

Location: MnDOT Water's Edge Conf Room 323
Client: MnDOT
Date: March 23, 2015
Time: 10:00 a.m. – 12:00 noon
Subject: Intelligent Work Zone Opportunities

Meeting Summary

INTRODUCTIONS

Kevin Kosobud, Tiffany Dagon, Craig Mittelstadt, Ken Johnson, Jon Jackels, Ted Ulven

SHORT INTRODUCTION TO IWZ SYSTEMS

Project in Iowa – standalone ITS project statewide. Street Smart Rental provides equipment and maintains. Iowa TMC runs it. Use Wavetronix trailers (Iowa requirement) and PCMSs. Most systems are queue warning. 14 projects across the state (~\$730K). 3 contracts – StreetSmart successful bidder on all three. Very similar to what was done in the MnDOT Metro project (2013).

- Iowa paid the mobilization up front – getting it out there, set up, communications, etc. Then there was a per day fee.
- SRF has a report on this that includes lessons learned.
- 30 projects over the next year identified that could benefit, going to use on 18 of them.
- Hired Iowa State University to perform evaluation of all 30 projects – then they can compare/contrast traffic flow and safety. Iowa State will be finalizing the project plan soon.
- Currently operating on last year's contract, but the contract is being renewed (annual renewals possible up to 5 years).

Iowa DOT purchased data from INRIX last year. Iowa State is evaluating this information. Third party probe data.

Iowa DOT is using 1325 pceplph as a trigger for defined traffic critical projects. Iowa State is evaluating this number to see if it's appropriate.

Metro liked the separate contract as it allowed flexibility; however, the overall construction project deployment over the past couple of years indicated a per project ITS system would work better.

NEED FOR END OF QUEUE WARNING SYSTEMS

Craig mentions that greater MN districts would like to know when queues are developing and what the length of the backup is. Video communication is expensive in rural area. Snapshots can be more efficient as the data stream is much less.

CHALLENGE OF ENFORCING ROAD CLOSED – LOCAL TRAFFIC ONLY

Perhaps monitor volume at location to determine problem areas. To possibly help determine when and where to deploy enforcement.

OTHER IWZ NEEDS

Five “bread and butter” ITS systems:

- End of queue warning system
- Active Zipper merge
- Travel time systems
- Electronic workers present speed limit
- Dynamic speed display sign (Tiffany feels that this special provision needs work)

Boilerplate Special Provision development:

- Should we author boilerplate special provisions for the above ITS systems?
- Include that the system be placed a set time before the construction work starts.
- Perhaps include monitoring of traffic flow and notification of incidents to project personnel.
- Should a performance evaluation be part of the specification? Not for all of the above.
- Performance based specification vs systems engineering design.
 - If run through RTMC have to use equipment that the RTMC can implement. Rural area perhaps better for performance based specification.

Update IWZ Toolbox

- Perhaps add recommendations for implementation (look at Enterprise warrants).

Rapid Deployed IWZ Contract for unexpected issues (greater MN vs Metro)

ACTION PLAN

Investigate the Rapid Deployed IWZ Contract (greater MN vs Metro)

Investigate options (possible contract) for updating IWZ Boilerplate Special Provisions

Investigate options (possible contract) for updating IWZ Toolbox

