

Table of Contents

AN OVERVIEW OF THE FY 2022 – 2025 TRANSPORTATION IMPROVEMENT PROGRAM

INTRODUCTION TO THE NORTH JERSEY TRANSPORTATION PLANNING AUTHORITY'S TRANSPORTATION IMPROVEMENT PROGRAM

I. PREFACE	1
A. THE NJTPA'S ROLE	2
B. ORGANIZATION OF THE TIP	3
II. THE NORTH JERSEY TRANSPORTATION PLANNING AUTHORITY, INC., AND THE NORTHERN NEW JERSEY REGION	5
A. NJTPA'S HISTORY, RESPONSIBILITIES, AND ORGANIZATION	5
B. BRIEF PROFILE OF THE REGION	5
1. <i>Vital Statistics</i>	5
2. <i>Factors Contributing to Growth in Regional Travel Demand</i>	6
3. <i>Snapshot of Regional Travel</i>	6
III. TRANSPORTATION PROJECT DEVELOPMENT PROCESS	8
A. TRANSPORTATION PLANNING	8
1. <i>Systems Planning</i>	8
a. <i>Performance Measures</i>	9
b. <i>Asset Management</i>	9
c. <i>Congestion Management Process</i>	10
2. <i>Long Range Transportation Plan</i>	10
B. PROJECT PIPELINE	11
1. <i>Pipeline Procedures</i>	11
2. <i>Study and Development Program</i>	12
C. TIP DEVELOPMENT PROCESS	12
1. <i>Project Pool</i>	12
2. <i>Project Prioritization</i>	14
a. <i>Project Prioritization Step 1: Application of Criteria</i>	14
b. <i>Project Prioritization Step 2: Application of Additional Priority Factors</i>	15
3. <i>NJTPA Local Capital Project Delivery Program</i>	17
4. <i>Transportation Capital Program</i>	17
5. <i>Draft Transportation Improvement Program (TIP)</i>	18
6. <i>Air Quality (AQ) Conformity Determination</i>	18
a. <i>Federal Regulations</i>	19
b. <i>Non-Attainment and Maintenance Areas in the NJTPA Region</i>	19
c. <i>Conformity Process</i>	21
d. <i>Air Quality Conformity Evaluation</i>	21
e. <i>Air Quality Codes</i>	21
7. <i>Congestion Mitigation Air Quality</i>	23
8. <i>Public Comments on the Draft TIP and AQ Conformity Determination</i>	24
9. <i>Final TIP Adoption and Certification of TIP by USDOT and Final Conformity Determination Certification by USEPA and USDOT</i>	25
10. <i>Amendments and Modifications to the TIP</i>	25
11. <i>Electronic Statewide Transportation Improvement Program (e-STIP)</i>	26
IV. TIP ON THE INTERNET	27
V. TRANSPORTATION IMPROVEMENT PROGRAM FINANCIAL PLAN	28
A. FUNDING SOURCES	28
1. <i>Federal Funding</i>	28
2. <i>State Transportation Trust Fund (TTF)</i>	31

B. FISCAL CONSTRAINT OF THE FY 2022 – 2025 TIP FUNDING PLAN.....	31
C. EXPENDITURES AS COMPARED WITH BOARD OF TRUSTEES GOALS.....	31
D. PROJECTS REQUIRING FINANCIAL PLANS	33
<i>E. NJDOT Financial Plan for the STIP</i>	<i>34</i>
1. <i>Financial Forecasts</i>	<i>34</i>
2. <i>Advance Construction Projects.....</i>	<i>36</i>
3. <i>Multi-Year Funded Projects.....</i>	<i>37</i>
4. <i>Non-Federal Match.....</i>	<i>37</i>
F. NJ TRANSIT FINANCIAL PLAN	38
1. <i>Financial Capacity – Sufficiency of Funding.....</i>	<i>38</i>
2. <i>Operations/Maintenance of Reinvestment.....</i>	<i>39</i>
3. <i>Innovative Financing</i>	<i>39</i>
4. <i>Private Enterprise Participation.....</i>	<i>39</i>

TRANSPORTATION IMPROVEMENT PROGRAM FY 2022 – 2025

PROJECT SUMMARIES BY COUNTY
PROJECT DETAILS BY COUNTY
NJDOT REGIONWIDE PROJECTS AND PROGRAMS SUMMARY
NJDOT REGIONWIDE DETAILS
NJDOT STATEWIDE PROJECTS AND PROGRAMS SUMMARY
NJDOT STATEWIDE DETAILS
NJ TRANSIT PROJECTS AND PROGRAMS SUMMARY
NJ TRANSIT DETAILS
PANYNJ PROJECTS SUMMARY
PANYNJ DETAILS

GLOSSARY

ACRONYM GUIDE

APPENDICES

A	Status of FY 2020 TIP Projects over \$50 Million
B	Regionally Significant Non-federally Funded Projects
C	NJTPA Study and Development program (S&D)
D	Memorandum of Understanding (MOU) – Statewide Procedures for the TIP/STIP Revisions among the DVRPC, NJTPA, SJTPO, NJ TRANSIT Corp and NJDOT
E	Comments Received During the Public Comment Period and Agency Responses
F	FY 2022 – 2025 TIP/SIP Air Quality Conformity Determination
G	Project Prioritization Criteria
H	Annual Listing of Obligated Projects, FY 2020 TIP
I	NJDOT/NJ TRANSIT STIP for Projects and Programs beyond FY 2025
J	Projects with Congressionally Designated Funds
K	FHWA - Eastern Federal Lands Highway Division (EFLHD) -- TIP Projects
L	Transportation Alternatives Set-aside (FY 2020)
M	Performance Measures
N	Equity, Environmental Justice, and Title VI in the TIP Process

Introduction to the North Jersey Transportation Planning Authority's Transportation Improvement Program

I. Preface

The Transportation Improvement Program (TIP) is where the NJTPA puts federal funding to work on important state and local projects and programs in the 13-county North Jersey region. To receive federal funds, a transportation project or program must be included in the TIP, a federally required four-year schedule of funding for transportation improvements that have completed planning. TIP projects are ready for (or in the process of) preliminary engineering, design, right-of-way acquisition or construction. Federal, state and other sources fund the projects in the TIP, which is updated biennially and must be “fiscally constrained,” meaning the total cost of its projects and programs cannot exceed the amount of federal, state and local transportation funds available for the region over the TIP’s four years.

The TIP provides for \$11.620 billion in transportation investments in the region during federal Fiscal Years (FFY) 2022, 2023, 2024 and 2025.¹ Table 1 and Figures 4 and 5 in Section V summarize this funding.

For each project, the TIP provides the following information:

- Project type
- Location
- Costs
- Funding sources
- Project phases and schedules
- Air Quality Code

The TIP includes a wide range of infrastructure improvement activities, such as redesigning intersections, resurfacing roads, constructing new bicycle/pedestrian paths, adding trains and buses, rehabilitating bridges, and upgrading traffic signals.

While projects are specific improvements at specific locations, the TIP also contains funding for transportation programs, which typically involve activities such as ongoing maintenance and repair of highways, bridges, railroad tracks, trains and buses, as well as procurement of capital equipment. Programs can apply to a subregion,² the NJTPA region or the state.

The TIP is a schedule of funding for various phases of work, not of when the actual work takes place. It identifies phases of projects that will be authorized for federal funding in the fiscal year(s) in which they appear. Therefore, construction of a project may be listed in the TIP for only one year – the fiscal year in which the funding will be initially authorized – but the TIP does not show the actual time required for completion of the project, which might be longer than one year.

The Code of Federal Regulation (23 “CFR” 450.324) requires that all transportation projects financed with federal funds appear in the TIP. The NJTPA also includes all state-funded roadway

¹ The FY 2022-2025 TIP covers the federal fiscal year period of October 1, 2021 through September 30, 2025.

² A subregion of the NJTPA is defined as one of the 13 counties or two major cities in the region, which are represented on the NJTPA Board of Trustees.

and transit projects, although this is not required. Transportation projects not using federal or state funds that are regionally significant (those affecting regional rather than just local travel movements) are referenced in the TIP (see Appendix B) because they are included in the evaluation of the region's compliance with federal air quality standards (known as the air quality conformity determination). These projects include those of such sponsors as the New Jersey Turnpike Authority and the Port Authority of New York & New Jersey (PANYNJ).

A. The NJTPA's Role

The NJTPA is the Metropolitan Planning Organization (MPO) that conducts regional transportation planning and programs federal transportation funding for its 15 subregions (13 counties and two cities).

Federal regulations (23 CFR Part 450 Subpart C) require that an MPO be established in each urbanized area with a population of more than 50,000. MPO duties are:

- Act as a forum for interagency coordination among implementing agencies;
- Monitor the performance of regional transportation systems;
- Prepare and maintain capital improvement programs;
- Prepare and maintain the Long Range Transportation Plan (LRTP);
- Develop and update the TIP to implement the LRTP;
- Carry out the regional Air Quality Conformity Determination as necessary; and
- Include a list of prioritized projects in the TIP.

The NJTPA Board of Trustees includes 20 voting members. Trustees include elected representatives from each of the NJTPA's 15 subregions (Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren counties, as well as the cities of Newark and Jersey City); the New Jersey Department of Transportation (NJDOT); NJ TRANSIT; the PANYNJ; the Governor's Authorities Unit; and a Citizens' Representative appointed by the Governor.

In developing the TIP, the Board of Trustees, in cooperation with NJDOT and NJ TRANSIT, prioritizes projects and decides which should receive funding based on priorities stated in the Long Range Transportation Plan (LRTP). The NJTPA's LRTP adopted in November 2017 (Plan 2045: Connecting North Jersey) is being superseded by an updated plan (Plan 2050: Transportation. People. Opportunity) slated for adoption in September 2021.

The NJTPA is responsible for an evaluation of the impact of TIP projects on air quality. This air quality conformity determination must demonstrate that the mix of transportation projects in the TIP meets state commitments to improve air quality as required by federal law. Following the biennial adoption of the TIP and conformity determination by the NJTPA and the state's other two MPOs (the Delaware Valley Regional Planning Commission and the South Jersey Transportation Planning Organization), are joined together to form the Statewide Transportation Improvement Program (STIP), which is submitted to the U.S. Department of Transportation (USDOT) for approval.

B. Organization of the TIP

This document is organized into the following sections:

INTRODUCTION (Sections I-V)

Section I: Preface

Section II: NJTPA regional geography, economy, and demography (as well as other factors affecting regional transportation)

Section III: The transportation planning process. (How a transportation project is conceived, planned and implemented, as well as where the TIP fits into the process, and how it is modified or amended. Section III also discusses the Local Capital Project Delivery Program, in which projects can be initiated at the local and county levels and included in the TIP.)

Section IV: TIP online resources

Section V: Financial Plan (Summary of how available federal, state and other funds are allocated among various project categories). Section V includes information about where the funding originates, as well as projected revenues and financial capacities of the NJDOT and NJ TRANSIT.

THE PROGRAM

This section includes all federally required transportation investment financial data. The Programs section is divided into several areas as follows:

PROJECT SUMMARIES BY COUNTY: Comprehensive index that can be used to find a specific project of interest.

PROJECT DETAILS BY COUNTY: Detailed project descriptions, maps, financial data and schedules.

NJDOT REGIONWIDE PROJECTS AND PROGRAMS: Financial and schedule data about highway and bridge transportation programs that apply to the entire NJTPA region. This section is divided into a summary index and detail pages.

NJDOT STATEWIDE PROJECTS AND PROGRAMS: Financial and schedule data about highway and bridge transportation programs that apply to all of New Jersey. (Financial data shown represents the NJTPA share of these programs, generally about 75 percent.) This section is divided into a summary index and detail pages.

NJ TRANSIT PROJECTS AND PROGRAMS: Financial and schedule information about NJ TRANSIT projects and programs. This section is divided into a summary index and detail pages.

PORT AUTHORITY OF NEW YORK AND NEW JERSEY PROJECTS: Financial and schedule information about PANYNJ projects that are programmed with federal funds This section is divided into a summary index and detail pages.

GLOSSARY: Defines terms and acronyms used throughout the document.

ACRONYM GUIDE: Provides complete language for the many commonly used abbreviations in the TIP.

