

FY 2026 UPWP

Unified Planning Work Program

Chapter IV

Other Regional Transportation Planning Initiatives

UNIFIED PLANNING WORK PROGRAM

FY 2026

**CHAPTER IV - OTHER REGIONAL TRANSPORTATION
PLANNING INITIATIVES**

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INTRODUCTION

The Federal rules governing the work and responsibilities of Metropolitan Planning Organizations (MPOs) require that the Unified Planning Work Program (UPWP) produced every year describe the planning priorities facing the metropolitan planning area (found in Chapter I). The UPWP should also identify any transportation planning activities in the region, regardless of funding source or agency conducting the activity. The information is intended to broaden awareness of related activities, to prevent duplication of planning and study efforts, and to encourage coordination of all transportation planning underway in the region.

Non-MPO funded transportation, or transportation-related, planning activities are outlined in this chapter. Their descriptions include who will perform the work and timeframes for completing the work, if available. This information, obtained from various transportation, planning and operating agencies that impact northern New Jersey, reflects the overall complexity and multi-dimensionality of metropolitan planning activities throughout the region.

This portion of the FY 2026 UPWP is divided into four sections.

- Section I:*** Planning initiatives from various transportation planning and operating agencies, including public authorities, local public agencies, and Transportation Management Association (TMA) activities.
- Section II:*** NJTPA's Study and Development Program, which is a schedule of project planning, environmental reviews and other work that will be conducted during the coming year to advance proposed improvement projects towards future phases of development and inclusion in the Transportation Improvement Program
- Section III:*** Federally funded competitive grants administered through FHWA and FTA for surface transportation planning initiatives in the NJTPA region.
- Section IV:*** NJDOT's State Planning and Research Program for CY 2025 – 2026 (Year 1).

**NORTH JERSEY
TRANSPORTATION PLANNING
AUTHORITY, INC.**

**FY 2026
UNIFIED PLANNING WORK PROGRAM**

**CHAPTER IV
OTHER REGIONAL TRANSPORTATION
PLANNING INITIATIVES**

SECTION I

**TRANSPORTATION PLANNING AND OPERATING
AGENCIES**

NJDOT Safe Routes to Schools TMA Program

The Federal-aid SRTS Program provides funds to states to substantially improve the ability of students to walk and bicycle to school safely. The purposes of the program are to: (1) Enable and encourage children, including those with disabilities, to walk and bicycle to school; (2) Make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age; and (3) Facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution.

Under the NJ SRTS Non-Infrastructure Program, NJDOT has partnered with the eight Transportation Management Associations (TMAs) in New Jersey to work with schools and communities within their jurisdiction to support the implementation of SRTS programs by administering a statewide education and encouragement program. TMAs must designate a regional SRTS coordinator(s) for their service area. TMA staff serve as the main contact for working with communities, NJDOT and VTC on implementing SRTS programs. This person will be responsible for attending all meetings and trainings, though other staff may attend as well. The regional SRTS coordinator will have hands-on, intimate familiarity with SRTS operations as well as programs and opportunities in the service area. The following tasks are included in the TMA's SRTS work programs: Task 1: Partnership with NJDOT and the NJ Safe Routes to School Resource Center; Task 2: NJ SRTS Direct Expenses –Promotional Items, Background Checks and Travel; Task 3: Program Building; Task 4: SRTS Training; Task 5: SRTS Statewide Promotion of SRTS Events; and Task 6: Program Evaluation.

<https://www.nj.gov/transportation/community/srts/funding.shtm>

Start Date:

Completion Date:

Project Status Ongoing, as required

NJ Highlands Water Protection and Planning Council

Addendum 2024-1: Policy Standards for Warehousing in the New Jersey Highlands Region

Provides policy guidance for Highlands municipalities regarding siting and standards of warehouse facilities in the Highlands Region. Supplement statewide policy guidance on this issue (“Distribution Warehousing and Goods Movement Guidelines,” NJ State Planning Commission, Sept 2022) by providing information specific to the Highlands Region.

<https://www.nj.gov/njhighlands/master/amendments/>

Start Date: 2023

Completion Date: 2024

Project Status Completed

Branding and Marketing Plan for the New Jersey Highlands Region

One of the key recommendations to come out of the 2021 New Jersey Highlands Economic Sustainability Plan was the need to develop a Highlands brand that could be used to support region-wide growth across a variety of industries. The objective of the projects is to increase tourism, support agriculture, bolster local businesses, and improve economic sustainability

<https://www.authenticnjhighlands.com/>

Start Date: 2024

Completion Date: 2025

Project Status Underway

Highlands Regional Master Plan Implementation

Through the passage of the Highlands Water Protection and Planning Act (Highlands Act) in August 2004, the Highlands Water Protection and Planning Council (Highlands Council) was created and charged with the task of developing a Regional Master Plan (RMP) to maintain and enhance the significant value of the abundant and critical resources of the Highlands Region. The Highlands Act defines the region as including nearly 860,000 acres located in 88 municipalities in seven northern New Jersey counties (Bergen, Morris, Hunterdon, Somerset, Sussex, Passaic, and Warren).

The RMP serves as the regional planning framework for resource protection and as a complement to local land use planning efforts. A fundamental aspect of the RMP is the process by which local governments work collaboratively with the Council to adjust land use plans and development requirements to support the plan's goals and requirements.

The Highlands Council is also charged with reviewing certain transportation projects in the Highlands Region under its capital review authority provided by the Highlands Act. These are reviewed on a case-by-case basis. The Council evaluates and coordinates on transportation projects with its agency partners and stakeholders and supports intra- and inter-regional transportation and transit through Plan Conformance, project review, and participation on steering committees. The Council also coordinates with NJTPA and NJ TRANSIT to evaluate potential transit strategies for the Highlands Region in support of the LRTP and ongoing TNJ initiatives. During FY 2026 the Council will continue to work with municipalities and counties in support of Plan Conformance with the RMP and intra- and inter-regional transportation and transit planning needs.

<https://www.nj.gov/njhighlands/>

Start Date:

Completion Date:

Project Status Underway

Highlands Trail Town Program

This project will outline recommendations on how to design, develop, and implement a “Trail Town” program associated with the Highlands Trail. Its objective is to strengthen the relationship between the Highlands Trail and the communities it passes through, capitalizing on trends in recreational tourism.

Start Date: 2024

Completion Date: 2026

Project Status Underway

Open Space and Recreation Plan for the Highlands Region

Land acquisition is a vital component of protecting the natural resources of the Highlands Region and to create opportunities for recreation based economic development. The OSRP will consider input from stakeholders, climate change, economic development, and environmental and agriculture factors to create a database of available properties for preservation. This will assist the Highlands Council to become more proactive in identifying properties.

Start Date: 2024

Completion Date: 2025

Project Status Underway

NJ TRANSIT

Bus and Other Surface Transportation Planning

NJ TRANSIT maintains a series of ongoing programmatic planning efforts undertaken and advanced as required, to develop planning concepts, analyze proposals, and address issues and specific needs. All work within these programs is regulated by the availability of resources including funding and staff, and internal priorities.

For its bus and other surface transportation planning efforts, NJ TRANSIT progresses both by singularly and in partnership with municipalities, counties, and other external parties, to plan for future bus service and network performance improvements, bus rapid transit projects, bus terminals and support facilities, to improve bus services and facilities so they operate better and address changing customer needs. Particular attention will be given to the phasing and scalability of bus improvements to effectively use available capital funding and fit within tight operating funding constraints. Planning efforts may include traditional bus vehicles as well as other types of specialized vehicles and propulsion systems.

Start Date:

Completion Date:

Project Status Ongoing, as required

Community Services Planning and Support

This program focuses on planning, analysis, and support relating to human services transportation programs. Among NJ TRANSIT's responsibilities is administering the distribution and use of Federal, State and NJ TRANSIT funding intended to provide vehicles and operating assistance for community transportation including paratransit and other related services. Planning efforts include support for the development of "locally developed" Coordinated Human Services Transportation Plans (CHSTP), analysis of the performance, effectiveness, coordination with and demand for human services transportation programs/efforts, analysis of funding sources and mechanisms, program oversight, and other planning and analyses relating to community transportation services.

Start Date:

Completion Date:

Project Status Ongoing, as required

Corridor Planning and Analysis

NJ TRANSIT maintains this program area to determine the suitability and feasibility of transit in local and regional transportation corridors. It provides for development and analysis of conceptual plans for transit capital improvements, transit alternatives, operating schemes, and assessment of potential environmental impacts. Efforts are undertaken in select corridors, working with communities where opportunities exist to leverage existing public transit services in support of redevelopment or other mobility goals. Assessments consider a wide range of issues including land use, demographics, existing travel patterns, local planning and zoning, transit modes and environmental impacts. At times within this program, NJT has teamed with MPOs, counties and other agencies in joint planning efforts.

Start Date:

Completion Date:

Project Status Ongoing, as required

NJ TRANSIT TMA Work Program

Under this work program the NJ Transportation Management Associations (TMAs) provide transit service information, advocacy to employers and other organizations, outreach to commuters and potential transit users, and feedback to NJ TRANSIT. These services include all scheduled public transit in the TMA's service area, with focus on local feeder, shuttle, and demand response services identified by NJ TRANSIT. The TMAs assist NJ TRANSIT by promoting the use of transit services as a means to help reduce traffic congestion, improve air quality, improve quality of life and work in the TMA service area, and improve mobility and accessibility to all residents in the service area.

Start Date:

Completion Date:

Project Status Ongoing, as required

Qualitative & Quantitative Research

Through this program, NJ TRANSIT updates knowledge of customer travel characteristics by conducting origin and destination surveys of rail, bus, light rail, and Access Link passengers. This information is used to support updating of forecasting models, to conduct Title VI analyses, to support Transit Oriented Development and other planning work, and for other business purposes. Research is conducted to define existing and potential markets through various techniques such as stated preference, public opinion studies and conjoint surveys. Databases are updated and merged in support of corridor planning, air quality initiatives and other planning efforts throughout the region. Focus Groups are conducted with customers and employees to obtain opinions and attitudes which provide an understanding and clarity on issues facing the Corporation. In addition, customer satisfaction studies are conducted on a regular basis. The Customer Satisfaction Survey was designed to provide actionable data by identifying specific areas needing attention, allowing NJ TRANSIT to focus resources on key drivers of satisfaction and improve the overall customer experience. The depth of the information gathered from the surveys will continue to help inform the Corporation in the areas of its operating budget, capital programs, customer service and marketing initiatives, as well as its operations and safety and security. The survey also will give our customers, stakeholders, and NJ TRANSIT a clear window into how the Corporation is performing.

Start Date:

Completion Date:

Project Status Ongoing, as required

Rail Operations and Infrastructure Planning

This program area provides for planning support for commuter rail and light rail-related initiatives and associated infrastructure needs and issues. This work defines infrastructure needs based on proposed operating plans which address projected ridership demand on rail transit services and/or to address safety, resiliency, reliability, and service performance goals. It includes operations planning support (schedule development, crew and equipment plans, and train performance analysis), as well as development of network performance simulations, interpretation, and reporting. The program also provides for other transit facility and infrastructure planning.

Start Date:

Completion Date:

Project Status Ongoing, as required

Ridership Forecasting

This program area involves development of ridership and revenue forecasts, as well as development and updating of forecasting models, in support of major capital projects, transit service planning, major service initiatives, and various other efforts. Much of the work is undertaken to comply with Federal Transit Administration (FTA) requirements and guidelines regarding preparation of travel demand forecasts for use in seeking FTA funding. In addition, this program provides support for MPO travel and air quality model development and training, Census, demographic and other travel data preparation and analyses, and other forecasting work. A continued focus of this work is to complete travel demand forecasts for regional transportation plans, as required for FTA's and NJ TRANSIT's longer-term planning. Also, NJ TRANSIT will focus on short term travel demand on segments of its system or in areas of interest.

Start Date:

Completion Date:

Project Status Ongoing, as required

Stations, Access, Parking and Site Planning

This program focuses on planning for transit facility improvements and needs, and prioritization for future capital investment, including specialized facility design, access to transit, accessibility and other potential improvements. It includes analysis related to stations and facilities, access to transit facilities including bicycle, pedestrian, and other micro-mobility and micro-transit, and parking issues including parking lot utilization, EV parking, parking management, and accommodating projected growth. Within this program, NJ TRANSIT broadly monitors station access by all modes as well as parking utilization and station access needs and formulates proposed actions and projects to address those needs.

Start Date:

Completion Date:

Project Status Ongoing, as required

Trans-Hudson Planning

NJ TRANSIT maintains this program area to focus on trans-Hudson planning. New York City is a regional and national center of economic activity and strongly drives travel demand and commutation patterns in northern New Jersey. Trans-Hudson planning includes the study of a variety of system investments to support a variety of trans-Hudson travel modes including commuter rail, rapid transit, bus, and ferry. In some efforts, NJ TRANSIT serves as the lead agency advancing studies and projects. In other cases, NJ TRANSIT works with other regional agencies, providing staff and other planning resources. Under this program, pertinent elements of capital investment in the Northeast Corridor are pursued by NJ TRANSIT in coordination with Amtrak, the Federal Railroad Administration and other regional agencies.

Start Date:

Completion Date:

Project Status Ongoing, as required

Transit-Friendly Planning Program

Through this program, NJ TRANSIT provides technical planning assistance to interested municipalities to create and implement sensitive, community-based “vision” plans to guide local growth in a comprehensive manner, especially in areas where transit could stimulate new development opportunities and create strong community centers for people to live, work and socialize. Critical components of this work include community outreach, engagement, consensus building and partnerships. Many accomplished projects successfully brought NJ TRANSIT and the targeted community together with state agencies, counties, MPOs, advocacy groups and not-for-profit organizations so that resources could be leveraged, and common goals and objectives achieved. In many communities, successful vision plans have been incorporated into Master Plans and/or adopted as enhanced zoning or new redevelopment plans designed to specifically implement mixed-use Transit Oriented Development.

Start Date:

Completion Date:

Project Status Ongoing, as required

NJ Department of Law & Public Safety

NJ Division of Highway Traffic Safety Grant Program

The NJ Division of Highway Traffic Safety (NJDHTS) offers, on an annual basis, federal grant funding to agencies that wish to undertake programs designed to reduce motor vehicle crashes, injuries, and fatalities on the roads of New Jersey. Seven of New Jersey's TMAs are currently working under this grant program to raise awareness on pedestrian safety, bicycle safety, and distracted driving. Tasks will vary with each participating TMA depending on the exact needs for their service area. Example tasks include: (1) Pedestrian Safety – Work with police departments, nonprofits, churches, social service agencies, high schools and youth organizations to deliver small group presentations about pedestrian safety topics, with an emphasis on vulnerable user populations; (2) Bicycle Safety – Work with community organizations to conduct bicycle safety presentations, events and media outreach; (3) Driving Safety – Work with community organizations to conduct driving safety presentations, events and media outreach; (4) Paint the Pavement – Conduct an educational campaign to raise awareness of distracted walking using painted messages or pictures on the sidewalk; and (5) Street Smart NJ – Conduct Street Smart NJ pedestrian safety campaigns.

Start Date:

Completion Date:

Project Status Ongoing, as needed

Palisades Interstate Park

Palisades Interstate Parkway - Bike Share Program

Avenues in Motion continues to work toward installation of a bike share system from the George Washington Bridge in Fort Lee through Bergen County 9W corridor PIPC property. Timeframe is not yet determined, but feasibility studies are underway.

Start Date:

Completion Date:

Project Status

Calhoun Street Toll Support Bridge Rehabilitation

This project will consist of painting and misc. repairs to the Calhoun Street Toll Supported Bridge. (Currently a planning initiative - dates reflect anticipated construction schedule).

Start Date: 2029
Completion Date: 2030
Project Status: Planned

Centre Bridge - Stockton Toll Supported Bridge Rehabilitation

This project is for the rehabilitation of the bridge including replacement of lower truss chord members, concrete substructure repairs and repainting. This project will also include esthetic lighting and electrical work. (Currently a planning initiative - dates reflect anticipated construction schedule).

Start Date: 2028
Completion Date: 2029
Project Status: Planned

Delaware Water Gap I-80 Toll Bridge All Electronic Tolling

This project consists of design and construction of implementing Hard All Electronic Tolling at the Delaware Water Gap I-80 Toll Bridge. (Currently a planning initiative - dates reflect anticipated construction schedule).

Start Date: 2032
Completion Date: 2033
Project Status: Planned

Easton - Phillipsburg Route 22 Toll Bridge All Electronic Tolling

This project consists of design and construction of implementing Hard All Electronic Tolling at the Easton - Phillipsburg Route 22 Toll Bridge. (Currently a planning initiative - dates reflect anticipated construction schedule).

Start Date: 2028
Completion Date: 2029
Project Status Planned

I-78 Toll Bridge All Electronic Tolling

This project consists of design and construction of implementing Hard All Electronic Tolling. (Currently a planning initiative - dates reflect anticipated construction schedule).

Start Date: 2033
Completion Date: 2034
Project Status Planned

Lower Trenton Toll Supported Bridge Rehabilitation

This project includes the cleaning and painting of the main river bridge. (Currently a planning initiative - dates reflect anticipated construction schedule).

Start Date: 2032
Completion Date: 2033
Project Status Planned

Milford - Montague Toll Bridge All Electronic Tolling

This project consists of design and construction of implementing Hard All Electronic Tolling at the Milford - Montague Toll Bridge. (Currently a planning initiative - dates reflect anticipated construction schedule).

Start Date: 2030
Completion Date: 2031
Project Status: Planned

Milford - Montague Toll Bridge Rehabilitation

This project will consist of painting and misc. repairs to the Milford - Montague Toll Bridge. (Currently a planning initiative - dates reflect anticipated construction schedule).

Start Date: 2031
Completion Date: 2032
Project Status: Planned

Portland - Columbia Toll Bridge All Electronic Tolling

This project consists of design and construction of implementing Hard All Electronic Tolling at the Portland - Columbia Toll Bridge. (Currently a planning initiative - dates reflect anticipated construction schedule).

Start Date: 2030
Completion Date: 2031
Project Status: Planned

Riegelsville Toll-Supported Bridge Rehabilitation

This project will consist of rehabilitation of the Riegelsville Toll-Supported Bridge. The Bridge was last rehabilitated in 2010. This project includes Architectural Lighting. (Currently a planning initiative - dates reflect anticipated construction schedule).

Start Date: 2031
Completion Date: 2032
Project Status: Planned

Riverton - Belvidere Toll-Supported Bridge Rehabilitation

This project will consist of cleaning, Painting and repainting the bridge. The work will also include esthetic lighting and electrical renovations. (Currently a planning initiative - dates reflect anticipated construction schedule).

Start Date: 2031
Completion Date: 2032
Project Status: Planned

Upper Black Eddy - Milford Toll-Supported Bridge Rehabilitation

This project will consist of rehabilitation of the Upper Black Eddy - Milford Toll-Supported Bridge. This rehabilitation will add architectural lighting. (Currently a planning initiative - dates reflect anticipated construction schedule).

Start Date: 2033
Completion Date: 2034
Project Status: Planned

NJ Sports and Exposition Authority

Access Management Criteria

Develop Access management criteria for Meadowlands District roadways.

Start Date:

Completion Date:

Project Status Underway

Active Transportation Plan

Create an Active Transportation Plan for the Meadowlands District and establish a regional pedestrian and cyclist infrastructure data clearinghouse.

Start Date:

Completion Date:

Project Status Planned

ADA Upgrades as Part of All Roadway Improvement Projects

Plan and implement Americans with Disabilities Act (ADA)-compliant access upgrades as part of all roadway improvement projects.

Start Date:

Completion Date:

Project Status Planned

ADA-compliant Off-site Connections to Nearby Transit Stops

Encourage new developments through the credit program to provide Americans with Disabilities Act (ADA)-compliant off-site connections to nearby transit stops.

Start Date:

Completion Date:

Project Status Planned

AV/On-demand/Micro-transit Pilot Application at/within Harmon Meadow

Study and implement Automated Vehicle (AV)/on-demand/micro-transit pilot application at/within Harmon Meadow East & West. Study will detail specific element (infrastructure and service) while considering an AV pilot to inspire further implementation/integration. (Collaborated effort with Hartz Mountain.)

Start Date:

Completion Date:

Project Status Planned

Bicycle facilities along Meadowlands Parkway between Secaucus Greenway/Riverside Court and Castle Road

Install bicycle facilities between Secaucus Greenway/Riverside Court and Castle Road. Investigate/install Vehicle to Everything (V2X) technology with active detection of bicycles. (Collaborated effort with Secaucus.)

Start Date:

Completion Date:

Project Status Planned

Bike / Ped Wayfinding Signage

Plan, design, and install wayfinding signage along all existing and future bicycle and pedestrian access ways within the Meadowlands District.

Start Date:

Completion Date:

Project Status Planned

Complete Streets Policy

Develop and adopt a contextual Complete Streets policy applicable to District roadways.

Start Date:

Completion Date:

Project Status Underway

Dedicated Automated Vehicle (AV) District

Create a dedicated Automated Vehicle (AV) District to allow for testing, pilot deployments, and full-scale AV deployment.

Start Date:

Completion Date:

Project Status Planned

Electric Vehicle Charging Stations

Develop guidance for electric vehicle charging infrastructure to facilitate the installation of a consistent, fast, and reliable charging network throughout the District that meets future demand.

Start Date:

Completion Date:

Project Status Planned

Electric Vehicles (EV) charging ports

Install Electric Vehicles (EV) charging ports within the District to provide unmet demand

Start Date:

Completion Date:

Project Status Planned

Formalize/Improve Valley Brook Avenue

Formalize/improve Valley Brook Avenue from Orient Way to DeKorte Park to include two striped travel lanes, pavement markings, roadway and pedestrian-scale lighting, sidewalks, and protected bicycle lanes. Install sidewalks and protected bicycle lanes on both sides of Valley Brook Avenue, Polito Avenue, Wall Street West, Clay Avenue, and Chubb Avenue. Roadway improvements to allow geofenced micro-transit/e-scooter mobility in addition to bicycles. (Collaborated effort with Lyndhurst.)

Start Date:

Completion Date:

Project Status Underway

Improve MASSTR

Continue to operate, invest in, upgrade, maintain, and expand the MASSTR network. Integrate new applications of V2X into the MASSTR network. Solicit input from NJDOT, NJ TRANSIT, and other key stakeholders and advance MOA with pertinent agencies as needed.

Start Date:

Completion Date:

Project Status Planned

Leverage Credit Program to Advance Technology

Leverage credit program to support businesses/properties that promote and incorporate emerging technologies such as Electric Vehicle (EV) charging stations, parking guidance systems, e-scooter rentals, etc.

Start Date:

Completion Date:

Project Status Planned

Micro Transit Circulator along Industrial Avenue Corridor

Study/implement a closed course micro-transit circulator along Industrial Avenue corridor. May feature on-demand and Automated Vehicle (AV) technology integration for midday business, airport customer, and commuter applications. (Collaborated effort with Teterboro.)

Start Date:

Completion Date:

Project Status Planned

Sidewalks and Bicycle Lanes in Future Roadway Projects

Evaluate and include sidewalks and bicycle lanes as part of future roadway improvement projects where feasible

Start Date:

Completion Date:

Project Status Planned

Southwest Area Transit Demand Market Analysis

Southwest area transit demand market analysis (collaborated effort with NJ TRANSIT).

Start Date:

Completion Date:

Project Status Planned

Truck Weight Restriction Study

Analyze roadway weight restrictions throughout the District to develop a GIS weight restriction roadway map and provide recommendations to roadway owners based on truck use.

Start Date:

Completion Date:

Project Status Planned

Valley Brook Avenue & Polito Avenue Intersection Improvements

Investigate and install safety improvements at the intersection at Valley Brook Avenue & Polito Avenue: remove the channelized right turn lane at the intersection with Polito Avenue; shorten the Polito Avenue crosswalk; provide pedestrian connection to the ball fields across Valley Brook Avenue. If signal is not warranted or supported by Lyndhurst, investigate use of Rectangular Rapid-Flashing Beacons (RRFBs) for crosswalks. Investigate/install Vehicle to Everything (V2X) technology where feasible/warranted to detect pedestrians in crosswalks. On WB Valley Brook Avenue, install warning signage (W7-6) and advisory speed signage (W13-1P) in advance of the vertical curve. Valley Brook Ave. & Polito Ave. Intersection Improvements. (Collaborated effort with Lyndhurst.)

Start Date:

Completion Date:

Project Status Underway

Port Authority of NY & NJ

Cross Harbor Freight Program (CHFP) Tier II Environmental Impact Statement (EIS)

The Port Authority of New York & New Jersey (PANYNJ) and the Federal Highway Administration (FHWA) are undertaking a Tier II Environmental Impact Statement (EIS) for the Cross Harbor Freight Program (CHFP). The primary purpose of the CHFP is to improve the movement of freight across New York Harbor between the east- and west-of Hudson regions. The Tier II EIS will include analyses based on engineering designs and site-specific environmental effects, development of site-specific mitigation measures, and cost estimates, as appropriate.

<https://www.panynj.gov/port/en/our-port/port-development/cross-harbor-freight-program.html>

Start Date: 2018

Completion Date: 2026

Project Status Underway

Port Authority Bus Terminal Replacement Planning

In 2013, the Port Authority initiated a Midtown Bus Master Plan process to evaluate options for redevelopment of the Port Authority Bus Terminal (PABT). Opened in 1950 and expanded in the early 1980's, in 2015 the PABT accommodated approximately 260,000 total passenger trips and more than 7,900 bus movements on a busy weekday. The planning initiative addressed a range of considerations, including life-cycle issues for the existing facility, constraints in accommodating larger and heavier modern buses, operational limitations, anticipated future growth in interstate commuter and intercity bus demand, and development in West Midtown. In March 2015, staff presented the agency's Board of Commissioners with findings that included the recommendation to replace the outmoded existing terminal, and a range of project concepts. In October 2015, the Board authorized a "Design and Deliverability" competition soliciting conceptual designs for a new facility to inform its deliberations. The Board also initiated a Trans-Hudson Commuting Capacity Study to examine factors likely to affect long-term demand on the interstate bus network as well as multi-modal approaches for addressing the region's trans-Hudson commutation needs. Findings and recommendations of both efforts were presented to the PANYNJ Commissioners in late 2016. In February 2017, the agency's board approved a ten-year capital plan including \$ 3.5 Billion toward a project to replace the current facility. In addition, the plan included funding for near-term improvements to maintain efficient operations and improve facilities for customers, as well as authorization and funding to initiate planning for a replacement facility as well as intermediate improvements to support efficient operation of the existing terminal based on forecasts of steadily increasing commuter transit demand. The Final Environmental Impact Statement (FEIS) was published in the Federal Register in October 2024 and the Federal Record of Decision Issuance completed December 2024.

<https://www.panynj.gov/bus-terminals/en/port-authority/planning-level-scoping-process-pabt.html>

Start Date: 2017

Completion Date: 2024

Project Status Completed

County of Middlesex

North Brunswick Train Station

The North Brunswick Train Station project will bring a new train stop to Middlesex County along the Northeast Corridor, providing numerous benefits, including substantial relief to one of the State’s busiest rail lines, reducing traffic along Route 1 – a major thoroughfare – and attracting new revenue to the region. Funding for the project was allocated in 2017 through the New Jersey Transportation Trust Fund and the Middlesex County Improvement Authority (MCIA) was tasked with managing the project in partnership with NJ TRANSIT. Concept development began in 2021. As of January 2025, MCIA and NJ Transit are nearing 60% design completion with the construction drawings.

<https://www.middlesexcountynj.gov/discover-our-community/north-brunswick-train-station>

Start Date: 2021

Completion Date:

Project Status Underway

City of Jersey City

Bergen Arches Feasibility Study

In 2022, the Jersey City Council adopted a resolution (Res. 22-403) accepting \$100,000 from the State of New Jersey to conduct a feasibility study examining transit and green space needs at the Bergen Arches. The study will evaluate the feasibility of developing a publicly accessible greenway trail and future public transit right-of-way through the Bergen Arches between Palisade Avenue to the east and Route 1&9/Tonnele Avenue to the west. The Bergen Arches Feasibility Study will provide critical information and analysis to enable Jersey City and its partners to pursue the design and construction of site improvements that would provide interim access to pedestrian, cyclist, and other active modes while retaining space for future passenger rail, bus, or autonomous vehicle (AV) transit to run alongside the greenway trail. The study would also examine the feasibility of potential connections to the proposed Harsimus Branch/Sixth Street Embankment Greenway to the east and Essex-Hudson Greenway to the west.

<https://bergenarchesstudy-jerseycity.hub.arcgis.com/>

Start Date: 2023

Completion Date: 2025

Project Status Completed

City of Newark

Newark Riverfront Pedestrian and Bicycle Access Concept Development Study

The City of Newark is working on a Concept Development (CD) Study to improve pedestrian and bicyclist connection between Broad Street and newly developed Passaic waterfront area, east of the McCarter Highway intersection with Center Street. A CD Study is the first phase of the Project Delivery Process for transportation improvements. The purpose of the CD Study is to evaluate practical alternatives that will guide future upgrades to the Newark Riverfront Study Area on Broad Street and Center Street, near the NJ Performing Arts Center and Military Park, making the roadways more accessible to bicyclists and pedestrians, and safer for all users.

<https://www.bikepedaccessnewark.com/>

Start Date: 2023

Completion Date: 2027

Project Status Underway

North Broad Street Redevelopment Project

The North Broad Street Redevelopment Area Corridor is within the Lower Broadway Neighborhood. The corridor is adjacent to New Jersey Transit's Broad Street Station and serves as the northern gateway into Newark's Central Business District (CBD). The Lower Broadway Neighborhood is desirably located on the northern edge of Downtown Newark, affording its residents easy access to employment, educational, cultural, entertainment and transportation amenities. The Corridor provides direct access to State Route 21 and Interstate 280 and connects to the Clay Street Bridge over the Passaic River and into the Borough of East Newark. New and pending high-rise residential and commercial development will add additional people and traffic to the North Broad Street Redevelopment Area. This study aims to improve various intersections within the corridor for pedestrians and bicyclist.

This study will examine traffic signal improvements to existing signalized and un-signalized intersections, improved pedestrian connections including traffic calming and control measures, crosswalks, sidewalks and signage with special attention to pedestrian safety at intersections. The intersections with the study area are: (1) Broad Street and 8th Avenue; (2) Broad Street and Broadway Ave/Clay Street; (3) Clay Street and Spring Street; (4) Clay Street and Mt Pleasant Avenue; and (5) Mt Pleasant and Clay Street.

Start Date:

Completion Date:

Project Status Planned

Avenues in Motion

Morris Area Bike Share

Avenues in Motion continues to work toward installation of a bike share system in the Morristown-Morris Township-Madison corridor. Timeframe is not yet determined, but fundraising is ongoing. Avenues in Motion will continue to lead stakeholders in the region to inform them of technology platforms, vendors, trends, costs and fundraising efforts. Avenues in Motion will leverage partnerships in these communities and the region to generate the funding needed for a full system. Avenues in Motion will also provide education and outreach to the community upon launch.

Start Date:

Completion Date:

Project Status

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**SECTION II
NJTPA STUDY AND DEVELOPMENT PROGRAM**

NJTPA STUDY AND DEVELOPMENT PROGRAM

The NJTPA's Study and Development (S&D) Program is a schedule of project planning, environmental reviews and other work that will be conducted during the coming year to advance proposed improvement projects toward possible federal funding. The latest S&D Program report is available on the NJTPA's website at [Study & Development | NJTPA | North Jersey Transportation Planning Authority](#).

All projects scheduled for work in the S&D Program were drawn from or referenced in NJTPA's long-range transportation plan. Many have been further investigated through regional or subregional studies. As such the projects reflect the goals and long-range strategy of the NJTPA for improving access and mobility in the northern New Jersey region.

Projects in the S&D Program undergo concept development. This phase of project development identifies and compares reasonable alternatives and strategies that address the purpose and need statement and selects a preliminary preferred alternative (PPA). At the conclusion of concept development, projects become candidates for inclusion in the NJTPA Transportation Improvement Program (TIP). The TIP allocates federal funding to implement projects including completion of design, right-of-way acquisition and construction.

More information on the S&D Program, including how projects are selected for inclusion in the document, can be found in the S&D Program's report and in the TIP's introduction on the [Adopted TIP](#) webpage.

**NORTH JERSEY
TRANSPORTATION PLANNING
AUTHORITY, INC.**

**FY 2026
UNIFIED PLANNING WORK PROGRAM**

**CHAPTER IV
OTHER REGIONAL TRANSPORTATION
PLANNING INITIATIVES**

**SECTION III
COMPETITIVE FEDERAL TRANSPORTATION
PLANNING GRANTS**

COMPETITIVE FEDERAL TRANSPORTATION PLANNING GRANTS

The following section provides a list of competitive grants (competitive congressional directed spending/community project funding or other discretionary program grants) authorized for surface transportation planning projects in the NJTPA region, under the Infrastructure Investment and Jobs Act ([IIJA](#)) signed into law on November 15, 2021. Additional information and updates about funding opportunities available through this Act can be found on NJTPA's website at [IIJA Info-Resources | NJTPA | North Jersey Transportation Planning Authority](#).

SAFE STREETS AND ROADS FOR ALL GRANTS

On February 1, 2023, USDOT announced \$800 million in grant awards for 510 communities through the first round of funding for the Safe Streets and Roads for All (SS4A) grant program. The FY 2022 awards included seven [Action Plan Grants](#) to local agencies in the NJTPA region to develop comprehensive safety action plans, which are noted in the table below.

FY 2022 SS4A Action Plan Awards

Lead Applicant	Project Name	Type of Plan	Total Federal Funding
Borough of Dunellen	SS4A Action Plan Grant to Dunellen in New Jersey	Action Plan	\$436,800.00
City of Paterson	The City of Paterson Action Plan	Action Plan	\$400,000.00
Essex County Department of Public Works	Essex County Action Plan	Action Plan	\$400,000.00
Hudson County	The County of Hudson Action Plan	Action Plan	\$480,000.00
Monmouth County	Monmouth County Safe Streets and Roads for All (SS4A) Comprehensive Action Safety Plan Grant Application	Action Plan	\$1,180,000.00
New Jersey Sports and Exposition Authority	Meadowlands Action Plan for Safety - MAP4S	Action Plan	\$877,600.00
Union County	Union County Safe Streets for All Project	Action Plan	\$699,271.44

The [announcement for the FY 2023](#) SS4A awards was issued on December 13, 2023. It included 14 [Planning and Demonstration Grants](#) to communities in the NJTPA region to develop road safety action plans and inform improvements along corridors with safety issues. Several of the grants also provide funding to conduct demonstration activities that implement “quick build” strategies to test out potential safety features such as separated bicycle lanes or curb extensions at intersections.

FY 2023 SS4A Planning and Demonstration Awards

Lead Applicant	Project Name	Application Type	Total Federal Funding
Borough of Red Bank	Red Bank Borough Vision Zero Action	Plan Develop New Action Plan (only)	\$120,000
City of Asbury Park	The City of Asbury Park Comprehensive Transportation Safety Action Plan	Develop New Action Plan (only)	\$160,000
City of Jersey City	City of Jersey City Planning and Demonstration Activities	Conduct Demonstration or Other Supplemental Planning Activities (only)	\$1,004,000
City of Newark, NJ	City of Newark, NJ Planning and Demonstration Activities	Conduct Demonstration or Other Supplemental Planning Activities (only)	\$800,000
City of Plainfield	Plainfield Roadway Safety Action Plan	Develop New Action Plan (only)	\$400,000
Edgewater Park	Township of Edgewater Park Safe Streets for All Action Plan	Develop New Action Plan (only)	\$400,000
Edison Township	Edison Vision Zero Action Plan	Develop New Action Plan (only)	\$320,000
Englewood City	City of Englewood Vision Zero Action Plan	Develop New Action Plan (only)	\$200,000
Town of Westfield	SS4A Planning Grant for the Town of Westfield, New Jersey	Develop New Action Plan (only)	\$100,000
Township of Belleville	Township of Belleville Roadway Safety Action Plan	Develop New Action Plan (only)	\$400,000
Township of Mahwah	Action Plan to Improve Pedestrian and Bicycle Safety	Develop New Action Plan (only)	\$80,000
Township of Montclair	Montclair Township Supplemental Planning & Demonstration SS4A Project	Conduct Demonstration or Other Supplemental Planning Activities (only)	\$438,220
Township of South Orange Village	South Orange Vision Zero Action Plan	Develop New Action Plan (only)	\$100,000
Union Township	Union Township Comprehensive Safety Action Plan	Develop Action Plan as well as Demonstration or Other Supplemental Planning	\$200,000

The [announcement for the final round of FY 2024 SS4A awards](#) was issued on November 15, 2024. The [FY 2024 SS4A grants](#) included four Planning and Demonstration Grants to communities in the NJTPA region to develop road safety action plans and/or conduct supplemental planning or demonstration activities.

FY 2024 SS4A Planning and Demonstration Awards

Lead Applicant	Project Name	Application Type	Total Federal Funding
Borough of Leonia	Overcoming the 'Waze Effect' to Get to Zero in Leonia, NJ	Planning and Demonstration	\$262,400
City of Passaic	Passaic City Vision Zero Action Plan	Planning and Demonstration	\$355,000
Township of West Orange	Township of West Orange Supplemental Planning	Planning and Demonstration	\$450,000
Hudson County	Advancing Hudson County's Vision Zero Action Plan via Planning and Demonstration Activities	Planning and Demonstration	\$260,000

**REBUILDING AMERICA INFRASTRUCTURE WITH SUSTAINABILITY
AND EQUITY GRANTS**

The Rebuilding American Infrastructure with Sustainability and Equity ([RAISE](#)) discretionary grant program provides funding for road, rail, transit, and port projects that promise to achieve national objectives. The RAISE program has previously been called the Better Utilizing Investments to Leverage Development (BUILD) and Transportation Investment Generating Economic Recovery (TIGER) programs. The [RAISE 2022 grant program](#) funded 166 projects. These awards included one planning grant to a local agency in the NJTPA region, which is noted in the table below.

FY 2022 RAISE Planning Project Awards

Lead Applicant	Project Name	Total Federal Funding	Total Project Cost
City of Elizabeth	Intermodal Transportation Infrastructure Planning Project	\$5,000,000	\$5,000,000

On June 28, 2023, [USDOT announced the RAISE 2023 grant awards](#) that provided funding for 162 communities of all sizes with half going to rural areas and the half to urban areas. These awards included one planning grant to a local agency in the NJTPA region, which is noted in the table below.

FY 2023 RAISE Planning Project Awards

Lead Applicant	Project Name	Total Federal Funding	Total Project Cost
Borough of Manville	Manville Grade Crossing Feasibility Study. The project will fund a feasibility study to collect data and identify solutions for several at-grade rail crossings. The project will focus on pedestrian mobility, blocked and unsafe roads, areas of congestion, and areas susceptible to flooding.	\$48,000.00	\$60,000

ALL STATIONS ACCESSIBILITY PROGRAM GRANTS

On December 19, 2022, FTA announced the award of \$686 million in [FY 2022 and FY 2023 grant funding for 15 projects in nine states](#), which will provide support to help make it easier for people with disabilities and mobility needs to access some of the nation’s oldest and busiest rail transit systems through essential upgrades, such as elevators. Funded by the Bipartisan Infrastructure Law, these [All Stations Accessibility Program](#) (ASAP) grants represent the first round of funding designed to improve accessibility so everyone, including those who use wheelchairs, push strollers, or cannot easily navigate stairs, can reliably access the rail systems in their communities. The awards include three grants in the NJTPA region, including one planning project which is noted in the table below.

FY 2022 - FY 2023 ASAP Planning Project Awards

Lead Applicant	Project Description	Total Federal Funding
New Jersey Transit Corporation	The New Jersey Transit Corporation will receive funding to study and design new platforms at two stations on the Morristown Line that are not ADA accessible because of geographical challenges. NJ Transit will develop new designs for its Chatham and Orange Stations along with implementation strategies and apply the recommendations from this study to other inaccessible stations.	\$1,400,000

AREAS OF PERSISTENT POVERTY PROGRAM GRANTS

On July 20, 2023, FTA announced approximately \$20 million in [FY 2023 project selections](#) supporting 47 projects in 32 states through the Areas of Persistent Poverty (AoPP) program to help improve public transportation options in areas experiencing long-term economic distress. The AoPP program provides support to state and local governments, transit agencies, and nonprofit organizations to create better transit for residents with limited or no transportation options. The awards include one planning grant in the NJTPA region that is noted in the table below.

FY 2022 - FY 2023 AoPP Planning Project Awards

Lead Applicant	Project Description	Total Federal Funding
New Jersey Transit Corporation	New Jersey Transit will receive funding to conduct a study and network redesign of bus service between Paterson and Passaic, NJ. The project will assess existing services and lay the foundation for an update to the bus system between these two communities to improve access and reduce wait times.	\$600,000

TRANSIT-ORIENTED DEVELOPMENT GRANTS

On November 17, 2022, FTA announced the award of approximately \$13.1 million in [FY 2022 Transit-Oriented Development \(TOD\) planning grants](#) for 19 projects in 14 states to support community efforts to improve access to public transportation. These grants, which were issued under its [Pilot Program for TOD Planning](#), will help organizations plan for transportation projects that connect communities and improve access to transit and affordable housing. The FY 2022 program included one planning grant in the NJTPA region, which is noted in the table below.

FY 2022 TOD Planning Project Awards

Lead Applicant	Project Description	Total Federal Funding
New Jersey Transit Corporation	The New Jersey Transit Corporation will receive funding to plan for TOD along the proposed nine-mile Northern Branch light rail extension in Bergen and Hudson Counties in northern New Jersey. The planned TOD will support public and private partnerships, enhance multimodal transit access, encourage economic development, and preserve affordable housing.	\$592,000

CONGRESSIONALLY DIRECTED SPENDING - COMMUNITY PROJECT SPENDING GRANTS

The Senate's Congressionally Directed Funding and House of Representative's Community Project Funding programs allow Senators and House members to request and secure federal funding for specific projects that benefit their states and local communities. The grants are funded through various federal programs that focus on economic development, infrastructure, public safety, education, healthcare, transportation, environmental conservation and other community investments. The FY 2022 and 2024 grant awards included two planning grants in the NJTPA region that pertain to surface transportation, which are noted in the table below.

Congressionally Directed Spending/Community Project Spending Planning Project Awards

Lead Applicant	Project Description	Grant Program	FY	Total Federal Funding
Sayreville Economic and Redevelopment Agency	Sayreville Waterfront Multimodal Transportation Improvement Project - This planning study will examine, identify, and assess the feasibility of constructing multimodal transportation connectivity between isolated parcels in the Sayreville Waterfront Redevelopment Area and the South Amboy Transit Station and Ferry Terminal.	Transportation Planning, Research and Development (FTA)	2022	\$1,316,000
Passaic County	Paterson-Newark Transit Market Project - To further the design and study of a new, high-quality transit service between Paterson and Newark along the existing Newark Industrial Track (NIT) freight rail corridor.	Transit Infrastructure Grants	2024	\$1,200,000

**NORTH JERSEY
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**FY 2026
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**CHAPTER IV
OTHER REGIONAL TRANSPORTATION
PLANNING INITIATIVES**

SECTION IV

**NEW JERSEY DEPARTMENT OF TRANSPORTATION
STATE PLANNING AND RESEARCH PROGRAM**

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

ACTIVITY: Performance-based Planning and Asset Management – 4510025 / 5900
MANAGER: Sudhir Joshi
UNIT: Statewide Strategies

VISON AND MISSION:

Maximize performance-based decision making in capital investment planning and programming through the preparation of the Long Range Transportation Plan and the Transportation Asset Management Plan and coordination of Transportation Performance Management target setting and reporting.

Continue to be a national leader in performance-based planning (PBP) and asset management (AM). NJDOT implements transportation improvements and multimodal strategies that provide the most comprehensive benefits to a range of transportation objectives. NJDOT implements cutting edge preservation and renewal strategies that keep our assets in a state-of-good repair in the most cost-effective means possible to enable access to essential services such as housing, employment and commerce, healthcare, schools/education, and recreation.

Note: Not all PBP/AM related activities are captured in this thumbnail activity. Portions are covered in various other activities and through coordinated and collaborative efforts with regional entities such as the MPOs and local entities, NJ TRANSIT, various transportation authorities, neighboring state DOTs and federal agencies. A number of activities in the work program can be considered PBP/AM in their entirety while others include portions of PBP/AM elements.

GOALS/ACTIVITIES:

1. Prepare the NJDOT Transportation Asset Management Plan (TAMP).
 - a. Continually coordinate efforts for the implementation of the 2022 New Jersey Transportation Asset Management Plan (TAMP) in line with the FAST Act and IIJA requirements.
 - b. Report on the development and implementation of the 2022 NJ TAMP in conformance with 23 CFR 515.13(b) requirements for the Annual Consistency Report (ACR).
 - c. Draft a scope of work to solicit and acquire consultant services to assist the Department in developing the 2026 NJ TAMP, the 2025, 2026, and 2027 ACRs, and the 2025, 2026, and 2027 SCIS .
 - d. Collaborate with MPOs, counties, independent transportation authorities and federal agencies on the initial phases to update TAM activities in New Jersey. Continue to gather and report on pavement condition on non-state NHS routes in line with FAST Act requirements. In addition to the collaborative performance measures reporting, these entities will also collaborate with NJDOT on target-setting for both the state and MPO targets for bridge and pavement assets in order to enhance on-going processes for establishing targets for bridge and pavement assets on the NHS, including non-NJDOT NHS assets and their owners in accordance with 23 CFR Part 490 (PM2 Final Rule).
 - e. Continue to identify innovative strategies for how technology can be utilized to keep NJ assets in a state-of-good repair.
 - f. Collaborate with various units and initiatives to identify how technology can support PBP/AM and enhance program/project delivery.
 - g. Update the Part 667 database of assets damaged during declared emergency events and the New Jersey Evaluation Report, which will include working with Department units to explore means to improve database update process. Collaborate as needed with counties, municipalities and authorities to collect new reports on road and bridge assets that were damaged as a result of an emergency event to add to the database. Collaborate with Department units to modify the project development process to include consideration of 23 CFR Part 667 requirements.

STATE PLANNING AND RESEARCH PROGRAM, 2025- 2026

ACTIVITY: Performance-based Planning and Asset Management – 4510025 / 5900
MANAGER: Sudhir Joshi
UNIT: Statewide Strategies

2. Prepare New Jersey's Long Range Transportation Plan (LRTP).
 - a. Manage the multiyear contract for consultant assistance in the preparation of the 2050 LRTP.
 - b. Deploy the LRTP Public Involvement Action Plan (PIAP). Collaborate with stakeholders and consult with interested parties in a continuous public engagement program through a variety of public involvement events to provide opportunities for input in the development of the LRTP and transportation planning process ultimately delivering an awareness of New Jersey's 2050 LRTP, its vision, mission and goals.
 - c. Ensure compliance with all federal and state requirements at 23 CFR 450 and the New Jersey state requirements at N.J.S.A. 27:1A-5.
 - d. Deliver the LRTP and New Jersey urban supplement in partnership with NJ TRANSIT.
3. Coordinate NJDOT's TPM implementation activities associated with the FAST Act performance requirements including the establishment and reporting in the PMF of performance measures and targets by the Department for various performance areas as required by the National Performance Management Measure Rules for safety (PM1), infrastructure (PM2) and system performance (PM3). TPM activities shall be reflected in the TAMP and LRTP.
 - a. Report and update National Highway Performance Program performance measures and targets as required per 23 CFR 490, Subparts A through F.
4. Continually enhance, update and report various key performance indicators (KPIs) and inventory data for NJDOT's Performance and Inventory Information Center, in addition to the periodic updates and reporting of KPIs to the State of New Jersey Transparency Center/Governor's Performance Center. Incorporate NHPP performance measures and targets for PM1, PM2 and PM3 into the Department's internal and external webpages as noted in item 3 above.
 - a. Routinely update on a quarterly basis, or as needed, working with units such as Budget, Communications and management system owners and SMEs.
 - b. Collaborate with a core group of units including, Budget, Communications and IT, to provide enhancements to the performance/inventory information center intranet webpage.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Provide Presentations to Transportation Asset Management Steering Committee and Directors Group. Goal 1.a. Ongoing.
2. Receive 2025 FHWA annual consistency determination of NJDOT's implementation of the 2022 NJ TAMP. Goal 1.b. Ongoing.
3. Collaborate with Department Units to integrate Part 667 considerations in the project delivery process. Goal 1.g. Ongoing.
4. Integrate technology, enhanced operational initiatives and innovative strategies that support PBP/AM into an enhanced project delivery process. Goal 1 and 2. Ongoing
5. Continue efforts for the Development of the 2050 NJ LRTP. Goal 2.b. Year Specific.
6. Collaborate with Department Units in the development of the New Jersey LRTP. Goal 2.c. Ongoing
7. Continue the New Jersey LRTP Public Involvement Action Plan for the collaboration, cooperation, and consultation of stakeholders, tribal nations, transportation partners, and the traveling public in New Jersey. Goal 2.e. Year Specific.

STATE PLANNING AND RESEARCH PROGRAM, 2025- 2026

ACTIVITY: Performance-based Planning and Asset Management – 4510025 / 5900
MANAGER: Sudhir Joshi
UNIT: Statewide Strategies

8. Update NJDOT policy and procedure for TPM implementation, including updating the "Table of Ownership" for NJDOT established/reported targets identifying staff SME owners and support staff for targets as defined in PM1, PM2 and PM 3 final rules. Goal 3. – Ongoing.
9. Post performance measures and targets to NJDOT’s Performance and Inventory Center Intranet site, Governor’s Transparency website and NJDOT’s website when/where applicable. Goals 3 and 4.-Ongoing.

New Jersey Long Range Transportation Plan and TAMP related additional tasks to meet FHWA requirements.
 Year 1 - \$1,900,000

TRAVEL:

	<u>Year 1</u>
Conferences	\$5,650.00
Business meetings	\$ 60.00
Total	\$5,710.00

Event	Year 2
TRB Annual Meeting, January, Washington, DC, 2 attendees/2-days	\$2,500.00
NJ Transaction Conference 2025, Date TBD, (Asset Management/Performance Mgt. Topic), 1 attendee/1-day	\$75.00
TRB/AASHTO, State, MPO/Regional Asset Mgt./TPM-PBP Event, Date TBD, 1 attendee/1-day	\$75.00
MPO Events/Meetings (DVRPC Parking for 2 staff, 2 events/\$15 each)	\$60.00
AASHTO Committee on Performance-Based Management Conference, 2025, location TBD 1 attendee, 3 days = \$3,000	\$3,000
TOTAL	\$5,710.00

EQUIPMENT: None.

