepared: 5/25/2021

Appendix 7
Financial Guidance
Federal Transit Funding 2023-2026 ($000)

Federal Transit	FFY 2023						
Urban Area	**Urbanized Area (5307 & 5340)**	**5337 (State of Good Repair)**	**5310**	**5311+**	**Appalachia Funds+**	**5339 (Bus and Bus Facilities)**	**Total**
Allentown-Bethlehem*	7,602	0	700	0	0	925	**9,227**
Altoona*	1,316	0	0	0	0	0	**1,316**
East Stroudsburg*	1,222	0	0	0	0	0	**1,222**
Erie*	4,261	0	0	0	0	0	**4,261**
Harrisburg*	5,534	0	457	0	0	582	**6,573**
Hanover*	1,000	0	0	0	0	0	**1,000**
Hazleton*	886	0	0	0	0	0	**886**
Johnstown*	1,612	14	0	0	0	0	**1,626**
Lancaster*	4,823	0	437	0	0	535	**5,795**
Lebanon*	1,148	0	0	0	0	0	**1,148**
Monessen*	1,482	0	0	0	0	0	**1,482**
Philadelphia**	105,112	123,572	3,499	0	0	8,529	**240,712**
Pittsburgh**	34,721	22,434	1,905	0	0	3,291	**62,351**
Pottstown*	1,431	0	0	0	0	0	**1,431**
Reading*	3,728	0	282	0	0	425	**4,435**
Scranton/Wilkes-Barre*	5,009	0	449	0	0	568	**6,026**
Sharon*	725	0	51	0	0	74	**850**
State College*	3,389	0	0	0	0	0	**3,389**
Uniontown-Connellsville*	1,260	0	0	0	0	0	**1,260**
Williamsport*	2,579	0	0	0	0	0	**2,579**
York*	3,326	0	243	0	0	383	**3,952**
Large Urban	6,601	3,903	0	0	0	0	**10,504**
Small Urban	1,656	0	2,224	0	0	1,888	**5,768**
Large or Small Urban	0	11,785	0	0	0	3,500	**15,285**
Non Urbanized	0	0	2,486	21,578	0	0	**24,064**
Intercity Bus	0	0	0	3,808	0	0	**3,808**
Appalachian Counties	0	0	0	0	4,788	0	**4,788**
TOTALS	**200,423**	**161,708**	**12,733**	**25,386**	**4,788**	**20,700**	**425,738**

Date prepared: 5/25/2021

+These funds can be used for operating, capital or technical assistance

* Systems that can use a portion of their federal 5307 funds for operating assistance

** Systems are not able to use their federal section 5307 funds for operating assistance

Appendix 7
Financial Guidance
Federal Transit Funding 2023-2026 ($000)

Federal Transit	FFY 2024						
Urban Area	**Urbanized Area (5307 & 5340)**	**5337 (State of Good Repair)**	**5310**	**5311+**	**Appalachian Funds+**	**5339 (Bus and Bus Facilities)**	**Total**
Allentown-Bethlehem*	7,602	0	700	0	0	925	**9,227**
Altoona*	1,316	0	0	0	0	0	**1,316**
East Stroudsburg*	1,222	0	0	0	0	0	**1,222**
Erie*	4,261	0	0	0	0	0	**4,261**
Harrisburg*	5,534	0	457	0	0	582	**6,573**
Hanover*	1,000	0	0	0	0	0	**1,000**
Hazleton*	886	0	0	0	0	0	**886**
Johnstown*	1,612	14	0	0	0	0	**1,626**
Lancaster*	4,823	0	437	0	0	535	**5,795**
Lebanon*	1,148	0	0	0	0	0	**1,148**
Monessen*	1,482	0	0	0	0	0	**1,482**
Philadelphia**	105,112	123,572	3,499	0	0	8,529	**240,712**
Pittsburgh**	34,721	22,434	1,905	0	0	3,291	**62,351**
Pottstown*	1,431	0	0	0	0	0	**1,431**
Reading*	3,728	0	282	0	0	425	**4,435**
Scranton/Wilkes-Barre*	5,009	0	449	0	0	568	**6,026**
Sharon*	725	0	51	0	0	74	**850**
State College*	3,389	0	0	0	0	0	**3,389**
Uniontown-Connellsville*	1,260	0	0	0	0	0	**1,260**
Williamsport*	2,579	0	0	0	0	0	**2,579**
York*	3,326	0	243	0	0	383	**3,952**
Large Urban	6,601	3,903	0	0	0	0	**10,504**
Small Urban	1,656	0	2,224	0	0	1,888	**5,768**
Large or Small Urban	0	11,785	0	0	0	3,500	**15,285**
Non Urbanized	0	0	2,486	21,578	0	0	**24,064**
Intercity Bus	0	0	0	3,808	0	0	**3,808**
Appalachian Counties	0	0	0	0	4,788	0	**4,788**
TOTALS	**200,423**	**161,708**	**12,733**	**25,386**	**4,788**	**20,700**	**425,738**

Date prepared: 5/25/2021

+These funds can be used for operating, capital or technical assistance

* Systems that can use a portion of their federal 5307 funds for operating assistance

** Systems are not able to use their federal section 5307 funds for operating assistance

Appendix 7
Financial Guidance
Federal Transit Funding 2023-2026 ($000)

Federal Transit	FFY 2025						
Urban Area	**Urbanized Area (5307 & 5340)**	**5337 (State of Good Repair)**	**5310**	**5311+**	**Appalachian Funds+**	**5339 (Bus and Bus Facilities)**	**Total**
Allentown-Bethlehem*	7,602	0	700	0	0	925	**9,227**
Altoona*	1,316	0	0	0	0	0	**1,316**
East Stroudsburg*	1,222	0	0	0	0	0	**1,222**
Erie*	4,261	0	0	0	0	0	**4,261**
Harrisburg*	5,534	0	457	0	0	582	**6,573**
Hanover*	1,000	0	0	0	0	0	**1,000**
Hazleton*	886	0	0	0	0	0	**886**
Johnstown*	1,612	14	0	0	0	0	**1,626**
Lancaster*	4,823	0	437	0	0	535	**5,795**
Lebanon*	1,148	0	0	0	0	0	**1,148**
Monessen*	1,482	0	0	0	0	0	**1,482**
Philadelphia**	105,112	123,572	3,499	0	0	8,529	**240,712**
Pittsburgh**	34,721	22,434	1,905	0	0	3,291	**62,351**
Pottstown*	1,431	0	0	0	0	0	**1,431**
Reading*	3,728	0	282	0	0	425	**4,435**
Scranton/Wilkes-Barre*	5,009	0	449	0	0	568	**6,026**
Sharon*	725	0	51	0	0	74	**850**
State College*	3,389	0	0	0	0	0	**3,389**
Uniontown-Connellsville*	1,260	0	0	0	0	0	**1,260**
Williamsport*	2,579	0	0	0	0	0	**2,579**
York*	3,326	0	243	0	0	383	**3,952**
Large Urban	6,601	3,903	0	0	0	0	**10,504**
Small Urban	1,656	0	2,224	0	0	1,888	**5,768**
Large or Small Urban	0	11,785	0	0	0	3,500	**15,285**
Non Urbanized	0	0	2,486	21,578	0	0	**24,064**
Intercity Bus	0	0	0	3,808	0	0	**3,808**
Appalachian Counties	0	0	0	0	4,788	0	**4,788**
TOTALS	**200,423**	**161,708**	**12,733**	**25,386**	**4,788**	**20,700**	**425,738**

Date prepared: 5/25/2021

+These funds can be used for operating, capital or technical assistance

* Systems that can use a portion of their federal 5307 funds for operating assistance

** Systems are not able to use their federal section 5307 funds for operating assistance

Appendix 7
Financial Guidance
Federal Transit Funding 2023-2026 ($000)

Federal Transit	FFY 2026						
Urban Area	**Urbanized Area (5307 & 5340)**	**5337 (State of Good Repair)**	**5310**	**5311+**	**Appalachian Funds+**	**5339 (Bus and Bus Facilities)**	**Total**
Allentown-Bethlehem*	7,602	0	700	0	0	925	**9,227**
Altoona*	1,316	0	0	0	0	0	**1,316**
East Stroudsburg*	1,222	0	0	0	0	0	**1,222**
Erie*	4,261	0	0	0	0	0	**4,261**
Harrisburg*	5,534	0	457	0	0	582	**6,573**
Hanover*	1,000	0	0	0	0	0	**1,000**
Hazleton*	886	0	0	0	0	0	**886**
Johnstown*	1,612	14	0	0	0	0	**1,626**
Lancaster*	4,823	0	437	0	0	535	**5,795**
Lebanon*	1,148	0	0	0	0	0	**1,148**
Monessen*	1,482	0	0	0	0	0	**1,482**
Philadelphia**	105,112	123,572	3,499	0	0	8,529	**240,712**
Pittsburgh**	34,721	22,434	1,905	0	0	3,291	**62,351**
Pottstown*	1,431	0	0	0	0	0	**1,431**
Reading*	3,728	0	282	0	0	425	**4,435**
Scranton/Wilkes-Barre*	5,009	0	449	0	0	568	**6,026**
Sharon*	725	0	51	0	0	74	**850**
State College*	3,389	0	0	0	0	0	**3,389**
Uniontown-Connellsville*	1,260	0	0	0	0	0	**1,260**
Williamsport*	2,579	0	0	0	0	0	**2,579**
York*	3,326	0	243	0	0	383	**3,952**
Large Urban	6,601	3,903	0	0	0	0	**10,504**
Small Urban	1,656	0	2,224	0	0	1,888	**5,768**
Large or Small Urban	0	11,785	0	0	0	3,500	**15,285**
Non Urbanized	0	0	2,486	21,578	0	0	**24,064**
Intercity Bus	0	0	0	3,808	0	0	**3,808**
Appalachian Counties	0	0	0	0	4,788	0	**4,788**
TOTALS	**200,423**	**161,708**	**12,733**	**25,386**	**4,788**	**20,700**	**425,738**

Date prepared: 5/25/2021

+These funds can be used for operating, capital or technical assistance

* Systems that can use a portion of their federal 5307 funds for operating assistance

** Systems are not able to use their federal section 5307 funds for operating assistance

Appendix 7
Financial Guidance
Federal Transit Funding 2023-2026 ($000)

Federal Transit	Total FFY 2023 - FFY 2026						
Urban Area	**Urbanized Area (5307 & 5340)**	**5337 (State of Good Repair)**	**5310**	**5311+**	**Appalachian Funds+**	**5339 (Bus and Bus Facilities)**	**Total**
Allentown-Bethlehem*	30,408	0	2,800	0	0	3,700	**36,908**
Altoona*	5,264	0	0	0	0	0	**5,264**
East Stroudsburg*	4,888	0	0	0	0	0	**4,888**
Erie*	17,044	0	0	0	0	0	**17,044**
Harrisburg*	22,136	0	1,828	0	0	2,328	**26,292**
Hanover*	4,000	0	0	0	0	0	**4,000**
Hazleton*	3,544	0	0	0	0	0	**3,544**
Johnstown*	6,448	56	0	0	0	0	**6,504**
Lancaster*	19,292	0	1,748	0	0	2,140	**23,180**
Lebanon*	4,592	0	0	0	0	0	**4,592**
Monessen*	5,928	0	0	0	0	0	**5,928**
Philadelphia**	420,448	494,288	13,996	0	0	34,116	**962,848**
Pittsburgh**	138,884	89,736	7,620	0	0	13,164	**249,404**
Pottstown*	5,724	0	0	0	0	0	**5,724**
Reading*	14,912	0	1,128	0	0	1,700	**17,740**
Scranton/Wilkes-Barre*	20,036	0	1,796	0	0	2,272	**24,104**
Sharon*	2,900	0	206	0	0	296	**3,402**
State College*	13,556	0	0	0	0	0	**13,556**
Uniontown-Connellsville*	5,040	0	0	0	0	0	**5,040**
Williamsport*	10,316	0	0	0	0	0	**10,316**
York*	13,304	0	972	0	0	1,532	**15,808**
Large Urban	26,404	15,612	0	0	0	0	**42,016**
Small Urban	6,624	0	8,896	0	0	7,552	**23,072**
Large or Small Urban	0	47,140	0	0	0	14,000	**61,140**
Non Urbanized	0	0	9,944	86,312	0	0	**96,256**
Intercity Bus	0	0	0	15,232	0	0	**15,232**
Appalachian Counties	0	0	0	0	19,152	0	**19,152**
TOTALS	**801,692**	**646,832**	**50,934**	**101,544**	**19,152**	**82,800**	**1,702,954**

Date prepared: 5/25/2021

+These funds can be used for operating, capital or technical assistance

* Systems that can use a portion of their federal 5307 funds for operating assistance

** Systems are not able to use their federal section 5307 funds for operating assistance

Appendix 8
2023-2026 Federal and State Transit Funding by Region
($000)

Region	2023			2024			2025			2026			TOTAL		
	Federal Transit	State Transit	Total	Federal Transit	State Transit	Total	Federal Transit	State Transit	Total	Federal Transit	State Transit	Total	Federal Transit	State Transit	Total
DVRPC	242,143	1,108,227	1,350,370	242,143	1,113,487	1,355,630	242,143	1,117,717	1,359,860	242,143	1,117,297	1,359,440	968,572	4,456,728	5,425,300
SPC	65,093	407,564	472,657	65,093	409,274	474,367	65,093	410,654	475,747	65,093	410,514	475,607	260,372	1,638,006	1,898,378
Harrisburg	6,573	10,817	17,390	6,573	10,817	17,390	6,573	10,817	17,390	6,573	10,817	17,390	26,292	43,268	69,560
Scranton/WB	6,912	18,803	25,715	6,912	18,803	25,715	6,912	18,803	25,715	6,912	18,803	25,715	27,648	75,212	102,860
Lehigh Valley	9,227	22,713	31,940	9,227	22,713	31,940	9,227	22,713	31,940	9,227	22,713	31,940	36,908	90,852	127,760
NEPA	1,222	7,633	8,855	1,222	7,633	8,855	1,222	7,633	8,855	1,222	7,633	8,855	4,888	30,532	35,420
SEDA-COG	0	772	772	0	772	772	0	772	772	0	772	772	0	3,088	3,088
Altoona	1,316	4,472	5,788	1,316	4,472	5,788	1,316	4,472	5,788	1,316	4,472	5,788	5,264	17,888	23,152
Johnstown	1,626	8,448	10,074	1,626	8,448	10,074	1,626	8,448	10,074	1,626	8,448	10,074	6,504	33,792	40,296
Centre County	3,389	8,577	11,966	3,389	8,577	11,966	3,389	8,577	11,966	3,389	8,577	11,966	13,556	34,308	47,864
Williamsport	2,579	5,658	8,237	2,579	5,658	8,237	2,579	5,658	8,237	2,579	5,658	8,237	10,316	22,632	32,948
Erie	4,261	12,098	16,359	4,261	12,098	16,359	4,261	12,098	16,359	4,261	12,098	16,359	17,044	48,392	65,436
Lancaster	5,795	0	5,795	5,795	0	5,795	5,795	0	5,795	5,795	0	5,795	23,180	0	23,180
York	4,952	0	4,952	4,952	0	4,952	4,952	0	4,952	4,952	0	4,952	19,808	0	19,808
Reading	4,435	0	4,435	4,435	0	4,435	4,435	0	4,435	4,435	0	4,435	17,740	0	17,740
Lebanon	1,148	2,738	3,886	1,148	2,738	3,886	1,148	2,738	3,886	1,148	2,738	3,886	4,592	10,952	15,544
Mercer	850	1,831	2,681	850	1,831	2,681	850	1,831	2,681	850	1,831	2,681	3,402	7,324	10,726
Adams	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Franklin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Urban	**361,521**	**1,620,351**	**1,981,872**	**361,521**	**1,627,321**	**1,988,842**	**361,521**	**1,632,931**	**1,994,452**	**361,521**	**1,632,371**	**1,993,892**	**1,446,086**	**6,512,974**	**7,959,060**
Northwest	0	4,384	4,384	0	4,384	4,384	0	4,384	4,384	0	4,384	4,384	0	17,536	17,536
N. Central	0	6,454	6,454	0	6,454	6,454	0	6,454	6,454	0	6,454	6,454	0	25,816	25,816
N. Tier	0	3,252	3,252	0	3,252	3,252	0	3,252	3,252	0	3,252	3,252	0	13,008	13,008
S. Alleghenies	0	1,408	1,408	0	1,408	1,408	0	1,408	1,408	0	1,408	1,408	0	5,632	5,632
Wayne County	0	1,147	1,147	0	1,147	1,147	0	1,147	1,147	0	1,147	1,147	0	4,588	4,588
Total Rural	**0**	**16,645**	**16,645**	**0**	**16,645**	**16,645**	**0**	**16,645**	**16,645**	**0**	**16,645**	**16,645**	**0**	**66,580**	**66,580**
Unallocated	**64,217**	**97,276**	**161,493**	**64,217**	**126,634**	**190,851**	**64,217**	**156,500**	**220,717**	**64,217**	**186,203**	**250,420**	**256,868**	**566,613**	**823,481**
Multiple -- SCTA*	**0**	**22,277**	**22,277**	**0**	**22,277**	**22,277**	**0**	**22,277**	**22,277**	**0**	**22,277**	**22,277**	**0**	**89,108**	**89,108**
Multiple -- CPTA*	**0**	**13,320**	**13,320**	**0**	**13,320**	**13,320**	**0**	**13,320**	**13,320**	**0**	**13,320**	**13,320**	**0**	**53,280**	**53,280**
Grand Total	**425,738**	**1,769,869**	**2,195,608**	**425,738**	**1,806,197**	**2,231,935**	**425,738**	**1,841,673**	**2,267,412**	**425,738**	**1,870,816**	**2,296,554**	**1,702,954**	**7,288,555**	**8,991,509**

