



## Advanced Technology Task Force

### Meeting Notes – March 20, 2008

The meeting was called to order at 9:30 AM at the CMAP Offices, 233 South Wacker Drive, Suite 800, Chicago, Illinois. Those present at the meeting were:

**Attendees**     **Co-Chairs David Zavattero (Chicago OEMC) & Gerry Tumbali (RTA)**

Members:

Chuck Sikaras	<i>IDOT, ITS</i>	Dean Mentjes	<i>FHWA</i>
Steve Wojtkiewicz	<i>Metra</i>	John Benda	<i>ISTHA</i>
Ruth Myers	<i>DuPage ED&amp;P</i>		

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Interested

Parties:

Steve Peters	<i>IDOT</i>	Justin Potts	<i>IDOT</i>
Paul Bocci	<i>Motorola</i>	Jim Powell	<i>Wilbur Smith</i>
Andre Santos	<i>Traffic Control Corp.</i>	Brian Plum	<i>Traffic Control Corp.</i>
Matt Letourneau	<i>Jacobs Engr.</i>	Chris DiPalma	<i>FHWA</i>
Jon Nelson	<i>Lake County DOT</i>	Marty Anderson	<i>IDOT</i>
Ken Glassman	<i>Jacobs Engr.</i>		

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CMAP

Staff:

Claire Bozic	Dan Rice	Tom Murtha
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SUMMARY OF COMMENTS:

**1. Introductions**

**2. Approval of meeting notes from December 13<sup>th</sup>, 2007 Task Force meeting.** The notes were approved with corrections.

**3. ATTF Co-Chair Designation** (*David Zavattero, Co-Chair*)

Since Duana Love left RTA for another position, the ATTF is lacking a co-chair. Mr. Zavattero suggested that maintaining the representation of transit and highways as co-chairs to the committee was sensible and should be continued. He further suggested that Mr. Tumbali, RTA’s replacement representative on the committee, would be a good candidate for co-chair seat. Mr. Tumbali said he would be willing to do that, so Mr. Zavattero requested confirmation from the committee. Hearing no objections, Mr. Tumbali was designated as the new co-chair.

**4. Vehicle-Infrastructure Integration, Mesh Networks** (Paul Bocci, Motorola)

Mr. Bocci gave a presentation about Vehicle Infrastructure Integration and how to plan for it. He began by describing that VII is the technology that enables vehicles and their passengers to communicate and interact with each other and the environment around them. The technology can then be used to provide a number of services to improve safety, traffic management, vehicle management, and passenger services. It is included

in the national ITS architecture, and serious development began with the allocation of “dedicated short range communications” commonly called DSRC which provided the communication spectrum for this communication.

The VII system includes on-board communications technology, roadside devices that can communicate with the vehicles, the communications system to receive the wireless data and channel it to the Traffic Management Centers and other databases.

A number of demonstrations of this technology have taken place, notably one took place in Schaumburg IL. The largest demonstration took place in Michigan, and incorporated 57 roadside devices and 20 equipped vehicles. This was meant to test the vehicles as probe data. All of the tests have faced numerous technical difficulties. During the “proof of concept testing,” it has become clear that the federal government isn’t the appropriate party to determine what technology will be successful, but rather what will be communicated and how it will be used. Based on this change, USDOT released a Broad Area Announcement soliciting field tests for ITS applications. Unfortunately, the deadline was very short, with the result that only projects that were underway or were ready to go could reasonably apply. The ATTF expressed disappointment in this, but did discuss whether it would be wise to develop a project that could be submitted if such opportunities arose in the future. The group agreed that this should be pursued.

Mr. Bocci went on to describe how a region should prepare for implementation of VII. Mr. Benda expressed the common fear that investments in infrastructure to support these new technologies could be wasted if the standards aren’t in place and the infrastructure can’t be used with the new technology. Mr. Bocci stated that the communication network needed for the rest of the ITS system will also support VII. What will likely happen, as has happened in the past, is that the other technology to support VII will be developed to be added to whatever is out there now, for example on signal controllers like signal preemption technology is now. As the technology advances, those various technologies will be integrated into a single device and normal maintenance/replacement processes will gradually deploy them.

