

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.



Traffic Operations Senior Technical Specialist
Traffic Operations Division – Freeway Operations Section
\$75,204 annually
Nashville, TN

Job Overview

The Traffic Operations Senior Technical Specialist will work independently and in a team setting, providing support and expertise to the Freeway Operations Section. This position will assist the Freeway Operations Manager with implementing statewide work plans, meeting the Section's strategic vision, and assuring compliance with Federal and State laws and requirements pertaining to Freeway Operations. This position will involve overseeing Quality Assurance and Quality Control of the Freeway Operations programs and the implementation of best practices at HQ and in the regions. This position will also assist with planning and implementing the Freeway Operations Section performance metrics and plans, schedules and budgets, development of various technical reports, and assurance of continuity and consistency statewide.

The Traffic Operations Senior Technical Specialist requires collaboration with TDOT divisions, Project Teams, consultants, contractors, Federal Highway Administration (FHWA), and external stakeholders. This position must effectively articulate technical concepts through training, mentoring, and collaborating as part of a matrix organization. The Traffic Operations Senior Technical Specialist will support the accessibility of all Freeway Operations Section deliverables, ensuring that relevant documentation and data are collected and stored to facilitate timely and accurate invoicing, efficient decision-making, and effective project close-outs. This role demands critical thinking skills for problem-solving and making informed decisions that enhance the safety, reliability, performance, sustainability, and efficiency of TDOT's transportation system.

Essential Job Responsibilities

Coordinate resources and assist the Freeway Operations Section and Project Managers as the Traffic Operations Subject Matter Expert (SME) in the management of external partners together with the Professional Services Division, including the negotiation of contracts, review of consultant invoicing, development of scopes, management of contract tasks, compliance monitoring, and completion of consultant grading.

Coordinate with the Freeway Operations Manager to assist the TDOT Technical Training Director in the development and delivery of Traffic Operations training and technical guidance that addresses acquired knowledge, risk management, technical design elements, and emerging technologies related to transportation to improve team performance, creating a deeper understanding of the transportation industry,

inspiring new ideas, and developing skills. Provide mentoring to TDOT staff, consultants, and local agencies with respect to the Freeway Operations Section. Administer and manage TDOT Freeway Operation's database program and software.

Provide input with the development of a Consultant Acquisition Plan (CAP) and assist in the oversight of external partners by serving on selection committees for professional Freeway Operations services as part of the Brooks Act, including assisting with Request for Proposals (RFP) development, attending project-specific marketing meetings, assisting with determining scoring criteria, assisting with project information sessions, when applicable, serving as a scorer as part of the consultant acquisition process, and attending de-briefs for consultants where usable feedback must be provided.

Serve as a resource on Project Teams, as part of a matrix organization, in developing the project vision for those projects having the highest complexity; help define Freeway Operations-related critical goals and intended outcomes for the scope, schedule, budget, and quality in coordination with the Project Manager; support Project Management staff by assisting with writing the Traffic Operations Scope of Work in collaboration with other Traffic Operations Division Teams, TSMO/ITS, TDOT Roadway, TDOT Maintenance, and TDOT Construction; assist with ensuring that Traffic Operations cost estimates data is accurate and current; proactively assess risk factors; and for Project Teams associated with Alternative Delivery Contracts, forecast the cause and effect of implementing Alternative Technical Concepts (ATCs) related to RFP's, project cost, and construction timing.

Provide exceptional customer service to internal and external customers by exercising effective listening skills, providing prompt responses, maintaining complete and accurate documentation, and communicating effectively. Ensure successful strategic partnerships with FHWA and local agencies to implement TDOT's statewide vision.

Assist in ensuring TDOT Freeway Operations deliverables are accomplished in alignment with TDOT's Quality Management procedures to produce consistently high levels of quality and achievement, including traffic reliability operations modeling methodologies, specifications, procedures, policies, and techniques, mitigate risk to the Department, and establish a track record of success. Integrate all deliverables into the Freeway Operations Section's tracking mechanism to provide project continuity and efficient workflows for internal project stakeholders.

Assist the Freeway Operations Manager with developing and implementing revisions of statutes, specifications, standards, policies, procedures, and guidelines related to Traffic Operations. Perform investigations and research of Traffic Operations components. Conduct and/or review complex technical studies/analyses to identify communications needs, opportunities, priorities, and appropriate remedies. Implement new technologies and best practices to improve freeway operations, such as managed lanes, HOV, HOT, ramp metering, connected vehicle technologies, or advanced traffic management systems. Drive innovation to generate safer transportation facilities through interoperable technology. Assist with reviewing department guidelines and project deployments ensuring the integration of statutory and regulatory requirements into all Traffic Operations elements and tasks.

Remain current on national best practices related to TDOT Traffic Operations guidelines, the American Association of State Highway and Transportation Officials (AASHTO), FHWA, local and state officials, ITS America, the National Operations Center of Excellence (NOCoe), the Transportation Research Board (TRB) National Cooperative Highway Research Program (NCHRP), and other applicable Department standards and procedures.

Qualifications

- Bachelor's degree
- 3 years of demonstrated competency in Traffic Operations

OR

- Master's degree
- 2 years of demonstrated competency in Traffic Operations

Ideal Candidate

The Traffic Operations Senior Technical Specialist combines exceptional technical expertise with extensive knowledge, making them a valuable asset to the team. They excel in collaboration and communication, effortlessly engaging with project teams, leadership, and external stakeholders. With a meticulous approach to each project, they ensure that all aspects of traffic operations meet the highest quality standards and comply with Federal and State regulations. As an experienced problem solver, they have a proven ability to overcome obstacles with innovative solutions, particularly when managing the complexities of multiple state agencies, traffic operations compatibility, and legacy traffic safety and reliability needs. They recognize that the best outcomes are achieved through teamwork and effective communication.