STAFFING:

Andrew Clark, Section Chief, Planning	0.50 PY
Thomas Houck, Program Specialist 4	0.75 PY
Joseph Burdulia, Senior Planner, Transportation	0.30 PY
Pritesh Prajapati, Senior Engineer, Planning	1.00 PY
Hailey Anilonis, Planner Trainee, Transportation	<u>0.60 PY</u>
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STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Transportation and Livable Communities – 4510025/5400
MANAGER: Sudhir Joshi
UNIT: Bureau of Statewide Strategies

VISION AND MISSION:

Foster the statewide initiatives, programs, and activities advancing New Jersey toward a livable and sustainable future through the following components:

- To play a leading role in providing long-term sustainable and context sensitive solutions to transportation problems, in collaboration with our federal partners, other state agencies and transit entities, MPOs, counties and municipalities
- To develop and implement alternatives to single-occupant vehicle (SOV) travel such as trip reduction, mass transit, Complete Streets, walking, biking and local street connectivity that ultimately create livable, economically thriving communities.
- To maximize the efficiency of the transportation system statewide and in local communities
- To increase use of non-SOV travel modes to help meet the performance target established within New Jersey’s urbanized areas
- To employ such initiatives as Transit Village designation and access management planning to create a stronger link between transportation and land use
- To utilize guidance from the smart growth principles of the State Development and Redevelopment Plan (SDRP) and the federal Partnership for Sustainable Communities’ six livability principles, as well as the federal emphasis areas including Regional Models of Cooperation, Ladders of Opportunity, Every Day Counts (EDC) and the Infrastructure Investment and Jobs Act (IIJA)

GOALS/ACTIVITIES:

1. Shape the delivery of the Capital Program with infusion of Smart Growth and State Development and Redevelopment Plan (SDRP) principles into the Department’s policies, programs, practices and investment decisions, along with requirements of federal legislation (FAST Act, formerly MAP-21) and the Infrastructure Investment and Jobs Act (IIJA).
 - a. Spearhead participation in New Jersey’s economic growth agenda through coordination with other agencies in the evolving statewide effort to implement the goals, strategies and policies of the SDRP and Smart Growth principles.
 - b. Increase awareness among Department units, county and local governments and the public about federal, regional and statewide Smart Growth, Sustainable Transportation and Livable Communities endeavors including implementation of the Together North Jersey Regional Plan for Sustainable Development, through interagency coordination, information and resource distribution and activities of the Department’s State Plan/Smart Growth Implementation Team (I-Team).
 - c. Improve the existing process of internal Department review of local plans for transportation elements that embody Smart Growth concepts and underpin sustainable land use objectives according to principles of the SDRP.
 - d. Advocate the use of SDRP concepts in the Department’s performance-based planning and programming activities including transportation asset management, transportation performance management, and the problem intake process by continuing to implement and further develop a “Smart Growth Management System” that works together with the other Department Management Systems to evaluate and prioritize transportation studies and capital projects for consistency with the SDRP and Smart Growth.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Transportation and Livable Communities – 4510025/5400
MANAGER: Sudhir Joshi
UNIT: Bureau of Statewide Strategies

GOALS / ACTIVITIES (cont'd.)

- e. Provide resources and technical assistance to communities to link transportation and land use in municipal master plans, community transit hub planning initiatives and other local planning efforts using the principles of Mobility and Community Form (MCF).
2. Foster development of compact, mixed use Centers, as embodied in the New Jersey State Development and Redevelopment Plan (SDRP), by designating more Transit Villages.
 - a. Designate at least two new Transit Villages
 - b. Monitor progress of designated Transit Villages.
 - c. Meet with interested Transit Village potential applicants and regularly coordinate with existing designated Transit Villages.
 - d. Utilize newsletters, webinars and workshops, and proactive outreach to generate interest from communities in the Transit Village Initiative.
 - e. Provide post-designation Transit Village implementation support as needed.
3. Maintain, administer and develop an enhanced State Highway Access Management Code (SHAMC) that contains provisions and planning elements that support New Jersey's smart growth and livability goals and objectives to ensure consistency with policies and strategies of the SDRP and Long-Range Statewide Transportation Plan (LRSTP), which reiterate federal requirements and national priorities.
 - a. Update the Desirable Typical Sections (DTS) in Appendix B of the State Highway Access Management Code by developing a standard approach to the appropriate sizing of the DTS consistent with State policies.
 - b. Provide guidance about the SHAMC for local officials and practitioners to promote the use of planning tools such as municipal zoning conformity with the Access Code and Access Management Plans.
 - c. Evaluate requests and provide recommendations on changes to access classifications as permissible in the Code's provisions on "Procedure for Changes in Access Classification" and consistent with State policies and direction.
 - d. Partner with MPOs, municipal governments, and the public to coordinate land use and transportation to facilitate corridor safety and preserve highway capacity in the development, advancement, and maintenance of access management plans (AMPs).
 - e. Review and provide DTS determinations to NJDOT Right of Way unit and NJ State Agricultural Development Committee on Excess Parcel and Farmland Preservation inquiries/requests.
4. Collaborate with federal and state agencies, NJ Transit, MPOs, counties, municipalities, and regional stakeholders to develop, recommend and advance viable transportation improvements that encourage innovative technology and implement context sensitive multimodal strategies and solutions as a result of planning/corridor studies and non-transportation initiatives that support the LRSTP, SDRP, MTPs, Complete Streets policies, The Connected Corridor, Vibrant Communities Initiative, and federal sustainability and livability initiatives.
 - a. Participate in and evaluate planning and corridor studies and problem statements recommending multimodal strategies for the Department's problem intake phase of the project delivery process

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Transportation and Livable Communities – 4510025/5400

MANAGER: Sudhir Joshi

UNIT: Bureau of Statewide Strategies

GOALS / ACTIVITIES (cont'd.)

- As appropriate, use the NJTPA PRIME system, identifying needs and recommendations, to support this process in the NJTPA region.
- b. Provide staff resources to participate in MPO, county and municipal-led initiatives, serving as members of technical evaluation/advisory committees, for the development of feasible problem statements that lead to sustainable transportation projects.

 - c. Partner with MPOs, local entities and various regional stakeholders to advance priorities that achieve sustainable livable communities. Provide staff resources to support regional and local initiatives.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Coordination of NJDOT's Smart Growth Implementation Team (I-Team) activities to foster sustainable transportation and community livability elements in the way the Department conducts its business, such as transportation mode choice, Complete Streets, Context Sensitive Solutions (CSS), transit-oriented development (TOD), highway and transit connectivity and transportation infrastructure resiliency. Goal 1b. - Ongoing
2. Arrangement of at least one I-team sponsored field visit to localities with smart growth, sustainability and livability potential or achievements., depending on public health guidelines. Goal 1b. – Year Specific
3. Contribution of transportation and land use integration perspective to any outstanding and new Plan Endorsements of municipalities by the State Planning Commission. Goal 1a. - Ongoing
4. Performance of any required Department activities associated with the current and future SDRP. Goal 1a and 1c.- Ongoing
5. Participation in Brownfields Interagency Work Group meetings and Brownfields Redevelopment and Development Opportunity Interagency Team meetings. Goal 1a. - Ongoing
6. Deploy use of the second phase of the Smart Growth Management System (SGMS), which would encompass physical roadway and project type factors. Goal 1d. – Year Specific
7. Provision of SGMS scores for proposed projects upon request to Capital Program Management. Goal 1d. - Ongoing
8. Designation of new Transit Villages (TV) that meet the TV criteria. Goal 2a. – Ongoing
9. Use of appropriate measures to apprise communities of the TV Initiative. Goal 2d. - Ongoing
10. Monitoring progress of existing designated Transit Villages according to the Transit Village Progress Report completed by consultant effort. Goal 2b.and 2c. - Ongoing
11. Continue to reference the TNJ Plan document for planning and concept development - Goal 1b. - Ongoing
12. Deliver decisions on access classification change requests as per the NJ SHAMC provisions on “Procedures for Changes in Classification” and forward Department approved request to the Bureau of Legislative Admin. & Regulatory Actions for inclusion in Appendix B of the Code through New Jersey’s rulemaking process. Goal 3d. - Ongoing
13. Deliver the state-funded consultant-led study, Evaluation of the NJ Access Code Desirable Typical Sections (DTS Study) for consideration and inclusion in the NJ SHAMC through the New Jersey rulemaking process. Goal 3a. – Year Specific.
14. Issuance of guidance and/or educational material for planning tools related to access management, i.e. Zoning Conformity and Access Management Plans. Goal 3b. – Ongoing

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Transportation and Livable Communities – 4510025/5400
MANAGER: Sudhir Joshi
UNIT: Bureau of Statewide Strategies

15. Complete reviews, determinations and responses to requests on Excess Parcel and Farmland Preservation inquiries related to the DTS in Appendix B. Goal 3e. – Ongoing
16. Represent the Department, as requested, on federal, state, regional and local planning initiatives. Goal 4b. - Ongoing

CONTRACTS:

None.

TRAVEL:

Mileage - **\$100.00**
Conferences - **\$100.00**

- NJ Sustainability Summit - **\$40.00**
- NJ State Data Center Network Meeting - **\$60.00 if in person**
- Transportation Research Board (TRB) Annual - \$2,400

EQUIPMENT:

None.

STAFFING:

Susan Weber, Supervising Transportation Analyst	1.00 PY
Richard Rabinowitz, Senior Planner, Transportation	1.00 PY
Jelena Lasko, Senior Planner, Transportation	1.00 PY
Hailey Anilonis, Assistant Planner, Transportation	0.60 PY
Thomas Houck, Program Specialist 4	0.25 PY
Joseph Burdulia, Senior Planner, Planning	<u>0.70 PY</u>
Total	4.65 PY

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Metropolitan Planning Organization (MPO) Liaison – 4510025/5690
MANAGER: Sudhir Joshi
UNIT: Statewide Strategies

MISSION / OBJECTIVE:

The MPO Liaison Unit acts as the conduit between the three New Jersey MPOs, the Department, and our federal transportation partners. The overarching mission of the MPO Liaison Unit is to cultivate and maintain strong working relationships with the MPOs so that communication flows quickly and easily in both directions to ensure compliance with federal regulations under 2 CFR 200 and 2 CFR 450.

The unit manages the federal funding and contract administration for the MPOs unified planning work programs. At the same time, ensuring that federal transportation priorities are integrated into the plans, policies, procedures, and activities of the MPOs. At times the MPO Liaison Unit acts as an advocate on behalf of the MPOs, at times the unit acts as an enforcer of federal regulations, and at times the unit conducts troubleshooting for MPO questions and concerns.

GOALS/ACTIVITIES:

1. Act as liaison between NJDOT and the MPOs: the South Jersey Transportation Planning Organization; the Delaware Valley Regional Planning Commission; and the North Jersey Transportation Planning Authority. (On-going)
 - a. Participate in MPO technical committee meetings and serve as a NJDOT resource to MPO board members, staff and sub-regional representatives.
 - b. Facilitate point-of-contact collaboration between MPO and NJDOT planning activities.
 - c. Support NJDOT voting member at MPO board and committee meetings.
2. Proactively work with MPOs and host organizations to meet annual milestones and requirements. (On-going)
 - a. Work with MPOs to ensure unified planning work program, regional transportation plans and task orders are completed and executed on time.
 - b. Submit MPO's annual unified planning work programs to FHWA and FTA for approval.
 - c. Secure federal funding authorization for annual work programs prior to June 30th.
 - d. Conduct a Risk Assessment of each MPO as required by 2 CFR 200.
 - e. Develop and maintain basic agreements with MPOs and/or hosting agencies as required.
3. Provide timely and accurate contract administration for MPO work program contracts and FHWA/FTA grants and agreements. (On-going)
 - a. Review and submit MPO progress reports internally and to federal agencies as required.
 - b. Ensure prompt processing of invoices.
 - c. Close out completed task orders and associated federal project agreements within three years of completion or as soon as practicable. Close out forms will be updated as per FHWA request.
 - e. Participate in federal and state financial, programmatic, and certification audits /reviews as required.
 - f. Support departmental use of basic agreements for non-work plan activities as required.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Attend all MPO technical meetings. Conduct quarterly MPO Collaboration Meetings.
2. Ensure timely execution of all items outlined in the Mutual Service Standards.
3. Execute the 2024 basic Agreement between NJDOT and SJTA/SJTPO.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Metropolitan Planning Organization (MPO) Liaison – 4510025/5690
MANAGER: Sudhir Joshi
UNIT: Statewide Strategies

4. Provide all contract administration for MPO work program contracts and FHWA/FTA grants and agreements. Strive for federal agreements to be closed within three years.

TRAVEL:

Mileage reimbursement to MPO meetings - \$250.00
 Travel expenses (parking fees, train fares) to MPO meetings - \$250.00

AMPO Conference - \$2400.00 (1 staff member, 4 days)
 TRB Conference - \$1400.00 (2 staff members, 2 days)
 Budget breakdown for AMPO Conference:

Expenditure items	Cost
Train tickets	\$310.00
Uber	\$60.00
Hotel (plus 13.82%)	\$850.00
Meals	\$280.00
Registration Fee	\$900.00
Total	\$2,400.00

CONTRACTS:

None

EQUIPMENT:

None

STAFFING:

<u>Name</u>	<u>Title</u>	<u>Person Years</u>
Andrew Clark	Section Chief	.50
Farzana Ahmed	Program Specialist 4	1.00
Tavainya Smith	Assistant Planner	1.00
Jaya Vatti	Contract Administrator 2	.50
Monica Etz (TES)	Professional Occupations Nonaligned	<u>1.00</u>
	Total PY	4.00

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Transportation Air Quality/Travel Demand Modeling Program – 4510025 / 5970
MANAGER: Sudhir Joshi, Manager
UNIT: Bureau of Statewide Strategies

MISSION / OBJECTIVE:

To support Air Quality (AQ) conformity, strategies and transportation project development with models and analysis tools. To assist the NJDOT to make use of CMAQ funds as efficiently and cost effectively, and, to help meet Statewide emissions reduction targets for CMAQ-funded projects.

GOALS/ACTIVITIES:

1. Update the unit's technical toolbox.
 - a. Update the unit's computers with the latest versions of MOVES4 and Cube. (ongoing)
 - b. Prepare the New Jersey air quality modeling process for EPA's MOVES4 update. Prepare model database for transition from MySQL to MariaDB by Winter 2025.
2. Enhance NJDOT's in-house modeling capability.
 - a. Acquire updated versions of Cube-based supported models – North Jersey Regional Transportation model (NJRTM-E), South Jersey Travel Demand Model (SJTDM), New Jersey Statewide Model (NJSWM), and MOVES. (ongoing)
 - b. Expand in-house capability to perform more complex regional modeling analyses.
 - c. Develop capability to perform benefit/cost analyses of transportation and air quality projects.
 - d. Acquire updated data from the Delaware Valley Regional Planning Commissions' latest model version including zonal data, highway and transit networks, trip tables, and highway assignment results.
 - e. Coordinate with MPOs on update of New Jersey Statewide Model (NJSWM).
3. Support the MPO conformity processes.
 - a. Participate in all MPO interagency consultation group (ICG) activities.
 - b. Alert upper management on any potential disruptions to the capital program.
4. Assist in implementing Green House Gas (GHG) strategies
 - a. Support development on selected GHG plan strategies.
 - b. Participate in multi-state, state and regional GHG activities.
 - i. Work to advance the Transportation Climate Initiatives Electric Vehicle project.
 - ii. Participate in/support the multi-state Transportation Climate Initiative (TCI) Cap/Invest Technical Analysis workgroup as needed.
 - c. Help to advance NJ's state of practice in climate change adaptation planning.
 - d. Participate on the Clean Vehicles Working Group in support of New Jersey's Senate Bill S2252 and EO 100.
 - e. Participate in State initiatives relating to the Infrastructure Investment and Jobs Act (IIJA)
5. Assist in the State implementation of the CMAQ program
 - a. Assist in development of NJDOT CMAQ strategy to maximize air quality benefits
 - b. Develop the air quality benefits piece for the Department's annual CMAQ report.
 - c. Assist (when needed) in requesting funds and managing CMAQ projects.
 - d. Regularly convene a statewide working group on the CMAQ program including the three MPOs and NJ TRANSIT to ensure a coordinated approach to program implementation and regulatory requirements as well as project selection and implementation. Host NJ Air Quality Working Group meetings, which will occur as quarterly conference calls to ensure adherence to scheduling, data gathering, and technical analysis requirements.
 - e. Coordinate with MPOs to set/update targets for the CMAQ emissions reduction performance measures.
 - f. Monitor progress toward meeting established targets. Identify and address issues that might impact target attainment, particularly those related to project authorization and implementation.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Transportation Air Quality/Travel Demand Modeling Program – 4510025 / 5970
MANAGER: Sudhir Joshi, Manager
UNIT: Bureau of Statewide Strategies

- g. 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, the U.S. Environmental Protection Agency, FHWA, NJ TRANSIT, DVRPC, SJTPO, NJTPA, and the consultant team.
- h. Ensure that all future CMAQ project analyses use rigorous quantitative methodologies and qualitative assessment of emissions reduction benefits.
- i. Ensure that all approved CMAQ projects have a demonstrated emissions reduction benefit, as established using the quantitative methodologies.
- j. Ensure that all projects and analyses utilize the FHWA CMAQ toolbox and similar approved methodologies to calculate project emissions reduction benefits.
- k. *Work closely with MPOs on Federal Authorization of CMAQ projects through regular meetings and project assessments.*

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Enhanced modeling capability- MOVES4. This will include obtaining the latest versions of all MPO models, in addition to installing the latest EPA emissions model- MOVES4.
2. NJDOT anticipated to start an update of the New Jersey Statewide Model (NJSWM).
3. Ongoing, effective coordination of MPO conformity process.
4. NJDOT will participate in GHG activities, subject to resource constraints. NJDOT will also participate in Every Day Counts Innovation for a Nation on the Move, State Transportation Innovation Council (STIC), NJ IJIA activities, Carbon Reduction Program, New Jersey Fuel Cell Task Force and National Electric Vehicle Infrastructure (NEVI) Formula Program. NJDOT will report State current 2-year and 4-year targets progress reports for the MAP-21 System Performance Measures final rule (PM 3) CMAQ Emissions Measures.
5. Ongoing support of the NJDOT's CMAQ program.
Organize and re-establish sessions for the New Jersey Air Quality Working Group.

TRAVEL:

TRB Annual Meeting, Washington DC - None

CONTRACTS:

New Jersey Statewide Model Update (**Stantec Consulting Services**) – \$750,000

EQUIPMENT:

None

STAFFING:

Simon Nwachukwu, Section Chief, Planning	1.0 py
Sushant Darji, Principal Engineer, Planning	1.0 py
Hirenkumar Joshi, Senior Engineer, Planning	<u>1.0 py</u>
Total	3.0 py

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

ACTIVITY: Mobility and Accessibility Planning – 4510025 / 5700
MANAGER: Sudhir Joshi, Manager
UNIT: Statewide Strategies

MISSION / OBJECTIVE:

Develop measurable, cost-effective and targeted strategies to improve the mobility and accessibility for New Jersey's transportation users to enhance the quality of life for its citizens, support a vibrant state economy and conserve natural resources.

GOALS/ACTIVITIES:

1. Improve the Congestion Management System-21 (CMS-21) tool
 - a. Work with NJDOT-IT and OIT to update the servers for CMS-21 application.
 - b. Work with Consultant, NJDOT-IT and the Data Development Unit to update the Department's Congestion Management System (CMS-21) with new traffic volume data as it becomes available.
 - c. Maintain CMS network to include updated SRIs and mileposts and add links for additional NHS routes and principal arterials if needed.
 - d. Support and coordinate with MPOs and other agencies for the process of Performance Based Planning and Programming by fulfilling requests for data available from the CMS-21.
2. Prepare Mobility and Congestion Relief Program Problem Statements
 - a. Revise (as needed) the Problem Statement Development Process (PSDP) for high need signalized intersections to improve and formalize an overall new and more integrated process in coordination with the Complete Team to achieve agreement by all stakeholders to the new PSDP version.
 - b. Develop problem statements for up to 5 signalized intersection locations.
 - c. Assess ranking list for problem area interchanges and determine whether to update.
3. Develop congestion screenings for NJDOT's Mobility and Congestion Relief Investment needs
 - a. Develop Problem Statement project scoping screenings.
 - b. Develop full scope project assessments for CPSC meetings, including the CMS ranking and congestion priority rating, Probe Data Analytics (PDA) congestion scans and Straight-Line Diagrams (SLD).
 - c. Prepare the annual update for the Statewide Capital Investment Strategy document that may include preparing project pool rankings for the Mobility and Congestion Relief Program.
4. Coordinate and integrate Planning/Traffic Operations Systems & Support (TOS&S) and Mobility and Systems Engineering activities.
 - a. Organize and attend quarterly meetings to establish process and tracking protocols for performing, integrating and optimizing linkages between Planning and Operations. (on-going)
 - b. Collaborate with TOS&S and other Divisions and Regional Partners to research, devise, institute and evaluate new technologies and strategies, such as adaptive signal control, ramp metering, Integrated Corridor Management (ICM), "Green" technology, feasibility of transit signal priority, etc. (on-going)
 - c. Participate in TOS&S / Mobility & Systems Engineering Strategic Plan and applications and strategies by coordinating with Regional Partners (as needed), providing technical support, e.g., CMS analysis for ITS candidate corridors and conducting report reviews.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Mobility and Accessibility Planning – 4510025 / 5700
MANAGER: Sudhir Joshi
UNIT: Bureau of Statewide Strategies

GOALS/ACTIVITIES: (cont'd.)

5. Collaborate with the State MPOs, NJT, NJTA and other State agencies through the Complete Team meetings, and neighboring States through the Urbanized Area Coordination meetings for the system performance targets in the performance-based planning and programming process.
 - a. Track and report the progress made towards achieving System Performance Measures targets, adjust targets if needed.
 - b. Strategize in relation to the performance targets that were set.
 - c. Engage in conversation within the Department and the Complete Team on how the established and future targets support potential strategies documented in longer range plans.
 - d. Using the guidance and recommendations from the FHWA and University of Maryland's Center for Advanced Transportation Technology Lab (UMD-CATT Lab), engage the Complete Team to coordinate and collaborate on the development of New Jersey's strategy for addressing MAP-21 System Performance Measures: the analytical processes, assumptions, targets, and reporting (on-going).
 - e. Develop process to integrate the missing enhanced NHS roadway segments into the CMS-21 tool.
 - f. Explore the use of an analytical tool like Probe Data Analytics (PDA) Suite to do the analysis and result summaries (reporting) for MAP-21 System Performance Measures.
 - g. Establish processes for integrating, summarizing, and presenting archived operations data for performance-based planning (on-going).
 - h. Develop an annual bottleneck ranking process for the NJ Interstate Routes and State Routes to enhance annual problem statements development.
 - i. Participate in comprehensive training programs on the use of tools and data, such as PDA Suite, RITIS, SPATEL, INRIX data, etc. (on-going).
 - j. Develop a companion (or standalone) one page summary document that provides simplified progress reporting in meeting performance goals and targets.
 - k. Develop and use the new congestion tools to enhance mobility and reliability (on-going).
 - l. Incorporate tools (CMS-21, PDA Suite, SPATEL, etc.) to evaluate up to 3 recently completed projects for performance improvement, such as travel time reduction, speed increase, etc.

6. Engage with Regional Partners.
 - a. Coordinate with each MPO in their Congestion Management Process (CMP).
 - i. Attend two coordination meetings per MPO in their yearly update cycle.
 - ii. Provide expert guidance on tools provided, such as CMS-21 (on-going).
 - iii. Provide technical support to MPOs in their enhancement of a fully functional CMP (on-going).
 - b. Participate in the Probe Data Analytics Suite webinars and provide suggestions and comments to assist UMD-CATT Lab staff in further enhancing the tool to meet the needs of regional stakeholders (e.g., MAP-21 System Performance measures and targets, incidents, construction, etc.) (on-going).
 - c. Coordinate with The Eastern Transportation Coalition (TETC), the Coalition's Travel Information Services Committee meetings, ITS-NJ and TRANSCOM to further the collaboration, understanding, sharing and use of archived operations data, system performance tools and techniques and the communication of results to a wide range of audiences (on-going).
 - d. Provide congestion data to support Office of Community & Constituent Relations in meetings with local officials.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Mobility and Accessibility Planning – 4510025 / 5700
MANAGER: Sudhir Joshi
UNIT: Bureau of Statewide Strategies

GOALS/ACTIVITIES: (cont'd.)

7. Explore how to incorporate accessibility into the mobility and congestion relief planning process.
 - a. Survey how states are addressing accessibility in mobility and congestion relief planning programs including the identification of performance measures and targets.
8. Develop recommendations for including accessibility measures and targets into the mobility and congestion relief planning program problem statements and screening process and the alternative investment scenarios for the annual Capital Investment Strategy update.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Update the three servers for the Congestion Management System-21 application.
2. Utilize the Congestion Management System-21 tool to support project development/evaluation– Ongoing
3. Advance the Congestion Relief Problem Statement Development Process – Ongoing
 - a. Develop a list of problem area intersections using the revised Congestion Relief Problem Statement Development Process for problem area intersections.
 - b. Field check and initiate problem statements.
4. Respond to NJDOT's Congestion Relief Investment needs – Year Specific
 - a. 120 Problem Statement Project Scoping screenings; 10 Project Assessments for CPSC meetings.
 - b. Support one Capital Investment Strategy document for Mobility and Congestion Relief.
5. Advance Planning/Operations Relationship to Facilitate Linkage Opportunities (Complete Team) – Year Specific
 - a. Approximately four quarterly meetings with TOS&S (exact outcomes TBD).
 - b. Participate in innovative solutions to congestion relief, such as an Integrated Corridor Management (ICM) and adaptive signal control.
 - c. Participate in Strategic Plan of TOS&S through analytical support and congestion relief expertise.
6. Foster Performance-based Planning and Programming – Ongoing
 - a. Track progress made towards achieving targets and develop strategies for addressing the requirements of MAP-21 System Performance Measures Final Rule (PM3).
 - b. Adjust the targets for next performance period if needed based on the mid-year performance.
 - c. Continue to verify Traffic Message Channels (TMCs) in the latest version of NPMRDS dataset from PDA Suite by comparing to the most recent HPMS and SLD for MAP-21 System Performance Measures (PM 3).
 - d. In coordination with the MPOs and other State agencies, incorporate archived operations data (speed and incident data) into the planning process.
 - e. Engage in conversation within the Department and the Complete Team on how the established and future targets support potential strategies documented in longer range plans.
7. Engage with Regional Partners – Ongoing
 - a. Participate in MPO's CMP Advisory Committee, coordinate and provide technical support to the MPO's CMP processes.
 - b. Coordination with regional stakeholders through the Complete Team (Planning and Operations Collaboration).
 - c. Support the Office of Community & Constituent Relations with congestion data in meetings with municipal and county officials to address congestion related issues.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Mobility and Accessibility Planning – 4510025 / 5700
MANAGER: Sudhir Joshi
UNIT: Bureau of Statewide Strategies

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025: (continued)

- d. Participate in the Probe Data Analytics Suite webinars and provide suggestions and comments to assist UMD-CATT Lab staff in further enhancing the tool to meet the needs of regional stakeholders, thereby enhancing project performance analyses in the Department.
 - e. Coordination with other groups (such as TETC, ITS-NJ, TRANSCOM) to further the use, understanding and collaboration of archived ops data and tools.
-
- 8. Explore how to incorporate accessibility into the mobility and congestion relief program.
 - a. Identify how other states incorporate accessibility.
 - b. Propose a strategy to incorporate accessibility into the mobility and congestion relief planning processes.

TRAVEL:

TRB Annual Meeting, Washington DC, January 5-9, 2025 – 2 attendees / 3 days - \$3600

CONTRACTS:

Consultant to update the CMS-21 processes (using available data) - \$80,000 each year.

EQUIPMENT:

None.

STAFFING:

Neha Galgali, Project Engineer, Planning	1.0	py
Disha Soni, Principal Engineer, Planning	1.0	py
Ifteker Bhuiyan, Engineer Trainee, Transportation	<u>1.0</u>	py
Total	3.0	py

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: SPR Program Management – 4510025 / 5395
MANAGER: Sudhir Joshi
UNIT: Statewide Strategies

MISSION / OBJECTIVE:

Manage the State Planning and Research (SPR) / Management System work program in compliance with federal and state program and financial requirements to support state policy, planning studies and programs.

GOALS / ACTIVITIES:

1. Manage CY 2025-2026 SPR/Management System Work Program.
 - a. Monitor federal agreement expenditures and secure modifications as needed.
 - b. Submit contract scopes of work, budget and/ or financial documents with the program modification preapprovals to FHWA for review and approval.
 - c. Prepare and submit 6- and 24-Months Progress report and hold progress report meetings with FHWA within 45 days of end of reporting period.
2. Prepare and authorize CY 2025-2026 SPR / Management system work program.
 - a. Hold early guidance meetings with FHWA.
 - b. Prepare year 2 (2026) Program.
 - c. Secure program approval and request authorizations for year 2 projects
3. Close out CY 2023-2024 SPR/Management System Work Program.
 - a. Prepare and submit Final Report and hold Final Report meetings with FHWA.
 - b. Complete Final Acceptance and closeout for projects.
4. Close out remaining projects of completed CY 2021-2022 program.
 - a. Prepare and submit Final Report for completed program projects.
 - b. Prepare and submit final acceptance requests to close out completed projects.
5. Streamline program delivery by monitoring existing practices to identify and recommend improvements.
6. Monitor FHWA guidance and rules for changes in planning requirements.
7. Provide support to the SPR job managers as the modifications and final acceptance requests occur and make sure that all supporting documents accompany modification and final acceptance requests, as applicable.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. CY 2025-2026 SPR/Management System Work Program Year 1 modifications. (Year specific)
2. Contract and program modification preapprovals and authorizations as appropriate. (Year specific)
3. 24- and 6-Months Progress report and meetings. (Year specific)
4. CY 2026-year 2 work program, program approval and authorizations (Year Specific)
5. CY 2023-2024 Final Report and closeouts (year specific)
6. CY 2021-2022 closeouts (year specific)

CONTRACTS / TRAVEL / EQUIPMENT:

None.

STAFFING PLAN:

Jaya Vatti Contract Administrator 2 .50 py

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Bicycle and Pedestrian Programs (SPR) - 4510025 / 7000
MANAGER: Daniel LiSanti
UNIT: Bureau of Safety, Bicycle and Pedestrian Programs

VISION AND MISSION:

The mission of the Bicycle and Pedestrian Program is to ensure the broadest implementation of the New Jersey Bicycle and Pedestrian Master Plan, the New Jersey Strategic Highway Safety Plan, NJDOT's Complete Streets policy, and FHWA's policies related to bicycle and pedestrian travel. The program seeks to promote and facilitate the increased use of non-motorized transportation on state and local roadways, including assisting with the planning and development of facilities for the use of pedestrians, bicyclists and micromobility and transit users, along with public education, equity, promotional, and safety programs for using such facilities.

Because New Jersey has a high number of bicyclist and pedestrian fatalities as a percentage of all traffic fatalities, many of the goals and activities relate to assisting with the planning, development and funding of projects to meet the needs of people who walk and bike, or who use transit and emerging micromobility modes and technologies. These activities also attempt to ensure that all NJDOT-funded studies, projects and programs include full consideration of non-motorized travel modes to increase active transportation while reducing bicyclist and pedestrian fatalities and serious injuries, particularly in traditionally underserved communities. To maximize effectiveness, a key objective is to collaborate with internal and external partners, such as the NJDOT Divisions of Statewide Planning, Project Management, Local Aid, and Traffic Engineering, other state agencies, Metropolitan Planning Organizations (MPOs), Transportation Management Associations (TMAs), counties, municipalities, and advocacy groups. Another key objective is to coordinate efforts with those funded by other programs, such as the Highway Safety Improvement Program (HSIP), the Congestion Mitigation and Air Quality (CMAQ) program and the Transportation Alternatives Set-Aside (TASA) program.

GOALS/ACTIVITIES:

1. Assist with the development of capital projects and grant -funded projects on New Jersey roadways to meet the needs of bicyclists, pedestrians and micromobility and transit users of all ages, abilities and backgrounds.
2. Ensure that studies, projects and programs in the Department include full consideration of bicycle and pedestrian needs whenever possible in accordance with state, federal, and Complete Streets policies.
3. Encourage and support the development and implementation of bicycle and pedestrian strategies, Complete Streets policies and multi-modal projects by MPOs, counties, municipalities, and TMAs.
4. Provide appropriate technical assistance and professional development opportunities to department staff, outside agencies, transportation professionals, bicycle and pedestrian advocates, and citizens throughout the state.
5. Disseminate information to local governments on Complete Streets and the planning, design, funding and implementation of bicycle, pedestrian and micromobility projects and programs throughout the state.
6. Assist MPOs, counties, municipalities, and the Department with efforts to increase the mode share of non-motorized and low-motorized travel on New Jersey's transportation network.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Bicycle and Pedestrian Programs (SPR) - 4510025 / 7000
MANAGER: Daniel LiSanti
UNIT: Bureau of Safety, Bicycle and Pedestrian Programs

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

Task 1: Working in cooperation with various divisions within Capital Project Management (CPM), including the Bureau of Major Access, Right of Way, Access Engineering and Outdoor Advertising, provide input to projects seeking to obtain access to state highways. Review plans from a planning perspective and identify opportunities to implement Complete Streets by improving access, mobility and safety for bicyclists, pedestrians, and transit users of all ages, abilities and backgrounds. Coordinate and track this process.

- Fulfilling Goals 1 and 3
- Deliverables:
 - Recommendations to the Bureau of Major Access to encourage the provision of bicycle and pedestrian facilities on development projects along state highways
- Timeline: Ongoing
- Measure of Progress:
 - Number of projects for which recommendations are submitted

Task 2: Working in cooperation with the Division of Local Aid and Economic Development, provide input to local projects funded by state and federal grants. Review plans from a planning perspective to ensure that the designers of proposed bicycle and pedestrian facilities in those projects are aware of the 1) concerns of non-motorized travelers and 2) appropriate resources to consult when designing for them, such as the MUTCD, ADA, PROWAG, AASHTO and NACTO guidelines.

- Fulfilling Goals 1 and 3
- Deliverable: Planning guidance for the managers of grant-funded projects
- Timeline: Ongoing
- Measure of Progress:
 - Number of projects for which plans are reviewed and guidance is provided

Task 3: Coordinate with FHWA and others on bicycle and pedestrian design workshops and safety seminars to NJDOT and outside agency staff, professional planners and engineers, and safety and active transportation advocates. These trainings improve our efforts to help counties and municipalities apply best practices in design and countermeasures for bicycle and pedestrian safety. Utilize the Local Technical Assistance Program (LTAP) as much as possible.

- Fulfilling Goal 4
- Deliverables: Up to one design workshop or safety seminar per year
- Timeline: On going
- Measures of Progress:
 - Number of workshops and seminars held
 - Number of workshops and seminars attended

Task 4: Participate as Bicycle, Pedestrian and Micromobility Subject Matter Experts on Department committees such as Scenic Byways, Title VI/Environmental Justice, the Smart Growth I-Team, the ADA Unit and the Transit Village Task Force. Provide advice and expertise to the Department and other state agencies, the MPOs, the TMAs, Sustainable Jersey, Shaping NJ, the Chronic Disease Task Force, the NJ Healthy Communities Network, the Age-

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Bicycle and Pedestrian Programs (SPR) - 4510025 / 7000
MANAGER: Daniel LiSanti
UNIT: Bureau of Safety, Bicycle and Pedestrian Programs

Friendly NJ Task Force, the New Jersey Trails Council, the Hudson County Vision Zero Task Force, and other advisory groups in the state.

- Fulfilling Goals 4 and 5
- Deliverable: Provide planning and technical expertise and guidance.
- Timeline: Ongoing
- Measures of Progress:
 - Relevant meetings attended
 - Input provided

Task 5: Serve as Bicycle, Pedestrian and Micromobility Subject Matter Experts in the development and implementation of statewide and regional plans that affect non-motorized travel and vulnerable road user safety. This could include the New Jersey State Development and Redevelopment Plan (State Plan), the New Jersey Energy Master Plan and others. It also includes NJDOT's Long-Range Transportation Plan, Americans with Disabilities Act ADA/504 Transition Plan, Statewide Freight Plan and plans at other state agencies, such as the Division of Highway Traffic Safety's (DHTS) Highway Safety Plan and the Department of Environmental Protection's (NJDEP) Trails Plan. It also includes active transportation plans developed through the MPOs, the counties and local municipalities.

- Fulfilling Goals 4 and 6
- Deliverable: Provide planning and technical expertise and guidance.
- Timeline: Ongoing
- Measures of Progress:
 - Relevant meetings attended
 - Input provided

Task 6: In cooperation with the Division of Local Aid and Economic Development, assist in the selection of federal-aid Safe Routes to School grant funded infrastructure projects from a pool of applications from around the state.

- Fulfilling Goal 3
- Deliverables: List of SRTS projects awarded
- Timeline: Ongoing
- Measure of Progress: Number of SRTS grants awarded

Task 7: Address public concerns with regards to bicycle and pedestrian issues in New Jersey. In coordination with the Office of Constituent and Community Relations, answer questions as they arise in letters, phone calls, emails, or the Bicycle and Pedestrian mailbox on the NJDOT server. Respond to Commissioner referrals as needed.

- Fulfilling Goal 5
- Deliverables: Responses to requests for information/action
- Timeline: Ongoing
- Measures of Progress:
 - Number of responses
 - Commissioner referrals

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Bicycle and Pedestrian Programs (SPR) - 4510025 / 7000
MANAGER: Daniel LiSanti
UNIT: Bureau of Safety, Bicycle and Pedestrian Programs

Task 8: Maintain and enhance the New Jersey Bicycle and Pedestrian and Safe Routes to School Resource Centers by collecting and adding new information and administering the web sites, list serves and project databases. Develop and disseminate technical information on bicycle, pedestrian and micromobility policy, planning and design.

- Fulfilling Goals 3, 4 and 5
- Deliverables:
 - Disseminate information in response to requests and refer technical requests related to bicyclists, pedestrians and micromobility to various agencies and experts in the field through help desks and list serves.
 - Organize and deliver an annual Safe Routes Academy, including training for local coordinators, either at the NJ Bike and Walk Summit or as a stand-alone event.
 - Organize and deliver a 2025 Complete Streets Summit, including awards for local projects and champions.
 - Develop and conduct up to two (2) Pedestrian and Bicycle Safety Enforcement Trainings.
 - Convene and facilitate meetings for the NJ Bicycle and Pedestrian Advisory Committee (BPAC) and its subcommittees (currently Design, Safety, and Policy).
 - Develop up to two (2) topical and/or short research papers on key issues that affect New Jersey bicycle and pedestrian program activities.
 - Develop and deliver presentations on Complete Streets, Safe Routes to School and bicycle-, pedestrian- and micromobility-related topics. Organize workshops and participate on panels at appropriate forums such as TransAction, the NJ State League of Municipalities Annual Meeting, the NJ School Boards Association Annual Meeting, the NJ Planning and Redevelopment Conference, the NJ Bike and Walk Summit and others.
 - Research and develop criteria and strategies to assist with the implementation of New Jersey's Safe Routes to School (SRTS) program.
 - Assist the state SRTS Coordinator with technical requests and presentations on the SRTS program.
 - Track metrics to determine the effectiveness of New Jersey's SRTS program.
 - Assist the New Jersey Bicycle and Pedestrian Coordinator with technical requests, presentations and development of priority actions related to bicyclists, pedestrians, and micromobility for the 2025 Strategic highway Safety Plan (SHSP).
 - Continue to develop and distribute the NJ Walks and Bikes Blog that provides information on bicycle, pedestrian and micromobility planning, design, project development and other related activities.
 - Continue to develop and distribute the NJ Safe Routes Blog that provides information on SRTS programs and activities across New Jersey.
 - Continue to implement the NJ SRTS Non-Infrastructure Program as a partnership between NJDOT, the NJ Safe Routes Resource Center and NJ's eight Transportation Management Associations (TMAs). Train and supervise local SRTS coordinators to enable them to offer free technical assistance to communities with School Travel Plans, bicycle and pedestrian safety lessons, Walk and Bike to School Day events and Walking School Bus programs.
 - Develop and disseminate case studies of successful Complete Streets and SRTS projects in NJ.
- Timeline: One year
- Measures of Progress:
 - Quarterly progress reports for both resource centers are available.

Task 9: Assist the Bureau of Legislative Analysis with the review and revision of proposed legislation as it relates to bicycles, pedestrians and micromobility in New Jersey as needed.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Bicycle and Pedestrian Programs (SPR) - 4510025 / 7000
MANAGER: Daniel LiSanti
UNIT: Bureau of Safety, Bicycle and Pedestrian Programs

- Fulfilling Goals 2 and 4
- Deliverable: Research on best practices and recommendations for specific legislation
- Timeline: Ongoing
- Measures of Progress:
 - Legislative reviews

Task 10: Provide outreach to stakeholders and coordination with other agencies and partners by participating in meetings, conferences, workshops and panel presentations in New Jersey and around the country.

- Fulfilling Goals 4 and 5
- Deliverables: Presentations and participation at meetings and conferences as the opportunities arise
- Timeline: Two years
- Measures of Progress:
 - Presentations at grant information sessions across the state
 - Presentations at TransAction, the NJ State League of Municipalities Annual Meeting, the NJ School Boards Association Annual Meeting, the NJ Planning and Redevelopment Conference, the NJ Bike and Walk Summit and the national Walk/Bike/Places and APBP conferences

Task 11: Attend conferences, seminars, task forces, and webinars to obtain training on planning, policy, design, and/or funding for bicycle, pedestrian, and micromobility travel modes from FHWA, AASHTO, ITE, APA, NACTO, APBP and other providers.

- Fulfilling Goal 4
- Deliverables: Trainings attended
- Timeline: One year
- Measure of Progress:
 - Number of trainings attended

Task 12: Represent the Department on appropriate national committees and councils, such as the AASHTO Council on Active Transportation and the AASHTO Committee on Planning's Multi-Modal Task Force.

- Fulfilling Goals 4, 5 and 6
- Deliverables: Trainings and meetings attended
- Timeline: One year
- Measure of Progress:
 - Number of trainings and meetings attended

CONTRACTS: \$1,500,000.000 for two resource centers in Year 1

Bicycle and Pedestrian Resource Center: Total: \$750,000.00 for Year 1

A two-year work program involving data collection, bicycle, pedestrian, and micromobility policy research, local technical assistance and training, and professional development activities with the New Jersey Bicycle and Pedestrian Resource Center, which will begin on January 1, 2025. An RFP is under development for 2025-26.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Bicycle and Pedestrian Programs (SPR) - 4510025 / 7000
MANAGER: Daniel LiSanti
UNIT: Bureau of Safety, Bicycle and Pedestrian Programs

New Jersey Safe Routes Resource Center: Total: \$750,000.00 for Year 1

A two-year work program involving evaluation, technical assistance, and policy research associated with the federally funded Safe Routes to School Program with the New Jersey Safe Routes Resource Center, which will begin on January 1, 2025. An RFP is under development for 2025-26.

Total request: \$750,000.00 + \$750,000.00 = **\$1,500,000.000**

TRAVEL:

_ \$3,750,00 for state, regional and national conferences and meetings in SPR Year 1 (01.01.2025 – 12.31.2025)

March

- NJ Bike and Walk Summit, New Jersey, Date TBD, (four employees)- **\$400.00**

April

- TransAction Conference, Atlantic City, NJ, April 2025 (four employees) - **\$400.00**

June

- New Jersey Planning and Redevelopment Conference, New Brunswick, NJ, June 11, 2025 – June 13, 2025 (three employees) - \$1,200

October

- AASHTO Annual Meeting, Location and date TBD, (one employee) - **\$1,000.00**

Mileage, parking and tolls for business meetings - **\$750.00**

Total Travel: \$400.00+\$400.00+\$1,200.00+\$1,000.00+\$750.00 = \$3,750

EQUIPMENT:

None

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Bicycle and Pedestrian Programs (SPR) - 4510025 / 7000
MANAGER: Daniel LiSanti
UNIT: Bureau of Safety, Bicycle and Pedestrian Programs

STAFFING:

Elise Bremer-Nei, Project Manager	0.65 py
Jeevanjot Singh, Section Chief	0.10 py
Nazhat Aboobaker, Section Chief	0.40 py
Khalid Shaikh, Project Engineer	0.50 py
Walid Jawawdeh, Project Engineer	0.65 py
Saidul Islam, Project Engineer	0.65 py
Marhaba Omer, Project Engineer	0.65 py
William Riviere, Principal Planner	0.75 py
Khalid Troumi, Principal Engineer	0.65 py
Mohammed Islam, Senior Engineer	0.80 py
Joseph Rapp, Senior Planner	0.65 py
Shannon Namey, Management Asst. 3	<u>0.80 py</u>
TOTAL:	7.25 py

Note: BSBPP staff salaries for Year 1 have been assigned to the HSIP, CMAQ, and SPR programs to ensure the salary for each staff member does not exceed 1.0 PY and there is no duplication between programs.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Local Concept Development-NJDOT/4510025/8000

MANAGER: Laine Rankin

UNIT: Local Aid and Economic Development

MISSION / OBJECTIVE:

To establish and identify locally lead projects other than the MPO supported studies for local initiatives through concept development that can be advanced in the local project delivery process using various Local Aid Programs delivered. This objective is to work with the appropriate local public agency in developing a Preliminary Preferred Alternative (PPA) that addresses transportation needs established in this phase. Also to assist the LPA in determining project local concept development key tasks such as coordination with stakeholders, and providing additional guidance of how to navigate through the federally funded project delivery process.

GOALS/ACTIVITIES:

1. Select participation on Consultant Selection Committee for advertisement of RFP.
2. Provide technical expertise and local knowledge towards the development of the Purpose & Need.
3. Participation on Project Selection Team to provide expertise towards identification of fatal flaws and selection of Preliminary Preferred Alternative at a planning level detail. Collaborate with the local sponsors as appropriate, to further incorporate multimodal planning context and coordination in the development of a Preferred Project Alternative (PPA).
4. Coordinate meetings with NJDOT SME's and the IRC as needed throughout the duration of a project. Also, coordinate with the respective MPO as needed throughout duration of the project (also limited scope projects including but not limited to CMAQ, ITS signal projects and Electric Vehicle Service Equipment projects). Occasional overtime may be necessitated on a particular study in order to complete reviews or provide guidance as necessitated by the project schedule, the political nature of the study and other time sensitive issues.
5. Participation on Interagency Review Committee to conduct periodic reviews as subject matter experts towards project eligibility and approval to advance to the next phase.
6. Approve LCD studies for selected projects and coordinate new LCD starts with MPO's and Local Aid. NJDOT will provide an ongoing list of CD studies to the respective MPO in the region; include the MPO as a stakeholder during the outreach component of the CD process. A copy of the final CD reports will be distributed to the respective MPO.
7. Conduct eligibility assessment activities such as: provide guidance to LPAs on eligibility requirements; conduct submission reviews, and make recommendations to the Local Aid Division for concurrence.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

Local Aid will review and approve LCD the pertinent studies ready for advancement of federally funded projects that ensure full compliance with FHWA requirements associated with non-PODI and PODI projects (Goals 1, 4, 5, 6 and 7), and in ways that incorporate efficiencies in terms of the duration of the review process (Goals 2 and 3). Local Aid will explore supporting the local sponsors in the exploration of further opportunities to incorporate regional and local planning context, and coordinate new LCD starts with local sponsors and the Bureau of Program Resources (BEPR) (Goal 3). Local Aid will work with local project sponsors to provide guidance and serve as a liaison for coordination of subject matter expert reviews in the development of reasonable alternatives and strategies that address the purpose and needs statement, leading to the selection of a Preliminary Preferred Alternative (PPA) (Goal 3). Local Aid will work on eligibility assessment activities (Goal 7) with local sponsors advancing federally funded projects. Representative project examples include: Borough of Bernardsville Boylan Terrace Neighborhood Pedestrian Connection; Pedestrian Walkway Improvements Along Rt.53 and Tabor Road; Broad Street, East/West Grand Street Traffic Light Replacement, City of Elizabeth; Hoboken Electric Vehicle Fast Charging Station Project; Borough of Norwood: Broad Street Bridge; Route 539 Overpass (joint Kim/Smith); Union County Structurally Deficient Bridge Initiative; Town of Westfield North Ave. Corridor Pedestrian

Enhancements; Carteret Ferry Terminal Building; County Road 653/County Ave. Improvements; Passaic - Main Ave. Parking Deck Project; McBride Ave. Roundabout Project; Central Ave. Corridor Improvement Project; Electric Vehicle Charging Station and Fleet Expansion Project; Sinatra Drive Redesign Project; Kings Highway Pedestrian Safety Improvements; Route 539 Overpass (joint Kim/Smith); Route 72 Transportation & Safety Connector Project; Chestnut Ave. Safety Improvements and South Brunswick Signalized Intersection Improvements.

TRAVEL:

None

CONTRACTS:

No contracts are associated with this activity.

EQUIPMENT:

No equipment is anticipated with this activity

STAFFING:

Each individual listed represents .04 person year for this activity.

GLATFELTER, THOMAS
KHANDAKAR, MAHMOOD
PATEL, DEVEN
TODD, NICOLE
JAHAN, NUSRAT
MOJSOSKI, JONATHAN
VADEIKA, THOMAS
AHMAD, AHMAD
MADHUSHOODHANAN, AKHIL
GHALY, MIRIANA
MCCOMBS, FRANK
PATHAK, SHAILESH
BISWAS, ARNAB
PATEL, ASHISH
SHETH, PAVANKUMAR
THAKAR, ANKITKUMAR
VEMURI, SWARNA
AMIN, YATINKUMAR
COE, LAUREN
GONZALES, NENEBERT
MASCIANDARO, VINCENT
ORIAKU, KENNETH
SHAH, ALKA
WIRTZ, BRIAN
Project Management Specialist 1-D1
Engineer Trainee-D2
Project Management Specialist 3-D3
Project Management Specialist 1-D3
Engineer Trainee-D3
Project Management Specialist 2-DO
Project Management Specialist 2-DO

McEWEN, MARQUIS
KOMATREDDY, VANAJA
SEAMAN, JULIE
ADAMS, ALYSSA
LOVELESS, RICHARD
DESROSIERS-EDOURD, VANIA
YOUSSEF, CECIEL
AYOUB, NABIL
DORVIL, OSBEL
GIRGIS, BAHER
MIRANDA, PAUL
ZAKI, MENA
KHAN, JOHEB
PIMENTEL, HECTOR
SOMARATNA, KUMUDIKA
TURSI, RUBEN
WARD, TREMAINE
ANDRESCAVAGE, EDWARD
DARJI, VIJESH
KASPRZAK, FRANCIS
MCKENNA, LUCERO
SANJOSE, ARTURO
VILLEGAS, TYRELL
ZAMAN, QAMAR
Project Management Specialist 2-D2
Project Management Specialist 3-D3
Project Management Specialist 3-D3
Engineer Trainee-D3
Project Management Specialist 1-D4
Administrative Analyst 2

Total 2.44 person years for all staff-Local Aid for a total of \$251,302.26

STATE PLANNING AND RESEARCH PROGRAM, 2025-2026

ACTIVITY: Statewide Goods Movement - 4510025 / 5340
MANAGER: Sudhir Joshi
UNIT: Office of Freight Planning (OFP)

Vision and Mission:

“Freight Moves NJ”

Vision: To support the development of an integrated intermodal goods movement transportation system in New Jersey that enhances mobility, network performance, and system reliability across all modes while considering economic development and smart growth opportunities. By working closely with FHWA, MPO’s, federal, state, and local agencies, and industry stakeholders, this unit will shape the policy, programs, and projects necessary to identify and address priority freight issues on, and that support, the State’s multimodal transportation system.

