

INSTRUCTIONS

A list of the units within the NJDOT that may have an employment opportunity for the position of Engineer Trainee Transportation are listed on the following pages. Please review all unit descriptions and follow the instructions below.

Step 1: Mark an “X” on all the units that you are not interested in by using the box **“I am NOT INTERESTED in this unit”**

Step 2: Mark an “X” on all the units that you are interested in by using the box **“I am INTERESTED in this unit”**

If the unit offers positions in multiple locations, please mark a “1” on the first choice, “2” on the second choice, or leave blank if not able to work in that location.

Step 3: Go back to the positions that you are interested in and add a Preference Rank for each one (1, 2, 3, 4, 5, etc.) in the box labeled **“Preference Rank”** — **“1”** reflects the position you are the most interested in and **“10”** reflects the position you are the least interested in. Please do not list your preferences with identical ranking.

PLEASE DO NOT REPEAT
PREFERENCE RANKS

LAST NAME	FIRST NAME	MIDDLE INTIAL/NAME	DATE

Unit:	Operations Support & Engineering
Location:	Headquarters (Home office is located in Ewing, NJ)
Description:	<p>The Bureau of Operations Support and Engineering is responsible for providing engineering and operations support to the Department, preparing and promulgating direction pertinent to roadway and bridge engineering and operations, providing emergency response to roadway and bridge emergencies to address health and safety hazards on the highway transportation system Statewide, in accordance with State and Federal regulations.</p> <p>Operations Support and Engineering performs the following type of work:</p> <ul style="list-style-type: none"> • Office work may include preparation of reports with findings, conclusions and recommendations, plan reviews, contract development, specification writing, drafting, and technical communication. • Fieldwork may include construction inspection, design inspection, evaluation of site conditions, repair recommendations, regional maintenance support, and contract enforcement to maintain our highway infrastructure system. • Maintenance engineering responsibilities for this Unit include, but are not limited to, bridge repair projects, roadway resurfacing projects, pavement preservation projects, drainage repair projects, stormwater management projects and other on-call emergency projects. • Work within this unit is complex and includes design, construction, and inspection activities that are critical during times when emergency response and public safety is paramount. • This is a Statewide position. Travel is required.

Unit:	Assistant Division Director’s Office – Region North
Location:	Region North (Home office is located in Mt. Arlington)
Description:	<p>The Division of Regional Operations performs project management, construction, and inspection work to maintain our highway system. Maintenance engineering responsibilities for this Unit include, but are not limited to, bridge repair projects, roadway resurfacing projects, pavement preservation projects, drainage repair projects, storm water facilities restoration projects, hot mix asphalt repair, guiderail repair and replacement, and other on-call Regional repair projects. The unit is also responsible for providing emergency response to roadway and bridge emergencies to address health and safety hazards on the highway transportation system within the designated Region. Work within this unit is complex and involve activities that are critical during times when emergency response is paramount. Travel is required.</p> <p>Region North includes Bergen, Essex, Hudson, Morris, Passaic, Sussex, Union, counties and portions of Warren County.</p>

Unit:	Support Services
Location:	Ewing
Description:	The Bureau of Facilities Planning, Engineering and Construction is responsible for the administration and management of the Division's Capital Construction Program as it relates to the building infrastructure and physical plant of the Department. The building infrastructure is comprised of 94 individual facilities, more than 600 buildings and over 2.7 million square feet of space throughout the State. The Bureau has the overall responsibility for ensuring that all assigned capital projects adhere to the project score and are delivered on schedule, within budget and of high quality from concept development through the completion of construction. The Bureau is at the center of the Project Management Team with other State agencies, consulting firms, contractors, in - house subject matter experts and our employee

Unit:	Mobility Engineering		
Location:	Multiple - Please indicate your location preference below. Leave blank if you are not interested in that location		
	Preference		Locations
			Woodbridge (Region North)
			Ewing (Region Central)
			Cherry Hill (Region South)
Description:	Working under an Engineering supervisor to manage the identification, development, implementation and support for the Advance Arterial Management (AAM) initiatives including Traffic Signal Optimization and Adaptive Signal Design and Management. Involved with the development of standards and specific improvement projects to use technology to provide safe and effective transportation facilities. Coordinate with the various entities within the NJDOT to minimize project conflicts and effectively use available resources. Provide technical support with the management of the Mobility and Systems Engineering's (MSE) Traffic Signal Optimization Program, Adaptive Traffic Signal System (ATSS) program and other research initiatives in the unit.		

