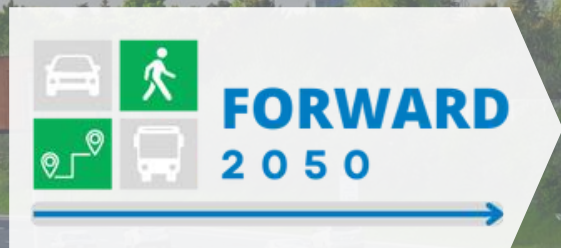




**South Jersey
Transportation Planning
Organization**

REGIONAL TRANSPORTATION PLAN (RTP)

APPENDIX E. CONGESTION MITIGATION & AIR QUALITY (CMAQ) MID-YEAR PROGRESS REPORT AND PERFORMANCE PLAN





South Jersey
Transportation
Planning Organization

Congestion Mitigation & Air Quality Mid-Period Progress Report and Performance Plan 2022-2025

South Jersey Transportation Planning Organization, Vineland, New Jersey (NJ)
Part of Philadelphia, PA—NJ—DE—MD Urbanized Area (UZA) and Atlantic City, Ocean City, Villas,
NJ UZA
(Revised 9/13/24)

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Introduction

The Congestion Mitigation Air Quality (CMAQ) Mid-Period Performance Report and Performance Plan is required to be completed per the System Performance Rules¹ if any part of a designated nonattainment and maintenance area within the metropolitan planning area overlaps the boundary of an urbanized area with a population of more than 1 million in population, a Metropolitan Planning Organization (MPO) shall establish both 2-year and 4-year targets for their metropolitan planning area and prepare a CMAQ Performance Plan.² The South Jersey Transportation Planning Organization (SJTPO) region, Figure 1, falls within the Philadelphia-Wilmington-Atlantic City, PA—NJ-MD-DE 8-Hour Ozone Nonattainment Area under the 2015 standard of 0.070 parts per million (ppm) (70 parts per billion (ppb)) as depicted in [Figure 1](#).³ Under the 8-hour Ozone Standard from 2015, the SJTPO region is now classified as a "serious" 8-hour Ozone Nonattainment area.

Since a portion of the 8-Hour Ozone Nonattainment Area within the SJTPO metropolitan planning boundary overlaps with the Philadelphia, PA-NJ-DE-MD Urbanized Area, with a population of approximately 5.7 million, it is subject to this requirement. The SJTPO region also includes the Atlantic City, Ocean City, Villas, NJ Urbanized Area (ACOCV UZA), which is also required to set targets for congestion measures because its overall population exceeds 200,000.⁴ [Figure 2](#) depicts the ACOCV UZA and all the other UZAs within the SJTPO region. This is an expansion of approximately 30 square miles (an approximate 30% increase) from the Atlantic City Urbanized Area that was in place when the original 2- and 4-year CMAQ congestion targets were set. The expansion was due to a new regulation requiring 2020 Census UZA boundaries to be updated to FHWA UZAs as part of a smoothing process. Since the Atlantic City, Ocean City, Villas Urbanized Area has a population of approximately 304,000, it is required to complete traffic congestion performance targets, which are included in this CMAQ Performance Plan.

As with many MPOs in nonattainment areas, the SJTPO has a competitive process to solicit projects to be funded under the CMAQ program. Projects are eligible for CMAQ funding if they are intended to reduce emissions in the region through direct means, such as converting to low-emission vehicles, or through indirect means, such as traffic signal improvements that improve vehicle flow and reduce congestion. Government, non-profit, and private entities are eligible to apply. Applicants must include specific information as part of their application, including a detailed description of the project, the amount of CMAQ funding being requested, a project cost estimate, a project schedule, certification of the project sponsor's familiarity with the New Jersey Department of Transportation (NJDOT) Local Aid process, and an overview of any preliminary work that has been done such as prior planning studies or data collection activities.

