CHAPTER 2: PROGRAM SUMMARIES

The DVRPC FY2018 TIP for New Jersey contains project descriptions and appendices for DVRPC's New Jersey region. There are 152 projects (99 Highway and 53 Transit), totaling $2 billion for the phases to be advanced over the next four years (FY2018–2021), and averaging at $506 million per year. Programmed funds include $1.3 billion for projects primarily addressing the highway system and $722 million for transit projects for NJ TRANSIT and DRPA/PATCO, as Table 1 and Figure 2 show. The TIP also shows 107 statewide projects that are highway programs managed by NJDOT for the State of New Jersey worth almost $4.3 billion in the first four years; 14 NJDOT sponsored projects that will be in the Study and Development Program; and 2 NJDOT "Tier 2" unfunded 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)

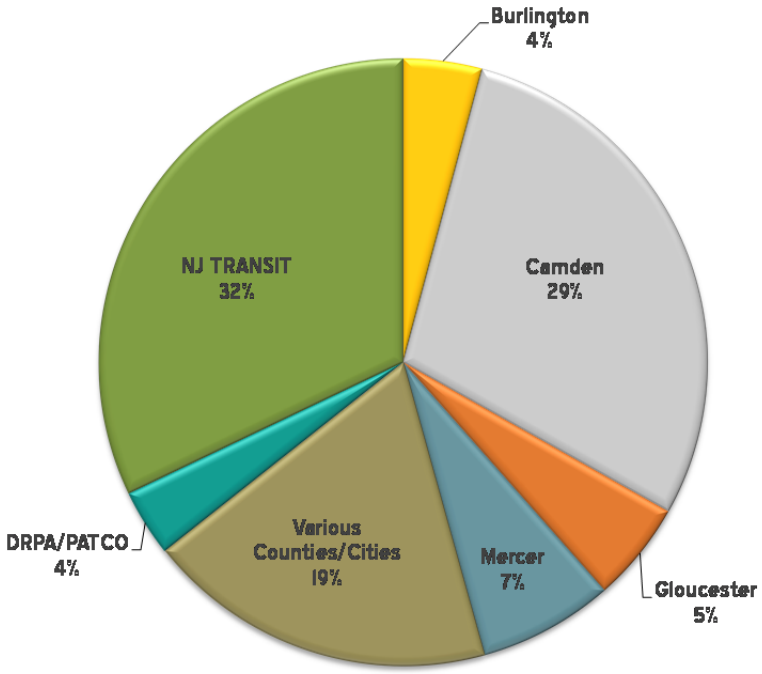
	FY2018	FY2019	FY2020	FY2021	4-YEAR TOTAL (FY2018-2021)
HIGHWAY PROGRAM					
Burlington County	34,447	23,870	9,300	17,040	**84,657**
Camden County	113,851	142,045	171,856	159,155	**586,907**
Gloucester County	24,990	43,874	4,069	35,311	**108,244**
Mercer County	60,821	35,211	26,057	23,411	**145,500**
Various Counties	86,701	102,633	88,455	99,983	**377,772**
TOTAL COST: 4-YEAR HIGHWAY PROGRAM ($000)					**1,303,080**
TRANSIT PROGRAM					
DRPA/PATCO	17,345	17,745	18,345	18,645	**72,080**
NJ TRANSIT	183,127	182,102	141,076	139,873	**650,718**
TOTAL COST: 4-YEAR TRANSIT PROGRAM ($000)					**722,258**
GRAND TOTAL COST: 4-YEAR HIGHWAY AND TRANSIT PROGRAMS ($000)					**2,025,338**

SOURCE: DVRPC, 2017

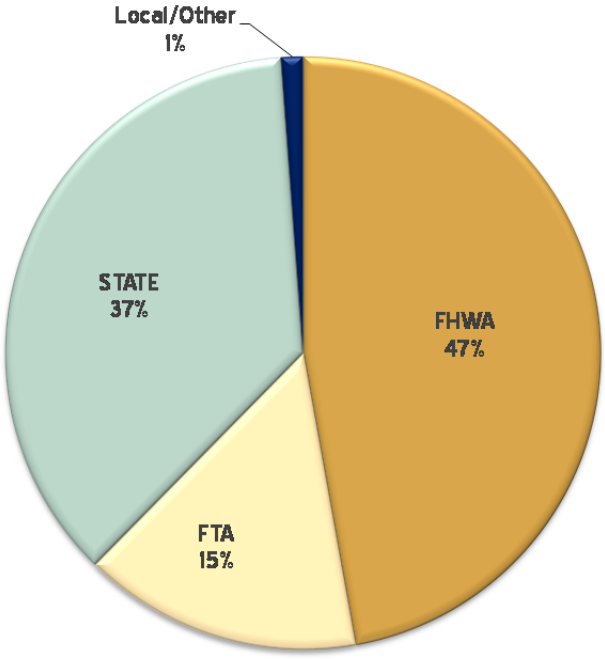
Per the Financial Guidance Tables 6 to 9 in Appendix B of the TIP, almost $5 billion of federal and state Highway funds (excluding "Other" non-public funds) in the first four years are distributed to all three MPOs: Delaware Valley Regional Planning Commission (DVRPC), North Jersey Transportation Planning Authority (NJTPA), and South Jersey Transportation Planning Organization (SJTPO). Of the federal and state Highway resources distributed to the MPOs, 26 percent is distributed to the DVRPC region. In addition, there is almost $4.3 billion in the first four years of the Statewide Program that is directly administered on a statewide basis by NJDOT. Projects in the Statewide Program are managed by NJDOT and are not specific to any particular MPO region.

