

# Western States Rural Transportation Consortium Meeting

June 21, 2016

# Overview/Agenda

- Welcome / Introductions
- Western States Forum Preview
- WSRTC Pooled Fund updates/discussions
- Incubator updates
- General project discussion
- Roundtable of recent/planned ITS activities
- Other discussions (as needed)

# Western States Rural Transportation Technology Implementers Forum

Preview

# Western States Rural Transportation Technology Implementers Forum

June 21-23, 2016

Yreka, California

Holiday Inn Express

# Presentations/Demonstrations

## ***RWIS Deployment Update for Campbell-Datalogger-Based RPU***

Jeff Worthington, Caltrans District 2

## ***Comparison of In-Pavement Versus Non-Invasive Pavement Sensor Technologies (AKA: The Lesser of Two Evils)***

Mike Beyer, Caltrans District 2

## ***Joint Base Lewis-McChord (JBLM) Bluetooth Traveler Information and Integration***

Tony Leingang, Tom Stidham; Washington State Department of Transportation

## ***Local Adaptive Signal Timing on US101 Hwy in Lincoln City, Oregon***

Julie Kentosh, Doug Spencer; Oregon Department of Transportation

# Presentations/Demonstrations

## ***iPads for Field Data Collection at WSDOT***

Joe Schmit, Washington State Department of Transportation

## ***Portable Work Zone Data Collection***

Blaine Van Dyke, Oregon Department of Transportation

## ***Caltrans' Controller Cabinet Standards: Models 33x, 33xL and 34xXL Present and Future***

Herasmo Iniguez, Caltrans Headquarters

## ***Dedicated Short Range Communications (DSRC) for Rural ITS***

Rodney Schilling, Jim Whalen; Nevada Department of Transportation

## ***Connected Vehicle CRADA Partnership***

Ira Pray, Scott Wold; Idaho National Laboratory

Bob Koeberlein, Idaho Transportation Department

# Schedule of Events

Tuesday, June 21<sup>st</sup>

- 4:00 pm Registration
- 5:00 pm Reception (no-host)
- 6:30 pm Dinner, Networking

Wednesday, June 22<sup>nd</sup>

- 8:00 am – 5:30 pm Technical Program
- 6:15 pm Social, Networking

Thursday, June 23<sup>rd</sup>

- 8:00 am – 12:05 pm Technical Program
- 12:05 pm – 1:00 pm Closing Remarks, Evaluations, Lunch

# Participation

- 11<sup>th</sup> Annual Western States Forum
- 51 Participants Registered:
  - By State:
    - CA (33)
    - ID (2)
    - MT (2)
    - NV (3)
    - OR (5)
    - WA (6)



# Participation

## Caltrans Participants:

- D1 (1)
- D2 (8)
- D3 (2)
- D4 (3)
- D6 (3)
- D8 (1)
- D9 (1)
- D10 (2)
- D11 (2)
- D12 (1)
- HQ (5)
- DRISI (1)

# Participation

## – Participants from Other Agencies:

- The City of Gresham (1)
- Federal Highway Administration (1)
- Idaho National Laboratory (1)
- Idaho Transportation Department (1)
- Nevada Department of Transportation (3)
- Oregon Department of Transportation (4)
- University of California Berkeley (1)
- University of the Pacific (1)
- Washington State DOT (6)
- Western Transportation Institute (2)

[www.westernstatesforum.org](http://www.westernstatesforum.org)

# WSRTC Pooled Fund update/discussion

# Rural Traveler Information (One Stop Shop) (Task Order 2)

- Start Date: 10/1/2011
- End Date: ~~9/30/2014~~ extended to 6/30/2016
- Budget: \$150,000
- Estimated approximately \$1170 remaining after May 2016.

# WSRTC Meeting Coordination, Western States Forum Travel Support and Website Maintenance (Task Order 5)

- Start Date: 8/1/2014
- End Date: 6/30/2016
- Budget: \$91,000
- WSRTC Meeting Facilitation and Attendance:
  - NWTC/NRITS
  - Other meetings via teleconference as needed.
- Western States Forum Support
- Website Content and Maintenance
- Estimated \$860 remaining after May 2016.

# WeatherShare Phase 4 (Task Order 7)

- Start Date: 3/1/2016
- End Date: 3/31/2017
- Budget: \$100,000
- The goal of WeatherShare Phase 4 is to continue to develop the WeatherShare prototype system to match the needs of Caltrans maintenance and operations personnel in terms of combining functionality of WeatherShare, SCAN Web™ and SCAN Sentry™ into a single, open system. The specific research objectives are:
  - Continue research and development of the prototype system.
    - Alerts
    - User Profiles
  - Test and evaluate the prototype system.
- Estimated \$86,000 remaining after May 2016.

# WSRTC Meeting Coordination, Western States Forum Travel Support and Website Maintenance (Task Order 8)

- Start Date: 3/1/2016
- End Date: 2/28/2017
- Budget: \$60,000
- WSRTC Meeting Facilitation and Attendance
  - WSF 2016
  - Other Meetings
  - Other meetings via teleconference as needed.
- Western States Forum Support
- Website Content and Maintenance
- Estimated \$59,400 remaining after May 2016.

# Rural Traveler Information (One Stop Shop) (Task Order 9)

- Start Date: 3/1/2016
- End Date: 3/31/2018
- Budget: \$300,000
- This project will continue to support surface transportation goals of enhancing safety and mobility by demonstrating an information mechanism that could provide route-specific information to highway users in rural areas throughout the Western United States. With limited availability of traveler information in rural areas, this project promises to provide a traveler information system benefiting all highway users, at a relatively low cost.
  - *Task 1: Project Management*, to keep the Caltrans project manager and technical panel apprised of project progress;
  - *Task 2: Expansion (Data Sources and Coverage)*, identifies data sources and implements expansion of the system to include new data and geographic coverage;
  - *Task 3: Mobile Application Development*, which will involve development of a mobile interface for the prototype system;
  - *Task 4: On-Going System Development*, to conduct on-going development of new application functionality and perform general system maintenance;
  - *Task 5: System Testing and Evaluation*, to examine the manner in which users interact with the prototype system, including selection of information, referring sources, etc. and summarize the project in a final report.
- Estimated approximately \$282,000 remaining after May 2016.



