

Statewide Transportation Engineer

AGENCY OVERVIEW AND PROGRAM FOCUS

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.

SUMMARY

The Engineering Series at TDOT is responsible for planning, designing, constructing, and preserving the transportation systems within the State of Tennessee. The Engineering Series provides technical support and guidance to divisions within the department as well as assistance to consultants, contractors, suppliers, federal and state agency partners, local governments, transit agencies, aviation partners, utilities, and developers in the quality assurance, contracting, permitting, development and construction of transportation assets statewide.

The Statewide Transportation Engineer is a recognized subject matter expert in their discipline. This position works with project teams to resolve novel or unique technical challenges to ensure the successful completion of exceedingly complex projects and statewide programs. The Statewide Transportation Engineer collaborates with the Asset Management Division to provide technical assistance in the development of TDOT asset management targets and spend plans. This classification develops technical guidance within their discipline that addresses recurring issues on projects and programs to increase efficiency, reduce risk, extend the asset lifecycle, and reduce the overall cost. This classification serves as a mentor and trains engineering staff within their area of discipline to retain the needed core competency within TDOT. The Statewide Transportation Engineer is expected to take an active role in staying relevant and engaged as part of their specific discipline, adapting new technologies and best practices in driving TDOT's transportation projects forward.

The Statewide Transportation Engineer must contribute to national technical committees within their area of technical expertise and provide innovative solutions for resolution of complex issues. The Statewide Transportation Engineer will be expected to contribute to the project team by defining expectations for how the project team manages risk, communicates as a team, delivers quality, and navigates changes throughout the life of the project.



RESPONSIBILITIES

- 1. Serve as a subject matter expert in applicable discipline specific project activities
- 2. Research, develop, and implement discipline specific technical guidance to address recurring issues on projects and programs
- 3. Coordinate with the Project Manager and Project Team within the structure of a matrix organization regarding potential impacts to the scope, schedule, and/or budget
- 4. Perform applicable discipline specific activities as outlined in the Project Delivery Network (PDN) on exceedingly complex projects and statewide programs having the highest degree of risk
- 5. Assist with multidisciplinary reviews for projects as part of the Quality Assurance process on exceedingly complex projects and statewide programs
- 6. Participate in the development of the systems plan for Transportation Systems Management and Operations (TSM&O) strategies including the application of emerging technologies
- 7. Participate in Risk Management Assessments and implement risk mitigation strategies
- 8. Identify conflicts in proposed designs, make recommendations, and coordinate proactive solutions with other disciplines to ensure the needs of the project are met in all phases of the project
- 9. Manage the construction bid letting process by creating contract proposal books, establishing contract completion dates, providing concurrence on bid letting proposals, executing the final contracts through the awards process, and assisting with electronic bidding
- 10. Participate in the scope development, selection, and administration of alternative delivery contracts on all phases of the project
- 11. Attend and facilitate public meetings as a representative of the department, appropriately addressing customer needs and concerns
- 12. Lead and participate in national technical committees
- 13. Review draft legislative language that could potentially impact TDOT's ability to deliver projects and programs and provide the Executive Leadership Team feedback on potential ways to mitigate these impacts
- 14. Serve as a mentor in supporting career development and cultivating communication and leadership skills of others at TDOT

QUALIFICATIONS (Education must be from an accredited institution.)

Education and Experience: Bachelor's degree in engineering, active status with the State of Tennessee as a professional engineer, and 12 years of demonstrated competency in developing and/or constructing transportation projects



KNOWLEDGE, SKILLS, ABILITIES AND COMPETENCIES (KSACs):

- Knowledge of the multiple project delivery methods, including design/bid/build and alternative delivery
- Knowledge of state and federal regulations/requirements for development and construction of transportation projects
- Ability to identify and mitigate risk associated with transportation projects
- Skilled in using critical thinking to problem solve and make informed decisions independently
- Ability to research and explore innovative technical concepts and develop uses for how to apply those concepts to transportation projects
- Ability to communicate effectively, with excellent verbal/written and public speaking skills, and to interact with others in a professional and courteous manner, including internal/external stakeholders, consultants, landowners, and governmental agencies
- Ability to resolve conflicts, coach and motivate others, build high-performing teams, and create a culture of accountability, collaboration, and accomplishment
- Skilled in advanced technical writing
- Skilled in review and assessment of draft legislative language