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

Radar Detector Activation (Safety Warning System)

Overall goal:	To improve road safety by providing drivers with advance warnings of hazards.
Technical approach:	The system activates any current, commercially available radar detector to warn of a hazard. The basic system emulates the effect of approaching a police vehicle, sounding the detector's K-band alert. It is intended to encourage drivers to slow down prior to encountering a hazard or potentially hazardous situation, such as railroad grade crossing. A more advanced system is being developed which will require enhanced radar detectors and transmitters. The transmitter will be able to issue a variable text message to the detector or activate any of a series of fixed text messages, which have been pre-stored in the "smart" detector, giving more precise details of a hazard.
Current status:	Equipment testing has been completed. The concept is being tested for whether or not the system would be viable for implementation. Testing of the system is being planned in Atlanta, but other state D.O.T.'s may be involved as well. Patents have been filed for the Safety Warning System, and FCC approval to use police radar frequencies is being sought. The "smart" detectors are commercially available.
Location / geographic scope:	The system could potentially be deployed in any state where use of radar detectors is legal. Deployment could take place either at site-specific locations, such as at railroad grade crossings, or on a corridor or region-wide basis.
Agencies involved:	The Safety Warning System is a cooperative effort involving the Radio Association Defending Airwave Rights (RADAR), a national non-profit

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	organization representing those who make, sell, and own radar and laser detectors, and other private organizations. Research and development is being conducted by Georgia Tech Research Institute.
Cost information:	Information is not currently available on costs incurred during the development of the system, or on the anticipated retail prices of the "smart" transmitters or detectors. It has been estimated that the cost of "non-smart" transmitters for a site-specific application, such as a railroad grade crossing, would be $600 to $800, plus installation costs. Given that the system is capable of activating any of the estimated 10 to 15 million radar detectors currently in use, the system can provide basic warning capabilities at no additional cost to a driver already owning a radar detector.
Key contacts:	Gene Greneker, Georgia Tech Research Institute. (770) 528-7744 Janice Lee, Safety Warning System, L.C. (941) 473-1555
Have goals been achieved?	The system has been developed and successfully tested in non-live situations. Ultimate success of the system depends on FCC approval and market uptake.
Solution timeline:	The implementation time frame depends on the system being granted the necessary FCC approval for use of radar frequencies. However, the Safety Warning System company established to market the system is proceeding with marketing activities, both to consumers and to state DOTs. Both the "smart" transmitters and receivers are said to be market-ready.

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