CHAPTER 2: PROGRAM SUMMARIES

The DVRPC FY2016 TIP for New Jersey contains project descriptions, project maps, and the appendices for DVRPC's New Jersey region. There are 130 projects (84 Highway and 46 Transit), totaling almost $1.9 billion for the phases to be advanced over the next four years (FY2016–2019), averaging approximately $474 million per year. Programmed funds include slightly over $1 billion for projects primarily addressing the highway system and $850 million for transit projects for NJ TRANSIT and DRPA/PATCO, as Table 1 and Figure 1 show. The TIP also shows 107 statewide projects that are highway programs managed by NJDOT for the State of New Jersey worth slightly over $3 billion in the first four years; 18 projects that will be in Study and Development; and four "Tier 2" projects in the DVRPC region that cannot be funded based on current 10-year revenue estimates. Table 2 provides a breakdown of various state and federal funding sources and their distributions, including local matches.

TABLE 1: COST SUMMARY BY COUNTY AND TRANSIT OPERATOR IN NEW JERSEY ($000)

	FY2016	FY2017	FY2018	FY2019	4-YEAR TOTAL (FY16–19)
HIGHWAY PROGRAM					
Burlington County	35,595	23,185	7,675	14,450	80,906
Camden County	75,175	115,247	125,154	210,830	526,406
Gloucester County	18,885	23,177	21,400	24,670	88,132
Mercer County	14,959	39,582	33,552	21,012	109,106
Various Counties	51,245	50,326	67,461	72,961	241,993
Total Cost - 4-Year Highway Program ($000)					1,046,542
TRANSIT PROGRAM					
DRPA/PATCO	16,895	17,045	18,170	18,070	70,180
NJ TRANSIT	179,406	198,198	203,911	198,407	779,922
Total Cost - 4-Year Transit Program ($000)					850,102
GRAND TOTAL COST – 4-YEAR HIGHWAY, DVRPC LOCAL PROJECTS, AND TRANSIT PROGRAMS ($000)					1,896,644

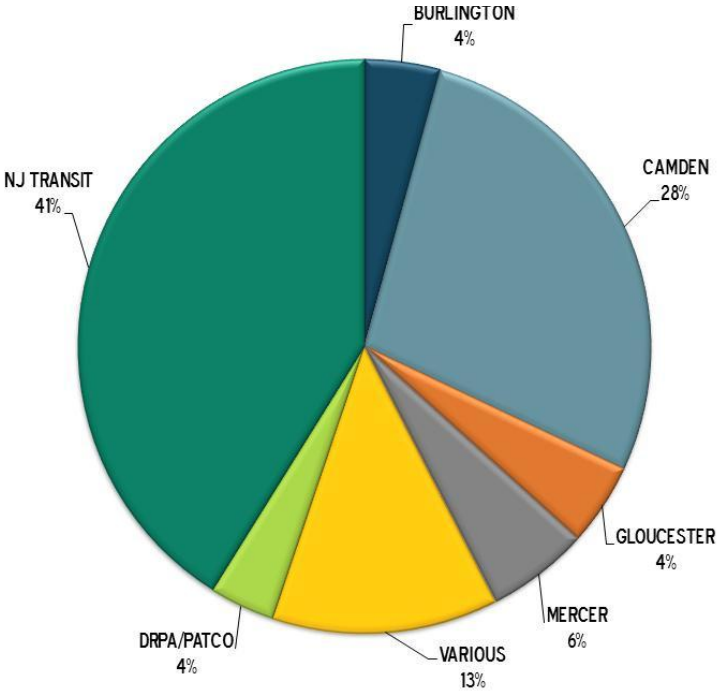
SOURCE: DVRPC, 2015

Per the Financial Guidance documents in Appendix B of the NJ TIP, slightly over $10 billion state and federal resources (excluding "Other" non-public resources, such as the Port Authority of New York and New Jersey) are distributed over the four year TIP period (FY2016-2019) to all three MPOs – Delaware Valley Regional Planning Commission (DVRPC), North Jersey Transportation Planning Authority (NJTPA), and South Jersey Transportation Planning Organization (SJTPO). Of this amount, 18 percent ($1.8 billion) is administered through DVRPC (see Table 7 in Appendix B). There is an additional $3.2 billion in the first four years of

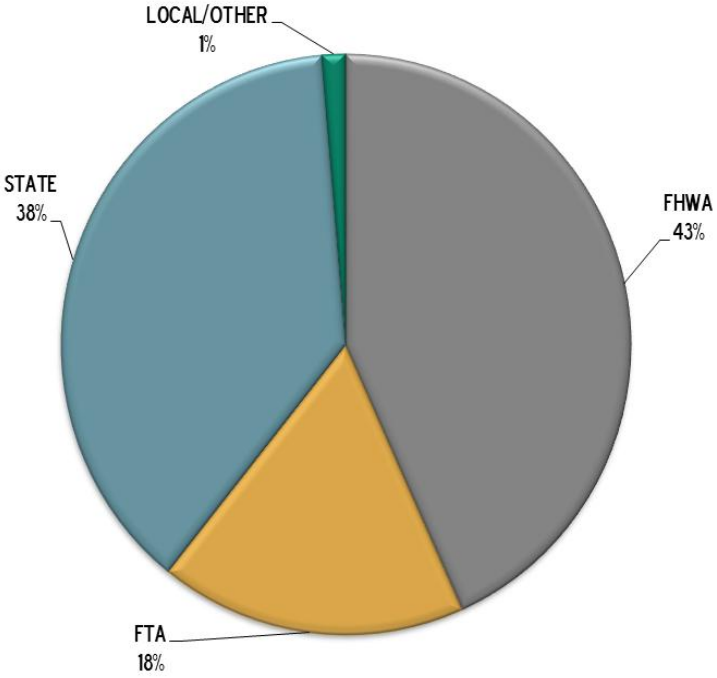
the Statewide Program that is directly administered on a statewide basis by NJDOT, of which a portion of those funds are directed to DVRPC (see Table 6 in Appendix B).

