

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.



Bridge Preservation Statewide Transportation Engineer

Structures Division – Bridge Preservation Section

Nashville, TN

\$115,008 annually

Job Overview

The Bridge Preservation Statewide Transportation Engineer will support all aspects of TDOT's Bridge Preservation processes and systems as part of a Project Team directly responsible for delivering projects for all phases of the Project Delivery Network (PDN) in accordance with the project's scope, budget, and risk, and the TDOT Strategic Plan. These projects will range in complexity and risk from simple to highly complex. The role of this position requires collaboration with multiple TDOT Divisions, project team members, contractors, consultants, 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 Tennessee's transportation system.

The Bridge Preservation Statewide Transportation Engineer ensures Department policies, technical guidance, procedures, software, and systems-related to bridge preservation are current and accurate for incorporation into the project delivery process. This position assists in implementing the Quality Assurance Program to reduce errors, delays, and contractor claims. The Statewide Transportation Engineer assists with monitoring and managing the scope, permitting, schedule, and budgets of all bridge preservation projects and working with the Project Management Division 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 as the Bridge Preservation Statewide Engineer Subject Matter Expert (SME). Act as a liaison between the Bridge Preservation Team, Region Leads, and national organizations that support transportation preservation elements. Provide quality assurance review for preliminary and final repair plans/specifications, propose materials, and collaborate with region staff and contractors to ensure project delivery compliance according to contract documents. Coordinate field issues with the region, design team, and contractor; ensure timely resolution(s) to all field issues.

Develop the project vision in alignment with department Asset Management objectives and funding allocation; define critical goals and intended outcomes for the scope, permitting, schedule, budget, and quality in coordination with the Project Manager; apply context-sensitive preservation 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 Request for Proposals (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, ensuring compliance with Asset Management's business objectives, plans, specifications, standards, policies, procedures, and alignment with the PDN with the purpose of reducing plan errors, delays, and contractor claims; assist Project Teams by providing reviews as part of TDOT's Quality Assurance Program.

Manage and take ownership of change, clarify your vision for TDOT's Bridge Preservation activities, communicate effectively, remain transparent, and hold yourself accountable to develop, maintain, and grow TDOT's preservation capabilities, data, software, and systems.

Routinely collaborate with HQ and Asset Management to identify and document knowledge on industry best practices to avoid past errors and ensure TDOT project successes. Partner with the industry, FHWA, and internal staff to lead a preservation process improvement team. This team will be responsible for improving the delivery and critical issues of concern needed to ensure safety for the public, workers, and staff. The team will develop preservation and preventative maintenance strategies, policy recommendations, resolve major field issues, and lead efforts that continually improve the preservation program, procedures, guidance documents, specifications, standards, special provisions, project delivery mythologies, and techniques.

Lead and participate in national technical committees related to bridge preservation, repair, rehabilitation, and performance activities. Review, assist with, and provide feedback on the development of legislative language and regulations that seek to increase safety, inspire innovation, and improve mobility for TDOT employees, contractors, and the traveling public. Integrate safety considerations and statutory and regulatory requirements into TDOT's guidance documents, processes, and procedures. Participate in regional/national working groups and training opportunities related to Bridge Preservation.

Develop Consultant Acquisition Plans (CAP) and oversee external partners by serving on selection committees for professional engineering services as part of the Brooks Act. Support the development of the Request for Proposal (RFP), attending project-specific marketing meetings, determining scoring criteria, participating in project information sessions, serving as a scorer as part of the consultant acquisition process, and attending de-briefs with consultants.

Provide exceptional customer service to internal and external customers by listening effectively, providing prompt responses, maintaining complete and accurate documentation, coordinating with other disciplines as part of a matrix organization, and communicating clearly. Assist in the development and delivery of Bridge Preservation training, mentoring, and technical guidance to TDOT and external stakeholders that addresses acquired knowledge, risk management, technical design elements, and emerging technologies related to Bridge Preservation for the purpose of improving team performance, creating a stronger understanding of the transportation industry, inspiring new ideas, and developing skills.

Coordinate and perform quality control reviews across the Bridge Preservation Team and assist as needed on various tasks within the team. Research information to stay up to date on preservation methods and computer applications. Attend training that is relevant to the position as requested by the supervisor. Assist in field inspection of assigned projects to determine existing conditions. Provide recommendations for scopes of work, construction methodologies, preventative maintenance prioritization, and specifications for materials and special equipment.

Qualifications

- Bachelor's degree in civil engineering with an emphasis in structural engineering preferred
- Licensed Professional Engineer (PE)
- 12 years of demonstrated competency in developing and/or constructing transportation projects

Ideal Candidate

The Bridge Preservation Statewide Transportation Engineer is a highly skilled technical expert with deep expertise in structural engineering and extensive experience in developing innovative, efficient, and safe bridge preservation solutions. The Statewide Transportation Engineer is adept at managing multiple projects simultaneously and excels at providing technical guidance to both internal teams and external stakeholders. Their ability to collaborate closely with project managers and stakeholders fosters a cooperative and results-driven environment. This ensures clear communication, timely decision-making, and seamless problem-solving across all stages of a project.