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.

Business Solutions Transportation Engineering Specialist 3 and 4
Region Business Solutions – Business Support
$80,784 – $88,860 annually

Job Overview

The Transportation Engineering Specialist 3 and 4 supports Region Business Solutions by providing technical support in region-wide engineering data systems, digital tools, and operational analytics that drive TDOT's project delivery and maintenance programs. Reporting to the Business Support Team Lead, this position serves as an engineering resource, offering insight into the intersection of engineering practices and business operations.

This position is responsible for translating transportation data into actionable insights, validating system outputs against engineering standards, and ensuring the integration of technical requirements into region business systems. The Transportation Engineering Specialist 3 and 4 independently manage high-complexity data products, develop and oversee dashboards, Geographic Information Systems (GIS) layers, and engineering documentation, and ensure that business systems reflect the technical needs of planning, design, and construction teams.

The Transportation Engineering Specialist 3 and 4 coordinates across Regions and Divisions to align project delivery goals with system capabilities. The position also plays a key role in ensuring the integrity of infrastructure-related data through quality assurance reviews, compliance checks, and the mentoring of less-experienced staff.

The Transportation Engineering Specialist 3 and 4 contributes to business continuity and system enhancements by implementing acquired knowledge that mitigates the Department's risk and increases performance as part of fulfilling TDOT's strategic vision.

This position embeds engineering knowledge into TDOT's digital and administrative tools, supporting the standardization, accuracy, and effectiveness of statewide infrastructure programs and fostering continuous improvement through training, mentoring, and collaboration as part of a matrix organization.

Essential Job Duties of Transportation Engineering Specialist 3 and 4 include:

Apply engineering judgment to ensure TDOT's region business systems support the technical requirements of infrastructure planning, design, construction, and maintenance. Optimize functionality for business-critical systems, including, but not limited to, AASHTOWare, Project 360, e-Plans, and SiteManager to enhance engineering workflows and maintain compliance with TDOT standards.

Analyze business processes, validate data integrity using engineering principles to ensure system deliverables meet technical quality and performance expectations. Develop and oversee dashboards, GIS visualizations, and reports that translate complex engineering data into actionable insights for infrastructure tracking, risk mitigation, and project decision-making.

Integrate engineering-based quality management by conducting technical reviews, verifying system documentation against specifications, and ensuring compliance with Records Disposition Authorization (RDA) and Business Solutions Section guidelines.

Coordinate with the Regions, Headquarters (HQ) Divisions, and Project Teams to gather user feedback, document business needs, and resolve complex system or data issues that affect project delivery. Assess software performance with a focus on its ability to support engineering calculations, reporting, and decision-making.

Provide technical assistance and mentoring to Region staff by delivering system training, onboarding support, and instructional resources focused on integrating engineering practices into business systems. Participate in peer exchanges and knowledge-sharing to promote cross-regional consistency statewide.

Support innovation and pilot testing by applying engineering evaluation methods to assess new digital tools, document lessons learned, and track performance metrics that inform process improvements and technology adoption aligned with TDOT strategic priorities.

Develop business intelligence products that transform engineering, infrastructure, and maintenance data into accurate, timely insights aligned with Asset Management goals and TDOT's performance framework.

Additional Job Duties for the Transportation Engineering Specialist 4 include:

Perform advanced analysis and support strategic system integration efforts for high-impact business operations and digital tools, ensuring scalable solutions across the Regions. Serve as a subject matter expert in business application implementation, addressing cross-functional challenges through innovative systems-thinking.

Share engineering expertise through mentoring junior staff and Region partners in the application of standards, data interpretation, and maintaining quality practices within business systems. Develop training strategies, facilitate technical workshops, and support statewide alignment through the promotion of best practices.

Assist with developing technical scopes of work and with procurement planning for consultant services or technology implementation initiatives related to business systems, analytics, or process improvements, ensuring alignment with TDOT standards and performance metrics.

Conduct cross-region quality control reviews for business system deliverables, dashboards, and reports. Evaluate system usage and workflow efficiency, recommending improvements to enhance reliability and user satisfaction.

Advance business continuity and innovation by applying emerging technologies and supporting digital transformation initiatives that strengthen transparency, data governance, and system interoperability. Coordinate with Information Technology (IT), HQ Divisions, and Region leadership to drive modernization efforts.

Qualifications

The Transportation Engineering Specialist 1 and 2 are part of the Graduate Transportation Engineer (GTE) Program.

Transportation Engineering Specialist 3:

- Bachelor's Degree in Engineering, Construction Project Management, or Concrete Industry Management
- 2 Years of demonstrated competency in Planning, developing and/or construction projects, or related field

OR

- Master's Degree in Engineering, Construction Project Management, or Concrete Industry Management
- 1 Year of demonstrated competency in planning, developing and/or constructing projects, or related field

Transportation Engineering Specialist 4:

- Bachelor's Degree in Engineering, Construction Project Management, or Concrete Industry Management
- 3 Years of demonstrated competency in engineering technical services, project management, construction, maintenance, or related field

OR

- Master's Degree in Engineering, Construction Project Management, or Concrete Industry Management
- 2 Years of demonstrated competency in planning, developing and/or constructing projects, or related field

Ideal Candidate

The Business Solutions Transportation Engineering Specialist 3 and 4 are naturally curious, detail-oriented, and solution-focused. They bring a collaborative spirit and a passion for applying their engineering mindset to strengthen systems and processes that support others' success. They thrive in a fast-changing environment, are comfortable translating complex ideas into clear, actionable information, and take pride in producing reliable work that others can trust. They value teamwork, share knowledge freely, and build strong relationships across diverse technical and business teams. Resilient and adaptable, they maintain a commitment to high standards while helping TDOT deliver projects that make a positive impact statewide.