FIGURE 1: COST SUMMARY BY COUNTY AND TRANSIT OPERATOR IN NEW JERSEY ($000)

BY COUNTY AND OPERATOR



BY FUNDING SOURCE



SOURCE: DVRPC, 2015

TABLE 2: COST BY TIP FUNDING CATEGORY ($000)

FUND TYPE	FY2016	FY2017	FY2018	FY2019	4-YEAR TOTAL (FY16–19)	OUT YEARS TOTAL (FY20–25)	10-YEAR TOTAL (FY16–25)
HIGHWAY PROGRAM							
CMAQ	1,170	1,170	1,170	1,170	4,680	7,020	11,700
DEMO	9,475	4,459			13,934		13,934
HSIP	3,200	3,000	5,200	3,000	14,400	23,000	37,400
NHPP	108,439	157,757	163,759	228,792	658,746	441,513	1,100,259
PL	2,244	2,244	2,244	2,244	8,976	13,464	22,440
PL-FTA	773	773	773	773	3,092	4,638	7,730
RHC	2,800	2,800	2,800	2,800	11,200	19,200	30,400
STATE	43,704	50,717	55,241	72,989	222,651	210,034	432,685
STATE-DVRPC	8,000	11,500	12,000		31,500		31,500
STP		4,344		7,900	12,244	13,000	25,244
STP-STU	14,554	11,254	10,554	22,754	59,116	135,924	195,040
TAP	1,501	1,501	1,501	1,501	6,004	9,006	15,010
Highway Subtotal	195,859	251,518	255,242	343,923	1,046,542	876,799	1,923,341
DRPA/PATCO PROGRAM							
DRPA	3,379	3,424	3,669	3,634	14,106	7,836	21,942
SECT 5307	4,356	4,756	4,756	4,356	18,224	16,224	34,448
SECT 5337	8,880	8,585	9,465	9,800	36,730	13,600	50,330
SECT 5340	280	280	280	280	1,120	1,120	2,240
DRPA/PATCO Subtotal	16,895	17,045	18,170	18,070	70,180	38,780	108,960
NJ TRANSIT PROGRAM							
CASINO REVENUE	4,329	4,329	4,329	4,329	17,317	25,975	43,291
CMAQ						15,000	15,000
MATCH	2,835	2,835	2,834	2,834	11,338	17,004	28,342
OPERATING	989	989	989	989	3,956	5,934	9,890
SECT 5307	47,260	47,266	46,101	46,440	187,067	265,722	452,789
SECT 5307-TAP	161	161	161	161	644	966	1610
SECT 5310	1,656	1,656	1,656	1,656	6,624	9,936	16,560
SECT 5311	966	966	966	966	3,864	5,796	9,660
SECT 5337	9,200	9,200	13,600	13,600	45,600	72,800	118,400
SECT 5339/5307	650	650	2,800	2,800	6,900	12,028	18,928
STATE	103,360	118,646	118,475	124,632	465,113	535,846	1,000,959
STP-STU	8,000	11,500	12,000		31,500		31,500
NJ TRANSIT Subtotal	179,406	198,198	203,911	198,407	779,922	967,007	1,746,929
DVRPC NJ REGION TOTAL	392,160	466,761	477,324	560,400	1,896,644	1,882,586	3,779,231

SOURCE: DVRPC, 2015

FINANCIAL CONSTRAINT

Towards the beginning of each TIP update, the state DOT develops estimated resources or "financial guidance" for use by DVRPC and the other 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 describes how each of the various federal and state varieties of funds is distributed to the regions. The NJDOT 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 DVRPC FY2016 TIP for New Jersey has been developed according to the state guidance, it meets the federal requirement of being financially constrained.

The NJ TIP makes information available for project costs beyond the formal four-year constrained period (FY2016–2019). 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” (FY2020–2025) do not technically have available or committed funding and cannot be federally authorized since they fall outside 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 commitment level to those projects by the region, the DVRPC FY2016 TIP for NJ does show a financially constrained 10-year program from FY2016–2025 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 insufficient funding resources even within a 10-year constrained programming horizon. These projects are shown on the NJDOT “Tier 2” Unfunded list at the end of this document. Therefore, not only do these projects *not* show up in the first four years of the DVRPC TIP, there is no expectation that adequate funding will be available to fully fund them by FY2025. It will be many years until planned projects are able to advance to construction if additional funding is not made available to the region through new revenue sources.

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

NJ TRANSIT prepares a Financial Capacity Analysis when required for specific projects, which are submitted, in turn, to FTA (Federal Transit Administration). Additionally, NJ TRANSIT is subject to annual financial and single audits conducted by Ernst and Young, attesting to the financial position of the corporation, the integrity of its internal controls, and its compliance with applicable grant provisions, laws, and regulations.

NJ TRANSIT also certifies each year its financial capacity when it submits FTA's Certification and Assurances in Transportation Electronic Award Management System (TEAM), which will soon transition to the Transit Award Management System (TrAMS). In addition, the FTA periodically conducts Triennial or State Management Reviews, which include an FTA-directed review of NJ TRANSIT's compliance in different areas, including its financial practices. As of February 22, 2013, NJ TRANSIT has corrected all deficiencies found from the last FTA State Management Review in 2012. The next FTA State Management Review is expected to occur in early fall of 2015.