Unit:	Administrative Support - Permits Unit
Location:	Ewing
Description:	The Operations Permits Unit within the Division of Operations Administrative Support is the Unit responsible for the review, processing and issuance of Highway Occupancy Permits and Minor Access Permits for work or events that need to happen on our State highway system. Permit Application Reviews are coordinated with respective subject matter experts and are issued to ensure that work is done safely and properly in accordance with NJ State Law and NJ Administrative Code. Furthermore, this unit is in charge of all construction inspection on permit projects and will have acceptance authority of permit construction and roadway restoration work. This Unit is complex in that it includes design review, construction inspection, coordination, training and customer support activities and is critical during times when emergency response is paramount.

Unit:	Capital Program Support
Location:	Ewing
Description:	The Division of Capital Program Support provides engineering and administrative support to Capital Program Management along with implementing various work programs for the Department. The major function of the division is to help the Department design projects for deliverability. This requires engineering support during all phases of project development - Planning/Concept Development, Preliminary Engineering, Final Design, and during Construction.

Unit:	Project Management
Location:	Ewing
Description:	The Division of Project Management consists of four teams, each of which are responsible for a specific geographic area of the State. The Division has the overall responsibility for the delivery of all assigned capital projects on schedule, within budget and of high quality from concept development through the completion of construction. These teams are at the center of the project management team approach, working and directing the activities of other specialized units both internal and/or external to the Division of Project Management. This includes coordination during Concept Development phase, oversight of the design consultant selection and agreement process, managing both in-house and consultant design, managing Preliminary Engineering & Final Design phases, oversight of the construction contractor bid and award, and managing the project through construction closeout.

Unit:	Major Access Permits
Location:	Ewing
Description:	Major Access Permits regulates highway access through a permitting process, in accordance with the New Jersey State Highway Access Management Code. Also, ROWAM regulates and issues permits for Outdoor Advertising in conformance with State law and the federal agreement. The Division through Outdoor Advertising assists in improving state communications systems by making DOT properties available for wireless communications infrastructures through Master Agreements with carriers and site licenses.

Unit:	Access Design & Right of Way
Location:	Ewing
Description:	The Access Design and Right of Way Engineering unit reviews, designs, and processes access changes, adjustments, modifications, and revocations for highway improvement projects in accordance with the New Jersey State Highway Access Management Code. They identify access impacts, prepare access plans, prepare access cut-outs, and administer modifications revocations. Access issues are resolved through notification, informal meetings, formal hearings and/or OAL hearings which are conducted in compliance with the code for all property owners.

Unit:	Materials
Location:	Ewing
Description:	The Bureau of Materials is responsible for the testing of construction materials, conducted in NJDOT's Headquarters Laboratory, the inspection of fabricated materials at the point of manufacture, and the independent assurance testing of regional materials testing. The Bureau of Materials is also responsible for providing materials specification and testing expertise for the Department and the administration of computer software for the management of projects.

Unit:	Regional Construction Services			
Location:	Multiple - Please indicate your location preference below. Leave blank if you are not interested in that location			
	Preference	Region	Office	Office Address
		North	Mt. Arlington	200 Stierli Court, Mt. Arlington, NJ
		Central	Ewing	1035 Parkway Ave, Ewing, NJ
		South	Cherry Hill	One Executive Campus, Route 70 West, Cherry Hill, NJ
Description:	<p>Engineers in Regional Construction are assigned to a construction project, and report to the construction project site for the duration of the project. There, they work under a Resident Engineer to monitor the Contractor's work to ensure the work is compliant with the project's plans and specifications. Engineers in Regional Construction also work with the project designer to resolve problems arising from field conditions. They administer the construction contract, authorize contractor payments, and resolve contractor claims. Engineers in Regional Materials are either assigned to a Field Team and perform the on-site concrete and soils testing for several construction projects or are assigned to concrete and asphalt plant quality assurance during the production of materials.</p> <p>Region North: Sussex, Passaic, Bergen, Warren, Morris, Essex, Hudson, and Union Region Central: Hunterdon, Somerset, Middlesex, Mercer, Monmouth, and Ocean Region South: Burlington, Camden, Gloucester, Salem, Atlantic, Cumberland, and Cape May</p>			

