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Project Title – Development of Pedestrian and Bicycle Transportation Course Modules
University – University of Florida
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Funding Source(s) and Amounts Provided (by each agency or organization)
Total Project Cost – $51,500
Agency ID or Contract Number – 2012-028S
Start and End Dates – 7/1/12–2/13/14
Brief Description of Research Project – The aim of this project is to develop and evaluate three short teaching modules on planning and design for pedestrians and bicyclists for undergraduate students. A student exercise will be created to engage the students in applying and practicing the concepts taught in the lectures. Training the next generation of planners and engineers to consider pedestrian and bicyclist needs is critical to addressing safety and livability concerns and creating more balanced, integrated, and efficient transportation systems.
Describe Implementation of Research Outcomes (or why not implemented) – Three 50-minute teaching modules were developed on planning and design for pedestrians and bicyclists for undergraduate students. The lessons, which cover Planning for Pedestrians and Bicycles, Pedestrian and Bicycle Facility Design, and Pedestrian and Bicycle Data and Performance, are ideally suited to be integrated into an existing course, such as the first or introductory course in transportation engineering. The modules will be made available to the public for download, and an instructor can choose between one, two, or all three modules. Each module can be taught in 1 to 1.25 hours, with later modules building on earlier module, to train the next generation of planners and engineers to consider pedestrian and bicyclist needs in addressing safety and livability concerns and creating more balanced, integrated, and efficient transportation systems. The modules can be downloaded from: http://www.pedbikeinfo.org/training/courses_short.cfm
Place Any Photos Here:

Module 1:

Concepts	Tools
Transportation plans	Pedestrian Road Safety Audit Guidelines
Strategic importance of pedestrian and bicycle as transportation modes	Highway Safety Manual
Connection between pedestrians and bicycles and the built environment (roads, vehicles, design)	Connection of plans with other traffic and development management tools
Process	**Context**
Plan-making multimodal transportation systems	Livability
Implementation of transportation plans	Benefits of multi-modalism: health, economy, environment, mobility
Funding for transportation plans	Policies and plans to support pedestrian and bicycle facilities

Module 2:

Concepts	Tools
Facility typology	AASHTO ped & bike guide
Geometric design for lane, intersection, island, sidewalks, grading, and traffic calming treatments	MUTCD
Complete streets and context sensitive design	ADA Guidelines
Special treatments for ped-bikes	Highway Capacity Manual
	Context
Process	Complete Streets policies
Facility design process	Traffic calming
	Perceived safety and mode choice

Module 3:

Concepts	Tools
Performance characteristics of peds and bikes	PB-LOS software, Transit LOS Manual
Process	Sources of pedestrian data
Identify seasonal and daily patterns	Technical Resources
Collecting primary data	**Context**
Pedestrian and bicycle LOS	Non-motorized pilot projects (US)
	Town demonstration program (UK)
	Geographic levels/scales of ped/bike plans and processes

Evaluation of downloaded modules:

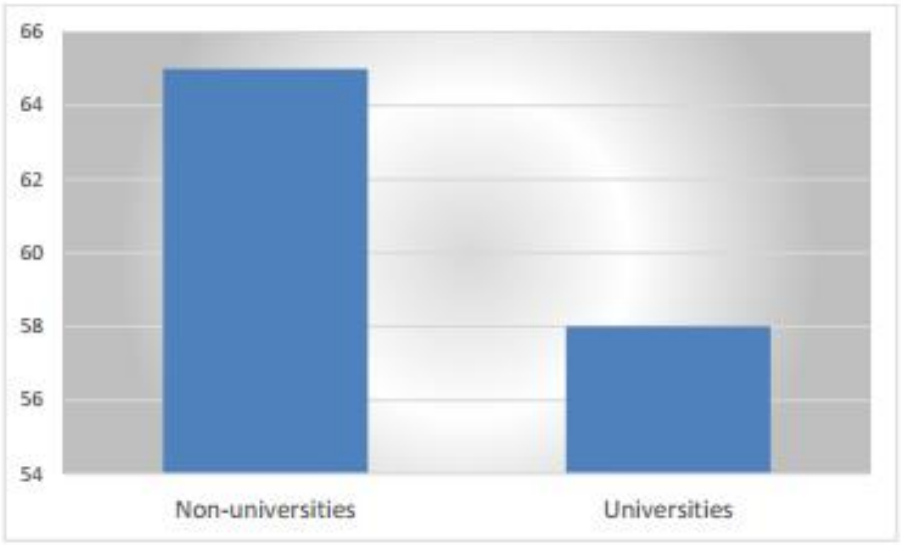

Figure 1. Affiliation of individuals downloading the modules (N=123)

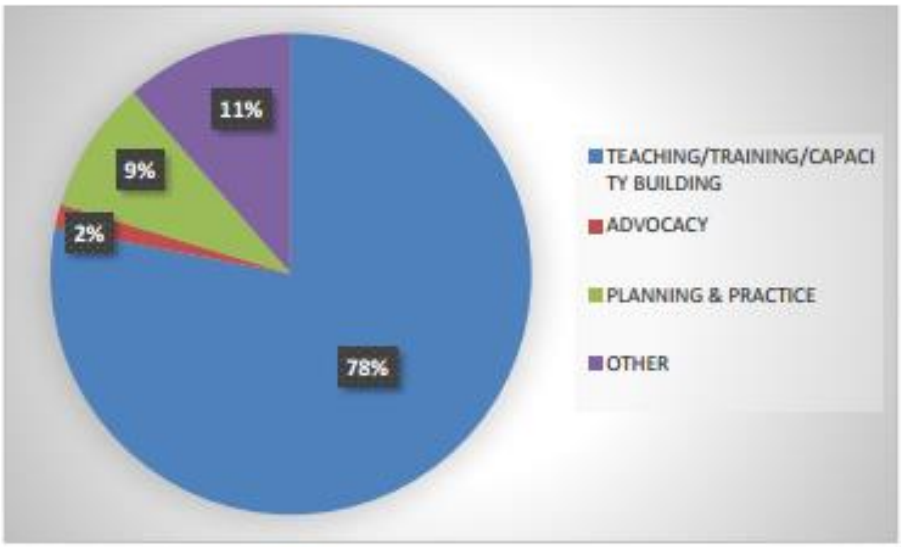

Figure 2. Stated use for the modules downloaded (N=123)

Impact/Benefits of Implementation (actual, not anticipated) - In spring 2013, all modules were tested and evaluated by 43 students at Auburn University enrolled in the junior-level introductory course, Transportation Engineering. Most feedback received focused on shortening the material to fit the 50-minute period and to better connect the tools to the concepts. Students were enthusiastic about the topic and realized it was an important addition to their educational experience. Materials were updated and improved based on this feedback. Since being made available to the public in August 2013, the materials were downloaded more than 120 times by individuals affiliated with educational and non-educational institutions (as of February 2014). Although the main use of the modules is educational and training activities, they have also been used for advocacy and practice.
Course Website: http://www.pedbikeinfo.org/training/courses_short.cfm Final Report on STRIDE: http://www.stride.ce.ufl.edu/uploads/docs/STRIDE_final_report_bikeped_modules_2014.pdf Final Report on TRB/TRID: https://trid.trb.org/view/2014/M/1314848