# CHAPTER 4: MAPPING APPLICATION AND LISTINGS OVERVIEW

## [4.1] MAPPING APPLICATION AND GEOGRAPHIC INFORMATION SYSTEMS

This is the first time that the TIP for New Jersey does not contain printed static maps in the document. Due to the dynamic, changing nature of the TIP, the maps are out of date by the time the final version of the TIP is printed and distributed. For this reason, DVRPC recommends using the TIP Web Map Search Tool found at <a href="https://www.dvrpc.org/TIP">www.dvrpc.org/TIP</a> as the primary mapping function to show the location of mappable projects for highway and transit projects.

Different project types, such as intersection improvements, bridge replacements, or new transit facilities, are shown by using various colors and symbols in the TIP Web Map Search Tool. Certain types of projects, such as roadway landscaping, lease payments for the use of railroad tracks, reserve line items, or preliminary studies, are not mapped. These projects are listed in a drop-down list under the heading "TIP Projects Not Mapped" and are listed on the map by their unique project identification number, DB #, under the same heading.

The TIP Web Map Search Tool has been enhanced to include more robust data sets, besides TIP projects, that include overlays such as, Planning Centers, Freight Centers, CMP Corridors, and IPD, as well as a "search by address or location" function. To go along with the more robust TIP Web Map Search Tool, DVRPC has made TIP Geographic Information Systems (GIS) data available as well. GIS is an important planning tool that supports state, regional, county, and local planning and technical efforts. Nearly all planning activities incorporate GIS technology, whether it is for data collection and storage, or for analysis and presentation. GIS allows planners to view and query spatial data; perform advanced analysis to discover relationships, patterns, and trends; and effectively present information to decision-makers and the public.

Downloadable GIS point and line location features for TIP projects in the Draft TIP, as well as current adopted Pennsylvania and New Jersey TIPs, and projects with formal TIP Actions that the DVRPC RTC and Board vote on, are available via the Transportation section of DVRPC's GIS Data webpage, <a href="www.dvrpc.org/Mapping/Data">www.dvrpc.org/Mapping/Data</a>. This webpage also contains links to DVRPC's GIS Portal, interactive maps, and a map gallery, in addition to other data resources. The GIS Portal contains boundaries, demographic, planning, and transportation data which is helpful for obtaining data that provides context for the TIP.

#### **DVRPC Regional Highway and Transit Programs**

This document includes various project listings. The project listings include the New Jersey Highway, Transit (NJ TRANSIT and DRPA/PATCO), NJDOT Statewide, and the Study and Development programs. The project listings within the Highway and Transit Programs are grouped by county and transit operator. Included are highway projects for Burlington, Camden,



Gloucester, and Mercer counties; a listing of projects that apply to various counties; and transit projects for NJ TRANSIT and DRPA/PATCO.

Within each county grouping, individual highway and transit projects are listed alphabetically by project title. Each project listing provides information on total program period cost, cost by fiscal year, phase of work, and funding source. Costs are shown in millions of dollars. Also included are project location, project description, air quality code, improvement type, DVRPC Planning Center, NJDOT Capital Investment Strategies (CIS) program category, CMP category, EJ Indicators of Potential Disadvantage (IPD) rating, and a variety of other information. To assist in quickly locating a project within the document, each county or transit section begins with an index of projects with page numbers listed. NJDOT and NJ TRANSIT have developed a STIP with a 10-year horizon, looking beyond the federal requirement of a four-year STIP, and that 10-year horizon is reflected in the finance records for all projects. The full New Jersey STIP is available at www.state.nj.us/transportation/capital.

Note that all projects within the formal first four years of the TIP period (FY2018–2021) would be considered funded and able to be federally authorized for funding. By federal regulation, the TIP is the four-year constrained program for which revenues are reasonably expected to be available. However, the state and region developed a 10-year constrained programming horizon for highway and transit projects in order to provide more realistic expectations and timeframes in which to expect advancement of TIP projects with more realistic costs. Many projects that have phases within the first four years (FY2018–2021) also have phases (such as Construction) that may be out in LFYs 2022–2027. This 10-year constrained programming horizon is illustrated on the project listings within the TIP and STIP documents. Project phases that fall beyond the formal four-year TIP period (FY2018–2021) are technically "unfunded," but they are listed to represent the region's planned commitment to fund these phases in the future as funds become available.

