

**MINUTES OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
INTELLIGENT TRANSPORTATION SYSTEMS COMMITTEE**

February 4, 2015
MAG Ironwood Room, 2nd Floor
302 North First Avenue
Phoenix, Arizona

MEMBERS ATTENDING

- | | |
|--|---|
| * Reza Karimvand, ADOT | # Faisal Saleem for Nicolaas Swart,
Maricopa County |
| * Yingyan Lou, ASU
Chris Hamilton, City of Avondale
Chris Lemka, City of Buckeye | Avery Rhodes, City of Mesa |
| # Mike Mah, City of Chandler | # Ron Amaya, City of Peoria |
| * Captain Burley Copeland, DPS
Bryce Christo, City of El Mirage | * Marshall Riegel, City of Phoenix |
| * Toni Whitfield, FHWA
Leslie Bubke, Town of Gilbert | * Steve Ramsey, City of Scottsdale
Albert Garcia, City of Surprise |
| * Debbie Albert, City of Glendale
Luke Albert, City of Goodyear | Catherine Hollow, City of Tempe
Amanda Luecker, Valley Metro |

OTHERS PRESENT

- | | |
|--------------------------------|------------------------|
| John Hoang, City of Tempe | Dan Hartig, Ayres |
| David Lucas, City of Tempe | Doug McCants, Horrocks |
| Simon Ramos, MCDOT | Arnab Gupta, PB |
| LeShawn Charlton, MCDOT | Corey Steele, Strand |
| Dave Riley, United Civil Group | Margaret Boone, MAG |
| Jeff Jenq, OZ Engineering | Ryan Gish, MAG |
| Dave Chambers, TransCore | Micah Henry, MAG |
| Deanna Haase, Kimley-Horn | Sarath Joshua, MAG |
| Tim Wolfe, Dibble | Eric Nava, MAG |
| Mike Manthey, Parsons | |
| Juan Davila, Parsons | |

- * Not present or represented by proxy
- # Participated by teleconference
- + Participated by videoconference

1. Call to Order
Chair Catherine Hollow called the meeting to order at 10:00 a.m.

2. Approval of the January 7, 2015 ITS and TAG Joint Meeting Minutes
Chair Hollow requested approval of the meeting minutes from the January 7th ITS and TAG Committees joint meeting. **Chris Lemka from City of Buckeye moved, Bryce Christo from City of El Mirage seconded and it was unanimously carried to approve the minutes of the meeting held on January 7, 2015.**

3. Approval of the January 7, 2015 Meeting Minutes
Chair Hollow requested approval of the meeting minutes from the January 7th ITS

Committee meeting. **Albert Garcia from City of Surprise moved, Leslie Bubke from Town of Gilbert seconded and it was unanimously carried to approve the minutes of the meeting held on January 7, 2015.**

4. Call to Audience

Chair Hollow made a call to the audience providing an opportunity for any members of the public to address the ITS Committee. No comments were received.

5. Program Manager's Report

Chair Hollow invited Sarath Joshua from MAG to present the Program Manager's Report. Mr. Joshua addressed the following items in his report:

➤ Current Status of TSOP Projects:

Of a total of 11 TSOP projects, nine have been completed and two projects are on-going. The two ICM projects on I-10 in Phoenix are in the final stages and scheduled to be completed by March 2015. This will conclude the efforts on all 2014 projects. The FY2015 TSOP projects are being prepared for initiation. There are 11 projects for a total cost of \$303,000. Scopes for the task orders are set to be completed and confirmed by member agencies by February 2015. The scopes will be sent to participating consultants for fee proposals and the TSOP projects will be initiated in February to be completed by June 2015. The Synchro training workshop is scheduled for June 9th through June 11th to avoid conflicts with the ITE/IMSA Spring Conference.

➤ Status Report on the Regional Community Network (RCN)

Sarath Joshua requested that Ryan Gish from MAG provide an update on the latest RCN developments. Mr. Gish thanked the ITS Committee members and their staff for approving the RCN no-cost Addition for law enforcement video and assistance in implementation. MAG staff will be conducting inventory checks on the outlying equipment to confirm IDs for the replacement parts. MAG staff will also be establishing wireless links for Queen Creek, Avondale, and Goodyear. There is also potential for a link to the Salt River Indian Community. The wireless links are interim solutions until the fiber plant is installed. Regarding the fiber mapping website, MAG staff is still soliciting conduit and fiber information from the member agencies. It is anticipated that the website will go live soon. The video management software pilot project has been in place for more than a year. MAG staff is assessing the success and challenges of that project with a survey. The initial review is that the software has been a great success in sharing video with the participating agencies.

