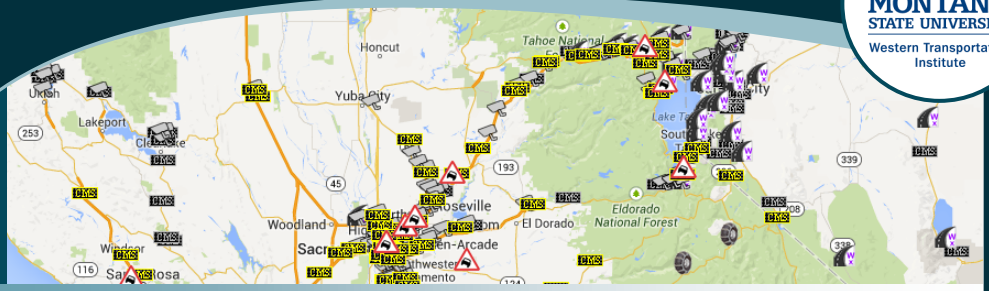
Western States Rural Transportation Consortium

MONTANA STATE UNIVERSITY
Western Transportation Institute



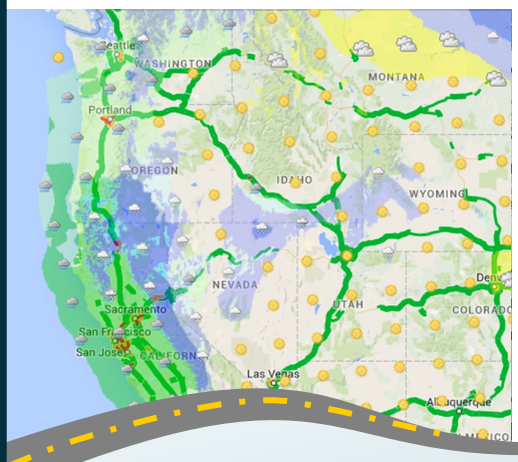
SYSTEMS ENGINEERING DEVELOPMENT AND INTEGRATION PROGRAM

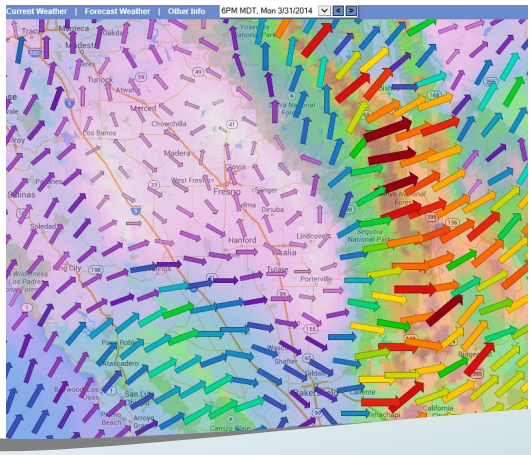
Western States One-Stop-Shop for Rural Traveler Information
oss.weathershare.org

The One-Stop-Shop web application provides travelers with comprehensive, real-time data that can be used in trip planning. OSS presents routing functionality, CCTV images, weather information, elevation profiles, rest areas, points of interest and more in a consistent, easily accessible and intuitive interface that allows travelers to plan both in-state trips and trips that cross state borders.

The Problem

Real-time traveler information is a valuable tool in protecting and enhancing both traveler safety and mobility, especially in rural areas. From a safety perspective, it is important for rural travelers to know before a trip about potential challenges including snow, ice, high winds, fires and other hazards. These same challenges may degrade mobility, as may challenges such as vehicle crashes and work zones. While such information may currently be available through a variety of sources, there is inconsistency in the types and quality of information available. In addition, information is generally scattered over numerous web-based (and sometimes non-web-based) sources, meaning travelers must spend significant amounts of time assembling this information prior to a trip. As a result of the effort involved with gathering this information, many rural travelers do not seek out all the information they need, if they seek any at all. This may result in increased delays and can potentially degrade safety.





