



Western States Rural Transportation Consortium (WSRTC)

Steering Committee Meeting

June 19, 2018

Yreka, California

Meeting Minutes

This document is the official record of the WSRTC Steering Committee meeting held June 19, 2018, in Yreka, California, just prior to the 13th Annual Western States Rural Transportation Technology Implementers Forum.

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Meeting/Teleconference

**Western States Rural Transportation Technology Implementers Forum
Yreka, California**

Meeting Minutes

Prepared by

Leann Koon

Western Transportation Institute, Montana State University

Sean Campbell called the meeting to order at 1:00 PM Pacific Time. Introductions were made by everyone at the meeting site in Yreka, California. Sean reviewed the purpose of the meeting and the planned agenda.

*The meeting agenda, presentation, and minutes are posted on the Consortium website at:
<http://www.westernstates.org/Documents/Default.html>.*

New Member State

Utah was formally and enthusiastically welcomed as a member state of the WSRTC. For some history, the group approached two UDOT individuals at last year's Western States Forum about joining the WSRTC. Later that summer, steering committee members visited Utah, touring the TMC in Salt Lake City, and meeting several stakeholders to discuss projects and the WSRTC incubators. At the last WSRTC meeting, the group approved Utah's membership. Tyler Laing from UDOT expressed how they were happy to be a part of the Consortium and looking forward to leveraging the Forum and Consortium to help develop ITS in rural areas.

Western States Forum

Leann Koon provided an overview of the upcoming 13th annual Western States Forum. Nine presentations (13 speakers) are on the agenda and most will address the topic of weather from various perspectives. Speakers will come from six different states with several new faces. Leann reviewed the agenda/schedule and participation. Those speakers and representatives who were in the meeting shared a quick synopsis of their presentation.

WSRTC Pooled Fund Updates and Discussions

Sean Campbell explained the history of COATS and the WSRTC. COATS 7 will be the last phase of the COATS partnership. The COATS projects will be conducted through the WSRTC pooled fund process in the future and the focus will be on technology transfer. It was noted that the project had come full circle as early COATS meetings were held at this location (Best Western Miner's Inn).

Sean Campbell discussed the status of the Pooled Fund and the various Task Orders. Sean shared and reviewed the balance sheets and the FHWA TPF transfer log. Phase 2 of the WSRTC goes through March of 2020. It was noted that this time next year, the group should consider whether to proceed with Phase 3 of the WSRTC. There was discussion concerning state contributions to the pooled fund. Sean will talk to Ron Vessey and determine how to proceed. Sean reminded the group that member states contribute \$5,000 annually to the Pooled Fund. California contributes \$60,000 per year. Member states can develop new task orders and contribute funds for those projects.

There have been 11 WSRTC task orders, 10 of which have been completed to date. Task Order 11 is the current meeting coordination and travel support task (start date March 1, 2018; end date February 28, 2019).

Starting September 1, 2018, Task Order 12 will be the Automated Safety Warning Controller System. The project team at Utah State University (USU), led by Doug Galarus, will be taking the system from the commercial off the shelf MOXA platform and running it on the 2070 LX. The system is intended to be general and the users will be the first at Caltrans to use the 2070 LX. The team will also work to get Python running on the system. Doug Spencer from ODOT commented that ODOT uses the ATC platform for everything with the same code and offered to do a peer to peer exchange review.

Task Order 13, One-Stop-Shop (OSS) for Rural Traveler Information Phase 4, will also start in the near future led by Doug Galarus at Utah State University. The project team will update the system to accommodate changing feeds and Google APIs. Server space will also be addressed as the question of future maintenance of the system is discussed.

Don Anderson moved, and Doug Spencer seconded to revise the WSRTC Charter to include Utah as a member state. Sean will send out his marked-up version and the group will return changes to him. Don amended the motion to also include Utah State University. Jim Whalen seconded. Tyler Laing commented that if Doug Galarus was going to continue being a part of the Consortium's projects and activities then the university should be involved. Jim suggested using a OneDrive document for editing the Charter. After discussion, the amendment and the main motion as amended passed unanimously.

Incubator Projects

Leann gave a quick review of the project topics and discussed staff changeover. The consensus was to complete as much as possible with the staff and resources available. Future incubator projects will be conducted through the WSRTC. There was some discussion about the traveler information data quality project after Doug Galarus mentioned the ITS America presentation he gave on the topic. In addition to him, the session included Cisco and Iteris. The question was raised whether there was anything in the available data that could be used to proactively predict failure.

