

Who we are:

Transportation is so basic that many of us overlook its overwhelming importance in our daily lives. Practically everything used in our homes, offices, or schools across Tennessee – from furniture to food items to clothing – requires a large and complex transportation network. The Tennessee Department of Transportation provides citizens of Tennessee and travelers with one of the best transportation systems in the country. TDOT is a multimodal agency with responsibilities in building and maintaining roads, aviation, public transit, waterways, railroads, cycling and walking. Our involvement ranges from airport improvements to funding transit buses to planning for river ports. The Department of Transportation has approximately 3,500 employees with four statewide region facilities in Knoxville, Chattanooga, Nashville, and Jackson.



Field Services Engineering Technician

Materials and Tests Division – Materials and Pavements Section, Field Services

\$43,140 – \$53,628 annually

Job Overview

The Field Services Engineering Technician works in a team setting, providing support to the Materials and Pavements Section. This position will perform field and laboratory testing, inspections, and quality control tasks to ensure materials and construction processes comply with TDOT, state, and federal standards. This role requires technical knowledge of operating and maintaining testing equipment, inspecting producer facilities and project sites, and ensuring materials meet the required specifications. The Field Services Engineering Technician assists with sampling, testing, and certifying materials, monitoring construction sites, and documenting results to support the successful delivery of TDOT's infrastructure projects.

The Engineering Technician role supports the construction, maintenance, and inspection of Tennessee's transportation infrastructure by conducting tests, monitoring compliance, and maintaining accurate records. They operate and maintain equipment, apply safety standards and technical specifications, and collaborate with stakeholders to ensure efficient project delivery. They assist in implementing the Quality Management Program as part of the Materials and Tests' Division activities. As they advance, engineering technicians take on more complex tasks, contributing to quality assurance, training, and process improvements, enhancing TDOT's commitment to safety and sustainability.

Essential Job Responsibilities of the TDOT Engineering Technician 1, 2, and 3 include:

Perform sampling and field and laboratory testing of construction materials such as soil, aggregates, asphalt, and concrete in accordance with TDOT standards. Inspect materials and equipment at producer facilities and construction sites to ensure compliance with project specifications. Record testing and inspection results accurately and prepare basic reports for material certifications and compliance documentation.

Operate and maintain testing equipment, including calibrating tools and conducting routine maintenance to ensure accuracy and functionality. Follow safety protocols and maintain an organized and clean work environment in the laboratory and field.

Participate in TDOT's Materials and Tests Engineering Technician Proficiency Program (ProPath) to develop skills and to improve knowledge and performance in field services.

Provide exceptional customer service to both internal and external customers by exercising effective listening skills, providing prompt responses, maintaining complete and accurate documentation, and communicating effectively.

Additional Job Responsibilities of TDOT Engineering Technician 2 and 3 include:

Conduct more advanced field and laboratory testing and analyze results to verify compliance with project specifications and applicable standards.

Assist in identifying and addressing issues with materials or construction processes during inspections or testing.

Calibrate and troubleshoot equipment to ensure reliable performance and accurate testing results.

Collaborate with project teams to resolve materials-related challenges and improve testing and inspection protocols.

Additional Job Responsibilities of TDOT Engineering Technician 3 include:

Perform testing and inspection for high-complexity or specialized projects, ensuring strict compliance with specifications and safety requirements. Analyze testing data and provide actionable recommendations for improving processes, quality, and efficiency in material usage. Review and validate testing results and reports for accuracy and consistency.

Monitor and inspect producer facilities and processes to certify materials and ensure compliance with TDOT's quality standards.

Assist in the training of employees by providing on-the-job training and guidance as needed to facilitate learning and development.

Provide feedback on design elements, change orders, and construction quality to support process improvements.

Qualifications

TDOT Engineering Technician 1:

- High School Education or equivalent

TDOT Engineering Technician 2:

- High School Education or equivalent
- Completion of the Proficiency Requirements for the Engineering Technician 1 level.

TDOT Engineering Technician 3:

- High School Education or equivalent
- Completion of the Proficiency Requirements for the Engineering Technician 1 and 2 levels.

The Tennessee Department of Transportation reserves the sole right in determining the level of position based on the applicant's work experience, education, skill level, and all other appropriate factors, and based on business

need. Within 6 months of hire, employees must demonstrate successful mastery of corresponding work competencies and skill blocks of the Technician Proficiency Program for the level of technician to which they were hired. If skills and competencies are not met during that period, the employee can be demoted to the level of technician for which he/she is qualified.

Ideal Candidate

This position is a career path series within TDOT. The Field Services Engineering Technician 1, 2, or 3 demonstrates technical expertise coupled with a commitment to safety and quality. They are eager to learn, capable of adapting to evolving needs, offering process improvements, sharing knowledge to support team development. The Engineering Technician possesses a collaborative mindset, problem-solving abilities, and dedication to excellence, making them a vital contributor to the success of TDOT's infrastructure initiatives.