The Western States Rural Transportation Consortium–An Implementers Pooled-Fund to Tackle the Challenges of Rural ITS

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Session A1: Multi-Agency Collaboration: Leveraging Resources and Improving Services for the Traveling Public
Monday, September 17, 2012
1:00 PM
Overview

- What the WSRTC is and what it does
- Origins and history of WSRTC
- Challenges it addresses
- Benefits it provides
- Incubator and spinoff projects
- Technology Transfer
WSRTC – What it is and does

• Facilitates and enhances safe, seamless travel throughout the western United States
• Promotes innovative partnerships, technologies and educational opportunities to meet these objectives
• Provides collaborative mechanism to leverage research activities in a coordinated manner to respond to rural transportation issues
• Focuses on technology transfer/education and incubator projects centered on the pillars of technology, operations and safety
Origins

• 1991- California Department of Transportation (Caltrans) inquired into rural concerns dealing with advanced transportation technologies

• 1995 - Program for Advancing Rural Transportation Technologies (PARTT), a rural ITS scoping study
  – Reviewed advanced transportation technologies, identified issues concerning them, and developed conceptual ideas for future activities
  – Geographic area in Northern California designated a study area to refine the need and application of rural ITS
  – Caltrans and the Oregon Department of Transportation (ODOT) expanded the study area into Southern Oregon to maximize resources, foster cooperation, and investigate feasibility of ITS in a bi-state study area
    • Result was California Oregon Advanced Transportation Systems (COATS)
Origins

• COATS (1998-2000) - Identified several regional needs that ITS could address
• COATS Showcase (2001 – 2006) - Focused on demonstration and evaluation activities
• COATS Phase 3 (2005 – 2009) – Promote technology transfer and coordination
• COATS Phase 4 (2008 – 2011) – Continue technology transfer, initiate incubator project concept
  – Investigate expansion of COATS to include additional states
WSRTC History

- June 2009 - Informal discussions occur regarding Consortium establishment/expansion of the COATS project/region
- August 2009 - Formal discussions between COATS members of expansion/consortium development result in agreement to pursue development of WSRTC
- August 2009 – October 2009 - Development of Consortium charter and mission/vision/goals documents undertaken
- November 2009 - Formal discussion between potential consortium members regarding charter and mission/vision/goals documents, intended roles and responsibilities, etc. occurs. All parties agree to move forward in formalizing Consortium
- February 2010 - Follow-up discussions on Consortium documents occur; Year 1 incubator projects are discussed,
- April, 2010 - Scopes of Work completed for incubator projects
Challenges Addressed

• Tighter agency and research budgets reducing opportunities to conduct technology, safety and operational research aimed at rural transportation
• Projects must be justified, often requiring an initial proof-of-concept
• Research involving multiple agencies likely to be of interest and transferable to others
  – Mechanism to promote results and share developed products does not exist
• Need existed for agencies to partner and leverage research funding, share technical findings and products, and promote educational opportunities
• The WSRTC addresses these challenges through collaboration
Mission and Vision

• Mission: The WSRTC shall 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.

• Vision: The WSRTC shall promote innovative partnerships, technologies and educational opportunities to facilitate and enhance safe, seamless rural travel throughout the western United States.
Goals and Benefits

• 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.
• Continued fostering of tech transfer activities through venues such as the Western States Forum
WSRTC Incubator Projects

- Radar Speed Signs deployment guidance
- Evaluation of the Fredonyer Pass icy curve warning system
- Analysis and recommendations for optimization and deployment of web-based projects
- Survey of western states safety warning devices (ongoing)
- Regional Integrated Corridor Management planning (ongoing)
- Bluetooth and other passive ID technologies for weather-related rural travel times (upcoming)
Safety Warning Device Survey

- Focused on western states – CA, OR, WA, ID, NV, UT, AZ, NM, CO, WY, MT, AK
- Ex. Intersection or curve warning systems, work zone safety systems, etc.
  - Identify location, function/purpose, components, effectiveness, and other info
- Seeking contacts from above states to interview and obtain information
  - Please see us after the session or send contact information to david.veneziano@coe.montana.edu
Spinoff Projects

- One Stop Shop for Rural Traveler Information
- WeatherShare
- Integration of Aviation AWOS with RWIS
- Automated Safety Warning Controller
- Redding Responder
- Professional Capacity Building (PCB) for Communication Systems
One Stop Shop:  http://oss.weathershare.org/
2 - Pine Grove N/B - Shasta Lake City
Updated: 10:58 AM MST - Wed, Jan 18 2012

I-5 CLOSED AT FAUNDALE DUE TO ACCIDENT

Fawndale
10:59 AM MST - Wed, Jan 18 2012

FAUNDALE PRESET 3

49th Corridor
10:55 AM MST - Wed, Jan 18 2012

49TH CORRIDOR PRESET 1

Siskiyu I-5 NB at Exit 1
Updated Jan 18 2012 10:20 AM

Central Oregon
10:19 AM MST - Wed, Jan 18 2012

BLOOMER PRESET 1

Weed Airport
10:43 AM MST - Wed, Jan 18 2012

WEED AIRPORT PRESET 1

Vollmers
10:31 AM MST - Wed, Jan 18 2012

VOLLMERS PRESET 1
Integration of Aviation AWOS with RWIS
Automated Safety Warning Controller
Redding Responder

Redding Responder Incident Organizer

Responders Summary:
- Organization: Caltrans
- Date: 2/26/2004
- Time: 08:35 AM
- Observer: Responder

Description:
Rockslide 1.5 miles west of Pulga. Includes more than 200 yards of material including some weighing well over 200 tons.

Facility: Lane blocked
Incident Type: Rockslide/ Mudslide

Location:
- Road / Address: SR-70, Oroville, CA 95965
- Mile Marker / Landmark: BUT 70 39.52
- County: Butte
- City: 
- State: California

Maps and Location Data Set to Current Location

Redding Responder Incident Organizer

Add Blank Sketch | Recover Sketch | Erase Ink | Undo Last

Description:
Relative size of slide

1 Lane open
200+ tons
5 ft
Pavement damage

Professional Capacity Building (PCB) for Communication Systems
Technology Transfer

• Western States Rural Transportation Technology Implementers Forum (WSRTTIF)
• Consortium Website
• NRITS, etc.
Western States Rural Transportation Technology Implementers Forum (WSRTTIF)
Awards

• ITS America 2007
  – Finalist: Best New Product, Service or Application
    • Redding Responder Project

• National Rural Intelligent Transportation Systems (NRITS) Conference 2010
  – Winner: Best of Rural ITS Awards - Best New Innovative Product, Service or Application
    • Responder System

• National Rural Intelligent Transportation Systems (NRITS) Conference 2012
  – Winner: Best of Rural ITS Awards - Best New Innovative Product, Service or Application
    • Western States Rural Transportation Technology Implementers Forum
For further information … please visit http://www.westernstates.org/
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Questions