Unit:	Roadway Design Field Survey Unit			
Location:	Multiple - Please indicate your location preference below. Leave blank if you are not interested in that location			
	Preference	Region	Office	Office Address
		North	Mt. Arlington	200 Stierli Court, Mt. Arlington, NJ
		South	Cherry Hill	One Executive Campus, Route 70 West, Cherry Hill, NJ
Description:	<p>Responsible for the oversight, administration, and production of in-house design projects in support of the Capital Program. Types of highway improvement projects would involve resurfacing, restoration, and rehabilitation work, intersection improvements, widening, ramps, new alignment, pedestrians, sign structures, bridge deck or superstructure replacements and bridge replacements.</p> <p>Region North: Sussex, Passaic, Bergen, Warren, Morris, Essex, Hudson, and Union Region South: Burlington, Camden, Gloucester, Salem, Atlantic, Cumberland, and Cape May</p>			

Unit:	Roadway Design Group 1 & 2			
Location:	Ewing			
Description:	Responsible for the oversight, administration, and production of in-house design projects in support of the Capital Program. Types of highway improvement projects would involve resurfacing, restoration and rehabilitation work, intersection improvements, widening, ramps, new alignment, pedestrians, sign structures, bridge deck or superstructure replacements and bridge replacements.			

Unit:	CADD Development & Support Unit
Location:	Ewing
Description:	The primary purpose of the CADD Development & Support Unit is to develop and maintain CADD standards for the Department's CADD system, provide general CADD user support (Help desk); provide interagency and consultant coordination; develop and maintain CADD training and reference manuals and conduct in-house training for engineering (In-Roads) and drafting (MicroStation) applications.

Unit:	Geodetic Survey
Location:	Ewing
Description:	<ul style="list-style-type: none"> • The major goals of the New Jersey Geodetic Survey Unit are to preserve, maintain, densify, and inspect the official control survey network within the State of New Jersey in accordance with Chapter 118 supplementing P.L. 1966.c.301. • 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 Geographic Information System (GIS) activities. • Operates Global Navigation Satellite System (GNSS) equipment in support of our mission to maintain and densify the State survey control network. • A member of the First-Order Geodetic leveling crew, documents monument recovery data, and submits data and observations to the National Spatial Reference System (NSRS) for inclusion into the database.

Unit:	Traffic Engineering
Location:	Ewing
Description:	The Traffic Engineering Unit within Highway & Traffic Design provides traffic engineering and electrical engineering design and support. The unit conducts design reviews of Capital Program Management projects, prepares traffic signal and electrical plans and timings, designs signing and pavement markings, highway/sign lighting, and traffic control plans for detours and stages construction for in-house design efforts. It also conducts reviews of Traffic Impact Studies, Concept Plans and Construction Plans for Developer Access Applications. This Unit also works closely with the resident engineers to provide traffic engineering support during construction projects. It is responsible for analyzing crash data and vehicle and pedestrian counts to facilitate new or revised traffic signal designs and sign and pavement marking work orders to be built by Maintenance.

Unit:	Pavement & Drainage Management Unit
Location:	Ewing
Description:	The Pavement and Drainage Management and Technology Unit includes the Pavement Management Unit, the Pavement Design Unit, and the Drainage Management Unit. This Unit is responsible for the prioritization and initiation of pavement and drainage projects for both Capital Management Program (CPM) and Operations. The Unit also provides and reviews pavement recommendations and specifications for CPM, Operations, and developer projects, and administers skid testing and the ride quality (IRI) quality assurance testing program. The Pavement Management and Drainage Management Units also provide data and analysis to support the Department's Asset Management and Capital Investment Strategy (CIS) functions.