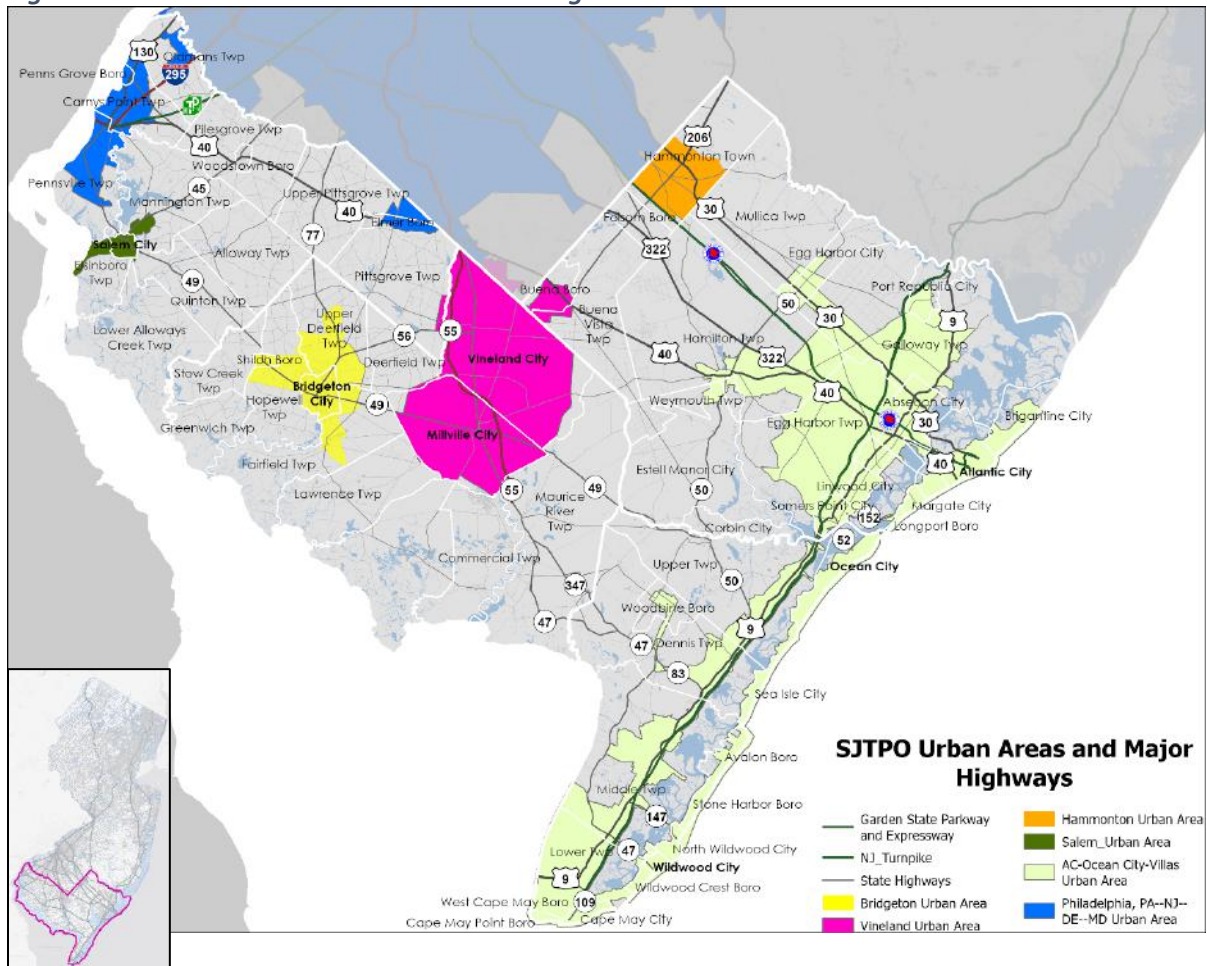
¹ As specified in 23 CFR 490.105(f)(6)(iii).

² As specified in 23 CFR 490.107(c)(3).

³ Environmental Protection Agency, EPA.

⁴ As specified in 23 CFR 490 & 23 CFR 450.

