

# THE UAB UNIVERSITY TRANSPORTATION CENTER

## LAB UTC TRANSIT-RELATED ACTIVITIES



#### **Background**

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), enacted in FY 2005, authorized USDOT to develop up to 60 University Transportation Centers (UTCs) across the country. Since FY 2006, SAFETEA-LU's Title III has provided approximately \$275 thousand direct dollars\* per year enabling the University of Alabama at Birmingham (UAB) to establish the UAB University Transportation Center (UAB UTC). Unlike any other UTC in the entire center network, UAB is programmatically unique – one of a kind – because it is the only UTC residing in a high profile School of Medicine which is, itself, a component of one of this country's leading academic medical centers.

\* Direct dollars are calculated by UAB's Central Administration which deducts and retains 45% "indirect costs" from the total award.

### Transit's Key Role at the UAB UTC

Transit is an important component of the UAB-UTC's traffic safety and injury control activities. Towards that end, the UAB UTC not only emphasizes transit but directs a substantial portion of its funds to transit research, education and technology transfer.

#### **Transit-Related Research**

The Role of Transit in Safe Evacuation of the Elderly and Disabled in Emergencies and Disasters — This project addresses emergency and disaster needs of transit dependent citizens as well as those individuals living with disabilities who are typically overlooked in emergency response planning. The refined traffic simulation model created through this project will allow local transportation agencies to evaluate alternatives for mass evacuations utilizing buses, to assess various alternatives, and to develop effective plans to respond to local and regional emergencies. Moreover, the developed model will serve as a framework for emergency preparedness modeling responses in other cities in the State of Alabama and beyond.

#### **Transit-Related Education and Training**

The UAB UTC, in conjunction with the UAB School of Engineering, Department of Civil, Construction & Environmental Engineering, offers a **Certificate in Transportation Safety and Injury Control Engineering**. The certificate enables students, practicing transportation professionals and other professionals with an interest

in transportation-related issues (such as urban planners, transit administrative personnel or emergency preparedness administrators) to focus on transportation safety-related issues, while learning about the tools and technology that are useful in resolving these issues. The program – a marriage between engineering and public health – allows students and other professionals to see not just the engineering side of transportation, but also the public health side.

#### **Transit-Related Technology Transfer**

The UAB UTC recently broadcast an international Webinar, "Transit Practices for Evacuation Preparedness and Response for Vulnerable Populations." Additionally, study findings from The Role of Transit in Safe Evacuation of the Elderly and Disabled in Emergencies and Disasters is being submitted for publication and presentation at local and national transportation conferences. The project team's methodology commits them to developing and conducting an on-line demonstration of the computer simulation model that will be made available to transportation and emergency management professionals and students.

#### **UAB UTC Overview**

he UAB UTC's theme is "Traffic Safety and Injury Control." The UAB UTC is pursuing its themedriven objectives with an integrated, interdisciplinary research, education and technology transfer program that addresses contemporary problems, issues and challenges associated with private motor vehicles, commercial carriers and transit. This approach has been taken because we believe sound, overall transportation management decisions and practices can be applied to multiple transportation modes in many different applications.

#### Research

The UAB UTC Advisory Board is keenly aware of and sensitive to federal and state transportation research priorities. Thus, the UAB UTC

supports and conducts research that is markedly improving outcomes associated with at least one critical aspect of injury control: acute care. Presently, this work is being conducted using the greater Birmingham metroplex as the experimental research platform. The planned methodology calls for the implementation of demonstration projects in other parts of the State when the nature and quality of provisional findings indicate it is appropriate to enlarge the test-bed. Then, as research outcomes are verified with "the good ones" being translated into policy and practice, the research's knowledge products will be made available for adoption regionally and nationally. In sum, UAB's UTC research is (1) redefining the most efficient, effective and cost-beneficial means to rapidly move emergency medical personnel or first responders and their equipment to places where they are needed; and (2) developing dynamic traffic assignment and simulation models for incident and emergency management applications.

#### **Education & Training**

The UTC's education and training portfolio which includes unique offerings, such as the recently established Certificate in Transportation Safety and Injury Control Engineering, reflect a core value commitment to multi-disciplinary teaching and research coupled with formal, structured, experiential learning opportunities. Our experience causes us to conclude that



initiatives incorporating both these characteristics measurably increase awareness of traffic safety and injury control among students from a spectrum of academic disciplines. Moreover, there is a growing body of evidence that this two-pronged approach is superior to others when it comes to successfully preparing transportation workers to address the traffic safety aspects and nuances of their own, individual disciplines. To help achieve successful education and training outcomes, the UAB UTC promotes student involvement in virtually all of its sponsored programs by underwriting short-term, project specific internships, and continually developing new traffic safety/injury control oriented programs.

#### **Technology Transfer**

The UAB UTC is committed to assuring that its research results become known and made available to potential users quickly and in a format that facilitates immediate application of findings and recommendations. For example, in response to DOT Secretary Ray LaHood's commitment to reduce the prevalence of distracted driving on American roadways, the UAB UTC was the first, and to our knowledge, the only UTC in the entire country to respond immediately to the Secretary's call by quickly planning and hosting the nation's first and, to this date, the nation's only state-wide Distracted Driving Summit since the Washington Summit in September 2009. To disseminate information resulting from Center-sponsored research and simultaneously increase awareness of other important transportation-related topics, the UTC hosts regularly scheduled Research-in-Progress Webinar broadcasts, publishes Center Newsletters and Annual Reports, and disseminates a variety of targeted educational information. Finally, the UAB UTC Center is fortunate to enjoy formal linkage with UAB's NIH-sponsored Center for Clinical and Translational Science (CCTS). The CCTS at UAB is accelerating the pace of moving fundamental scientific discoveries into practical applications that enhance health and safety. Finally, the CCTS is increasing interaction between UAB researchers and the community and among researchers at UAB and other premier health centers.