APPENDICES:

Appendix A	Status of FY 2020 TIP Projects over \$50 Million
Appendix B	Regionally Significant Non-federally Funded Projects
Appendix C	NJTPA Study and Development Program (S&D)
Appendix D	Memorandum of Understanding (MOU) – Statewide Procedures for the TIP/STIP Revisions among the DVRPC, NJTPA, SJTPO, NJ TRANSIT Corporation and NJDOT
Appendix E	Comments Received During the Public Comment Period and Agency Responses
Appendix F	FY 2022 – 2025 TIP/SIP Air Quality Conformity Determination
Appendix G	Project Prioritization Criteria
Appendix H	Annual Listing of Obligated Projects, FY 2020 TIP
Appendix I	NJDOT/NJ TRANSIT STIP for Projects and Programs Beyond FY 2025
Appendix J	Projects with Congressionally Designated Funds
Appendix K	FHWA - Eastern Federal Lands Highway Division (EFLHD) TIP Projects
Appendix L	Transportation Alternatives Set-aside (FY 2020)
Appendix M	Performance Measures
Appendix N	Equity, Environmental Justice, and Title VI in the TIP Process

II. The North Jersey Transportation Planning Authority, Inc., and the Northern New Jersey Region

A. NJTPA's History, Responsibilities, and Organization

The NJTPA is responsible for a “continuing, cooperative, and comprehensive” transportation planning process that results in plans and programs that consider all transportation modes and supports metropolitan community development and social goals³ for northern New Jersey. The NJTPA's predecessor agency was the North Jersey Transportation Coordinating Council (NJTCC). The NJTCC received gubernatorial designation as the MPO for northern New Jersey in May 1982.

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 gave MPOs expanded transportation planning and project selection responsibilities. In 1994, the NJTCC was incorporated as the North Jersey Transportation Planning Authority, Inc. Its mission was to meet the new responsibilities and challenges of this landmark federal legislation.

The current law governing MPO planning is the Fixing America's Surface Transportation (FAST Act) which was signed into law on December 4, 2015. It requires performance-based planning and consolidates funding programs while providing more flexibility between them and streamlines certain aspects of project development.

The NJTPA Board of Trustees generally meets every other month. Three standing committees – Planning & Economic Development, Project Prioritization, and Freight Initiatives – meet during months when there is no Board meeting. The committees recommend actions to the full Board of Trustees. Also meeting regularly is the Regional Transportation Advisory Committee (RTAC), composed of planners and engineers from the subregions and member agencies. This group is charged with reviewing regional issues. All Board and Committee meetings are open to the public.

B. Brief Profile of the Region

1. Vital Statistics

The 13-county NJTPA region includes:

- Population is close to 7 million, or 75 percent of the state's total population (NJTPA Plan 2050).
- 3.1 million wage and salary workers (NJTPA Plan 2050, Bureau of Labor Statistics & Bureau of Economic Analysis).
- 26,000 miles of roads on which trucks and cars travel 151 million vehicle miles each day (NJTPA Plan 2050).
- A transit system accommodating over 353 million passengers (NJ TRANSIT, PANYNJ, 2019) in the region. The state's transit system includes: approximately 250 public and private bus routes; a commuter rail network over 150 stations on twelve lines running over 500 miles; the two Newark Light Rail lines; the 34 directional route mile Hudson Bergen Light Rail Line from Bayonne to North Bergen; and the 29 directional route mile PATH network to New York City (NJTPA Plan 2050).

³ Federal Regulation 23 CFR 450.300.

- Newark Liberty International Airport, which was used by more than 46 million travelers at the end of 2019 and handled nearly 825,000 tons of air cargo in 2019 (NJTPA Plan 2050).
- A goods movement network that carries nearly 400 million tons of domestic freight to and from the region via truck, rail, port facilities and air annually (NJTPA Plan 2050).

2. Factors Contributing to Growth in Regional Travel Demand

- *Population and Employment Growth:* The NJTPA's population increased 50 percent from 3.8 million in 1940 to 5.8 million in 1990 and reached 6.7 million in 2019. Population is projected to exceed 7.7 million persons (+16 percent) by 2050. Regional wage and salary employment is expected to grow to 3.4 million in 2050 (+13 percent).
- *An Older Population:* About 16 percent of people in the region are 65 years and older and the region has 742,000 households (over 31 percent of total households) with people in that age group (2015-2019 American Community Survey).
- *More, Smaller Households:* The number of households has increased substantially in recent years; at the same time household size has declined due to later marriage, more couples choosing to defer or forgo having children, and more single-parent households. Smaller, more numerous households translate into greater trip-making activity. Of the 2.4 million households in the region, 26 percent consisted of just one person (2015-2019 American Community Survey).

3. Snapshot of Regional Travel

Analysis of the 2012-2016 Census Transportation Planning Products data yields a snapshot of the travel patterns that have emerged in recent decades:

- *Most residents work within their own counties.* Most residents work relatively close to home, with over half (52 percent) of the region's residents working in their home county.
- *Work trip flows to and from New York City are still important.* About 10 percent of all work trips by NJTPA region residents are to and from Manhattan. Approximately 63 percent of these commutes to Manhattan are from Bergen, Essex, and Hudson counties. Over 78 percent of regional commuters to Manhattan use transit.
- *Most workers commute alone by auto.* Over 70 percent of work trips are made in single-occupancy vehicles (SOVs). Essex and Hudson counties have lower percentages of SOV commutes because of more available travel alternatives, higher residential densities, and large areas of low-income households.
- *Walking or biking is preferred for shorter trips.* For shorter trips (less than 1 mile), residents walk, or bike more often (more than 80 percent share) based on the 2010-2011 Regional Household Travel Survey (RHTS). Walking is more prevalent for social/recreational and shopping trips than for work trips. In the region's densest urban neighborhoods, such as Hoboken, upwards of 40 percent of trips are walking trips.

The TIP is a key resource to address the region's mobility challenges. It allocates funding to projects and programs that the NJTPA Board of Trustees has identified as the highest regional priorities with input from agencies, interest groups, officials, and citizens in the region. As part of this process, the NJTPA considered the ongoing impacts of the 2020-21 pandemic and the uncertainties it presents for future travel patterns. The NJTPA also considered other emerging priorities including the need to address growing threats from climate change, new recognition of the need for improved equity in investments (particularly for low income and minority

communities) and the potential applications of new technologies. These and other considerations are discussed in Plan 2050.

III. Transportation Project Development Process

The Moving Ahead for Progress in the 21st Century Act (MAP-21) and the subsequent Fixing America's Surface Transportation (FAST Act) require state DOTs and MPOs to establish and use a performance-based approach to transportation planning and decision making. The FAST Act, as Public Law (P.L.) 114-94, became effective on December 4, 2015. It created a streamlined, performance-based, and multimodal program to address the many challenges facing the nation's transportation system.

The FAST Act at its core mandates states to adequately maintain facilities on the designated federal-aid system. In New Jersey, the federal-aid system includes transportation facilities under the jurisdiction of many agencies including the NJDOT, NJ TRANSIT, counties, certain municipalities and authorities.

To meet federal mandates, NJDOT inspects all bridges in New Jersey over 20 feet in length every two years. Standards for measuring the condition of bridges have been established nationally and the program carried out by NJDOT provides an assessment of the health of all the state's bridges greater than 20 feet long, regardless of owner.

County-owned roads make up a large portion of the federal-aid system (20 percent). Each county is responsible for managing its own network of roads, which includes facilities both on and off the federal-aid system, and each county may have its own way to measure performance. A similar situation applies to the toll facilities.

Bridges and pavements make up the largest investments on the federal-aid system, but there are other assets that need to be maintained, such as signage, lighting, guiderail, etc. Many of these assets are in a very good state of repair, and NJDOT does not expect them to degrade significantly over the next 10 years. NJDOT's approach is to address any items in disrepair as quickly as possible.

The FTA oversees NJ TRANSIT's system with respect to state of good repair. The current funding priority is for maintaining the system in a state of good repair and operating it in a safe and secure manner. This includes replacing vehicles (buses, railcars, and locomotives) as they age, as well as attending to 600 rail bridges, over 500 miles of track, signal systems, stations, and other infrastructure—most of it located in the NJTPA region.

The development of a transportation project consists of three stages:

- Transportation planning (identifying and evaluating needs)
- The Project Pipeline (studying project alternatives, conducting project planning)
- The TIP (serving as a formal, budgeted commitment to implementing the project)

A. Transportation Planning

1. Systems Planning

The metropolitan planning process led by the NJTPA addresses important transportation issues facing northern New Jersey. To support wise decisions and reach agreement, systematic planning analysis is conducted in the MPO forum, allowing the best available technical information to be reviewed by experts, stakeholders and the public. This analysis includes an examination of projected travel conditions, economic factors and demographics.

a. Performance Measures

Performance measures operationalize the goals valued by the region, providing a framework for wise decision-making. Their use is required under federal laws and regulations. Performance measures are also encouraged as an emphasis area under federal transportation programs to guide the application of federal funds for transportation improvements. Using data to inform decision-making is particularly important to be able to address critical regional issues and priorities with constrained funding. NJTPA has developed collaborative, standardized performance measures, targets and reporting that are aligned with the seven national goals (Safety; Infrastructure Condition; Congestion Reduction; System Reliability; Freight Movement and Economic Vitality; Environmental Sustainability; and Reduced Project Delivery Delays). Appendix M of the TIP includes sections for each performance area, discussing the performance measures, targets, and efforts underway (particularly those in the TIP) to help meet the targets.

b. Asset Management

NJDOT operates management systems to support maintaining, upgrading, and operating physical assets cost-effectively. NJDOT gathers data for the following specific management systems:

- Congestion
- Pavement
- Bridge
- Safety
- Drainage

For National Highway System pavement and bridge assets, these address infrastructure condition performance measures and targets noted above, which are incorporated in New Jersey's required Transportation Asset Management Plan (TAMP). The TAMP defines New Jersey's overall policy, state-of-good-repair objectives and plans for infrastructure preservation. Similarly, NJ TRANSIT and the PANYNJ maintain TAMPs, tracking required performance measures and targets for rolling stock, equipment, facilities, and other infrastructure.

Congestion and safety management systems are coordinated with complementary NJTPA planning efforts that focus on these elements of transportation performance (including the Congestion Management Process described below) and local safety initiatives. NJTPA subregional local asset management complements the statewide systems that address physical infrastructure condition.

Management systems yield projects or programs appropriate for inclusion in the LRTP and the various stages of subsequent project development described below. The data produced by management systems are evaluated in the NJTPA planning process and utilized in evaluating and ranking projects in the Study and Development Program (S&D). The S&D Program is a schedule of project planning, environmental reviews and other work that will be conducted during the coming year to advance proposed improvement projects toward possible capital funding. Projects generated by management systems are eligible to enter the Project Pipeline. The management systems also may generate programs that are not location specific.

c. Congestion Management Process

The NJTPA uses a Congestion Management Process (CMP) to investigate performance of the region's transportation system in terms of accessibility, reliability and congestion. The CMP addresses not only the roadway system, but also rail and bus transit, ridesharing, walking and bicycling, and freight transportation. The CMP points to mobility strategies that complement roadway investments to minimize the need for capacity expansions, realize greater system efficiency and protect the environment. The regional CMP is conducted in coordination with statewide efforts, including the NJDOT Congestion Management System noted above.

All highway expansion projects must arise from the Congestion Management Process (CMP). Federal regulations require a CMP as part of the MPO planning process in regions like North Jersey, which are not in compliance with national air quality standards. This ensures that alternative means of reducing single-occupancy vehicle (SOV) demand, such as transit, carpools or bicycle/pedestrian facilities, are evaluated as part of the planning process. Central to the NJTPA CMP, an Accessibility and Mobility Strategy Synthesis assesses needs throughout the region and advances effective transportation strategies for addressing those needs vis further planning, project development, and inclusion in the Long Range Transportation Plan.

2. Long Range Transportation Plan

- Under federal regulations, the NJTPA Board of Trustees must adopt a Long Range Transportation Plan (LRTP) every four years. The LRTP must have at least a 20-year horizon. The NJTPA Board is scheduled to adopt an update of the LRTP, entitled Plan 2050: Transportation, People, Opportunity in September 2021.
- Plan 2050 establishes a long-range vision and action agenda for improving transportation for people and goods within the region. The plan anticipates future travel conditions and needs, analyzing the most demographic and economic projections and assessing future changes such as ongoing impacts of increased remote work and the need for improved regional equity and responses to climate change. It includes a financial element addressing long term financing of transportation investments and a project index identifying project needs and concepts. Plan 2050 can be found at <http://njtpa.org/plan2050>.
- The LRTP is guided by seven policy goals, with the intent of translating these goals into specific actions, programs and projects:
 - *Environmental Quality*: Protect and improve natural ecosystems, the built environment and quality of life.
 - *User Responsiveness*: Provide affordable, accessible and dynamic transportation systems responsive to all current and future travelers.
 - *Economic Vitality*: Retain and increase economic activity and competitiveness.
 - *System Coordination*: Enhance system coordination, efficiency, overall safety and connectivity for people and goods across all modes of travel.
 - *Repair Maintenance*: Maintain a safe, secure and reliable transportation system in a state of good repair.

- *Coordinate Land Use and Transportation:* Create great places through select transportation investments that support the coordination of land use with transportation systems.
- *Safety:* Improve overall system safety, reducing serious injuries and fatalities for all travelers on all modes.

