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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 Draft DVRPC FY2013 Transportation Improvement Program (TIP) for the Pennsylvania portion of the region (FY2013-2016). 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.

In the Pennsylvania subregion, the TIP contains approximately 385 projects, totaling \$3.7 billion for the phases to be advanced over the next four years, averaging \$925 million per year. Programmed funds include \$2.3 billion for projects primarily addressing the highway system and \$1.4 billion of transit projects for SEPTA, Pottstown Urban Transit, and the Delaware River Port Authority/PATCO (DRPA/PATCO). These figures include the fifteen projects in the DVRPC region totaling over \$536 million dollars which are part of the Pennsylvania Statewide Interstate Management Program. Chapter 2 presents summary tallies of these programs.

The TIP and Federal Requirements

The TIP is a requirement of federal transportation legislation, most recently the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA LU), which was enacted August 10, 2005, as law 109-59. SAFETEA-LU builds on the initiatives established in both the Transportation Equity Act for the 21st Century (TEA-21), and the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA). These laws prescribe transportation investment in a balanced approach through a guaranteed commitment to highways and bridges, public transit, intermodal projects, and advanced technologies, such as Intelligent Transportation Systems. SAFETEA-LU promised to spend more than \$286 billion nationally on transportation over the five years through FY2009 and guaranteed that most of the money would be appropriated. SAFETEA-LU expired in September 2009. Until new legislation is passed, funds for transportation are made available through a process of “Continuing Resolutions,” which extends SAFETEA-LU spending levels for a period of time.

What this Document Includes

The complete TIP document has been divided into four sections. This first section contains 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 second section contains various summaries of the Pennsylvania programs. The third section describes the TIP Public Involvement process, including issues relating to Environmental Justice. Finally, the fourth section contains an explanation of funding and phasing codes and abbreviations, project maps, project lists, and project descriptions.

At the end of the document, there are five appendices: (a) Acknowledgement of Board Resolutions (This section is purposely left blank and is reserved for signed resolutions in the final document upon Board approval), (b) State DOT Financial and Procedural Guidance used in developing the program, (c) Acknowledgement of the Executive Summary of the Draft Documentation of the Conformity Finding (the Draft Conformity Finding will be available on the DVRPC website on May 7, 2012), (d) Memorandum of Understanding on Procedures to Amend and Modify the TIP, (e) Acknowledgement of Summary of Public Outreach, Public Comments, and Agency Responses (This section is purposely left blank and is reserved for documentation of public outreach, public comments and agency responses in the final document upon Board approval).

Using the Web

The Draft TIP for Pennsylvania can also be found on the DVRPC website. The web includes an interactive method for displaying maps and project listings for the Draft and current TIPs, as well as a way to submit comments on the Draft during the public comment period. 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 is on the cutting edge of technology and has provided the ability to use the QR Code (Quick Response Code) symbol to access the TIP website using your smartphone. 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. The TIP represents the transportation improvement priorities of the region and is required by federal law, the most recent of which is the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users, or SAFETEA-LU. The list is multi-modal; in addition to the more traditional highway and public transit projects, it includes bicycle, pedestrian, and freight-related projects as well.

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 DVRPC Pennsylvania and New Jersey TIPs formally cover four years and are updated every other year; the Pennsylvania TIP is updated in odd years, and the New Jersey TIP is now updated in even years, based on a recent NJDOT decision to update the Statewide TIP (STIP) every other year. Both the Pennsylvania and New Jersey TIP documents demonstrate a longer planning and programming horizon in order to better plan for expected resources and to provide the region with a more realistic time-frame in which to expect advancement of TIP projects with more realistic costs. Upon adoption, the Pennsylvania TIP will demonstrate a fiscally constrained 12 year planning horizon for projects from FY13-FY24, although it is important to note that by federal regulation the funding represented after the four year TIP period is not technically available or able to be committed or authorized. NJDOT prepares a 10 year Capital Program, and DVRPC's New Jersey TIP also presents 10 years of proposed programming for illustrative purposes.

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 D 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 2035*, into a short-term program of improvements. For further information about the policies and strategies of the long-range plan, *Connections 2035*, 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 air quality standards. A TIP is said to conform if it is drawn from a conforming plan, as determined by an emissions analysis. The projects in the FY2013 TIP are a subset of the regionally significant projects contained in the *Connections 2035* long-range plan.

The Draft TIP and Plan will be tested for conformity in order to meet all requirements, including the critical test that Volatile Organic Compounds (VOCs), Oxides of Nitrogen (NOx), Carbon Monoxide (CO), and fine particulate matter (PM-2.5) emissions are less than any applicable budgets or baseline established for all analysis years. The Draft Documentation of the Conformity Finding can be found on DVRPC's website beginning on May 7, 2012. A complete description of the conformity procedures can be found in the *Connections 2035* long-range plan and on DVRPC's website.

How is the TIP Funded?

The major funding source for the projects in the TIP is SAFETEA-LU, administered through the U.S. Department of Transportation's Federal Highway Administration and Federal Transit Administration. In addition, funds are made available by the states of New Jersey and 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 pre-implementation research and public input precedes 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 Planning Coordinating Committee/Regional Transportation Committee (PCC/RTC) reviews them. The PCC/RTC seeks to insure 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 PCC/RTC, composed of state, county, and city planners; transit operators; and transportation related interest groups make 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 PCC/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, 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 personnel 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 conducts a 30-day public comment period and holds open house meetings to allow the public an opportunity to present comments to state, county, and transit agencies as well as DVRPC staff about the process and projects. Copies of the Draft TIP are available online, as well as at the sites listed above. In addition, both Draft and current TIP documents are able to be viewed on DVRPC's website at www.dvrpc.org/TIP, where you can also use DVRPC's web-based Draft TIP public comment application.