In addition, NJDOT has identified "Tier 2" unfunded projects that cannot be funded based on current 10-year revenue estimates. A further refinement of the 10-year capital program could lead to greater flexibility and accommodation of more projects. See Appendix H for a list of "Tier 2" unfunded highway and transit projects that cannot be funded based on current 10-year revenue estimates.

#### NJDOT Statewide Program

Following the lists of DVRPC region highway and transit projects are lists of highway projects in the NJDOT Statewide Program. These Statewide projects are primarily highway programs managed by NJDOT on a statewide basis that are not specific to any particular MPO region or that provide direct support to NJDOT.

#### Study and Development Program

There is a subset of highway proposals referred to as Study and Development (S&D) projects. Projects marked with an "L" preceding any phase indicate a Local Agency Lead; otherwise, the state DOT is the lead agency. The objective of the S&D Program is to make candidate projects

ready for consideration in a future TIP update cycle for potentially TIP funded phases: Preliminary Engineering, Final Design, Right-of-Way Acquisition, and Construction. Projects in the S&D Program have been identified as priorities for further advancement but have not reached approval for advancement into Preliminary Engineering or Final Design. In other words, these projects are in the "pre-TIP" phase. Reasonable strategies and alternatives that address the purpose and need are identified for S&D projects during the pre-TIP Concept Development phase.

### [4.2] CODES AND ABBREVIATIONS OVERVIEW

Various codes and abbreviations are used in the project descriptions for the phase of work and source of funds. These codes and abbreviations are explained below.

#### Air Quality Codes

An alphanumeric air quality (AQ) coding scheme has been developed for all projects. The AQ code is applied by DVRPC for the conformity determination and exempt eligibility identification purposes.

For non-exempt projects, the project's AQ code is identified by the first conformity "analysis year" that follows the project's last year of programmed funds for construction that are expected for authorization (hence, projected year of project opening to the public or completion year): 2020, 2025, 2035, or 2045. The letter following the year indicates whether the project was modeled (M) in the regional simulation or if the project was analyzed using an off-model technique (O). The Route 295/NJ 42/I-76 Direct Connection project in the TIP, for example, has the last year of funding programmed for construction in 2023, so the AQ code is 2025M.

The Clean Air Act regulations also provide for projects that may be exempt from the conformity analysis. An exempt project of the final conformity rule (40 CFR 93) is defined as a project that primarily enhances safety or aesthetics, maintains mass transit, continues current levels of ridesharing, or builds bicycle and pedestrian facilities. There are several categories of exempt projects, and DVRPC indicates the specific exempt code in the project descriptions. In cases in which multiple codes apply, the most representative code is assigned. Exempt projects in design phases are classified under the planning and technical studies category. Tables 11 and 12 provide a complete list of exempt and nonexempt categories and corresponding air quality codes.

Study and Development projects are those that are still in the conceptual phase and are not yet part of the TIP. However, they are likely to be included in future TIPs; therefore, they are assigned AQ codes that begin with "SDX" for projects likely to be exempt from air quality conformity, or "SDN" for projects not likely to be exempt from air quality conformity.

