SPR PROJECT DESCRIPTION

PROJECT NUMBER: 00461


PRINCIPAL INVESTIGATORS:
John McFadden
Department of Civil & Environmental Engineering
The University of Alabama
Box 870205
Tuscaloosa, AL 35487-0205
(205) 348-0747
jmcfadden@coe.eng.ua.edu

Daniel Turner
Department of Civil & Environmental Engineering
The University of Alabama
Box 870205
Tuscaloosa, AL 35487-0205
(205) 348-9925
dturner@coe.eng.ua.edu

PROJECT OBJECTIVE:
The goal of this UTCA project is to develop a short course that will provide an overview of the 2000 Highway Capacity Manual (HCM) making special note of the changes from the 1994 HCM and the 1994 updates. The short course will be presented for transportation professionals in Alabama to provide them with a timely explanation of the existing and new materials.

PROJECT ABSTRACT:
In October 2000 the latest version of the HCM was made available to transportation professionals. It included changes from the 1994 HCM (and the 1997 update to the HCM). It includes the following materials:
Part I- Principles of Capacity: introduction, concepts and applications, traffic characteristics.
Part II- Freeways: basic freeway sections, weaving areas, ramps and ramp junctions, freeway systems
Part III- Rural and Suburban Highways: multilane rural and suburban highways, two-lane highways
Part IV- Urban Streets: signalized intersections, unsignalized intersections, urban and suburban arterials, transit, pedestrians, bicycles.

Transportation professionals in Alabama will need training related to these changes. This project will involve the development of a short course for transportation officials. The course will
encompass one eight-hour day, and will initially be offered at four Alabama Department of Transportation offices in the State. The course will be geared toward transportation engineers, and will emphasize the content included in the 2000 HCM. Direct applications will be used in the classroom to ensure full working knowledge and understanding of this reference.

PROJECT TASK DESCRIPTIONS:
1) Develop the course syllabi and a course teaching schedule in consultation with the Alabama Department of Transportation and industry representatives.
2) Develop course brochure and mailing list.
3) Prepare and reproduce course materials with the assistance of graduate and undergraduate students.
4) Present course, with supplemental handouts.
5) Evaluate course, and develop a plan for subsequent course offerings to benefit Alabama transportation professionals.

MILESTONES AND DATES:
Jan – Mar 2001: start initial consultations for the course development
Mar 2001: mail course brochure
Apr – May 2001: prepare course materials
May 2001: anticipated date for the course to be offered

TOTAL BUDGET:
Six-month project: ALDOT (SPR funds) $29,797; total budget $45,562.

STUDENT INVOLVEMENT:
A graduate student will work on this project, especially on the development of the short course.

RELATIONSHIP TO OTHER RESEARCH PROJECTS:
This project will be developed and offered in a manner similar to other UTCA technology transfer projects; however, no other UTCA research projects been identified that are similar to this topic.

TECHNOLOGY TRANSFER ACTIVITIES:
This project is a technology transfer project. Seminars will be given to ALDOT officials as part of the deliverable for this project.

POTENTIAL BENEFITS OF THE PROJECT:
This project has the potential to provide transportation professionals in Alabama with a timely explanation of the existing and new materials.

TRB KEYWORDS:
Highway capacity manual, traffic characteristics, signalized intersections, unsignalized intersections, transit capacity.