

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

Automated Visibility Warning System

Overall goal:

To improve traveler safety through areas subject to severe low visibility conditions through the use of advanced warning messages and speed advisories.

Technical approach:

This system monitors visibility conditions as well as traffic slowdowns along a five-mile segment of roadway. When either type of condition or a combination of both reaches a series of predetermined thresholds, alerts are automatically posted at changeable message signs located upstream from the site. These messages notify travelers of conditions ahead and provide speed advisories. At the same time, DOT personnel are notified of conditions at the site to aid decisions regarding road closures and identification of alternative routes.

Due to the limited range of the visibility sensors, deployment activities tend to occur only on a site-specific basis. However, multiple sensors can be linked together to monitor conditions along a designated corridor. The Georgia system currently uses 19 sensors.

Current status:

The system is complete and is scheduled for acceptance testing in Fall, 2001. A three-year evaluation project is currently being planned. The evaluation will include system issues such as reliability and accuracy as well as human factors issues such as the effect of the messages on driver behavior.

Location / geographic scope:

This system is located along a 14-mile stretch of I-75 in southern Georgia.

Agencies involved:

The project was originally funded as a research study by FHWA. The development of an operational system was funded by Georgia Department of Transportation. Georgia Institute of Technology designed the system, installed the fog sensors and computer, and integrated the system.



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:



Cost information:

The total cost of the system, including both design and construction, was approximately \$4M.

Key contacts:

Gary Gimmestad, Georgia Institute of Technology. (404) 894-3419

Have goals been achieved?

The system has not yet been fully tested.

Solution timeline:

Since the system comprises mainly off-the-shelf technology, such as visibility sensors and changeable message signs, similar systems may be assembled with little lead-in time. Other potential deployment sites have been identified in Georgia but not finalized.