Unit:	Bureau of Structural and Railroad Engineering Service – Structural Value Solutions
Location:	Ewing
Description:	The Bureau of Structural and Railroad Engineering Service's Diagnostic Team Management Unit is responsible for providing safe and effective railroad crossings statewide through administration of the annual Grade Safety Inspection Program and the annual Rail - Highway Construction Program

Unit:	Bureau of Structural and Railroad Engineering Service – Railroad Diagnostics Team
Location:	Ewing
Description:	The Bureau of Structural and Railroad Engineering Service's Diagnostic Team Management Unit is responsible for providing safe and effective railroad crossings statewide through administration of the annual Grade Safety Inspection Program and the annual Rail - Highway Construction Program

Unit:	Bureau of Structural and Railroad Engineering Services – Bridge Design Policy & Standards
Location:	Ewing
Description:	The Bridge Design Policy and Standards unit provides guidelines and criteria for designing and constructing safe, durable, and cost-effective bridges and highway related structures statewide through the development of the Design Manual, standard specifications, and standard drawings by incorporating the latest guidance from the American Association of State Highway Transportation Officials (AASHTO), the Federal Highway Administration (FHWA), and state of the art technologies and practices. This unit also manages the Bridge Resource Program, an effort by engineering professionals with the object of providing bridge engineering research expertise and practical solutions in highway bridge and structure design, construction, and management.

Unit:	Structural Design & Geotechnical Engineering – Structural Design
Location:	Ewing
Description:	The Structural Design Unit provides structural design services for the in-house Department projects. These services include the design and preparation of structural contract documents, quality assurance reviews, construction shop drawing reviews, technical input during scope development, and technical advice for the resolution of construction field problems. This unit also provides quality assurance reviews for design of bridges, culverts, noise walls, retaining walls, and other miscellaneous structures on projects designed by consultants. These design projects could be on the State Highway System, on county or local highways, or New Jersey Transit facilities. Additionally, this unit provides technical input on unique design projects and provides constructability reviews for all structural design projects when required.

Unit:	Structural Design & Geotechnical Engineering – Geotechnical Engineering
Location:	Ewing
Description:	The Geotechnical Engineering Unit is primarily responsible for providing Geotechnical Engineering, Rock Engineering, and Subsurface Engineering Services. The Geotechnical and Foundation Design staff perform and approve geotechnical engineering design for foundations, roadway embankments/cuts, and subsurface drainage for projects in the Capital Program. Technical specifications are provided and evaluation/implementation of new geotechnical engineering technology is performed. Construction and Maintenance Operations are supported by approving pile driving hammer systems, reviewing test pile records, recommending pile order lengths to the Resident Engineers and providing general geotechnical guidance.

Unit:	Structural Evaluation & Bridge Management
Location:	Ewing
Description:	The Bureau of Structural Evaluation and Bridge Management is responsible for the safety inspection of all bridges in New Jersey (State, County, Toll, etc.) in accordance with the National Bridge Inspection Standards (23 CFR 650). It is also responsible for the inspection programs for State-owned sign structures, minor bridges (culverts) and dams, as well as County minor bridges (culverts). For all assets inspected, significant deficiencies are identified and the bridge owner is notified to act, based on pre-established priority criteria. The Bureau also responds to emergencies, especially in response to risks to our infrastructure due to natural or man-made events. The Bureau is also responsible for the tracking of all structural assets, and to proactively identify Capital Projects and bridge preservation needs and initiates new structural project starts.

Unit:	Geodetic Survey
Location:	Ewing
Description:	<ul style="list-style-type: none"> • The major goals of the New Jersey Geodetic Survey Unit are to preserve, maintain, densify, and inspect the official control survey network within the State of New Jersey in accordance with Chapter 118 supplementing P.L. 1966.c.301. • 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 Geographic Information System (GIS) activities. • Operates Global Navigation Satellite System (GNSS) equipment in support of our mission to maintain and densify the State survey control network. • A member of the First-Order Geodetic leveling crew, documents monument recovery data, and submits data and observations to the National Spatial Reference System (NSRS) for inclusion into the database.