# WSRTC Pooled Fund

- Renewal of Pooled Fund after expiration (June 30, 2016)
- Other Items for Discussion
  - Emeritus Status (see later slides)
  - Future Incubators (see later slides)

# Incubator Project Updates

# Data Quality for Aggregation and Dissemination of DOT Traveler Information: An Analysis of Existing System Best Practices

## Goal:

- Analyze and document existing system best practices for data quality for the aggregation and dissemination of state department of transportation traveler information.

## To achieve this goal:

- Conduct a survey of DOT practitioners in western states.
- Conduct a literature review on data quality within the transportation field.
- Document “Best practices”
- Formulate recommendations and next steps.

# Data Quality for Aggregation and Dissemination of DOT Traveler Information: An Analysis of Existing System Best Practices

## Survey Participants:

- Lisa Idell-Sassi, Alaska DOT&PF
- Mike Jenkinson, California Department of Transportation (Caltrans)
- Dennis Jensen, Tony Ernest; Idaho Transportation Department (ITD)
- Brandi Hamilton, Montana Department of Transportation (MDT)
- Ismael Garza, Jim Whalen, Israel Lopez, Seth Daniels; Nevada DOT
- Galen McGill, Chris Wright; Oregon DOT
- Lisa Miller, Utah DOT
- Ron Vessey, Monica Harwood, Tony Leingang, Jay Wells, Chris Thomas, Hal Weiblen, Tom Stidham, Kerry Jorgensen, Mike Kress; Washington State DOT

# Data Quality for Aggregation and Dissemination of DOT Traveler Information: An Analysis of Existing System Best Practices

- At the onset of the project, it was recognized that there may not be any so called “best practices” established for traveler information data quality.
- Neither the survey of DOT practitioners nor the literature review found a comprehensive, well-defined plan for unified, multi-dimensional approaches to quality assurance of traveler information.
- All of the DOT practitioners that were surveyed, as well as the literature reviewed relative to data quality in transportation, indicated in some way that quality data was important for safe, efficient operation of the transportation system, including provision of traveler information that is accurate, timely, and reliable.

# Data Quality for Aggregation and Dissemination of DOT Traveler Information: An Analysis of Existing System Best Practices

## Recommendations:

- Define where the state DOT is in the traveler information environment.
  - “the DOT has limited flexibility or ability to move quickly”
  - the DOT’s “niche” may be to provide quality data to others and allow the traveler information environment to sustain it from that point.
- Investigate mechanisms such as data governance models. Define who owns what data, as well as uses.
- Relevant quality metrics and requirements should be clearly defined. This includes how to determine that requirements are being met with quality data.
- Common statewide standards for data quality, performance, maintenance, and calibration should be established .
- Investigate further implementation of automated feeds.
- An engineering approach must be used to define standards - Currently, a WAG approach is used to set "standards" in far too many cases.

# Data Quality for Aggregation and Dissemination of DOT Traveler Information: An Analysis of Existing System Best Practices

## Final Report:

- The final report will be reviewed by the WSRTC steering committee before finalizing.

## Prior COATS 6 Incubators

- Chain-up Delay Tracking with Bluetooth
- Evaluation of the Fredonyer Summit Icy Curve Warning System –Before and After Study of Long-Term Effectiveness



# General project discussions

# Spin-Off Projects – Pending & On-Going

- Professional Capacity Building (PCB) for Communication Systems
  - Phase 4 Pending
  - Start: 7/1/2016 ?
  - Duration: Two Years
- COATS
  - Phase 7 Pending
  - Start: 7/1/2016 ?
  - Duration: Two Years

# Spin-Off Projects – On-Going

- Integration of Aviation AWOS with RWIS
  - Phase 4 Pending
  - Start: 7/1/2016 ?
  - Duration: Two Years
- WeatherShare Integration with QuickMap
  - Initiated
  - 3/17/2014 – 6/30/2017
- Automated Safety Warning Controller
  - Deferred Until 2017
  - Will go through the WSRTC

# Website, Discussion Group

# Other Items

# COATS-WSRTC Emeritus Status

## Discussed During the March 2016 Meeting:

### Proposed Requirements

- Consistent participant in COATS-WSRTC activities for a minimum of three years.
- Contributing member of the steering committee for all or part of their tenure.
- Formally request Emeritus Status.

### Proposed Benefits

- Participate as a non-voting member.
- Included on all general COATS-WSRTC steering committee correspondence.
- Included on the Listserv distribution list.
- Included in review/comment distribution of COATS-WSRTC reports and documents.
- Access to all COATS-WSRTC documents.
- Listed as Emeritus with brief biography on the WSRTC web page.

Further Discussion?

# Incubator Projects

## Discussed During the March 2016 Meeting:

- Winter Travel Times from Mexico to Canada and Wendover to the Sea (submitted by Ian Turnbull, Caltrans).
- Automated Safety Warning Data Feeds and Virtual Changeable Message Signs (submitted by Ian Turnbull on behalf of John Liu, Caltrans).

Further Discussion?

# Roundtable of Recent ITS Activities



# Upcoming Steering Committee Meetings

# Steering Committee Meeting

- Next meeting?

# Other Discussions

# Items

- Next meeting
- Action items
- Other

# Wrap-up