CHAPTER 2

Program Summaries

The Draft DVRPC FY2013 Transportation Improvement Program for Pennsylvania contains approximately 385 projects, totaling more than \$3.7 billion for the phases to be advanced over the next four years, averaging \$925 million per year. Programmed funds include \$2.3 billion for projects primarily addressing the highway system and \$1.4 billion of transit projects for SEPTA, Pottstown Urban Transit, and the Delaware River Port Authority/PATCO (DRPA/PATCO). 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).

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

	FY2013	FY2014	FY2015	FY2016	Total
Highway Program					
Bucks	\$99,049	\$139,796	\$117,531	\$118,352	\$474,728
Chester	\$72,907	\$64,381	\$68,963	\$78,770	\$285,021
Delaware	\$33,717	\$32,669	\$45,659	\$24,369	\$136,414
Montgomery	\$74,532	\$57,884	\$67,892	\$112,576	\$312,884
Philadelphia	\$96,616	\$106,238	\$105,680	\$50,980	\$359,514
Various	\$50,832	\$48,423	\$47,666	\$51,669	\$198,590
-Interstate	\$222,558	\$191,687	\$107,429	\$14,948	\$536,622
Subtotal	\$650,211	\$641,078	\$560,820	\$451,664	\$2,303,773
Total Cost – 4 Year Highway Program					\$2,303,773
Transit Program					
SEPTA	\$343,293	\$343,345	\$343,398	\$343,453	\$1,373,489
DRPA/PATCO*	\$1,000	\$0	\$0	\$0	\$1,000
Montgomery	\$15,500	\$0	\$0	\$0	\$15,500
Pottstown	\$1,754	\$1,754	\$1,754	\$1,754	\$7,016
Subtotal	\$361,547	\$345,099	\$345,152	\$345,207	\$1,397,005
Total Cost – 4 Year Transit Program					\$1,397,055
Grand Total Cost – 4 Year Highway and Transit Program					\$3,700,828

Source: DVRPC, 2012

* See the FY2012 DVRPC TIP for NJ for the main program & projects for DRPA/PATCO.

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

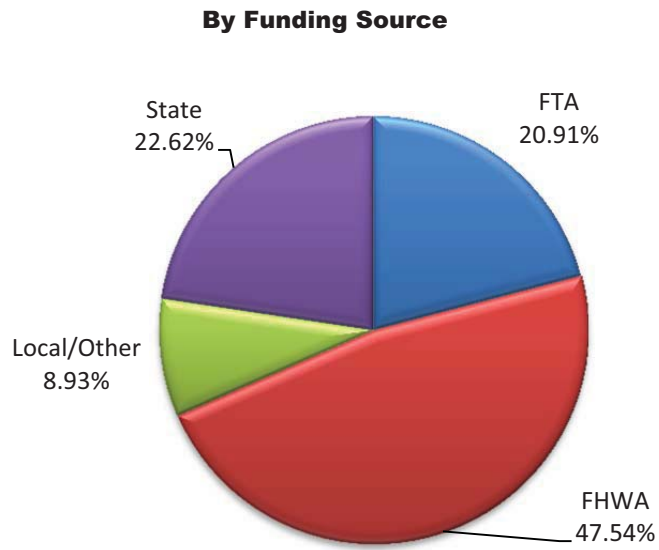
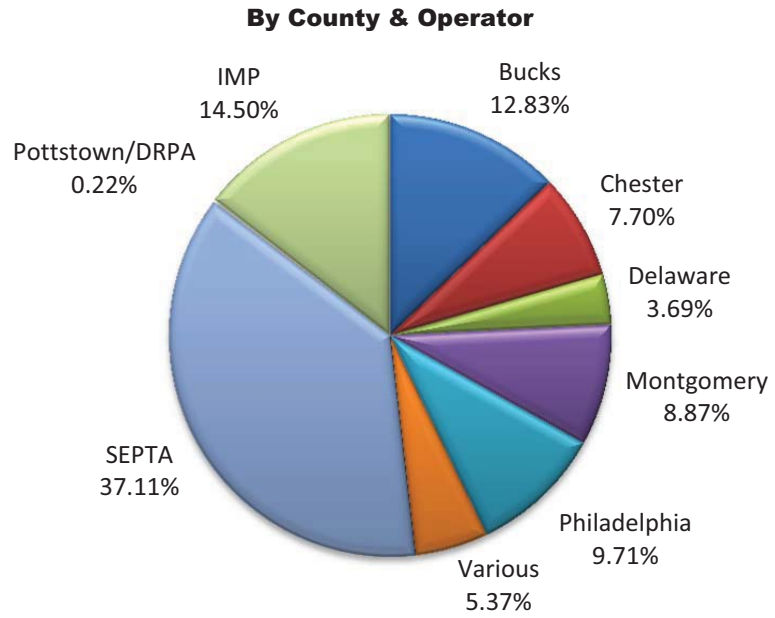


