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 Engineering Specialist 3 and 4
Region Preconstruction – Traffic Design Section
$80,784 - $88,860 annually

Job Overview

The Traffic Design Engineering Specialist 3 and 4 assists in providing guidance and support services for the 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 the Department's transportation system. The Traffic Design Engineering Specialist 3 and 4 requires collaboration with multiple TDOT Divisions, project team members, consultants, contractors, and other external stakeholders. This position follows the Department policies, technical guidance, and procedures related to TDOT's Traffic Design, specifications, software, and websites to support the traffic design project delivery process. The Traffic Design Engineering Specialist 3 and 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.

The Traffic Design Engineering Specialist 3 and 4 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 will continuously evaluate performance indicators to implement acquired knowledge into policies and procedures that mitigate the Department's risk and increase performance as part of fulfilling TDOT's strategic vision. 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 data and technical concepts through training, mentoring, and collaborating as part of a matrix organization.

Essential Job Responsibilities of the TDOT Transportation Engineering Specialist 3 and 4 include:

Serve as a resource for Project Teams as part of a matrix organization by applying the Project Delivery Network (PDN) through traffic design plan reviews to ensure compliance with TDOT specifications, policies, procedures, standards, federal requirements, Circular Letters, and MUTCD applications, ensuring all pay items and associated costs are accurately accounted for in the project estimate, mitigating risk by identifying potential conflicts during development and preconstruction phases, and meeting timelines established by the project schedule. Assist and support Region Preconstruction teams in matters related to intermediate or complex 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.

Assist with modifications to all applicable policies, procedures, design standards, specifications, and guidelines. Integrate Quality Management into all deliverables, including policies, procedures, and manuals in support of traffic design resources; analyze data by monitoring trends that could require updates to the Region Preconstruction Traffic Design Section procedures with the purpose of reducing errors, construction delays, and contractor claims.

Assist in the development of a Consultant Acquisition Plan to address design requests and assist in the oversight of consultants by serving on selection committees for professional engineering services as part of the Brooks Act, including assisting with Request For Proposal (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, negotiating contracts, attending de-briefs for consultants where usable feedback must be provided, and monitoring contract compliance.

Assist on Project Teams as part of the Project Delivery Network (PDN) by providing input at all applicable project milestones, including Project Kick Off, Risk Workshops, Project Scoping meetings, Plan-in-Hand Field Review meeting, and the Plans, Specs, and Estimates meeting.

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. Provide exceptional customer service to project stakeholders by facilitating the sharing of acquired knowledge with Project Teams, exercising effective listening skills, and communicating effectively.

Additional Job Responsibilities for the TDOT Transportation Engineering Specialist 4 include:

Work on projects ranging from intermediate complexity to the highest degree of complexity and risk for TDOT. Collaboration with diverse project teams to implement innovative solutions. Work independently and with minimal supervision on traffic design projects and with other technical disciplines, being fully accountable for prioritizing, meeting project schedules, maintaining budgets, eliminating constructability issues, and mitigating maintenance concerns. Solve project challenges by turning data into actionable decisions, ensuring the project remains within the pre-determined scope, schedule, and budget. Serve as a mentor and train staff to ensure succession planning and retention of core competencies within TDOT.

Coordinate with the Region Traffic Design Manager to assist the TDOT Technical Training Director in the development and presentation of training that addresses the traffic design training program, oversight of local programs, acquired knowledge, risk management, TDOT performance metrics, governing rules and processes, reporting procedures, and emerging technologies related to transportation for the purpose of improving team performance, creating a stronger understanding of the transportation traffic industry, inspiring new ideas, and developing skills.

Remain current on traffic design related industry trends and national best practices by participating in AASHTO, industry associations, and other appropriate committees.

Coordinate with the Traffic Design Engineer and support the development, implementation, and maintenance of specifications, circular letters, and relevant standard guidelines. Coordinate and oversee traffic design reviews, ensuring they are scheduled and managed effectively. Provide data-driven engineering insights to assist Project Teams in addressing complex issues, proactively identifying potential challenges, and ensuring deadlines and timelines are met.

Assist and support the development and implementation of a tracking mechanism that ensures the traffic design programs, software, and systems are evolving and meet TDOT needs.

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, Traffic Operations or Design or Project Management, or TSMO/ITS or related field
- 2 years of demonstrated competency in Traffic Operations/TSMO/ITS planning, developing, design and/or constructing transportation projects

OR

- Master's Degree in Engineering, Traffic Operations or Design or Project Management, or TSMO/ITS or related field
- 1 year of demonstrated competency in Traffic Operations/TSMO/ITS planning, developing, design and/or constructing transportation projects

Transportation Engineering Specialist 4:

- Bachelor's Degree in Engineering, Traffic Operations or Design or Project Management, or TSMO/ITS or related field
- 3 years of demonstrated competency in Traffic Operations/TSMO/ITS planning, developing, design and/or constructing transportation projects

OR

- Master's Degree in Engineering, Traffic Operations or Design or Project Management, or TSMO/ITS or related field
- 2 years of demonstrated competency in Traffic Operations/TSMO/ITS planning, developing, design and/or constructing transportation projects

Ideal Candidate

This position is a part of the career path series at TDOT. The Traffic Design Transportation Engineering Specialist 3 and 4 possess exceptional problem-solving and communication skills, which enable them to effectively articulate construction data and technical concepts to stakeholders. They have an analytical mindset and great attention to detail, which helps them identify inefficiencies and opportunities for improvement that contribute to the success of construction projects. The Traffic Design Transportation Engineering Specialist 3 and 4 understand that the best results are achieved through collective effort and effective communication.