* Section 5311 Federal Funding is discretionary and based on annual approval of budget deficits up to total amount appropriated for Pennsylvania.
* Operating Assistance for South Central Transit is shared by the Lancaster and Reading MPOs
* Operating assistance for Central Pennsylvania Transportation Authority is shared amongst Adams, SEDA-COG, Harrisburg, Franklin and York MPOs

June 29, 2021

PENNSYLVANIA'S 2023 TRANSPORTATION PROGRAM GENERAL AND PROCEDURAL GUIDANCE

2023 Transportation Program
General and Procedural Guidance

2023 Transportation Program
General and Procedural Guidance

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
1st Four Years (STIP/TIPs)				2nd Four Years				3rd Four Years			
TYP											
TAMP											

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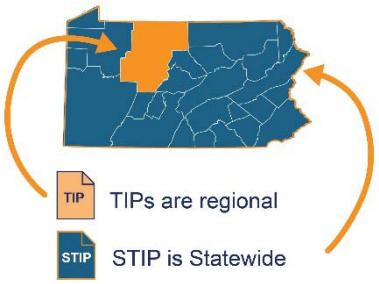
Pennsylvania is required under 49 USC 5304(g) and 23 USC 135(g) to develop a STIP. Pennsylvania's STIP is a fiscally constrained four-year program of highway, bridge, and transit projects. The STIP is developed in cooperation with the MPOs/RPOs and public transportation agencies in the state and is consistent 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

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

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

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

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

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.

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 LRTP 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

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 LRTPs, comprehensive plans, and regional TIPs. The MPOs/RPOs shall make their regional LRTPs 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.

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.

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.

2023 Transportation Program
General and Procedural Guidance

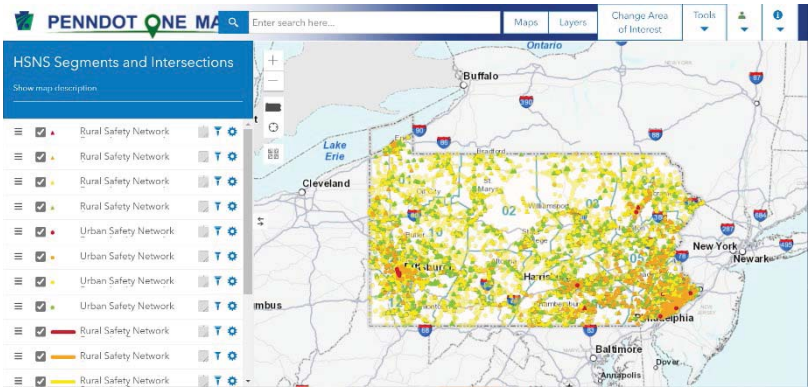
Safety

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.

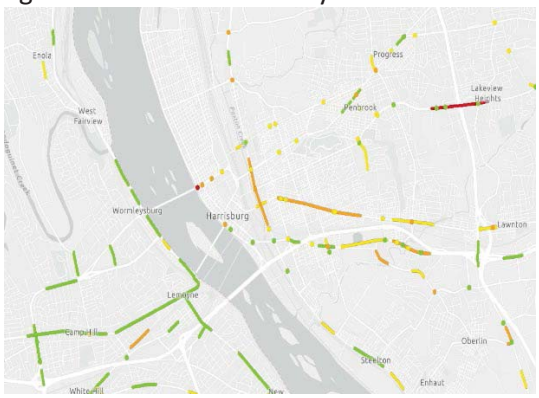
All projects utilizing HSIP funds shall be evaluated based on Benefit/Cost (B/C) analysis, Highway Safety Manual (HSM) analysis, fatal and injury crashes, application of systemic improvements, improvements on high risk rural roads, and deliverability. Specifically, as part of PennDOT's HSIP application 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.

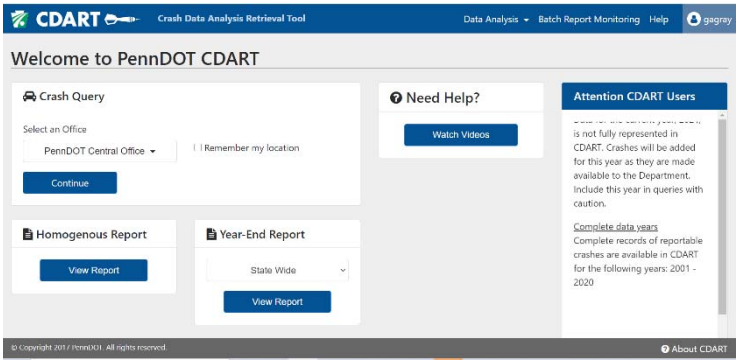


The process for selecting safety projects for inclusion in the TIP should begin with the Network Screening Evaluation that the Department has performed on a statewide basis. Selecting locations with an excess crash frequency greater than zero from this network screening is key to identifying locations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

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.

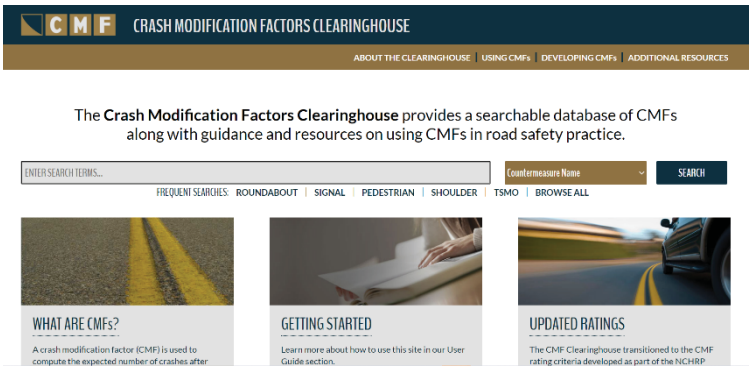
Locations in OneMap are color coded to easily identify potential safety project locations. The locations identified in yellow, orange, or red have an increasing potential for improving safety with the red locations having the greatest opportunity to improve safety. Locations in green are locations that 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)



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:

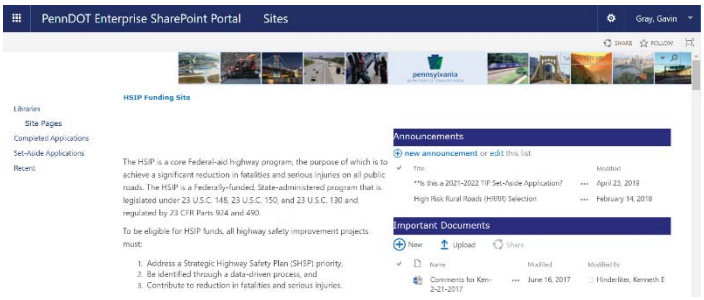
- Highway Safety Benefit-Cost Analysis Guide
- Highway Safety Benefit-Cost Analysis Tool: Reference Guide
- HSM Analysis [Crash Modification Factor (CMF) Clearinghouse]

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



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

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

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

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

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 LRTPs in order to support progress towards achievement of the PM3 targets. Methods for PM3 for integration will remain flexible for each agency.

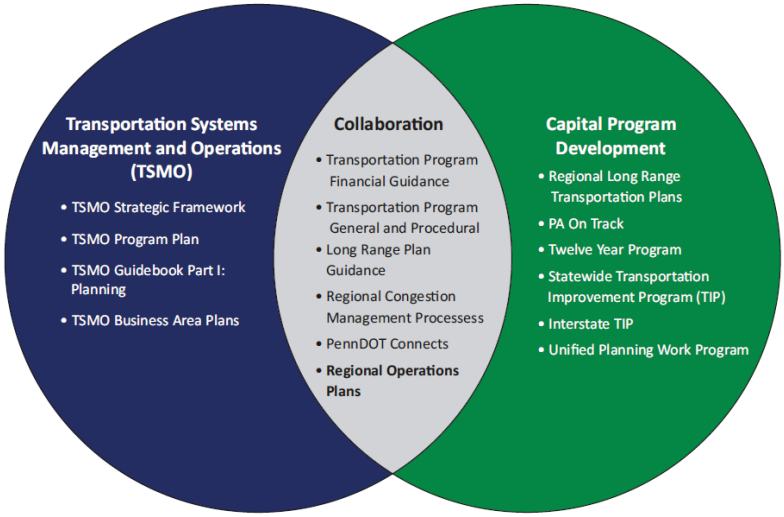
Transportation Systems Management and Operations

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.

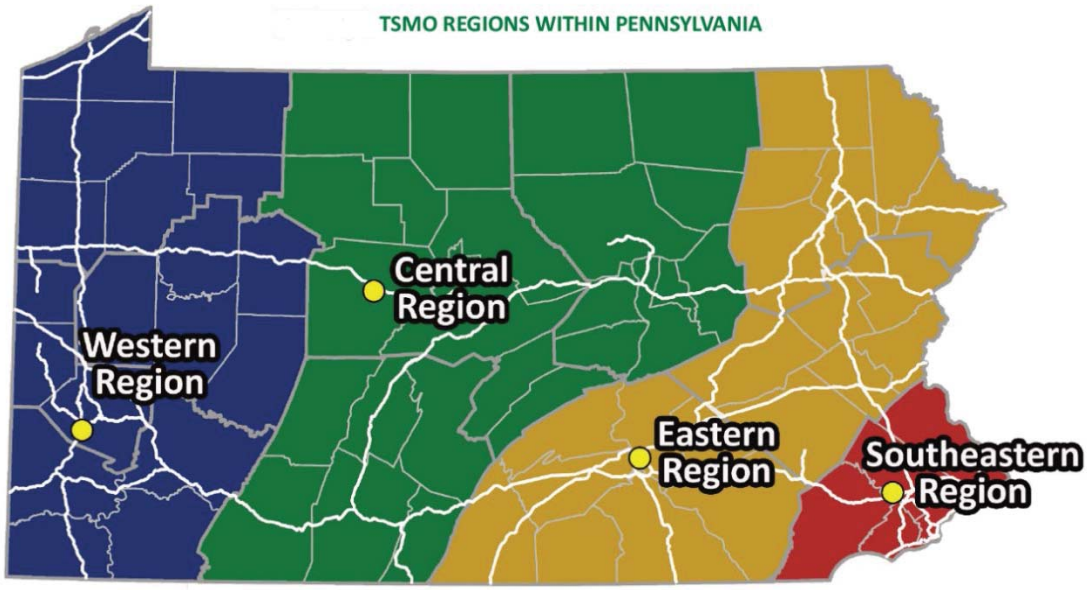
PennDOT has developed a TSMO Guidebook (PUB 851) on how to implement its approach to integrating TSMO into planning and programming and how to connect operations-related planning efforts with other Pennsylvania planning efforts. Stakeholders should consider the applicability of TSMO solutions for every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

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).



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.

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).

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 performance 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.

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.

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:

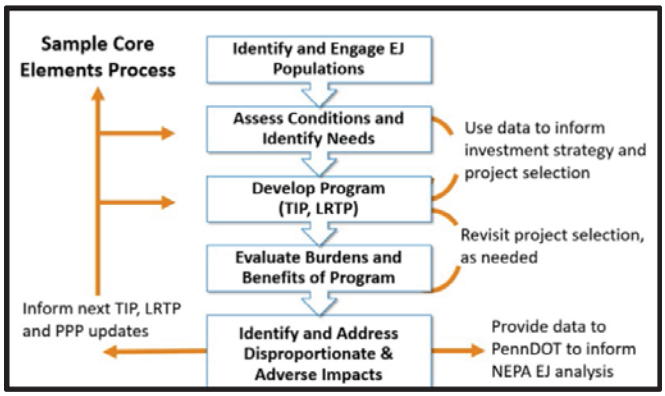
- Identify low-income and minority populations
- Assess conditions and identify needs
- Develop the draft Program
- Evaluate benefits and burdens of the Program
- Identify and avoid, minimize, or mitigate any disproportionate and adverse impacts

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

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

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

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.

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

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).

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.

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

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

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).

- 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 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.

2023 Transportation Program
General and Procedural Guidance

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

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.

