



NEW YORK METROPOLITAN TRANSPORTATION COUNCIL
ADOPTED AUGUST 21, 2025



TRANSPORTATION CONFORMITY DETERMINATION

Prepared for New York Metropolitan Transportation Council's
Federal Fiscal Years (FFYs) 2026-2030 Transportation
Improvement Program (TIP) and FFYs 2026-2055 Regional
Transportation Plan

Disclaimer

The preparation of this report is financed through the U.S. Department of Transportation's Federal Transit Administration and Federal Highway Administration. This document is disseminated under the sponsorship of the New York Metropolitan Transportation Council (NYMTC) in the interest of information exchange. The contents of this report reflect the views of the authors who are responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the Federal Transit Administration, Federal Highway Administration, or the State of New York. This report does not constitute a standard, specification, or regulation.

Title VI/Non-Discrimination Policy Statement (adopted November 17, 2022)

The New York Metropolitan Transportation Council (NYMTC) is committed to compliance with Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, Title II of the Americans with Disabilities Act, Section 504 of the Rehabilitation Act of 1973, Executive Order 12898 on Environmental Justice, Executive Order 13166 on Limited English Proficiency, and all other related nondiscrimination statutes, rules, regulations, and executive orders cited in its Title VI/Non-Discrimination Program.

NYMTC assures that no person or group(s) of persons shall, on the grounds of race, creed, color, national origin, sex, marital status, disability, age, sexual orientation or income level, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination through the federally mandated metropolitan transportation planning process undertaken by NYMTC, whether the activities are federally funded or not. It is also the policy of NYMTC to ensure that its plans, programs, procedures, policies, and activities do not have disproportionate adverse effects based on race, creed, color, national origin, sex, marital status, disability, age, sexual orientation or income level.

Minority and low-income communities, as identified through the United States Census, will be engaged to facilitate their full and fair participation in the metropolitan transportation planning process. In addition, NYMTC will provide meaningful access to services for persons with limited English proficiency. Regarding the distribution of federal-aid funds to eligible subrecipients, NYMTC will include Title VI/non-discrimination language in all written agreements entered into through its administrative host, the New York State Department of Transportation, and will monitor those agreements for compliance.

NYMTC is responsible for initiating and monitoring the organization's Title VI/NonDiscrimination Program, for preparing related reports, and for other requirements and responsibilities under Title 23 Code of Federal Regulations (CFR) Part 200 and Title 49 CFR Part 21.

Acronyms

ABBREVIATION	EXPLANATION
ACS	American Community Survey
BRT	Bus Rapid Transit
CAA90	Clean Air Act Amendments of 1990
CEMDAP	Comprehensive Econometric Microsimulator for Daily Activity Travel Patterns
CEMSELTS	Comprehensive Econometric Microsimulator of Socioeconomics, Land Use and Transportation Systems
CFR	Code of Federal Regulations
CO	Carbon Monoxide
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GA	Generation Allocation
GIS	Geographic Information Systems
GISDK	Geographical Information Systems Developer Kit
GTFS	General Transit Feed Specification
HOV	High Occupancy Vehicle
HPMS	Highway Performance Monitoring System
LMP	Limited Maintenance Plan
MDP	Model Design Plan
MOVES	Motor Vehicle Emission Simulator
MPO	Metropolitan Planning Organization
MTA	Metropolitan Transportation Authority
MVEB	Motor Vehicle Emissions Budget
NAAQS	National Ambient Air Quality Standards
NHTS	National Household Travel Survey
NOx	Nitrogen Oxides

NYBPM	New York Best Practice Model
NYCRR	New York Codes, Rules and Regulations
NYMTC	New York Metropolitan Transportation Council
NYSDEC	New York State Department of Environmental Conservation
NYSDOT	New York State Department of Transportation
NYSICG	New York State Interagency Consultation Group
OCTC	Orange County Transportation Council
PANYNJ	Port Authority New York and New Jersey
PATH	Port Authority Trans-Hudson
PM _{2.5}	Fine Particulate Matter (2.5 Microns or Smaller in Diameter)
PONA	Poughkeepsie Ozone Nonattainment Area
PPS-AQ	Post Processor Software for Air Quality
PUMS	Public Use Microdata Sample
RES	Regional Establishment Survey
RHTS	Regional Household Travel Survey
SED	Socioeconomic and Demographic
SIP	State Implementation Plan
SOV	Single Occupancy Vehicle
STIP	Statewide Transportation Improvement Program
TAZ	Transportation Analysis Zone
TCM	Transportation Control Measures
TIP	Transportation Improvement Program
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds

TABLE OF CONTENTS

1	Preface	1
2	Introduction	2
3	Transportation Conformity Requirements.....	3
2.1	Relevant Federal Regulations	3
2.2	New York State Implementation Plan (SIP).....	4
2.3	Consultation Procedures.....	4
2.4	Transportation Control Measures.....	5
2.5	Public Participation	5
4	Forecasting Demand	6
4.1	Model Components	6
4.1.1	Network Files	6
4.1.2	Model Structure	8
4.2	Model Inputs.....	12
4.2.1	Transportation Analysis Zones (TAZs).....	12
4.2.2	Socioeconomic and Demographic (SED) Forecasts.....	14
4.2.3	Planning Assumptions.....	16
4.3	Model Outputs	17
4.3.1	Calculating VMT	17
4.3.2	Highway Performance Monitoring System (HPMS) Reconciliation	17
4.3.3	Travel Time Adjustments	19
5	Forecasting Emissions	20
5.1	Calculating the Emissions Inventory	20
5.1.1	MOVES Inputs and Parameters.....	20
5.1.2	Post-Processor Software for Air Quality (PPS-AQ).....	20
5.1.3	Preparing Emission Rates	21
5.1.4	Calculating Emissions	21
5.2	Transportation Projects Evaluated	21
5.2.1	Regionally Significant Projects	22
5.2.2	Master Listing of Evaluated Projects.....	22
6	Regional Emissions Analysis Results	23

6.1	New York-Northern New Jersey-Long Island, NY-NJ-CT Ozone Nonattainment Area	23
6.2	Poughkeepsie Ozone Nonattainment Area (PONA).....	25
6.3	New York-Northern New Jersey-Long Island, NY-NJ-CT PM _{2.5} Area	26
7	Statement of Conformity	29
Appendices.....		30
Appendix 1: Transportation Improvement Projects Programmed and Modeled in Future Years		31
Appendix 2A: Summer Emissions Forecasts by County.....		38
Appendix 2B: Annual PM _{2.5} and NOx Emissions Forecasts by County		44
Appendix 2C: Monthly NOx and PM _{2.5} Emissions by County.....		50
Appendix 3: Public Comments and Responses.....		51
Appendix 4: Resolution.....		52

1 PREFACE

As per 40 CFR § 93.110, this Transportation Conformity Determination was undertaken using the latest planning assumptions regarding the travel demand model inputs used to conduct the regional emissions analysis and establish transportation conformity. These planning assumptions include socio-economic forecasts, transit operating policies and service levels, roadway operating policies, and transportation improvement projects programmed for future years which are “non-exempt” under the Clean Air Act Amendments of 1990.

In consultation with the New York State Interagency Consultation Group (NYSICG) and as per 40 CFR § 93.110(a), the planning assumptions were locked in as of **March 31, 2025** at the time conformity analysis began.

2 INTRODUCTION

This Transportation Conformity Determination for the Federal Fiscal Years (FFYs) 2026-2030 Transportation Improvement Program (TIP) and FFYs 2026-2055 Regional Transportation Plan (Plan) was developed by the New York Metropolitan Transportation Council (NYMTC), as the designated metropolitan planning organization (MPO) for New York City, Long Island and the lower Hudson Valley, to demonstrate that its TIP and Plan conform to the motor vehicle emissions budgets set by the State Implementation Plan (SIP) for Air Quality. These budgets are set forth in the New York State SIP for the nonattainment and maintenance areas designated under the Clean Air Act Amendments of 1990 (CAAA90) that fall in whole or in part within the NYMTC planning area. In accordance with 40 CFR 93 Subpart A, this Transportation Conformity Determination is being issued in conjunction with NYMTC's FFYs 2026-2030 TIP and FFYs 2026-2055 Regional Transportation Plan, and the need to determine conformity for the following areas:

- The New York-Northern New Jersey-Long Island, NY-NJ-CT Ozone Nonattainment Area, which includes all NYMTC counties except for Putnam County.
- The Poughkeepsie Ozone Nonattainment Area (PONA), which is comprised of Dutchess, Orange and Putnam counties.
- The New York-Northern New Jersey-Long Island, NY-NJ-CT PM_{2.5} Maintenance Area, which includes all NYMTC counties except Putnam County, as well as Orange County.

In addition, this Transportation Conformity Determination complies with related federal and New York State regulations, including:

- 23 CFR § 450.322 - Congestion management process in transportation management areas.
- 23 CFR § 450.324 - Development and content of the metropolitan transportation plan.
- 23 CFR § 450.326 - Development and content of the transportation improvement program (TIP).
- 23 CFR § 450.328 - TIP revisions and relationship to the STIP (Statewide Transportation Improvement Program).
- 40 CFR § 93.108 through 40 CFR § 93.119 - Fiscal constraint, various criteria and procedures, modeling, consultation, Transportation Control Measures, and motor vehicle emissions budgets.
- 6 NYCRR Subparts 240-1 (Transportation Conformity General Provisions); 240-2 (Consultation) and 240-3 (Regional transportation-related emissions and enforceability).

3 TRANSPORTATION CONFORMITY REQUIREMENTS

The intent of the transportation conformity requirements is to fully coordinate transportation and air quality planning to ensure that an MPO's Plan and TIP will not:

- 1) Cause or contribute to any new violation of the National Ambient Air Quality Standards (NAAQS);
- 2) Increase the frequency or severity of any existing NAAQS violations; or
- 3) Delay timely attainment of the NAAQS or any required interim emissions reductions or other milestones in any area.

Transportation conformity requires that the overall set of planned and programmed transportation investments contained in an MPO's fiscally constrained Plan and TIP result in forecasted mobile source emissions levels that conform to the mobile source emissions budgets in the SIP. Therefore, NYMTC, as an MPO, must consider the air quality impacts of its transportation investments as part of the decision-making process. This establishes a framework by which NYMTC's program can improve air quality in the region and meet the NAAQS.

This Transportation Conformity Determination is based on a regional mobile source emissions analysis conducted using NYMTC's transportation demand model, the New York Best Practice Model (NYBPM), and the U.S. Environmental Protection Agency's (USEPA) Motor Vehicle Emission Simulator (MOVES) model. The NYBPM used for this conformity analysis was validated against observed counts for a base year (2019) that is not more than 10 years prior to the date of the conformity determination.

3.1 RELEVANT FEDERAL REGULATIONS

The following federal regulations, in part, define the requirements and purpose of Transportation Conformity:

- 40 CFR § 50.1 through 40 CFR § 50.19 establishes NAAQS for various pollutants.
- 40 CFR § 51.372 requires the development of SIPs to achieve these NAAQS.
- 40 CFR § 93.100 through 40 CFR § 93.129 establishes transportation conformity criteria and procedures.
- 40 CFR § 51.390 requires the SIP, for transportation conformity, to address three subsequent sections:
 - 40 CFR § 93.105 (consultation procedures);
 - 40 CFR § 93.122 (written commitments to implement control measures that are not contained in the Plan or TIP); and
 - 40 CFR § 93.125(c) (written commitments to implement mitigation measures).

On October 3, 2013, the New York State Department of Environmental Conservation (NYSDEC) submitted a SIP revision, 6 NYCRR Part 240, that addressed these three provisions. This SIP revision was approved by USEPA on September 29, 2014.

3.2 NEW YORK STATE IMPLEMENTATION PLAN (SIP)

42 U.S.C. § 7407 declares that:

Each State shall have the primary responsibility for assuring air quality within the entire geographic area comprising such State by submitting an implementation plan for such State which will specify the manner in which national primary and secondary ambient air quality standards will be achieved and maintained within each air quality control region in such State.

Per 40 CFR § 51.372, SIPs are developed to demonstrate that a state has appropriate program components in place, and to identify emission control programs that the state will rely on to meet and maintain the NAAQS in air quality control regions designated by USEPA under CAAA90. State SIPs must also account for pollution that contributes to visibility impairment, otherwise known as regional haze.

The New York SIP is made up of many related actions that have been taken to meet these CAAA90 requirements, such as infrastructure assessments, rate-of-progress plans, attainment demonstrations, and regulations. Regarding metropolitan transportation planning, it establishes motor vehicle emissions budgets.

3.3 CONSULTATION PROCEDURES

6 NYCRR Subpart 240-2 is the NYSDEC regulation that identifies the appropriate agencies, procedures, and allocation of responsibilities for consultation as required by 40 CFR § 93.105. NYMTC followed this regulation by participating in meetings, teleconferences, and other communications with the New York State Interagency Consultation Group (NYSICG). This consultation process ensures that NYMTC has used the following in this Transportation Conformity Determination:

- The latest available planning assumptions;
- An acceptable transportation demand modelling approach;
- The appropriate mobile-source emissions model and post-processor;
- The appropriate consideration of non-exempt and regionally significant transportation improvement projects in the regional emissions analysis; and
- The required mobile source emissions tests to determine conformity with the SIP mobile source emissions budgets.

