Planning Data Technical Specialist
Planning Division – Roadway Data Section, Planning Data
$60,600 - $70,680 annually

Job Overview

The Planning Data Technical Specialist supports the Planning Division by utilizing tools, technologies, and methods to compile, organize, analyze, and process traffic and HPMS data used to evaluate transportation projects and support data-driven decisions for project planning. This position supports the Planning Data Team's efforts to manage and maintain statewide traffic count data and prepare all roadway data items for Highway Performance Monitoring System (HPMS) reporting in alignment with Federal Highway Administration (FHWA) requirements.

The Planning Data Technical Specialist frequently collaborates with internal teams, regional staff, external agencies, and stakeholders to ensure continuous and effective administration of the traffic data and HPMS reporting programs. The position assists with implementing the Quality Management Program as part of the Planning Division's activities to eliminate rework and manage risk. The Planning Data Technical Specialist III works more independently and may mentor junior staff and contribute to process improvements.

Essential Job duties of Technical Specialist I, II, and III include:

Support the Planning Data Team by ensuring the collection of the data needed to maintain the FHWA HPMS inventory to ensure accurate tracking of condition, performance, use, and operating characteristics of TDOT's roadway network, particularly on HPMS sample sections.

Evaluate the location of traffic count stations in the Tennessee Traffic Information Management and Evaluation System (TN-TIMES) based on traffic patterns and alternative data sources. Develop a process for relocating, adding, and/or deleting stations in order to strengthen the representation of traffic volumes across the state.

Review the geospatial assignment of traffic stations and HPMS sample sections onto the network and perform various spatial analyses to update and maintain both events in the ESRI Roads & Highways environment.

Manage the corridor balancing structures in TN-TIMES and perform analyses throughout the year to ensure adequate data collection as well as annual analyses to ensure optimal functionality of all corridors.

Update all groups in TN-TIMES used for seasonal, axle, and classification factoring. Add, remove, and regroup stations and assess any gaps in the clusters. Monitor collection throughout the year to ensure adequate cluster size.

Build and utilize dashboards and other geospatial and analytical tools using such applications as ArcGIS Online, ArcGIS Pro, PowerBI, and excel.

Review annual updates to the Certified Public Road Mileage (CPRM) and Vehicle Miles of Travel (VMT) reports for TDOT roadways.

Assist with importing short-term traffic data into the Tennessee Traffic Information Management and Evaluation System (TN-TIMES) to verify data integrity. Use TN-TIMES to analyze, maintain, and provide traffic data reports to FHWA in accordance with requirements, TDOT Headquarters and Divisions for various transportation projects and analyses, and to other parties, as requested.

Assist with processing Annual Average Daily Traffic (AADT) by compiling raw data generated from short-term average daily traffic counts from permanent and temporary count systems and applying approved traffic factors, as needed, for Axle, Seasonal, and Class Distribution in accordance with Planning Data Team procedures.

Provide timely and complete responses to public and TDOT Leadership requests for traffic data. Support preparation of Planning Data deliverables including mapping products and traffic data reports.

Implement policies, standards, guidance, and a data management system that promote statewide uniformity and consistency of the Planning Data Team deliverables. Implement records retention policies for use and compliance with Records Disposition Authorization (RDA) requirements.

Assist in developing, maintaining, and updating TDOT's policies, methods, procedures, and guidelines for efficient and effective Planning Data management, ensuring conformance with federal and state requirements, and TDOT policies.

Assist with the development and execution of quality management procedures for Planning Data activities and deliverables to ensure a high level of quality, achievement, and implementation. Consistently work to improve processes that support quality deliverables. Participate in peer exchange opportunities that foster collaboration internally and externally to share ideas, skills, and insights regarding planning data initiatives and trends.

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

Additional Job duties for the Technical Specialist II and III include:

Perform consultant prequalification activities, assist in the consultant selection process, review and process consultant invoices, and complete consultant performance assessments to ensure quality, compliance, and fiscal accountability. Contribute to the development and implementation of policy for consultant submittal requirements and compliance with federal and state procurement regulations and TDOT procedures.

Additional Job Duties for the Technical Specialist III include:

Assist the Division Director, Section Manager, and Team Lead in the development and delivery of Planning Data training and technical guidance that address 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 planning data issues, uses, and considerations, fostering a culture of continuous improvement and exceptional customer service for both internal and external stakeholders.

Qualifications

TDOT Technical Specialist I

- Bachelor's Degree

TDOT Technical Specialist II

- Bachelor's Degree
- 1 year of demonstrated competency in State and Regional Transportation Planning, Geographic Information Systems (GIS), Statistics or Mathematics, Data or Computer Science, or a related field

TDOT Technical Specialist III

- Bachelor's 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

The Tennessee Department of Transportation reserves the sole right in determining the level of position based on the applicant's work experience, education, skill level, and all other appropriate factors, including business needs. Within 6 months of hire, employees must demonstrate successful mastery of corresponding work competencies and skill blocks of the Technical Specialist Competency Program for the level of worker for which they were hired. If skills and competencies are not met during that period, the employee can be demoted to the level of worker for which he/she is qualified.

Ideal Candidate

The Planning Data Technical Specialist I, II, or III is detail-oriented, organized, and possesses a strong interest in traffic data, geospatial analytics, and transportation planning. They are eager to learn new tools and techniques to enhance the quality and usability of traffic and HPMS data. They take initiative to perform advanced data quality checks, analyze intricate data trends, and prepare detailed visualizations or reports to support planning studies and operational decisions. They excel at ensuring information is accurate, consistent, and accessible to stakeholders. The Planning Data Technical Specialist I, II, or III has strong communication and interpersonal skills and provides exceptional customer service while collaborating effectively with internal teams and external partners to complete daily tasks and larger project assignments.