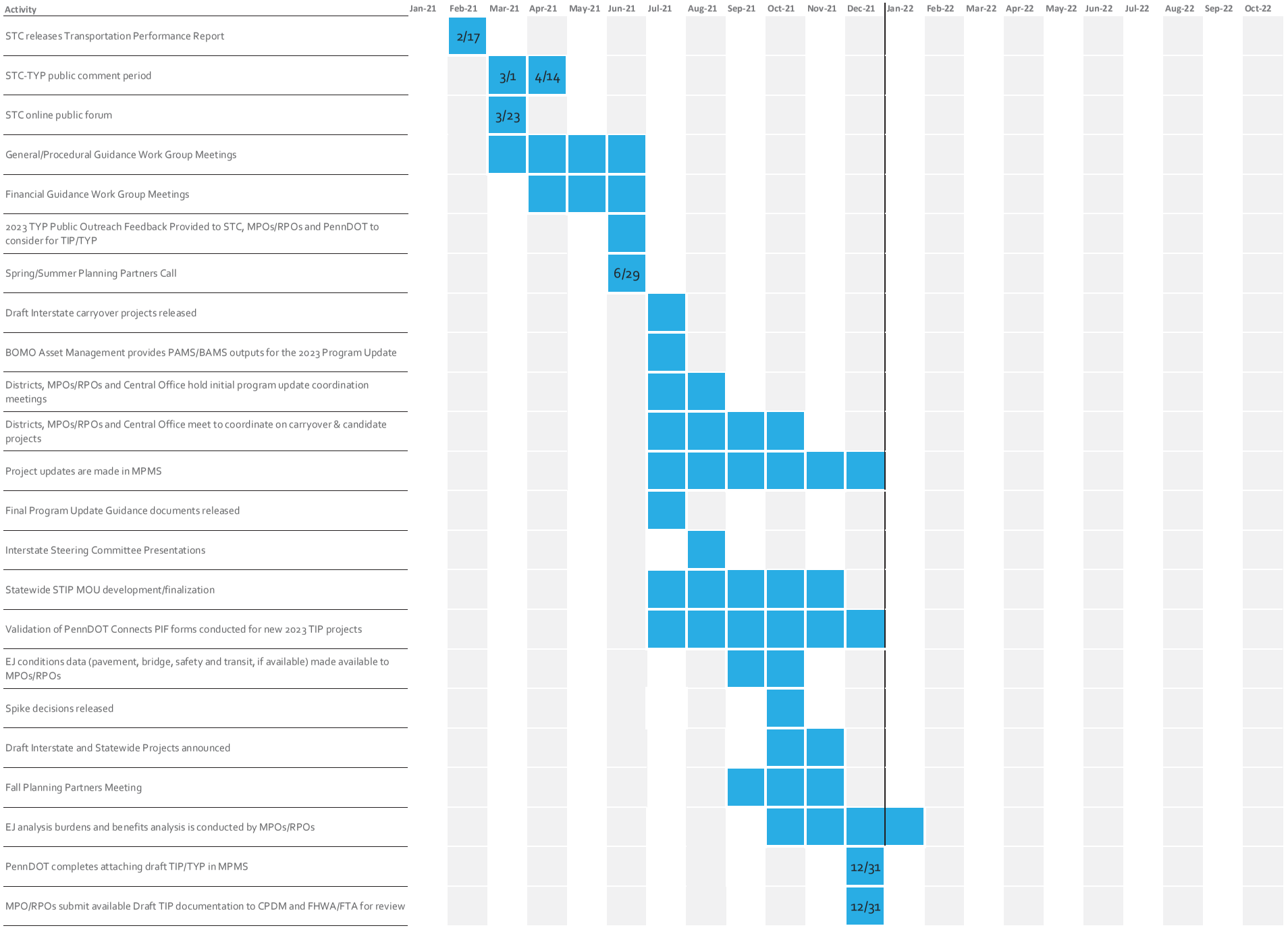
Changes to the TIPs and the delivery of completed projects are monitored by PennDOT CPDM, PennDOT Districts and the MPOs/RPOs and are the subject of various program status reports. PennDOT CPDM will track the progress of the highway Program and project implementation and share the findings with the MPOs/RPOs. 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:

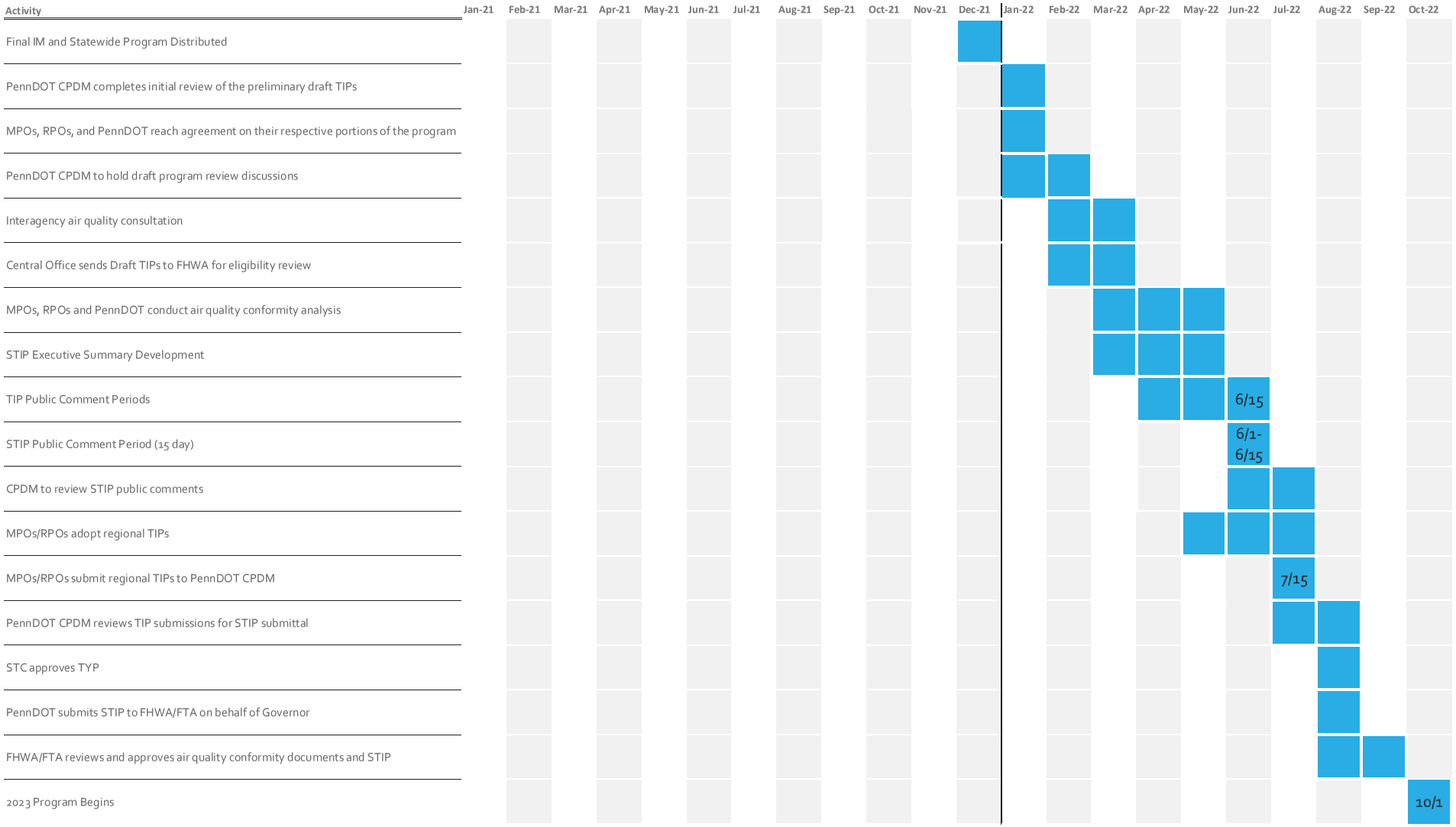
- the amount of funds requested on the TIP
- Federal funding that was obligated during the preceding year
- Federal funding remaining and available for subsequent years
- sufficient description to identify the project or phase
- identification of the agencies responsible for carrying out the project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

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



2023 Program Development Schedule



Transportation Program Development and Project Delivery Process

pennsylvania DEPARTMENT OF TRANSPORTATION

Transportation Issues
Potential Sources:
LRTP, Asset Management, Public, MPO/RPO, Districts, STC Comments, State and/or Regional Priorities and Goals, County/Municipal Comprehensive Plans, Corridor Studies, Planning Products, Discretionary, Financial Guidance

C O L L A B O R A T I O N

Problem Assessment → Proposal [2] Identification → Proposal [2] Evaluation → Project addition to TIP/STIP → PE/NEPA Decision → Final Design and Construction

Public Input Form [1] | Proposal Screening Form | TIP/STIP Document | Scoping Form | Environmental Decision Document | ECMTS

Review problems identified for consideration and determine Purpose and Need

Evaluate and refine problem

Determine priority level of problem - identify potential solutions and contextual issues

Evaluate contextual issues, as well as potential solutions and alternatives considering:
- Safety issues/concerns
- Bicycle/pedestrian accommodations
- Transit/multi-modal considerations
- Stormwater management
- Presence of/impacts from (current/future) freight-generating land uses
- Utility Issues
- Transportation operation considerations
- Emergency services accommodations
- Planned development
- Long range transportation plans
- Consistency with current and/or proposed zoning
- Consistency with community comprehensive or other plans
- Regional planning studies
- Other proposed transportation improvements
- Impacts on the natural, cultural, or social environment
- Right-of-way considerations
- Anticipated public opinion
- Community or cultural events in the candidate project area
- Presence of EJ populations or LEP individuals
- Maintenance agreement requirements
- Other specific regional/local topics

TIP+2

Recommend project/study to the TIP or to TIP Candidate List

At a minimum projects approved for the TIP require collaboration with local governments to identify multimodal [5], stormwater best management practices, and other appropriate community features

Conduct collaborative scoping field view including local governments with full consideration of community vision, needs, goals and objectives

Use information collected in the collaborative planning process to inform the NEPA decision document, preliminary engineering, final design and construction. Monitor commitments made.

Recommend formal study; place on LRTP or TIP as a study [4]

LRTP [2,3]

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

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

2023-2026 Transportation Program Submission Checklist

Planning Partner: _____ [Click Here to View Pop-Up Directions]

Transportation Management Area: ☐ Yes ☐ No

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

2023-2026 Transportation Program Submission Checklist

Planning Partner: _____ [Click Here to View Pop-Up Directions]

Transportation Management Area: ☐ Yes ☐ No

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

2023 - 2026 Transportation Program Development 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.

	FFY 2023		FFY 2024		FFY 2025		FFY 2026		Comments
Fund Type	**Financial Guidance**	**Programmed**	**Financial Guidance**	**Programmed**	**Financial Guidance**	**Programmed**	**Financial Guidance**	**Programmed**	
NHPP	$121,609,000	$121,609,000	$114,828,000	$114,828,000	$108,699,000	$108,699,000	$102,682,000	$102,682,000	
STP	$27,899,000	$27,899,000	$28,497,000	$28,497,000	$29,335,000	$29,335,000	$30,190,000	$30,190,000	
State Highway (581)	$43,021,000	$43,021,000	$46,455,000	$46,455,000	$47,289,000	$47,289,000	$51,819,000	$51,819,000	
State Bridge (185/183)	$38,354,000	$38,478,000	$37,669,000	$38,403,000	$37,669,000	$37,669,000	$37,531,000	$37,531,000	State 179 funds are accounted for in FY23, FY24, for MPMS #15183 .
BOF	$18,698,000	$18,698,000	$18,698,000	$18,698,000	$18,698,000	$18,698,000	$18,698,000	$18,698,000	
HSIP	$24,528,000	$24,528,000	$25,394,000	$25,394,000	$26,276,000	$26,276,000	$27,176,000	$27,176,000	
CMAQ	$39,553,000	$39,553,000	$40,547,000	$40,547,000	$41,561,000	$41,561,000	$42,595,000	$42,595,000	
TAU	$7,932,000	$7,932,000	$8,097,000	$8,097,000	$8,266,000	$8,266,000	$8,438,000	$8,438,000	
STU	$85,174,000	$85,174,000	$86,877,000	$86,877,000	$88,615,000	$88,615,000	$90,387,000	$90,387,000	
BRIP	$41,313,000	$41,313,000	$41,313,000	$41,313,000	$41,313,000	$41,313,000	$41,313,000	$41,313,000	
Total	$448,081,000	$448,205,000	$448,375,000	$449,109,000	$447,721,000	$447,721,000	$450,829,000	$450,829,000	State 179 funds are accounted for in FY23, FY24, for MPMS #15183 .

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**
FFL	$300,000				MPMS #117327- Valley Park Road over Anderson Brook
FLEX (CMAQ)	$17,083,000	$17,083,000	$17,083,000	$17,083,000	
Other	$1,000,000	$500,000			MPMS #11803 - Spring Garden Connector - Phase 1
Private	$47,000,000				MPMS #106264 - I-95 CAP and MPMS #11803 - Spring Garden Connector - Phase 1
Local	$66,577,000	$13,558,000	$6,984,000	$9,466,000	
RRX	$619,000	$730,000	$85,000		
sHSIP	$8,141,000	$9,665,000	$8,765,000		
SPIKE-NHPP			$36,000,000	$60,000,000	
SPIKE-STP	$29,176,000	$20,346,000	$19,094,000	$20,619,000	
SXF	$2,410,000	$8,728,000			MPMS #102709-PA 41 & SR 926 Improvements, MPMS #66952- PA 23/Valley Forge Road and North Gulph Road Relocation (2NG), MPMS #79832 -North Delaware Riverfront Greenway project, Sec 3
TAP	$7,572,000	$3,332,000			
TPK - Turnpike		$21,050,000			MPMS #110444 - Ridge Pike, School Lane to Belvior Rd
Total	$179,878,000	$94,992,000	$88,011,000	$107,168,000	

SEPTA's Financial Capacity Analysis and TAM Plan

DELAWARE VALLEY
dvrpc
REGIONAL
PLANNING COMMISSION

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SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY

FINANCIAL CAPACITY ASSESSMENT

August 2, 2022

In accordance with Federal Transit Administration (FTA) Circular 7800.1A, the following is provided as documentation that the Southeastern Pennsylvania Transportation Authority ("SEPTA" or the "Authority") has the financial capacity to carry out the operating and capital projects included in the Fiscal Year 2023-2026 Transportation Improvement Program. Notwithstanding the Authority's long-term financial capacity, SEPTA acknowledges that the COVID-19 pandemic has adversely affected travel and utilization of the Authority's services along with SEPTA's operations and financial results. SEPTA has received $1.67 billion in Federal COVID-19 Relief funding (Coronavirus Aid, Relief, and Economic Security (CARES) Act of March 2020; the Coronavirus Response and Relief Supplemental Act (CRRSA) of January 2021; and the American Rescue Plan Act (ARPA) of March 2021), which provided economic assistance to American workers, businesses, and industries impacted by COVID-19. These relief dollars have helped SEPTA offset the adverse financial impacts of the COVID-19 pandemic.

A. Scope of Operations

The Southeastern Pennsylvania Transportation Authority was formed by an act of the Pennsylvania General Assembly in 1964 in order to provide public transportation services to Bucks, Chester, Delaware, Montgomery and Philadelphia Counties. Over the years, SEPTA acquired the assets of several private transportation companies. Today, SEPTA is the sixth-largest public transportation system in the United States and is responsible for operating:

- 125 Bus Routes (including 5 circulator routes & shuttle services)
- 13 Regional Rail Lines
- 8 Trolley Lines
- The Broad Street Line and the Market-Frankford Line (subway/elevated)
- The Norristown High Speed Line (interurban heavy rail line)
- 3 Trackless Trolley Routes
- Customized Community Transportation (CCT), demand response services for seniors and individuals with disabilities

Due to the COVID-19 pandemic, SEPTA has realized substantial ridership decreases since March 2020. As of June 2022, SEPTA overall ridership reached 147 million total unlinked trips for FY 2022, which is 50% of pre-COVID FY 2019 levels of 292.9 million unlinked trips, and a 39% increase from FY 2021 total unlinked trips of 105.8 million. All SEPTA modes are progressively recovering ridership. Between June 2021 and June 2022, overall ridership increased by 39% with Bus ridership leading the recovery at 64% of pre-COVID levels. Similarly, Regional Rail ridership grew by 99% between June 2021 and June 2022 and recently reached 38% of pre-COVID levels. City Transit, which includes subways, trolleys, and buses that serve Philadelphia residents, grew by 37% between June 2021 and June 2022. In the month of June 2022, SEPTA recorded its best ridership recovery (56%) since the start of the pandemic.