Table 2: Cost by TIP Funding Category (000's)

TIP FUND	FY2013	FY2014	FY2015	FY2016	FY2013-2016	1st LFY 2017-2020	2nd LFY 2021-2024	Total LFYs >2016
Highway Program								
ACT26A	\$1,600	\$1,940	\$4,324	\$2,517	\$10,381	\$0	\$0	\$0
ACT44	\$27,656	\$27,656	\$27,656	\$27,656	\$110,624	\$110,624	\$110,624	\$244,556
ACT44-DS	\$9,125	\$3,775	\$0	\$0	\$12,900	\$0	\$0	\$0
BRIDGE	\$63,750	\$63,750	\$63,750	\$63,750	\$255,000	\$255,000	\$255,000	\$521,460
BRIDGE-IM	\$0	\$153,800	\$58,958	\$0	\$212,758	\$561,766	\$571,522	\$1,133,288
B-STATE	\$17,673	\$15,066	\$15,066	\$15,066	\$62,871	\$60,264	\$60,264	\$123,393
B-STATE-IM	\$0	\$0	\$6,551	\$0	\$6,551	\$23,911	\$19,714	\$43,625
CMAQ	\$40,990	\$40,990	\$40,990	\$40,990	\$163,960	\$163,960	\$163,960	\$327,920
DEMO	\$25,192	\$14,842	\$13,608	\$17,768	\$71,410	\$0	\$0	\$0
ECON	\$5,000	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0
FHA	\$0	\$0	\$950	\$0	\$950	\$0	\$0	\$0
FLEX	\$17,083	\$17,083	\$17,083	\$17,083	\$68,332	\$68,332	\$0	\$68,332
HCB	\$0	\$252	\$1,100	\$0	\$1,352	\$0	\$0	\$0
HSIP	\$9,813	\$9,813	\$9,813	\$9,813	\$39,252	\$39,252	\$39,252	\$78,504
H-STATE	\$12,471	\$12,471	\$12,471	\$12,471	\$49,884	\$49,884	\$49,884	\$99,768
H-STATE-IM	\$15,339	\$4,720	\$4,192	\$1,495	\$25,746	\$38,723	\$17,363	\$56,086
H-TE	\$5,989	\$5,989	\$5,989	\$5,989	\$23,956	\$23,956	\$23,956	\$47,912
H-TED	\$2,000	\$0	\$0	\$0	\$2,000	\$0	\$0	\$0
IM	\$207,219	\$33,167	\$32,084	\$13,453	\$285,923	\$304,639	\$255,687	\$560,326
LOCAL	\$15,112	\$15,046	\$16,888	\$9,133	\$56,179	\$8,163	\$0	\$8,163
NHS	\$29,753	\$28,187	\$38,219	\$39,147	\$135,306	\$231,461	\$137,714	\$369,175
NHS-IM	\$0	\$0	\$5,644	\$0	\$5,644	\$8,376	\$0	\$8,376
SPK-FB	\$8,762	\$5,831	\$4,852	\$1,844	\$21,289	\$0	\$0	\$0
SPK-FH	\$28,762	\$30,831	\$28,651	\$21,844	\$110,088	\$106,800	\$0	\$106,800
SPK-SH	\$0	\$0	\$1,200	\$0	\$1,200	\$0	\$0	\$0
SRTSF	\$3,094	\$494	\$768	\$0	\$4,356	\$0	\$0	\$0
STP	\$46,512	\$46,578	\$36,546	\$35,618	\$165,254	\$67,599	\$161,346	\$228,945
STU	\$43,104	\$43,104	\$43,104	\$43,104	\$172,416	\$172,416	\$172,416	\$344,832
STX	\$1,313	\$1,313	\$1,313	\$1,313	\$5,252	\$5,252	\$5,252	\$10,504
TCSP	\$1,899	\$0	\$0	\$0	\$1,899	\$3,024	\$0	\$3,024
TIGER	\$10,000	\$0	\$0	\$0	\$10,000	\$0	\$0	\$0
TOLL-MATCH	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TPK	\$1,000	\$64,380	\$69,050	\$71,610	\$206,040	\$16,410	\$0	\$16,410
TOTAL	\$650,211	\$641,078	\$560,820	\$451,664	\$2,303,773	\$2,319,812	\$2,043,954	\$4,401,399

Source: DVRPC 2012

Table 2: Cost by TIP Funding Category (000's) (continued)