Mission: Through projects, planning and partnerships, the Office of Freight Planning facilitates the movement of freight through New Jersey. To this end, OFP endeavors to develop a safe, efficient, and integrated intermodal goods movement system throughout New Jersey’s diverse multimodal freight network that supports the operation and growth of the region’s critical freight related industries with strategic planning and investments in freight transportation infrastructure.

GOALS/ACTIVITIES:

1. **Freight Planning** - Coordinate and manage significant freight related studies, programs, or policy initiatives among all modes on behalf of the Department. (ongoing)
 - Implement 2023 State Freight Plan including programs and projects highlighted in the plan.
 - Continue to champion truck parking improvements throughout the state through dialogue with MPO partners and industry stakeholders (trucking, real estate, manufacturing, etc.). Update existing maps to identify current trends and issues relevant to stakeholders and identify opportunities to develop and broaden truck parking facilities.
 - Plan for and develop freight project problem statements for consideration into the NJDOT project pipeline.
 - Continue to plan for and grow the state’s Offshore Wind and Marine Highway Program facilitating interaction and partnership with stakeholders and industry partners.
 - Support the multimodal aspects of wind “farm” and associated freight, port, and logistics development.
 - Continue to integrate freight into the CPM and grants process (NHFP, BUILD, INFRA, etc.) and across NJDOT units to incorporate freight-based projects.
 - Raise awareness of the value of freight to New Jersey, including continued development and implementation of a Freight Social Media Program “Freight Moves NJ.”
 - Continue to develop, expand, and implement a Rail GIS layer for use by NJDOT as well as MPO/agency partners.
 - Work with partners and stakeholders to implement freight rail guidance priorities.
 - Maintain freight related mapping and update relevant data to support freight planning initiatives.

STATE PLANNING AND RESEARCH PROGRAM, 2025-2026

ACTIVITY: Statewide Goods Movement - 4510025 / 5340
MANAGER: Sudhir Joshi
UNIT: Office of Freight Planning (OFF)

2. **Adherence to Federal Requirements** - Address Federal requirements regarding Freight Planning in close coordination with the State's MPO's. (ongoing)
 - Develop specific *Freight Performance Measures* and communication mechanisms to convey freight trends and assist in the alignment of freight investment and capital improvement strategies. Develop and/or enhance Multimodal freight data collection efforts, analysis tools, databases, and models on a state, regional or national scale.
 - Provide support of the *Freight Management System* to prioritize capital and freight projects and implement a routine timetable that will update and maintain system data.
 - Coordinate with public and private partners, including the MPOs and PANYNJ, on the state's Freight Advisory Committee. This group serves as a nexus of statewide freight planning and analysis. Manage the Freight Advisory Committee and related sub-committees that will serve as a forum and place for raising issues and concerns, identifying problems and needs, and proposing and discussing solutions for the freight industry.
 - Maintain data for the state's official National Highway Multimodal Network (NHMN), National Highway System (NHS) connectors, and intermodal connectors serving intermodal freight facilities. Serve a coordination function between and among stakeholders.
 - Implement IJA provisions related to freight and goods movement. Engage with staff in the new USDOT's "Office of Multimodal Freight Infrastructure and Policy".
 - Conduct continuous planning management to deliver a State Freight Plan on a 4-year cycle.
3. **Multimodal Freight Coordination and Participation** - Participate in and advance programs or projects that will promote greater usage of freight rail, marine highway, and other modal systems. (ongoing)
 - Assist the MPOs in their development and advancement of freight programs as needed. Provide SME.
 - Work with the Port Authority of New York and New Jersey, NJTPA, DVRPC, South Jersey Port Corporation, NJEDA, NYCEDC, and other regional partners to advance and improve the use of marine highway services at previously identified potential locations, such as Port Raritan, and investigate the opportunity for new services that may become available based on freight logistics and upland development opportunities.
 - Utilize the unit's Rail Bridge Management System as required by FRA to schedule and oversee inspection of active state-owned freight rail bridges. Inactive bridges are to be inspected for infrastructure preservation as needed.

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

ACTIVITY: Statewide Goods Movement - 4510025 / 5340
MANAGER: Sudhir Joshi
UNIT: Office of Freight Planning (OFF)

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

Freight Planning

- Reduce adverse outcomes and increase actions highlighted in the state-wide 2023 Freight plan finalized December 2022.
- Obtain freight focused data identify and reduce fatalities on the state managed roadways.
- Increase SME knowledge and support at NJDOT.
- Identify, prioritize, and increase truck parking access on NHFN by implementing a plan and coordinating with other agencies to plan for or expand these existing facilities.
- Continue to plan for opportunities to expand the state's Offshore Wind and Marine Highway Program and structure to support supply chain resiliency and reduce truck VMT.
- Support and/or provide SME to obtain Federal Grants that benefit the region, facilitating the integration of insights, issues, and initiatives towards a more unified, regional (multi-state) approach to the planning process.
- Produce an updated social media video along with related Infographics to show and grow the value of freight to NJ as well as to highlight the lesser-known aspects of the movement of freight that support a safe and resilient goods movement system.
- Implement a "Rail Straight line Diagram" (track charts) associated with the State Rail GIS mapping system.

Federal Requirements

- Continue to establish and implement Freight Performance Measures and target settings as required by FHWA.
- Implement an FMS Support Procedure. Maintain data currency. Continue to implement the *Freight Management System* in the department's delivery process.
- Incorporate Freight Related Project into the department's Problem Statement process.
- Continue to update FHWA's various freight networks: NHFM, NMFN, CUFC, CRFC, etc.
- Produce 3 Freight Advisory Committee meetings and one FHWA supported workshop.

Coordination

- Assist the MPOs in their development and advancement of freight programs as needed.
- Execute a Task Order to support The Truck Parking Profile – Part 2.
- Work with the PANYNJ, NJTPA, DVRPC, South Jersey Port Corporation and other regional partners to advance and improve the use of marine highway services at previously identified and investigate the opportunity for new services that may become available based on freight logistics and upland development opportunities.
- Utilize the unit's Rail Bridge Management System as required by FRA to schedule and oversee inspection of active state-owned freight rail bridges. active

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

ACTIVITY: Statewide Goods Movement - 4510025 / 5340
MANAGER: Sudhir Joshi
UNIT: Office of Freight Planning (OFP)

CONTRACTS:

1	\$ 400,000.00	2027 State Freight Plan Scoping, Freight Advisory Committee, and project development and planning
2	\$ 230,000.00	On-demand Freight Plan Support
3	\$ 495,000.00	Truck Parking Profile – Part 2
4	\$ 200,000.00	FMS Support
5	\$ 150,000.00	Offshore Wind and Marine Highway Service Planning
6	\$ 200,000.00	Project Selection Support
7	\$ 125,000.00	Federal Grant Response Support

Total: \$1,800,000.00

TRAVEL:

Total: \$ 14,750.00

1	\$ 6,250.00	AASHTO Council on Water – 1 staff for three days \$1,950.00 Rail Transportation Annual Meeting – 1 staff for two days \$1,800.00 Data Management and Analytics – 1 staff for three days \$1,300.00 Annual Meeting – 1 staff for three days \$1,200.00
2	\$ 4,000.00	TRB Innovation Freight, Annual Meeting, NCHRP Panels
3	\$ 500.00	FMCSA Safety Seminar
4	\$ 4,000.00	NJ Railroad Association - National Highway Rail Grade Crossing Safety Conference

EQUIPMENT: N/A

STAFFING:

Janice Marino-Doyle	Program Specialist 4	0.90 py
Nipa Maniar	Project Engineer	0.90 py
Devyn Cordero	Assistant Planner	0.90 py
Planner/Engineer	Assistant	0.90 py
	Total:	2.70 py

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Unmanned Aerial System – # 4510025 / 8500
MANAGER: Kimbrali Davis
UNIT: Bureau of Aeronautics, Unmanned Aerial System Program (UAS) Program

MISSION / OBJECTIVE:

Continuing with the institutionalization of the Unmanned Aerial System (UAS) Program that will support the planning for, growth and integration of UAS technology into the Department's transportation mission. UAS, often referred to as a drone, is an aircraft, without a human pilot onboard, controlled by an operator on the ground. The Program has adopted innovation as a standard practice and uses it regularly on projects.

The Program will provide guidance to various NJDOT divisions regarding best practices, risk management and regulatory compliance; provide input into development of NJDOT policies and procedures that integrate the utilization of UAS technology that impact nearly all aspects of highway transportation; and will provide a new perspective with improving operation, construction, inspection, and safety utilizing UAS technology. This program will ensure that NJDOT staff has easy access to up-to-date information about the UAS program and can see the value that UAS technology brings to the transportation projects

GOALS/ACTIVITIES:

1. Support the SPR Program Achievement of Transportation Choices (PATC) 2030 Goals (Ongoing)
 - a. Maintain & Renew Infrastructure
 - i. Ability to efficiently perform structural inspections and help determine the scope and progress of infrastructure projects. (Equipment Required)
 - b. Integrate Transportation & Land Use Planning
 - i. Ability to produce automated 3D maps and conduct railroad Right of Way surveys.
 - c. Increase Safety & Security
 - i. Ability to reduce personnel exposure to excessive heat, toxic fumes, or working high above a busy roadway.
 - ii. Work with Emergency Response Planning (4510025/5500) to explore use of drones to support 1) aerial surveys for hazard identification and 2) conduct post-storm damage aerial surveys to inform future vulnerability analyses and support repair and replacement design efforts.
 - d. Improve Mobility, Accessibility & Reliability
 - i. Ability to serve as a temporary mobility, reliability, and accessibility device by providing automated traffic volume data.
 - e. Operate Efficiently
 - i. Ability to reduce traffic congestion associated with lane closures and shoulder closures due to necessary routine maintenance operations.
 - f. Respect the Environment
 - i. Ability to greatly reduce the carbon footprint when compared to traditional equipment and maintenance operations.
 - g. Continue to Improve Agency Effectiveness
 - i. Ability to increase safety, increase efficiency, save time, and save money for the state transportation agency.
2. UAS Strategic Program Plan
 - a. Develop a strategic program plan based on the understanding of federal and state UAS regulation, legislation, and policy. (Ongoing)
 - b. Establish program procurement protocols such as a list of criteria to pre-qualify UAS consultants for NJDOT projects.
 - c. Develop standard operating procedures (SOP's) to support the UASP transportation missions. (Ongoing)

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Unmanned Aerial System – # 4510025 / 8500
MANAGER: Kimbrali Davis
UNIT: Bureau of Aeronautics, Unmanned Aerial System Program (UAS) Program

GOALS/ACTIVITIES: *(cont'd.)*

- d. Finalize the development and implementation of the NJDOT UAS Operations Manual. (Ongoing)
 - e. Maintain a routine schedule for reviewing, updating, and implementing federal and state regulations, policies, procedures, NJDOT UAS operator credentials, training protocols and equipment inventory. (Ongoing)
 - f. Maintain and update recurring remote pilot in command (RPIC) training course and refresher program. (Ongoing)
 - g. Institutionalize the UAS missions to support federal highway projects and initiatives aligned with best practices established through Everyday Counts (EDC-5) - Unmanned Aerial Systems (UAS). (Ongoing)
 - h. Expand the ability of the UAS program to support Bridge Inspection, Construction Inspection, Environmental and Land Surveying, and Emergency Management of Flooding for drone technology integration and data deployment. (Ongoing). (Equipment Required)
 - i. Develop comprehensive plans for implementation, including additional equipment with high-resolution imaging, tunnel/hard to access areas, and light detection and ranging (LiDAR) capabilities; investment in supporting software for increased imaging and data processing; increasing the ability to store high volume data (secured UAS dedicated data warehousing); dedicated website for hosting community-friendly accessibility to share data. (ongoing)
3. Develop a Stakeholder Engagement Plan & NJDOT UAS Communications Plan
 - a. Develop a communications plan to proactively inform and educate the various NJDOT departments on the benefits of the UAS program.
 - b. Engage with stakeholders including law enforcement agencies, drone operators, and the public.
 - c. Establish a feedback mechanism to continuously improve the program.
 - d. Represent NJDOT to MPO's and other stakeholder meetings.
 4. Research and develop guidelines for record retention policies for state transportation agency data collected by UAS
 - a) Review federal laws such as the Federal Records Act and state specific record retention schedules to understand the legal requirements for record retention.
 - b) Study industry standards and best practices for data management in UAS operations.
 - c) Review existing record retention policies within the agency and identify areas for improvement.
 - d) Classify UAS data based on its type, sensitivity, and importance to the agency's operations.
 - e) Define how long each type of data should be retained to satisfy administrative, fiscal, legal, and historical requirements.
 - f) Regularly monitor compliance with the record retention policies and address any issues promptly.
 5. Innovative Research and Technology Transfer
 - a) Review current state of practices and new developments in the fields of American-made Drones, American-base Supporting technological platforms, and overall UAS Program Management. (Equipment Required)
 - b) Make enhancements to the Department's UAS fleet to align with industry best practices. . (Equipment Required)

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Unmanned Aerial System – # 4510025 / 8500
MANAGER: Kimbrali Davis
UNIT: Bureau of Aeronautics, Unmanned Aerial System Program (UAS) Program

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Supporting the SPR Program Achievement of Transportation Choices (PATC) 2030 Goals
 - a. Continue to conduct UAS missions that support the key elements identified.
 - i. Capture high resolution pre-construction photos for an NJDOT funded rail and aeronautic projects (Ongoing) . (Equipment Required)
 - ii. Aerial photos and videos of structural inspections to support the scope and progress of infrastructure projects (Ongoing) . (Equipment Required)
 - b. Continue to work with the Division of Traffic Operations System & Safety to develop procedures that incorporate the use of UAS to increase safety, improve accessibility and efficiency. (Ongoing)
 - c. Continue to work with the Division of Planning, Multimodal and Grants Administration to develop procedures that incorporate the use of UAS in determining environmental resiliency, improving project monitoring and management. (Ongoing)
 - d. Develop a pilot program with Emergency Response Planning(4510025/5500) to explore the use of drones to support 1) conducting aerial surveys of NJDOT facilities for emergency and evacuation hazard identification and 2) to conduct post-storm damage aerial surveys to inform future NJDOT facility vulnerability analyses and support damage repair and replacement design efforts
2. UAS Strategic Plan
 - a. Continue to work with consultant team to develop strategic program plan scope of work. (Ongoing)
 - b. Continue to draft a series of documents that outline procurement protocols such as a list of criteria to pre-qualify UAS consultants for NJDOT projects. (Ongoing)
 - c. Continue to work with consultants on outline for key areas of information towards the development of a NJDOT website presence.
 - d. Continue to draft and update standard operating procedures (SOP's) to support the UASP. (Ongoing) . (Equipment Required)
 - e. Continue to establish a recurring remote pilot in command (RPIC) training course and refresher program. (Ongoing) . (Equipment Required)
 - f. Continue to institutionalize the UAS missions to support federal highway projects and initiatives aligned with best practices established through Everyday Counts (EDC-5) - Unmanned Aerial Systems (UAS). (Ongoing)
3. Develop a Stakeholder Engagement Plan & NJDOT UAS Communications Plan
 - a. Develop the NJDOT website presence to provide a UAS program information centralized site and raise awareness of the value UAS technology within the department.
 - b. Conduct knowledge transfer events (webinar, open house) to educate internal and external stakeholders (MPOs)
4. Research and develop guidelines for record retention policies for state transportation agency data collected by UAS
 - a. Establish secure and efficient data storage methods that ensure data integrity and accessibility.
 - b. Outline procedures for the safe and compliant disposal of data after the retention period ends.
 - c. Provide training to all relevant personnel on the new record retention policies.
5. Innovative Research and Technology Transfer
 - a. Purchases and upgrade to the Department's UAS fleet to ensure regulatory compliance. (Equipment Required)
 - b. Diversify the current UAS/Drone fleet and develop new checklists, maintenance procedures, and SOP's for new or upgraded UAS equipment. (Equipment Required)

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Unmanned Aerial System – # 4510025 / 8500
MANAGER: Kimbrali Davis
UNIT: Bureau of Aeronautics, Unmanned Aerial System Program (UAS) Program

Contracts

UAS Strategic Program & Planning Services (FY 2025) \$750,000 (FY 2026) \$750,000

Travel

NJDOT Unmanned Aerial System Program (UASP) staff will travel to Unmanned Aircraft System (UAS) related meetings and training courses, inclusive but not limited to:

- TRB Annual Meeting
- American Association of State Highway and Transportation Officials (AASHTO) UAS/Drone Meeting
- UAS State Transportation Agency Peer Exchanges
- Metropolitan Planning Organization (MPO) Quarterly Meetings
 - Delaware Valley Regional Planning Commission (DVRPC)
 - North Jersey Transportation Planning Authority (NJTPA)
 - South Jersey Transportation Planning Organization (SJTO)

(FY 2025) - \$15,000 (FY 2026) - \$15,000

<u>SPR TRAVEL BUDGET BREAKDOWN 25/26</u>									
<u>Event</u>	<u>Number of Attendees</u>	<u>Name of Attendees</u>	<u>Registration</u>	<u>Travel</u>	<u>Parking/Uber/Tolls</u>	<u>Lodging</u>	<u>Meals</u>	<u>Total Cost</u>	<u>Total Cost of Attendees</u>
Northeast UAS Peer Exchange	2	David Nevil, Jake Basantis		State Car	\$100.00	\$350	\$150	\$600	\$1,200
FAA Drone/AAM (Advanced Air Mobility) Symposium	2	David Nevil, Jake Basantis	\$799.00	\$500	\$100.00	\$411.00	\$207.00	\$2,017.00	\$4,034.00
The Highway Engineering Exchange Program (HEEP)-UAS	2	David Nevil, Jake Basantis	\$950	\$700	\$200	\$567	\$150	\$2,567	\$5,134
TRB Annual Meeting	2	David Nevil, Jake Basantis	\$900	State Car	\$100	\$500	\$150	\$1,650	\$3,300
AASHTO -UAS Meeting	3	Maryiam Kazmi, David Nevil, Jake Basantis	2- Days Meeting Pass					\$625	\$1,875.00
MPO's Meetings	4	Kimbrali Davis, Maryiam Kazmi, David Nevil, Jake Basantis	Not required	State Car		N/A	N/A	\$50	\$150.00
<u>TRAVEL EXPENSE (APPROX)</u>									\$15,693.00

Equipment

The Drones used to support this program have a life expectancy based on number of missions and flight hours. These drones have begun to require increased maintenance to keep them flight operational which means they are approaching their life expectancy limit. As existing equipment is retired, the following American manufactured equipment is requested for replacement:

Quote for **one Skydio X10** that totals **\$28,184.07**.

- Hardware: \$18,714.40
- Software: \$4,200.00
- Warranty: \$4,898.00

Training: \$300.00

Skydio X10

(FY 2025) \$30,000 (FY 2026) \$30,000

Staffing

Kimbrali Davis	Manager, UAS Program	0.4
Maryiam Kazmi	Administrative Analyst 4	1.0
Shadman Mohammad	Principal Engineer	0.3
Michael Difrancescantonio	Aero Operations Specialist	0.3
Laura Alexander	Administrative Analyst 2	0.3
David Nevil	Program Specialist 1	1.0
Jake Basantis	Program Specialist Trainee	1.0
	Total Person-years	4.3

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Program – wide Procedures for Consulting with Federally Recognized Tribal Nations and Non-Federally Recognized Tribal Entities in NJ - 4510023 / 9999
MANAGER: Pamela Garrett, Director
UNIT: Division of Environmental Resources

MISSION / OBJECTIVE:

Develop procedures for consultation with the five (5) Federally Recognized Tribes (FRTs) who claim a cultural affiliation with the lands of the State of New Jersey and Non-federally Recognized Tribal Entities (NFRTEs) in NJ during the project delivery processes including development of the *Protocols for the Treatment of Human Remains Discovered during Archeological Investigations and Post-Review Discoveries*.

Consult with Native American tribal representatives from FRTs claiming an affiliation with the lands of the State of NJ, NFRTEs, FHWA staff and the NJ State Historic Preservation Officer and staff to develop internal procedures that describe how tribal concerns can be raised and addressed throughout the project delivery processes as required by Federal law, and the policies and directives of federal review agencies. Internal implementation procedures and training, as needed, will also be developed.

GOALS/ACTIVITIES:

The Division of Environmental Resources will continue to work on meeting the following Goals/Activities:

1. Complete Tribal Consultation Guidance:
 - a. Compile information from three MPOS and NJDOT into single document.
 - b. Submit and circulate documents for FHWA and SHPO review and comments.
 - c. Prepare transmittal for FHWA to send guidance to each FRT (and NFRTEs as appropriate) and discuss comments on procedures and the feasibility of executing a programmatic agreement with them.
 - d. Work with FHWA to seek guidance from FHWA resource center on how best to handle communication with tribal nations and identify appropriate tribal contacts for planning documents as well as circulating information to MPOs and others as appropriate.
 - e. Consider presenting procedures to the NJ Commission on Native American Affairs.
2. Continue internal coordination to include consultation with FRTs and NFRTEs as appropriate into NJDOT's Public Involvement Action Plan (PIAP).
3. Complete draft of Protocols for the Treatment of Human Remains, Burial Sites, and Associated Artifacts and Objects:
 - a. Circulate for review and comments to FHWA, SHPO, and internally.
 - b. Circulate for review and comments to the State Forensic Anthropologist.
 - c. With assistance from FHWA, seek guidance from FHWA Resource Center on how best to handle communication about procedures with tribal nations.
 - d. In coordination with FHWA, schedule discussions with FRTs (may require individual discussions with tribal nation representatives; consider having discussion before sending document out); Document discussions, ensuring that tribal concerns are documented thoroughly and accurately, and that any agreements are also documented thoroughly and accurately.
 - e. Prepare transmittal for FHWA to send to FRTs (and if necessary, send to NJ Commission on Native American Affairs and NFRTEs).
 - f. Address comments that have been received.
 - g. Prepare final procedures.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Program – wide Procedures for Consulting with Federally Recognized Tribal Nations and Non-Federally Recognized Tribal Entities in NJ - 4510025 / 9999
MANAGER: Pamela Garrett, Director
UNIT: Division of Environmental Resources

GOALS/ACTIVITIES: (cont'd.)

4. Develop programmatic agreement(s) [PAs] with FRTs willing to enter into such agreement.
5. Finalize Internal Procedures:
 - a. In collaboration with FHWA and SHPO, develop a plan for drafting, circulating, and executing PAs.
 - b. Develop appropriate briefing material to inform upper management of finalized procedures/ intent to pursue PAs.
 - c. Develop and implement internal (within NJDOT) and external distribution plans.
 - d. Develop training as appropriate.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

It is anticipated that Goals 1 through 3 will be accomplished in Calendar Year 2025.

TRAVEL:

No travel is anticipated at present; meetings are likely to be held virtually.

CONTRACTS: None

EQUIPMENT: None

STAFFING: Division of Environmental Resources

Sean Warren	Project Manager Transportation	0.01
Sean Ream	Environmental Specialist 4	0.10
Lindsay Thivierge	Program Specialist 2	0.10
	Total	0.21

STATE PLANNING AND RESEARCH PROGRAM, 2025-2026

ACTIVITY: Transportation Improvement Programs (TIP/STIP) Preparation – 4510025 / 5985
MANAGER: Amy Polachak
UNIT: Capital Program Development

MISSION / OBJECTIVE:

Approval and execution of the Statewide Transportation Improvement Program that enhances the safety and mobility of the traveling public, preserves the infrastructure of the transportation system, and reflects sound long-range planning. To implement both highway and transit projects to achieve the statewide long-range transportation plan and capital investment strategy goals and objectives guided by an asset management, performance-based approach, among state, regional and local agencies in New Jersey.

GOALS/ACTIVITIES:

1. Administration of Federal Fiscal Years 2024-2027 STIP. (Year Specific)
 - a. Annual New Jersey Capital Program approved in June.
 - b. Modifications and Amendments will be processed to maintain an accurate and up-to-date TIP/STIP documents.
 - c. Initiate revisions to the STIP MOU regarding TIP Amendments and Modifications. Includes coordination with all federal planning partners (MPO, NJT, FHWA, FTA, NJDOT).
2. Initiate development of Federal Fiscal Years 2026-2029 STIP. (Year Specific)
 - a. Initiate process to collect updated costs and schedules via eCAP application.
 - b. Develop resource estimate for FY26-35.
 - c. Review FY2024 STIP Federal Planning findings and implement recommended changes where possible. Discuss with FHWA at quarterly meetings.
3. Budget Application maintenance and enhancement (eSTIP, eCAP) (ongoing).
 - a. Quarterly meetings with FHWA, will discuss changes to eSTIP.
 - b. Monthly meetings with MPO, NJT, will discuss changes to eSTIP.
4. Review Problem Statements (Ongoing) for advancement to Concept Development (ongoing).
5. Development of the Financial Element of the Transportation Asset Management Plan (TAMP) (Year Specific)
6. Coordinate the disbursement of draft Financial Management Plans to the MPOs and work with the Division of Project Management so that comments received from the MPOs are considered and if appropriate, included in final Financial Management Plans. (ongoing)

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Manage the FY 2024-2027 STIP (with six additional informational years)
 - a. New Jersey Legislature to pass and Governor to approve Appropriations Bill to establish Capital Program authority.
 - b. Execute the federal budget through modifications in the eSTIP application.
2. Initiate development of Federal Fiscal Years 2026-2030 STIP.
 - a. Initiate process to collect updated costs and schedules via eCAP application.
 - b. Develop resource estimate for FY26-35.
3. Maintain and enhance eSTIP and eCAP applications.
4. Complete Problem Screenings through the analysis of integrated department management systems for highest priority Problem Statements. Obtain approval to advance via Capital Program Coordination meetings.
5. Provide data to assist in the development of the financial element section of the TAMP and provide

STATE PLANNING AND RESEARCH PROGRAM, 2025-2026

ACTIVITY: Transportation Improvement Programs (TIP/STIP) Preparation – 4510025 / 5985
MANAGER: Amy Polachak
UNIT: Capital Program Development

- budget data to support development of the annual consistency review.
6. Facilitate approval of Financial Plans for projects exceeding \$100m (federal).

TRAVEL:
None.

CONTRACTS:
2 year ESTIP task order modification update. anticipated execution July 1, 2025.
Estimate contract budget \$2.0m.

SUPPLIES:
\$1,500.00 1 laptop for staff to use in office.

STAFFING:

George Baier	Administrative Analyst III, IS	1.00
Nicole Daniel	Administrative Analyst III	1.00
Stephen Fowler	Administrative Analyst IV	1.00
Smruti Gariwala	Administrative Analyst III	1.00
Walter Lytwyn	Administrative Analyst II	1.00
John Micikas	Administrative Analyst IV	1.00
Vacancy	Administrative Analyst II	1.00
Evan Hason	Analyst Trainee	1.00
Vacancy	Supervising Administrative Analyst	<u>1.00</u>
TOTAL		9.00

Anticipate vacancies to be filled during CY2024

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Concept Development – 4510025 / 5980
MANAGER: Hardev Dave / Veronica Murphy
UNIT: Division of Project Management

MISSION / OBJECTIVE:

To sustain and improve New Jersey's multi-modal transportation network by developing project plans in a manner that ensures multi-disciplinary reviews at the earliest stages.

Guided by Performance Based Programming and the Capital Investments Strategy, to wisely invest federal resources in a way that enables the Department to advance the project planning process as efficiently as possible.

NJDOT utilizes the Concept Development phase to assess the condition existing infrastructure within the project limits as well as to take note of nearby educational, cultural and other resources that could be affected by the project. During Concept Development, NJDOT Subject Matter Experts (SMEs) **an MPO planning representative (s)** and consultants assess a wide range of factors, including environmental impacts, pedestrian and bicycle accommodations, and compliance with the Americans with Disabilities Act within the project limits. Coordination with the respective MPO will be completed as needed throughout duration of the project for other projects in LCD (also limited scope projects including but not limited to CMAQ, ITS signal projects and Electric Vehicle Service Equipment projects).

Concept Development studies result in a Preliminary Preferred Alternative (PPA) that will fulfill the need and purpose of the project.

GOALS/ACTIVITIES:

1. Continue the use of FHWA-approved Term Agreements to advance projects through Concept Development in an efficient manner.
 - a. There are 12 three-year term consultant agreements executed, which was awarded in December 2020.
 - b. Each term agreement has a \$2 million cap, and individual task orders are capped at \$750,000.
 - c. Consultant selection processes such as Term Agreements, Multi-project, Group, Batch, and Bundled solicitations are FHWA-approved methods to save time and money while conforming to all federal requirements to ensure fair competition and equal opportunity.
2. FHWA has established a programmatic review process for CD reports for projects of varying complexity, including a robust review and approval process for those projects designated to be a Project of Departmental Interest (PODI).
 - a. FHWA approval of the CD report is required for CPC to advance PODI projects to PE.
 - b. The STIP/TIP is updated on a two-year cycle.
3. Those bridge and pavement projects proposed for advancement via the limited scope process are screened at the beginning of the CD phase to reveal any fatal flaws and uncover basic information.
 - a. Screenings are utilized to verify the appropriateness of a project advancing as a limited scope project, in which case it would advance from CD to FD, or if instead it should advance as a standard delivery project, which involves a more detailed CD study and a PE phase prior to FD.
 - b. Major elements of the screenings and studies are data collection, field investigations, internal coordination with subject matter experts and development of the scope of work and cost estimate.
 - c. NJDOT also performs screenings for other transportation needs such as drainage, safety, pedestrian, motorcycle, etc.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Concept Development – 4510025 / 5980
MANAGER: Hardev Dave / Veronica Murphy
UNIT: Division of Project Management

4. To ensure multidisciplinary reviews at the earliest stages, NJDOT Subject Matter Experts (SMEs), consultants and MPO planning representatives will assess a wide range of factors, including environmental impacts, project area and regional planning multimodal context and congestion needs, pedestrian and bicycle accommodations, and compliance with the Americans with Disabilities Act within the project limits. NJDOT will provide an ongoing list of CD studies to the respective MPO in the region; include the MPO as a stakeholder during the outreach component of the CD process. A copy of the final CD reports will be distributed to the respective MPO.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Utilize the federally funded term agreements to advance projects through Concept Development. Conduct Concept Development studies, as programmed in CY 2025, which have adequately assessed the community impacts for consideration by NJDOT and the MPOs, for advancement to preliminary engineering. We anticipate completing approximately 30 CD studies in CY 2025.

Six complex projects are currently receiving multi-year funding for Concept Development through the 2017-2018 SPR program. They will continue to advance through Concept Development in CY 2025 program year:

CR 501 (JFK Blvd), Rt 139 Conrail Viaduct Spans
Rt 3 EB, Bridge over Hackensack River and Meadowlands Pkwy
CR 527 (Old Bridge Turnpike) Bridge
Rt. 33, Wayside Rd to Rt. 71
South Main Street, Bridge over Washington Secondary (Conrail)
Route 33, Bridge over Manalapan Brook

2. Through collaboration with FHWA-NJ, NJDOT has revised the review process of CD reports in ways that ensure full compliance with FHWA requirements associated with non-PODI and PODI projects, and in ways that incorporate efficiencies in terms of the duration of the review process.
3. NJDOT will continue to screen bridge projects early in or prior to the planning phase to avoid time and money costs related to changes to project scope. MPO planning representatives will identify regional planning context needs relating to potential policy and compliance requirements.

TRAVEL:

None

CONTRACTS:

Existing contracts:

- 6 task order projects were initiated from the 12 term agreements in the 2021-2022 program are listed in the Multi-year Contracts table.
- Existing authorized agreements for CD studies for the following projects:
 - CR 501 (JFK Blvd), Rt 139 Conrail Viaduct Spans
 - Route 3 EB Bridge over Hackensack River and Meadowlands Parkway
 - CR 527 (Old Bridge Turnpike) Bridge
 - Rt. 33, Wayside Rd to Rt. 71

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Concept Development – 4510025 / 5980
MANAGER: Hardev Dave / Veronica Murphy
UNIT: Division of Project Management

- South Main Street, Bridge over Washington Secondary (Conrail)
- Route 33, Bridge over Manalapan Brook

New contracts:

- 12 term agreement task orders estimated at \$750,000 each for a total of \$9,000,00

EQUIPMENT:

None

STAFFING:

Division of Project Management: **0.33 person-years multiplied by 100 persons for a total of 33 person years.**

ADHIKARI, SUJANA	PRJCT MGMT SPECLST 2
PATEL, KIRAN	PRJCT MGMT SPECLST 3
AKHTAR, MALIHA	SENIOR ENGR TRNPRTN
ALAM, MUHAMMAD	PRJCT MGMT SPCLST 2
ASSAD, HANAA	PRJCT MGMT SPECLST 3
BANCROFT, KEVIN	PRJCT MGMT SPCLST 3
GANARAJAN, VASUDEVAN	PRJCT MGMT SPCLST 1
SCHWIERS, OGECHI N	PRJCT MGMT SPCLST 1
CARR, MICHAEL	PRJCT MGMT SPECLST 3
CHIVULESCU, NICULINA	PRJCT MGMT SPECLST 3
COLQUITT, WILLIE	PRJCT MGMT SPCLST 2
DALWADI, DIPAKKUMAR	ASST ENGR TRNPRTN
DALWADI, NISHARG	PRJCT MGMT SPCLST 1
DARCY, EDWARD	PRJCT MGMT SPECLST 3
DAVE, BHAGIRATH	PRJCT MGMT SPCLST 1

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Concept Development – 4510025 / 5980

MANAGER: Hardev Dave / Veronica Murphy

UNIT: Division of Project Management

STAFFING: (cont'd)

BURNS, VICTORIA	SR ENGR TRNPRTN
TRIVEDI, MEETA	PRJCT MGMT SPECLST 2
ACHARYA, HEENA	ASSISTANT ENGINEER
DEHNAM, RON	PRJCT MGMT SPECST 1
ESTRADA, JAVIER	PRJCT MGMT SPECLST 3
EZEUKA, PAUL	PRJCT MGMT SPECLST 3
FAROOQI, WAJIHA	PRJCT MGMT SPCLST 3
THAJUDEEN, ZUHAIL	ASSISTANT ENGINEER
PATEL, RAKESHKUMAR	ENG TRNE TRNPRTN
VIJAYAKUMAR, AMUTHA	PRJCT MGMT SPCLST 3
HAMEED, OMAR	PRJCT MGMT SPECLST 3
HEBERT, MELVIN	PRJCT MGMT SPCLST 1
HENRY, CHARLES	PRJCT MGMT SPECLST 3
HOSSAIN, MOHAMMED	SENIOR ENGINEER
HURST, AIMEE	PRJCT MGMT SPCLST 3
HUSSEIN, ALI	SENIOR ENGINEER
JIN, JAEYOON	SR ENGR TRNPRTN
KASBEKAR, MILIND	PRJCT MGMT SPECLST 3
KAUR, AMANDEEP	SENIOR ENGINEER
KAUSHAL, KUNALVIR	PRJCT MGMT SPECLST 3
KENNARD, AMY	PRJCT MGMT SPECLST 3
PATEL, NISHI	SENIOR ENGINEER
AI-ZAIN, HOUDA	PRJCT MGMT SPCLST 1
KURCON, PIOTR	PRJCT MGMT SPCLST 2
SHELAT, HEMANT	PRJCT MGMT SPCLST 1
VIOLA, JASON	ENG TRNE TRNPRTN
MAEVSKY, ALEXANDER	PRJCT MGMT SPECLST 2
MAEVSKY, ANDREW	PRJCT MGMT SPECLST 3
MARCELLUS, EVENS	PRJCT MGMT SPECLST 3
MCALLISTER, JAMES	PRJCT MGMT SPCLST 3
MEHTA, HEMABEN	PRJCT MGMT SPECLST 3
CHOKSHI, YOGESH	ENG TRNE TRNPRTN
MIDDLETON, LYNN	PRJCT MGMT SPECLST 3
MINSKY, JESSE	PRJCT MGMT SPCLST 3

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Concept Development – 4510025 / 5980

MANAGER: Hardev Dave / Veronica Murphy

UNIT: Division of Project Management

STAFFING: (cont'd)

SHUM, IGOR	PRJCT MGMT SPECLST 1
MOLAVI, TOWFIGH	SR ENGR TRNPRTN
MORTAJA, NADER	PRJCT MGMT SPCLST 1
NAJEM, FROZAN	PRJCT MGMT SPECLST 3
ISHAK, POULA	ASSISTANT ENGINEER
NEUPANE, PRADEEP	PRJCT MGMT SPCLST 3
OBIDIKE, ANTHONY	PRJCT MGMT SPECLST 3
PANDYA, SUNAY	PRJCT MGMT SPCLST 3
PATEL, CHIRAG	PRJCT MGMT SPCLST 1
PATEL, DISHITKUMA	SR ENGR TRNPRTN
PATEL, GAURANG	PRJCT MGMT SPCLST 2
PATEL, GIRISHKUMA	PRJCT MGMT SPECLST 3
PATEL, JAIMINI	PRJCT MGMT SPCLST 2
PATEL, MADHUSUDAN	SENIOR ENGINEER
PATEL, MEETA	PRJCT MGMT SPCLST 2
PATEL, PRIYANK	PRJCT MGMT SPCLST 2
VANEGAS, ANDRES	PRJCT MGMT SPCLST 1
PATEL, RAJENDRAKU	PRJCT MGMT SPCLST 1
PATEL, RASHMIN	PRJCT MGMT SPECLST 3
PATEL, SAGAR	ASSISTANT ENGINEER
PATEL, VANDNA	PRJCT MGMT SPECLST 3
PATEL, VIJAYKUMAR	PRJCT MGMT SPCLST 1
PATEL, VISHAL	PRJCT MGMT SPCLST 2
PATHAK, KETAKI	PRJCT MGMT SPCLST 2
PERWAIZ, NAJUM	SR ENGR TRNPRTN
RANA, DHANANJAY	PRJCT MGMT SPCLST 3
RAUZINO, DAVID	PRJCT MGMT SPCLST 3
RAVISHANKAR, KAMALAVATH	PRJCT MGMT SPECLST 3
SCHANNE, NATALIE	PRJCT MGMT SPECLST 1
HASHIM, SAJA	ASSISTANT ENGINEER
SHAH, BHAVESH	PRJCT MGMT SPECLST 3
SHAH, DINESH	PRJCT MGMT SPECLST 3
SHAH, PANKAJKUMA	PRJCT MGMT SPCLST 1
SHAH, SHIL	ASSISTANT ENGINEER

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Concept Development – 4510025 / 5980

MANAGER: Hardev Dave / Veronica Murphy

UNIT: Division of Project Management

STAFFING: (cont'd)

DESAI, MAITRI	ASSISTANT ENGINEER
ELHOWARDY, OMAR	ASSISTANT ENGINEER
PARIKH, JAIMIN	ASSISTANT ENGINEER
TRAN, NAMGIAO	PRJCT MGMT SPCLST 2
TRIPATHI, KRISHNA	PRJCT MGMT SPECLST 3
UPADHYAY, ARPITA	PRJCT MGMT SPECLST 3
LONI, HISSEIN	ASSISTANT ENGINEER
VIJAYAKUMAR, SANGARANAT	PRJCT MGMT SPECLST 3
VILLANUEVA, DIANA	PRJCT MGMT SPCLST 3
WORTH, GEORGE	PRJCT MGMT SPECLST 3
YOUSAFZAI, POOJA	PRJCT MGMT SPCLST 2
YOUSOUFZAI, WAHIDA	SR ENGR TRNPRTN
RABIE, SAMER	PRJCT MGMT SPCLST 1

Total person years: 33

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Travel Projections - (4510025 / 5350)
MANAGER: Hardev Dave / Laine Rankin/Veronica Murphy
UNIT: Division of Project Management

MISSION / OBJECTIVE:

Provide technical expertise in travel projections and traffic analysis to various areas of NJDOT as it relates to traffic design data, pavement design data and future year travel projections.

To support various NJDOT units by projecting future travel volumes and developing related data to ensure that proposed projects have adequate capacity and are economically designed. The mission includes:

- Providing specific traffic analyses, e.g., regional vs. local travel characteristics determination, that may be required for project development/advancement
- Providing review, consultation, and advice to those units when travel projections and/or traffic analyses are undertaken by their consultants
- Providing planning support/input during concept development by participating in scoping meetings and plan reviews.

GOALS/ACTIVITIES:

1. Perform Travel Projections.

The Division of Project Management (DPM) relies on the Bureau of Transportation Data Development's (BTDD) Traffic Monitoring System-Traffic Volumes Data Collection Activity. DPM reviews BTDD's files for available data and requests counts if none are available to complete DPM's Travel Projections Activity. DPM worked with BTDD to develop an internal Data Warehousing project to make traffic counts (Phase I) and other traffic related information (Phase II) readily available to anyone in the Dept. This effort provides for immediate count access improving on the monthly updates located on the web site.

Additionally, consultant agreements include a provision in the standard articles requiring consultants to submit any traffic data to BTDD. This Activity-Traffic Monitoring System-Database Maintenance also provides the seasonal and axle correction factors necessary for calculating the projections under the DPM Travel Projections Activity. The DPM Activity also makes use of the BTDD activity of Weights and Speed Monitoring using WIM sites for classification. DPM also identifies locations of defunct WIM stations during Pavement screenings for consideration updating or repairing sites as related to the Infrastructure Renewal activity. DPM continually uses the Straight Line Diagrams, Road Inventory and Mile posting and the Functional Classification System and Federal Aid System Products in the Travel Projections Activity. The Division of Project Development and BTDD will reach out to the respective Departmental Unit prior overseeing the Transportation Air Quality/Travel Demand Modeling Program to coordinate with them prior to developing a Travel Projection. Results of the analysis will be shared with the unit.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Complete approximately 15 travel projections and other analyses/consultation requests. – year specific

TRAVEL:

N/A

CONTRACTS:

N/A

EQUIPMENT:

N/A

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Travel Projections - (4510025 / 5350)
MANAGER: Hardev Dave / Laine Rankin/Veronica Murphy
UNIT: Division of Project Management

STAFFING:

Dipakkumar Dalwadi	.01 py	Amandeep Kaur	.01 py
Victoria Burns	.01 py	Nishi Patel	.01 py
Heena Acharya	.01 py	Jason Viola	.01 py
Zuhail Thajudeen	.01 py	Towfigh Molavi	.01 py
Rakeshkumar Patel	.01 py	Yogesh Chokshi	.01 py
Mohammed Hossain	.01 py	Sagar Patel	.01 py
Jaeyoon Jin	.01 py	Poula Ishak	.01 py
Ali Hussein	.01 py	Dishitkuma Patel	.01 py

Total person years: 0.15

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

ACTIVITY: Geodetic Survey and Survey Support – 4510025 / 5100
MANAGER: Alexander Didok
UNIT: Geodetic Survey

MISSION / OBJECTIVE:

To ensure projects are developed avoiding and or minimizing impacts to the human, manmade, and natural environments by gathering data for base maps

Geodetic Survey:

Maintaining and establishing a Control Network will help ensure that projects minimize impacts and therefore are in compliance with provisions of federal and state environmental regulations. Providing Control data for base mapping to identify these potential areas is a key function.

The primary mission of the New Jersey Geodetic Survey Unit are to preserve, maintain, densify and inspect the official control survey network, North American Datum 1983 (NAD83) and North American Vertical Datum 1988 (NAVD88), within the state as per Chapter 118 supplementing P.L. 1966, c. 301, to submit precise horizontal and vertical surveying data to the National Geodetic Survey (NGS) for inclusion into the National Spatial Reference System (NSRS); to establish Capital Program Management (CPM) design project specific primary horizontal and vertical control as needed; to give survey support to the Department of Transportation (DOT) mapping, photogrammetry, boundary determination and graphic information system (GIS) activities.

Survey Support:

Provide In-house Topographic Survey and Base Mapping for the Capital Program. Research and utilize newer mass data collection technologies such as Laser Generated Point clouds and Drone Photography.

GOALS/ACTIVITIES:

1. Establish monument data into the NSRS maintained by NGS to define NAD83 and NAVD88 framework. This is in compliance with State Law and is published by NGS on the internet for project and public use.
2. Establish vertical/horizontal control in deficient areas on the State for inclusion into NGS Integrated data Base (IDB) through campaign-style GNSS surveys using the NGS OPUS Project format.
3. Establish bench mark projects to tie together existing NGS published level lines.
4. Continue to establish vertical/horizontal control in deficient areas of the State.
5. Establish Project Control surveys for Photogrammetric, LiDAR and transit surveys in support of the Capital Program.
6. From Consultant derived Mobile LiDAR Scans, generate Topographic and Surface data during Concept Development for Capital Projects.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Through campaign style GNSS surveys using NGS OPUS Project format. Locations to be determined
2. Continue to establish vertical/horizontal control in deficient areas of the State. (Ongoing)
3. Establish photogrammetric control for multiple project base maps (TBD). (Year specific)
4. Establish Topographic Survey and Base Mapping for multiple Capital Projects. (Year specific)

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

ACTIVITY: Geodetic Survey and Survey Support Services – 4510025 / 5100
MANAGER: Alexander Didok
UNIT: Geodetic Survey

TRAVEL: None

CONTRACTS:

Active 2024 Federal Survey Projects

1. Bridge Street, (CR 669), Bridge over Amtrak, M.P. 0.11, UPC #213010 Authorized \$138,817.41, FPED 12/31/2024
2. Route 173, Bridge over Mulhockaway Creek, M.P. 8.98, UPC #163380 Authorized \$107,610.41, FPED 12/31/2024
3. Rt. 138, GSP to Rt. 35, M.P. 0.37 to 3.52, UPC #154010, Authorized \$405,131.17, FPED 12/31/2024.
4. CR 527 (Old Bridge Tpk.) Bridge over Sayreville Secondary, M.P. 41.14 UPC #174150 Authorized, \$214,413.61 FPED 12/2/2024
5. Centre Street, Bridge over Amtrak, M.P. 0.07, UPC #153120 (approximated \$150,000) Authorized, \$182,347.80 FPED 12/2/2024.
6. Sidney Road (CR 617), Bridge over Lehigh Valley ML (NS) RR, M.P. 7.70, UPC #173070 Authorized, \$162,592.85 FPED 12/2/2024

Total Authorized = \$1,210,913.00

2025 Federal Survey Projects

1. Route 1, Route 1B to CR 533 (Province Rd. / Quaker Bridge Rd.) Resurfacing
2. Route 44, MP 9.40 to 10.28
3. Route 28, MP 3.07 to 4.18 and MP 4.7 to 6.12
4. Route 22 EB, MP 31.4 to 34.3
5. Route 40, CR557 (Tuckahoe Rd.) to Rite 54 Blue Anchor Rd. / Wheat Rd. (CR 619) Resurfacing
6. Route 23, MP 8.94 to 10.22
7. Route 42, Route 322 / CR 536 (Sicklervill Rd.) to CR 555 (Tuckahoe Rd. / Stagecoach Rd. Resurfacing
8. Route 1T, Pulaski Skyway to Service Rd. to Park Resurfacing
9. Route 30, MP 7.78 to 9.3 and MP 9.83 to 18.15
10. Route 206, MP 63.9 to 66.0
11. Route 202, MP 7.0 to 9.35
12. Route 29, Old River Rd. to Alexauken Creek Rd. Resurfacing
13. Rt. 23, Alexander Avenue to Highland Ave., MP 10.23 to 13.00 Resurfacing
14. Mid-block Crosswalk Improvements, Central
15. Systemic Backplate Pilot Program Central

Total = Approximately \$4,600,000.

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

ACTIVITY: Geodetic Survey and Survey Support Services – 4510025 / 5100
MANAGER: Alexander Didok
UNIT: Geodetic Survey

EQUIPMENT: NONE

STAFFING:

G. Krawtschenko, Tech 4	.80py	F. Andrascik, Tech 2	.80py
J. Romer, Engineering Tech 4	.80py	M. Iorio, Engineering Tech 2	.80py
Vacant, Tech 3	.80py	Christian Joya-Fernandez, Eng. Tech Apprentice	.80py
J. Bentsen, Tech 3	.80py	Mohammed Sadat, Eng. Tech Apprentice	.80py
D. Kopec, Tech 2	.80py	Vacant, Eng. Tech Apprentice	.40py
		Total:	7.6py

STATE PLANNING AND RESEARCH PROGRAM, 2025 -2026

ACTIVITY: Bridge Screening and Scoping – 4510025 / 6100
MANAGER: Kimberly Sharp
UNIT: Bureau of Structural Design and Geotechnical Engineering

MISSION / OBJECTIVE:

Develop well-defined and well-justified structural and Geotechnical scope of work to improve the condition of bridges in Poor Condition, Culverts, Unstable Slopes, Retaining Wall, and Sign Structures on the State system.

GOALS/ACTIVITIES:

1. Perform screenings and develop structural scope of work for the bridges in Poor Condition under Limited Scope Project Delivery, and Standard Capital Project Delivery.
 - a. From the list developed by the Bridge Management System, prioritize the list of structures for Deck/Superstructure in accordance with the limited scope program.
 - b. Verify with other units to see if any of these structures already programmed in any projects.
 - c. Review inspection reports for each structure.
 - d. Screen structures using recent inspection report and the bridge history to determine structural scope of work.
 - e. Prioritize and program structures to advance to Concept Development phase under limited scope program.
2. Perform screenings and develop structural and geotechnical scope of work for bridges in need of full replacement submitted to CPSC for disposition, discussion and recommendation to CPC under Problem Screening of the Standard Capital Project Delivery.
 - a. From the list developed and approved by the CPC, prioritize the list of structures for full replacement.
 - b. Verify with other units to see if any of these structures already programmed in any projects.
 - c. Review inspection reports for each structure.
 - d. Screen structures using recent inspection report and the bridge history to determine structural and geotechnical scope of work.
 - e. Prioritize and program structures to advance to Concept Development phase.
3. Perform screenings for Replacement of all deficient sign structures.
 - a. From the list developed by the Bridge Management System, group the sign structures based on the location in the State.
 - b. Program sign structures to proceed to the Concept Development Phase.
 - c. Perform field-screening inspection to evaluate various options for sign structure replacement.
 - d. Check conflicts with other projects.
 - e. Coordinate with other units and agencies.
 - f. Prepare the checklist for the structural portion as part of screening.
4. Review and Assist during Concept Development Phase for all projects (Limited Scope and Full scope project Delivery).
 - a. Attend meetings and act as Subject Matter Expert during Concept Development Phase.
 - b. Review and provide comments on the draft CD report.
 - c. Review and approve structural scope of work as part of CD process
5. Review and Evaluate the Project Technical Proposals and Assist in selecting the Design Consultants for multiple Bridge Rehabilitation/Replacement Projects as part of the Technical Evaluation Committee (TEC).
 - a. Attend meetings and act as Subject Matter Expert in the TEC.

