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.

Traffic Operations & Permitting Transportation Engineering Specialist 3 & 4
Region Traffic Operations – Traffic Operations & Permitting Section
$80,784 - $88,860 annually

Job Overview

The Traffic Operations & Permitting Transportation Engineering Specialist 3 & 4 supports Project Teams, Technical Divisions, and Region Operations through the application of Department specifications, policies, technical guidance, and procedures into the design of traffic operations & permitting-related assets. This position collaborates with technical disciplines and Project Teams to prioritize safety and cohesiveness for traffic operations & permitting elements in support of TDOT's project delivery process. The Traffic Operations & Permitting Transportation Engineering Specialist 3 & 4 assists in ensuring that TDOT permitting policies, procedures, and technical guidance are effectively implemented in the review, issuance, and documentation of permits, supporting statewide efforts to maintain accurate and efficient permit processing.

The Traffic Operations & Permitting Transportation Engineering Specialist 3 & 4 implements integrated strategies that leverage technology to enhance TDOT's transportation network, improve performance and travel time reliability. This position collaborates with the Traffic Design Division, Asset Management Division, Region Transportation Management Centers (TMC), Highway Response, and Project Teams to apply proactive and predictive approaches for managing congestion and increasing safety. By optimizing the technological and operational integration of TDOT's infrastructure, the Traffic Operations & Permitting Transportation Engineering Specialist dynamically manages traffic conditions, deploying Active Traffic Management (ATM), Integrated Corridor Management (ICM), and Managed Lanes to enhance corridor efficiency and overall roadway performance.

The Traffic Operations & Permitting Transportation Engineering Specialist 3 & 4 collaborates with both internal and external stakeholders, including Project Teams, TDOT Divisions, Regions, and contractors to facilitate the transformation of critical project control activities into a quality deliverable that aligns with the goals of the Asset Management Division. This position must effectively articulate Traffic Operations and Permitting concepts through training, mentoring, and collaborating as part of a matrix organization. This position continuously evaluates performance indicators to implement acquired knowledge into Traffic Operations & Permitting elements, mitigating the Department's risk and increasing performance as part of fulfilling TDOT's strategic vision.

Essential Job Responsibilities of the Transportation Engineering Specialist 3 and 4 include:

Serve as a resource for Project Teams by applying the Project Delivery Network (PDN) to define the scope of work for traffic operations & permitting elements through all PDN stages while ensuring alignment with the project's scope, schedule, and budget. Strengthen Region Operations teams by providing technical expertise and support for traffic operations challenges, including traffic and safety studies that assess roadway congestion deficiencies, crash patterns, and safety enhancements. Assist and support Headquarter Divisions with permit encroachments and agreements assist TMCs with special event management, analyze developer-driven traffic signals and potential countermeasures, review median opening requests, and maintain corridor performance metrics, identify real-time congestion mitigation strategies. Ensure the reliable operation of managed lanes, optimizing safety and efficiency across TDOT's transportation network.

Integrate Quality Management into all deliverables for the purpose of proactively addressing plan errors, avoiding ROW delays, and minimizing contractor claims. Address and resolve all comments obtained from Quality Control reviews. Verify compliance with the Quality Management Guidelines regarding traffic operations & permitting elements, including safeguarding the performance of the transportation network; identifying operational and maintenance concerns that should be considered once the strategy is deployed; and mitigating construction delays and contractor claims.

Assist with operating and supporting ITS technologies, deploying emergency management strategies to mitigate primary and secondary crashes, and implementing Active Traffic Management (ATM) strategies to improve overall network performance. Provide guidance on complex work zone scenarios, address legislative requests related to operational concerns, and work with local jurisdictions to improve corridor efficiency for multimodal traffic operations. Collaborate on innovative strategies used as best practices for mitigating travel time delays, coordinating the management of corridors, and ensuring the interoperability of traffic operations technologies. Assist in implementing a tracking mechanism that ensures the traffic operations program, software, and systems are continually evolving to meet TDOT's operational needs. Promote the integration of advanced and innovative technologies such as connected and autonomous vehicles, smart traffic signals, artificial intelligence, and real-time data analytics tools into the Region's transportation network.

Assist in ensuring design decisions are prioritized and focused on safety and risk mitigation by presenting potential multimodal context-sensitive design concepts and implementing strategies that improve road safety, including the collaboration of roadway safety features with HQ Traffic Design, the development of work zone impact management strategies and traffic control concepts based on input from Region Traffic Operations, and the implementation of acquired knowledge.