Unit:	Geometric Solutions
Location:	Ewing
Description:	A new engineer in the Geometric Solutions office will take part in design meetings throughout the project delivery process; in the early stages when the project is just taking shape, throughout plan development and during construction for Change of Plans. They will provide guidance on geometric standards and offer ideas to improve the project. They will attend field trips, review plans, crash diagrams and Level of Service analysis as to identify design features that can result in crashes and/or poor traffic operations. They will write memorandums discussing their findings and recommendations as to help shape the final project.

Unit:	Utility Management
Location:	Ewing
Description:	The Office of Utility Management provides coordination and subject matter expertise regarding utilities and railroad companies to Department personnel in Project Management, Construction Management, Design Services, Regional Operations and Consultant Designers in support of Capital Program Projects and Utility Permits.

Unit:	Bureau of Safety, Bicycle and Pedestrian Programs
Location:	Ewing
Description:	<p>The Bureau of Safety, Bicycle and Pedestrian Programs (BSBPP) is made up of three primary units: Office of Safety Program Management, Office of Bicycle and Pedestrian Planning, and the Office of Complete Streets Implementation. The Bureau is responsible for administering the federally funded Highway Safety Improvement Program (HSIP) for all public roads (municipal, county and state) in New Jersey. HSIP funds are used for State Highway Improvements and Metropolitan Planning Organization locally driven roadway improvement projects, in support of the New Jersey's Strategic Highway Safety Program (SHSP). The Bureau is responsible for managing the implementation of the New Jersey 2020 Strategic Highway Safety Plan (SHSP). Under the new Infrastructure Bill (IIJA), New Jersey will be allocated in the mid \$70 million range and the funds are only to be used on projects with a documented safety need.</p> <p>The Bureau is also responsible for initiating safety related problem statements to address data driven safety concerns along state routes. To this extent, the Bureau is responsible for managing technical projects that identify, inventory, review and analyze safety concerns along state and non-state roads, with a goal of suggesting safety countermeasures. The Bureau is also responsible for a variety of bicycle and pedestrian planning and program activities including the Complete Streets initiative and Subject Matter Expert (SME) support to the Safe Routes to School program. The Bureau serves as a SME on the Department's Complete Streets policy, and for ensuring its implementation. This requires coordination with the Division of Project Management (DPM) and supervision of staff to thoroughly assess all NJDOT projects regarding bicycle, pedestrian, and Complete Streets accommodations in a timely manner.</p>

Unit:	Bureau of Research
Location:	Ewing
Description:	Under close supervision and direction, an Engineer Trainee – Transportation (ETT) will be assigned tasks that support the BoR’s function. The ETT will be given appropriate assignments and training to become a Research Project Manager. As a Research Project Manager, the ETT will be responsible for the management of research studies within the annual research work program, administering all research activities necessary to meet Federal requirements. As a Project Manager, ETTs must oversee research projects from the idea phase through to successful and timely close out. Throughout the project duration, ETTs will provide review, oversight, and approval of proposals, scopes of work, budgets, scope/budget modifications, quarterly project status reports, and other deliverables such as final reports and tech briefs.

Unit:	Bureau of Fixed Guideway
Location:	Ewing
Description:	The New Jersey Department of Transportation’s Office of Fixed Guideway is designated as the State Safety Oversight Agency (SSOA) for New Jersey and is responsible for overseeing and regulating rail transit agencies within the state not overseen by the Federal Railroad Administration (FRA). As the SSOA, NJDOT is responsible for reviewing, approving, and enforcing rail agencies’ safety and security plans. NJDOT establishes minimum standards that are consistent with the National Public Transportation Safety Plan, the Public Transportation Safety Certification Training Program, the rules for Public Transportation Agency Safety Plans, and all applicable Federal and State law. Interacting with safety managers, work crews and contractors. Fieldwork includes, checking rail vehicles, stations, equipment and safety practices. Utilizing a mobile app to collect inspection data.

