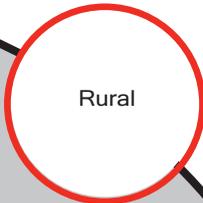




Caltrans Division of Research,
Innovation and System Information

Research

Notes



Rural

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Project Title:
Western States Rural Transportation
Consortium (WSRTC) II Pooled Fund TPF-5(241)

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A Collaborative Mechanism to Leverage Rural Research Activities

Responding to rural transportation issues among western states related to technology, operations and safety

WHAT IS THE NEED?

The Western States Rural Transportation Consortium (WSRTC), comprised of California, Oregon, Washington and Nevada, is a pooled fund that facilitates and enhances safe, seamless travel throughout the western United States. The Consortium seeks to promote innovative partnerships, technologies and educational opportunities to meet these objectives. Additionally, the Consortium seeks to provide a collaborative mechanism to leverage research activities in a coordinated manner to respond to rural transportation issues among western states related to technology, operations and safety.

The WSRTC is a continuation and broadening of the original California Oregon Advanced Transportation System (COATS) project. During the third phase of the COATS project, the Western States Rural Transportation

Technology Implementers Forum (WSF) was initiated. The Forum provided a venue for presentations and frank discussions on how technology projects were implemented in the field. It also provided insight not only for the need of collaboration on rural ITS technology transfer, but also operations and safety research. Through attendance of the Forum, representatives from the Washington and Nevada Departments of Transportation expressed interest in becoming affiliated with the COATS partnership in order to foster greater research and technology transfer and collaboration. Based on this interest, the idea of expansion to include Washington and Nevada was investigated and it was determined that it was in the best interest of the project to broaden its area of service to the western United States. This included a refocusing on three primary areas, technology, operations and safety, while leveraging research dollars to provide reliable, robust solutions to common rural transportation issues.



DRISI provides solutions and knowledge that improves California's transportation system

WHAT ARE WE DOING?

Highlights of the activities include:

- Western States Rural Transportation Technology Implementers Forum. The Western States Forum is an annual event where implementers of ITS technologies have the opportunity to share technical information on best practices and field deployment experiences with fellow professionals from across the western United States. It can best be described as an engineering practitioner's conference with the goal of providing a forum for high-quality exchange of technical information that can help to support better ITS deployment in rural areas. It is a forum for dynamic discussion of practical and technical issues associated with rural ITS, to promote transferability of solutions and knowledge across the ITS community. Four to five highly interactive technical presentations, ranging in length from 1 to 2 hours each, in-depth equipment demonstrations, and numerous opportunities for networking with peers, are all part of the agenda.
- Automated Safety Warning System Controller. California has many different warning systems on the state's highways to disseminate safety notifications, such as changeable message signs, Highway Advisory Radio, and flashing beacons. These warning systems depend on data collected from sensors and other detection systems. The data is then interpreted in a Transportation Management Center (TMC) or maintenance shop, and staffers make decisions about whether to issue a warning. This dependency on human interaction can slow the timely activation of a warning. Because rural TMCs are usually not staffed 24 hours a day, activating warnings or information systems can be further delayed. In addition, during severe weather, communication lines to a remote site might not be reliable, affecting the decision-making process to issue roadway warnings. The goal is to develop a standardized Automated Safety Warning System Controller (ASWSC) that can collect and analyze roadside sensor data and issue related warning messages and signals autonomously.

WHAT IS THE GOAL?

- Provide a framework to leverage research and promote collaboration in solving rural transportation issues.
- To leverage research resources related to rural issues concerning technology, operations and safety.
- Provide technology solutions in the form of technology transfer to rural areas and training on a regular basis.
- Recycle and reuse existing research, applying its results to rural issues.
- Development of a rural western states integrated corridor management system to improve seamless, coordinated and safe transportation to the public.

WHAT IS THE BENEFIT?

By collaborating with our neighboring states, Caltrans is able to leverage knowledge gained by participating in WSRTC meetings, forums and projects. By participating on incubator projects, Caltrans is able to determine if a proof-of-concept project has merit for deployment within the state. Participating in the WSRTC provides Caltrans the knowledge-base to introduce the use of ITS in rural areas to enhance safety, improve the movement of people, goods and services, and subsequently promote the economic development.

To learn more about the WSRTC effort, please visit:
<http://www.westernstates.org>.



Keith Koeppen describes the Automated Chain Control Sign System developed by District 2.