The critical investment will be in the communication network underlying the system. From the implementer’s point of view, these networks will be built up of a variety of communications, both mobile and fixed. Mesh networking will provide redundancy and capacity to carry the flow of communication.

The discussion of ITS and VII has traditionally focused on technology, but more discussion has to take place on the policy side. Questions such as who should implement it, who should pay for it, who can access it, how it should and should not be used have not been addressed well thus far.

The group talked about the lack of standards in this technology. Implementers prefer standards, to ensure that investments will not become obsolete, while developers prefer not to have standards because standards impede the development process. It is a difficult balancing act. Mr. Bocci thought that the auto makers would install this technology when it was clear there was a communication system it could use, but likely would still need a mandate to get all autos equipped. The auto makers do see an advantage in this because they can keep more points of contact with the fleet they’ve marketed – unlike now when the only time there is contact is when the vehicles are brought to the dealer for service.

They would know more about what their vehicles are ‘doing’ and could use that information for various purposes.

The subject of VII and transit also arose, and it was noted that transit vehicles are ahead of automobiles when it comes to communication technology, etc. The need to track vehicles is driving this progress.

## **5. Gary-Chicago-Milwaukee (GCM) Corridor Transition (John Benda, ISTHA)**

### Lake Michigan Gateway Alliance

Mr. Benda described how the GCM Corridor group is evolving into the Lake Michigan Interstate Gateway Alliance (LMIGA), with a focus on the interstate operations. This group has a more “grass roots” structure than the GCM did. It includes Wisconsin DOT, Illinois DOT, Indiana DOT, Illinois State Toll Highway Authority, Indiana Toll Road and the Chicago Skyway. Michigan DOT is also considering joining.

When the group was formed, they immediately developed the Traffic Center Communication Workgroup which meets bi-monthly. This committee has been very successful, for example in providing messages on signs up to 200 miles away so travelers can avoid serious interstate incidents. Most recently, this was in response to road closures caused by flooding.

The Service Patrol Sub Committee was recently created in response to expansion of the roadway assistance patrols. Both of these groups are working on the three c’s – coordination, communication, and cooperation.

LMIGA is considering various projects in the categories of information sharing and coordination, training, and inter-agency coordination.

LMIGA is not focusing very much attention on freight issues, since the Mississippi Valley Freight Coalition is addressing this. There is no desire to duplicate efforts – LMIGA will support other groups’ efforts when appropriate.

Mr. Sikaras suggested holding two annual events. First, he suggested bringing back the January “Summer Construction” event, where the summer’s planned major construction projects were presented and which allowed implementers to plan accordingly. Also, a new annual workshop was suggested, which would present progress on all the security related work going on in the region – for example, the Illinois Terrorism Task force.

Mr. Benda said that LMIGA does not yet have a website, any information is being disseminated via the GCM Communicator. Also, it is early in the process so no agreements have been developed and no funding is involved.

### Northeastern Illinois Operations Group Development

Based on what is happening with the GCM Corridor group, the ATTF discussed forming an Illinois Operations Group. The Illinois focused participation in the GCM was the most vibrant aspect of the GCM Corridor. This provided a good avenue for outreach and coordination, which the new LMIGA will not provide. The group discussed the memo regarding four potential steps the region could take in response to this: do nothing, have

the ATTF fill the role, develop an ATTF subcommittee for this, or create a wholly new group. Mr. Zattero enquired whether the group found the GCM efforts to be useful.

Ken Glassman (Jacobs Engineering) said a great void will be left with the development of LMIGA, and that the work the GCM did in Illinois is still needed.

Dean Mentjes (FHWA) said that the GCM had been useful to FHWA, especially in terms of communication and that not doing anything was not really an option.

Gerry Tumbali (RTA) thought a subgroup of ATTF would be good, because the right people were involved, but that we had to avoid having too many meetings and make sure the meetings that we did have were relevant. There could be other communication options besides physical meetings.

Marty Anderson (IDOT) agreed that the same people were included in ATTF, but he did not think a completely independent group was a wise idea. The planning and operations had to develop and maintain a solid link, and membership in both groups would promote that.