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



TABLE 11: DVRPC AIR QUALITY CODES FOR NON-EXEMPT PROJECT CATEGORIES

NON-EXEMPT PROJECT	ION-EXEMPT PROJECT CATEGORY AQ CODE			
PROJECTS MODELED USING DVRPC'S TRAVEL DEMAND MODEL	Regionally Significant, non-exempt projects included in the 2020 network and all subsequent analysis years	2020M		
	Regionally Significant, non-exempt projects included in the 2025 network and all subsequent analysis years	2025M		
	Regionally Significant, non-exempt projects included in the 2035network and all subsequent analysis years	2035M		
	Regionally Significant, non-exempt projects included in the 2040 network and all subsequent analysis years	2045M		
STUDY AND DEVELOPMENT PROJECTS IN NEW JERSEY	Project in the Study and Development Program expected to result in an exempt project	SDX		
	Project in the Study and Development Program expected to result in a non-exempt project	SDN		
	Project on the illustrative "Tier 2" Unfunded List expected to result in a non-exempt project	FYN		

SOURCE: DVRPC, 2017

#### Long-Range Plan ID

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

#### **TIP Project Status Codes**

DVRPC has developed a coding scheme to highlight certain projects in the TIP by denoting them with the following status codes: NEW, NEW-B, NEW-G, NEW-LG, NEW&SD, NEW-CD, SD, or RETURN. As a result of the TIP being updated every two years, these status codes help establish the origin of the projects by distinguishing them from other projects within the TIP and by tracking which TIP document that they first appear.

Projects determined as "new" projects in the TIP are denoted with a status code of NEW, NEW-B, NEW-G, NEW-LG, NEW&SD, or NEW-CD. *NEW* projects are programmed in the TIP for the absolute first time.

TABLE 12: DVRPC AIR QUALITY CODES FOR EXEMPT PROJECT CATEGORIES

EXEMPT PROJECT CATEGORY		AQ CODE	EXEMPT PROJECT CATEGORY		AQ CODE
	Railroad/Highway Crossing	S1		Operating assistance to transit agencies	M1
SAFETY	Hazard Elimination Program	S2		Purchase of support vehicles	M2
	Safer Non-Federal-Aid System Roads	S3	MASS TRANSIT	Rehabilitation of transit vehicles	М3
	Shoulder Improvements	S4		Purchase of office, shop, and operating equipment for existing facilities	M4
	Increasing Sight Distance	S5		Purchase of operating equipment for vehicles (e.g., radios, fareboxes, lifts, etc.)	M5
	Safety improvement program	S6		Construction or renovation of power, signal, and communications systems	M6
	Traffic control device and operating assistance other than signalization projects	S7		Construction of small passenger shelters and information klosks	M7
	Railroad/highway crossing warning devices	S8		Reconstruction or renovation of transit buildings and structures	M8
	Guardrails, median barriers, crash cushions	S9		Rehabilitation or reconstruction of track structures, track, and tracked-in existing rights-of-way	М9
	Pavement resurfacing and/or rehabilitation	S10		Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet	M10
	Pavement marking demonstration	S11		Construction of new bus or rail storage/maintenance facilities categorically excluded in 23 CFR part 771	M11
	Emergency relief (23 U.S.C. 125)	S12		Specific activities that do not involve or lead directly to construction, such as planning and technical studies	X1
	Fencing	S13		Grants for training and research programs	X2
	Skid treatments	S14		Planning activities conducted pursuant to title 23 and 49 U.S.C.	Х3
	Safety roadside rest areas	S15		Federal aid systems revisions	X4
	Adding medians	S16	OTHER	Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action	X5
	Truck-climbing lanes outside the urbanized area	S17 PROJECTS		Noise attenuation	Х6
	Lighting improvements	S18		Advance land acquisitions (23 CFR 712 or 23 CFR 771)	X7
	Widening narrow pavements or reconstructing bridges (no additional travel lanes)	S19		Acquisition of scenic easements	X8
	Emergency truck pullovers	S20		Plantings, landscaping, etc.	Х9
AIR QUALITY	Continuation of ridesharing and van-pooling promotion activities at current levels	A1		Sign removal	X10
	Bicycle and pedestrian facilities	A2		Directional and informational signs	X11
NOT REGIONALLY SIGNIFICANT PROJECTS	Projects determined to be "Not Regionally Significant" and do not fit into an exempt category	NRS		Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)	X12
STUDY AND DEVELOPMENT PROJECTS (NJ)	Project in the Study and Development Program expected to result in an exempt project	SDX		Repair of damage caused by natural disasters, civil unrest, or terrorist acts, except projects involving substantial functional, locational, or capacity changes	X13
NO REGIONAL EM	IISSIONS ANALYSIS IS REQUIRED				
Intersection channelization projects		R1	Truck size and weight inspection stations		R4
Intersection signalization projects at individual intersections		R2	Changes in vertical and horizontal alignment		R5
Interchange reconfiguration projects		R3	Bus terminals and transfer points		R6