PROJECT SELECTION AND EVALUATION PROCESS

The DVRPC TIP project selection process is consensus based, in combination with newly updated TIP project selection criteria that incorporate new performance-based measures for new projects (see Appendix F for details on the TIP Project Benefit Criteria that addresses MAP-21 requirements and will further link to the goals of DVRPC's long-range plan). Program development occurs through a TIP subcommittee composed of regional stakeholders and was determined mostly by schedule and cost of existing highway and transit projects, constrained by the level of funding available over a 10-year programming horizon (FY16 to FY25). Project managers and stakeholder subcommittee members have updated all project costs and schedules. A series of subcommittee meetings were held including NJDOT, NJ TRANSIT, and DRPA/PATCO staff, as well as city and county partners and a citizen representative from the DVRPC Public Participation Task Force, to review projects and identify the highest priorities, costs and schedules, and to vet concerns and negotiate final programming. A constrained draft program was available for a 32-day public comment period, and the program with recommended changes was adopted by the DVRPC Board on September 30, 2015.

Due to severe funding constraints and overwhelming needs that far outreach the region's resources, project candidates will continue to be identified for the local concept development process before they can be programmed in order to address potential issues that could arise and that may impact their overall schedule. In addition, state "asset management" type projects that ranked very high within NJDOT's statewide management systems for bridges, pavement projects, and drainage improvements are included as new projects. New and existing projects are consistent with and have been drawn from DVRPC's long-range plan, *Connections 2040*. Only new projects have been evaluated through the TIP Benefit Criteria that is found in Appendix F. These are universal benefit criteria that can be used to evaluate highway and transit 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. Also important to note is 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. Transit agencies will screen projects internally before submitting them for more evaluation.

The full version of the universal project benefit criteria that has been established for the Transportation Improvement Program is found in Appendix F and is summarized below from the order of the criterion with the highest percentage/regional priority to the criterion with the lowest percentage/regional priority.

- **Facility/Asset Condition (19 percent)** – 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 (17 percent)** – safety critical for transit, high-crash road location, or incorporates an FHWA-proven safety countermeasure;

- **Reduce Congestion (15 percent)** – location in the Congestion Management Process (CMP) congested corridors, or appropriate everywhere CMP strategy; AADT per lane, and daily transit riders per daily seats;

- **Invest in Centers (13 percent)** – location in a *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 (11 percent)** – daily vehicle miles traveled (VMT), truck volume, and transit ridership;

- **Economic Competitiveness (8 percent)–** reduced operating/maintenance costs, or part of an economic development or transit-oriented development (TOD) project;

- **Multimodal Bicycle/Pedestrian (7 percent)** – bicyclists and pedestrians using the facility, new trails, sidewalks, or bike trails, and connections to other multimodal facilities;

- **Environmental Justice (5 percent)** – benefits high "Indicators of Potential Disadvantage" (IPD – previously known as "Degrees of Disadvantage" or "DOD") communities;

- **Air Quality/Green Design (5 percent)** – stresses air quality benefits and incorporates environmentally friendly principals.

THE LONG-RANGE PLAN AND 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 (Trenton and Camden in the New Jersey subregion, and Philadelphia and Chester in the Pennsylvania subregion); developed communities, which represent the region's older boroughs and townships; 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 New Jersey TIP projects are included on each project listing in the DVRPC FY2016 TIP document for New Jersey, and they can be found in the current DVRPC FY2015 TIP for Pennsylvania. 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 that provides information on transportation system performance. It 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 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.

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 to get the most 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 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 offers a web-based PhillyFreightFinder freight mapping and data platform for the Delaware Valley that can be found at 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 Planning 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 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.

TABLE 3: SUPPORTING PROJECTS THAT FACILITATE GOODS MOVEMENT AND ECONOMIC DEVELOPMENT

BENEFITS	PROJECT DB #	COUNTY
ADVANCES SAFETY AND SECURITY		
Burlington County Roadway Safety Improvements	D0302	Burlington
BALANCES FREIGHT OPERATIONAL NEEDS WITH COMMUNITY GOALS		
River Road Improvements, Cramer Hill	D0902	Camden
IMPROVES THE ENVIRONMENT		
Local CMAQ Initiatives	X065	Various
ELIMINATES BOTTLENECKS/REDUCES CONGESTION, UPGRADES BRIDGES, AND IMPROVES INTERSECTIONS		
Route 322, Corridor Congestion Relief Project	07369	Gloucester
Route 38, South Church Street (CR 607) to Fellowship Road (CR 673), Operational and Safety Improvements	12307	Burlington
MAINTAINS PRIMARY TRUCK ROUTES, HIGHWAYS OF REGIONAL SIGNIFICANCE, AND PAVEMENT		
Route 76/676, Bridge Deck Replacements	11326	Camden
IMPROVES DISTRIBUTION PATTERNS AND SUPPLY CHAINS AND MODERNIZES INTERCHANGES AND RAMPS		
Route 295/76/42 Missing Moves and Direct Connect	355A, D, E	Camden
MAXIMIZES FREIGHT RAILROADS		
Rail-Highway Grade Crossing Program, Federal and State	X35A1 and X35A	Statewide
PROMOTES THE GROWTH OF CENTRAL BUSINESS DISTRICTS, COMMERCE, AND TOURISM		
Roebling Phase 3, Rehabilitation for the Invention Factory	X107	Mercer
SPEEDS THE DELIVERY OF GOODS AND MODERNIZES COMMUNICATIONS		
RIMIS - Phase II Implementation	01300	Various
IMPROVES NHS INTERMODAL CONNECTORS AND SERVES PORTS, AIRPORTS, FREIGHT CENTERS, AND/OR MANUFACTURING SITES		
Route 322, Corridor Congestion Relief Project	07369	Gloucester