- b. Review and Rank the Technical Proposals.
- c. Assist in the Consultant Selection Process

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

ACTIVITY: Bridge Screening and Scoping – 4510025 / 6100
MANAGER: Kimberly Sharp
UNIT: Bureau of Structural Design and Geotechnical Engineering

- 6. Review and Evaluate New Technologies and New Product Submittal Packages for inclusion in the Standard Specifications and Qualified Product List associated with Bridge Construction.
 - a. Review the technical information and Standard Details of the Products and Technologies.
 - b. Assist in developing Evaluation Plans.
 - c. Witness Field Demonstration and Conduct Field Visits for inspecting Product Performances.
 - d. Assist in developing Standard Specifications for the New Product to include in the QPL through the BDC Process.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

- 1. When condition of Deck/Superstructure of bridges drop below the criteria, Structural Evaluation group will develop the list of bridges. These bridges will be programmed after completion of screening.
- 2. When condition of bridges drop below the criteria, Structural Evaluation group will develop the list of bridges that need replacement. These bridges will be programmed after completion of screening.
- 3. When the sign structures in service come to the end of service life or some defect develops, the structural Evaluation will provide the list of these sign structures. These sign structures will be programmed to initiate Concept Development.
- 4. When Concept Development phase begins through Project Management, SME assistance will be provided.

TRAVEL:

Travel not anticipated for next fiscal year.

CONTRACTS:

None.

EQUIPMENT:

None.

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

ACTIVITY: Bridge Screening and Scoping – 4510025 / 6100
MANAGER: Kimberly Sharp
UNIT: Bureau of Structural Design and Geotechnical Engineering

STAFFING: Bureau of Structural Design and Geotechnical Engineering (Unit 509-13)

NO.	EMPLOYEE	TITLE	CY '25	CY '26
1	KIMBERLY SHARP	SES MANAGER	0.1	0.1
2	KUMAR SELVAKUMAR	SUPERVISING ENGINEER BRIDGE DESIGN	0.1	0.1
3	PARTH SHAH	SUPERVISING ENGINEER BRIDGE DESIGN	0.1	0.1
4	HARSHAD PATEL	PROJECT ENGINEER STRUCTURAL TRANS	0.1	0.1
5	HUMAYUN KABIR	PROJECT ENGINEER STRUCTURAL TRANS	0.1	0.1
6	MOHAMAD HASAN	PRINCIPAL ENGINEER STRUCTURAL BRIDGE DESIGN	0.1	0.1
7	MOHAMMED FASIHUDDIN	PRINCIPAL ENGINEER STRUCTURAL BRIDGE DESIGN	0.1	0.1
8	NICHOLAS FACAS	PRINCIPAL ENGINEER STRUCTURAL BRIDGE DESIGN	0.1	0.1
9	ANDREW BRANIN	PRINCIPAL ENGINEER STRUCTURAL BRIDGE DESIGN	0.1	0.1
10	MICHAEL WILCOX	PRINCIPAL ENGINEER STRUCTURAL BRIDGE DESIGN	0.1	0.1
11	JUAN JAVIER	SENIOR ENGINEER STRUCTURAL BRIDGE DESIGN	0.1	0.1
12	FARIA KASHEM	SENIOR ENGINEER STRUCTURAL BRIDGE DESIGN	0.1	0.1
13	ABDELLAH JBOUHA	ASSISTANT ENGINEER TRANSPORTATION	0.1	0.1
14	TASNIA KHAN	ASSISTANT ENGINEER TRANSPORTATION	0.1	0.1
15	PRAFULKUMAR BORAD	ASSISTANT ENGINEER TRANSPORTATION	0.1	0.1
16	ROBERT GAULD	ASSISTANT ENGINEER TRANSPORTATION	0.1	0.1
17	DONGHYUN KIM	ASSISTANT ENGINEER TRANSPORTATION	0.1	0.1
18	KIRAN RINGWALA	ENGINEER TRAINEE TRANSPORTATION	0.1	0.1
19	NISHTHA DESAI	ENGINEER TRAINEE TRANSPORTATION	0.1	0.1
20	SHIVAM PATEL	ENGINEER TRAINEE TRANSPORTATION	0.1	0.1
21	KIBRIA SAYEDUL	ENGINEER TRAINEE TRANSPORTATION	0.1	0.1
22	GAVIN SQUIRES	ENGINEERING TECHNICIAN 3	0.05	0.05
23	FRANCIS BURKE	ENGINEERING TECHNICIAN 3	0.05	0.05
24	PARTHIVKUMAR PATEL	ENGINEERING TECHNICIAN 1	0.05	0.05

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

ACTIVITY: Bridge Screening and Scoping – 4510025 / 6100
MANAGER: Kimberly Sharp
UNIT: Bureau of Structural Design and Geotechnical Engineering

STAFFING: (cont'd.) Bureau of Structural Design and Geotechnical Engineering (Unit 509-13)

NO.	EMPLOYEE	TITLE	CY '25	CY '26
25	ILYASS JIBBOU	ENGINEERING TECHNICIAN APPRENTICE	0.05	0.05
26	YEN CHU	ENGINEERING TECHNICIAN APPRENTICE	0.05	0.05
27	SANDIP PATEL	ENGINEERING TECHNICIAN APPRENTICE	0.05	0.05
28				
29				
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39				
40				
41				
42				
43				
44				
		TOTAL PERSON YEARS:	2.40	2.40

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Rockfall Hazard Management System -4510025/6000
MANAGER: Kim Sharp
UNIT: Geotechnical Engineering Unit

MISSION / OBJECTIVE:

Research and development of state-of-the-art asset management practices as it relates to rockfall hazard to support further growth and assimilation of the RHMS asset management program into the State of New Jersey's overall Asset Management System. The RHMS directs State investments to monitor and evaluate inventory of NJDOT jurisdiction State and Interstate rock cut slopes and program implementation of rockfall hazard mitigation measures to reduce the frequency and severity of rockfall hazard impacts and improve the safety of the traveling public and improve infrastructure resiliency.

GOALS/ACTIVITIES:

1. Research tools and technologies that can increase the efficiency and accuracy of data collection using the Rockfall Hazard Rating System (RHRS), as it directly applies to the geology and climatology of the state of New Jersey and providing a means to incorporate new inspection data recently collected for previously mitigated slopes (on-going goal)
2. Increase the proportion of NJDOT maintained highway rock cut slopes rated "moderate" or "low" in the RHMS (on-going goal)
3. Maximize the effectiveness of State investments in rockfall mitigation on NJDOT maintained roadways using innovative cost-effective methodologies to evaluate rock slope hazards, maintain thoughtful and practical project development practices and conduct risk assessments to identify potential barriers to reaching target milestones and goals (on-going goal)

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Research tools and technologies that can increase the efficiency and accuracy of data collection using the Rockfall Hazard Rating System (RHRS), as it directly applies to the geology and climatology of the state of New Jersey and providing a means to incorporate new inspection data collected for previously mitigated slopes (on-going goal)
 - a. Conduct internal review of current NJDOT RHMS and external State DOT's RHMS data collection practices for accuracy, efficiency, innovation and timeliness of methodologies
 - b. Research and compile historic and current climate data to review climate trends as they apply to the state of New Jersey. Develop methods for anticipating, monitoring and recording potential climate impacts on rock/soil slope asset conditions
 - c. Investigate and re-evaluate site conditions and RHRS rating factors at locations experiencing rockfall events
 - d. Further development of a new RHRS category for previously mitigated slopes within the NJDOT inventory.
2. Increase the proportion of NJDOT maintained highway rock cut slopes rated "moderate" or "low" in the RHMS (on-going goal)
 - a. Develop appropriate project priorities and recommendations for Asset Management
 - b. Screen and program rockfall mitigation projects for implementation through Capital Project Delivery Process.
 - c. Develop Rockfall mitigation alternatives for implementation through NJDOT Operations Engineering

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Rockfall Hazard Management System -4510025/6000
MANAGER: Kim Sharp
UNIT: Geotechnical Engineering Unit

- 3. Maximize the effectiveness of State investments in rockfall mitigation on NJDOT maintained roadways using innovative cost-effective methodologies to evaluate rock slope hazards, maintain thoughtful and practical project development practices and conduct risk assessments to identify potential barriers to reaching target milestones and goals (on-going goal)
 - a. Review industry applications of innovative technologies and cost-effective methodologies to maximize use of funding. Make recommendations as appropriate.
 - b. Continue to collaborate closely with Project Design Consultants during Concept Development and Preliminary Engineering to achieve Preliminary Preferred Alternatives that avoid conflicts and accelerate graduation to Construction.
 - c. Develop long-term funding projections. Modify as necessary.
 - d. Conduct risk assessments to identify any potential barriers that may inhibit progress of project development and advancement through the Capital Project Delivery Process
 - e. Continue to determine inefficiencies in data collection, slope monitoring, design, and construction activities to identify activities or practices that can be updated or streamlined
 - f. Utilize internal and external subject matter experts, maintenance crews, Information Technology staff, etc. to ensure the most appropriate and effective design and collaborative delivery of projects.

TRAVEL: N/A

CONTRACTS: N/A

EQUIPMENT: N/A

STAFFING:

Amanda McElwain, Geologist 4	0.4 Person-years
Christina Comuso, Geologist 2	0.4 Person-years
Robert Stinson, Geologist 2	0.2 Person-years
Steven Tapanes, Geologist 1	0.2 Person-years
Jeremiah Martin, Geologist Trainee	0.2 Person-years

TOTAL 1.4 Person-years

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Geotechnical Asset Management Planning - 4510025 / 6010
MANAGER: K. Sharp
UNIT: Geotechnical Engineering Unit

MISSION / OBJECTIVE:

Transportation infrastructure supports the nation's economic growth and enhances communities with an acceptable level of safety, comfort, and reliability. Significant capital investments and ongoing expenditure and resources are required to continue to provide efficient and safe transportation services. Under the requirements set forth by Fixing America's Surface Transportation (FAST), State Department of Transportation (DOTs) are required to develop a risk-based, performance-driven transportation asset management plan (TAMP) that informs and guides the transportation management strategies, investment decisions, and long-term expenditure forecasts. Apart from bridges and pavement assets, most DOTs have very limited database regarding their geotechnical infrastructure (i.e., retaining walls, noise walls, slopes). The development of a complete geotechnical asset management database will assist the Department in making sound investment decisions to improve performance goals, reduce risk of physical failures, and improve system resiliency under natural hazards as specified by Moving Ahead for Progress in the 21st Century Act (MAP-21), FAST, and INVEST in America Act.

GOALS/ACTIVITIES:

1. Develop a new geotechnical database system.
2. Collect and record geospatially based data to populate the new geotechnical asset management database.
3. Research and develop of GPS enabled and mapping referencing system.
4. Research and develop cost-effective tools and methodologies to aid in the updating of the newly developed database.
5. Establish the appropriate data linkages, and/or manual methods, to enable the optimized flow of information to support the Department's decision-making.
6. Implement and improve project and structure identification system.
7. Share the benefits of established and new transportation-related technology with other agencies using Technology Transfer programs

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. The implementation of the database system, including structure of the database and how the data elements will be stored
2. The development of the data collection system, including the input and output data elements and the methodologies for collecting the data. Attend related conferences, committee meetings, and workshops to learn about new relevant technologies with other stakeholders
3. The development of a referencing system for field data collection and reporting. Attend related conferences, committee meetings, and workshops to learn about new relevant technologies with other stakeholders.
4. The development of a desktop level review process and followed by systematic field inspection process.
5. The integration of the database with the Department's existing systems, including Bridge Management System (BMS), TAMS - Transportation Asset Management System, Project Management Reporting System (PMRS), Capital Investment Strategy (CIS), and Rockfall Hazard Management System (RHMS). Attend related conferences, committee meetings, and workshops to learn about new relevant technologies with other stakeholders.
6. The integration of the projects and structures in an interactive GIS-based referencing system.
7. The contributions and participation in exchange of information and technology transfer through outreach, webinars, workshops, conferences, and other users' groups.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Geotechnical Asset Management Planning - 4510025 / 6010
MANAGER: K. Sharp
UNIT: Geotechnical Engineering Unit

TRAVEL:

Event	Year 1	Year 2
Event	Year 1	Year 2
SuperPile 2025, June 2025, Cleveland OH (2 Staff)	\$6,000	N/A
S3: Slopes, Slides and Stabilization, Date TBD, Location TBD (2 Staff)	\$6,000	N/A
48th Annual Conference on Deep Foundations, October 2025, Nashville TN (2 staff)	\$6,000	N/A
Transportation Research Board (TRB) 2026 Annual Meeting January 2026 Washington, DC (2 staff)	N/A	\$5,315
SuperPile 2026, Date TBD, Location TBD (2 Staff)	N/A	\$6,000
S3: Slopes, Slides and Stabilization, Date TBD, Location TBD (2 Staff)	N/A	\$6,000
Total:	\$18,000	\$17,315

Total: \$35,315

CONTRACTS:

Development of Geotechnical Assets, estimated.

Yr1: \$2,000,000 Yr2: \$3,000,000

Total: \$5,000,000

EQUIPMENT:

STAFFING:

Yr1:

M. Hussein	Supervising Engineer	0.35	D. Spell	Assistant Engineer	0.45
M. Sazo	Principal Engineer	0.35	A. McElwain	Geologist 4	0.15
R. Farag	Principal Engineer	0.40	R. Stinson	Geologist 2	0.10
K. Thomas	Principal Engineer	0.35	C. Comuso	Geologist 2	0.15
A. Ibrahim	Assistant Engineer	0.40	S. Tapanes	Geologist 1	0.10
C. Chan	Assistant Engineer	0.40	J. Martin	Geologist Trainee	0.10
M. Kamal	Assistant Engineer	0.20			
TOTAL PERSON YEARS					3.50

Yr2:

M. Hussein	Supervising Engineer	0.20	D. Spell	Assistant Engineer	0.35
M. Sazo	Principal Engineer	0.20	A. McElwain	Geologist 4	0.10
R. Farag	Principal Engineer	0.20	R. Stinson	Geologist 2	0.10
K. Thomas	Principal Engineer	0.20	C. Comuso	Geologist 2	0.10
A. Ibrahim	Assistant Engineer	0.15	S. Tapanes	Geologist 1	0.10
C. Chan	Assistant Engineer	0.15	J. Martin	Geologist Trainee	0.10
M. Kamal	Assistant Engineer	0.15			
TOTAL PERSON YEARS					2.10

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Geotechnical Asset Management Planning - 4510025 / 6010
MANAGER: K. Sharp
UNIT: Geotechnical Engineering Unit

Overtime - \$45,000 per CY budget to utilize the subject matter experts that are sufficiently involved to ensure that the requirements of the program are properly implemented in every aspect of this system. This work involves after-normal-hours work and weekends due to high volume. After establishing the inventory database, the team will be doing advanced asset management, risk assessment management, enhanced deterioration modeling, preservation modeling, and projects.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Geotechnical Resource Program- 4510025 /6020
MANAGER: K. Sharp
UNIT: Geotechnical Engineering Unit

MISSION / OBJECTIVE:

Develop and support sustainable management policies to preserve and renew New Jersey Department of Transportation's (NJDOT's) infrastructure as a component of the State of New Jersey's Asset Management System and improve transportation infrastructure resiliency. The primary mission of the Geotechnical Resource Program (GRP) is to provide ongoing Geotechnical Engineering and Geology support to the NJDOT's Geotechnical Engineering and Geology Office to (1) preserve the condition of the current assets, (2) improve the performance and the resiliency of the system, (3) protect the system against extreme events and climate change, (4) implement sustainable infrastructure, and (5) optimize the State's available budget, resources, workforce, and investments.

GOALS/ACTIVITIES:

1. Develop tools and techniques to improve transportation project development and infrastructure lifecycle costs. (On-going goal)
2. Develop tools and techniques to forecast and mitigate transportation systems' negative environmental impacts. (On-going goal)
3. Develop tools and techniques for sustainable design and construction. (On-going goal)
4. Develop tools and techniques for preventative maintenance. (On-going goal)
5. Improve policies and operations. (On-going goal)
6. Provide Technology Transfer with training. (Year-specific goal)
7. Develop tools and techniques to identify and prioritize geotechnical information associated with NJDOT "mission critical" facilities and assets to support NJDOT capital program, operations, planning, environmental, safety and emergency management projects and programs. (On-going goal)

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Evaluate and refine existing NJDOT pay items and associated specification language to enhance the cost-effectiveness of transportation project development, while also developing tools to review the vulnerability and resiliency of structures entails creating assessment methods to evaluate how well buildings and infrastructure can withstand various challenges. These tools help identify weaknesses and areas for improvement, enabling the implementation of measures to enhance structural integrity and overall resilience, especially in the face of natural disasters and other threats.
2. Create Environmental Product Declarations (EPDs). These EPDs provide standardization information on the environmental impact of different geotechnical options, aiding in the New Jersey Department of Transportation (NJDOT) and other stakeholders in making well-informed decisions for infrastructure projects. By offering comprehensive insights into aspects such as material sourcing, energy use, emissions, and waste generation, EPDs empower decision-makers to choose geotechnical solutions that not only meet performance and safety standards, but also align with sustainability objectives.
3. Select, examine, and test cutting-edge environmentally sustainable materials and energy-efficient geotechnical techniques. This includes optimizing the design of foundations and retaining structures for enhanced efficiency. It also encompasses the management of geotechnical waste, entailing the development of methods for the responsible management and disposal of wastes materials generated during geotechnical construction and maintenance efforts. The primary emphasis of this goal is on promoting recycling and repurposing of geotechnical materials, with the aim of reducing the environmental footprint and preserving valuable resources whenever feasible.
4. Create tools and techniques for proactive maintenance, focusing on the identification of vulnerabilities and deterioration of geotechnical assets. This initiative includes the development of predictive maintenance models that leverage historical data and real-time monitoring to forecast maintenance requirements.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Geotechnical Resource Program- 4510025 /6020
MANAGER: K. Sharp
UNIT: Geotechnical Engineering Unit

Additionally, the program establishes thorough policies and guidelines to address risks associated with scour and erosion, promoting a comprehensive approach to maintenance and asset preservation.

5. Assist in the development of related design guidance, construction specifications and quality assurance test procedures to aid in the successful implementation of new methods and technologies.
6. Deliver training to NJDOT staff, and county/municipalities/consultant engineers. Select and coordinate webinars and training on geotechnical engineering and geology topics.
7. Inform NJDOT capital program, operations, planning, environmental, safety and emergency management program staff of “mission critical” facility and asset geotechnical concerns based on the research and findings identified in (accomplishments) 1 – 4.

TRAVEL:

CONTRACTS:

Yr1: \$300,000 Yr2: \$300,000

Total: \$600,000

EQUIPMENT:

STAFFING:

M. Hussein	Supervising Engineer	0.20	D. Spell	Assistant Engineer	0.20
M. Sazo	Principal Engineer	0.20	A. McElwain	Geologist 4	0.10
R. Farag	Principal Engineer	0.20	R. Stinson	Geologist 2	0.10
K. Thomas	Principal Engineer	0.20	C. Comuso	Geologist 2	0.10
A. Ibrahim	Assistant Engineer	0.20	S. Tapanes	Geologist 1	0.10
C. Chan	Assistant Engineer	0.20	J. Martin	Geologist Trainee	0.10
M. Kamal	Assistant Engineer	0.20			
TOTAL PERSON YEARS					2.10

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Concept Development – Environmental Support Services – 4510025 / 5111
MANAGER: Tina Shutz – Executive Manager
UNIT: Bureau of Landscape Architecture and Environmental Solutions, Office of Environmental Solutions and Office of Environmental Engineering

MISSION / OBJECTIVE:

To support the Division of Project Management in sustaining and improving New Jersey’s multi-modal transportation network by providing SME input and guidance early in the design process.

The Bureau of Landscape Architecture and Environmental Solutions (BLAES) identifies environmentally sensitive areas within each project study area and provides input on ways to avoid and or minimize impacts to the natural and man-made environments. These environmental parameters will be considered in the development of the Preliminary Preferred Alternative (PPA) while balancing the transportation needs identified in this phase. Based on sufficient environmental analysis, the appropriate NEPA classification will be determined (Categorical Exclusion, Environmental Assessment, or Environmental Impact Statement) for the PPA that will be prepared in the next project development phase. BLAES also will complete the NEPA document for projects that are Limit Scope.

GOALS/ACTIVITIES:

1. Provide feedback during the screening phase for those bridge and pavement projects proposed for advancement via the limited scope process to reveal any fatal flaws and identify constraints. Ensure thorough and comprehensive environmental constraint analysis is conducted during the screening phase which is consistent with the FHWA planning and environmental linkages approach for CD projects.
2. Environmental screenings are conducted for each project identified by the Division of Project Management under ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2024 for 4510023/5980. Criteria evaluated include wetlands, flood plains, cultural resources, 4(f) properties, EJ populations, among others.
3. Prepare Categorical Exclusion documents for limited scope projects that advance directly from CD to FD. These projects are identified by DPM.
 - i) Conduct field review as needed.
 - ii) Complete appropriate technical studies/analysis as required for NEPA compliance.
 - iii) Seek review agency, stakeholder and public comments as appropriate to evaluate the PPA.
 - iv) Prepare appropriate NEPA and other (Section 4(f), MOA, etc.) documentation required to define environmental constraints that must be considered in Final Design
4. For Bridge projects, conduct sufficient Hydrology and Hydraulic calculations within the CD phase to best guide the alternative analysis and selection to avoid time and money costs related to changes to project scope.
 - i) Select the appropriate alternative that will comply with the NJ Department of Environmental Protection Rules.
 - ii) Determine whether terrestrial crossing will need to be considered under these Rules.
5. Ensure socioeconomic factors, particularly community concerns related to Environmental Justice, livability, sustainability, and quality of life issues are identified and considered in the initial project development phases.
6. Determine the appropriate environmental document consistent with NEPA requirements for the PPA.
7. Ensure appropriate community involvement has been initiated to fulfill NEPA requirements.
8. Ensure community involvement is conducted in compliance with the NJDOT Public Involvement Plan.
9. Participate in Project Meetings to understand design decisions that are being made and to provide timely input regarding environmental concerns and constraints.
 - i) Ensure the avoidance and/or minimization of impacts to environmental resources is considered during project development, in accordance with local, state and federal environmental regulations.
 - ii) Ensure mitigation requirements for impacts to environmental resources are understood and included in the project during project development to facilitate obtaining approvals from permitting agencies.

- iii) Provide input regarding the project schedule (PE and FD) based on required environmental approvals and coordination with permitting agencies.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Prepare environmental screenings for inclusion in CD reports for those FY 2025 projects identified by DPM (Goals #1 and 2)
2. Identify appropriate bridge PPA that will comply with NJDEP Flood Hazard Regulations. (Goals# 3 and 4)
3. Identification of probable NEPA classifications for PPAs (Goals #5, 6, 7 and 9)
4. Prepare NEPA documents for the 2025 Limited Scope projects identified by DPM.(Goal 3 and 8)

TRAVEL:

N/A

CONTRACTS:

N/A

EQUIPMENT:

N/A

STAFFING:

See below:

OES, OEE and OLA Year 1

Martinez-Collins, Monica, Env. Specialist Train.	.35py	Kuntz, Rob Lands. Des. 3	.10py
Bevans, K., Env. Engineer 4	.25py	Lisa, Galen, Assist. Eng.	.25py
Bird, Jarret, Env. Specialist 1	.35py	Maher, Brian, Lands, Des. 3	.10py
Dill-Wendrzycki, Sue, Env. Specialist 3	.35py	McSulla, Jessica, Lands. Des. Train.	.10py
Bird, Robert, Env. Specialist 4	.35py	Metzler, Jesse, Env. Specialist 2	.35py
Blick, Sandra, Section Chief Engineering	.10py	Mikusa, J. P., Env. Specialist 4	.35py
Boenning, Brittin, Lands. Des. 1	.10py	Mousa, Domenica, Env. Specialist 2	.35py
Chan, Yat, Lands. Des. 1	.10py	Nguyen, Henry, Asst. Engineer Trans.	.25py
Cheney, Amber, Sect. Chief Env.	.05py	Pajak, Sean, Env. Specialist 1	.35py
Cyr, Philip, Landscape Designer 3	.10py	Stork, Melissa, Env. Specialist 1	.35py
Davis, Lana, Landscape Designer 2	.10py	Patel, Kairavi, Env. Specialist 3	.35py
Dekovitch, Rachel, Env. Specialist 4	.35py	Popolo, Gabrielle, Land. Des.1	.10py
Doherty, Morgan, Env. Specialist 3	.35py	Rey, David, Assist. Eng.	.10py
Dolge, Robert, Landscape Designer 3	.35py	Rodriguez, Smerline, Lands. Des. 1	.10py
Donne, Irene, Env. Specialist 2	.35py	Swanton, Kristin, Env. Specialist 3	.35py
Eelman, J., Principal Env. Engineer	.25py	Townsend, Ian, Env. Specialist 2	.35py
Fairfax, Brenna, Sect. Chief Env.	.05py	Vaidya, Charu, Env. Specialist 3	.35py
Ferris, Ariela, Env. Specialist 3	.35py	Wilityer, M., Env. Specialist 3	.35py
Henry, Sean, Princ. Engineer Trans.	.25py	Wright, Nicholas, Landscape Designer 1	.10py
Venkatesulu, Benjamin Env. Serv. Train	.35py	Patel, Monica	.25py
Joseph Russell Env. Serv. Train	.35py	LeBon, Hannah, Env. Serv. Train	.35py

Total Person Years: 9.55 Current vacancies: 3 Engineers, 2 Env. Spec. , 1 Lands. Des.

General instructions: DO NOT change format. Enter all text in standard 10 pt. Times New Roman font.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: New Jersey Scenic Byway Program Management- 4510021 / 5600
MANAGER: Tina Shutz
UNIT: Bureau of Landscape Architecture and Environmental Solutions

MISSION / OBJECTIVE:

To work with the byway groups on ways to increase awareness of the individual New Jersey Scenic Byways and in developing marketing resources, branding, and tools for the Program and the individual byway organizations. Expand on the sustainability of the NJ Scenic Byways Program and the individual byway organizations with the improvement of a strong network and partnerships that are more effective. Work with the byways' sponsors on matters relating to the role of intermodal transportation in facilitating mobility with respect to travel and tourism activities; and to ensure compliance with FHWA requirements.

GOALS/ACTIVITIES:

1. Show the benefit of the NJ Scenic Byways Program and the individual byways in building stronger long-term economic communities through byway marketing and promotion.
 - a. With the assistance of a consultant, support a website for the NJ Scenic Byway organizations to use to expand awareness and usage of the program and of the individual byways.
 - b. Communicate with the NJ Tourism organizations regarding the opportunity to promote the NJ Scenic Byways and expand on the knowledge of what the individual byways have to offer.
2. Advance the sustainability of both the program and individual byways and ensure endurance and energy to strengthen the NJ Scenic Byways Program.
 - a. Maintain the role of the Scenic Byway Advisory Committee and hold two meetings per year.
 - b. Continue to work with the byway organizations with the development of partnerships that can assist with sustainability related priorities for the individual byways and resources needed by the byway organizations to address these priorities.
 - c. Maintain ongoing conversations with individual byway groups as they update their priorities and goals in their Corridor Management Plans.
3. Assist the state byways in facilitating mobility with respect to travel and tourism activities.
 - a. Provide information, advice, and recommendations to the byways on matters relating to the role of intermodal transportation in facilitating mobility with respect to travel and tourism activities.
 - b. Assist state designated byway with signing its route.
 - c. Assist new designated byways with adding "national" logo to wayfinding signs.
 - d. Inform MPOs of multi-modal mobility needs or concerns identified through the Scenic Byways Program process.
4. Complete and close the Scenic Byway Projects awarded through previously received National Scenic Byway Grant Cycles.
 - a. Delaware River Scenic Byway: Land Acquisition – Devil's Tea Table.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

- 1)
 - a. Continue to support website for use by the NJ Scenic Byway Organizations.
 - b. Ongoing communication with NJ Tourism Organizations for promotion of NJ Scenic Byways.
- 2)
 - a. Continue to hold 2 meetings per year with the Scenic Byway Advisory Committee.
 - b. Advance conversations with byway groups on maintaining sustainability and creating partnerships that can benefit their byways.
- 3) Assist with signing the byways for state and National Scenic Byway Designation.
- 4) Complete and close out the last remaining project from the federal funded grants.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: New Jersey Scenic Byway Program Management- 4510025 / 5600
MANAGER: Tina Shutz
UNIT: Bureau of Landscape Architecture and Environmental Solutions

TRAVEL:

None

CONTRACTS:

None

EQUIPMENT:

None

STAFFING:

John Mikusa Environmental Specialist 4, Environmental Solutions .25 PY

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Emergency Response Planning (4510025 / 5500)
MANAGER: Robert M. Burd
UNIT: Office of Emergency Management, Security, and Response

MISSION / OBJECTIVE:

To build, sustain and improve New Jersey Department of Transportation's preparedness to address all hazards (natural, man-made, or technological) through each of the Emergency Management and Homeland Security mission areas (Prevention, Protection, Response, Recovery, and Mitigation) as well as Risk Management.

GOALS/ACTIVITIES:

1. Maintain and improve NJDOT's Continuity of Operations program to support the Department's ability to operate during a crisis. (On-Going Accomplishment)
 - a. Update the Continuity of Operations Plan
 - i. Coordinate a planning team with representatives from key units within the Department.
 - ii. In consultation with Human Resources, develop a process to regularly update the plan with the business essential status for Department personnel.
 - iii. Continue to have each major business unit to complete an identification of essential supporting activities and staff.
 - iv. Conduct a Business Impact Analysis of each business unit
 - v. Continue to develop a plan for support resources in coordination with Facilities and Information Management.
 - b. Conduct training of key personnel
 - i. Update and enhance a COOP training plan for the following groups at a minimum:
 1. Executive Policy Team
 2. COOP Planning Team
 3. Emergency Relocation Group personnel
 4. Essential Personnel
 - c. Conduct a Table Top exercise with key personnel
 - i. Develop a reasonable scenario to allow Executive Policy Team personnel to think through challenges after the implementation of the COOP.
 - ii. Prepare After-Action Report (AAR) and Improvement Plan (IP)
 - iii. Implement corrective actions consistent with IP
 - d. Conduct Drills with business units.
 - i. Exercise the activation of the Emergency Relocation Group
 - ii. Prepare After-Action Report (AAR) and Improvement Plan (IP)
 - iii. Implement corrective actions consistent with IP
 - e. Develop a resource support annex for the plan
 - i. Identify needed equipment resources for implementation of the plan.
 - ii. Identify gaps in equipment resources and procure additional equipment.
 - iii. Develop a maintenance and control plan for the equipment resources
2. Maintain and improve New Jersey's Reverse Lane/Contraflow Plans to support the evacuation of State residents prior to significant emergency events. (On-Going Accomplishment)
 - f. Update Contraflow/Reverse Lane Plans.
 - i. Involve local, county, MPO and state level stakeholders into update planning group.
 - ii. Develop an Improvement Plan for After Action Review documents.
 - iii. Utilize Improvement Plan to identify actions to take during plan updates.
 - g. Conduct Contraflow plan training of the following groups at a minimum:
 - i. Senior Executives
 - ii. Operations personnel

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Emergency Response Planning (4510025 / 5500)
MANAGER: Robert M. Burd
UNIT: Office of Emergency Management, Security, and Response

- iii. Transportation Mobility personnel
 - h. Conduct a Full Scale exercise of the plans
 - i. Participation from NJ State Police, NJ Turnpike Authority, South Jersey Transportation Authority, NJ Department of Corrections, NJ Transit, and affected counties.
 - ii. Prepare After-action Report (AAR) and Improvement Plan (IP)
 - iii. Implement corrective actions consistent with IP
 - i. Research number and location of assets in support of the plan
- 3. Update NJDOT Emergency Operations Plan (EOP) to increase the Department's preparedness for emergency response. (On-Going Accomplishment)
 - j. Review and revise the current NJDOT EOP to be consistent with the updated State EOP.
 - k. Develop and implement an annual review process and schedule to ensure timely updates to the plan as needed.
 - l. Incorporate an Active Shooter Emergency Action Plan
 - m. Incorporate the Moveable Bridge Emergency Action Plans
 - n. Incorporate the State-Owned Dam Emergency Action Plans
- 4. Update the Delaware River Emergency Action Plan (Route 29) to advance the department's preparedness for flooding along the Route 29 corridor. (On-Going Accomplishment)
 - o. Involve all stakeholders in the review and update of the plan.
 - p. Develop training for key stakeholders.
 - q. Develop a Table Top Exercise to evaluate the components of the plan.
 - r. Develop an Improvement Plan from the Table Top Exercise information.
 - s. Develop a dedicated resources plan similar to the concept used in the Contraflow plans.
- 5. Develop a strategy for a Statewide Evacuation Annex as part of the State Emergency Operations Plan and Regional initiatives. (On-Going Accomplishment)
 - a. In collaboration with NJ Office of Emergency Management, develop a State Evacuation Task Force
 - b. Develop a strategy to create a statewide evacuation protocol
 - c. Use previous and currently existing plans to identify a common operating strategy.
 - d. Develop standardized evacuation zones to support emergency plans and response.
 - e. Participate in regional emergency planning effort with other states, contiguous to New Jersey, and MPOs.
- 6. Coordinate with NJDOT Aeronautics (Unmanned Aerial System – 4510025 / 8500) to explore use of drones to conduct aerial surveys of hazard identification and document post-storm damage to support federal repair funding requests, inform future vulnerability analyses, support repair and replacement design efforts.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Update NJDOT's Continuity of Operations Plan
2. Update the Contraflow plans
3. Update the Emergency Operations Plan

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Emergency Response Planning (4510025 / 5500)
MANAGER: Robert M. Burd
UNIT: Office of Emergency Management, Security, and Response

TRAVEL:

National Hurricane Conference: \$ 2,240 (1 Attendee)
 April 14-17, 2025

- Registration: \$475
- Airfare, Baggage & Fees: \$550
- Taxi: \$250
- Hotel: \$632
- Meals/Incidentals: \$333

All-Hazard Incident Management Teams Association Conference: \$1849 (1 Attendee)
 2025 (specific date not posted)

- Registration: \$500
- Airfare, Baggage & Fees: \$425
- Taxi: \$250
- Hotel: \$ 492
- Meals/Incidentals: \$407

CONTRACTS:

None.

EQUIPMENT:

None.

STAFFING:

Name	Title	PY
Elizabeth Falcon	Principal Transportation Analyst - EMC	0.2
Eugene Eng	Senior Transportation Analyst – EMC	0.8
Muhammad Khan	Senior Transportation Analyst - EMC	0.8
Robert McGeehan	Senior Transportation Analyst - EMC	0.1
Michael Macari	Senior Transportation Analyst - EMC	0.1
James Racanelli	Senior Transportation Analyst – EMC	0.1
	Total	2.1

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Mobility Engineering - Concept Development – 4510025 / 5300
MANAGER: John Longworth
UNIT: Mobility Engineering and Operations, Transportation Mobility Operations.

MISSION / OBJECTIVE:

Develop solutions to transportation problem statements that result in a project that can proceed through the project delivery process in a timely manner and without delays.

Deliver well-defined and well-justified Purpose and Need Statements focusing on the primary transportation requirement to be addressed and concludes in the selection of a Preliminary Preferred Alternative (PPA) that addresses a problem using advanced technology solutions that are cost effective, considerate of the environment, safe, secure and preserve existing systems that are supported by the community.

GOALS/ACTIVITIES:

Concept Development (CD) Studies assess the present and future transportation needs of a specified roadway segment or area and define recommended physical and/or operational concepts that should be pursued to satisfy those needs and achieve sustainable solutions. The CD Phase will deliver a well-defined and well-justified Purpose and Need Statement focusing on the primary transportation need to be addressed and concludes in the selection of the Preliminary Preferred Alternative (PPA). The following major elements can be included in the CD Process: evaluation of needs, analysis of physical deficiencies, early and intensive public involvement, environmental screening using the FHWA planning and environmental linkages approach, integration of the federal Congestion Management process, analyses of multi-modal alternatives, definition of potential concepts and/or complementary strategies as well as staging and phasing opportunities, and order of magnitude construction cost estimate. As part of this pipeline process, the Capital Program Screening Committee and the Capital Program Committee ultimately will endorse a project to advance from CD to Final Design Engineering. FHWA is part of the review and approval process for CD reports. FHWA approval of the CD report is required for the Capital Program Committee (CPC) to advance the project to Final Design.

Concept Development studies will be conducted on proposed Intelligent Transportation Systems (ITS)/Wrong way Driving and Smart & Connected Corridor (CAV) projects that are generated from Transportation Mobility/Mobility Engineering. The process will be achieved with a detailed review of the purpose and need, determining fatal flaws and uncover any basic information to inform necessary decisions about the scope of work. The CD will also evaluate any environmental impact, constructability, order of priority, schedule and effectiveness of the PPA. Major elements of the CD studies are data collection, field investigations, cost estimating, internal coordination with subject matter experts and development of scope of work.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Mobility Engineering - Concept Development – 4510025 / 5300
MANAGER: John Longworth
UNIT: Mobility Engineering and Operations, Transportation Mobility Operations.

In summary goals are as follows:

- 1) Assign task orders to selected consultants to produce Concept Development reports. All CD studies will have a well-defined Purpose & Need Statement, select a PPA, and provide a final CD report while following the TSM Limited Scope Project Delivery Process and all its associated activities/tasks. If specific additional activities are needed that are not part of the TSM Limited Scope process then the corresponding activities from the Capital Program Management Delivery Process will be added to the scope.
- 2) In-house staff to provide all necessary support and reviews for successful progression and completion of all CD studies.
- 3) If applicable, certain projects may just require CD checklists in lieu of formal CD reports which will be conducted with in-house staff if resources are available.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

- 1) Request for Proposals and assign work to selected consultants via task orders or project specific to produce Concept Development reports following the TSM Limited Scope Project Delivery Process.
- 2) Review reports/other deliverables from consultants on the completed CD work and provide all required support.
- 3) Conduct in-house CD checklists for projects not requiring the work effort of a consultant.

TRAVEL:

ITSNJ, ITS America/World Congress,
Total Travel Expenses CY 2025: \$8,890

CONTRACTS:

Multiyear contract to prepare Concept Development studies: 1st year - \$1,500,000 / 2nd year - \$1,500,000.

EQUIPMENT: None

SALARIES CY 2025: \$243,321

TOAL BUDGET CY 2025: \$1,752,212

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Mobility Engineering - Concept Development – 4510025 / 5300
MANAGER: John Longworth
UNIT: Mobility Engineering and Operations, Transportation Mobility Operations.

STAFFING:

CY 2025				
NAME	TITLE	Person Years	Actual Salary	Total Billable Salary
Patel, Bindesh	Supervising Engineer, Electrical	0.05	\$ 126,324.75	\$6,316
Martinez, Jonathan	Contract Administrator 3	0.05	\$ 127,744.53	\$6,387
Sampat, Padma	Contract Administrator 2	0.05	\$ 108,618.82	\$5,431
Ononiwu, Charles	Project Engineer, Electrical	0.05	\$ 119,262.50	\$5,963
Romero, Jose	Project Engineer, Electrical	0.05	\$ 102,298.44	\$5,115
Patel,Hirenkumar	Principal Eng. Electrical	0.1	\$ 96,344.78	\$9,634
Ajibaye, Olajide	Principal Eng. Electrical	0.1	\$ 100,008.79	\$10,001
Ahmed, Ridwan	Senior Eng. Electrical	0.1	\$ 90,202.95	\$9,020
Daniel, Joel	Senior Eng . Electrical	0.1	\$ 90,202.95	\$9,020
Patel,Mayankkumar	Assistant Engineer, Electrical	0.1	\$ 73,101.45	\$7,310
Saad, Ahmed	Assistant Engineer, Electrical	0.1	\$ 73,101.45	\$7,310
Abu Raida, Fady	Engineer Trainee Transportation-Electrical	0.05	\$ 64,261.64	\$3,213
Girgis, Mark	Engineer Trainee Transportation-Electrical	0.05	\$ 66,739.28	\$3,337
Malik,Fatima	Engineer Trainee Transportation-Electrical	0.05	\$ 64,261.64	\$3,213

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Project Management of Contracts – 4500025 / 7021
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

MISSION / OBJECTIVE:

The mission of the NJDOT Bureau of Research (BoR) is to help transportation professionals address complex challenges that affect the safety, mobility and accessibility of the state's residents, workers, visitors, and businesses. To accomplish this mission, BoR staff work directly with university and research professionals to develop innovative, cost-effective solutions that will ultimately enhance the quality and cost effectiveness of the policies, practices, standards, and specifications that are used in planning, building and maintaining New Jersey's transportation infrastructure. The BoR is also charged with satisfying NJDOT's technology transfer needs as well as fostering a strong culture of innovation through the activities of the New Jersey State Transportation Innovation Council. Lastly, the BoR acts as a liaison to various national transportation entities (TRB, AASHTO, other State DOTs) through participation in national research activities such as project panels, committees, peer exchanges, and surveys.

GOALS/ACTIVITIES:

The BoR's goals to meet our mission/objective are as follows:

Ongoing Goals:

1. NJ Transportation Research & Implementation
2. National Transportation Research & Implementation
3. Innovation Implementation & Development
4. Technology & Knowledge Transfer
5. Local Technical Assistance
6. Compliance with State & Federal Regulations

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Manage existing research & implementation studies carried over from prior work program years through to timely federal close-out; solicit new research ideas/needs via online portal to be vetted and developed into RFPs; award new research studies and implementation projects that align with NJDOT and FHWA strategic goals. SEE INDIVIDUAL PROJECT THUMBNAILS
2. Manage national research activities such as FHWA pooled fund studies, TRB technical services, AASHTO technical products, provide technical expertise to TRB's NCHRP projects, participate in AASHTO Research Advisory Committee activities (i.e. monthly calls, Summer Meeting, and High Value Research Competition), participate in other State DOT research peer exchanges; complete all received national transportation surveys.
3. Manage, organize and facilitate NJ STIC Tri-Annual Meetings; review and submit FHWA-required reports for EDC and innovation grant projects (AID, STIC Incentive); participate in EDC Summit to select and develop list of innovations NJDOT will commit to implementing; maintain and update NJ STIC's webpage with current activities; assist applicants with grant applications; develop a strategic plan for innovation; develop framework for what will become an annual innovation report.
4. Organize and facilitate Tech Talks on topics solicited by NJDOT subject matter experts; maintain and update NJDOT's Technology Transfer website; organize and facilitate the Annual Research Showcase where awards are presented for outstanding student, implementation, and innovation; administer the in-house NJDOT transportation research library by offering updated 21st Century library services.
5. Train NJDOT and non-NJDOT individuals on topics selected by NJLTAP and NJDOT; provide technical assistance to municipal agencies; facilitate a communication and outreach strategy; complete reporting and evaluation activities in accordance with goals.
6. Administration of all university and consultant contracts in accordance with applicable rules, regulations, and grants accounting principles; grants management training for staff.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Project Management of Contracts – 4500025 / 7021
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

TRAVEL:

Anticipated project-specific travel is listed in individual project thumbnails.
Anticipated general travel is listed in the Technology Transfer Program thumbnail.

CONTRACTS:

Various Institutes of Higher Education

New CY 2025-2026 Studies	(CY 2025) \$475,000	(CY 2026) \$100,000
Continuing Studies	(CY 2025) \$900,531	(CY 2026) \$595,000
TOTAL	\$1,375,531	\$695,000

EQUIPMENT:

Any anticipated project-specific equipment is listed in individual project thumbnails.

STAFFING:

TBD*	Administrative Analyst 4	0.9 person-year
S. Potapa	Project Engineer	0.9 person-year
P. Ukpah	Principal Engineer	0.9 person- year
G. Venkiteela	Research Scientist 1	0.45 person-year
K. Patel	Assistant Engineer	0.9 person-year
Devyn Cordero	Program Specialist 2	0.9 person-year
S. Shah	Contract Administrator	1.0 person-year
TBD*	Senior Engineer	<u>0.45 person-year</u>
	Total	6.4 person-years

*position will be filled prior to January 1, 2025.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: National Transportation Research Support – 4500025 / 7204
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

MISSION / OBJECTIVE:

The mission of the NJDOT Bureau of Research (BoR) is to help transportation professionals address complex challenges that affect the safety, mobility and accessibility of the state's residents, workers, visitors, and businesses. To accomplish this mission, BoR staff work directly with university and research professionals to develop innovative, cost-effective solutions that will ultimately enhance the quality and cost effectiveness of the policies, practices, standards, and specifications that are used in planning, building and maintaining New Jersey's transportation infrastructure. The BoR is also charged with satisfying NJDOT's technology transfer needs as well as fostering a strong culture of innovation through the activities of the New Jersey State Transportation Innovation Council. Lastly, the BoR acts as a liaison to various national transportation entities (TRB, AASHTO, other State DOTs) through participation in national research activities such as project panels, committees, peer exchanges, and surveys.

GOALS/ACTIVITIES:

1. Support and invest in (Title 23 Section 505) state, public Universities that are members of University Transportation Consortium (UTCs). The UTC Program both sustains existing and establishes new and vital initiatives in transformational research, education and workforce development, and technology transfer that benefit the U.S. traveling public, freight movement, and the safety and efficiency of the U.S. transportation system. These UTCs will concentrate their research in seven focus areas: 1. Improving Mobility of People and Goods; 2. Reducing Congestion; 3. Promoting Safety; 4. Improving the Durability and Extending the Life of Transportation Infrastructure; 5. Preserving the Environment; 6. Preserving the Existing Transportation System; and 7. Reducing Transportation Cybersecurity Risks.

New Jersey UTC CONSORTIUM MEMBERS

Region 2 Center for Social and Economic Mobility for People and Communities through Transportation

- New Jersey Institute of Technology
- Rutgers University

Region 2 Center for Advanced Infrastructure and Transportation (CAIT)

- Rutgers University
- New Jersey Institute of Technology
- Rowan University

National Center for Infrastructure Transformation (focus area – Improving the Durability and Extending the Life of Transportation Infrastructure)

- Rutgers University

Tier 1 Connected Communities for Smart Mobility Towards Accessible and Resilient Transportation for Equitably Reducing Congestion

- Rutgers University

2. Support and invest in Federal Highway Administration (FHWA) Pooled Fund (TPF) Program. FHWA administers the TPF Program as a means for interested States, FHWA, and other organizations to partner when significant or widespread interest is shown in solving transportation-related problems. By pooling funds and expertise, participants develop innovative solutions at a lower cost while extending the reach and impact of their research.
3. Support and invest in Transportation Research Board (TRB) Core Program Services
4. Support and invest in the National Cooperative Highway Research Program (NCHRP)
5. Support and invest in AASHTO Technical Services Products

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: National Transportation Research Support – 4500025 / 7204
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Provide financial and technical support to in-state, public institutes of higher education that are members of national-level USDOT funded UTCs. Support includes letters of support, funding, and/or technical support.
2. Commit funds to various FHWA TPF projects (see accompanying table) that are relevant to NJDOT, process transfers of funding to FHWA.
3. Pay annual invoice for TRB Core Program Services on behalf of the NJDOT Commissioner
4. Provide financial support to TRB’s NCHRP by paying the annual invoice, disseminate NCHRP products throughout the Department for use, house NCHRP products in our Research Library, solicit votes from SMEs to inform NCHRP of national priority topics, solicit NCHRP project topics from SMEs, solicit and nominate project panel members, provide technical input on NCHRP projects by serving as panel members.
5. Bureau acts as an AASHTO Gatekeeper and provides a central location for physical and digital copies of AASHTO products, providing library services and access to AASHTO products, and provides financial support to AASHTO by paying the annual invoices for the following Technical Services Products on behalf of NJDOT:
 - a. Technical Training Solutions (formerly TC3)
 - b. Innovation Management (formerly AII)
 - c. Product Evaluation and Audit Solutions (formerly NTPEP)
 - d. Census Transportation Solutions (ACTS)

TRAVEL:

N/A

Travel associated with national transportation research or products is either covered by TRB/NCHRP/AASHTO or it is listed in individual thumbnails and/or the Technical Transfer program thumbnail.

CONTRACTS:

N/A – The below funds are not expended via contracts, but rather they are transfers of funds directly to other agencies.

University Transportation Consortium Support	(CY 2025) \$200,000	(CY 2026) \$200,000
FHWA Pooled Fund Projects (see accompanying table)	(CY 2025) \$613,033	(CY 2026) \$613,033
TRB Core Program Services Dues	(CY 2025) \$225,000	(CY 2026) \$235,000
NCHRP Annual Contribution	(CY 2025) \$1,500,000	(CY 2026) \$1,600,000
AASHTO Technical Services Products	(CY 2025) \$101,000	(CY 2026) \$101,000
TOTAL	\$ 2,639,033.00	\$ 2,749,033.00

EQUIPMENT:

N/A

STAFFING:

N/A

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: NJDOT Innovation Program – 4500025 / 7205
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

MISSION / OBJECTIVE:

The mission of the NJDOT Bureau of Research (BoR) is to help transportation professionals address complex challenges that affect the safety, mobility and accessibility of the state’s residents, workers, visitors, and businesses. To accomplish this mission, BoR staff work directly with university and research professionals to develop innovative, cost-effective solutions that will ultimately enhance the quality and cost effectiveness of the policies, practices, standards, and specifications that are used in planning, building and maintaining New Jersey's transportation infrastructure. The BoR is also charged with satisfying NJDOT’s technology transfer needs as well as fostering a strong culture of innovation through the activities of the New Jersey State Transportation Innovation Council. Lastly, the BoR acts as a liaison to various national transportation entities (TRB, AASHTO, other State DOTs) through participation in national research activities such as project panels, committees, peer exchanges, and surveys.

GOALS/ACTIVITIES:

NJDOT’s mission of “improving lives by improving transportation” drives innovation at the Department. The goal of NJDOT’s Innovation Program is to gather and evaluate new ideas while implementing and rapidly deploying proven innovative products, systems, policies, practices, standards, specifications, procedures, and technologies (original or new to NJDOT) that create valued outcomes. The Innovation Program will pilot the latest technologies and innovations to adapt to changing conditions and environments, implement innovations to enhance the quality of life for residents and the traveling public, allow for experimentation and foster a safe to fail environment, integrate innovation into NJDOTs culture, and provide opportunities to collaborate to broaden the impact of innovations.

