

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

October 7, 2014  
MAG Ironwood Room, 2nd Floor  
302 North First Avenue  
Phoenix, Arizona

**MEMBERS ATTENDING**

# Reza Karimvand, ADOT	Paul Porell for Nicolaas Swart, Maricopa County
* Chris Hamilton, City of Avondale	Avery Rhodes, City of Mesa
# Chris Lemka, City of Buckeye	Ron Amaya, City of Peoria
# Mike Mah, City of Chandler	Bruce Littleton for Marshall Riegel, City of Phoenix
Captain Burley Copeland, DPS	Camila Weckerly for Mohamed Youssef, Town of Queen Creek
Bryce Christo, City of El Mirage	Steve Ramsey, City of Scottsdale
# Toni Whitfield, FHWA	Albert Garcia, City of Surprise
Leslie Bubke, Town of Gilbert	Catherine Hollow, City of Tempe
Allan Galicia, for Debbie Albert, City of Glendale	Amanda Luecker, Valley Metro
* Luke Albert, City of Goodyear	
Rob Dolson, City of Maricopa	

**OTHERS PRESENT**

Joey Paskey, Atkins	Tim Wolfe, Dibble
Deanna Haase, KHA	Saroja Devarakonda, HDR
Jeff Jenq, OZ Engineering	Stephen Doubek, PB
Jothan Samuelson, Wilson	Margaret Boone, MAG
Don Wiltshire, YSMA	Ryan Gish, MAG
Radu Nan, Kittelson	Micah Henry, MAG
Aaron Felix, City of Maricopa	Sarath Joshua, MAG
Sara Simpson, UCG	Eric Nava, MAG
Sheina Hughes, Stantec	

- \* 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. Introductions were conducted.
2. Approval of the September 3, 2014 Meeting Minutes  
**Reza Karimvand from ADOT moved, Albert Garcia from Surprise seconded and it was unanimously carried to approve the minutes of the meeting held on September 3, 2014.**
3. 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.

4. Program Manager's Report

Mr. Sarath Joshua from MAG addressed the following items in his report:

➤ Current Status of TSOP Projects:

A total of 11 TSOP projects, five have been completed, six projects are underway. These projects are scheduled to be completed by January 2015.

➤ Status Report on the Regional Community Network (RCN)

Sarath Joshua requested that Ryan Gish from MAG provide an update on the RCN Working Group and latest RCN developments. Mr. Gish detailed the Working Group's discussion regarding network updates, including firmware updates on the RCN switches throughout the MAG region. The core switches are complete. Some of the outlying switches were completed remotely, but others will require a site visit, scheduled for later this month. Mr. Gish will be coordinated with those local agencies affected by the updates.

MAG has been coordinating with City of Tempe staff to kick-off the Network Assessment and Services Project. The consultant providing this work is TransCore under the ITS On-Call contract. The earlier tasks that included City of Chandler were successful. Following Tempe, MAG staff will be working with Gilbert and Surprise.

Mr. Gish reported on the Video Management Software Pilot. MAG staff has been working with the local TMCs to test video-sharing capabilities, including Mesa, Gilbert, Chandler, and Tempe. These agencies are also capable of viewing ADOT camera images. MAG staff will be working with West Valley agencies for video-sharing with the intent on success prior to the scheduled mega event, the Super Bowl.

Regarding the Regional Fiber Mapping Project, MAG solicited conduit and fiber information to be included in the project for those that would like to be involved. The project goal is to receive information and include it on the website by the end of the year.

➤ Highlights from ITS Arizona Conference

Sarath Joshua highlighted several of the themes of the conference including USDOT Vision of Connected Vehicles. He referred to a study report by AASHTO titled the National Footprint Analysis, identifying infrastructure needs. The study provides a road map for local agencies with regards to deploying necessary infrastructure for connected vehicle needs. USDOT has also solicited local agency input into the Guidance document for connected vehicles and urban deployments. Mr. Joshua provided the report's title, index, and executive summary to the committee, along with the challenges for local agencies for full implementation.

Reza Karimvand stated that he and Faisal Saleem presented at the conference on connected vehicles, along with several other local experts. Mr. Karimvand and Mr. Saleem have been involved with connected vehicle efforts for almost a year. They provided a brief overview and stated that they will be attending a related meeting in December in Irvine, California. Regarding MCDOT's

connected vehicle study in Anthem, three miles of I-17 were added to the test site, with approval from FHWA. The project is being referred to as Arizona Connected Vehicle in cooperation with MCDOT Smart Drive.

➤ Arterial ITS Infrastructure Needs

Sarath Joshua discussed a recent effort by MAG to identify of arterial ITS infrastructure needs in the future. MAG requested these estimates from ITS Committee members in order to generate an estimate for the total funds needed for ITS projects planned between 2018 and 2027.