Figure 2: Urbanized Areas within the SJTPO Region



The CMAQ applications are scored by a CMAQ Selection Committee designated by the SJTPO Technical Advisory Committee (TAC). The CMAQ Selection Committee is comprised of SJTPO staff, SJTPO Technical Advisory Committee members, and representatives from NJDOT's Transportation and Air Quality unit. Applications are scored in accordance with federal CMAQ guidance, with the main scoring criterion being the cost-effectiveness of the expected emissions benefit. SJTPO continues to work with all project sponsors throughout the project authorization process. Additional information and guidance on SJTPO's CMAQ process is available at www.sjtpo.org/CMAQ.

Baseline Condition, Performance & Targets

The CMAQ Program assesses traffic congestion and on-road mobile source emissions. The promulgation of performance measures and targets covering the national goals for the Federal-Aid Highway System is in accordance with the Fixing America's Surface Transportation Act (FAST Act), Moving Ahead for Progress in the 21st Century (MAP-21), and the Infrastructure Investment and Jobs Act (IIJA).⁵ The Federal Highway Administration (FHWA) enacted the System Performance Measure Final Rule, establishing national performance measures for assessing performance for carrying out the CMAQ program.⁶ Traffic congestion

⁵ As specified in 23 USC 150.

⁶ As specified in 23 CFR 490.

and on-road mobile source emissions are performance measures that establish targets to be approved by the NJDOT.

Additionally, through correspondence with local and State Department of Transportation (DOT) Organizations, coordinated emissions reductions are implicated to the maximum extent possible through awareness and education. An assessment of the project's expected emission reduction benefits is completed, including the reduction in ozone precursors of Nitrogen Oxides (NO_x) and Volatile Organic Compounds (VOC) in kilograms (kg) per day or per year, along with the expected lifespan of the emissions reduction. SJTPO frequently assists project applicants in completing emissions estimates using the FHWA Office of Environment's series of spreadsheet-based tools to facilitate the calculation of representative air quality benefit data, congestion management data, and other tools developed for use in NJDOT's CMAQ program. NJDOT reports current conditions and frequently updates emission rates and estimation methodologies.

The CMAQ performance plan includes two major performance areas: Traffic Congestion and Emissions. As such, federal regulation calls for MPOs and State DOTs to report both a baseline conditions assessment and a 2-year (except for the Peak Hour Excessive Delay (PHED) measure) and 4-year targets. These targets were set at conservative levels to ensure a realistic chance of attainment. In developing these baseline measures and targets, the SJTPO coordinated extensively with NJDOT and the other New Jersey MPOs to ensure maximum consistency.

Traffic Congestion Measures

Two performance measures are required for the Traffic Congestion performance area: Peak Hour Excessive Delay (PHED) and Percent of Non-Single-Occupancy Vehicle Travel. A single target is required for these measures in urbanized areas. This includes the Philadelphia, PA-NJ-DE-MD Urbanized Area and the Atlantic City, NJ-Ocean City-Villas, NJ Urbanized Area (ACOCV UZA). Projections for each of the two baseline measures were based on projected reductions for FFY 2022-2023 for the 2-year target and FFY 2022-25 for the 4-year target. On July 25, 2022, the SJTPO Policy Board approved the urbanized area targets for the following CMAQ Traffic Congestion measures.

Peak-Hour Excessive Delay

The Peak Hour Excessive Delay (PHED) measure indicates the extra time spent traveling due to congestion, expressed as the number of hours per year per capita. The threshold for excessive delay is based on the travel time at 20 miles per hour or 60% of the posted speed limit travel time; the greater value is measured in 15-minute intervals.⁷ The established targets are based on historical trends while utilizing the Regional Integrated Transportation Information Systems (RITIS) tool maintained by the University of Maryland's Center for Advanced Transportation Technology (CATT) lab.⁸ The metric used to calculate the target measures is the Annual Hours of PHED per capita on the National Highway System (NHS).

⁷ As specified in 23 CFR 490.707a.

⁸ An information portal that computes various travel-time related performance measures using the federally approved National Performance Research Dataset (NPMRDS). The NPMRDS is archived travel time data collected in 15-minute intervals. It covers most of the NHS roadways, on which many of these performance measures apply.

Atlantic City, Ocean City- Villas, NJ Urbanized Area

For the second Performance Period for the ACOCV UZA, the 2-year target is 6.3 person-hours/capita, and the 4-year target is 6.2 person-hours/capita. This decision was concurred by the AC UZA Coordination Group members at their June 14, 2022 meeting.

