



Advanced Technology Task Force

Minutes

May 15, 2014

Cook County Conference Room

233 S. Wacker Drive, Suite 800

Chicago, Illinois

Committee Members

Present: David Zattero (CDOT, Chair), Jon Nelson (Lake County DOT), Andy Hynes (Naperville), Mike Tuman (DuPage DOT), Christina Kupkowski (Will County DOT), Eric Holeman (CTA), Kevin Price (IDOT), Jeff Galas (IDOT), Taqhi Mohammed (Pace)

Others Present: Austin Provost (TranSmart), Scott Lee (Parsons Transportation Group), Seth Johnson (TranSmart), Matt LeTourneau (URS), Brian Plum (Traffic Control Corporation)

Staff Present: Todd Schmidt, Claire Bozic, Thomas Murtha, Patricia Berry, Dan Rice

1.0 Call to Order

David Zattero, Chair called the meeting to order just after 9:30a.m.

2.0 Agenda Changes and Announcements

There were no agenda changes or announcements.

3.0 Approval of Minutes

The last meeting was a joint meeting with the Regional Transportation Operations Coalition. No meeting minutes are available.

4.0 Implementer Updates

Mr. Holeman (CTA) reported that CTA continues to monitor the implementation of the Ventra fare payment system. CTA staff is meeting with CMAP next week to discuss updates to the ITS Architecture.

Mr. Price (IDOT ITS) reported that the statewide ITS Architecture update contract negotiations were underway. Work tasks will include updating the statewide

architecture, undertaking coordination with regions that already have a regional architecture, and helping to develop a regional architecture in areas newly required to have one. Work is continuing on expanding the Gateway Traveler Information System (GTIS) to encompass the entire Great Lakes Regional Transportation Operations Coalition (GLRTOC) area. Real time traffic information coverage will extend from Minnesota to Michigan. Currently construction information from Michigan is being tested. Ultimately, it may be that only construction information from Michigan is displayed, without real time traffic. This depends on how the agencies are able to negotiate an agreement. Finally, work continues on the mobile application which was made available in the autumn of 2013. Also, work on the [statewide buildout](#) of a fiber communication network continues.

Mr. Galas (IDOT TSC) reported that expansion of the vehicle detection system (VDS) on I-55 to Grundy County and I-88 continues. The devices are a primarily loop detectors with radar installed at a few locations. There have been instances of problems collecting data on I-55, but the problem is being addressed. A smart workzone has been implemented for the work on the DesPlaines River bridge and the Arsenal Road interchange construction sites on I-55. They include VDS, dynamic message signs (DMS), and cameras which were rented for the project and are being used by the traffic engineers monitoring the workzone operations. They are temporary and not integrated into the TSC system so that information is not being distributed to the public through TravelMidwest.com. However, information is being provided to a number of other outlets.

Work on project development for the I-94 Smart Corridor (I-94 from the Kennedy junction all the way to the Wisconsin state line and the parallel US 41) continues. Fiber communication installed to replace the 30 year old copper wire will form the foundation for the project. This part of the project has already been agreed on. The remaining parts of the project are still in development. On a related note, work to determine what ITS investment is needed for the I-55 managed lane, the I-290 project and the Kennedy Expressway is underway.

The Illinois Tollway signed an agreement with FHWA to become an affiliated ITS Connected Vehicle testbed using I-90 (Jane Addams Tollway). The Tollway intends to implement Advanced Traffic Management systems as part of the I-90 widening and testbed status. The ATMS system will initially be focused on the segment between Barrington Road and the Kennedy Expressway. This will provide the foundation for lane management.

Mr. Zavattero (CDOT) reported that the Jeffrey Jump is the first of planned BRT projects in the city. It includes transit signal priority (TSP) and the work is the prototype for a hybrid fiber/wireless communication system. There are three upcoming signal interconnects projects which will also likely include hybrid communication systems: Broadway/Sheridan/Lakeshore Drive, Stoney Island, and Roosevelt Road. Together, these represent about 120 intersections. The city's controller upgrade project continues,

where over 300 controllers will replace 20-30 year old signal controllers. The contract is finally being negotiated for development of the Chicago Traffic Management Center. The electronic crash report system is in now in use by the Chicago Police Department. Officers can use portable data terminals (PDT) to enter the information for any reporting necessary. All officers see the same interface, and branching brings them to the correct reporting forms. It was a custom system and is tied to the Chicago Police Department case management system.

Mr. Nelson (Lake County DOT) reported that the contract was signed to install the county's first adaptive signal control system for 8 signals, but work is not progressing because the contractor is waiting for delivery of some of the equipment. This should be operational by fall. Another Lake County adaptive signal control system should be on the IDOT letting for this year. Lake County 911 operators have implemented a system that allows them all to communicate with each other through a central location. Lake County DOT can now receive incident information from all the county's 911 centers. This is also allowing the DOT to share more video images with the 911 centers through fiber of VPN. Lake County DOT is also working on a cooperative effort for traffic management on Lake-Cook Road with Cook County DOT. Roadside equipment (cameras, signals, VDS) will be connected to the Lake County TMC. Cook County also has a connection to the Lake County TMC, and a terminal in the Cook County offices. Cook County DOT staff thereby has the ability to monitor and manage traffic on Lake-Cook Road via communications through the Lake County TMC.