B. Historical Trends

SEPTA's historical trends are outlined in Appendix A, Financial and Statistical Summary, for each of the past five fiscal years (Fiscal Year 2017 through Fiscal Year 2021). From FY 2017 to FY 2021 passenger revenue declined at a compound average growth rate of -23.7%. The 6% increase in FY 2018 was due to a fare increase effective on July 1, 2017. Operating expenses during the five-year period increased from $1.351 billion to $1.375 billion, reflecting a compound average growth rate of 0.4% per year. Operating subsidies increased from $857 million in FY 2017 to $1,182 million in FY 2021, an average rise of 8.4% per year. Operations for Fiscal Years 2017 through 2021 resulted in a relatively small surplus each year as total operating revenues, subsidies and investment income exceeded total expenses by an average of $1.06 million over the five-year period. Investment income for Fiscal Years 2017 through 2021 are shown in the appendix and reflect financial market conditions and fund balances.

Transportation usage decreased during the five-year period at an average of 23.5% per year. The number of total unlinked passenger trips decreased from 308.3 million in FY 2017 to 105.8 million unlinked trips in FY 2021, due to the impacts of the COVID-19 pandemic.

SEPTA was able to meet its financial obligations during the five-year period and its long-term debt, incurred for capital expenditures, decreased from $655.8 million at June 30, 2017 to $610.6 million at June 30, 2021. SEPTA's recovery ratio, expressed as a percentage of total operating revenues to total operating expenses, decreased from 36.5% in 2017 to 14% in 2021.

C. Current Condition

For FY 2021, the most recent fiscal year for which comparative information is available, total passenger revenue decreased 57.2% relative to the prior fiscal year. Operating expenses decreased 2.1% primarily due to lower labor wages, casualty and liability expenses, lease rentals, purchased transportation, services, fuel and lubricant costs, and other material and supplies offset by higher fringe benefits, and utilities. The lower costs were realized to a reduction in service once the pandemic began. Total government subsidies needed to support operations increased 18.1% from $996.1 million to $1,176.4 million primarily to the receipts of CARES Act funding. On March 27, 2020, the U.S. Congress passed, and the President signed into law the Coronavirus Aid, Relief, and Economic Security (CARES) Act. The CARES Act provides emergency assistance and health care response for individuals, families and businesses affected by the COVID-19 pandemic. The Authority was awarded $644 million in CARES Act funding, a portion of which offset the significant passenger revenue shortfall resulting from lower ridership related to the COVID-19 pandemic. The CARES Act Grant was awarded by the Federal Transit Administration on June 3, 2020. The Authority recognized $464.1 million in federal CARES Act funding to help offset lower passenger revenues. FY 2021 ended with an operating surplus of $995,000.

The Authority's Fiscal Year 2021 audited financial results are prepared in accordance with generally accepted accounting principles (GAAP).

D. Financial Projections

With the passage of Act 44 of 2007, as amended by Act 89 of 2013, a dedicated, long-term funding solution for transportation in Pennsylvania was enacted. This ended years of uncertainty with regard to SEPTA's operating subsidy. Act 89 also provides new bondable revenue sources for transit. In the future, SEPTA anticipates issuing bonds for certain capital projects, such as rail car acquisitions, to assist in financing the capital program.

Appendix B, Financial Projections Consolidated Budget, provides the detailed projections through Fiscal Year 2028.

Forecast Assumptions By Category:

Passenger Revenue
Passenger Revenue and Shared Ride Revenue is projected to grow an average of 6.21% over the five-year period, with total Operating Revenue projected to eventually reach 83% of pre-COVID levels in FY 2028.

Other Income
SEPTA's Other Revenue category includes income from investments, real estate rentals, advertising, parking lot fees, scrap sales, and property damage recoveries. Other Revenue is expected to increase approximately 6.21% per year.

Expenses
Overall expense growth rate averages 2.21% annually with fringe benefits expected to grow at a higher rate due to increased healthcare costs.

Subsidy
In response to the COVID-19 pandemic, three Federal relief bills were passed: The Coronavirus Aid, Relief, and Economic Security (CARES) Act in March 2020; the Coronavirus Response and Relief Supplemental Act (CRRSA) in January 2021; and the American Rescue Plan Act (ARPA) in March 2021. In Fiscal Year 2023, Federal Subsidy is expected to cover 26.7 percent of SEPTA's operating expenses, a significant increase over pre-pandemic fiscal years. The sources of this subsidy are: $415 million from the aforementioned relief acts; Federal Capital Lease Subsidy of $639 thousand; Federal Capital Debt Service Subsidy of $6.9 million and $400 thousand from Highway Pass Through Funds.

The subsidy category reflects the anticipated funding levels of the Public Transportation Trust Fund established by Act 44 of 2007, as amended by Act 89 of 2013. The Service Stabilization Fund will be especially important to balance the Operating Budget in forthcoming fiscal years after federal relief funding expires, which is currently projected to occur in Fiscal Year 2024. Based on current financial projections, the Service Stabilization Fund will cover an anticipated gap in funding in Fiscal Years 2025, Fiscal Year 2026, and a portion of Fiscal Year 2027 before it too is projected to expire.

E. Capital Program

The Fiscal Year 2023 Capital Budget was developed based on the following principles:

- Forecasted Federal, State and Local Funding Levels; and
- Budgeting based on Annual Cash Flow Projections and Financial Obligations.

Funding Assumptions

The following references were used to develop the programming amounts for SEPTA's Fiscal Year 2023 Capital Budget and Fiscal Years 2023-2034 Capital Program:

- Federal funding levels based on the transportation funding authorization, Bipartisan Infrastructure Law (BIL, also known as the Infrastructure Investment and Jobs Act, or IIJA).
- Transition of state sources of capital assistance from reliance on Pennsylvania Turnpike Commission bonds to the state's Motor Vehicle Sales and Use Tax.
- Financial guidance for state funding from Act 89 of 2013.
- City/Counties local match requirements on federal and state funding.
- Capital financing to manage cash flow obligations. SEPTA is planning the implementation of a multi-year borrowing program utilizing State Motor Vehicle Sales Tax revenues for repayment.

Fiscal Year 2023 Projects

SEPTA's Proposed Fiscal Year 2023 Capital Budget totals $1.162 billion, a 63% increase from the FY 2022 Capital Budget. Available funds are allocated among projects that will advance strategic objectives, bring assets to a state of good repair, meet the Authority's financial obligations, implement system improvements, and enhance safety and security. Capital investments are focused on the following areas:

Rebuilding the System
Projects will return the system to a state of good repair via restoration or replacement of transit infrastructure that has exceeded its useful life. Projects will address the State of Good Repair backlog and preserve transit service for current and future customers. Programs include bridges; communication, signal systems, and technology; maintenance/transportation facilities and roofs; substations and power; and track and right-of-way.

Safety and Security
Projects include safety and security measures for vehicles and facilities, and interoperable communications improvements.

Vehicle Acquisitions and Overhauls
Projects include replacing buses and utility vehicles that have exceeded their useful life, acquisition of multi-level rail cars, and optimizing the fleet through targeted overhaul.

Financial Obligations

This includes payments for SEPTA's Amtrak trackage lease, other capital leases, and debt service payments.

Project of Significance

SEPTA continues to seek long term funding to complete major regional projects including Trolley Modernization; the King of Prussia Rail project; Market-Frankford Line Vehicle Replacements; and Bus Revolution (comprehensive bus network redesign). These projects will address regional transportation needs, accommodate the growing economy and reduce traffic congestion, but they will require additional, bondable revenue sources to complete. $2.7 billion is programmed in 2023-2034 to advance Trolley Modernization, King of Prussia Rail, Bus Revolution, and the Market-Frankford Line Vehicle Replacements.

F. Financial Capability

SEPTA has the financial capacity to carry out the projects included in the FY 2023-2026 Transportation Improvement Program (TIP).

SEPTA is designated by the Governor of Pennsylvania as the designated recipient of Section 5307 Urbanized Area formula funds for the five-county Southeastern Pennsylvania region of Bucks, Chester, Delaware, Montgomery, and the City of Philadelphia. As such, the Authority submits, executes, and administers over $700 million in federal and state grants annually. The final report for the FY 2021 FTA Triennial Review for SEPTA Systems identified several deficiencies, but they have since been addressed by SEPTA and closed out by the FTA. SEPTA is in a good/fundable standing with FTA. This documentation is on file with the transit operator, as well as with the FTA.

The Commonwealth of Pennsylvania's Public Transportation Trust Fund provides SEPTA with financial resources for transit capital projects. In order to create a sustainable program and to leverage transportation investments, the State of Pennsylvania has established the match requirement of the Federal grant commitments as a top priority of the State Trust Fund. Additionally, local governments, such as the City of Philadelphia and the Counties of Bucks, Chester, Delaware, and Montgomery contribute a percentage of the local share. This funding is provided through the Annual Capital Budget process for each government entity.

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY

FINANCIAL CAPACITY ASSESSMENT

August 2, 2022

CERTIFICATION

In accordance with Circular 7800.1A and based on the updated operating and capital needs as outlined in this Financial Capacity Assessment, SEPTA certifies that it has the financial capacity to provide the services and capital projects included in the DVRPC Fiscal Years 2023-2026 Transit Improvement Program (TIP).

Leslie S. Richards
Chief Executive Officer & General Manager
Southeastern Pennsylvania Transportation Authority

Appendices

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY

FINANCIAL CAPACITY ASSESSMENT

August 2, 2022

Southeastern Pennsylvania Transportation Authority
Financial and Statistical Summary
For Fiscal Years Ended June 30
(Amounts in thousands)

	2017	2018	2019	2020	2021	% Change FY 2020 to FY 2021	Average Annual % Change FY 2017 to FY 2021
Passenger Revenue	$ 441,401	$ 466,569	$ 457,709	$ 349,307	$ 149,422	-57.2%	-23.7%
Shared Ride Program	17,205	16,351	15,992	12,609	5,627	-55.4%	-24.4%
Total Revenues Based on Ridership	458,606	482,920	473,701	361,916	155,049	-57.2%	-23.7%
Other Operating Revenues	35,732	38,749	41,017	41,530	38,310	-7.8%	1.8%
Total Operating Revenues	494,338	521,669	514,718	403,446	193,359	-52.1%	-20.9%
Operating Subsidies	857,003	847,587	893,747	1,000,280	1,181,648	18.1%	8.4%
Total Revenue	1,351,341	1,369,256	1,408,465	1,403,726	1,375,007	-2.0%	0.4%
Operating Expenses (a)	1,353,073	1,371,790	1,411,366	1,403,458	1,374,199	-2.1 %	0.4%
Surplus / (Deficit)	$ (1,733)	$ (2,534)	$ (2,901)	$ 268	$ 808	201.5%	
Investment Income (b)	$ 1,939	$ 2,978	$ 3,229	$ 3,067	$ 187	-93.9%	-44.3%
Surplus/ (Deficit) After Investment Income	$ 207	$ 444	$ 328	$3,335	$995	-64.5	48.1%
Operating Revenue to Expense Ratio	36.5%	38.0%	36.5%	28.7%	14.1%		
Passengers Carried (Annual Unlinked Passenger Trips)	308,300	302,702	292,857	58,571	117,143	100.0%	-21.49%
Actual Vehicle/Car Revenue Miles	100,196	100,609	101,449	20,289	-40,578	-300.0%	
Unrestricted Cash and Investments, at Year-end	$ 78,801	$ 81,917	$ 81,834	$ 50,371	$ 42,027	-16.6%	-14.54%
Long-term Debt, at Year-end	$ 655,788	$ 708,203	$ 710,430	$538,381	$ 610,637	13.4%	-1.77%
			100.0%	-21.49%			

(a) Excludes the reserve change related to other postemployment benefits and pensions
(b) Excludes unrealized investment gains and losses.

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY

FINANCIAL CAPACITY ASSESSMENT

August 2, 2022

Appendix B - Financial Projections Consolidated Budget

	Budget	Projection				
Amounts in thousands ('000)	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
REVENUE						
PASSENGER REVENUE	$265,567	$282,385	$299,351	$318,130	$337,942	$358,911
SHARED RIDE PROGRAM	9,569	10,175	10,786	11,463	12,177	12,932
OTHER INCOME	40,496	43,060	45,647	48,511	51,532	54,729
INVESTMENT INCOME	598	635	674	716	760	808
TOTAL REVENUE	**$316,229**	**$336,255**	**$356,458**	**$378,819**	**$402,411**	**$427,380**
Revenue % of Pre-COVID	*61%*	*65%*	*69%*	*73%*	*78%*	*83%*
EXPENSES						
LABOR & FRINGE BENEFITS	$1,085,167	$1,113,751	$1,143,113	$1,173,274	$1,204,258	$1,239,959
MATERIALS & SERVICES	401,298	409,324	417,511	421,686	425,903	430,162
INJURY & DAMAGE CLAIMS	28,795	29,371	29,958	30,258	30,560	30,866
PROPULSION POWER	31,188	30,876	30,567	30,567	30,873	31,490
FUEL	31,626	31,310	30,997	30,377	29,465	28,287
VEHICLE & FACILITY RENTAL	8,200	8,118	8,037	7,956	7,877	7,798
DEPRECIATION	24,260	24,987	25,737	26,509	27,304	28,124
TOTAL EXPENSES	**$1,610,534**	**$1,647,737**	**$1,685,919**	**$1,720,627**	**$1,756,241**	**$1,796,685**
DEFICIT BEFORE SUBSIDIES	**$(1,294,305)**	**$(1,311,482)**	**$(1,329,461)**	**$(1,341,808)**	**$(1,353,829)**	**$(1,369,306)**
SUBSIDIES						
FEDERAL	$422,942*	$398,843*	$59,151	$59,964	$96,988	$98,265
STATE	757,324	794,221	1,105,769**	1,110,880**	819,995	822,282
LOCAL	108,646	113,827	159,905	161,382	158,087	160,001
OTHER	5,393	4,591	4,637	4,684	4,731	4,778
TOTAL SUBSIDY	**$1,294,305**	**$1,311,482**	**$1,329,461**	**$1,336,910**	**$1,079,801**	**$1,085,326**
SURPLUS/(DEFICIT)	$-	$-	$-	$(4,898)	$(269,130)	$(283,980)
NOTES	*FEDERAL RELIEF		**SERVICE STABILIZATION			

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Transit Asset Management Plan

Prepared by the
Southeastern Pennsylvania Transportation Authority
in accordance with 49 CFR part 625

October 1, 2018

ASSET MANAGEMENT POLICY STATEMENT

SEPTA's mission is to provide safe and reliable multi-modal public transportation services within a 2,200-square mile service area in Philadelphia, Bucks, Chester, Delaware, and Montgomery Counties. The Authority relies on a diverse portfolio of assets including revenue vehicles, passenger and maintenance facilities, infrastructure, and equipment to deliver this service. Many of these assets were manufactured or constructed by legacy operators prior to SEPTA's creation by the State of Pennsylvania in 1964. The condition of the Authority's assets can have a direct impact to passenger safety, employees' environment, service delivery, and service quality. SEPTA is committed to bringing the system to a state of good repair and building for the future. This commitment has been documented in the Capital Budget, and the Strategic Business Plan.

Transit asset management provides the framework for the strategic and systematic processes through which SEPTA procures, operates, maintains, rehabilitates, and replaces assets to balance risk, performance, and cost throughout the assets' life cycles. In order to provide a framework for making data-informed and risk-based decisions for investing limited funds, SEPTA established an Asset Management Program. The Asset Management Program will allow SEPTA to:

- Make data-informed and risk-based decisions about the procurement, operation, maintenance, and renewal of assets;
- Prioritize investments that optimize safety and reduce risk, while bringing the system to a state of good repair;
- Evaluate the impact of funding and spending scenarios on asset condition and performance;
- Evaluate the impact of system modernizations on SEPTA's long-term capital and maintenance needs while growing capacity for existing and future riders; and
- Implementing tools for providing data to the Federal Transit Administration and key planning partners.