FIGURE 2: COST SUMMARY BY COUNTY AND TRANSIT OPERATOR AND BY FUNDING SOURCE IN NEW JERSEY ($000)

BY COUNTY AND OPERATOR



BY FUNDING SOURCE



SOURCE: DVRPC, 2017

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

PROGRAM	FUND TYPE	FY2018	FY2019	FY2020	FY2021	4-YEAR TOTAL (FY2018-2021)	FY2022-2027 (OUT YEARS)	10-YEAR TOTAL (FY2018-2027)
Highway	BRIDGE-OFF		3,820			3,820		3,820
	CMAQ	4,000	2,000	4,000	2,000	12,000	27,138	39,138
	DEMO	16,199				16,199		16,199
	HSIP	3,000	8,600	3,000	12,900	27,500	24,000	51,500
	NHFP-HWY	29,607	33,308	37,009	39,633	139,557	159,893	299,450
	NHPP	138,888	143,372	133,991	127,613	543,864	387,045	930,909
	PL	2,431	2,482	2,538	2,538	9,989	15,228	25,217
	PL-FTA	700	700	700	700	2,800	4,200	7,000
	RHC	2,800	2,800	3,000	3,000	11,600	20,400	32,000
	STATE	96,102	101,940	86,211	89,151	373,404	357,660	731,064
	18-STATE-DVRPC	15,000				15,000		15,000
	STBGP		6,900		26,000	32,900	41,641	74,541
	STBGP -STU	10,665	35,311	27,888	29,965	103,829	184,713	288,542
	TAP	1,400	1,400	1,400	1,400	5,600	8,400	14,000
	OTHER	5,018				5,018		5,018
	Highway Subtotal	**325,810**	**342,633**	**299,737**	**334,900**	**1,303,080**	**1,230,318**	**2,533,398**
DRPA/ PATCO	DRPA	3,469	3,549	3,669	3,729	14,416	8,654	23,070
	SECT 5307	4,756	4,916	4,996	5,136	19,804	8,936	28,740
	SECT 5337	8,840	9,000	9,400	9,500	36,740	24,000	60,740
	SECT 5340	280	280	280	280	1,120	1,680	2,800
	DRPA/PATCO Subtotal	**17,345**	**17,745**	**18,345**	**18,645**	**72,080**	**43,270**	**115,350**
NJ TRANSIT	CASINO REVENUE	4,030	4,030	4,030	4,030	16,120	24,182	40,302
	CMAQ	2,930	4,395	4,395	4,395	16,115	26,370	42,485
	MATCH	437	437	437	437	1,748	2,622	4,370
	OPERATING	1,219	1,219	1,219	1,219	4,876	7,314	12,190
	SECT 5307	35,584	40,067	41,324	40,010	156,985	269,017	426,002
	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	11,624	11,368	12,118	12,118	47,228	79,762	126,990
	SECT 5339	551	624	700	3,603	5,478	21,619	27,097
	STATE	112,037	116,274	74,001	71,209	373,521	536,712	910,233
	STBGP -STU	15				15		15
	STBGP -TE			230	230	460	1,380	1,840
	OTHER	1,093	1,066			2,159		2,159
	NJ TRANSIT Subtotal	**187,127**	**182,102**	**141,076**	**139,873**	**650,178**	**984,710**	**1,634,888**
DVRPC NJ Region Total		**530,282**	**542,480**	**459,158**	**493,418**	**2,025,338**	**2,258,298**	**4,283,636**

SOURCE: DVRPC, 2017

[2.1] FINANCIAL CONSTRAINT

Toward 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 MPO 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 for the DVRPC FY2018 TIP for New Jersey is included in Appendix B. It should be noted that actual levels of federal and state transit funding are determined annually through the state and federal budget development and appropriations processes, so the amounts actually applied to projects during a given year will vary (generally lower) from what is shown in the TIP. Since the TIP has been developed according to the state guidance, it meets the federal requirement of being financially constrained.

The NJ TIP makes information available for project costs beyond the formal four-year constrained period (FY2018–2021). Project phases appear in these LFYs 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 LFYs (FY2022–2027) 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 FY2018 TIP for New Jersey does show a financially constrained 10-year program from FY2018 to FY2027 by using reasonable 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 in Appendix H. Therefore, not only do these projects *not* show up in the first four years of the FY2018 DVRPC TIP, but there is also no expectation that adequate funding will be available to fully fund them by FY2027. 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 that 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 the FTA. 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 the Transit Award Management System. 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. Equal Employment Opportunity was the

only deficient area found from the last FTA State Management Review in 2015. The next FTA State Management Review is expected to occur in 2018 for NJ TRANSIT. See Appendix B for NJ TRANSIT's Triennial Report and the State Management Review Report for further details.

[2.2] PROJECT SELECTION AND EVALUATION PROCESS

The DVRPC TIP project selection process is consensus based, in combination with a TIP project selection criteria that incorporates performance-based measures for new projects (see Appendix F for details on the TIP Project Benefit Criteria that addresses federal requirements and further links to the goals of DVRPC's Long-Range Plan). Program development occurs through a TIP subcommittee composed of regional stakeholders and is 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 (FY2018 to FY2027). Project Managers and stakeholder subcommittee members have updated all project costs and schedules. A series of subcommittee meetings was held that included 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; identify the highest priorities, costs and schedules; and to vet concerns and negotiate final programming. The final constrained draft program was made available during the 30+ day public comment period. The program with recommended technical changes was then presented to the DVRPC Board for adoption on October 26, 2017.

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. 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 TIP 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 CMP congested corridors, or appropriate-everywhere CMP strategy; annual average daily traffic per lane; and daily transit riders per daily seats;

- **Invest in Centers (13 percent)**: location in the Long-Range Plan 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, truck volume, and transit ridership;

- **Economic Competitiveness (8 percent)**: reduced operating/maintenance costs, or part of an economic development or transit-oriented development 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") communities; and

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

[2.3] THE LONG-RANGE PLAN AND INVESTING IN THE REGION'S PLANNING CENTERS

The Delaware Valley region is a mosaic of 352 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 2045: 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 categories of Planning Centers. Planning Centers for all New Jersey TIP projects are included on each project listing in the DVRPC FY2018 TIP for New Jersey, and they can be found in the current DVRPC FY2017 TIP for Pennsylvania. A more complete discussion and illustration of Planning Centers is found in the Long-Range Plan on the DVRPC website at www.dvrpc.org/LongRangePlan.

