

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.



Roadway Data Analytics Senior Technical Specialist

Planning Division – Roadway Data Section

\$75,204 annually

Job Overview

The Roadway Data Analytics Senior Technical Specialist serves as the subject matter expert for and complements a system-wide roadway data network with accompanying initiatives, and planning activities. This position is responsible for supporting TDOT by ensuring quality, accuracy, and completeness in systems applications and planning, enabling effective roadway asset management, supporting strategic planning and resource allocation, and complying with Federal Highway Administration (FHWA) reporting requirements. The Roadway Data Analytics Senior Technical Specialist role requires collaboration with TDOT Divisions, the FHWA, and Local Public Agencies. This position must effectively articulate Roadway Data Analytics concepts through training, mentoring, and collaborating as part of a matrix organization.

Essential Job Responsibilities

Assist with the inter-agency development of functional classification delineation of new and altered routes by preparing and following a structured format, including document preparation, agency agreements, and LRS network changes.

Using Geographic Information Systems (GIS) as a tool to oversee systems planning activities, including network boundary changes, and other route enhancement and definition activities, to accommodate changes in the LRS.

Assist with the coordination of the Photolog program by developing suitable contracts to support data collection activities of photolog imagery and other roadway data elements and features, which complement image viewing and querying functions in an LRS environment.

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

Support the State-Aid program and State-Aid and Bridge Grant Section Team, including reviewing county requests for additions and deletions to the State Aid system to ensure the roadways meet State-Aid requirements, and process the request by changing the information in the LRS.

Coordinate with internal and external consultants and stakeholders to ensure TDOT contracts and Memoranda of Understanding items are upheld, including data integrity

and quality of all deliverables.

Coordinate with the TDOT Technical Training Director and assist in the development and delivery of roadway data 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 GIS, route functional classification activities, data analysis, State Aid program roadway data 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 roadway data 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 roadway data/GIS initiatives and trends. Assist in developing, maintaining, and updating TDOT's policies, methods, procedures, and guidelines for the efficient and effective management of roadway data 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 Roadway Data Analytics Senior Technical Specialist is highly organized, 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, enhance, and analyze road inventory data. The Roadway Data Analytics Senior Technical Specialist balances technical precision with innovative problem-solving and takes a proactive approach and commitment to quality.