



Improving the Quality of Life by Enhancing Mobility

http://utcm.tamu.edu



Our Framework

- A Title III UTC designated by the passage of SAFETEA-LU in August 2005
- Part of the University Transportation Centers Program (see back cover), administered by U.S. DOT's Research and Innovative Technology Administration (RITA).
- Operating under a grant from the UTC Program of \$1.5M per year

Our Theme

Improving the Quality of Life by Enhancing Mobility through Innovations in Research, Education and Technology Transfer

Our Goals

- Make a lasting impact on transportation. UTCM seeks projects and deliverables that seed programs—attracting additional support for ongoing research and technology transfer, and ultimately providing new transportation solutions.
- Aid in developing a strong, diverse, multidisciplinary transportation workforce.
- Form lasting partnerships. The UTCM fosters collaboration among TTI, Texas A&M departments/programs, other universities and UTCs, and transportation professionals.
- Leverage funds. Projects that contribute additional funding and services from other sources, especially those with long-term potential, expand the potential impact of UTCM initiatives.



Research Focus Areas

To accomplish its theme, the UTCM conducts research in four focus areas:

Coast-to-coast, border-to-border mobility

includes all transportation modes and the linkages between them from a regional and national viewpoint. A breakdown in the transportation system in one area of the country could impact the movement of goods and people throughout the entire system and affect the country as a whole. The UTCM is working to develop a national model to predict the impact of such a failure and to aid in analyzing proposed mitigation measures, and welcomes other research that would positively impact this area.

Rural public transportation research at the UTCM aims to increase access to public transportation for rural populations, including disadvantaged, aging and disabled persons. Research topics and programs include better routing methods, the use of technology in rural transit systems, safety issues, a transit management certificate program, topical workshops for transit agencies and more.

Congestion management and mitigation research currently underway at TTI has been expanded by the UTCM, providing a greater understanding of the benefits of mobility improvement programs and projects. Through such efforts, UTCM is enabling major, long-term research initiatives in this area.

Innovative financing methods can provide alternative sources of funding to bridge the ever-expanding gap between increasing vehicle miles traveled and the decreasing resources available for both new construction and existing infrastructure improvements. The UTCM sponsors initiatives that seek to better understand policy implications and implementation issues involved with innovative financing options. For example, the UTCM has significantly impacted the relatively new field of mileage-based user fees (MBUF), conducting some of the early feasibility research and hosting three national conferences and the definitive website on the topic. UTCM research on managed lanes and Public-Private Partnerships (PPPs) investigates the potential of these systems to both generate and maximize revenue while reducing investment risk.

All research projects sponsored by the UTCM include meaningful student involvement and a technology transfer component.

Education

UTCM's education activities are designed to increase both the quantity and quality of graduates entering the professional transportation workforce. UTCM initiatives include:

Course Development. Awards are made to develop new transportation courses that are developed by Texas A&M faculty and TTI professional staff. UTCM courses enrich the curriculum available for students, as well as provide for professional development. Course materials are made available for replication in transportation programs at other universities.

Program Development. The UTCM sponsors the development of new transportation programs, within a department or in interdisciplinary collaborations. For example, UTCM funding

for the successful graduate certificate in Transportation Planning at Texas A&M University included the development and approval of the new interdisciplinary program, development of three new courses, recruiting for the program, student fellowships, and expansion to include web-based certification for professionals. The UTCM also encourages the development of other educational activities, such as short courses or curriculum analysis and enhancement.

Student Support. The UTCM supports students with standalone assistantships, fellowships and travel awards to participate in technology transfer activities such as presenting research results at conferences or attending professional meetings. Supervising faculty are encouraged to nominate deserving students for these awards.



Technology Transfer

The UTCM's tech transfer initiatives include local, state and national conferences; professional development activities, including short courses, webinars, websites and online education; and fostering collaboration between transportationrelated programs at Texas A&M.The UTCM also emphasizes workforce development through outreach programs for K-12, including curriculum enrichment, after-school and summer transportation programs, leadership development programs and diversity initiatives.

University Transportation Centers Program

"Advancing U.S. technology and expertise in the many disciplines comprising transportation through the mechanisms of education, research and technology transfer at university-based centers of excellence."

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University Transportation Center for Mobility™ Texas Transportation Institute The Texas A&M University System College Station, TX 77843-3135

> 979.845.2538 utcm@tamu.edu http://utcm.tamu.edu