Other Projects

Leann gave an update on the Professional Capacity Building (PCB) for Communications (Phase 4) project. Several IP Fundamentals courses have been offered; these are updated repeats with the same instructor of the training originally offered in 2013. A new course on Small Data Center Design, Structured Cabling, and Grounding will be delivered in October 2018. Sean discussed the needs driving the PCB project, including that related to TIA standards. He added that many IT professionals don't have a communications background. The engineers and technicians who have taken the PCB courses have

done well. Don Anderson commented that Caltrans District 2 does well because they have taken the time to learn.

- Caltrans District 2 inspects projects to make sure contractors have completed the work to required standards; other districts don't inspect projects often because it is too dangerous to get on the roadway.
- Oregon DOT has a small staff for design. What is contracted out, that staff does review. Contractors only do infrastructure installation on the roadway, while ODOT staff does the rest.
- Nevada DOT sets up examples to show contractors exactly how work should be done.

The COATS Phase 7 project is set to end next year. This phase is the last in a partnership with roots going back to 1991. Future incubator projects and support for the Western States Forum will go through the WSRTC.

Don Anderson asked whether anyone had been through leadership training. He commented that in the second level of the Caltrans training, participants come up with a project and present it to the group. Many great ideas are proposed but die there due to lack of experience moving beyond that point. Don indicated he would talk to the leadership about ideas.

Doug Galarus briefly discussed the Caltrans Aviation project. This phase of the project is completely moving the application from a research project to Caltrans Aeronautics and IT. He will present the project at the Forum tomorrow.

Roundtable of Recent ITS Activities

Don Anderson – Caltrans District 2

- ITS technologies were part of Senate Bill 1.
- Performance measures are becoming more of a focal point.
- Asset management is also a focal point. He commented that it is difficult to manage all that fast.
- “Accurate, timely, and reliable” was first mentioned at 2:49 PM.
- He is willing to help with WSRTC contributions/payments.
- He is looking forward to the Western States Forum.

Jeremiah Pearce – Caltrans, District 2

- District 2 is in the midst of deploying the RWIS and CCTV information relays statewide. Eight RWIS info relays are currently deployed using a Red Hat system. If Districts are using ScanWeb then they will be changing to the info relay through WeatherShare. The CCTV information relay also uses a Red Hat enterprise system which will be cloned and deployed statewide; users can see system performance from a statewide perspective.
- Advertising for the statewide RWIS maintenance contract did not produce any qualified responses.
- District 2 will deploy a safety chain-on system at Fawndale this summer. The system is similar to what WSDOT presented at the 2014 Forum (*Organized Chain-Up: Save the Space – Bringing Order to Chaos*).
- The District 2 Office of ITS Engineering and Support continues to grow. Two new electricians have been hired and they are still looking for a third. The lab has been “named” ‘Turnbull Labs – Accurate, Timely, Reliable’.

- Several cellular deployments and experiments are being conducted. Keith Koeppen will be presenting some of the work at this year's Forum. One District 2 deployment covers a 30 mile stretch along I-5.
- The Information Relay system was nominated for a California Transportation Foundation award.

Tyler Laing, Utah DOT

- UDOT is continuing development of public private partnerships with telecom companies for fiber communications and have almost covered the entire state. These partnerships are allowing expansion of the rural ITS network. UDOT gets dark fiber and has the legislative authority for trade value. NDOT copied UDOT's model and it passed as SB 53. Caltrans has also been trying to set up a similar plan but are facing legislative challenges.
- ITS project managers work for Tyler in each region. So far, they have been stationed in Salt Lake City, but in the process of moving them to regions, UDOT will be hiring one person to focus on rural ITS efforts. This person will likely be an integral part of the WSRTC.
- UDOT has developed a map of ITS projects and deployments.
- Several weather projects are underway. Jeff Williams and Cody Oppermann will be presenting the *Snow and Ice Performance Measure* at this year's Forum.
- An enforceable variable speed limit system is deployed along the Salt Lake City – Park City corridor. UDOT is planning to make it more automated and expand it throughout more of the state.
- UDOT is working on some connected and automated vehicle projects. One is testing signal priority to buses and considering expansion of the system to snow plows.

