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C H A P T E R 1

General Overview of the TIP

The Delaware Valley Regional Planning Commission (DVRPC) is pleased to present the DVRPC FY2015 Transportation Improvement Program (TIP) for the Pennsylvania portion of the region (FY2015 to FY2018). DVRPC and its member governments have worked diligently to prepare a program of projects that responds to the needs of the region and at the same time complies with federal and state policies.

The DVRPC FY2015 TIP for Pennsylvania contains more than 330 projects (including the Interstate Management Program), totaling over \$5 billion for the phases to be advanced during the next four years, an average over \$1.25 billion per year. Programmed funds include almost \$2.06 billion for projects primarily addressing the non-interstate highway system, and \$658 million for projects addressing the Interstate Management Program, resulting in an overall four-year total for the Highway Program of over \$2.7 billion. Additionally, there is a \$2.3 billion Transit Program for SEPTA and Pottstown Area Rapid Transit. Chapter 2 presents financial summaries of these programs.

The TIP and Federal Requirements

The TIP is a requirement of federal transportation legislation, most recently the Moving Ahead for Progress in the 21st Century Act (MAP-21), as Public Law (P.L.) 112-141, which became effective on October 1, 2012, and is slated to expire on September 30, 2014. As of this printing, it is anticipated that there will be a temporary extension of MAP-21, as it will expire prior to the beginning of federal fiscal year 2015. MAP-21 is the first multiyear highway authorization after multiple temporary extensions of the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which was signed in 2005 and expired in 2009. MAP-21 builds on the initiatives established in SAFETEA-LU, the Transportation Equity Act for the 21st Century (TEA-21), and the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). Transportation investment has been prescribed in a balanced approach through a guaranteed commitment to highways and bridges, public transit, safety, intermodal projects, and advanced technologies, such as Intelligent Transportation Systems. MAP-21 will spend more than \$105 billion in FY2013 and FY2014, as most of the money will be appropriated.

What This Document Includes

The complete TIP document has been divided into multiple sections. Included is a general overview of the TIP and the TIP development process, intended to familiarize you with what the TIP is and is not, how it was developed, and what can be expected for projects in the TIP. The document also contains various summaries of the Pennsylvania programs, a description of the TIP Public Involvement process, including issues relating to environmental justice, and an

explanation of project maps, project listings, and codes and abbreviations. This reference information is followed by project maps and indexes, and finally the project listings themselves.

At the end of the main document, there are three appendices: (a) Board Resolutions, (b) State DOT Financial and Procedural Guidance used in developing the program, and (c) Memorandum of Understanding on Procedures to Amend and Modify the TIP.

There is also an addendum, which is a companion document. This document contains three additional appendices: (d) DVRPC TIP Project Benefit Criteria, (e) Executive Summary of the Documentation of the Conformity Finding, and (f) Summary of Public Involvement Process, Index of Comments, Original Public Comments, Responses to Public Comments, List of Recommended Changes, Public Comment Outreach Documentation, the Draft Highlights of the FY2013 Draft TIP for Pennsylvania, a copy of an e-mail notification sent to the Tribal Nations indicating that they can view the Draft TIP online during the Public Comment period, and Proof of Publication.

Using the Web

The TIPs for Pennsylvania and New Jersey can also be found on the DVRPC website. The website includes an interactive method for displaying maps and project listings. During the public comment period, comments can be submitted directly to DVRPC through this interactive site. Using Google Maps as a base, projects can be located using either street grid or aerial views. To use the DVRPC TIP website, go to www.dvrpc.org/TIP.

DVRPC has provided the ability to use the QR Code (Quick Response Code) symbol to access the TIP website using your smartphone. DVRPC also has a new mobile website for easier viewing using a smartphone, tablet, or other mobile device that can access the Internet. If you have a smartphone with a QR Reader Application, open the application, point your camera at the QR Code symbol, and your smartphone will open up directly to the DVRPC TIP webpage. Below is the DVRPC TIP QR Code symbol:



Scan QR code with your
smartphone for up-to-date
information on DVRPC's
TIP or visit www.dvrpc.org/TIP.

What is the TIP?

The TIP is the agreed-upon list of specific priority projects. The TIP lists all projects that intend to use federal funds, along with non-federally funded projects that are regionally significant. In the DVRPC region, the TIP also includes state-funded capital improvements (not maintenance). The TIP represents the transportation improvement priorities of the region and is required by federal law, the most recent of which is the Moving Ahead for Progress in the 21st Century, or MAP-21. The list is multimodal; in addition to the more traditional highway and public transit projects, it includes bicycle, pedestrian, and freight-related projects.

The TIP shows estimated costs and schedule by project phase. The TIP not only lists the specific projects, but also documents the anticipated schedule and cost for each project phase (preliminary engineering, final design, right-of-way acquisition, and construction). Inclusion of a project phase in the TIP means that it is seriously expected to be implemented during the TIP time period.

The TIP covers a four-year period by regulation, follows the federal fiscal year schedule, and is updated every other year. Federal regulation requires that the TIP cover a minimum of four federal fiscal years of programming. DVRPC TIP documents for both states demonstrate a longer planning and programming horizon (10 years for New Jersey; 12 years for Pennsylvania) in order to better understand expected resources and to provide the region with a more realistic timeframe for advancement of TIP projects, as well as more realistic project costs. The funding presented in both TIP documents after the first four years is considered “Later Fiscal Year” (LFY) funding, and per regulation is not technically available or able to be committed or authorized. The TIP operates on a federal fiscal year schedule, which begins on October 1 of a given year and ends on September 30 of the following year. The New Jersey and Pennsylvania TIPs are updated every other year, in alternate years.

The TIP may be changed after it is adopted. Under the provisions of federal law and regulation, the approved TIP can be modified or amended in various ways in order to add new projects, delete projects, advance projects into the first year, and accommodate cost and phase-of-work changes or major scope changes to a project. The criteria and procedures for changing the TIP are outlined in a Memorandum of Understanding (MOU), included as **Appendix C** in this document.

The TIP is financially constrained. The list of projects in the TIP must be financially constrained to the amount of funds that are expected to be available. In order to add projects to the TIP, others must be deferred. As a result, the TIP is not a wish list; competition between projects for a spot on the TIP clearly exists. The financial guidance used to develop each of the programs is included as **Appendix B** in this document.

The TIP is authorization to seek funding. A project’s presence in the TIP represents a critical step in the authorization of funding for a project. It does not, however, represent a commitment of funds, an obligation to fund, or a grant of funds.

The TIP is not a final schedule of project implementation. The timeframe shown in the TIP is the best estimate at the time of TIP development, which is six to nine months prior to the beginning of the first fiscal year of the TIP period. Projects quite often cannot maintain that schedule and are reprogrammed to later years.

The TIP is not a guarantee of project implementation. Unforeseen problems may arise, such as engineering obstacles, environmental permit conflicts, changes in priorities, and additional financial constraints. These problems can slow a project and cause it to be postponed, or even dropped from further consideration.

Regional Consensus

The production of the TIP is the culmination of the transportation planning process and represents a consensus among state and regional officials as to what near-term improvements to pursue. Consensus is crucial because, before committing significant sums of money, the federal and state governments want assurances that all interested parties have participated in developing the priorities. A project's inclusion in the TIP signifies regional agreement on the priority of the project and establishes eligibility for federal funding.

How Does the TIP Relate to the Long-Range Plan?

Regionally significant projects must be drawn from the region's long-range plan, and all projects in the TIP must help implement the goals of the plan. The long-range plan, required by federal law, is the document that helps direct transportation and land use decisions over a minimum 20-year horizon. The plan presents an extensive list of policies and strategies, as well as the actions required to carry them out.

While all projects included in the TIP must be consistent with the long-range plan, projects that add capacity for single-occupant vehicles must meet further federal requirements in a region like the Delaware Valley. These projects must result from the region's Congestion Management Process, which attempts to meet increasing travel demand through non-capacity-adding strategies, where practical. All projects included in the TIP have met this requirement.

The TIP represents the translation of recommendations from DVRPC's current long-range transportation plan, *Connections 2040 Plan for Greater Philadelphia*, into a short-term program of improvements. For further information about the policies and strategies of *Connections 2040 Plan for Greater Philadelphia*, visit the long-range plan on the Internet at www.dvrpc.org/LongRangePlan/.

How Does the TIP Relate to the Clean Air Act?

The Clean Air Act Amendments of 1990 require that all transportation plans, programs, and projects conform to the purpose of state implementation plans (SIPs) to attain national ambient air-quality standards (NAAQS). A TIP meets the conformity requirements by demonstrating that the projects contained in the TIP do not cause the region to violate the NAAQS or impede the region from attaining the NAAQS. Projects in the TIP must be drawn from a conforming long-range plan. The projects in the FY2015 TIP are a subset of the regionally significant projects contained in the *Connections 2040 Plan for Greater Philadelphia* long-range plan.

The TIP and Plan are currently being tested for conformity in order to meet all requirements, including the critical test that Volatile Organic Compounds (VOCs), Oxides of Nitrogen (NOx), and fine particulate matter (PM-2.5) emissions are less than any applicable emissions budgets or baselines established for all analysis years. The Documentation of the Conformity Finding can be found on DVRPC's website. A complete description of the conformity procedures can be found in the *Connections 2040 Plan for Greater Philadelphia* long-range plan and on DVRPC's website.

How is the TIP Funded?

The major funding source for the projects in the TIP is MAP-21, administered through the U.S. Department of Transportation's Federal Highway Administration and Federal Transit Administration. In addition, funds are made available by the State of Pennsylvania to match

federal funding in varying ratios and to provide 100 percent financing for selected projects. Local counties, municipalities, and private developers or toll authorities, as well as transit operators, may also participate in providing matching funds for federal aid. New funding sources and innovative funding techniques are constantly being sought.

Who Are the Players?

Approximately 20 agencies directly participate in the TIP development process. They include member governments, operating agencies, and state and federal agencies. Municipalities within the region participate through their respective county governments. Countless other groups, the business community, and the general public become involved through the DVRPC public participation process, in addition to their involvement at the municipal and county level. The multiplicity of jurisdictions and agencies in the region necessitates a high degree of coordination during the TIP development process by DVRPC.

How Does a Project Get on the TIP?

Securing a spot on the TIP is not a simple task. Sometimes years of preimplementation research and public input precede a project's inclusion on the TIP. Although there are several ways in which a project can get on the TIP, the most typical course is described here. First, a particular transportation need is identified. In many cases, municipal planners and engineers generate lists of potential improvements based on their needs analyses and citizen complaints and inquiries. Since only DVRPC member agencies are allowed to formally submit candidate TIP projects, the local proposals are in turn reviewed at the county or major city level, often in consultation with locally based state engineers. If the county agrees that a particular idea has merit, it may decide to act as the project sponsor and work toward refining the initial idea and developing clear project specifications. Project proposals are also generated at the county and state level in much the same way.

Once each county and operating agency has developed its own list of projects and priorities, they are brought to DVRPC, where the Regional Technical Committee (RTC) reviews them. The RTC seeks to ensure that the highest priorities of the region are being addressed within the limits of available resources, and to assure consistency among projects and with the region's goals. The RTC is composed of state, county, and city planners; transit operators; citizen representatives from the Public Participation Task Force; and transportation-related interest groups, and makes recommendations to the DVRPC Board.