Note: Both exempt and not regionally significant project categories adhere to 40 CR 93 Sections 126 and 127. In the PM10 non-attainment or maintenance area, rehabilitation of transit vehicles is exempt only if they comply with control measures in the applicable implementation plan. SOURCE: DVRPC. 2017



#### TIP Project Status Codes (Continued)

Projects indicated as *NEW-B* are new "break-out" projects that have been "broken out of," or derived from, an existing TIP project. *NEW-G* projects have "graduated" from the Study and Development Program and are advancing into the TIP for Design to Construction phases. Similarly, *NEW-LG* projects are locally sponsored projects that have "graduated" from DVRPC's Local Concept Development Program to advance into the TIP's Local Program.

Furthermore, as a result of funds being programmed over a 10-year horizon, projects may be included, for the first time, in both the TIP's Study and Development Program and Highway Program. Such projects are denoted as *NEW&SD* (e.g. DB #16340, Route 130, Bridge over Main Branch of Newton Creek). *NEW-CD* projects are those that are programmed for Concept Development in the DVRPC Highway or NJDOT Statewide Program for the first time.

A project denoted with a *SD* status indicates that it is not a new project but is in the TIP Highway or Statewide Program and Study and Development Program. For example, the projects, Delaware & Raritan Canal Bridges (DB #15322) and Route 130, Bridge over Main Branch of Newton Creek (DB #16340), is in the Study and Development Program, and both have Preliminary Engineering (PE) to Construction (CON) phases programmed in the TIP. However, Delaware & Raritan Canal Bridges is programmed in the NJDOT Statewide Program, while the other is programmed in the DVRPC Highway Program. Finally, projects indicated as *RETURN* have previously been programmed in a prior year TIP, but through a variety of circumstances, have returned to be programmed in the DVRPC FY2018 TIP for New Jersey.

#### **Planning Center Notations**

The Greater Philadelphia region is a mosaic of 352 townships, boroughs, and cities, each making their own land use decisions. In an effort to categorize and simplify community types and corresponding long-range planning policies, DVRPC assigned each municipality a Planning Center type associated with the long-range planning policies that will be most beneficial to the community as a whole. At the regional scale, Planning Centers guide the direction of policy.

Planning Centers include the following: *Metropolitan Center* (Center City/University City/Camden Central Business District); *Metropolitan Subcenters*, which reflects their magnitude of jobs and commercial activity; *Neighborhood Centers*, which have varying characteristics, assets, challenges, and needs, and for which specific approaches and strategies for improving and revitalizing these neighborhoods will differ; *Suburban Centers*, which are regionally significant and defined primarily by a concentration and variety of office, retail, professional, and light industrial uses, and generally have more jobs than residents, and are generally auto dependent; *Town Centers*, which have a mixture of high-density residential and commercial land use, are pedestrian friendly, are often transit oriented and are surround by suburban land uses; *Rural Centers*, which have a minimum density of six people and three employees per developed acre and are surrounded by rural and agricultural land uses; and *Planned Centers*, which are planned town-center-type developments on greenfields in Growing Suburbs or Rural Areas or through redevelopment on grayfields and/or brownfields in developed communities. "Planning Center" is a notation in the TIP project description.

