

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.



Preconstruction Senior Technical Specialist

Asset Management Division – Performance and Quality Management Section
Nashville, TN
\$75,204 annually

Job Overview

The Preconstruction Senior Technical Specialist in TDOT's Performance and Quality Management Section of the Asset Management Division ensures project programming, planning, design quality, compliance, and alignment with asset management strategies. This role reviews current processes and assists in developing policies, procedures, and performance targets to improve and sustain TDOT's goals and objectives. Acting as a liaison with the Pavements, Bridge, and Ancillary Infrastructure, Transportation Data Systems Asset Sections, the Senior Technical Specialist integrates the level of service, lifecycle cost analysis, risk mitigation, and compliance practices into the Project Delivery Network (PDN) while coordinating audits, quality reviews, and execution evaluations to support continuous improvement.

This position analyzes preconstruction data and trends to collaborate with Project Management, Construction, Environmental, Planning, and other stakeholders in developing and enhancing policies that improve quality and reduce risks. The Senior Technical Specialist must effectively articulate technical concepts within a matrix organization and through training and mentoring. This position coordinates stakeholder collaboration, ensures effective data governance, and supports the efficient, sustainable implementation of TDOT's Asset Management Plan.

Essential Job Responsibilities

Develop and implement asset management policies, procedures, and standards to guide preconstruction planning and project program development from feasibility through final letting. Ensure asset condition assessments and risk evaluations are incorporated into project scopes, schedules, and budgets to optimize lifecycle planning. Continuously analyze trends in project letting dates, preconstruction costs, and as-bid costs to identify opportunities for improving efficiency and effectiveness. Facilitate communication and collaboration between the Performance and Quality Management Section and the Pavements, Bridge, and Ancillary Infrastructure Asset Sections by integrating lifecycle cost analysis, risk mitigation, and compliance into managing these critical assets.

Support project prioritization, funding allocation, and Statewide Transportation Improvement Plan (STIP) planning by tracking asset performance, integrating asset management strategies into project selection, and aligning infrastructure investments with TDOT's strategic goals. Leverage predictive analytics and real-time data insights with key performance indicators (KPIs) to track program development, ensure

alignment with evolving asset conditions and funding needs, and enhance preconstruction planning efforts. Analyze preconstruction project data to identify trends, inefficiencies, and areas for improvement. Prepare comprehensive performance reports for TDOT leadership and stakeholders, ensuring transparency and alignment with TDOT's asset management goals.

Evaluate preconstruction project performance against state, regional, and national benchmarks. Research and integrate best practices to enhance preconstruction quality, efficiency, cost-effectiveness, and asset management principles. Conduct lifecycle cost analyses to assess how initial preconstruction quality impacts asset long-term maintenance, rehabilitation, and replacement costs, ensuring sustainable preconstruction infrastructure investment decisions.

Compile and analyze preconstruction vendor performance data, ensuring compliance with project development timelines and quality standards. Utilizing risk-based assessment methodologies, prioritize quality reviews for high-impact and high-risk projects. Identify and report on areas of risk and success with preconstruction vendor services.

Review, develop, and improve QA/QC processes to ensure preconstruction projects comply with TDOT specifications, industry standards, and regulatory requirements. Conduct and coordinate program reviews, audits, and performance monitoring to identify discrepancies, mitigate risks, and enhance preconstruction effectiveness. Guide TDOT preconstruction teams to ensure compliance aligned with asset management principles and federal/state regulations. Establish performance benchmarks and corrective measures to drive continuous improvement, support TDOT's Asset Management Plan, and align preconstruction projects with strategic goals.

Assist in developing and delivering training programs and workshops to enhance TDOT staff capabilities in preconstruction performance and quality program management. Support efforts to create engaging, practical, and results-driven learning opportunities that equip employees with the skills and knowledge necessary to implement effective asset management practices in alignment with TDOT's strategic goals and quality standards. Recommend improvements to align with asset management principles.

Coordinate preconstruction data needs with the Asset Management Transportation Data Systems Section. Ensure compliance with established data governance requirements for storing, using, and accessing necessary asset information throughout the project's life. Coordinate with stakeholders to align preconstruction practices with departmental goals, provide governance policies and systems training, and liaise between asset management teams to address departmental needs, ensuring policies address organizational goals and provide a foundation for continuous asset performance and reliability improvement.

Deliver exceptional customer service to project stakeholders by sharing relevant data, ensuring accessible and organized data information, practicing effective communication, and maintaining positive public relations. Respond promptly and accurately to inquiries from the public and department personnel.

Qualifications

- Bachelor's degree in Civil Engineering, Administration, or Data Analysis related field
- 3 years of demonstrated competency in project delivery, construction, data analysis, and related technical disciplines.

OR

- Master's degree in Civil Engineering, Administration, or Data Analysis related field
- 2 years of demonstrated competency in project delivery, construction, data analysis, and related technical disciplines.

Ideal Candidate

The Senior Technical Specialist for Preconstruction in TDOT's Asset Management Division is a detail-oriented professional with expertise in quality assurance, audits, and compliance. Skilled in analyzing data and resolving issues, they implement QA/QC processes and integrate lessons learned into asset management strategies. With strong communication and collaboration skills, they align lifecycle cost analysis, risk mitigation, and compliance practices with strategic goals. Their proactive approach to continuous improvement and stakeholder engagement ensures sustainable, efficient project delivery and alignment with TDOT's Asset Management Plan.