Mr. Joshua provided a summary of the estimates, grouping the projects into three categories: Signal System Improvements, Strategic Planning and Studies, and Infrastructure related to Fiber Optic & CCTV/DMS. The total estimated cost of the projects is \$106.4M, with about 35% for signal system improvements, 0.5% for strategic planning, and 65% for infrastructure. Mr. Joshua will provide this information to committee members via email.

5. Review of Proposed FY2015 Projects

Chair Hollow identified the summary sheet for the proposed projects. She invited Sarath Joshua to lead the discussion of the presentation of projects to the committee. A project ranking sheet was distributed to the committee to document the selection process. Committee members were invited to present the project, providing a brief overview of the description, study area, and participating agencies. Concluding the presentations, committee members will assign a rank to each project. The rankings will be compiled and the top-ranked projects will receive funding through the MAG On-Call contract based on available funds. The projects identified for funding will require ITS Committee action for approval.

Chair Hollow invited Bryce Christo with El Mirage to present the Dysart Road project to the committee. Mr. Christo presented the proposal for traffic signal timing refinement at four locations that are outside of the current project work areas within the city. The objectives of the project is to get new turning movement counts, review the delays experienced at the intersections, and develop a SYNCHRO model for the city. Sarath Joshua identified the need for an implementation task to incorporate the results of the study into operations.

Chair Hollow invited Allan Galicia with Glendale in association with ADOT to present the 59<sup>th</sup> Avenue project. Mr. Galicia presented the proposal for 59<sup>th</sup> Avenue from Deer Valley Road to Union Hills Drive and includes 7 intersections. The objective of the project is to develop new signal timing plans for the corridor to account for the new development in the area. Mr. Galicia expressed the need for this effort and presented a complaint from a motorist the city recently received.

Chair Hollow invited Rob Dolson with City of Maricopa to present the Porter Road Corridor project. Mr. Dolson presented the proposal for Porter Road for seven intersections. The objective of the project is to conduct turning movement counts and develop and implement new signal timings to coordinate the corridor. This will help alleviate traffic that has increased with development and new schools in the corridor.

Chair Hollow invited Paul Porell with MCDOT to present the MC-85 project. Mr. Porell

identified the objectives of the project, including retiming 8 intersections using new turning movement counts and model development. The corridor is currently under construction for new communications for the County, providing the opportunity to coordinate the signals.

Chair Hollow invited Ron Amaya with City of Peoria in association with Glendale and ADOT. Mr. Amaya presented the proposal for Union Hills Drive from 55<sup>th</sup> Ave. to 91<sup>st</sup> Ave., incorporating 14 intersections. Four intersections are in Peoria, nine are in Glendale, and one is a TI controlled by ADOT. The objectives of the project are to develop a model using new turning movement counts and incorporate the proposed signal timings along the corridor.

Chair Hollow invited Bruce Littleton with City of Phoenix in association with MCDOT and ADOT to present the I-10 ICM project. Mr. Littleton presented the proposal for the I-10 ICM project, involving 118 intersections. The objectives of the project include continuing the ICM effort from the past 3 years to implement traffic signal timings for non-recurring events involving closures of the freeway. The changes will be conducted for detour routes identified in the previous ICM projects. Reza Karimvand identified the importance of this project with regards to ICM on a regional basis.

Chair Hollow invited Camila Weckerly with Town of Queen Creek to present the modeling project. Ms. Weckerly presented the proposal for the city-wide modeling effort. The objectives include developing traffic signal timing plans from the model for implementation in the two primary corridors: Ellsworth and Ocotillo. This optimization effort will help alleviate the congestion in the region associated with new development.

Chair Hollow invited Albert Garcia with City of Surprise to present the Bell Rd. project. Mr. Garcia presented the proposal for Bell Road from Grand Ave. to Loop 303, incorporating 10 intersections. The objectives of the project include developing week day traffic signal timings for AM, midday, and PM periods, using modeling and new turning movement counts. The current plans are no longer effective as the last optimization effort was conducted in 2009. The benefits for this project include coordinating with the Bell Road Adaptive Signal Timing project to provide evaluation of the deployment.

Chair Hollow presented two proposals for City of Tempe along Mill Avenue. The first project is the priority for Tempe and includes 8 intersections on Mill, from Curry to University. The second project includes 10 intersections on Mill, from University to Baseline. The objectives of the projects include using turning movement counts to update the model and develop new signal timings for implementation. Coordination of the corridor will help alleviate congestion due to new development in the area. Sarath Joshua identified the correction in the spreadsheet with regards to the Tempe project. The estimated cost of the project is \$30,000.

Chair Hollow invited Reza Karimvand to present the ADOT projects to the committee. Mr. Karimvand presented the proposals for the four projects, three involving I-17 in Phoenix and one involving I-10 in Chandler. He identified the need for the projects based on the high Average Daily Traffic. The objectives of the projects are to optimize the signals across the interstates. Allan Galicia asked whether the intersections in the projects were for isolated TIs. Mr. Karimvand stated that the projects include adjacent

intersections in the identified cities.