Finally, the DVRPC Board provides the forum through which the elected officials of the region's counties and major cities and representatives of the states and operating agencies determine each year's TIP projects. After considering the recommendations of the RTC and the comments received from the public, the Board determines the final list of projects to be included in the TIP and adopts it as its selection of projects to be advanced.

What Happens to a Project Once It's on the TIP?

Once a project is on the TIP, a considerable amount of work remains to be done to bring it to completion. The designated lead agency is responsible for ensuring that its project moves

forward—the lead agency in most cases is the state DOT or transit operator, and in some cases, a county or city.

Highway projects typically proceed in phases (preliminary engineering, final design, right-of-way acquisition, and construction). Each phase is included in the TIP, showing funding and anticipated schedule. Transit projects are programmed in the TIP according to the annual grant application cycle under which the funds will be sought. Ideally, a project will advance according to its programmed schedule. In reality, however, projects are often delayed due to unforeseen obstacles, such as environmental issues and community concerns. Tracking each project's progress is important so that delays can be identified and remedied as soon as possible and so that resources can be reallocated as necessary.

Once federal funds have been made available for a project's final construction phase, it will no longer appear in future TIP documents (even though the project may not yet be constructed or completed).

Why is Municipal and Interest Group Involvement Important?

DVRPC believes that a collaborative process between all levels of government and the public and business communities will ensure that the best transportation program is produced. This type of process is one in which state, county, and local governments and transportation providers become partners in the planning and programming process, and interest groups and community leaders have a voice. For this reason, planning efforts for the region's capital improvements exhibit a "bottom-up" approach within the context of a regional plan that gives a top-down perspective.

In What Ways Can the Public Participate?

Public participation occurs during all stages of a project's development. Letters of concern to municipal and county officials and transit agency managers are one of the most effective starting points. As local investigations begin, public input may be provided at formal meetings or informal sessions with local and county planning boards and staff. Citizens are also asked to participate in special task forces to review transportation improvement concepts at the corridor, county, and regional level. Finally, once a project is on the TIP and it enters the preliminary engineering phase, the detailed environmental review process affords yet another opportunity for the public to offer input.

DVRPC provides various opportunities for the public to review its planning and programming activities. Representatives from the private sector, social service entities, environmental organizations, partnering agencies, and citizens are encouraged to comment on DVRPC's policies and plans. To this end, an online commenting feature is available for Board action items. The Commission's website provides a wide array of information and interactive mapping. Materials are available in hard copy in DVRPC's Resource Center, as well as at various libraries throughout the region. Project-specific open houses and listening sessions are held to inform the public and to gather input.

Specifically, the public and other interest groups have the opportunity to comment on the Draft TIP before it is officially adopted by the DVRPC Board. DVRPC conducted a 30+-day public comment period and held an open house meeting to allow the public an opportunity to present comments about the process and projects to state, county, and transit agencies, as well as to

DVRPC staff. Copies of the TIP are available online, as well as at the DVRPC resource center. The TIP documents are able to be viewed on DVRPC's website, at www.dvrpc.org/TIP.

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C H A P T E R 2

Program Summaries

The DVRPC FY2015 TIP for Pennsylvania contains more than 330 projects (including the Interstate Management Program), totaling over \$5 billion for the phases to be advanced during the next four years, an average of over \$1.25 billion per year. Programmed funds include almost \$2.06 billion for projects primarily addressing the non-interstate highway system, and \$658 million for projects addressing the Interstate Management Program, resulting in an overall four-year total for the Highway Program of over \$2.7 billion. Additionally, there is a \$2.3 billion Transit Program for SEPTA and Pottstown Area Rapid Transit. Table 1 presents a funding summary for the DVRPC region by county and transit operator for each of the four TIP years in Pennsylvania and includes the Pennsylvania Statewide Interstate Management Program (IMP) for the DVRPC region.

Table 1: TIP Cost Summary by County and Transit Operator, Southeastern Pennsylvania (\$000)

	FY2015	FY2016	FY2017	FY2018	FY2015- FY2018 Total
Highway Program					
Bucks County	\$121,321	\$153,124	\$153,136	\$120,900	\$548,481
Chester County	\$34,112	\$57,112	\$60,055	\$15,507	\$166,786
Delaware County	\$62,705	\$45,115	\$69,692	\$91,787	\$269,299
Montgomery County	\$60,892	\$84,949	\$117,531	\$99,207	\$362,579
Philadelphia County	\$162,668	\$134,143	\$111,798	\$99,387	\$507,996
Various Counties	\$45,533	\$51,814	\$39,420	\$66,105	\$202,872
Regional Highway Program Subtotal Cost	\$487,231	\$526,257	\$551,632	\$492,893	\$2,058,013
-Interstate - Montgomery County	\$1,392	\$0	\$3,162	\$0	\$4,554
-Interstate - Philadelphia County	\$151,078	\$188,673	\$173,366	\$139,845	\$652,962
Interstate Program Subtotal	\$152,470	\$188,673	\$176,528	\$139,845	\$657,516
Highway Regional and Interstate Program Total Cost	\$639,701	\$714,930	\$728,160	\$632,738	\$2,715,529
Transit Program					
SEPTA	\$552,041	\$571,311	\$571,995	\$598,724	\$2,294,071
Pottstown Area Rapid Transit	\$2,242	\$2,061	\$2,086	\$3,538	\$9,927
Transit Program Subtotal Cost	\$554,283	\$573,372	\$574,081	\$602,262	\$2,303,998
Grand Total Cost – 4-Year Highway and Transit Programs in DVRPC Region					\$5,019,527

Source: DVRPC, 2014

Pennsylvania Act 89 and Funding to the Region

Act 89 of 2013 is the State of Pennsylvania's new transportation funding bill that provides much-needed funding for the state's roads and bridges and transit systems. Act 89 will generate an additional \$2.3 billion annually by the fifth year of the program for the commonwealth's highway, bridge, public transit, local government, port, aviation, and other intermodal infrastructure systems. Act 89 of 2013 eliminated the state retail gas tax paid at the pump starting January 1, 2014, and replaced it with an equivalent increase in the Oil Company Franchise Tax (OCFT). It will also remove the cap on the OCFT in thirds over five years. The majority of the Act 89 funding is distributed as state highway funding (in addition to state bridge funding); however, state highway funds are flexible in use and can be used on a variety of infrastructure, including bridges if necessary. PennDOT is responsible for the third highest number of bridges in the nation and has high need in reducing the number of structurally deficient bridges.

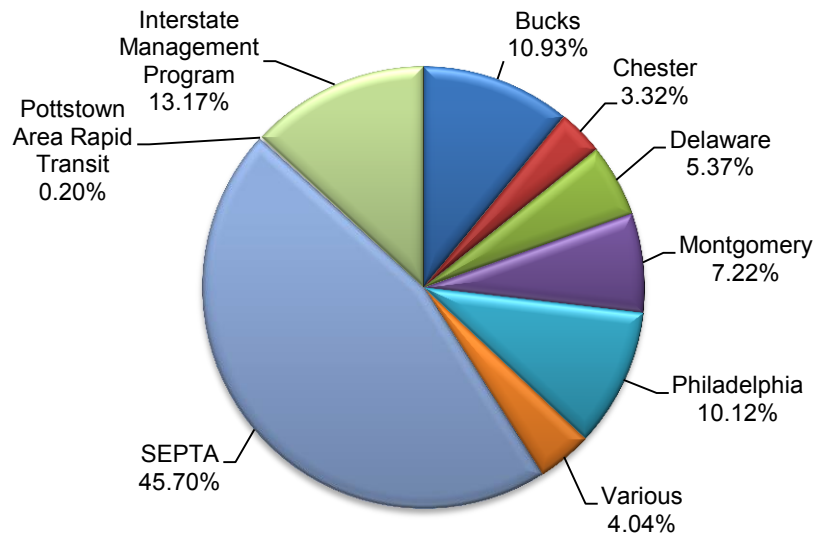
Development of Financial Guidance for the FY2015 STIP, and the division of funds statewide, was significantly different than in previous years, due to changes in state (Act 89) and federal (MAP-21) funding. Fund categories changed, distribution formulas changed, and various "Statewide Reserves" were established to address various classes of roadways and fund types. Further, past allocations have tended to remain flat over the first four years of the TIP, but Act 89 grows over time, and a four-year ramp-up of highway and bridge funding can be observed, beginning with \$98,911,000 (Highway and Bridge) in FY2015 and increasing to \$149,141,000 in FY2018 for the DVRPC region. Further increases over time are also projected. Finally, an additional allocation of \$99,783,000 State Act 89 funding in FY2014 was also distributed to the DVRPC region and provided a "jump-start" to get shovel-ready projects let for construction.

Regarding funding to the Statewide Interstate Management Program (IMP), which is managed statewide, PennDOT's Financial Guidance (Appendix B) indicates that \$1,611,854,000 would be distributed (statewide) to projects in the IMP. The distribution of funds to the IMP increased by 43 percent to \$2,303,215,155 over the four years due to an overwhelming need and the MAP-21 emphasis to maintain federal aid roadways. For projects programmed during the FY2015 to FY2018 time period, \$658,266,000, or 28.6 percent of IMP funds, have been distributed to the DVRPC region.

In addition to funds provided by the IMP, and according to the PennDOT Financial Guidance, which establishes base funding levels for the highway and transit programs, the DVRPC region receives close to 24 percent (\$1,556,461,000) of the \$6.6 billion in resources from the formula highway funds distributed to MPOs and RPOs in the state, and 64 percent (\$2,215,840,000) of \$3.5 billion in resources for the Transit Program. Overall, 37.5 percent (\$3,772,301,000) of \$10 billion in (highway and transit) federal and state resources for non-interstate funding over the four years (FY2015 to FY2018) of the STIP is allocated to the DVRPC region. For details, see PennDOT's Financial Guidance in Appendix B of this document, which reflects the region's core funding programs. These guidance numbers vary from actual programming levels, as seen in Table 1, due to a myriad of funds that are added to the TIP for earmarks, special funding programs, Pennsylvania Turnpike funding, discretionary awards, or awards from PennDOT statewide reserves.

