

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.



ITS Team Lead

Traffic Design Division – ITS Section
\$110,676 annually

Job Overview

The ITS (Intelligent Transportation Systems) Team Lead will lead, mentor, and train the ITS Team through empowerment, communication, and delegated authority. This position will develop Work Plans that align with the ITS Section's strategic vision, and the TSMO Program Plan to effectively delegate authority and responsibility, while ensuring the availability of resources for the ITS Team to be successful. The ITS Team Lead will coordinate efforts with the Regions and ITS stakeholders to identify, plan, design, deploy and maintain the appropriate ITS program planning needs. This position will develop and maintain a strategic ITS Architecture design plan that is stakeholder-driven, multi-jurisdictional, and multi-disciplinary to enhance ITS architecture projects and ITS SmartWay Infrastructure expansion needs statewide.

This position will implement Department policies, discipline-specific technical guidance, procedures, and manuals to lead and assist the ITS Team in producing deliverables and implementing the Quality Assurance Program as part of the Department's Work Program. The ITS Team Lead will recommend changes to design plans and programs, and lead efforts related to ITS device and communications maintenance and operational expansion service level needs. This position will participate in the development and implementation of an ITS and Fiber Deployment Plan and ensure alignment with the organizational TDOT Strategic Plan, Statewide TIM Strategic Plan, and the TSMO Program Plan, including the application of emerging technologies designed to preserve corridor capacity and improve safety and travel time reliability. This position will supervise technical staff and implement performance plans, schedules, and budgets, ensuring expected outcomes, performance, and accountability of each team member. The ITS Team Lead will research national best practices to drive innovation and efficiency within each technical unit of the ITS Team.

Essential Job Responsibilities

Manage resources and staff utilization and assist Project Managers in the management of external partners together with the Professional Services Division, including training needs, negotiating contracts, reviewing consultant invoicing, developing contract scopes, managing contract tasks, and completing consultant grading. Collaborate with stakeholders such as FHWA, transportation agencies, local

governments, law enforcement, transit agencies, and private sector partners to coordinate ITS planning and design needs, address concerns, and promote collaboration.

Establish and ensure that there is a direct relationship between quality and work outcomes by developing and implementing standards for the ITS Team and coordinating with the Quality Team Lead to assist with quality control tasks as per the TDOT Quality Assurance Process with respect to TDOT's guidance documents, standards, processes, and procedures. Integrate quality management into the Project Delivery Network (PDN) process to reduce plan errors, right-of-way delays, construction delays, and contractor claims; assist Project Teams by providing reviews as part of TDOT's Quality Assurance Program.

Assist in the development of Consultant Acquisition Plans (CAP) and oversight of external partners by serving on selection committees for professional engineering services as part of the Brooks Act. Provide support in the development of the Request for Proposal (RFP) by attending project-specific marketing meetings, determining scoring criteria, participating in project information sessions, serving as a scorer in the consultant acquisition process, and attending de-briefs with consultants. Support and assist with review and compliance of the TDOT ITS and Fiber Deployment Plans and ITS Architecture Plan. Implement ITS data-driven decisions that improve planning, design, safety, and reliability.

Participate on Project Teams as part of a matrix organization in developing the project vision for those projects having the highest complexity; define critical goals and intended outcomes for the scope, schedule, budget, and quality in coordination with the Project Manager. Support Project Management staff by writing the ITS project design Scope of Work in collaboration with TDOT Environment, TDOT Design, TDOT Construction, and TDOT Maintenance; apply context-sensitive design strategies. Assist other units within TDOT to mitigate constructability and maintenance concerns as part of the Functional Design Plans development per the PDN; proactively assess risk factors and Project Teams associated with Alternative Delivery Contracts. Forecast the cause and effect of implementing Alternative Technical Concepts related to Request for Proposals (RFPs), project cost, and construction timing.

Lead the ITS Team in providing 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. Take a multi-modal approach to all ITS design concepts and initiatives, including highways, transit, vulnerable road users, freight, aeronautics, and rail.

Guide the development and implementation of revisions to specifications, standards, policies, procedures, and guidelines related to ITS planning, programming, and design needs to ensure statewide consistency. Perform investigations and research of ITS components for complex projects having the highest degree of risk. Conduct and/or review complex technical studies/analyses to identify ITS needs, opportunities, priorities, and appropriate remedies. Drive innovation to generate safer transportation facilities through ITS interoperable technology. Assist with the review of department guidelines and project deployments ensuring the integration of statutory and regulatory requirements into all ITS elements and tasks.

Remain current on national best practices related to TDOT ITS guidelines, Federal Communications Commission (FCC), American Association of State Highway and Transportation Officials (AASHTO), Federal Highway Administration (FHWA), local and state officials, ITS America, Transportation Research Board (TRB) National Cooperative Highway Research Program (NCHRP), National Operations Center of Excellence (NOCOe) and other

applicable Department standards and procedures. Incorporate ITS research, evaluations, and implementation of emerging technologies into projects that will improve design safety, reliability and reduce congestion. Evaluate and implement innovative design trends including advancements with connected and automated vehicles, mobility-as-a-service (MaaS), mobility-on-demand (MOD), artificial intelligence, and drone technology as potential applications for ITS Deployments. Lead department committees related to ITS design issues regarding maintenance and operations services.

Provide oversight in the development of ITS program planning and design deliverables to ensure they are predictable and repeatable, providing consistently high levels of achievement, mitigation of risk, and an established track record of success.

Qualifications

- Bachelor's degree in traffic, civil, transportation engineering or related field.
- 5 years of demonstrated competency in transportation engineering, digital communications, or related field.

Necessary Special Qualifications

- Licensed Professional Engineer (PE)

Ideal Candidate

The ITS Team Lead improves the efficiency of the transportation system by collaborating with regions and stakeholders to find innovative ideas and solutions. This position must ensure that ITS systems and services are aligned with Regions programming, planning, and architectural design and expansion needs. The ITS Team Lead motivates and inspires others, promoting a culture of collaboration and continuous improvement. They are knowledgeable about emerging technology, customer needs, operational plans, and ITS programs. This Team Lead is detail-oriented, adapts quickly to challenges, and has strong communication skills to develop solutions that ensure safe and reliable traffic flow.