

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

Inter-Agency Signal Master System

Overall goal:

To improve the operations of local traffic signal systems and to increase the options interagency signal control.

Technical approach:

A microcomputer based traffic signal control system has been developed which interfaces type 170 intersection controllers. The system, which operates in a Windows environment and can monitor over 10,000 intersections, can store up to 15 years of data on a single optical disk. The system can transmit data simultaneously over a variety of communications media including voice grade telephone lines, fiber optic cable, and cellular, packet, and spread spectrum radio. The system can also automatically page a standby technician to report intersection and equipment failures. Technicians can then access the main computer with a notebook computer via cellular phone. The system is able to monitor the signals of multiple agencies, such as city, county, and state systems.

Current status:

In 1993, a DOS version of the system was initially implemented, which was followed by a Windows version. By 1997 the NT version was introduced and it still used today. Plans to upgrade the system to a PCS II system are underway. Some 400 intersections are currently covered by the system.

Location / geographic scope:

The system was initially used to operate intersections in Colorado Springs, Colorado. The system is now being used throughout much of Colorado and in parts of Kentucky, Connecticut, and Texas.

Agencies involved:

City of Colorado Springs, Traffic Engineering Department.

Cost information:

The system cost ranges from \$150,000 to \$1,000,000+ depending on the



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Key contacts:

size of the system.

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Have goals been achieved?

Yes. The system is considered a success.

Solution timeline:

A new system is being developed to improve the technical capabilities and overall performance of the system. The system will soon be implemented in Boulder and Loveland, Colorado.

Solution Status:

The system still in use and is starting to be used across the country

