



## Advanced Technology Task Force

### Meeting Notes - September 6, 2007

The meeting was called to order at 10:00 AM at the CMAP Offices, 233 South Wacker Drive, Suite 800, Chicago, Illinois. Those present at the meeting were:

**Attendees**

	<b>David Zavattero, Co-Chair</b>			
	<b>Duana Love, Co-Chair</b>			
Members:	Marty Anderson	<i>IDOT Elec. Op.</i>	John Dillenburg	<i>UIC</i>
	Tony Khawaja	<i>LCDOT</i>	Dean Mentjes*	<i>FHWA</i>
	Chuck Sikaras	<i>IDOT, ITS</i>	John Benda	<i>ISTHA</i>
	David Tomzik	<i>Pace</i>		
	Steve Wojtkiewicz	<i>Metra</i>		
Interested Parties:	Joseph Brahm	<i>Delcan</i>	Andy Hynes	<i>City of Naperville</i>
	Abraham Emmanuel	<i>Chicago OEMC</i>	Justin Potts	<i>IDOT</i>
	David Ziesemer	<i>DuPage County</i>	Jon Nelson	<i>LCDOT</i>
	Steve Peters	<i>IDOT Elec. Op.</i>	Jim Powell	<i>Wilbur Smith</i>
	Lee-Ann Seeling	<i>Trichord</i>		
CMAP Staff:	Claire Bozic			
	Tom Murtha	Dan Rice		

\*Teleconferenced.

**SUMMARY OF COMMENTS:**

- 1. Approval of meeting notes from June 13, 2007 Task Force meeting.** The notes were approved as submitted.
- 2. ITS Status Reports**

IDOT (Chuck Sikaras) reported that the regional Gateway information system was moved from the IDOT District 1 office in Schaumburg to the IDOT Traffic Systems Center in Oak Park. It was a smooth process, on time and on budget and the system was up and running by July 1<sup>st</sup>. This included all new hardware, as the existing equipment was 9 or 10 years old. Even though the system was basically rebuilt from scratch, the change was seamless. Some of the software has also been upgraded, but the software upgrade process will continue over time. Unfortunately, the router which provides links to some information for RTA was temporarily mislaid but has been located and should be transmitting the needed information to airport signs soon. The IDOT CMAQ application to fund additional closed circuit televisions was approved. An intergovernmental agreement between IDOT and ISTHA for cooperation on ITS activities has been developed and reviewed by the legal departments for both agencies. Both parties are expected to sign off on the agreement during September. This agreement has been designed to be easily amended by the IDOT District 1 Engineer and the ISTHA Lead Engineer, as long as the change does not involve a financial transaction.

This means that changes can be made quickly, as needed, without sending the entire agreement back up the hierarchy for sign-offs.

The Gary-Chicago-Milwaukee (GCM) has changed its focus to mainly interstate highway operations. To that end, it has created a multistate highway operations workgroup with members from the Illinois Department of Transportation, the Indiana Department of Transportation, the Wisconsin Department of Transportation, the Chicago Skyway, the Indiana Toll Road and the Illinois State Toll Highway Authority, among others. The relationship between the various interstate highway operators is better than ever and this group will continue to improve those relationships. For example, during the recent torrential rainstorm when Indiana was forced to close I-80 because of flooding, closure information was displayed in Illinois and Wisconsin message boards.

To fill the resulting vacuum, a multi-modal focused group has also been identified for northeastern Illinois to ensure that multi-modal issues continue to be addressed.

IDOT (Marty Anderson) reported that a Request for Proposal has been released to develop the capability for an online registration process providing larger image users (such as television stations) dedicated access to IDOT camera images with the potential for additional services for registered users in the future. In this way, instead of those users "trolling" and capturing the images anonymously from the internet, they can be tracked. The images are currently static shots but could be expanded to moving video images in the future. Camera coverage of the existing expressway system is increasing year by year and soon the entire system will be covered.

IDOT (Chuck Sikaras) reported on a timely study by Southern Illinois University for remote monitoring of bridge structures using sensor devices. Phase I of the study was funded through an earmark in FY 2002, with a draft report recently being completed. In FY 2005, additional funding was allocated for a test deployment program. Given the importance of these results to the infrastructure maintenance community, this study will be closely monitored to ensure a very high quality study.

IDOT is studying the potential for moving control of the moveable bridges in Joliet to a centralized remote operation instead of the current bridge tender system.