In 2022, at 7 person-hours of delay per capita, the PHED per capita exceeded the 2- and 4-year PHED targets. However, in 2023, the PHED per capita was 5.7 person-hours of delay per capita. Through April 2024, it was 1.8 person-hours of delay per capita, below the 4-year target of 6.2 person-hours per capita. SJTPO staff also looked at other indicators, including historical population and VMT, which have been flattening in recent years. Staff also looked at transit ridership, which, while rebounding somewhat from a decline in the pandemic, is not showing a significant increase.

In addition to the numbers reported by RITIS and the other demographic indicators, SJTPO staff compiled a list of major CMAQ-funded projects in SJTPO's capital program that could mitigate PHED per capita in the ACOCV UZA. These consisted primarily of signal synchronization projects in Ventnor (the Ventnor Avenue Signal Synchronization Project) and the Pacific Avenue Traffic Signal Optimization project in Atlantic City. Once implemented, SJTPO staff envisions these signal synchronization projects could mitigate congestion. Given the fact that the ACOCV UZA is meeting both the current 2- and 4-year targets, as well as the relatively flat indicators, the ACOCV Coordination Committee agreed to keep the existing PHED targets for the ACOCV UZA at 6.3 person-hours/capita for the 2-year target, and the 6.2 person-hours/capita for the 4-year target. This decision was concurred by the AC UZA Coordination Group members at their May 30, 2024 meeting.

Philadelphia, PA-NJ-DE-MD Urbanized Area

For the Philadelphia UZA, the existing PHED targets are as follows: the 2-year target is 15.2 person-hours/capita, and the 4-year target is 15.1 person-hours/capita. This decision was concurred by the Philadelphia UZA Coordination Group members at their June 9, 2022 meeting.

A meeting of the PM3 CMAQ Traffic Congestion Coordination Group convened by the Delaware Valley Regional Planning Commission (DVRPC), the lead agency for the PM3 CMAQ Traffic Congestion Coordination Group, was held on Tuesday, April 25, 2024, for the Philadelphia, PA-NJ-DE-MD UZA. The performance in 2023 was 13.9, below both the 2- and 4-year PHED targets for the Philadelphia UZA. Various potential scenarios were proposed to prepare for the 2-year and 4-year performance plan targets. The conservative target scenarios showed higher PHED, indicating more SOV. However, the aggressive target scenarios showed lower PHED, indicating more telework, transit commuting, and carpooling. These scenarios were sent out to the coordination group for feedback. The coordination group discussed trends, including the continuation of telework, decreased transit use due to health risks, increased safety projects, and increased population or employment.

The SJTPO Policy Board formally approved the 2-year and 4-year PHED targets for the Atlantic City, NJ Urbanized Area (as it was then referred to) and the Philadelphia, PA-NJ-DE-MD Urbanized Areas on July 25, 2022.

Percent of Non-Single-Occupancy Vehicle Travel

The Non-Single-Occupancy Vehicle (SOV) Travel measure indicates the number of persons using a travel mode that includes walking, bus, carpool, train, bicycle, taxi, rideshare, and working at home, excluding those using single-occupancy vehicles.⁹ The metric utilized is the percent of non-SOV travel in the urbanized area.

Atlantic City, Ocean City, Villas, NJ Urbanized Area

For the second Performance Period for the ACOCV UZA, the 2-year target is 24.1%, and the 4-year target is 23.7%. This decision was concurred by the AC UZA Coordination Group members at their June 14, 2022 meeting.

In reviewing the performance of the ACOCV UZA in this area, SJTPO looked at several different datasets. Results from the 5-year American Community Survey (ACS) and the 1-year ACS from 2010 to 2022 were analyzed. Looking at non-overlapping 5-year ACS datasets, there was a slight decline in %non-SOV from the 2006-2010 ACS to the 2016 to 2020 ACS, from 26.10% to 25.40%. These are above the original two- and four-year percent non-SOV targets. Further, in the last two 5-year American Community Surveys, from 2018-2022 and from 2017 to 2021, the percent non-SOV travel values were 27.1% and 26.7%, respectively, well above the existing 2- and 4-year targets. The last three years of the 1-year ACS data (from 2020 to 2022) show %non-SOV values of 25.4%, 31.4%, and 31.2%, respectively. A 5-year rolling average based on the 1-year ACS data back to 2009 was also drawn to delineate the overall historical trends more clearly in this measure. This rolling average trend line depicts an increase in the percent non-SOV travel.