[2.4] 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 Long-Range Plan and the TIP.

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

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

The CMP evaluates all new or amended TIP projects proposed for federal funding, and, where 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 an approximately three-year cycle. Further information about the CMP is available from the DVRPC Resource Center or on DVRPC's website at www.dvrpc.org/CongestionManagement.

[2.5] 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. 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. The FAST Act also created a new National Highway Freight Program (NHFP) funded at an average of $1.2 billion per year, for FY2016–2020, which is distributed to the states by formula. Each state receives NHFP funds in proportion to the amount of funds a state receives compared to other states under all formula

apportioned programs. For example, if a state receives 5 percent of federal-aid formula funding, the state will receive 5 percent of the NHFP funding.

In addition, the FAST Act directs the FHWA administrator to establish a National Highway Freight Network (NHFN), replacing the National Freight Network and Primary Freight Network established under MAP-21, to strategically direct federal resources and policies toward improved performance of highway portions of the U.S. freight transportation system. The NHFN includes the following four subsystems of roadways:

- **Primary Highway Freight System (PHFS):** This is a network of highways identified as the most critical highway portions of the U.S. freight transportation system determined by measurable national data. The initial network consists of 41,518 centerline miles, including 37,436 centerline miles of Interstate, and 4,082 centerline miles of non-Interstate roads.

- **Other Interstate portions not on the PHFS:** These highways consist of the remaining portion of Interstate roads not included in the PHFS. These routes provide important continuity and access to freight transportation facilities. As of December 31, 2013, these portions amounted to approximately 9,511 centerline miles of Interstate, nationwide. This number and the total mileage of the NHFN will fluctuate with additions (including conversions of state routes) and deletions to the Interstate Highway System.

- **Critical Rural Freight Corridors (CRFCs):** These are public roads not in an urbanized area, to be designated by the states, which provide access and connection to the PHFS and the Interstate with other important ports, public transportation facilities, or other intermodal freight facilities.

- **Critical Urban Freight Corridors (CUFCs):** These are public roads in urbanized areas that provide access and connection to the PHFS and the Interstate with other ports, public transportation facilities, or other intermodal transportation facilities.

As of July 2017, a new competitive federal grant for freight, the Infrastructure for Rebuilding America (INFRA) discretionary grant program, replaced the Fostering Advancements in Shipping and Transportation for the Long-Term Achievement of National Efficiencies (FASTLANE) grant program that was newly authorized under the FAST Act's Nationally Significant Freight and Highway Projects program. INFRA will continue to fund critical freight and highway projects across the country. The INFRA program will make approximately $1.5 billion available for its first round of awards to help rebuild, repair, and revitalize infrastructure. For a large project, the INFRA grant must be at least $25 million. For a small project, the grant must be at least $5 million. Visit www.transportation.gov/buildamerica/infragrants for further information about the new INFRA program.

Statewide, NJDOT has established a newly created State funded grant program, Local Freight Impact Fund (LFIF), to assist counties and local municipalities with the mitigation of impacts on the local transportation system associated with the State's freight industry. The available funding for the FY2018 LFIF program is $30.1 million with applications due by December 19, 2017. Eligible projects include pavement preservation, truck safety and mobility, bridge preservation, and new construction in support of freight travel on municipal or county transportation infrastructure. Visit NJDOT's LFIF webpage for more details at www.nj.gov/transportation/business/localaid/localfreight.shtm.

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 individual layers of infrastructure and facilities that are organized into several 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 is available on 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.

[2.6] 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, DRPA/PATCO, New Jersey Turnpike Authority, Pennsylvania Turnpike Authority, and South Jersey Transportation Authority) undertake numerous significant highway, transit, and port-related projects by utilizing their own funds. Although not included in the TIP's project listings or funding summaries, toll authority projects are important to identify to provide a more complete picture of the transportation issues being addressed throughout the DVRPC region. The projects are listed, along with their associated costs, in Table 4.

[2.7] STUDY AND DEVELOPMENT

Future TIP projects are likely to be generated from the Study and Development process. This 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 Acquisition, and Construction. The entire Study and Development Program for the New Jersey counties is presented in Chapter 5 of this document.

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

GOAL	PROJECT DB #	COUNTY
INTEGRATE FREIGHT CENTERS WITH SAFETY, ENVIRONMENTAL, AND COMMUNITY GOALS		
Burlington County Roadway Safety Improvements	D0302	Burlington
Local CMAQ Initiatives	X065	Various
Local Freight Impact Fund	17390	Various
FACILITATE DELIVERIES AND THE GROWTH OF CENTRAL BUSINESS DISTRICTS		
Transportation Alternatives Program	X107	Various
Cooper Street Pedestrian Access Project (TIGER) Cooper's Poynt Roads Reconstruction Project (TIGER)	D1707 D1708	Camden
ENHANCE PRIMARY TRUCK ROUTES AND THE NATIONAL HIGHWAY FREIGHT NETWORK		
Route 322, Rt 295 to Tomlin Station Rd (CR 607)	12417	Gloucester
Center Square Rd (CR 620), Rt 295 Overpass	D1719	Gloucester
National Highway Freight Program	X34A	Various
Route 1, Alexander Road to Mapleton Road/Plainsboro-Cranbury Road	17419	Mercer
Transportation Systems Management and Operations (TSMO)	01300	Various
Route 295/38, Missing Moves, Mount Laurel	191A	Burlington
Route 295/42, Missing Moves, Bellmawr Route 295/42/I-76, Direct Connection, Contract 3 Route 295/42/I-76, Direct Connection, Contract 4	355A 355D 355E	Camden, Gloucester
Route 76/676 Bridge Deck Replacements	11326	Camden
INCREASE FREIGHT RAIL UTILITY		
Rail-Highway Grade Crossing Program, Federal Rail-Highway Grade Crossing Program, State	X35A1 X35A	Various
New Jersey Rail Freight Assistance Program	X34	Various
IMPROVE PORTS AND AIRPORTS		
Maritime Transportation System	01309	Various
Airport Improvement Program	08415	Various