SOURCE: DVRPC, 2015

TOLL AUTHORITY HIGHWAY, TRANSIT, AND PORT-RELATED PROJECTS

The toll authorities with facilities in this region (Burlington County Bridge Commission, Delaware River Joint Toll Bridge Commission, Delaware River Port Authority/Port Authority Transit Corporation, New Jersey Turnpike Authority, and South Jersey Transportation Authority) undertake numerous significant highway, transit, 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

Future TIP projects are likely to be generated from Environmental Impact Statements (EIS)/Environmental Assessment (EA), Transportation Investment Studies (TIS) (formerly known as Major Investment Studies), and Feasibility Assessments (FA) that are currently underway. An EIS is an in-depth technical analysis of the significant environmental impact of a project, and it identifies alternatives that would avoid or minimize the adverse impact. The purpose of TIS is to provide policy-level information about the impact of alternative transportation investments in order to ensure cost-effective decisions when major new facilities are contemplated. DVRPC's Unified Planning Work Program identifies ongoing studies. Selected studies for FY16, including those from the DVRPC Work Program, are listed in Table 5.

Excluded in Table 5 are studies that already appear in either the TIP or NJDOT's Study and Development Program. The Study and Development process takes a selected highway deficiency through the steps of problem documentation and concept development in order to make candidate projects ready for consideration in the next TIP update for the phases of Preliminary Engineering, Final Design, Right-of-Way, and Construction. The entire Study and Development Program for the New Jersey counties is presented in Chapter 5 of this document.

TABLE 4: TOLL AUTHORITY HIGHWAY, TRANSIT, AND PORT-RELATED PROJECTS

PROJECT DESCRIPTION	SCHEDULE (YEARS)	COST (IN MILLIONS)	COUNTY
BURLINGTON COUNTY BRIDGE COMMISSION (BCBC)			
Tacony-Palmyra Bridge Rehabilitation - The project includes the painting of the steel structures, installation of a maintenance/inspection traveler system, replacement of the existing fender systems, rehabilitation of the rack and pinion system and the installation of warning gates. This project also includes an annual maintenance contract.	2016-2019	$28.0	Burlington
Tacony-Palmyra Bridge Electrical Upgrades - The project includes the installation of a data system, installation of a traffic control system, replacement of existing wiring conduit and junction boxes and the installation of solar panels. This project also includes the replacement of the existing submarine cables and the festoon cables. This project also includes an annual electrical maintenance contract.	2016-2019	$13.1	Burlington
Burlington-Bristol Bridge Rehabilitation - The project includes the replacement of the existing span decks, repairs to the existing walkway, railing and ladder system, painting of the steel structures, rehabilitation of the bridge mounted structures, repairs to the existing counter weights, gateway improvements the installation of warning gates.. This project also includes an annual maintenance contract.	2016-2019	$25.5	Burlington
Burlington-Bristol Bridge Electrical Upgrades - The project includes the replacement of the existing 480 volt power feed from the PA power house to the lift span and the installation of a new data center (fit-out). This project includes an annual electrical maintenance contract.	2016-2019	$3.3	Burlington
Riverside Delanco Bridge Rehabilitation - The project includes the replacement/upgrade existing mechanical equipment and gateway improvements. This project also includes an annual maintenance contract.	2016-2019	$3.0	Burlington
Riverside Delanco Bridge Electrical Upgrades - The project includes the replacement of the existing electrical system and the replacement of the existing submarine cable. This project also includes an annual electrical maintenance contract.	2016-2019	$2.8	Burlington
DELAWARE RIVER PORT AUTHORITY/PORT AUTHORITY TRANSIT CORPORATION (DRPA/PATCO)			
Benjamin Franklin Bridge - Replace Moveable Barrier - The project will replace existing moveable barrier system. The bridge has a moveable barrier wall along the bridge roadway deck that separates the opposing directions of traffic and is moved multiple times on a daily basis throughout the year using a moveable barrier machine.	2015-2019	$7.2	Camden
Benjamin Franklin Bridge - Tower Expansion Joint Rehabilitation - The project will perform structural rehabilitation of the main tower expansion joints. The types of repairs include bearing replacement, finger plate replacement, below deck transverse walkway rehabilitation cleaning and sealing, drainage repairs, pin replacement, and structural steel repairs.	2016-2018	$7.0	Camden
Benjamin Franklin Bridge - Masonry Rehabilitation - This project will repair, rehabilitate, and preserve the granite facades on the anchorages, piers, abutments, and retaining walls. Weathering and age have caused the facades to deteriorate.	2017-2019	$5.8	Camden
Benjamin Franklin Bridge - Bridge Deck Resurfacing - The project included rehabilitation of the approach spans on each side of the bridge (Philadelphia and Camden); repair of steel components (columns/beams) within the bridge support system; and additional drainage and electrical improvements.	2018-2019	$10.5	Camden
Betsy Ross Bridge - Bridge Deck Resurfacing - This project will mill and repave the existing bridge overlay. The approaches to the bridge will be included from the toll to west of Richmond St. along with drainage and other improvements.	2015-2016	$18.8	Camden
Commodore Barry Bridge - Deleading and Repainting - This project will entail the blast cleaning and painting of the entire Commodore Barry Bridge along with substructure concrete rehabilitation. Under this particular project we anticipate installing protective shielding at suspender locations and along the main cable.	2015-2019	$100.0	Delaware

TABLE 4 (CONTINUED)