TIP FUND	FY2013	FY2014	FY2015	FY2016	FY2013-2016	1st LFY 2017-2020	2nd LFY 2021-2024	Total LFYs >2016
Transit Program								
1513	\$940	\$940	\$940	\$940	\$3,760	\$940	\$0	\$940
1514B	\$84,000	\$84,000	\$84,000	\$84,000	\$336,000	\$335,998	\$336,005	\$672,003
1517	\$16,325	\$16,276	\$16,326	\$16,390	\$65,317	\$73,266	\$132,759	\$206,025
5307	\$95,324	\$95,324	\$95,324	\$95,324	\$381,296	\$379,046	\$378,296	\$757,342
5309	\$94,488	\$94,488	\$94,488	\$94,488	\$377,952	\$377,952	\$377,954	\$755,906
DEMO	\$1,000	\$0	\$0	\$0	\$1,000	\$0	\$0	\$0
JARC	\$2,155	\$2,155	\$2,155	\$2,155	\$8,620	\$8,620	\$8,620	\$17,240
JARC-S	\$4,259	\$4,259	\$4,259	\$4,259	\$17,036	\$17,036	\$17,036	\$34,072
LOCAL	\$12,997	\$13,049	\$13,102	\$13,157	\$52,305	\$52,825	\$51,127	\$206,573
NF	\$1,322	\$1,322	\$1,322	\$1,322	\$5,288	\$5,288	\$5,288	\$10,576
NF-S	\$319	\$319	\$319	\$319	\$1,276	\$1,276	\$1,276	\$2,552
OTHER	\$15,500	\$0	\$0	\$0	\$15,500	\$0	\$0	\$0
PTAF 44	\$32,918	\$32,967	\$32,917	\$32,853	\$131,655	\$123,706	\$64,213	\$187,919
TOTAL	\$361,547	\$345,099	\$345,152	\$345,207	\$1,397,005	\$1,375,953	\$1,372,574	\$2,851,148
Grand Total Cost - 4 Year Highway and Transit Program								
DVRPC Total	\$1,011,758	\$986,177	\$905,972	\$796,871	\$3,700,778	\$3,695,765	\$3,416,528	\$7,252,547

Source: DVRPC 2012

Financial Constraint

At the beginning of each TIP update, the State DOT develops a four-year "financial guidance" for use by DVRPC and their other Metropolitan Planning Organizations (MPOs). The financial guidance establishes highway and transit funding levels which 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 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 Draft TIP has been developed according to the state guidance, it meets the federal requirement of being financially constrained.

You will also note that the Draft TIP makes information available for project costs beyond the formal four-year (FY13-FY16) constrained period of the TIP. Project phases appear in these Later Fiscal Years 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" (LFY) FY17-24 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 time-frames 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 Draft FY2013 TIP does show a financially constrained twelve year program from FY13-FY24 using assumptions of funding levels that are currently available.

There are also projects in the DVRPC region that have been identified as needs and that have been TIP projects in a previous TIP, but for which there are not sufficient funding resources even within a 12 year constrained programming horizon. These projects are shown on an Illustrative Unfunded List towards the end of this document. So not only do these projects not show up in the first four years of the DVRPC TIP, there is no expectation that enough funding will be available to fully fund them by FY2024 and they do not have complete funding in the LFY of the TIP. If additional funding is not made available to the region through new revenue sources it will be many years until planned projects are able to advance to construction.

The Interstate Management Program (IMP), as part of the Pennsylvania Statewide Transportation Improvement Program (STIP), was created to pro-actively address the maintenance and reconstruction of the state's aging Interstate infrastructure. An average of \$375 million per year (FY2013 - 2016) will be used statewide, utilizing all federal Interstate Maintenance Funds as well as a portion of federal Interstate Bridge 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 fifteen projects in the region totaling over \$536 million that are included in the IMP over the four years FY2013-2016. Those highway

projects, all currently for I-95 in Philadelphia, are listed at the end of the Philadelphia project section as well as in a separate Interstate Management Program section.

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 will be included in the final FY2013 TIP document.

To get a more complete picture of SEPTA's overall annual funding, the levels of state and local operating assistance are listed in Appendix B following PennDOT's financial guidance documentation.

Investing in the Region's Planning Areas

The Delaware Valley Region is a mosaic of 353 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 2035*, the region's long-range plan. Those four areas are: Core Cities (Philadelphia and Chester City in the Pennsylvania subregion 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 will be included on each project listing in the final FY2013 TIP document, and can be found in the current FY2012 TIP for New Jersey. A more complete discussion and illustration of planning areas can be found in the *Connections 2035* 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 that provides information on transportation system performance. It identifies congested corridors and 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 Transportation Improvement Program (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.
- ▶ It helps to suggest ideas for TIP projects based on analysis and to refine ideas for TIP projects from other partners

The CMP evaluates all new or amended TIP projects proposed for federal funding and, where Major Single-Occupancy Vehicle (SOV) capacity is consistent, the CMP includes the required table of supplemental strategies to reduce travel demand and get the most long-term value from the investment. Project managers are encouraged to contact DVRPC to check whether project alternatives are consistent early in planning phases for the most effective coordination.

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. The projects are noted as such in their TIP descriptions. This review considers, though is not determined by, projects modeled for air quality conformity purposes and studies considered likely to result in non-exempt 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 DVRPC's website at www.dvrpc.org/CongestionManagement.

Goods Movement and Economic Development

The SAFETEA-LU federal transportation legislation contains specific provisions to incorporate goods movement and economic development (or, more simply - freight) considerations in the MPO planning process. Through its long-range transportation planning, TIP development, and the conduct of technical studies (e.g., Intermodal Management System and corridor studies), DVRPC has proactively sought to fulfill the federal requirement to include freight as a primary planning consideration. 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 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 committee provides a forum for private and public sector freight stakeholders to interject their recommendations 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 which facilitate the flow of goods and promote economic development.

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 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 intermodal connectivity, 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 DVRPC's adopted Delaware Valley Freight Corridors.

Toll Authority Highway and Port-Related Projects

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 sub-area 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 Transportation Investment Study (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, 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 Draft FY2013 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 (CMAQ), Transportation Enhancement Program (TE), and the Home Town Streets/Safe Routes to School Program (HTS/SRTS).