The needs identified in the LRTP provide the basis for development and implementation of transportation projects.

B. Project Pipeline

1. Pipeline Procedures

Figure 1 illustrates the phases of the Project Pipeline through which a Transportation project progresses. To summarize the process: NJDOT and NJTPA each administer early stages of the pipeline, with NJDOT focusing on needs on the state highway system and NJTPA focusing on needs on county and local roads. All needs regardless of their location are identified in accordance with the goals identified in the LRTP. If the project is selected for the Study and Development Program (S&D), it undergoes Concept Development during which reasonable alternatives and strategies are examined.

Projects under the jurisdiction of NJDOT, after first completing concept development, are then reviewed by NJDOT's Capital Program Committee (CPC). The CPC approval enables authorization of federal funds. Those that are deemed ready to move into preliminary engineering, final design, right-of-way acquisition and construction become part of the NJTPA TIP development process described below. Funding must be available and committed before the project can be listed in the TIP.

County and local projects under the jurisdiction of the NJTPA are also eligible for inclusion in the S&D program, allowing concept development work on them to proceed. Once projects complete concept development, they undergo ranking through the NJTPA project prioritization process to judge their eligibility for funding through the TIP.

Figure 1: Project Pipeline

Long Range Transportation Plan		Study and Development Program	Transportation Improvement Program				Under Construction/ Complete
		Planning	(TIP)				
LRTP Needs Statement		Concept Development	Preliminary Engineering	Final Design	Right-of-Way	Construction	

It should be noted that Operations and Maintenance Projects are not included in the S&D Program or TIP as an individual project or program listing. These types of projects are incorporated directly into the Operations and Maintenance budget line items in the TIP for implementation. An example of this type of project is a minor roadway resurfacing.

A more detailed description of elements of the NJTPA project pipeline is provided below.

2. Study and Development Program

Transportation problems identified in the LRTP are selected for advancement as potential projects into the Study and Development Program (S&D). The S&D Program contains the schedule of Concept Development work that will be conducted during the current fiscal year. The S&D Program is included in the annual Unified Planning Work Program (UPWP)⁴, which is subject to action by the NJTPA Board of Trustees. Under federal law (23 CFR 450.308), the UPWP must include “a discussion of the planning priorities facing the MPO, regardless of funding source. The UPWP shall identify work proposed for the next one- or two-year period by major activity and task.” In this way, the Board remains informed of the progress of work in the region, whether the work is conducted by the NJTPA or other agencies (shown in Appendix C).

The implementing agencies (NJDOT and NJ TRANSIT) are normally responsible for carrying out this work. Concept Development is the phase in which reasonable alternatives and strategies that address the purpose and need statement are studied and a preliminary preferred alternative (PPA) is selected.

As discussed in the next section, NJTPA Central Staff uses Project Prioritization Criteria to score those projects that emerge from Concept Development with specific geographic delineations and scopes.

C. TIP Development Process

The following sections describe the phases in the development of the TIP (see Figure 2).

1. Project Pool

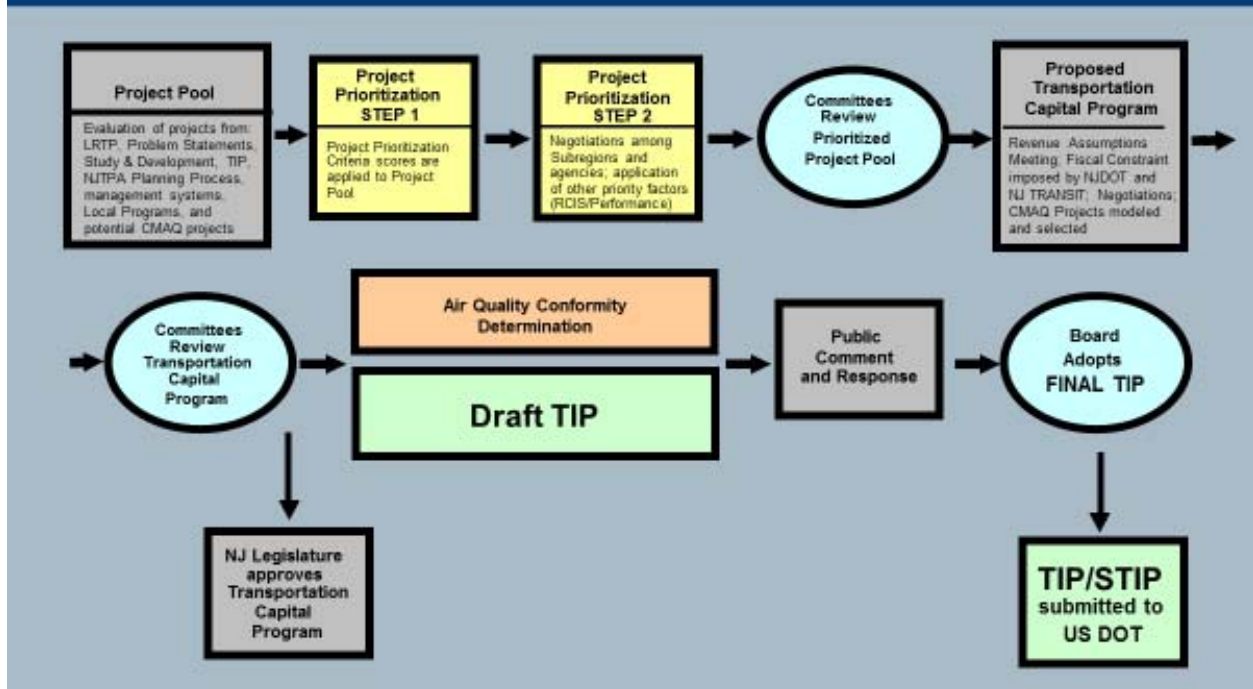
The Project Pool is comprised of all projects that are eligible for inclusion in the TIP, including:

- Projects that are already in the TIP;
- Projects that advance from the S&D Program;
- Projects that advanced from the S&D Program in previous years, but were not scheduled in the TIP because of funding constraints; and
- Projects that advanced from the NJTPA Local Capital Project Delivery Process.

Projects are selected from the Project Pool for inclusion in the TIP based on a prioritization process, discussed below, as well as the level of funding available to implement them. There are some projects that are mandated to be included and therefore are not evaluated as part of the Project Pool. They are advanced automatically into the TIP providing there is sufficient information including project sponsor, project limits and an adequate description. Mandated projects include those that are designated by Congress in the transportation laws and projects that fulfill other laws such as those implementing the Americans with Disabilities Act.

⁴The UPWP contains all federally funded planning efforts conducted in the northern New Jersey region in any given fiscal year. Efforts related to highway or transit mobility, bicycle and pedestrian connectivity, freight movement needs, or infrastructure maintenance and other needs may be included.

Figure 2
TIP Development Process



2. Project Prioritization

There are rarely enough resources to move the entire Project Pool (typically over 300 projects) forward for inclusion in the TIP in any given year. The fiscal constraint mandate of federal law (23 CFR Part 450.324) requires funding choices be made among proposed projects.

The NJTPA's role is to provide a prioritized (ranked) list of projects to the implementing agencies. Like many MPOs, the NJTPA has established prioritization procedures for this purpose.

The NJTPA Central Staff administers the project prioritization process under the direction of the Project Prioritization Committee (PPC) of the Board of Trustees with participation by the implementing agencies and the Regional Transportation Advisory Committee (RTAC). The project scores resulting from this process are considered during development of the proposed Transportation Capital Program (TCP). The TCP is submitted to the state legislature for the appropriation of state transportation funding. In alternating years, the TCP becomes the basis for development of the TIP. In determining which projects to include in the TIP, the project scores are considered along with other factors, such as feasibility of project delivery, funding availability and project timing.

The NJTPA's Project Prioritization process consists of two steps described in the sections below.

a. Project Prioritization Step 1: Application of Criteria

The NJTPA Project Prioritization Criteria were originally developed in 1993 based on efforts of the NJTPA's Transportation Advisory Committee (this Committee has been reformulated as the RTAC) and the NJTPA Central Staff. County engineers, planners and representatives from the environmental community, business groups and organized labor assisted in this process.

The criteria are grouped in accordance with the seven goals of the current LRTP (Plan 2045) (see Section III.A.2). These goals are consistent with the planning factors in MAP-21 and the FAST Act.

Periodically, the PPC of the Board of Trustees reviews the Project Prioritization Criteria and refines or revises them as appropriate. The criteria may need to be revised if the PPC finds that a particular issue has changed or is not being adequately addressed. Revisions of the criteria are carried out in accordance with federal and state planning regulations that directly impact or have secondary effects on transportation and land use planning in the region. The Board last adopted revised highway and bridge project prioritization criteria in May 2018 to better reflect the needs and priorities of the NJTPA Board, as well as to better coordinate with the policies and priorities of partner agencies (including NJDOT and NJ TRANSIT). This update takes advantage of new data sources and decision support software and tools, and meets new and emerging federal mandates, among other objectives.

The NJTPA uses the criteria to systematically and objectively evaluate proposed future investments, scoring them according to how well they satisfy the goals of the NJTPA's federally required LRTP. For example, under the Environment Goal, the criterion is: "Will [the project] improve air quality?" The performance measure used to assign points in this

case examines whether the project will eliminate vehicle trips, reduce vehicle miles traveled, improve traffic flow or are air quality neutral.

To identify and address the needs of traditionally underserved (environmental justice) communities as called for in the LRTP, the NJTPA project prioritization criteria includes additional points for improvement projects in urban areas, designated centers and distressed municipalities, and those providing benefits to underserved communities. (See Appendix N)

Many other variables are considered in the criteria, such as traffic congestion, types of improvement, and land use plans. The criteria scoring uses databases, including the management systems described above, that provide ratings for pavement, bridge sufficiency, truck traffic volumes, brownfield locations, and project locations relative to state planning areas as defined in the State Development Redevelopment Plan (SDRP). The maximum score a project can receive is 1000 points.

During development of the S&D Program, the criteria are applied to projects whose locations are specifically identified and for which a scope of work is developed. When this information becomes available, a score is developed for each project as described above. The score then stays with the project until it reaches the Project Pool.

Scores are changed only if there is a significant change in project scope, project-related data, or in the Project Prioritization Criteria. If any projects have not been scored when they reach the Project Pool, scoring is conducted during Step 1 of the Project Prioritization process.

Project data and scores are provided to the subregions for their review. A “Challenge Round” is conducted during which the subregions evaluate this information. They may request a recalculation of the scoring based upon updated information they possess.

b. Project Prioritization Step 2: Application of Additional Priority Factors

The prioritized Project Pool is negotiated among the NJTPA, NJDOT and NJ TRANSIT. The objectives of this part of the process are to consider the feasibility of project delivery (i.e., implementation schedule) and for all parties to understand each other’s most pressing transportation issues.

The relative ranking of projects in the Project Pool is one consideration in deciding whether a particular project is included in the Transportation Capital Program and then in the TIP, as is the year it is targeted for implementation. The other considerations include:

**Feasibility of
Project Delivery**

Even though a project ranks highly, obstacles to its implementation can arise, including unforeseen environmental issues, delays in obtaining permits, problems in acquiring needed right-of-way or community opposition. Because the Project Pool is developed months in advance of the Transportation Capital Program, these kinds of changes can occur and may affect a project’s delivery schedule.

Scheduling	When and how construction is to be undertaken must be considered. For instance, it may not be desirable to initiate complex projects on parallel routes at the same time due to resulting congestion. On the other hand, undertaking nearby or related projects simultaneously can sometimes save costs or minimize traffic impacts.
Funding Availability	Funding availability plays an important role in whether Project Pool projects can move ahead in the TIP. Some projects, like safety projects, qualify for special federal funding programs that can allow them to be implemented more quickly than projects covered by general funding programs. On the other hand, funding for larger projects must be balanced carefully with available funding sources.

A project's phase of work is an important component of Step 2 of Project Prioritization and can have significant impact on project feasibility and scheduling. A project proposed for inclusion in the TIP will usually be scheduled for one or more of the following phases of work (see Figure 1):

- *Preliminary Engineering (PE)*: In this phase, projects will be further developed to a level of detail necessary to secure the approval of the environmental document.
- *Final Design (DES)*: In this phase, detailed working drawings and project specifications are drawn up, and a contractor selected. There can also be a *Utilities (UTI)* phase during or following final design. This involves moving utilities that are located beneath or above the project and can be time-consuming in dense, older urban areas.
- *Right-of-Way (ROW)*: This phase includes the property acquisition necessary for completion of the project. Right-of-way acquisition can be contentious, since it sometimes involves eminent domain property takings, and can involve costly and time-consuming negotiations or even lawsuits. Therefore, on a large project, two years are normally allocated for the right-of-way phase, although it can take longer. Right-of-way problems are the most common cause of project delays.
- *Construction (CON)*: This phase involves the construction and completion of the project.