#### Indicators of Potential Disadvantage Codes

DVRPC uses the Indicators of Potential Disadvantage (IPD) methodology to identify direct and disparate effects of its plans, programs, and planning process on defined population groups in the Delaware Valley region under Title VI of the Civil Rights Act and the Executive Order on Environmental Justice. Population groups assessed at the census tract level as defined by the U.S. Census Bureau include Non-Hispanic Minority, Carless Households, Households in Poverty, Female Head of Household with Child, Elderly (75 years and over), Hispanic, and Limited English Proficiency, and Persons with Disabilities. Census tracts that have higher concentrations of a particular demographic group than the regional average for that population are considered to be at a potential disadvantage. The total number of demographic groups that are above the regional average concentration in each census tract is that tract's IPD. If a tract has higher than average population for three of the identified demographic groups, for example, then it has three IPDs. IPDs range from 0 to 8, with eight indicating a tract at the highest potential disadvantage. "IPD" is listed in the project listings to note the highest number of IPD tracts affected by a project on the TIP.

#### **Congestion Management Process Notation**

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

#### National Highway Freight Network

The Delaware Valley is a premier freight transportation gateway and is made up of a multifaceted, inter-connected freight network. Projects that have a direct, significant impact on the flow of goods along strategic freight corridors or that would improve National Highway System connector routes to intermodal facilities are noted as integral to the federally designated National Highway Freight Network (NHFN). This system designation is intended to improve the performance of highway portions of the U.S. freight transportation system through strategic use of Federal resources. The NHFN has four subsystems: (1) the Primary Highway Freight System (PHFS); (2) those portions of the Interstate Highway System not part of the PHFS; (3) Critical Rural Freight Corridors, which DVRPC does not have; and (4) Critical Urban Freight Corridors. Projects that are in the NHFN and Interstates are eligible for National Highway Freight Program (NHFP) funding.



#### Phase of Work Abbreviations

Note that an "L" preceding any phase means Local Agency Lead (MPO, county, or municipality); otherwise, state DOT is the lead agency.

CAP (Capital Acquisition): Used to denote NJ TRANSIT's acquisition of rolling stock.

**CD/LCD (Concept Development)**: Involves traffic studies needs analyses, corridor studies, and other work preparatory to project development, which includes assessing alternatives and determining a Preliminary Preferred Alternative (PPA) based on environmental impact, constructability, and cost effectiveness to address the problem. CD is the phase for projects in the Study and Development Program. Projects marked with an "L" preceding "CD" indicate a Local Agency Lead; otherwise, the state DOT is the lead agency.

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

**DES (Final Design)**: Consists of taking a recommended solution and scope of work defined in the Preliminary Engineering phase and developing a Final Design, including right-of-way and construction plans and construction contract documents to solicit bids from prospective contractors.

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

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

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

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

**FA/LFA (Feasibility Assessment)**: The purpose is to develop feasible project proposals that produce the best balance among transportation needs, environmental values, public concerns and costs. LFA indicates feasibility assessment by a local sponsor (MPO, county, or municipality). FA indicates feasibility assessment by NJDOT.

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

**PE/LPE (Preliminary Engineering)**: The process of advancing preliminary engineering and obtaining formal community and environmental approval of the Initially Preferred Alternative. Projects marked with an "L" preceding "PE" indicate a Local Agency Lead; otherwise, the state DOT is the lead agency.

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

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

**PUR (Purchase of Equipment)**: Involves the purchasing of equipment.

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

**SWI (Statewide Investment)**: Used to describe a series of coordinated smaller-scale projects in multiple locations, and in multiple phases work, that addresses a specific mobility issue.

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

#### Federal Highway Funding Sources Abbreviations

**BRIDGE (Federal Bridge Program)**: Provided funding for the rehabilitation or replacement of bridges defined as structurally deficient and/or functionally obsolete. This program was merged into the National Highway Performance Program (NHPP) in MAP-21.

**BRIDGE-OFF (Federal Bridge Program)**: Provided funding for the rehabilitation or replacement of bridges that are off the federal-aid system and are defined as structurally deficient and/or functionally obsolete. This program was merged into the Surface Transportation Program (STP) in MAP-21.

**CMAQ (Congestion Mitigation and Air Quality Improvement Program)**: Provides funding for projects that improve air quality and/or relieve congestion without adding new highway capacity, and in MAP-21, include demand-shifting projects or programs such as telecommuting or establishing electric vehicle charging stations or natural gas vehicle refueling stations.