Figure 1: Cost Summaries for Southeastern Pennsylvania (Highway and Transit Programs)

By County & Operator



By Funding Source

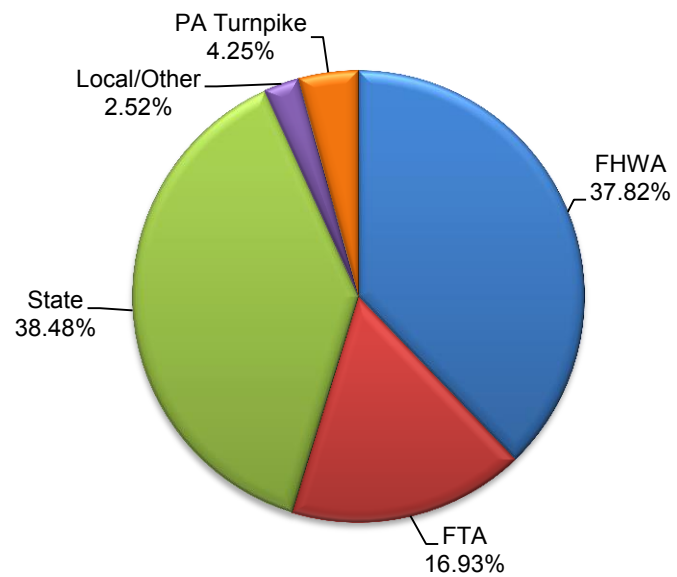


Table 2: Cost by TIP and Interstate Funding Category (\$000's)¹

TIP FUND	FY2015	FY2016	FY2017	FY2018	FY 2015–2018	LFY 2019–2022	LFY 2023–2026	Total LFYs 2019–2026
Highway Program								
B-State	\$40,880	\$42,362	\$44,447	\$44,447	\$172,136	\$177,788	\$177,788	\$355,576
B-State-IM	\$1,642	\$0	\$3,162	\$0	\$4,804	\$16,617	\$0	\$16,617
ARLE	\$3,390	\$0	\$0	\$0	\$3,390	\$0	\$0	\$0
H-State	\$62,031	\$78,467	\$104,694	\$104,694	\$349,886	\$418,776	\$418,776	\$837,552
H-State-IM	\$2,378	\$6,905	\$9,357	\$4,025	\$22,665	\$82,609	\$25,341	\$107,950
Bridge Off	\$10,074	\$10,074	\$10,074	\$10,074	\$40,296	\$40,296	\$40,296	\$80,592
CAQ	\$30,904	\$30,904	\$30,904	\$30,904	\$123,616	\$123,616	\$123,616	\$247,232
FLEX	\$17,083	\$17,083	\$17,083	\$17,083	\$68,332	\$68,332	\$68,332	\$136,664
HCB	\$252	\$40	\$0	\$0	\$292	\$1,280	\$0	\$1,280
HSIP	\$11,858	\$11,858	\$11,858	\$11,858	\$47,432	\$47,432	\$47,432	\$94,864
LOC	\$14,480	\$9,789	\$11,614	\$8,605	\$44,488	\$20,346	\$5,285	\$25,631
NHPP	\$121,065	\$121,065	\$121,065	\$121,065	\$484,260	\$484,260	\$484,260	\$968,520
NHPP-IM	\$98,450	\$131,768	\$134,009	\$105,820	\$470,047	\$569,043	\$888,086	\$1,921,129
SPK-NHPP	\$80,000	\$70,000	\$60,000	\$61,500	\$271,500	\$225,300	\$0	\$225,300
SPK-SH	\$6,300	\$0	\$0	\$0	\$6,300	\$0	\$0	\$0
SRTSF	\$1,477	\$1,000	\$0	\$0	\$2,477	\$0	\$0	\$0
STP	\$20,703	\$20,703	\$20,703	\$20,703	\$82,812	\$82,812	\$82,812	\$165,624
STU	\$61,224	\$61,224	\$61,224	\$61,224	\$244,896	\$244,896	\$244,896	\$489,792
SXF	\$16,178	\$15,406	\$8,684	\$6,954	\$47,222	\$9,062	\$0	\$9,062
TAU	\$3,782	\$3,782	\$3,782	\$3,782	\$15,128	\$15,128	\$15,128	\$30,256
TOLL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TPK	\$35,550	\$82,500	\$75,500	\$20,000	\$213,550	\$0	\$0	\$0
TOTAL	\$639,701	\$714,930	\$728,160	\$632,738	\$2,715,529	\$2,627,593	\$2,622,048	\$5,713,641

Source: DVRPC, 2014

¹ The TIP fund categories are explained in the Codes and Abbreviations section, beginning on page 37. The funds that are highlighted in green are state transportation funds; the funds highlighted in blue are FHWA funds; the funds highlighted in purple are local funds; the funds highlighted in orange are turnpike funds. See pie chart titled “By Funding Source” on page 13.

Table 2: Cost by TIP and Interstate Funding Category (\$000's) (Continued)²

TIP FUND	FY2015	FY2016	FY2017	FY2018	FY 2015–2018	LFY 2019–2022	LFY 2023–2026	Total LFYs 2019–2026
Transit Program								
1513	1,100	1,100	1,100	1,100	4,400	1,100	0	1,100
1514	283,067	305,182	305,906	335,725	1,229,880	1,377,805	1,422,376	2,800,181
1516	800	800	800	0	2,400	0	0	0
1517	35	20	70	28	153	50	0	50
5307	101,882	101,782	101,782	103,282	408,728	405,228	403,928	809,156
5307-S	3,200	3,200	3,200	0	9,600	0	0	0
5337	99,611	99,611	99,611	99,611	398,444	398,444	398,444	796,888
5339	8,234	8,234	8,234	8,234	32,936	32,936	32,936	65,872
LOC	19,712	20,436	20,461	21,450	82,059	85,612	85,385	170,997
PTAF 44	33,142	33,007	32,917	32,832	131,898	96,314	51,744	148,058
TOTAL	554,283	573,372	574,081	602,262	2,303,998	2,397,489	2,394,813	4,792,302
Grand Total Cost – 4-Year Highway and Transit Program								
DVRPC Total	\$1,193,984	\$1,288,302	\$1,302,241	\$1,235,000	\$5,019,527	\$5,025,082	\$5,016,861	\$10,505,943

Source: DVRPC, 2014

² The TIP fund categories are explained in the Codes and Abbreviations section, beginning on page 37. The funds that are highlighted in green are state transportation funds; the funds highlighted in blue are FHWA funds; the funds highlighted in purple are local funds. See pie chart titled “By Funding Source” on page 13.

Financial Constraint

At the beginning of each TIP update, the state DOT develops a four-year “financial guidance” for use by DVRPC and other Metropolitan Planning Organizations (MPOs). The financial guidance establishes highway and transit funding levels that may be reasonably anticipated by the MPO over the TIP period from appropriate federal and state resources. Each region must develop its TIP within the funding levels established by this guidance, thus maintaining the “fiscal constraint” of the TIP. The guidance explains how each of the various federal and state varieties of funds are distributed to the regions. The PennDOT Financial and Procedural Guidance is included in Appendix B. It should be noted that actual levels of federal and state transit funding are determined annually through the budget development and appropriations processes, so the amounts actually applied to projects during a given year will vary (generally lower) from what is shown in the TIP. Since the TIP has been developed according to the state guidance, it meets the federal requirement of being financially constrained.

The DVRPC FY2015 TIP for Pennsylvania makes information available for project costs beyond the formal four-year (FY2015 to FY2018) constrained period of the TIP. Project phases appear in these “Later Fiscal Years” (LFY) because it may take several years before the phase can advance due either to the technical effort that needs to be completed, or to the severe funding constraints on the region. In any case, project costs that show in the TIP under “Later Fiscal Years” (FY2019 to FY2026) do not technically have available or committed funding and cannot be federally authorized since they fall outside of the four-year TIP period per federal regulation. However, in order to demonstrate a longer planning and programming horizon, to provide more realistic expectations and timeframes in which to expect advancement of TIP projects with more realistic costs, and to indicate a certain level of commitment to those projects by the region, the FY2015 TIP does show a financially constrained 12-year program from FY2015 to FY2026, using assumptions of funding levels that are currently available.

The Interstate Management Program (IMP), as part of the Pennsylvania Statewide Transportation Improvement Program (STIP), was created to proactively address the maintenance and reconstruction of the state’s aging interstate infrastructure. An average of \$576 million per year (FY2015 to FY2018) will be used statewide, utilizing all federal National Highway Performance Program Funds that these miles/bridges represent, plus the appropriate state match. Those funds have been removed from what was previously allocated to the various regions throughout the state, but which are now pooled under the IMP. These funds are allocated statewide to specific projects. DVRPC has 19 projects in the region, totaling over \$657 million, which is included in the IMP over the four years FY2015 to FY2018. Those highway projects, for I-95 in the City of Philadelphia and I-76 in Montgomery County, are listed at the end of the Montgomery County and Philadelphia project sections, as well as in a separate Interstate Management Program section. The I-95/322 interchange in Delaware County is also now included in the 12-year IMP in the third four years.

Federal regulations also require transit operators that receive federal funds for new capital facilities to prepare a Transit Financial Capacity Analysis, showing that the agency is capable of maintaining its existing operations, as well as taking on new capital projects and new services.

SEPTA certifies annually to its financial capacity as part of the Federal Transit Administration (FTA) Certifications and Assurances, under Category XV. In addition, the FTA conducts triennial reviews of SEPTA's compliance in 24 different areas, including financial. The final report for the 2011 Triennial Review for SEPTA found no deficiencies with FTA requirements for financial responsibilities. This documentation is on file at the transit operators, as well as with the FTA. In addition, the complete and updated SEPTA Financial Capacity Analysis is included in this document.

TIP Development, and Project Selection and Evaluation Process

The DVRPC TIP project selection process is consensus based, in combination with newly updated TIP project selection criteria for new projects. All project costs and schedules were updated by PennDOT project managers and stakeholder subcommittee members. Subcommittee members reviewed projects and identified highest priorities. A series of subcommittee meetings were held, where costs and schedules were further reviewed and concerns vetted and negotiated. New projects, and projects that were added back into the program after being on hold due to funding constraints, were evaluated using new performance-based measures (see *DVRPC FY2015 TIP for Pennsylvania Addendum*, Appendix D for details on TIP Project Benefit Criteria). A 12-year constrained programming horizon was developed for both the highway and transit programs. A constrained draft program was put out for a 30+-day public comment period, and the program, with recommended changes, was adopted by the DVRPC Board on July 24, 2014.

New federal MAP-21 legislation was used as guidance for this TIP update. Among MAP-21's reforms is the creation of 13 performance measures related to the nation's Interstate and National Highway System road networks, and a set of criteria related to the transit system. While USDOT has not yet identified all criteria, national goals have been identified for the Interstate and National Highway System: Infrastructure Condition, System Reliability, Congestion Reduction, Environmental Sustainability, Freight Movement and Economic Vitality, and Reduced Project Delivery Delays. MAP-21 will further several important goals for transit, including safety, state of good repair, performance, and program efficiency.

DVRPC updated TIP Project Benefit Criteria, which would proactively position the region to address MAP-21 requirements and would further link to the goals of the long-range plan. This effort considered all types of nonmajor roadway, transit, bike/pedestrian, preservation, operational improvement, and freight projects, and ultimately establishes universal benefit criteria that can be used to evaluate both highway and transit projects, as well as projects in both the DVRPC Pennsylvania and New Jersey counties. For specific, large-scale, major regional long-range plan projects, or those using special fund categories, more specific project evaluation criteria will continue to be used. It is also important to note that the benefit criteria analysis is only one consideration in ultimate project selection. Local and regional priorities, asset management system rankings, public input, political support, geographic distribution, fund eligibility, project readiness, leveraging investments, and even working to ensure a variety of project types are all factors that play into consensus-based TIP project selection.

Only new TIP candidate projects and those that were on the list previously known as the "Illustrative Unfunded List" went through the benefit evaluation process. Roadway funded projects

can also be screened via PennDOT's Linking Planning and NEPA (LPN) process, which can identify project readiness, community support, potential historic preservation, cultural resource, or environmental resource impacts. Transit agencies will screen projects internally before submitting them for more evaluation.