PROJECT DESCRIPTION	SCHEDULE (YEARS)	COST (IN MILLIONS)	COUNTY
DRPA/PATCO (CONTINUED)			
Commodore Barry Bridge - Structural Rehabilitation - Phase II - This project replaces the out-of-service transverse maintenance walkways attached to the bridge approach piers. It will also perform various concrete and steel repairs to the bridge as identified in recent biennial and interim inspections.	2015-2019	$9.4	Delaware
Walt Whitman Bridge - Deleading and Repainting - Phase 3 (Suspended Span, Towers, & Anchorage) - This project will entail the painting of the suspension span, stiffening truss towers, and anchorage steel.	2015-2019	$72.0	Gloucester
Walt Whitman Bridge - Replacement of PA DMS Boards - This project will replace existing DMS boards on the PA approach to the WWB that are outdated and have outlived their life expectancy. The signs were installed to inform motorists of lane closures and lane drop-offs plus other information.	2017-2019	$6.3	Gloucester
PATCO - PATCO Track Rehabilitation Across the Benjamin Franklin Bridge - This project is rehabilitating the PATCO track structure on the BFB. The rehabilitation work includes track replacement; power, signal, and communication infrastructure improvements; and structural improvements.	2013-2016	$102.8	Camden
PATCO - Rehabilitation of Track Structure on Viaduct at Westmont - This effort is to replace the existing structure that secures the rail to the viaducts. The work involves the demolition of the existing concrete plinths, anchoring systems, and rail fastening system.	2015-2017	$14.5	Camden
PATCO - PATCO Hall and Way Interlocking Rehabilitation - This project will replace the track and switches at Hall and Way Interlockings in the Camden subway. The work includes replacement of existing turnouts and crossing diamonds and installation of signal and electrical components.	2015-2018	$6.5	Camden
PATCO - PATCO Interlocking and Track Rehabilitation Phase II - This effort is to perform a rehabilitation of Locust, Hall, Way, East/West Ferry, and East Crest Interlockings. The project will involve the removal and replacement of switches, frogs, ties, and signal/communication/power cabling.	2018-2019	$11.3	Camden
PATCO - Rehabilitation of PATCO Fleet - This project is overhauling the 120-vehicle PATCO Transit Car fleet. The fleet is over 40 years old and requires increased maintenance for service reliability. An evaluation of the car fleet determined that a major overhaul to the fleet was warranted and more cost effective than new car procurement.	2011-2017	$194.0	Camden
PATCO - Install Elevators in Remaining PATCO Stations - The project will install new elevators at six (6) PATCO stations not currently served by elevators. The six (6) stations include Ashland, Haddonfield, Westmont, Collingswood, City Hall, and 12th-13th & Locust Stations. Seven of the 13 PATCO stations already have elevators in service. All stations on the PATCO system will be compliant with the Americans with Disabilities Act (ADA) when the project is completed.	2015-2019	$20.0	Camden
PATCO - Lindenwold Yard Track Rehabilitation & Lindenwold Viaduct - This effort is to perform a rehabilitation of the tracks in PATCO's Lindenwold Yard. The project will involve the removal and replacement of individual yard tracks, switches, signals, lighting, and viaduct track structure.	2015-2018	$44.5	Camden
PATCO - Embankment Restoration, Drainage Improvements, & Retaining Walls Rehabilitation - This project will rehabilitate and restore embankments and retaining walls at several locations along PATCO right-of-way to prevent erosion and preserve drainage control in order to maintain the system in a safe and functional condition. The work includes stabilizing deteriorated embankment slopes, constructing drainage improvements, and repairing retaining walls between Camden and Lindenwold.	2015-2017	$8.6	Camden
PATCO - Replace Electrical Cables in Subways - Replace power and signal communication cables in subways. Existing cables in service are over 40 years and have exceeded expected service life. Replacement is required to ensure reliability of traction power and signal systems.	2017-2019	$9.5	Camden

TABLE 4 (CONTINUED)

PROJECT DESCRIPTION	SCHEDULE (YEARS)	COST (IN MILLIONS)	COUNTY
PENNSYLVANIA TURNPIKE AUTHORITY			
PA Turnpike/I-95 Interchange Project – Redesignate I-95 to I-395 from PA Turnpike north over Scudder Falls Bridge to I-295 at U.S. Route 1	2018-2020	Not Available	Mercer
PA Turnpike/I-95 Interchange Project - Stage 3 – will provide an additional bridge over the Delaware River parallel to the existing bridge	Beyond 2020	Not Available	Burlington
SOUTH JERSEY TRANSPORTATION AUTHORITY (SJTA)			
Atlantic City Expressway All Electronic Tolling – Upgrade toll collection by using innovative technology through electronic tolling on the Atlantic City Expressway mileposts 0.0 to 44	2018	$50.0	Atlantic, Camden, Gloucester
Atlantic City Expressway Widening Project – Construction of a third lane eastbound and westbound from milepost 31 to 44	2018 to 2021	$150.0	Atlantic, Camden, Gloucester

SOURCES: BCBC, DRJTBC, DRPA/PATCO, PA TURNPIKE AUTHORITY, AND SJTA, 2015

TABLE 5: SELECTED TRANSPORTATION STUDIES FOR FY2016

STUDIES CURRENTLY UNDERWAY IN NEW JERSEY	CURRENT STUDY PHASE	COUNTY/CITY/STATE	CITY/COUNTY/ AGENCY
NEW JERSEY STUDIES			
Glassboro-Camden Line	EIS under way	Gloucester and Camden Counties (NJ); City of Philadelphia (PA)	DRPA/NJ TRANSIT
Route 55/42/676 Bus Rapid Transit	EA under way	Gloucester and Camden Counties (NJ); City of Philadelphia (PA)	NJ TRANSIT
US Route 1 Bus Rapid Transit (BRT) Study	FA completed; elements of project advancing	Mercer and Middlesex Counties	NJ TRANSIT
Route 29 Trenton Boulevard Study	FA completed; study has turned over to Trenton City	Trenton City, Mercer County	Trenton City & CCDC
Route 38 Smart Growth Initiative	Not available	Burlington County	Local Lead Burlington County
NJ 102" Wide Large Truck Network	Re-adoption of study pending with minor edits	State of New Jersey	NJDOT
Development of Freight Performance Measures and Freight Management System	Study under way	State of New Jersey	NJDOT
BI-STATE STUDIES			
I-95 Scudder Falls Bridge/Road Widening/ Interchange Reconstruction	Final Design	Mercer (NJ) and Bucks (PA)	DRJTBC

NOTES:
"FA" IS FEASIBILITY ASSESSMENT; "EIS" IS ENVIRONMENTAL IMPACT STATEMENT; "EA" IS ENVIRONMENTAL ASSESSMENT; "TIS" IS TRANSPORTATION INVESTMENT STUDY.

