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. TDOT Aeronautics is located near the John C. Tune Airport in Nashville, TN.



Field Services Engineering Specialist 3 & 4

Materials and Tests Division – Materials and Pavements Section, Field Services \$80,784 - \$88,860 annually

Job Overview

The Field Services Engineering Specialist 3 & 4 supports Project Teams, Materials and Tests Field Services Teams and Regional Operations by providing a broad expertise of project-based independent oversight requirements. This position serves as the liaison between Project Teams, the Region, and Materials & Pavements in the delivery of the Region's projects and operations. This position will incorporate acquired knowledge to ensure that required project oversight is accurate, complete, and appropriately documented. This position employs Department specifications, policies, technical guidance, and procedures related to project oversight to support the project delivery process.

The Field Services Engineering Specialist 3 & 4 are responsible for collaborating with both internal and external stakeholders, including Project Teams, Region Operations, contractors, suppliers, and producers to ensure contractual requirements are met.

The Field Services Engineering Specialist 3 & 4 will apply acquired knowledge to improve TDOT specifications, policies, and procedures to mitigate the Department's risk and increase performance as part of fulfilling TDOT's strategic vision. This position must effectively articulate technical concepts through training, mentoring, and collaborating as part of a matrix organization.

Essential Job Responsibilities of Field Services Transportation Engineering Specialist 3 and 4 include:

Serve as a resource for Project Teams, Region Operations, and Materials and Pavements in the Region as part of a matrix organization by applying the Project Delivery Network (PDN) to ensure required in-house and/or Construction Engineering and Inspection (CEI) project oversight is accurate and complete; ensure all required project sampling and testing data and information is appropriately documented and stored to facilitate end-of-project materials certification; minimize risk by identifying and mitigating potential conflicts during construction; meet the timelines established by the project schedule, and provide expert guidance and recommendations for project-based material testing, inspection, and oversight concerns.

Integrate Quality Management into all deliverables, including preparation, review, evaluation, and/or processing support and recommendations to Project Teams on project-based sampling, testing, tracking, and reporting of materials; selection and

evaluation of in-house and CEI project inspectors, troubleshooting project oversight issues, and minimizing risks to on time, on budget project delivery.

Assist with improving specifications, policies, procedures, and manuals in support of project delivery with the purpose of reducing errors, construction delays, and contractor claims.

Assist in the tracking and enforcement of contractual requirements of producers and suppliers by ensuring all materials and products delivered to a project site meet relevant specifications. Assist in the tracking and performance evaluation of contracted CEI services.

Assist the Team Lead and Operations in ensuring the District's work program is delivered on time and within budget.

Support and assist with the Construction and Materials Proficiency Programs when needed.

Remain current and engaged on project independent oversight requirements and methods, material control specifications, designs, manufacturing methods, testing and acceptance methods, and construction trends. Participate in peer exchanges.

Provide exceptional customer service to project stakeholders by facilitating the sharing of acquired knowledge with Project Teams, project inspection staff and other project stakeholders providing prompt assistance for materials testing, inspection, and oversight concerns; exercise effective listening skills, and communicate effectively. Serve as TDOT's liaison in teaming with industry on materials related issues.

Additional Job Responsibilities for the Field Services Transportation Engineering Specialist 4 include:

Serve as a mentor and a resource to less experienced staff by assisting in the development and presentation of training that addresses project-based sampling, testing, tracking, and reporting of materials, including governing rules and processes, lessons learned, and emerging technologies.

Assist Project Teams by providing data-driven, engineering judgment for complex issues, anticipating and acting on potential issues, and meeting associated deadlines and timelines.

Provide innovative recommendations for independent oversight improvements.

Perform quality assurance reviews of project oversight requirements.

Coordinate with the State Construction Engineer, assist in the development, implementation, and maintenance of applicable State Specifications, Special Provisions, Circular Letters, and applicable standard guidance that relates to the independent project oversight.

Qualifications

The Transportation Engineering Specialist 1 and 2 are part of the Graduate Transportation Engineer (GTE) Program.

Transportation Engineering Specialist 3:

- Bachelor's Degree in Engineering, Concrete Industry Management, or Construction Management
- 2 years of demonstrated competency in Materials Engineering/Testing or a Highway Construction related field

<u>OR</u>

- Master's Degree in Engineering, Concrete Industry Management, or Construction Management
- 1 year of demonstrated competency in Materials Engineering/Testing or a Highway Construction related field

Transportation Engineering Specialist 4:

- Bachelor's Degree in Engineering, Concrete Industry Management, or Construction Management
- 3 years of demonstrated competency in Materials Engineering/Testing or a Highway Construction related field

<u>OR</u>

- Master's Degree in Engineering, Concrete Industry Management, or Construction Management
- 2 years of demonstrated competency in Materials Engineering/Testing or a Highway Construction related field

Ideal Candidate

This position is a part of the career path series at TDOT. The Field Services Engineering Specialist 3 & 4 possess exceptional problem-solving and communication skills, which enable them to effectively articulate project oversight and technical sampling and testing concepts to stakeholders. They have an analytical mindset and pay great attention to detail, which helps them identify inefficiencies and opportunities for improvement that contribute to the success of project delivery strategies. The Field Services Engineering Specialist 3 & 4 understand that the best results are achieved through collective effort and effective communication.