In the case of smaller, less complex projects, the three phases shown above may be combined into one labeled ERC, which includes Engineering (design), Right-of-way, and Construction.

A further important factor for project scheduling and budgeting is Congressional designation of funding. These are funds that are appropriated by the US Congress and specified in the law. Those projects that are partially funded with congressionally designated funds and are not yet fully programmed and will be in Appendix J. Once full funding is "available and committed" the project will be displayed in the main body of the TIP.

3. NJTPA Local Capital Project Delivery Program

While most funding is allocated to projects based on the prioritization process described above, a portion of annual funding is set aside for locally initiated projects that advance goals and priorities of the LRTP. For this purpose, the NJTPA has developed the Local Capital Project Delivery Program (LCPD). Project sponsors identify problems and needs within their respective subregions and develop projects through the Local Concept Development phase of this program. This work, once completed, enables a project to be considered for inclusion in the NJTPA's TIP.

In response to the FAST Act's goal to accelerate project delivery and promote innovation, the NJTPA developed a Local Transportation Trust Fund (TTF) Program from FY 2014 – FY 2018 to expedite the project delivery process at the local level. Projects funded through the program are shown individually in the TIP with the funding source noted as STATE-NJTPA.

A potential project must first clear a project intake process prior to being accepted into the LCPD program. The NJTPA screens problem statements submitted by potential project sponsors. These problem statements describe transportation issues and deficiencies that may warrant further investigation through the LCPD. After a project completes the project intake process and is accepted for inclusion in the LCPD, the sponsor carries out the following four phases of work sequentially:

- *Concept Development:* In this phase, sponsors will identify and compare reasonable alternatives and strategies that address the purpose and need statement and select a preliminary preferred alternative (PPA). As needed, work in this stage helps to address regional Congestion Management Process requirements.
- *Preliminary Engineering:* During this phase, projects will be further developed and refined to a level of detail necessary to secure the approval of the environmental document, also known as the National Environmental Policy Act (NEPA) document.
- *Final Design/Right-of-Way Acquisition:* This phase will produce construction contract documents (i.e., Final Plans, Specifications, and Cost Estimates – PS&E) and if necessary, acquire right-of-way.
- *Construction Phase:* In this phase, the project will be advertised, awarded, construction management systems and processes will be established, and construction will commence. The project is considered completed when the final phase is closed out with NJDOT and FHWA.

Projects funded through the Local Concept Development program will move through each phase with the approval of the Project Prioritization Committee. During FY 2022, the Local projects are programmed with \$103.97 million of STBGP-NY/NWK funding, \$61.14 million of other federal funding, and \$153.822 million of Prior Year STATE-NJTPA funding for 20 projects and four programs.

4. Transportation Capital Program

As discussed previously, in the final step of the prioritization process the NJTPA collaborates with the implementing agencies to impose fiscal constraint on the prioritized Project Pool. To do this, the agencies agree on the revenue assumptions and sources of funding that will be available during the next four fiscal years. Scheduling and matters of project implementation are also considered at this point (See Section III.C.2.b). The result of this process is the draft

Transportation Capital Program (TCP), a document developed to secure needed state transportation funding.

The draft TCP is reviewed by the subregions. The NJTPA conducts negotiations among the subregions, the NJDOT and NJ TRANSIT to obtain input concerning subregional priorities, resolve differences, and arrive at a consensus concerning the project mix.

The Legislature is responsible for reviewing the state-funding portion of the TCP. The Legislature reviews the projects contained in the draft TCP and then includes them in the overall New Jersey Capital Program. This certifies to the federal government that the State's share of funding for transportation projects will be available during the upcoming fiscal year.⁵

5. Draft Transportation Improvement Program (TIP)

Every other year, the Transportation Capital Program serves as the basis for developing the federally required TIP. When the Transportation Capital Program has been submitted to the State Legislature, preparation of the Draft TIP begins. After completing the air quality conformity analysis described in the next section, it is subject to a 30-day public comment period (see Section III.C.8), after which public comments are considered and, as appropriate, addressed in the TIP to produce a Final TIP for review and action by the NJTPA Board of Trustees. During this period, changes in the TCP made by the state Legislature are incorporated into the TIP.

6. Air Quality (AQ) Conformity Determination

The process known as "Air Quality Conformity" has been established to ensure that transportation investments will contribute to improving air quality in areas that either currently do not meet national standards or have not met them in the recent past. The NJTPA region includes areas that do not meet or have not met the national standards for four pollutants: nitrogen oxides (NO_x), volatile organic compounds (VOCs), carbon monoxide (CO), and fine particulate matter (PM_{2.5}).

The NJTPA prepares an air quality conformity determination in tandem with the Draft TIP (every two years) and LRTP (every four years) to ensure that all transportation projects, plans, and programs are, in aggregate, consistent with the purpose of reaching the air quality standards. The conformity determination includes regionally significant projects from all sources, including those that do not appear in the Draft TIP (e.g., projects being advanced by the NJ Turnpike Authority). Regionally significant projects generally involve capacity expansion (highway projects), or reduction of automobile traffic (mass transit projects). (See Appendix B)

Although the NJTPA has always successfully met the requirements of the air quality conformity analysis, the consequences of failing an air quality conformity determination (referred to as a "conformity lapse") can be severe. A new TIP cannot be approved; only projects that appear in a previously approved (conforming) TIP can be advanced. Continuation of a conformity lapse beyond one fiscal year can result in decertification of the MPO by the USDOT, with resultant significant cuts in budget and activities.

⁵ Federal funding is reimbursed after costs are incurred.

The following sections discuss air quality regulations and the conformity determination process.

a. Federal Regulations

The Clean Air Act of 1963, the Air Quality Act of 1967 and the Clean Air Act Amendments (CAAA) of 1990 collectively established a set of National Ambient Air Quality Standards (NAAQS), setting national goals for clean and healthy air. US Environmental Protection Agency (EPA) designated areas across the United States that did not meet the standards, as “non-attainment” areas.

As stated in the CAAA of 1990, areas that are in non-attainment or have been in the past, are required to analyze their transportation projects, plans, and programs to ensure that the emissions from the transportation network do not degrade air quality further. To do this, these areas are required to develop an air quality conformity determination.

b. Non-Attainment and Maintenance Areas in the NJTPA Region

Portions of the NJTPA region are “maintenance areas” for carbon monoxide (CO) which means that while current air quality meets the federal standard for CO, there have been occurrences of unhealthy levels of CO in the recent past. Before the region can permanently be re-designated as “attainment,” it must show that it can maintain CO standards for a period of at least 20 years. The NJTPA concluded its first 10 year “maintenance period” in 2014. Currently the NJTPA is in its second 10 year “maintenance period” which ends in 2024. In this second “maintenance period” the NJTPA does not have to run emissions for CO.

Nine of the NJTPA’s 13 counties are in “maintenance” for PM_{2.5}, both daily and annual standards. Again, this means that while current air quality meets the federal standards for PM_{2.5}, there have been occurrences of unhealthy levels of PM_{2.5} in the recent past. Before the region can be permanently re-designated as “attainment” it must show that it can maintain PM_{2.5} daily and annual standards for at least 20 years. The NJTPA must continue to demonstrate air quality conformity for PM_{2.5} for an initial “maintenance period” of 10 years to 2023. A second 10-year maintenance period for PM_{2.5} will be considered after 2023 in a new State Implementation Plan (SIP).

All 13 counties in the NJTPA region are classified as moderate non-attainment areas for ozone. Thus, conformity determinations are required for ozone. Figure 3 shows non-attainment and maintenance areas in the NJTPA region.

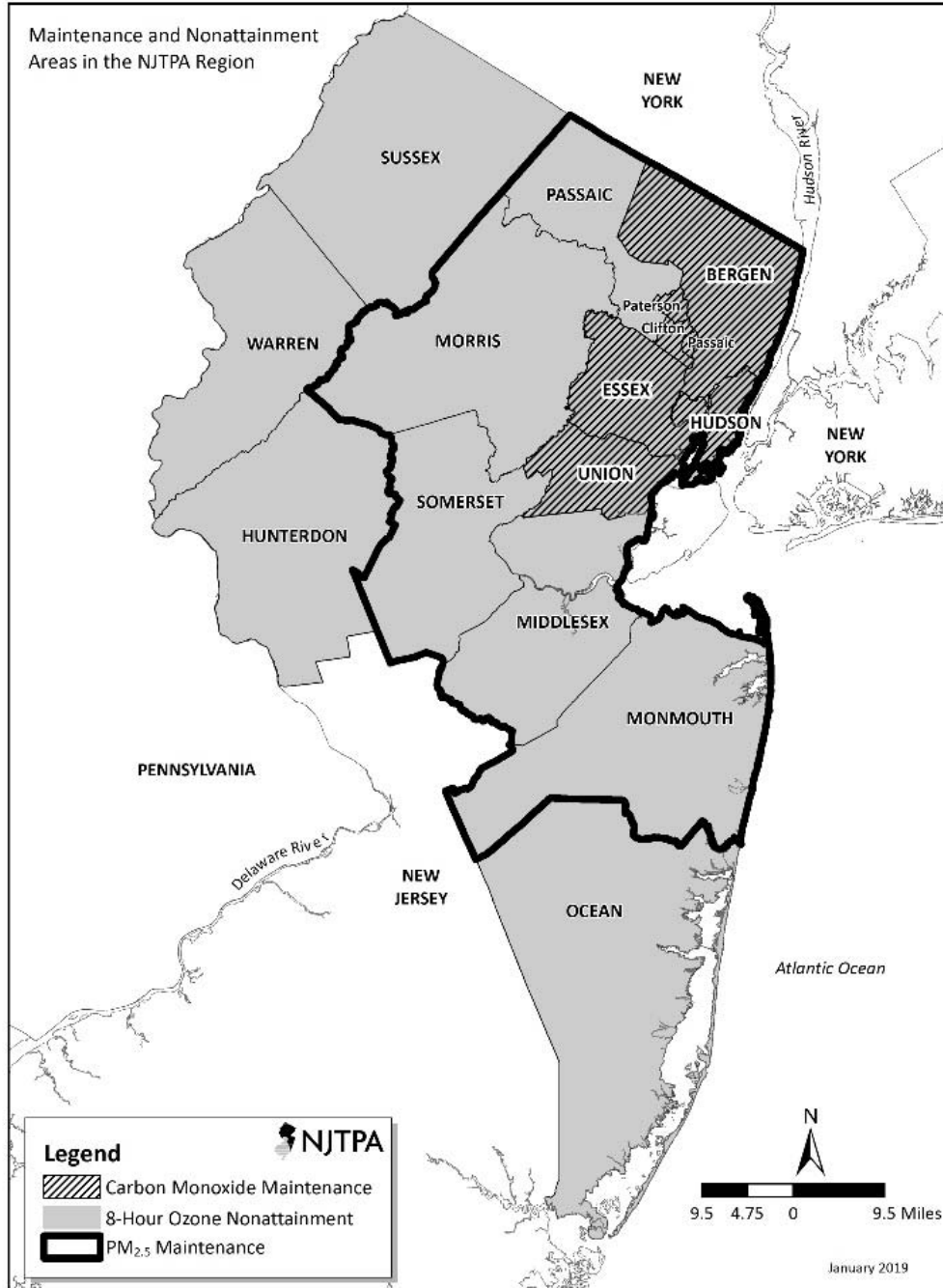


Figure 3
NJTPA Maintenance and Nonattainment Areas for CO, 8 Hour Ozone and PM_{2.5}

c. Conformity Process

The process for determining conformity includes federal, state, and local coordination and input. The CAAA of 1990 established a strict timetable for non-attainment areas such as northern New Jersey to meet the national air quality standards. To achieve these standards, New Jersey is required to prepare a State Implementation Plan (SIP), a legally binding document that commits the state, counties, municipalities, and transportation agencies to progressively reduce emissions by specified dates.⁶ Furthermore, the CAAA of 1990 requires that TIPs and transportation plans be consistent with the SIP and serve to reduce emission levels and improve air quality.

To ensure that the region's transportation projects are consistent with the SIP, a regional emissions analysis is conducted. To do this, the NJTPA uses a regional transportation model to estimate vehicle miles traveled (VMT). The model factors in characteristics of the region such as demographics, tolls, fares, and current transportation policies. Transportation projects included in the TIP and LRTP are coded into a network reflecting a particular scenario year (based on the year that the projects will be open to traffic). The VMT estimated by running the model is translated into emissions projections using an EPA emissions model, currently the MOVES model. To conform to the CAAA, these emissions projections must be consistent with or less than those contained in the SIP.

d. Air Quality Conformity Evaluation

Improved air quality is an important goal of the transportation planning process, and the TIP is structured to help achieve that goal.