Doug Spencer – Oregon DOT

- ODOT has had difficulty with managing the installation of fiber optics communication within its highway construction projects. This is due to several reasons. To move the management of the fiber optic termination work under the ITS program, ODOT is establishing a fiber optics installation and maintenance contract. The highway construction contractor will still install conduit and fiber cable. However, the terminating of the fiber cable within the roadside cabinets will be from this new fiber optic contract managed by the ITS Unit. Oregon DOT worked with FHWA in this approach. ODOT intends to use this approach first in Region 1 and then on projects statewide. The fiber optic termination work will be paid for by the project as an anticipated item.
- Oregon is approaching connected vehicles a bit differently; Galen McGill is presenting their work at an upcoming AASHTO meeting. For example, they are currently working on a Connected Vehicle application where the Signal Phase and Timing and MAP data are provided to the Internet so that third party companies can create applications for displaying this data. The other aspect of this project that is interesting is ODOT is working with its traffic signal software vendor to integrate the setup of the MAP into their software. So when a traffic engineer programs the timing, they also create the MAP of the intersection layout. This reduces the likelihood of human errors between the signal timing and others that would generate the MAP data for CV applications.
- Traffic signals are being migrated to the ATC and new software.
- ODOT is also working on developing public private partnerships for fiber optic communications. This has been difficult in the past with Oregon's laws regarding R/W and utilities. ODOT is currently working on a fiber optic partnership agreement with Facebook.

- The Transportation Systems Management and Operations (TSM&O) plan was recently completed.
- HB2017 addressed project delivery and attrition rates, creating 300 new positions to serve project delivery. Eighty percent (80%) of project work will now be outsourced.

Jim Whalen – Nevada DOT

- The civil work related to the US 55 fiber project is completed. The fiber still needs to be lit and a mountain top microwave site installed.
- Over 300 ITS devices have been deployed along Interstate 80 and I-580 in the Reno / Carson City area to the California border. Microwave, along with a couple cellular applications, is being used to communicate to all those devices.
- The communications core and protocol will be completed around the end of October or beginning of November.
- DMS will be incorporated along the resort corridor.
- The entire statewide radio system is being replaced with a new P25 system.
- The state's freeway management system has been upgraded from a central system to a KITS platform by Kimley-Horn.
- Jim's section has requested six new positions.
- Results from the IMO project with 'intelligent' snow plows is being presented to maintenance and operations personnel. Next steps include starting to visualize road applications.
- An individual who will focus on fiber communications will be joining the department. This person will help set up agreements for using rights-of-way. The position came about with initial interest in promoting rural broadband and telemedicine.
- The Transportation Systems Management and Operations (TSM&O) plan is almost complete.
- A Strategic Rural Development plan is in place which is helping to implement some ITS projects that don't necessarily correspond with the typical construction projects.
- A north-south communications link that connects some bigger data centers is in the works.

Sean Campbell – Caltrans Division of Research, Innovation, and System Information (DRISI)

- Caltrans DRISI is conducting approximately \$34 million worth of research.
- Sean is unwinding from his role with the CWWP (Commercial Wholesale Web Portal). IT and Traffic Operations are developing an MOU for operating the system.
- A research project for solar generation sites within roadway rights-of-way is ongoing.
- Another research project is working with drones outfitted with a cellular wi-fi repeater. The system is modeled after the Responder project.
- A solar information relay is also being developed. The system could monitor battery life, power output, communications links, etc.
- The MG² advanced camera lowering device was officially deployed. UC Davis is evaluating the system and creating user videos for it. So far, the system is working well, and maintenance is happy with it. They are currently using a hand crank. ODOT has stopped using a drill. NDOT is using a drill and UDOT has had less success with the drill.
- The QuickMap video page has been updated to support the Wowza service and Adobe Flash is being phased out for video.

Other Discussions

Sean Campbell commented that the 13th Forum happened to have a weather/RWIS theme. In the future, a Forum theme of connected and autonomous vehicles in rural applications in the western states might make a timely and interesting technical agenda. Such an event would be the first of its kind as discussions about connected and autonomous vehicles in the rural areas west of the Rocky Mountains have not been held. ODOT’s Doug Spencer commented that they generally look at the topic from two perspectives – policy and “nuts and bolts.” The group agreed it may be a good theme, especially after agencies have implemented projects.

The 2018 National Rural ITS Conference will be held October 21st – 24th in Fort McDowell, Arizona. Leann will follow up on travel, lodging, and conference registration.

Sean Campbell thanked the group for the discussion and participation and then moved to adjourn the meeting. Don seconded the motion. Meeting was adjourned.

Action Items

<u>Item</u>	<u>Deadline</u>
1. Sean Campbell will discuss state contributions with Ron Vessey and determine the best way to proceed.	As soon as possible
2. Sean Campbell will send out to the group an edited version of the revised Charter for comments.	As soon as possible
3. Comments and edits on the revised Charter will be returned to Sean Campbell.	As soon as possible
4. Sean Campbell will talk with Ron Vessey about the University of Washington’s involvement in the WSRTC.	As soon as possible
5. Don Anderson will talk to the team that facilitates the Caltrans leadership training courses about potential project ideas.	Before the next WSRTC meeting
6. Leann Koon will distribute information concerning WSRTC participation at the upcoming NRITS conference (travel, lodging, conference registration, etc.).	End of July

Meeting Participants

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