SOURCE: DVRPC, 2015

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) and the Transportation Alternatives Program (TAP) that includes the Safe Routes to School 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 non-attainment and maintenance areas for projects that contribute to the attainment of the Clean Air Act standards by reducing emissions from highway 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 and diesel engine retrofits. 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. Any public agency or public–private partnership may submit projects to DVRPC for consideration. The CMAQ subcommittee of the Regional Technical Committee evaluates the projects and makes recommendations to the Board for final selection. Since 1994, DVRPC has conducted five rounds of the competitive program. The most recent round concluded in 2015 with $3.6 million CMAQ funds programmed from FY16 to FY19.

Transportation Alternatives Program (TAP)

In MAP-21, the Transportation Alternatives Program (TAP) is an amalgamation of the previous authorization's Transportation Enhancements (TE), Recreational Trails (REC TRAILS), and Safe Routes to School programs. As such, eligibility requirements from these programs have remained largely the same.

Transportation Alternatives Program eligible projects focus on nontraditional projects designed to enhance the experience of transportation, mitigate the impact of transportation facilities on communities and the environment, and enhance community character through transportation-related improvements. For example, projects may involve on-and off-road trail facilities for pedestrians, bicyclists, and other non-motorized forms of transportation. Projects seeking TAP funds are required to be submitted by TAP-eligible sponsors and to undergo a competitive selection process. In previous years, New Jersey's TE project selection process occurred at the state level with MPO involvement. TAP requirements under MAP-21 include provisions for more direct selection of projects by the MPO. Table 7 provides a full listing of projects that were selected since the year 2000 through the previous TE and the recent TAP Program for New Jersey.

The Recreational Trails Program (REC TRAILS) has continued funding the development and maintenance of recreational trails and trail-related facilities for motorized and non-motorized uses as a set-aside from the TAP.

The Safe Routes to School (SRTS) program is funded through the Federal Highway Administration's Federal Aid Program and is being administered by the New Jersey Department of Transportation (NJDOT), in partnership with the Delaware Valley Regional Planning Commission (DVRPC), North Jersey Transportation Planning Authority (NJTPA), and the South Jersey Transportation Planning Organization (SJTPO). The objectives of the SRTS Program are to enable and encourage children, including those with disabilities, to walk and bicycle to school; to make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age; and to facilitate the development and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of New Jersey's primary and middle schools (grades K–8). Projects must be located within two miles of a school that serves students in grades K–8. Funding for the FY2014 SRTS Program was available for the construction of infrastructure projects only. Infrastructure projects may include the installation of sidewalks, crosswalks, bike lanes, multiuse paths, traffic calming measures, and other means to ensure the ease and safety of children walking or biking to school. The final project selections were approved by the Commissioner of Transportation and each MPO. See Table 6 for the complete list of selected SRTS projects from fiscal years 2008, 2009, 2012, and 2014.

TABLE 6: SAFE ROUTES TO SCHOOL (SRTS) PROJECTS FROM STATEWIDE LINE ITEM, DB #99358, FOR FY2008, FY2009, FY2012, AND FY2014

YEAR	MUNICIPALITY	PROJECT DESCRIPTION	TOTAL AWARD
BURLINGTON COUNTY			
2008	Riverton	Riverton Safe Crossings Project	$23,000
2009	Maple Shade	Maple Shade Safe Routes to Maude Wilkins School at Cutler Avenue	$200,000
	Mount Holly	Ensuring a Safe Route to School in Mount Holly	$125,000
2012	Edgewater Park	Stevenson Avenue & East Franklin Avenue Multi-Use Path	$113,000
2014	Southampton	Pedestrian Infrastructure Upgrades (Access & Safety). Campus - Schools 1, 2, 3	$92,000
CAMDEN COUNTY			
2008	Chesilhurst	New Jersey Safe Routes to School Program for Chesilhurst Borough	$256,000
	Magnolia	Magnolia Safe Routes to School – Infrastructure and Non-Infrastructure Programs	$156,000
2012	Haddonfield	FY2012 Safe Routes to School Pedestrian Safety Infrastructure Improvements	$300,000
	Lindenwold	Concrete Sidewalk Installation: School #5, School #4 and High School	$330,000
	Voorhees	Kresson Road Sidewalk Improvements	$74,000
2014	City of Camden	Morgan Village Safe Routes to School Project	$317,200
	Collingswood	Collingswood Safe Routes to School and Traffic Calming	$241,000
GLOUCESTER COUNTY			
2009	Clayton	Clayton SRTS Sidewalk Extension and Warning Beacons	$130,000
	East Greenwich	Township of East Greenwich – Construction of Crosswalks at Various Locations – Construction Phase	$20,000
MERCER COUNTY			
2009	Hightstown	Summit Street Sidewalk Improvements	$147,000
	Pennington	S. Main Street and W. Delaware Avenue Crosswalk – Sidewalk Improvements	$220,000
2012	Hamilton	Klockner, Morgan, and University Heights Pedestrian Safety Improvements	$275,000
2014	Hightstown	Improvements to Stockton Street and Joseph Street	$275,000
	Princeton	Pedestrian Upgrades to Two Harrison Street Traffic Signals	$300,000

