Advanced Technology Task Force
Annotated Agenda
Thursday, May 31, 2012
9:30 a.m.

DuPage County Conference Room
233 S. Wacker Drive, Suite 800
Chicago, Illinois

In attendance: Tom Murtha-CMAP , Matt LeTourneau-URS, Jon Nelson-Lake County DOT, Claire Bozic-CMAP, John Dillenburg-UIC, Justin Potts-IDOT, Chuck Sikaras-IDOT, Jeff Galas-IDOT, David Zavattero -CDOT, Joseph Brahm-Delcan, Randy DeShazo-CMAP, Gerry Tumbali-RTA, Chris DiPalma-FHWA, Brian Plum-TCC. Duana Love -FTA, Darryl Dawson-ISHTA , John Benda-ISTHA, Ahmed Ghaly-ISTHA, Tom Szabo-Kane County DOT

1.0 Call to Order 9:30 a.m.

2.0 Agenda Changes and Announcements
No agenda changes or announcements were suggested.

3.0 Approval of Minutes – December 8, 2011
No corrections were suggested and the minutes were accepted.

4.0 Review of Regional ITS Architecture
Mr. Murtha introduced the subject of updating the region's ITS architecture and called the group's attention to the CMAP ITS Architecture website. He briefly reviewed the contents with the committee. He noted that the "Architecture Summary" CMAP produced for the meeting is not in included in the interactive version, but CMAP will post it on the ITS page. Mr. Sikaras suggested that a timeline or deadlines be established for updating the current architecture information and providing information on new projects.

5.0 Agency Updates
The group started with a review of the Architecture Summary. This proceeded on a project by project basis.
Chicago Traffic Management Center (TMC) – This project is still moving forward. The RFP for the advanced traffic management system has been released.
Cicero Avenue Smart Corridor – Design phase is completed. Phase III, construction, is ready to move forward. New variable message signs are needed for I-55 and Cicero Avenue. Real time arterial traffic information collection and information transmission to the signs and highway advisory radio will be needed.
Chicago Citywide Smart Corridors – No additional progress was reported on these items, but Mr. Zavattero noted that adaptive signal control should be considered a component of the

corridors. Mr. Zavattero pointed out that the smart corridor technology will be important to implementation of the city's bus rapid transit service and transit signal priority routes.

CDOT Red Light Camera Inforcement – about 200 intersections are currently operating in this program. The city of Chicago also intends to begin automatic speed limit enforcement around "safety areas" (parks and schools). The group discussed whether the automatic speed enforcement should be a different project, or whether this project should be revised as "Automatic Video Enforcement" which would include red-light and speed enforcement. The cameras are also able to count vehicles, and CDOT is working on a way to use this information to help update the traffic counts completed in 2006.

Illinois Gateway – Mr. Sikaras said that the description should be changed to reflect the Lake Michigan Gateway Alliance. Many improvements have been made to the system, which are reported in a quarterly report produced for the project. Mr. Sikaras will provide that information. Additional information is being collected and distributed by they system, and some future initiatives include potentially expanding the system to be statewide.

Northeastern Illinois Regional Data Archive and Management System – Ms. Bozic said that an update to this project was included in a later agenda item, but that she would provide it here. The project is moving forward. CMAP has a contract with a consultant who is writing scripts which will collect the reports from the Gateway, as well as data from about 50 National Weather Service weather stations. Retrieving CLARUS road weather information from that site is also included in the project, but automating this has proven a little more difficult than for the other datasets. CMAP is also working with UIC, IDOT and the Illinois Tollway to start the flow of 30 second sensor and ramp data through the Gateway to be archived. RTA and CMAP had previously had an unofficial agreement that RTA would work on the transit focused data archiving and CMAP would focus on the roadway data. Mr. Tumbali reported that RTA has not had enough staff to get this project really moving, and they are in discussions with CMAP about how to proceed. RTA will not object if CMAP wishes to begin working on the transit data archiving as well.