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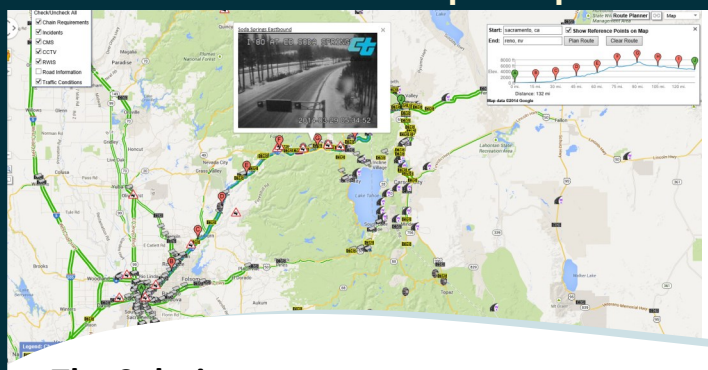
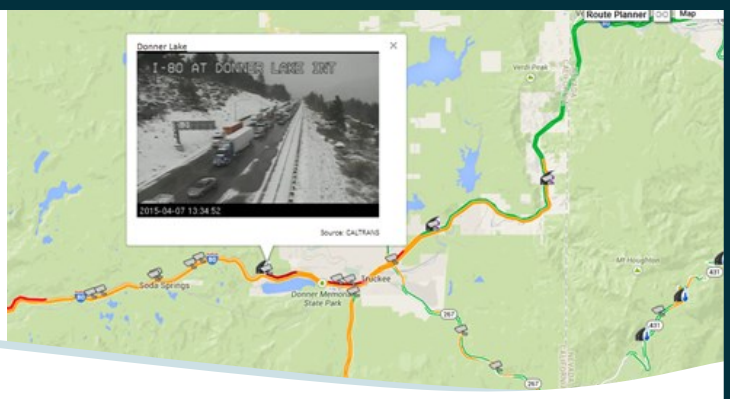
Western States One-Stop-Shop for Rural Traveler Information





The Solution

The One-Stop-Shop currently provides traveler information for 11 states including Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming. This research serves as a proof of concept for route-based traveler information provided in one location. While this scale of implementation will yield some direct benefits for the selected states, it is believed that the principal value of this research is in demonstrating the feasibility and attractiveness of a One-Stop-Shop for real-time, route-specific traveler information for rural areas. The proof of concept is designed in a scalable fashion so that the system may be expanded to other routes and states. Ultimately, the One-Stop-Shop could become an umbrella traveler information web site that can be used as a primary point of reference for longer distance trips, improving safety and mobility for all highway system users across the United States.

ITS AMERICA

At the 2014 ITS World Congress in Detroit, Michigan, the One-Stop-Shop was announced as the winner of ITS America's Best of ITS Award for Best New Innovative Practice — Research Design and Innovation. ITS America presents these awards to "the most prominent and innovative transportation technology leaders in the Americas" whose projects exemplify innovation and demonstrate specific and measurable outcomes.

Benefits

- OSS provides real-time traveler information which protects and enhances traveler safety and mobility in rural areas.
- OSS enables travelers to "know before they go" so that they may make the best travel decisions.
- OSS can reduce the impacts of nonrecurring congestion and unexpected delays by notifying travelers of various roadway incidents (e.g., vehicle accidents, weather, work zones, etc.).
- Agencies responsible for managing the transportation system may find additional benefits from the interface and information provided through the One-Stop-Shop.

To access and use the One-Stop-Shop, please visit: http://oss.weathershare.org/

For further information please visit www.westernstates.org/Projects/OSS/ or contact

Douglas Galarus
WTI
dgalarus@montana.edu
(406) 994-5268

Ian Turnbull, P.E.
Caltrans
ian_turnbull@dot.ca.gov
(530) 225-3320

Sean Campbell, P.E.
Caltrans
sean_campbell@dot.ca.gov
(916) 657-8868