

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.



Senior Design Transportation Engineer
Region Preconstruction – Roadway Design
\$104,292 annually

Job Overview

The Senior Design Transportation Engineer will manage all aspects of TDOT's design processes and systems as part of a Project Team and is directly responsible for delivering projects for all phases of the Project Delivery Network (PDN) in accordance with the project's scope, budget, and risk. These projects will range in complexity and risk from simple to highly complex. The design role requires collaboration with multiple TDOT Divisions, project team members, contractors, consultants, and other external stakeholders.

The Senior Design Transportation Engineer ensures Department policies, technical guidance, procedures, software, and systems are incorporated into the project delivery process and implements the Quality Assurance Program as part of the Preconstruction Division's activities to reduce errors, construction delays, and contractor claims. This position must effectively articulate design concepts through training, mentoring, and collaborating as part of a matrix organization. The Senior Design Transportation Engineer assists with monitoring and managing the scope, schedule, and budgets to make the required adjustments as necessary to ensure that the work completed is in alignment with the Department's Asset Management and Strategic goals.

Essential Job Responsibilities

Serve on Project Teams as part of a matrix organization by providing technical expertise related to transportation design elements; develop the project solution in alignment with Asset Management objectives and funding allocation; define critical goals and intended outcomes for the scope, schedule, budget, and quality in coordination with the Project Manager; apply context-sensitive design strategies; implement innovative concepts; proactively assess risk factors; 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. Optimize the Project Team's ability to mitigate risk and address unanticipated challenges while meeting the project's scope, schedule, and budget.

Integrate Quality Management into all deliverables in compliance with Asset Management's business objectives and alignment with the PDN. Focus on reducing plan errors, right-of-way delays, construction delays, and contractor claims; assist Project Teams by providing reviews as part of TDOT's Quality Assurance Program.

Serve on selection committees for professional engineering services as part of the Brooks Act, including assistance with RFP development, attendance at project-specific marketing meetings, assistance with determining scoring criteria, assistance with project information sessions, when applicable, serving as a scorer as part of the consultant acquisition process, and attendance at de-briefs for consultants where usable feedback must be provided.

Routinely identify, document, and effectively collaborate with HQ and Asset Management on acquired knowledge that will maximize project successes, acknowledge national best practices, and avoid past errors. Assist with modifications to all applicable policies, procedures, design standards, specifications, and special provisions.

Assist in the development of a consultant acquisition plan and assist in the oversight of external partners by serving on selection committees for professional engineering services as part of the Brooks Act. Assist with RFP development, attend project-specific marketing meetings, assist with determining scoring criteria, assist with project information sessions, when applicable, serve as a scorer as part of the consultant acquisition process, and attending de-briefs for consultants where usable feedback must be provided.

Remain current on revisions to design codes, standards, and guidelines related to transportation design components, including trends and technologies; perform the design and analysis of design components for complex projects; and assist with Risk Assessments.

Provide exceptional customer service to both internal and external customers; mentor and provide technical guidance to project team members; coordinate with other disciplines as part of a matrix organization; exercise effective listening skills; provide prompt responses; maintain complete and accurate documentation; and communicate effectively.

Assist in the development of training that addresses asset management objectives, risk management, technical design elements, and emerging technologies related to transportation. Improve team performance, create a stronger understanding of the transportation industry, inspire new ideas, and develop skills.

Lead project teams in ensuring preconstruction deliverables are consistent, predictable, and repeatable to provide for consistently high levels of achievement, mitigation of risk, and an established track record of success.

Qualifications

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

Ideal Candidate

The Region Senior Design Transportation Engineer brings the team a wealth of technical expertise and knowledge. They excel in conveying complex technical information to various stakeholders and project teams in headquarters and the regions. The Region Senior Design Transportation Engineer is detail oriented which ensures all aspects of preconstruction roadway design are thoroughly evaluated and optimized for success. Their collaborative nature fosters productive working relationships with various teams. Their ability to bridge the gap between effective communication and technical expertise makes them an asset in roadway design and the overall success to TDOT.