SOURCE: SAFE ROUTES TO SCHOOL NATIONAL PARTNERSHIP, 2015

TABLE 7: NEW JERSEY TRANSPORTATION ENHANCEMENT (TE) AND TRANSPORTATION ALTERNATIVES PROGRAM (TAP) PROJECTS FROM STATEWIDE LINE ITEM, DB #X107, FOR FY2000–2014

YEAR	MUNICIPALITY	PROJECT DESCRIPTION	TOTAL AWARD*
BURLINGTON COUNTY			
2000	Beverly	Cooper Street Gateway Project	$228,000*
	Pemberton	North Pemberton Railroad Station Rehabilitation	$35,000
	Pemberton	North Pemberton Railroad Station Phase 2	$250,000
2001	Riverton	Historic Streetscape Enhancement Project	$335,000
2002	Palmyra	Broad Street Pedestrian Revitalization Project - Final Phase	$500,000
	Willingboro	Willingboro Town Center Bikeway/Walkway and Landscaping Features	$500,000
2003	Edgewater Park	Cooper Street Revitalization Project	$410,000
	Medford	Medford Township Bicycle Network Plan	$300,000
2008	Various Municipalities	NJ Pinelands Birding and Wildlife Trails	$512,000
2009	Palmyra	Market Street Gateway Improvement Project	$260,000*
	Mount Holly	Pedestrian Safety and Beautification Improvements at The Mount	$160,000*
2012	Burlington	Phase V TE: Broad Street/Towne Center Station, Pedestrian Route & Beautification Improvement Plan	$216,000
	Wrightstown	North Fort Dix Street Pedestrian and Landscape Improvements	$510,000
2014	*Fieldsboro, Florence, Bordentown, and Mansfield*	*Delaware River Heritage Trail, Route 130 Bypass, Fieldsboro to Florence Connector Trail*	*$750,000*
CAMDEN COUNTY			
2000	Berlin	Berlin Hotel Historic Preservation Program	$523,000
	Camden	Mickle Boulevard Interior Gateway	$471,000
2001	Camden	Johnson Park Station Stop Streetscape Project	$500,000
	Camden	Battleship New Jersey Historic Museum	$400,000
2002	Barrington	Streetscape Improvements to Clements Bridge Road	$250,000
	Gloucester	Gloucester City Streetscape Improvement	$480,000
	Haddon	Streetscape Improvements to Haddon Avenue	$300,000
	Pine Hill	Pine Hill Streetscape Project	$478,000
2003	Haddon Heights	Historic Railroad Corridor Enhancement	$379,000
	Haddon	Streetscape Improvements to Haddon Avenue - Phase 2	$512,000
	Runnemede	Route 168 (Black Horse Pike) Corridor Revitalization	$552,000
2004	Barrington	Streetscape Improvements to Clements Bridge Road (CR 573) - Phase 3, From Newton Avenue to the New Jersey Turnpike Overpass	$500,000
	Berlin	Berlin Township Transportation Enhancement Program	$400,000
	Gibbsboro	Gibbsboro Borough Gateway Enhancement along Haddonfield-Berlin Road (CR 561) & Clementon Road (CR 686)	$500,000

TABLE 7 (CONTINUED)

YEAR	MUNICIPALITY	PROJECT DESCRIPTION	TOTAL AWARD*
CAMDEN COUNTY (CONTINUED)			
2009	Gloucester	Market Street Commons and Streetscape	$485,000*
	Gloucester	Burlington Street Streetscape Improvement Program	$523,000*
	Mount Ephraim	Kings Highway Streetscape Improvements, Phase II	$290,000*
	Camden	Martin Luther King Boulevard Project	$750,000*
	Gloucester	Streetscape Project on Broadway Street (between Monmouth and Hudson Streets)	$270,000*
	Haddonfield	Mechanic Street and Clement Street Historic Preservation and Streetscape Improvements	$570,000*
	Merchantville	Chestnut Avenue Pedestrian/Bikeway Extension	$150,000*
2012	Barrington	Clements Bridge Road Streetscape Improvements from NJ Turnpike Bridge to Borough Boundary	$539,000
	Merchantville	West Maple Avenue Streetscape Improvement Project	$51,000
2014	*Delaware River Port Authority (DRPA)*	*Benjamin Franklin Bridge South Walkway Bicycle and Pedestrian Ramp Project*	*$800,000*
	Merchantville, Pennsauken	*Pennsauken-Merchantville Multi-Use Trail*	*$755,000*
GLOUCESTER COUNTY			
2001	Glassboro	Pedestrian Streetscape Enhancement Program	$124,000
	Wenonah	Creating a Heart for Wenonah	$350,000
2002	Paulsboro	Pedestrian, Bus, and Bicycle Enhancement in Central Business District	$150,000
	Westville	Westville Pedestrian Transportation Enhancement Program	$500,000
2003	Glassboro	Glassboro's Streetscapes Project – Phase V	$300,000
2005	Glassboro	Paving the Way to Glassboro's Downtown-Streetscapes Phase VI	$150,000
	Swedesboro	Swedesboro Pedestrian Transportation	$200,000
2009	Glassboro	Rebuilding Glassboro's Historic Train Station[1]	$1,101,400*
	Woodbury	Pedestrian Safety and Wayfinding Signage	$194,000*
	Paulsboro	Paulsboro Pedestrian Streetscape, Phase 2 – Central Business District	$425,000
2012	Woodbury	Pedestrian Path to Connect Woodbury Neighborhoods, Retail and Recreation Areas	$310,000
	Merchantville, Pennsauken	West Maple Avenue Streetscape Improvement Project	$51,000
2014	*Wenonah*	*Multimodal Transportation Improvements to Mantua Avenue, from Monroe Avenue to Marion Avenue*	*$900,000*