Table 3: Supporting Projects that Facilitate Good Movement and Economic Development

Supporting Project	MPMS	County
Advances Safety		
Highland Avenue Grade Crossing	90473	Delaware
Balances Freight Operational Needs with Community Goals		
PA 41 Study	14484	Chester
Marcus Hook Streetscape	65911	Delaware
Eliminates Bottlenecks		
PA 252 Underpass and US 30 Intersection	85062	Chester
Fortifies Central Business Districts		
Chester Commercial Business District	72913	Delaware
Preserves Vital Infrastructure		
I-95 Reconstruction	79686	Philadelphia
Improves Distribution Patterns		
I-95/PA Turnpike Interchanges	13347	Bucks
Maximizes Railroads		
CSX Trenton Line Clearance	48197	Various
Promotes Commerce and Tourism		
River Crossing Complex: Valley Forge National Historic Park	66952	Montgomery
Provides Increased Capacity		
US 202, Johnson Highway to Township Line Road	63486	Montgomery
Serves Ports		
PRPA Access Project	74841	Philadelphia
Speeds Deliveries		
Quakertown Joint Closed Loop Signal System SR: 0309	57635	Bucks

Source: DVRPC 2012

DVRPC Competitive CMAQ Program

The Congestion Mitigation and Air Quality Improvement Program (CMAQ) was established by ISTEA and has continued under TEA-21 and SAFETEA-LU. CMAQ funds are allocated to the states for use in air quality non-attainment 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 and 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. Since 1994, DVRPC has conducted four rounds of the competitive program. The most recent round of the DVRPC Competitive CMAQ Program is currently underway and a selected list of projects is expected during the summer of 2012.

Table 4: Toll Authority Highway and Port Related Projects

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	Design ends 2012; Construction Ends 2015	\$190,000,000
I-76, Roadway and Bridge Reconstruction, Downingtown to SR 29, MP 312-319	Design Ends 2016	\$150,000,000
I-76, All Electronic E-ZPASS Interchange at SR 29	Design Complete; Construction Ends 2012	\$50,000,000
I-76, Replacement of Overhead Bridge Carrying I-489 over the Turnpike	Design Ends 2013; Construction Ends 2014	\$5,000,000
I-76, Replacement of Overhead Bridge Carrying SR 1021 over the Turnpike	Design Ends 2012; Construction Ends 2013	\$5,000,000
I-276, Replacement of Mainline Bridge over PA 611	Construction Ends 2013	\$13,000,000
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	Construction Ends 2013	\$151,000,000
I-476, Roadway and Bridge Reconstruction, Mid-County to Lansdale	Construction Ends 2016	\$160,000,000
I-476, Roadway and Bridge Reconstruction, Wambold Road	Construction Ends 2016	\$30,000,000
I-476, Roadway and Bridge reconstruction, Lansdale to Quakertown	Design ends 2015	\$200,000,000

Source: DVRPC 2012

Table 4: Toll Authority Highway and Port Related Projects (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 Authority		
<i>Specific Bridge Projects</i>		
I-95 Scudder Falls Bridge Improvement Project	2014 to 2017	\$328,600,000
New Hope - Lambertville Toll Bridge PA & NJ Approach Roadways Repaving & NJ Route 29 Overpass Bearing Seat & Bridge Painting	2013	\$6,900,000
Washington Crossing Toll Supported Bridge Phase 2 Rehabilitation	2016 to 2017	\$9,500,000
System – Wide Projects		
None		

Source: DVRPC 2012

Table 5: Selected Transportation Studies

Studies Currently Underway	Sponsor(s)
US 422 River Crossing Complex	PennDOT/VFNHP/Montgomery County
Route 23 Relocation	Upper Merion Township
Quakertown /Stony Creek Rail Restoration	TMA Bucks
PATCO Philadelphia Waterfront Transit Expansion	DRPA/PATCO
US Route 202 Section 100	PennDOT
NHSL Extension to King of Prussia	SEPTA
Southeastern Pennsylvania Emergency Transportation Plan	PEMA
PHL, Class B Airspace Re-design	FAA
PA Comprehensive Statewide Freight Plan	PennDOT

Source: DVRPC 2012

Transportation Enhancements Program and Hometown Streets/Safe Routes to School

The Transportation Enhancements (TE) program focuses on non-traditional projects designed to enhance the experience of transportation, mitigate the impacts of transportation facilities on communities and the environment, and enhance community character through transportation-related improvements. This program, mandated by Congress, is funded through a ten percent set aside of each state's highway federal Surface Transportation Program (STP) dollars. The Safe Routes to School program (SRTS) is designed to work with both school districts and pedestrian and bicycle safety advocates to make physical improvements that promote safe walking and biking passages to schools. The Home Town Streets (HTS) program provides for streetscape improvements to help revitalize defined downtown and commercial centers.

PennDOT suballocates the TE funds by region according to a formula based in part on population. DVRPC is empowered to select projects directly, resulting in a program which more closely reflects the regional priorities. The four DVRPC Pennsylvania counties and the City of Philadelphia during the competitive TE selection rounds are involved in project evaluation and formulating recommendations for the DVRPC Board. In addition, SEPTA offers its transit TE funds (a one percent set aside of the FTA urbanized Area Formula Grants) effectively merging the two TE programs. Much like the Competitive CMAQ Program, projects are subjected to a rigorous evaluation process before the priority list of projects is selected.