➤ TIP Programming Cycle

The next cycle for TIP programming will begin in the July/August time frame. MAG staff is reviewing funding availability for arterial ITS projects. It is anticipated that approximately \$3.5M will be available for programming projects in FY2018 and another \$3.5M available for projects in FY2019. At the discretion of the ITS Committee, it is anticipated that both years will be programmed at the same time, so there will be a single call for projects. As programming for the TIP is not done annually, the opportunity in Fall 2015 (FY16) will be the last one as there is no defined funding source for future cycles of programming for arterial ITS.

Faisal Saleem with MCDOT recognized Ryan Gish's effort in working with the member agencies along with LeShawn Charlton with MCDOT.

6. Emergency Vehicle Pre-emption Study

Chair Hollow invited Micah Henry with MAG and Jeff Janq with OZ Engineering to present on the Emergency Vehicle Pre-emption (EVP) Best Practices Study. The study includes five tasks with four accompanying tech memos detailing regional existing deployment, operations challenges, current technologies, best practices, and recommendations. Tech Memo No. 1 includes an overview of EVP technology, regional EVP inventory, and deployment challenges.

The general components of EVP technology include the optical emitter on the emergency vehicle, the optical detector mounted at the intersection, the confirmation light mounted on the signal mast arm, and the preemption detector card housed in the traffic signal controller cabinet. The study relies on information surveys conducted with member agency input to detail existing EVP systems. Key information collected included number of EVP-equipped intersections, EVP system vendor, signal phase during preemption, use of confirmation light, use of encoding, detection range settings, EVP system maintenance, system users, central management software, EVP usage data collection, and shared transit use.

During the investigation the project team documented the existing encoding challenges that exist between the MAG member agencies. Encoded systems will reject a request from an un-encoded ("open") transmitter. With competing vendors encoding has introduced a challenge for adjacent agencies using different systems. The City of Mesa has led the effort to define the East Valley regional encoding scheme shared by several agencies.

There are different preemption phase treatments used throughout the region. The signal indications vary between the jurisdictions and sometimes within the same jurisdiction. Confirmation lights are deployed sporadically throughout the region without uniform treatment. The major challenges of the existing EVP deployment in the region include incompatibility between the systems, two different preemption traffic signal phase scenarios are in use, confirmation light is not consistently present, usage data is underutilized, and on-going, recurring maintenance is a challenge for agencies with widespread deployment.

The forthcoming Tech Memo No. 2 includes an overview of current EVP technologies. This includes optical and radio-based systems, GPS-based systems, central/AVL-based systems, and connected vehicles. This will be distributed to the Project Technical Advisory Group (TAG) and then submitted to the ITS Committee for review and comment. Faisal Saleem with MCDOT commented on the need for standards as the available products are proprietary in nature. Committee members were requested to submit comments on the tech memo to MAG staff.

7. Developing Traffic Management Response Plans for Freeway Closures: I-10 West and US-60 Projects

Chair Hollow invited Eric Nava with MAG to present on the project involving the development of traffic management response plans for freeway closures. The Tempe

ICM projects were recently completed and the Phoenix ICM projects are expected to be completed at the end of March. As the I-10 West projects are still underway the focus of the presentation is on US-60.

The US-60 project through Tempe involves a hypothetical closure of the freeway in both the AM and PM peak periods. The AM closure in the westbound direction of US-60 occurs at the Hardy bridge crossing between Priest and Mill. The PM closure in the eastbound direction occurs between Rural and McClintock. The goal of the effort is to develop signal timing plans in anticipation of the dynamic change in vehicle demand throughout the affected study area. These divergent strategies include demand on arterials parallel to US-60, including Baseline, Southern, and Broadway.

The project included conducting field reviews and inventories, gathering existing traffic signal operations, identifying closure locations, modeling with DynusT, assessing the modeling results, configuring the volume demand, optimizing new signal timings, and evaluating the multiple scenarios. The project team explored the effects of a two-hour closure with diversions to the parallel arterials and tested scenarios with varying cycle lengths. The analysis of the AM closure scenario indicated that the preferred result of 180-second cycle lengths supports higher network volumes on Southern Avenue and 120-second cycle lengths for Baseline Road. The second preference was for 120-second cycle lengths on Southern Avenue. The analysis of the PM closure scenario indicated that the first preferred strategy was for 120-second cycle lengths on both Southern Avenue and Baseline Road. The second preferred strategy was for 150-second cycle lengths on both parallel arterials.

8. Reports by Committee Members

Chair Hollow called on members to report items of interest to the committee. Chair Hollow reminded the committee on the upcoming ITE/IMSA Spring Conference scheduled for February 24th through 26th.

9. Request for Future Agenda Items

Chair Hollow called on members to request future agenda items. There were no requests.

10. Next Meeting Date and Place

Next meeting date was announced at 10:00 a.m. on Wednesday, March 4, 2015, in the Ironwood Room (2nd floor) at MAG.

11. Adjournment

Chair Catherine Hollow adjourned the meeting at 11:25 a.m.