

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:	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:	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:	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:	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:	Bridge Engineering and Infrastructure Management (BEIM)
Location:	Ewing
Description:	Bridge Engineering and Infrastructure Management is composed of three bureaus. <u>Structural Evaluation and Bridge Management</u> is responsible for inspection and condition reporting of all bridges, culverts, pedestrian bridges, sign structures, high mast lighting, tunnels, and dams. They also perform load ratings, issue overweight vehicle permits, and provide structural emergency response teams. The Bridge Management Unit manages the state bridge population and recommends bridges for rehabilitation or replacement. <u>Structural Engineering Services</u> performs Subject Matter Expert (SME) reviews of all bridge projects, reviews new technologies and products, participates in value engineering reviews, performs construction inspections, and obtains USCG bridge permits. NJDOT bridge design policies and standards are also developed. <u>Structural Design and Geotechnical Engineering</u> designs bridges, structures, and foundations for in-house design projects and provides engineering support during construction. The Geotechnical Engineering Unit performs scour modeling and mitigation, provides SME reviews of projects, reviews critical shop drawings, and provides emergency response teams. The Geology Unit reviews subsurface investigation programs, manages the state inventory of rock slopes, and provides emergency response for rockfalls and slope instabilities.

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

	Not Interested	Interested	Preference Rank
Capital Program Support			
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			
Bridge Engineering and Infrastructure Management (BEIM)			
Geometric Solutions			
Utility Management			