



# 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, preserving, operating, and maintaining 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 Transportation Engineer provides discipline specific technical expertise to multidisciplinary project teams as part of a matrix management structure, both in the Region and statewide. Positions within this classification resolve complex or unique technical challenges to ensure the successful completion of a project. The Transportation Engineer has a key role in ensuring that a project is completed within the agreed scope, schedule, and budget that is in alignment with the Department's Work Program. This classification requires a professional engineering license and is expected to sign and seal applicable documents for construction, increasing the efficiency in plans preparation activities for the department. This classification serves as a mentor and trains engineering staff. The 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 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 products, and navigates changes throughout the life of the project.



## **RESPONSIBILITIES**

1. Serve as a subject matter expert in applicable discipline specific project activities
2. 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
3. Perform applicable discipline specific activities as outlined in the Project Delivery Network (PDN)
4. Assist with multidisciplinary reviews for projects as part of the Quality Assurance process
5. Design, implement, and operate Transportation Systems Management and Operations (TSM&O) strategies including the application of emerging technologies
6. Participate in Risk Management Assessments and implement risk mitigation strategies
7. Identify conflicts in proposed designs, make recommendations, and coordinate proactive solutions with other disciplines to ensure the needs of the project are met
8. Participate in the scope development, selection, and administration of consultant contracts on all phases of the project
9. Attend and represent the department in public meetings, appropriately addressing customer needs and concerns
10. 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 4 years of demonstrated competency in developing and/or constructing transportation projects

## **KNOWLEDGE, SKILLS, ABILITIES, AND COMPETENCIES (KSACs):**

- Knowledge of engineering principles within a specific discipline and how they relate to transportation projects
- 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 learn technical concepts and apply those concepts to work
- 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