

August 25, 2015

TO: Members of the MAG Intelligent Transportation Systems Committee

FROM: Marshall Riegel, City of Phoenix, Chair

SUBJECT: MEETING NOTIFICATION AND TRANSMITTAL OF TENTATIVE AGENDA

Wednesday, September 2, 2015- **10:00 a.m.**
MAG Office Building, 2nd Floor, Ironwood Room
302 North First Avenue, Phoenix

The ITS Committee has been scheduled at the time and place noted above. Committee members or their proxies may attend **in person or by video conference or by telephone conference call**. Those attending by telephone conference call please contact MAG offices for conference call instructions.

Please park in the garage under the MAG building, bring your ticket, parking will be validated. For those using transit, Valley Metro/RPTA will provide transit tickets for your trip. For those using bicycles, please lock your bicycle in the bike rack in the garage.

In 1996, the Regional Council approved a simple majority quorum for all MAG advisory committees. If the ITS Committee does not meet the quorum requirement, members who have arrived at the meeting will be instructed a legal meeting cannot occur and subsequently be dismissed. Your attendance at the meeting is strongly encouraged.

Pursuant to Title II of the Americans with Disabilities Act (ADA), MAG does not discriminate on the basis of disability in admissions to or participation in its public meetings. Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting Jason Stephens at the MAG office. Requests should be made as early as possible to allow time to arrange the accommodation.

If you have any questions regarding the meeting, please contact Sarath Joshua at (602) 254-6300.

TENTATIVE AGENDA

	<u>COMMITTEE ACTION REQUESTED</u>
1. <u>Call to Order</u> For the September 2, 2015 meeting, the quorum requirement is 10 committee members.	
2. <u>Approval of the August 5, 2015 ITS Committee Meeting Minutes</u>	2. Review and approve minutes of the meeting held on August 5, 2015.
3. <u>Call to Audience</u> An opportunity will be provided to members of the public to address the ITS Committee on items not scheduled on the agenda that fall under the jurisdiction of MAG, or on items on the agenda for discussion but not for action. Members of the public will be requested not to exceed a three minute time period for their comments. A total of 15 minutes will be provided for the Call to the Audience agenda item, unless the ITS Committee requests an exception to this limit. Please note that those wishing to comment on action agenda items will be given an opportunity when the item is heard.	3. For information and discussion.
4. <u>Program Managers Report</u> The following items will be discussed: <ul style="list-style-type: none">• Status of FY2015 TSOP Projects• Next Steps for the EVP Study• Status Report on the RCN	4. For information and discussion.
5. <u>FY2018-2019 TIP Applications & Project Evaluation Process</u> All project applications for qualifying ITS projects, seeking CMAQ funds in FY2018 & 2019, are due to MAG by 10 a.m. on Monday September 21, 2015. The total amount of CMAQ available in each year is \$3.68 million. In an email request by MAG sent to all member agencies on August 14, 2015, agencies have been requested to submit projects by dividing them into	5. For information and discussion.

multiple phases, with the CMAQ request for each phase not exceeding \$400,000.

All ITS project applications will be posted at the MAG website by Wednesday September 23, 2015. Committee members will download applications and review them prior to the committee meeting on October 7, 2015, at which brief project presentations will be provided by lead agencies. Committee members will complete the project review process and submit the Excel-based evaluation form to MAG by Monday October 26, 2015.

The recommended list of ITS projects will be generated at the committee meeting on November 4, 2015.

6. Preliminary Results from Improved Freeway Traffic Incident Management

Last October a pilot project was launched, jointly funded by ADOT and MAG, to colocate DPS officers at the ADOT Traffic Operations Center. This project was one of the recommendations that was generated by the committee, and included in the list of near-term ITS improvements recommended for the I-10/I-17 Spine project. How the performance of the freeway system is impacted by this project is being monitored and the first of several annual reports will be provided to MAG, in November.