SOURCE: DVRPC, 2017

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

PROJECT DESCRIPTION	SCHEDULE (YEARS)	TOTAL 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; replacement/upgrade of existing mechanical operational equipment; and rehabilitation of the concrete abutments, sidewalks and piers. This project also includes an annual maintenance contract.	2017-2020	$28.9	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 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.	2017-2020	$11.2	Burlington
Burlington-Bristol Bridge Rehabilitation: The project includes the replacement of the existing span decks; painting of the steel structures; rehabilitation of the concrete abutments, sidewalks and piers; counterweight rope tensioning; mechanical operational system upgrades; and miscellanies steel repairs. This project also includes an annual maintenance contract.	2017-2020	$28.7	Burlington
Burlington-Bristol Bridge Electrical Upgrades: The project includes the replacement of the existing electrical system on the New Jersey side, backup generator system, replacement/upgrade of existing mechanical operational equipment, and the installation of a new data center (fit-out). This project also includes an annual electrical maintenance contract.	2017-2020	$4.2	Burlington
Riverside Delanco Bridge Rehabilitation: The project includes the replacement/upgrade of existing mechanical operational equipment; rehabilitation of the concrete abutments, sidewalks, and piers; and gateway improvements. This project also includes an annual maintenance contract.	2017-2020	$2.9	Burlington
Riverside Delanco Bridge Electrical Upgrades: The project includes the replacement of the existing electrical system. This project also includes an annual electrical maintenance contract.	2017-2020	$1.34	Burlington
DELAWARE RIVER JOINT TOLL BRIDGE COMMISSION (DRJTBC)			
I-95 Scudder Falls Bridge Replacement: Under a Memorandum of Agreement that the DRJTBC entered into with NJDOT and the Pennsylvania Department of Transportation, the project's limits are I-95 from PA Route 332 in Bucks County, Pennsylvania, to Bear Tavern Road in Mercer County, New Jersey. This project is planned to: (1) Widen I-95 from PA 332 to the inside by adding one travel lane in each direction through utilization of the current grass median along that roadway stretch. (2) Reconfigure the Taylorsville Road interchange in Lower Makefield Township, Pennsylvania, by relocating the existing western southbound off-ramp and modifications to I-95 acceleration and deceleration lanes. (3) Replace the existing outdated four-lane Scudder Falls Bridge with new twin structures on the upstream side with overlapping of the current bridge footprint. The new structures will provide six lanes of through traffic (three in each direction) with two auxiliary northbound lanes for entry/exit travel and one auxiliary southbound lane for entry/exit travel. The recommended option calls for full inside and outside roadway shoulders and bicycle and pedestrian facility on the upstream side of the bridge's southbound span. (4) Reconstruct and reconfigure the Route 29 interchange through the use of roundabouts. This option would avoid traffic signals, resulting in a folded diamond interchange with two roundabout intersections at the ramps with I-95. Bypasses for NJ Route 29 northbound and southbound traffic would be retained, and improved acceleration and deceleration lanes will be provided onto I-95.	2017 - 2021	$512.0	Mercer

TABLE 4: TOLL AUTHORITY FUNDED HIGHWAY, TRANSIT, AND PORT-RELATED PROJECTS (CONTINUED)

PROJECT DESCRIPTION	SCHEDULE (YEARS)	TOTAL COST (IN MILLIONS	COUNTY
DRJTBC (CONTINUED)			
Trenton-Morrisville Toll Bridge Open Road Tolling: Study, design and implementation of Open Road Tolling at the Trenton-Morrisville Toll Bridge.	2022-2023	$8.9	Mercer
Lower Trenton Toll-Supported Bridge Cleaning and Painting	2022	$6.7	Mercer
DELAWARE RIVER PORT AUTHORITY/PORT AUTHORITY TRANSIT CORPORATION (DRPA/PATCO)			
Ben Franklin Bridge—Replace Moveable Barrier: The project will replace the 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
Ben 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
Ben 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.	2017-2020	$5.8	Camden
Ben Franklin Bridge—Bridge Deck Resurfacing: The project includes 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.	2018-2021	$30.0	Camden
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 Dynamic Message Sign (DMS) Boards: This project will replace existing DMS boards on the Pennsylvania approach to the bridge, which 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.	2017-2020	$6.25	Gloucester
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.	2015-2021	$100.0	Delaware
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.	2016-2021	$9.9	Delaware
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.	2015-2019	$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.	2015-2019	$6.75	Camden

TABLE 4: TOLL AUTHORITY FUNDED HIGHWAY, TRANSIT, AND PORT-RELATED PROJECTS (CONTINUED)

PROJECT DESCRIPTION	SCHEDULE (YEARS)	TOTAL COST (IN MILLIONS)	COUNTY
DRPA/PATCO (CONTINUED)			
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.	2018-2021	$16.4	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 a new car procurement	2011-2019	$194.0	Camden
PATCO—Install Elevators in Remaining PATCO Stations: The project will install new elevators at six PATCO stations not currently served by elevators. The six 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.	2015-2021	$30.0	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.	2015-2021	$48.5	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.	2015-2020	$8.5	Camden
PATCO—Replace Electrical Cables in Subways: Replace power and signal communication cables in subways. Existing cables in service are over 40+ years old and have exceeded expected service life. Replacement is required to ensure reliability of traction power and signal systems.	2017-2021	$9.5	Camden
NORTH JERSEY TRANSPORTATION AUTHORITY (NJTA)			
Express E-ZPass Improvements at New Gretna Toll Plaza: This project provides for the modification of the Garden State Parkway New Gretna Toll Plaza in Bass River Township to implement Express E-ZPass toll collection. The New Gretna Toll Plaza is one of the few remaining barrier toll plazas south of the Raritan River that does not provide an Express E-ZPass option.	2018-2020	$11.5	Burlington
PENNSYLVANIA TURNPIKE AUTHORITY (PA TURNPIKE)			
PA Turnpike/I-95 Interchange Project, Stage 3: The project will provide an additional bridge over the Delaware River parallel to the existing bridge.	Beyond 2020	$394.0	Burlington
PA Turnpike/I-95 Interchange Project: PA Turnpike to fund the redesignation of I-95 to I-295 east-west from PA Turnpike north to the Scudder Falls Bridge, and NJDOT/NJTA to fund the redesignation of I-95 to I-295 north-south from Scudder Falls bridge to US Route 1 in New Jersey.	2018	Not Available	Mercer

