TN TDOT
Department of Transportation

Traffic Modeling Technical Coordinator 1
Traffic Design Division – Traffic Modeling Section
Nashville, TN
$61,428 annually

Job Overview

The Traffic Modeling Technical Coordinator 1 supports Divisions, technical disciplines, Project Teams, and the Regions by interpreting consultant-generated traffic modeling reports, presenting traffic modeling forecasts and analysis findings to Project Teams, and providing insight into project-specific traffic patterns as determined through data analysis. This position collaborates with Project Teams in identifying and resolving technical challenges that arise with respect to traffic modeling elements.

The Traffic Modeling Technical Coordinator 1 position assists with ensuring Department policies, technical guidance, and procedures are incorporated into the development of traffic reports. This position uses computer software to complete traffic modeling tasks and develop reports, technical drawings, and data analytics. This position must effectively articulate traffic modeling concepts and documentation through mentoring and collaborating as part of a matrix organization.

Essential Job Responsibilities

Support Project Teams in the efficient delivery of TDOT's Work Program by performing traffic modeling to address traffic-related concerns, including congestion, travel delays, and traffic accidents. Provide project synopses of traffic data that summarize critical traffic project components, including, but not limited to, high crash locations, bottlenecks, bicycle and pedestrian safety concerns, rail concerns, queuing concerns, and any potential freight and supply chain impacts.

Integrate Quality Management into all traffic modeling activities, including data and reports, and ensure compliance with relevant standards and project-specific methodologies. Ensure traffic studies represent incidents and variations in travel demand, encompass a data-driven calibration process based on statistically derived objective criteria, and accurately represent bottleneck and queuing locations, onset times, and durations. Provide Quality Assurance for all traffic modeling consultant reports for the Traffic Design Division.

Assist in data collection and analysis for projects having a low to moderate risk to the Department, including existing and historical traffic data, transportation systems, land use, environmental data, and planned and programmed projects within the project's area of influence. Assist in obtaining input from local stakeholders for use in constructing the framework needed for accurate modeling and informed decision-making.

Assist in providing a framework for accurate modeling and informed decision-making by proactively coordinating the collection of traffic data to ensure the methods used to obtain traffic data are pertinent to the specific project and include traffic flow patterns, public transit ridership, freight movement, and input from local stakeholders.

Remain current and engaged on revisions to the Project Delivery Network (PDN), TDOT Traffic Design Manual, TDOT ITS Project Development Guidelines, Statewide and Regional ITS Architectures, TDOT Standard Traffic Operations Drawings, TDOT Highway System Access Manual, TDOT Roadway Design Guidelines, TDOT Quality Manual, Highway Capacity Manual, Federal and State regulations, TDOT Performance Metrics, local planning and land use regulations, and standards related to traffic modeling elements. Assist in adapting new technologies and developing best practices that drive the Department's transportation projects forward.

Assist in conducting traffic modeling and analysis for traffic design projects using Highway Capacity Software (HCS) and SYNCHRO and other deterministic models for those projects having a low to moderate degree of risk to the Department. Prepare comprehensive traffic reports that summarize analysis findings and provide actionable insights to support decision-making by TDOT leadership.

Provide exceptional customer service to project stakeholders by facilitating the sharing of data and acquired knowledge with Project Teams, ensuring data is easily accessible, organized, and documented, exercising effective listening skills, and communicating effectively.

Qualifications

- Associate or bachelor's degree in engineering, planning, or related field
- 3 years of demonstrated competency in traffic modeling or a related field

OR

- Education equivalent to graduation from high school
- 5 years of demonstrated competency in traffic modeling or a related field

Ideal Candidate

The Traffic Modeling Technical Coordinator 1 is analytical, detail-oriented, and organized, with a strong commitment to accuracy and quality management in traffic modeling. They possess a collaborative mindset, thriving in an environment where teamwork and clear communication with both technical and non-technical stakeholders are essential. The Traffic Modeling Technical Coordinator 1 is adaptable and open to new technologies. They stay current with industry standards and proactively find solutions to traffic challenges. Exceptional customer service skills are key, as this role requires facilitating data sharing and providing insightful recommendations to support TDOT's projects. The Traffic Modeling Technical Coordinator 1 improves transportation safety and efficiency by combining technical expertise with a service-oriented approach.