

**Madison Area Transportation Planning Board (an MPO)
Regional Intelligent Transportation System (ITS) Strategic Plan Implementation Committee
February 19th, 2016 Meeting**

1. Roll Call

Members present: Rich Beadles, Kate Christopherson, Shaun Olson, Kyle Hemp, Yang Tao, Paul Logan, Dan Pruess, Bill Putnam, Peter Rafferty, Elizabeth Schneider

Members absent: Dave Bursack, Dan Holt, Patrick Kass, Lt. Trevor Knight

MPO Staff present: William Schaefer, Philip Gritzmacher

Others present: Dave Dryer, Scott Langer

2. Introductions & Review Committee Purpose

Schaefer explained that the purpose of the meeting is to bring together the diverse group of stakeholders that are involved in regional ITS to ensure implementation of the recently finalized *Regional Intelligent Transportation Systems (ITS) Strategic Plan for the Madison Metropolitan Area*. He said that the meetings should aid with cooperation between agencies and facilitate integration of the ITS plan into implanting agency plans and budgets.

3. Set Regular Meeting Date/Time

The committee decided to meet quarterly, on the third Friday of the month, from 10:00 am-12:00 pm, except for the August meeting which is scheduled for the third Thursday. Schaefer said he would send out an Outlook meeting request for the dates.

4. University of Wisconsin TOPS Lab Systems and Potential County Traffic Operations Web Mapping Application

Rafferty gave a presentation on the Wisconsin Traffic Operations and Safety Laboratory (TOPS), some of the efforts that they have completed, projects that they are currently working on, and opportunities for future collaboration. He explained that the TOPS lab was formed in 2003 as a joint effort between UW-Madison and the Wisconsin Department of Transportation (WisDOT). The TOPS lab focuses on system operations, information technology, and traffic safety and engineering.

In the past, the lab has been involved with the development and implementation of statewide ITS infrastructure, such as WisDOT's 511 traveler information system; geospatial analysis products, such on-going maintenance of specific MAAPS measures for WisDOT; evaluations of implemented ITS technology, and planning for operations. He explained that the TOPS Lab is involved with multi-state ITS and freight coalitions, which facilitates additional data sharing and collaboration, and ensures that Madison is integrated into major efforts in the Midwest and nationally.

Rafferty then introduced TOPS Lab's WisTransPortal. The site stores traffic operations data that can be downloaded by authorized users for a wide variety of uses, including planning and operations. WisTransPortal includes both archived data as well as real-time data exchange. He said that data from WisTransPortal is used for a variety of real-time applications as well such as roadway message boards and maps for incident management. For these applications, the portal's InterCAD capabilities push scrubbed data to the requesting agency. He believes that the platform could be used in even more center-to-center applications. He reviewed a concept for a traffic

operations web mapping application for Dane County using information regarding incidents, etc. from both WisDOT data feeds and other local information from InterCAD.

He asked committee members whether their agencies could benefit from the traffic operations mapping application concept. Logan said that the 911 center would benefit from the ability to map incidents as well as having live traffic cameras available in one location. Dryer said that the City of Madison would benefit from that capability as well, especially because space is being created for an operations center when the Madison Municipal Building is remodeled. Rafferty said that TOPS could design an application with different levels of security, allowing incident responders to see information with a higher-level of granularity than those that would simply benefit from viewing incident locations and/or cameras. Hemp mentioned that he would appreciate the different levels of security, because the lower-security option on the maps that WisDOT currently uses makes it possible to utilize them in the field. Rafferty said this was a good idea, because a less-secure version of the information could have a public application program interface (API), which will allow for the creation of or integration into private sector software.

Schaefer asked Rafferty for a ballpark estimate of the cost for fully developing the mapping application would be. Rafferty estimated that it would cost \$50,000. Schaefer then asked if any agencies would be willing to act as a project sponsor. Dryer said that the city may be able to contribute to the project. He asked Schaefer whether MPO funding might be available for the project. Schaefer said that the project would be eligible and would probably score well, but the next round of STP Urban project applications isn't until next year for projects in 2021 and 2022, unless currently committed projects were delayed or came in under budget.

Schaefer requested that Rafferty draft a more detailed scope for the project and estimate the project expense. Rafferty agreed to do so.