Illinois Tollway Smart Work Zones – Based on early success, this project continues. It was difficult to quantify the benefits, but anecdotally there seemed to be fewer crashes in the work zones. Mr. Benda said they learned that it was difficult to coordinate Smart Work Zones put in place by multiple roadway contractors. The Tollway requires that the variable message signs be able to operate with the TIMS system, and the contractors often did not have the right equipment in the first season. The hope is that as a few years pass, the contractors will obtain the necessary equipment and the project will be easier in the future. The Tollway requires that a VMS sign announcing the upcoming construction be in place 10 days before construction and believes that if you give people appropriate information, they will change their behavior accordingly. There are about 12 Smart Work Zones running this year. The congestion information from the work zones is provided to the Gateway Traveler Information System. The messages posted on the portable variable message signs are not currently sent to the Gateway with other VMS messages. However, any workzone information that is displayed on the existing permanent message signs is transmitted to the Gateway.

Google Transit Trip Planner – Metra and CTA are still participating, providing Google with GTFS (General Transit Feed Specification) schedule data for the application. RTA has been working with Pace to generate the necessary information. Mr. Tumbali said the RTA

has also been working with the three service boards to generate the GTFS data based on real-time information rather than schedules. This information can be used for a real-time trip planner. For budgetary reasons, RTA is keeping the option of using Google for the region's multimodal trip-planning platform.

Transit Management Systems – RTA is working with Metra on their new GPS based train location system. It will go into operation on June 1st 2012. CTA Bus Tracker and CTA Rail Tracker systems provide public Application Programming Interfaces (APIs) so any developer can use the real time information. The data from Metra and Pace should also become available through APIs. As described earlier, soon Metra, Pace and CTA will all have real time location information available which can be converted o GTFS format and support a real time trip planner portal for dynamic trip planning.

City of Chicago Traffic Signal Interconnects – CDOT is continuing to move towards central signal control. Some of the system is piggybacking on Operation Virtual Shield (OVS) communication infrastructure.

City of Chicago Wireless Interconnect – in areas where supporting fiber infrastructure is not available, CDOT is using wireless communication to implement interconnects. These systems will be integrated with a central control where possible.

Chicago Skyway Travel Monitoring and Integration with IDOT Gateway- The committee did not have any progress to report on this project and suggested the CMAP contact Mike Lowry at the Skyway Concession Company SCC to determine the status of this project.

Chicago Critical Bridge Infrastructure – Mr. Zavattero said he would have to check in with the bridge department to find out what was happening.

Chicago Truck Route Advisory System – Mr. Zavattero reported that the first step, updating the Chicago truck route system is underway as a truck route planning study which was funded through the region's Unified Planning Work Program. This will also help the city comply with a new law requiring communities to identify routes in the truck route system. CMAP has been working with communities and IDOT to identify the truck route system for the rest of the region. CDOT's ultimate aim is to have an interactive route planner, where the driver can enter the desired origin and destination, truck vehicle class and type of cargo and the appropriate route will be mapped out. Mr. DiPalma wondered if the state system and the Chicago system could somehow be integrated for a one-stop experience for the driver. Mr. Sikaras suggested that the CMAP Freight Committee should provide input on this project.

Lake Shore Drive and 18th/31st Street Ramp Congestion Relief Project – no report.

Chicago Information and Improvement Project – an interactive web-based map has been developed.

(Chicago) Parking Management System – many changes are needed to this project. The city leased much of the parking to a concessionaire.

*Cook County Traffic Management Center-*no report.

City of Chicago Snow Command – The mobile asset tracking system (GPS on snowplows and garbage trucks) is collecting data, and the city of Chicago has a "plow tracker" service which allows residents to observe the locations of plows during snow events, and subscribe to Facebook and Twitter for updates.

Chicago Citywide BRT/TSP – The Jeffrey Corridor and East-West Corridor on Washington and Madison Streets are funded and will be implemented shortly.

Chicago Signal Controller Upgrade – The specifications for the advanced traffic controller have been completed and there is enough funding to upgrade approximately 400 locations. The controller will mostly be installed in existing cabinets and the first locations will be along transit signal priority (TSP) and bus rapid transit corridors (BRT).

City of Chicago Traffic Surveillance – part of the City of Chicago TMC project specs includes using existing cameras to monitor traffic. This is moving ahead.

City of Chicago Portable Variable Message (VMS) Communication- upgrades to about half of the city's 40 VMS have been completed. These now have the ability to be controlled from the city traffic management center.

