

## 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.



### **Value Engineering Statewide Technical Specialist**

Technical Training and Production Support Division – Production Support Section  
Nashville, TN  
\$99,864 annually

#### **Job Overview**

The Value Engineering Statewide Technical Specialist implements the Value Engineering (VE) Process in alignment with US Code 23 CFR Part 627 as part of a carefully managed, systematic approach for achieving the required safety, performance, and reliability of a project at the lowest life-cycle cost. This position is responsible for collaborating with internal stakeholders, including Project Management, Asset Management, and other TDOT Divisions, as part of a matrix organization, to facilitate a multicriteria decision-making approach used to identify and prioritize cost reduction solutions while maintaining value as part of delivering the Department's Work Program.

This position is responsible for identifying those projects that qualify for Value Engineering and assembling a team of individuals who will be responsible for driving innovation and optimizing approaches to the design, construction, and maintenance of projects. The Value Engineering Statewide Technical Specialist is responsible for maintaining documentation and data analytics associated with VE studies and for collaborating with Region Quality teams responsible for implementing acquired knowledge.

The Statewide Technical Specialist ensures Department policies, technical guidance, procedures, software, and systems related to VE studies are current and applied consistently statewide. This position must effectively articulate data and technical concepts through training, mentoring, and collaborating as part of a matrix organization.

#### **Essential Job Responsibilities**

Support Project Teams through Value Engineering for applicable projects. Coordinate with the Project Manager and Design Lead in identifying projects that meet the project selection criteria, facilitating the Value Engineering Analysis in alignment with the Project Delivery Network (PDN), assembling a multidisciplinary team with members from key project disciplines, implementing the Value Engineering Job Plan in alignment with 23 CFR Part 627.3(f), assembling the VE Recommendations Report, and assembling and distributing the VE Workbook.

Implement US Code 23 CFR Part 627.9 and include an evaluation framework that provides a consistent and objective method of evaluating proposed solutions. Define

concerns, generate ideas, examine project potential, and maximize value. Oversee the implementation of all accepted VE recommendations and review the final PS&E package to ensure all accepted VE recommendations have been implemented.

Measure the effectiveness of the VE process related to cost reduction and/or increased value. Identify those project elements that were either modified or eliminated due to added costs for which there was no proportional value to the overall function. Provide an annual report to FHWA summarizing the results of the VE analyses and coordinate with HQ Construction to fulfill any Program Performance Data requested by FHWA.

Implement an integrated approach to Value Engineering that emphasizes the vision of Asset Management for each project. Collaborate with Project Managers and technical disciplines as part of a matrix organization to create VE teams tailored to the critical elements of each project, establish challenging targets for improvement, and develop evaluation factors that can be measured.

Remain current on national best practices, design standards, progressive data collection methods, project delivery, federal regulations, and Tennessee Statutes related to transportation design, construction, maintenance, and Value Engineering. Apply innovative technologies that reduce repetition and effectively manage time, including FAST, value index, and Pareto Law. Participate in regional and working groups, research, committees, and training opportunities related to initiatives that improve TDOT's project delivery through Value Engineering.

Provide exceptional customer service to Project Teams and Value Engineering Teams through the systematic facilitation of value engineering studies that includes preparing the VE Team with all applicable project documentation, design criteria, and feedback from the public. Ensure the materials provided are quantitative and accommodate effective problem-solving, evaluation, and solution development. Provide mentoring and technical guidance statewide, exercise effective listening skills, provide prompt responses, maintain complete and accurate documentation, and communicate effectively.

Collaborate with the Production Support Manager to assist the TDOT Technical Training Director in the development of training, tools, and guidance related to VE training elements that address acquired knowledge, including technical elements and emerging technologies related to VE for the purpose of driving consistency statewide, creating a stronger understanding of cost estimating elements as they relate to the transportation industry, inspiring new ideas, and developing skills.

Assist in ensuring Value Engineering deliverables are consistent, predictable, and repeatable to provide consistently high levels of achievement and an established track record of success.

### **Qualifications**

- Bachelor's degree in:
  - Engineering: Environmental, Traffic, Civil, or Transportation
  - Business Administration, Construction Management, Public Administration, Public Policy,
  - Environmental: Natural, Physical, Social, or Environmental Sciences; Cultural Resources; Historic Preservation, History, or Anthropology
- 8 years of demonstrated competency in Construction, Design, Planning, Traffic Operations, Maintenance, Environmental, or related field.

### **OR**

- Master's degree in:
  - Engineering: Environmental, Traffic, Civil, or Transportation
  - Business Administration, Construction Management, Public Administration, Public Policy,

- Environmental: Natural, Physical, Social, or Environmental Sciences; Cultural Resources; Historic Preservation, History, or Anthropology
- 7 years of demonstrated competency in Construction, Design, Planning, Traffic Operations, Maintenance, Environmental, or related field.

### **Ideal Candidate**

The Statewide Value Engineering Technical Specialist brings extensive knowledge of value engineering principles, methods, and best practices. They are meticulous in their approach, ensuring that value engineering principles are effectively applied to projects. The Statewide Value Engineering Technical Specialist has a passion for enhancing project efficiency. They are dedicated to improving the quality and performance of infrastructure projects across TDOT. The Statewide Value Engineering Technical Specialist excels in fostering collaborative relationships with TDOT teams, local agencies, and project stakeholders. With their strong analytical and problem-solving skills and a keen eye for detail, they are well-equipped to tackle any challenge.