The following universal project benefit criteria have been established for the Transportation Improvement Program:

- ▶ Facility/Asset Condition – project brings a facility or asset into a state of good repair, extends the useful life of a facility, or removes a functionally obsolete bridge rating.
- ▶ Safety – safety critical for transit, high-crash road location, or incorporates an FHWA-proven safety countermeasure.
- ▶ Reduce Congestion – location in CMP (Congestion Management Process) congested corridors, or appropriate everywhere CMP strategy; AADT per lane, and daily transit riders per daily seats.
- ▶ Invest in Centers – location in Connections 2040 Center or Freight Center, or high, medium-high, or medium transit score areas, or connection between two or more key centers.
- ▶ Facility/Asset Use – daily vehicle miles traveled (VMT), trucks, and transit ridership.
- ▶ Economic Competitiveness – reduced operating/maintenance costs, or part of an economic development or TOD project.
- ▶ Multimodal Bike/Pedestrian – bicyclists and pedestrians using the facility, new trails, sidewalks, or bike lanes, and connections to other multimodal facilities.
- ▶ Environmental Justice – benefits high “Indicators of Potential Disadvantage” (IPD – previously known as Degrees of Disadvantage or “DOD”) communities.
- ▶ Air Quality/Green Design – stresses air-quality benefits and incorporates environmentally friendly principals.

Please see the full version of the DVRPC TIP Project Evaluation Criteria found in the *DVRPC FY2015 TIP for Pennsylvania Addendum*, Appendix D.

Investing in the Region's Planning Areas

The Delaware Valley region is a mosaic of over 350 townships, boroughs, and cities, each making their own land use decisions. In an effort to categorize and simplify types of communities and corresponding long-range planning policies, DVRPC organized the region into four community types as part of the development of *Connections 2040 Plan for Greater Philadelphia*, the region's long-range plan. Those four areas are: Core Cities (Philadelphia and Chester City in southeastern Pennsylvania, and Trenton and Camden City in New Jersey); Developed Communities, which represent the region's older suburbs; Growing Suburbs, which are experiencing or are forecasted to experience significant additional growth; and Rural Areas, where preservation and limited development are key.

As the implementation tool of the long-range plan, the TIP funds a variety of projects that address the transportation needs of all four categories of planning areas. Planning areas for all Pennsylvania TIP projects are included on each project listing in the DVRPC FY2015 TIP document for Pennsylvania, and can be found in the current DVRPC FY2014 TIP for New Jersey. A more complete discussion and illustration of planning areas can be found in the *Connections 2040 Plan for Greater Philadelphia* long-range plan on the DVRPC website at www.dvrpc.org/LongRangePlan.

Congestion Management Process

A Congestion Management Process (CMP) is a systematic process for managing congestion. It provides information on transportation system performance and identifies specific multimodal strategies for all locations in the region to minimize congestion and enhance the ability of people and goods to reach their destinations. These multimodal strategies include, but are not limited to, operational improvements, travel demand management, policy approaches, and additions to roadway and transit capacity. The CMP advances the goals of the DVRPC long-range plan and strengthens the connection between the plan and the TIP.

In coordination with other management systems, the CMP serves the following purposes:

- ▶ It provides technical information for consideration in updating the TIP as to what may be the most efficient subcorridors and transportation strategies for investment of the limited dollars available.
- ▶ It helps with reviewing and prioritizing the list of existing study and development proposals and with feeding new ones into the pipeline.
- ▶ It is used in selecting corridor studies for DVRPC, which later results in study and development proposals, along with other means of follow through.

The CMP evaluates all new or amended TIP projects proposed for federal funding and, where projects that increase Major Single-Occupancy Vehicle (SOV) capacity are consistent, the CMP includes the required table of supplemental strategies to reduce travel demand and to get the

most value from the investment. For the most effective coordination, project managers are encouraged to contact DVRPC early in the planning phases to check whether project alternatives are consistent with the CMP.

The CMP category of Major SOV Capacity-adding Projects refers to projects that add roadway capacity in a way that affects regional or corridor travel patterns, and those projects are noted as such in their TIP descriptions. The Major SOV review considers, though is not determined by, projects modeled for air-quality conformity purposes and studies considered likely to result in nonexempt projects. Being categorized as Major SOV makes a project eligible for additional support from CMP staff to help it generate the most long-term positive effect possible in an environment of limited funding.

The CMP completes its cycle by evaluating the effectiveness of transportation improvements and then starts updating the analysis again on approximately a three-year cycle. Further information about the CMP can be obtained from the DVRPC resource center, or on DVRPC's website, at www.dvrpc.org/CongestionManagement.

Goods Movement and Economic Development

DVRPC proactively seeks to fulfill the federal requirement to include freight as a primary planning factor through its long-range transportation planning, TIP development, and the conduct of technical studies. DVRPC's goal is to serve the region's manufacturers, businesses, ports, freight railroads, truckers, air cargo interests, and developers, and to maintain the Philadelphia-Camden-Trenton region as an international freight center.

At the forefront of DVRPC's freight-planning program is the Delaware Valley Goods Movement Task Force (DVGMTF). This broad-based freight advisory committee provides a forum for the private- and public-sector freight community to interject its unique perspectives on regional plans and specific projects. Since there is no special funding category for freight-related projects, the input of the committee is central to assuring the advancement of eligible projects that facilitate the flow of goods and promote economic development in concert with community goals.

The Delaware Valley contains an impressive freight transportation network, consisting of highways, rail lines, ports, airports, and pipelines. There are also many related support facilities, such as warehouses, manufacturing sites, rail yards, and truck stops. To support its freight planning activities, DVRPC recently developed the PhillyFreightFinder freight mapping and data platform for the Delaware Valley, including access to the PhillyFreightFinder application.

This web-based mapping application can be accessed by visiting <http://www.dvrpc.org/webmaps/PhillyFreightFinder>. It pinpoints freight facilities and freight activity in the region and highlights how the various freight system components intertwine and complement one another. PhillyFreightFinder contains 20 individual layers of infrastructure and facilities that are organized into seven categories. PhillyFreightFinder has been created with a variety of uses and users in mind, ranging from county and city planners to the general public and municipal officials. Further information about the Freight Program at DVRPC can be obtained from DVRPC's website, at www.dvrpc.org/freight.

Projects listed in Table 3 illustrate a sampling of projects in the TIP that promote goods movement and economic development, and some of the benefits that they provide to the freight industry. The identified projects have a direct, significant, and positive association with the flow of goods at intermodal facilities, near manufacturing, office, or commercial locations, or along strategic corridors. The projects improve National Highway System (NHS) connector routes, operating conditions for commercial vehicles, and access to economic activity centers.

The benefits of the projects can be expressed in terms of increasing safety and efficiency, spurring economic activity, creating jobs, protecting the environment and the region's quality of life, and promoting primary freight corridors and industrial centers.

Toll Authority Highway

The toll authorities with facilities in the Pennsylvania portion of this region (Pennsylvania Turnpike Commission, Delaware River Port Authority/PATCO, Delaware River Joint Toll Bridge Commission, etc.) undertake numerous significant highway and port-related projects utilizing their own funds. Although not included in the project listings or funding summaries, it is important to identify toll authority projects to provide a more complete picture of the transportation issues being addressed throughout the region. The projects are listed, along with their associated costs, in Table 4.

Selected Studies

Environmental Impact Statements (EIS), Transportation Investment Studies (TIS) (formerly known as Major Investment Studies), and subarea studies currently underway are likely to generate future TIP projects. An EIS is an in-depth technical analysis of the significant environmental impacts of a project, which identifies alternatives that would avoid or minimize the adverse impacts. The purpose of a TIS is to provide policy-level information about the impacts of alternative transportation investments in order to ensure cost-effective decisions when major new facilities are contemplated. DVRPC's Unified Planning Work Program (UPWP), also known as the Work Program, identifies ongoing studies. Selected studies, including those from the DVRPC Work Program, are listed in Table 5. Not included in Table 5 are studies that already appear in the FY2015 TIP for Pennsylvania.

Special Programs

Special programs are often established that set aside funding for projects that will be selected at a future date, or that earmark funds for specific types of projects. Examples are the Congestion Mitigation and Air Quality Improvement Program and Transportation Alternatives Program.

DVRPC Competitive CMAQ Program

The Congestion Mitigation and Air Quality Improvement Program (CMAQ) was established by ISTEA and has continued under TEA-21, SAFETEA-LU, and MAP-21. CMAQ funds are allocated to the states for use in air-quality nonattainment and maintenance areas for projects that contribute to the attainment of the Clean Air Act standards by reducing emissions from mobile sources. The types of projects that are eligible for CMAQ funding include public transit improvements; bicycle and pedestrian facilities; outreach efforts; traffic flow improvements; ridesharing and other demand management programs; alternative fuel vehicles; and projects that will reduce idling emissions. In addition to the projects that use CMAQ funds and are selected through the regular TIP development process, DVRPC periodically sets aside a specific amount of CMAQ funds for a DVRPC Competitive CMAQ Program. Projects may be submitted by a public agency or a public-private partnership. A CMAQ Subcommittee of the RTC evaluates the projects and makes recommendations to the Board for final selection. In October 2012, the DVRPC Board finalized the most recent round of the DVRPC Competitive CMAQ Program by selecting 16 projects for funding in the DVRPC Pennsylvania counties. DVRPC may undertake a new competitive round in the next couple of years, depending on the success of the 2012 Competitive CMAQ Program.

Transportation Alternatives Program

MAP-21 introduced fundamental changes to the administration of local programs, including those that previously existed as separate programs in the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) legislation. Transportation Enhancements (TE), Safe Routes to School (SRTS), Scenic Byways (Byways), and the Recreational Trails Program (RTP) are now consolidated into the Transportation Alternatives Program (TAP). With the exception of the RTP, which takes funding “off the top,” the eligible activities from the previous SAFETEA-LU programs now compete against each other for funding.

Other significant changes in the TAP include that there is now a direct allocation of TAP funds to urbanized areas with populations greater than 200,000, and that all TAP funds must be awarded through a competitive process, whether the funds come from regional MPO funds or from the statewide allocation.

Transportation alternatives projects build pedestrian and bicycle facilities, improve access to public transportation, create safe routes to school, preserve historic transportation structures, provide environmental mitigation, and create trail projects that serve a transportation purpose, while promoting safety and mobility. Annually, \$3,781,850 TAP funds are made available per MAP-21 directly to the DVRPC southeastern Pennsylvania region for use in selecting projects on a competitive basis. A recent competitive round of two years’ worth of MPO funding occurred in the spring of 2014, with final project selections in the summer of 2014. Even though MAP-21 is only a two-year authorization, funds are shown in all 12 years of the TIP in anticipation of continuing resolutions or a new reauthorization. For the DVRPC regional funding, priority is given to the following project types: Bicycle and Pedestrian Facilities; Conversion of Abandoned Railway Corridors to Trails; and Stormwater Management. The four DVRPC Pennsylvania counties and the City of Philadelphia during the regional TAP selection rounds are involved in project evaluation and formulating recommendations for the DVRPC Board. Much like the Competitive CMAQ Program, projects are subjected to a rigorous evaluation process before the priority list of projects is selected. In addition to the regional MPO funding, there is a Statewide Transportation Alternatives Program, administered by PennDOT, totaling \$26,000,000 (also two years’ worth of funding) for which sponsors across the state may apply, with project selection expected to take place in the summer/early fall of 2014.