1. Lead and administer the NJ Statewide Transportation Innovation Council (NJ STIC) Program
2. Seek out, apply for, manage, and oversee the administration of innovative special grants.
3. Evaluate new and emerging technologies & products and provide financial support to NJDOT for testing and demonstration.
4. Lead and administer innovation communication and outreach activities.
5. Develop and implement a department-wide Innovation Grant Program.
6. Research Project Management

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. **NJ STIC** - Plan, organize and facilitate three NJ STIC Planning Meetings and three NJ STIC Tri-Annual Meetings; review and submit FHWA-required reports for the Every Day Counts Program as well as for innovation grant projects like AID and STIC Incentive; participate in EDC Summit activities such as developing a list of innovations NJDOT will commit to implementing; maintain and update the NJ STIC webpage with current activities; assist applicants with STIC Incentive grant applications.
2. **Special Grants** – Lead and manage the Low-Carbon Transportation Materials grant for the use of substantially low-carbon materials and products on construction projects. The NJDOT shall undertake a comprehensive program to use construction materials and products that have “substantially lower1” levels of embodied GHG emissions associated with all relevant stages of production, use, and disposal as compared to the estimated industry averages of similar materials or products. The NJDOT will develop specification language and conduct identification activities needed to demonstrate these LCTM materials are appropriate for use on Federal-aid construction projects. Additionally, NJDOT will contract to construct projects using LCTMs and will establish procedures to monitor and report the performance of those projects after construction. The NJDOT program will address asphalt, concrete(cement), steel, and glass. NJDOT’s program will be implemented through several Tasks and the processes associated with each Task will be documented using Implementation Progress Reports (IPRs). These IPRs shall be submitted to the FHWA for approval before beginning any work.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: NJDOT Innovation Program – 4500025 / 7205
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

3. **New & Emerging Technologies** - Manufacturers and vendors of construction materials are encouraged to submit new technologies and products to NJDOT for evaluation. The Bureau will review, evaluate, test, and demonstrate new technologies, products, processes, and innovations designed for bridge and roadway construction and maintenance. Recommendations will then be made by the Bureau regarding whether or not Standard Specifications should be developed. A comprehensive database, consisting of all items that receive a formal evaluation, will be maintained.
4. **Communication & Outreach** – Establish and administer communication and outreach activities such as task forces, working groups, special interest groups, newsletters, articles, social media posts. These activities will be for the purpose of promoting collaboration among and between NJDOT divisions and units, open exchange of information and knowledge, encouraging and inspiring staff to think critically and innovatively, and to add value to an efficient, safe, and sustainable transportation system.
5. **NJDOT Innovation Grant Program** – Develop a grant program that will empower individuals to contribute their innovative ideas and solutions to address the challenges and opportunities in the realm of transportation. The program will be designed to encourage out-of-the-box thinking and innovative approaches to address current and future transportation challenges. Fostering creativity and integration innovation into NJDOT’s culture will lead to breakthroughs which can positively impact the way we move people and goods.
6. Manage innovative research & implementation studies through to timely federal close-out.

TRAVEL:

Anticipated travel is listed in the Technology Transfer (T2) & Implementation Program thumbnail. The T2 contractor acts as the Bureau’s travel coordinator.

CONTRACTS:

University Innovation Program Support	(CY 2025) \$400,000	(CY 2026) \$400,000
New Technologies & Product Investment	(CY 2025) \$100,000	(CY 2026) \$100,000
TOTAL	\$500,000	\$500,000

EQUIPMENT:

N/A

STAFFING:

Giri Venkiteela	Research Scientist 1	0.45 person-year
TBD*	Senior Engineer	<u>0.45 person-year</u>
	Total	0.9 person-year

*position will be filled after January 1, 2025.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Technology Transfer and Implementation Program – 4500025 / 7030
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

MISSION / OBJECTIVE:

The mission of the NJDOT Bureau of Research (BoR) is to help transportation professionals address complex challenges that affect the safety, mobility and accessibility of the state's residents, workers, visitors, and businesses. To accomplish this mission, BoR staff work directly with university and research professionals to develop innovative, cost-effective solutions that will ultimately enhance the quality and cost effectiveness of the policies, practices, standards, and specifications that are used in planning, building and maintaining New Jersey's transportation infrastructure. The BoR is also charged with satisfying NJDOT's technology transfer needs as well as fostering a strong culture of innovation through the activities of the New Jersey State Transportation Innovation Council. Lastly, the BoR acts as a liaison to various national transportation entities (TRB, AASHTO, other State DOTs) through participation in national research activities such as project panels, committees, peer exchanges, and surveys.

GOALS/ACTIVITIES:

The Technology Transfer (T2) Program seeks to bridge the gap between the information needs of practicing transportation professionals and tight budgets of transportation agencies while engaging other interested stakeholders such as Metropolitan Planning Organizations (MPOs), advocacy and community groups, consultants, students, and lay people. The T2 program seeks to increase the level of awareness concerning transportation-related issues (from local to international) within New Jersey, promote an ongoing exchange of ideas, translate the latest state-of-the-art trends and technology practices, showcase innovation, and disseminate research results in a form that can be readily applied to current transportation problems.

Included within the T2 program is the New Jersey Department of Transportation Research Library. The NJDOT Research Library's fundamental mission is to support the NJDOT Bureau of Research and the Department in its mission of "Improving Lives by Improving Transportation" by providing library, information, and knowledge services to the NJDOT staff and other stakeholders. The NJDOT Research Library will provide support services and manage its essentials functions. The NJDOT Research Library provides knowledge resources to transportation professionals in New Jersey so that they can plan, design, construct, and maintain a high-quality transportation system. All goals/activities are ongoing.

1. Identify and evaluate NJDOT Tech Transfer needs and develop a knowledge capture program. Address knowledge gap and develop a technology transfer program with training, other events, and peer exchange program.
2. Maintain NJDOT Technology Transfer website.
3. Provide support and assistance to the NJDOT Bureau of Research staff in national research efforts and state level research programs.
4. Provide tools and technologies to solicit and capture transportation research ideas and innovative ideas for NJ State Transportation Innovation Council (STIC). Provide technology transfer through dissemination of transportation knowledge resource availability on a quarterly basis.
5. Prepare an annual Implementation Status Report, project management quarterly reports and final report.
6. Operate and improve the Research Library as a major resource for transportation knowledge management. Implement 21st Century Transportation Research Library findings. Promote awareness of the library to the NJDOT staff. Participation in ongoing research efforts in library services is also required. For example, participation in pooled fund studies and other NJDOT research projects, attendance at and participating in library-related activities at the TRB Annual Meeting.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Technology Transfer and Implementation Program – 4500025 / 7030
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Document best practices in technology transfer in use at other state DOTs. Survey NJDOT SMEs to determine technology transfer needs and continue to explore potential topics and speakers for future Lunchtime Tech Talks and/or events. Prioritize and schedule topics for Technology Transfer training and events and assist with peer exchange programs. Develop a guide of effective knowledge capture techniques and provide technical assistance for knowledge capture initiatives (videos). Maintain the knowledge management toolkit.
2. Provide updates to new initiatives, capture the solicitation of research ideas via Idea Scale and innovative ideas for NJ STIC. Maintain information architecture which includes information for NJ STIC, Tech Talks, Share your ideas, Research, Resources, and calendar.
3. Provide support for attendance of NJDOT Bureau of Research staff at TRB Annual Meeting and other research events. Periodically update NJDOT's research TRB's Research in Progress (RiP) and Transport Research International Documentation (TRID) databases.
4. Establish a competition for ideas in innovation and support the management and dissemination of innovative ideas submitted through the STIC Program.
5. Prepare an annual Implementation Status Report, provide quarterly status reports and final report capturing accomplishments, new initiatives, and lessons learned. Compile quarterly list of new materials and make available via Intranet Newsletters and website. Send notification of research reports and upcoming webinars to relevant units. Foster new research and networking opportunities for NJDOT staff and other professionals. Disseminate research findings, reports and new standards from NJDOT and other states, as well as AASHTO, Transportation Research Board (TRB), American Society for Testing and Materials (ASTM), etc. to the respective divisions. All efforts must be reported to the Bureau of Research each quarter and a yearly Final Report must be submitted.
6. Provide library reference and referral services to government employees, transportation and other professionals, and the general public. Maintain the current library materials and acquire, process, and store, new materials including books, journals, articles, standards, and magazines related to transportation. These materials can be electronic and/or hard copies. The Library collection materials shall meet the unique and changing needs of its users. Digitize appropriate library materials and maintain corresponding databases. Shall play active role and implement the Bureau of Research's ongoing effort to move the current traditional Research Library to the 21st Century Library Services.

TRAVEL:

Attendance for 4 staff at TRB Annual meeting (Washington DC)

Accommodation:	(CY 25) \$4,500	(CY 26) \$5,000
Travel (Ground/Air):	(CY 25) \$2,500	(CY 26) \$3,000
TOTAL:	(CY 25) \$ 7,000	(CY 26) \$ 8,000

Attendance for 3 staff at annual AASHTO-RAC Summer meeting (location varies)

Accommodation:	(CY 25) \$5,000	(CY 26) \$5,000
Travel (Ground/Air):	(CY 25) \$3,000	(CY 26) \$3,000
TOTAL:	(CY 25) \$8,000	(CY 26) \$8,000

Attendance for Research conferences/meetings (locations vary)

Accommodation:	(CY 25) \$6,000	(CY 26) \$7,000
Travel (Ground/Air):	(CY 25) \$4,000	(CY 26) \$4,000
TOTAL:	(CY 25) \$10,000	(CY 26) \$11,000

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Technology Transfer and Implementation Program – 4500025 / 7030
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

CONTRACTS:

University Contract: Rutgers Voorhees: (CY 25) \$900,000 (CY 26) \$910,000

EQUIPMENT:

N/A

STAFFING:

Manager staff time charged to MN

TBD*	Administrative Analyst 4	.1 person-year
S. Potapa	Project Engineer	.1 person-year
P. Ukpah	Principal Engineer	.1 person year
G. Venkiteela	Research Scientist 1	.1 person-year
K. Patel	Assistant Engineer	.1 person-year
D. Cordero	Program Specialist 2	.1 person-year
TBD*	Senior Engineer	<u>.1 person-year</u>
	Total	0.7 person-year

*position will be filled after January 1, 2025.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: NJ Local Technical Assistance Program (NJ LTAP) – 4500025 / 7158
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

MISSION / OBJECTIVE:

The mission of the NJDOT Bureau of Research (BoR) is to help transportation professionals address complex challenges that affect the safety, mobility and accessibility of the state's residents, workers, visitors, and businesses. To accomplish this mission, BoR staff work directly with university and research professionals to develop innovative, cost-effective solutions that will ultimately enhance the quality and cost effectiveness of the policies, practices, standards, and specifications that are used in planning, building and maintaining New Jersey's transportation infrastructure. The BoR is also charged with satisfying NJDOT's technology transfer needs as well as fostering a strong culture of innovation through the activities of the New Jersey State Transportation Innovation Council. Lastly, the BoR acts as a liaison to various national transportation entities (TRB, AASHTO, other State DOTs) through participation in national research activities such as project panels, committees, peer exchanges, and surveys.

GOALS/ACTIVITIES:

The overall objective of the LTAP center is to provide training, technical assistance, and technology transfer services to assist the local public agencies in managing and maintaining their roadway systems and reflective of FHWA's current focus areas.

NJDOT's LTAP is guided by focus areas as directed by FHWA's strategic plan. It is important that the program is aligned with NJDOT priorities while addressing emerging priorities resulting from new technologies, environmental realities, and the ever-changing demands of New Jersey's communities. The mission is to enhance the safety and efficiency of the roadway system throughout New Jersey by strengthening the knowledge and capabilities of local government officials and workforces through training, technical assistance, partnerships, and emerging means of technology transfer by advancing and aligning the FHWA's four focus areas: Safety, Workforce Development, Infrastructure Management and Organizational Excellence.

The CY 2025 work plan is organized into six task areas which address the Federal Highway Administration's mandated four focus areas for the national LTAP/TTAP program: Safety, Infrastructure Management, Workforce Development, and Organizational Excellence. The objectives of the NJLTAP for 2025 are as follows:

1. Training (non NJDOT)
2. Training for NJDOT
3. Technical Assistance
4. Communications
5. Outreach
6. Reporting and Evaluation

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

All anticipated accomplishments are on-going:

1. Workshops for municipal and county officials and consultants performing work on behalf of public agencies will be conducted. Topics will be selected in partnership between NJLTAP and NJDOT.
2. Workshops specifically requested by NJDOT and for NJDOT personnel.
3. Upon request, the team will provide guidance on technical, transportation-related problems that municipal agencies may be experiencing. The team will not perform any studies or engineering work that is more appropriately conducted by private entities.
4. Develop and maintain website. Publish e-newsletter, printed newsletter, and technical briefs.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: NJ Local Technical Assistance Program (NJ LTAP) – 4500025 / 7158
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

5. Exhibits, Every Day Counts Webinar Exchanges, meetings and conferences: The Selected University will coordinate and participate in the events, as approved and/or directed by NJDOT’s Research Project Manager (RPM). The Selected University shall develop and distribute LTAP brochures on the LTAP services, and technical assistance and make recommendations to the NJDOT Research Project Manager for additional marketing materials. During the outreach efforts, the Selected University will develop and distribute appropriate handout materials and informational packets to support the NJDOT LTAP program. The Selected University will work with NJDOT’s Research Project Manager to coordinate the development and provision of appropriate handout materials. The Research Project Manager must approve all material prior to distribution.
6. The Selected University will be responsible for assessing quarterly performance, evaluating program effectiveness, and submitting annual program performance reports - the Program Assessment Report (PAR) and the Center Assessment Report (CAR). This information will be reported to NJDOT’s Research Project Manager on a quarterly basis as part of a quarterly progress report.

TRAVEL:

Attendance of 1 staff at Annual National LTAP Meeting

Accommodation:	(CY 25) \$4,000	(CY 26) \$5,000
Travel (Ground/Air):	<u>(CY 25) \$1,500</u>	<u>(CY 26) \$2,000</u>
TOTAL:	(CY 25) \$5,500	(CY 26) \$7,000

CONTRACTS:

Training workshops for transportation professionals of NJDOT and non-NJDOT local public agencies; assist in selection of topics; provide technical assistance; maintain website, distribute e-newsletter, printed newsletter, technical briefs; conduct outreach through exhibits, webinars, meetings, and conferences; reporting; annual customer survey; and continual course evaluation.

University Contract: Rutgers CAIT (CY 25) \$700,000 (CY 24) \$750,000

OTHER :

Federal LTAP Funds: National LTAP (CY 25) \$210,000 (CY 26) \$210,000

EQUIPMENT:

N/A

STAFFING:

In-house staff time will be charged to Project Management of Contracts

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Annual Research Showcase – 4500025 / 7165
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

MISSION / OBJECTIVE:

The mission of the NJDOT Bureau of Research (BoR) is to help transportation professionals address complex challenges that affect the safety, mobility and accessibility of the state's residents, workers, visitors, and businesses. To accomplish this mission, BoR staff work directly with university and research professionals to develop innovative, cost-effective solutions that will ultimately enhance the quality and cost effectiveness of the policies, practices, standards, and specifications that are used in planning, building and maintaining New Jersey's transportation infrastructure. The BoR is also charged with satisfying NJDOT's technology transfer needs as well as fostering a strong culture of innovation through the activities of the New Jersey State Transportation Innovation Council. Lastly, the BoR acts as a liaison to various national transportation entities (TRB, AASHTO, other State DOTs) through participation in national research activities such as project panels, committees, peer exchanges, and surveys.

GOALS/ACTIVITIES:

The Annual Research Showcase is for NJDOT customers to experience the broad scope of ongoing research initiatives, technology transfer activities, and academic research being conducted by university research partners and their associates. This event also serves to showcase the benefits of the NJDOT Research program. The Showcase provides a forum for transportation related agencies to convene for the purpose of shared knowledge in the advancements being made in the field of transportation research and technology. The event highlights and enhances NJDOT research, technology, and innovation initiatives. It offers the transportation community effective academic and scientific research opportunities. It promotes poster session quality and involvement through a "Best Poster Award" competition. The bureau identifies and selects "Implementation Award" winner to acknowledge a NJDOT sponsored project that has had significant positive impact through implementation. The bureau identifies and selects two "Build A Better Mousetrap Award" winners to acknowledge state employees that have significantly improved upon a product, process, method, or system. The bureau also recognizes outstanding students involved in transportation research through an "Outstanding Student in Transportation Research" award competition. The bureau also recognizes the research champion demonstrating effective collaboration, partnership and contributing to the research project's success through the "Research Champion Excellence Award". **All goals/activities will be performed in accordance with 2 CFR 200.432 Conferences.**

1. Secure the event location for Annual Research Showcase, space accommodations, and additional logistics required to accommodate a hybrid event.
2. Marketing and registration for the Showcase
3. Event coordination for the Research Showcase
4. Participation and On-Site Facilitation for the Showcase
5. Procurement and Reporting

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Annual Research Showcase – 4500025 / 7165
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Schedule a date, set times and select location for the research showcase event. Identify space availability for general session of approximately 250, refreshments for approximately 250, breakout sessions (up to 4), and space for poster displays. Identify audio/visual needs and technical support including live stream; parking arrangements; catering. Finalize all contractual agreements.
2. Develop marketing materials for the event, including posters for display at the NJDOT. Offer advance on-line registration through the LTAP website/CVENT event management system. Provide registration updates to NJDOT. Prepare conference agenda. Prepare electronic marketing piece for the NJDOT to distribute. Conduct electronic brochure distribution to professional organizations and research partners. Process advance registrations and confirm registrations via email prior to the event.
3. The LTAP staff will assist the NJDOT with securing speakers. The event theme and suggestions for speakers are the decision of NJDOT. Presentations will be selected by the NJDOT from the abstracts submitted. Prepare nametags for attendees; solicit speaker information and presentations prior to the event; determine booth/table set-up requirements and coordinate the roles and needs of participants in the research showcase. Special needs, i.e. audio/visual support, easels. Distribute student award/student paper nomination/requirements to research universities and procure awards (six total: Best Poster, Implementation Award, two Build A Better Mousetrap Awards: Operations and Organizational Improvement, Outstanding Student in Transportation Research, and Research Champion Excellence Award). Prepare and print 250 event programs. Prepare PDH credit for licensed Professional Engineers in NJ. Provide attendance certificates with appropriate credit noted for attendees.
4. Provide staffing for registrant sign-in the day of the event. Provide event moderator. On-site contact will be provided throughout the event. Audiovisual technician will be on hand, as contracted through the facility. Photos will be taken by a contracted photographer and provided to the NJDOT.
5. Process requisitions and payment for host location and catering. Process requisitions and payment for host location and catering. Maintain attendance records. Provide quarterly reports and invoices which documents the accomplishment of the project activities. to NJDOT. Processing the final invoice.

TRAVEL:

N/A

CONTRACTS:

University Contract: Rutgers CAIT (CY 25) \$ 130,000 (CY 26) \$ 140,000

EQUIPMENT:

N/A

STAFFING :

In-house staff time will be charged to Project Management of Contracts.

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

Bureau of Research, Innovation & Information Transfer

New & Continuation Studies for CY 2025 – 2026

CONTINUATION Study Title (Study titles subject to change)	Current Status (as of 7/1/24)	Estimated Cost CY 2025	Estimated Cost CY 2026
Best Practices in Transit Customer Satisfaction Surveys 4500023/7202	New survey techniques and analysis will be developed for NJ Transit. Kick-off meeting was held 5/10/24. Task 1 is underway.	\$300,000.00	\$0.00
External Service Life of Concrete Bridge Deck with Internal Curing 4500023/7199	2 nd quarterly progress report submitted, and quarterly meeting was held	\$200,000.00	\$200,000.00
Evaluation of NJDOT Hardened Traffic Paint Markings and Stripes Performance 4500023/7195	Project Ongoing	\$0.00	\$0.00
Innovative Pothole Repair Materials and Techniques Phase II 4500023/7200	Project Ongoing	\$0.00	\$0.00
Identifying Travel Needs for South Jersey and Shore Customers 4500023/7201	Project Ongoing	\$130,000.00	145,000.00
Multi Hazard Design of Highway Bridges 4500023/7197	Project Ongoing	\$20,531.00	0.00
NJDOT Corrosion Study on Steel Structural Members 4500023/7194	Project Ongoing	\$0.00	\$0.00
Transit Usage Impacts of NJ Transit-Oriented Developments (TODs) 4500021/7192	Project has been extended through 12/29/2024 to allow additional time for task completion.	\$0.00	\$0.00
WIM Analysis for New Jersey Bridges for Establishing Various Live Load Models for Design and Bridges Management Tasks 4500023/7203	A Kick of Meeting was held and awaiting a 2 nd quarterly progress report to be submitted	\$250,000.00	\$250,000.00
TOTAL estimated cost of continuation studies:		\$900,531.00	\$595,000.00

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

Bureau of Research, Innovation & Information Transfer

New & Continuation Studies for CY 2025 – 2026

NEW Study Title (Study titles subject to change)	Current Status (as of 7/1/24)	Estimated Cost CY 2025	Estimated Cost CY 2026
Developing Reliability-based Vulnerability Analysis to Enhance Resilience and Risk Assessment of New Jersey's Culvert and/or Bridge Infrastructure	Champion Assigned. Technical Advisory Panel and RFP Under Development	\$300,000.00	\$100,000.00
Evaluation of Alternative (Non-Crude Oil Based) Diesel Fuel for NJ Transit Locomotives and Over-the-Road Buses	RFP posted, Champion and Technical Advisory Panel Assigned, Proposals to be Submitted Shortly	\$175,000.00	\$0.00
TOTAL estimated cost of New studies:		\$475,000.00	\$100,000.00

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026
Bureau of Research, Innovation & Information Transfer
Pooled Fund Studies Contribution for CY 2025 – 2026

Study Number	Study Name	NJDOT Technical Contact	Estimated Cost CY 2025	Estimated Cost CY 2026
TPF-5(447)	Traffic Control Device (TCD) Consortium (3)	Jaime Oplinger	\$10,000.00	\$10,000.00
TPF-5(489)	Safety Service Patrol Standardization and Management Practices	Sal Cowan	\$25,000.00	\$25,000.00
TPF-5(536)	Ahead of the Curve - Migration from NCHRP to AASHTO Technical Training Solutions (TTS)	Amanda Gendek	\$10,000.00	\$10,000.00
TPF-5(533)	Midwest Roadside Safety Pooled Fund Program (FY25-FY29)	Hung Tang	\$65,000.00	\$65,000.00
TPF-5(530)	TRB Core Program Services for a Highway RD&T Program – Federal Fiscal Year 2024/TRB (State DOTs) Fiscal Year 2025	Amanda Gendek	\$223,033.00	\$223,033.00
TPF-5(487)	Transportation Management Centers Pooled Fund Study Phase II	Sal Cowan	\$25,000.00	\$25,000.00
TPF-5(486)	Center for the Aging Infrastructure: Steel Bridge Research, Inspection, Training and Education Engineering Center - SBRITE (Continuation)	Mula Reddy	\$35,000.00	\$35,000.00
TPF-5(479)	Clear Roads Winter Highway Operations Phase III Pooled Fund	Pooja Thakkar	\$25,000.00	\$25,000.00
TPF-5(503)	Standardizing Rigid Inclusions for Transportation Projects – Phase I	Mohab Hussein	\$30,000.00	\$30,000.00
TPF-5(399)	Improve pavement surface distress and transverse profile data collection and analysis, Phase II	Narinder Kohil	\$0.00	\$0.00
TPF-5(467)	Research Project Tracking System	Giri Venkiteela	\$0.00	\$0.00
TPF-5(468)	Structural Behavior of Ultra-High-Performance Concrete	Giri Venkiteela	\$0.00	\$0.00
TPF-5(484)	Develop Countermeasure Strategies for Protecting Bridge Girders Against Overweight Vehicles Impact	Ali Jawed Najem	\$0.00	\$0.00
Solicitation#1616	Recycled Materials Resource Center - 5th Generation	Giri Venkiteela	\$40,000.00	\$40,000.00
Solicitation#1612	Designing Transportation Infrastructure for Electric Vehicles	Giri Venkiteela	\$50,000.00	\$50,000.00
Solicitation#1614	Establishment of a Public-Private Transportation Data Exchange Center	Sal Cowan	\$50,000.00	\$50,000.00
Solicitation#1615	Vehicle to Everything (V2X) Pooled Fund Study	Sal Cowan	\$25,000.00	\$25,000.00
Total			\$613,033	\$613,033

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Straight Line Diagrams – 2207910 / 5140
MANAGER: Stephen V. Choborda
UNIT: Bureau of Transportation Data and Support

MISSION / OBJECTIVE:

Provide easily accessible roadway inventory characteristic data for engineering tasks and decision making support. To maintain and continue the availability of the Straight-Line Diagrams (SLD) as a platform to access data elements describing the physical and network characteristics of all public roadways in the state.

GOALS/ACTIVITIES:

Provide convenient access to roadway characteristic data stored in the SLD database.

1. Deploy the Automated SLD application to the NJDOT, FHWA and public facing web site.
 - i. Provide training
 - ii. Provide technical support
 - iii. Provide application updates
2. Provide convenient access to the NJDOT Videolog application to view digital roadway images and provide a link to it through the SLD application.
 - i. Deploy the NJDOT Videolog application to the NJDOT, FHWA and public facing website.
 - ii. Provide training
 - iii. Provide technical support
 - iv. Provide application updates
3. Provide access to the Transportation Asset Management System (TAMS) maintenance features that are maintained in the SLD database and displayed in the Automated SLD application.

SLD application.

 - i. Develop symbology to display TAMS features on the SLD
 - ii. Maintain point-and-click technology to retrieve TAMS features data
 - iii. Link TAMS feature symbology to the Straight Line Diagrams database
 - iv. Link TAMS feature symbology to digital imagery
4. Maintain a reference and indexing system for all roadways in New Jersey.
 - i. Implement the Standard Route Identifier (SRI) system for all public roads in NJ.
 - ii. Identify route hierarchy
 - iii. Assign logical SRI's to the routes
 - iv. Promote the SRI to be the department wide-standard for indexing public roadways
5. Provide coordination with internal and external agencies to improve the accuracy of and support information requests related to the SLD database.
 - i. Perform ad-hoc queries for data as requested by customers
 - ii. Educate customers on how to best utilize the SLD
 - iii. Provide training and demonstrations
 - iv. Provide assistance to internal stakeholders to pull SLD data for internal applications, such as the SLD.
7. Provide access to the Automated SLD and Videolog for use on mobile devices.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Straight Line Diagrams – 2207910 / 5140
MANAGER: Stephen V. Choborda
UNIT: Bureau of Transportation Data and Support

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Provide enhancements, maintenance and access to the Web-enabled Automated SLD utilizing consultant services.
2. Provide enhancements, maintenance and access to the NJ Web-enabled Videolog application utilizing consultant services.
3. Provided annual support for the TAMS Inventory process for the Bureau of Maintenance Engineering using tools developed in the Web-enabled Automated SLD application.
4. Provide and maintain the Standard Route Identifier (SRI) and inventory limits for all public roadways, Park roads and unpaved roads in support of the Highway Performance Monitoring System (HPMS).
5. Provide customer support and training for users of the Web-enabled Automated SLD and NJ Web-enabled Videolog both internally and external customers. Perform queries and provide roadway data using the new Data Browser tool, as requested, to include map projects.
6. Amend existing SLD contract for additional tasks or procure new SLD contract.

TRAVEL: None

CONTRACTS: Straight Line Diagrams contract - \$300,000.00

- Amend existing contract or procure new contract for the maintenance and enhancement of the current architecture and capabilities of the existing Web-enabled SLD application as well as the Web-enabled roadway Videolog.

EQUIPMENT: None

STAFFING:

Aloe, A.	0.05
Aloe, R.	0.05
Auletta, L.	0.10
Brzostowski, P.	0.10
Wael, Y.	0.20
Haji, S.	0.15
Oberle, E.	0.15
Signora, N.	0.05
Total Staff Time:	0.85

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Transportation Data Warehouse and Maintenance – 2207910 / 5160
MANAGER: Stephen V. Choborda
UNIT: Bureau of Transportation Data and Support

MISSION / OBJECTIVE:

Develop and maintain a one stop shop for all transportation related data. Provide a Transportation Data Warehouse which contains accurate, complete, and up-to-date transportation data for internal user groups, The Federal Highway Administration (FHWA) and other related agencies.

GOALS/ACTIVITIES:

1. Develop and maintain inventory data collection programs to keep data current.
2. Make available all current and archived data to department decision makers, i.e.: roadway, digital images, Transportation Asset Management System (TAMS) and other various asset management data through both the Straight-Line-Diagrams (SLD) suite of products and through the NJDOT's Business Objects program.
3. Develop and maintain NJDOT's mile posting program.
4. Manage the NJ Linear Referencing System Maintenance and Enhancements contract.
5. Maintain NJDOT's Roadway Network GIS file to keep it current every quarter.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

- Collect roadway inventory data and pavement condition data for dissemination in the SLD, Videolog and HPMS.
- Provide current data related to roadway characteristics by routine updates to the SLD and HPMS databases. Maintain and collect Roadway images. Maintain databases and images in cloud storage environment.
- Perform field mile post calibration on the state highway system.
- Coordinate LRS improvements with HPMS and SLD systems to make data uniform.

TRAVEL: MAC URISA GIS Conference 2025 - \$1,400.00
* Three (3) Attendees

TOTAL: \$1,400.00

CONTRACTS:

NJ Linear Referencing System Improvement Contract - \$500,000.00

- Procure new NJ Linear Referencing System Improvement Contract consisting of developing a new geospatial roadway linear referencing system (RLRS). This contract will also entail the further exploration/implementation of various options for improvements to the existing system to meet current Department requirements.

Route Coordinator Contract - \$500,000.00

- This contract will support, develop, and maintain inventory data collection programs to keep data current. In addition, the database will make available all current and archived data to department decision makers, i.e.: roadway, digital images, TAMS and other various asset management data through both the SLD suite of products and through the NJDOT's Business Objects program. The SLD database assets will be maintained on cloud based server that can be utilized by various programs. This contract will support the Web-Enabled SLD contract, the HPMS contract and the LRS contract. It will also allow time to remove the Route Coordinator task from the TMS Agreements in 5310 to allow seamless transition to a specific Route Coordinator Contract.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Transportation Data Warehouse and Maintenance – 2207910 / 5160
MANAGER: Stephen V. Choborda
UNIT: Bureau of Transportation Data and Support

Total in Contracts: \$ 1,000,000.00

EQUIPMENT: None

STAFFING:

Aloe, A.	0.05
Aloe, R.	0.05
Auletta, L.	0.10
Brzostowski, P.	0.10
Wael, Y.	0.25
Haji, S.	0.15
Oberle, E.	0.10
Signora, N.	0.05
Total Staff Time:	0.85

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Traffic Monitoring Systems (TMS) - Traffic Volumes Data Collection - 2207910 / 5310
MANAGER: Stephen V. Choborda
UNIT: Bureau of Transportation Data and Support

MISSION / OBJECTIVE:

Collect and process traffic volumes and vehicle class data throughout the state. Provide traffic data to various units of the Department, the Metropolitan Planning Organizations (MPOs), Local governments and individual constituents. Provide traffic data required for the Highway Performance Monitoring System (HPMS) program. Submit traffic volume and vehicle-type classification data to Federal Highway Administration (FHWA) monthly. Implement Innovative Concepts that will benefit the Bureau in regard to data collection and processing. Traffic data collected under New Jersey's Traffic Monitoring System for Highways will have a 95% confidence level of accuracy as we continue to install more sites, maintain existing sites and collect more samples.

GOALS/ACTIVITIES

1. To complete the third year, 2024, of TMS (2022-2024) current cycle which is set to expire on June 30, 2025, for the Data Collection program and to start year 1 of TMS (2025-2027) cycle. This Traffic Monitoring System is required by the FHWA and is intended to monitor approximately 4,000 sites throughout the state per calendar year. These sites will be collected as short term coverage sites and will track travel trends over the short – term (minimum 48 hours and up to 7 days). The spread of these counts and the type of activities are as follows:
 - a. Assigned pre-established TMS locations are counted using Automatic Traffic Recorder's (ATR's)
 - b. Assigned pre-established TMS Automatic Vehicle Classification sites (AVC's)
 - c. New HPMS sample sections on mainlines and ramps using ATR's
 - d. The performance of the special counting program to support NJDOT operations and other management Systems including:
 - i. Special Manual (visual) turning movement counts
 - ii. Special ATR's
 - iii. Special Pedestrian & Bicycle counts (if requested).
 - e. Pre-established Major Stations will be counted for one week every month using Automated Vehicle Classification (AVC) equipment.
 - f. Divide the State into 4 regions, Northwest, Northeast, Central, and Southern regions instead of Northern, Central and Southern NJ
2. Collect about (400) ramp counts.
3. Continue to support all units of the Department with traffic data as needed.
4. Raw data will be retrieved and processed from continuous and major stations.
5. Innovative concepts will include an application of new technology, communications, relational database design, development and management automation of processes, statistical analysis, data presentation and dissemination.
 - a. Support a Safe Corridors evaluation initiative by providing geocoded crash records linked to the most up-to-date NJ roadway network file.
 - b. TMS Short Term Counts workflow website phase 3.
 - c. WIM Operator Mobile phase 3.
 - d. WIM Website – maintain a service side environment to aggregate weight data for Visualization. Prepare aggregation filters enabling to have data available by vehicles classification (light trucks, heavy trucks, weekdays, weekends, monthly, and weekly summaries).
6. Perform roadway inventory for a state highway system.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Traffic Monitoring Systems (TMS) - Traffic Volumes Data Collection - 2207910 / 5310
MANAGER: Stephen V. Choborda
UNIT: Bureau of Transportation Data and Support

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Complete approximately (4,000) TMS short term coverage counts Minimum of (48 hours) and up to 7-days including new HPMS sample sections, AVC counts, and major stations.
2. Complete approximately (400) ramps.
3. Conduct special traffic counts to support Department projects up to (390) locations, including Volume Turning Movement Counts, Classified Turning Movement Counts, Volume Automatic Traffic Recorders (ATRs) and Automated Vehicle Classifications (AVCs).
4. Process data from continuous and major stations on monthly basis.
5. Innovative Concepts:
 - a. WIM analysis and processing
 - b. WIM Website Enhancements
 - c. Mobile Client for WIM Operator Server Environment
 - d. ESAL yearly development for 2024 data
 - e. Quality Assurance/Quality Control of the Events Mater Table in the TMS database, that includes short term, WIM and TVS AADT information. Current Gap analysis to meet MIRE requirements.
 - f. Inventory Coordination and Support
 - g. AWS hosting environment upgrades.
 - h. Short Term count workflow website continuation and development
 - i. Maintenance and completion of WIM Website server side aggregation module to prepare data for truck weight visualizations.
6. Route Coordinator
7. Roadway Inventory and Feature Extraction for 6,548 Directional Miles

TRAVEL: None

CONTRACTS:

Proposed Contracts: TMS Data Collection Cycle (2022-2024) Contract.

Traffic Monitoring Data Collection	
Traffic Monitoring System Data Collection- North-Eastern Region	\$ 1,275,684.00
Traffic Monitoring System Data Collection- North-Western Region	\$ 1,720,176.00
Traffic Monitoring System Data Collection- Central Region	\$ 2,035,857.00
Traffic Monitoring System Data Collection- Southern Region	\$ 2,606,193.00
<u>Innovative Concepts</u>	<u>\$ 1,000,000.00</u>
	\$ 8,637,910.00

Roadway Inventory Data Collection

Traffic Monitoring System Data Collection- North-Eastern Region	\$ 277,725.00
Traffic Monitoring System Data Collection- North-Western Region	\$277,725.00
Traffic Monitoring System Data Collection- Central Region	\$ 330,625.00
Traffic Monitoring System Data Collection- Southern Region	\$ 476,100.00

<u>Traffic Monitoring System Data Collection- Route Coordinator</u>	<u>\$ 524,410.00</u>
	\$ 1,886,585.00

Total in Contracts: \$ 10,524,495.00

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Traffic Monitoring Systems (TMS) - Traffic Volumes Data Collection - 2207910 / 5310
MANAGER: Stephen V. Choborda
UNIT: Bureau of Transportation Data and Support

CONTRACTS (continued):

- The TMS contracts (Traffic Monitoring Data Collection and Roadway Inventory Data Collection) will allow the Bureau of Transportation Data and Support to continue with the collection of short-term, classification and manual count data as well as any associated various tasks. In addition, these contracts allow for the processing of data, and collection of data to meet the Federal Highway Administration Model Inventory or Roadway Elements (MIRE) requirements as well as any innovative concepts to improve current BTDS tasks and requirements.
 - a. 4 Regions
 - i. Northeast
 - ii. Northwest
 - iii. Central
 - iv. South

EQUIPMENT: None.

STAFFING:

Abraham, A.	0.30
Aloe, A.	0.05
Aloe, R..	0.20
Auletta, L.	0.10
Brzostowski, P.	0.10
Griffis, R	0.20
Oberle, E.	0.05
Khalifa, A.	0.20
Osiegbu, J.	0.25
Signora, N.	0.30
Total Staff Time:	1.75 person years

STATE PLANNING AND RESEARCH PROGRAM, 2025-2026

ACTIVITY: Traffic Monitoring System (TMS) – Traffic Data Processing & Analysis– 2207910 / 5320
MANAGER: Stephen V. Choborda
UNIT: Bureau of Transportation Data and Support

MISSION / OBJECTIVE:

Collect and process traffic volumes and vehicle class data throughout the state. Provide traffic data to various units of the Department, the MPOs, Local governments and individual constituents. Provide traffic data required for the Highway Performance Monitoring System (HPMS) program. Submit traffic volume and vehicle-type classification data to Federal Highway Administration (FHWA) monthly. Implement Innovative Concepts that will benefit the Bureau in regards to data collection and processing.

Traffic data collected under New Jersey’s Traffic Monitoring System for Highways will have a 95% confidence level of accuracy as we continue to install more sites, maintain existing sites and collect more samples.

GOALS/ACTIVITIES:

1. Submit monthly to the FHWA volume, classification, and weight data collected from continuous monitoring stations.
2. Review and process traffic volume and classification data collected by consultants at over 3,000 HPMS sample sections sites and about 500 ramp locations and data collected for other transportation related studies.
3. Maintain the database of all traffic data collected and update the internet home page and/or MS2 public facing webpage.
4. Calculate annually and update the tables for the seasonal adjustment factors, axle correction factors, and the annual average growth rates.
5. Manage AADTs Dynamic Segmentation Map contract.
6. Create training and tutorials or WIM / TVS related tasks.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Online monthly submittal via TMS to the FHWA of volume, classification, and weight data collected from WIM and TVS stations by the 3rd week of the following month.
2. Summarize classification and volume data for the HPMS Travel Activity by Vehicle Type report. Prepare all data for the annual processing.
3. Update [TMS Search website](#) and/or the MS2 public facing webpage on annual basis.
4. Create 2024 tables of seasonal adjustment factors, axle correction factors and the annual average growth rates.
5. Refine a working prototype for the AADT segmentation model utilizing multiple data sources and without utilizing physical traffic counts.

TRAVEL:	MS2 User Conference – 2024/2025 -	\$4,500.00
	MS2 Peer Exchange – 2024/2025 -	\$4,500.00
	*Two (2) attendees	

TOTAL: \$9,000.00

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Traffic Monitoring System (TMS) – Traffic Data Processing & Analysis– 2207910 / 5320
MANAGER: Stephen V. Choborda
UNIT: Bureau of Transportation Data and Support

CONTRACTS:

Software contracts:

MS2 services - Software as Service \$ 350,000

- Yearly subscription for MS2 for support and maintenance of the online software to auto poll, house and process traffic counts from both short-term and permanent count locations.

AirVantage Wireless modem management System \$ 6,000

- Yearly Subscription for the AirVantage/ALMS modem management system. This is a cloud based system that will allow for the real-time management of the approximately 150 Wireless modems that are deployed in roadside cabinets for permanent count stations.

TOTAL: \$356,000

EQUIPMENT: None.

STAFFING:

Aloe., A.	0.05
Aloe, R.	0.20
Abraham, A	0.40
Auletta, L.	0.10
Brzostowski, P.	0.20
Oberle, E.	0.10
Signora, N.	0.25
Khalifa, A.	0.30
Osiegbu, J.	0.30

Total Staff Time: 1.90 person years

STATE PLANNING AND RESEARCH PROGRAM, 2025-2026

ACTIVITY: Traffic Monitoring System (TMS) – Weights, Classifications and Speeds – 2207910 / 5330
MANAGER: Stephen V. Choborda
UNIT: Bureau of Transportation Data and Support

MISSION / OBJECTIVE:

Collect and process traffic volumes and vehicle class data throughout the state. Provide traffic data to various units of the Department, the MPOs, Local governments and individual constituents. Provide traffic data required for the Highway Performance Monitoring System (HPMS) program. Submit traffic volume and vehicle-type classification data to Federal Highway Administration (FHWA) monthly. Implement Innovative Concepts that will benefit the Bureau in regards to data collection and processing.

Traffic data collected under New Jersey's Traffic Monitoring System for Highways will have a 95% confidence level of accuracy as we continue to install more sites, maintain existing sites and collect more samples.

GOALS/ACTIVITIES:

1. Collect truck weight, speed and classification data needed for the design of roadways and bridges.
2. Provide traffic data needed for the Highway Performance Monitoring System (HPMS) program and other various internal and external parties.
3. Share truck data with the Freight Planning & Services unit for the implementation of the Comprehensive Statewide Freight Plan.
4. Provide monthly, traffic volume, classification and weight data at 10 Strategic Highway Research Program (SHRP) Long Term Pavement Performance (LTPP) program sites to FHWA consultant.
5. Maintain all permanent Weigh-in-Motion (WIM) stations and Traffic Volume Stations (TVS) sites in good working condition.
6. Update the NJ WIM website annually.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR: 2025

1. Collect Weight, Classification, and Traffic Volume data continuously 24 hrs. daily.
2. Continue to provide various units of NJDOT, State Police and other agencies with truck weight, classification and other traffic data from permanent WIM stations.
3. Provide data to the Freight Planning & Services monthly.
4. Continue to support SHRP program.
5. Construction contract that will improve existing Permanent Count sites and install new non-intrusive sites.
6. Upload data to NJ WIM website.

CONTRACTS:

\$ 2,800 - Division of Purchase and Property (Calibration Truck driver salary).

- Assistance is provided to the New Jersey Department of Transportation for the calibration of existing Weigh-in-Motion (WIM) sites located across New Jersey to ensure proper functionality.

TRAVEL:

\$ 2,000 – TRB Conference – January 2024, Washington DC.

*One (1) Attendee

EQUIPMENT: None.

STATE PLANNING AND RESEARCH PROGRAM, 2025-2026

ACTIVITY: Traffic Monitoring System (TMS) – Weights, Classifications and Speeds – 2207910 / 5330
MANAGER: *Stephen V. Choborda*
UNIT: Bureau of Transportation Data and Support

STAFFING:

Abraham, A.	0.20
Aloe., A.	0.05
Aloe, R..	0.30
Auletta, L.	0.10
Brzostowski, P.	0.15
Griffis, R	0.30
Oberle, E.	0.10
Signora, N.	0.25
Khalifa, A.	0.30
Osiegbu, J.	0.30

Total Staff Time: **2.05** person years

OVERTIME BUDGET:

\$ **20,000** - The Bureau staff plays a subject matter expert role in different CPM and Operations resurfacing projects impacting our WIM/TVS monitoring stations. The activities related to the construction contracts require overnight working hours due to Traffic Operations regulations to conduct in-road construction during off-peak hours. BTDS staff have an obligation to be present during sensor installations to make sure that all Quality Assurance rules are followed.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Functional Classification System, Federal Aid System and National Highway System –
2207910 / 5650
MANAGER: *Stephen V. Choborda*
UNIT: Bureau of Transportation Data and Support

MISSION / OBJECTIVE:

To provide, maintain the most current and accurate information for New Jersey's Urban Boundary, Functional Classification System and National Highway System (NHS); performing modifications to these systems; and, maintaining / updating the data in associated databases when requests for updates are received.

GOALS/ACTIVITIES:

1. Analyze 2020 Census data or mapping that is made available through requests for updates.
2. In coordination with the FHWA, MPOs and the Counties, update the Urban Boundary and Function Classification System.
3. In compliance with the Moving Ahead for Progress in the 21st Century Act (MAP-21) performance measures and Fixing America's Surface Transportation Act or FAST Act, update the most current and accurate National Highway System (NHS).

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

- Update maps for New Jersey's Urban Boundary, Functional Classification System and Federal-Aid System. Maps are made available to interested users via the Roadway System Section's website.
- Meet individually with the MPO involved and update the Urban Boundaries and Functional Classification System as Needed
- Update the NHS database file and Map.
 - Create a route list of all NHS and STP roadways if revisions are required
 - Revise various mileage statistics by county and jurisdiction of the Functional Classification System if required.
 - Provide the NHS data to our customers.
 - Update route List of all NHS and STP roadways if revisions are required.

TRAVEL: None

CONTRACTS: See 5930 sub job number.
HPMS maintenance contract

EQUIPMENT: None

STAFFING:

Aloe, A.	0.05
Auletta, L.	0.10
Brzostowski, P.	0.05
Yosef, W	0.10
Haji, S.	0.15
Oberle, E.	0.15

Total Staff Time: **0.60** person years

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Highway Performance Monitoring System – 2207910 / 5930
MANAGER: Stephen V. Choborda
UNIT: Bureau of Transportation Data and Support

MISSION / OBJECTIVE:

To provide the most current HPMS data and its submittal; to ensure federal decisions are based on the best available and most accurate data for New Jersey. To maintain and monitor an integrated database, using random selection of road sections with predetermined functional classification system and volume groups, in accordance with procedures outlined in FHWA's "HPMS Field Manual." A submittal of HPMS data will be done on April 15 and June 15 yearly as required by FHWA representing the New Jersey Department of Transportation and the state of New Jersey. Also, a submittal of the New Jersey certified public road mileage will be done on June 1 yearly as required by FHWA.

GOALS/ACTIVITIES:

1. Develop and maintain inventory data collection programs for HPMS Update.
 - i. Design changes and enhancements to the NJDOT HPMS field and office version software. In coordination with the HPMS staff, current HPMS consultant will review and make the needed updates/changes to both versions.
 - ii. Staff will inventory half of the twenty-one counties for the 2025 data year. All the HPMS sample sections for half the counties will be field inventoried by in house staff.
 - iii. Sample sections will be checked for both consistency and accurate data elements.
 - iv. Staff will begin to identify, investigate, and if suitable, inventory new sample sections throughout the State.
 - v. All sample sections to be homogeneous and will be field inventoried for data and roadway features/elements per HPMS specifications.
2. Complete the 2024 Certification of Public Road Mileage and the 2025 HPMS submittal, 2024 data year.
 - i. Certified Public Road Mileage will be input into the FHWA system on or before June 1.
3. Prepare all the data requirements for 2025 HPMS FHWA submissions.
 - i. Collect the various needed pavement data items per FHWA's guidelines for both full extent and sample sections. Review and then process the pavement data items to the HPMS dataset for the 2024 data year.
 - ii. Update the HPMS dataset to include the correction of anomalies between NHS and the Functional Classification in the FHWA HPMS application.
 - a. Run a validity check between the HPMS dataset and the SLD tables to ensure accuracy exists between both datasets.
 - b. Provide details and documentation for any changes or updates to both datasets.
 - iii. Complete the updating of all twenty-one county sample section maps. Show all HPMS sample sections on maps that are to be inventoried.
 - iv. Assist FHWA local office with field inspection of random HPMS sample sections.
 - a. Review and field inspect random sample sections through-out the twenty-one counties.
 - b. As per FHWA guidelines for HPMS, all sample sections need to be reviewed and checked for both the accuracy and consistency of each data element.
 - v. Identify and investigate all HPMS full extent sections that need updated or current AADTs.
 - a. Updates will be applied to the HPMS dataset after each AADT is validated.
 - vi. Analyze all HPMS volume groups that are oversampled and under sampled.
 - a. Delete sample sections that are oversampled per each volume group.
 - b. Review clustering of too many sample sections when mapping samples on county maps, if applicable.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Highway Performance Monitoring System – 2207910 / 5930
MANAGER: Stephen V. Choborda
UNIT: Bureau of Transportation Data and Support

- vii. Update the HPMS dataset with new local road mileage for the data year 2024.
 - a. Any new inventoried local road mileage will be checked and reviewed before being updated to the HPMS dataset.
- viii. Update all the NHS Pavement data metrics each year as required by FHWA for the 2025 HPMS Submittal.
4. Update the Department's website with the 2023 Mileage and Vehicle Miles Traveled (VMT) statistics reports.
 - i. After approval from FHWA of the 2024 HPMS submittal NJDOT's website will be updated. This will be completed before December 31st.
5. Provide continuous feedback concerning the new software and submittal procedures to the FHWA NJ Local office and headquarters in Washington D.C.
 - i. Any concerns and questions will be directed to FHWA for guidance and direction.
6. Staff will participate in several HPMS webinars regarding the HPMS Policies, Data Elements, and Software updates. These Webinars will take place virtually from the FHWA offices.
 - i. Webinars will inform the states of what procedures and steps should be followed to meet all of FHWA's requirements.
 - ii. Stay up to date with postings/information on FHWA's HPMS online community page.
7. Staff will inventory the unpaved roadways in the State.
8. Review the Model Inventory of Roadway Elements (MIRE), Fundamental Data Elements (FDEs) Gap Analysis and provide the update to NJDOT's Safety Section and TMS Unit.
9. Review the National Performance Management Research Data Set (NPMRDS) – Travel Metrics Time

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Collect roadway inventory data and pavement condition data for the FHWA HPMS Submission.
 - i. Provide enhanced HPMS NJ program.
 - ii. Create and collect new sample sections and input the data into HPMS NJ Software
2. Submit New Jersey's Annual Certification of Public Roadway Miles and address comments from FHWA on HPMS 2024 data year submissions.
3. Perform New Jersey's Annual HPMS submittal to the FHWA.
4. Provide current HPMS data related roadways on the NJDOT Website
 - i. VMT estimates by Urbanized Area and County.
 - ii. Mileage statistics by Urbanized Area and County.
 - iii. NHS Mileage
5. Provide Feedback to the NJ local FHWA office and FHWA Headquarters Washington, D.C.
6. Participate in the HPMS Trainings, Seminars and Webinars.
7. Collect roadway inventory data on unpaved roadways in the State.
8. Update the Model Inventory of Roadway Elements (MIRE), Fundamental Data Elements (FDEs) for Safety programs. Continue to work on the MIRE Gap Analysis.
9. Download NPMRDS – Travel Time Metrics and submittal to the FHWA HPMS annually.

TRAVEL:

Highway Information Seminar, Washington D.C. 2025 - \$0.00

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Highway Performance Monitoring System – 2207910 / 5930
MANAGER: Stephen V. Choborda
UNIT: Bureau of Transportation Data and Support

CONTRACTS:

New Highway Performance Monitoring System Maintenance Contract - \$500,000.00

- The current Highway Performance System Maintenance Contract is set to expire in February of 2025. Therefore, a new contract will be prepared in late 2024 to provide a seamless transition of HPMS related efforts. This contract will allow slight overlap for transition of current responsibilities and on-gong maintenance requirements as needed. The Highway Performance System Maintenance Contract is comprised of various tasks that assist the Bureau with the yearly FHWA submittal of required HPMS data. This contract assists with the urban boundary and functional classification updates, federal aid system updates, maintenance and updates to the existing databases, and support for various tasks associated with the HPMS.

