

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.



Road Characteristics and Inventory Senior Technical Specialist

Planning Division – Roadway Data Section

\$75,204 annually

Job Overview

The Road Characteristics and Inventory Senior Technical Specialist serves as the subject matter expert for and maintains a system-wide roadway network, events, and inventory. This position is responsible for supporting TDOT by ensuring the road inventory's quality, accuracy, and completeness, enabling effective roadway asset management, supporting strategic planning and resource allocation, and complying with Federal Highway Administration (FHWA) reporting requirements. The Road Characteristics and Inventory Senior Technical Specialist role requires collaboration with TDOT Divisions, the FHWA, and Local Public Agencies. This position must effectively articulate road inventory concepts through training, mentoring, and collaborating as part of a matrix organization.

Essential Job Responsibilities

Assist in the management and maintenance of the statewide Linear Referencing System (LRS), including ensuring all data inventory meets the Model Inventory of Roadway Elements (MIRE) federal guidelines and other guidelines for Highway Performance Monitoring System (HPMS) reporting.

Ensure revisions to the LRS data are accomplished using GIS software and applications, including data collected by the Road Characteristics and Inventory Team and data received from the Traffic Data Collection Team, the Planning Data Team, and local governments.

Verify the data quality through performing field reviews, and ground truthing activities to facilitate data-driven decisions for maintaining and improving the transportation network in a sustainable, efficient, and equitable manner.

Coordinate with local agencies and municipalities to develop a comprehensive integrated system to share and augment deficits and inconsistencies in TDOT's data collection, LRS and roadway event data activities.

Coordinate with the TDOT Technical Training Director and assist in the development and delivery of road inventory training and technical guidance that addresses acquired knowledge and risk management, inspiring new program and project processes, procedures and emerging technologies, and developing skills. Provide expertise, training, and mentoring to TDOT staff regarding the Linear Referencing System, data collection activities, road inventory issues and considerations.

Provide exceptional customer service to both internal and external customers by exercising effective listening skills and providing prompt responses.

Promote and encourage the pursuit of excellence in alignment with TDOT's visions. Assist with the development and execution of quality management procedures for road inventory activities to ensure a high level of quality, achievement, and implementation. Consistently work to improve processes that support quality deliverables.

Remain current with national and regional applicable road inventory initiatives and trends. Assist in developing, maintaining, and updating TDOT's policies, methods, procedures, and guidelines for the efficient and effective management of road inventory activities in conformance and compliance with federal and state requirements and TDOT policies.

Qualifications

- Bachelor's degree
- 3 years of demonstrated competency in State and Regional Transportation Planning, Geographic Information Systems, Data or Computer Science, or a related field

OR

- Master's degree
- 2 years of demonstrated competency in State and Regional Transportation Planning, Geographic Information Systems, Data or Computer Science, or a related field

Ideal Candidate

The Road Characteristics and Inventory Senior Technical Specialist is highly organized and detail oriented and thoroughly competent in GIS. They excel at integrating diverse data sources to ensure data accuracy and usability. They are effective communicators and collaborators who work seamlessly with various teams and stakeholders to maintain and enhance road inventory data. The Road Characteristics and Inventory Senior Technical Specialist balances technical precision with innovative problem-solving and takes a proactive approach and commitment to quality.