

ANNUAL TECHNOLOGY TRANSFER PROGRAM

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Executive Summary

Technology Transfer has been a central goal the University Transportation Center for Alabama (UTCA) since its inception in 1999. This report documents the accomplishments of the third year of UTCA Technology Transfer as a formal program. As a result of this program, UTCA is active in technology transfer and has published five research briefs, sponsored more than 10 short courses, as well as a specialty bridge conference and two symposiums showcasing UTCA-derived research, in addition to a number of ancillary activities where UTCA has been positively represented.

The third year of the UTCA built upon the technology transfer foundations developed under UTCA Project 03217, *UTCA Technology Transfer Program* and continued under project 04313, *UTCA Annual Technology Transfer Program Continuation*. In particular, the project established tech transfer program as a continuing entity within UTCA. The third year focused more on expanding the range of UTCA technology transfer efforts beyond the promotion of only UTCA-funded projects and events.

It is recommended that, as the program continues, it begin incorporating research results from sources other than UTCA into its technology transfer products (symposium, short courses, etc.). Specifically, it is recommend that the 2006 UTCA Research Symposium feature research presentations from other University Transportation Centers in the nation as well as promote participation by U.S. Department of Transportation agencies.

Section 1

Introduction

Technology Transfer has been a central goal the University Transportation Center for Alabama (UTCA) since its inception in 1999. This report documents the accomplishments of the third year of UTCA Technology Transfer as a formal program. As a result of this program, UTCA is active in technology transfer and has published five research briefs, sponsored more than 10 short courses, as well as a specialty bridge conference and two symposiums showcasing UTCA-derived research, in addition to a number of ancillary activities where UTCA has been positively represented.

The third year built upon the technology transfer foundations developed under UTCA Project 03217, *UTCA Technology Transfer Program* and continued under project 04313, *UTCA Annual Technology Transfer Program Continuation*. In particular, the project established tech transfer program as a continuing entity within UTCA. The third year focused more on expanding the range of UTCA technology transfer efforts beyond the promotion of only UTCA-funded projects and events.

During 2005, the program assisted in the promotion and delivery of four short courses and one seminar. It published an issue of the research-oriented newsletter, *The UTCA Signal*, and mailed copies to more than 5,000 recipients. Additionally, the program began to expand its efforts beyond the immediate promotion of tech transfer for UTCA-derived projects. Specifically, the director became active with the Transportation Research Board Technology Transfer Committee (ABG30) and assisted the International Simulation Society to organize, promote and chair a session on Transportation Simulation at the Huntsville Simulation Conference (HSC).

Section 2

Program Development and Accomplishments

The UTCA Technology Transfer program conducted a number of outreach and development activities during 2005. Each of these is described briefly in the sections below.

2.1. Outreach

The program continued the outreach activities it established during the previous two years of the program.

2.1.1. Research Brief

One issue of the research-oriented newsletter, *The UTCA Signal*, was published and mailed to more than 5,000 recipients. It featured an extended article on the a series of UTCA projects to develop and deploy ALDOT's asset management system:

- Project 01459: "ALDOT and GASB 34 – Phase I"
- Project 02114: "GIS-Resource Allocation Visualization"
- Project 02411: "GASB 34 Compliance – Phase II"
- Project 03112: "Bridge Decay/Maintenance Forecasting"
- Project 03416: "Pavement Condition Management System"
- Project 03417: "GASB 34 Compliance – Road Condition rating"
- Project 03418: "GASB 34 Compliance – Bridge Condition Rating"
- Project 03419: "Transportation Network Planning: Data, Analysis and Visualization."

It also promoted two new air quality models developed specifically for use in Alabama under project 03412 and served as the initial announcement for two new short courses derived from project 04112.

2.1.2. Seminars and Short Courses

Two UTCA-derived short courses were delivered in 2005. Both courses, *Phase II Stormwater Regulations and Compliance* and *Phase II Stormwater Site Design*, were developed under UTCA Project 04112, "NPDES Technology Transfer." The courses were delivered in March and April 2005. Total enrolment for the two courses was 44. Additionally, the program worked with the PI for UTCA project 05209 to promote a series of short courses. The program also assisted in the promotion and delivery of a specialized seminar on *Dynamic Traffic Assignment*. The seminar was conducted by the UAB Branch office in Birmingham in conjunction with researchers from Northwestern University and the City University of New York. The program

has issued Professional Development Hour (PDH) certificates for the sponsored courses and has built a reputation in the State for offering quality courses and excellent professional educational experiences.

2.1.3. Research Symposium

The normal Annual Research Symposium was not conducted during 2005. An analysis was conducted of available projects and it was deemed that there were not a sufficient number of completed projects to present that had not already been showcased at a previous UTCA-sponsored event. There were many projects active during 2004 and 2005. Many of these, however, were started later than normal due to delays associated with the most recent Federal surface transportation reauthorization bill. It was decided not to force a symposium out of projects that were not yet ready for presentation. This was deemed to be in the best interest of UTCA and its commitment to quality technology transfer products.

Interestingly, the discussion over whether to hold a 2005 symposium led to consideration of using the UTCA Research Symposium to present research results from sources outside of UTCA. In its initial inception, the UTCA Technology Transfer program focused solely on the promotion of UTCA-derived results. Given its track record of well received outreach products and events, it was decided that UTCA would begin presenting and promoting research results from sources other than UTCA. This decision was consistent with growing intentions to expand the UTCA technology transfer influence beyond Alabama.

2.2. Activities Outside of UTCA

In 2005, the UTCA Technology Transfer program began to expand its efforts beyond the immediate promotion of tech transfer for UTCA-derived projects. The director of the UTCA Technology Transfer program became a friend of the Transportation Research Board (TRB) Technology Transfer Committee (ABG30) and participated in committee preparations for the 2006 annual meeting. It is intended that the director increase the role of UTCA on the TRB committee by obtaining full membership and participating in further activities.

Additionally, the program director worked with the International Simulation Society to organize, promote and chair a session on Transportation Simulation at the Huntsville Simulation Conference (HSC). The HSC was attended by more than 400 participants. The Transportation Simulation session hosted more than 30 participants and consisted of six presentations, one of which was derived from UTCA-sponsored work. The other presentations ranged from academic presentations from universities in other parts of the U.S. and one from Canada as well as one from the Federal Highway Administration.

Section 3

Conclusions and Recommendations

The third year of the UTCA built upon the technology transfer foundations developed under UTCA Project 03217, *UTCA Technology Transfer Program* and continued under project 04313, *UTCA Annual Technology Transfer Program Continuation*. In particular, the project established tech transfer program as a continuing entity within UTCA. The third year focused more on expanding the range of UTCA technology transfer efforts beyond the promotion of only UTCA-funded projects and events.

In following years, it is recommended that the program begin incorporating research results from sources other than UTCA into its technology transfer products (symposium, short courses, etc.). Specifically, it is recommend that the 2006 UTCA Research Symposium feature research presentations from other University Transportation Centers in the nation as well as promote participation by U.S. Department of Transportation agencies.