Responding to 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 of 1964 states that no person or group shall be excluded from participation in or denied the benefits of any program or activity utilizing federal funds, and 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, bi-state Philadelphia-Camden-Trenton region, DVRPC is committed to responding to the federal guidance on Title VI and EJ, 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, called the Degrees of Disadvantage (DOD) Methodology, is utilized 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. In 2007, the DVRPC Board approved the Commission's 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 non-discrimination 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. Throughout the year, DVRPC engages in a variety of public participation events, such as public meetings and workshops, regional listening sessions, and conferences that provide opportunities for the public to participate and comment on DVRPC plans and programs.

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 upon the EJ methodology outlined in Environmental Justice at DVRPC (2011 update, publication number TM12007). Census data from 2010 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), car-less 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 its degree 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 degrees of disadvantage. Each census tract is mapped to illustrate the number of DODs. TIP projects are mapped to identify low-disadvantage census tracts (with 1 to 4 DODs) and high-disadvantage census tracts (with 5 to 8 DODs), with and without a TIP project.

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.

For the FY2013-2016 Pennsylvania Transit TIP, 14 tracts (10.6%) of the 132 tracts with 5-7* DOD contain a TIP project, while 53 (8.1%) of the 657 tracts with 1-4 DOD contain a TIP project. For the FY 2013-2016 Pennsylvania Highway TIP, 46 (34%) of the 132 tracts with 5-7 DOD contain a TIP Project, while 247 (37.6%) of the 657 tracts with 1-4 DOD contain a TIP project.

* Only seven of the eight DOD were mapped for this project—population counts for physically disabled have not yet been released for the 206-2010 American Community Survey. Population counts for minority populations and low-income populations, which are the two population groups mandated for investigation, are covered in the seven DOD population groups.

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 under-involved and often unconcerned, 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, but it is also the responsibility of DVRPC 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 FY2013 TIP for Pennsylvania will open on May 3, 2012 and extend through June 1, 2012, at 5:00 p.m. (EST) There will be a public meeting held at the following location for the purpose of presenting comments on the Draft FY2013 TIP:

May 15, 2012

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, <http://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 is posted on the DVRPC website, including the dates and locations of the public meetings, and other general information. Individuals can download and/or access TIP materials during the public comment period or any other time. In addition, an email address link is provided, tip-plan-comments@dvrpc.org, to facilitate the submission of comments during the public comment period.

Written Comments via US Mail should be forwarded to:

TIP Comments

DVRPC Public Affairs Office

8th Floor

190 N. Independence Mall West

Philadelphia, PA 19106

Comments may also be faxed to: 215-592-9125.

Additionally, comments can be made online as part of DVRPC's new web-based TIP public comment application located at www.dvrpc.org/TIP. Click on the "Submit a comment on the Draft DVRPC FY2013 TIP for Pennsylvania" button to make general and project specific comments.

For those without access to the internet, TIP documents are also available at selected area libraries (see Table 6), including the DVRPC library 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 ask you to consider as you review the Draft 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 SAFETEA-LU?
- 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 non-traditional projects (like pedestrian, bicycle, smart technology, Transportation Enhancement, 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 are not limited to these broader issues of concern. DVRPC, as always, welcomes opinions on specific projects contained in the Draft TIP, the Draft TIP development process, or on any other topic of concern. However, we remind those intending to recommend new projects for the Draft TIP that in order to earn a place on the Draft 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 6: Libraries Displaying the Pennsylvania FY2013 TIP

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 2012

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C H A P T E R 4

Project Maps & Listings Overview

Project Map Explanation

The maps on the following pages show the location of the projects included in the Draft DVRPC FY2013 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 and a listing of projects that apply to various counties. The second section includes transit projects for SEPTA, Pottstown, and DRPA/PATCO.

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 (FY13-FY16) 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 time-frames in which to expect advancement of TIP projects with more realistic costs. Many projects which have phases within the four years also have phases (such as construction) which may be out in later fiscal years (LFY) FY17-FY24. This 12 year constrained programming horizon is illustrated on the project listings within the TIP document. Project phases which 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 are available. Toward the end of this document in a section labeled “Illustrative List” you will see lists of additional highway and transit projects that do not fall within the 4 year constrained TIP, nor will they fit within the constrained 12 year programming horizon.

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, sources of funds, as well as other information described below. A sample TIP project listing 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.

All non-exempt, regionally significant projects are assigned five-character alphanumeric AQ codes that begin with a four-digit analysis year (2013, 2015, 2020, or 2030) 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 it was included as part of a group of projects in the regional transportation demand network simulation. “O” (“off-model”) means it was analyzed individually using a 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 2013O, in which case the project is identified as a regionally significant, nonexempt project, expected to be open to traffic by 2013, with emissions estimates which are 1) included in the 2013 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 where multiple codes apply, the most representative code is assigned. Exempt projects in design phases are classified under the planning and technical studies category. Table 7 is a complete list of exempt and non-exempt categories and corresponding air quality codes.

There are projects listed in the TIP document that are still in pre-construction 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 Illustrative Unfunded 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".

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 either 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 (FY2011-2014), 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 FY2013 Draft TIP.