Projects from the NJDOT, New Jersey Turnpike Authority, Palisades Interstate Parkway Commission, New Jersey Sports and Exposition Authority, Delaware River Bridge Joint Toll Commission, Port Authority of New York & New Jersey and NJ TRANSIT were analyzed in the conformity determination. As stated in this conformity determination (see Appendix F), "Taken as a whole, they demonstrate that both the current Long Range Transportation Plan and the Fiscal Year 2022 – 2025 TIP for northern New Jersey meet the tests of conformity as set out in the Final Rule."

e. Air Quality Codes

An alphanumeric air quality (AQ) coding scheme has been developed for all projects and programs. The AQ code is applied by NJTPA as part of the conformity determination and exempt eligibility identification process.

For non-exempt projects (projects for which no exemption code applies, as discussed below), the first conformity analysis year following the project's opening or projected completion is listed (analysis years in the current conformity determination are 2022, 2023, 2030, 2040, and 2050). The letter following the year indicates whether the project was modeled (M) or not modeled (NM) in the NJTPA's regional travel demand model or if the project was analyzed using an off-model technique (O). Off-model techniques are

⁶ The SIP applies to the TIPs of the three MPOs in this state. In addition to the subregions covered by the NJTPA, the Delaware Valley Regional Planning Council (DVRPC) includes the New Jersey counties of Burlington, Camden, Gloucester and Mercer. The South Jersey Transportation Planning Organization (SJTPO) includes the counties of Atlantic, Cape May, Cumberland and Salem.

commonly used for projects that cannot be adequately represented in the travel demand model.

The Clean Air Act regulations also provide for projects that may be exempt from the conformity analysis. An exempt project is defined as a project that primarily enhances safety or aesthetics, maintains mass transit, continues current levels of ridesharing, builds bicycle and pedestrian facilities, or is currently in the study phase. There are several categories of exempt projects, and NJTPA indicates the specific exemption code on each TIP page (note that multiple exemption codes may apply to a particular project/program). Exempt projects in design phases are classified under the planning and technical studies category. A complete list of exempt categories is shown below.

Even though projects may be exempt, the NJTPA includes those that represent changes in the travel demand model and those for which VMT or emissions savings have been estimated, where possible. These projects are noted by including the analysis year and modeling status within parentheses following the exemption code(s).

Projects for which conformity does not apply (e.g., freight rail projects which are non-road) have been labeled “NA”.

Air Quality Codes

Category	Category Source
Safety	
S1	Railroad/highway crossing
S2	Hazard elimination program
S3	Safer non-Federal-aid system roads
S4	Shoulder improvements
S5	Increasing sight distance
S6	Safety improvement program
S7	Traffic control devices and operating assistance other than signalization projects
S8	Railroad/highway crossing warning devices
S9	Guardrails, median barriers, crash cushions
S10	Pavement resurfacing and/or rehabilitation
S11	Pavement marking demonstration
S12	Emergency relief (23 U.S.C. 125)
S13	Fencing
S14	Skid treatments
S15	Safety roadside rest areas
S16	Adding medians
S17	Truck climbing lanes outside the urbanized area
S18	Lighting improvements
S19	Widening narrow pavements or reconstructing bridges (no additional travel lanes)
S20	Emergency truck pullovers
Mass Transit	
MT1	Operating assistance to transit agencies
MT2	Purchase of support vehicles

MT3	Rehabilitation of transit vehicles
MT4	Purchase of office, shop, and operating equipment for existing facilities
MT5	Purchase of operating equipment for vehicles (e.g., radios, fare-boxes, lifts, etc.)
MT6	Construction or renovation of power, signal, and communications systems
MT7	Construction of small passenger shelters and information kiosks
MT8	Reconstruction or renovation of transit buildings and structures (e.g., rail or bus buildings, storage and maintenance facilities, stations, terminals, and ancillary structures)
MT9	Rehabilitation or reconstruction of track structures, track, and track bed in existing rights-of-way
MT10	Purchase of new buses and rail cars to replace existing vehicles or for minor expansions of the fleet
MT11	Construction of new bus or rail storage/maintenance facilities categorically excluded in 23 CFR 771
Air Quality	
AQ1	Continuation of ride-sharing and van-pooling promotion activities at current levels
AQ2	Bicycle and pedestrian facilities
Other	
O1	Engineering to assess social, economic, and environmental effects of the proposed action or alternatives to that action
O2	Noise attenuation
O3	Advance land acquisitions (23 CFR 712 or 23 CFR 771)
O4	Acquisition of scenic easements
O5	Plantings, landscaping, etc.
O6	Sign removal
O7	Directional and informational signs
O8	Transportation enhancement activities (except rehabilitation and operation of historic transportation buildings, structures, or facilities)
O9	Repair of damage caused by natural disasters, civil unrest, or terrorist acts, except projects involving substantial functional, location or capacity changes
Planning and Technical Studies	
O10a	Planning and technical studies
O10b	Grants for training and research programs
O10c	Planning activities conducted pursuant to titles 23 and 49 U.S.C
O10d	Federal-aid systems revisions
Exempt from Regional Emission Analysis	
NR1	Intersection channelization projects
NR2	Intersection signalization projects at individual intersections
NR3	Interchange reconfiguration projects
NR4	Changes in vertical and horizontal alignment
NR5	Truck size and weight inspection stations
NR6	Bus terminals and transfer points

7. Congestion Mitigation Air Quality

The purpose of the federal Congestion Mitigation Air Quality (CMAQ) program is to fund transportation projects or programs that will reduce criterion-pollutant emissions and/or traffic congestion and contribute to attainment or maintenance of the National Ambient Air Quality Standards (NAAQS).

Projects potentially eligible for CMAQ funds are identified during the development of the S&D Program, the Transportation Capital Program, the NJTPA's Transportation Clean Air

Measures (TCAM) Program and the NJTPA's Local Mobility Initiatives (LMI)⁷ The implementing agencies, subregions, regional partners such as NJDEP and the PANYNJ, the NJTPA subregions and Transportation Management Agencies (TMAs)⁸ are invited by solicitation to propose projects potentially eligible for CMAQ funding. CMAQ eligibility is then determined by referring to criteria contained in the CMAQ Program Guidance. Eligible CMAQ projects are included in the Transportation Capital Program (TCP), and then proceed through the project development process as outlined earlier in this section of the Introduction.

After the TCP has been prepared, when projects are ready for inclusion in the TIP, those potentially eligible for CMAQ funding are evaluated in more detail using the CMAQ Program Guidance, and specific projects are identified for CMAQ funding in the TIP. Projects identified for CMAQ funding in the first year of the TIP are then subject to:

- An assessment of the air quality improvement that would result from their implementation; and
- Other justifications for CMAQ funding in accordance with the *Guidance*.

The FY 2022–2025 TIP includes \$93.362 million of CMAQ funding in FY 2022, and \$372.200 million in FYs 2022–2025. In FY 2022, \$75 million of the CMAQ funding is allocated for NJ TRANSIT projects, and the remaining \$18.362 million is for NJDOT projects and programs. In FY 2022, all the NJ TRANSIT CMAQ funding will be programmed to Rail Rolling Stock Procurement.

8. Public Comments on the Draft TIP and AQ Conformity Determination

The NJTPA follows its Public Engagement Plan to ensure that citizens, affected agencies, employees, private providers of transportation and other interested parties have an opportunity to comment on the Draft TIP and Air Quality Conformity Determination before they are finalized. Specifically, the NJTPA took the following steps this year:

- Placed a public notice in area newspapers;
- Sent copies of the proposed TIP and conformity analysis to all regional libraries designated by the NJTPA Public Participation Plan;
- Encouraged subregional transportation committees to discuss the local impacts of the TIP;
- Scheduled and held an advertised public meeting (see below);
- Conducted a public workshop on Air Quality;
- Held an open public comment period for 30 days; and
- Made the Draft TIP and Conformity Determination available on the NJTPA Webpage with announcements on social media.⁹

The 30-day public comment period for the FY 2022 – 2025 TIP/SIP Conformity was held from July 6, 2021 through August 4, 2021. During this period the public was invited to submit comments on the Draft TIP to NJTPA via standard mail, e-mail or fax. A public workshop on air quality and the open public meeting was held for review and comment on the FY 2022 –

⁷ Detailed CMAQ project development procedures are available on the NJTPA website.

⁸ A Transportation Management Association (TMA) is responsible for providing modes of transportation to work other than single-occupant vehicles (SOV). There are six TMAs in the NJTPA region. They sponsor projects such as van pools or ride-sharing. TMAs are funded through TIP line-items, and have been funded and overseen by NJTPA to operate shuttle services using CMAQ funding.

⁹ The URL for the NJTPA Webpage is <http://www.njtpa.org>.

2025 TIP, Statewide Transportation Improvement Program (STIP),¹⁰ and the TIP/SIP Conformity Determination.

The NJTPA held a virtual public meeting on Tuesday July 27, 2021 from 4 to 7 p.m. to provide the public with an opportunity to learn more about the LRTP, TIP, STIP, and Air Quality Conformity Determination and to submit comments.

The public meeting, was held in a virtual open house format; attendees arrived at any time between 4 and 7 p.m. There were short presentations and breakout rooms to provide details.

In addition, the public was invited to comment on the Project Pool, TCP, TIP, and related matters at monthly meetings of the NJTPA Board of Trustees and its committees. The FY 2022 – 2025 TIP was presented to the Board on Monday, September 13, 2021.

Beyond these formal procedures, the NJTPA has instituted a variety of programs and activities for promoting public participation. These are detailed in the Unified Planning Work Program (UPWP) and include outreach to interested organizations, provision of information to media outlets, and preparation and dissemination of reports and publications, in print and through the NJTPA website and social media. The UPWP also describes the Subregional Transportation Planning (STP) Program, which requires subregions to establish and maintain a mechanism for assuring public input to the planning process.

9. Final TIP Adoption and Certification of TIP by USDOT and Final Conformity Determination Certification by USEPA and USDOT

All comments received on the Draft TIP, including written comments and comments made at the public meetings, are reviewed and distributed to the appropriate agencies for response. The comments, along with responses, appear in Appendix E of the FY 2022 – 2025 TIP.

After the Board of Trustees has adopted the TIP, it is included as part of the Statewide Transportation Improvement Program (STIP), which must be certified by the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) of the US Department of Transportation (USDOT) prior to being implemented.

10. Amendments and Modifications to the TIP

The biennial publication of the TIP represents the best estimate of the projects and funding levels planned for advancement. However, it is inevitable that project changes will need to be made during the TIP fiscal year, such as adding a new project, changing the scope and/or funding level of a project, changing the source of funding, or changing the phasing of a project. Depending on the nature of the change, actions may be taken to amend or modify the TIP.

In October 2012, an updated Memorandum of Understanding (MOU) between the NJTPA, NJDOT and NJ TRANSIT and the three MPO's was adopted by the NJTPA. The MOU establishes procedures for changing the TIP after it is adopted by the NJTPA and approved as part of the STIP. The document can be revised as becomes necessary. This MOU is revised as necessary by the three parties. The updated MOU is included in the TIP as Appendix D.

¹⁰ The final NJTPA TIP is combined with the TIPs of the other two MPOs in the state to form the Statewide Transportation Improvement Program (STIP), which is submitted to the FHWA and FTA for approval.

11. Electronic Statewide Transportation Improvement Program (e-STIP)

The electronic Statewide Transportation Improvement Program (e-STIP) is a web-based application that provides current information contained in the STIP/TIP as the program is modified and amended. The benefits of the e-STIP are that it:

- streamlines the STIP/TIP modification and amendment process;
- allows for access in real-time to project, financial and map information;
- improves the fiscal management of the STIP/TIP; and
- reduces the amount of time necessary for review and approval of modifications and amendments to the STIP/TIP.

The public may view the e-STIP at the NJDOT website or follow the link to the eSTIP:

<https://www.state.nj.us/transportation/capital/estip/>

https://estip.nj.gov/DOT_ESTIP/WebTelus/Login:LoginPublic

IV. TIP on the Internet

In an effort to make the TIP and other documents more widely available to the public, the NJTPA has posted the TIP and related project information on the NJTPA's website www.njtpa.org. Using the TIP on the Web offers significant advantages:

- The entire TIP document can be viewed online at [Projects & Programs > Transportation Improvement Program \(TIP\) > Current TIP](#). Throughout the year as amendments and modifications occur the website is updated to reflect these changes.
- Project information can be obtained interactively by online text or map searches via the NJTPA Online Transportation Information System (NOTIS) Web site at <http://www.njtpa.org/NOTIS>. NOTIS provides information about current TIP and Study and Development projects, including schedules, phases of work, project locations, funding year, funding sources, detailed project descriptions, and project status information that is updated monthly. The Federal Fiscal Year (FFY) 2022 – 2025 TIP will appear on NOTIS following federal approval of the STIP at the beginning of FFY 2022.
- Monthly status reports and current stages of the project development cycle can be accessed through NOTIS.