To provide for the continuation of recreational trails projects, MAP-21 directs each state to set aside a portion of its TAP funds for projects relating to recreational trails, unless a state exercises the “opt out” option. In Pennsylvania, the program will continue and will be administered by the Department of Conservation and Natural Resources (DCNR). Guidance for the Recreational Trails Program remains relatively unchanged.

Table 3: Supporting Projects That Facilitate Goods Movement and Economic Development

Supporting Project	MPMS	County
<i>Advances Safety/Security</i>		
Railroad/Highway Grade Crossings	Statewide	Various
<i>Balances Freight Operational Needs with Community Goals</i>		
Chester City Access Improvements II	70245	Delaware
<i>Eliminates Bottlenecks/Upgrades Bridges/Improves Intersections</i>		
PA 41, Gap Newport Pike Bridge Over Valley Creek	69917	Chester
<i>Enhances Central Business Districts</i>		
PA 263, York Road Hatboro Revitalization	74817	Montgomery
<i>Improves Distribution Patterns and Supply Chains/Modernizes Interchanges and Ramps</i>		
I-95/PA Turnpike Interchanges	13347, 95439, 95444	Bucks
<i>Improves the Environment/Reduces Congestion</i>		
US 322, Environmental Mitigation	69815	Delaware
<i>Maintains Primary Truck Routes and Highways of Regional Significance</i>		
I-95 Reconstruction	17782, 17821, 47394, 47811, 47812, 47813, 79685, 79686, 79826, 79827, 79828, 79903, 79904, 79905, 79908, 79910, 79911, 79912, 83640	Philadelphia
<i>Maintains Primary Truck Routes and Highways of Regional Significance</i>		
I-95 Reconstruction	79686	Philadelphia
<i>Maximizes Freight Railroads</i>		
West Trenton Line Separation Project	98235	Bucks
<i>Promotes Commerce and Tourism</i>		
River Crossing Complex: Valley Forge National Historic Park	66952	Montgomery
<i>Provides Increased Capacity</i>		
US 202, Exton Bypass to Route 29	64498	Chester
<i>Serves Ports, Airports, Freight Centers, Manufacturing Site/Improves NHS Intermodal Connectors</i>		
PRPA Access Project	74841	Philadelphia
<i>Speeds Deliveries/Modernizes Communications</i>		
Quakertown Joint Closed Loop Signal System SR: 0309	57635	Bucks

Source: DVRPC, 2014

Table 4: Toll Authority Highway

Pennsylvania Turnpike Commission Specific Bridge Projects		
<i>Design and Construction Projects</i>		
I-76, Roadway and Bridge Reconstruction, SR 29 to Valley Forge, MP. 319-326	Start Construction 2015	\$230,000,000
I-76, Roadway and Bridge Reconstruction, Downingtown to SR 29, MP 312-319	Design Ends 2016	\$175,000,000
I-76, Replacement of Yellow Springs Road bridge over the Turnpike (T-488)	Construction Ends: 2016	\$5,000,000
I-276/I-95 Interchange	Design Ends 2013; Construction of Phase 1 Ends 2018	\$435,000,000
I-476, Roadway and Bridge Reconstruction, Mid-County to Lansdale A20-A26	Construction Ends 2014	\$151,000,000
I-476, Roadway and Bridge Reconstruction, Mid-County to Lansdale A26-A31(Wambold Road Included)	Construction Ends 2016	\$198,000,000
I-476, Roadway and Bridge Reconstruction, Lansdale to Quakertown	Design ends 2019 Construction Ends 2022	\$550,000,000

Source: DVRPC, 2014

Table 4: Toll Authority Highway (Continued)

Delaware River Port Authority/PATCO		
<i>Specific Bridge Projects</i>		
Walt Whitman Redeck Suspended Span and Anchorage Spans - Design & Construction	2013 to 2015	\$50,000,000
Walt Whitman Bridge Deleading and Repainting - Phase 3	2013 to 2016	\$70,500,000
Benjamin Franklin Bridge Deck Resurfacing	2014 to 2016	\$10,500,000
Commodore Barry Bridge Deleading and Repainting	2013 to 2016	\$86,500,000
<i>System-Wide Projects</i>		
Facility Security	2013 to 2016	\$31,007,000
Rehabilitation of PATCO Fleet	2013 to 2016	\$151,500,000
Delaware River Joint Toll Bridge Commission		
<i>Specific Bridge Projects</i>		
I-95 Scudder Falls Bridge Improvement Project	2015 to 2019	\$344,200,000
Trenton – Morrisville TB & Lower Trenton TSB Approach Roadways Improvements	2015	\$2,500,000
<i>System-Wide Projects</i>		
None		

Source: DVRPC 2014

Table 5: Selected Transportation Studies

Studies Currently Underway	Sponsor(s)
Quakertown Rail Restoration	TMA Bucks
PATCO Philadelphia Waterfront Transit Expansion	DRPA/PATCO
PA Turnpike Midcounty to Bensalem	Bucks and Montgomery Counties
US Route 202 Section 100	PennDOT
NHSL Extension to King of Prussia	SEPTA
Roosevelt Boulevard Transit Investment Alternatives Development	City of Philadelphia
Southeastern Pennsylvania Emergency Transportation Plan	PEMA
PA Long-Range Plan and Comprehensive Freight Plan	PennDOT

Source: DVRPC 2014

Responding to Title VI and Environmental Justice Concerns

The Transportation Improvement Program (TIP), as the agreed-upon list of priority projects for the region, serves to manage the construction, improvement, and expansion of the region's transportation system, a system that affects every resident of the Delaware Valley. Title VI of the Civil Rights Act states that "no person in the United States, shall, on the grounds of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." The 1994 President's Executive Order on Environmental Justice (#12898) ensures "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."

Each federal agency is required to identify any disproportionately high and adverse health or environmental effects of its programs on minority populations and low-income populations. In turn, Metropolitan Planning Organizations (MPOs), as part of the United States Department of Transportation's certification requirements, are charged with evaluating their plans and programs for Title VI and environmental justice (EJ) sensitivity, including expanding their outreach efforts to low-income and minority populations.

As the MPO for the nine-county, bistate Philadelphia-Camden-Trenton region, DVRPC is committed to responding to the federal guidance on Title VI and EJ, as well as other nondiscrimination mandates, and has designated the Planning Division and Public Affairs Office to address technical and public involvement activities, respectively, as they relate to Title VI and EJ. To meet the requirements of these laws, the Commission must:

- Enhance its analytical capabilities to ensure that the long-range plan and the TIP comply with Title VI;
- Identify residential, employment, and transportation patterns of low-income and minority populations so that their needs can be identified and addressed, and the benefits and burdens of transportation can be fairly distributed; and
- Evaluate and, where necessary, improve the public outreach process to eliminate barriers and engage minority and low-income populations in regional decision-making.

DVRPC's technical work program involves the evaluation of EJ issues through quantitative and qualitative analysis and mapping. In 2001, DVRPC developed an EJ technical assessment to identify direct and disparate impacts of its plans, programs, and planning process on defined demographic groups in the Delaware Valley region. This assessment, now called the Indicators of Potential Disadvantage (IPD) Methodology, is used in a variety of DVRPC plans and programs, including the TIP. DVRPC publishes an annual update, Environmental Justice at DVRPC, which summarizes EJ and public outreach activities of the previous year and describes the methodology for evaluating the agency's long-range plan, TIP, and other projects and programs. DVRPC has a Board-approved Title VI Compliance Plan, which establishes a framework for DVRPC's efforts to ensure compliance with Title VI, as well as with other EJ and nondiscrimination mandates. The

plan outlines how Title VI and EJ considerations are reflected in the Commission's work program, publications, communications, public involvement efforts, and general way of doing business.

DVRPC believes that effective public outreach is a dynamic and ongoing process that is essential to meeting the future transportation and land use needs of all residents of the Delaware Valley. Further, effective planning cannot be achieved without the consideration, cooperation, and consent of residents and stakeholders throughout the region. Since 2001, DVRPC has had a formal Public Participation Plan, which is designed as a resource for DVRPC's Board, staff, and the public to better understand the Commission's overall public participation strategy and procedures, as well as the federal mandates that inform DVRPC's public participation efforts. In addition to public meetings, events, and various web-based and communication channels to provide ongoing input to the regional planning process, an additional outlet for public participation in DVRPC is the Public Participation Task Force, which is comprised of members from throughout Greater Philadelphia.

Environmental Justice and the TIP

DVRPC's Transportation Improvement Program (TIP) for Pennsylvania is an important component of the agency's EJ public involvement and technical work program activities. As the TIP is updated every other year, new EJ analyses and mapping are conducted, and public comment is received.

Technical EJ analysis and mapping of the TIP is based on the EJ methodology outlined in Environmental Justice at DVRPC (2013 update, publication number TM14006). Census data from 2012 is analyzed at the census tract level to identify demographic groups that may be underrepresented in the planning process, or might otherwise be disproportionately impacted by planning decisions. The eight population groups currently analyzed are: households in poverty, non-Hispanic minority, Hispanic, elderly (75 years and over), carless households, persons with physical disabilities, limited English proficiency, and female head of household with child.

Each census tract can contain a concentration greater than the regional average for each individual population group previously discussed that is considered regionally sensitive. Each census tract can contain zero to eight categories that are recognized as regionally sensitive. The number of sensitive demographic groups per census tract, with concentrations greater than the regional average, is referred to as Indicators of Potential Disadvantage (IPD), formerly Degrees of Disadvantage (DOD). For example, if a census tract equals or exceeds the regional average for elderly and physically disabled populations, then that census tract is said to have two IPDs. Each census tract is mapped to illustrate the number of IPDs. TIP projects are mapped to identify low-disadvantage census tracts (with one to four IPDs) and high-disadvantage census tracts (with five to eight IPDs), with and without a TIP project.

Table 6: Indicators of Potential Disadvantage Analysis Table

Number of Indicators of Potential Disadvantage (IPD) per census tract: Non-Hispanic minority; Hispanic; Limited English Proficiency (LEP); persons with a physical disability; elderly over 75 years of age; carless households; female head of household with child; households in poverty.	Total Census Tracts (998)	Number of Census Tracts that contain a project in FY2015 to FY2018 Pennsylvania Highway TIP	Percent of Census Tracts that contain a project in FY2015 to FY2018 Pennsylvania Highway TIP	Number of Census Tracts that contain a project in FY2015 to FY2018 Pennsylvania Transit TIP	Percent of Census Tracts that contain a project in FY2015 to FY2018 Pennsylvania Transit TIP
0 IPD (Not Potentially Disadvantaged)	175	78	44 percent	10	6 percent
1-4 IPD (Potentially Disadvantaged)	530	179	34 percent	75	14 percent
5-7 IPD (Potentially More Disadvantaged)	293	95	32 percent	75	25 percent

Source: DVRPC 2014

The table above indicates that there is not a disproportionate existence of highway projects in various types of communities relative to their level of potential disadvantage. There is a higher level of existence of transit projects in census tracts with higher levels of potential disadvantage.

The location of transportation investments can greatly influence the level of mobility and accessibility within and throughout the region. DVRPC's EJ method is used to analyze the distribution of the TIP for both highway and transit programs. Not all TIP projects can be mapped due to the scale and nature of the improvement. While a TIP project may not occur in an EJ-sensitive area, disadvantaged populations can still be impacted by the proposed investment, especially if the project focuses on a highway or transit corridor that is used by a particular disadvantaged population. Consideration of Environmental Justice communities is included in the DVRPC Project Benefit Criteria, which can be found in the *DVRPC FY2015 TIP for Pennsylvania Addendum Appendix D*.