AADT Segmentation Map Contract \$ 400,000

- A new AADT Segmentation Contract will further update an Average Annual Daily Traffic (AADT) map for the State of New Jersey. In addition, locations will be identified for missing AADT data to be backfilled.

TOTAL CONTRACTS: \$900,000.00

EQUIPMENT:

N/A

STAFFING:

Aloe, A.	0.05
Aloe, R.	0.10
Auletta, L.	0.10
Brzostowski, P.	0.10
Yosef, W.	0.45
Haji, S.	0.45
Oberle, E.	0.15
Signora, N.	0.10
Griffis, R.	0.50
Khalifa, A.	0.10
Osiegbu, J.	0.15

Total Staff Time: **2.25** person years

Overtime budget

\$ 15,000 - To review and update HPMS biennial sample sections data collections, update AADT/ramp AADT and unpaved roadways data collections. Also, in the 2018 HPMS submissions, we had shortfall on the sample sections data collections. To remedy the shortfall, we divided the state counties into two instead of three. To complete the yearly sample data collections, we collect the sample section data through overtime on Saturdays.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Transportation Statistics – 2207889 / 5420
MANAGER: Naileen Rodriguez
UNIT: Traffic Monitoring - GIS

MISSION / OBJECTIVE:

For New Jersey to consistently provide reliable, accurate and timely Transportation Statistics submissions. To compile and report statistical data as prescribed by FHWA to ensure the State receives its maximum share of Federal Fuel Tax revenue apportionments and the data produced and published by FHWA and potentially used by independent research organizations properly reflects state highway capital spending and maintenance metrics.

GOALS/ACTIVITIES:

1. Submit FY24 FHWA Forms 531, 532, 541, 542, 556, 561, and 562/566 due April 1, 2025.
2. Submit FY24 FHWA Form 534 due May 15, 2025.
3. Submit FY24 FHWA Form 536 due October 1, 2025.
4. Submit FY24 financial statements from toll authorities (NJTA & SJTA) due April 1, 2025.
5. (ongoing) Submit/update FHWA Form 551M, due within 90 days after close of each reporting month.
6. (ongoing) Respond timely to periodic inquiries from FHWA regarding data review/verification.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Timely submission of FHWA Forms 531, 532, 541, 542, 556, 561, and 562/566.
2. Timely submission of FHWA Form 534.
3. Execute contract with independent research consultant for timely submission of FY24 FHWA Form 536.
4. Provide draft/final annual financial statements for toll authorities (NJTA & SJTA) once available.
5. Monthly submissions and updates of FHWA Form 551M.
6. Timely and complete responses to periodic inquiries from FHWA regarding data review/verification.

TRAVEL:

None.

CONTRACTS:

(TBD) FHWA 536 Local Highway Finance Report for FY 2024 – \$50,000

EQUIPMENT:

None.

STAFFING:

Naileen Rodriguez, Comptroller, 0.10 person-years.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Transportation Geographic Information Systems – 2207889 / 5210
MANAGER: Timothy Stewart
UNIT: Bureau of Information Management & Technology Planning / GIS

MISSION / OBJECTIVE:

To develop, manage, maintain and provide the most current, accurate, reliable and productive geospatial data, applications and technical expertise in support of the New Jersey Department of Transportation (NJDOT) and its mission by supporting department-wide activities, improving accessibility & safety and continuing to work and plan cooperatively with other governmental agencies at the federal, state and local level.

GOALS / ACTIVITIES:

1. Coordinate efforts with federal, regional, county and local agencies in GIS development to avoid data redundancy and increase GIS presence. Assess technological advances in the geospatial industry, including both hardware and software solutions, and plan implementation when appropriate, including training of Department staff to support the GIS environment.
2. Continued support and development of an industry standard Enterprise GIS software platform and associated interfaces and Relational DataBase Management System (RDBMS) back-end storage for managing and maintaining current GIS datasets/tables. Updating data and resources utilizing and consuming current database table information from the Enterprise Data Warehouse (EDW) to reflect current conditions.
3. Manage and facilitate digitized GIS versions of various NJDOT assets, utilities and activities: Roadway Network (RWN), Waterway Linear Segmentation (WLS), Aviation, Drainage, Railroad, Guiderail, and Environmental Resiliency, etc.
4. Maintain Waterway Linear Segmentation (WLS) which provides a linear reference system for NJ navigational waterways, and the Dredged Materials Management System (DMMS) used for shoaling project planning and enhancing use of available beneficial dredged materials throughout the state. Liaison between OIT/OGIS, vendors and the Office of Marine Resources (OMR) allowing Marketplace to match material consumers and providers at a savings to NJDOT. This data supports various OMR planning and engineering projects.
5. Assist development and improvement of various GIS related projects funded throughout the NJDOT supporting their goals: CPM - Guiderail Asset Management, Operations-Transportation Asset Management System (TAMS), HPMS, MIRE, etc. Many of these improvements involve platform upgrades and migrations, some to a cloud environment (e.g., ArcGIS Enterprise, Hub, Portal, AGO, Azure, etc.).
6. Create and maintain the Geotechnical Data Management System which allows users to search online for engineering soil information. The application created on DOT GIS system is maintained and allows updating to database as necessary, including continued updating of soil borings logs and data into system.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Continued updates to shared datasets with federal, regional, county and local agencies in GIS. Continue to attend NJ Geospatial Forum and Round Table (GIC), informational presentations, conferences and webinars to investigate new technologies and advancements for potential solutions. Test and install software upgrades and patches as they become viable. (Ongoing Activity)
2. Support, maintenance and upgrades of the enterprise GIS infrastructure and data. Continue to resource database table information via Enterprise Data Warehouse (EDW) to reflect current conditions. (Ongoing Activity)
3. Continued support and maintenance of state enterprise infrastructure requirements. Resource database table information via authoritative management system or Enterprise Data Warehouse (EDW) to reflect current conditions. Examples include; Bridge, Capital Plan, SLD, Pavement, Traffic Counts, etc. (Ongoing Activity)

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Transportation Geographic Information Systems – 2207889 / 5210
MANAGER: Timothy Stewart
UNIT: Bureau of Information Management & Technology Planning / GIS

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025: (cont'd.)

4. Manage IT & GIS project requirements for the Waterway Linear Segmentation (WLS) application and update database as necessary, including continued updating of bathymetric survey data into system, and the Dredged Materials Management System (DMMS.) Continued development of Marketplace and promotion of program. (Ongoing Activity)
5. Manage various IT & GIS project requirements of GIS related projects for various bureaus within NJDOT, maintaining applications and update GIS databases as necessary. (Ongoing and New Activities)
 - a. CPM - Guiderail Assets, updating replaced or damaged rail and terminals,
 - b. Operations-Transportation Asset Management System (TAMS), providing active construction and crew linework,
 - c. Local Aid Project Mapping, providing SRI project location assistance,
6. Manage IT & GIS requirements for the Geotechnical Data Management Systems which automates vendor uploading of new soil borings, application and update database as necessary, including continued updating of soil borings data into system. Vendor to be hired using GIS Service Contract T-1841 to scan in backlog of submissions.

TRAVEL:

Year One: \$11,000

- Allow multiple staff to attend the ESRI User Conference in California (July 2025), which provides 5 days of ESRI software training, hundreds of user presentations that share best practices, and user-to-user communication opportunities essential for learning about real-life GIS experiences, best practices, and tips.
- Allow multiple staff to attend the AASHTO GIS-Transportation Conference (Spring, 2025) where GIS professionals from government and private industry share information and skills pertinent to NJDOT GIS program.

Year One: (Estimate - \$ 10,420)

1. We hope to send two GIS Specialists to attend the **2025 ESRI User Conference** in San Diego, California.

\$1,650 5 nights hotel (\$300 per night plus tax)
 \$750 Round Trip airfare Philly to San Diego.
 \$200 Parking
 \$450 per diem around \$75 a day (6 days).
Total - \$3050 per person x two = \$ 6100

2. We hope to send two GIS Specialists to the **2025 AASHTO GIS-Transportation** event in Portland, OR.

Registration Fees : \$400
 Hotel Fee: \$1000
 Air fare: \$360
 Transportation : \$200
 Allowance: \$200
Total : \$ 2160 Per Person x two = \$ 4320

Year Two: \$12,000

- Allow multiple staff to attend the ESRI User Conference in California (July 2026), which provides 5 days of ESRI software training, hundreds of user presentations that share best practices, and user-to-user communication opportunities essential for learning about real-life GIS experiences, best practices, and tips.
- Allow multiple staff to attend the NSGIC Conference (Fall, 2026) where state government GIS professionals share information, skills, technology and procedures.

CONTRACTS: None

EQUIPMENT: None

STAFFING:

Thomas Rafferty, GIS Specialist 1	0.25
Magdy Guirguis, Administrative Analyst 3	0.25
Nirali Patel, Software Development Specialist 2	0.50
Chris Tenebruso, GIS Specialist 2	0.25
David Weighart, GIS Specialist 3	0.25
Michael Prihoda, GIS Specialist 3	0.25
Total	1.75

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Automated Mapping - Graphics – 2207889 / 5220
MANAGER: Timothy Stewart
UNIT: Bureau of Information Management & Technology Planning / GIS

MISSION / OBJECTIVE:

To develop, manage, maintain and provide the most current, accurate, reliable and productive geospatial data, applications and technical expertise in support of the New Jersey Department of Transportation (NJDOT) and its mission by supporting department-wide activities, improving accessibility & safety and continuing to work and plan cooperatively with other governmental agencies at the federal, state and local level.

GOALS / ACTIVITIES:

1. Rapidly respond to NJDOT's special GIS mapping requests, by providing digital and hard copy graphic and cartographic materials.
2. Rapidly respond to NJDOT's special GIS web mapping and GIS application requests, by providing web map services, maps and applications customized to requested needs.
3. Keep updated state and county digital base map layers using digital orthophotography, LiDAR and other source information to add new local roads, features, points of interest and realign the existing hydrography, as well as cultural, environmental and boundary features. These datasets include base layers such as state, county, municipal boundaries, coastlines, waterways, census tracts, legislative & congressional districts, etc. This ensures each state agency uses and shares the same boundaries and datasets.
4. Provide plotters and support for Department large format plotting, including supporting the newly provided consolidated 42" and 36" plotters located throughout the department facilities.
5. Provide support for digital mapping and plotting to users allowing self-support via mapping portal.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Continue to complete and deliver Department geospatial mapping requests as required. (Ongoing Activity)
 - a. Custom map requests will be turned around in 5 business days
 - b. Standard plots will be turned around in 2 business days.
2. Continue to complete and deliver Department geospatial web and application requests as required. Applications customized to include data sharing, security, user tools, field data collection tools as well as dashboard creation. (New Activity)
3. Continued updates to state roadway, county land/boundary and municipal base maps. Update using digital orthophotography to add new local roads, cultural and environmental features. Data sourced to authoritative datasets from various bureaus, Departments and Enterprise Data Warehouse. (Ongoing Activity)
4. Maintain equipment and promote Department plotting on the IT provided consolidated plotters located throughout the department facilities. (Ongoing Activity)
5. Provide technical assistance for use of new tools and platforms allowing users to create their own maps without desktop GIS (New Activity)

TRAVEL: None

CONTRACTS: None

EQUIPMENT:

- Year Two - \$15,000 Plotter Purchase – Plotter required to support plotting for all custom and standard mapping requests and support plotting of Cartographic / Photo Images such as State map (42" plotter.)

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Automated Mapping - Graphics – 2207889 / 5220
MANAGER: Timothy Stewart
UNIT: Bureau of Information Management & Technology Planning / GIS

EQUIPMENT: (cont'd.)

These plotters are necessary to support the job activity goals of providing rapid plotting of NJDOT's special GIS mapping requests, including providing hard copy graphic and cartographic materials. Large format plotters are required to provide clear accurate mapping support for GPS projects, state/county digital base map layers using digital orthoimagery, LiDAR imagery and photo raster image files. Equipment purchases are in accordance with 2 CFR 200.48: \$200.48 and 2 CFR 200.89: \$200.89

STAFFING:

Thomas Rafferty, GIS Specialist 1	0.25
Nirali Patel, Software Development Specialist 2	0.25
Chris Tenebruso, GIS Specialist 2	0.25
David Weighart, GIS Specialist 3	0.25
Michael Prihoda, GIS Specialist 3	0.25
Total	1.25

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: New Jersey State Transportation Map – 2207889 / 5230
MANAGER: Timothy Stewart
UNIT: Bureau of Information Management & Technology Planning / GIS

MISSION / OBJECTIVE:

To develop, manage, maintain and provide the most current, accurate, reliable and productive geospatial data, applications and technical expertise in support of the New Jersey Department of Transportation (NJDOT) and its mission by supporting department-wide activities, improving accessibility & safety and continuing to work and plan cooperatively with other governmental agencies at the federal, state and local level.

GOALS / ACTIVITIES:

1. Manage and maintain the cartographic and digital production of the Official New Jersey State Transportation Map which is provided for free distribution to the public. State transportation base maps, inset maps and datasets are kept updated to reflect current information.
2. Planning and creation of new theme, colors and appearance and layout templates for the future planned map. Selection and authorization of photography for cover and backside artwork, ensuring permissions /waivers are obtained.
3. Collaborate with multiple NJDOT Bureaus, other NJ Departments and Agencies for inclusion of other transit agency information, safety, security data resources and Travel & Tourism information.
4. Initiate and assist in the state procurement process, allowing selection of the vendor for printing. Requiring safeguards for delivery including multiple press proof color separations and quality assurances prior to printing. Providing on-site visit ensuring color accuracy and map registration prior to final printing.
5. Assist in the acceptance, receiving and accounting of maps in storage, prior to planning and arranging map distribution throughout the state.
6. Migrate all State Map base layers to new GIS platform (ArcGIS Pro) as old platform is being discontinued (ArcGIS Desktop/ArcMap).

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Ensure staffing and training complete for map creation team effort, providing continued updating of the base maps, insets and datasets to reflect current information. (Ongoing Activity)
2. Development of new layouts, themes and content for the next official state map printing. Review imagery and photos for publication, from various outlets including new leadership. (New Activity)
 - a. Obtain and file official photo releases.
3. Collaborate with sister departments and agencies to gather current up-to-date datasets. (Ongoing Activity)
4. Prepare specifications, budgeting and bid process requirements after submission of final map files to printer. Conduct final on-site press proof and quality assurance before final print. (New Activity)
5. Accept, receive, store and plan for distribution of final map product. (Ongoing Activity)
6. Prepare, implement and QA test the migration onto the new ArcGIS Pro platform. (New Activity)

TRAVEL: None

CONTRACTS: None

EQUIPMENT: None

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: New Jersey State Transportation Map – 2207889 / 5230
MANAGER: Timothy Stewart
UNIT: Bureau of Information Management & Technology Planning / GIS

STAFFING:

Thomas Rafferty, GIS Specialist 1	0.25
Magdy Guirguis, Administrative Analyst 3	0.25
Chris Tenebruso, GIS Specialist 2	0.25
David Weighart, GIS Specialist 3	0.25
Michael Prihoda, GIS Specialist 3	0.25
Total	1.25

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Digital Data Distribution – 2207889 / 5240
MANAGER: Timothy Stewart
UNIT: Bureau of Information Management & Technology Planning / GIS

MISSION / OBJECTIVE:

To develop, manage, maintain and provide the most current, accurate, reliable and productive geospatial data, applications and technical expertise in support of the New Jersey Department of Transportation (NJDOT) and its mission by supporting department-wide activities, improving accessibility & safety and continuing to work and plan cooperatively with other governmental agencies at the federal, state and local level.

GOALS / ACTIVITIES:

1. Maintain the NJDOT GIS Internet & Intranet webpages providing current county maps, state base maps, data download links, GIS information and access links to various developed GIS applications.
2. Create, manage, maintain and plan for multiple NJDOT GIS content managers to support current and future NJDOT geospatial needs: ArcGIS Desktop migrating into ArcGIS Pro platform, ArcGIS Enterprise (Server, Portal, Data Warehouse), ArcGIS Hub, ArcGIS Online, ESRI Field Apps (Survey 123, etc.).
3. Distribute GIS datasets and maps via various media including; paper maps, FTP and feature web map services. Data also provided in various formats such as: file geodatabases, mobile geodatabases and map layers and features. Map products provided in various formats such as; .pdf, .jpeg, .ai, and other raster formats, on various paper types, sizes and include mounted or laminated boards.
4. Continue enhancing GeoTrans (NJDOT internal web-based mapping system) providing current management system data from various bureaus of NJDOT and EDW, allowing analysis, display, exporting and printing capabilities.
5. Development, maintenance and enhancement of NJDOT's ArcGIS Server and ArcGIS Online web based platforms, providing viewers feeding information to be populated on base maps, provided to general public via web applications, including: SRI Locator, Aviation, Agreement & Jurisdictional Map, Address Locator, Park & Ride, Geodetic Monuments, etc. Continued development of AGOL infrastructure which will allow the creation of interactive web maps and dashboards for various divisions within NJDOT to allow for project analysis and data sharing.
6. Develop and maintain a complete NJ statewide imagery system, by collecting new imagery datasets in collaboration with OGIS, NJDEP, NGA, Corps of Engineers, OHSP and private vendors. Imagery types include LiDAR, Aerial, Satellite, Ortho, Oblique and other raster imagery formats and services in order to support the NJDOT raster needs.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Continued updating and improvement of available GIS applications, data, maps and interactive viewers on NJDOT GIS Internet and Intranet web pages, including an Open Data sharing platform based on ArcGIS Hub technology. (Ongoing Activity)
2. Manage existing GIS content managers including working with NJOIT/OGIS for required infrastructure improvements needed for future GIS improvements. (Ongoing Activity)
3. Distribute data and mapping products via various media, including ArcGIS Hub, Portal, dvd's, mounted and laminated boards. (Ongoing Activity)
4. Continue to provide a web presence for GIS through GeoTrans web viewer, customizing new map enhancements including: map tools, analysis, map tips, transparency, buffers, plot template, export template, SQL queries, clip, conversion tools, etc. (Ongoing Activity)
 - a. Resource data connections to utilize current EDW availability.
5. Develop special web applications as needed/requested from NJDOT groups utilizing ArcGIS Server and AGOL platforms in order to improve data sharing capabilities. (New Activity)

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Digital Data Distribution – 2207889 / 5240
MANAGER: Timothy Stewart
UNIT: Bureau of Information Management & Technology Planning / GIS

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025 (cont'd):

- 6. Develop collection of various imagery datasets in collaboration with OGIS, NJDEP, NGA, Corps of Engineers, OHSP and private vendors, including securing web service solutions and various raster file datasets. (New Activity)

TRAVEL: None

CONTRACTS:

Year One

- \$150,000 funding for 2025 Statewide Orthoimagery Project. Imagery will provide full statewide coverage, 4 band, leaf off, 1 ft resolution in support of the GIS platform. NJDOT will participate in a cost sharing effort to fund this collection with NJDEP and the Office of Information Technology /GIS facilitating this effort. This project will provide much needed updating, as last collected in 2015, and will support many bureaus including: Transportation Security, Land Use/Environmental, Freight/Rail, Maritime, Aeronautics, Planning and Highway Classifications, etc. Beyond the Department the imagery is utilized by most the MPO's, Federal, State and Local agencies.
- \$25,000 funding for ESRI GIS training. This project supports the NJDOT GIS modernization program with vendor training to bolster the transition from ArcGIS Desktop to ArcGIS Pro and ArcGIS Portal for users. Provides additional training for GIS staff to better manage the enterprise GIS system and support the users throughout the Department as well as developing a NJDOT GIS training program.

Year Two

- \$150,000 funding for GIS consultant services. This project supports NJDOT GIS initiatives including development of ArcGIS Hub, Enterprise and Portal environments to support department users. Also provides training for GIS staff to better manage these environments as well as developing a NJDOT GIS training program. This funding for GIS consultant services supports NJDOT programs including Drainage, Guiderail, Basins, Emergency Management, LiDAR-Elevation, Geotechnical, Maritime, etc.

EQUIPMENT: None

STAFFING:

Thomas Rafferty, GIS Specialist 1	0.25
Magdy Guirguis, Administrative Analyst 3	0.50
Nirali Patel, Software Development Specialist 2	0.25
Chris Tenebruso, GIS Specialist 2	0.25
David Weighart, GIS Specialist 3	0.25
Michael Prihoda, GIS Specialist 3	0.25
	<hr/>
Total	1.75

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Transportation Systems Information Management and Data Integration - 2207889 / 5250
MANAGER: Timothy Stewart
UNIT: Bureau of Information Management & Technology Planning/Information Management Unit

MISSION / OBJECTIVE:

To provide NJDOT with Departmental data resources in a manner that avoids duplication and promotes easy and open access to data throughout the Department.

To offer analysis, design and implementation of integration of the NJDOT Transportation Management Systems that support department-wide activities.

GOALS/ACTIVITIES:

1. Optimize Enterprise Data Warehouse and Business Intelligence tools within our environment, to leverage the existing system and to support additional components for a seamless and transparent product. Meet the informational and administrative needs necessary to support the day-to-day management of the Department. Provide the ability to query the Enterprise Data Warehouse and retrieve data from all integrated systems.

Data Marts have been created to facilitate quick retrieval of data and reports. Business Objects Universes continue to be built to satisfy user community reporting needs. The EDW allows the user community, system owners and planners, better advice for new projects and investments and to answer questions that have not been previously possible. Provide Business Objects training and education to NJDOT user community.

2. The NJDOT Data Stewardship Council shall review and discuss issues related to the Enterprise Data Warehouse. The Council shall also review planned changes to the Enterprise Data Warehouse source systems and the possible impact of the planned changes. The goal is to ensure that system changes are properly vetted among all affected parties to avoid unnecessary IT Data Warehouse development costs.
3. The New Jersey Department of Transportation (NJDOT) has several internal data systems that are critical to the effective management of New Jersey's transportation infrastructure. These systems provide decision support to management in the areas of planning, design, construction, maintenance, and operations of NJDOT's wide array of infrastructure. TransINFO is part of the Department Enterprise Data Warehouse (EDW) that combined datasets from numerous transportation management systems to support NJDOT planning efforts and facilitate analysis across multiple disciplines. The current NJDOT Enterprise Data Warehouse is Oracle 19c and it is hosted by NJOIT. The Enterprise Data Warehouse is further organized into smaller logical units called Data Marts. Currently the data marts are: TransINFO and Executive Information System (EIS). Goals for this period include:
 - a. The EDW enhancement project consists of adding data from several new source systems and enhancing existing EDW tables with new and modified data from updated DOT source systems.
 - Safety Portfolio Projects data
 - PMRS e-Builder (Project Management Reporting System)
 - Maritime, DMMS (Dredged Materials Management System)
 - AASHTOWARE Site Manager (Construction Projects data)
 - FMIS data
 - b. Addition of new source systems
 - Maritime, WLS (Waterway Linear Referencing System)

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Transportation Systems Information Management and Data Integration - 2207889 / 5250
MANAGER: Timothy Stewart
UNIT: Bureau of Information Management & Technology Planning/Information Management Unit

GOALS/ACTIVITIES: (cont'd.)

- TAMS (Transportation Asset Management System) – Claims and Drainage data
 - PPMS (Pavement Project Management System)
 - eBuilder SAGE (Municipal aid awards/projects data)
 - CRD Crash data
4. Develop a multi-phased plan for enabling MPOs access to Data Marts via Business Objects. The MPO representatives will provide their anticipated data needs, categorized by management system, identifying how the data will be used. An MOU renewal for the MPO data sharing project is in progress. Per the Models of Regional Planning Cooperation, this project will promote the cooperation and coordination across MPO and State boundaries to ensure a regional approach to transportation planning and reporting via the Enterprise Data Warehouse. Provide the analytical tool available via Business Intelligence; develop Business Objects reports as per the data needs; including training.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Provide Business Objects training and education to MPO's/ FHWA for the TransINFO Planning Data Mart and Dashboards and EIS dashboards. Continue training of the NJDOT user community for new users, etc. (New and Ongoing)
2. Meet bi-annually with Management Systems Data Stewards. (Ongoing)
3. Add data from new source systems and enhance existing EDW tables with new and modified data from updated DOT source systems. Support the NJDOT user community for the development of Business Objects reports and Dashboards as requested. (New and Ongoing)
4. Provide the MPO's access to the analytical tool available via Business Intelligence to access the EDW data and reports. Provide training and act as the liaison between MPO's and DOT Source SME's for supporting data sharing as needed. (New and Ongoing)
5. Develop a new dashboard for the Capital Project Management division to monitor the Construction projects' timelines and funds. (New)
6. Support for DOT user community on new and existing Business Object development for Funds management (Contracts, Agreements, Vendors), eCATS time management (Overtime, Emergency management) and Budget reports. (New and Ongoing)

TRAVEL: None

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Transportation Systems Information Management and Data Integration - 2207889 / 5250
MANAGER: Timothy Stewart
UNIT: Bureau of Information Management & Technology Planning/Information Management Unit

STAFFING:

Silpa Reddy, Administrative Analyst 4	1.00
Jyothi Puchalapalli, Software Development Specialist 2	1.00
Lily Goyal, Information Technology Specialist	1.00
Vasavi Mukkamala, Administrative Analyst 3	1.00
Snehaben V. Desai, Information Technology Specialist	1.00
Siresha Avva, Administrative Analyst 3	1.00
Deepthi Chinthapatla, Administrative Analyst 3	1.00
Kiranmai Sadineni, Administrative Analyst 3	1.00
Priti Sharma, Administrative Analyst 3	1.00
Poonam Patel, Administrative Analyst 3	1.00
Priyanka Yarakaraju, Administrative Analyst 3	1.00
Vacant – Backfill, Software Development Specialist 2	1.00
Vacant - Backfill, Information Technology Specialist	1.00
Vacant - Backfill, Information Technology Specialist	<u>1.00</u>
Total	14.00

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

ACTIVITY: Local Concept Development DVRPC - Environmental – 2207891/5000
MANAGER: Pamela Garrett, Director
UNIT: Division of Environmental Resources

MISSION / OBJECTIVE:

Identify projects that can be delivered in the DVRPC Administered Local Concept Development (LCD) Program; dismiss those that have fatal flaws that preclude project delivery.

Identify environmental parameters that, along with the Project Purpose and Need, will be used to evaluate alternatives in order to develop the Initially Preferred Alternative (IPA). Based on sufficient environmental analysis, determine the appropriate National Environmental Policy Act (NEPA) classification (Categorical Exclusion, Environmental Assessment, Environmental Impact Statement) for the IPA. Complete NEPA documents for limited scope projects as needed.

GOALS/ACTIVITIES:

The Division of Environmental Resources will continue to:

1. Ensure viable projects enter the LCD phase by providing subject matter expertise regarding candidate applications.
 - a. Review applications for candidate projects; provide input to selection process.
 - b. Conduct field visits to the project location to identify site specific design and constraint issues.
 - c. Provide subject matter expertise guidance related to Scopes of Work, Man-Hour Estimates, Request for Proposal (RFPs) and consultant proposals.
2. Participate in Project Team Meetings to understand the factors that influence design decisions that are being made and to provide timely input regarding environmental concerns.
3. Assist in the development of the Purpose and Need Statement/Goals and Objectives
 - a. Ensure the avoidance and/or minimization of impacts to environmental resources is considered during project development, in accordance with local, state and federal environmental regulations.
 - b. Ensure mitigation requirements for impacts to environmental resources are understood and included in the project during project development to facilitate obtaining approvals from permitting agencies.
4. Ensure a thorough and comprehensive environmental constraint analysis that is consistent with the Federal Highway Agency (FHWA) Planning and Environmental Linkages (PEL) approach is conducted during LCD.
 - a. Ensure all socioeconomic and environmental factors, including community concerns related to equity, Environmental Justice, sustaining livability, and quality of life issues are identified and considered.
 - b. Seek technical assistance/comments from Review Agencies, Stakeholders, and the public to identify environmental constraints (e.g. wildlife crossings) and assess the importance/significance of those constraints.
5. Ensure appropriate alternatives that satisfy the project Purpose and Need and consider environmental factors are fully investigated prior to selecting the IPA.
 - a. Ensure that a sufficient range of alternatives is identified that addresses (to the degree known) environmental concerns and constraints for the project
 - b. Ensure that appropriate coordination with Stakeholders and Review agencies is conducted (re: alternatives).

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

ACTIVITY: Local Concept Development DVRPC - Environmental – 2207891/5000
MANAGER: Pamela Garrett, Director
UNIT: Division of Environmental Resources

6. Participate in the Internal Review Committee (IRC) meetings to select the project IPA.
 - a. Review the LCD Report to ensure the environmental concerns are reflected in the Purpose and Need Statement, Environmental Constraints, Alternatives Analysis, and Anticipated environmental approvals and coordination with permitting agencies.
 - b. Provide input regarding the project schedule Preliminary Engineering (PE) and Final Design (FD) based on required environmental approvals and coordination with permitting agencies.
7. Once an IPA is identified, determine the appropriate NEPA environmental document that will be required in the subsequent PE Phase of work.
 - a. Ensure that NEPA requirements are considered.
 - b. Seek concurrence from FHWA on the appropriate environmental document.
8. Participate during PE and FD phases in the review of the RFP to ensure tasks are included to complete the environmental studies (if required) and coordination with permitting agencies and the public (if required).
9. When appropriate and consistent with PEL, complete the NEPA environmental document.
 - a. Conduct field review as needed.
 - b. Complete appropriate technical studies/analysis as required for NEPA compliance.
 - c. Seek comments from the review agencies, stakeholders and the public on technical studies.
 - d. Prepare appropriate NEPA and other (Section 4(F), MOA, etc.) documentation required to define environmental constraints that must be considered in PE.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Work is anticipated to continue on the following projects in CY 2025:
 - Williamstown Rd (CR536 Spur) and Erial Rd (CR 706) Intersection Improvements, Winslow Township
 - Dinosaur Trail (Mantua, Pitman, Glassboro, Harrison)
 - CR 653 Paulsboro Road and CR 684 Repaupo Station Road/Asbury Station Road
 - Rancocas Creek Greenway, Route 130 (MP 40-42)/Rancocas Creek Crossing
 - Burlington County Bridge D4.56 Church Road (CR 616) over Southwest Branch of Rancocas Creek
2. New LCD projects and consultants to pursue the CD analysis will be selected for multiple projects through the joint efforts of DVRPC and NJDOT staff (Goal 1).
3. LCD studies will be complete as a basis for selection of an IPA (Goals 2-6) and the identification of the appropriate NEPA document (Goal 7).
4. Review the RFP and associated PE/FD Proposal include environmental task, if required (Goal 8).
5. NEPA documents will be completed for Limited Scope of other projects as circumstances warrant (Goal 9).

TRAVEL: No travel costs are anticipated.

CONTRACTS: None

EQUIPMENT: None

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

ACTIVITY: Local Concept Development DVRPC - Environmental – 2207891/5000
MANAGER: Pamela Garrett, Director
UNIT: Division of Environmental Resources

STAFFING: Division of Environmental Resources

Sean Warren	Project Manager Transportation	0.043
Jeffrey Gendek	Environmental Specialist 4	0.058
Sarah Helble	Environmental Specialist 3	0.038
Shaquille Fearon – Elliott	Environmental Specialist 1	0.034
Ryan Scully	Environmental Specialist Trainee	0.019
Sean Ream	Environmental Specialist 4	0.008
Sharon Coe	Environmental Specialist 3	0.004
Lindsay Thivierge	Program Specialist 2	0.014
Harrison MacDowall	Environmental Specialist Trainee	0.001
Ishita (Khushi) Malhotra	Environmental Specialist Trainee	0.019
New Hire	Environmental Specialist 4	0.048
New Hire	Environmental Specialist Trainee	0.019
New Hire	Environmental Specialist Trainee	0.019
Paula Scelsi	Environmental Specialist 4	0.008
Raymond Souweha	Environmental Specialist 3	0.002
John Riggi	Environmental Specialist 3	0.019
David Luciano	Environmental Specialist 1	0.001
	Total:	0.354 py

STATE PLANNING AND RESEARCH PROGRAM, 2023 – 2024

ACTIVITY: Local Concept Development – Local Aid – DVRPC-2207891 / 4999
MANAGER: Laine Rankin
UNIT: Division of Local Aid and Economic Development

MISSION / OBJECTIVE:

Establish and identify projects through concept development that can be delivered in the various Local Aid Programs. The objective of this effort is to work with the MPO's in developing Preliminary Preferred Alternative (PPA) that addresses transportation needs established in this phase. Also, to assist the MPO in determining project local concept development key tasks such as coordination with stakeholders.

GOALS/ACTIVITIES:

1. Select participation on Consultant Selection Committee for advertisement of RFP.
2. Provide technical expertise and local knowledge towards the development of the Purpose & Need.
3. Participation on Project Selection Team to provide expertise towards identification of fatal flaws. and selection of Preliminary Preferred Alternative at a planning level detail. Collaborate with the DVRPC and other MPOs as appropriate, to further incorporate multimodal planning context and coordination in the development of a Preferred Project Alternative (PPA).
4. Coordinate meetings with NJDOT SME's and the IRC as needed throughout the duration of a project. Occasional overtime may be necessitated on a particular study in order to complete reviews or provide guidance as necessitated by the project schedule, the political nature of the study and other time sensitive issues.
5. Participation on Interagency Review Committee to conduct periodic reviews as subject matter experts towards project eligibility and approval to advance to the next phase.
6. Approve LCD studies for selected projects and coordinate new LCD starts with MPO's and Local Aid.
7. Conduct eligibility assessment activities such as: provide guidance to LPAs on eligibility requirements; conduct submission reviews and make recommendations to the Local Aid Division for concurrence.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

- Local Aid will review and approve LCD the pertinent studies ready for advancement for selected projects in coordination with DVRPC, that ensure full compliance with FHWA requirements associated with non-PODI and PODI projects (Goals 1, 4, 5, and 6), and in ways that incorporate efficiencies in terms of the duration of the review process (Goals 2 and 3). Local Aid will explore supporting the MPO's or local sponsors in the exploration of further opportunities with the MPOs to incorporate regional and local planning context, and coordinate new LCD starts with local sponsors, MPO's, and the Bureau of Program Resources (BEPR) (Goal 3). Local Aid will work with local project sponsors to provide guidance and serve as a liaison for coordination of subject matter expert reviews in the development of reasonable alternatives and strategies that address the purpose and needs statement, leading to the selection of a Preliminary Preferred Alternative (PPA) (Goal 3). Local Aid will work on eligibility assessment activities (Goal 7) with local sponsors advancing selected projects. Representative project examples include but are not limited to: Rancocas Creek Greenway Trail, Route 130 (MP 40-42)/Rancocas Creek Crossing, Willingboro and Delran Townships; Burlington County Bridge D4.56 Church Road (CR 616) over Southwest Branch of Rancocas Creek Medford Township; Williamstown Road (CR536 Spur) and Erial Road (CR 706) Intersection Improvements, Winslow Township; CR 653 and CR 684 Intersection Improvements, Logan Township
Dinosaur Trail, Mantua Township, Pitman Borough, Glassboro Borough, Harrison Township

STATE PLANNING AND RESEARCH PROGRAM, 2023 – 2024

ACTIVITY: Local Concept Development – Local Aid – DVRPC-2207891 / 4999
MANAGER: Laine Rankin
UNIT: Division of Local Aid and Economic Development

TRAVEL:

None

CONTRACTS:

No contracts are associated with this activity.

EQUIPMENT:

No equipment is anticipated with this activity

STAFFING:

This program is managed by staff from the Division of Local Aid. Each individual listed represents 0.04 person years for this activity.

Division of Local Aid

Hector Pimentel
Joheb Khan
Swarna Vemuri
Arnab Biswas
Kumudika Somaratna
Tremaine Ward
Pavan Sheth
Ankit Thaker
Kenneth Oriaku
Brian Wirtz
Arturo San Jose
Vijesh Darji
Lauren Coe
Nenbert Gonzalez
Tyrell Villegas
Lucero McKenna
Alka Shah
Francis Kasprzak
Vincent Masciandaro
Yatinkumar Amin
Qamar Zaman
Edward Andrescavage
Deven Patel
Julie Seaman
Mahmood Khandakar
Nicole Todd
Thomas Glatfelter
Marquis McEwen
Alyssa Adams
(Project Management Specialist 3-D3)

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Local Concept Development – Local Aid – DVRPC-2207891 / 4999

MANAGER: Laine Rankin

UNIT: Division of Local Aid and Economic Development

(Project Management Specialist 3-D3)

(Project Management Specialist 3-D3)

(Project Management Specialist 1-D3)

(Engineer Trainee-D3)

(Engineer Trainee-D3)

(Project Management Specialist 1-D4)

(Project Management Specialist 2-DO)

(Project Management Specialist 2-DO)

Total Person Years: 1.52 person years for a total of \$161,684.25

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

ACTIVITY: Local Concept Development NJTPA - Environmental – 2207893/5000
MANAGER: Pamela Garrett, Director
UNIT: Division of Environmental Resources

MISSION / OBJECTIVE:

Identify projects that can be delivered in the NJTPA Administered Local Concept Development (LCD) Program; dismiss those that have fatal flaws that preclude project delivery.

Identify environmental parameters that, along with the Project Purpose and Need, will be used to evaluate alternatives in order to develop the Initially Preferred Alternative (IPA). Based on sufficient environmental analysis, determine the appropriate National Environmental Policy Act (NEPA) classification (Categorical Exclusion, Environmental Assessment, Environmental Impact Statement) for the IPA. Complete NEPA documents for limited scope projects as needed.

GOALS/ACTIVITIES:

The Division of Environmental Resources will continue to:

1. Ensure viable projects enter the LCD phase by providing subject matter expertise regarding candidate applications.
 - a. Review applications for candidate projects; provide input to selection process.
 - b. Conduct field visits to the project location to identify site specific design and constraint issues.
 - c. Provide subject matter expertise guidance related to Scopes of Work, Man-Hour Estimates, Request for Proposal (RFPs) and consultant proposals.
2. Participate in Project Team Meetings to understand the factors that influence design decisions that are being made and to provide timely input regarding environmental concerns.
3. Assist in the development of the Purpose and Need Statement/Goals and Objectives
 - a. Ensure the avoidance and/or minimization of impacts to environmental resources is considered during project development, in accordance with local, state and federal environmental regulations.
 - b. Ensure mitigation requirements for impacts to environmental resources are understood and included in the project during project development to facilitate obtaining approvals from permitting agencies.
4. Ensure a thorough and comprehensive environmental constraint analysis that is consistent with the Federal Highway Agency (FHWA) Planning and Environmental Linkages (PEL) approach is conducted during LCD.
 - a. Ensure all socioeconomic and environmental factors, including community concerns related to equity, Environmental Justice, sustaining livability, and quality of life issues are identified and considered.
 - b. Seek technical assistance/comments from Review Agencies, Stakeholders, and the public to identify environmental constraints (e.g. wildlife crossings) and assess the importance/significance of those constraints.
5. Ensure appropriate alternatives that satisfy the project Purpose and Need and consider environmental factors are fully investigated prior to selecting the IPA.
 - a. Ensure that a sufficient range of alternatives is identified that addresses (to the degree known) environmental concerns and constraints for the project
 - b. Ensure that appropriate coordination with Stakeholders and Review agencies is conducted (re: alternatives).

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

ACTIVITY: Local Concept Development NJTPA - Environmental – 2207893/5000
MANAGER: Pamela Garrett, Director
UNIT: Division of Environmental Resources

6. Participate in the Internal Review Committee (IRC) meetings to select the project IPA.
 - c. Review the LCD Report to ensure the environmental concerns are reflected in the Purpose and Need Statement, Environmental Constraints, Alternatives Analysis, and Anticipated environmental approvals and coordination with permitting agencies.
 - d. Provide input regarding the project schedule Preliminary Engineering (PE) and Final Design (FD) based on required environmental approvals and coordination with permitting agencies.
7. Once an IPA is identified, determine the appropriate NEPA environmental document that will be required in the subsequent PE Phase of work.
 - a. Ensure that NEPA requirements are considered.
 - b. Seek concurrence from FHWA on the appropriate environmental document.
8. Participate during PE and FD phases in the review of the RFP to ensure tasks are included to complete the environmental studies (if required) and coordination with permitting agencies and the public (if required).
9. When appropriate and consistent with PEL, complete the NEPA environmental document.
 - a. Conduct field review as needed.
 - b. Complete appropriate technical studies/analysis as required for NEPA compliance.
 - c. Seek comments from the review agencies, stakeholders and the public on technical studies.
 - d. Prepare appropriate NEPA and other (Section 4(F), MOA, etc.) documentation required to define environmental constraints that must be considered in PE.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Work is anticipated to continue on the following projects in CY 2025:
 - Lenape Island Bridge over Indian Lake
 - Kennedy Boulevard (CR 6) & County Line Road (CR 526) Congestion Mitigation
 - Easton Avenue (CR 527) Safety Improvements
 - Tennent Rd (CR3) Corridor Improvements from Denon Drive to Kensington Drive
2. New LCD projects and consultants to pursue the CD analysis will be selected for multiple projects through the joint efforts of NJTPA and NJDOT staff (Goal 1).
3. LCD studies will be complete as a basis for selection of an IPA (Goals 2-6) and the identification of the appropriate NEPA document (Goal 7).
4. Review the RFP and associated PE/FD Proposal include environmental task, if required (Goal 8).
5. NEPA documents will be completed for Limited Scope of other projects as circumstances warrant (Goal 9).

TRAVEL: No travel costs are anticipated.

CONTRACTS: None

EQUIPMENT: None

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

ACTIVITY: Local Concept Development NJTPA - Environmental – 2207893/5000
MANAGER: Pamela Garrett, Director
UNIT: Division of Environmental Resources

STAFFING: Division of Environmental Resources

Sean Warren	Project Manager Transportation	0.048
Jeffrey Gendek	Environmental Specialist 4	0.005
Sarah Helble	Environmental Specialist 3	0.001
Shaquille Fearon – Elliott	Environmental Specialist 1	0.004
Ryan Scully	Environmental Specialist Trainee	0.001
Sean Ream	Environmental Specialist 4	0.048
Sharon Coe	Environmental Specialist 3	0.038
Lindsay Thivierge	Program Specialist 2	0.019
Harrison MacDowall	Environmental Specialist Trainee	0.014
Ishita (Khushi) Malhotra	Environmental Specialist Trainee	0.019
New Hire	Environmental Specialist 4	0.043
New Hire	Environmental Specialist Trainee	0.019
New Hire	Environmental Specialist Trainee	0.019
Paula Scelsi	Environmental Specialist 4	0.010
Raymond Souweha	Environmental Specialist 3	0.002
John Riggi	Environmental Specialist 3	0.019
David Luciano	Environmental Specialist 1	0.001
	Total:	0.310 py

STATE PLANNING AND RESEARCH PROGRAM, 2025-2026

ACTIVITY: Local Concept Development – Local Aid – NJTPA 2207893 / 4999
MANAGER: Laine Rankin
UNIT: Division of Local Aid and Economic Development

MISSION / OBJECTIVE:

Establish and identify projects through concept development that can be delivered in the various Local Aid Programs. The objective of this effort is to work with the MPO's in developing Preliminary Preferred Alternative (PPA) that addresses transportation needs established in this phase. Also to assist the MPO in determining project local concept development key tasks such as coordination with stakeholders.

GOALS/ACTIVITIES:

1. Select participation on Consultant Selection Committee for advertisement of RFP.
2. Provide technical expertise and local knowledge towards the development of the Purpose & Need.
3. Participation on Project Selection Team to provide expertise towards identification of fatal flaws and selection of Preliminary Preferred Alternative at a planning level detail. Collaborate with the NJTPA and other MPOs as appropriate, to further incorporate multimodal planning context and coordination in the development of a Preferred Project Alternative (PPA).
4. Coordinate meetings with NJDOT SME's and the IRC as needed throughout the duration of a project. Occasional overtime may be necessitated on a particular study in order to complete reviews or provide guidance as necessitated by the project schedule, the political nature of the study and other time sensitive issues.
5. Participation on Interagency Review Committee to conduct periodic reviews as subject matter experts towards project eligibility and approval to advance to the next phase.
6. Approve LCD studies for selected projects and coordinate new LCD starts with MPO's and Local Aid.
7. Conduct eligibility assessment activities such as: provide guidance to LPAs on eligibility requirements; conduct submission reviews and make recommendations to the Local Aid Division for concurrence.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

Local Aid will review and approve LCD the pertinent studies ready for advancement for selected projects in coordination with NJTPA, that ensure full compliance with FHWA requirements associated with non-PODI and PODI projects (Goals 1, 4, 5, and 6), and in ways that incorporate efficiencies in terms of the duration of the review process (Goals 2 and 3). Local Aid will explore supporting the MPO's or local sponsors in the exploration of further opportunities with the MPOs to incorporate regional and local planning context, and coordinate new LCD starts with local sponsors, MPO's, and the Bureau of Program Resources (BEPR) (Goal 3). Local Aid will work with local project sponsors to provide guidance and serve as a liaison for coordination of subject matter expert reviews in the development of reasonable alternatives and strategies that address the purpose and needs statement, leading to the selection of a Preliminary Preferred Alternative (PPA) (Goal 3). Local Aid will work on eligibility assessment activities (Goal 7) with local sponsors advancing selected projects. Representative project examples include but are not limited to: Tennent Road (CR 3) Corridor Improvements from Devon Drive to Kensington Drive, Monmouth County; Lenape Island Road Bridge over Indian Lake, Morris County; Kennedy Boulevard (CR 6) & County Line Road (CR 526) Congestion Mitigation, Ocean; and Easton Avenue (CR 527) Safety Improvements, Somerset County. The NJTPA will be conducting a new solicitation for projects, where Local Aid will be participating in the selection and coordination of the new starts.

TRAVEL:

None

STATE PLANNING AND RESEARCH PROGRAM, 2025-2026

ACTIVITY: Local Concept Development – Local Aid – NJTPA 2207893 / 4999
MANAGER: Laine Rankin
UNIT: Division of Local Aid and Economic Development

CONTRACTS:

No contracts are associated with this activity.

EQUIPMENT:

No equipment is anticipated with this activity

STAFFING:

This program is managed by staff from the Division of Local Aid. Each individual listed represents 0.04 person years for this activity.

Division of Local Aid

Richard Loveless
Nusrat Jahan
Jonathan Mojsoski
Thomas Vedeika
Ceciel Youssef
Vania Desrosiers-Edouard
Baher Girgis
Frank McCombs
Nabil Ayoub
Paul Miranda
Miriana Ghaly
Ahmad Ahmad
Shailesh Pathak
Mena Zaki
Osbel Dorvil
Ruben Tursi
Akhil Madhusoodhanan
Arnab Biswas
Kumudika Somaratna
Hector Pimentel
Joheb Khan
Ankit Thakar
Swarna Vemuri
Tremaine Ward
Pavan Sheth
Alyssa Adams
Deven Patel
Julie Seaman
Marcus McEwen
Mahmood Khandakar
Nicole Todd
Thomas Glatfelter
(Project Management Specialist 1-D1)

STATE PLANNING AND RESEARCH PROGRAM, 2025-2026

ACTIVITY: Local Concept Development – Local Aid – NJTPA 2207893 / 4999

MANAGER: Laine Rankin

UNIT: Division of Local Aid and Economic Development

(Project Management Specialist 2-D2)

(Engineer Trainee-D2)

(Project Management Specialist 3-D3)

(Project Management Specialist 3-D3)

(Project Management Specialist 3-D3)

(Project Management Specialist 1-D3)

(Engineer Trainee-D3)

(Engineer Trainee-D3)

(Project Management Specialist 2-DO)

(Project Management Specialist 2-DO)

Total Person Years: 1.72 person years for a total of \$175,670.39

STATE PLANNING AND RESEARCH PROGRAM, 2025-2026

ACTIVITY: TA Set Aside (TAP) Planning and Development- 2207894
MANAGER: Laine Rankin
UNIT: Local Resources Community Development-Division of Local Aid and Economic Development

MISSION / OBJECTIVE:

Local Aid plays a leading role in the planning and selection of projects that meet the spirit and vision of the Transportation Alternatives Set Aside Program (TA Set Aside). This program provides federal funds to grant recipients for community based “non-traditional” surface transportation projects designed to strengthen the cultural, aesthetic, and environmental aspects of the nation’s intermodal system. TA Set Aside funding supports “non-traditional” surface transportation projects developed at the local level to advance community-based needs and goals consistent with the broad program eligibility categories. Local Aid also administers the planning and selection of projects for the Safe Routes to School Program (SRTS). SRTS funds are federally funded and a subset of TA Set Aside funds. The SRTS Program strives to empower communities to make walking and bicycling to school a safe and routine activity; and provides funding for projects and activities that support and encourage students to walk and bicycle to school. Funds are used for infrastructure projects benefiting school children in grades K-12 in public and private schools. All projects must be located within two miles of an elementary or middle school. Program objectives include:

GOALS/ACTIVITIES:

1. Network with other States TAP and SRTS coordinators, including webinars, conference calls and attend conferences and related events.
2. Develop program guidance and management, and update guidance including various communication platforms. Ensure both program goals are aligned with MAP-21 and IIJA requirements; ensure compliance with federal regulatory and environmental requirements for the Set-Aside and SRTS programs. Update and develop applications annually, for TA Set Aside and SRTS using the System for Administering Grants Electronically (SAGE) software. Coordinate updates with the three MPOs, the NJDOT Division of Environmental Resources and the Office of Bicycle and Pedestrian Programs (OBPP).
3. Solicit applications, conduct community outreach (including application workshops to increase awareness of both programs and their requirements); conduct applicant one on one meetings for both programs.
4. Conduct field reviews to evaluate application submissions. Gather data and perform a competitive project selection process as required by MAP-21 and IIJA. Prepare correspondence announcing the program solicitation and develop approval and rejection letters. Conduct Lessons Learned with MPO’s, District staff, and provide debriefings to applicants to better aid them in future solicitations.
5. Organize the lists of selected projects and create reports for the Commissioner’s office, MPOs, and FHWA. Track programs and previously selected projects and provide performance updates to Commissioner’s office, MPOs, and FHWA.
6. Hold kickoff meetings with grant recipients providing guidance federal and project delivery requirements. A subsequent meeting with the grant recipient will be held either decide the scope under design assistance or the scope on locally lead design efforts.
7. Conduct eligibility assessment activities such as: provide guidance to LPAs on eligibility requirements; conduct submission reviews, and make recommendations to the Local Aid Division for concurrence.
8. Assist applicants to help them successfully apply for funds (including for applicants to the statewide, MPO, or other competitive processes authorized under 23 U.S.C. 133(h)(2)(B)), and assisting applicants with project implementation, including NEPA review, planning, design, permits, and project management.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

Local Aid anticipates launching a new solicitation for the 2026 SRTS program during this time period. Review and develop program guidance and management for next SRTS solicitation. (Goals 2-5). Complete remaining tasks for the 2024 RTA Set-Aside solicitation (Goals 4 and 5). Continue activities related to 2025 TA Set Aside program

STATE PLANNING AND RESEARCH PROGRAM, 2025-2026

ACTIVITY: TA Set Aside (TAP) Planning and Development- 2207894
MANAGER: Laine Rankin
UNIT: Local Resources Community Development-Division of Local Aid and Economic Development

solicitation (Goals 2-5). For the grants recently announced and including 2024 RTA Set Aside, SRTS 2024, TA Set Aside 23, along with previously announced grants, continue activities related to the advancement of approved grants and project delivery (Goals 5-8). Local Aid will work with both applicants as well as grant recipients in all phases of the a grant cycle from pre application through project development and up to authorization (Goal 8). Consideration of Equity is included in these programs and will continue to be included to be included. Continue coordination with the NJDEP and other agencies and stakeholders on the NJ Trails Plan. (Goals 1 and 8). Coordination with other agencies and outside organizations may occur related to this program and meeting its requirements.