Preliminary results, based on statistics on freeway incident clearance, related to this pilot project have been compiled and show significant improvements in freeway traffic incident management. The preliminary results will be presented by DPS.

7. Reports by Committee Members

Members will be provided an opportunity to share information related to ongoing ITS activities in their jurisdictions.

6. For information and discussion.

7. For information and discussion.

8. Request for Future Agenda Items

Topics or issues of interest that members of the committee would like to have considered for discussion at a future meeting will be requested.

9. Next Meeting Date and Place

The next meeting is scheduled to be held at 10:00 a.m. on Wednesday, October 7, 2015. It will be held in the Ironwood Room on the 2nd Floor of the MAG office building.

Adjournment

8. For information and discussion.

9. For information.

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

August 5, 2015

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

MEMBERS ATTENDING

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

OTHERS PRESENT

Farzana Yasmin, ADOT	Dan Hartig, Ayres
Robert Kyser, City of Phoenix	Tim Wolfe, Dibble
John Kissinger, Kimley-Horn	Scott Kelley, AMEC
Lisa Burgess, Kimley-Horn	Arnab Gupta, AECOM
Jeff Jenq, OZ Engineering	Cory Steele, Strand
Srini Goundla, PB	Margaret Boone, MAG
Sandra Thomas, Jacobs	Ryan Gish, MAG
Anil Mudigonda, Jacobs	Micah Henry, MAG
Paul Porell, RTE	Sarath Joshua, MAG
Jothan Samuelson, Wilson	Eric Nava, MAG
Doug McCants, Horrocks	Steve Tate, MAG
Don Tappendorf, TEC	

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

1. **Call to Order**

Chair Marshal Riegel called the meeting to order at 10:00 a.m.

2. **Approval of the June 3, 2015 ITS Meeting Minutes**

Chair Riegel requested approval of the meeting minutes from the June 3rd ITS Committee meeting. **Reza Karimvand from ADOT moved, David Lucas from City of Tempe seconded and it was unanimously carried to approve the minutes of the meeting held on June 3, 2015.**

3. Call to Audience

Chair Riegel 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

Chair Riegel invited Sarath Joshua from MAG to present the Program Manager's Report. Mr. Joshua welcomed the newly installed Chair Riegel and Vice-Chair Hamilton. Mr. Joshua addressed the following items in his report:

➤ Status of TSOP Projects:

For Fiscal Year 2014, the total of 11 TSOP projects at a contracted cost of \$337,200 have been completed. The cost to complete all projects was \$332,700. The FY2015 TSOP projects include 11 projects for a total cost of \$302,227. Seven projects have been completed. The I-10 Integrated Corridor Management (ICM) project for I-10 from 35th Avenue to 83rd Avenue is expected to start in September 2015. The SYNCHRO training workshop was held successfully in June and had 22 participants.

➤ Update on the Emergency Vehicle Pre-emption (EVP) Study

Micah Henry was invited to discuss the update for the Emergency Vehicle Pre-emption (EVP) Best Practices Study. The draft Final Report recommendations include forming a regional EVP coordination forum/working group, identifying feasible technologies for system interoperability, identifying methodology and a transition schedule for system interoperability, identifying operations for preemption phasing, and developing a consensus on confirmation lights. The regional EVP working group would coordinate a workshop to develop a regional consensus for adopting the Final Report recommendations, establish a vision/charter agreement, develop a strategy for interoperability, identify EVP phasing and confirmation lights use, and identify costs and form a unified direction for EVP procurement and implementation. The next steps include distributing the Draft Final Report to the ITS Committee for review and comment, prepare the Final Report, and planning steps for follow-up action. Committee members were asked to submit comments by Friday, August 21st.

5. Project Initiation Pool

Chair Riegel invited Steve Tate from MAG to present the update on the available funding for upcoming projects. MAG has initiated a three-year pilot program to help encourage member agencies to start early on the project development process with ADOT for projects already programmed in the TIP. Approved by Regional Council, this program allows for eligible projects to receive \$2,829 in federal funds with a \$171 local match. These funds provided to ADOT would allow ADOT staff to begin project review, assign project numbers, hold a kick-off meeting, etc.

