Traffic Signal Design the ALDOT Way – October 15, 2003

The course is intended to provide a fundamental introduction to traffic signal timing and as well as a detailed introduction into the specific requirements for designing signals for ALDOT. The fundamentals portion will be conducted during a 3.5-hour morning session and the ALDOT-specific information will delivered during a 3-4 hour afternoon session. The morning session focuses on Signal Timing Concepts and fundamentals. The afternoon session will be hands-on. It will include examples of ALDOT signal design plan sets as well as necessary calculations and interpretation of applicable standards and specifications.

Course Content:

- **Fundamental Terms and Concepts** - Signal Timing Fundamentals, Controller Fundamentals, Measures of Effectiveness, Important Terms and Definitions and Time-Space Diagram

- **Signal Timing Concepts** - Cycle Length, Split, Offset, Phase Sequences and Signal Timing Optimization, Actuated Controllers & Fully Actuated Controllers, Passage Time, Extension and Coordination of Actuated and Permitted Controllers

- **ALDOT Standards** - Elements of a Signal Design Layout Sheet, Signal Quantities Sheet, Signal Details, Signal Installation-related traffic Control Plans, Standard Specifications and Approved equipment/Vendor List and Preemption

To register for this program please call 205.934.8994 or register on-line at www.eng.uab.edu/epd.

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University Transportation Center for Alabama

Research Briefs and Technology Transfer News

Welcome to the Premiere Issue of the UTCA Signal!

The Signal is a new publication from the University Transportation Center for Alabama (UTCA). UTCA was created by a resolution of the Board of Trustees of The University of Alabama System. The driving force that activated UTCA was the Transportation Equity Act for the 21st Century (TEA21), which established UTCA as a University Transportation Center of the U.S. Department of Transportation. Upon approval of its Strategic Plan by USDOT, UTCA officially began operation on March 15, 1999.

The Signal is intended to serve as a briefing on the results of UTCA-sponsored projects and to provide information on technology transfer outreach activities. Since its inception in 1998, the UTCA has sponsored over 100 projects. The scope of projects have ranged from community outreach to research on the cutting edge of the transportation field. Reports of completed projects and descriptions of those ongoing are available on the UTCA website at http://utca.eng.ua.edu/. In each issue of The Signal, we will showcase one or more UTCA projects and deliver it straight to you, the transportation community in Alabama and the Southeast. The Signal will also provide information on outreach activities such as seminars, workshops and the UTCA annual symposium that will highlight work from both completed and ongoing UTCA projects.

**Technology Transfer Program – UTCA 03217**

The UTCA Technology Transfer Program began in January 2003 as a UTCA-sponsored project to develop and administer a formal tech transfer program. The program is intended to showcase the efforts and successes of the UTCA and promote its activities throughout the State, region, and nation. Project activities will be developed based on input from a technology transfer advisory board as well as direct input from transportation professionals throughout the State and region.”

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For the UTCA Technology Transfer Program to be successful, it is essential that it meet the needs of the community of transportation professionals in Alabama. Although the steering committee provides valuable insight and guidance, it is necessary to reach out to the larger community to identify interests in UTCA project results and identify “hot topics” that address immediate educational and training needs within the State. If you would like to provide input, please visit the UTCA Tech Transfer website at www.eng.ua.edu/utca.

An online survey has been developed to collect information on what transportation professionals in Alabama expect from the UTCA Technology Transfer. These projects were conducted for the specific purposes of developing and delivering transferable results of their research-oriented projects have (or soon will) result in knowledge and expertise of value to other transportation professionals. A key goal of the UTCA Technology Transfer Program will be to assist UTCA investigators identify, develop, and deliver transferable results of their projects.

Who – Technology Transfer

The program is being developed and administered by a team consisting of the UTCA Executive Committee, the UTCA Advisory Board, Steven Jones, David Eckhoff and the technology transfer steering committee.

Steven Jones is an assistant professor in the Civil and Environmental Engineering department at UAB. He has ten years experience in transportation engineering and planning. He holds a Bachelor’s and Master’s degree in civil engineering from Auburn University and a Ph.D. in civil engineering from the University of Virginia. In addition to his academic experience, Steven has held consulting positions in Washington, DC and Birmingham as well as a research scientist position with the Department of Transportation. While working as a consultant in Washington, Steven assisted in the development of a short course on traffic signal controller selection for the Federal Highway Administration. He has experience working with the public agencies in the State (ALDOT, MPO’s, etc.) as well as numerous consultants. In the past, he has sponsored transportation-related seminars on the behalf of UTCA and has delivered UTCA-derived short courses to ALDOT personnel.

David Eckhoff is Director of UAB School of Engineering, Professional Development Department. Mr. Eckhoff has 23 years in the design, development and administration of continuing education activities with UAB and Auburn University. Mr. Eckhoff served as an investigator on the UTCA-sponsored Transfer of Transportation Management and Safety Technology project and helped design, develop and manage the Concrete Technology Conference held in October 2001. He is a member of ASEE-CPD division and has served as past Treasurer and on the Board of Directors ASEE-CPD division.

The technology transfer steering committee is comprised of representatives from all three UTCA universities, ALDOT (Training, Human Resources, Research, and Maintenance Bureaus), FHWA, MPO’s, and consulting firms. We appreciate all of their interest and support.