

**Project title:**

Interdisciplinary Transportation Education and Workforce Development Modules.

**Principal investigator:**

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**Project description:**

The expanding transportation industry in the U. S. has a growing need for professionals qualified to manage advanced transportation systems. With up to 50% of the current workforce expected to retire in the next ten years, the industry faces a challenge of finding replacements. As this issue comes to the forefront there is an increasing awareness that there is a dearth of minority professionals in transportation technical and policy-making positions. Although often overlooked, education and training of future professionals is critical in view of the projected shortage of skills to meet transportation's increasing needs. The overall goal of the proposed Interdisciplinary Transportation Education and Workforce Development Modules (ITEWDM) is to attract and educate the next generation of transportation professionals through well-designed program of coursework, guest lectures, field trips, case studies, and experiential learning that reinforces classroom knowledge. The modular approach follows the design of the well recognized *Structured Training* system of the Louisiana Model for Transportation Workforce Development that offers varied education and training options to suit an individual's position. Students will have flexibility in selecting academic or training modules from ITEWDM that suit their career goals. The transportation education modules will enhance existing programs offered by various departments within the University by incorporating intermodal transportation concepts into courses. Students will concurrently work alongside faculty researchers on related research projects. The partnerships with the transportation industry (please refer to supporting letters) will offer students experiential learning through co-ops and internships similar to the *Work-Based Learning* component of the workforce development needs in the Australian Transport Industry.

The ITEWDM will be designed to offer curriculum and delivery systems for interdisciplinary transportation programs that include courses, guest lectures by transportation professionals, field trips to transportation organizations, case studies on freight and passenger mobility, and internships in intermodal transportation operations. The distinctive feature of the education module is its interdisciplinary approach covering technological and management issues that will offer students from other majors an opportunity to enhance transportation skills. Through prior funding from the U. S. DOT, the School of Business initiated transportation education and training programs that prepare students for management careers in business organizations. The Department of Aviation prepares students for a variety of careers in Aviation Science and Management. These and other transportation programs will be revised and integrated to offer an interdisciplinary education curriculum with emphasis in intermodal transportation. The proposed ITEWDM cover sections of education and workforce development allowing students to select modules to suit their career plans.