V. Transportation Improvement Program Financial Plan

Federal legislation requires the TIP to contain a financial plan that documents anticipated available resources from public and private arenas, and to recommend innovative financing techniques to fund needed projects and programs. The TIP is required to include four fiscally constrained years.

Table 1 displays all state and federal funding included in the TIP. Programmed amounts are listed according to funding source as well as by the year in which they are programmed. The table is divided into four sections: NJDOT Projects (highway and bridge projects), NJDOT Programs, NJ TRANSIT Projects and Programs, and PANYNJ.

Individual TIP project pages display the four years of constrained funding as well as projected funding for the next six years (FY 2026 - 2031). It must be emphasized that the forecast for those years is prepared for planning purposes only and may not represent what will appear in future TIPs. (see Appendix I for detailed listing of 10-year projections)

A. Funding Sources

The TIP lists funds from federal, state and other sources. Federal funds are primarily derived from the FHWA and FTA. The FAST Act apportionments are used as a basis for specifying federal funding for all four years of the TIP. State funding, otherwise referred to as the New Jersey Transportation Trust Fund (TTF) has sufficient capital to fulfill the FY 2022 program.

Funding sources (shown in the “Fund” column of Table 1) relate directly to programs established under federal and state transportation legislation. The eligibility for each program funding category is established by federal and state law. Definitions of funding sources shown on Table 1 are provided in the TIP Glossary.

For example, the National Highway Performance Program, (NHPP) as established by MAP-21, provides support for the construction of new facilities on the National Highway System (NHS), the condition and performance of the NHS, and achieving performance targets, as set by that State’s asset management plan. Other funding categories such as STP are more flexible.

In the FY 2022 TIP, highway infrastructure urbanized funds for Coronavirus Response and Relief Supplemental Appropriations Act (CRRSAA), Highway Infrastructure Program Funds (HWI), Rail Highway Crossings (RHC), Surface Transportation Block Grant Program (STBGP), and Transportation Alternatives (TA) have been sub-allocated by population and geographical areas: CRRSAA [Allentown (Allen), Flex, New York-Newark NY-NJ-CT (NY/NWK), Poughkeepsie-Newburgh, NY (PGH/NWB)]; HWI [Z005 – Allen, PGH/NWB; Z905 – Allen, PGH/NWB; Z910 – Allen, NY/NWK, PGH/NWB; Z919 – Allen, NY/NWK, PGH/NWB], RHC [Flex; NY/NWK]; STBGP [Allen, Flex, NY/NWK, Off System Bridge (OS-BRDG), PGH/NWB]; and TA [Allen, B5K200K, Flex, L5K, NY/NWK, PGH/NWB, Recreational Trails Program (RTP)].

1. Federal Funding

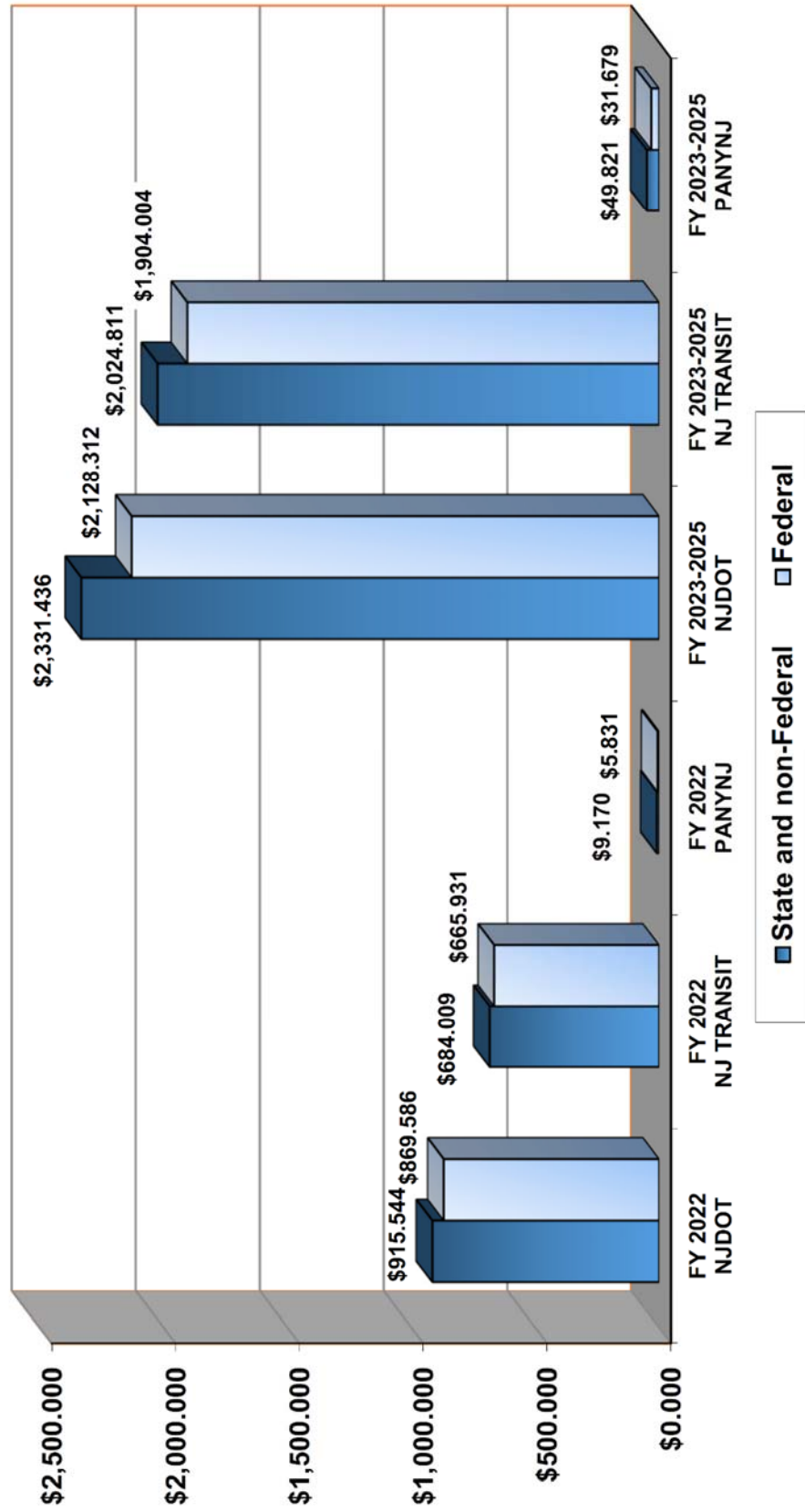
The TIP allocates a total of \$3.150 billion in funding from all sources for FY 2022, \$2.968 billion in FY 2023, \$2.494 billion in FY 2024, and \$3.008 billion for FY 2025. Federal funding allocated for those years is \$1.541 billion in FY 2022, \$1.346 billion in FY 2023, \$1.340 billion in FY 2024 and \$1.378 billion in FY 2025. (see Figure 4)

Table 1
NJTPA Transportation Improvement Program
Financial Plan for Fiscal Years 2022 - 2025 (\$ Millions)

Fund	FY 2022	FY 2023	FY 2024	FY 2025	Total
NJDOT Projects					
CMAQ	3,267	0,000	7,433	0,000	10,700
CRRSAA-FLEX	26,300	0,000	0,000	0,000	26,300
DEMO	12,891	12,100	6,290	0,000	31,281
DEMO-R	2,342	1,363	0,000	0,000	3,705
HSIP	6,130	2,950	11,500	28,650	49,230
NHFP-HWY	39,376	0,000	0,000	0,000	39,376
NHPP	265,600	218,843	224,557	189,806	898,806
OTHER	0,000	4,000	4,500	6,000	14,500
STATE	72,255	73,792	17,000	100,000	263,047
STBGP-FLEX	33,511	25,899	39,477	29,879	128,766
STBGP-NY/NWK	23,400	28,097	55,202	66,500	173,199
STBGP-OS-BRDG	7,350	35,088	10,742	40,600	93,781
NJDOT Projects	\$492,422	\$402,132	\$376,701	\$461,435	\$1,732,691
NJDOT Programs*					
CMAQ	15,095	16,140	16,626	19,182	67,044
CRRSAA-ALLEN	0,230	0,000	0,000	0,000	0,230
CRRSAA-FLEX	6,000	0,000	0,000	0,000	6,000
CRRSAA-NY/NWK	43,645	0,000	0,000	0,000	43,645
CRRSAA-PGH/NWB	0,080	0,000	0,000	0,000	0,080
FBP	3,000	3,000	3,000	3,000	12,000
HSIP	31,988	28,579	28,329	29,106	118,001
HWIZ005-ALLEN	0,098	0,000	0,000	0,000	0,098
HWIZ005-PGH/NWB	0,034	0,000	0,000	0,000	0,034
HWIZ905-ALLEN	1,000	0,000	0,000	0,000	1,000
HWIZ905-PGH/NWB	0,048	0,000	0,000	0,000	0,048
HWIZ910-ALLEN	0,000	0,040	0,000	0,000	0,040
HWIZ910-NY/NWK	0,000	0,672	0,000	0,000	0,672
HWIZ910-PGH/NWB	0,000	0,014	0,000	0,000	0,014
HWIZ919-ALLEN	0,000	0,000	0,033	0,000	0,033
HWIZ919-NY/NWK	0,000	0,000	6,227	0,000	6,227
HWIZ919-PGH/NWB	0,000	0,000	0,011	0,000	0,011
LTAP	0,113	0,113	0,113	0,113	0,450
NHPP	141,157	124,394	119,177	169,215	553,944
PL	9,890	9,890	9,890	9,890	39,560
PL-FTA	3,173	3,173	3,173	3,173	12,691
RHC	2,784	2,796	2,808	2,821	11,209
RHC-FLEX	3,000	0,000	0,000	0,000	3,000
RHC-NY/NWK	3,289	0,000	0,000	0,000	3,289
SPR	16,487	16,741	16,999	17,261	67,487
STATE	843,289	852,469	444,088	829,587	2,969,433
STBGP-ALLEN	0,548	0,555	0,563	0,570	2,235
STBGP-FLEX	70,639	63,170	64,973	74,670	273,452
STBGP-NY/NWK	80,570	77,285	51,609	41,757	251,221
STBGP-OS-BRDG	2,250	2,139	2,177	5,250	11,816
STBGP-PGH/NWB	0,190	0,192	0,195	0,197	0,774
TA-ALLEN	0,032	0,032	0,032	0,032	0,127
TA-B5K200K	0,295	0,295	0,295	0,295	1,180
TA-FLEX	6,460	6,460	6,460	6,460	25,839
TA-L5K	0,361	0,361	0,361	0,361	1,444
TA-NY/NWK	6,034	6,034	6,034	6,034	24,136
TA-PGH/NWB	0,011	0,011	0,011	0,011	0,044
TA-RTP	0,920	0,920	0,920	0,920	3,680
NJDOT Programs*	\$1,292,709	\$1,215,475	\$784,101	\$1,219,903	\$4,512,188
NJDOT Projects and Programs*					
NJDOT Total*	\$1,785,131	\$1,617,607	\$1,160,802	\$1,681,339	\$6,244,879
NJ TRANSIT Projects and Programs					
CASINO REVENUE	15,841	15,841	15,841	15,841	63,364
CMAQ	75,000	75,000	75,000	70,456	295,456
MATCH	1,330	1,330	1,330	1,330	5,320
METRO-NORTH	0,690	0,690	0,690	0,690	2,760
NJ TURNPIKE	22,500	22,500	22,500	22,500	90,000
SECT 5307	260,357	262,735	253,612	249,427	1,026,131
SECT 5309	125,000	100,000	100,000	100,000	425,000
SECT 5310	5,413	5,413	5,413	5,413	21,652
SECT 5311	2,813	2,813	2,813	2,813	11,251
SECT 5337	182,091	182,091	182,091	182,091	728,365
SECT 5339	14,558	14,908	14,908	14,908	59,281
STATE	643,648	628,036	631,589	644,103	2,547,376
STP-TE	0,700	0,700	0,700	0,700	2,800
NJ TRANSIT	\$1,349,940	\$1,312,057	\$1,306,487	\$1,310,272	\$5,278,755
PANYNJ Total					
INFRA	5,831	14,771	10,495	6,414	37,510
PANYNJ	9,170	23,229	16,505	10,086	58,990
PANYNJ Total	\$15,000	\$38,000	\$27,000	\$16,500	\$96,500
Total TIP					
Total*	\$3,150,071	\$2,967,664	\$2,494,289	\$3,008,111	\$11,620,134

* NJTPA's share of Statewide Programs is estimated at 75%.