Transit asset management is an integral program to achieving a state of good repair, operating as a business, and keeping safety as the foundation of capital investment decisions. The Authority has committed to bringing the system to a state of good repair. To this end SEPTA is committed to providing staff and resources to create and implement asset management at the Authority.

_*(Signature on File)* _____

Jeffrey D. Knueppel, P.E.

General Manager

Accountable Executive

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Executive Summary

The Southeastern Pennsylvania Transportation Authority (SEPTA) has developed this Asset Management Plan in accordance with the guidelines given in the 2016 Transit Asset Management Rule (49 CFR part 625). This plan outlines the framework for which vehicle and infrastructure information is evaluated in developing capital investment plans. The program will also help the Authority to more effectively use its resources to minimize unacceptable safety concerns and mitigate risk while bringing the system to a state of good repair.

Data governance is integral to supporting an asset management framework. SEPTA will utilize two maintenance management systems and a capital investment prioritization tool to support asset management efforts. . The business processes that are followed to update and utilize these programs and to provide data for internal and external stakeholders have been incorporated into this Plan. Ongoing projects to support the Asset Management Program implementation include:

- SEPTA Transit Asset Management Plan (this document);
- SGR Asset Inventory (Complete);
- SGR Targets (To be complete 10/31/18);
- Vehicle Maintenance Management System (Ongoing, to be complete Winter);
- Infrastructure Maintenance Management System (Ongoing, to be complete Fall 2019);
- Decision Support Tool (Complete); and
- Narrative Report for NTD (Start March 2019, Complete October 2019).

The initial program will be fully implemented by the October 1, 2018 date mandated by the FTA. However, SEPTA views asset management as a practice that will continue to mature as data is collected. As such, this plan will be updated periodically to reflect the state of the practice at SEPTA.

Transit Asset Management at SEPTA

Transit Asset Management (TAM) is the strategic and systematic practice of procuring, operating, inspecting, maintaining, rehabilitating, and replacing transit capital assets to manage their performance, risks, and costs over their life cycles to provide safe, cost-effective, and reliable public transportation. TAM uses transit asset condition and associated risks to guide how to manage capital assets and prioritize funding to achieve or maintain a state of good repair.

SEPTA was created through the consolidation of private transportation providers in the region, some of whom had been in operation since the mid 1800's. The resulting system is truly multimodal, with commuter rail, heavy rail, light rail, bus, and paratransit service. Due to the age and complexity of the system, SEPTA owns, operates, and maintains a vast and diverse inventory of assets. Prioritizing the maintenance and replacement of these assets requires a balance of potential safety risk, operational impacts, and costs.

While SEPTA has always performed some form of asset management, implementation and practices have varied among the many departments responsible for maintaining the assets. In 2010, SEPTA applied for and received a grant from the Federal Transit Administration (FTA) to improve transit asset management practice. With the grant monies received, SEPTA has been developing an Authority-wide Transit Asset Management Program. The purpose of SEPTA's Asset Management Team is to develop the data required to inform decisions regarding the renewal and replacement of SEPTA's multimodal infrastructure and fleet. This information will include:

- State of the System Report and Annual State of Good Repair Backlog Assessment;
- Establishment and Evaluation of Asset Management Performance Targets;
- Interface with the System Safety Plan (49 CFR 270) and the Authority Safety Plan (49 CFR 273);
- Reports to the National Transit Database;
- Reports to External Stakeholders, including the FTA, Pennsylvania Department of Transportation (PennDOT), and the Delaware Valley Regional Planning Commission (DVRPC); and
- Collaboration with the Planning and Project Coordination Team for project scheduling.

The Asset Management Program includes collaboration with many entities within the Authority, including Engineering, Maintenance, and Construction; Vehicle Engineering and Maintenance; System Safety; Operations; and Finance. This collaboration will facilitate a data-informed investment decision process that supports the overall mission of the Authority to provide safe and reliable public transportation.

This Asset Management Plan is the documentation of the various business processes that support the Asset Management Program. The Asset Management Plan was developed in alignment with the Federal Transit Administration's requirements, as established in the 2016 Transit Asset Management Rule (49 CFR part 625). Per the requirements, this plan outlines how people, processes, and tools work together to address asset management policy and goals; provides accountability and visibility for furthering understanding of asset management practices; and supports planning, budgeting, and communications to internal and external stakeholders. As SEPTA's practice of asset management matures, this plan will continue to evolve.

Asset Management Advances SEPTA's Roadmap Forward

In 2015, SEPTA's General Manager established five areas of strategic focus for the Authority. Asset management is a key enabler in providing information to support these goals.

The Customer Experience

The condition and performance of vehicles and infrastructure has a direct impact on SEPTA's service quality and operational safety. SEPTA must continue to make strategic investments to reduce the risk of decreased reliability due to asset condition. Moreover, SEPTA must continue to make improvements

that make public transportation a mode of choice in the Philadelphia Region. These improvements include increased station accessibility, increased parking capacity, and more reliable vehicles with increased passenger capacity. SEPTA continues to work on projects to harden the system in the case of extreme weather events.

Employee Development

Enterprise asset management systems will help the employee onboarding process, and collate institutional knowledge of more experienced employees. This centralized program will allow personnel to access asset information and maintenance practices, and reinforce protocols taught in trade-specific training. The enterprise system will provide a mechanism for transferring knowledge about the assets that may not otherwise be written down.

Rebuilding the System

As a legacy system, SEPTA's capital program is largely focused on repairing and replacing assets that are no longer in a state of good repair. Asset management helps to identify potential projects that can address the state of good repair backlog.

SEPTA as a Business

SEPTA operates on a 12-year fixed capital and operating budget. As a publically funded agency, SEPTA has a responsibility to make prudent decisions about the public funds for which the Authority is responsible. Asset management can be used to help prioritize SEPTA's investment plan while reducing overall asset lifecycle costs. Asset maintainers will have the data to perform more preventative, rather than reactive, maintenance, which is a more cost effective business model.

Safety as the Foundation

Safety is an integral component of SEPTA's employee culture. Asset management can be used to prioritize projects that mitigate safety risks for passengers and employees. These investments help to keep the system running in a safe and reliable manner. Because of the tie to the new Safety Management System (SMS) approach promulgated in 49 CFRR 673, the System Safety Division is a key stakeholder in the Asset Management Program. Future updates to this plan will show the linkage between these two systems.

SEPTA's Key TAM Stakeholders

The TAM Program interfaces with several departments directly, and others in a support capacity. Here are some of the roles of key SEPTA stakeholders:

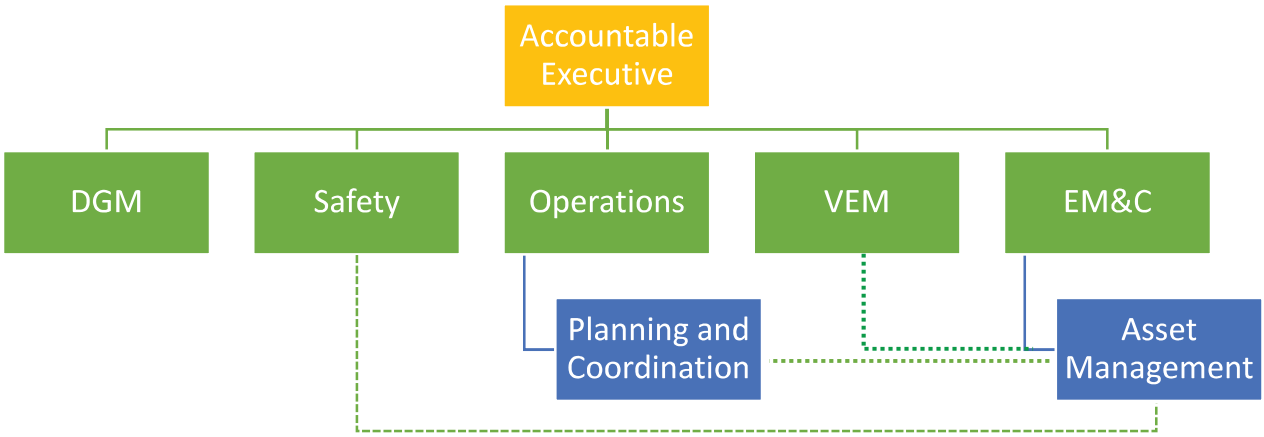

Figure 1: SEPTA Asset Management Stakeholders

The Accountable Executive

Per the FTA, the Accountable Executive is the single, identifiable person who has ultimate responsibility for carrying out the safety management system of a public transportation agency; responsibility for carrying out transit asset management practices; and control or direction over the human and capital resources needed to develop and maintain both the agency's safety and asset management plans in accordance with 49 U.S.C. 5329(d) and 49 U.S.C. 5326. The accountable executive is responsible for the overall implementation of the asset management strategy, and for promoting a culture of safety and TAM. SEPTA's Accountable Executive is the General Manager, Jeffrey D. Knueppel, P.E.

Deputy General Manager

SEPTA's Deputy General Manager/ Treasurer is responsible for many Divisions that support the Asset Management program, including Finance, Capital Grants, Procurement, Information Technology, and Human Resources. The information technology group has a significant role in the deployment and management of all systems that support TAM. The Deputy General Manager is also responsible for the development of the Capital and Operating Budgets.

System Safety

The Assistant General Manager of System Safety is a direct report to SEPTA's Accountable Executive. In this capacity, the System Safety Department reviews all maintenance and inspection procedures, condition assessments, drawings, and specifications. The System Safety Department is responsible for evaluating safety-related risk for SEPTA's passengers and employees. They will make recommendations of immediate or long-term corrective actions or projects in the event that an actionable risk is

discovered. The System Safety Division reviews the Capital Budget to ensure that that known safety concerns are addressed within the horizon of the program. The System Safety Division is SEPTA's liasson with the FTA and PennDOT's State Safety Oversight (SSO). Concerns raised at the SSO are relayed to appropriate departments for mitigation, including but not limited to the Asset Management group.

Regulatory Link to Safety Management System

On January 19, 2018, the FTA issued a final rule on Public Transportation Agency Safety Plans. This rule applies the SMS approach to transit system operators. This System Safety Division will be responsible for implementing a plan that addresses the four pillars of SMS: safety management policy, safety risk management, safety assurance, and safety promotion. A new safety hazard identification process will be implemented for both operational and asset renewal activities. The asset management group will coordinate with the System Safety Division to ensure that the TAM Plan and Asset Inventory can be used to support the SMS implementation.

Operations

SEPTA's primary mission is to provide transportation through the Philadelphia region. Therefore, all projects must coordinate with the Operations Division to ensure that service disruptions due to infrastructure condition, performance, and replacement activities are minimized while maintaining the safety of passengers, public, and employees. Where appropriate, projects include an evaluation of whether or not a proposed action has the potential to increase capacity or operational flexibility on the system.

Vehicle Engineering and Maintenance

The Vehicle Engineering and Maintenance Department is responsible for the maintenance and procurement of SEPTA's multimodal fleet. This Division consists of personnel who specialize in Bus, Rail, and Utility Vehicles, as well as an administration group that develops the fleet management and vehicle overhaul plans.

Engineering, Maintenance, and Construction

The Engineering, Maintenance, and Construction Division is responsible for maintaining SEPTA's infrastructure, which includes assets on the right of way and at transit facilities. Asset managers within this group include Bridges and Buildings, Track, Power, Communications and Signals, Administration, and Capital Construction. The EM&C Division is also responsible for Real Estate.

The asset management team is a function of the Administration Department within EM&C and works closely with the Vehicle Engineering and Maintenance Division.

Planning and Coordination, Operations Control Center

The Planning and Coordination Department serves as an interface between the Operations and EM&C Divisions. This department develops the five year infrastructure renewal plan and schedule for service outages. This schedule is developed to ensure that service disruptions due to infrastructure renewal are minimized, and that all work groups are able to work in a safe manner, compliant with Roadway Worker rules. These plans may also include the utilization of buses to facilitate passenger flow when rail is out of service. The five year plan includes large scale capital projects, such as Positive Train Control and station renewals; maintenance activities, such as tie and surfacing or overhead contact system renewal; and projects by other agencies that have the potential to impact SEPTA service.

Asset Management Program Technical Enablers

Three pieces of software provide the primary support for SEPTA's TAM Program.

Vehicle Maintenance Information System

The Vehicle Maintenance Information System (VMIS) was initially deployed at SEPTA between 1998 (bus) and 2005 (commuter rail). VMIS is an integral part of work flow at the depots. Moreover, VMIS is the Authority's system of record for all fleet assets and associated work orders. VMIS generates enterprise reports, such as the depots' vehicle availability reports, as well as more granular reports, such as fuel consumption and component maintenance history.

At the time of the publication of this plan, SEPTA is utilizing Trapeze M4 for VMIS, and is currently upgrading to Trapeze M5.

Infrastructure Maintenance Management System

The Infrastructure Maintenance Management System (IMMS) is the counterpart to VMIS. This work order management system will serve as the system of record for the asset inventory, condition, maintenance history, and performance of bridge, power, systems, and track assets. The data in this system will be utilized to improve lifecycle management and develop SEPTA-specific age and condition curves for use in the decision making software.

At the time of implementation of this plan, SEPTA is in the process of deploying Asset Works' FA Suite to the Power and Track Departments within the EM&C Division.

State of Good Repair Database

The State of Good Repair (SGR) Database is a decision support tool. Originally developed by the Massachusetts Bay Transportation Authority, the SGR Database is used to prioritize investments with a goal of bringing the system to a state of good repair. The SGR Database utilizes asset age, condition, performance, ridership impact, replacement cost, and renewal cost to develop a composite State of

Good Repair score. This score can be used to generate optimized lists of spending actions based on different levels of spending. This tool is also utilized to model SEPTA's unconstrained needs and SGR Backlog. The SGR Database inventory is the source of the capital asset inventory included in this plan.

SEPTA started to use an Access version of the SGR Database in 2011, and will adopt a SQL version of the SGR Database in Fall 2018.

Asset Management Framework for Data-Informed Decision-Making

Prior to the start of the capital planning process, the Asset Management Group will run scenarios in the State of Good Repair Database. At a minimum, these scenarios will include:

- Unconstrained Needs Analysis
- Investment Prioritization based on Unconstrained Funding Scenario
- Investment Prioritization based on Projected Funding Scenarios

The output of these scenarios will be provided to the Capital Planning Committee. The Committee will utilize this input when developing the Capital Plan. However, it is important to recognize that capital planning requires a balance of many factors. Beyond the goal of bringing the system to a state of good repair, other needs shape the overall program, such as:

Safety

Passenger and employee safety is SEPTA's highest priority. The mitigation of identified and assessed hazards and risks takes priority over all other spending. Moreover, System Safety is a key stakeholder in the review of inspection and maintenance procedures, development of spending plans, and providing oversight during the design and construction of major transit facilities. In the case of an unforeseen safety condition, SEPTA must re-evaluate proposed spending and make adjustments so that these conditions can be remedied as quickly as possible.

SEPTA evaluates the safety of the system continuously, through planned inspections, location-specific programs, and through location safety committee (LSC) meetings. These processes help to identify critical safety concerns. The mitigation of safety concerns is a primary selection criterion for capital project selection. Examples of the inclusion of safety in the 2019-2030 Capital Budget include:

- Lawndale Station (Includes the construction of a grade-separated pedestrian track crossing);
- Positive Train Control on the Media-Sharon Hill Line;
- Fleet management programs that address technical and safety obsolescence.

