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.



Statewide Signals Transportation Engineer

Traffic Design Division – Traffic Services Section
Nashville, TN
\$115,008 annually

Job Overview

The Statewide Signals Transportation Engineer is a statewide transportation engineer position that will manage all aspects of TDOT's signals program within Traffic Services. This position will provide support to Project Teams directly responsible for delivering projects for all phases of the Project Delivery Network (PDN) in accordance with the project's scope, budget, and risk. These projects will range in complexity and risk from simple to exceedingly complex. The purpose of this position, which functions as a Statewide Signals Transportation Engineer, is to coordinate and oversee the development of the signal program as developed by the unit and consultants to ensure uniform and comprehensible visual systems for these devices.

This position will serve as the Statewide Signals Transportation Engineer for TDOT, establish the design and standard application of signals and authorizes their use on state trunklines for the purpose of improving motorists' safety and operational efficiency. This work includes developing standards, timing plans, reference guides and manuals, as well as preparing correspondence, reports, programs, contracts, and work authorizations at the regions and headquarters. This position must effectively articulate technical signal concepts through training, mentoring, and collaborating as part of a matrix organization. The Statewide Signals Transportation Engineer assists with monitoring and managing the scope, schedule, and budgets of all transportation signal optimization projects and working with the Project Management Division to make the required adjustments as necessary to ensure that the work completed is in alignment with the Department's Asset Management and Strategic goals.

Essential Job Responsibilities

Serve on Project Teams as part of a matrix organization by providing technical expertise related to transportation signal elements for both stand-alone projects and in support of larger roadway design project visions for those projects having the highest complexity; adhere to traffic services-related critical goals and intended outcomes for the scope, schedule, budget, and quality in coordination with the Project Manager, applying context-sensitive design strategies; implementing innovative concepts; proactively assessing risk factors.

Ensure exceptional customer service to both internal and external customers by exercising effective listening skills, providing prompt responses, maintaining complete and accurate documentation, and communicating effectively.

Remain current on national best practices related to traffic services and on the Manual on Uniform Traffic Control Devices (MUTCD) within TDOT's Traffic Design

Division as it relates to transportation projects, facilities, emerging technologies and operations activities; serve in the role of the Statewide Signals Engineer to ensure compliance with the standards, specifications, and design of traffic control measures, assist with the development of plans, legislation, and regulations that seek to increase traffic technologies, inspire innovation, and improve mobility for TDOT employees, contractors, and the traveling public; and integrate traffic considerations and statutory and regulatory requirements into TDOT's guidance documents, processes, and procedures.

Routinely identify, document, and effectively collaborate with the Traffic Services Section acquiring knowledge that includes maximizing project successes, acknowledging national best practices, and avoiding past errors. Assist with modifications to all applicable policies, procedures, design standards, manuals, specifications, and special provisions. Work collectively with stakeholders to ensure proper signal timing and coordination with adjacent facilities.

Serve on selection committees for professional engineering services as part of the Brooks Act, including assistance with RFP development, attendance at project-specific marketing meetings, assistance with determining scoring criteria, assistance with project information sessions, when applicable, serving as a scorer as part of the consultant acquisition process, and attendance at de-briefs for consultants where usable feedback must be provided. Review and give final approval to consultant submittals to determine if a consultant is qualified to perform signal work. Review and give final approval of signal specifications. Review, advise and make recommendations to ensure that projects are completed on time.

Serve as the Signals Program Specialist for the department to review and give approval of the signals program, including permanent and temporary signals, including traffic signal timing plans developed by consultants and inhouse for contract letting and in support of Design's projects. Review and give final approval to design and attend meetings for plans prepared by consultants or in-house.

Provide technical expertise that ensures the contractual agreements, scope, schedule, budget, and quality of all traffic services projects support the delivery of the Department's Work Program while also ensuring compliance with Federal and State traffic design and regulations.

Assist in the development of training that addresses acquired knowledge, traffic signal objectives and technical design elements related to transportation for the purpose of improving team performance, creating a stronger understanding of the transportation industry, inspiring new ideas, and developing skills.

Maintain and update the department's signal inventory system, coordinate and work collectively with the asset management division. Responsible for the maintenance and updates the department's signal inventory system.

Qualifications

- Bachelor's degree in engineering
- Licensed Professional Engineer (PE)
- 12 years of demonstrated competency in signal design in the traffic engineering field

Ideal Candidate

The Statewide Signals Transportation Engineer values mobility and efficiency. They are strategic thinkers who develop strategies for efficient traffic. They leverage traffic data and trends to make decisions for improvements while staying with schedule and budget. The Statewide Signals Transportation Engineer excels at collaborating with various stakeholders, such as government agencies, contractors, and community members, to address transportation issues. They are exceptional project managers and leaders with strong analytical and problem-solving skills. They stay current on emerging technologies and best practices to continuously improve systems and processes.