

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 Design Engineer

Region Preconstruction – Traffic Design Section
\$99,348 annually

Job Overview

The Traffic Design Engineer provides traffic design technical expertise to Region Traffic Design 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 and performance of TDOT's transportation system. The Traffic Design Transportation Engineer position requires collaboration with multiple TDOT divisions, project team members, consultants, contractors, and other external stakeholders. It requires critical thinking and engineering judgment to problem solve and make well-informed decisions that increase the safety, performance, sustainability, and efficient delivery of the region transportation system and traffic design program.

The Traffic Design Engineer ensures Department policies, technical guidance, and procedures are incorporated into traffic design deliverables and assists in implementing the Quality Assurance Program as part of the Region's preconstruction activities. This position helps support the Region with core traffic services such as traffic signals, signs, traffic markings, and roadway lighting, along with other areas such as advanced transportation technologies, traffic modeling, safety projects, and work zones. This position must effectively articulate technical engineering concepts through collaborating as part of a matrix organization.

Essential Job Responsibilities

Strengthen Region Preconstruction teams by providing technical expertise and support in matters related to complex or unique traffic design-related challenges to allow Preconstruction staff to perform their roles effectively and efficiently, optimizing the Team's ability to successfully address unanticipated challenges.

Verify compliance with the Quality Management policy regarding Traffic Design elements to reduce 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 PDN and TDOT's Quality Assurance Program. Identify potential constructability concerns in proposed designs and make recommendations for proactive solutions with other disciplines to ensure the project's needs are met.

Routinely collaborate with HQ Traffic Design 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. Assist in implementing a tracking mechanism that ensures the traffic design program, software, and systems are evolving and meet all TDOT needs.

Contribute to Project Teams as part of a matrix organization by providing traffic design expertise, defining expectations for how the Project Team manages risk; assisting in developing the project vision in alignment with Project 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 design elements. Participate in Risk Management Assessments providing input at all applicable project milestones per the Project Delivery Network (PDN); assisting in support of Project Management staff with respect to the Traffic Design Scope of Work in collaboration with TDOT Environment, TDOT Maintenance, and TDOT Construction; applying context-sensitive traffic design methodologies; attending, public meetings as a Department representative to assist with addressing stakeholder concerns; effectively coordinating with other disciplines within TDOT to address all potential traffic elements as part of the Functional Design Plans development per the PDN. Provide approvals on traffic design-related products and deliverables, when applicable; and proactively assessing risk factors related to legal aspects, public relations, and safety for traffic design elements.

Provide exceptional customer service to both internal and external customers by mentoring and providing technical guidance related to traffic 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 on revisions to design codes, standards, and guidelines related to traffic design elements, adapt new technologies and best practices that drive TDOT's transportation projects forward, and assist in implementing policies and procedures related to traffic design. Collaborate on innovative strategies used as best practices for statewide quality assurance needs.

Collaborate with the Region Traffic Design Manager to assist the TDOT Technical Training Director in the development of training related to traffic design elements that addresses acquired knowledge, including technical elements and emerging technologies related to Traffic Design for the purpose of improving team performance, creating a stronger understanding of traffic design 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 Design services 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 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 design elements, including access to acquired knowledge across the Regions.

Qualifications

- Bachelor's degree in engineering
- Licensed Professional Engineer (PE)
- 4 years of demonstrated competency in developing and/or constructing transportation projects

Ideal Candidate

The Traffic Design Engineer has a proven traffic engineering and design track record. They excel at fostering collaboration and ensuring the successful execution of simple and complex projects. The Traffic Design Engineer is committed to public safety in every aspect of their work. They are strong communicators who can assist with bridging the gap between technical experts and stakeholders. The Traffic Design Engineer is an effective collaborator committed to working with other team members in their growth and development. They readily share their expertise and passion with their team and keep an eye on the future from a transportation system and workforce perspective. As a mobility leader, they are passionate about ensuring the agency's projects increase safety and reduce congestion.