

## GETTING UP TO SPEED WITH MULTIMODAL PLANNING

*A NITC education project developed a state-of-the-practice multimodal planning curriculum for university graduate courses in transportation.*

### The Issue

Integrated multimodal transportation and land use planning is critical to advancing mode choice, public health and safety, and livability objectives. Multimodal planning—planning for walking, cycling and transit in addition to auto travel—is becoming increasingly prioritized as communities across the U.S. redefine their planning practices. In response, university graduate urban planning and engineering programs are beginning to devote more courses to multimodal planning and sustainable transportation. As with any fast-developing discipline, the state of the practice sometimes outpaces existing curricula and training materials.

To help address this need, NITC researcher Kristine Williams of the University of South Florida (USF) Center for Urban Transportation Research (CUTR) developed a curriculum for a course on multimodal transportation planning and its role in advancing livability and related objectives. The course curriculum developed under this project was designed for integration into university urban planning programs, but is also relevant to graduate-level engineering and architecture/community design programs. The materials can be used in university settings or as refresher training for planners in the field.

### The Research

The urban and regional planning department at USF asked CUTR researchers to develop a course on multimodal transportation planning, and the funding from NITC allowed Williams and her team to create and advance a flexible, multi-purpose curriculum.

### THE ISSUE

Multimodal planning is a fast-growing field and university course materials are often derived from an older, auto-centric system.

### THE RESEARCH

NITC researchers created a curriculum that offers:

- An overview of multimodal planning and livability objectives;
- Modules that let students practice developing multimodal plans;
- Comprehensive course materials including lesson plans, grading rubrics and applied methods.

### IMPLICATIONS

This curriculum can assist students and planners alike in keeping up with new developments in the field of multimodal planning.

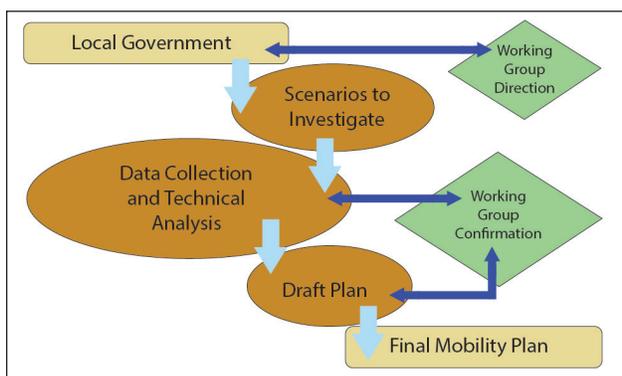
The project had two phases. In the first phase Williams and her team developed an introductory course to provide an overview of multimodal transportation planning and its role in advancing livability and related objectives. The second phase built on the first with advanced applications to provide practical experience. The modules guide students through the process of developing a multimodal transportation plan, beginning with doing the initial data collection and inventory and continuing through analysis, visioning and priority setting. By evaluating an existing multimodal plan and proposing improvements, students gain an understanding of the state of the practice as well as critical analysis ability.

The curriculum was developed through an evaluation of published literature and guidebooks on multimodal transportation planning practice, and comprehensive plans that include robust multimodal transportation elements. The modules come from training materials created by CUTR for local governments and agencies, and can also offer valuable assistance to communities who do their planning work in-house.

### Implications

Until 2015, the urban and regional planning program at USF had no transportation courses. Urban planning students who wanted to study transportation had to do so through the engineering program. The multimodal transportation planning course was first offered at USF in the spring of 2015. The focus of the course is primarily on the local government level, with some aspects relating and tying in to regional transportation planning.

The development of this curriculum allowed USF to begin offering a graduate certificate in sustainable transportation for the first time in the spring of 2016. The certificate program is multi-disciplinary and draws students from various



#### Multimodal Transportation Best Practices

This flow chart, developed by the Florida DOT and included as required reading in the System Analysis Methods And Tools module of the Phase 2 curriculum, illustrates the mobility planning process.

fields including planning, engineering and public administration.

The course is designed to familiarize students with the application of a multimodal network and systems approach to planning that integrates land use with transportation. Students learn how to prepare a vision statement and identify strategic areas of improvement, how to work with selected system analysis tools and methods that are used in multimodal planning, how to develop a working vision map and context sensitive thoroughfare plan, and how to establish appropriate goals, measurable objectives and strategies to advance the multimodal plan. For small communities who may not have the means to hire outside consultants, the training materials can also provide technical assistance to local planners and policymakers.

### PROJECT INFORMATION

**TITLE:** Phase 2 Multimodal Transportation Planning Applications Curriculum for Urban Planning Programs

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