

NATIONAL TRANSPORTATION CAREER PATHWAYS INITIATIVE ATTRACTING NEXT GEN TRANSPORTATION OPERATIONS PROFESSIONALS

THE PROBLEM: FUTURE OF THE TRANSPORTATION OPERATIONS WORKFORCE

An overarching theme in transportation operations is the necessity of a systems approach and ever-changing impacts of technological advances. In the public sector, the rise of Intelligent Transportation Systems (ITS) began rapidly changing the knowledge, skills, and abilities, required of its workforce. Transformative technologies dominate all areas of transportation operations, and occupy a key focus for companies whether from the standpoint of impact on efficiencies and the way business is conducted or the challenges in attracting and retaining an appropriately skilled workforce. It is crucial to examine how we are preparing the workforce of the future to deal with disruptive/ transformative technologies and rapidly changing demands.

Transportation operations of the future requires workers who are:

- Tech-savvy, flexible, responsive, and adaptive to an ever-changing set of technological tools and innovations;
- Effective communicators, particularly with a wide range of stakeholders;
- Knowledgeable of system infrastructure design, connectivity, and interoperability;
- Equipped with data acquisition, management, analysis, modeling, and decision-making skillsets.

OUR SOLUTION: NATIONAL TRANSPORTATION CAREER PATHWAYS INITIATIVE

The Southeast Transportation Workforce Center (SETWC) identified lack of awareness of transportation operations careers as one of the most significant challenges to attracting the next generation workforce. As part of the National Transportation Career Pathways Initiative, SETWC developed a strategic action plan with targeted initiatives to increase awareness and interest in transportation operations careers within traffic, transit and freight contexts within the following occupational clusters: operations management, operations engineering, operations research, and operations technology. Our approach includes two key initiatives:

Interactive Transportation Operations Career Pathway Web Portal

An engaging online resource that allows users to explore a variety of priority operations career pathways through interactive investigation of required skills, training, and education that features a diverse group of industry professionals in a series of Transportation Spotlights.

Transportation Operations Challenge Projects

A collaborative industry-academia approach to creating resources that demonstrate transportation operations careers through developing exciting, interdisciplinary, real-world challenge projects that are relevant to curriculum and can be readily deployed within K-12, technical schools, community colleges, and 4-year universities.



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OUR PARTNERS

Collaborative partnerships between academia and industry are essential for the success of these initiatives. While several organizations are already committed to a leading role in this effort, we will continually engage new partners to increase impact and ensure products reflect a national perspective.

Thank you to our lead partners!



PROGRAM OUTCOMES

Interactive Transportation Operations Career Pathway Web Portal

- Online, interactive career pathways for all four operations occupational clusters
- Minimum of 5 spotlight profiles developed per occupation

Transportation Operations Challenge Projects

- 15 Challenge Projects developed for high school and post-secondary audiences
- Minimum of 300 students and 50 academic industry partners engaged during project period

PHASED ROLLOUT