This transportation conformity determination has been developed in consultation with the NYSICG, whose members include representatives from USEPA, Federal Highway Administration (FHWA), Federal Transit Administration (FTA), NYSDEC and the New York State Department of Transportation (NYSDOT). All air quality categorization and coding of projects proposed for the Federal Fiscal Years (FFYs) 2026-2030 TIP and FFYs 2026-2055 Plan were reviewed by the NYSICG throughout the development process for the TIP. The NYSICG was also consulted to discuss analysis methodologies and review other compliance issues as needed.

3.4 TRANSPORTATION CONTROL MEASURES

6 NYCRR § 240-3.1 specifies that written commitments for control and mitigation measures that are not included in the Plan and TIP must be obtained before transportation conformity can be determined.

Transportation Control Measures (TCMs) are strategies that are specifically identified and committed to in the SIP or listed in Section 108 of the CAAA90. TCMs reduce mobile source emissions by reducing vehicle use or by improving vehicular traffic flow. Strategies or programs that reduce emissions by improving vehicle technologies, fuels, maintenance practices are not considered TCMs. Federal and state conformity regulations require all TIPs and Plans to provide for the timely implementation of TCMs within a nonattainment area from the applicable SIP and to ensure that no project in the TIP or Plan interferes with the implementation of any TCMs.

There are currently no TCMs in the SIP. All TCMs within the NYMTC planning area that were previously included in the SIP have either been completed or, in a few special cases, removed from the SIP. In addition, no project in the FFYs 2026-2030 TIP or the FFYs 2026-2055 Plan will interfere with the timely implementation of TCMs in other areas.

3.5 PUBLIC PARTICIPATION

NYMTC's Public Involvement Plan and Public Participation Operating Procedures require the TIP, Plan and related Transportation Conformity Determinations to be publicly reviewed prior to adoption. NYMTC seeks public comment on the draft Conformity documentation through notification of interested parties and media outlets for a thirty-day public comment period and related public review meetings.

The public comment period for this Transportation Conformity Determination was from June 2, 2025 through July 1, 2025.

4 FORECASTING DEMAND

To determine the impact of future non-exempt and regionally significant transportation projects, NYMTC uses the New York Best Practice Model (NYBPM), an activity-based and tour-based travel demand model, to predict and simulate detailed travel patterns for every household in the 28-county study area, over a 24-hour average weekday period, based on their travel behavior.

4.1 MODEL COMPONENTS

The NYBPM simulates the daily activities (i.e., work, school, or leisure travel) of all individuals residing in a household using intra-household interactions that are constrained by choice of travel with regards to mode, cost, time, and space, to predict the travel characteristics of that household. The model uses tours (travel between two primary locations including stops) as a unit of travel rather than just home-to-work trips. Geographic Information Systems (GIS) software is used to map the existing and proposed transportation networks that are used by the models to predict tour generation, destination and mode choice, time of day travel, and trip assignment/route choice to simulate travel patterns.

4.1.1 Network Files

The NYBPM contains network files which represent the roadway and transit system in the area covered by the model. The roadway network file is encoded and simulated using TransCAD software, which features a GIS framework that provides a realistic representation of roadways. The base year 2019 roadway network contains 67,043 internal links representing roadway segments covering 21,737 centerline miles and includes all freeways and major arterials, most minor arterials, ramps and some local and collector roadways. The characteristics of these roadways represented in the network include information on the number of lanes, functional class, direction, speed, parking regulations, truck usage and restrictions, and tolled links. The centerline and total lane mileage included in the NYBPM roadway network is noted in Table 1 below.

Table 1 – Roadway Centerline and Lane Miles

Area	Functional Class	Number of Links	Centerline Miles	Lane Miles
Rural	1	667	532	1,728
	2	1,495	1,077	2,384
	6	1,967	1,340	2,741
	7	1,294	843	1,691
	8	426	508	1,025
	9	1,020	557	1,127
Urban	11	4,306	1,706	4,987
	12	4,671	1,474	3,777
	14	16,239	4,320	11,500
	16	21,108	6,188	13,616
	17	3,648	1,178	2,451
	19	1,196	402	796
	20 (ramps)	9,006	1,612	1,986
Total		67,043	21,737	49,809

The transit network file contains transit service characteristics, which is used with TransCAD network settings and coding protocols to calculate the skims (or impedance) needed to predict destination, mode, and route choices. The transit network representation integrates the many diverse transit services in New York City, Long Island, northern New Jersey, and five upstate New York counties into a single TransCAD (version 9.0) route system. The transit network includes:

- Commuter rail lines (MTA Long Island Rail Road, MTA Metro-North Railroad, and New Jersey Transit);
- Rapid transit lines (MTA New York City Transit, Port Authority Trans-Hudson (PATH), Newark Light Rail, and Hudson Bergen Light Rail);
- Express, limited stop and local bus routes, as well as bus rapid transit and Select Bus Service routes; and
- Ferry services and an aerial tramway.

In the NYBPM, commuter buses are separated from all other buses and included with commuter rail as a premium mode. The Staten Island Ferry is treated as part of the subway mode, and other ferry services are treated as part of the commuter rail mode.

INTEGRATED NETWORK LINK LAYER

The NYBPM 2019 base year consists of an integrated network that consists of three types of links:

- Highway network links representing the regular roadway segments which can be used for regular road vehicles and buses;
- Fixed guideway transit links representing the links exclusively used by transit modes like subway, rail, ferry, and Bus Rapid Transit (BRT); and
- Transit station connection links connecting the fixed guideway stations and road network links for station access and egress, or the transferring between transit stations.

The highway link layer was augmented with links needed to support the General Transit Feed Specification (GTFS) for bus routes. GTFS provides a common format for public transportation schedules and related geographic information, including bus frequencies and other schedule data. Bus routes for transit operators without GTFS data (“non-GTFS” routes) were also conflated to conform to the integrated network link layer.

FARE AND CAPACITY DATA

NYBPM 2019 base year transit fares represent those charged by the various transit operators in 2019, in 2019 dollars. The route and line capacities used account for the fact that bus and subway lines are used by commuter rail riders in addition to other riders, and therefore reflect crowding (congested) conditions.

4.1.2 Model Structure

The activity-based model components in the NYBPM 2019 are part of CEMSELTS and CEMDAP, which each consist of several components (submodels) as shown below in Figures 4.1 and 4.2. The overall activity-based model system is defined by the integration of three key components:

- **PopGen**, the synthetic population generator;
- **CEMSELTS**, the socioeconomic modeling system; and
- **CEMDAP**, the activity-based modeling engine.

PopGen (Population Generator) generates the population and related socioeconomic attributes (i.e., age, sex) for the entire region by expanding the data from a known sample population. The NYMTC socioeconomic demographic (SED) dataset serves as the primary source for the expansion, and is enriched with block group level data from the American Community Survey (ACS).

CEMSELTS (Comprehensive Econometric Microsimulator of Socioeconomics, Land use and Transportation Systems) is the component used to produce additional socioeconomic and demographic attributes for each person in the synthetic population with a view to develop a rich set of input data for the activity-based microsimulation model system. All the variables that can be simulated by CEMSELTS

are stripped away from the synthetic population generated by PopGen and replaced with simulated values from CEMSELTS. The resulting richer set of inputs is then fed to CEMDAP, to simulate complete daily activity-travel patterns for the population of the model region.

CEMDAP (Comprehensive Econometric Microsimulator for Daily Activity-travel Patterns) is a microsimulation implementation of a continuous-time activity-travel modeling system. It takes as input the disaggregate “agent” level sociodemographics, land use patterns, and transportation system level-of-service characteristics, and model parameters for the region, to provide as outputs the detailed individual level daily activity-travel patterns for all the individuals in the study area. “Agents” in this case refer to the individuals who live in the model region, who are performing the activities that result in the travel being modeled.

Figure 4.1 shows the CEMSELTS model structure and order of execution of the components, and Figure 4.2 shows the CEMDAP model structure and order of execution of the components (note that some of the CEMDAP components may be executed in parallel). Generally, the activity-scheduling models (the large lower box in Figure 4.2) are dependent on the results of components of the generation-allocation (GA) model system (the upper box).

Figure 4.1 CEMSELT Structure and Flow

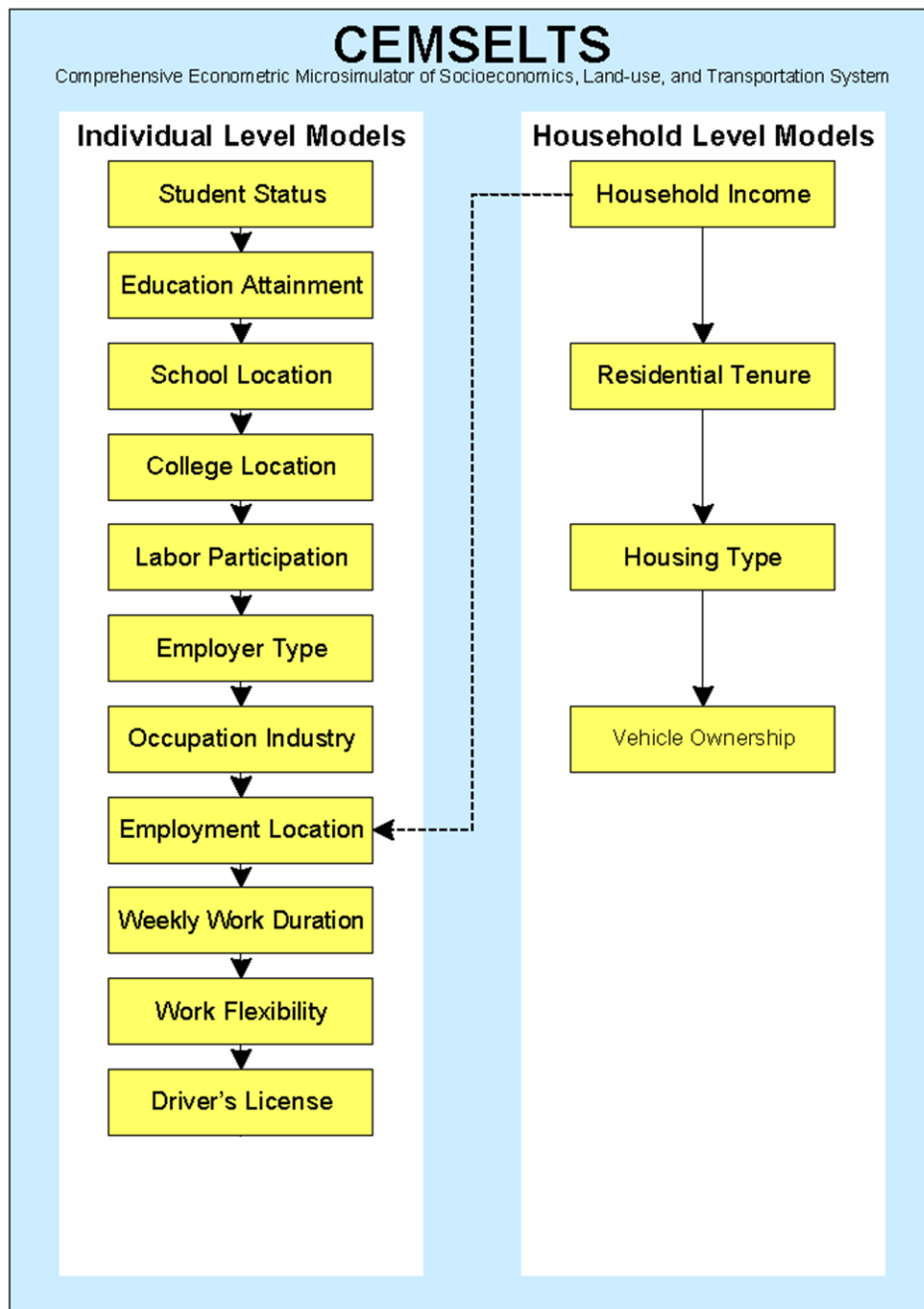
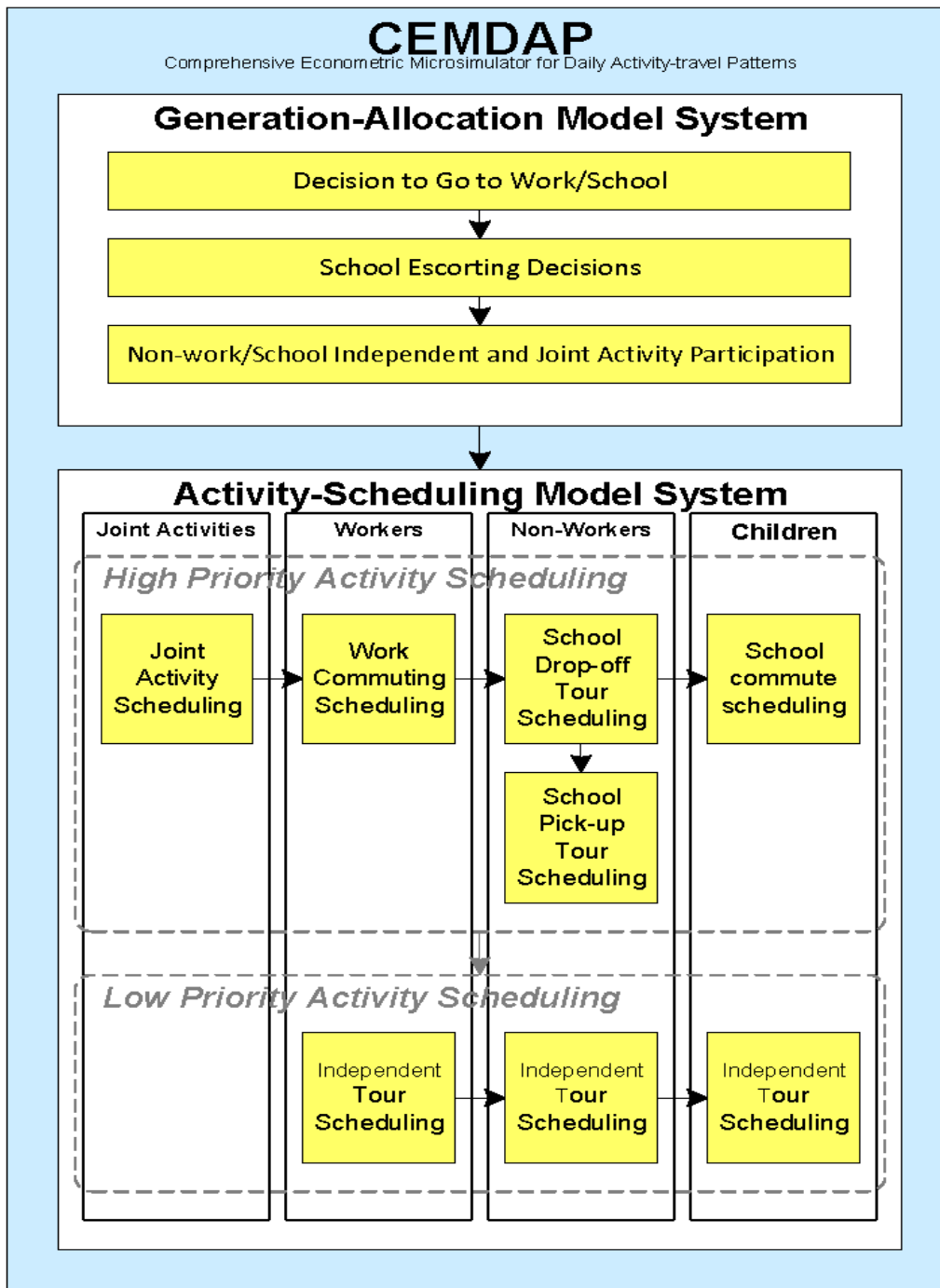