Figure 4
NJTPA FY 2022 Transportation Improvement Program
NJDOT, NJ TRANSIT, and PANYNJ Funding Distribution
Federal and State and non-Federal Dollars
Fiscal Years 2022-2025 (Millions of Dollars)



Federal transportation funding generally provides a certain level of funding flexibility for capital programming. Prior to ISTEA, highway funds could (with some exceptions) only be used on highway projects; similarly, transit funds could only be spent on transit projects. ISTEA allowed MPOs to look at their needs on a regional basis and to transfer funds between programs and modes accordingly. Since 1991, the NJTPA, NJDOT and NJ TRANSIT have agreed annually that highway funds are “flexed” (switched) to transit projects. In FY 2022, \$75 million in Congestion Mitigation Air Quality (CMAQ) funds, and \$0.7 million in Surface Transportation Program Transportation Enhancements (STP-TE) funds will be “flexed” to NJ TRANSIT for the NJTPA region. Additionally, CMAQ funds are flexed from the Local CMAQ Initiatives Program to NJ TRANSIT for local transit projects that enhance air quality.

2. State Transportation Trust Fund (TTF)

The TTF and other non-federal resources will provide \$1.6 billion in FY 2022 and \$1.6 billion in FY 2023 for highway, bridge, transit and local expenditures.

Normally, a substantial share of state funds would be applied to 20 percent match required by most FHWA funding categories. However, under federal transportation legislation, it is recognized that some states collect toll revenues that are used to maintain highways vital to interstate commerce, as well as commutation. Congress reasoned that this substantial local investment should be recognized as part of a state’s overall contribution to the federal/state transportation partnership. An example of this is the NJ Turnpike, which carries I-95 on the key link between New York and Philadelphia and is financed by tolls. Accordingly, federal legislation recognizes such investments as “credit for the non-federal share,” referred to as “Non-Federal Match” or “soft match.” The soft match provision means New Jersey can “draw down” all available federal funds without a cash state match. As a result, the state funds can be used to fund other projects. It has been assumed that the soft match provision will be applicable throughout FYs 2022 – 2025.

B. Fiscal Constraint of the FY 2022 – 2025 TIP Funding Plan

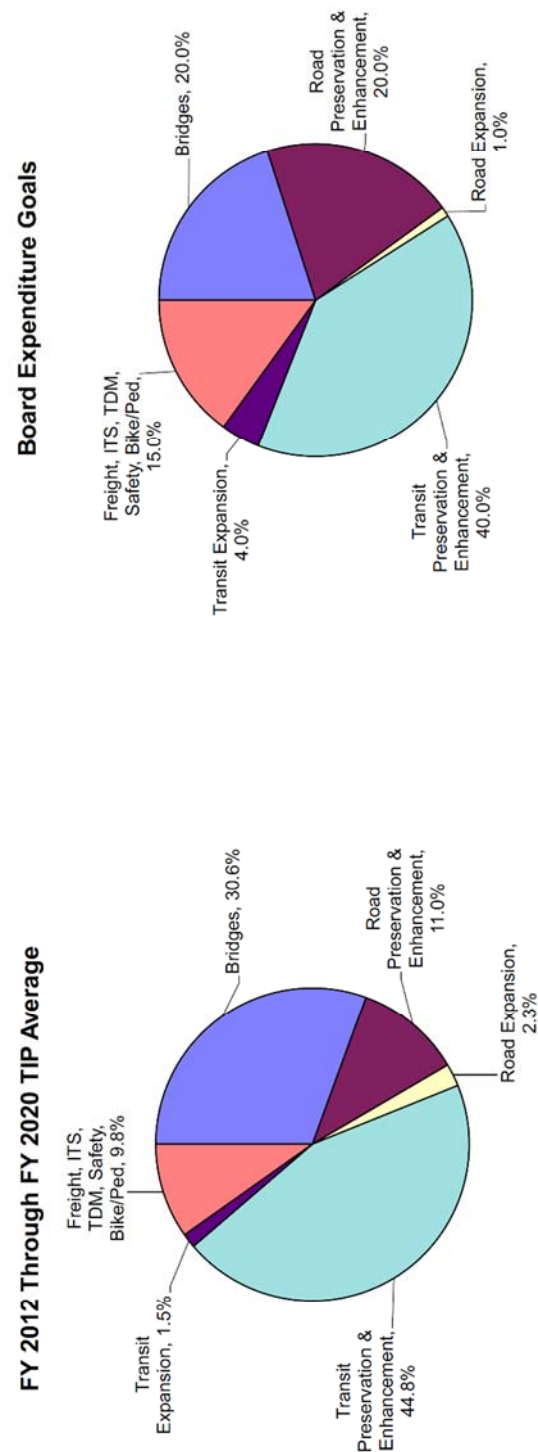
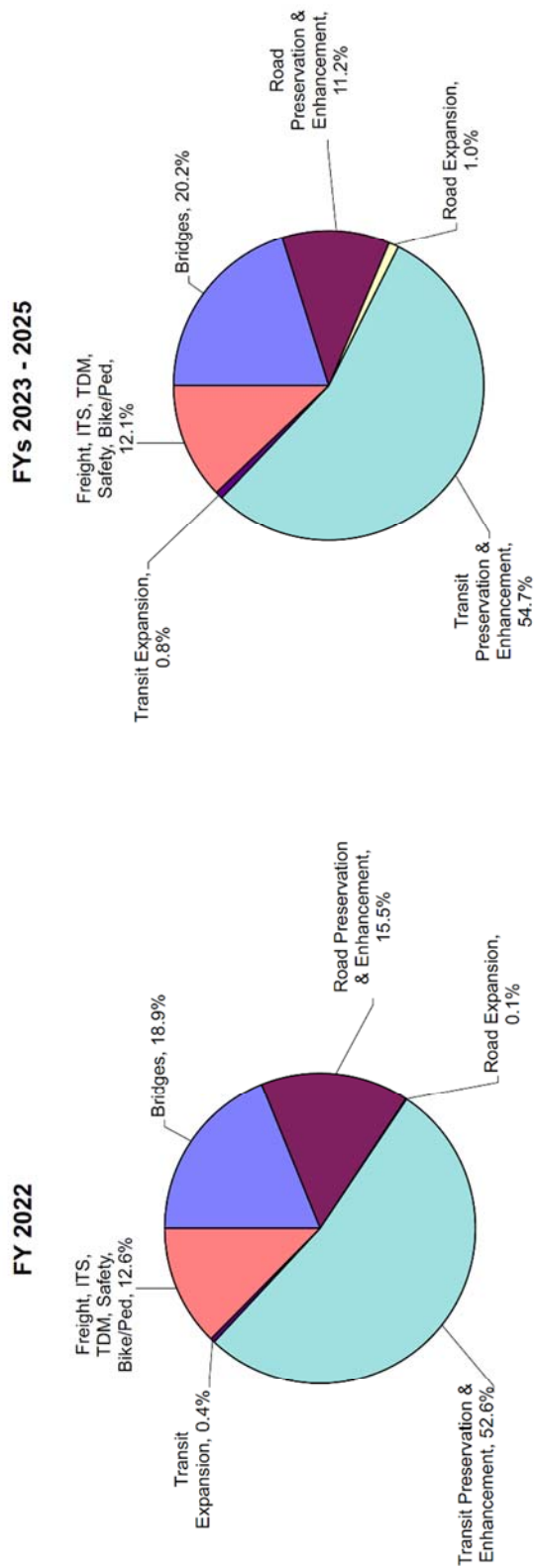
The four-year funding for the FY 2022 - 2025 TIP is within the overall revenue projections of the current LRTP. The funding plan for the TIP conservatively assumes federal resources increasing annually for NJDOT and remaining at the FY 2020 STIP/TIP level of funding for NJ TRANSIT. State funding resources remain flat for NJDOT and NJ TRANSIT over the next four years.

C. Expenditures as compared with Board of Trustees Goals

Figure 5 shows the categories of expenditures in the FY 2022 – 2025 TIP. The expenditure categories shown on Figure 5 are in accordance with those identified in the Regional Capital Investment Strategy (RCIS) which was adopted by the NJTPA Board of Trustees in September 2005 and modified in November 2017. Figure 5 shows the following expenditure categories:

- Bridges
- Road Preservation and Enhancement
- Road Expansion
- Transit Preservation and Enhancement
- Transit Expansion
- Freight, Intelligent Transportation Systems (ITS), Travel Demand Measures (TDM), Safety, and Bicycle/Pedestrian projects.

Figure 5
FY 2022 Distribution of Expenditures By RCIS Category



The percentage distribution of expenditures is shown in pie-charts for FY 2022, FYs 2023- 2025, and the five-TIP average of TIPs from FY 2012 through 2020. These distributions can be compared with the Board of Trustees RCIS expenditure goals, shown in a separate pie chart in the lower right-hand portion of Figure 5.

FY 2022 funding for projects and programs that fall into the Preservation and Enhancement categories is 68.1 percent, and another 18.9 percent is allocated to Bridges. When added together, 87.0 percent of all funding is allocated for State of Good Repair projects and programs. There is limited funding for Road Expansion projects in FY 2022. Road Expansion in FY 2023 through 2025 is forecast to be 1.0 percent, which is the Board expenditure goal.

D. Projects Requiring Financial Plans

Recipients of federal funding for projects with a total cost of between \$100 million and up to \$500 million must have a financial plan. Changes to the requirements for a Financial Plan under MAP-21 include a phasing plan when there are insufficient financial resources identified to complete the entire project, and an assessment of a public-private partnership (P3) to deliver the project. This plan shall include the following content items:

- Project Description
- Cost Estimate
- Implementation Plan
- Financing and Revenues
- Cash Flow
- Risk Identification and Mitigation Factors
- Phasing Plan
- Public Private Partnership (P3)
- Annual Update Cycle

This information should reflect actual cost, expenditure, and revenue performance. The initial financial plan is prepared by NJDOT or the subregion with NJTPA consultation, submitted to the Board of Trustees for consideration and approval, and forwarded to FHWA for certification prior to funding authorization.

The plan must meet the fiscal constraint requirements of the Long Range Transportation Plan, and the current TIP because it serves as a commitment to fund the project through completion. The FY 2022 TIP has four projects with approved financial plans: Route 72, Manahawkin Bay Bridges in Ocean County; Route 206 Project in Somerset County; Route 3, Route 46, Valley Road and Notch/Rifle Camp Road Interchange in Passaic County; and Route 80, Route 15 Interchange Improvements in Morris County. Table 2 displays the funding commitment.

Table 2
Financial Plan Commitment (Millions of \$)

Route 72, Manahawkin Bay Bridges

DB#	Phase	Funding Source	2022	2023	2024	2025	Out Years
00357D1	DES	State	\$0.455	\$0.352			

Route 206 Project

DB#	Phase	Funding Source	2022	2023	2024	2025	Out Years
780A	CON	NHPP		\$23.500	\$23.500	\$24.500	

Route 3/46, Valley Road and Notch/Rifle Camp Road Interchange

DB#	Phase	Funding Source	2022	2023	2024	2025	Out Years
059B	CON	NHPP	\$26.441				

Route 80, Route 15 Interchange Improvements

DB#	Phase	Funding Source	2022	2023	2024	2025	Out Years
93139	ROW	NHPP		\$1.200			
93139	CON	NHPP					\$105.000
93139A	ROW	NHPP	\$0.400				
93139A	CON	NHPP			\$17.700		

To review the list of projects that may have or need financial plans, see Appendix A.

E. NJDOT Financial Plan for the STIP¹¹

1. Financial Forecasts

Federal law and regulations require that the Statewide Transportation Improvement Program (STIP) be fiscally constrained for the first four years. Specifically, “planned federal aid expenditures” cannot exceed “projected revenues.” The major sources of funding identified in this document are the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), and the New Jersey Transportation Trust Fund.

NJDOT and its transportation planning partners (NJ TRANSIT, NJTPA, Delaware Valley Regional Planning Commission, South Jersey Transportation Planning Organization, FHWA, and FTA) have developed an estimate of \$15.111 billion in available state, other, and federal revenues to support the state’s transportation budget during the four fiscal years from FY 2022 through FY 2025. (For planning purposes, state revenues are estimated based on state fiscal

¹¹ State of New Jersey Fiscal Year 2022 Statewide Transportation Improvement Program, New Jersey Department of Transportation (NJDOT), excerpts from the Introductory Text.

years, which begin on July 1, and federal revenues are estimated on the basis of federal fiscal years, which begin on October 1.) In addition, NJDOT and NJ TRANSIT have incorporated an additional six years of constrained resources into the STIP. The 10-year total is estimated to be \$38.179 million. This amount constitutes the funding expected to be available to support the whole FY 2022 - 2031 Statewide Transportation Improvement Program (STIP). These revenue estimates were developed cooperatively by NJDOT, NJ TRANSIT, and New Jersey's three MPOs, with full consultation with FHWA and FTA, at a meeting held on January 7, 2021.

