



Rural

MAY 2019

Project Title:

Demonstrating and Evaluating Intelligent Transportation Systems in Rural Environments

Task Number: 1753

Start Date: June 30, 2014

Completion Date: June 29, 2016

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Demonstrating and Evaluating Intelligent Transportation Systems in Rural Environments

Promoting innovative partnerships, technologies, and educational opportunities to facilitate and enhance safe, seamless rural travel throughout the western United States

WHAT IS THE NEED?

The California Oregon Advanced Transportation Systems (COATS) established regional public and private sector cooperation to investigate and address rural concerns with advanced transportation technologies. This effort, dating back to 1998, has identified regional challenges, as well as developed and evaluated solutions to these throughout the northern California and southern Oregon region. It has served as the impetus for long-term partnerships, provided a forum for discussion and information dissemination, and provided an incubator for ideas that have evolved into stand-alone projects and products.

As COATS and its products have matured, it has gained interest from surrounding states. Consequently, the expanded COATS region now encompasses the Western States Rural Transportation Consortium (WSRTC) region, which includes the states of California, Oregon, Washington, and Nevada.

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."



Caltrans provides a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability.

WHAT DID WE DO?

COATS focuses on incubator projects centered on the pillars of technology, operations and safety. Incubator projects are small scale research projects intended to serve as a “proof of concept” for larger subsequent efforts.

Incubator projects in this phase include:

- Evaluation of the Fredonyer Summit Icy Curve Warning System (ICWS) –Before and After Study of Long-Term Effectiveness (Safety/ Operations)
- Data Quality for Aggregation and Dissemination of DOT Traveler Information: An Analysis of Existing System Best Practices (Technology)
- Chain-Up Delay Tracking with Bluetooth (Technology)

Successful incubator projects may lead to expanded research initiatives.

A number of successful, on-going Caltrans research projects have been extended through WSRTC efforts including the One-Stop-Shop for Rural Traveler Information, WeatherShare and the Automated Safety Warning System Controller.

WHAT IS THE BENEFIT?

Research in the COATS region, whether directly funded as a COATS project or as a spinoff project, has brought substantial benefits to the region as well as other stakeholders. These include the following:

- First-generation ITS planning and architecture documentation, which each state incorporated into its respective ITS efforts.
- Successful implementations of ITS technologies, including CCTV cameras,

dynamic message signs, and road weather information systems, to address regional transportation challenges.

- Strengthened partnerships between the states which have improved operations and maintenance of the transportation system, especially near the state border.
- Innovative technology development activities, such as work providing new web-based traveler information mechanisms.
- Evaluations of rural ITS deployments, for which the results have been presented in national venue

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<http://westernstates.org/Projects/COATS/Default.html>