

Annual Technology Transfer Program

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16. Abstract <p>This report summarizes the activities conducted by the University Transportation Center for Alabama Technology Transfer Program during 2006. The project directly related to the technology transfer foundations developed under <i>UTCA Project 03217 - UTCA Technology Transfer Program</i> and continued under <i>Projects 04313 and 05205 - UTCA Annual Technology Transfer Program Continuation</i>. This year focused on expanding the influence of the UTCA beyond Alabama.</p> <p>During 2006, the program hosted a meeting of the Alabama Section of the Institute of Transportation Engineers (ALSITE) attended by more than 70 participants. The events consisted of half-day program of three technical programs followed by a keynote address by the Federal Highway Administration on its <i>Traffic Analysis Toolbox</i>. UTCA assisted in the promotion of a training course entitled “<i>Implementation of FHWA Culvert Management System</i>” in March 2006 and published an issue of the research brief, <i>The UTCA Signal</i>. A Research Symposium- Transportation Career Fair was held in November 2006. Representatives from four private consulting firms and the Alabama Department of Transportation had booths at the Career Fair. Students interacted with these representatives and, in one case, an interview was held for an internship position. The symposium also hosted a seminar on Dynamic Traffic Assignment (DTA). The event was attended by more than 60 individuals representing faculty and students from the three UTCA campuses (UA, UAB, and UAH) as well as transportation agencies and private consulting firms from around the State.</p> <p>Recommendations are offered to facilitate technology transfer at UTCA as the program transitions to an administrative activity.</p>					
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Table of Contents

Topic	Page
Table of Contents	iii
List of Tables	iv
List of Figures	iv
Executive Summary	v
1.0 Introduction.....	1
2.0 Outcomes	2
3.0. Recommendations.....	5
4.0 Acknowledgments.....	6

List of Tables

Table 2-1 Program from the 2006 UTCA Research Symposium and Career Fair	3
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List of Figures

Figure 2-1 Dynamic traffic assignment seminar announcement	4
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Executive Summary

This report summarizes the activities conducted by the University Transportation Center for Alabama Technology Transfer Program during 2006. The project directly related to the technology transfer foundations developed under UTCA *Project 03217 - UTCA Technology Transfer Program*, and continued under UTCA *Projects 04313 and 0520 - UTCA Annual Technology Transfer Program Continuation*. The 2006 year focused on expanding the influence of the UTCA beyond Alabama.

During 2006, the program hosted a meeting of the Alabama Section of the Institute of Transportation Engineers attended by more than 70 participants. The event consisted of a half-day program of three technical presentations followed by a Federal Highway Administration (FHA) presentation on its *Traffic Analysis Toolbox*. UTCA assisted in the promotion of a training course entitled “Implementation of FHWA Culvert Management System” in March 2006 and published an issue of the research brief, *The UTCA Signal*. A Research Symposium and Transportation Career Fair were held in November 2006. Representatives from four private consulting firms and the Alabama Department of Transportation had booths at the Career Fair. Students interacted with these representatives and, in one case, an interview was held for an internship position. The symposium also hosted a seminar on Dynamic Traffic Assignment (DTA). The event was attended by more than 60 individuals representing faculty and students from the three UTCA campuses (UA, UAB, and UAH) as well as transportation agencies and private consulting firms from around the State.

Recommendations are offered to facilitate technology transfer at UTCA as the program transitions to an administrative activity.

Section 1

Introduction

The project directly related to the technology transfer foundations developed under UTCA *Project 03217 - UTCA Technology Transfer Program* and continued under UTCA *Projects 04313 and 05205 - UTCA Annual Technology Transfer Program Continuation*. The 2006 year focused on expanding the influence of the UTCA beyond Alabama.

Section 2

Outcomes

During the first half of 2006, the UTCA Technology Transfer Program hosted a meeting of the Alabama Section of the Institute of Transportation Engineers (ALSITE). The event consisted of a half-day program of three technical presentations followed by a Federal Highway Administration (FHA) presentation on its *Traffic Analysis Toolbox*. The event was attended by more than 70 participants including 25 students from among the three UTCA campuses.

UTCA assisted in the promotion of a training course entitled “Implementation of FHWA Culvert Management System” in March 2006. The course was a result of UTCA *Project 05209* conducted on the UAB campus. As a result of this course, UTCA issued more than 25 certificates for professional development hours (PDHs).

In March, the Technology Transfer Program held a meeting of its Steering Committee. The purpose of the meeting was to “retool” the annual research symposium scheduled for November. As a result of the meeting and the input from the committee, efforts are underway to make the 2006 research symposium a flagship event that will promote UTCA and its research to audiences beyond Alabama.

An issue of the research brief, *The UTCA Signal*, was published and distributed electronically to both the UTCA and ALSITE e-mail lists. It was also published on the UTCA website. The issue showcased homeland security-related projects conducted under UTCA. It will also describe programmatic relationships UTCA has formed with other Alabama centers involved in safety and security research in an effort to raise the visibility of this type of collaboration. Additional articles described UTCA research into freeway ramp metering (*Project 04203*), using the internet to collect travel behavior data (*Project 05302*), as well as the current activities of the ITS/TMC laboratory developed under *Project 04116*.