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 non-exempt 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 7:
Air Quality Codes for DVRPC Project Categories**

	<i>Exempt Project Category</i> ¹	<i>DVRPC AQ Code</i>		<i>Exempt Project Category</i> ¹	<i>DVRPC AQ Code</i>
Safety Projects	Railroad/highway crossing	S1	Air Quality Projects	Continuation of ride-sharing and van-pooling promotion activities at current levels	A1
	Hazard elimination program	S2		Bicycle and pedestrian facilities	A2
	Safer non-federal-aid system roads	S3	Other Projects	Specific activities that do not involve or lead directly to construction, such as: Planning and technical studies	X1
	Shoulder improvements	S4		Grants for training and research programs	X2
	Increasing sight distance	S5		Planning activities conducted pursuant to title 23 and 49 U.S.C.	X3
	Safety improvement program	S6		Federal-aid systems revisions	X4
	Traffic control device and operating assistance other than signalization projects	S7		Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action	X5
	Railroad/highway crossing warning devices	S8		Noise attenuation	X6
	Guardrails, median barriers, crash cushions	S9		Advance land acquisitions (23 CFR 712 or 23 CFR 771)	X7
	Pavement resurfacing and/or rehabilitation	S10		Acquisition of scenic easements	X8
	Pavement marking demonstration	S11		Plantings, landscaping, etc.	X9
	Emergency relief (23 U.S.C. 125)	S12		Sign removal	X10
	Fencing	S13		Directional and informational signs	X11
	Skid treatments	S14		Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	X12
	Safety roadside rest areas	S15		Repair of damage caused by natural disasters, civil unrest, or terrorist acts, except projects involving substantial functional, locational, or capacity changes	X13
	Adding medians	S16	No Regional Emissions Analysis Required	Intersection channelization projects	R1
	Truck climbing lanes outside the urbanized area	S17		Intersection signalization projects at individual intersections	R2
	Lighting improvements	S18		Interchange reconfiguration projects	R3
	Widening narrow pavements or reconstructing bridges (no additional travel lanes)	S19		Changes in vertical and horizontal alignment	R4
	Emergency truck pullovers	S20		Truck size and weight inspection stations	R5
Mass Transit Projects	Operating assistance to transit agencies	M1		Bus terminals and transfer points	R6
	Purchase of support vehicles	M2	Non-Exempt Project Category		
	Rehabilitation of transit vehicles ²	M3	Projects modeled using DVRPC's travel demand model	Regionally significant, non-exempt projects included in the 2013 and all subsequent analysis years	2013M
	Purchase of office, shop, and operating equipment for existing facilities	M4		Regionally significant, non-exempt projects included in the 2015 and all subsequent analysis years	2015M
	Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	M5		Regionally significant, non-exempt projects included in the 2020 and all subsequent analysis years	2020M
	Construction or renovation of power, signal, and communications systems	M6		Regionally significant, non-exempt projects included in the 2030 and all subsequent analysis years	2030M
	Construction of small passenger shelters and information kiosks	M7		Regionally significant, non-exempt projects included in the 2035 and all subsequent analysis years	2035M
	Reconstruction or renovation of transit buildings and structures	M8	Projects modeled using an off-network analysis technique	Regionally significant, non-exempt projects included in the 2013 and all subsequent analysis years	2013O
	Rehabilitation or reconstruction of track structures, track, and trackbed in existing rights-of-way	M9		Regionally significant, non-exempt projects included in the 2015 and all subsequent analysis years	2015O
	Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	M10		Regionally significant, non-exempt projects included in the 2020 and all subsequent analysis years	2020O
	Construction of new bus or rail storage/maintenance facilities categorically excluded in 23 CFR part 771	M11		Regionally significant, non-exempt projects included in the 2030 and all subsequent analysis years	2030O
		Regionally significant, non-exempt projects included in the 2035 and all subsequent analysis years		2035O	
Not Regionally Significant PROJECT CATEGORY³					
Non Regionally Significant Projects	Projects determined to be "Not Regionally Significant" and do not fit into an exempt category	NRS			
Study & Development PROJECT CATEGORY					
Study & Development Projects	Resulting project of which is likely to be an exempt kind	SDX			
	Resulting project of which is likely to be a non-exempt kind	SDN			
	Project on the Illustrative Unfunded List expected to result in a nonexempt project	FYN			

Source: DVRPC, 2012

Note: ¹ 40 CFR 93 Sections 126 and 127.

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 upon environmental studies, community input and the needs of the traveling public. In the New Jersey TIP, Final Design is designated as 'DES'.

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

PLS (Planning Study) - Involves traffic studies, needs analyses, corridor studies, and other work preparatory to project development.

PRD (Project Development) - Intended to develop feasible project proposals that produce the best balance among transportation needs, environmental values, public concerns and costs.

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

BRIDGE (Federal Bridge Program) - Federal funding for the rehabilitation or replacement of bridges defined as structurally deficient and/or functionally obsolete.

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.

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

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

EB (Equity Bonus Program) - Federal funding to states based on equity considerations.

HSIP (Highway Safety Improvement Program) - Federal funding for projects or strategies included in the State strategic highway safety plan that corrects or improves a hazardous road location or features or addresses a highway safety problem.

IM (Interstate Maintenance) - Federal funding for projects that promote resurfacing, rehabilitation, and preventive maintenance on the interstate system.

NHS (National Highway System) - Federal funding for projects that improve and support the interstate highway system and other key highway links.