As with the PHED performance measure above, in addition to reviewing ACS data, past trends of other indicators were examined to get an overall sense of the context. These "related" indicators included population in the SJTPO region and the ACOCV UZA, employment, vehicle miles traveled (VMT), transit ridership within the region, and percentage of people working from home. While many indicators, including population, employment, and VMT, have recovered to their pre-pandemic levels, other indicators, such as bus transit ridership, are still lower than pre-pandemic. The Atlantic City Rail line, the sole rail transit line in the SJTPO region, seems to have recovered to pre-pandemic levels. Based on this analysis and feedback from the coordination group, the decision was made to keep the four-year target. This decision was concurred by the AC UZA Coordination Group members at their May 20, 2024 meeting.

⁹ As specified in 23 CFR 490.707b.

Philadelphia, PA-NJ-DE-MD Urbanized Area

The existing targets for the two- and four-year targets for the %Non-SOV are as follows: the 2-year target is 30.0% non-SOV travel, and the 4-year target is 30.0% non-SOV travel. At the April 25, 2024, meeting referenced above, members learned that the actual performance in 2022 was 34.6%. Therefore, the two-year target was easily achieved. The Coordination Group briefly discussed the two-year progress and agreed that shifts to working at home that increase non-SOV travel helped achieve the target and more than offset the decrease in transit ridership.

DVRPC recommended that the percent non-SOV travel four-year target (30.0%) be adjusted slightly higher based on the gap between the two-year performance (34.6%) and past five- and one-year ACS performances. After some discussion amongst the Coordination Group members and looking at some scenarios based on the most recent one-year and 5-year ACS tables, it was agreed to raise the 4-year percent non-SOV target for the Philadelphia, PA-NJ-DE-MD Urbanized Area from 30% to 33.0%.

The 2-year and 4-year percent non-SOV targets for the Atlantic City, NJ Urbanized Area (as it was then called) and the Philadelphia, PA-NJ-DE-MD Urbanized Area were formally approved by the SJTPO Policy Board on July 25, 2022. The SJTPO Policy Board is scheduled to approve the revised 4-year target for %Non-SOV travel for the Philadelphia-PA-NJ-DE-MD Urbanized Area at its September 23, 2024 Policy Board meeting.

On-Road Mobile Source Emissions Measures

SJTPO Region

The On-Road Mobile Source Emissions measure requires the reduction of benefits by pollutants from all investments made through the CMAQ Program. As SJTPO falls within the Philadelphia-Wilmington-Atlantic City PA-NJ-MD-DE 8-Hour Ozone Nonattainment Area, it must report this measure. The Atlantic City, NJ, Ocean City, Villas, NJ Urbanized Area is not required to report this measure. The specific metrics are kilograms/day of Volatile Organic Compounds (VOCs) and Nitrogen Oxides (NO_x), both ozone precursors. As SJTPO meets the National Ambient Air Quality Standards (NAAQS) for CO or PM_{2.5}, these measures are not required to be reported.

The existing 2- and 4-year target values were based on cumulative emissions reduction benefits recorded in the FHWA CMAQ Public Access System (PAS) database for fiscal years 2018-21. [Table 1](#) contains the initial 2- and 4-year emissions reduction targets that the SJTPO Policy Board approved on September 26, 2022. The targets assume a declining return in emissions reduction benefits with the implementation of tighter fuel and vehicle emission standards, combined with fleet turnover and new energy-efficient cars.¹⁰ The SJTPO Policy Board approved the CMAQ mobile source emissions reduction targets on September 26, 2022.

¹⁰ In 2018, a statewide project was completed which increased the yield of NO_x and VOC exponentially; this was an unusual one-off project and the SJTPO region met and exceeded the set targets without the addition of the project.