Mandates

SEPTA must comply with all mandates issued by the authorities that govern its operation. These mandates include installation of positive train control (PTC) on the Regional Railroad, payment to Amtrak under the terms of the Passenger Rail Investment and Improvement Act (PRIIA) and compliance with the National Environmental Policy Act (NEPA) and the Americans with Disabilities Act (ADA). Some mandates have required SEPTA to take immediate action to accelerate projects to be completed by a specified date. Others have required SEPTA to incorporate additional elements to a project. Since assets are not always able to be replaced in kind, future costs may increase.

Operations

Projects must be performed in a manner that minimizes operational impact while maintaining the safety of passengers, public, and employees. When a piece of infrastructure is taken out of service for an extended period of time, SEPTA will oftentimes develop a comprehensive plan to repair all assets within the limits of the service outage. This allows SEPTA to bring an entire corridor of assets to the same performance standard. This proactive approach to maintenance reduces the risk of unplanned service disruptions due to infrastructure condition. This also allows SEPTA employees and third party contractors a safer environment for work. The corridor approach to infrastructure renewal results in a significant cost savings. Moreover, this approach reduces customer impacts during construction as well as mitigating the risk of future infrastructure failure.

SEPTA will sometimes extend the useful life of an asset in order to schedule its replacement within a corridor-wide program. The extension of life can only be performed if this action does not does not impose additional risk or introduce new hazards. Several long term infrastructure renewal plans are providing the framework of these long range infrastructure plans. These include: the installation of positive train control; the rationalization of the interlocking plant; replacement of the legacy overhead contact system; and cyclical tie and surfacing of the right of way.

Funding

SEPTA is primarily funded through FTA formula funds and State of Pennsylvania grants. However, some grants are funded through discretionary grants, such as the Superstorm Sandy Resiliency program, the former TIGER program, and the BUILD program. The capital program must comply to the requirements of the funding sources.

Adaptation

Some projects include elements to harden the existing infrastructure against impacts of extreme weather events. Other adaptation projects have included the addition of infrastructure to provide operational flexibility in areas of known flooding. SEPTA continues to perform projects to reduce energy consumption, such as the installation of LED fixtures and the procurement of electric buses.

Partnership

SEPTA collaborates its program with that of other neighboring agencies. These partnerships allow for more comprehensive improvements in the communities that the Authority serves. Some of these partner agencies have included the Philadelphia Water Department (for stormwater improvements), Aqua (minimizing impact of roadway closures for utility installation and track replacement), and Townships (increasing parking capacity or accessibility at stations to facilitate the use of public transit in areas of potential development, i.e., Transit Oriented Development.)

Growth

SEPTA continues to perform investments that facilitate additional use of the system and effectively increase ridership. Some of these investments include projects to increase operational flexibility, such as the construction of passing sidings or the installation of bi-directional signal systems. Other investments include improved passenger amenities, such as increased parking capacity, compliance with the Americans with Disabilities Act (ADA), and the installation of high level platforms. SEPTA has initiated the procurement of multi-level rail cars to increase passenger capacity of the Regional Railroad.

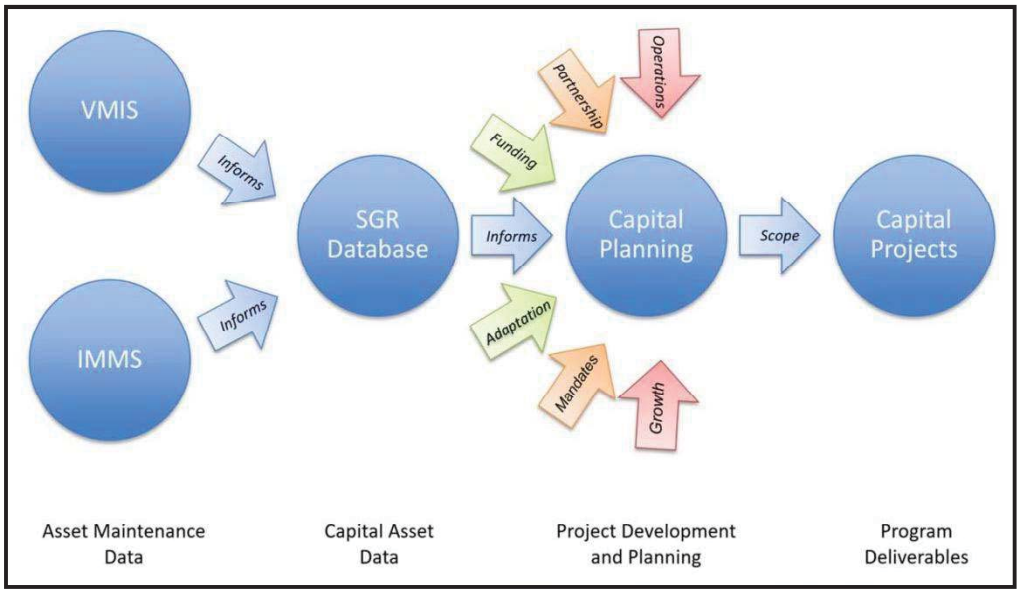

Figure 2 Data Informed Decision Framework for Balancing State of Good Repair Needs in the Capital Program.

Documents that Interface with the Asset Management Program

There are many established procedures that provide information integral to the success of the Asset Management Program and that will continue to be developed and curated by subject matter experts. When updating the Asset Management Plan, the group must look to the following documents:

- The System Safety Program (49 CFR 470) and the Authority Safety Plan (49 CFR 673);

- Fleet Management and Vehicle Overhaul Plans;
- Vehicle Technical Information Library;
- Five Year Outage Plans (Railroad, CTD, STD);
- Capital Project Summary Reports;
- Capital Budget;
- Project Control 10-Year Cash Flow Report; and
- Asset Inspection Protocols.

External-Facing Deliverables of the Asset Management Program

The Asset Management Program will provide reports regarding asset age, condition, and performance to key stakeholders, including the FTA, the Metropolitan Planning Office (DVRPC), and the Pennsylvania Department of Transportation (PennDOT).

Federal Transit Administration (FTA)

In order to comply with the Asset Management Rule, transit agencies must demonstrate process and report deliverables, beginning on October 1, 2018. Process deliverables include a compliant Transit Asset Management Plan, certified by the Accountable Executive. The agency must be able to demonstrate appropriate recordkeeping to support the plan. Report deliverables include age and condition data within the National Transit Database asset inventory module and establishment of asset performance targets for the next year. Beginning in report year 2019, agencies must provide a narrative that documents changes in transit system conditions and the progress toward achieving the performance targets established in the previous reporting year.

Table 1: National Transit Database Performance Measures		
Category	**Assets**	**Performance Measure**
Rolling Stock	Revenue Vehicles by Mode	Percentage of Revenue Vehicles that have Exceeded the Agency's Useful Life Benchmark
Equipment	Non-revenue support-service and maintenance vehicles	Percentage of Non-Revenue Vehicles that have Exceeded the Agency's Useful Life Benchmark
Infrastructure	Rail fixed-guideway including bridges and tunnels, track, signals and systems	Percentage of track segments with performance restrictions
Facilities	Maintenance and administrative facilities; stations, and parking facilities	Percentage of assets with condition rating below 3.0 on the FTA TERM Scale

Notes:

1.) The useful life benchmark (ULB) has been developed with input from the Vehicle Engineering and Maintenance Division. ULB's take into account the asset lifecycle based on equipment type, operating environment, duty cycle, and performance.
2.) Performance Restrictions are established based on the data in the weekly Speed Restriction Reports.
3.) Facility Condition Scores are taken from the Structural Engineering Department's condition assessments and from sample inspections performed by the Asset Management group.

Delaware Valley Regional Planning Commission (DVRPC)

DVRPC is the Metropolitan Planning Organization for Philadelphia and eight surrounding counties. On an annual basis, SEPTA will provide DVRPC with the performance targets that have been established for that calendar year. Every five years, SEPTA will to provide the 30-year unconstrained needs assessment for the development of the long range plan. (SEPTA utilized the State of Good Repair Database to provide data for DVRPC's 2040 and 2045 long range plans.)

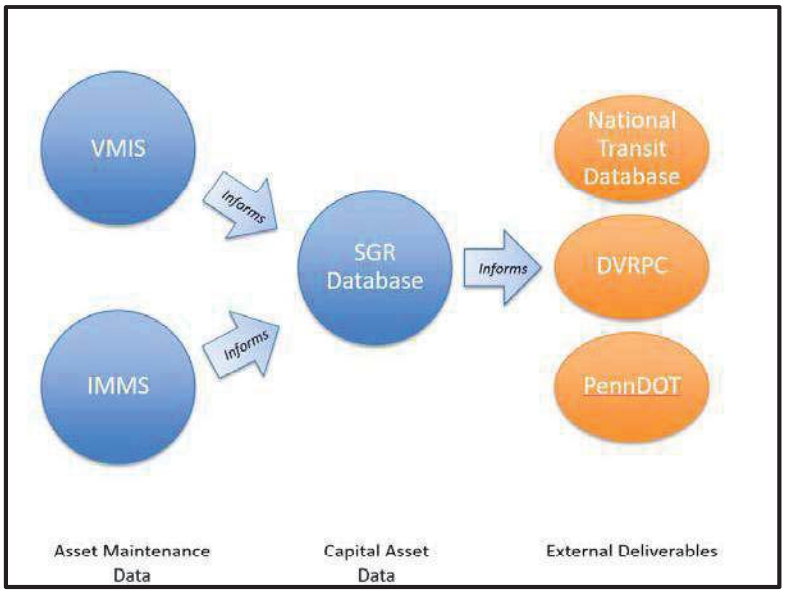

Figure 3: External Face of the Transit Asset Management Plan

Pennsylvania Department of Transportation (PennDOT)

PennDOT utilizes the TransAM system to develop a state-wide asset inventory and condition report for capital planning purposes. PennDOT requires that an update to the inventory be completed at the end of each year prior to issuing funding to an agency. The Asset Management Group provides SEPTA's annual update to TransAM.

TAM Plan Requirements per 49 CFR part 625

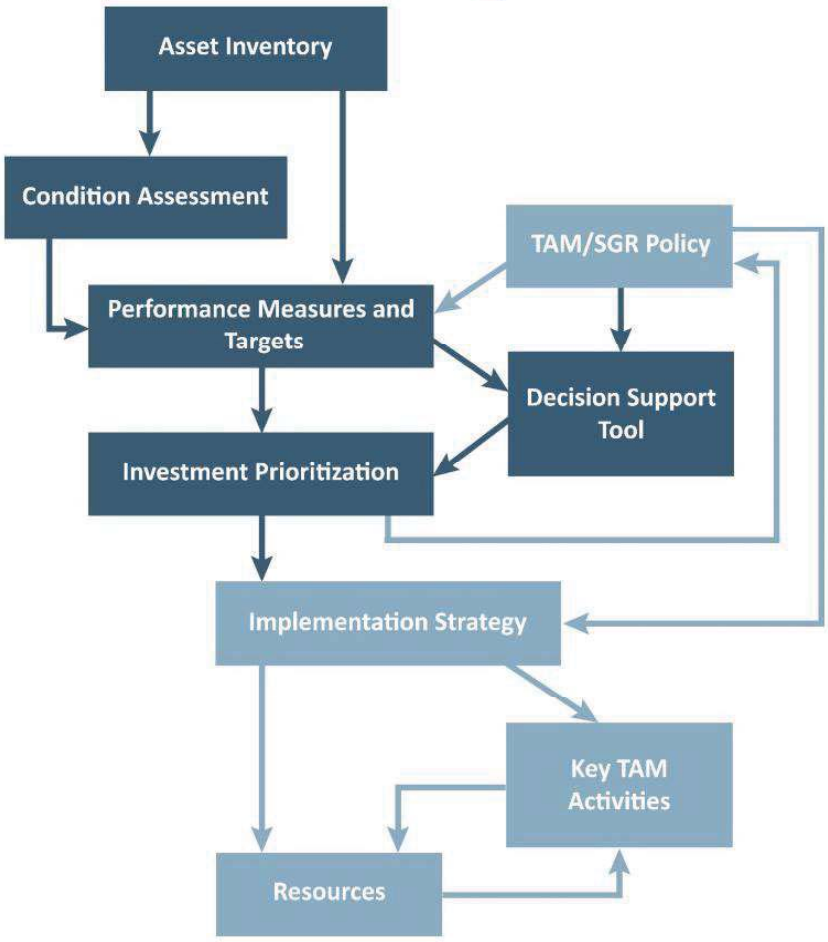

Figure 4: Relation of TAM Plan Elements. Source: FTA TAM Plan Compliance Checklist, December 2017

Inventory of Capital Assets

The agency should have an inventory of all capital assets it uses in the provision of public transit. The asset inventory should be as detailed enough as needed to develop a capital plan.

SEPTA has developed a capital asset inventory in the State of Good Repair Database. As discussed in previous sections, the asset inventory is structured by asset class at the capital project level. For example, a bridge that is made up of several subcomponents is a single asset in the inventory because that is the level at which capital decisions are made about the asset class. Likewise, the Broad Street Subway cars are a single asset in the inventory, because SEPTA would choose to overhaul or replace those cars as a fleet. The capital asset inventory is broken into twelve asset classes, as shown in the table below. This asset hierarchy was developed to mirror both the FTA TAM Categories as well as the SEPTA departments accountable for asset maintenance.

Table 2: Crosswalk of Inventory Elements to FTA Requirements

SEPTA Asset Class	Typical Elements	Typical Renewal Activities	FTA TAM Category	SEPTA Accountable Department
Bridges	Bridges, Elevated Structure	Painting, waterproofing	Infrastructure	B&B
Communications	Communications Systems, Radio Towers, Radios, Cameras, CCTV Equipment, Fiberoptic Plant	Technical Refresh	Infrastructure	C&S
Elevators and Escalators	Vertical Transportation Equipment at Stations and Shops	Mechanical Overhaul	Facilities	B&B
Fare Collection	Turnstyles, fare vending machines		Facilities	Finance
Industrial Equipment	HVAC, Cranes and Hoists, Wheel Truing Machines, Lifts, Hoists, Generators, Pumps		Facilities	B&B
Parking	Surface Parking Lots, Garage Structures		Facilities	Finance Civil
Power	Traction Power Substations, Overhead Contact System, Third Rail	Contact Wire Renewal	Infrastructure	Power
Shops and Yards	Maintenance Facility Buildings		Facilities	B&B
Signals	Signal System, Control Center Equipment	Technical Refresh	Infrastructure	C&S
Stations	Passenger Stations, Loops	Roof and Canopy Repair	Facilities	B&B
Track	Rail, Ties, Bridge Timbers, Interlockings, Sidings, Switches, Culverts	Tie and Surfacing, Vegetation Clearing	Infrastructure	Track, Civil
Tunnels	Tunnel Structure,	Painting, Leak	Infrastructure	B&B

	Emergency Exits, Vent Wells	Mitigation		
Vehicles	Revenue Vehicles Utility Vehicles	Vehicle Overhaul Program	Rolling Stock Equipment	VEM

A copy of the asset inventory is included as an appendix to the asset management plan. This attachment will be updated annually to reflect current age, condition, and performance for each asset in the inventory. This inventory will be the primary source of information for external TAM reports.

Condition Assessment

The agency should assess the condition of all of its assets. The condition assessment should be detailed enough to support capital plan development.

SEPTA inspects all assets on a continuous basis in order to assess condition and performance. Many of these inspections are performed at a frequency mandated by oversight organizations, such as the Federal Railroad Administration or the Department of Transportation. SEPTA has adopted a FRA-style inspection frequency for infrastructure on the heavy rail and light rail lines.

The inspection type and frequency by asset class is listed below. Tests are also performed after extreme weather events or as condition warrants. Unless otherwise stated, inspections are performed by trained SEPTA personnel.

