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.



Operations Support Engineering Specialist 3 & 4

Materials and Tests Division – Operations Support Section
Nashville, TN
\$80,784 - \$88,860 annually

Job Overview

The Operations Support Engineering Specialist 3 & 4 support Project Teams, Materials and Tests (M&T) Division and the Operations Support Section by assisting with administrative duties, materials project and producer records, procurement, and Qualified Products List use and issue resolution. This position will provide support to the Materials and Tests Technician Proficiency Program. This position serves as the liaison for stakeholders utilizing M&T Operations Support functions. This position employs Department specifications, policies, technical guidance, and procedures related to all aspects to the construction and to support the project delivery process.

The Operations Support Engineering Specialist 3 & 4 are responsible for collaborating with both internal and external stakeholders, including Project Teams, TDOT Divisions, Regions, and contractors to ensure contractual requirements are met.

This position will apply acquired knowledge to improve TDOT specifications, policies, and procedures that mitigate the Department's risk and increase performance as part of fulfilling TDOT's strategic vision. This position must effectively articulate M&T operations support concepts through training, mentoring, and collaborating as part of a matrix organization.

<u>Essential Job Responsibilities for the Operations Support Transportation Engineering</u> Specialist 3 and 4 include:

Serve as a resource for TDOT Operations, Project Teams, and the M&T Division as part of a matrix organization by applying the Project Delivery Network (PDN) to collect, organize and store the diverse array of project information and data; ensure all project data is accurately accounted for in the project planning, delivery, and close-out processes; mitigate risk by identifying and reducing potential conflicts during construction; meet the timelines established by the project schedule, and provide Qualified Products Lists, Materials and Standard Operating Procedures, SiteManager, and AASHTO Ware Product (AWP). Provide qualified, specialty, and proprietary products guidance and recommendations for all phases of a project's lifecycle from initial design to final FHWA materials certifications.

Integrate Quality Management into all deliverables to ensure materials incorporated into the project conform to specifications; ensure all appropriate project material sampling and testing data is correctly loaded into SiteManager and AWP; ensure all

specialty and proprietary products are QPL approved; ensure adequate acceptance and independent assurance testing is being completed and documented per the Federal Stewardship and Oversight Agreement.

Assist Project Teams in defining critical goals and intended outcomes for the scope, schedule, budget, and quality in coordination with the Project Manager related to Specialty and Proprietary Products.; support Project Management staff by writing the Operations Support Scope of Work; proactively assess risk factors due to material supply or testing failures; and, for Project Teams associated with Alternative Delivery Contracts, forecast the cause and effect of implementing Alternative Technical Concepts related to the Request for Proposal (RFPs), project cost, and construction timing.

Monitor and track project materials data using the established statewide tracking mechanism to ensure the quality of all Materials and Testing activities that support the delivery of the Department's Work Program are following Federal and State rules and regulations.

Provide oversight in the development and completion of Operations Support deliverables and ensure they are consistent, predictable, and repeatable to provide for consistently high levels of achievement, mitigation of risk, and an established track record of success.

Assist in administering the Materials and Tests Proficiency Program for Materials and Tests Technicians 1-3 and facilitate field and associated training.

Remain current on revisions to the design codes, standards, and guidelines related to operations specifications, special provisions, and Standard Operating Procedures (SOPs).

Provide exceptional customer service to project stakeholders by facilitating the sharing of acquired knowledge with Project Teams, providing prompt assistance for operations support related concerns, exercising effective listening skills, and communicating effectively. Serve as TDOT's liaison in teaming with industry for pavements.

Additional Job Responsibilities for the Operations Support Transportation Engineering Specialist 4 include:

Serve as a mentor and resource to less experienced staff by assisting in the development and presentation of training that addresses operations support elements, including governing rules and processes, lessons learned, communications 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 operations support issues.

Perform quality assurance reviews of all operations support aspects of project planning and delivery.

Assist in developing and providing training, technical expertise, and support in matters related to TDOT Guidance, industry standards, state codes, and federal code requirements within the Division and Regions in coordination with the Technical Training Director.

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 Operations Support Engineering Specialist 3 & 4 possess exceptional problem-solving and communication skills, which enable them to effectively articulate technical concepts to stakeholders. They have an analytical mindset and great attention to detail, which helps them identify inefficiencies and improvement opportunities that contribute to project delivery strategies' success. The Operations Support Engineering Specialist 3 & 4 understand that the best results are achieved through collective effort and effective communication.