5. Current Adaptive Traffic Signal System and Project to Expand to University Avenue

Langer gave a presentation on the Econolite Centrac's adaptive traffic signal system that was deployed as part of the Verona Road/West Beltline interchange area project. The City of Madison partnered with the City of Fitchburg, Dane County, and WisDOT to install the signal system along a portion of Fish Hatchery Road and McKee Road in an effort to mitigate the traffic impacts from the reconstruction of the interchange. In total, 14 signals were installed along the corridor.

Langer presented the results of a report on the impacts from the system installation. While volumes had increased substantially, travel times decreased across all measured time period. The system provided over a 20% savings in travel times during off-peak periods, but also improved travel times in peak periods as well. Another benefit of the system was its incident response capabilities. Langer cited an incident in which the Beltline had a full closure during the AM peak period. The closure caused traffic to reverse along the McKee/Fish Hatchery corridor, which would have caused a major delay with a traditional system. The adaptive traffic signal system, however, was able to respond to the increased demand and mitigate the delay.

Langer said that the City is planning a similar application for the University Avenue corridor from Middleton to University Bay Drive/Farley Ave. Originally approved for STP Urban funding in 2018 (SFY 2019), the project may be able to be advanced to 2017 due to the delay in the CTH M project. Traffic Engineering is working on a budget amendment request to obtain funds for design to allow the project to be completed next year. An update will be provided at the next meeting.

6. City of Madison's Smart City Challenge Proposal

Rafferty provided an overview of the City of Madison's Smart City Challenge Grant Proposal. The City of Madison procured the services of the UW TOPS Lab and the consulting firm Kimley-Horn

to complete the application. Rafferty said that he believes that the city is well positioned to advance to the next round of proposals, due to the desired community characteristics outlined by US DOT, strong support of city leadership, strong commitment from business leaders, and the articulated vision laid out in the proposal. He said that regardless of the outcome, he believes that the region will benefit from the information generated as part of the application process.

The application was submitted February 4, 2016. Cities that will move onto the final round of applications will be notified in Austin, Texas on March 12. Those winners will receive \$100,000 to create a more detailed proposal with more specifics on the projects that would be implemented with the grant funding. The selected city for the funding will receive up to \$50 million, with \$40 million coming from US DOT, and \$10 million coming from the company Vulcan.

7. WisDOT RITIS Performance Management Workshop Recap

Schneider gave a recap of a Regional Integrated Transportation Information System (RITIS) demonstration WisDOT held in December 2015. She explained that WisDOT is exploring the use of RITIS for incident, operations, and investment decisions as well as for planning and performance monitoring. She said that there are over 5,000 users of RITIS around the county, with users including DOTs, MPOs, emergency management agencies, universities, transit providers, developers, the military, legislators, and the public.

Schneider explained that WisDOT is still in an exploratory phase, and is not committed to partnering with Center for Advanced Transportation Technology Laboratory at the University of Maryland at this time for RITIS. WisDOT will test the platform over the next year while exploring options to replace the current Advanced Traffic Management System (ATMS). Additionally, WisDOT will determine whether or not a probe data contract will be included with the procurement of an ATMS. She said that if the platform was pursued, WisDOT may seek partnerships with other agencies during procurement. She then offered to provide trial RITIS logins to members of the group.

8. Committee Member Reports

- ITS/ITS Related Projects Being Considered for 2017 Capital Budget
 - Hemp said that WisDOT Southwest Region office had applied for funding for improved signal surveillance cameras and detection. He said that WisDOT has \$10 million in funding set aside for these types of projects. The region will know the results of the application by July 1, 2016.
- Report on WisDOT TIME Meeting(s)
 - Schaefer said that this topic would have to be moved to a future meeting due to time constraints.
- Other
 - Rafferty said that the US DOT will begin soliciting for connective vehicle WAVE 2 pilot project applications in 2017 after the Smart City Challenge. In the previous cycle, Tampa, New York City, and Wyoming were awarded funding. During that cycle, WisDOT and the Madison did not apply.

9. Discussion of Future Meeting Topics

Schaefer solicited ideas for future topics, requesting that members email him.

10. Adjournment

The meeting adjourned at 12:05 pm.