The New Jersey Department of Environmental Protection (NJDEP), New Jersey Transit (NJ TRANSIT), NJDOT, and the three MPOs in New Jersey, including SJTPO, agreed upon the methodology for forecasting these targets. These concepts are as follows: reduced fleet emissions, prior CMAQ PAS benefits, high-impact outlier projects, and miscellaneous miscalculations. The average fleet emissions are reported as reduced on a downward trend over time due to strict fuel and emissions standards or older vehicles retired in preparation for new clean vehicles added to the fleet. The benefits from the last four-year reporting period for CMAQ are considered and projected for future forecasted projections. Aside from calculated impacts upon forecasting, outliers formed as high yield or impact projects disproportionately bias the reporting, and general miscalculations during the CMAQ PAS revision process have been eliminated. The forecasted targets were construed through a conservative approach like the congestion target measures. The total emission reduction projections were from (at the time) projected programmed projects for FFY 2022-23 for the 2-year target and FFY 2022-25 for the 4-year target.

The SJTPO emission reduction projections are in [Table 1](#). For the 2-year target, SJTPO reported the projections to be 0.73 kg/ day of VOC and 2.33 kg/ day of NOx. For the 4-year target, SJTPO reported that the projections are 1.39 kg/ day of VOC and 4.30 kg/ day of NOx. As SJTPO is in attainment for CO and PM_{2.5}, emissions reductions are not included for these pollutants.

Table 1: Two and Four-year Emissions Reductions Targets, SJTPO Region

Federal Fiscal Year (FFY)	Total Emissions Benefits Projections (kg/day)			
	VOC	CO*	NO _x	PM _{2.5} *
2022	0.37		1.22	
2023	0.36		1.12	
2024	0.34		1.03	
2025	0.32		0.94	
2-Year Target	0.73		2.33	
4-Year Target	1.39		4.30	

*No CO or PM_{2.5} is reported as SJTPO meets the NAAQS for these pollutants.

The SJTPO Policy Board approved the CMAQ congestion targets on July 25, 2022, and the CMAQ mobile source emissions reduction targets on September 26, 2022.

Description of Projects

For the local CMAQ Program, SJTPO solicits projects to be funded on a three-year basis instead of annually or several years in advance. In FFY 2023, the Carbon Reduction Program (CPR), a similar program with the objective of funding projects that will lead to a reduction in carbon emissions, was combined with the CMAQ program at SJTPO. The most recent solicitation period for both programs was FFY 2025-27, and applications were due in August 2023. Throughout the remaining two years of the performance period, in addition to monitoring those projects listed below, SJTPO will continue to program new projects and programs that will help contribute to even further emissions reductions beyond the current targets.

Table 2: Current and Future Local and Statewide CMAQ and CRP Projects, FFY 2021-FFY 2027

State Project ID	TIP Program Year	Project Category	Project Title	County	Additional Project Description	Emissions Benefits	PHED Traffic Congestion Benefit	Non-SOV Traffic Congestion Benefit	Status
I. Local CMAQ Projects									
X065	FFY 2021-2024	Congestion Reduction and Traffic Flow Improvements	Pacific Avenue Signal Optimization	Atlantic City	Installation of traffic signal system for synchronization: Pacific Ave from Hartford Ave to Massachusetts Ave; Tennessee Ave to Atlantic City – City Hall to Pacific Ave; and Iowa Ave Atlantic City Public Safety Building to Pacific Ave	Yes, improved operations and less idling.	Yes, improved operations.	No	\$1.2 M Programmed for FFY 2025
X065/S2319	FFY 2023-2027	Congestion Reduction and Traffic Flow Improvements	Ventnor Avenue Signal Synchronization Project	Atlantic County	Installation of traffic signal system for synchronization; Ventnor Ave between Oxford Ave and Baton Rouge Ave.	Yes, improved operations and less idling.	Yes, improved operations.	No	\$1.5 M authorized FFY 2024
X065	FFY 2021-2024	Transit improvement project	Cumberland County Department of Workforce Development "To-Work" Transportation	Cumberland County	Procurement of 5 low-emission, unleaded fuel, body-on-chassis minibuses to replace older models that will reach the end of	Yes, improved operations.	Yes, reduced vehicles on the road.	No	\$0.4624 M programmed in FFY 2023.