John Benda: The most important requirement is to have actual operations staff participation. It has been his experience that they usually get planners, but planners are not the appropriate participants in this effort. In addition, it will be important to get this effort moving quickly because independent groups are popping up to fill the void already. If that continues, the region will have a fragmented communication process and fragmented coordination efforts. For example, today data is being shared directory through local arrangements instead of going through the region's Gateway system, which was the region's original intent. Short term solutions like this are ok, but there has to be a committed group of people who understand what the region's ultimate goals are and who can craft solutions that move towards that goal. Once the group gets moving, they have to identify and solve a few smaller problems to prove the success of the group. Mr. Benda also felt that, at least at first, face to face meetings were important to build the personal relationships that make this kind of group work well.

After all the discussion, the group generally agreed that solution 3, having a subgroup of the ATTF would be the best solution. This should be pursued with the understanding that at some point it could become completely independent.

Mr. Zattero said that outreach to implementers to identify needs would be important early on in this process. Mr. Letourneau said that because of his work with Kane and DuPage County, he already had assembled such a list of some issues.

Mr. Sikaras said that this new group would also be valuable if the region actually received funding for a regional project.

## **6. Regional Data Archive (Jim Powell, Wilbur Smith Associates)**

Mr. Benda started this discussion by explaining that the original study started in spring 2007 and was scheduled to be completed in June 2008. This will likely be extended a little, maybe 1-3 months.

Mr. Powell gave a progress report. There are three phases of this project. Phase 1, state of the practice review, is essentially complete. Phase 2, review of business models and recommendation is in progress. So far, because of the variety of data and sources, a

centralized rather than distributed model was recommended. Recommendations on who would pay for the system, how it would be paid for and who would maintain it have not yet been recommended. Phase 3, identify procurement strategy, partnerships, and costs/benefits is still underway. It is still unclear whether the consultants (University of Illinois) will do Phase 4, preparation of a bid package with system requirements.

The interviews UIUC held with stakeholders were discussed. Mr. Sikaras expressed some disappointment that many comments made during IDOT's interview did not seem to be recorded and after that was pointed out and the comments were provided again, he did not receive any updated summary showing they had been recorded. Mr. Powell said he would check on that to make sure all comments were recorded. Mr. Powell presented a slide showing a comparison of the data said to be available in the regional ITS architecture and what data people said was available during the interviews. The architecture list was much longer and more detailed than the interview list. Mr. Zavattero thought that in hindsight, bringing the architecture-generated list to the interviews would have likely been helpful. It will be necessary to reconcile the data people mentioned with the list from the architecture anyway. Mr. Powell displayed the prototype of a data-inventory form the study will use to collect additional information on availability of data.

The group discussed an October meeting with Argonne National Lab, an organization within the region that has the computer resources to take on such a project. Surprisingly, they did not view the effort as a big opportunity for them. Argonne was interested in having access to the data to support their own Transims efforts, but were not interested in collecting, developing or maintaining the system.

Other regions have been successful having a university host such an archive. Washington, Virginia and California have been successful this way, but this is likely because they have applied and been designated as "University Research Centers." They receive some federal funding for this activity. Mr. Sikaras said that it still made sense that the MPO would be a regional organization that was appropriate to undertake the job. CMAP has not ruled this out, the key, as always, is how will it be funded.

## **7. Open Discussion, Upcoming Events**

Lake County (Jon Nelson) reported that Phase 2 of the Lake County Passage project has gone out for bids. They received bids on Tuesday March 18th. Phase 2 will add 17 miles of fiber optic cable, about 200 traffic signals, and about 100 PTZ (pan, tilt, zoom) cameras to the Lake County network.

ISTHA (John Benda) reported that ISTHA is developing a "Smart Work Zone" capability, and will implement it in a work zone near Rockford. They use their own equipment, but they may lease additional equipment if necessary. They haven't found any advantage in hiring a contractor for this task.

The city of Chicago OEMC (David Zavattero) reported that the Traffic Management Center requirements went out in June.

IDOT (Chuck Sikaras) and DuPage County (Ruth Myers) reported that they have signed an Inter-Governmental Agreement for Army Trail Road.

A large rescission removed funding from many unobligated ITS projects this spring—including earmarked projects. The impact on Illinois is about \$5.4 million. The state is

still working with FHWA to assess the damage to the ITS program. For more information, contact David Zavattono.

**8. Next meeting**

The next meeting was set for June 26<sup>th</sup> again at 9:30 am. The earlier starting time worked out well for most people.