Lake County (Tony Khawaja) reported that Phase II of the Lake County Passage system is underway. This will connect an additional 150 signals to the central system. The county is still having difficulties connecting some manufacturers' controllers to the system, but they expect to get this worked out soon. In addition, the county is planning to install up to 50 new traffic monitoring cameras, depending on what the budget will support. They are also planning to purchase 5 more variable message signs. The three they already have are in constant use and have proven to be very effective for providing driver information. The disadvantage to using mobile signs is that it takes time to move them from location to location, so they must be deployed at incidents of a duration that justifies their use. Finally, the Lake County Passage system is connected to the Gary-Chicago-Milwaukee Gateway information system, but does not seem to be receiving all the desired (and available) incident types. Mr. Dillenburg said that all incident types are available to the county and some editing to the requested incident types on the Lake County end is likely needed. That conversation led to the subject of entering incidents and assigning categories (incident type). Mr. Sikaras and Mr. Benda led a discussion of how incidents are originally entered into

the system, and because of staffing, the variety of incidents entered by different agencies will differ and impact the numbers of incidents included in the database.

Metra (Steve Wojtkiewicz) reported that Metra's parking guidance center has been taken over by the communications department. That department is also responsible for message signs and Voice of Metra announcements. The Voice of Metra system will be going wireless in the future. The Metra train tracking equipment capabilities are still being explored and Metra continues to discuss with RTA what information will be shared with the region's transit hub. State legislation was passed in June instructing IDOT to study the cost of providing wireless computer access to transit riders. Given strides the private communications companies (Verizon, etc.) are making in wireless access, the city of Chicago recently "pulled the plug" on a similar effort. Amtrak was also considering providing this service on their equipment, but based on the recently released Amtrak RFP, the idea has changed to equipping vehicles with transmitters to monitor location and "train health" nationwide.

RTA (Duana Love) reported that progress on transit signal priority in the 159<sup>th</sup> Street corridor continues with an RFP for procuring hardware being finalized. This is being coordinated with IDOT. CTA is moving closer to signal prioritization on Western Avenue. RTA's multimodal trip planner pilot should begin in November. This was an FTA demonstration project which is hoped to be a model for other regions. The RTA information line (836-7000) has been operational for 10 years now, and RTA is working to increase the level of automated voice information capabilities which will provide more automated telephone information.

DuPage County (Dave Ziesemer) announced that Edwards & Kelcey has completed the traffic management center study for the county. One of the recommendations was that DuPage County take advantage of the work Lake County has already completed as a model for their own traffic management center. DuPage county is working on a fiber-based communications backbone for the county, initially focusing on interchanges, Metra stations and congested SRAs. They will continue to add to the fiber network so later (not within 5 years) they can look at central control of the traffic signal systems and other functions. A major focus of DuPage's efforts is on getting people to work. They are working with emergency responders on how to share data 24 hours per day as well as working with the tollway on the same issue. They are equipping Army Trail Road with congestion monitoring equipment to prevent the dangerous situation where traffic backs up from the traffic lights onto the tollway.

Wilbur Smith Associates (WSA, Jim Powell) reported that they are working with the tollway on the regional data archive effort. WSA will monitor the university work to ensure that the resulting recommendations are reasonable. WSA is also working on one of eight studies on integrated corridor management sponsored by FHWA. The focus of these projects is managing all the roadways within an expressway corridor. Of the eight corridor studies, FHWA will select 3-4 to model, and then implement a few to gauge the effectiveness of this approach.

IDOT (Joe Hill) reported that the organizational work needed to implement a statewide Amber Alert program has been completed. The result is that missing child information will be posted on all statewide variable message signs. It will be up to the DOT to decide if the Amber Alert information will take precedence over other important emergency information.

In many cases, messages can rotate and a number of messages can be provided. However, this capability is not available for all the equipment in the state. Inconsistency in equipment makes this and similar programs more difficult to implement.

City of Chicago (Abraham Emmanuel) reported that the city is ready to release the traffic count data they have recently completed collecting. This data will be available on the internet through an interactive map. They will also provide IDOT with updated count data. The City of Chicago has also created a GIS-based database of signal and incident information. DuPage County is also planning to put the traffic count data collected at intersections on-line. Mr. Zavattero suggested that CMAP inventory the sources of traffic count data available on-line.

UIC (John Dillenburg), where the Share the Drive carpool matching software is housed and maintained, has 10-12 new users each week. Mr. Zavattero suggested that Pace could use the unfortunate funding crisis and service cut situation as a marketing tool for the rideshare program.

ISTHA (John Benda) added to the discussion of the "umbrella" ITS cooperation intergovernmental agreement. The tollway's August meeting was canceled, so he hopes the agreement will be signed by the tollway board in September. The tollway is continuing to work on a wireless system to transmit camera images. They have identified the technology, which will rely on wireless technology transmitting the image to a nearby cabled location for final transmission. They are also expanding the Remote Traffic Microwave Sensor (RTMS) system and cameras which will aid implementation of "smart work zones" and provide before, during and after data for these locations. Traffic.com will be involved in the data collection. The tollway will also test deployment of a camera based incident detection system. The system should detect an incident, send out an automated message to the control center and retrieve a video image of the incident. The tollway has not tested such a system in the past because of cost. However, the systems are improving and the costs are coming down now. Nine out of thirty-three variable message signs will be replaced, mainly old models manufactured by a company which is now going out of business. They are looking at additional large over the road message signs, as well as midrange ground-mounted wireless-controlled units. These tend to be smaller but also less expensive. They will be testing deployment of these before reconstruction. ISTHA has found that it is difficult to get a guarantee that the signs being tested will always work, which is a tollway requirement. ISTHA is currently evaluating installation of message signs on arterials approaching expressway entrances to provide information about traffic conditions before motorists enter the tollway system. This would give drivers the opportunity to opt out of entering if conditions were bad downstream. Also, ramp queue detectors will be installed at the Naperville Road exit at I-88 to prevent backups on the ramp.

