SPOTLIGHT ON TECHNOLOGY TRANSFER
The Road from Farm to Market Connects Transportation and Economy

Project Title: The Transportation Economy: Past & Future

Principal Investigator: Richard Cole (Director of Communications, Texas Transportation Institute)

Co-PI: David Dennis (Coordinator of Electronic Media, Texas Transportation Institute)

How does an ear of corn get from the farmer’s field to your backyard cookout? And how does the nation’s infrastructure network – including roads, trucks and policies – affect the quality and cost of the goods we consume?

Richard Cole, Director of Communications at the Texas Transportation Institute, is showing how transportation has become vital to every level of society with an educational video aimed at high schoolers and the general public. With UTCM funding, Cole and David Dennis, Coordinator of Electronic Media at TTI, are focusing on the everyday example of moving perishable goods from field to processing to grocery to consumer, to demonstrate the direct impact the nation’s growing transportation challenges can have on every step of the process.

Using historic footage, the film will document the role transportation has played in the nation’s economic prosperity. Combined with new video documenting the farm-to-market process, it will demonstrate the importance of reinvesting in our transportation infrastructure.

“If we fail to maintain the nation’s infrastructure, we threaten our economy at every level,” says Cole. The film has timely application, as the critical need for infrastructure improvements has become the subject of increasing national attention and evolving public discourse.

The completed video will be made available to all Texas Educational Service Centers for use as supplemental material for high school economics and civics classes. Companion resources will include a supporting website and a PowerPoint® presentation. Cole also intends to market the film for wider distribution including commercial sources such as Discovery Channel.

Says Cole, “The goal of this film is to highlight the importance of transportation to our economy in a way that can be understood by everyone.”
SPOTLIGHT ON EDUCATION

UTCM Graduate Student Witnesses DOT and Women’s Transportation Seminar Partnership

UTCM researcher and Texas A&M University graduate student Suzie Edrington (far right) and Texas A&M Graduate Student Director’s Message

Melissa S. Tooley, Center Director

I just returned from meetings in Washington, D.C., and I am very concerned about some of the misperceptions I heard regarding the UTC program.

The myth that the UTCs do whatever they want with the grant is just that – a myth. Further, the idea that the UTCs are inadequately supervised and conducting research that is not germane to USDOT is completely false as well. Each UTC is required to complete a Strategic Plan before the grant is approved. This Strategic Plan outlines the research agenda for the UTC and must conform to the research priorities of USDOT. The plan is submitted to RITA for approval, which includes a review by a USDOT panel including representatives from each modal agency. Only after the plan passes all levels of approval are the first year’s grant funds issued to the UTC. In addition, the UTC must be reviewed and approved annually for each subsequent year of funding; RITA’s approval is based on the UTC’s annual report, financial report, a set of performance measurements, and individual project reports.

Another common misconception is that the UTCs do not coordinate with one another and duplicate research. Although it may be true, for example, that multiple UTCs conduct pavement research, site conditions and environmental challenges differ from one region to another. Epw Committee Chair Barbara Boxer, D-CA, mon traffic woes of rural communities. He also linked traffic safety challenges with congestion. Epw Committee Chair Barbara Boxer, D-CA, also cited the UMR to underscore congestion challenges nationwide.

While there are programs that provide funding to help address transportation needs in rural areas, there are currently no targeted initiatives focused on the needs of rural America in the federal highway program,” Boxer said.

Sen. James Inhofe, R-OK, reinforced these views, stating, “The next transportation bill must continue to recognize that the transportation needs of rural America, though different in many ways, are just as real as those of our urban areas.”

“If we think of these as related problems, we will be much closer to comprehensive improvements in the quality of life,” Lomax testified.

UTCM researcher and Texas A&M University graduate student Suzie Edrington (far right) looks on as Transportation Secretary LaHood signs a memorandum of cooperation between USDOT and Women’s Transportation Seminar (WTS). WTS President Elaine Dezenski is seated with Secretary LaHood.

This month, UTCM reinforced one of its goals to diversify the transportation workforce, awarding UTCM researcher and Texas A&M University graduate student Suzie Edrington a travel grant to participate in the Women’s Transportation Seminar (WTS) annual conference in Washington, D.C. WTS is an international organization dedicated to the advancement of women in transportation through professional development, mentoring, and strategic positioning of women.

While WTS attendees including Suzie Edrington witnessed, Transportation Secretary Ray LaHood signed a memorandum of cooperation between the US Department of Transportation and WTS International. This memorandum encourages women to complete undergraduate and graduate degrees in science, technology, engineering and math – without having to put their transportation careers on hold.

The joint initiative will support the advancement of women in transportation. DOT is also planning outreach sessions with UTCs around the country that are already addressing workforce issues. And now, utilizing its network of 45 chapters and more than 4,000 transportation professionals, WTS will work with the US Department of Transportation to organize a series of outreach sessions in 2010 and 2011 throughout the US. Sessions will focus on workforce development as it relates to STEM, with specific attention given to attracting and retaining a highly qualified, diverse and technically advanced workforce for the future.

In addition to receiving this UTCM travel grant, Suzie has conducted research on five UTCM projects. One of these projects is featured on page 4 of this newsletter. “We are extremely pleased to support the career advancement of this prolific researcher,” said UTCM Director Melissa Tooley.

The resulting four-minute video was featured on AASHTO’s website, and is now part of YouTube’s archive. AASHTO calls the interview “Close Up with the King of Congestion.”

A pair of Senate hearings in March were part of a series designed to spotlight important topics in the process of authorizing surface transportation programs. Congestion in both urban and rural areas was the focus of the first hearing, held March 12th in Washington, D.C.

