

DRISI

CALTRANS DIVISION OF RESEARCH,
INNOVATION AND SYSTEM INFORMATION

TRANSFORMING IDEAS INTO SOLUTIONS

Research

Results

Rural

MAY 2023

Project Title:

California Oregon Advanced
Transportation Systems (COATS)

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Demonstrating and Evaluating Intelligent Transportation Systems (ITS) in Rural Environments

Technology transfer and testing of incubator projects in rural California

WHAT WAS THE NEED?

The California Oregon Advanced Transportation Systems (COATS) effort encouraged regional, public and private sector cooperation between California and Oregon organizations to better facilitate the planning and implementation of Intelligent Transportation Systems (ITS) in a rural bi-state area extending north of Eugene, Oregon and south of Redding, California.

For over 20 years, the COATS program showed that a bi-state partnership to address rural ITS concerns was both feasible and advantageous. It allowed for the maximization of shared resources and provided a source for fresh ideas and perspectives. It provided a platform to address the issues and concerns of rural areas that might otherwise remain ignored. Numerous systems and approaches were developed and evaluated over the years, providing useful information on which to base future deployment decisions. Several of these initial systems are still in place, addressing the concerns they were designed to answer. COATS provided a platform on which to conduct expanding efforts geared toward outreach and technology transfer.

WHAT WAS OUR GOAL?

To provide research and support activities to help California and Oregon achieve the COATS vision of "Promoting innovative partnerships, technologies and educational opportunities to facilitate and enhance safe, seamless rural travel throughout the western United States."



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

WHAT DID WE DO?

The work plan for COATS Phase VIII consisted of the following five tasks:

- Project Management
- Project Technical Advisory Panel (PTAP) Meetings
- Western States Rural Transportation Technology Implementers Forum (WSRTTIF)
- Update WSRTTIF Handbook
- Final Report and Workshop Presentation

The most significant activity was to provide support for the WSRTTIF. This task provided financial and logistical support for the 2020, 2021, and 2022 Western States Forums and a portion of the 2023 event. The WSRTTIF focuses on delivering high-quality technology transfer and networking opportunities. The Forum targets an audience of professionals working in design and maintenance of ITS technologies in rural environments. It is unique nationally with respect to its audience and technical content, and its origin and development over the years reflect the idea of using COATS as an incubator for innovations in the use of technology to address rural transportation challenges.

WHAT WAS THE OUTCOME?

COATS served as an incubator for research ideas in a rural context. These incubator ideas were bounded by limited scope, time and money and provided insight if a proposed idea has merit. If the incubator was successful, it often turned into a larger, fully funded rural research project, always with the eye toward deploying the results. Numerous incubator projects went this route, including:

- [The Responder Project](#)
- [WeatherShare](#)
- [Automated Safety Warning System Controller](#)
- [One Stop Shop for Rural Traveler Information](#)
- [Integration of Aviation AWOS with RWIS](#)
- [TMC-TMS Communication Systems](#)
- [Professional Capacity Building for Communication Systems](#)

WHAT IS THE BENEFIT?

The COATS Project served to focus member agencies on a seamless, state-of-the-art, multi-modal transportation network benefiting travelers, goods movement, economic activity, and transportation systems operators in California and Oregon, as well as Washington, Nevada and Utah. Collaboration between the COATS project and its partnership coalition provided information and served to promote increased safety, mobility, traveler comfort, environmental quality, operational efficiency and productivity. As the COATS project shifted to the Western States Rural Transportation Consortium (WSRTC) effort, the benefit was 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.

LEARN MORE

The final report is posted to this website when available:

<https://dot.ca.gov/programs/research-innovation-system-information/research-final-reports>

IMAGES



Image 1: Presentation being made at the Western States Rural Transportation Implementers Forum in Yreka, CA