Ms. Kupkowski (Will DOT) reported that the Will DOT's second signal interconnect on Bell Road/143rd Street is under design. There are 3 signals on two different roadways

Mr. Hynes (City of Naperville) reported that the City of Naperville is designing the Advanced Traffic Management System, first integrating 3 closed loop systems with a centralized traffic management center. They are coordinating with DuPage DOT who is working on a separate but parallel process to develop improved centralized traffic management capabilities. This project is partially funded through the STP and CMAQ programs.

Mr. Tuman (DuPage DOT) reported that DuPage DOT is working on installing fiber communications with Naperville for the coordination of the traffic management activities. DuPage DOT also desires communication with the Gateway, and the group discussed the possibility of routing communications through the tollway system since the DuPage DOT offices don't own fiber for this purpose. The Tollway currently has agreements to share communication infrastructure with a number of agencies.

Mr. Mohammed (Pace) reports that they are still working on bus on shoulders and TSP projects. Pace is working with RTA, CTA, and highway agencies to develop regional TSP standard message sets. They are targeting TWP for 6 corridors, which will include about 130 signals. Signal optimization will be undertaken first at locations which have not been optimized within the last five years. Testing of an interoperable system on Milwaukee

Avenue will be underway shortly. This will provide a proof of concept on whether it is possible to design a system that will work with a number of signal systems, and the different CTA and Pace equipment.

Mr. Lee, noted that the Tollway wasn't represented at the meeting today but that their work should not go unreported. He reported that the traffic.com VDS detectors ownership had been transferred to the Tollway, and that work needed to integrate them into the TIMS system was completed. The Tollway is also about 99% finished converting the analog cameras and supporting infrastructure to digital equipment. In conjunction, the video wall at the Tollway TIMS is also being replaced.

The Smart Truck Parking system on I-94 towards Detroit is underway. It includes public and private parking lots, signs to post parking information, and truck on-board equipment to assist drivers in finding parking.

Related to the Connected Vehicle Testbed agreement, Mr. Lee attended a connected vehicle symposium. It was a high level discussion, and a large part of the focus was on security. It is necessary to ensure information being transmitted and received is not corrupted or tampered with. Mr. Zavattero asked whether they were still discussing using Dedicated Short Range communication (DSRC). In the past it wasn't clear what direction they were leaning on this, and that CDOT did not include DSRC in its standard communication nodes (C-Boxes). However, it could be added later.

5.0 Regional Congestion Database

Mr. Murtha provided a presentation about the work he has done using with traffic probe data acquired from FHWA and IDOT. The presentation is available on the meeting materials website. The Committee was interested in using the information. Mr. Murtha said that CMAP couldn't redistribute the actual data, but that maps and tables could be produced as needed. He also said that the region could purchase access to the data in ways that it could be shared among all the agencies and that shouldn't be ruled out.

6.0 Agreements

Ms. Bozic started by saying the update of the ITS Architecture engendered a couple of questions. First, why the agreements only linked to descriptions of the agreements not copies of the actual agreements and second, why the standards did not link to the actual detailed standards when they were available. Mr. Tuman described difficulties with FHWA around the standards while writing project requirements. First, FHWA would like more detail in the requirements but if a RFP is written with too much specificity it may be that no vendor can meet the requirements. Second, the national standards still include some specs that are proprietary, which FHWA does not agree with. FHWA supports implementing agencies writing their project requirements in such a way to start changing the standards. Project implementers don't feel they have enough power to be successful doing that. It is an impasse, and Mr. Zavattero suggested that the only way to get this done would be for FHWA to enact a requirement to change the standard. He still

thought it would be helpful to have an easier way to find the standards, and Ms. Bozic said she would investigate options as they related to the ITS architecture.

In respect to keeping a library of copies of agreements, most of the committee thought it would be useful. Some agencies said that there were so many agreements it wouldn't be workable, but other members thought that even example agreements would be nice to have.

Mr. Zavatiero also said that it would be useful for CMAP to sponsor another training session on using Turbo Architecture. Ms. Bozic will also look into that possibility.

Actions: Ms. Bozic will 1) report back on how links to actual standards can be accommodated 2) report back on how a library of agreements can be accommodated and 3) report back on training opportunities for Turbo Architecture. Links to online training should be available from the CMAP ITS page.

7.0 ITS Architecture Update Strategy

A memo was distributed showing the update strategy, and it is available on the ATTF meeting materials webpage. The Committee agreed that it was a reasonable schedule and the proposed documents would be adequate for the update. The group agreed to send any additional update material to cbozic@cmapp.illinois.gov by June 15th or even just call Ms. Bozic to describe desired changes.

8.0 Other Business

The [ITS World Congress](#) will meet in Detroit in September. ITS Midwest [annual meeting](#) will take place in Indianapolis November, tentatively the 6th and 7th. The North American Traffic Monitoring [Expo and Conference](#) (NATMEC) will take place in Chicago, and is cosponsored by CMAP and IDOT, among others.

9.0 Public Comment

There was no public comment

10.0 Next Meeting

11.0 Adjournment