



2016 Executive Committee

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ITS Technical Committee Meeting Minutes Tuesday, April 5th, 2016

Table with 2 columns: Name, Agency. Rows include Derek Nieveen, Scott Petersen, Ginny Crowson, Jesse Larson, Todd Foster, Nick VanGunst, Steve Rippey, Dan Rowe, Sue Zarling, Kyle Halligan, Mike Kronzes, Morrie Luke, Durga Panda, Ray Starr.

Meeting Location: MnDOT Waters Edge, Conference Room A

Meeting Topic: Remote Monitoring Systems Engineering

Meeting Presenter: Ginny Crowson, Athey Creek

- 1. Introductions / Sign-up sheet
2. Approve Minutes of Tuesday, February 2nd, 2016
3. Review Agenda of Tuesday, April 5th, 2016
4. Discussion Topic – Remote Monitoring Systems Engineering. Presented by Ginny Crowson, Athey Creek
- This project was prompted by MnDOT to address the following challenges:
o Monitoring operation of ITS field devices (i.e., cameras, truck rollover systems, etc.) in remote areas.
o Remote monitoring functionality to ICWS being deployed in 2016.
- Concept of Operations
o The current systems are located in rural areas, malfunctions are identified by random observations by citizens or field staff, and troubleshooting is time consuming.

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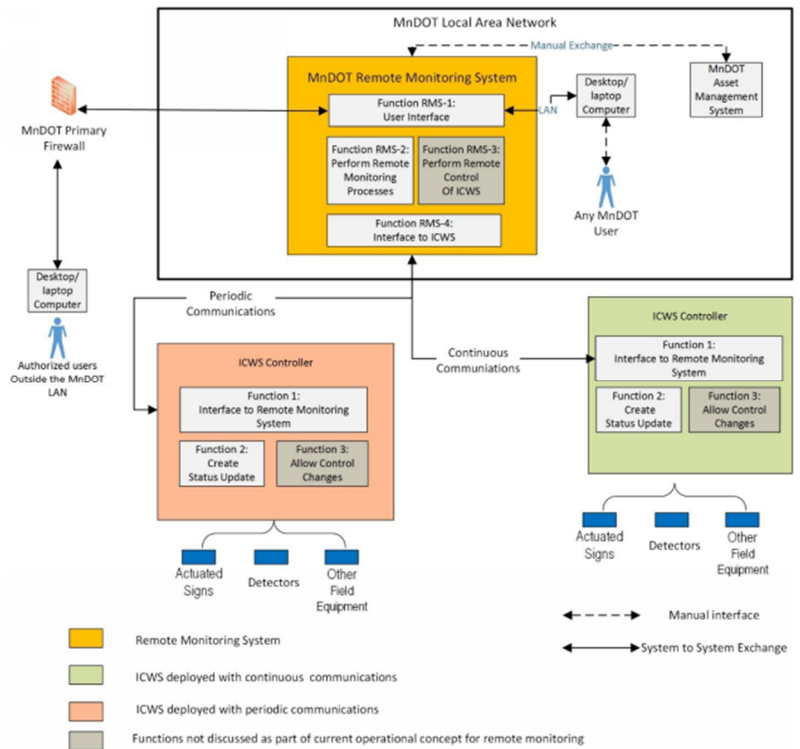
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- Existing Systems were used to determine what MnDOT needs were for a Remote Monitoring System (RMS):
  - MnDOT ScanWeb for RWIS
  - MnDOT IRIS for select CCTV and DMS
  - Iowa DOT CCTV for ICWS
- Operational Concepts were developed for RMS related to:
  - Detection of ITS device status in the field
  - System alerts
  - Troubleshooting capabilities
  - Action to be taken
- System requirements and a corresponding test plan were developed for RMS and ICWS specifically. Requirements will be developed for other remote monitoring systems at a future date. Diagram below shows a basic system overview for RMS and ICWS:



### Next Steps

- MnDOT has chosen to use IRIS as their RMS
- An RFP will be sent out for the development of an IRIS Remote Monitoring System
- Remote monitoring to begin with ICWS and expand to other ITS devices/systems

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- Discussion included comments regarding
  - Potential to develop remote monitoring capability in another ITS device to further test functionality beyond ICWS
  - Prospects for alternative communication options such as those being used to expand the Internet of Things
  - Cost of ongoing communication fees might be an issue for local agencies

**5. Round Robin:**

- Jesse Larson informed the group of a Queue Warning System that will be deployed on I-94 near the I-35W/I-94 Commons
- Morrie Luke noted that the I-35E MnPASS extension will be finished in Fall 2016. MnPASS will extend to County Road J in the northbound direction and Highway 96.
- Todd Foster noted that Ver-Mac currently has over 50 active Intelligent Work Zone systems throughout the United States.
- Steve Rippey provided updates from Metro Transit:
  - Metropolitan Council has an RFP out for On-Board Real-Time Transit Information Display Systems.
  - Metro Transit's "A" Line Bus Rapid Transit (BRT) is expected to be operational starting on June 11, 2016.
- Dan Rowe provided an update on a Truck Parking Availability System project he is working on for rest areas along I-94. This is part of a seven state effort to provide truckers real-time information.
- Ray Starr provided an update on solicitations that MnDOT is pursuing:
  - A bill in the legislature for a demonstration on the use of automated vehicles for people with disabilities for five million dollars.
  - ATCMTD
  - FAST Lane Freight
  - A study for the use of automated vehicles on I-94 between Minneapolis and St. Cloud.
- Ray Starr also noted that he will be attending a V2I Deployment Coalition. Todd Foster asked if Ray could ask how work zones will be recognized by automated vehicles.
- Morrie Luke noted that the I-394 MnPASS signage will be swapped out with new signs this Spring.
- Mike Kronzer provided an update on RICWS. Two sites will be deployed this year. Additionally, the Maintenance Warranty contract expires this December.
- Scott Petersen noted that SRF has developed an ITS Technologies Guidebook that is expected to be published in the coming months.
- Scott Peterson also stated that the Communications committee are creating an automated vehicle repository on the ITS Minnesota website for members.



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- Ginny Crowson shared that ENTERPRISE will be starting five new projects. She also noted that North/West Passage currently has two RFPs on the MnDOT website:
  - Multistate assessment of interstate speed limit impacts
  - Freight Task Force, Year 2

## 6. Other:

- Next meeting will be held on Tuesday, May 3<sup>rd</sup>, 2016, 1:00pm-to-3:00pm at Waters Edge Conference Room A.
  - Meeting Topic: Technology in the Squad Car, by Col. Matt Langer, Minnesota State Patrol.