TABLE 4: TOLL AUTHORITY FUNDED HIGHWAY, TRANSIT, AND PORT-RELATED PROJECTS (CONTINUED)

PROJECT DESCRIPTION	SCHEDULE (YEARS)	TOTAL COST (IN MILLIONS)	COUNTY
SOUTH JERSEY TRANSPORTATION AUTHORITY (SJTA)			
Atlantic City Expressway All Electronic Tolling: Upgrade of toll collection using innovative technology through electronic tolling along the Atlantic City Expressway (mileposts 0.0 to 44.0).	2018 - 2019	$50.0	Camden and Gloucester
Atlantic City Expressway Widening Project: Construction of a third lane eastbound and westbound from along the Atlantic City Expressway from milepost 31 to milepost 44.	2020 - 2023	$150.0	Camden and Gloucester

SOURCES: BCBC, DRJTBC, DRPA/PATCO, NJTA, PA TURNPIKE AUTHORITY, AND SJTA, 2017

[2.8] 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 Transportation Alternatives Program (TAP), which includes the Safe Routes to School (SRTS) Program; the Congestion Mitigation and Air Quality Improvement Program (CMAQ); and the DVRPC Regional Trails Program.

Transportation Alternatives Program (TAP)

The FAST Act's Surface Transportation Block Grant sets aside funding for the continuation of TAP, which was established under MAP-21 as an amalgamation of the previous authorization's Transportation Enhancements (TE), Recreational Trails (REC TRAILS), and SRTS programs. Under the FAST Act, this program is no longer called TAP; however, New Jersey has decided to continue to use the TAP name. Eligibility requirements of the TAP program have remained largely the same as previous programs. Transportation Alternatives projects build pedestrian and bicycle facilities, improve access to public transportation, create safe routes to school, preserve historic transportation structures, provide environmental mitigation, and create trail projects that serve a transportation purpose, while promoting safety and mobility among others. TAP 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 those who use non-motorized forms of transportation.

Not only is there a statewide TAP allocation, but there is also a direct allocation of TAP funds to urbanized areas with populations greater than 200,000. All TAP funds must be awarded through a competitive process, whether the funds come from regional MPO funds or from the statewide allocation. Much like the Competitive CMAQ Program, projects are subjected to a rigorous evaluation process before the priority list of projects is selected. Projects seeking TAP funds are required to be submitted by TAP-eligible sponsors and to undergo a competitive selection process. For more information about NJ TAP, visit www.dvrpc.org/TAP/NJ.

In previous years, New Jersey's TE project selection process occurred at the state level with MPO involvement. Table 5 provides a full listing of projects that were selected since the year 2000 through the previous TE and the latest TAP Program for New Jersey. The REC TRAILS Program 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 SRTS program is funded through the FHWA's Federal Aid Program and is being administered by NJDOT, in partnership with NJ MPOs (DVRPC, NJTPA, and 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. 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 FYs 2008, 2009, 2012, 2014, 2016, and 2017. For further details, visit www.dvrpc.org/SafeRoutes.

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, MAP-21, and the FAST Act. 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 RTC evaluates the projects and makes recommendations to the Board for final selection. The most recent round concluded in 2015 with a total of $3.6 million CMAQ funds available for obligation (FY2016 to FY2019). See Table 7 for a list of CMAQ project awards since FY2012. For more information about the CMAQ Program, please visit www.dvrpc.org/cmaq.

DVRPC Regional Trails Program

With financial support from the William Penn Foundation, DVRPC's Regional Trails Program provides planning assistance and financial support to trail developers, counties, municipalities and nonprofit organizations to complete the Circuit, Greater Philadelphia's 750-mile network of multi-use trails. The Circuit Trail system takes advantage of the many opportunities to build and connect trails across the region, which is a product of the area's success in re-purposing unused rail corridors and developing linear parks along the region's waterways. The Circuit will also serve as the backbone for a network of "bicycling highways," which will allow safe and efficient travel by bicycle between homes, businesses, parks, schools and institutions free from motorized traffic. The list of awarded trail planning, design, and construction projects in New Jersey is displayed in Table 8. For more information about the Regional Trails Program or the Circuit, visit www.dvrpc.org/Trails/RegionalTrailsProgram or circuittrails.org.

TABLE 5: NEW JERSEY TRANSPORTATION ENHANCEMENT (TE) AND TRANSPORTATION ALTERNATIVES PROGRAM (TAP) PROJECTS FROM STATEWIDE LINE ITEM, DB #X107, FOR FY2000–2017