The assumptions underlying financial forecasts on a statewide and MPO area basis are as follows:

- The STIP/TIP is a 10-year plan that is fiscally constrained based on federal resources increasing annually for NJDOT and remaining at the previous STIP/TIP level of funding for NJ TRANSIT. State resources, consisting of the Transportation Trust Fund (TTF), were assumed to remain flat in FYs 2022 through 2031.
- Dollar amounts shown in federal funding categories are based, except as otherwise noted below, on the FAST Act federal-aid apportionment tables or equivalent data obtained from the FHWA, FTA, and Federal Aviation Administration (FAA), as appropriate.
- Construction cost estimates are escalated to the mid-point of construction to address “year of expenditure dollars.” NJDOT’s Cost Estimating Guideline provides the methodology for developing, documenting, and reviewing construction cost estimates throughout the project development process. The NJDOT uses several methods and tools to develop construction cost estimates, including: historical bid-based estimating, analogous or similar project estimating, historical percentages estimating, and cost-based estimating. All NJDOT projects are to include a 3 percent inflation factor when providing future year construction cost estimates. The NJDOT uses AASHTOWare Project Cost Estimation software for preparing construction cost estimates to produce more accurate and consistent estimates during the Final Design phase.
- For the purpose of defining a project line item estimate in the STIP, each item includes an estimate of independent contractor costs to produce the project, an estimate of implementing agency costs anticipated in support of the development and delivery of the project, and any payments to third parties regarding matters of right-of-way and utility relocations. The implementing agency costs include activities such as: inspection, testing, equipment, and salary costs.
- Funds in the Surface Transportation Block Grant Program (STBGP) and Transportation Alternatives program (TA) categories are broken down into the allocations and minimums required by federal law.
- “High Priority” funds and “demo” funds are shown only as authorized by federal legislation. These congressional earmark projects are shown with the fund type “DEMO” or “DEMO-R” in the TIP.
- The State will provide \$2.0 billion in both FY 2022 and FY 2023 to support the Capital Program. For programming purposes, it is assumed that NJDOT’s share of State funds is \$1.240 billion of TTF in FY 2022 and FY 2023. NJ TRANSIT’s share of the TTF is \$760.0 million in FY 2022 and FY 2023.
- The following transfers are programmed between NJDOT and NJ TRANSIT:
 - For FY 2022-FY 2025: \$75 million of FHWA CMAQ funds are to be transferred annually for use by NJ TRANSIT.

- From FY 2014 through FY 2018, the MPOs and NJ TRANSIT participated in an exchange of federal sub-allocated funds for state or TTF funds for the MPOs local program. Prior year funds are listed on individual NJTPA TIP pages.
- Because New Jersey is classified as a “non-attainment” area with regard to air quality, certain project funding must meet a federal standard of “available or committed” revenue in FY 2022 and FY 2023 to be considered fiscally constrained. Such projects are those which are funded with federal resources, and all other “projects of regional significance” regardless of funding source. All federal funds in FY 2022 and FY 2023 are based on the current federal-aid apportionment table allocations, or equivalent data obtained from FHWA, FTA and the FAA, as appropriate, and are therefore considered available. All TTF funding for FY 2022 will be appropriated July 1, 2021. Sufficient funds are available or committed to cover funding of projects and programs in the FY 2022 - FY 2023 period. New Jersey’s Transportation Authorities use authority revenues to fund various projects classified as projects of regional significance.
- The current STIP and Capital Program provides funding for the NJDOT and NJ TRANSIT employee salaries, leave and fringe benefits, overhead, and other administrative costs which benefit the development and delivery of their transportation programs. This funding is provided from both federal-aid and state TTF sources, and these funds are allocated for multi-year and previously authorized project costs. Federal-aid in support of employee and administrative costs is programmed on an individual project basis. TTF funding is programmed as a single item under the heading of “Program Implementation Costs, NJDOT.” For NJ TRANSIT, TTF funding is allocated to specific programs.
- The state of New Jersey has made a significant commitment to public transportation through continued operating support from the state’s general fund.
- With two notable exceptions, federal and state funds are not allocated within the boundaries of the MPO. The first exception is for Surface Transportation Block Grant Program (STBGP) funds, some of which are required under a formula in federal regulations to be allocated to specific geographic areas. These allocated funds are shown in Table 1 as CRRSSA-NJTPA, HWIZ005-NJTPA, HWIZ905-NJTPA, HWIZ910-NJTPA, STBGP-ALLEN, STBGP-NY/NWK, STBGP-PGH/NWB, TA-ALLEN, TA-NY/NWK, and TA-PGH-NWB. The second exception is Trust Fund state-aid funds, which are allocated on a county-by-county basis under a statutory and regulatory formula.

2. Advance Construction Projects

Advance Construction (AC) is a procedure to advance a federally funded project phase into the current fiscal year and implement that phase with non-federal funds. The use of AC is subject to the availability of non-federal funds (e.g., state funds) in the year in which the project is to be implemented, and the availability of federal funds in the year in which the AC project is to be converted to a regular federal-aid project. AC projects are to be listed individually in the TIP and STIP in both the year that the project is to be implemented and the year in which the conversion is to take place. Appropriate notification will be provided in the TIP and STIP so it is clearly understood that these “other funds” are available and that future federal funds may be committed to these AC projects. Fiscal constraint must be maintained throughout this process for both the implementing and conversion years.

The MPOs and the State agree that the inclusion of an AC project in the TIP/STIP in the year the project is to be implemented signifies that the project can be converted to federal funding when federal funds become available and the decision is made to convert.

3. Multi-Year Funded Projects

Multi-year funding is a capital programming approach to program and authorize only that portion of a given project phase necessary to support reimbursement of planned cash outlays for a given year. Remaining portions of the project phase are programmed in subsequent years. In the first fiscal year of funding for a multi-year funded phase of work, NJDOT will only seek federal authorization for that portion of the federal funds shown in that fiscal year in the TIP/STIP. The remaining balance of funds for that phase of work will appear in the TIP/STIP in the fiscal year NJDOT intends to request Federal authorization for the remaining funds needed for continuation/completion of the phase/project.

Each multi-year federally funded project will be submitted to FHWA with the condition that authorization to proceed is not a commitment or obligation to provide federal funds for that portion of the undertaking not fully funded herein. Fiscal constraint will be maintained at all times throughout this process. If sufficient federal funding is not available in any fiscal year to complete a multi-year funded phase of work, NJDOT will take full responsibility to fund that portion of the phase of work in accordance with applicable Federal and New Jersey State law. In the event that State or other funding would not be available to complete a project, the project may be terminated or placed on hold until such time as funding is made available. In such cases, NJDOT would need to comply with applicable Federal and New Jersey State law, including where applicable, providing a revised air quality determination to FHWA/FTA and reimbursing FHWA/FTA for any federal funds expended on the project.

4. Non-Federal Match

As previously noted in relation to the Transportation Trust Fund, New Jersey takes advantage of a “soft match” to meet federal matching funds requirements. This involves taking credit for improvements financed by toll revenues. Toll Credits were created in the Transportation Equity Act for the 21st Century (TEA-21) and are to be used as a credit toward the non-Federal matching share of programs authorized by Title 23 (except for the emergency relief program) and for transit programs authorized by Chapter 53 of Title 49.

The amount of credit earned is based on revenues generated by the toll authority (i.e., toll receipts, concession sales, right-of-way leases, or interest), including borrowed funds (i.e., bonds, loans) supported by this revenue stream, that are used by the toll authority to build, improve or maintain highways, bridges or tunnels that serve interstate commerce.

The federal government has allowed the state and local governments to use toll credits to be part of the local matching funds regarding transit grants. This allowance results from the recognition that different modes of transportation are interconnected. Capital expenditures to reduce congestion in a particular corridor benefit all modes in that corridor including automobiles, buses and rail.

New Jersey estimates that it will begin federal FY 2022 with a balance of \$6.318 billion in available toll credits. Both NJDOT and NJ TRANSIT use approximately \$350 million in toll

credits each year and earn \$650 million in additional toll credits annually. By the end of FFY 2025, an estimated balance of \$7.460 billion is expected to be available.

With the assumption that federal funds apportionments will continue to remain flat and a steady or increasing request for additional credits will continue, there is an expectation for the available balance of toll credits to accrue over the next 10 years. With new credits outpacing usage, the risk of toll credits being unavailable to provide the soft match is low.

F. NJ TRANSIT Financial Plan

The Transportation Improvement Program (TIP) is formulated to guide NJ TRANSIT's capital investment plans for the existing system and strategic expansion. The NJ TRANSIT element of the FY 2022 – 2025 NJTPA TIP amounts to \$5.279 billion for the region. The NJ TRANSIT Capital Program continues advancing many initiatives that modernize the transit system, while improving service reliability, frequency and connectivity. As stated in the NJDOT Financial Plan, the NJ TRANSIT Capital Program is supported primarily through state and federal funding. The total statewide TTF is appropriated at the level of \$2.00 billion in FY 2022 and \$2.00 billion in FY 2023. Of the statewide total, NJ TRANSIT is allocated \$643.648 million in FY 2022 and \$628.036 million in FY 2023.

Federal formula funds are programmed based on revenue estimates developed cooperatively by NJDOT, NJ TRANSIT, and New Jersey's three MPOs, with full consultation with FHWA and FTA.

1. Financial Capacity – Sufficiency of Funding

The following financial capacity assessment demonstrates the resource availability and regional allocation for transit projects. Total transit funding within the NJTPA region is anticipated to be nearly \$1.350 billion for FY 2022, which includes the following resources:

- **FTA Funding:** \$590.232 million of FTA funding in the NJTPA region is anticipated to be available in FY 2022. Federal formula funds consist of \$260.357 million of Section 5307 funds and \$182.091 million of Section 5337 funds. Other federal funds include \$125 million Section 5309, \$5.413 million Section 5310, \$2.813 million Section 5311, and \$14.558 million Section 5339 funds.
- **STP-TE Funding:** \$0.7 million of STP-TE funds is anticipated to be available in the NJTPA region for transit projects in FY 2022.
- **CMAQ Funding:** \$75 million of CMAQ funding is anticipated to be available in the NJTPA region for transit projects in FY 2022.
- **State Funding:** State Transportation Trust Funds totaling approximately \$643.648 million are anticipated for transit projects in the NJTPA region in FY 2022.
- **Other Funding:** The FY 2022 program assumes \$39.031 million of other funding in the NJTPA region, including \$22.5 million from the New Jersey Turnpike Authority. In the NJTPA region, Casino Revenue Funds total \$15.841 million and Metro North funds total \$0.69 million in FY 2022.

The NJTPA program also includes \$1.330 million in matching funds for the Section 5310 Program and the Section 5311 Program. These funds are from local programs, other federal programs and a match from NJ TRANSIT's operating budget.

2. Operations/Maintenance of Reinvestment

NJ TRANSIT has been able to implement its capital program, including service expansion projects, while keeping operating cost increases consistent with transportation cost indices and maintaining a balanced operating budget each year. NJ TRANSIT emphasizes strengthening maintenance of equipment capability to ensure that cars and locomotives will be kept in good operating condition. Investments to bring the system to a state of good repair and improve service quality are critical to a viable and efficient transit system.

For NJ TRANSIT, operating funding comprises a much larger share of its total expenditures. Operating funding gaps are a much greater long-term concern. NJ TRANSIT is one of the nation's largest public transit agencies and one of the most cost efficient, with almost 50 percent of its operating budget supported by passenger fares and other system generated revenues (such as advertising and parking). NJ TRANSIT's FY 2021 operating budget is \$2.6 billion. The expenses which are not covered by system revenues are supported by yearly State appropriations and various Federal funding sources.

The primary concern facing NJ TRANSIT in the long term is continued support for operations. NJ TRANSIT is periodically required to impose fare increases to make up shortfalls in operating funds. It also continues to direct a portion of capital funds each year to support operations – principally maintenance of bus and rail systems and vehicles.

3. Innovative Financing

NJ TRANSIT continues to pursue a variety of innovative financing strategies to control its costs and increase revenues. Opportunities for leveraged lease revenues are limited by current Federal law that no longer allow for domestic leases and that restrict cross border leases to State-funded assets. Another financing technique has been capital lease opportunities. A capital lease stretches building and equipment purchases over a longer period of time to more effectively manage tight resources while responding to the current needs of operation.

4. Private Enterprise Participation

Through its Office of Carrier Administration, NJ TRANSIT will continue to discuss its participation in the Capital Program with privately-owned carriers.

NJ TRANSIT continues its policy of contracting for certain bus services. All new and major restructured bus service is competitively bid. The process followed by NJ TRANSIT is designed to minimize impediments in competitive bidding while striving to maintain a high level of service quality.