

Technology in Rural Transportation



A recent study documented more than eighty proven, cost-effective, “low-tech” solutions to rural transportation needs, most developed or implemented by local transportation professionals. One of these solutions is outlined below:

Learn all about the simple solutions on the Internet at <http://inform.enterprise.prog.org>

The simple solutions report is available from Hau To at (503) 892-2533, or email: to@crc-corp.com

Traveler Information Services Via Personal Communication Devices (PCD)

Overall goal:

The overall goal of the field operational test is to determine if commuters will modify their travel mode and plans when they have easy access to transit and real-time traffic condition information.

Technical approach:

Fastline provided PCD-based software as one means of disseminating information to the commuters on the I-45 North corridor. TranStar’s field operational test installed and operated a Commuter Information Delivery System (CIDS) at the TranStar facility. The CIDS will receive real-time traffic information from the TranStar Integrated Transportation Management System and format it for distribution to the travelers. The information distribution to the handheld computer will be provided through a wireless FM subcarrier broadcast channel. The participants will be provided a Sony Magic Link Personal Intelligent Communicator to receive and display the transit and real-time traffic information. Fastline created the client application software for the handheld communicator with integration to the FM subcarrier receiver. Access to the dynamic traffic information and connection through the integrated landline is provided for two-way communication between the PCD and the remote CIDS server for updated transit information and user survey feedback.

Current status:

Initially, it was anticipated that the Smart Commuter project would include a second component. Testing real-time ride matching in the I-10 West (Katy) Freeway and using pagers to provide traffic information to a small group of commuters were both considered. Although it was decided not to move forward with a second phase, the study provided the TxDOT with



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Location / geographic scope:

several other ideas for future studies.

This project focused on the Houston I-45 North corridor with emphasis on commuters residing in the outlying corridor areas who regularly travel to their workplace in downtown Houston.

Agencies involved:

The Field Operational Test is sponsored by the coordinated and cooperative effort of TxDOT, METRO, the City of Houston, Harris County, and others. Funding is provided by TxDOT, METRO, FHWA and FTA. Local evaluation was performed by the Texas Transportation Institute.

Cost information:

The project was federally funded, however the precise amount was not available.

Key contacts:

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Have goals been achieved?

The project successfully developed and tested the provisions of real-time traffic and static transit information through a hand-held device and a telephone system. The core results of the study (that travelers will seek out traffic conditions information on a regular basis and will modify their travel patterns as a result) will help Tx/DOT determine future traveler information programs.

Solution timeline:

The operational test has been completed.