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C H A P T E R 3

Public Involvement

The Delaware Valley Regional Planning Commission (DVRPC) firmly believes in the principle of public participation by reaching out to as many populations as possible in an equitable and timely manner. Public participation is the only real way to ascertain the interests of a wide variety of citizens, including the underinvolved and often uninformed, the private sector, special interest activists, mature citizens, educators and parents, public officials, and the physically and economically disadvantaged. While today's citizens are far more sophisticated and modern standards are more all-inclusive, the need for public involvement is inherent to sound decision-making.

It is the responsibility of each citizen to become involved in regional issues and to play a role in the decision-making process; therefore, DVRPC will strive to provide as many opportunities as possible for residents to be informed and aware of the decisions that will affect the future of this region.

The public comment period for the Draft DVRPC FY2015 TIP for Pennsylvania opened on May 30, 2014, and extended through June 30, 2014, at 5:00 p.m. (EST). There was a public meeting held at the following location for the purpose of presenting comments on the Draft FY2015 TIP:

Thursday, June 26, 2014
4:00 p.m.–6:00 p.m.
American College of Physicians Building
DVRPC 8th Floor Conference Center
190 N. Independence Mall West
Philadelphia, PA 19106

DVRPC's website, www.dvrpc.org, is a vital tool in public outreach and continues to serve a useful purpose during this TIP update cycle. The entire Draft TIP document was posted on the DVRPC website, including the date and location of the public meeting and other general information. Individuals can download and/or access TIP materials during the public comment period or any other time. In addition, an e-mail address link, tip-plan-comments@dvrpc.org, is provided to facilitate the submission of comments during the public comment period.

Written comments via U.S. mail were forwarded to:

TIP Comments
DVRPC Public Affairs Office
8th Floor
190 N. Independence Mall West
Philadelphia, PA 19106

Comments were also taken by fax by sending a fax transmittal to 215-592-9125.

Additionally, comments were made online as part of DVRPC's web-based TIP public comment application, located at www.dvrpc.org/TIP. Users were able to click on the "Submit a comment on the Draft DVRPC FY2015 TIP for Pennsylvania" button to make general and project-specific comments. Responses provided by the appropriate agency are posted on this website after adoption of the program. Responses were not provided unless comments were submitted in writing during the public comment period.

For those without access to the Internet, TIP documents were/are available at selected area libraries (see Table 7), including the DVRPC Resource Center at the above address in Downtown Philadelphia. Call 215-592-1800 for more information.

Public Comment Guidance

In an effort to facilitate the public comment process, we offer some extended guidance. Listed below are issues that we asked the public to consider while reviewing the TIP document.

- Given the projects in the TIP, are we headed in the right direction? Are we meeting the needs of the region? Are we following the intent of MAP-21?
- For example, does the TIP contain the appropriate mix of projects with regard to (a) the amount of investment in highway projects versus the amount in transit projects, or (b) the types of improvements, such as maintenance and reconstruction of the existing system, versus new capacity-adding projects; or nontraditional projects (such as pedestrian, bicycle, smart technology, Transportation Alternatives, and Congestion Mitigation and Air Quality projects) versus the more traditional highway and transit projects?
- Is this region getting its fair share of resources compared to other regions in the state or nation?
- Is the current transportation project development process, including environmental reviews and public input, effective?
- Given financial constraints, are we spending money on the right types of projects?
- Is the TIP document easy to use? How could it be improved?

Of course, comments were not limited to these broader issues of concern. DVRPC, as always, welcomes opinions on specific projects contained in the TIP, the TIP development process, or on any other topic of concern. However, we remind those intending to recommend new projects for the TIP that in order to earn a place on the TIP, projects must first progress through the screening and planning processes described earlier. As a result, requests for new projects are generally referred to the appropriate agency for further investigation through their respective pre-TIP study efforts. These study efforts may lead to the project winning a place on the TIP in some future year.

Table 7: Libraries Displaying the Draft DVRPC FY2015 TIP for Pennsylvania

Philadelphia City Institute Library 1905 Locust Street Philadelphia, PA 19103	Independence Branch Library 18 South 7th Street Philadelphia, PA 19106	Ramonita G. Derodriqz Branch Library 600 W Girard Avenue Philadelphia, PA 19123
Joseph E. Coleman Regional Library 68 W. Cheltenham Avenue Philadelphia, PA 19144	Lucien E. Blackwell Regional Library 125 S. 52nd Street Philadelphia, PA 19139	Northeast Regional Library 2228 Cottman Avenue Philadelphia, PA 19149
Free Library of Philadelphia 1901 Vine Street Philadelphia, PA 19103	McPherson Square Branch Library 601 E. Indiana Avenue Philadelphia, PA 19134	Bucks County Free Library 150 S. Pine Street Doylestown, PA 18901
Levittown Regional Library 7311 New Falls Road Levittown, PA 19055	Indian Valley Public Library 100 E. Church Avenue Telford, PA 18969	Newtown Public Library 201 Bishop Hollow Road Newtown Square, PA 19073
Chester County Library 450 Exton Square Parkway Exton, PA 19341	Coatesville Area Public Library 501 E. Lincoln Highway Coatesville, PA 19320	Cheltenham Township Library 215 S. Keswick Avenue Glenside, PA 19038
J. Lewis Crozer Library 620 Engle Street Chester, PA 19013	LaMott Free Library 7420 Sycamore Avenue LaMott, PA 19027	Ardmore Library 108 Ardmore Avenue Ardmore, PA 19003
Library for the Blind & Physically Handicapped Free Library of Philadelphia 919 Walnut Street Philadelphia, PA 19107		

Source: DVRPC, 2014

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C H A P T E R 4

Project Maps and Listings Overview

Project Map Explanation

The maps on the following pages show the location of the projects included in the DVRPC FY2015 TIP for Pennsylvania. Highway projects are shown on individual county maps, while transit projects are shown on a regional map. Projects are identified on the maps by their state DOT project number (MPMS#).

The different types of projects, such as intersection improvements, bridge replacements, or new transit facilities, are shown using various colors and symbols. Each map has its own legend and a companion index showing the project titles in MPMS# order.

Certain types of projects, such as roadway landscaping, lease payments for the use of railroad tracks, or preliminary studies, are not mapped. These projects are listed on the appropriate map by their MPMS# under the heading TIP Projects Not Mapped.

The Internet version of the TIP, found on the DVRPC website at www.dvrpc.org/TIP, includes an interactive method for displaying the maps and the project listings.

Project Listing Explanation

This document includes various project listings. The project listings include the Pennsylvania Highway, Transit, and Interstate Management programs, which are thoroughly explained in the following paragraphs.

DVRPC Region Highway and Transit Projects

The project listings are grouped by county and transit operator. The first section includes highway projects for Bucks, Chester, Delaware, and Montgomery counties; the City of Philadelphia; the Interstate Management Program (IMP); and a listing of projects that apply to various counties. The second section includes transit projects for SEPTA and Pottstown Area Rapid Transit.

Within each county grouping, individual highway and transit projects are listed numerically by DOT ID number (MPMS). Each project listing provides information on total program period cost, cost by fiscal year, phase of work, and funding source. Costs are shown in millions of dollars. Also included are project location, project description, and air-quality code.

All projects within the four years of the TIP period (FY2015 to FY2018) are considered funded and are able to be federally authorized for funding. By federal regulation, the TIP is the four-year constrained program for which revenues are reasonably expected to be available. However, the region has worked to develop a 12-year constrained programming horizon for highway and transit

projects in order to provide more realistic expectations and timeframes in which to expect advancement of TIP projects with more realistic costs. Many projects that have phases within the four years also have phases (such as construction) that may be out in later fiscal years (LFY) FY2019 to FY2026. This 12-year constrained programming horizon is illustrated on the project listings within the TIP document. Project phases that fall beyond the four-year TIP are technically “unfunded,” but they are listed, as they represent the region’s planned commitment to fund these phases in the future as funds become available.

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C H A P T E R 5

Codes and Abbreviations Overview

Codes and Abbreviations

Various codes and abbreviations are used in the project descriptions/listings. These abbreviations and codes help to explain factors such as air-quality codes, project phases of work, and sources of funds, as well as other information described below. A sample TIP project listing, titled “Roadmap,” explaining the project description/listings, is also included as Figure 2.

Air-Quality Codes

An alphanumeric air-quality (AQ) coding scheme has been developed for all projects. The AQ code is applied by DVRPC for the conformity determination and exempt eligibility identification purposes. “Nonexempt” and “Exempt” projects are described below.

All nonexempt, regionally significant projects are assigned five-character alphanumeric AQ codes that begin with a four-digit “Analysis Year” (2015, 2025, 2035, or 2040), followed by either the letter “M” (model) or “O” (off-network). The “Analysis Year” indicates the year by which a project is expected to be open to traffic. “M” (modeled) means that it was included as part of a group of projects in the regional transportation demand network simulation. “O” (“off-model”) means that it was analyzed individually using separate software developed for the state DOTs and approved for this purpose by the Transportation Interagency Consultation Group for this analysis. For instance, a TIP project may have an AQ code of 2025O, in which case the project is identified as a regionally significant, nonexempt project expected to be open to traffic by 2025, with emissions estimates that are 1) included in the 2015 and all subsequent future analysis years, and 2) performed using an off-network analysis technique.

The Clean Air Act regulations also provide for projects that may be exempt from the conformity analysis. An exempt project is defined as a project listed in table 2 or 3 of the final conformity rule (40 CFR 93) that primarily enhances safety or aesthetics, maintains mass transit, continues current levels of ridesharing, or builds bicycle and pedestrian facilities. There are several categories of exempt projects, and DVRPC indicates the specific exempt code in the project descriptions. In cases in which multiple codes apply, the most representative code is assigned. Exempt projects in design phases are classified under the planning and technical studies category. Table 8 is a complete list of exempt and nonexempt categories and corresponding AQ codes.

There are projects listed in the TIP document that are still in preconstruction phases and are not yet part of the current four-year constrained TIP. These projects show planned funding in future years that are outside of the current TIP four-year period. Unless these projects are also long-

range plan projects, they are not included in the regional emissions analysis. DVRPC assigns AQ codes to these projects to indicate the future planned status. In DVRPC's Pennsylvania region, these projects are considered to be on the Projects for Continued Evaluation list of projects and are given an AQ code that begins with "FY" to indicate that funding is planned for future years outside of the current four-year TIP. These projects will be further scrutinized when or if they advance to be included in the four-year TIP.

Projects that have been determined to be not regionally significant as defined in the final conformity rule and do not fit into an exempt category have been labeled "NRS."

Long-Range Plan ID

The Long-Range Plan ID (MRP ID) indicates if a project is identified as a Major Regional Project in the DVRPC long-range plan with the corresponding ID number.

Status Codes

DVRPC has developed a coding scheme for projects that have been determined to be "new" projects in the TIP. New projects in the TIP are denoted with one of three status codes: NEW, NEW-B, or RETURN. These status codes indicate which projects were not programmed in the final version of the preceding TIP (FY2013 to FY2016) and assist in establishing the origin of these projects.