The need for an earlier start is highlighted by the fact that project submission deadlines have been moved up by ADOT. An earlier start would enable projects to be reviewed and any issues resolved, allowing agency staff time to assist in developing the IGA through ADOT. This would help the region ensure that all programmed federal funds are obligated each year for an efficient closeout process.

These initial project funds will establish a project number, allow ADOT to assign staff

for project oversight, and move the IGA development forward. This program is geared for non-certification accepted agencies that require IGAs with ADOT. Certification accepted agencies (CA) can apply these funds towards the environmental clearance or any other fees agencies might incur. The program is open from October through December. To be eligible for the funding, agencies must have projects identified in the next two fiscal years. This pool of funds can be used for projects programmed in FY2017 and FY2018.

Discussion included how the actual funds are to be distributed. Agencies will provide \$171 to ADOT and ADOT will receive the additional \$2,829. Even though the local agency contribution is small, the actual amount set aside for the program is below state administration requirements for establishing an IGA. Reza Karimvand with ADOT clarified the need to establish the IGA process earlier than the current process allows and provides an early initiation for the process. It represents a commitment by the local agency for advancing the project and the minimum match required by federal protocols.

As this is a 3-yr pilot project, the goal is to improve the process and is subject to the initial success in accelerating projects. Funding covers currently programmed projects.

6. TIP Call for ITS Projects, Project Application Form, Project Evaluation Process and Planned Schedule

Chair Riegel invited Sarath Joshua to discuss the upcoming call for ITS projects, the TIP project application form, the project evaluation process, and the planned schedule. Mr. Joshua informed the committee that a MAG call for projects is anticipated to be announced on August 7th to program new projects in the FY2017-2021 TIP. Applications will be due on Monday, September 21st at 10AM. (<http://www.azmag.gov/Transportation/ModalApplications.asp>).

A total of \$3.68M per year in CMAQ funds is available for qualifying ITS projects in FY2018 and FY2019. The TIP Project Application Form and Project Evaluation Process have been updated in preparation for this call for projects.

Mr. Joshua provided a review of the TIP application form for ITS projects and the planned project evaluation process. Essential requirements for the applications include compliance with the Regional ITS Architecture, identification of the regional priority in the 2012 MAG ITS Strategic Plan for the project's proposed improvement, and the location of the proposed project to be located within the CMAQ eligible area.

Mr. Joshua reviewed the ITS Project Information spreadsheet. There are four project categories: Local ITS plans, ITS applications that improve safety, Integrated Corridor Management (ICM) applications, and Arterial ITS applications. These four categories are explained in the 2012 MAG ITS Strategic Plan. The project information also shall include project title and sponsor, goals and objectives, scope and a map of the project area, identification of relevant ITS service packages for the MAG Regional ITS Architecture and appropriate architecture flow diagrams, the program fiscal year for funding, the project budget and cost estimate, required system maintenance and operations, and the compliance statement for the systems engineering analysis requirements.

Mr. Joshua also provided an overview of the ITS project evaluation process and the planned timeline. As discussed at the June 2015 meeting, the revised project application form includes the Working Group recommendations for incorporating safety considerations in future ITS projects. The ITS Committee members will evaluate all project applications and generate an individual project ranking. The project review by committee members will begin as soon as applications are made available to committee members. MAG staff has developed an Excel-based project evaluation tool with the scoring components. The project evaluation criteria includes the Congestion Management Process (CMP) score (comparing against the 6 CMP objectives), the Air Quality Score (emission reduction potential to be provided by the Air Quality TAC), and the Safety Score (potential to improve safety). The ITS Committee members will assign values to the CMP score and the Safety score. The three scores will form the Combined Weighted Score. Based on the weighted scores, the individual projects will receive a ranking.