Naperville (Andy Hynes) announced that Naperville has issued an RFP to install automated red-light photo enforcement. They will start with two intersections by the end of this year and hope to expand that to 10-15 locations within a year. The system should also collect other traffic information, too. Mr. Zavattero mentioned that the city of Chicago has 30 successful locations now, and the enforcement seems to be both lowering the crash rate and providing revenue.

City of Chicago (Dave Zavattero) reported that the transit signal priority on Western Avenue was moving forward. Also, the Cicero Avenue Smart Corridor near Midway Airport is also

working. Signal interconnects on Cicero will collect traffic data, and signs report the travel time downtown on I-55. The city of Chicago traffic management center deployment is still in progress, with a contract under review at IDOT. They expect to move ahead with this project in 2008. Mr. Sikaras inquired about some earmarks that the city of Chicago received but has not used yet, in the amounts of 250k in FY03 and 711k in FY05 (federal amount only with an equal amount required from the city as a match). Mr. Zavertero said that they would use that funding and Mr. Sikaras urged them to start the very lengthy funding application process as soon as possible so as not to risk losing the funding.

### **3. Regional ITS Architecture Update.**

TriChord (Lee-Ann Seeling) summarized the purpose of the 2 technical memos. Technical memo 1 was intended to describe what they found at the outset of the project. Technical memo 2 described the plan for outreach to identify other updates that should be made to the region's ITS architecture. Mr. Zavertero asked about using the newest Turbo software (4.0) to which Ms. Seeling responded that the decision was made early on not to wait for that software to be developed but to just complete this project using 3.1 which was currently available. That turned out to be a good choice because 4.0 is as yet unreleased. However, contacts with FHWA have been initiated regarding the potential of the Chicago region being a beta test site. FHWA would benefit by debugging the software on a very large regional architecture, and the region would benefit by virtue of the extra attention and training from FHWA. The ITS architecture database is basically updated, and Edwards & Kelcey staff are checking to make sure all interfaces, requirements and functions have been included. They are currently working on material for the CMAP website, to replace what is out there now. The original architecture website material was created using a special software which the consultant does not have available for this effort. CMAP staff stated that the product did not have to look exactly like the previous one, however the functionality should be the same. Ms. Seeling said that the standard Turbo reports can be used, and that the region could use this as an opportunity to press for a product with better presentation capabilities from FHWA. Ms. Seeling also described some of the information that will be included in deliverable 4, which is the "lessons learned" and maintenance plan. One of the main things they have found is that updating is very different from creating the architecture in the first place, and it is important when making changes not to carelessly discard items that were previously included – because what was already in the architecture was the product of regional consensus. The effort should be wrapped up by the end of September.

### **4. CMAQ Program ITS Applications**

Mr. Zavertero commented on a summary table of CMAQ projects prepared by CMAP staff. He expressed his disappointment that the proposed FY 2008 CMAQ program did not include more ITS projects and went on to say that we have to educate the public, elected leaders and programmers that investment in the transportation system is NOT simply a big capital program. ITS investment, and management and operations strategies are important components of how we will improve the transportation system in the future. Funding opportunities have not kept pace with this new reality.

### **5. ATTF as a Resource Group – Future Activities**

Mr. Murtha commented that he believed that identifying funding for ITS projects and strategies should play an important part in the future activities of the ATTF. In addition, there is a move to have CMAP invest more time and energy assisting communities, so

educating them about ITS, management and operations and why we should be investing in them is another role for the committee. Mr. Zattero stated that there are additional functions that ATTF has and should perform. At a high level these are: a) planning for the use of existing and emerging transportation technologies, b) supporting and encouraging projects focused on management and operation of the transportation systems, c) serving as a forum to coordinate management and operations, d) insuring that technologies in general and ITS systems are developed and operated in an integrated manner (the ITS Strategic Plan and the Regional Architecture are primary ways to do this) but the real-world method is to make sure a forum exists where system operators can compare notes. This discussion will continue in future meetings.

#### **6. Other Items/Upcoming Events and Conferences**

Duana Love announced that this would be her last ATTF meeting, because she is leaving RTA.

#### **7. Next meeting**

The next ATTF meeting is scheduled for Thursday, December 13<sup>th</sup>, 2007 at 10:00AM.