Figure 4.2 CEMDAP Structure and Flow



The Model takes input data from various sources and uses statistical processes and mathematical equations to formulate outputs. There are several types of these formulations, and the estimation procedure uses observed data from a variety of sources. All input data sources are the latest available for use at the time of model development and include the following:

- Regional Household Travel Survey (RHTS), conducted by NYMTC and North Jersey Transportation Planning Authority (NJTPA) in 2010 – 2011. This survey was conducted in the fall 2010 through fall 2011. The data became available in October 2014.
- Regional Establishment Survey (RES), conducted by NYMTC in 2015 – 2016. This data became available in the spring of 2018.
- The 2019 1-year Public Use Microdata Sample (PUMS), which is part of the American Community Survey (ACS) conducted by the U.S. Census Bureau. The data became available in October 2020, which was the most recent available at the time.

4.2 MODEL INPUTS

The NYBPM is updated approximately every three to four years with new data to ensure that the model is current. The year for which the data is refreshed is called the base year. The base year of the current model is 2019. In addition, the NYBPM requires several data as inputs to predict travel demand on the transportation systems for any future scenario year. The data requirements are described in the sections below.

4.2.1 Transportation Analysis Zones (TAZs)

The NYBPM TAZ system is the underlying spatial structure for the representation of the socioeconomic and demographic characteristics of the area covered by the NYBPM, as well as the roadway and transit networks.

For the 28-county modeling area, 5,418 zones were created based on land use and socioeconomic data collected for the adjusted SED 2055 dataset, which was rebenchmarked to a new 2020/2022 baseline from the previous SED 2055 forecast. These zones are mostly equivalent to census tracts, though there are instances where several tracts correspond to one zone, and vice versa. Table 2 shows the NYBPM TAZ system by County, Districts and Sub-Region.

Table 2 - NYBPM Zone System – 2019 Base Year TAZs by County, Districts and Sub-Region

State (3)	County (28)			District (31)		Sub-Region	TAZs Range		# of TAZs	# Census Tracts 2010
	#	FIPS	Name							
NY	1	36061	New York	1	CBD: Lower	CBD	1	14	14	288
				2	CBD: Valley		15	107	93	
				3	CBD: Midtown		108	165	58	
				4	Other Manhattan	Upper Manhattan	166	335	170	
	2	36081	Queens	5	Queens	Other NYC	336	1,004	669	669
	3	36005	Bronx	6	Bronx		1,005	1,343	339	339
	4	36047	Kings	7	Kings		1,344	2,103	760	761
	5	36085	Richmond	8	Richmond		2,104	2,212	109	111
	6	36059	Nassau	9	Nassau	Long Island	2,213	2,491	279	284
	7	36103	Suffolk	10	Suffolk		2,492	2,813	322	323
	8	36119	Westchester	11	Westchester	Mid-Hudson	2,814	3,036	223	223
	9	36087	Rockland	12	Rockland		3,037	3,101	65	65
	10	36079	Putnam	13	Putnam		3,102	3,120	19	19
	11	36071	Orange	14	Orange		3,121	3,200	80	79
	12	36027	Dutchess	15	Dutchess		3,201	3,279	79	79
NJ	13	34003	Bergen	16	Bergen	New Jersey NJTPA Core Area	3,280	3,467	188	179
	14	34031	Passaic	17	Passaic		3,468	3,568	101	100
	15	34017	Hudson	18	Hudson		3,569	3,754	186	166
	16	34013	Essex	19	Essex		3,755	3,983	229	210
	17	34039	Union	20	Union		3,984	4,098	115	108
	18	34027	Morris	21	Morris	New Jersey NJTPA Other	4,099	4,199	101	100
	19	34035	Somerset	22	Somerset		4,200	4,280	81	68
	20	34023	Middlesex	23	Middlesex		4,281	4,489	209	175
	21	34025	Monmouth	24	Monmouth		4,490	4,642	153	144
	22	34029	Ocean	25	Ocean		4,643	4,778	136	126
	23	34019	Hunterdon	26	Hunterdon		4,779	4,810	32	26
	24	34041	Warren	27	Warren		4,811	4,837	27	23
	25	34037	Sussex	28	Sussex		4,838	4,881	44	41
26	34021	Mercer	29	Mercer	New Jersey (DVRPC)	4,882	5,005	124	77	
CT	27	09001	Fairfield	30	Fairfield	Connecticut	5,006	5,215	210	211
	28	09009	New Haven	31	New Haven		5,216	5,404	189	190
Subtotal									5,404	5,184
Special Generator Zones							6,151	6,164	14	
Total TAZs									5,418	

4.2.2 Socioeconomic and Demographic (SED) Forecasts

Federal planning regulations require NYMTC to prepare and adopt long-range SED forecasts to be used in transportation and land use analyses. To do this, employment, population, labor force and household models were employed for the area covered by the NYBPM to produce the following forecasted variables by county/borough in five-year intervals:

- Population Variables: total population, household population, group quarters population
- Employment Variables: total employment, payroll employment, self-employment
- Labor Force Variables: labor force, employed labor force
- Household Variables: total households, average household size

Forecasts of total employment, total population, and total households for the NYMTC planning area are shown in Table 3.

A description of each SED model is provided below:

- **POPULATION** - The Population Model is produced using a cohort-component (CC) method. The CC method divides the population into age and sex cohorts in five-year intervals and uses historical birth and death rates to estimate the net change in population and net migration. The Population Model results for each county were adopted on June 24, 2024, as part of the Adjusted 2055 SED forecasts.
- **EMPLOYMENT** - The Employment Model generates the county-level employment forecasts that serve as a basis for generating work trips in the journey-to-work forecasting process. It averages the third-party forecasts to form a base level of payroll employment and to determine the growth rate for each county over the forecast horizon. The Employment Model outputs for each county were adopted on June 24, 2024, as part of the Adjusted 2055 SED forecasts.
- **LABOR FORCE** – The Labor Force Model converts population projection inputs into estimates of civilian labor force by combining various other inputs through a series of calculations. The other key functions are to generate estimates of Labor Induced Migration, and to provide an estimate of the employed labor force by county of residence.
- **HOUSEHOLDS** - The Household Model forecasts the average household size and the number of households for each county. The number of households is determined by dividing the household population by average household size. A headship rate (a ratio of household-heads to the corresponding household population) was used to forecast the projected number of households.

Table 3 - Employment, Population, and Households for NYMTC Counties¹

		2025	2030	2035	2040	2045	2050	2055
Bronx County	Employment	407	422	437	450	462	483	503
	Population	1,430	1,495	1,536	1,574	1,608	1,634	1,647
	Households	553	579	596	611	625	635	640
Kings County	Employment	1,040	1,080	1,115	1,151	1,182	1,215	1,248
	Population	2,612	2,723	2,792	2,853	2,910	2,957	2,980
	Households	1,041	1,085	1,114	1,138	1,162	1,181	1,190
New York County	Employment	2,644	2,696	2,737	2,765	2,793	2,821	2,849
	Population	1,604	1,674	1,714	1,745	1,772	1,791	1,797
	Households	830	869	890	907	922	932	935
Queens County	Employment	864	902	930	973	1,006	1,059	1,112
	Population	2,291	2,376	2,423	2,462	2,499	2,529	2,537
	Households	867	899	918	933	947	958	961
Richmond County	Employment	160	167	172	176	180	185	189
	Population	491	495	499	502	505	508	510
	Households	174	175	177	178	179	180	181
Nassau County	Employment	737	762	781	794	807	821	835
	Population	1,389	1,409	1,466	1,505	1,518	1,546	1,573
	Households	459	466	480	489	492	502	511
Suffolk County	Employment	758	772	784	792	800	808	816
	Population	1,534	1,554	1,613	1,652	1,673	1,693	1,713
	Households	517	528	546	558	563	569	575
Putnam County	Employment	34	35	35	36	36	36	36
	Population	98	100	103	106	107	107	108
	Households	36	37	38	38	39	39	39
Rockland County	Employment	150	154	158	161	164	167	170
	Population	345	357	374	390	404	419	435
	Households	105	108	113	118	121	126	130
Westchester County	Employment	509	518	527	536	546	552	557
	Population	991	997	1,017	1,030	1,031	1,029	1,028
	Households	375	379	385	388	388	388	388

*Numbers are in thousands

¹ County-level forecasts were further disaggregated to 16 variables at the TAZ level. NYMTC has incorporated major future land use developments in the region as a base for the TAZ disaggregation process. Information on these projects and their timelines were submitted to NYMTC staff by the relevant member agencies. The threshold for major developments is a minimum of 50 residential units or 15,000 square feet for commercial developments. .

The NYBPM requires 16 SED forecast variables as primary inputs for travel demand forecasting. These variables are derived from the county-level population, employment, household, and labor force forecasts.

RESIDENCE-BASED VARIABLES INCLUDE:

- Total Population
- Household Population
- Group Quarters Population – Total
- Group Quarters Population – In Institutions
- Group Quarters Population – Homeless/Streets
- Group Quarters Population – Other
- Number of Households – Total
- Average Household Size
- Mean Household Income (2022 dollars)
- Employed Labor Force

WORKPLACE-BASED VARIABLES INCLUDE:

- Employment – Total
- Employment – Office
- Employment – Retail
- Mean Earnings per Worker (2022 dollars)

SCHOOL ENROLLMENT VARIABLES INCLUDE:

- Kindergarten-12th Grade Enrollment
- University Enrollment

4.2.3 Planning Assumptions

When a new regional emissions analysis is undertaken, all the latest assumptions regarding the model inputs are incorporated in that analysis. These planning assumptions fall into several general areas such as SED forecasts, transit operating policies and service levels, roadway operating policies, and “non-exempt” transportation improvement projects programmed for future years.

Based on consultation with the NYSICG and as per 40 CFR § 93.110(a), all assumptions were locked in as of **March 31, 2025**, when the regional emissions analysis began for the FFYs 2026-2030 TIP and FFYs 2026-2055 Plan.