Projects indicated as "NEW" have never been programmed in a prior year TIP. These projects are programmed in the TIP for the absolute first time. Projects indicated as "NEW-B" are new "break-out" projects that have been "broken out of," or derived from, an existing TIP project. Lastly, projects indicated as "RETURN" have previously been programmed in a prior year TIP, but through a variety of circumstances, have returned to be programmed in the FY2015 TIP.

Planning Area Notation

The Delaware Valley region is a mosaic of over 350 townships, boroughs, and cities, each making their own land use decisions. To categorize and simplify the types of communities and define corresponding long-range planning policies appropriate for each type, each municipality has been assigned a planning area type associated with the long-range planning policies that will be most beneficial to the community as a whole. At the regional scale, Planning Areas guide the direction of policy. Planning Areas include: Core Cities (Philadelphia and Chester City in southeastern Pennsylvania, and Trenton and Camden City in New Jersey); Developed Communities, which represent the region's older suburbs; Growing Suburbs, which are experiencing or are forecasted to experience significant additional growth; and Rural Areas, where preservation and limited development are key. "Planning Area" is a notation in the TIP project description.

Indicators of Potential Disadvantage

DVRPC uses the Impacts of Potential Disadvantage (IPD) methodology to identify direct and disparate impacts of its plans, programs, and planning process on defined population groups in the Delaware Valley region under Title VI of the Civil Rights Act and the Executive Order on Environmental Justice. Population groups assessed at the census tract level, as defined by the U.S. Census Bureau, include Non-Hispanic Minority, Carless Households, Households in Poverty, Female Head of Household with Child, Elderly (over 75 years old), Hispanic, Limited English Proficiency, and persons with a physical disability. Census tracts that have higher concentrations of a particular demographic group than the regional average for that population are considered to be at a disadvantage. The total number of demographic groups that are above the regional average concentration in each census tract is that tract's IPD. If a tract has higher than average population for three of the identified demographic groups, for example, then it has three IPDs. IPDs range from zero to seven, with seven indicating a tract at the highest degree of disadvantage. "IPD" is listed in the project descriptions to note the highest number of IPD tracts impacted by a project on the TIP.

Congestion Management Process (CMP) Notation

Certain projects have been determined to be major capacity or operational improvements and found consistent with DVRPC's CMP. They are noted as such in the TIP description, with indications of whether supplemental strategies for addressing congestion are required, and in which subcorridor. The CMP category of Major SOV Capacity Projects refers to projects that add capacity or improve operations in a way that impacts regional travel patterns. This review considers, though is not determined by, projects modeled for air-quality conformity purposes and studies considered likely to result in nonexempt projects.

Freight Corridor Initiative

Projects that have a direct, significant impact on the flow of goods along strategic freight corridors, or that improve National Highway System connector routes to intermodal facilities, are noted as integral to the Delaware Valley Freight Corridors Initiative.

Table 8: Air-Quality Codes for DVRPC Exempt Project Categories

Exempt Project Category		AQ Code	Exempt Project Category		AQ Code
SAFETY	Railroad/Highway Crossing	S1	MASS TRANSIT	Operating assistance to transit agencies	M1
	Hazard Elimination Program	S2		Purchase of support vehicles	M2
	Safer Non-Federal-Aid System Roads	S3		Rehabilitation of transit vehicles	M3
	Shoulder Improvements	S4		Purchase of office, shop, and operating equipment for existing facilities	M4
	Increasing Sight Distance	S5		Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	M5
	Safety improvement program	S6		Construction or renovation of power, signal, and communications systems	M6
	Traffic control device and operating assistance other than signalization projects	S7		Construction of small passenger shelters and information kiosks	M7
	Railroad/highway crossing warning devices	S8		Reconstruction or renovation of transit buildings and structures	M8
	Guardrails, median barriers, crash cushions	S9		Rehabilitation or reconstruction of track structures, track, and tracked-in existing rights-of-way	M9
	Pavement resurfacing and/or rehabilitation	S10		Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	M10
	Pavement marking demonstration	S11		Construction of new bus or rail storage/maintenance facilities categorically excluded in 23 CFR part 771	M11
	Emergency relief (23 U.S.C. 125)	S12	OTHER PROJECTS	Specific activities that do not involve or lead directly to construction, such as planning and technical studies	X1
	Fencing	S13		Grants for training and research programs	X2
	Skid treatments	S14		Planning activities conducted pursuant to title 23 and 49 U.S.C.	X3
	Safety roadside rest areas	S15		Federal aid systems revisions	X4
	Adding medians	S16		Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action	X5
	Truck-climbing lanes outside the urbanized area	S17		Noise attenuation	X6
	Lighting improvements	S18		Advance land acquisitions (23 CFR 712 or 23 CFR 771)	X7
	Widening narrow pavements or reconstructing bridges (no additional travel lanes)	S19		Acquisition of scenic easements	X8
	Emergency truck pullovers	S20		Plantings, landscaping, etc.	X9
AIR QUALITY	Continuation of ridesharing and van-pooling promotion activities at current levels	A1	Sign removal	X10	
	Bicycle and pedestrian facilities	A2	Directional and informational signs	X11	
NOT REGIONALLY SIGNIFICANT PROJECTS	Projects determined to be “Not Regionally Significant” and do not fit into an exempt category	NRS	Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	X12	
			Repair of damage caused by natural disasters, civil unrest, or terrorist acts, except projects involving substantial functional, locational, or capacity changes	X13	
NO REGIONAL EMISSIONS ANALYSIS REQUIRED					
Intersection channelization projects		R1	Truck size and weight inspection stations		R4
Intersection signalization projects at individual intersections		R2	Changes in vertical and horizontal alignment		R5
Interchange reconfiguration projects		R3	Bus terminals and transfer points		R6

Table 9: Air-Quality Codes for DVRPC Nonexempt Project Categories

Non-Exempt Project Category		AQ Code
PROJECTS MODELED USING DVRPC'S TRAVEL DEMAND MODEL	Regionally Significant, nonexempt projects included in the 2015 and all subsequent analysis years	2015M
	Regionally Significant, nonexempt projects included in the 2025 and all subsequent analysis years	2025M
	Regionally Significant, nonexempt projects included in the 2035 and all subsequent analysis years	2035M
	Regionally Significant, nonexempt projects included in the 2040 and all subsequent analysis years	2040M

Notes on Tables 8 and 9:

1. Both exempt and not regionally significant project categories adhere to 40 CR 93 Sections 126 and 127.
2. In the PM₁₀ nonattainment or maintenance area, rehabilitation of transit vehicles is only exempt if they comply with control measures in the applicable implementation plan.
3. AQ codes are DVRPC designated.

Source: DVRPC, 2014

Phase of Work Abbreviations

CAL (Capital Acquisition Lease) - Involves lease payments attributable to the acquisition, through financial leasing arrangements for various capital assets for transit operator.

CAP (Capital Asset Construction) - Involves construction of buildings, structures, equipment, or intellectual property for transit operator.

CON (Construction) - Involves the actual building of a project.

DS (Debt Service) - Involves scheduled payments due for principal and interest on bonds for transit operator.

EC (Engineering/Construction) - Funding can be used for both design and construction costs.

ER (Engineering/Right-of-Way) - Funding can be used for both design and right-of-way costs.

ERC (Engineering/Right-of-Way/Construction) - Funding can be used for design, right-of-way, and construction costs.

FD (Final Design) - The refinement of the Initial Preferred Alternative (IPA) based on environmental studies, community input, and the needs of the traveling public. In the New Jersey TIP, Final Design is designated as "DES."

OP (Operations Phase) – Funding can be used for any activity required for the operation of a transit system.

PE (Preliminary Engineering) - The process of advancing preliminary engineering and obtaining formal community and environmental approval of the Initially Preferred Alternative.

PRA (Planning, Research and Administration) – Involves planning, research, or administrative projects.

PUR (Purchase of Equipment) - Involves the purchasing of equipment.

ROW (Right-of-Way Acquisition) - Involves purchasing the land needed to build a project.

UTL (Utilities) - Utility relocation work associated with a project.

Federal Highway Funding Sources Abbreviations

Note: In the TIP project listings section, an '*' after a fund code indicates that the phase has been initiated as Advance Construct using state funds, and will be 'converted' to federal funds. This is a technique that allows PennDOT to initiate a project using nonfederal funds, while preserving eligibility for future federal-aid funds.

The term “advance construct” refers to a finance tool that allows the department to secure federal authorization for a project without tying up any federal funds or obligation authority. In essence, what we are doing is saying that we will pay for the project with state funds until such time as we request federal reimbursement for eligible project costs. There are several advantages to using advance construct. Used on large construction projects that span two or more construction seasons, advance construct frees up and allows us to use obligation authority that we might have used for that project on several other projects. We also use advance construct to authorize new project phases that will be implemented in the last quarter of the federal fiscal year (July, August, and September), when funds and obligation authority are generally scarce. Fourth quarter project authorizations generally don't incur costs prior to the beginning of the new federal fiscal year, when federal funds and obligation authority are made available once again.

The amount of funds and project costs that we have in advance construct status has to be closely monitored. Nearly all advance construct represents the borrowing of future federal funds. We need to be careful not to borrow beyond certain levels. Projects that are fully or partially advance constructed must be carefully monitored so as not to incur costs that can't be billed.

In reality, we do not spend state funds when we don't have to. We try to practice “just in time” funding, whereby we request all or some of the federal funds before we actually start incurring costs. These requests are known as AC Conversions. We may request a partial conversion for just the amount that we need this year, or a full conversion, for all of the funds we initially requested to be authorized as advance construct.

BOF or BRIDGE-OFF (Federal Bridge Program) - Provides funding for the rehabilitation or replacement of bridges that are off the federal-aid system and are defined as structurally deficient and/or functionally obsolete.

CAQ or CMAQ (Congestion Mitigation and Air Quality Improvement Program) - Federal funding for projects that improve air quality and/or relieve congestion without adding new highway capacity.

TIGER (Competitive TIGER (Transportation Investment Generating Economic Recovery) Discretionary Grants) - Special federal economic recovery funding used to spur a national competition for innovative, multimodal, and multijurisdictional transportation projects that promise significant economic and environmental benefits to an entire metropolitan area, a region, or the nation.

FLEX (Flexible funds) – Federal funding anticipated to be flexed from FHWA to FTA, or from FTA to FHWA, in support of a transit or highway project.

HCBS (Historic Covered Bridge Preservation Program) – Federal funding to preserve, rehabilitate, or restore historic covered bridges eligible for listing on the National Register of Historic Places.

HSIP (Highway Safety Improvement Program) - Federal funding for projects or strategies included in the state strategic highway safety plan that correct or improve a hazardous road location or feature or address a highway safety problem.

National Highway Performance Program (NHPP) – Provides funding used to support the condition and performance of the National Highway System (NHS), and to construct new facilities on the NHS that support national performance goals. Three programs from the previous authorization (SAFETEA-LU) have merged into NHPP: the Federal Bridge Programs (BOO/BON/BRIDGE), Interstate Maintenance (IM), and the National Highway System (NHS). Eligible activities broadly vary from workforce development and training to construction of bridges, tunnels, highways, and bicycle and pedestrian facilities to ITS capital improvements, for example.