			Vehicle Replacement		their useful life by the end of 2023.				
X065/S2319	FFY 2023-2027	Transit improvement project	Purchase of Seven (7) Replacement Paratransit Passenger Buses (flex to NJ Transit)	AC Transportation Unit	Replacement of older vehicles with cleaner diesel-powered buses and low emission unleaded fueled minibuses.	Yes, cleaner vehicles and fuels.	Yes, will remove SOV.	Yes	Funds flexed to NJ TRANSIT. \$0.77 M programmed in FFY 2023.
X065	FFY 2021-2024	Congestion Reduction and Air Quality Benefits	Procurement of 7 low-emission, unleaded fuel, body-on-chassis mini-buses	CMC Fare Free Transportation		Yes, improved operations and less idling.	Yes, improved operations and less idling.	Yes, less vehicular traffic.	Funds (0.480 M) flexed to NJ TRANSIT, \$0.6160 M programmed in FFY 2023.
X065	FFY 2025-2027	Congestion Reduction and Traffic Flow Improvements	New Jersey Avenue Traffic Signal Synchronization	Borough of Wildwood Crest and City of Wildwood		Yes, improved operations and less idling.	Yes, improved operations and less idling.	Yes, less idling.	\$2.4090 programmed in FFY 2023-2027.
X065	FFY 2025-2027	Congestion Reduction and Traffic Flow Improvements	Landis & Valley, Traffic Signal Upgrade	City of Vineland		Yes, improved operations and less idling.	Yes, improved operations and less idling.	Yes, less idling.	\$0.112 M programmed in FFY 2024, \$0.057 M programmed in FFY 2025, \$0.550 M programmed in FFY 2026
X065	FFY 2025-2027	Congestion Reduction and Traffic Flow Improvements	Park and West Traffic Signal Upgrade	City of Vineland		Yes, improved operations, less idling.	Yes, improved operations, less idling.	Yes, less idling.	\$0.112 M programmed FFY 2025, \$0.057 M programmed in FFY 2026, \$0.550 M programmed in FFY 2027.

II. Statewide CMAQ Projects									
T112	FFY 2022-2025	Transit Improvement Project	Rail Rolling Stock Emissions		This program provides funds for the replacement of rail rolling stock, including engineering assistance and project management, to replace over-aged equipment, including rail cars, revenue service locomotives, and expansion of the NJ TRANSIT rolling stock fleet (cars and locomotives) to accommodate projected ridership growth and other system enhancements over the next ten years. Funding is provided to support vehicles\equipment (for rail operations).	Yes, Improved Operations.	Yes, Improved Operations.	Yes	Ongoing, new operation.

NJDOT examined projects programmed in the CMAQ Public Access database to assess the performance of CMAQ emissions reductions within the SJTPO region.

[Table 3](#) provides the 2-year emission summary for the SJTPO region. As depicted in the table, SJTPO met the emissions reductions targets for its regions.

Table 3: Emissions Benefits Performance, FFY 2022-2023

Performance Measure: <i>(depending on CMAQ Applicability)</i> Cumulative emissions reductions (total daily kilograms) for each pollutant	Baseline condition As reported in 2022	2-year Target As set in the Year 2022 (Reporting due on October 1, 2024)	2-Year Performance	2-Year Target Met?	4-year Target (Reporting will be in year 2026)
PM2.5	0.000	0.000	0.281	Yes	0.000
NOx	22.450	2.334	2.795	Yes	4.296
VOC	9.470	0.739	0.984	Yes	1.386
CO	0.000	0.000	14.758	Yes	0.000

The following factors were considered while calculating the emissions reductions benefits and comparing them to the 2-year targets set in 2022.

