UTC PROJECT DESCRIPTION

PROJECT NUMBER:
00202

PROJECT TITLE:
Transfer of Transportation Management and Safety Technologies

PRINCIPAL INVESTIGATORS:
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PROJECT OBJECTIVES:
• To develop a pilot program for Technology Transfer of UTCA research results
• To develop a strategic plan for UTCA Technology Transfer short courses
• To launch the UTCA Technology Transfer program with an initial offering of three strong courses
These objectives will improve management, economy, and performance of constructed transportation facilities through transfer of construction materials technology.

PROJECT ABSTRACT:
Three continuing education courses for transportation professionals will be developed. Each course will be one day long and will initially be offered at the University of Alabama in Birmingham through its School of Engineering’s Engineering Professional
Development (EPD) program. Subsequent offerings may either travel to different locations in Alabama or offer the course through a distance learning technology such as the Intercampus Interactive Television System (IITS). The courses will be geared toward engineers and managers and will emphasize design, performance, specifications, quality control, and economic considerations. Course development and recruiting will focus on state department of transportation personnel, city and country engineers, designers, construction company personnel, estimators, testing company personnel, researchers, and students. Courses offered will be “Concrete Technology for Transportation Professionals”, “Uses of Aggregates in Transportation”, and “Intelligent Transportation Systems”.

PROJECT TASK DESCRIPTIONS, MILESTONES AND DATES:
1. Project Startup – January 1, 2000
2. Develop course descriptions, materials, and brochure – January-April, 2000
3. Mail course brochure – May 1, 2000
4. Offer first courses – June-September, 2000
5. Faculty questionnaire to develop future course offerings – October-November, 2000

TOTAL BUDGET:
One-year project: UTCA $50,000; total budget $100,000.

STUDENT INVOLVEMENT:
Students will be encouraged to take these courses at reduced cost, and student labor involved in course development and preparation of course materials will provide financial support for students.

RELATIONSHIP TO OTHER RESEARCH PROJECTS:
This project will include the results of UTCA Project 99247, “Transfer of Transportation Materials Technology for Concrete Pavements”.

TECHNOLOGY TRANSFER ACTIVITIES:
The principal focus of this project is technology transfer. This project will develop a minimum of three short course seminars for UTCA.

POTENTIAL BENEFITS OF THE PROJECT:
By utilizing the latest technologies for construction materials, transportation professionals will be able to improve the durability and economy of Alabama’s constructed facilities. Technology transfer projects of this nature will involve more engineering students and professionals in Alabama in transportation. Transferring the latest materials technology to transportation professionals in Alabama will substantially enhance the management of transportation systems both during construction and in service. Furthermore, the management of highway infrastructure is of critical importance to the economic performance of Alabama in the southeastern U.S. State and local transportation agencies have significant investments in concrete pavement infrastructure. Sound management of this investment requires information about the expected
performance of existing facilities and about design details that will improve performance of new facilities. This study will improve the management and maintenance of concrete highway pavements in Alabama and southeastern U.S.

TRB KEYWORDS:
Management, safety, ITS, concrete, aggregate, testing, specifications, quality control, pavements, technology transfer.