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.

Traffic Services Transportation Engineer
Traffic Design Division – Traffic Services Section
Nashville, TN
$99,348 annually

Job Overview

The Traffic Services Transportation Engineer provides traffic services design technical expertise to Project Teams. This position collaborates with Project Teams by identifying potential design challenges and implementing statewide acquired knowledge that focuses on ensuring quality deliverables, minimizing variability, and increasing the safety, performance of the Department's transportation system. The Traffic Services Transportation Engineer position requires a professional engineering license and is expected to sign and seal applicable construction plans.

The Traffic Services Transportation Engineer ensures Department policies, technical guidance, and procedures are incorporated into traffic services design deliverables and assists in implementing the Quality Assurance Program as part of the Traffic Design activities. This position must effectively articulate technical engineering concepts through training, mentoring, and collaborating as part of a matrix organization.

Essential Job Responsibilities

Enhance the capabilities of the Traffic Design teams by providing specialized technical expertise and support in addressing complex or unique traffic services design challenges. This includes areas such as signals, pavement marking and signing, traffic data, lighting, work zones, asset management, construction and maintenance, and multi-modal concepts. Ensure the successful implementation of traffic services safety and travel reliability initiatives, while enabling the team to manage unforeseen challenges effectively and efficiently. Additional responsibilities may be assigned by the Team Lead and/or Manager.

Verify compliance with the Quality Management policy with respect to Traffic Design elements with the purpose of reducing plan errors and re-work, right-of-way delays, construction delays, and contractor claims. Assist the Quality Teams by providing reviews in alignment with the Project Delivery Network (PDN) and TDOT's Quality Assurance Program, identifying potential constructability concerns in proposed designs, and making recommendations for proactive solutions with other technical disciplines to ensure the needs of the project are met.

Routinely collaborate with Regions and Asset Management to identify and document knowledge on industry best practices to avoid past errors and ensure TDOT project successes. Assist with modifications to all applicable policies, procedures, design standards, specifications, and special provisions. Stay informed on traffic services-

related industry trends and national best practices by participating in American Association of State Highway and Transportation Officials (AASHTO), industry associations, and other appropriate committees.

Serve on Project Teams as part of a matrix organization by providing traffic services design expertise, defining expectations for how the Project Team manages risk, and assisting in developing the project vision in alignment with Asset Management. Assisting in defining critical goals and intended outcomes for the scope, schedule, budget, and quality in coordination with the Project Manager related to traffic services design elements; participating in Risk Management Assessments; providing input at all applicable project milestones per the PDN.

Provide support of Project Management staff with respect to the Traffic Design Scope of Work in collaboration with TDOT Environment, Maintenance, and Construction Divisions; applying context-sensitive traffic services design methodologies; attending public meetings as a Department representative to assist with addressing stakeholder concerns; effectively coordinating with other technical disciplines within TDOT to address all potential traffic services elements as part of the Functional Design Plans development per the PDN; providing approvals on traffic services design-related products and deliverables; when applicable, proactively assessing risk factors related to legal aspects, public relations, and safety for traffic services design elements.

Provide exceptional customer service to both internal and external customers, including mentoring and technical guidance related to traffic services design, coordinating with other disciplines as part of a matrix organization, exercising effective listening skills, providing prompt responses, maintaining complete and accurate documentation, and communicating effectively.

Remain current and engaged on revisions to design codes, standards, and guidelines related to traffic services design elements, adapt new technologies and best practices that drive TDOT's transportation projects forward, implement innovative trends including advancements with connected and automated vehicles; Safety, Mobility, Automated, Real-time Traffic Management (SMART) Corridors mobility-as-a-service, mobility-on-demand, artificial intelligence, and drone technology as potential applications for traffic services deployments; assist in implementing policies and procedures related to traffic services design. Collaborate on innovative strategies used as best practices for statewide quality assurance needs.

Collaborate with the TDOT Technical Training Director and assist in the development of training that addresses acquired knowledge, including technical elements and emerging technologies related to traffic services design for the purpose of improving team performance, creating a stronger understanding of traffic services elements as they relate to the transportation industry, inspiring new ideas, and developing skills.

Assist in the development of a Consultant Acquisition Plan (CAP) for traffic services design and assist in the oversight of external partners by serving on technical review committees, including assisting with 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.

Assist in ensuring traffic services design deliverables are consistent, predictable, and repeatable to maintain consistently high levels of achievement, mitigate risk, and establish a track record of success by implementing statewide policy, data collection, processing standards, specifications, and direction. Utilize best practices and TDOT policy for the incorporation of traffic services design elements, including access to acquired knowledge across the state.

Qualifications

- Bachelor's Degree in Engineering

- Licensed Professional Engineer (PE)
- 4 years of demonstrated competency in developing and/or designing transportation projects

Ideal Candidate

The Traffic Services Transportation Engineer has advanced knowledge in aspects of traffic design. They possess strong attention to detail and are committed to improving safety and performance. With a wealth of technical expertise, they offer unique solutions to traffic design challenges. The Traffic Services Transportation Engineer's analytical skills allow them to predict and prevent issues before they become problematic, ensuring efficient and reliable transportation designs. They possess excellent communication and collaboration skills, which enable them to effectively communicate complex technical information with stakeholders at all levels.