Descriptions of the key assumptions follow:

- **SED FORECASTS** - The county-level Adjusted 2055 SED forecasts for population and employment were adopted by the NYMTC Program, Finance and Administrative Committee on June 24, 2024. These adopted forecasts were further disaggregated to 16 variables at the TAZ level to be used as inputs to the NYBPM. The NYMTC SED forecasts are employment driven; the smaller growth in employment yields smaller growth in both Labor Force and Population which determines the supply of workers.
- **TRANSIT OPERATING POLICIES AND SERVICE LEVELS** - NYMTC tracks changes to transit operating policies and service levels on an ongoing basis. These changes are reflected in the NYBPM transit network.
- **ROADWAY OPERATING POLICIES** - Roadway operational and tolling information is collected on an on-going basis and used to update the NYBPM roadway network. All roadway tolls in the NYMTC region, such as the New York State Thruway and bridge/tunnel tolls, were updated in the NYBPM.
- **PROJECTS PROGRAMMED IN FUTURE YEARS** - Transportation conformity requires that the overall set of investments contained in an MPO's TIP and fiscally constrained Plan conform to the mobile source emissions budgets in the SIP. This regional emissions analysis considers and evaluates projects in NYMTC's 2026-2030 TIP identified as "non-exempt" and all fiscally constrained transportation improvements in NYMTC's 2026-2055 Plan identified as "non-exempt" or "regionally significant" (i.e., non-federal, non-exempt improvements on regionally significant transportation facilities) pursuant to 40 CFR Part 93 and 6 NYCRR Part 240. Projects are coded into the relevant NYBPM roadway or transit network to model future scenario year conditions. A complete listing of the transportation improvement projects included in the regional emissions analysis appears in Appendix 1.

4.3 MODEL OUTPUTS

The NYBPM traffic assignments produce travel demand forecasts on the transportation networks. The roadway/highway assignment outputs must undergo a series of adjustments to calculate the regional vehicle-miles of travel (VMT) and speeds before the emission rates can be applied to generate the required emissions estimates. The adjustments involve the following steps:

4.3.1 Calculating VMT

For each time-period and each link (roadway segment) in the NYBPM network, VMT is calculated by multiplying the forecasted link volume with the link length.

4.3.2 Highway Performance Monitoring System (HPMS) Reconciliation

HPMS is a national program that includes inventory information for all of the Nation's public roads as certified by the States' Governors annually. HPMS reconciliation factors are applied to the link VMTs to account for the missing local roads in the NYBPM and adjustment of higher functional class roadways, to get an accurate estimate of the regional VMT.

The HPMS reconciliation factors (Table 4) are the ratio of the county-level HPMS-based daily VMT (provided by NYSDOT) to the NYBPM network-based daily VMT by functional class. The ratio is held constant for the future year forecasts. The Daily VMT Reconciliation factors based on HPMS 2023 generated for each county by roadway functional class (FClass) are shown below:

Table 4 - HPMS Reconciliation Factors

HPMS VMT Reconciliation Factors								
County		Fclass	Factor		County		Fclass	Factor
NEW YORK	1	11	0.631		WESTCHESTER	8	7	1.000
		12	0.931				11	1.055
		14	0.964				12	0.979
		16	1.237				14	1.076
		17	3.709				16	0.757
		19	82.258				17	2.549
QUEENS	2	11	0.833		ROCKLAND	9	19	46.625
		12	1.067				1	1.000
		14	0.911				8	1.000
		16	0.693				11	1.064
		17	22.590				12	1.158
		19	153.586				14	0.802
BRONX	3	11	0.888				16	1.122
		12	0.960				17	2.604
		14	1.279				19	335.191
		16	0.958				1	1.000
		17	1.442				2	2.032
		19	39.509				6	0.660
KINGS	4	11	0.649		PUTNAM	10	7	0.550
		12	1.018				8	0.442
		14	0.681				11	1.356
		16	0.553				12	0.418
		17	2.485				14	1.306
		19	176.588				16	1.235
RICHMOND	5	11	0.783			17	1.103	
		12	1.337			19	1.000	
		14	1.461			1	0.506	
		16	1.087			2	0.097	
		17	8.630			6	0.118	
		19	47.336			7	0.059	
NASSAU	6	11	0.864	ORANGE	11	8	0.272	
		12	0.985			9	1.335	
		14	0.748			11	2.456	
		16	0.743			12	35.399	
		17	1.185			14	1.214	
		19	209.218			16	3.493	
SUFFOLK	7	2	1.000		DUTCHESS	12	17	8.392
		6	0.035				19	207.737
		7	0.040				2	0.451
		8	1.000				6	0.340
		9	6.821				7	0.652
		11	0.854				8	0.206
		12	1.134				11	1.589
		14	1.243				12	0.820
		16	1.115				14	1.359
		17	2.019				16	0.657
		18	1.000				17	2.852
19	100.781							

4.3.3 Travel Time Adjustments

The NYBPM roadway network does not include any signalized intersections. To account for mid-block delays, delays at signalized intersections, delays caused by incidents (non-recurring delays) on the road network, and effects of Intelligent Transportation Systems (ITS) and signal projects, the travel time of the appropriate links are adjusted as part of post processing step for more realistic speed estimates.

5 FORECASTING EMISSIONS

This section provides a brief description of tools and methodology used to calculate the emissions inventory for the regional emissions analysis. The emissions inventory is the total emissions of specific air pollutants for each county by four time periods.

5.1 CALCULATING THE EMISSIONS INVENTORY

5.1.1 MOVES Inputs and Parameters

USEPA's MOtor Vehicle Emission Simulator (MOVES) is a state-of-the-science emission modeling system that estimates emissions for mobile sources at the national, county, and project level for "criteria" air pollutants (i.e., those specified by CAAA90) and air toxics. NYMTC used version MOVES5, to conduct the regional emissions analysis for the FFYs 2026-2030 TIP and FFYs 2026-2055 Plan. The NYSICG concurred on March 26, 2025, that NYMTC will use MOVES5 as the regulatory emission model in the NYMTC Post-Processor Software for Air Quality (PPS-AQ) for the regional emissions analysis. MOVES estimates emissions from all the on-road vehicles including cars, trucks, motorcycles, and buses.

There are two options for using MOVES to forecast emissions: 1) inventory mode; and 2) emissions rate mode. The inventory mode calculates total emissions inventory based on vehicle miles of travel and vehicle population data. The emission rate mode produces a look-up table of emission rates including emissions per unit of distance for running emissions, the rate per profile for evaporative processes, and the rate per vehicle for starts and extended idling. As per USEPA guidance, NYMTC can use either method to conduct regional emissions analyses. NYMTC, with the concurrence of the NYSICG, chose to use the emissions rate mode for its emission inventory analysis since emission rates can be applied to multiple scenarios in the same calendar analysis year, thereby reducing the amount of "run-time" for each scenario analysis.

5.1.2 Post-Processor Software for Air Quality (PPS-AQ)

NYMTC's PPS-AQ is a powerful web-based application that bridges input data from the NYBPM and runs it through MOVES to produce an emissions estimate. The PPS-AQ preprocesses NYBPM output data, invokes MOVES to generate emission rate files, and produces an emission inventory for the regional emissions analysis.

- **DOMAIN/SCALE:** Analysis was performed at the county level. The roadways by functional class are, aggregated to MOVES road types for the emissions analysis.
- **CALCULATION TYPE:** Analysis was performed using the "emissions rate" methodology.
- **TIME SPAN:** Analyses were performed for 24 one-hour periods of a weekday since the NYBPM data represents an average weekday. The PPS-AQ applies monthly adjustment factors to incorporate monthly fluctuation and then multiplies that adjusted value to the number of days in that month to produce monthly VMT. Yearly VMT is the aggregation of twelve months. All twelve months are selected for the annual emissions forecasts of fine particulate matter (PM_{2.5}) and nitrogen oxides (NOx). To reflect the summer months for

analysis of volatile organic compounds (VOC) and NO_x, the ozone precursors, an average day of summer months (June, July, August) is selected.

- **GEOGRAPHIC BOUNDARY:** Custom domains based on the geographic boundary of each nonattainment area and maintenance area in the NYMTC planning area were established in the PPS-AQ.
- **COUNTY DATA INPUTS:** the most recent county-specific MOVES input databases from NYSDEC and NYSDOT as of March 18, 2025, are used in the regional emissions analysis.

5.1.3 Preparing Emission Rates

The MOVES system generates three emission rate files:

- Emissions rate per distance (roadway) is used for on-road running processes to capture exhaust and most evaporative emissions for each temperature and 16 speed bins, and the units are in grams per vehicle-mile.
- Emissions rate per vehicle is used for off-network to capture exhaust and most evaporative emissions such as starts and extended-idling for each temperature and hour, and the units are grams per vehicle.
- Emissions rate per profile (source type & source type population) is used for evaporative vapor venting from the vehicle's fuel for each temperature and hour, and the units are in grams per vehicle.

5.1.4 Calculating Emissions

PPS-AQ applies customized scripts/programs to post-process the NYBPM output and calculates total emission inventories for each county/borough by road type of the various nonattainment or maintenance areas. The total emissions inventory is calculated by capturing two emission sources: VMT-based (emissions generated by distance traveled) and fleet-based (emissions generated based on source/vehicle type).

PPS-AQ combines the "emissions rate per vehicle" and "emissions rate per profile" tables from MOVES into one table and multiplies it by the population data obtained from NYSDOT to calculate 'population-based' emissions. The "rate per distance" generated from MOVES is multiplied by the VMT for each speed bin and designated temperature to calculate 'VMT-based' emissions for on-road conditions. Finally, the vehicle 'fleet-based' emissions and the 'VMT-based' emissions are combined to produce the total emissions inventory.

5.2 TRANSPORTATION PROJECTS EVALUATED

All projects programmed and planned in the FFYs 2026-2030 TIP and fiscally constrained FFYs 2026-2055 Plan, were categorized by their air quality status under the CAAA90. All FHWA/FTA projects categorized as "non-exempt" were included in the regional emissions analysis per 40 CFR § 93.104 (c), and 6 NYCRR Subpart 240-2. Non-exempt projects are those that are not exempt from the requirements of Transportation Conformity. The NYSICG reviewed and concurred with the air quality classifications for all new and revised projects in the FFYs 2026-2030 TIP and fiscally constrained FFYs 2026-2055 Plan.

5.2.1 Regionally Significant Projects

Per 40 CFR § 93.101, a regionally significant project is defined as a transportation project (other than an exempt project) that is on a facility which serves regional transportation needs (such as access to and from the area outside of the region, major activity centers in the region, major planned developments such as new retail malls, sports complexes, etc., or transportation terminals as well as most terminals themselves) and would normally be included in the modeling of a metropolitan area's transportation network, including, at a minimum, all principal arterial highways and all fixed guideway transit facilities that offer an alternative to regional roadway travel. Regionally significant projects that are not funded by the FHWA/FTA and do not require any FHWA/FTA approvals must be included in the regional emissions analysis. There were no new non-federal regionally significant projects in this transportation conformity determination.

5.2.2 Master Listing of Evaluated Projects

The table in Appendix 1 presents a master listing of projects and operational attributes that have been included in this regional emissions analysis:

- Projects that have been determined to be either non-exempt under the CAAA90 or to be regionally significant.
- Roadway operational changes from the base network in each milestone year included in the regional emission analysis.
- Transit operational changes to the transit network from the base network in each milestone year included in the regional emission analysis.

6 REGIONAL EMISSIONS ANALYSIS RESULTS

6.1 NEW YORK-NORTHERN NEW JERSEY-LONG ISLAND, NY-NJ-CT OZONE NONATTAINMENT AREA

The New York-Northern New Jersey-Long Island, NY-NJ-CT Nonattainment Area, which includes the counties of Nassau and Suffolk on Long Island, Rockland and Westchester in the lower Hudson Valley, and the five counties of New York City in the NYMTC planning area, was classified as a “moderate” nonattainment for the 1997 ozone NAAQS on June 15, 2004. The motor vehicle emission budget for the New York State portion of the nonattainment area was found to be adequate by the USEPA on August 2, 2010.

On July 20, 2012, the USEPA classified the same area as “marginal” nonattainment for the 0.075 parts per million (ppm) 2008 ozone standard. The 1997 ozone standard was officially revoked on July 20, 2013, but the area retains its nonattainment designation for the 1997 standard in addition to the 2008 standard. As per the USEPA’s “Transportation Conformity Guidance for 2008 Ozone Nonattainment Areas,” the NYMTC is required to demonstrate consistency with the existing motor vehicle emissions budgets for two ground-level ozone precursors: Volatile Organic Compounds (VOC) and Nitrogen Oxides (NOx).

On April 11, 2016, the USEPA determined that the New York-Northern New Jersey-Long Island, NY-NJ-CT area failed to attain the 2008 ozone standard by the July 15, 2015, attainment date. Based on 2012-2014 air quality monitoring data, the area was reclassified to “moderate” nonattainment for the 2008 ozone standard. On November 10, 2017, the NYSDEC submitted a SIP revision for the New York portion of the New York-Northern New Jersey-Long Island 8-hour ozone nonattainment area. The SIP revision included summer day VOC and NOx motor vehicle emissions budgets associated with the SIP reasonable further progress (RFP) demonstration. The USEPA determined that the 2017 Motor Vehicle Emission Budgets (MVEBs) contained in the 8-hour ozone SIP submission for the New York portion of the New York-Northern New Jersey-Long Island, NY-NJ-CT area were adequate for transportation conformity purposes, effective June 25, 2018.