PL (Metropolitan Planning Funds - FHWA) - Federal funding for the federally mandated transportation planning process conducted within each Metropolitan Planning Organization.

RHX (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 taken from the top of 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-NHS (National Highway System), SPK-FB (Federal Bridge), and SPK-FH (Federal Highway).

STP (Surface Transportation Program) - Federal flexible funding that may be used on any federal aid highway, bridge project, public road, transit capital project, and intra-city and inter-city 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.

STP-TE (Surface Transportation Program-Transportation Enhancement Program) - Federal funding for pedestrian and bicycle infrastructure and safety programs, scenic and historic highway programs, landscaping and scenic beautification, historic preservation, environmental mitigation, rehabilitation of historic facilities related to transportation, renovated streetscapes, rail-trails and other transportation trails, transportation museums, and scenic and historic highway program visitor centers.

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

State Highway Funding Sources Abbreviations

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

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

179 (Appropriation 179) – State funding which can be applied to selected local bridge projects in distressed areas.

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

582 (Appropriation 582) - State funding which can be applied to the operations of various maintenance activities such as resurfacing projects maintenance personnel, and other maintenance operations.

916 (Act 44) - State funding to be used for the preservation and restoration of roadways and structurally deficient bridges as well as operations and maintenance of the system.

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

ECON - Special bond funding from the state Department of Economic Development.

SPR (Planning and Research) - State funding for planning and research activities.

Other Highway Funds

FERRY (Federal Ferry Funds) - Federal funding for the rehabilitation and/or development of ferry facilities throughout the State.

LOCAL - Funding provided by counties, municipalities, or other non-federal sources to be used to match State of Federal funds.

OTHER – Other funds.

TBD - To be determined

Federal Transit Funding Sources Abbreviations

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.

HPP10 (High Priority Projects) - Special funding from congressional earmark provided under SAFETEA-LU.

HPP20 (High Priority Projects) - Special funding from congressional earmark provided under SAFETEA-LU.

JARC (Job Access and Reverse Commute Program) - Federal funding for selected municipal plans that either increase job accessibility for the most disadvantaged members of the population, or facilitate reverse commute movements.

NEW FREEDOM (FTA 5317 Formula Program) - Federal Transit Administration formula funding for operating and capital costs for new transportation services and public transportation alternatives beyond those required by the Americans with Disabilities Act of 1990 (ADA) to assist persons with disabilities.

PL-FTA (Metropolitan Planning Funds - FTA) - Federal funding for the federally mandated transportation planning process conducted within each Metropolitan Planning Organization.

SPR-FTA (Planning and Research-FTA) - Federal funding for planning and research activities.

SEC 5307 (FTA Urban Area Formula Program) - Federal Transit Administration Urbanized Area Formula Program funding for use on public transportation capital investments.

SEC 5309 (FTA Capital Assistance Program) - Federal Transit Administration Capital Investment Program funding that provides for transit capital projects that meet specific criteria either by earmarks (5309D - 5309 Discretionary/5309B - 5309 Bus) or by apportionment under a formula. Capital Investment categories include Fixed Guideway Modernization, New Starts, and Bus and Bus Facilities programs.

SEC 5310 (Elderly and Persons with Disabilities Program) - Federal Transit Administration formula funding provided to states for capital costs of providing services to elderly persons and persons with disabilities.

SEC 5311 (Nonurbanized Area Formula Program) - Federal Transit Administration formula funding provided to states for capital and operating assistance for rural and small urban programs.

SEC 5340-G (Growing States and High Density States Programs) - Federal Transit Administration formula funding. Half of these funds are apportioned based on specific 15 year population forecasts and half are apportioned to urbanized areas within 7 states identified in SAFETEA-LU, including New Jersey.

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

T-TE (Transit - Transportation Enhancement Program) - Federal funding for historic preservation, rehabilitation, and related activities; bus shelters; landscaping and other scenic beautification including street lights; public art; pedestrian access and walkways; bicycle access including storage facilities and installation of equipment for transporting bicycles on transit vehicles; transit connections to parks; signage; and enhanced access to transit for persons with disabilities.

State Transit Funding Sources

CB (Capital Bonds) - State funding used to match federal grants and support State funded initiatives.

Section 1513 (Act 44 – Mass Transit Operating) - State Act 44 funding that is distributed to transit agencies based on their demonstrated need.

SEC 1514 (Act 44 - Asset Improvement Program) - State Act 44 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.

SEC 1515 (Act 44 - New Initiatives Program) - State Act 44 funding that is used to provide the framework to advance new or expansion of existing fixed guideway projects.

SEC 1516 (Act 44 - Programs of Statewide Significance) - State Act 44 funding that fund programs such as Persons With Disabilities, Welfare to Work, Job Access and Reverse Commute, intercity passenger rail and bus services, community transportation capital and service stabilization.

SEC 1517 (Act 44 - Capital Improvement Program) - State Act 44 funding that is distributed on a formula based on the number of passengers carried so that transit agencies will have a steady reliable stream of capital funding.

Other Transit Funds

FTA FERRY (Federal Ferry Funds-FTA) - Federal funding for the rehabilitation and/or development of ferry facilities throughout the state.

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

LOCAL - Funding provided by counties, municipalities, or other non-federal sources to match State or Federal funds.

OTHER – Other funds.

TBD - To be determined

Figure 2 Roadmap for TIP Project Listing