Table 3: Inspection of Typical SEPTA Elements

SEPTA Asset Class	Inspection Frequency	Governing Inspection Practice
Bridges and Structures	Railroad: Annual; Transit: Biannual; or, more frequently if condition warrants	B&B Structural Inspection Manual
Communications	Specific to equipment type	C&S1/ C&S2
Elevators and Escalators	Daily, Weekly, Monthly Semi-Annually, and Annually	Elevator/ Escalator Inspection and Preventative Maintenance Manual
Industrial Equipment	Specific to equipment type	Specific to Individual Equipment Type
Parking	Surface: Every 3 years. Stormwater BMPs: Annually.	B&B Structural Inspection Manual
Power	Traction Power Substations, Overhead Contact System, Third Rail	ET-01, ET-02
Shops and Yards	Every 4 years	B&B Structural Inspection Manual
Signals	Specific to equipment type	C&S1/ C&S2
Stations	Every 3 years	B&B Structural Inspection Manual
Track	Track infrastructure is inspected twice a week by Track Department personnel, and annually with the geometry car. Culverts are inspected every 3 years.	SR-01, SR-02, SMW-100
Tunnels	Annual inspection of tunnels and support infrastructure	B&B Structural Inspection Manual
Vehicles	Daily	DOT inspection

The asset age, condition, and performance are assessed, and an overall "SGR Score" is calculated for each asset. The SGR score for all assets is included in the asset inventory attached as an appendix of this plan.

Decision Support

A description of analytical processes or decision-support tools that a provider uses to estimate capital investment needs over time and develop its investment prioritization.

SEPTA utilizes the SGR Database as its decision support tool. The system utilizes the capital asset inventory with the following information to prioritize projects:

- Age;
- Useful Life;
- Ridership Impact;
- Duration of Failure;
- Replacement Cost;
- Renewal Activities and Cost;
- Condition; and
- Performance.

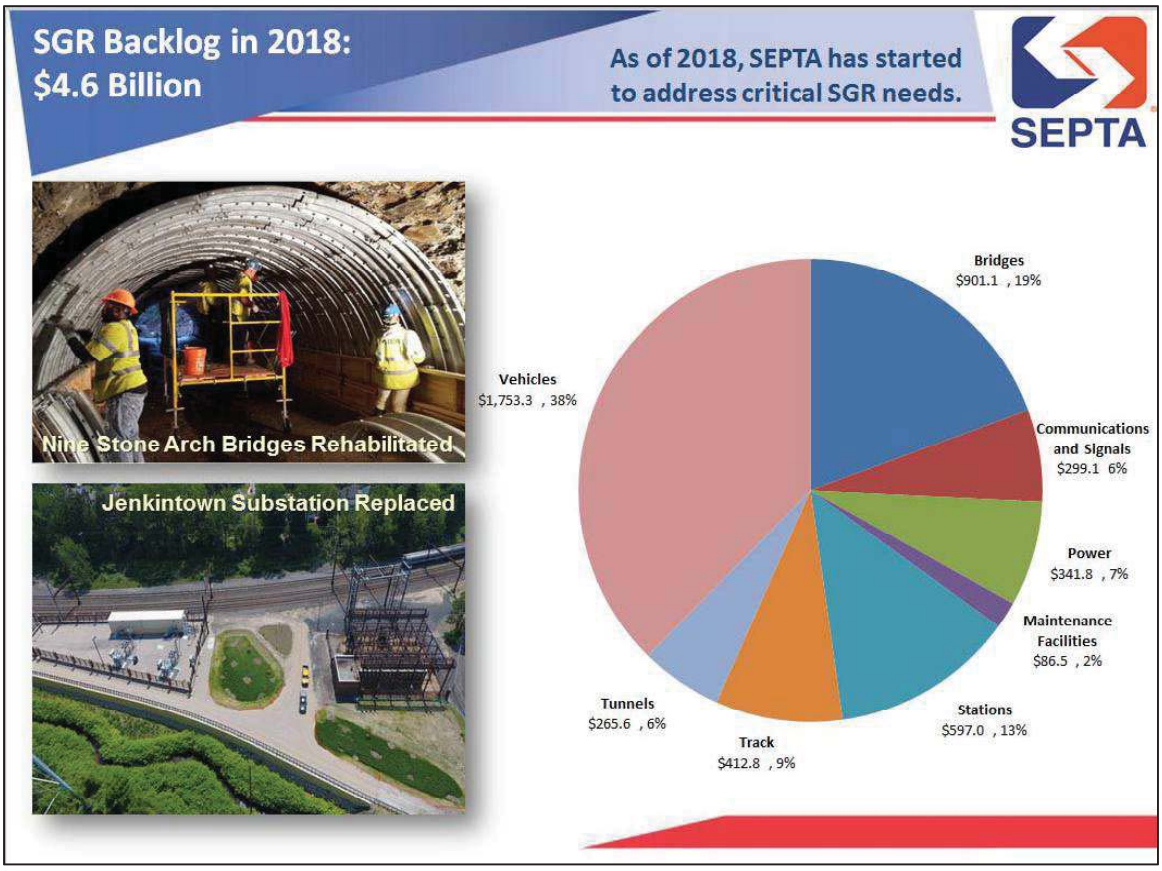

Figure 5: Output from the SGR Database. Source: LJZ Presentation at Executive Board Session, May 2018

Project Prioritization

A provider's project-based prioritization of investments, developed in accordance with §625.33 of this part.

SEPTA's annual capital budget and 12-year capital program describes the capital improvements SEPTA plans to undertake with anticipated funding. The budget is adopted by SEPTA's Board, and is reflected in the regional Transportation Improvement Program (TIP). The projects that have been identified in SEPTA's Capital Program have been indicated on the attached Capital Asset Inventory.

A full copy of the current capital budget, which demonstrates how projects are funded through various funding sources, may be found on SEPTA's website: http://www.septa.org/strategic-plan/reports/fy-2019-cap-budget-2030-program.pdf. A summary of the program is included below.

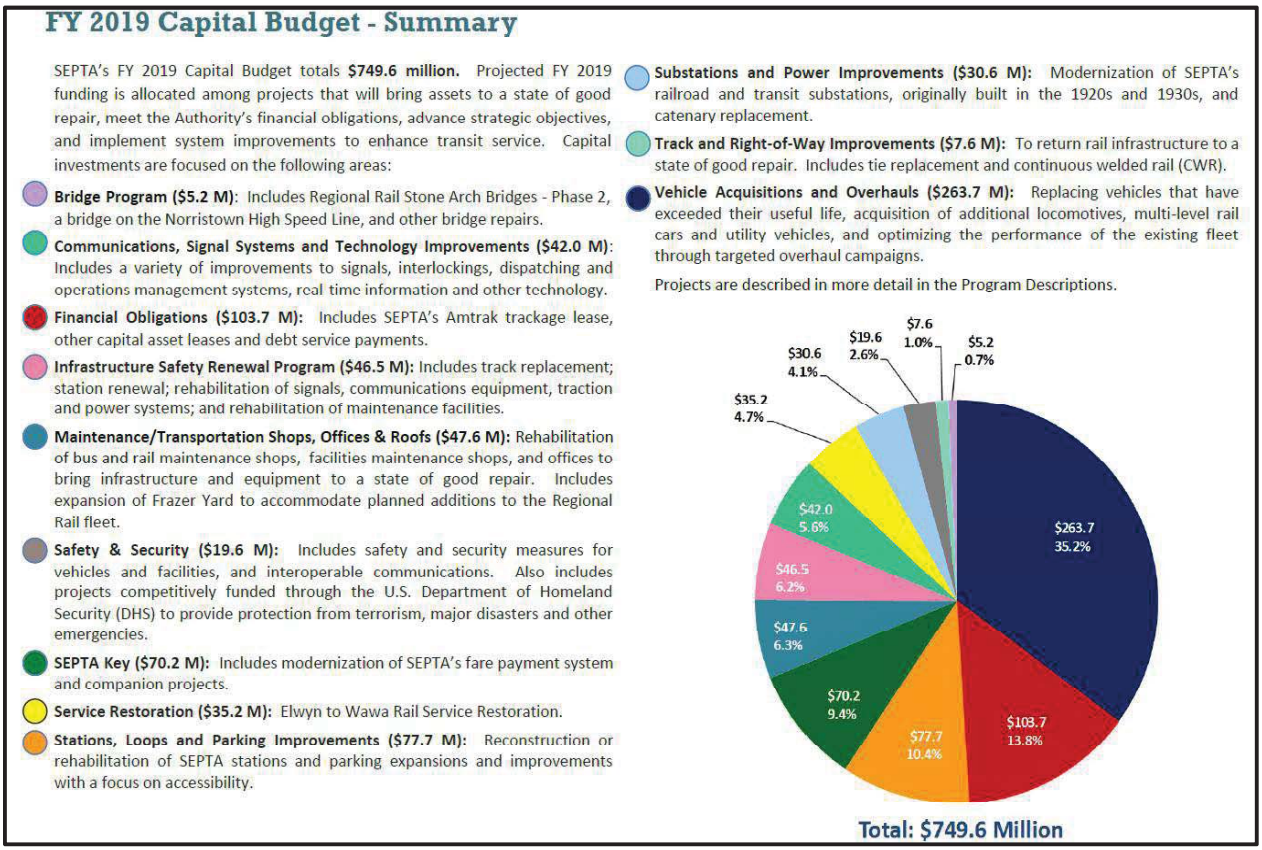

Figure 6: Capital Budget by Program Area. Source: SEPTA FY 2019-2030 Capital Budget, Published July 1, 2018

Addressing Safety-Critical Projects within the Capital Plan

Safety is a fundamental principle of the transit industry and SEPTA has committed to establish a safety first corporate culture for our employees and customers. In order to achieve this goal, SEPTA has developed a number of employee safety committees to discuss safety concerns, including:

- Bi-annual companywide safety days held twice a year at work location to discuss general and site-specific work concerns;
- Location-safety committee meetings; and
- Elevated Joint Health and Safety Committee.

One of the results of these meetings is the recognition of needs that may not be identified through age, condition, and performance data alone. The mitigation of these needs often results in programs that are included in SEPTA's Capital or Operating Budgets.

Table 4 – Ongoing Safety Initiatives

Project	Schedule	Description	Cost
Fern Rock Pedestrian Crossing (Multimodal)	Design 2018 – 2019 Construction 2019 - 2022	Includes construction of a grade separated pedestrian crossing, replacement of elevator entrances and hoist equipment and related station modifications.	$19.5M
Lawndale Station (RRD – Fox Chase)	Design 2016 – 2018 Construction 2019 - 2020	Construction of a grade separated pedestrian access at Lawndale Station. This project also includes the installation of a high level platform and passenger shelters.	$9.6M
Broad Street Line Ridge Spur Signals (Subway - Broad Street Line)	Design Complete Construction 2015 - 2019	Modernization of the signal system on the Broad Street Line's Broad-Ridge Spur. Work includes signal upgrades to improve operational reliability for the train control systems on the portion of track between Fairmount Interlocking and the 8th and Ridge Terminal Interlocking.	$8.7M
Route 101/102 Positive Train Control (Streetcar Rail – MSHL)	Design Complete Construction 2015 - 2019	Installation of a new state-of-the art Communications Based Train Control (CBTC) system for the Route 101/102 trolley lines. The new system will automatically enforce trolley separation and provide overspeed and roadway worker protection. New power switching will be installed to facilitate operational flexibility.	$76.4M
M-4 Bolster Repairs	Ongoing	Vehicle overhaul of a critical component of the Market-Frankford Line fleet.	*Design/ Evaluation*
Critical Roof Program	Ongoing	Replacement of existing roofs at Southern, Midvale, Comly, Courtland, and Frankford.	$62.83M

Potential Future Asset-Based Safety Projects

There are several assets that are scheduled to be replaced in the further years of the Capital Program, such as the Kawasaki trolley fleet and the Silverliner IV rail cars. These assets are scheduled to be operated beyond their normal estimated useful lives. Like all SEPTA fleets, these vehicles are inspected on a daily basis and repaired through the vehicle overhaul program in order maintain a safe operating condition. SEPTA's procedures are supplemented by annual third-party inspections. For example, a contractor is testing commuter rail car components that are prone to failure as the Silverliner IV fleet approaches the age of 50 years. SEPTA performed strain gauge testing on three fleets (Broad Street Subway, Market-Frankford Line, and Silverliner IV) to demonstrate the feasibility of extending the

vehicles' useful life benchmark. SEPTA may have to adjust the Capital Program to accelerate the procurement of replacements for the Silverliner IV and Kawasaki trolley fleets if conditions warrant. SEPTA has started to evaluate funding sources for replacing these two fleets.

SEPTA continues to evaluate future safety enhancement projects. Projects pertaining to signal system renewal have the highest potential to mitigate risk. Positive train control has recently been installed on the Regional Railroad and the Media/ Sharon Hill Lines. A similar system, CBTC, was installed in the Center City Trolley Tunnel. SEPTA is currently developing scopes for projects that could install PTC-equivalent systems to the heavy rail lines (Norristown High Speed Line, Broad Street Subway, and Market-Frankford Lines).

Implementation Strategy

The Plan must include an agency's implementation strategy; namely, a transit provider's approach to carrying out TAM practices, including establishing a schedule, accountabilities, tasks, dependencies, and roles and responsibilities.

While SEPTA has had many asset management enablers in place, implementation of the consolidated asset management program began in 2010. SEPTA's Chief Engineer and Chief Information Officer began an asset management process improvement initiative. The goal of this program was to consolidate the disparate data collection methodologies throughout the Authority, particularly for maintenance and lifecycle costs. The following initial needs were identified:

- Replacement of the functionally obsolete vehicle information management system;
- Inclusion of the paratransit fleet into the new vehicle information management system;
- Implementation of a new infrastructure maintenance management system (or inclusion within the vehicle information system);
- A tool that could model state of good repair needs in relationship to condition, age, and funding levels; and
- Funding to implement these changes.

SEPTA received a competitive grant to implement these initially identified needs in November 2010.

Identification of Asset Management Stakeholders

August 2010 – November 2010

SEPTA identified a core group of asset management stakeholders, including:

- Assistant General Manager of Engineering, Maintenance, and Construction;
- Assistant General Manager of Operations;
- Chief Information Technology Officer;
- Director of Administration and Finance, EMC; and
- Chief Engineering Officers of Bridges and Buildings, Power, Communications and Signals, Track, Bus, and Rail.