The USEPA revised the 8-hour primary and secondary NAAQS for ozone on October 1, 2015. The ozone NAAQS was lowered from 0.075 parts per million (ppm) to 0.070 ppm, but the 2008 ozone standard was not revoked. On June 4, 2018, the USEPA designated the New York-Northern New Jersey-Long Island, NY, NJ, CT area nonattainment for the 2015 ozone standard and classified the area as “moderate” nonattainment, effective August 3, 2018. On July 25, 2024, the USEPA granted a request from the States of New York, New Jersey, and Connecticut to reclassify the New York-Northern New Jersey-Long Island, NY-NJ-CT ozone nonattainment area from “Moderate” to “Serious” for the 2015 8-hour ozone NAAQS with an attainment date of August 3, 2027.

On August 23, 2019, the USEPA issued a Federal Register notice to announce that the 8-hour ozone design value for the New York-Northern New Jersey-Long Island, NY-NJ-CT area exceeded 0.075 ppm for the period 2015 – 2017. Thus, effective September 23, 2019, the area was reclassified to “serious” nonattainment for the 2008 ozone NAAQS with an attainment date of July 20, 2021. Based on certified

2018-2020 ozone monitoring data, the area did not attain the 2008 standard by July 20, 2021 and was re-classified to “severe” nonattainment with an attainment date of July 20, 2027.

On November 29, 2021, the NYSDEC submitted a SIP revision for the New York portion of the New York-Northern New Jersey-Long Island, NY-NJ-CT, 2008 8-hour ozone nonattainment area. This revision to the SIP included 2020 summer day VOC and NOx motor vehicle emissions budgets associated with the SIP’s reasonable further progress demonstration. The new budgets became effective August 15, 2022.

- **ANALYSIS YEARS** – Ozone precursors were forecasted for 2025, 2026 (interpolated), 2035, 2045, 2050, and 2055 and analyzed for consistency with the MVEB for the 2008 8-hour ozone standard. These analysis years meet the requirements of the federal transportation conformity regulations as follows:
 - Analysis year 2025 is a SIP milestone year
 - Analysis year 2026 due to the 2008 ozone standard being bumped up to “severe” nonattainment classification
 - Analysis year 2035 to meet the requirement that consecutive analysis years be no more than ten years apart
 - Analysis year 2045 to meet the requirement that consecutive analysis years be no more than ten years apart
 - Analysis year 2055 to align with the horizon year of NYMTC’s Regional Transportation Plans (*Moving Forward 2055*)

Table 5 - Nine County NOx Mobile Source Emissions Analysis (tons per day)

Scenario Year	NYBPM/PPS emissions	Ozone SIP Budget	<i>Conclusion</i>
		(NOx)	
2025	49.45	89.07	<i>Pass</i>
2026	46.64*	89.07	<i>Pass</i>
2035	21.36	89.07	<i>Pass</i>
2045	14.06	89.07	<i>Pass</i>
2050	13.20	89.07	<i>Pass</i>
2055	12.85	89.07	<i>Pass</i>

*Linear interpolation

Table 6 - Nine County VOC Mobile Source Emissions Analysis (tons per day)

Scenario Year	NYBPM/PPS emissions	Ozone SIP Budget	Conclusion
		(VOC)	
2025	38.64	54.51	<i>Pass</i>
2026	37.41*	54.51	<i>Pass</i>
2035	26.29	54.51	<i>Pass</i>
2045	18.76	54.51	<i>Pass</i>
2050	17.42	54.51	<i>Pass</i>
2055	17.17	54.51	<i>Pass</i>

*Linear interpolation

6.2 POUGHKEEPSIE OZONE NONATTAINMENT AREA (PONA)

Effective June 15, 2004, the EPA designated Dutchess, Orange, and Putnam counties to be a nonattainment area (PONA) under the 1997 8-hour ozone standard. Based on 2001-2003 data, the 8-hour ozone design value for PONA was 0.094 ppm (the current design value for the area, based on 2021-2023 data is 0.064 ppm). Dutchess, Orange and Putnam counties were therefore classified as a “moderate” ozone nonattainment area under the 1997 8-hour ozone standard. The Dutchess County Transportation Council (DCTC), OCTC, and NYMTC, serve as the designated MPOs for Dutchess, Orange, and Putnam counties.

On May 21, 2012, USEPA issued air quality designations for the 2008 ozone NAAQS. With an effective date of July 20, 2012, USEPA designated PONA as being in attainment for the 2008 ozone NAAQS of 0.075 ppm. On June 4, 2018, the EPA issued its air quality designations for the 2015 ozone NAAQS of 0.070 ppm. Effective August 3, 2018, USEPA designated PONA as being in attainment for the stricter 2015 ozone standard.

On November 29, 2018, USEPA issued guidance (EPA-420-B-18-050, November 2018) for the *South Coast II* Court Decision that addresses how transportation conformity determinations can be made in areas that were nonattainment or maintenance for the 1997 ozone NAAQS when the 1997 ozone NAAQS was revoked, but designated attainment for the 2008 ozone NAAQS in EPA’s original designations for this NAAQS (May 21, 2012).

For the 1997 ozone NAAQS areas, which include PONA, transportation conformity for the 1997 ozone NAAQS can be demonstrated without a regional emissions analysis, per 40 CFR 93.109(c). This provision states that the regional emissions analysis requirement applies one year after the effective date of USEPA’s nonattainment designation for a NAAQS and until the effective date of revocation of such NAAQS for an area. The 1997 ozone NAAQS revocation was effective on April 6, 2015, and the *South*

Coast II decision upheld the revocation. As no regional emission analysis is required for this conformity determination, there is no requirement to use the latest emissions model, budget, or interim emissions tests.

Therefore, transportation conformity for the 1997 ozone NAAQS can be demonstrated by showing the remaining requirements in Table 1 in 40 CFR 93.109 have been met. These include the following requirements that are addressed in Section 2.4 of USEPA's guidance: latest planning assumptions (93.110); consultation (93.112); Transportation Control Measures (93.113); and fiscal constraint (93.108).

The conformity determination process completed for the current DCTC, OCTC, and NYMTC Plans and FFY 2026-2030 TIPs demonstrates that they meet the transportation conformity rule requirements for the 1997 ozone NAAQS. The Transportation Conformity Statement can be found on Dutchess County's website here: <https://www.dutchessny.gov/Departments/Transportation-Council/Transportation-Improvement-Program.htm>

6.3 NEW YORK-NORTHERN NEW JERSEY-LONG ISLAND, NY-NJ-CT PM_{2.5} MAINTENANCE AREA

The New York-Northern New Jersey-Long Island, NY-NJ-CT PM_{2.5} Area encompasses all or portions of nine MPOs or councils of government, as follows:

CONNECTICUT: Naugatuck Valley Council of Governments (NVCOG); Connecticut Metropolitan Council of Governments (CTMetroCOG); South Central Region Council of Governments (SCRCOG); Western Connecticut Council of Governments (WestCOG)

NEW JERSEY/PENNSYLVANIA: Delaware Valley Regional Planning Commission (DVRPC); North Jersey Transportation Planning Authority (NJTPA)

NEW YORK STATE: NYMTC; OCTC

- **1997 PM_{2.5} STANDARD:** In July 1997, USEPA issued NAAQS for fine particulate matter (PM_{2.5}), designed to protect the public from exposure at levels that may cause health problems. The 1997 standards included an annual standard set at 15 micrograms per cubic meter, based on the 3-year average of annual mean PM_{2.5} concentrations and a 24-hour standard of 65 micrograms per cubic meter, based on the 3-year average of the 98th percentile of 24-hour concentrations. The New York-Northern New Jersey-Long Island, NY-NJ-CT PM_{2.5} Area was classified nonattainment for the 1997 annual PM_{2.5} standard and was classified attainment for the 1997 24-hour PM_{2.5} standard.
- **2006 PM_{2.5} STANDARD:** In September 2006, the USEPA revised the 1997 PM_{2.5} standards. The 2006 standards strengthened the 24-hour PM_{2.5} standard from 65 micrograms per cubic meter (µg/m³) to 35 µg/m³ and retained the current annual PM_{2.5} standard at 15 µg/m³. On December 14, 2009, the New York-Northern New Jersey-Long Island, NY-NJ-CT PM_{2.5} Area was classified nonattainment for the new 2006 24-hour PM_{2.5} standard.

- **2012 PM_{2.5} STANDARD:** On March 13, 2013, the USEPA again revised the PM_{2.5} standards. The primary annual standard was lowered to 12 µg/m³, the secondary annual standard remained at 15 µg/m³, and the primary and secondary 24-hour standards remained at 35 µg/m³.

Effective April 18, 2014, USEPA approved New York State's request to redesignate the New York portion of the New York-Northern New Jersey-Long Island, NY-NJ-CT PM_{2.5} Area to attainment for 1997 annual and 2006 24-hour PM_{2.5} Standard. As part of the redesignation to attainment, EPA also approved the New York State "Maintenance Plan" for PM_{2.5}.

The New York-Northern New Jersey-Long Island, NY-NJ-CT PM_{2.5} Area is classified attainment for the 2012 PM_{2.5} NAAQS. However, the air quality maintenance plan for the 1997 and 2006 fine particulate matter standards is still in place. Thus, both OCTC and NYMTC remain subject to the transportation air quality conformity requirements for the 1997 and 2006 fine particulate matter standards.

The motor vehicle emissions budget for the New York State portion of the PM_{2.5} Maintenance Area includes Orange County and all NYMTC counties except Putnam. New York State determined that motor vehicle emissions budgets based on annual emissions of direct PM_{2.5} and NO_x, a precursor, are appropriate for the 2006 24-hour standard because exceedances of the daily standard are not isolated to one season. Therefore, transportation conformity for both the 1997 annual and 2006 daily PM_{2.5} standards are demonstrated using the annual budget test for direct PM_{2.5} and NO_x precursor.

Accordingly, the combined OCTC and NYMTC emissions analyses demonstrate that emissions forecasts in each analysis year "action" scenario are not greater than emissions established by the MVEB for annual direct PM_{2.5} and NO_x. Noted below are the analysis tables for NYMTC, and the combined OCTC/NYMTC tables. For details of the OCTC conformity process and procedures, see Orange County Transportation Council's website: <https://www.orangecountygov.com/2060/Air-Quality>.

Effective September 18, 2013, USEPA found the motor vehicle emissions budgets for PM_{2.5} and NO_x in the submitted maintenance plan for the New York portion of the New York-Northern New Jersey-Long Island, NY-NJ-CT PM_{2.5} nonattainment areas to be adequate for transportation conformity purposes. USEPA officially approved the entire New York State PM_{2.5} Maintenance Plan, including the previously adequate motor vehicle emissions budgets, on April 18, 2014. These budgets have been used in this conformity and compliance is demonstrated in the tables below.

- **ANALYSIS YEARS** - the years 2025, 2035, 2045, 2050 and 2055 were analyzed to demonstrate conformity for the PM_{2.5} standard. These analysis years meet the requirements of the federal transportation conformity regulation as follows:
 - Analysis year 2025 is a maintenance SIP milestone year for the PM_{2.5} budget
 - Analysis year 2026 is a SIP milestone year
 - Analysis year 2035 to meet the requirement that consecutive analysis years be no more than ten years apart
 - Analysis year 2045 to meet the requirement that consecutive analysis years be no more than ten years apart

- Analysis year 2050 to align with the horizon years of Orange County Transportation Council's (OCTC) Long Range Transportation Plan (LRTP)
- Analysis year 2055 to align with the horizon year of NYMTC's Regional Transportation Plans (*Moving Forward 2055*)

**Table 7 - NYMTC Nine County and OCTC Combined Annual NO_x
Mobile Source Emissions Analysis Budget Test (tons per year)**

Scenario Year	NYMTC emissions	OCTC emissions	Total emissions	SIP Budget	Conclusion
2025	19,016.05	2,662.91	21,678.96	51,260.81	<i>Pass</i>
2035	8,483.49	1,252.88	9,736.37	51,260.81	<i>Pass</i>
2045	5,869.97	928.91	6,798.88	51,260.81	<i>Pass</i>
2050	5,550.75	892.97	6,443.72	51,260.81	<i>Pass</i>
2055	5,418.16	880.66	6,298.82	51,260.81	<i>Pass</i>

**Table 8 - NYMTC Nine County and OCTC Combined Annual PM_{2.5}
Mobile Source Emissions Analysis Budget Test (tons per year)**

Scenario Year	NYMTC emissions	OCTC emissions	Total emissions	SIP Budget	Conclusion
2025	466.90	56.88	523.78	3,291.09	<i>Pass</i>
2035	161.41	16.04	177.45	3,291.09	<i>Pass</i>
2045	56.25	5.89	62.14	3,291.09	<i>Pass</i>
2050	37.19	4.20	41.39	3,291.09	<i>Pass</i>
2055	46.48	4.86	51.34	3,291.09	<i>Pass</i>

7 STATEMENT OF CONFORMITY

NYMTC's proposed FFYs 2026-2030 TIP and FFYs 2026-2055 Regional Transportation Plan support and comply with the applicable New York State SIP for Ozone and PM_{2.5} in the relevant nonattainment and maintenance areas. This Transportation Conformity Determination demonstrates the consistency of these programs with the intent of the Clean Air Act Amendments of 1990 and the state and federal transportation conformity regulations. This Transportation Conformity Determination is made in accordance with the criteria and procedures of 40 CFR § 93.106 and 40 CFR § 93.109 - 93.119, and 6 NYCRR Subpart 240-2 and 6 NYCRR § 240-3.1.

