Chicago Metropolitan Agency for Planning

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Regional Transportation Operations Coalition / Advanced Technology Task Force

Annotated Agenda
Thursday, November 17, 2016
9:30 a.m.

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

Members Present: Jon Nelson – Lake County DOT, RTOC Chair, Chuck Sikaras – IDOT ITS Program Office, Peter Stresino – IDOT, Terry Heffron – IDOT, Bob Greene – DuPage DOT, Stephen Zulkowski – Kane DOT, Andy Hynes – City of Naperville, John Dillenburg – UIC, Justin Potts – IDOT, Rose Ran – IDOT, Dean Mentjes – FHWA Illinois Division, Kevin Stanciel – RTA, Luis Galimberti – Cook County DOTH, Christina Kupkowski – Will County DOT, Taqhi Mohammed – Pace, Mark Pitstick – Regional Transportation Authority, Abraham Emmanuel – Chicago DOT, Tom Szabo – Christopher Burke Engineering, Matt Letourneau – AECOM, Sam Van Hecke – Cambridge Systematics, Ken Glassman – Jacobs, Jae Ju – HNTB, Sagar Sonar – Stanley Consultants, Jeff Hochmuth – CDM Smith, Ryan Smith – WSP, Jesse Carrol – WSP, Duana Love – TranSmart, Arnold Kasemsam – DAMA Consultants, Scott Lee – Parsons, Darryl Dawson – ITS Engineering Ltd.
Phone: Jeff Galas - IDOT
Staff Present: Claire Bozic, Todd Schmidt, Parry Frank, Jesse Elam, Tom Murtha, Aaron Brown, Elizabeth Irvin

1.0 Call to Order
The meeting was called to order at 9:30 am.

2.0 Approval of Minutes – August 18, 2016
The minutes were approved.

3.0 Agenda Changes and Announcements
The discussion of the highway safety strategy paper was postponed until the next meeting.

4.0 Agency Updates
Mr. Nelson (Lake County DOT) told the group that the DOT is working on a few signal interconnect projects funded through CMAQ. He also told the group that Lake County currently has ten permanent count stations and will be adding six more count stations this fall. Mr. Murtha (CMAP) asked if the count stations would include classification information. Mr. Nelson responded classification data is not available at this time.

Dr. Dillenburg (UIC) told the group that the IDOT arterial construction tracking system is operational. The system allows project engineers to enter road construction project details into the system. Lane closure information is transmitted electronically to the Gateway Traveler Information System where it is made available to the public on the Travel Midwest website.

Mr. Emmanuel (Chicago DOT) provided an update on the Chicago Traffic Management Center status. Phase I should go live in April 2017. CDOT is also looking into using street light cameras to track congestion around intersections.

Ms. Kupkowski (Will County DOT) reported that the Will County long-range transportation plan will be adopted in March, and includes an ITS section.

Mr. Zulkowski (Kane DOT) reported that the Stearns Road ITS Corridor is progressing. They are testing new video walls for the arterial operations center.

Mr. Greene (DuPage DOT) informed the group that the central signal network is running and they are wrapping up establishing the video feed.

Mr. Mohammed (Pace) reported that Pace is currently working on the Milwaukee Avenue transit signal priority project. Pace is also working on a proof of concept to deploy a TSP system on 10 corridors with 300 intersections.

Mr. Price (IDOT) told the group that IDOT is in the process of updating the statewide ITS architecture and reminded the group that the stakeholder meeting will be held this afternoon at CMAP. He also mentioned that IDOT is participating in an ITS pooled fund study to create connected vehicle deployment guidance.

Mr. Hynes (City of Naperville) reported that the City of Naperville implemented a central traffic signal system with 32 traffic signals, and is working out the details for sharing signal information with DuPage DOT.

Mr. Sikaras (IDOT) reported that IDOT Districts 1 and 3 are installing fiber communication to support new dynamic message signs and travel time collection to expand real time traveler information.