A Research Symposium-Transportation Career Fair was held in November 2006. The event was publicized by the Alabama Section of the Institute of Transportation Engineers. Table 2-1 shows the event program. The Transportation Career Fair was held in conjunction with the poster session of student research. Representatives from four private consulting firms and the Alabama Department of Transportation had booths at the career fair. Students interacted with these representatives and, in one case, an interview was held for an internship position.

The event was attended by more than 60 individuals representing faculty and students from the three UTCA campuses (UA, UAB, and UAH) as well as transportation agencies and private consulting firms from around the State.

The Symposium consisted of a half-day technical program comprised of six presentations as listed in the table below. Four PDHs were awarded for attending the Research Symposium, and an additional three PDHs were awarded for attending the DTA seminar. The announcement for the DTA seminar is shown in Figure 2-1.

Table 2-1. Program from the 2006 UTCA Research Symposium and Career Fair

Time	Presentation/Activity	
8:15 – 8:30	Steven Jones	Welcome
Safety Session		
8:30 – 9:00	Kerri Keith	Integration of GIS into the CARE software
9:00 – 9:30	Jay Lindly	Safety Impacts of Rumble Stripes
9:30 – 9:45	Break	
Advanced Technology Session		
9:45 – 10:15	Mike Anderson	Design and Application of an Internet-based Travel Survey
10:15 – 10:45	Virginia Sisiopiku	Transit Operations in Birmingham, Alabama and the Potential Impact of Signal Priority Implementation
10:45 – 11:00	Break	
Policy Session		
11:00 – 11:30	Qingbin Cui	Long-Term Warranties on Highway Projects
11:30 – 12:00	Johnnie Waid	Available Options for Financing Alabama Highways
12:00 – 1:00	Keynote speaker/Lunch	Heritage Room
1:00 – 2:00	Student Research*	Heritage Room
2:00 – 4:00	Job Fair*	Heritage Room
1:00 – 4:30	Seminar*	Mortar Board Room/HM Comer 316

* - These events ran concurrently

During 2006 the UTCA Technology Transfer Program was active and well represented at the national level. The Director continued participation in an NCHRP Panel focused on improving traffic analysis tools. Membership on this panel afforded UTCA national level contacts and led directly to two Federal Highway Administration program officers being added to the UTCA Advisory Board. The Director was asked by the Alabama Section of the Institute of Transportation Engineers (ALSITE) to serve as the section champion on technical issues. In this role the UTCA Technology Transfer Director represents both ALSITE and UTCA during the upcoming *Strategic Planning* process of the Southern District of the Institute of Transportation Engineers (SDITE). The Director also obtained full member status to the TRB Technology Transfer Committee (ABG30). The Director attended and participated in meetings and other events at the International Technology Transfer Symposium in August 2006. Also, the Director was appointed as a Corresponding Editor for the *ASCE Journal of Professional Issues in Engineering Education and Practice*.

Announcement:
DYNAMIC TRAFFIC ASSIGNMENT SEMINAR

November 13, 2006
1:00 PM- 4:30 PM

Tuscaloosa, AL

Description

As part of the 2006 UTCA Symposium on November 13, 2006 this seminar will present Dynamic Traffic Assignment (DTA) fundamentals and discuss potential applications of DTA in planning, operations, and real-time traffic management. Participants will also receive training on VISTA, an innovative network-enabled framework that integrates spatio-temporal data and models for a wide range of transportation applications.

Target Audience

The seminar is intended for those who are involved in transportation planning, travel demand modeling, traffic operations, transit operations and management, and ITS deployment. Participants completing this seminar will receive 3 PHDs and a Certificate of Participation.

Seminar Instructors

The seminar instructor is Mr. Curtis Barrett with Vista Transport Group, Inc. Dr. Virginia Sisiopiku, Associate Professor at the University of Alabama at Birmingham (vsisiopi@uab.edu) will serve as the seminar facilitator.

Sponsorship

This seminar is co-sponsored by the University Transportation Center for Alabama (UTCA), the Alabama Department of Transportation (ALDOT), the USU/GCU Transportation Initiative, and the University of Alabama at Birmingham (UAB).

Figure 2-1. Dynamic traffic assignment seminar announcement.

Section 3

Recommendations

The UTCA Technology Transfer program has concluded its fourth year. Due to changes in the administration of UTCA, the technology transfer activities will become a part of the administrative activities of the Center rather than a stand-alone project. As such the following recommendations are offered in order to continue maximizing the impact of technology transfer derived from UTCA-sponsored research.

- The UTCA administration should continue publishing *The UTCA Signal*. It would be reasonable to produce one four-page brief per year that highlights recently completed and current projects of either broad interest or that cater to a specialized interest but shows potential for significant impact.
- The UTCA administration should continue the Research Symposium. Future events should consider including presentations from researchers at other University Transportation Centers outside of Alabama.
- The UTCA administration should continue encouraging UTCA researchers to deliver short courses and seminars based on their project results. Whenever applicable, these events should be advertised outside of Alabama to continue increasing national awareness of UTCA work.

Section 4

Acknowledgments

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