APPENDICES

APPENDIX 1: TRANSPORTATION IMPROVEMENT PROJECTS PROGRAMMED AND MODELED IN FUTURE YEARS

Plan ID	PIN Number	Project Name	Completion Date	Milestone Year	Project Type	Project Status
BIN 1066539	X73179	Northbound Bruckner Expwy Mobility Improvements	9/1/2030	2035	Highway	No Change
MHSMC1772	M803-03-07	West Of Hudson Capacity Improvements - Port Jervis Line	12/31/2024	2025	Transit	Deleted
MHSMC5795C	881623	Signal Optimization to Improve Air Quality	7/11/2024	2025	Other	Completed
MHSMC767C	NYCMB767C	Construction Of MNR Penn Station Access	11/30/2027	2035	Transit	No Change
MHSPC701	876197	Stoneleigh Ave. at Drewville Rd Improvement	10/1/2025	2035	Highway	Deleted
MHSRC12307C	876383	Spook Rock Road Extension	1/1/2028	2035	Highway	New
MHSRC2723	8TRM86	Orangetown Gas Powered Vehicles Replacement	8/1/2025	2035	Other	Date Only
MHSRC5330C	882402	Rockland Commute Alternatives	12/1/2022	2025	Other	Deleted
MHSRC5331C	882403	Rockland Commute Alternatives	12/1/2024	2025	Other	Deleted
MHSRC750	875898	Suffern Lane At Hammond Rd	12/1/2024	2025	Highway	Deleted
MHSRC751	875907	Pascack Road At Lawrence Street	3/1/2026	2035	Highway	Deleted
MHSWC1380	880688	Westchester County Commute Alternatives Program	12/31/2023	2025	Other	Deleted
MHSWC1485	875900	Main Street & Huguenot Street Traffic Operations	7/30/2026	2035	Other	Date Only
MHSWC1487	875902	Webster Avenue Traffic Signals	12/31/2029	2035	Other	No Change
MHSWC1807	875899	Pelham Road Traffic Signal Replacement, Ph I	4/30/2025	2025	Other	Date Only

Plan ID	PIN Number	Project Name	Completion Date	Milestone Year	Project Type	Project Status
MHSWC2817	810352	Route 9A: Route 119 To Warehouse Lane	11/1/2031	2035	Highway	Date Only
MHSWC5692C	876263	Microtransit Zones In Westchester County	12/31/2025	2035	Other	Deleted
MHSWC5790C	876260	Construct The Sleepy Hollow Continental Street Bridge Over the Metro-North Hudson Line	1/1/2028	2035	Highway	Date Only
NSMC1778	L703/04/WU	Jamaica Capacity Improvements - Phase II	12/31/2039	2045	Transit	No Change
NSMC2761	L701/01/ME	LIRR New M-9 Electric Train Cars	5/31/2024	2025	Transit	Completed
NSNC12270C	76243	Merrick Road Signal Expansion Phase 13	10/9/2030	2035	Combination	Deleted
NSNC12279C	76239	Signal Communications Expansion Phase 3	6/3/2030	2035	Combination	New
NSNC12531C	76244	Merrick Road Signal Expansion Phase 14	7/16/2031	2035	Combination	Deleted
NSNC1339	76046	Nassau County Traffic Signal Expansion Phase 9	12/31/2027	2035	Combination	Date Only
NSNC1787	NSNC1787	Nassau Hub - Bus Rapid Transit	4/1/2030	2035	Combination	Date Only
NSNC2406	76050	Nassau County Variable Message Signs Phase 2	8/26/2027	2035	Combination	Deleted
NSNC2410	76124	Merrick Road Signal Expansion PH2	6/14/2028	2035	Combination	Deleted
NSNC2516	76125	Nassau County Traffic Signal Expansion Phase 10	3/30/2028	2035	Other	Date Only
NSNC2672	76049	Merrick Road Signal Expansion PH 1	9/17/2031	2035	Combination	Date Only
NSNC4709C	82498	Nassau Hub Initial Operating Segment	3/25/2030	2035	Transit	No Change
NSNC4811	76144	Merrick Avenue Signal Expansion	3/30/2028	2035	Combination	Scope Change

Plan ID	PIN Number	Project Name	Completion Date	Milestone Year	Project Type	Project Status
NSNC4812C	76160	Variable Message Signs Phase 3	6/18/2025	2025	Other	Deleted
NSNC4813C	76161	Traffic Signal Expansion Phase 11	4/1/2030	2035	Highway	Scope Change
NSNC5309C	082498OPS	Nassau Hub - Bus Rapid Transit IOS Phase 1	9/10/2025	2035	Combination	Date Only
NSNC5765C	NC0046	Traffic Signal Expansion Phase 12	4/1/2030	2035	Other	Scope Change
NSNC619	L606/01/YL	Port Washington Yard Track Extensions	12/31/2029	2035	Transit	No Change
NSSC1597	5409	NY 347 Reconstruction	8/14/2027	2035	Combination	No Change
NSSC1598	5423	NY 347 Reconstruction: Gibbs Pond to Hallock Road	2/11/2025	2025	Combination	Completed
NSSC1599	0T2155	NY 347 Reconstruction	1/4/2035	2035	Combination	Date Only
NSSC1600	5410	NY 347 Reconstruction	1/5/2033	2035	Combination	Scope Change
NSSC1603	5411	NY 347 Reconstruction	1/5/2038	2045	Combination	Date Only
NSSC1604	0T2305	NY 347 Reconstruction from NSP To Old Willets Path	9/7/2039	2045	Combination	Date Only
NSSC2408	76114	NYS Route 110 BRT Corridor	10/11/2034	2035	Combination	Date Only
NSSC2610	000BRT	Brookhaven Rail Terminal	12/31/2022	2025	Combination	No Change
NSSC2862	22948	LIE (I-495) At Crooked Hill Road (CR13)	2/11/2025	2025	Highway	Completed
NSSC646	5412	NY 347 Over CR97 Interchange Construction	12/18/2030	2035	Combination	Date Only
NSSC647	0T2493	NY 347 Reconstruction: NY25 Over NY 347 Interchange	1/7/2037	2045	Highway	Date Only

Plan ID	PIN Number	Project Name	Completion Date	Milestone Year	Project Type	Project Status
NSSC678C	76226	Construction Of Midway Crossing Surface Parking, Ronkonkoma	8/18/2027	2035	Transit	No Change
NYCBK165	UTICA_BUSLN	Utica Ave Priority Corridor	7/1/2025	2035	Combination	No Change
NYCBK166	X77303	Bushwick-Downtown Brooklyn Select Bus Service	7/1/2030	2035	Combination	No Change
NYCBK168	X77304	Flatbush Ave Bus Priority Corridor	9/1/2024	2025	Combination	Completed
NYCBK2214	X77309	Brooklyn Waterfront Greenway Gowanus Connector	10/31/2025	2035	Other	Date Only
NYCBK2400	NYCBK2400_B	Citywide Ferry - South Brooklyn Route Modifications	3/8/2023	2025	Transit	Completed
NYCBK2580	X73157	Active Traffic Management (ATM) For Gowanus Expressway	12/15/2028	2035	Combination	Scope Change
NYCBK2589	X02173	Belt Parkway Four Bridge Reconstruction	1/20/2029	2035	Highway	Date Only
NYCBK5545C	BB_SECOND2021	1st/2nd Ave Bus Lane Upgrades	9/1/2024	2025	Combination	Completed
NYCBK5546C	5THAVE_2021	5th Ave Complete Street	7/1/2030	2035	Highway	No Change
NYCBKC5246	D702VN84	Reconstruction Of Verrazzano Bridge to Belt Parkway Exit Ramps	8/31/2029	2035	Highway	Date Only
NYCBKC5247	D702VN86	Belt Parkway - Eastbound Reconfiguration	12/29/2024	2025	Highway	Completed
NYCBX1053	X77243	Replacement Of Bruckner Expressway Over Westchester Creek (Unionport Bridge)	10/7/2025	2035	Highway	No Change
NYCBX2842	X73163	Hunts Point Interstate Access Improvement Project Contract 1	3/21/2023	2025	Highway	Completed

Plan ID	PIN Number	Project Name	Completion Date	Milestone Year	Project Type	Project Status
NYCBX3	X73127	I-95 (Bruckner Expy & NE Thruway Connectivity, Ph 1	4/30/2024	2025	Highway	Completed
NYCBX3235	X73164	Hunts Point Interstate Access Improvement Project Contract 2	11/30/2023	2025	Highway	Completed
NYCBX3236	X73165	Hunts Point Interstate Access Improvement Project Contract 3	10/31/2025	2035	Highway	No Change
NYCBX4715	SBS_TRE2019	Tremont Av Bus Priority Corridor	7/1/2024	2025	Combination	Completed
NYCBX4726	X72707	Rehab 5 CBE Bridges from Boston Rd to BRP. Bronx County, NYC	3/30/2030	2035	Highway	No Change
NYCBX4727	X72711	Cross Bronx Expressway Active Traffic Management	7/31/2025	2035	Other	No Change
NYCBX5301C	BB_FORD2020	Fordham Road Bus Priority Corridor	9/1/2026	2035	Combination	No Change
NYCBX5303C	BB_167ST_2020	167 St & 168 St Bus Priority Corridor	7/1/2026	2035	Combination	No Change
NYCBX5863C	X73178	SB Bruckner Expwy Mobility Improvements (Gun Hill Rd to Westchester Ave)	9/1/2028	2035	Highway	No Change
NYCM2663	G710-01AA	Second Avenue Subway (Phase 2)	9/30/2032	2035	Transit	No Change
NYCM2664	NYCM2664	Second Avenue Subway (Phase 3-4)	12/31/2055	2055	Transit	Date Only
NYCM2848	SBS_96ST2018	96 St Busway	9/1/2028	2035	Combination	No Change
NYCMB12190	N8110102	Interborough Express	1/1/2030	2035	Transit	No Change
NYCMB2350	PW08-2548	Canarsie Line Power Improvement Project	6/30/2025	2025	Transit	Date Only
NYCMB2609	X50197	Congested Corridors Project - Queensboro Bridge	10/1/2024	2025	Combination	Completed

Plan ID	PIN Number	Project Name	Completion Date	Milestone Year	Project Type	Project Status
NYCMB2614	X50160	Fiber Optics on Jackie Robinson Parkway	12/31/2027	2035	Other	No Change
NYCMB2615	X50164	Fiber Optics Links Along Henry Hudson PKWY	12/31/2025	2035	Other	No Change
NYCMB4718	SBS_RDBK2019	Ridgewood To Downtown Brooklyn Bus Priority Corridor	9/1/2025	2035	Combination	No Change
NYCMB4728	SBS_BKJFK2019	Brooklyn JFK Access Bus Priority Corridor	9/1/2025	2035	Combination	No Change
NYCMB4731	NYCM2711	CBTC: 8th Avenue (59th St - High St)	9/30/2027	2035	Transit	Date Only
NYCMB5413C	C801CP03	Central Business District Tolling Program	6/1/2024	2025	Highway	Completed
NYCMB5910C	X22877	I 495 Integrated Corridor Management	6/14/2027	2035	Other	Date Only
NYCMB601	X77374	SBS Transit Signal Priority	1/31/2025	2025	Combination	Completed
NYCMB832	X50162	Construction Of Fiber Optics Links on The Belt Parkway	6/30/2026	2035	Other	Date Only
NYCMB91	X77032	Brooklyn Bridge ITS	6/30/2026	2035	Other	Date Only
NYCQ1693	X80659	LIE Corridor Active Transportation & Demand Management	7/13/2025	2035	Combination	No Change
NYCQ2698	X50161	ITS On Cross Island Parkway	12/31/2025	2035	Other	No Change
NYCQ2707	X73584	VWE Capacity and Access Improvements to JFK Airport	7/30/2025	2035	Highway	No Change
NYCQ2849	SBS_KISS2019	Kissena Blvd Bus Priority Corridor	7/1/2028	2035	Combination	No Change
NYCQ2851	SBS_RF2019	Ridgewood To Flushing Bus Priority Corridor	9/1/2026	2035	Combination	No Change

