

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.



Drones and Advanced Air Mobility (AAM) Technical Specialist

Aeronautics Division – Drones and Advanced Air Mobility

\$61,200 – \$70,680 annually

Job Overview

The Drones and Advanced Air Mobility (AAM) Technical Specialist supports the implementation and coordination of drone and AAM projects, such as drones for delivery and alternative fuel aircraft, in alignment with TDOT's strategic goals. As a key technical contributor under the direction of the Statewide Technical Specialist, this position helps ensure projects adhere to applicable Tennessee and Federal Codes.

This position requires coordination with internal TDOT teams, local governments, external consultants, and regulatory agencies. The Technical Specialist plays a key role in integrating emerging drone and AAM technologies into planning and operational workflows, supporting quality assurance, compliance with Federal Aviation Administration (FAA) regulations, and contributing to the advancement of safe and innovative aviation solutions across the state.

Essential Job duties of Technical Specialist I, II, and III include:

Assist with project coordination and data gathering for drone and AAM initiatives to support planning, permitting, and project delivery. Participate in coordinating internal and external stakeholder activities for AAM and drone-related infrastructure and operations projects. Gather data such as airspace classifications, site logistics, and land use conditions to inform feasibility analyses and permitting pathways. Provide input to project plans by documenting site constraints, stakeholder input, and regulatory requirements that influence planning and implementation strategies.

Support FAA compliance efforts by referencing applicable Parts (including but not limited to 49, 91, 107, 135) and state aviation regulations in project planning. Monitor and interpret FAA regulations to ensure projects meet operational and regulatory requirements for different classes of drone and AAM operations. Assist in developing documentation and reviewing operational procedures that align with FAA Parts 49, 91, 107, 135, and others. Provide internal guidance for risk mitigation strategies related to flight operations, controlled airspace access, and integration with the national airspace system.

Collaborate internally to assist in reviewing conceptual designs, site feasibility, and cost estimates. Evaluate early-phase planning materials such as site layout plans, vertiport or drone port configurations, and multi-modal access. Assist in performing technical reviews to assess design suitability for advanced aircraft systems and support equipment. Participate in workshops and design meetings, contributing

subject matter expertise in AAM system requirements, site considerations, and operational safety needs.

Engage in quality assurance processes by reviewing technical deliverables and participating in necessary review processes. Assist in reviewing design submittals, environmental documentation, and construction deliverables for conformance with TDOT standards and applicable AAM specifications. Support the quality assurance process by completing checklists, logging review comments, and tracking resolution status to reduce the likelihood of errors, omissions, and claims during construction or operation phases.

Assist in tracking scope, schedule, and budget performance for advanced aviation projects and escalate concerns to supervisors as needed. Use project management tools and templates to monitor project progress across multiple workflows. Assist with schedule updates, budget tracking, and scope verification efforts in collaboration with the Statewide Technical Specialist and Project Manager. Identify deviations from baseline plans and document corrective actions or escalation needs based on impact analysis.

Assist in coordinating with local agencies, developers, and regional TDOT offices to communicate project requirements and assist with public-facing efforts. Serve as a technical liaison to city and county agencies, developers, airport operators, and TDOT regional staff to explain AAM program goals, project scope, and development timelines. Participate in public information meetings, workshops, and interagency briefings. Assist with translating technical content into accessible formats to support stakeholder participation and community education.

Support the development and implementation of drone and AAM operational strategies, including testing and pilot project participation. Contribute to the planning and execution of field tests and pilot demonstrations, such as Beyond Visual Line of Sight (BVLOS) trials, emergency response support, or cargo delivery operations. Assist in developing test protocols, documenting procedures, and evaluating operational data for performance validation and regulatory engagement. Coordinate logistics for equipment deployment, site access, and data collection.

Maintain awareness of evolving technologies and contribute to documenting lessons learned, best practices, and regulatory updates. Track advancements in drone and AAM platforms, including automation, battery technology, aerial traffic management integration, and electric aerial vehicle development. Contribute to TDOT's internal knowledge base by compiling case studies, summarizing national peer activities, and participating in cross-agency working groups. Assist in updating internal guidance and training materials to reflect current industry practices.

Support the development and refinement of TDOT's statewide drone and AAM policies, standard operating procedures, and technical guidance documents, contributing lessons learned, emerging technologies, and national best practices.

Additional Job duties for the Technical Specialist II and III include:

Serve as a technical liaison with local governments, the FAA, developers, and industry partners, representing TDOT's Drones and AAM program in working groups, stakeholder meetings, or external presentations. Facilitate interagency coordination and resolve technical or regulatory challenges.

Mentor staff and regional personnel by providing technical training, reviewing deliverables, and supporting knowledge-sharing on drone operations, regulatory compliance, and project planning.

Provide technical and administrative support in consultant selection processes, invoice reviews, and contract management coordination. Assist in the preparation of scopes of work, evaluation criteria, and Request for Proposal (RFP) materials for consultant procurement related to drone and AAM services. Participate in selection committee activities, review consultant performance documentation, and assist in tracking contract deliverables. Help verify invoice accuracy, ensuring services align with contractual terms and budget allocations.

Assist in implementing pilot programs and field demonstrations, including preparing safety documentation, coordinating logistics, developing evaluation criteria, and generating technical reports or post-mission summaries.

Represent TDOT in various professional capacities, promoting Tennessee's innovation efforts and contributing to broader transportation modernization initiatives.

Assist in identifying and pursuing state and federal grant opportunities that advance drone and AAM readiness by assembling technical components of applications, including narratives, safety cases, and concept-of-operations materials.

Additional Job Duties for the Technical Specialist III include:

Lead the development and implementation of statewide drone and AAM strategies, serve as a technical resource in coordination with the FAA, American Association of State Highway and Transportation Officials (AASHTO), National Association of State Aviation Officials (NASAO), and industry partners.

Review and approve advanced operations and design deliverables, including BVLOS use cases, AAM infrastructure configurations, and complex risk assessments.

Direct pilot programs, research partnerships, and funding pursuits by preparing technical components of federal and state grant applications and overseeing consultant work.

Oversee and mentor Technical Specialists I and II, providing training, reviewing deliverables, and guiding the advancement of program standards by cultivating staff skills and proficiency.

Qualifications

TDOT Technical Specialist I

- Bachelor's Degree

TDOT Technical Specialist II

- Bachelor's Degree
- 1 year of demonstrated competency in aviation management, aviation planning, transportation management, or a related field.

TDOT Technical Specialist III

- Bachelor's Degree
- 2 years of demonstrated competency in aviation management, aviation planning, transportation management, or a related field.

The Tennessee Department of Transportation reserves the sole right in determining the level of position based on the applicant's work experience, education, skill level, and all other appropriate factors, including business needs. Within 6 months of hire, employees must demonstrate successful mastery of corresponding work competencies and skill blocks of the Technical Specialist Competency Program for the level of worker for which they were hired. If

skills and competencies are not met during that period, the employee can be demoted to the level of worker for which he/she is qualified.

Ideal Candidate

The Drones and AAM Technical Specialist I, II, or III possesses a proactive and technically curious mindset with foundational knowledge of drones, airspace, and aviation systems. They are comfortable working in a dynamic environment with multiple stakeholders and are committed to advancing safe, innovative, and collaborative approaches to integrating drones and AAM technologies into the state's transportation network. They are committed to fostering collaboration and promoting transparency and thrive in a dynamic, team-oriented environment. Above all, they maintain professionalism related to federal and state standards for drones and AAM and are committed to advancing awareness of safe practices for others in the industry.