TABLE 7 (CONTINUED)

YEAR	MUNICIPALITY	PROJECT DESCRIPTION	TOTAL AWARD*
MERCER COUNTY			
2000	Hamilton	Delaware & Raritan Canal State Park – Bordentown Outlet, Phase 1	$948,000
	Trenton	Roebling Phase 3, Rehabilitation for the Invention Factory	$250,000
2001	Lawrence	Route 1 Pedestrian Overpass – D & R Canal State Park	$1,250,000
	Trenton	Inventory Factory Bridge Exhibit	$1,609,823
2002	Hamilton	South Broad Street Streetscape	$985,000
	Princeton	Regional Bicycle and Pedestrian Bridge at Stoney Brook	$500,000
2003	Lawrence	Lawrenceville Main Street Transportation Streetscape Improvement	$190,000
2004	Hightstown	Hightstown TE	$444,000
2005	Hopewell	Streetscape Improvements to the Intersection of Broad Street and Greenwood Avenue	$154,000
2009	Hightstown	Stockton Street Historic District Streetscape Infrastructure Project[2]	$994,646*
	Hopewell	Hopewell Borough Streetscape Improvements Project, Phase II[3]	$935,000*
2012	East Windsor	Route 571 Sidewalks to Transit	$124,000
	Hopewell	Hopewell Borough – Streetscape Phase 3 and Final	$235,000
2014	*Hightstown*	*Peddie Lake Dam Pedestrian Bridge*	*$331,000*

AN ASTERISK ("*") INCLUDED WITH A PROJECT'S TOTAL AWARD AMOUNT INDICATES THE PROJECT IS FUNDED BY TE FUNDS FROM THE FEDERAL AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009 (ARRA), WHICH ARE ALSO KNOWN AS ARRA-TE.

PROJECTS THAT ARE *ITALICIZED* IN THE TABLE WERE AWARDED TRANSPORTATION ALTERNATIVES PROGRAM (TAP) FUNDS. PROJECTS THAT ARE NOT ITALICIZED IN THE TABLE WERE AWARDED TRANSPORTATION ENHANCEMENT (TE) FUNDS.

PROJECT NOTES:
1. THE ORIGINAL AWARD AMOUNT FOR THE PROJECT, REBUILDING GLASSBORO'S HISTORIC TRAIN STATION, IS $250,000 ARRA-TE.
2. THE ORIGINAL AWARD AMOUNT FOR THE PROJECT, STOCKTON STREET HISTORIC DISTRICT STREETSCAPE INFRASTRUCTURE PROJECT, IS $1,690,000 ARRA-TE.
3. THE ORIGINAL AWARD AMOUNT FOR THE PROJECT, HOPEWELL BOROUGH STREETSCAPE IMPROVEMENTS PROJECT, PHASE II, IS $917,000 ARRA-TE.

SOURCE: NJDOT LOCAL AID AND ECONOMIC DEVELOPMENT, 2015

RESPONDING TO ENVIRONMENTAL JUSTICE CONCERNS

The Transportation Improvement Program (TIP), as the agreed-upon list of priority projects for the region, serves to manage funding for 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 Transportation Planning Division and Office of Communications & Engagement 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

1. Enhance its analytical capabilities to ensure that the long-range plan and the TIP comply with Title VI;

2. 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

3. 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 effects of its plans, programs, and planning process on defined demographic groups in the Delaware Valley region. This assessment, significantly revised in 2010 and updated in 2014, is called Indicators of Potential Disadvantage (IPD), and is utilized in various DVRPC plans and programs, including the TIP. The EJ analysis tool is available online at www.dvrpc.org/webmaps/EJ2014. DVRPC regularly publishes an 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 2014, 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 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. In April 2012, the DVRPC Board adopted an updated 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 communication channels, a primary outlet for public participation in DVRPC is the Public Participation Task Force composed of appointed members and members-at-large throughout Greater Philadelphia bringing their own individual experiences to the planning table. The task force strives to represent the racial, ethnic, cultural, gender, age, and economic diversity of the region.

ENVIRONMENTAL JUSTICE ANALYSIS OF THE TIP

DVRPC's Transportation Improvement Program (TIP) for New Jersey is an important component of the agency's EJ public involvement and technical work program activities. As the TIP is updated every other year for New Jersey, 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* (2014 update, publication number TM15017). Using U.S. Census American Community Survey (ACS) 2008-2012 five-year estimates, DVRPC has identified different geographic areas in which populations may disproportionately bear the burden of planning decisions and/or demographic groups who may be underrepresented in the planning process. 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 Indicators of Potential Disadvantage (IPD). For example, if a census tract meets or exceeds the regional average, or threshold, for elderly and physically disabled populations, then that census tract is said to have two IPD. Of the 381 census tracts in the four New Jersey counties, 55 have five or more IPDs and 245 have one to four IPDs.

For this analysis, each TIP project that can be mapped is laid over IPD census tracts. The presence of a TIP project in a given geographic area does not necessarily mean the population will be adversely affected. In fact, some projects, such as expanded rail service or a trail connection, can benefit the adjacent population. Many projects, however, can negatively

impact the population and/or demographic group and therefore require additional analysis and review.

For the Transit Program of the DVRPC FY2016 TIP for New Jersey, 26 (47 percent) tracts of the 55 tracts with five to seven IPD contain a project, while 26 (11 percent) of the 245 census tracts with one to four IPD contain a project. For the highway program of the DVRPC FY2016 TIP for New Jersey, 15 (27 percent) of the 55 tracts with five to seven IPD contain a project, while 68 (28 percent) of the 245 census tracts with one to four IPD contain a project.

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