YEAR	MUNICIPALITY	PROJECT DESCRIPTION	AWARD*
BURLINGTON COUNTY			
2000	Beverly	Cooper Street Gateway Project [(ARRA-TE)]	$228,000
	Pemberton	North Pemberton Railroad Station Rehabilitation[(TE)]	$35,000
	Pemberton	North Pemberton Railroad Station Phase 2[(TE)]	$250,000
2001	Riverton	Historic Streetscape Enhancement Project[(TE)]	$335,000
2002	Palmyra	Broad Street Pedestrian Revitalization Project – Final Phase[(TE)]	$500,000
	Willingboro	Willingboro Town Center Bikeway/Walkway and Landscaping Features[(TE)]	$500,000
2003	Edgewater Park	Cooper Street Revitalization Project[(TE)]	$410,000
	Medford	Medford Township Bicycle Network Plan[(TE)]	$300,000
2008	Various Municipalities	NJ Pinelands Birding and Wildlife Trails[(TE)]	$512,00
2009	Palmyra	Market Street Gateway Improvement Project [(ARRA-TE)]	$260,000
	Mount Holly	Pedestrian Safety and Beautification Improvements at The Mount [(ARRA-TE)]	$160,000
2012	Burlington	Phase V TE: Broad Street/Towne Center Station, Pedestrian Route & Beautification Improvement Plan[(TE)]	$216,000
	Wrightstown	North Fort Dix Street Pedestrian and Landscape Improvements[(TE)]	$510,000
2015-2016	Fieldsboro, Florence, Bordentown, and Mansfield	Delaware River Heritage Trail, Route 130 Bypass, Fieldsboro to Florence Connector Trail (Circuit) [4] [(TAP)]	$2,320,000[4]
2015-2016	Delanco, Delran, Riverside	Rancocas Creek Greenway-Amico Island to Pennington Park (Circuit) [4]	$2,900,000[4]
2017	Mount Holly	Mount Holly Streetscape Project – High Street Phase II[(TE)]	$483,000
	Moorestown	Lenola Town Center Improvements Plan[(TE)]	$971,000
CAMDEN COUNTY			
2000	Berlin	Berlin Hotel Historic Preservation Program[(TE)]	$523,000
	Camden	Mickle Boulevard Interior Gateway[(TE)]	$471,000
2001	Camden	Johnson Park Station Stop Streetscape Project[(TE)]	$500,000
	Camden	Battleship New Jersey Historic Museum[(TE)]	$400,000
2002	Barrington	Streetscape Improvements to Clements Bridge Road[(TE)]	$250,000
	Gloucester	Gloucester City Streetscape Improvement[(TE)]	$480,000
	Haddon	Streetscape Improvements to Haddon Avenue[(TE)]	$300,000
	Pine Hill	Pine Hill Streetscape Project[(TE)]	$478,000

TABLE 5: NEW JERSEY TRANSPORTATION ENHANCEMENT (TE) AND TRANSPORTATION ALTERNATIVES PROGRAM (TAP) PROJECTS FROM STATEWIDE LINE ITEM, DB #X107, FOR FY2000–2017 (CONTINUED)

YEAR	MUNICIPALITY	PROJECT DESCRIPTION	AWARD*
CAMDEN COUNTY (CONTINUED)			
2003	Haddon Heights	Historic Railroad Corridor Enhancement[TE]	$379,000
	Haddon Township	Streetscape Improvements to Haddon Avenue, Phase 2[TE]	$512,000
	Runnemede	Route 168 (Black Horse Pike) Corridor Revitalization[TE]	$552,000
2004	Barrington	Streetscape Improvements to Clements Bridge Road (CR 573) – Phase 3, From Newton Avenue to the New Jersey Turnpike Overpass[TE]	$500,000
	Berlin	Berlin Township Transportation Enhancement Program[TE]	$400,000
	Gibbsboro	Gibbsboro Borough Gateway Enhancement along Haddonfield-Berlin Road (CR 561) & Clementon Road (CR 686) [TE]	$500,000
2009	Gloucester	Market Street Commons and Streetscape[ARRA-TE]	$485,000
	Gloucester	Burlington Street Streetscape Improvement Program[ARRA-TE]	$523,000
	Mount Ephraim	Kings Highway Streetscape Improvements, Phase II[ARRA-TE]	$290,000
	Camden	Martin Luther King Boulevard Project[ARRA-TE]	$750,000
	Gloucester	Streetscape Project on Broadway Street (between Monmouth and Hudson Streets) [ARRA-TE]	$270,000
	Haddonfield	Mechanic Street and Clement Street Historic Preservation and Streetscape Improvements[ARRA-TE]	$570,000
	Merchantville	Chestnut Avenue Pedestrian/Bikeway Extension[ARRA-TE]	$150,000
2012	Barrington	Clements Bridge Road Streetscape Improvements from NJ Turnpike Bridge to Borough Boundary[TE]	$539,000
	Merchantville	West Maple Avenue Streetscape Improvement Project[TE]	$51,000
2014	DRPA	Benjamin Franklin Bridge South Walkway Bicycle and Pedestrian Ramp Project [TAP]	$800,000
	Merchantville, Pennsauken	Pennsauken-Merchantville Multi-Use Trail (Circuit)[TAP]	$755,000
2015-2016	Camden, Cherry Hill, Collingswood, Haddon Township, Pennsauken	Cooper River Park Access Improvements (Circuit)[4]	$600,000[4]
2017	City of Camden	North Camden Waterfront Park Development Project[TE]	$825,000
	Camden County	Camden County Grove Street Trail Connector[TE]	$255,000
	Merchantville	Merchantville Pedestrian Street[TE]	$861,000

TABLE 5: NEW JERSEY TRANSPORTATION ENHANCEMENT (TE) AND TRANSPORTATION ALTERNATIVES PROGRAM (TAP) PROJECTS FROM STATEWIDE LINE ITEM, DB #X107, FOR FY2000–2017 (CONTINUED)