5.0   CDOT Signal Interconnect Play (Abraham Emmanuel)
Mr. Emmanuel gave a presentation on the signal interconnect plan for the city of Chicago. In 2015, CDOT initiated implementation of the Advanced Traffic Management System (ATMS) that is currently the hub for 25 Intelligent Transportation System (ITS) projects. CDOT would like to integrate a number of signal interconnects that have received CMAQ funding into the ATMS. The design phase has taken several years, and the contract with the design vendor for many of these projects has expired. CDOT reviewed current alternatives to fiber installation and found that cellular technology has become a good option. Cellular technology can be implemented at a fraction of the cost to fiber and does not require costly fiber network maintenance. Additionally, cellular technology can be implemented in a shorter time and with a larger geographic coverage. CDOT is evaluating two implementation models, either relying on a public/private partnership or building its own cellular communication network. Each option has its own pros and cons. Mr. Emmanuel concluded asking the group for feedback regarding the use of cellular

technologies in place of fiber. Mr. Dawson stated that 4G bandwidth is good enough for these applications. Mr. Mohammed (Pace) stated that CDOT should look into security issues with cellular technology and make sure there are no issues around the CDOT's firewall. Mr. Emmanuel responded that the Verizon Private Network could get through the city's firewall.

6.0   Emerging Transportation Technology Strategy Paper (Sam Van Hecke)
Mr. Van Hecke gave a presentation on technologies that can potentially have a dramatic impact on the future of our region's transportation system. The emerging transportation technology strategy paper is intended to help develop practical forward thinking strategies that can be included in ON TO 2050. The presentation focused on nine emerging transportation technologies:
- Autonomous vehicles
- Connected vehicles & smart infrastructure
- Alternative energy
- Shared mobility
- Active transportation & health
- Data & information
- Communications
- Business & logistics
- Freight movement

For each emerging transportation technology, there was a short description of the technology, a watch list that included companies or agencies that are innovators in the technology, and major areas of potential impact.

Mr Mohammed (Pace) asked if the strategy paper looked at or found existing infrastructure gaps. Mr. Van Hecke responded that the strategy paper did not go into that much detail and that the strategy paper was focused on setting priorities and strategies to include in the long range plan. Mr. Frank (CMAP) asked who would build the groundwork for autonomous vehicles to operate on the road. Mr. Van Hecke responded that NITSA has taken a lead role at the federal level.

7.0   Highway Traffic Signal Inventory (Aaron Brown)
Mr. Brown provided a progress report on development of the new highway traffic signal inventory (HTSI). The HTSI will create a single regional highway traffic signal inventory with uniform information across jurisdictions. Additionally, the HSTI will make highway traffic signal information open and accessible to regional transportation agencies.   The HTSI is being developed in the ArcGIS environment and the location information will be linked the Illinois Highway Information System (IHIS) shapefile. The next steps in the development of the HTSI are to collect agency signal data and complete the development of ArcGIS tools to automate the loading of signal data. Additionally, staff may develop automated procedures to clean and load the signal information into the database. Once this is complete, the final step will be to build and maintain the inventory. Mr. Letourneau asked if the CMAP staff envisions a time when partners can directly input

data into the inventory. Mr. Brown responded that CMAP could be open to that, but it currently is not an option.

8.0 Truck Origin and Destination Study (Tom Murtha)
Mr. Murtha presented a truck origin and destination analysis that he completed for the east-bound I-290 to southbound I-294 interchange. The analysis used truck probe data purchased from the American Trucking Research Institute (ATRI). The date includes location and speed information for class 7 and 8 trucks at the traffic analysis zone level for the CMAP modelling region. Mr. Murtha created an animation to display the movement of trucks that pass through the interchange on an average day. The truck dataset will be used for future truck analysis, and to develop truck information for the regional travel demand model. Mr. Sikaras asked how many trucks bypass the region using the I-39 to I-80 route. Mr. Murtha responded that the study did not address that question, but the data is able to answer those types of questions.

9.0 Highway Safety Strategy Paper (Todd Schmidt)
This item was postponed until the next meeting.

10.0 Other Business

11.0 Next Meetings
The next meeting is tentatively scheduled for Thursday, March 16, 2017.

12.0 Adjournment