

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.



Planning Data Engineering Technician 4

Planning Division – Roadway Data Section, Planning Data Team

\$59,628 annually

Job Overview

The Planning Data Engineering Technician 4 supports the Planning Division by providing advanced technical expertise in collecting, processing, and assuring the quality of roadway and traffic data used to support TDOT's statewide transportation planning, programming, and asset management goals. This position plays a key role in the Planning Data Team by ensuring the accuracy and integrity of statewide traffic count data as well as preparing all roadway data for Highway Performance Monitoring System (HPMS) reporting in compliance with Federal Highway Administration (FHWA) requirements.

Working under the direction of the Planning Data Team Lead, the Planning Data Engineering Technician 4 ensures compliance with federal and state guidance for Traffic Monitoring Analysis System (TMAS) and Highway Performance Monitoring System (HPMS) reporting and provides technical leadership in maintaining high standards of data integrity, completeness, and timeliness. The position serves as a key liaison between TDOT Divisions, consultants, FHWA, and peer State DOTs to coordinate data integration, resolve quality issues, and strengthen planning data resources and processes.

Essential Job Responsibilities

Support the Planning Data Team by ensuring that all datasets (e.g. traffic counts or HPMS items) are received from their respective offices and adequately quality controlled. Confirm that the received datasets provide full coverage across the network and communicate any gaps in data, quality, or equipment functionality to the data owners. Request recounts or reassessments wherever required.

Perform validations on datasets to ensure compliance with federal guidance and TDOT requirements. Develop reports to communicate validation errors and propose solutions. Prepare data using various applications and tools for federal reporting (e.g. TMAS or HPMS). Communicate all feedback from FHWA to the data owners.

Maintain and update Standard Operating Procedures (SOPs) related to each respective task and manage internal dashboards to monitor data collection status and performance. Produce annual statistical summaries and reports and maintain detailed SOPs and program documentation.

Participate in peer exchange opportunities that foster collaboration internally and externally, sharing best practices and insights to strengthen planning data resources. Stay up to date with any federal changes and collaborate with other State DOTs.

Locate relevant publications and document findings from all sources.

Assist with the development and execution of quality management procedures for Planning Data activities and deliverables to ensure a high level of quality, accuracy, achievement, and implementation. Consistently seek opportunities to improve processes that support quality deliverables.

Provide exceptional customer service to project stakeholders by facilitating the sharing of information that is accurate, well-organized, and understandable to technical staff and the general public. Demonstrate effective listening skills, provide prompt responses, and communicate effectively with both technical staff and non-technical audiences. Promote transparency, responsiveness, accountability, and clarity by removing barriers to communication and maintaining complete and accurate documentation.

Qualifications

- High school diploma or equivalent
- 4 years of demonstrated competency in State and Regional Transportation Planning, Geographic Information Systems (GIS), Statistics or Mathematics, Data or Computer Science, or a related field
- Completion of the Engineering Technician Proficiency Program levels I through III.

OR

- High school diploma or equivalent
- 4 years of demonstrated competency in State and Regional Transportation Planning, Geographic Information Systems (GIS), Statistics or Mathematics, Data or Computer Science, or a related field
- Including at least one (1) year of experience with leading crews or teams on assignments and/or training employees, including effective communication through active listening, and providing verbal and written instructions.

OR

- Associate degree
- 2 years of demonstrated competency in State and Regional Transportation Planning, Geographic Information Systems (GIS), Statistics or Mathematics, Data or Computer Science, or a related field
- Including at least one (1) year of experience with leading crews or teams on assignments and/or training employees, including effective communication through active listening, and providing verbal and written instructions.

Ideal Candidate

The Planning Data Engineering Technician 4 is highly organized, dependable, and detail-oriented, with a strong commitment to accuracy and quality in their work. They demonstrate sound judgment, adaptability, and the ability to solve problems with practical and thoughtful solutions. This position requires someone who communicates clearly, collaborates effectively with diverse groups, and builds positive working relationships across teams and agencies. They are proactive in taking initiative, dependable in meeting deadlines, and comfortable balancing multiple priorities in a fast-paced environment. The Planning Data Engineering Technician 4 thrives in a team setting, contributes to a culture of continuous improvement, and provides leadership by supporting and mentoring others. They are motivated by public service, take pride in delivering reliable results, and are dedicated to strengthening resources that support statewide planning and decision-making.