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

**DEMO (Demonstration Funds)**: Special federal funding from congressional earmarks provided under ISTEA, TEA-21, and SAFETEA-LU. Project earmarks were discontinued in MAP-21. Funding also includes TIGER/CTDG.

**EB (Equity Bonus Program)**: Provided funding to states based on equity considerations. This program was discontinued in MAP-21.

**ER (Emergency Relief Program)**: Provides funding for emergency and permanent repairs on federal-aid highways and roads on federal lands that have suffered serious damage in the event of a natural or manmade disaster.

**FBP (Federal Ferry Boat Program or Sec 1121)**: Provides funding for the leasing or construction of ferry boat, terminal facilities, or maintenance facilities except temporary ferry operations.



**GARVEE (Grant Anticipation Revenue Vehicle) Bond Program**: Program that provides securities upfront to advance the high cost federal-aid transportation projects and accelerate construction timelines based on future federal-aid funding for debt repayment. The state is reimbursed for annual project debt service rather than construction outlays over a number of years. Once a project is selected for debt financing, the project is submitted to the FHWA for approval as an advance construction project.

**HPP10 (High-Priority Projects)**: Provided special federal funding from congressional earmarks under SAFETEA-LU.

**HPP20 (High-Priority Projects)**: Provided special federal funding from congressional earmarks under SAFETEA-LU.

**HSIP** (Highway Safety Improvement Program): Provides funding for projects or strategies included in the state's strategic highway safety plan that correct or improve a hazardous road location or feature or addresses a highway safety problem. Truck parking was eligible for the first time under MAP-21.

**I-MAINT or IM (Interstate Maintenance)**: Provided funding for projects that promote resurfacing, rehabilitation, and preventive maintenance on the Interstate system. This funding category was merged into NHPP in MAP-21.

**INFRA (Infrastructure for Rebuilding America)**: A new federal discretionary grant program that was established in July 2017 to replace the FASTLANE program that was newly authorized under the FAST Act.

NHFP-HWY, NHFP-RAIL (National Highway Freight Program): Funding for this program provides for the efficient movement of freight on the National Highway Freight Network (NHFN) and supports the freight investment plan in the State's freight plan. The NHFN consists of four components: Primary Highway Freight System (PHFS), Critical Rural Freight Corridors, Critical Urban Freight Corridors, and portions of the Interstate Highway System that are not part of the PHFS.

NHPP (National Highway Performance Program): Provides funding used to support the condition and performance of the NHS, and to construct new facilities on the NHS that support national performance goals. Three programs from the previous authorization, SAFETEA-LU, were merged into NHPP under MAP-21: BRIDGE and BRIDGE-OFF, I-MAINT, and the NHS. Eligible activities broadly vary from workforce development and training to construction of bridges, tunnels, highways, and bicycle and pedestrian facilities to ITS capital improvements, for example.

**NHS (National Highway System)**: Provided funding for projects that improve and support the interstate highway system and other key highway links. This funding category was merged into NHPP in MAP-21.

**PL/PL-FTA (Metropolitan Planning Funds by FHWA/FTA)**: Provides funding for the federally mandated transportation planning process conducted within each MPO.

**RCA (FHWA Redistribution of Certain Authorized Funds)**: Provided authorized funds that were appropriated for federal-aid highway programs in FY2013, not allocated to the state, and not available for obligation in FY2013 under MAP-21. RCA funds were available for obligation until September 30, 2016.

**REC TRAILS or RTP (Recreational Trail Program)**: Provided funding for the development and maintenance of recreational trails and trail-related facilities for non-motorized and motorized recreational trail uses, such as hiking, bicycling, off-road motorcycling, or cross-country skiing. This program was incorporated into TAP in MAP-21.

**RHC (Rail Highway Grade Crossing)**: Provides funding for safety improvement projects to reduce the number and severity of crashes at public highway-rail grade crossings under the Highway Safety Improvement Program (HSIP).