TRAVEL:

None

CONTRACTS:

No contracts associated with this activity.

EQUIPMENT:

No equipment is anticipated with this activity

STAFFING:

Each individual listed represents .1 person year for this activity.

PATEL, DEVEN	AYOUB, NABIL	ZAKI, MENA
BISWAS, ARNAB	GHALY, MIRIANA	ALYSSA ADAMS
WARD, TREMAINE	LOVELESS, RICHARD	COE, LAUREN
NUSRAT JAHAN, NUSRAT	McCOMBS, FRANK	DARJI, VIJESH
KHANDAKAR, MAHMOOD	MOJSOSKI, JONATHAN	GONZALES, NENEBERT
ZAJAK, CHRISTOPHER	GIRGIS, BAHER	KASPRZAK, FRANCIS
MADHUSOODHANANAN, ANKIL	PATHAK, SHAILESH	MASCIANDARO, VINCENT
SEAMAN, JULIE	DORVIL, OSBEL	AMIN, YATINKUMAR
VADEIKA, THOMAS	YOUSSEF, CECIEL	SAN JOSE, ARTURO
FAYAZI-AZAD, FOROOZAN	THAKAR, ANKIT	SHAH, ALKABEN
MCEWEN, MARCUS	PIMENTAL, HECTOR	SWARNA VEMURI
AHMAD, AHMAD	KHAN, JOHEB	WIRTZ, BRIAN
MIRANDA, PAUL	TODD, NICOLE	ZAMAN, QAMAR
VILLEGAS, TYRELL	SOMARATNA, M. KUMUDIKA	ANDRESCAVAGE, EDWARD
McKENNA, LUCERO	KOMATREDDY, VANAJA	SHETH, PAVAN
TURSI, RUBEN	EDWARDS, DAVID	ORIAKU, KENNETH

STATE PLANNING AND RESEARCH PROGRAM, 2025-2026

ACTIVITY: TA Set Aside (TAP) Planning and Development- 2207894
MANAGER: Laine Rankin
UNIT: Local Resources Community Development-Division of Local Aid and Economic Development

(Project Management Specialist 1-D1)

(Project Management Specialist 2-D2)

(Engineer Trainee-D2)

(Project Management Specialist 3-D3)

(Project Management Specialist 3-D3)

(Project Management Specialist 3-D3)

(Project Management Specialist 1-D3)

(Engineer Trainee-D3)

(Engineer Trainee-D3)

(Project Management Specialist 1-D4)

(Administrative Analyst 2-DO)

(Project Management Specialist 2-DO)

(Project Management Specialist 2-DO)

64 person years for Local Aid staff.for a total of \$661,102.75

Division of Environmental Resources

Staff person years are as follows:

Sharon Coe	0.2	Paula Scelsi	0.1	Shaquille Fearson-Elliot	0.2
Sean Warren	0.1	Ray Souweha	0.1	Sean Ream	0.1
Jeff Gendek	0.1	John Riggi	0.1	Harrison McDowall	0.2
Lindsay Thivierge	0.2	Sarah Helbe	0.2	Ryan Scully	0.2
(Environmental Specialist Trainee)	0.2			(Environmental Specialist Trainee)	0.2
(Environmental Specialist Trainee)	0.2			(Environmental Specialist 4)	0.1

2.3 person years for Environmental staff. \$207,154.22

66.3 people for a Grand total \$806,000.09

STATE PLANNING AND RESEARCH PROGRAM, 2025- 2026

ACTIVITY: Pavement Program Planning – 2207887 / 9000
MANAGER: Robert Blight
UNIT: Pavement and Drainage Management & Technology

MISSION/OBJECTIVE:

The Pavement Management Unit will be the primary resource for pavement planning and condition information in NJ not only for the Department, but for all stakeholders.

As a component of the Department's Asset Management (AM) program, provide information, recommendations, and expertise in planning a comprehensive, performance-based pavement program that will assist the Department in making sound pavement investment decisions to maximize network condition levels in the most cost-effective manner with an emphasis on a performance management approach as specified by MAP-21, FAST, and potential INVEST legislations.

GOALS/ACTIVITIES:

Consistent with NJDOT performance-based planning, asset management and FHWA MAP-21/FAST/INVEST Implementation:

1. Maintain and enhance the Department's Pavement Management System to meet the Department's data needs.
2. Analyze and report pavement data to drive informed decision making.
3. Work to address pavement maintenance, repair and replacement needs.
4. Information and Technology Transfer
5. Maintain and enhance Department's Guide Rail Management System (GRMS) to meet Department's data needs to comply agreement with FHWA dated 6/1/2018, analyze and report guiderail data to drive data driven decision for upgrading sub-standard guiderail.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

Enhanced data collection of pavement condition data for the NJ State Highway System and National Highway System networks. ONGOING.

Overtime \$90,000/year). Overtime is essential so that pavement condition data can be collected on high volume roads during off-peak hours with extended days and on weekends. To take skid trailer to Ohio for testing, staff needs overtime. Overtime is also needed for pavement staff to perform pavement data quality assurance review and for construction quality field review for pavement projects in the nighttime, then feeding that data to the pavement management system, and to complete time sensitive contract management tasks.

Develop, maintain, enhance and coordinate pavement software applications which comprise the NJDOT Pavement Management System. (PMS) (Corresponds to goal # 1) ONGOING.

Enhanced pavement data analysis and reporting to support Department planning, programming and project delivery efforts including management system data requests, Department dashboards and Engineering Data Warehouse updates, CIS and TAMP funding needs and performance projections, Pavement Report to the Legislature, and Ride Quality pay adjustments. (Corresponds to goal # 2) ONGOING.

Develop pavement work programs for Operations and CPM based on updated pavement and funding data and optimized data analysis, screen candidate locations for optimal treatment and efficient delivery and develop associated problem statements. (Corresponds to goal # 3) ONGOING.

Evaluate, and implement new treatments and materials related to pavements, cost effective strategies for maintaining, preserving, rehabilitating, and constructing pavements, participate in the Department's TAMP team, Participate in the exchange of information and technology transfer through outreach, workshops, conferences, and users' groups. Provide training for Pavement Program Planning staff and other key staff in the department. (Corresponds to goal # 4) NEW/ONGOING.

Maintaining and Updating GRMS inventory data, enhance Guide Rail selection priority tool and reporting to support Department planning, programming and project delivery efforts including management system data requests, Department dashboards and Engineering Data Warehouse updates, and CIS. (Corresponds to goal # 5) ONGOING.

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

ACTIVITY: Pavement Program Planning - 2207887 / 9000
MANAGER: Robert Blight
UNIT: Pavement and Drainage Management & Technology

CONTRACTS:

\$ 25,000 Amazon AWS Data Storage
 \$ 55,000 Pathweb from Pathway Services
 \$205,000 Deighton Associates (dTIMS software)
 Total: \$285,000

TRAVEL:

\$3,000 – dTIMS US Peer Exchange, anticipated in October/November 2025, location TBD (2 staff)
 \$4,500 – 2025 Transportation Research Board Annual Meeting, Washington DC (January 2025) (2 staff)
 \$2,600 – Mid-Atlantic Quality Assurance Workshop, Maryland (February 2025) (2 staff)
 \$ 200 - NJ Asphalt Paving Conference (2 staff) (March 2025)
 \$1,500 – NJSAT Asphalt Paving Construction Technologist (2 Staff), TBD
 \$5,000 – 2025 Road Profiler User Group Meeting (April 2025) (2 staff)
 \$3,000 – Calibration of 1 Skid Traler TBD 2025 (2 staff)
 \$4000 - AASHTOWARE Pavement ME User Group Meeting (2 staff)

Total: \$23,800

EQUIPMENT:

These equipment and supplies used for Pavement Condition Data Collection, as well as to measure and monitor skid resistance are necessary to achieve the goal # 1, 2, & 3 above.

The equipment listed below meet the definition of Equipment under 2CFR200.33, Special Purpose Equipment definition under 2CFR200.89, and meet the requirements to use, manage, and dispose of such equipment under 2CFR200.313 and 2CFR200.314.

Standard Rib Tires (12 nos.) for Pavement Skid-Resistance Tests: **\$15,000**

Calibration of one Skid Traylor in 2024 in accordance with ASTM2793 **\$24,000**

Total: \$39,000

STAFFING:

N. Kohli	Supervising Engineer	0.85	N. Morshed	Project Engineer	0.80
K. Sereni	Admin Analyst 4 Info Sys	0.90	V. Gervasoni	Principal Engineer	0.75
B. Kotwal	Info Tech. Specialist	0.90	W. Kettleson	Principal Engineer	0.75
S. Rana	Project Engineer	0.95	A. Semler	Senior Engineer	0.70
H. Abdu	Project Engineer	0.65	Y. Patel	Senior Engineer	0.70
V. Patel	Principal Engineer	0.80	B. Islam	Principal Engineer	0.75
D. Jacob	Engineering Tech Apr.	1.00	S. Sadeqlu	Senior Engineer	0.70
G. Walters	Engineering Tech 3	1.00	N. Desai	Senior Engineer	0.70
N. Hayduk	Engineering Tech 3	1.00	H. Bitewlign	Senior Engineer	0.70
B. Onyile	Admin Analyst 3 I S	0.95	M. Alrubaye	Assistant Engineer	0.70
R. Surin	Engineering Tech 2	1.00	M. Moyer	Administrative Analyst 3	0.70
E. Ramsey	Engineering Tech Apr	1.00	M. Khan	Info Tech. Specialist	1.00
M. Henin	Assistant Engineer	0.85	S. Kazmi	Admin Analyst 3 I S	1.00
T. Choudhary	Senior Engineer	0.85	N. Saleh	Engineer Trainee	0.70

TOTAL PERSON YEARS **23.35**

STATE PLANNING AND RESEARCH PROGRAM, 2025-2026

ACTIVITY: Pavement Support Program – 2207887 / 9100
MANAGER: Robert Blight
UNIT: Pavement and Drainage Management & Technology

MISSION/OBJECTIVE:

Improve the health of NJDOT's pavement network as a component of the State of New Jersey's performance-based planning (PBP) and asset management (AM).

The primary mission of the NJDOT Pavement Support Program is to identify and evaluate innovative Pavement Management and Engineering strategies to support the New Jersey Department of Transportation (NJDOT)'s Pavement and Drainage Management and Technology Unit in the following areas:

- Cost effective preservation and renewal strategies to keep the state's pavement assets in a state of good repair.
- Optimization of the overall condition of the State's Pavement network within the available funding levels
- Compliance with MAP-21/FAST and INVEST Legislation

GOALS/ACTIVITIES:

The overall goal of this program is to use the tools and resources of the Pavement Support Program (PSP) to optimize the funds available to preserve the State's pavement assets and optimize the overall conditions of New Jersey's state-maintained highway pavements. The goals and activities for the 2024 program are ON-GOING:

1. Innovative Materials - Research and test new or innovative materials or additives or mix designs to enhance pavement performance, constructability, material production, sustainability.
2. Innovative Technologies - Research innovative pavement technologies that offer benefits with regard to cost, quality, performance, constructability or sustainability through surveys, literature reviews, equipment demonstrations, etc.
3. Pavement Management System (PMS) Development - Support the Department in the development and continuous improvement of its Pavement Management System
4. Evaluate and Enhance Pavement Design Procedures – Assist the Department in evaluating and improving its current Pavement Design procedures and software to improve reliability of pavement designs.
5. Life Cycle Cost Analysis/ Cost Benefit Analysis - Assist in developing a methodology to evaluate and compare the life cycle costs of new pavement materials and technologies that have been implemented with those of more traditional materials and technologies.
6. Research in Support of Pavement Policy Development - Assist in gathering and presenting information to help guide and justify DOT pavement policy through data mining, surveys, and literature searches.
7. Technology Transfer – Provide pavement related presentations/demonstrations/training to highlight relevant pavement information to keep NJDOT staff abreast of the current state of the practice and promising developments in the fields of pavement management, pavement design, materials engineering, and pavement construction.
8. On-Call Service During Urgent Situations: Assist the NJDOT during urgent situations.

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

ACTIVITY: Pavement Support Program – 2207887 / 9100
MANAGER: Robert Blight
UNIT: Pavement and Drainage Management & Technology

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

Update of NJDOT's Asphalt Materials Mixture Design and QC Specifications and Forms, NJDOT High RAP (HRAP) Pilot Projects.

Review, Research, and Development of Pavement Design Procedures and Specifications for Slurry/Micro surfacing with 100% RAP, Phase III, Review and Recommendations on Revising the Design Practices, and Specifications for Scrub Seals (Corresponds to Goal # 1)

Interlayer Bonding Properties of Asphalt Pavements, A Framework for Balanced Mix Design (BMD) Concepts in New Jersey, Demonstration Project – Look at Incorporating 3D Project Modeling and Visualization During Project Planning, Development and Selection

Development of Pavement Design Procedures and Construction Specifications for Cold Central Plant Recycling (CCPR) Asphalt Mixtures-Phase IV, Review of Literature and Interviews of Subject Matter Experts to Develop a Pavement Repair Guide, Full-Scale Evaluation of Full-Depth Reclamation Asphalt Mixtures with Bituminous Additives (Corresponds to Goal # 2)

Management of Data Workflow of Pavement Condition Data Collected During NJDOT Highway Network Condition Assessment, Pavement Equipment Verification Program, Enhance dTIMS Pavement Management Software Configuration, Developed Updated Pavement Performance Curves, Implementation of GIS for Enhanced Decision Making, Pavement Performance Prediction with Machine Learning Models

Integration of NJDOT PMS Database Applications, Developing a New Equation for Ranking Drainage Projects, - Developing a Framework for Incorporating Risk Factors into the dTIMS Optimization Process, Incorporating Structural Indices into NJDOT's Pavement Management System Using Traffic Speed Deflectometer (TSD) Data, PMS Roadmap Implementation (1.1.3) – Develop Model to Estimate Pavement Structural Health (Corresponds to Goal # 3)

Continue Updating of PAVEMENT-ME Material Catalog and NJ Specific Inputs (Corresponds to Goal # 4)

Benefit-Cost Analysis of Overlay Strategy and Specialty Mix.

Developing a Life Cycle Cost Analysis Framework for New Jersey Pavement Surfacing (Corresponds to Goal # 5)

Pathways Training, dTIMS User Training for NJDOT PMS Staff, SurPro Walking Profiler Test Training, NJSAT Hot Mix Asphalt Materials Refresher

Pavement Performance Modeling Techniques, Pavement Lifecycle Planning, Electrically Conductive Asphalt Pavements for Self-Deicing Applications, Laboratory and Full-Scale Evaluation of Fiber-Reinforced Hot-Mix Asphalt (HMA) (Corresponds to Goal # 7)

Assist the NJDOT during urgent situations at short notice with emphasis on quick completion and recommendations. (Corresponds to Goal # 8)

CONTRACTS: \$ 5,000,000 **TRAVEL:** None **EQUIPMENT:** None **STAFFING:** None

STATE PLANNING AND RESEARCH PROGRAM, 2025 - 2026

ACTIVITY: Drainage Program Planning – 2207887 / 9200
MANAGER: Robert Blight
UNIT: Pavement and Drainage Management & Technology

MISSION/OBJECTIVE:

Reduce statewide motorist impacts of functionally obsolete drainage facilities resulting in increased mobility, improved safety and increased pavement performance of NJDOT's highway network. Through performance-based planning and asset management, provide drainage information, recommendations and expertise in coordination with Pavement Program Planning to better address drainage factors and infrastructure that impact mobility, safety and pavement life.

GOALS/ACTIVITIES:

Consistent with NJDOT performance-based planning, asset management and FHWA MAP-21/FAST/INVEST Implementation:

6. Maintain and enhance the Department's Drainage Management System to meet the Department's data needs
7. Analyze and report drainage impact data to drive informed decision making
8. Work to address high drainage impact areas
9. Information and Technology Transfer

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

Update the Drainage Management system with newly collected flooding and icing data. Enhance data collection process. (Corresponds to goal # 1) ONGOING

Enhance analysis, ranking, and reporting capabilities to support pavement and drainage programming decisions, TAMP compliance and meet Department's changing needs. Provide current drainage ranking information in response to management system information requests and to support the Department's dashboards, Engineering Data Warehouse, CIS, TAMP, and Resiliency initiatives. (Corresponds to goal # 2) ONGOING

Develop drainage work programs for Operations and CPM based on updated DMS rankings and available funding and prepare associated problem statements to initiate new capital drainage improvement projects. Coordinate with other Divisions to implement low-cost high value drainage solutions where possible and Coordinate drainage and pavement solutions. Evaluate, support, and assist in the implementation of new drainage technologies and treatments (Corresponds to goal # 3) ONGOING

Support NJDOT's compliance with Federal TAMP and PM regulations, Participate in the exchange of drainage related information and technology transfer through outreach, workshops, conferences and users' groups. Provide continued training for Drainage Management and other key Department staff. (Corresponds to goal # 4) ONGOING

CONTRACTS: None

TRAVEL: None

EQUIPMENT: None

STATE PLANNING AND RESEARCH PROGRAM, 2023 - 2024

ACTIVITY: Drainage Program Planning – 2207534 / 9200
MANAGER: Robert Blight
UNIT: Pavement and Drainage Management & Technology

STAFFING:

Name	Title	Person Years
N. Kohli	Supervising Engineer	0.15
S. Rana	Project Engineer	0.05
H. Abdu	Project Engineer	0.35
V. Gervasoni	Principal Engineer	0.05
K. Sereni	Admin Analyst 4, IS	0.10
B. Kotwal	Info Tech Specialist	0.05
N. Morshed	Project Engineer	0.05
W. Kettleson	Principal Engineer	0.05
B. Islam	Principal Engineer	0.05
S. Sadeqlu	Senior Engineer	0.05
N. Desai	Senior Engineer	0.05
H. Bitewlign	Senior Engineer	0.05
A. Semler	Senior Engineer	0.05
B. Onyile	Admin Analyst 3, IS	0.05
Y. Patel	Senior Engineer	0.05
V. Patel	Principal Engineer	0.20
M. Moyer	Administrative Analyst 3	0.05
M. Henin	Assistant Engineer	0.15
T. Choudhary	Senior Engineer	0.15
M. Alrubaye	Assistant Engineer	0.05
N. Saleh	Engineer Trainee	0.05

TOTAL PERSON YEARS **1.85**

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Bridge Management System – 2207905
MANAGER: Mujahid Khan, Manager
UNIT: Bureau of Structural Evaluation & Bridge Management

MISSION / OBJECTIVE:

The Department’s overall Bridge Management System (BMS) effort directs state investment to maintain the state’s bridges, and other transportation structures, in optimal condition at minimal cost. Improve the Department’s Bridge Management Systems to assist in developing the Statewide Transportation Asset Management Plan (TAMP), the Performance Measures and Target Setting Process (PM2), the State Transportation Improvement Program (STIP), the Ancillary Asset Management Plan (AAMP), and the Bridge Preservation Program to enable more pro-active and cost-efficient methods of managing the State’s structural assets.

GOALS/ACTIVITIES:

1. Improve accuracy and quality, efficiency, and timeliness of BMS data collection.
 - a. Continue to develop and implement the new NBIS Bridge Inspection Program in CombIS (Combined Inspection System) and new BrM (Bridge Management), expanding the functionality to capture complete bridge inspection information for the largest and most complex NBIS bridges for all owners. This effort will also include State and County owned Minor bridges, and other State-owned structural assets such as the Overhead Sign structures and High Mast Light Poles, Tunnels, Dams, and Pedestrian and other bridges).
 - i. Develop and implement inspection reports, field-by-field, for the remaining bridge assets within CombIS including underwater inspection reports, interim inspection reports, mechanical/electrical reports for movable structures, tunnel and dam reports, pedestrian bridge reports, and for any special events.
 - ii. Perform the typical cleanup effort needed at the end of any major upgrade to ensure all aspects of the system are functioning properly. This activity also includes cleanup of the current state items for future usefulness.
 - iii. Continue to add additional fields to CombIS and BrM to query as needed to support current National Bridge Inspection Standards (NBIS) rules, current Specifications for the National Bridge Inventory (SNBI) requirements, the MAP-21 data requirements, bridges and other structural asset management and performance management, and Bipartisan Infrastructure Law (BIL) compliant Transportation Asset Management Plan (TAMP), which also includes extreme weather events, major accidents, resiliency, etc.
 - b. Continue to improve the Federal reporting features of the SI&A, Unit Costs, National Bridge Element Data, National Tunnel Inventory Data, and Compliance Metrics
 - i. Develop new reports as needed, in both CombIS and BrM to improve the data quality control, quality assurance, checking and reporting.
 - ii. Develop reports to track and report on the federally mandated 23 Metrics for NBI and SNBI Data Compliance, Element Level Data Compliance metrics, and 15 Metrics for SNTI data Compliance.
 - iii. Develop reports to support day-to-day Senior Management and MPO requirements.
 - iv. Develop reports to support the latest TAMP requirements, and MAP-21 Performance Metrics.
 - v. Improve NBI Component to Element conversion and include priority repair criteria based on Element Condition States.
 - c. Perform all necessary actions to prepare for the federal “Tapes” for NBI, SNBI, SNTI and NBE compliance from BrM.
 - d. Continue to include data for State Border NBIS Bridges into New Jersey NBI and SNBI data as per MAP-21 requirements, including State Border Tunnels in BrM and CombIS.
 - e. Include bridges in New Jersey under FHWA ownership (such as bridges within the vicinity of Defense/Military Areas) within the Historical Database.
 - f. Continue to develop and implement SNBI compliant NJDOT Risk Assessment Management in BMS for evaluating risk at assets level, including generating guidelines for inspectors to

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Bridge Management System – 2207905
MANAGER: Mujahid Khan, Manager
UNIT: Bureau of Structural Evaluation & Bridge Management

- update/modify risk score during routine inspections. This effort will also include supporting ongoing development of the NJDOT extreme weather and resilience program by generating reports and sharing information as needed.
- g. Develop and implement plan of action for a Standard Baseline Document Change (BDC) Process in New Jersey to incorporate current National Bridge Inspection Standards.
 - h. Continue to maintain and enhance the Structure Numbering process and record keeping as a part of bridge asset registry.
2. Establish and enhance the appropriate data linkages, including manual methods, to enable the optimized flow of information to support the Department’s decision-making. Work with various Department units to adjust/refine the structural project identification and prioritization process such that, for major efforts, the right work happens at the right time. As part of this, develop appropriate project priorities and recommendations for effective Asset Management, and provide this information for use in the Statewide Capital Investment Strategy (CIS), the TAMP, the STIP, the Bridge Preservation, and the PM2 needs. Connect work candidates from Maintenance Work Order System (now called TAMS - Transportation Asset Management Systems) to CombIS and BrM to ensure that work accomplished during both major and minor preventive maintenance/preservation treatments are properly credited.
- a. Continue to develop and implement a plan to obtain and provide data to different management systems within the Department for generating an approved STIP every two years for bridge & other structural assets.
 - b. Annual consistency review for TAMP process and its implementation will be performed.
 - c. Under the performance measures and target setting process, performance metrics will be evaluated, and state established targets may be revised if needed for mid- and full-performance period.
 - d. Continue to develop and implement a plan of obtaining data on work completed on bridge and structural assets under preventive maintenance/preservation program from Maintenance Work Order System (or TAMS) into CombIS and BrM.
 - e. Continue to develop and implement a plan of obtaining data on major work performed on bridges and other structural assets (major rehabilitations and replacements) from the Department’s project management and construction activities. This will require working within Project Management Reporting System (PMRS), and developing a data flow process (initially manually, and later via data transfer utility) from PMRS, and possibly other data sources, to CombIS.
 - f. Continue to develop and implement appropriate project priorities and recommendations using Problem Initiation (TP-1), Project Analysis, and Historical Analysis, including “deep dives” processes under Asset Management program. This prioritization process is a collaborative effort performed by the SMEs from Structural Evaluation, Asset Management, Bridge Preservation, Moveable Bridge Engineering Group, Structural Design, and Structural Value Solutions utilizing input from BMS, PMRS, Design, Value Solutions, Inspections, and other Best Practices, which helps adjusting these recommendations over time to maximize value and minimize cost.
 - i. Continue to work with the Department as necessary to adjust the project development and delivery process to be more compatible with the management systems for project identification, development, and time-based (delivery-date-focused) optimization.
 - ii. Based on the approved TAMP investment strategies, continue to develop and identify Project/Maintenance recommendations for the yearly Capital Program, while updating the CIS, and the STIP based on the revised bridge needs.
 - iii. Develop and implement methods of tracking progress with regards to meeting established goals.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Bridge Management System – 2207905
MANAGER: Mujahid Khan, Manager
UNIT: Bureau of Structural Evaluation & Bridge Management

3. Maximize the effectiveness of the investment in bridge and structural assets infrastructure.
 - a. Improve BrM data driven modeling capabilities.
 - i. Continue to calibrate BrM Deterioration models, Utility Value models, Action-Benefit-Cost models, Lifecycle planning, and Projects & Programs modeling for NJDOT.
 - ii. Utilize the Bridge Resource Program and Staff Augmentation to refine various processes involved within BMS.
 - iii. Develop procedures and mechanisms to enable development of projects to ensure goals are met for bridges and other structural assets in the system.
 1. Continue to develop procedures and analysis to optimize the preventive maintenance/preservation program.
 2. Continue to develop procedures and analysis to optimize major rehabilitation and replacement programs, including limited scope projects, partial replacement and widening projects, and projects due to other than bridge needs.
 - iv. Continue to update the override unit cost for bridge work types as per FHWA guidelines and develop methodology to estimate element level unit cost in BrM.
 - v. Continue to enhance the BrM functionality to support the risk-based methodology for decision making.
 - vi. Align Bridge GIS with NJ Datum, and integrate with NJ GIS to develop bridge layer, including 3D scans using LiDAR, Project layer, ancillary assets layer, and risk assessment layer.
 - b. MAP-21 Implementation and data sharing/integration
 - i. Continue to improve integration of the BMS with the other Department management systems to ensure that projects are coordinated between disciplines.
 - ii. Continue to develop and provide an appropriate level of support to the MPOs and major Toll Agencies with regards to their data sharing as they endeavor to comply with the MAP-21 requirement to: *Transition to Performance Based Planning and Programming*.
 - iii. Implement all required aspects of the Bridge Performance Measures and the TAMP.
 - c. Continue to enhance and implement a bridge preventive maintenance/preservation program, and BMS methods to support this program.
 - i. Continue to develop the NJDOT Bridge Preservation Section (also called “*Playbook*”) as part of the NJDOT BMS Manual, that captures a task-by-task method of documenting why we chose each action we make available for a bridge, what benefit we can take credit for in BrM deterioration modeling, what the cost benefit is, and the specifics of the action.
 - ii. Continue to work in the preservation team, which consist of SMEs from Division of Bridge Engineering & Infrastructure Management, Bureau of Operations Support and Engineering, Moveable Bridge Engineering Group, and Asset Management, to develop, document and implement methods that provide current information on what existing maintenance contracts are being performed on State bridges and when. The team will continue to develop programming tools such as entering a list of actions in BrM that result in future bridge preservation projects.
 - iii. Continue to develop and document various “plays” and decision trees for determining when to implement the various alternatives listed in the Playbook.
 - iv. Develop standards for Maintenance and Preservation interventions and treatment frequency, and update standards design drawings whenever needed.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Bridge Management System – 2207905
MANAGER: Mujahid Khan, Manager
UNIT: Bureau of Structural Evaluation & Bridge Management

- d. Continue to enhance the BMS capabilities to deliver the TAMP, including annual consistency review, current Capital Program, the 10-year STIP, and 25-year Capital Plan, utilizing BrM directly to the extent possible and other supporting tools' capabilities where required.
 - i. Continue to calibrate BrM to generate the capital program and stabilize its functionality specific to New Jersey needs.
 - ii. Continue to adjust BrM to bring the models in alignment with our expectations and look for data sources and methods external to BrM for developing supporting information.
 - iii. Continue to develop and deliver data required for the TAMP, including PM2, Lifecycle Planning, Budgeting, and Alternate Funding Scenarios analyses.
 - iv. Develop design service life criteria for major components and elements.
4. Implement current NBIS rulemaking plan of action in accordance with 23 CFR Part 650
 - a. Develop and prepare a plan to update the New Jersey's Recording and Coding Guide for the Structure Inventory and Appraisal of NBIS Bridges based on the final approved version of the Specifications for the National Bridge Inventory (SNBI), including updating of the NJDOT Bridge Elements Inspection Manual.
 - b. Evaluate Data Crosswalk tool and align with NJDOT Bridge Management Databases
 - c. Initiate a plan to implement Data Submittal Schema and Data Submittal Validation Logic which will integrate with the FHWA NBI *NextGen* system.
 - d. Utilize the Transition Tool intended to assist NJDOT in understanding the relationship between the Coding Guide data items and the SNBI data items and populating the new bridge data systems.
 - e. Continue to add additional fields to CombIS and BrM to support the new SNBI coding manual.
 - f. Plan for adjusting compliance oversight of National Bridge Inspection Program
 - g. Institute administrative trainings and workshops to preserve bridge management system knowledge and implement training of new requirements statewide.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

- I. (Activities 1.a.i and 1.a.iii) Continue to design and implement NBIS Bridge Inspection reports within CombIS for underwater inspections, interim inspections, tunnel inspections, and pedestrian bridge inspection. Continue to add additional fields within CombIS and BrM to support the MAP-21 data requirements for bridges and other structural assets. Continue to add additional fields to CombIS and BrM to query as needed to support current National Bridge Inspection Standards (NBIS) rules, current Specifications for the National Bridge Inventory (SNBI) requirements
- II. (Activities 1.b.ii, and 1.b.iv) Continue to improve the data quality control, quality assurance, look ahead checking process on a quarterly basis to support the federal compliance. Create reports to specific to the TAMP requirements, and Performance Metrics.
- III. (Activity 1.c) Submit NBI, NTI, NBE, State Border bridges, and Unit Cost data on time.
- IV. (Activity 1.f) Continue to develop a plan for SNBI Compliant NJDOT Risk Assessment Management tool in BMS for evaluating risk at assets level, including generating guidelines for inspectors to update/modify risk score during routine inspections and supporting NJDOT Resilience Program.
- V. (Activity 2.c) Evaluate performance measures and performance metrics so that the state baseline is reported, and 2-year and 4-year targets can be established for the next performance period.
- VI. (Activity 2.f) Continue to enhance and implement project priorities and recommendations during Problem Initiation (TP-1) process, Project Analyses, and Historical Analyses under Asset Management program. Based on the approved TAMP investment strategies, continue to develop, identify and track Projects and Maintenance Recommendations.
- VII. (Activities 3.a.i, and 3.a.ii) Continue to enhance the BMS functionalities by improving the BrM data driven modeling capabilities. Continue to calibrate BrM deterioration models, utility value models, action-benefit-cost models, lifecycle planning, and Projects & Program modeling.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Bridge Management System – 2207905
MANAGER: Mujahid Khan, Manager
UNIT: Bureau of Structural Evaluation & Bridge Management

- VIII. (Activities 3.a.iii.1, and 3.c.ii) Continue to develop procedures and analysis internally to optimize the preventive maintenance/preservation program. The preservation team will work together to develop, document, and implement methods that provide current maintenance contracts that are being performed and develop programming tools in BrM such as entering a list of actions that result in future bridge preservation projects.
- IX. (Activity 3.d.i) Continue to calibrate BrM to generate the capital program and stabilize its functionality specific to New Jersey needs.
- X. (Activities 4.a thru 4.g) Continue to develop and implement all activities associated with 23 CFR Part 650 – New NBIS updates including SNBI Coding Guide, Data Crosswalk, Data Submittal Schema, Data Submittal Validation Logic, Transition Tool, NBIP Compliance, and training of new requirements statewide. These activities will be ongoing and will align with the FHWA timeline.

Note: The following staff augmentation efforts will directly support the BMS:

- Continue to develop external public facing dashboards showing existing bridge condition based of the approved annual data, and internal dashboards to show latest performance goals and targets.
- Continue to develop element cost model for preservation, rehabilitation, and replacement programs using historical information available in BidX, engineer’s estimates and maintenance work orders.
- Enhance NJDOT Risk Assessment Framework methodology, scoring criteria, and Excel tool incorporating new risk categories for State Maintained NBIS Bridges, including scour program, overall criticality score, and resiliency.
- Continue to create new elements for sign structures aligned with AASHTO elements and the high mast light pole elements and develop a comprehensive manual for inspection of ancillary structures, including data transfer from CombIS to BrM.
- Continue to develop “new starts” or TP-1s for eligible problem statements on the remaining bridge assets and enhance the process resolving scoping issues using “deep dive” matrix on as needed basis.
- Continue to develop active projects module in BrM by uploading programmed projects and create a tracking mechanism to reflect the entire project lifecycle process.
 - *TRAVEL:*
 - Year 1: 2025 Year 2: 2026
 - Conferences = **\$3,500.00** Conferences = **\$18,000.00**
 -

Event	Year 1	Year 2
National TRB Asset Management Conference 2025 and 2026		\$7,200
AASHTOWare BrM User Group Meeting 2025 and 2026	\$3,500	\$3,600
Northeast Bridge Preservation Meeting 2026		\$7,200
TOTAL	\$3,500	\$18,000

- **Note:**
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- Recommend **two (2)** staff members to attend the National TRB Asset Management Conference, **two (1)** staff members to attend the AASHTOW are BrM User Group Meeting, and **two (2)** staff members to attend the Northeast Bridge Preservation Meeting.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Bridge Management System – 2207905
MANAGER: Mujahid Khan, Manager
UNIT: Bureau of Structural Evaluation & Bridge Management

CONTRACTS:

CombIS contract - Bentley (*AssetWise Inspections*) – Approximately: \$500,000 in FFY2025
 CombIS contract - Bentley (*AssetWise Inspections*) – Approximately: \$550,000 in FFY2026
 AASHTOWare BrM implementation – Approximately: \$250,000 in FFY2025
 AASHTOWare BrM implementation – Approximately: \$300,000 in FFY2026

EQUIPMENT:

None.

STAFFING:

<u>Name</u>	<u>Title</u>	<u>Person-Years</u>
Harjit Bal	Supervising Engineer Structural Evaluation	0.80
Nirav Patel	Supervising Engineer Structural Evaluation	0.20
Gina Rossi	Project Engineer Structural Evaluation	0.30
Douglas Tintle	Project Engineer Structural Evaluation	0.30
Vincent Shu	Project Engineer Structural Evaluation	0.10
Chandrabhas Shah	Project Engineer Structural Evaluation	0.40
James DeCristofaro	Project Engineer Structural Evaluation	0.10
John Soldwedel	Principal Engineer Structural Evaluation	0.10
Ramy Shamroukh	Principal Engineer Structural Evaluation	0.10
Vijay Sampat	Principal Engineer Structural Evaluation	0.40
Dauda Kamara	Principal Engineer Structural Evaluation	0.20
Aakash Shah	Principal Engineer Structural Evaluation	0.40
Nikunj Lathia	Principal Engineer Structural Evaluation	0.20
Wael Kassem	Principal Engineer Structural Evaluation	0.20
David Bishay	Senior Engineer Structural Evaluation	0.40
TBD	Principal Engineer Structural Evaluation	0.40
Zachary Keator	Assistant Engineer Transportation	0.30
Abdelrahman Mahana	Assistant Engineer Transportation	0.20
TBD	Assistant Engineer Transportation	0.20
TBD	Assistant Engineer Transportation	0.20
TBD	Engineer Trainee Transportation	0.20
TBD	Engineer Trainee Transportation	0.20
In-house Staff for Training	Various titles	1.00
	Total	6.90

Overtime - \$122,400 for Year 1 and \$124,848 for Year 2 budget to utilize the subject matter experts that are sufficiently involved to ensure that the requirements of the federal mandate are properly implemented in every aspect of this system. After stabilizing the two major tools (CombIS and BrM), the team will be doing advanced asset management, risk assessment management, enhanced deterioration modeling, preservation modeling, and projects in bridge program in support of the NJDOT STIP, TAMP, and PM2. As we will be relying on this data driven development of the entire bridge program, we must ensure that it is done correctly by using people with the proper expertise.

STATE PLANNING AND RESEARCH PROGRAM, 2025-2026

ACTIVITY: Bridge Resource Program - 2207908
MANAGER: Ali J. Najem, P.E.
UNIT: Bureau of Structure Engineering Services

MISSION / OBJECTIVE:

The primary mission of the Bridge Resource Program (BRP) is to provide ongoing engineering evaluation and research support to the NJDOT's Division of Bridge Engineering and Infrastructure Management to

- (1) Preserve the State's Bridge and Structural Assets,
- (2) Optimize and rehabilitate the overall condition of the state's structures within the available funding levels, and
- (3) Assist with the development of policy and standards based on new technologies and guidelines as a component of the State of New Jersey's Asset Management System.

GOALS/ACTIVITIES:

The foundation for a successful Bridge Resource Program is to ensure that its core functional areas are aligned with NJDOT's needs, and are flexible, responsive and can efficiently enhance the overall performance of State assets. As such the BRP plan will be focused on the following core work areas:

Task 1 Enhance the NJDOT's Structural Management Activities

- a) Develop, refine, and validate Bridge Deterioration Modeling.
 - a.1 Develop new historical database using current standards in SNBI and create historical deterioration trends.
 - a.2 Validate accuracy of existing deterioration models.
 - a.3 Evaluate correlation between the Components and Element condition ratings.
- b) Provide data mining and technical assistance as needed with respect to the Bridge Management Systems.
 - b.1 A model-based bridge data extraction method for both textual and graphical information from bridge inspection reports can be developed by leveraging text mining methods to automatically extract critical information from inspection reports as well as image recognition methods to align photographs of bridge deck conditions with bridge models generated by LiDAR.
 - b.2 Research drone-based inspection guidance, and business requirements for GIS based model to incorporate bridge assets data layer.
- c) Provide technical assistance to Bridge Management Systems
 - c.1 Develop Bridge Preservation System and calibrate preservation actions and programs.

Task 2 Structural Load Capacity Analysis

- a) Provide research to develop a procedure to perform a parametric study on New Jersey special permit live load models (Ocean Bourne live loads) with HL-93, NJ 3S2 and AASHTO 3-3 live load models.

Task 3 Advanced Materials

- a) Review, test and pilot study of new products and technologies in the areas of structural engineering, bridge design and bridge preservation to enhance performance and constructability.
- b) Assist in the development of related design guidance, construction specifications and quality assurance test procedures to aid in the successful implementation of new methods and technologies.
- c) Develop and evaluate innovative materials. Assist in implementing innovative materials in alignment with industry, AASHTO, FHWA programs.

STATE PLANNING AND RESEARCH PROGRAM, 2025-2026

ACTIVITY: Bridge Resource Program - 2207908
MANAGER: Ali J. Najem, P.E.
UNIT: Bureau of Structure Engineering Services

Task 4 **On-Call Services**

- a) Rapidly respond to NJDOT's needs for advanced bridge engineering tools and services to address ongoing design, construction, or maintenance issues. Perform in-depth structural inspection and evaluation using innovative testing technology to investigate structural emergencies due to unforeseen and/or special events for individual structures as well as any other structures within the corridor and provide recommendations.
- b) Assist in investigating the applicability of new AASHTO, TRB/NCHRP and other industry guidelines to NJDOT Standards and Specifications specifically; recommend changes to NJDOT standards, specifications, and existing policies; develop guidelines as required.
- c) Assist in resolving practical issues in a quick turn-around manner encountered during design, construction, implementation and evaluation for NJDOT bridge and highway structures and/or develop recommendations and guidelines.

Task 5 **Provide Technology Transfer**

- a) Provide technology transfer and training to NJDOT's Division Bridge Engineering & Infrastructure Management staff on topics pertaining to but not limited to new products, policy guidelines and research products for Bridge design, construction, maintenance, and preservation.
- b) Provide Ethics course for renewal of Professional Engineer license to NJDOT & FHWA staff annually.

Task 6 **Bridge Design Manual, Standards and Policy Update**

- a) Assist in updating and maintaining NJDOT's Design Manual for Bridges & Structures and structural portion of the Standard Specifications for Road & Bridge Construction.
- b) Assist in updating and maintaining Bridge Construction Details, Guide Plates, and Standard Drawings in accordance with the latest design and construction standards.
- c) Conduct Research in support to Bridge Engineering and Infrastructure Management policy decisions. Assist in gathering and presenting information to help guide and justify NJDOT's bridge policy through data collection, surveys and literature searches.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

Task 1 Enhance the NJDOT's Structural Management Activities

- a) Develop, refine, and validate Bridge Deterioration Modeling.
 - a.1 Develop new historical database using current standards in SNBI and create historical deterioration trends.
- b) Provide data mining and technical assistance as needed with respect to the Bridge Management Systems.
 - b.1 A model-based bridge data extraction method for both textual and graphical information from bridge inspection reports can be developed by leveraging text mining methods to automatically extract critical information from inspection reports as well as image recognition methods to align photographs of bridge deck conditions with bridge models generated by LiDAR.

STATE PLANNING AND RESEARCH PROGRAM, 2025-2026

ACTIVITY: Bridge Resource Program - 2207908
MANAGER: Ali J. Najem, P.E.
UNIT: Bureau of Structure Engineering Services

Task 2 Structural Load Capacity Analysis

- a) Provide research to develop a procedure to perform a parametric study on New Jersey special permit live load models (Ocean Bourne live loads) with HL-93, NJ 3S2 and AASHTO 3-3 live load models:
 - i) Develop the procedure for parametric study using the existing data on NJDOT owned bridges for various bridge types.
 - ii) After developing the procedure, perform a parametric study on New Jersey routine permit live load models with HL-93, NJ 3S2 and AASHTO 3-3

Task 3 Advanced Material and Technology

- a) Review, test and pilot study of new products and technologies in the areas of structural engineering, bridge design and bridge preservation to enhance performance and constructability.
 - i) Continue research and optimization of mix proportion for rapid set materials, Evaluation of full-size samples.
 - ii) Continue research and literature review on Structural Adhesive, Synthesis of information.
 - iii) Continue development of the Design Manual for Repair of Damage Caused by Over-sized Vehicles using Fiber Reinforced Polymers (FRP).
- b) Assist in the development of related design guidance, construction specifications and quality assurance test procedures to aid in the successful implementation of new methods and technologies.
 - b.1: Develop the technical specifications for three (3) innovative materials under Task 3. The team will also assist the Structural Engineering Division in developing design guidance, construction specifications, and quality assurance test procedures based on the previous experience and technical understanding of AASHTO, TRB, NCHRP, and other literature on an as-needed basis.
- c) Develop and evaluate innovative materials. Assist in implementing innovative materials in alignment with industry, AASHTO, FHWA programs.
 - 1). Develop and evaluate innovative material and retrofit detail to repair the Prestressed concrete beam end deterioration (spalls & exposed strands).

Task 4 On-Call Services

- a) Assist in investigating the applicability of new AASHTO, TRB/NCHRP and other industry guidelines to NJDOT Standards and Specifications specifically; recommend changes to NJDOT standards, specifications, and existing policies; develop guidelines as required.
 - a.1: This will be on an as-needed basis. The team will provide the necessary support to Bridge Engineering and Infrastructure Management Units when NJDOT requests it. The team will attend various meetings, such as but not limited to, AASHTO, TRB, NCHRP, ACI, and ASCE, to learn about the recent changes for the future implication to NJDOT

STATE PLANNING AND RESEARCH PROGRAM, 2025-2026

ACTIVITY: Bridge Resource Program - 2207908
MANAGER: Ali J. Najem, P.E.
UNIT: Bureau of Structure Engineering Services

Task 5 Technology Transfer

- a) Provide BRP related presentations and demonstrations to highlight relevant information to keep NJDOT staff abreast of the current state of practices and new developments in the fields of design, materials engineering, maintenance and preservation, construction, and bridge management.
 - i) Training to develop knowledge of AASHTO, FHWA, industry requirements, and ability to timely respond to practical issues encountered in design and construction.
 - ii) Our team has established a partnership with many national and local agencies and organizations to host or organize seminar(s) and webinar(s) to promote state-of-the-art technology and discuss trending topics in the bridge and concrete industry. The following forum(s), webinar(s)/seminar(s), and workshop(s) are proposed to offer in this period based on the coordination with NJDOT and funding availability.
 - o **Forum:** The team will host a forum and panel discussions to discuss new policies and strategies to minimize the impact of overweight trucks on bridge and pavement infrastructure in order to support the Bridge Management unit. The team will discuss the Forum with the Structural Engineering Division for more details.
 - o **Bridge Design Workshop:** Two-Day course to address various topics related to the state-of-the-practice related to current and any future changes in the AASHTO LRFD BDS, AASHTO BME, AASHTO MASH, and Section 13 design requirements, etc.
 - o **Webinar/Seminars and Training:** The team will host several seminars/webinars about emerging technologies for structure resilience and smart infrastructure and provide several pieces of training for various technologies and procedures including, but not limited to:
 - Load rating procedure using the most recent AASHTO Manual for Bridge Evaluation
 - The use of advanced and innovative non-destructive testing (NDT) and structural health monitoring (SHM) equipment for infrastructure evaluation.
 - ASTM testing and on-site Technician training through NJACI certification program
 - Other technology transfer supports through other collaborating Tier 1 University Transportation Centers, e.g., C2SMART at NYU
- b) Provide Ethics course for renewal of Professional Engineer license to NJDOT & FHWA staff annually.
 - i) Offer one (1) Ethics Course to NJDOT engineers (and Consultants, if NJDOT approves) in 2024 to provide the PDH credits to maintain their PE licenses. The schedule will be confirmed upon request.

Task 6 Bridge Design Manual Standards and Policy Update

- a) Update and maintain NJDOT's Design Manual for Bridges & Structures and structural portion of the Standard Specifications for Road & Bridge Construction.
 - i) Update the submitted BDM 7th edition (or BDM7) recommendations if additional comments from FHWA, PMO, and NJDOT are received. The team will coordinate/discuss with the Structural Engineering Division to update the BDM7 recommendation based on recent changes in AASHTO, FHWA, and industry practices
- b) Update and maintain Bridge Construction Detail, Guide Plate, and Standard Drawings in accordance with current design manual. Incorporate all the comments from NJDOT to update the details of GP and SD so that they are aligned with the BDM7 recommendation. The team will also closely coordinate with NJDOT bridge engineers and SMEs with their approval and proceed with further updating

STATE PLANNING AND RESEARCH PROGRAM, 2025-2026

ACTIVITY: Bridge Resource Program - 2207908
MANAGER: Ali J. Najem, P.E.
UNIT: Bureau of Structure Engineering Services

- c) Conduct Research in support to Bridge Engineering and Infrastructure Management policy decisions. Assist in gathering and presenting information to help guide and justify NJDOT's bridge policy through data collection, surveys and literature searches.

TRAVEL: None

CONTRACTS:
 2025 - \$1.6 Million; 2026 - \$1.6 Million

EQUIPMENT: None

STAFFING:

Name	Title	Yearly Salary	Person-Years	Total	Days	Hours
Pranav Lathia	Supervising Engineer Surface Design	\$135,606.81	0.10	\$13,560.68	25	200
Xiaouha (Hannah) Cheng	Supervising Highway Engineer Bridge Design	\$135,606.81	0.75	\$101,705.11	188	1504
Jess Mendenhall	Supervising Highway Engineer Bridge Design	\$122,052.90	0.15	\$18,307.94	38	304
Hemantlal Padalia	Project Engineer Structural Transportation	\$115,229.47	0.75	\$86,422.10	188	1504
Ankur Patel	Project Engineer Structural Transportation	\$115,229.47	0.10	\$11,522.95	25	200
Joseph Warren	Principal Engineer Structural Bridge Design	\$96,626.85	0.40	\$38,650.74	100	800
Dipen Mehata	Principal Engineer Structural Bridge Design	\$93,086.74	0.30	\$27,926.02	75	600
Habel Sabu	Principal Engineer Structural Bridge Design	\$89,546.63	0.30	\$26,863.99	75	600
Ryan Whitlock	Principal Engineer Structural Bridge Design	\$93,086.74	0.05	\$4,654.34	13	104
Fady Daoud	Senior Engineer Structural Bridge Design	\$74,921.65	0.10	\$7,492.17	25	200
Humayun Kabir	Project Engineer Structural Transportation	\$119,327.07	0.15	\$17,899.06	38	304
Andrew Branin	Principal Engineer Structural Bridge Design	\$100,166.96	0.15	\$15,025.04	38	304
Nicholas Facas	Principal Engineer Structural Bridge Design	\$100,166.96	0.10	\$10,016.70	25	200
Mohab Hussein	Project Engineer Geotechnical	\$98,839.07	0.10	\$9,883.91	25	200
Kadijah Thomas	Principal Engineer Geotechnical	\$93,086.71	0.05	\$4,654.34	13	104
Mario Sazo	Principal Engineer Geotechnical	\$96,626.81	0.05	\$4,831.34	13	104
Harjit Bal	Supervising Engineer Structural Evaluation	\$135,606.81	0.2	\$27,121.36	50	400
Gina Rossi	Project Engineer Structural Evaluation	\$123,424.67	0.05	\$6,171.23	13	104
Douglas Tintle	Project Engineer Structural Evaluation	\$123,424.67	0.05	\$6,171.23	13	104
Chandahas Shah	Project Engineer Structural Evaluation	\$115,229.47	0.05	\$5,761.47	13	104
Aakash Shah	Principal Engineer Structural Evaluation	\$100,166.96	0.05	\$5,008.35	13	104

Nikunj Lathia	Principal Engineer Structural Evaluation	\$96,626.85	0.05	\$4,831.34	13	104
Dauda Kamara	Principal Engineer Structural Evaluation	\$96,626.85	0.1	\$9,662.69	25	200
Vijay Sampat	Principal Engineer Structural Evaluation	\$100,166.96	0.1	\$10,016.70	25	200
David Bishay	Senior Engineer Structural Evaluation	\$84,094.87	0.1	\$8,409.49	25	200
Utsab Pokharel	Senior Engineer Structural Evaluation	\$81,037.13	0.05	\$4,051.86	13	104
Zachary Keator	Assistant Engineer Transportation	\$70,629.42	0.05	\$3,531.47	13	104
Wael Kassem	Principal Engineer Structural Evaluation	\$89,546.63	0.05	\$4,477.33	13	104
TBD	Principal Engineer Structural Evaluation	\$89,546.63	0.05	\$4,477.33	13	104
Abdelrahman Mahana	Assistant Engineer Transportation	\$67,987.61	0.1	\$6,798.76	25	200
TBD	Assistant Engineer Transportation	\$67,987.61	0.1	\$6,798.76	25	200
TBD	Assistant Engineer Transportation	\$65,688.50	0.05	\$3,284.43	13	104
TBD	Engineer Trainee Transportation	\$65,688.50	0.05	\$3,284.43	13	104
TBD	Engineer Trainee Transportation	\$65,688.50	0.05	\$3,284.43	13	104
Mula Reddy	Project Engineer Structural Evaluation	\$123,424.67	0.2	\$24,684.93	50	400
Yasothea Rishindran	Project Engineer Structural Evaluation	\$123,424.67	0.025	\$3,085.62	6	48
Akash Sutariya	Principal Engineer Structural Evaluation	\$100,166.96	0.025	\$2,504.17	6	48
			5.15	\$552,834	1297	10376.00

3.5% salary increase : \$746,326

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Intelligent Transportation Systems Resource Center (ITS RC) – 2207888
MANAGER: Salvatore Cowan
UNIT: Mobility Research and Planning

Vision and Mission: Use the Intelligent Transportation Systems Resource Center (ITS RC), a premier technical, research, education, and knowledge transfer program, to provide resources and assistance to NJDOT in improving the safety, mobility, and efficiency of New Jersey’s surface transportation systems through the implementation of Intelligent Transportation Systems (ITS), and innovative transportation planning and management methods and strategies. The ITS RC is a partnership between federal and state transportation agencies and academia, but it also engages private industry and other entities that promote and advance the implementation of ITS technologies on New Jersey’s transportation system.