Business Process Assessment

January 2011-May 2011

The asset management team, with the aid of a consultant, assessed existing asset inventories, inspection methodologies, maintenance practices, and documentation. The team reviewed current plans for rehabilitation and replacement, and assessed the type of information required to make data-informed decisions regarding investment prioritization. Key takeaways from this assessment were:

1.) Vehicle TAM Process Strengths:
    a. SEPTA has documented processes for vehicle maintenance. These processes are based on regulatory requirements, manufacturers' recommendations, and institutional best practices. These processes are held in SEPTA's Vehicle Technical Information Library.
    b. SEPTA's Vehicle Engineering and Maintenance Division has a 20-year fleet management plan, which includes overhaul and replacement of the fleet.
    c. The VEM plan is based on data collected over the life of the assets.
    d. The fleet overhaul component of the plan has been developed through lifecycle maintenance data. The vehicle overhaul plan includes items for preventative maintenance for many components, rather than running all components to failure.
    e. The VEM Division was utilizing a legacy maintenance management system, which was initially implemented in 1998. Light rail, heavy rail, and commuter rail were brought into the system between 2000 and 2005.
    f. The VEM Division utilizes performance metrics for new and overhauled vehicles.
2.) Vehicle TAM Process Deficiencies
    a. The enterprise system did not include the paratransit fleet, which is owned by SEPTA but operated under contract.
    b. The maintenance management system did not track consumables, other than fuel.
    c. The system was 15 years old and functionally obsolete.
    d. Useful life benchmarks had not been established for the non-revenue fleet.
3.) Infrastructure TAM Process Strengths:
    a. Due to regulatory requirements, many of SEPTA's infrastructure assets had well documented inspection, maintenance, and replacement protocols.
    b. Procedures for non-regulated assets had been created in many cases.
    c. SEPTA had discrete inventories of most infrastructure assets. Methodology and use of this information varied by maintenance group.
4.) Infrastructure TAM Process Deficiencies:
    a. The majority of SEPTA's infrastructure information was in many different places, mostly on paper or legacy Access databases.
    b. There was no consolidated inventory of record for infrastructure assets.
    c. Failure data of assets, components, or systems was difficult to assemble.
    d. Cost of delay or repair due to severe events was impossible to calculate.
    e. Some assets were not contained in an inventory.
5.) Decision Support TAM Process Strengths:
    a. SEPTA had developed a strong fleet management plan.
    b. SEPTA had developed an infrastructure management plan on the railroad and subway lines, loosely based on a balance of lifecycle data and personnel management.
6.) Decision Support TAM Process Deficiencies
    a. SEPTA did not have a full capital planning inventory.
    b. SEPTA could not answer questions regarding the state of good repair backlog and long term funding needs.

c. SEPTA could not model the long range implications of budget shortfalls on asset condition and service reliability. This was especially critical to SEPTA after its Act-44 funding stream dissolved in 2010.

The goal of the infrastructure maintenance management system was to implement software that supported the mandatory compliance inspection and reporting requirements of the regulatory agencies that govern SEPTA's transportation operation. A secondary goal was to document current business practices and develop data-supported process improvements. The initial step for procuring the maintenance management system was a business process assessment. The process assessment was conducted by Universal Business Solutions. Potential users at various levels within the Authority were interviewed and compliance reports and procedures were evaluated. The results of the process assessment were used to develop a list of technical specifications based on functionality and software. Software vendors who met these initial requirements were invited to give product demonstrations. After this evaluation period, SEPTA chose to procure Asset Works' FA Suite for infrastructure maintenance management. SEPTA chose to upgrade the functionally obsolete VMIS software that supported vehicle maintenance management but to keep these assets in separate databases.

Development of Data-Informed Decision Framework

The asset management group worked with key agency stakeholders to develop the asset management framework. These groups included Accounting, Vehicle Engineering, Engineering Maintenance and Construction, System Safety, Capital Budgets, and Long Range Planning. This framework, as described earlier in this plan, allowed the asset management team to articulate the role of asset management within the Authority's decision making process. The framework also allowed the team to develop requirements for process enablers. The framework, shown below, provides for the flow of asset information from the operator/ inspector to agency decision makers.

During this time, SEPTA participated as a peer reviewer of the FTA Transit Asset Management Guide. This effort allowed SEPTA to collaborate with peer agencies and align the program framework with available FTA guidance.

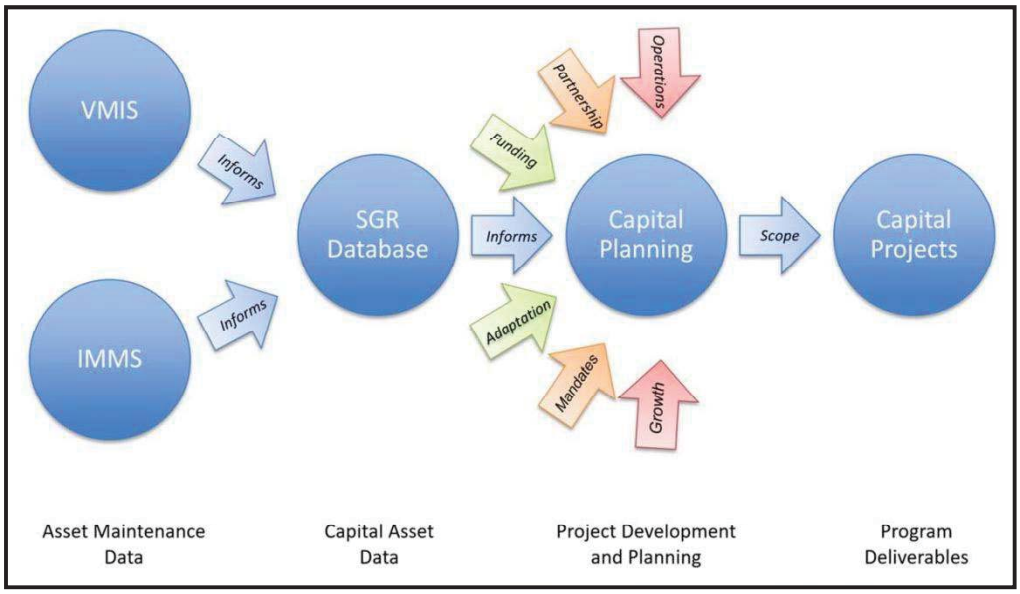

Figure 7: Data Informed Decision Framework for Balancing State of Good Repair Needs in the Capital Program. The framework is described in greater detail at the beginning of this asset management plan.

State of Good Repair Needs Model

May 2011 - February 2012

SEPTA retained the services of AECOM to compile a capital asset inventory and to implement a SEPTA-specific version of the State of Good Repair Database, which had been successfully implemented at the Massachusetts Bay Transportation Authority in Boston in 2003. The development of the SGR Database was SEPTA's initial step in compiling asset information in a single inventory. This project included identifying asset owners, evaluating existing information, and performing field investigations to supplement existing records. The asset management group worked with maintenance managers, engineers, and cost estimating to assign investment costs to each asset. The service planning department provided the data necessary to assign a ridership impact to each asset. This database was used to develop SEPTA's first published State of Good Repair backlog, and to demonstrate the impact of underinvesting in the fleet and infrastructure. SEPTA utilized the State of Good Repair Database to model the Service Realignment Plan in 2013, which ultimately resulted in the passage of the State of Pennsylvania's transportation funding bill, Act-89.

The State of Good Repair Database is now SEPTA's Decision Support Tool, as described previously in this Plan.

Development of Baseline and Annual TAM Targets

Baseline December 2016, Reported Annually Starting October 2018

During the Fall of 2016, the asset management group worked with the vehicle, infrastructure, and facilities engineering departments to establish baseline TAM targets, and to develop a methodology for

setting annual targets in the future. The methodology for each area is described at the beginning of this asset management plan. The targets for each report year are included as an appendix to this plan.

Compilation of Data for Asset Inventory Report Module

October 2017-August 2018

Beginning in 2018, all transit agencies will be required to submit an asset inventory module to the National Transit Database. The information that was utilized to develop the TAM targets was an initial point of discussion for developing the asset inventory module forms. The asset management team utilized the operating manuals, as well as track charts, speed restriction reports, and the SGR Database, to develop the initial asset inventory module. The team anticipates that future reports will be developed utilizing the Infrastructure Maintenance Management System.

Development and Continuous Update of the Asset Management Plan

Completion October 1, 2018; Annual updates to follow

The Asset Management Rule requires that agencies update their TAM Plans once every four years. However, since SEPTA's capital program makes continual updates to the fleet and infrastructure, the Authority intends to update this plan on an annual basis.

Future Phase: Utilization of Tools to Develop a "State of the System" Report

Target March 2019

This report will be developed at the asset class level, and will serve as the inventory of record when responding to inquiries about asset quantities, age, condition, and performance. The document will include the NTD targets and serve as the basis of the narrative report to be delivered to the National Transit Database. This document will be used to inform asset owners and members of the capital planning committee as they develop long term investment plans. This document will also include the annual State of Good Repair backlog analysis.

Future Phase: Maturation of the Maintenance Management System

To Start Fall 2019

The Infrastructure Maintenance Management System is scheduled to be fully implemented throughout the Engineering, Maintenance, and Construction Division by Spring 2019. Upon full implementation, the system will include:

- An asset inventory developed at a level of granularity determined by the asset owners, taking regulatory compliance and best practices into account;
- Installation date, manufacturer, and identification information;

- Associated scheduled maintenance and compliance inspections, programmed as work tasks;
- Condition assessments for each asset as appropriate;
- Performance and reliability data;
- Links to manuals and inspection photos; and
- Maintenance work orders, with associated charges, for each asset.

The project team acknowledges that the initial system implementation is reflective of the best data and understanding of business processes at the time of deployment; however, as field and office personnel continue to use the system, additional configuration will be necessary. SEPTA anticipates that an additional year of system configuration will be necessary after all departments are using the program.

Future Phase: Utilization of Tools to Develop Comprehensive Infrastructure Lifecycle Data

Because of the method by which SEPTA was formed, the asset management team did not have full lifecycle maintenance or cost data when deploying software. Instead, SEPTA relied on FTA TERM curves and managers' experiences. However, once the system has been in place, lifecycle costs and reliability trends may become apparent. Each year, the asset management team will assess the data set and compare to initial assumptions.

Future Phase: Development of a Project Management Practice to Collect Asset Data at the Time of Construction

SEPTA runs a $600 Million capital improvement program. The majority of this program allows for the replacement and renewal of vehicle and infrastructure assets. The asset management team must develop a methodology to collect data from project managers at the time of asset deployment. The team will work with the Business Services Division to ensure that the appropriate language is added to all contracts.

Key Activities Required to Implement and Maintain the Asset Management Plan

The TAM Plan must include a description of key TAM activities that a provider intends to engage in over the TAM plan horizon period.

SEPTA's maintenance protocols are developed in compliance with regulatory requirements and in accordance with best industry practice. The TAM program is not changing these protocols. However, the asset management group will continue to monitor these protocols to ensure that the tools are able to meet the asset owners' compliance and reporting requirements.

Annual updates to the TAM program include validation of the capital asset inventory, updating financial and ridership information, and developing a number of reports as discussed in the "Implementation Strategy" section of this plan. These processes will include:

- Annual extraction of data from VMIS;
- Annual extraction of data from IMMS;
- Annual assessment of infrastructure component performance;
- Model of State of Good Repair Backlog;
- Conversations with asset owners in respective classes to determine if predicted useful life and performance are in line with the predictions made the previous year;
- Conversations with System Safety to incorporate findings from the SMS that require the prioritization of renewals;
- Evaluation of prior year's performance against the established targets; and
- Establishment of the next year's performance targets.

Table 5: Schedule for Updates to the State of Good Repair Database

Asset Class	Update to SGR Database
Bridges	April (After FRA Bridge Report has been submitted.)
Communications	November
Elevators and Escalators	November
Industrial Equipment	November
Parking	October (After annual parking utilization report is submitted)
Power	November
Revenue Equipment	November
Shops and Yards	November
Signals	November
Stations	November
Track	November
Tunnels	April (After FRA Bridge Report has been submitted.)
Vehicles	October (After NTD Inventory Form has been submitted.)

Resources Required

The plan must include a summary or list of the resources, including personnel, that a provider needs to develop and carry out the TAM plan.

The success of the SEPTA Asset Management Program is dependent on both administrative and field personnel. As discussed in the "Condition Assessment" section of this plan, SEPTA has utilized the existing inspection protocols for vehicle and infrastructure assets to develop the asset inventory and condition assessment. Therefore, SEPTA does not anticipate a need to increase the size of the staff as a part of the asset management program. A total of 8 full time personnel are utilized to support the Asset Management Program.

Asset Management Group

3 full time staff

The Asset Management group is composed of three full time employees and one shared employee. The asset management group has three core responsibilities: compliance, communication, and data governance. This group is responsible for

- Preparation and administration of the Asset Management Plan;
- Collaboration with the System Safety Division for the development of the SMS program;
- Preparation of age, condition, and performance reports to support the capital planning and grant development process;
- Implementation of the Infrastructure Maintenance Management System to the Bridges and Buildings, Communications and Signals, Power, and Track Departments, including all training;
- Administration of the Infrastructure Maintenance Management System and support hardware;
- Implementation and Administration of the State of Good Repair Database;
- Maintaining the inventory of record for infrastructure assets;
- Performing supplemental facility condition assessments;
- Collation and documentation of the inspection and maintenance procedures for infrastructure assets;
- Coordination with the Chief Engineering Officers in the EM&C and VEM Divisions;
- Developing the infrastructure and narrative reports for the National Transit Database;
- Developing the TAM Performance Targets for the National Transit Database;
- Providing updates to TransAM, PennDOT's asset management software;
- Collaboration with SEPTA's Metropolitan Planning Organization, as well as other local stakeholders, such as the City of Philadelphia and Amtrak; and
- Development of the business rules necessary to maintain an accurate inventory as assets are procured, maintained, renewed, and retired.

Asset management is a large part of every employee's job function. Therefore, the asset management group interfaces frequently with subject matter experts within each maintenance department to ensure data quality and accuracy.

Information Technology

5 full time staff

The Information Technology department provides overall support for the asset management software. This support consists of five staff to support the implementation and use of the Vehicle Information Management System, as well as two database administrators who are assigned to the State of Good Repair Database and Infrastructure Maintenance Management System. The VMIS staff are full time dedicated personnel, while the database administrators support the software on an as-needed basis. Support needs are at the greatest during periods of training or technical refreshes.

Telecommunications Support

No additional staff

The telecommunications group is responsible for maintaining the communications network for SEPTA's widespread locations. For the implementation of asset management software, the telecommunications group has been installing the equipment necessary to provide internet access at crew meeting locations, and will assume maintenance of this equipment thereafter. This work is being performed with existing SEPTA staff; therefore, no additional personnel will be required.

Technology

Here pieces of software support the Asset Management Program and were procured expressly to support TAM efforts:

- Vehicle Maintenance Management System (Update funded by 2010 Grant);
- Infrastructure Maintenance Management System (Procurement funded by 2010 Grant); and
- State of Good Repair Database (Procurement funded by 2010 Grant).

The 2010 grant was also used to procure tablet computers for field staff to utilize during inspections.

The need for additional software to supplement TAM efforts will be evaluated over the first two years of the plan's implementation.

Continuous Improvement

An outline of how a provider will monitor, update, and evaluate, as needed, its TAM plan and related business practices, to ensure the continuous improvement of its TAM practices.

The focus of the first year for this plan will be on the final implementation of the enterprise asset management software. We will continue to work with asset owners and maintainers to ensure that the systems can adequately address compliance, reporting, and data collection from field activities.

Of secondary concern will be the utilization of the decision support tool. Over the next year, the project manager will work to ensure that the capital asset inventory is at an appropriate level of granularity for each asset class so that information can be updated in a consistent manner, and that the output is an actionable basis for developing a preliminary project scope and budget for uses in capital planning.

The asset management team recommends that an outreach program for Transit Asset Management be developed for employees. This outreach may include presentations to various stakeholders, including System Safety Directors; Finance (especially for NTD submission); information technology; engineering staff; and maintenance foremen. This outreach will ensure that key stakeholders are aware of SEPTA's overall TAM process. SEPTA has already started to include asset management messaging in the AIM AD and Engineer I rotational programs.

As the enterprise asset management systems are matured, the project team will start to evaluate asset lifecycle performance data against assumptions made with the FTA TERM curves. The team will focus on comparing the assumed infrastructure asset useful lives to the field data, and make adjustments to the software as necessary. The team will also assess if there is a shift towards a preventative maintenance model.

Once the data systems are in place, the Asset Management Team recommends that a gap assessment be performed to assess alignment with the International Assent Management framework. The Asset Management Team recommends that this be performed near the end of a capital program development schedule.