Provide exceptional customer service to both internal and external customers by mentoring and providing technical guidance related to traffic operations & permitting needs, coordinating with other disciplines as part of a matrix organization, exercising effective listening skills, providing prompt responses, maintaining complete and accurate documentation, and communicating effectively.

Remain current and engaged on revisions to design codes, standards, and guidelines related to traffic operations elements, adopt new technologies and best practices that increase traffic throughput, reliability, and safety for TDOT's transportation network; assist in implementing policies and procedures related to traffic operations & permitting. Research national best practices to optimize designs, methodologies, and safety considerations.

Coordinate and mitigate potential areas of risk with Project Teams, Asset Management, Region Construction, Region Maintenance, and HQ Traffic Design throughout the project delivery process. Assist in ensuring traffic operations & permitting deliverables are consistent, predictable, and repeatable to maintain consistently high levels of achievement, mitigate risk, and establish a track record of success by implementing statewide policy, data collection, specifications, and direction. Utilize best practices and TDOT policy for the incorporation of maintenance and

operation of traffic elements, including access to acquired knowledge across the Regions. Monitor the effectiveness of implemented risk mitigation strategies and provide additional recommendations, as needed.

Additional Job Responsibilities for the Transportation Engineering Specialist 4 include:

Coordinate with the TDOT Technical Training Director and assist in the development and presentation of training that addresses traffic operations elements, including acquired knowledge, risk management, TDOT performance metrics, governing rules and processes, reporting procedures, and emerging technologies related to traffic operations design for the purpose of improving team performance, creating a stronger understanding of the traffic operations elements, inspiring new ideas, and developing skills.

Assist Project Teams by evaluating complex traffic operations studies, planning, and designs to determine potential incompatibility with other technical discipline requirements. Break down complex issues, including the identification of causes and their cause-and-effect relationships.

Assist with the Development of Scope of Services documents for consultant traffic operations studies and design services. Assist in the development of a Consultant Acquisition Plan (CAP) for Region Traffic Operations services and assist in the oversight of external partners by serving on technical review committees, 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 for consultants where usable feedback must be provided.

Verify compliance with the Quality Management Guidelines for traffic operations & permitting elements by ensuring the performance of the transportation network is safeguarded, operational and maintenance concerns are addressed, and construction delays and contractor claims are mitigated. Assist the Quality Teams by conducting reviews in alignment with the Project Delivery Network (PDN) and TDOT's Quality Assurance Guidelines while identifying potential constructability and maintenance concerns in proposed designs. Perform quality control reviews of traffic operations design elements, proactively addressing plan errors and constructability issues. Provide recommendations to mitigate risks and ensure that designs align with Asset Management goals, the Scope of Work, TDOT standards, and federal and state policies, ensuring all project-specific requirements are met.

Support both Region Preconstruction and Operations by safeguarding accessibility to the State Highway System through the review of permits such as highway entrance permits, utility permits, Outdoor Advertising (ODA), and Junkyard permits. Ensure all proposed improvements, including those improvements adjacent to TDOT's right of way, will have no negative impacts to the safety and maintenance of the State Highway System.

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
- 2 Years of demonstrated competency in developing and/or constructing transportation projects

OR

- Master's Degree in Engineering
- 1 year of demonstrated competency in developing and/or constructing transportation projects

Transportation Engineering Specialist 4:

- Bachelor’s Degree in Engineering
- 3 years of demonstrated competency in developing and/or constructing transportation projects

OR

- Master's Degree in Engineering
- 2 years of demonstrated competency in developing and/or constructing transportation projects

Ideal Candidate

The Traffic Operations and Permitting Transportation Engineering Specialist 3 & 4 has a proven track record in traffic engineering and Traffic Operations and Permitting, fostering collaboration and ensuring the successful execution of both simple and complex projects. Committed to public safety, they serve as strong communicators who bridge the gap between technical experts and stakeholders while mentoring and supporting team members in their growth and development. As a mobility leader, they are passionate about improving safety, reducing congestion, and enhancing travel reliability. Detail-oriented and adept at balancing multiple priorities, they apply problem-solving skills and industry best practices to assess challenges and implement solutions that improve project outcomes. Through effective communication, training, and mentorship, they make complex concepts understandable, working collaboratively with internal and external stakeholders to drive TDOT’s mission forward.