Unit:	Bureau of Transportation, Data and Support
Location:	Ewing
Description:	This unit oversees the Highway Performance Monitoring System (HPMS), which is responsible for the collection Roadway Inventory and Traffic data. The HPMS serves as the official Federal government source of data in regard to the extent, condition, performance, use, and operating characteristics of the nation’s highways. The unit is also accountable for checking, preparing, analyzing, and submitting data to the Federal Highway Administration (FHWA), in which office staff have received from different sources and field technicians representing the Bureau.

Unit:	Statewide Strategies
Location:	Ewing
Description :	The Bureau of Statewide Strategies is composed of the following units: Transportation Livable Communities, MPO Liaison, Technical Analysis, Modeling/Air Quality, and State Planning & Research Program. The Bureau develops statewide strategies to shape transportation policy and enhance statewide transportation services. The Bureau provides broad, future oriented direction for the Department’s mission and programs that ultimately result in the delivery of capital investments and mobility services to the public. The Bureau promotes compatibility among state, regional, and local transportation, land use, air quality, and private sector planning activities, processes, and products. The Bureau is tasked with preparing a comprehensive statewide long-range transportation plan and a Transportation Asset Management Plan. They participate on the State Planning Commission in the development, update and implementation of the State Development and Redevelopment Plan. They manage the Transit Village Initiative to designate Transit Villages in municipalities that meet criteria for walkable, mixed use, compact development around transit facilities. They also maintain and update Appendix B of the State Highway Access Management Code and manage the access classification process including Desirable Typical Sections and Access Levels and recommend changes to the New Jersey State Highway Access Code to strengthen support of the state’s Smart Growth goals and objectives and improve consistency with the policies and strategies of the State Development and Redevelopment Plan.

Unit:	Local Aid & Economic Development			
Location:	Multiple - Please indicate your location preference below. Leave blank if you are not interested in that location			
	Preference		Region	Assigned Work Location/Counties
			District 1	Mt. Arlington (Morris County)
			District 2	City of Newark (Essex County)
			District 3	Ewing (Mercer County)
			District 4	Cherry Hill (Camden County)
Description:	<p>The Division of Local Aid and Economic Development works with county and municipal government officials and engineers to improve the efficiency and effectiveness of the state's transportation system by providing funding and guidance on the local system. The Division has six core functions: Municipal Aid, County Aid, Contract Administration, Local Bridge Preservation, Safety Programs and the Administration of Federal Funds. Engineers within Local Aid become familiar with both Federal and State laws and statutes, and other rules and regulations related to engineering practice and oversee a project through all phases of work.</p> <p>The Division's District Offices are strategically located close to their customers to build a better partnership with local government officials and engineers. The District Engineers assist municipalities with every phase of the State and Federal Aid process. Engineers assigned to the Headquarters office in Ewing provide assistance to the District's through contract administration, setting policies and procedures and various troubleshooting tasks, while the four (4) District offices focus on project delivery.</p>			

PLEASE CHECK OFF THE UNITS YOU ARE INTERESTED IN AND YOUR PREFERENCE NUMBER BELOW

	Not Interested	Interested	Preference Rank
Operations Support & Engineering			
Assistant Division Director's Office – Region Central			
Support Services			
Mobility Engineering			
Administrative Support – Permits			
Capital Program Support			
Project Management			
Major Access Permits			
Access Design & Right of Way			
Materials			
Regional Construction Services			
Roadway Design Field Survey Unit			
Roadway Design Group 1 & 2			
CADD Development & Support Unit			
Geodetic Survey			
Traffic Engineering			
Pavement & Drainage Unit			
Bureau of Structural and Railroad Engineering Service – Structural Value Solutions			
Bureau of Structural and Railroad Engineering Service – Railroad Diagnostics Team			
Bureau of Structural and Railroad Engineering Services – Bridge Design Policy & Standards			
Structural Design & Geotechnical Engineering – Structural Design			
Structural Design & Geotechnical Engineering – Geotechnical Engineering			
Structural Evaluation & Bridge Management			
Geometric Solutions			
Utility Management			
Bureau of Safety, Bicycle and Pedestrian Programs			
Bureau of Research			
Bureau of Fixed Guideway			
Bureau of Transportation Data and Support			
Statewide Strategies			
Local Aid & Economic Development			