

TEXAS TRANSPORTATION INSTITUTE THE TEXAS A&M UNIVERSITY SYSTEM

Project Summary Report 0-4451-S URL: http://tti.tamu.edu/documents/0-4451-S.pdf

Project 0-4451: Alternative Funding Solutions for ITS Deployment

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Future Funding for ITS in Texas

The formal goals set forth in 1996 by the U.S. Department of Transportation (USDOT) regarding the deployment of intelligent transportation systems (ITS) technologies, accompanied by the Transportation Equity Act of the 21st Century (TEA-21) funding support for these deployments, have resulted in significant progress for ITS in the United States in recent years. The next several years, however, represent a new and critical phase for ITS deployment one when such deployment can no longer rely on public funds as the sole source of financial support.

In order to achieve the ultimate goal of a "fully integrated system" of transportation technologies, new strategies, approaches, and/or opportunities must be identified or developed. The objective of this research project was to examine a variety of approaches and alternatives for acquiring future funding for ITS deployment within the state of Texas.

What We Did...

The objective of this research was accomplished through the following activities:

- identifying important cross-cutting issues,
- summarizing the best existing resources for information on this topic,
- identifying alternative funding solutions, and
- dividing new funding alternatives and/or concepts into near-term opportunities versus longterm strategies.

The products resulting from this research effort included a guidebook outlining promising programs and approaches for obtaining future funds for deploying ITS technologies in Texas. A project website (http:// san-antonio.tamu.edu/4451/) was established containing many of the documents and related sources of information found and/or developed during the course of this research.

What We Found...

Important Cross-Cutting Issues

Important cross-cutting issues identified in this project included the importance of conveying ITS successes and benefit-cost (B/C) information to decision makers and the Texas Department of Transportation's (TxDOT's) new project funding process. One of the most informationrich sources of general information for ITS, as well as B/C data, is the national USDOT website for this topic (http://www.benefitcost. its.dot.gov). With regard to TxDOT's new funding process, several examples were found of states where ITS are more clearly funded and/or prioritized-these states included California, Colorado, Florida, Michigan, and Washington. Without modification, the new (current) project funding process will make it even more difficult to fund ITS projects-particularly on a consistent statewide basis.



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Near-Term Opportunities for ITS Funding

Several near-term opportunities for ITS funding and/or maximizing the use of available funds were identified and include the following.

*Re-authorization of TEA-*21 (*TEA-LU*). Upon its reauthorization, this new bill should be reviewed in detail to identify any and all opportunities for Texas to leverage available funding for ITS. As of August 2004, the current version of the House Bill (TEA-LU), Section 1205, allocated \$3 billion toward ITS over the next six-year period.

Collaboration with Florida ITS Model Deployment. There are several sources of potential products and cost sharing that could benefit TxDOT as a result of close coordination with (and support of) the ongoing largescale ITS deployments taking place in Florida.

Conversion of DalTrans Software to "Open Source" Status. This activity presents a low-cost means for TxDOT to develop improved ITS-related software for possible use on a statewide basis and for improved compatibility of ITS operations among different public operating agencies.

Energy Service Companies (ESCOs) and Tax Credits for Using Energy-Efficient Equipment. There are contracting mechanisms and grant sources for cost savings when TxDOT deploys energy-efficient ITS components and/or systems.

Cost-Sharing of ITS Deployment with New Toll Road Construction. In areas where new toll roads will interchange with existing roadways, there will be opportunities to co-deploy new ITS technologies and thereby accomplish increased ITS deployment at a reduced cost to TxDOT (see Figure 1).

New/Ongoing Federal Initiatives. USDOT recently announced nine new focal areas for ITS deployment that represent new sources of ITS funding. There also continues to be federal support and interest in ITS deployments related to safety and rural applications.

Long-Term Strategies

Several longer-term strategies for ITS funding were also developed and/or identified that include the following.

Leasing and Related Financing Options. Leasing provides an attractive and viable alternative to purchase and would allow TxDOT to spread out technology costs over time. Leasing would place the department in a more positive position with regard to technology life-cycle issues and accessing and/or upgrading to new technologies more costeffectively.

Options for Creating New Revenue. Opportunities to create new sources of revenue for ITS funding appear to exist in several areas such as subscription services, data exchange, naming rights, sponsorships, and 511 information fees.

North American Free Trade Agreement (NAFTA) Transportation Corridors and Related ITS Strategies. As a state that facilitates a significant amount of the nation's tradeparticularly in the form of providing safe and efficient routes for commercial trucks—Texas is well positioned to bring forward plans for ITS deployment that should receive significant federal support and be the source of innovative public-private partnering projects.

Homeland Security/ *Evacuations*. As a state that is home to targets at high risk of terrorist attacks, contains several of the nation's largest metropolitan urban areas, and has the second-largest coastline in the nation that is prone to hurricanes, Texas is also well positioned to receive federal support for ITS deployment that addresses any/all of these issues. Regardless of federal support, ITS deployment projects that can offer multiple benefits by addressing many of these issues simultaneously should be considered.

The Researchers Recommend...

The researchers recommend that all of the areas of opportunity for ITS deployment outlined as both near-term opportunities and long-term strategies be pursued as quickly as practical. As much follow up activity as possible is particularly critical given the new TxDOT project funding process. Unless that process is modified to provide a special category and/or otherwise place a higher priority in ITS deployment, it is likely that such projects will be more difficult to fund and the prospects of consistent, coordinated deployments (from a statewide perspective) will be more problematic.



Figure 1. Preliminary Plans for SH 130 Layout and Project Schedule, Highlighted Areas of Strategic ITS Deployment.

For More Details...

The research is documented in Report 0-4451-2, *An Examination of Alternative Funding Solutions for ITS Deployment*.

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TxDOT Implementation Status—March 2005

This research project examined a variety of approaches and alternatives for acquiring future funding for ITS deployment in Texas. The product developed for this project can be used to identify strategies used to deploy ITS technologies and services. Most of the information in this document is relevant only to TxDOT Traffic Operations Division personnel and should not be distributed to the districts.

For more information, contact Mr. Wade Odell, P.E., RTI Research Engineer, at (512) 465-7403 or email wodell@dot.state.tx.us.

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Disclaimer

The contents of this report reflect the views of the authors, who are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official view or policies of the Federal Highway Administration (FHWA) or the Texas Department of Transportation (TxDOT). This report does not constitute a standard, specification, or regulation.

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