Mission: The primary mission of ITS RC is to assist NJDOT in enhancing the quality and efficiency of New Jersey’s transportation systems through the effective implementation of ITS and other strategies and technologies for effective transportation system management and operations. This is accomplished by conducting a robust combination of planning and research studies, operational tests and demonstrations, evaluation of deployment scenarios and strategies, training, and outreach. These activities specifically focus on technology assessment, development of new technology applications, pilot and demonstration deployments of new technologies, evaluation of ITS implementation strategies and scenarios, application of advanced transportation and traffic modeling tools for ITS deployment evaluation and planning, maintaining the ITS information database, delivery of traveler information via multiple methods, and technology transfer. This approach ensures that NJDOT is at the forefront of adopting the latest advancements in transportation technology and makes the right decisions about investing in the most effective ITS applications and deployments that maximize benefits to the traveling public.

Goals/Activities: (activities to be performed in CY 2025) *

The ITS RC supports all goals of the Transportation Choices 2030. Its work program addresses the overarching goals of improving mobility, safety, and quality of life by advancing innovative strategies and technologies for more effective and efficient management of the NJDOT transportation system and operations. The provision of traveler information, including travel times and alerts, ITS Architecture, active traffic management, and free travel time information on the roads and via free access to 511NJ, integrated corridor management, and related strategies also supports transportation disadvantaged communities and Ladders of Opportunity. The objective of the ITS Resource Center Program is to identify, enhance, guide, and strengthen the State’s direction and decision making in the activities of NJDOT Transportation Mobility. Since its inception, the Program has conducted these types of core activities:

1. Applied studies and program evaluation/analyses.
2. Concept of Operations documentation.
3. Training and education.
4. Operations Center evaluations and improvements.
5. Safety Service Patrol and Incident Management Response Team assessments, improvements, research and deployments.
6. Technical and Executive Management assistance; and
7. Outreach and information dissemination.

The 2025-2026 ITSRC work program will address the core activities and undertake additional items by doing the following:

1. Conduct Annual Best Practices Reviews;
2. Support implementation of the NJDOT ITS Strategic Deployment Plan and Technology Policies;
3. Conduct ITS and TSM&O Training and Technology Transfer and Outreach for NJDOT and other agencies;
4. Provide support to NJDOT for data analysis, tools, research, and solutions for TSM&O and transportation planning and operations application;

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Intelligent Transportation Systems Resource Center (ITS RC) – 2207888

MANAGER: Salvatore Cowan

UNIT: Mobility Research and Planning

5. Support Planning and Capacity Building for Effective Traffic Operations;
6. Conduct and Implement Work Zone and Related Mobility Monitoring Research and Evaluation;
7. Provide Technical and On-Call support for Technology Evaluation and Deployment;
8. Conduct ITS Feasibility, ConOps and Concept Development and System Requirement Studies for ITS and TSM&O Pilot Applications; and
9. Provide Program Management/Communication Protocol and Methodology for Technical Leads.

Activity 1: Best Practices Research and Strategic Planning/Policy Development

- a) Conduct Annual Best Practices Scan of Traffic Incident Management (TIM), Connected and autonomous vehicles (CAV), Work Zones, Traffic Operations Centers (TOC), TSM&O Management System practices, 511, Traffic Detection and Analysis.
- b) Support the implementation of the NJDOT Connected and Autonomous Vehicle Strategic Plan.
- c) Support the NJDOT ITS Strategic Deployment Plan (SDP) as well as Departmental capital programming.
- d) Contribute to the development, planning, evaluation, adoption, training, and implementation of the ITS Architecture framework for New Jersey.
- e) Promote TSM&O successes within and external to the NJDOT by the creation of website concept and execution, to be eventually incorporated and regularly updated as part of the Department's Internet site.

Activity 2: Develop and Conduct TSM&O and ITS Training, Technology Transfer and Outreach

- a) Develop and execute an ITS/TSM&O annual plan for training in specific areas of traffic management and operations to enhance the effectiveness of NJDOT and local agency incident management-related personnel.

Activity 3: Data Analysis Tools, Solutions and Research to Support TSM&O and Transportation Planning for Operations

- a) Continue big-data research and application and analysis of distributed storage and processing technologies of large datasets across computing clusters for extraction, analysis, and use of integrated mobile observation data, data from connected vehicles, weather-related data, and infrastructure-based sensors.
- b) Provide technical support for acquisition, integration, and analysis of connected vehicle data and develop AI and machine learning-based innovative solutions for real-time traffic incident detection and prediction, situational awareness, and predictive analytics for traffic operations.

Activity 4: Traffic Operations Capacity Building

- a) Support the NJDOT Innovation program with analysis on crowdsourcing data and its applicability for traffic operations and incident management.
- b) Carry out the Traffic Incident Management (TIM) training and outreach program, and support advancement of the Statewide TIM Strategic Plan.
- c) Support the integration of connected and autonomous vehicles into the TIM training.
- d) Continue to enhance and update the online self-paced TIM training tool.
- e) Support the update of the NJ interactive Diversion Routes portal and continue to update and/or develop detailed diversion routes for the State.

Activity 5: Work Zone (WZ) and Related Mobility Monitoring and Improvement Research

- a) Continue the WZ V2X pilot and conduct the integration of real-time work information into the national work zone data exchange feed to communicate accurate, up-to-the-minute roadwork and road closures information to road users.

Activity 6: Technical Support for Technology Evaluation and Deployment

- a) Continue the evaluation of innovative ITS technologies, as well as connected vehicle and vehicle automation technologies, utilizing the testbed locations developed as part of the ITS RC Program, including the Connected Vehicle (CV), Urban Mobility, Pedestrian Safety, and Transit preemption.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Intelligent Transportation Systems Resource Center (ITS RC) – 2207888
MANAGER: Salvatore Cowan
UNIT: Mobility Research and Planning

- b) Carry out research AI-based Video Analytics (VA) applications in traffic monitoring and data collection, including evaluation of the effectiveness of VA system(s) in incident detection and vehicle counting from the video feed in real-time.

Activity 7: Conduct ITS Feasibility Studies, Concepts of Operations (ConOps), and System Requirements Studies for ITS and TSM&O Pilot Applications

- a. Continue the performance analysis of real-time ITS detection technologies deployed at the Truck Rest Area Pilot Project.
- b. Conduct research and develop CONOPS for select ITS and traffic operations pilot deployment and demonstration project.

Activity 8: Program Management

- a) Conduct regular progress reviews, identify any problems/issues impacting the progress in reaching the milestones according to the work plan and implement any corrective actions needed to ensure successful completion of the work program.
- b) Provide continuous project monitoring and management.
- c) Provide copies of any/all subcontracts/scopes and describe quality assurance measures that will be utilized to ensure timely deliverables receipt.
- d) Meet with TSM&O technical staff management as appropriate, at a minimum once a month for management meetings.
- e) Oversee preparation of technical reports and provide quality control. Schedule and plan deliverable schedules with ample time for Departmental review, revision and approval. Ensure schedules provided are adhered to and detail staff support needed to ensure timely completion of all work program tasks. Assist in preparations for meetings with Department/FHWA staff in reporting progress.

Anticipated Accomplishments for Calendar Year 2025

Activity 1: Conduct Annual Best Practices Research and Strategic Planning/Policy Development

- a. A final report summarizing the findings of the best-practices scan.
- b. Scans and recommend improvements, focusing on the use of ITS and TSM&O technologies and strategies.
- c. Plan and support the transportation “digital infrastructure” which is an emerging operations area. It has grown much larger and diverse in the last 10 years due to deployment and confluence of edge networks, cloud computing, AI/machine learning, lidar applications, digital twin, etc.
- d. A report documenting the NJ Architecture update accomplishments and TM ITS Deployment

Activity 2: Develop and conduct TSM&O and ITS Training, Technology Transfer and Outreach

- a. Notes, PowerPoint presentations, and other Knowledge and Technology Transfer (KTT) materials developed as part of training courses, seminars, and workshops.
- b. An annual report on training and outreach activities completed as part of this program.
- c. Maintain Outreach Tracker for njtim.org for NJDOT to monitor the program

Activity 3: Data acquisition, integration, analysis and visualization support for transportation planning and traffic operations

- a. Technical memoranda, annual progress reports, and final reports summarizing accomplishments of development and implementation of innovative solutions for traffic data acquisition, cluster-based data processing and storage, and analytics in support of urban mobility, traffic management, and roadway maintenance applications, including applications of integrated mobile observations.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Intelligent Transportation Systems Resource Center (ITS RC) – 2207888
MANAGER: Salvatore Cowan
UNIT: Mobility Research and Planning

- b. Technical reports acquisition, integration and analysis of connected vehicle data and develop AI and machine learning-based innovative solutions for real-time optimization, situational awareness, and predictive analytics for traffic operations.

Activity 4: Traffic Operations Capacity Building

- a. A technical report documenting analysis of crowdsourcing data and its applicability for traffic operations and incident management.
- b. An annual progress report summarizing TIM outreach efforts (working groups, regional meetings). Technical memorandum summarizing the evaluation of specific TIM program(s) and/or initiative(s).
- c. A report addressing the implementation of strategies for the inclusion of connected and autonomous vehicles into the TIM training curriculum.
- d. A technical report documenting the analysis of commercial vehicle travel restrictions on safety and mobility during winter weather events.

Activity 5: Work Zone and Related Mobility Monitoring and Improvement Research

- a. A technical report documenting the development and integration of the Smart Work Zone test bed and integration into the FHWA’s Work Zone Data Exchange (WZDx) program.

Activity 6: Program Management

- a. Project Management Plan that establishes a management and communication protocol between NJDOT Project Manager and the University’s Principal Investigator as well as University technical leads to follow in completing activities.
- b. Quality assurance measures that will be utilized to ensure timely receipt of deliverables.
- c. Prepare Quarterly progress reports
- d. Memoranda documenting any project management issues and their resolution.
- e. Technical and Final report management and quality control

Contracts

A cost reimbursement type of University Task Order to conduct the Intelligent Transportation Systems Resource Center with a budget of \$3,500,000 each year.

Travel

TRIP	Staff	Location	Hotel	Meals	Travel Expenses	Registration
TRB Annual Meeting 01/05/2025-01/09/2025	1	Washington DC	\$1,500	\$200	\$300	
ITS World Congress 8/24/25-08/28/2025	2	Atlanta	\$3,000	\$375	\$700	\$1,000
TOTAL			\$4,500	\$575	\$1,000	\$1000

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Intelligent Transportation Systems Resource Center (ITS RC) – 2207888
MANAGER: Salvatore Cowan
UNIT: Mobility Research and Planning

Equipment

None

Staffing

B. Kepler	Project Manager	0.2
V. Mathur	Supervisor, TM Planning & Research	0.65
T. Murphy	Administrative Analyst 1	0.85
K. Ferguson	Administrative Analyst 1	0.85
K. Kyros	Analyst Trainee	0.85
E. Falcon	Princ. Trans. Analyst	0.05

<i>TOTAL</i>	<i>3.45</i>
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General Guidance

All thumbnails should be a total of 2-4 pages in length. An extensive staff list may go beyond this rule of thumb. The format of the thumbnail template is approved by FHWA. Please do not change the format.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Bicycle and Pedestrian Projects (CMAQ) - 2207935

MANAGER: Daniel LiSanti
UNIT: Bureau of Safety, Bicycle and Pedestrian Programs

VISION AND MISSION:

The mission of the Bicycle and Pedestrian Program is to ensure the broadest implementation of the New Jersey Bicycle and Pedestrian Master Plan, the New Jersey Strategic Highway Safety Plan, NJDOT's Complete Streets policy, and FHWA's policies related to bicycle and pedestrian travel. The program seeks to promote and facilitate the increased use of non-motorized transportation on state and local roadways, including assisting with the development of facilities for the use of pedestrians, bicyclists and micromobility and transit users, along with public educational, promotional, and safety programs for using such facilities.

Because New Jersey has a high number of bicyclist and pedestrian fatalities as a percentage of all traffic fatalities, many of the goals and activities relate to assisting with the planning, development and funding of projects to meet the needs of people who walk and bike, or who use transit and emerging micromobility modes and technologies. These activities also attempt to ensure that all NJDOT-funded studies, projects and programs include full consideration of non-motorized travel modes to increase active transportation while reducing bicyclist and pedestrian fatalities and serious injuries, particularly in traditionally underserved communities. To maximize effectiveness, a key objective is to collaborate with internal and external partners, such as the NJDOT Divisions of Statewide Planning, Project Management, Local Aid, and Traffic Engineering, other state agencies, Metropolitan Planning Organizations (MPOs), Transportation Management Associations (TMAs), counties, municipalities, and advocacy groups. Another key objective is to coordinate efforts with those funded by other programs, such as the Highway Safety Improvement Program (HSIP), the Congestion Mitigation and Air Quality (CMAQ) program and the Transportation Alternatives Set-Aside (TASA) program.

GOALS/ACTIVITIES:

1. Assist with the development of capital and grand funded projects on New Jersey roadways to meet the needs of bicyclists, pedestrians, micromobility, and transit users of all ages, abilities and backgrounds.
2. Ensure that studies, projects and programs in the Department include full consideration of bicycle and pedestrian needs whenever possible in accordance with state, federal, and Complete Streets policies.
3. Encourage and support the development and implementation of bicycle and pedestrian strategies, Complete Streets policies and multi-modal projects by MPOs, counties, municipalities, and TMAs.
4. Provide appropriate technical assistance and professional development opportunities to department staff, outside agencies, and transportation professionals throughout the state.
5. Disseminate information to local governments on Complete Streets and the planning, design, funding and implementation of bicycle, pedestrian and micromobility projects and programs throughout the State.
6. Assist MPOs, counties, municipalities, and the Department and other state agencies with efforts to increase the mode share of non-motorized and low-motorized travel on New Jersey's transportation network.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Bicycle and Pedestrian Projects (CMAQ) - 2207935

MANAGER: Daniel LiSanti
UNIT: Bureau of Safety, Bicycle and Pedestrian Programs

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

Task 1: Working in cooperation with various divisions within Capital Project Management (CPM), including the Division of Project Management and the Bureau of Traffic Engineering, supervise staff providing input to projects in the scoping and design work program regarding Complete Streets, bicycle and pedestrian access, mobility and safety needs. Coordinate and track this process. Provide technical assistance to various entities of the Department for projects going through the pipeline process. Investigate barriers to improving access, mobility and safety for bicyclists, pedestrians, and micromobility and transit users and pursue all available opportunities to implement appropriate accommodations. Supervise staff preparing problem statements and initiate the project development process to implement these improvements.

- Fulfilling Goals 1 and 2
- Deliverables: Technical memoranda, reports and problem statements providing bicycle/pedestrian input to the NJDOT Capital Project Delivery Process
- Timeline: Ongoing
- Measures of Progress:
 - Scoping meetings attended
 - Scope Statements signed
 - Problem Statements submitted
 - Complete Streets Checklists submitted
 - Permits/Plans reviewed
 - Field Reviews

Task 2: Utilizing consultant assistance under existing and new Task Order Agreements, carry out a program of local technical assistance to communities by developing bicycle and pedestrian planning studies, including feasibility assessments and Pedestrian Road Safety Audits, to address local bicycle, pedestrian and micromobility access and safety needs. Supervise staff managing the task orders. Encourage towns and counties to adopt Complete Streets policies and to apply for Local Aid grants to implement the projects that are recommended in the planning studies. Initiate policy studies as needed to support the full implementation of FHWA and NJDOT bicycle and pedestrian policy initiatives. Review bicycle and pedestrian safety priorities arising from Local Safety Action Plans where these priorities intersect or are impacted by State roadways and conduct studies around these needs

- Fulfilling Goals 3, 5 and 6
- Deliverables: Local bicycle and pedestrian planning studies with recommendations for implementation
- Timeline: Ongoing
- Measures of Progress:
 - Studies completed
 - Complete Streets policies passed

Task 3: Initiate problem statements to supply the NJDOT project pipeline. These will address bicycle and pedestrian access and safety needs or opportunities on state system roadways resulting in independent bicycle and pedestrian projects. Such projects will originate from bicycle and pedestrian crash lists and input from counties and municipalities via Commissioner Referrals.

- Fulfilling Goal 1
- Deliverables: Problem statements submitted
- Timeline: Ongoing
- Measures of Progress:

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Bicycle and Pedestrian Projects (CMAQ) - 2207935

MANAGER: Daniel LiSanti
UNIT: Bureau of Safety, Bicycle and Pedestrian Programs

- Problem statements submitted
- Tech memos completed

Task 4: Utilizing consultant assistance under existing and new Task Order Agreements, update the 2016 Statewide Bicycle and Pedestrian Master Plan.

- Fulfilling Goals 1, 2, 3, and 6
- Deliverables:
 - An updated Bicycle and Pedestrian Master Plan
- Timeline: Two years
- Measures of Progress:
 - An updated Bicycle and Pedestrian Master Plan

Task 5: Utilizing consultant assistance under existing and new Task Order Agreements, and in coordination with the Metropolitan Planning Organizations (MPOs), develop a statewide map of bicycle suitability conditions for all roadways owned and operated by NJDOT. This map will be informed by the North Jersey Transportation Planning Authority (NJTPA) and the Delaware Valley Regional Planning Commission (DVRPC) bicycle suitability maps for the local roads within their regions.

- Fulfilling Goals 1, 3, 5 and 6
- Deliverable: Implementation approach; GIS roadway network with data element and field as required access and/or mobility issues with semi-annual project update reports
- Timeline: Two years

Task 6: In cooperation with the Safety Program Management Section, utilize the Pedestrian Safety Management System, the Bicycle Crash Location List, crash records, roadway inventory data and the New Jersey Bicycle and Pedestrian Master Plan to identify and prioritize pedestrian and bicycle crash locations and corridors for improvement. Investigate whether these Safety Management System locations are in areas overlapping with NJDOT capital projects and work with associated project managers to address bicycle and pedestrian safety within their existing projects.

Task 7: Expand outreach to senior citizens and all other citizens in accordance with Governor Murphy's Executive Order No. 227 establishing the Age-Friendly State Advisory Council, which works to make communities supportive and accessible places to live for people of all ages. Utilizing consultant assistance under existing and new Task Order Agreements, initiate Senior Walkability Workshops in locations across the state with significant numbers of seniors and a documented history of pedestrian crashes involving the elderly. Work with the appropriate Metropolitan Planning Organizations (MPOs) and Transportation Management Associations (TMAs).

- Fulfilling Goals 3, 4, 5 and 6
- Deliverables: Up to six (6) Senior Walkability Workshops
- Timeline: One year
- Measures of Progress:
 - Workshops held

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Bicycle and Pedestrian Projects (CMAQ) - 2207935

MANAGER: Daniel LiSanti
UNIT: Bureau of Safety, Bicycle and Pedestrian Programs

Task 8: Utilizing consultant assistance under existing and new Task Order Agreements, assisting with the development of priority actions as a part of 2025 NJ Strategic Highway Safety Plan. Coordinate with Emphasis Area Team Leaders and Priority Action Champions and provide input that improves the safety of vulnerable road users.

- Fulfilling Goals 2, 3, 4 and 6
- Deliverables:
 - Development of the 2025 NJ Strategic Highway Safety Plan
- Timeline: Ongoing
- Measures of Progress:
 - Implementation Plan for 2025

Task 9: Participate in cooperative efforts between NJDOT, NJDEP and other agencies to identify opportunities for the development of multi-use trails and trail connections, especially where they serve as routes to transit, employment, education, etc. Coordinate activities to assist with implementation. Utilizing consultant assistance under existing and new Task Order Agreements, investigate improvements to locations on state roadways that intersect with existing and planned trail networks, including the East Coast Greenway, the Circuit Trails Network, the Delaware River Heritage Trail, the Morris Canal Greenway, the Capital to Coast Trail, the Essex-Hudson Greenway and others. Serve as the Department's designated representative to the New Jersey Trails Council.

- Fulfilling Goals 3, 4 and 6
- Deliverables:
 - Reviews of regional trail routes for opportunities to improve them via Department projects and funding programs, including the East Coast Greenway through northern and central New Jersey
 - Presentations to New Jersey communities about funding opportunities for trail planning, design and construction
 - Assistance to municipalities, counties and the MPOs with feasibility studies and trail network plans
- Timeline: Ongoing
- Measures of Progress:
 - Routing studies
 - Presentations
 - Trail plans

Task 10: Utilizing consultant assistance under existing and new Task Order Agreements, continue to develop and implement Complete Streets training workshops both internally at NJDOT and for municipalities, counties and the MPOs on the benefits of Complete Streets, including policy elements, design, cost, liability and implementation.

- Fulfilling Goals 2, 3, 4, and 5
- Deliverable: Internal and external Complete Streets Workshops as needed.
- Timeline: One year
- Measures of Progress:
 - Complete Streets Workshops

Task 11: Utilizing consultant assistance under existing and new Task Order Agreements, assist with updates to bicycle and pedestrian design guidance in Department documents, such as the Roadway Design Manual, the Bridges and Structures Design Manual, the Complete Streets Design Guide, and the School Zone Design Guide. Keep staff up to date on the latest guidance from FHWA, AASHTO, NACTO and others and make relevant units in the Department aware of best practices.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Bicycle and Pedestrian Projects (CMAQ) - 2207935

MANAGER: Daniel LiSanti
UNIT: Bureau of Safety, Bicycle and Pedestrian Programs

- Fulfilling Goals 2, 3, 4, and 5
- Deliverable: Periodic review of national best practice in design for cyclists and pedestrians.
- Timeline: One year
- Measures of Progress:
 - Updates to NJDOT design manuals

Task 12: Provide the public access to the Department’s bicycle and pedestrian safety information and materials. Periodically, assist with updates to NJDOT’s njcommuter.com bicycling and walking web pages, and the Complete Streets and the Safe Routes to School web pages to include updated materials and information. Supervise staff in tracking interest for the materials through the Department’s website.

- Fulfilling Goal 5
- Deliverable: Updated NJDOT Bicycle & Pedestrian Website
- Timeline: Ongoing
- Measures of Progress:
 - Additions to the NJDOT website

Task 13: Attend conferences, seminars, task forces, and webinars to obtain training on planning, policy, design, and/or funding for bicycle, pedestrian, and micromobility travel modes from FHWA, AASHTO, ITE, APA, NACTO, APBP and other providers.

- Fulfilling Goals 2 and 6
- Deliverables: Trainings attended
- Timeline: One year
- Measures of Progress:
 - Trainings attended

Task 14: Administer the federally funded Bicycle and Pedestrian Program to include developing a work program and budget; managing program implementation, project selection and implementation, and reporting requirements to FHWA as agreed in the Mutual Service Standard.

- Fulfilling Goals 1 through 6
- Deliverable: A work program and budget based upon previously identified bicycle and pedestrian safety, access and/or mobility issues with semi-annual project update reports
- Timeline: One year

CONTRACTS: \$2,000,000 for two on-call planning consultants in SPR Year 1 (Bike and Pedestrian Year 3)

Two (2) on-call consultants solicitation process will begin summer of 2025 for selection. Selected consultants will perform bicycle and pedestrian planning work at a ceiling of \$2million per year for a 3–year term (2025-2027) FFY 2025, 2026 and 2027. This relates to CY 2026, 2027 and 2028. Each firm will be funded at \$1 million per FFY.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Bicycle and Pedestrian Projects (CMAQ) - 2207935

MANAGER: Daniel LiSanti
UNIT: Bureau of Safety, Bicycle and Pedestrian Programs

TRAVEL:

\$8,850.00 for state, regional and national conferences, and meetings in SPR Year 1 (01.01.2025 – 12.31.2025)

March:

- Institute of Transportation Engineers (ITE) Virtual Spring Conference, March 25-26, 2025, (one employee)- \$300.00

May:

- National Association of City Transportation Officials (NACTO), Washington, D.C., May 28, 2025 – May 31, 2025. (two employees) - **\$4,000.00**

August:

- Institute of Transportation Engineers (ITE) Annual Meeting, Orlando, Florida, August 10, 2025 – August 13, 2025 (2 employees)- **\$3,000.00**

September:

- American Council of Engineering Companies of New Jersey (ACECNJ) Conference, Location and date TBD, (two employees) - **\$300.00**

November:

- NJ State League of Municipalities, Location and date TBD, (two employees) - **\$500.00**

Mileage, parking and tolls for business meetings - **\$750.00**

Total Travel: \$300.00+\$4,000.00+\$3,000.00+\$300.00+\$500.00+\$750.00 = \$8,850.00

EQUIPMENT: None

STAFFING:

Elise Bremer-Nei, Project Manager	0.25 py
Nazhat Aboobaker, Section Chief	0.50 py
Walid Jawawdeh, Project Engineer	0.25 py
Saidul Islam, Project Engineer	0.25 py
Marhaba Omer, Project Engineer	0.25 py
Khalid Troumi, Principal Engineer	0.25 py
Joseph Rapp, Senior Planner	0.25 py
William Riviere, Principal Planner	<u>0.25 py</u>

TOTAL: 2.25 py

Note: BSBPP staff salaries for Year 1 have been assigned to the HSIP, CMAQ, and SPR programs to ensure the salary for each staff member does not exceed 1.0 PY and there is no duplication between programs.

APPENDIX - B

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Best Practices in Transit Customer Satisfaction Surveys – 4500023 / 7202
MANAGER: Pragna Shah

UNIT: Bureau of Research, Innovation & Information Transfer

MISSION / OBJECTIVE:

The mission of the NJDOT Bureau of Research (BoR) is to help transportation professionals address complex challenges that affect the safety, mobility and accessibility of the state's residents, workers, visitors, and businesses. To accomplish this mission, BoR staff work directly with university and research professionals to develop innovative, cost effective solutions that will ultimately enhance the quality and cost effectiveness of the policies, practices, standards, and specifications that are used in planning, building, and maintaining New Jersey's transportation infrastructure. The BoR is also charged with satisfying NJDOT's technology transfer needs as well as fostering a strong culture of innovation through the activities of the New Jersey State Transportation Innovation Council. Lastly, the BoR acts as a liaison to various national transportation entities (TRB, AASHTO, other State DOTs) through participation in national research activities such as project panels, committees, peer exchanges, and surveys.

GOALS/ACTIVITIES:

This proposed research will seek to gain insights into best practices and lessons learned in transit customer satisfaction surveys. The focus is specifically on exploring new data visualization and analysis tools, survey methodologies, weighting approaches, and other techniques that can enhance the survey process. This research project will identify effective models and best practices in transit customer satisfaction surveys that successfully capture customer feedback and provide actionable results for agencies in their data collection, public engagement, and decision-making processes. The research will be conducted in four phases, with project management tasks continuing throughout the study:

1. Literature Review
2. Develop Interview questions about Best Practices
3. Conduct In-Depth Interviews with Key Staff at other Transit Agencies
4. Provide Customer Satisfaction Survey Recommendations

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Literature Review (This task will be completed in CY2024)
2. Develop Interview questions about Best Practices (This task will be completed in CY2025)
3. Conduct In-Depth Interviews with Key Staff at other Transit Agencies (This task will be completed in CY2025)
4. Provide Customer Satisfaction Survey Recommendations (This task will be completed in CY2025)

TRAVEL:

N/A

CONTRACTS:

University Contract: Rutgers University (CY 25) \$300,000 (CY 26) \$0

EQUIPMENT:

N/A

STAFFING:

In-house staff time will be charged to Project Management of Contracts

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: External Service Life of Concrete Bridge Deck with Internal Curing – 4500023 / 7199
MANAGER: Pragna Shah

UNIT: Bureau of Research, Innovation & Information Transfer

MISSION / OBJECTIVE:

The mission of the NJDOT Bureau of Research (BoR) is to help transportation professionals address complex challenges that affect the safety, mobility and accessibility of the state's residents, workers, visitors, and businesses. To accomplish this mission, BoR staff work directly with university and research professionals to develop innovative, cost-effective solutions that will ultimately enhance the quality and cost effectiveness of the policies, practices, standards, and specifications that are used in planning, building, and maintaining New Jersey's transportation infrastructure. The BoR is also charged with satisfying NJDOT's technology transfer needs as well as fostering a strong culture of innovation through the activities of the New Jersey State Transportation Innovation Council. Lastly, the BoR acts as a liaison to various national transportation entities (TRB, AASHTO, other State DOTs) through participation in national research activities such as project panels, committees, peer exchanges, and surveys.

GOALS/ACTIVITIES:

This research will evaluate the efficiency of internally cured concrete for New Jersey bridge structures, the framework proposes several phases. Extensive review of other neighboring states' DOT's specifications, lessons learned and challenges of the current practices of IC-HPC in the US. This research is devoted to promoting the application and production of IC-HPC in NJ

1. Identification of the internal curing carriers (ICC) utilized in IC-HPC development and local supplies.
2. Review of the current practices of ICC for bridge deck and pavement.
3. Survey of the transportation agencies experience with ICC
4. Prepare a work plan for the phases based on work completed
5. Prepare experimental program to evaluate LWFA for internal curing of NJDOT HPC
6. Draft and Final Report and Technical brief.

ANTICIPATED ACCOMPLISHMENT FOR CALENDAR YEAR 2025:

1. Identification of the internal curing carriers (ICC) utilized in IC-HPC development and local supplies. **COMPLETED**
2. Review of the current practices of ICC for bridge deck and pavement. **COMPLETED**
3. Survey of the transportation agencies experience with ICC
4. Prepare a work plan for the phases based on work completed
5. Prepare experimental program to evaluate LWFA for internal curing of NJDOT HPC
6. Draft and Final Report and Technical brief.

TRAVEL:

N/A

CONTRACTS:

Rutgers University, (CAIT)- External Life Service of Concrete Bridge Decks with Internal Curing
(CY 25) \$ 200,000 (CY 26) \$200,000

EQUIPMENT:

N/A

STAFFING:

In – house staff time will be charged to Project Management of Contracts

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Evaluation of NJDOT Hardened Traffic Paint Markings and Stripes Performance- 4500023/7195
MANAGER: Pragna Shah

MISSION / OBJECTIVE:

The mission of the NJDOT Bureau of Research (BoR) is to help transportation professionals address complex challenges that affect the safety, mobility and accessibility of the state's residents, workers, visitors, and businesses. To accomplish this mission, BoR staff work directly with university and research professionals to develop innovative, cost-effective solutions that will ultimately enhance the quality and cost effectiveness of the policies, practices, standards, and specifications that are used in planning, building and maintaining New Jersey's transportation infrastructure. The BoR is also charged with satisfying NJDOT's technology transfer needs as well as fostering a strong culture of innovation through the activities of the New Jersey State Transportation Innovation Council. Lastly, the BoR acts as a liaison to various national transportation entities (TRB, AASHTO, other State DOTs) through participation in national research activities such as project panels, committees, peer exchanges, and surveys.

GOALS/ACTIVITIES:

This project aims to obtain and analyze relevant technical and performance data of various pavement marking materials, and to determine which product(s) can be used to stripe various roadway surfaces to withstand the NJ weather and traffic conditions. In addition, this project will evaluate drying time issues, alternative testing protocols, durability issues, cost benefits, temporary markings, and to develop an alternative specification for quick application of paints when supply chain issues arise. This study will provide guidance and recommendations to improve new marking installation specifications and techniques, improve marking maintenance practices, and evaluate the current specifications and requirements for road markings and stripes paint with respect to sensing capabilities of autonomous vehicles for operational purpose.

1. Create inventory of required data such as pavement and markings. This is an ongoing goal.
2. Field evaluations of measured marking characteristics/testing protocol This is an ongoing goal.
3. Evaluations of marking visibility / data analysis. This is an ongoing goal.
4. Develop recommendations to improve specifications and pavement marking applications and durability. This is an ongoing goal.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Conduct a survey, inventory, and review, of the various markings and pavement surface types/materials used in different geographical regions of New Jersey. The team will work closely with NJDOT to obtain the inventory of pavement surfaces and markings used on most road surfaces in the state
2. The research team will develop an evaluation plan to study the performance of desired pavement marking materials on typical road surfaces across the various NJDOT regions. The research team will then propose two potential field study designs that could be used to successfully meet the objectives of this research
3. The research team will use different performance evaluation indices to evaluate pavement markings, such as pavement marking index (PMI), retro reflectivity deduct curve, and presence deduct curve. The research team will also use image analysis techniques and machine learning statistical methods.
4. The research team will develop recommendations for improving pavement marking specifications and pavement marking applications. The research team will use information gathered in this study to make recommendations for improving NJDOT's pavement marking practices.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Evaluation of NJDOT Hardened Traffic Paint Markings and Stripes Performance- 4500023/7195
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

TRAVEL:

None

CONTRACTS:

University Contract: Rowan University (CY 25) - \$0 (CY 26) - \$0

EQUIPMENT:

None

STAFFING:

In-house staff time will be charged to Management of Contracts

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Innovative Pothole Repair Materials and Techniques Phase II-4500023/7200
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

MISSION / OBJECTIVE:

The mission of the NJDOT Bureau of Research (BoR) is to help transportation professionals address complex challenges that affect the safety, mobility and accessibility of the state's residents, workers, visitors, and businesses. To accomplish this mission, BoR staff work directly with university and research professionals to develop innovative, cost-effective solutions that will ultimately enhance the quality and cost effectiveness of the policies, practices, standards, and specifications that are used in planning, building and maintaining New Jersey's transportation infrastructure. The BoR is also charged with satisfying NJDOT's technology transfer needs as well as fostering a strong culture of innovation through the activities of the New Jersey State Transportation Innovation Council. Lastly, the BoR acts as a liaison to various national transportation entities (TRB, AASHTO, other State DOTs) through participation in national research activities such as project panels, committees, peer exchanges, and surveys.

GOALS/ACTIVITIES:

The objectives of phase II work are to further develop concrete crack repair material and conduct field implementation using new technologies including automated repair technologies and non-destructive evaluation. The repair treatment of concrete surfaces will reduce damage from cracking and spalling and extend service life of concrete structures

7. Enhancement of Crack Filler Material to Improve Flowability, Adhesion, and Penetration into Cracks. This is an ongoing goal
8. Investigation of Automatic Delivery Methods for Crack Repair. This is an ongoing goal
9. Evaluate Crack Depth and Repair Quality Using Non-Destructive Testing Method. This is an ongoing goal.
10. Field Implementation of Crack Filler Material and Delivery Methods. This is an ongoing goal.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Several mix designs with different mix proportions will be tested. This will include varying the polymer to cement ratio, the water to cement ratio, the added fine aggregates, the volume fraction of fibers, the type of non-metallic fibers and the effectiveness of several types of admixtures including high range water reduction admixture (HRWRA) and viscosity modifying admixture (VMA). The addition of nano particles will also be evaluated as well the use of high-speed blenders.
2. The team will integrate the use of high-precision automated injection units and rapid delivery enhanced filler materials to fill deck cracks that will be nondestructive, rapid, cost effective and implementable with minimum disruption to traffic.
3. Concrete crack depths and crack repairs using non-destructive testing methods will be evaluated. Current NDT methods for measuring crack widths include impact echo, ultrasonic pulse velocity, and ultrasonic pulse echo. An effective NDT method will be developed to detect crack depth and evaluate concrete integrity after repair.
4. The bridge deck with existing cracks will be identified, and the extent of these defects will be initially mapped using ultrasonic measurements. Subsequently, the filler material will be poured into the identified defects, and its interaction with the crack walls will be closely monitored at regular intervals to establish the monitoring of repair quality.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Innovative Pothole Repair Materials and Techniques Phase II-4500023/7200
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

TRAVEL:
None

CONTRACTS:
University Contract: Rutgers University (CY 25) - \$0 (CY 26) - \$0

EQUIPMENT:
None

STAFFING:
In-house staff time will be charged to Management of Contracts

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Identifying Travel Needs for South Jersey and Shore Customers
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

MISSION / OBJECTIVE:

The mission of the NJDOT Bureau of Research (BoR) is to help transportation professionals address complex challenges that affect the safety, mobility and accessibility of the state's residents, workers, visitors, and businesses. To accomplish this mission, BoR staff work directly with university and research professionals to develop innovative, cost-effective solutions that will ultimately enhance the quality and cost effectiveness of the policies, practices, standards, and specifications that are used in planning, building and maintaining New Jersey's transportation infrastructure. The BoR is also charged with satisfying NJDOT's technology transfer needs as well as fostering a strong culture of innovation through the activities of the New Jersey State Transportation Innovation Council. Lastly, the BoR acts as a liaison to various national transportation entities (TRB, AASHTO, other State DOTs) through participation in national research activities such as project panels, committees, peer exchanges, and surveys.

GOALS/ACTIVITIES:

1. Focus Groups or Interviews with South Jersey/Jersey Shore Employees and Large Employers
2. Design Survey Questions and Survey Preparations
3. Conduct Onboard Bus Rider Survey
4. Data Entry, Cleaning, and Weighting
5. Data Analysis
6. Draft and Final Report

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Conduct focus groups with shore area employees and a separate group with large employers in the shore area to learn about their use of NJ TRANSIT buses and any travel challenges they may experience. Develop a discussion guide or interview guide for each of the focus groups. Anticipated completion in CY 26.
2. Identify the survey questions for the weekday and weekend summer and off-peak (spring or fall) surveys utilizing information learned from the focus groups/interview. Recruit individuals with relevant experience and proficiency in administering surveys. Prior to commencing fieldwork, the surveyors will undergo comprehensive training sessions conducted by the research team. These training sessions will cover survey protocols, techniques for engaging respondents, and data collection standards to ensure consistency and accuracy throughout the survey process. Anticipated completion in CY 24.
3. Conducting an onboard bus rider survey to collect comprehensive data from riders during both summer and off-peak periods on weekdays and weekends. supervise the survey implementation process to maintain data quality and address any potential issues or questions that may arise. Anticipated completion in CY 25.
4. Data entry software or tools will be utilized to ensure the accuracy, integrity, and representativeness of the collected survey data. The entered data will undergo a rigorous cleaning process to identify and rectify any inconsistencies, missing values, or anomalies. In collaboration with NJ TRANSIT, the research team will develop a robust weighting methodology to account for potential biases and ensure the representativeness of the survey data. Anticipated completion in CY 26.
5. To explore relationships, correlations, and patterns within the data the team will utilize statistical techniques, such as descriptive statistics, inferential statistics, cross-tabulations, and regression analysis Anticipated completion in CY 26.
6. Final report along with a section dedicated to formulating actionable recommendations to enhance and encourage transit usage; the recommendations will be evidence-based and will aim to address the identified gaps, improve service quality, enhance customer experience, and promote transit usage in south Jersey and the shore area. Anticipated completion in CY 26.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Identifying Travel Needs for South Jersey and Shore Customers
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

TRAVEL:

None

CONTRACTS:

University Contract: Rowan University (CY 25) \$130,000.00 (CY 26) \$145,000.00

EQUIPMENT:

None

STAFFING:

In-house staff time will be charged to Management of Contracts

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Multi Hazard Design of Highway Bridges – 4500023/7197
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

MISSION / OBJECTIVE:

The mission of the NJDOT Bureau of Research (BoR) is to help transportation professionals address complex challenges that affect the safety, mobility and accessibility of the state’s residents, workers, visitors, and businesses. To accomplish this mission, BoR staff work directly with university and research professionals to develop innovative, cost-effective solutions that will ultimately enhance the quality and cost effectiveness of the policies, practices, standards, and specifications that are used in planning, building, and maintaining New Jersey’s transportation infrastructure. The BoR is also charged with satisfying NJDOT’s technology transfer needs as well as fostering a strong culture of innovation through the activities of the New Jersey State Transportation Innovation Council. Lastly, the BoR acts as a liaison to various national transportation entities (TRB, AASHTO, other State DOTs) through participation in national research activities such as project panels, committees, peer exchanges, and surveys.

GOALS/ACTIVITIES:

1. Review all design codes, standards, and specifications that NJDOT utilizes to design highway bridges. Additionally, conduct a comprehensive review of recent scientific research and practices related to multi-hazard bridge designs.
2. Identify and summarize available information and methodologies to develop the multi-hazard designs of highway bridges phase I report that documents the work completed in Tasks 1 through 3, and plan Phase 2 work based on TAP approval.
3. Identify types of structures and members, and dominant load combinations to be analyzed in this study.
4. Develop and finalize preliminary “NJDOT Multi-Hazard Bridge Design Guidelines” with design examples. Also, collaborate with consultants or practitioners to seek input and recommendations on the resilience design guidelines.
5. Perform a cost-benefit analysis for the selected highway bridge designs based on the design guidelines.
6. Prepare the final report.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Identify and summarize the sections addressing various problems with natural and man-made hazards such as flooding, earthquakes, storm surges, fire, and terrorist threats to highway bridges. Assess whether lessons learned from past events such as Hurricane Katrina or various earthquakes have been implemented into current NJDOT designs. Review near-term scientific research and review state of practice within the United States. Completed.
2. Summarize available framework to develop the multi-hazard design of highway bridges. Identify key factors in the development of multi-hazard bridge design. Collaborate with consultants or practitioners to seek input and recommendations on the methodologies to develop the multi-hazard designs of highway bridges. Anticipated completion in CY 24.
3. The study will specify the types of structure and members, as well as the critical load combinations. Then the framework will be utilized to develop design criteria. Anticipated completion in CY 24.
4. Develop preliminary “NJDOT Multi-Hazard Bridge Design Guidelines” and design examples/case studies. Anticipated completion in CY 25.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Multi Hazard Design of Highway Bridges – 4500023/7197
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

5. Based on the discussion with NJDOT TAP, the team will perform the incremental agency's cost only at the bridge and component level. The team will consider two scenarios for comparing the cost, including (a) design with current LRFD, and (b) design with proposed MH-LRFD for bridge construction or rehabilitation. Anticipated completion in CY 25.
6. Prepare the final deliverables and submit them to the NJDOT Project TAP for comments and recommendations. Anticipated completion in CY 25.

TRAVEL:

None

CONTRACTS:

University Contract: Rutgers University (CY 25) \$20,531 (CY 26) \$0

EQUIPMENT:

None

STAFFING:

In-house staff time will be charged to Management of Contracts

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: NJDOT Corrosion Study on Steel Structural Members-4500023/7194
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

MISSION / OBJECTIVE:

The mission of the NJDOT Bureau of Research (BoR) is to help transportation professionals address complex challenges that affect the safety, mobility and accessibility of the state's residents, workers, visitors, and businesses. To accomplish this mission, BoR staff work directly with university and research professionals to develop innovative, cost-effective solutions that will ultimately enhance the quality and cost effectiveness of the policies, practices, standards, and specifications that are used in planning, building and maintaining New Jersey's transportation infrastructure. The BoR is also charged with satisfying NJDOT's technology transfer needs as well as fostering a strong culture of innovation through the activities of the New Jersey State Transportation Innovation Council. Lastly, the BoR acts as a liaison to various national transportation entities (TRB, AASHTO, other State DOTs) through participation in national research activities such as project panels, committees, peer exchanges, and surveys.

GOALS/ACTIVITIES:

Given the large portion of steel infrastructure in New Jersey, and the need to maximize the service life of new structures, while extending the life of existing structures, it is critical to understand the rate and nature of steel corrosion in the state. The proposed research will seek to provide that understanding and the tools to estimate the corrosion that may be expected for a given member considering its exposure parameters

1. Develop Experimental Program.
2. Field Data Collection
3. Statistical Analysis and Design Recommendation.

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. The research team will analyze the data gathered during literature review and identify any data and knowledge gaps that may be addressed by collecting additional data. The research team will then work with NJDOT to identify at least 15 structures that meet established criteria and show signs of significant corrosion. For each test specimen, a testing program will be developed that details the type of tests to be performed and the associated protocols for performing them.
2. The research team will perform testing on the bridges identified according to the experimental program. It is anticipated that several of the selected case structures will require the cutting of coupons for lab analysis (e.g., strength testing). In addition, several nondestructive methods of testing will be employed to gather a larger data set. A summary of the field activities and the data collected will be provided as a summary report.
3. The data gathered will be analyzed using statistical methods to determine the influence of exposure and protection parameters on measured corrosion. From these analyses, recommendations will be developed for sacrificial steel design thickness for structures in each of NJ's geographic regions, as well as recommendations for corrosion protection and effective maintenance techniques that are tailored to New Jersey's exposures. In addition, it is anticipated that a model will be developed to be used by bridge designers or managers to more accurately estimate the future rate of corrosion on specific structures.

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: NJDOT Corrosion Study on Steel Structural Members-4500023/7194

MANAGER: Pragna Shah

UNIT: Bureau of Research, Innovation & Information Transfer

TRAVEL:

None

CONTRACTS:

University Contract: Rutgers University (CY 25) - \$0 (CY 26) - \$0

EQUIPMENT:

None

STAFFING:

In-house staff time will be charged to Management of Contracts

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: Transit Usage Impacts of NJ Transit-Oriented Developments (TODs) – 4500021 / 7192
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

MISSION / OBJECTIVE:

The mission of the NJDOT Bureau of Research (BoR) is to help transportation professionals address complex challenges that affect the safety, mobility and accessibility of the state's residents, workers, visitors, and businesses. To accomplish this mission, BoR staff work directly with university and research professionals to develop innovative, cost effective solutions that will ultimately enhance the quality and cost effectiveness of the policies, practices, standards, and specifications that are used in planning, building, and maintaining New Jersey's transportation infrastructure. The BoR is also charged with satisfying NJDOT's technology transfer needs as well as fostering a strong culture of innovation through the activities of the New Jersey State Transportation Innovation Council. Lastly, the BoR acts as a liaison to various national transportation entities (TRB, AASHTO, other State DOTs) through participation in national research activities such as project panels, committees, peer exchanges, and surveys.

GOALS/ACTIVITIES:

This proposed research will seek to better understand the relationships between (a) Transit Oriented Development (TOD) – concentrated real estate development around transit facilities – and the travel behaviors of those who live near those facilities, and (b) TOD characteristics and its appeal to the customers of retail establishments located within TODs. Additionally, the examination of both avenues of study will consider the impacts of the current pandemic and will seek to better understand transit usage and motivations before, during, and after the pandemic. The research will employ a mixed method approach that will utilize both quantitative (survey) and qualitative (interview and focus group) methods to achieve a richer understanding of travel and consumer choices over time. The research will be conducted in four phases, with project management tasks continuing throughout the study:

1. Review of Survey Methodologies
2. Development of Draft Survey Instruments
3. Data Collection – Implementation of Surveys, Interviews and/or Focus Groups
4. Analysis and Synthesis

ANTICIPATED ACCOMPLISHMENTS FOR CALENDAR YEAR 2025:

1. Review of Survey Methodologies (Accomplished in CY 2023)
2. Development of Draft Survey Instruments (Accomplished in CY2023)
3. Data Collection – Implementation of Surveys, Interviews and/or Focus Groups (This task will be completed in CY2024)
4. Analysis and Synthesis (This task will be completed in CY2024)

TRAVEL:

N/A

CONTRACTS:

University Contract: Rutgers University (CY 25) \$0 (CY 26) \$0

EQUIPMENT:

N/A

STAFFING:

In-house staff time will be charged to Project Management of Contracts

STATE PLANNING AND RESEARCH PROGRAM, 2025 – 2026

ACTIVITY: WIM Analysis for New Jersey Bridges for Establishing Various Live Load Models for Design and Bridge Management Tools – 4500023 / 7203
MANAGER: Pragna Shah
UNIT: Bureau of Research, Innovation & Information Transfer

MISSION / OBJECTIVE:

The mission of the NJDOT Bureau of Research (BoR) is to help transportation professionals address complex challenges that affect the safety, mobility and accessibility of the state's residents, workers, visitors, and businesses. To accomplish this mission, BoR staff work directly with university and research professionals to develop innovative, cost-effective solutions that will ultimately enhance the quality and cost effectiveness of the policies, practices, standards, and specifications that are used in planning, building, and maintaining New Jersey's transportation infrastructure. The BoR is also charged with satisfying NJDOT's technology transfer needs as well as fostering a strong culture of innovation through the activities of the New Jersey State Transportation Innovation Council. Lastly, the BoR acts as a liaison to various national transportation entities (TRB, AASHTO, other State DOTs) through participation in national research activities such as project panels, committees, peer exchanges, and surveys.

GOALS/ACTIVITIES:

The goal of the study is to analyze NJ's recorded WIM data for establishing various live load models for the design and evaluation of bridges. In addition, the objective is to calibrate the load factors based on the latest edition of the "Manual of Bridge Evaluation (MBE)" for SHV's to avoid (if possible) load posting of bridges. The main tool to analyze the live load effect on bridges is utilizing reliable WIM data.

1. Identifying various permit truck configurations (9 months).
2. Validating NJDOT LRFD permit load model (7months).
3. Identifying the risk of load-induced fatigue cracking (10 months)
4. Identifying the risk of distortion-induced fatigue cracking (10 months)
5. Validating the load factor for operating rating for SHV's (3 months)
6. Preparing Final Report and Technical brief and other deliverables

ANTICIPATED ACCOMPLISHMENT FOR CALENDAR YEAR 2025:

1. Identifying various permit truck configurations
2. Validating NJDOT LRFD permit load model
3. Identifying the risk of load-induced fatigue cracking
4. Identifying the risk of distortion-induced fatigue cracking
5. Validating the load factor for operating rating for SHV's
6. Draft and Final Report and Technical brief.

TRAVEL:

N/A

CONTRACTS:

Rutgers University, (CAIT)- WIM Analysis for NJ Bridges for Establishing various live Load Model Design (CY 25) \$ 250,000 (CY 26) \$250,000

EQUIPMENT:

N/A

STAFFING:

In – house staff time will be charged to Management of Contracted Research Initiatives (7021)