The MAG ITS Committee discussed the estimated costs for the individual projects and concluded that in future TSOP programs a single estimated cost will be developed between MAG and member agencies and this single estimated cost will be provided for the ranking process.

Chair Hollow called upon committee members to rank the projects from 1 to 14 and submit them to MAG staff for compiling the rankings. MAG ITS Committee members submitted rankings and MAG staff compiled the results. Sarath Joshua identified the rankings of the projects. The projects were ranked as follows:

1. Phoenix (with ADOT and MCDOT) – I-10 ICM
2. Glendale (with ADOT) – 59<sup>th</sup> Avenue
3. MCDOT – MC-85
4. Peoria (with Glendale and ADOT) – Union Hills Drive
5. Tempe – Priority 1: Mill Avenue (Curry to University)
6. Surprise – Bell Road
7. El Mirage – Dysart Road
8. Queen Creek – City Model Update
9. City of Maricopa – Porter Road
10. Tempe – Priority 2: Mill Avenue (University to Baseline)
11. ADOT (with Phoenix) – Project 1: I-17 Crossings (Buckeye to Bethany Home)
12. ADOT (with Chandler) – Project 4: I-10 Crossings (Ray to Chandler)
13. ADOT (with Phoenix) – Project 2: I-17 Crossings (Glendale to Cactus)
14. ADOT (with Phoenix) – Project 3: I-17 Crossings (Thunderbird to Union Hills)

Sarath Joshua identified two additional projects that needed to be funded. The first project is Before and After Study Evaluations for 3 corridors for \$30,000 and the second project is for regional training workshop for the SYNCHRO modeling software for \$12,000. The overall budget of \$300,000 includes these two projects, leaving \$258,000 for TSOP projects to be programmed. The top nine projects tally to an accumulative \$261,000, \$3,000 an excess of what is available in the current program. Mr. Joshua stated that the addition \$3,000 can be made up through savings in the current cycle of projects. Based on the rankings, project estimated costs, and total available funding for TSOP projects, Mr. Joshua suggested that the top nine ranked projects be recommended for the next cycle of TSOP projects.

Chair Hollow requested a motion from the Committee to recommend approval of projects ranked 1 through 9, along with the Before and After Study Evaluations and SYNCRHO training workshop to be funded by the FY2015 TSOP program. **Paul Porell from MCDOT moved, Leslie Bubke from Gilbert seconded and it was unanimously carried to approve projects ranked 1 through 9, along with the Before and After Study Evaluations and SYNCRHO training workshop to be funded by the FY2015 TSOP program.**

6. Reports by Committee Members

Chair Hollow called on members to report items of interest to the committee.

Allan Galicia with Glendale provided the Committee with an update to Glendale's TMC

upgrade. The upgrade is almost complete and the first trial run is scheduled for the planned football game on October 26<sup>th</sup>. The goal is to have complete functionality prior to the subsequent home game, working towards the planned mega event, the Super Bowl.

Paul Porell with MCDOT stated that the ITS Arizona Conference included Mark Taylor, an employee of Utah Department of Transportation. MCDOT hosted Mr. Taylor following the conference and he presented a more in depth review of UDOT's efforts at implementing changes to traffic signal operations and maintenance based on the recently establish program involving automated traffic signal performance measures. Mr. Taylor presented the Purdue Coordination Diagrams as a means to identifying malfunctioning hardware in the field, arrivals on green vs. arrivals on red, and numerous other metrics. The discussion included the opportunity to implement a similar program in the Phoenix metropolitan area. MCDOT is developing an additional task to the improvement program for the RADS that includes the exploration of other members of AZTech in implementing the performance measures that UDOT has provided.

Amanda Luecker with Valley Metro detailed the implementation of transit signal priority project on Scottsdale Road and Rural Road, from Chandler Mall to the City of Scottsdale Air Park. In lieu of the planned Link route on Scottsdale Road, Valley Metro is implementing TSP on the corridor to help with travel times. Infrastructure has already been deployed and outreach is on-going.

Bruce Littleton with Phoenix stated that he is coordinating with Ryan Gish and MAG staff to develop connections via the RCN to share video prior to the planned mega event, the Super Bowl.

Reza Karimvand with ADOT stated that Phase 2 for the Travel Times Project was launched, including 65 total travel times in the Valley and 5 in Tucson. The final phase is expected to be in place by December 2014.

7. Request for Future Agenda Items  
There were no requests for future agenda items.
8. Next Meeting Date and Place  
Next meeting date was announced at 10:00 a.m. on Wednesday, November 5, 2014, in the Ironwood Room (2<sup>nd</sup> floor) at MAG.
9. Adjournment  
Chair Catherine Hollow adjourned the meeting at 11:40 a.m.