YEAR	MUNICIPALITY	PROJECT DESCRIPTION	AWARD*
GLOUCESTER COUNTY			
2001	Glassboro	Pedestrian Streetscape Enhancement Program (TE)	$124,000
	Wenonah	Creating a Heart for Wenonah (TE)	$350,000
2002	Paulsboro	Pedestrian, Bus, and Bicycle Enhancement in Central Business District (TE)	$150,000
	Westville	Westville Pedestrian Transportation Enhancement Program (TE)	$500,000
2003	Glassboro	Glassboro's Streetscapes Project – Phase V (TE)	$300,000
2005	Glassboro	Paving the Way to Glassboro's Downtown-Streetscapes Phase VI (TE)	$150,000
	Swedesboro	Swedesboro Pedestrian Transportation (TE)	$200,000
2009	Glassboro	Rebuilding Glassboro's Historic Train Station [1] (ARRA-TE)	$1,101,400 [1]
	Woodbury	Pedestrian Safety and Wayfinding Signage (ARRA-TE)	$194,000
	Paulsboro	Paulsboro Pedestrian Streetscape, Phase 2 – Central Business District (TE)	$425,000
2012	Woodbury	Pedestrian Path to Connect Woodbury Neighborhoods, Retail and Recreation Areas (TE)	$310,000
	Merchantville, Pennsauken	West Maple Avenue Streetscape Improvement Project (TE)	$51,000
2014	Wenonah	Multimodal Transportation Improvements to Mantua Avenue, from Monroe Avenue to Marion Avenue (TAP)	$900,000
2015-2016	Monroe, Washington	Washington Township and Monroe Township Bikeway [4]	$1,500,000 [4]
MERCER COUNTY			
2000	Hamilton	Delaware & Raritan Canal State Park – Bordentown Outlet, Phase 1 (TE)	$948,000
2000	Trenton	Roebling Phase 3, Rehabilitation for the Invention Factory (TE)	$250,000
2001	Lawrence	Route 1 Pedestrian Overpass – D & R Canal State Park (TE)	$1,250,000
2001	Trenton	Inventory Factory Bridge Exhibit (TE)	$1,609,823
2002	Hamilton	South Broad Street Streetscape (TE)	$985,000
2002	Princeton	Regional Bicycle and Pedestrian Bridge at Stoney Brook (TE)	$500,000
2003	Lawrence	Lawrenceville Main Street Transportation Streetscape Improvement (TE)	$190,000
2004	Hightstown	Hightstown TE (TE)	$444,000

TABLE 5: NEW JERSEY TRANSPORTATION ENHANCEMENT (TE) AND TRANSPORTATION ALTERNATIVES PROGRAM (TAP) PROJECTS FROM STATEWIDE LINE ITEM, DB #X107, FOR FY2000–2017 (CONTINUED)

YEAR	MUNICIPALITY	PROJECT DESCRIPTION	AWARD*
MERCER COUNTY (CONTINUED)			
2005	Hopewell	Streetscape Improvements to the Intersection of Broad Street and Greenwood Avenue (TE)	$154,000
2009	Hightstown	Stockton Street Historic District Streetscape Infrastructure Project[2] (ARRA-TE)	$994,646[2]
2009	Hopewell	Hopewell Borough Streetscape Improvements Project, Phase II[3] (ARRA-TE)	$935,000[3]
2012	East Windsor	Route 571 Sidewalks to Transit (TE)	$124,000
2012	Hopewell	Hopewell Borough – Streetscape Phase 3 and Final (TE)	$235,000
2014	Hightstown	Peddie Lake Dam Pedestrian Bridge (TAP)	$331,000

Project Notes:

1. The original award amount for the project, Rebuilding Glassboro's Historic Train Station, is $250,000 ARRA-TE. ARRA-TE funds are from the federal American Recovery and Reinvestment Act of 2009 (ARRA), which are also known as 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.

4. In 2015–2016, through conversations with member agencies, DVRPC identified project candidates to submit to NJDOT for consideration of unobligated TE and TAP funds from SAFETEA-LU and MAP-21 in order to expend such funds. Of the projects submitted, NJDOT approved four (4) projects in the DVRPC region to utilize such funds.

SOURCE: NJDOT LOCAL AID AND ECONOMIC DEVELOPMENT, DVRPC, 2017

TABLE 6: SAFE ROUTES TO SCHOOL (SRTS) PROJECTS FROM STATEWIDE LINE ITEM, DB #99358, FOR FY2008, FY2009, FY2012, FY2014, AND FY2016

YEAR	MUNICIPALITY	PROJECT DESCRIPTION	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
2016	Pemberton	Phase 1: Busansky/Emmons Schools Multimodal Improvements	$466,000
	Maple Shade	Phase 1: SRTS Pedestrian Safety Improvements. Frederick Avenue & S. Clinton Avenue	$257,000
	Eastampton	SRTS: Eastampton Community School - Pedestrian Multi-Use Path and Walking Route Improvements	$429,000
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
2016	Gloucester City	Gloucester City Middle School Improvements and Pedestrian Safety Improvement Program	$343,000
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, DVRPC, NJDOT LOCAL AID, 2017

TABLE 7: DVRPC CMAQ COMPETITIVE PROGRAM AWARDS IN NEW JERSEY

YEAR	COUNTY	PROJECT SPONSOR	PROJECT NAME	DB #	AWARD
2012	Camden	New Jersey Department of Environmental Protection	Gloucester Marine Terminal Truck Engine Retrofits	X065	$300,000
2012	Camden	CSX Transportation	CSX Clean Diesel Locomotive	D1306	$1,000,000
2012	Gloucester	Gloucester County	Gloucester County CNG Transit Vehicles	X065A	$160,000
2012	Camden (City)	City of Camden/ Cooper's Ferry Partnership	Haddon Avenue Roadway Improvements	D1407	$880,000
2012	Mercer	Lawrence Township	Province Line Road Bike Trail	D1408	$360,000
2015	Burlington	Burlington County	Burlink Bus Replacements	X065	$450,000
2015	Camden	Voorhees Township	Voorhees Township Senior Bus Replacement	X065	$110,000
2015	Camden	Voorhees Township	Somerdale Road (CR 678), Burnt Mill Road (CR 670) to Echelon Road (Pedestrian Enhancements)	D1702	$515,000
2015	Camden (City)	Camden County	South Jersey Port Corporation Fleet Modernization Program	X065	$1,000,000
2015	Mercer	Princeton	Princeton Township Bike Share Expansion	D1703	$196,000

Note: A DB # may be assigned to a project when the project is ready to break out of the program line item, Local CMAQ Initiatives (DB #X065), for obligation.