National Highway Performance Program Statewide Reserve (NHPP Reserve) – Funding reserved from federal allocations and then distributed to specific projects chosen by the commonwealth's secretary of transportation. Provides funding used to support the condition and performance of the National Highway System (NHS) and to construct new facilities on the NHS that support national performance goals. Three programs from the previous authorization (SAFETEA-LU) have merged into NHPP: the Federal Bridge Programs (BOO/BON/BRIDGE), Interstate Maintenance (IM), and the National Highway System (NHS). Eligible activities broadly vary from workforce development and training to construction of bridges, tunnels, highways, and bicycle and pedestrian facilities to ITS capital improvements, for example.

RRX (Rail Highway Grade Crossing) - Federal funding for safety improvement projects to reduce the number and severity of crashes at public highway-rail grade crossings.

SPIKE - Funding reserved from federal allocations and then distributed to specific projects chosen by the commonwealth's secretary of transportation. Several variations of SPIKE funding are coded as SPK-NHPP (National Highway Performance Program).

SRTSF (Safe Routes to School Federal-Aid) – Federal funding that can be used for programs and projects that encourage children and their parents to walk and bicycle safely to school.

STP (Surface Transportation Program) - Federal flexible funding that may be used on any federal aid highway, bridge project, public road, transit capital project, and intracity and intercity bus terminals and facilities.

STP-STU (Surface Transportation Program-Urban Allocation) - Federal funding previously made available under various smaller federal aid categories, as well as a broad, flexible component that is allocated based on federal formulas to areas with population over 200,000.

SXF - Special federal funding from congressional earmarks provided under ISTEA, TEA-21, and SAFETEA-LU.

Transportation Alternatives (TAP) – Provides set-aside funding for programs from the previous authorization, SAFETEA-LU, which are: Transportation Enhancements (TE), Recreational Trails (REC TRAILS), and the Federal-Aid Safe Routes to School (SRTS). TAP funds may be transferred to NHPP, STP, HSIP, CMAQ or PL, or to the Federal Transit Administration for TAP-eligible projects.

State Highway Funding Sources Abbreviations

183 (Appropriation 183) - State funding that can be applied to local bridge projects.

185 (Appropriation 185) - State funding that can be applied to bridge projects.

185-IM (Appropriation 185) – State funding that can be applied to state bridge projects in the Interstate Management Program.

179 or 179A (Appropriation 179) - State funding that can be applied to selected local bridge projects in distressed areas.

581 (Appropriation 581) - State funding that can be applied to highway or bridge projects on the state highway system.

581ED (Appropriation 581/Economic Development) – State economic development funding that can be applied to highway projects on the state highway system.

581-IM (Appropriation 581) - State funding that can be applied to highway projects in the Interstate Management Program.

BND (Bond Funds) - State funding made available from the sale of state bonds and applied to resurfacing projects, structurally deficient bridge projects, safety, and capacity management projects.

SPIKE (State Spike Funds – State Bridge/State Highway) - Funding reserved from state allocations and then distributed to specific projects chosen by the commonwealth's secretary of transportation. A variation of SPIKE funding is coded as SPK-SH (State Highway).

STP-D (Statewide Discretionary Funds) – Statewide discretionary funding that may be used on any federal aid highway, bridge projects, or public road.

Other Highway Funds

LOC - Funding provided by counties, municipalities, or other nonfederal sources to be used to match state or federal funds.

OTHER – Other funds.

TBD - To be determined.

TOLL (Toll Credit Match) – State toll credits that may be used to match federal funds.

TPK (Turnpike Funds) – Funds provided by the Pennsylvania Turnpike Commission.

Federal Transit Funding Sources Abbreviations

CAQ or CMAQ (Congestion Mitigation and Air Quality Improvement Program) - Federal funding for support projects that improve air quality and/or relieve congestion without adding new highway capacity. These funds can be “flexed” (transferred) from FHWA to FTA for use by transit operators.

DEMO (Demonstration Funds) - Special federal funding from congressional earmarks provided under ISTEA, TEA-21, and SAFETEA-LU.

FED OTHER (Federal Other) – Used to denote unanticipated allocations of federal funds outside the regular apportionment process, so the funding source is not known.

FERRY (Federal Ferry Funds) – Provides funding for the rehabilitation and/or development of ferry facilities throughout the state. It has been discontinued in MAP-21.

SEC 5307/5340 (FTA Urbanized Area Formula Grants Program) – Section 5307 provides funding for capital, planning, and JARC-eligible activities, as well as discretionary passenger ferry grants, state safety oversight, and associated transportation improvements. Systems with 100 or fewer buses in urbanized areas with over 200,000 became eligible to receive funding for operating expenses in MAP-21. Sec 5307 transit funds can no longer be transferred to highway projects under MAP-21, but FHWA funds may be transferred to this program.

SEC 5307-S (PennDOT’s FTA Urbanized Area Formula Grants Program) – Section 5307-S is the PennDOT federal funding for the Paoli Transportation Center (MPMS #60674). It is written to distinguish SEPTA funds from PennDOT funds. See SEC 5307/5340 (FTA Urbanized Area Formula Grants Program) for program definition.

SEC 5340 (FTA 5340 Formula Program) – Provides additional apportionment of funding to the Urbanized Area Formula and Rural Area Formula programs in MAP-21, as in previous authorizations.

SEC 5309 (FTA Fixed Guideway Capital Investment Grants “New Starts”) – Provides funding for new and expanded rail, bus rapid transit, and ferry systems that reflect local priorities, including core capacity projects. Fixed-guideway modernization projects and bus facilities projects are funded in Sec. 5337 (State of Good Repair Program, which provided grants to replace and rehabilitate rolling stock, signals and communications, security, maintenance, passenger facilities, etc.) and Sec. 5339 (Bus and Bus Facilities Program) in MAP-21. The previous authorization’s Section 5309 funded only fixed-guideway modernization projects.

SEC 5310 (FTA Enhanced Mobility of Seniors and Individuals with Disabilities Program) – Provides funding for two programs merged from the previous authorization: NEW FREEDOM FTA’s 5317 Formula Program, which has been discontinued by MAP-21, and the previous authorization’s Section 5310 Elderly and Persons with Disabilities Program for the purchase of small buses or van-type vehicles with lifts for private or nonprofit agencies that serve the elderly and persons with disabilities.

SEC 5311 (Nonurbanized Area Formula Program) – Provides funding for rural public transportation programs in areas with a population fewer than 50,000, according to the Census, including JARC-eligible activities from previous authorizations and in MAP-21.

Sec 5324 (Public Transportation Emergency Relief Program) – Provides funding for capital and operating expenses to protect, repair, replace, or reconstruct equipment and facilities in danger of failing, or that have suffered serious damage in the event of a natural or manmade disaster that are not reimbursed by the Federal Emergency Management Agency (FEMA).

SEC 5337 (State of Good Repair Program) – Provides dedicated formula-based federal funding under MAP-21 for the replacement and rehabilitation of the fixed-guideway system and high-intensity motor bus systems that use high-occupancy vehicle (HOV) lanes, including bus rapid transit (BRT), rail, and passenger ferries, in order to maintain public transportation systems in a state of good repair. Projects must be included in a transit asset management plan.

SEC 5339 (Bus and Bus Facilities Program) – Provides formula-based federal funds based on population, vehicle revenue miles, and passenger miles to replace, rehabilitate, and purchase buses and related equipment, and to construct bus-related facilities with a 20 percent local match requirement. This replaces the previous authorization's Section 5309 Bus and Bus Facilities Program.

TIGER (Competitive TIGER (Transportation Investment Generating Economic Recovery) Discretionary Grants) - Special federal economic recovery funding used to spur a national competition for innovative, multimodal, and multijurisdictional transportation projects that promise significant economic and environmental benefits to an entire metropolitan area, a region, or the nation.

State Transit Funding Sources

PTAF 44 (Public Transportation Assistance Fund) – State funding provided by the Public Transportation Assistance Fund.

Section 1513 (Act 89 – Mass Transit Operating) - State Act 89 operating funding that is distributed to transit agencies based on their demonstrated need.

SEC 1514 (Act 89 - Asset Improvement Program) - State Act 89 funding that is distributed to transit agencies based on their demonstrated need. Funding can be used for debt service payments, asset improvement projects, and acquisition of new assets.

Other Transit Funds

LOCAL - Funding provided by counties, municipalities, or other nonfederal sources to be used to match state of federal funds.

OTHER – Other funds.

TBD - To be determined.

Figure 2: Roadmap for TIP Project Listing

Roadmap for TIP Project Listing

Below is an example of an actual TIP project listing that has been modified for display purposes.

PennDOT ID#

County or transit operator of where project is located

Roadways are assigned to one of several possible functional classifications (FC) within a hierarchy based on the character of travel service provided. A roadway's FC can impact its eligibility for federal funds.

Indicates if a project is "New," "New-B," or "Return." See page 38 in PA TIP for further explanation.

DVRPC FY 2015-2018 TIP for PA

Pennsylvania - Highway Program (Status: TIP)

Philadelphia
Final Version

MPMS# 17782

I-95 & Aramingo Ave., Adams Ave. Connector

SR:1007

State Route, if applicable

Return

LIMITS: Betsy Ross Bridge to Torresdale Ave.

MUNICIPALITIES: Near Northeast Philadelphia

IMPROVEMENT: Intersection/Interchange Improvements

DVRPC PLANNING AREA: Core City

PROJECT MANAGER: AECOM/P. Shultes

CMP: Major SOV Capacity

CMP Subcorridor(s): 4B

No Let Date

MRPID:68

AQ Code:2025M

IPD: 4

Construct an extension of Adams Ave. east of Tacony St. to connect to ramps constructed as part of the I-95, Delaware Expressway at Betsy Ross Bridge Interchange project and provide a connection between Torresdale Ave. (east of Frankford Ave.) and I-95.

Project CMP (Congestion Management Process) commitments include strategies such as improvements for transit users, bicyclists, pedestrians, and drivers on the existing road network (operations). See DVRPC's 2012 annual report for details related to this project.

		TIP Program Years (\$ 000)											
		FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024	FY2025	FY2026
FD	STU	127											
FD	581	32											
ROW	581	2,122											
UTL	STU			1,801									
UTL	581			450									
CON	STU					7,642							
CON	581					1,910							
CON	STU						7,642						
CON	581						1,910						
		2,281	0	2,251	0	9,552	9,552	0	0	0	0	0	0
Total FY2015-2018		4,532				Total FY2019-2022				19,104			
						Total FY2023-2026				0			

Note that funds are in Millions (\$).

Fund type for each phase; see pages 43 to 48 in the PA TIP for explanations. Note that an "*" following a fund type indicates conversion funds for advanced construction phases.

Anticipated Preliminary Engineering, Final Design, Right of Way, Utility, or Construction project phases; see page 42 in PA TIP for discussion.

Project Manager assigned by PennDOT District 6

Community types which correspond to long range planning policies; see page 38 in PA TIP for discussion.

DVRPC Project Category

Project location information

Congestion Management Process (CMP) codes; see page 39 in PA TIP for explanation.

Highest Indicators of Potential Disadvantage (IPD) for Environmental Justice; see page 39 in PA TIP for discussion.

Air Quality Code; see pages 37 to 38 and 40 to 41 in PA TIP for explanations.

Indicates that a project is identified as a Major Regional Project in the DVRPC long-range plan.

Estimated or actual date that project contractor bids for construction may be open; advertising dates occur prior to let dates.

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