In his Senate testimony, Lomax addressed research and conclusions of the UMR, funded in part by the UTCM, and touched upon the most common traffic woes of rural communities. He also linked traffic safety challenges with congestion. Epw Committee Chair Barbara Boxer, D-CA, also cited the UMR to underscore congestion challenges nationwide.

“We think of these as related problems, we will be much closer to comprehensive improvements in the quality of life,” Lomax testified.

“Working to create new opportunities and advance the careers of women in transportation.”

“At the WTS conference, I learned a great deal about transportation initiatives at the national and state levels, took lots of notes and handed out lots of business cards. I was able to network with many professional women – and even a few men. And it was a particular honor to stand behind Secretary LaHood as he signed the agreement with WTS. This agreement is designed to promote opportunities for women just like me who are pursuing careers alongside undergraduate and graduate degrees in transportation.”

– Suzie Edrington

UTCM Researcher and Texas A&M Graduate Student

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Another common misconception is that the UTCs do not coordinate with one another and duplicate research. Although it may be true, for example, that multiple UTCs conduct pavement research, site conditions and environmental challenges differ from one region to another. Thus, one must look beyond similarly titled projects to recognize research that is completely different in practice. RITA maintains a comprehensive Research in Progress (RiP) database to address the issue of duplication, so that UTCs – and anyone else – can determine ongoing UTC research on any topic. And, like many UTCs, the UTCM requires PIs who submit proposals to search RfP (for active research) and TRs (for completed research) to discuss the state of the practice and to develop a unique research idea. As for coordination, UTCM is actively engaged with several other UTCs on ongoing research and is developing ideas for collaboration with several more. I know that we are not unique in this regard.

Misinformation has the power to undermine or even eliminate the UTC program. Decisions are being made based on generalized, unfounded perceptions, and it is the responsibility of the UTCs to educate the misinformation to ensure the future of this vital and successful program.
Student Project Receives Two Awards

**Project Title:** Texas Urban Triangle: Creating a Spatial Decision Support System for Mobility Policy and Investments that Shape the Sustainable Growth of Texas

**Principal Investigator:** Michael Neuman, PhD, AICP (Associate Professor, Department of Landscape Architecture and Urban Planning, Texas A&M University)

**Co-PI:** Elise Bright, PhD, AICP (Professor, Department of Landscape Architecture and Urban Planning, Texas A&M University)

Graduate students working on the UTCM’s project on the Texas Urban Triangle took home two awards from the American Planning Association (APA) for Best Student Project. The awards, representing best project from the Central Texas Section and from the Texas Chapter, were made at the APA Texas Chapter Annual Conference in Galveston, TX in October 2009.

Awards were based on excellence in innovation, transferability, quality, implementation, and comprehensiveness.

![UTCN Researchers Jeff Arndt and Suzie Edrington](image)

**SPOTLIGHT ON RESEARCH**

**Looking Down the Road in Texas Rural Transportation Funding**

**Project Title:** Impacts of Funding and Allocation Changes on Rural Transit in Texas

**Principal Investigators:** Jeff Arndt & Suzie Edrington (Transit Mobility Program, Texas Transportation Institute - Houston)

Funding among Texas rural transportation districts has undergone rapid and significant change over the past five years. First, under SAFETEA-LU, the FTA committed to increased rural funding. At the same time, TxDOT implemented a revised “needs plus performance” based method for distributing both federal and state rural funds among providers, resulting in a significant redistribution of funding among rural transit providers: some providers would lose as much as half of their FY2004 funding level, while others would receive increases exceeding 300%.

The 2010 census currently underway will introduce another point of discontinuity in funding because population and land area, the two “needs” factors in the current TxDOT funding allocation formula, will be assigned to either enlarging or emerging urbanized areas in several rural areas. “Modification to the funding allocation formula is almost certain at that point,” says Jeff Arndt, the project’s lead investigator.

This project is collecting and reporting the data on increased investment and redistribution of rural transit funds over the past five years. This information will be critical as Texas rural transit operators, TxDOT and elected officials consider future rural transit funding allocation formula changes in Texas.

**Completed UTCM Projects (since 01.01.10)**

**RESEARCH**

“Estimating the Benefits of Managed Lanes”
- Mark Burris and Douglass Shaw • 01.01.08 - 01.31.10 • $80,000

“Bio-Fuels Energy Policy and Grain Transportation Flows: Implications for Inland Waterways and Short Sea Shipping”
- Dmitry Vedenov, Sharada Vadali, Gabriel Power, Steve Fuller and Mark Burris • 04.01.08 - 01.31.10 • $70,773

“Transportation Planning, Policy and Climate Change: Making the Long Term Connection”
- Eric Lindquist and Arnold Vedlitz • 09.01.07 - 02.28.10 • $50,000

“Examining Challenges, Opportunities and Best Practices for Addressing Rural Mobility and Economic Development Under SAFETEA-LU’s Coordinated Planning and Human Services Framework”
- June Martin, Cecelia Giusti, Eric Dumbaugh and Linda Cherrington • 05.01.08 - 02.28.10 • $100,000

“Texas Urban Triangle: Creating a Spatial Decision Support System for Mobility Policy and Investments that Shape the Sustainable Growth of Texas”
- Michael Neuman, Elise Bright and Curtis Morgan • 02.01.09 - 05.31.10 • $100,000

“Bluetooth-Based Travel Time/Speed Measuring Systems Development”
- Darryl Puckett • 06.01.09 - 05.31.10 • $58,500

**EDUCATION**

“Developing an Interdisciplinary Certificate Program in Transportation Planning”
- Forster Ndubisi and Eric Dumbaugh • 01.01.08 - 01.31.10 • $101,852

More information on these projects is available at http://utcm.tamu.edu under “Projects”.

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