SOURCE: DVRPC, 2017

TABLE 8: DVRPC REGIONAL TRAILS PROGRAM AWARDS IN NEW JERSEY

ROUND	COUNTY	PHASE	PROJECT NAME	AWARD
1	Camden (Camden City)	Design	Baldwin's Run Tributary Trail	$150,000
1	Camden	Construction	Kaighn's Avenue to Route 130 Connector Trail	$125,000
1	Mercer	Construction	Lawrence-Hopewell Trail: Lewisville Road Section	$248,000
2	Burlington	Study	Kinkora Trail Mansfield Township Community Park Connector	$40,000
3	Burlington	Design/Construction	Kinkora Trail Mansfield Township Community Park Connector	$500,000
3	DRPA/PATCO	Design/Construction	DRPA/PATCO Ben Franklin Bridge Walkway Bicycle and Pedestrian Ramp	$400,000
3	Mercer	Design/Construction	Lawrence-Hopewell Trail: Carter Road East and West	$250,000
4	Mercer (City of Trenton)	Construction	Trenton Wellness Loop	$195,000
4	Mercer	Design	D&R Canal—Delaware River Heritage Trail Gap	$110,000
4	Burlington	Design & Engineering	Rancocas Creek Greenway	$300,000
4	Camden	Design & Engineering	Cooper River Trail, Pub Connector	$37,820
4	Camden	Design & Engineering	Gloucester Township Bike Path	$217,000
4	Gloucester	Design & Engineering	Harrison Trail	$400,000
5	Camden (City)	Design	Riverbirch Trail	$50,000
5	Mercer	Study & Engineering	Union Transportation Trail - East Windsor Township Segment	$135,000
5	Mercer	Alternative Analysis	Lawrence-Hopewell Trail - Dyson Tract Segment	$15,600

SOURCE: DVRPC, 2017

[2.9] RESPONDING TO TITLE VI AND ENVIRONMENTAL JUSTICE (EJ) CONCERNS

The 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."

Every 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 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 conduct the following activities below.

- 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 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 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) Methodology, and is utilized in a variety of various DVRPC plans and programs, including the TIP. The EJ and Title VI analysis tool is available online at www.dvrpc.org/webmaps/IPD. DVRPC regularly publishes an annual update for 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. Note that publication number TM15017 is the latest to date for this document. In 2007-2014,

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 non-discrimination mandates. This 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 comprised of regional citizens who come together to bring 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.

[2.10] EJ ANALYSIS OF THE TIP

Recognizing that the location of transportation investments can greatly influence the level of mobility and accessibility within and throughout the region, the TIP is an important component of the agency's overall Environmental Justice and Title VI initiatives, Public Involvement Program, and work program activities. When the TIP is updated every other year for New Jersey, new analyses and mapping are conducted, and public comments are received.

The TIP uses DVRPC's Indicators of Potential Disadvantage (IPD) to analyze projects that can be mapped. TIP projects that cannot be represented by mapping are not included in the analysis, such as county roadway safety improvements (e.g. DB #D0302 for Burlington County) and county bus purchases that benefit various locations. Using U.S. Census American Community Survey (ACS) 2011–2015 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. There are eight population groups that are currently analyzed via the IPD and include the following listed below.

- Households in Poverty;
- Non-Hispanic Minority;
- Hispanic;
- Elderly (75 years and over);
- Carless Households;
- Persons with Disabilities;
- Limited English Proficiency; and
- Female Head of Household with Child.

Each census tract is evaluated by the IPD to quantify the concentration of potentially disadvantaged populations, which are defined as the eight IPD categories listed above. A census tract is considered vulnerable for each of the IPD categories if the concentration of that population group in that tract is greater than the regional average. A total IPD score is then made based on how many population

categories were found in that tract. TIP projects are mapped overtop the IPD mapping methodology to identify whether projects are in low-disadvantage census tracts (containing 1 to 4 IPDs) and high-disadvantage census tracts (containing 5to 8 IPDs).

DVRPC conducts EJ and Title VI analyses by analyzing the distribution of mapped TIP projects from the Regional Highway and Transit Programs. As mentioned above, not all projects are mappable due to the scale and nature of the improvement. In the TIP, a total of 72 Regional Highway and Transit projects were mapped (67 Highway projects; two NJ TRANSIT projects; and five DRPA/PATCO projects). While a TIP project may not occur in an EJ- or Title VI-sensitive area, a proposed project can still impact populations who could be at a disadvantage, especially if a project focuses on a highway or transit corridor that the population uses. Therefore, a 50 foot buffer was applied around a mapped project point or line in order to capture census tracts with populations that could also be impacted.

Table 9 shows that there is a similar percentage of regional highway projects in low-disadvantaged census tracts (1 to 4 IPDs) (at 41%); as in high-disadvantaged census tracts (with 5 to 8 IPDs) (at 38%). For transit projects, there is also a similar percentage (13%) of census tracts with 5 to 8 IPDs that contain a regional transit project programmed in the TIP than tracts with IPDs less than 5 (9%). Again, bear in mind that these results only reflect the projects that can be mapped and does not reflect all projects in the TIP. Finally, there could be an opportunity to add new projects after the TIP is adopted and federally approved as a result of new or additional funding, project schedule changes, or project cost savings. When this opportunity arises, DVRPC evaluates new project candidates by using the TIP Project Benefit Criteria that considers EJ and Title VI communities (see Appendix D).

TABLE 9: IPD ANALYSIS RESULTS

NUMBER OF IPD PER CENSUS TRACT	TOTAL CENSUS TRACTS (381)	DVRPC NJ HIGHWAY PROGRAM		DVRPC NJ TRANSIT PROGRAM	
		Number of census tracts containing a project from FY2018 to FY2027	Percent of census tracts containing a project from FY2018 to FY2027	Number of census tracts containing a project from FY2018 to FY2027	Percent of census tracts containing a project from FY2018 to FY2027
0 IPD	53	18	34%	5	9%
1-4 IPD	241	100	41%	21	9%
5-8 IPD	87	33	38%	11	13%

SOURCE: DVRPC, 2017