**SCENIC BYWAYS (Scenic Byways Program)**: Provided funding for byway-related projects. This was discontinued under MAP-21.

**SPR (FHWA Statewide Planning and Research)**: Provides funding for planning and research activities.

SRTS (Federal-Aid Safe Routes to School): Provided funding that could be used for programs and projects that encourage children and their parents to walk and bicycle safely to school. This was merged into MAP-21's Transportation Alternatives Program (TAP). For the FY2014 round, the State of New Jersey elected to competitively select only SRTS infrastructure projects and partnered with New Jersey Transportation Management Associations to administer a new statewide education and encouragement program using Safe Routes to School federal SAFETEA-LU funds.

**STP/STP-STU/STBG (Surface Transportation Block Grant Program)**: Federal flexible funding that may be used on any federal aid highway, bridge project, public road, transit capital project, and intracity and intercity bus terminals and facilities. It was previously known as STP.

**STP-TE (Surface Transportation Block Grant Program-Transportation Enhancement)**: Provides funding for pedestrian and bicycle infrastructure and safety programs, scenic and historic highway programs, landscaping and scenic beautification, historic preservation, environmental mitigation, rehabilitation of historic facilities related to transportation, renovated streetscapes, rail-trails and other transportation trails, transportation museums, and scenic and historic highway program visitor centers. STP-TE was incorporated into TAP in MAP-21.

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

**TAP (Surface Transportation Block Grant Programs Set-A-Side)**: This program is formally known as Transportation Alternatives. Fifty percent of the funds allocated to each state are



based on populations greater than 200,000. A competitive process for selection of projects must take place. The other 50 percent of funds are available to any area of the state and are held in a statewide reserve that requires a statewide competitive process for selection of projects. The fund code is designated as TAP.

#### State Highway Funding Sources Abbreviations

**STATE or TTF (State Transportation Trust Fund)**: Provides funding from the New Jersey Transportation Trust Fund (TTF).

**STATE-DVRPC**: Provides STATE funding from the TTF for use by DVRPC for locally sponsored projects. STATE funds are made available annually during FY2016 through FY2018 as a result of the MPO exchange of program funds with NJ TRANSIT and NJDOT. The two digits associated with this fund code indicate the year that STATE-DVRPC funds were appropriated by the state Legislature (e.g., 18-STATE-DVRPC denote STATE-DVRPC funds that were appropriated in FY2018). See Appendix E for detailed information.

#### Federal Transit Funding Sources Abbreviations

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

**FERRY (Federal Ferry Funds)**: Provided funding for the rehabilitation and/or development of ferry facilities throughout the state. It was discontinued in MAP-21.

**HPP10 (High Priority Projects)**: Provided special funding from congressional earmark under SAFETEA-LU.

**HPP20 (High Priority Projects)**: Provided special funding from congressional earmark under SAFETEA-LU.

Sections 5303, 5304, & 5305 (FTA Metropolitan & Statewide and Nonmetropolitan Transportation Planning): Provides funding and procedural requirements for the state and MPOs to develop transportation plans and programs; plan, design and evaluate a public transportation project; and conduct technical studies related to public transportation.

**SEC 5307 (FTA Urbanized Area Formula Grants Program)**: Provides funding to a census-designated urbanized area of 50,000 people or more for the planning, engineering, design and evaluation of transit projects and technical transportation-related studies; capital investments in bus and bus-related activities, such as replacement of buses, overhaul of buses, rebuilding of buses, crime prevention and security equipment and construction of maintenance and passenger facilities; and capital investments in new and existing fixed guideway systems including rolling stock, overhaul and rebuilding of vehicles, track, signals, communications, and computer hardware and software.

**SEC 5309 (FTA Fixed Guideway Capital Investment Grant)**: Provides discretionary funding for fixed guideway investments, such as new and expanded rail, and corridor-based bus rapid

transit investments that follow the features of rail. The four categories of eligible projects under this program are New Starts, Small Starts, Core Capacity, and Programs of Interrelated Projects.

