

Mercer County Job Announcement

Dan Benson, County Executive | Board of County Commissioners

PRINCIPAL ENGINEER - TRAFFIC

OVERVIEW:

The Mercer County Engineering Department is seeking a Principal Traffic Engineer to lead various traffic engineering initiatives, including the design, installation, maintenance, and construction of traffic control systems to regulate and improve traffic flow. Under the direction of the Supervising Engineer, the Principal Traffic Engineer will play a key role in ensuring the safety, efficiency, and functionality of roadways and intersections throughout Mercer County.

This position offers the opportunity to work closely with local and state agencies, analyze traffic patterns and data, and develop innovative solutions to improve transportation systems. A strong preference is placed on candidates possessing a valid Professional Engineering (PE) license issued by the New Jersey State Board of Professional Engineers and Land Surveyors, as this qualification is critical for the engineer role.

RESPONSIBILITIES INCLUDE, BUT ARE NOT LIMITED TO:

- Lead and organize traffic engineering studies, including data collection, analysis, and interpretation, for highway design and traffic operations.
- Design and implement traffic control systems, such as signals, signs, and road markings, to optimize traffic flow and enhance safety.
- Analyze traffic patterns, investigate traffic-related issues, and recommend solutions to improve roadway safety and reduce accidents.
- Collaborate with local and state government representatives to address traffic engineering concerns and resolve traffic flow issues.
- Oversee the conduct of field investigations, monitor construction projects, and inspect the installation and effectiveness of traffic control systems.

REQUIREMENTS:

- Graduation from an accredited college or university with a Bachelor's degree in Engineering.
- Three (3) years of experience in traffic engineering, including data collection, analysis, and design.
- A valid Professional Engineering (PE) license issued by the NJ State Board of Professional Engineers and Land Surveyors is strongly preferred and may be required for positions assuming responsible charge over staff.
- Possession of a Master's degree in Engineering may substitute for one year of required experience.

 A valid New Jersey driver's license may be required if vehicle operation is necessary for job duties.

KNOWLEDGE AND SKILLS:

- Strong knowledge of the principles, theories, and techniques of traffic engineering, including the design and analysis of traffic control systems.
- Expertise in analyzing traffic patterns, interpreting data, and developing actionable recommendations for traffic flow and safety improvements.
- Familiarity with traffic control devices, regulations, and engineering mathematics, including trigonometry and calculus.
- Ability to lead and mentor engineering staff, providing clear guidance, supervision, and technical instruction.
- Proficiency in preparing clear, accurate engineering reports, maps, and specifications, and utilizing electronic and manual data systems for traffic engineering projects.

SALARY:

\$103,915.39-\$121,415.39

TO APPLY:

Candidate subject to all New Jersey Civil Service Requirements. Mercer County residency required within one (1) year of employment. Send application, resume and cover letter to Basit A. Muzaffar, PE, Mercer County Engineer via e-mail at: mrizziello@mercercounty.org.