Plan ID	PIN Number	Project Name	Completion Date	Milestone Year	Project Type	Project Status
NYCQ355	X77044	Willets Point Development District	12/31/2039	2045	Other	Scope Change
NYCQ383	X77229	Hillside Ave Bus Priority Corridor	9/1/2024	2025	Combination	Completed
NYCSI1700	X09626	SIE EB Ramp Improvements (South Ave to MLK Interchange)	8/5/2028	2035	Highway	Deleted

APPENDIX 2A: SUMMER EMISSIONS FORECASTS BY COUNTY

Appendix 2A
2025 Build Summer Emissions Report by County

COUNTY		DAILY VMT	VHT	SPEED	VOC	NOx
		Vehicle miles traveled	Vehicle hours traveled	Miles per hour	Tons per day	Tons per day
1) New York	1) Urban Restricted Access	3,972,519	175,525	22.6	0.36	0.90
	2) Urban Unrestricted Access	4,733,003	436,883	10.8	0.75	1.82
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				0.77	0.22
	County Total	8,705,522	612,408	14.2	1.88	2.94
2) Queens	1) Urban Restricted Access	11,552,437	487,776	23.7	1.00	2.52
	2) Urban Unrestricted Access	10,985,372	1,275,844	8.6	2.06	4.92
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				2.74	0.75
	County Total	22,537,809	1,763,620	12.8	5.80	8.19
3) Bronx	1) Urban Restricted Access	5,816,184	168,062	34.6	0.39	1.03
	2) Urban Unrestricted Access	4,360,672	456,668	9.5	0.76	1.96
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				0.92	0.28
	County Total	10,176,856	624,730	16.3	2.07	3.27
4) Kings	1) Urban Restricted Access	4,694,732	180,354	26.0	0.37	0.83
	2) Urban Unrestricted Access	8,615,116	927,841	9.3	1.49	3.18
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				1.70	0.46
	County Total	13,309,848	1,108,195	12.0	3.56	4.47
5) Richmond	1) Urban Restricted Access	2,595,782	87,795	29.6	0.19	0.45
	2) Urban Unrestricted Access	3,507,636	343,754	10.2	0.57	1.28
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				0.96	0.22
	County Total	6,103,418	431,549	14.1	1.72	1.95
6) Nassau	1) Urban Restricted Access	11,949,248	399,012	29.9	0.98	2.07
	2) Urban Unrestricted Access	15,797,780	1,211,450	13.0	2.37	4.71
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				3.79	0.91
	County Total	27,747,028	1,610,462	17.2	7.14	7.69
7) Suffolk	1) Urban Restricted Access	13,298,921	350,084	38.0	0.92	1.86
	2) Urban Unrestricted Access	25,441,293	2,071,027	12.3	3.93	7.26
	3) Rural Unrestricted Access	850,829	28,129	30.2	0.07	0.14
	Off Network				4.77	1.20
	County Total	39,591,043	2,449,240	16.2	9.69	10.46
8) Westchester	1) Urban Restricted Access	14,197,744	385,952	36.8	1.00	2.81
	2) Urban Unrestricted Access	10,293,290	792,908	13.0	1.52	4.20
	3) Rural Unrestricted Access	13,406	472	28.4	0.00	0.00
	Off Network				2.46	0.70
	County Total	24,504,440	1,179,332	20.8	4.98	7.71
9) Rockland	1) Urban Restricted Access	4,182,777	159,140	26.3	0.37	0.98
	2) Urban Unrestricted Access	3,959,370	317,804	12.5	0.60	1.56
	3) Rural Unrestricted Access	36,596	1,105	33.1	0.00	0.00
	4) Rural Restricted Access	10,981	196	56.1	0.00	0.00
	Off Network				0.83	0.23
	County Total	8,189,724	478,245	17.1	1.80	2.77
Grand Total		160,865,688	10,257,781	15.7	38.64	49.45
10) Putnam	1) Urban Restricted Access	1,358,145	24,857	54.6	0.08	0.24
	2) Urban Unrestricted Access	1,142,745	31,164	36.7	0.08	0.27
	3) Rural Unrestricted Access	523,624	15,670	33.4	0.04	0.13
	4) Rural Restricted Access	8,898	144	61.9	0.00	0.00
	Off Network				0.34	0.10
	County Total	3,033,412	71,835	42.2	0.54	0.74

A Series*

Appendix 2A

2035 Build Summer Emissions Report by County

COUNTY		DAILY VMT	VHT	SPEED	VOC	NOx
		Vehicle miles traveled	Vehicle hours traveled	Miles per hour	Tons per day	Tons per day
1) New York	1) Urban Restricted Access	4,168,138	188,883	22.1	0.25	0.37
	2) Urban Unrestricted Access	4,865,224	454,909	10.7	0.51	0.77
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				0.52	0.13
	County Total	9,033,362	643,792	14.0	1.28	1.27
2) Queens	1) Urban Restricted Access	12,054,086	532,990	22.6	0.71	1.04
	2) Urban Unrestricted Access	11,780,102	1,387,647	8.5	1.49	2.22
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				1.83	0.45
	County Total	23,834,188	1,920,637	12.4	4.03	3.71
3) Bronx	1) Urban Restricted Access	6,080,806	179,841	33.8	0.26	0.40
	2) Urban Unrestricted Access	4,352,221	443,668	9.8	0.49	0.78
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				0.62	0.17
	County Total	10,433,027	623,509	16.7	1.37	1.35
4) Kings	1) Urban Restricted Access	4,909,586	197,515	24.9	0.26	0.34
	2) Urban Unrestricted Access	9,088,051	999,361	9.1	1.07	1.41
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				1.15	0.28
	County Total	13,997,637	1,196,876	11.7	2.48	2.03
5) Richmond	1) Urban Restricted Access	2,685,035	93,699	28.7	0.13	0.18
	2) Urban Unrestricted Access	3,704,820	363,185	10.2	0.40	0.57
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				0.64	0.13
	County Total	6,389,855	456,884	14.0	1.17	0.88
6) Nassau	1) Urban Restricted Access	12,442,330	431,972	28.8	0.63	0.75
	2) Urban Unrestricted Access	17,040,113	1,379,545	12.4	1.66	1.98
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				2.57	0.54
	County Total	29,482,443	1,811,517	16.3	4.86	3.27
7) Suffolk	1) Urban Restricted Access	13,874,476	377,119	36.8	0.59	0.65
	2) Urban Unrestricted Access	27,199,530	2,256,338	12.1	2.65	2.95
	3) Rural Unrestricted Access	880,995	29,446	29.9	0.04	0.05
	Off Network				3.28	0.73
	County Total	41,955,001	2,662,903	15.8	6.56	4.38
8) Westchester	1) Urban Restricted Access	14,930,088	421,314	35.4	0.65	1.06
	2) Urban Unrestricted Access	10,874,712	852,915	12.8	1.00	1.79
	3) Rural Unrestricted Access	13,929	498	28.0	0.00	0.00
	Off Network				1.66	0.41
	County Total	25,818,729	1,274,727	20.3	3.31	3.26
9) Rockland	1) Urban Restricted Access	4,450,769	179,027	24.9	0.25	0.39
	2) Urban Unrestricted Access	4,336,569	356,917	12.2	0.42	0.69
	3) Rural Unrestricted Access	41,446	1,247	33.2	0.00	0.00
	4) Rural Restricted Access	11,507	206	56.0	0.00	0.00
	Off Network				0.56	0.13
	County Total	8,840,292	537,397	16.5	1.23	1.21
Grand Total		169,784,534	11,128,242	15.3	26.29	21.36
10) Putnam	1) Urban Restricted Access	1,409,919	26,015	54.2	0.05	0.08
	2) Urban Unrestricted Access	1,208,981	33,111	36.5	0.05	0.10
	3) Rural Unrestricted Access	550,162	16,682	33.0	0.03	0.05
	4) Rural Restricted Access	8,858	143	61.9	0.00	0.00
	Off Network				0.23	0.06
	County Total	3,177,920	75,951	41.8	0.36	0.29

Appendix 2A

2045 Build Summer Emissions Report by County

COUNTY		DAILY VMT	VHT	SPEED	VOC	NOx
		Vehicle miles traveled	Vehicle hours traveled	Miles per hour	Tons per day	Tons per day
1) New York	1) Urban Restricted Access	4,311,134	202,616	21.3	0.19	0.24
	2) Urban Unrestricted Access	5,127,783	482,268	10.6	0.39	0.51
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				0.36	0.10
	County Total	9,438,917	684,884	13.8	0.94	0.85
2) Queens	1) Urban Restricted Access	12,346,137	566,597	21.8	0.52	0.68
	2) Urban Unrestricted Access	12,236,951	1,445,850	8.5	1.10	1.54
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				1.26	0.32
	County Total	24,583,088	2,012,447	12.2	2.88	2.54
3) Bronx	1) Urban Restricted Access	6,265,887	189,959	33.0	0.20	0.25
	2) Urban Unrestricted Access	4,618,878	480,734	9.6	0.38	0.52
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				0.44	0.12
	County Total	10,884,765	670,693	16.2	1.02	0.89
4) Kings	1) Urban Restricted Access	5,095,555	215,012	23.7	0.20	0.22
	2) Urban Unrestricted Access	9,270,658	1,019,375	9.1	0.78	0.92
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				0.80	0.20
	County Total	14,366,213	1,234,387	11.6	1.78	1.34
5) Richmond	1) Urban Restricted Access	2,770,493	98,741	28.1	0.10	0.11
	2) Urban Unrestricted Access	3,866,657	384,178	10.1	0.30	0.39
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				0.44	0.09
	County Total	6,637,150	482,919	13.7	0.84	0.59
6) Nassau	1) Urban Restricted Access	12,673,049	450,710	28.1	0.46	0.46
	2) Urban Unrestricted Access	17,767,824	1,473,948	12.1	1.25	1.30
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				1.73	0.38
	County Total	30,440,873	1,924,658	15.8	3.44	2.14
7) Suffolk	1) Urban Restricted Access	14,241,181	392,038	36.3	0.43	0.38
	2) Urban Unrestricted Access	28,120,791	2,349,630	12.0	1.96	1.92
	3) Rural Unrestricted Access	909,654	30,740	29.6	0.03	0.03
	Off Network				2.24	0.52
	County Total	43,271,626	2,772,408	15.6	4.66	2.85
8) Westchester	1) Urban Restricted Access	15,313,190	441,312	34.7	0.47	0.65
	2) Urban Unrestricted Access	11,042,673	866,127	12.7	0.72	1.13
	3) Rural Unrestricted Access	14,289	514	27.8	0.00	0.00
	Off Network				1.13	0.28
	County Total	26,370,152	1,307,953	20.2	2.32	2.06
9) Rockland	1) Urban Restricted Access	4,678,937	195,635	23.9	0.19	0.26
	2) Urban Unrestricted Access	4,555,971	372,819	12.2	0.31	0.45
	3) Rural Unrestricted Access	45,160	1,362	33.2	0.00	0.00
	4) Rural Restricted Access	11,903	213	55.9	0.00	0.00
	Off Network				0.38	0.09
	County Total	9,291,970	570,029	16.3	0.88	0.80
Grand Total		175,284,754	11,660,378	15.0	18.76	14.06
10) Putnam	1) Urban Restricted Access	1,475,395	27,448	53.8	0.04	0.05
	2) Urban Unrestricted Access	1,245,402	34,337	36.3	0.04	0.06
	3) Rural Unrestricted Access	571,581	17,372	32.9	0.02	0.03
	4) Rural Restricted Access					
	Off Network				0.16	0.04
	County Total	3,292,378	79,157	41.6	0.26	0.18