DuPage Emergency management and Signal Preemption – no report.

DuPage County Paratransit Coordination – no report.

Kane County Traffic Management Center – Kane County is finalizing the architectural design, which will be an addition to the county administration building. Construction should start in early fall and completed in about 8 months. Mr. Szabo also said that they were finalizing the advanced traffic management system (ATMS) element and will start work on this shortly. This will be a scalable system that can accommodate existing and planned signal systems. The county is upgrading about 6 closed-loop systems to communicate with a central traffic management system. They are installing fiber optic communications and their goal is to have about 120 signals communicating with the TMC. In addition, they are installing 2 road weather information systems (RWIS) on bridges of over 1000 feet in length which will also have pavement sensors to report on whether bridges are getting icy, and include flashing beacons to warn motorists of hazardous bridge conditions.

Lake County PASSAGE – this service has been enhanced by adding smart phone format information, Twitter and email notification and additional highway advisory radio (HAR). Mr. Nelson said the county was also installing some adaptive signal control location and corridor signal retiming. Additional connections to the county's emergency responders have been established for improved public safety answering PSAP integration. Lake County will receive road-related emergency information from nearly the entire county which will allow them to better manage traffic operations.

Will County Traffic Management Center – no report.

Integration of Centers – Mr. Zavattero suggested that the city of Chicago should not be listed as the developer of this project. The group discussed the intention of this project, which it seems is related to how the region's TMCs communicate with the Gateway to provide real time information to each other. As an example, he said that if there was a problem downtown, the Chicago TMC would be able to provide a message to be displayed on a variable message sign owned by another entity automatically - without a manual process of contacting the office and sending suggested language another way. This would require both communications between the two TMCs and appropriate agreements would have to be in place. The group suggested that more discussion was needed on this project and there wasn't enough time to work through the issue now. There wasn't enough time to continue down the list, so the group decided to move on to the next item. Each agency will be sent a list of architecture items to review and the committee would discuss them at the next meeting.

6.0   Recommended Changes

Mr. Murtha presented a number of projects which are not reflected in the architecture but which seem important to include.

Positive Train Control – New regulations require monitoring of train positions and the ability to override the engineer to avoid collisions. For Metra, this is over $100 million and may be the largest ITS project currently underway in the region. The Class I railroads must also implement the system, and the systems must be complete by 2015. The group agreed that this was an appropriate project.

Congestion Pricing- The group discussed whether it would be better to include "congestion pricing" as a project. Mr. Benda said that the I-90 corridor was being referred to as a Smart Corridor, and would include the infrastructure to support active traffic demand management (ATDM). ATDM could include congestion pricing, vehicle to vehicle communication, and vehicle to infrastructure communication and other components. The group agreed that it was important to include the I-90 Smart Corridor project in the regional architecture and would discuss this further at the next meeting.

CTA BRT/ART and Pace Bus on Shoulders – One questioned whether bus on shoulders was an ITS project. Mr. Benda said that the current bus on shoulders was a first step in the direction of "Lane 0," which refers to managing the shoulder as a special lane and which will require ITS investment. No decision was suggested for these projects.

Cook DuPage Smart Corridors – The Cook DuPage Study is concluding with a recommendation for 4 initial arterial Smart Corridors. No decision was suggested for this project.

Real Time Information Requirements 23 CFR 511 – No decision was suggested for this project.

7.0   Data Archive Status

The update for this project was provided under agenda item 5.

8.0   Other Business/Next Meetings

Mr. DiPalma informed the group that Cyber Security has detected hacking of Traffic Management Center software so everyone should be sensitive to security issues and make sure system security patches have been installed.

The ITE Midwestern District and TRB is sponsoring the 4th Urban Street Symposium in Chicago on June 24 - June 27.

The 2012 ITS Midwest Annual Meeting will be held on November 15th and 16th in Columbus Ohio at the Ohio Department of Transportation headquarters. Save the date and more information will be provided when it becomes available.

The U.S. Department of Transportation's ITS Professional Capacity Building (PCB) Program is hosting a free webinar called "Why do Transportation Agencies Adopt ITS? Join the conversation and share your experiences with the ITS Evaluation Program" on Thursday, June 7, 2012, 1:00- 2:30.