

## 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 Geodetics Transportation Engineer Policy and Training**

Engineering Division – Geodetics Section

\$115,008 annually

#### **Job Overview**

The Statewide Geodetics Transportation Engineer for Policy and Training will lead, mentor, and train quality assurance best practices within the Statewide Geodetics section as well as within the Regions. This position will develop Geodetics policies, standards, and specifications that align with the Geodetics Section's strategic vision and provide training and direction that promotes uniformity and consistency for geodetics.

This position will develop and maintain department policies, discipline-specific technical guidance, procedures, and manuals to train and assist the Geodetics Section in producing deliverables and implementing the Geodetics Quality Assurance Plan that focus on ensuring quality, minimizing variability, and providing flexibility on a risk-based scale to maximize efficiency as part of the Department's Work Program. Statewide Geodetics Transportation Engineer will pilot national best practices within the Geodetics Section and will report and recommend ideas that drive innovation and efficiency.

#### **Essential Job Responsibilities**

Establish and ensure that there is a direct relationship between quality and work outcomes by developing standards for the Geodetics Section and coordinating with the Statewide Geodetics Quality Transportation Engineer for training personnel to comply with quality control tasks as per the TDOT Quality Assurance Process with respect to geodetics elements. Coordinate with the Unmanned Aircraft Systems (UAS) group for the use of UAS within Geodetics and best practices regarding policies and training that promote quality deliverables with UAS technology.

Assist in the development of a Consultant Acquisition Plan (CAP) and assist in the oversight of external partners by serving on selection committees for professional engineering and non-engineering services, including assisting with RFP development, attending project-specific marketing meetings, assisting with determining scoring criteria, assisting with project information sessions, when applicable, serving as a scorer as part of the consultant acquisition process, and attending de-briefs with consultants, including those projects for which Alternative Delivery methods are applied.

Routinely identify, document, and effectively collaborate with HQ, and with the Transportation Data Unit and Quality Unit within Asset Management on acquired

knowledge that includes maximizing project successes, acknowledging national best practices, and avoiding past errors. Lead the effort in modifications to all applicable policies, procedures, design standards, specifications, and special provisions.

Assist on Project Teams as part of a matrix organization by providing technical expertise for those projects having the highest complexity; assist with defining critical goals and intended outcomes for the scope, schedule, budget, and quality in coordination with the Project Manager related to Geodetics; develop training for context-sensitive survey data collection methodologies per the TDOT Survey Standards Manual; effectively coordinate with other disciplines within TDOT to address all potential survey policy and training needs to support the Functional Design Plans development per the Project Delivery Network (PDN); and proactively assess risk factors related to legal aspects, public relations and safety related to Geodetics tasks.

Provide exceptional customer service to both internal and external customers, exercising effective listening skills, providing prompt responses, maintaining complete and accurate documentation, provide training and guidance, and communicating effectively. Collaborate with the Region Geodetics Quality Teams to maintain consistent communication.

Remain current on revisions to the design codes, standards, and guidelines related to geodetics; maintain collaboration with the transportation industry to enhance the work of preconstruction teams through the implementation of new technologies and national best practices; and create, manage, and implement policies and procedures related to geodetics. Collaborate on innovative strategies used as best practices for statewide quality assurance needs.

Through training, implement the Division's tracking mechanism that ensures all workflow items are addressed as per the PDN and within the time constraints laid out by the project's schedule and maintain a single-point data system for use in providing TDOT staff with geodetics data for the Region.

Assist with Geodetics training that addresses acquired knowledge, geodetics policies, asset management objectives, risk management, technical design elements, and emerging technologies related to transportation for the purpose of improving team performance, creating a stronger understanding of the transportation industry, inspiring new ideas, and developing skills.

Assist in ensuring the Geodetics deliverables are consistent, predictable, and repeatable to provide for consistently high levels of achievement, mitigation of risk, and an established track record of success. Create policy to establish data consistency for survey data, including submittal requirements for those items that are submitted by consultants, and provide access and available server space to existing data across the Regions, including LiDAR data.

### **Qualifications**

- Bachelor's degree in engineering
- Licensed Professional Engineer (PE)
- 12 years of demonstrated competency in transportation project delivery (e.g., survey, roadway design, CEI, construction, project management), geodetics, or land surveying
- Registered Professional Land Surveyor (RLS) or Professional Land Surveyor in Training (PLSIT) preferred

### **Ideal Candidate**

The Statewide Geodetics Transportation Engineer Policy and Training team plays a crucial role in shaping policy and providing comprehensive training for Geodetics. They are highly skilled problem-solvers and maintain strong interpersonal relationships with staff at all levels. They collaborate effectively with various teams and stakeholders to ensure the successful implementation of training and policies are in adherence to established standards. The Statewide Geodetics Transportation Engineer Policy and Training team is innovative and uses their strategies as best practices for statewide quality assurance needs.