**SEC 5310 (FTA Enhanced Mobility of Seniors and Individuals with Disabilities Program)**: Provides funding for transportation services planned, designed, and implemented to support special transportation needs of seniors and individuals with disabilities in all areas.

**SEC 5311 (FTA Non-Urbanized Rural Area Formula Program)**: Provides funding for rural public transportation programs and training and technical assistance to states and federally recognized Indian tribes with population fewer than 50,000 according to the census.

**Sec 5312 (FTA Public Transportation Innovation)**: Provides funding for public transportation research and development.

**Sec 5316 (FTA Job Access and Reverse Commute Program, JARC)**: Provided funding for selected municipal plans that either increase job accessibility for the most disadvantaged members of the population, or facilitate reverse commute movements. This program expired under MAP-21 and the FAST Act.

**Sec 5317 (FTA New Freedom Program)**: Provided funding for projects that improve public transportation services, and alternatives to public transportation, for people with disabilities beyond those required by the ADA Act of 1990. This program expired under MAP-21 and the FAST Act, and was replaced by FTA's Section 5310 FTA Enhanced Mobility of Seniors and Individuals with Disabilities Program.

**Sec 5318 (FTA Bus Test Facility)**: Provides funding for a bus testing facility to ensure new models offered for purchase will meet performance standards.

**Sec 5324 (FTA Public Transportation Emergency Relief Program)**: Provides funding for capital and operating expenses to protect, repair, replace, or reconstruct equipment and facilities in danger of failing or that have suffered serious damage in the event of an emergency, including natural disasters.

**SEC 5326 (FTA Transit Asset Management)**: Provides transit asset management and reporting requirements across FTA's grant programs to promote accountability.

**SEC 5337 (FTA State of Good Repair Program)**: Provides funding for capital asset maintenance, rehabilitation, and replacement, as well as projects that implement transit asset management plans.

**SEC 5339 (FTA Bus and Bus Facilities Program)**: Provides funding for capital projects that will replace, rehabilitate, and purchase buses, vans, and related equipment, and to construct bus-related facilities. This program also replaces the expired Alternative Analysis Program.

**SEC 5340 (FTA States/High Density States Programs)**: Provides additional apportionment of funding to the Urbanized Area Formula and Rural Area Formula programs in MAP-21, as in authorizations prior to MAP-21.



#### State Transit Funding Sources Abbreviations

**CASINO REVENUE**: Provides state transit funding from the annual allocation of the 7.5 percent of the Casino Tax Fund appropriated for transportation services for senior and disabled persons.

#### Other Funding and Phase Abbreviations

**Advance Construction (AC)**: Procedure to advance a federally funded project phase into the current FY and implement it with non-federal funds. The use of this procedure is subject to the availability of non-federal funds (e.g., state funds) in the year that the phase is to be implemented and the availability of federal funds in the year that the AC project is to be converted to a regular federal-aid project. AC projects are listed individually in the TIP in the year the project is to be implemented and the year conversion will take place.

**DRPA**: Delaware River Port Authority funds.

**LOCAL/MATCH**: Funding provided by counties, municipalities, or other non-federal sources to be used to match state or federal funds.

LTAP: Funding provided for the New Jersey Local Technical Assistance Program.

**Multi-Year Funding**: Procedure to program and authorize only a portion of a given project phase that is necessary to support the reimbursement of planned cash outlays for a given year. The remaining portions of the project phase are programmed in subsequent years with the condition that federal authorization to proceed is not a commitment or obligation to provide federal funds for the portion that is not fully funded. If sufficient federal funding is not available in any fiscal year, NJDOT will take full responsibility to fund the remaining portion of that phase of work in accordance with federal and state law, or the project may be terminated or placed on hold until funding is available.

**OPER (Operating)**: Funding from fare box revenues

**OTHER**: From a source other than federal or state transportation funds.

**TBD**: To be determined.

#### FIGURE 3: ROADMAP FOR TIP PROJECT LISTING

(BELOW IS AN EXAMPLE OF A PROJECT LISTING. IT IS NOT A REAL TIP PROJECT.)