- There was one project entered for SJTPO in FFY 2022, Project DBNUM X065, Local CMAQ Initiatives.
- No projects were entered into the FHWA system for FFY 2023. Additional information on jitney service was received from SJTPO and presumed/entered for FFY 2023, although these emissions were not added to the master CMAQ database tables.
- Emissions reduction benefits included 7.8% of the FFY statewide DBNUM T112, Rail Rolling Stock Emissions, which is based on the percentage of 2022 HPMS VMT in the SJTPO region.
- Due to a lack of project data, this summary does not include an analysis of the emissions benefits from the implementation of statewide projects.

Statewide Targets

Even though the SJTPO region met its emissions reduction targets for its area, the state is not meeting its 2-year CMAQ emissions targets. The statewide emissions targets are the sum of each of the three NJ MPOs' individual targets for each pollutant. [Table 4](#), below, gives the 2- and 4-year statewide emissions reductions targets that were established back in 2022, as well as the two-year statewide performance for each of the pollutants. [Table 5](#), below, depicts the shortfall between the Statewide two-year CMAQ emissions performance and the the Statewide two-year targets. As seen from the table, on the statewide level, only the two-year target for CO was met.

Table 4: Statewide CMAQ Emissions Reductions 2- and 4- year Targets and 2-year Performance

Performance Measure: (depending on CMAQ Applicability) Cumulative emissions reductions (total daily kilograms) for each pollutant	Baseline condition As reported in 2022	2-year Target As set in Year 2022 (Reporting due on October 1, 2024)	2-Year Performance	2-Year Target Met?	4-year Target (Reporting will be in year 2026)
PM2.5	178.800	28.911	1.068	No	54.805
NOx	1572.321	34.367	12.154	No	63.218
VOC	179.176	11.958	6.115	No	22.740
CO	1080.681	60.422	95.700	Yes	114.796

Table 5: Statewide 2-Year Target Shortfall

Year	Total Emissions Reductions (kg/day)			
	VOC	CO	NOX	PM2.5
2022-2023 Target	11.958	60.422	34.367	28.911
2022-2023 Performance	6.115	95.700	12.154	1.068
Shortfall	-5.843	35.278	-22.213	-27.843

NJDOT's Air Quality Working Group believes that this CMAQ emissions shortfall can be attributed mainly to the lack of a rigorous quantitative assessment of obligated CMAQ projects. Using a qualitative approach resulted in a perceived deficit of emissions reductions benefits from obligated CMAQ projects. Despite this shortfall in emissions, NJDOT's Air Quality Working Group decided to retain the existing four-year targets

(as displayed in Table 5.1 above), given the short turnaround timeframe and lack of data for statewide projects. NJDOT and its planning partners, including SJTPO, will seek to resolve these issues in the next fiscal year to properly and promptly analyze past and future CMAQ project emissions benefits.

NJDOT proposes the following Action Plan to meet the 4-year CMAQ Emissions Benefit Targets:

- NJDOT will establish a schedule to host NJ Air Quality Working Group meetings, which will occur as conference calls on a quarterly schedule to ensure adherence to scheduling, data gathering, and technical analysis requirements. NJDOT will facilitate CMAQ coordination and establish roles and responsibilities for each partner in the CMAQ emission analysis process. The coordination with MPOs and other relevant agencies in the CMAQ targets evaluation and project selection will include NJDOT, NJDEP, EPA, FHWA, NJ TRANSIT, DVRPC, SJTPO, NJTPA, and the consulting team.
- All future CMAQ project analyses will utilize rigorous quantitative methodologies in addition to the qualitative assessment of emissions reduction benefits of CMAQ-funded projects.
- NJDOT and its partner agencies will exclusively approve CMAQ projects with a demonstrated emissions reduction benefit, as established using quantitative methodologies.
- For all projects and analyses, NJDOT will utilize the [FHWA CMAQ toolbox](#) and similar approved methodologies to calculate project emissions reduction benefits.
- Pursue project authorizations more rigorously to ensure projects are authorized and move forward promptly.

NJDOT will rely on an improved emission analysis process and coordination with partner agencies to meet New Jersey's 4-year CMAQ emission benefit goals. Following the above proposed Action Plan, NJDOT's air quality planning team proposes to keep the existing 4-year CMAQ emission targets. It expects to meet or exceed emission benefits from the proposed CMAQ projects for the next evaluation cycle.