Appendix 2A

2050 Build Summer Emissions Report by County

COUNTY		DAILY VMT	VHT	SPEED	VOC	NOx
		Vehicle miles traveled	Vehicle hours traveled	Miles per hour	Tons per day	Tons per day
1) New York	1) Urban Restricted Access	4,375,290	208,990	20.9	0.18	0.23
	2) Urban Unrestricted Access	5,209,274	490,709	10.6	0.37	0.48
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				0.33	0.09
	County Total	9,584,564	699,699	13.7	0.88	0.80
2) Queens	1) Urban Restricted Access	12,489,272	581,133	21.5	0.50	0.65
	2) Urban Unrestricted Access	11,921,216	1,366,826	8.7	0.98	1.37
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				1.16	0.30
	County Total	24,410,488	1,947,959	12.5	2.64	2.32
3) Bronx	1) Urban Restricted Access	6,337,653	194,114	32.6	0.19	0.24
	2) Urban Unrestricted Access	4,720,433	495,324	9.5	0.37	0.50
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				0.41	0.12
	County Total	11,058,086	689,438	16.0	0.97	0.86
4) Kings	1) Urban Restricted Access	5,172,196	222,538	23.2	0.19	0.21
	2) Urban Unrestricted Access	9,508,186	1,055,581	9.0	0.76	0.89
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				0.74	0.18
	County Total	14,680,382	1,278,119	11.5	1.69	1.28
5) Richmond	1) Urban Restricted Access	2,809,910	101,062	27.8	0.09	0.11
	2) Urban Unrestricted Access	3,911,619	387,185	10.1	0.28	0.37
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				0.40	0.08
	County Total	6,721,529	488,247	13.8	0.77	0.56
6) Nassau	1) Urban Restricted Access	12,843,822	460,599	27.9	0.43	0.43
	2) Urban Unrestricted Access	18,150,421	1,526,863	11.9	1.18	1.24
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				1.58	0.35
	County Total	30,994,243	1,987,462	15.6	3.19	2.02
7) Suffolk	1) Urban Restricted Access	14,365,259	398,685	36.0	0.40	0.36
	2) Urban Unrestricted Access	28,406,639	2,378,518	11.9	1.82	1.80
	3) Rural Unrestricted Access	913,691	31,009	29.5	0.03	0.03
	Off Network				2.05	0.49
	County Total	43,685,589	2,808,212	15.6	4.30	2.68
8) Westchester	1) Urban Restricted Access	15,471,563	450,039	34.4	0.45	0.61
	2) Urban Unrestricted Access	11,115,035	870,561	12.8	0.67	1.05
	3) Rural Unrestricted Access	14,227	511	27.9	0.00	0.00
	Off Network				1.04	0.26
	County Total	26,600,825	1,321,111	20.1	2.16	1.92
9) Rockland	1) Urban Restricted Access	4,804,918	205,145	23.4	0.18	0.24
	2) Urban Unrestricted Access	4,682,342	382,550	12.2	0.29	0.43
	3) Rural Unrestricted Access	47,913	1,440	33.3	0.00	0.00
	4) Rural Restricted Access	12,031	215	55.8	0.00	0.00
	Off Network				0.35	0.09
	County Total	9,547,204	589,350	16.2	0.82	0.76
Grand Total		177,282,910	11,809,597	15.0	17.42	13.20
10) Putnam	1) Urban Restricted Access	1,499,094	27,917	53.7	0.03	0.05
	2) Urban Unrestricted Access	1,255,384	34,686	36.2	0.04	0.06
	3) Rural Unrestricted Access	582,264	17,533	33.2	0.02	0.03
	4) Rural Restricted Access	9,819	159	61.9	0.00	0.00
	Off Network				0.15	0.04
	County Total	3,346,561	80,295	41.7	0.24	0.18

Appendix 2A

2055 Build Summer Emissions Report by County

COUNTY		DAILY VMT	VHT	SPEED	VOC	NOx
		Vehicle miles traveled	Vehicle hours traveled	Miles per hour	Tons per day	Tons per day
1) New York	1) Urban Restricted Access	4,396,281	211,826	20.8	0.18	0.22
	2) Urban Unrestricted Access	5,272,860	497,865	10.6	0.37	0.47
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				0.32	0.09
	County Total	9,669,141	709,691	13.6	0.87	0.78
2) Queens	1) Urban Restricted Access	12,562,636	589,822	21.3	0.49	0.64
	2) Urban Unrestricted Access	12,065,357	1,386,780	8.7	0.98	1.34
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				1.13	0.29
	County Total	24,627,993	1,976,602	12.5	2.60	2.27
3) Bronx	1) Urban Restricted Access	6,338,889	194,513	32.6	0.19	0.23
	2) Urban Unrestricted Access	4,761,419	501,862	9.5	0.37	0.49
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				0.40	0.11
	County Total	11,100,308	696,375	15.9	0.96	0.83
4) Kings	1) Urban Restricted Access	5,197,438	225,157	23.1	0.19	0.21
	2) Urban Unrestricted Access	9,618,294	1,075,966	8.9	0.76	0.88
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				0.72	0.18
	County Total	14,815,732	1,301,123	11.4	1.67	1.27
5) Richmond	1) Urban Restricted Access	2,830,819	102,001	27.8	0.09	0.11
	2) Urban Unrestricted Access	3,954,523	394,791	10.0	0.29	0.36
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				0.39	0.08
	County Total	6,785,342	496,792	13.7	0.77	0.55
6) Nassau	1) Urban Restricted Access	12,969,440	471,750	27.5	0.43	0.42
	2) Urban Unrestricted Access	18,532,385	1,579,526	11.7	1.20	1.23
	3) Rural Unrestricted Access	0	0	0.0	0.00	0.00
	Off Network				1.53	0.34
	County Total	31,501,825	2,051,276	15.4	3.16	1.99
7) Suffolk	1) Urban Restricted Access	14,492,674	403,938	35.9	0.40	0.35
	2) Urban Unrestricted Access	28,895,081	2,439,146	11.8	1.83	1.77
	3) Rural Unrestricted Access	926,228	31,599	29.3	0.03	0.03
	Off Network				1.98	0.47
	County Total	44,313,983	2,874,683	15.4	4.24	2.62
8) Westchester	1) Urban Restricted Access	15,320,776	431,803	35.5	0.43	0.57
	2) Urban Unrestricted Access	11,014,273	857,967	12.8	0.66	0.99
	3) Rural Unrestricted Access	14,501	524	27.7	0.00	0.00
	Off Network				1.01	0.26
	County Total	26,349,550	1,290,294	20.4	2.10	1.82
9) Rockland	1) Urban Restricted Access	4,770,059	188,030	25.4	0.17	0.22
	2) Urban Unrestricted Access	4,724,934	388,075	12.2	0.29	0.42
	3) Rural Unrestricted Access	48,614	1,460	33.3	0.00	0.00
	4) Rural Restricted Access	12,011	215	55.9	0.00	0.00
	Off Network				0.34	0.08
	County Total	9,555,618	577,780	16.5	0.80	0.72
Grand Total		178,719,492	11,974,616	14.9	17.17	12.85
10) Putnam	1) Urban Restricted Access	1,504,697	28,055	53.6	0.03	0.05
	2) Urban Unrestricted Access	1,248,890	34,343	36.4	0.04	0.06
	3) Rural Unrestricted Access	561,110	17,037	32.9	0.02	0.03
	4) Rural Restricted Access	9,719	157	61.9	0.00	0.00
	Off Network				0.15	0.04
	County Total	3,324,416	79,592	41.8	0.24	0.18

APPENDIX 2B: ANNUAL PM_{2.5} AND NO_x EMISSIONS FORECASTS BY COUNTY

Appendix 2B
2025 Annual Build PM2.5 & NOx Emissions Report by County

COUNTY	PM 2.5	Nox
	Tons	Tons
1) New York	24.07	1,128.68
2) Queens	66.99	3,127.81
3) Bronx	25.66	1,264.64
4) Kings	39.61	1,723.36
5) Richmond	17.65	758.74
6) Nassau	81.02	2,944.16
7) Suffolk	113.92	4,044.83
8) Westchester	72.73	2,972.40
9) Rockland	25.25	1,051.43
Grand Total	466.90	19,016.05
10) Putnam	7.89	289.97

Appendix 2B
2035 Annual Build PM2.5 & NOx Emissions Report by County

COUNTY	PM 2.5	Nox
	Tons	Tons
1) New York	8.07	499.67
2) Queens	23.77	1,457.78
3) Bronx	8.92	536.32
4) Kings	15.03	808.27
5) Richmond	6.67	350.41
6) Nassau	28.38	1,299.31
7) Suffolk	39.67	1,758.35
8) Westchester	22.80	1,294.75
9) Rockland	8.10	478.63
Grand Total	161.41	8,483.49
10) Putnam	2.57	116.74

Appendix 2B
2045 Annual Build PM2.5 & NOx Emissions Report by County

COUNTY	PM 2.5	Nox
	Tons	Tons
1) New York	2.84	347.41
2) Queens	8.36	1,048.26
3) Bronx	3.28	372.68
4) Kings	5.19	562.48
5) Richmond	2.29	251.06
6) Nassau	9.93	889.61
7) Suffolk	13.89	1,201.66
8) Westchester	7.66	865.50
9) Rockland	2.81	331.31
Grand Total	56.25	5,869.97
10) Putnam	0.87	77.86

Appendix 2B
2050 Annual Build PM2.5 & NOx Emissions Report by County

COUNTY	PM 2.5	Nox
	Tons	Tons
1) New York	1.97	330.64
2) Queens	5.52	962.27
3) Bronx	2.35	358.05
4) Kings	3.51	543.42
5) Richmond	1.49	238.32
6) Nassau	6.42	850.03
7) Suffolk	8.93	1,135.25
8) Westchester	5.08	815.02
9) Rockland	1.92	317.75
Grand Total	37.19	5,550.75
10) Putnam	0.57	73.65

Appendix 2B
2055 Annual Build PM2.5 & NOx Emissions Report by County

COUNTY	PM 2.5	Nox
	Tons	Tons
1) New York	2.46	322.86
2) Queens	6.97	942.90
3) Bronx	2.86	350.00
4) Kings	4.50	534.71
5) Richmond	1.96	234.11
6) Nassau	8.13	840.56
7) Suffolk	11.21	1,117.60
8) Westchester	6.12	772.96
9) Rockland	2.27	302.46
Grand Total	46.48	5,418.16
10) Putnam	0.71	70.89

APPENDIX 2C: MONTHLY NO_x AND PM_{2.5} EMISSIONS BY COUNTY

**THE MONTHLY RESULTS BY COUNTY AND FACILITY TYPE ARE
AVAILABLE AS A SEPARATE FILE AT:**

**[https://www.nymtc.org/en-us/Required-Planning-Products/
Transportation-Conformity/Transportation-Conformity-
Determination-Documents-adopted](https://www.nymtc.org/en-us/Required-Planning-Products/Transportation-Conformity/Transportation-Conformity-Determination-Documents-adopted)**

APPENDIX 3: PUBLIC COMMENTS AND RESPONSES

PUBLIC COMMENTS AND RESPONSES

The New York Metropolitan Transportation Council (NYMTC) held a public comment period from June 2, 2025 through July 1, 2025, for the Draft Transportation Conformity Determination for the Federal Fiscal Years (FFYs) 2026-2030 Transportation Improvement Program (TIP) and the FFYs 2026-2055 Regional Transportation Plan. NYMTC presented two online public webinars on June 17, 2025. No public comments were received.

APPENDIX 4: RESOLUTION



PROGRAM, FINANCE AND ADMINISTRATION COMMITTEE

RESOLUTION #602

**TRANSPORTATION CONFORMITY DETERMINATION FOR THE FEDERAL FISCAL YEARS (FFYs) 2026-2030
TRANSPORTATION IMPROVEMENT PROGRAM (TIP) AND FFYs 2026-2055 REGIONAL TRANSPORTATION PLAN**

WHEREAS, the New York Metropolitan Transportation Council (NYMTC) is a regional council of governments which is the metropolitan planning organization for New York City, Long Island, and the lower Hudson Valley; and

WHEREAS, NYMTC's planning area is included in whole or in part in several non-attainment areas for various pollutants as determined under the Clean Air Act Amendments of 1990; and

WHEREAS, as required for non-attainment areas by the Clean Air Act Amendments of 1990 and in consultation with relevant local, state, and federal transportation and environmental agencies, NYMTC must complete a regional emissions analysis for mobile sources of various pollutants each time a TIP or Plan is adopted; and

WHEREAS, NYMTC has coordinated this regional emissions analysis with the Orange County Transportation Council as required for both the Poughkeepsie Ozone Non-Attainment Area and the New York-New Jersey-Connecticut Fine Particulate Matter (PM 2.5) Non-Attainment Area; and

WHEREAS, the regional emissions analysis demonstrates that the transportation improvements identified in the FFYs 2026-2030 TIP and the fiscally constrained element of the FFYs 2026-2055 Regional Transportation Plan have met all applicable mobile source emissions tests for pollutants and analysis years as specified in the New York State Implementation Plan for Air Quality (SIP) and therefore conforms to the mobile source emissions milestones set forth in the SIP; and

WHEREAS, the documentation and supporting analyses contained in the attached Transportation Conformity Determination demonstrate NYMTC's compliance with the appropriate federal air quality requirements under the Clean Air Act Amendments of 1990; and

WHEREAS, the attached Transportation Conformity Determination has been publicly reviewed along with the draft FFYs 2026-2030 TIP and draft FFYs 2026-2055 Regional Transportation Plan, and all comments received have been addressed and are incorporated in this documentation.

NOW, THEREFORE, BE IT RESOLVED, that PFAC adopts the attached Transportation Conformity Determination for the FFYs 2026-2030 TIP and the FFYs 2026-2055 Regional Transportation Plan in order to demonstrate conformity with the mobile source emissions milestones set forth in the SIP.

This resolution shall take effect on the twenty-first day of August two thousand and twenty-five.

ADOPTED: August 21, 2025

"I hereby certify that the above is a true copy of Resolution #602, the adoption of the Transportation Conformity Determination for the Federal Fiscal Years (FFYs) 2026-2030 Transportation Improvement Program (TIP) and the FFYs 2026-2055 Regional Transportation Plan and was motioned by Barbara Barosa representing the Mid-Hudson South Transportation Coordinating Committee and seconded by Conor Clark representing the New York City Transportation Coordinating Committee. This Resolution was adopted and passed unanimously."


Debra Nelson, PFAC Chair