At the ITS Committee meeting on October 7th, brief project presentations will be made by lead agencies. The Air Quality Technical Advisory Committee (TAC) will be providing Air Quality Cost Effectiveness Scores on October 22nd. These scores will be provided to committee members to be incorporated in the individual Evaluation Forms. When the air quality scores are added to the individual evaluation form, the final ranking will be generated. These rankings will be combined by MAG staff into a composite committee ranking. At the ITS Committee meeting on November 4th committee members will review the final ranking and generate a recommendation for programming projects in the two fiscal years.

Discussion included the following resolutions:

- Project ranking will be independent of the requested fiscal year funding. Following the scoring and ranking of the projects, the ITS Committee will program FY2018 and FY2019 based on individual project rank and available funds.
- Under System Maintenance and Operations, the project applications should identify staffing support for the proposed ITS application and/or implementation.
- The applications need to be signed by agency' manager committing to the funding to the best ability of the respective agency.
- Benefit-Cost Ratio was changed to Cost Effectiveness for System-wide Benefits.
- The six objectives for the CMP score will remain equally weighted.
- The Safety Potential Weight/Factor was eliminated from the calculation for the Safety Score. For academic purposes MAG staff will include hypothetical scores that include the weight factor for comparison purposes.
- The Combined Weighted Score for the project evaluation form will be based on the CMP score for 75%, the air quality score for 15%, and the safety score for 10%.

7. Update on the I-10/I-17 Spine Project Concept of Operations

Chair Riegel invited Reza Karimvand and Farzana Yasmin of ADOT and John Kissinger with Kimley-Horn and Associates to provide an update on the Concept of Operations that is being developed for the I-10/I-17 Spine project's first phase of Active Traffic Management (ATM) implementation on the 14-mile stretch of I-17 from the I-10 Stack interchange to SR-101L North Stack interchange. This phase of the ATM project will be limited to the implementation of Variable Speed Limits (VSL), Lane Control Signs

(LCS) and Wrong-Way Ramp Entry Detection.

Mr. Kissinger described the goals of improving safety, mobility, and reliability, and the objectives of reducing crashes and incident duration, providing advanced warnings, reducing delay, and increasing throughput for smoother traffic flow. The on-going development of the Project Assessment includes the Concept of Operations, modeling, cost estimate, and preliminary design. The focus of this project is a portion of the Spine Corridor study.

The Concept of Operations (ConOps) includes establishing the project vision, definition of the corridor area, current TSM&O functions, processes, and gaps, and near term ITS Improvements. Also included are operational concepts and defined roles and responsibilities. The ConOps will define operational scenarios and performance measurement strategies. Participants include ADOT, MAG, FHWA, City of Phoenix, MCDOT, DPS, and Valley Metro.

Currently under consideration are the need for gantries along I-17 and the sign configuration, types and configuration of lane control signs, and types and configuration of VSL and LCS operations. Other peer ATM programs reviewed included WSDOT (Seattle), MnDOT (Twin Cities), and VicRoads (Melbourne, Australia). Emerging programs include VDOT (I-66 in Northern Virginia), Caltrans (I-80 in Oakland), and NDOT (Las Vegas to support Project Neon).

The Project Team will rely on agency experiences to influence this project. Key decisions made so far include regulatory VSL (not advisory), VSL thresholds, half-mile gantry spacing, and sign displays. The Project Team also invited participation by any member of the ITS Committee.

8. Reports by Committee Members

Chair Riegel called on members to report items of interest to the committee. Reza Karimvand with ADOT described the current status of the deployment of travel times on freeway DMSs. He stated that point-to-point travel times are now displayed from 5AM to 11PM on weekdays and from 7AM to 9PM on weekends. ADOT is reviewing the sign priority protocols with anticipation of using the double-panel feature. There are 77 DMSs in the region with this functionality. Bryce Christo with City of El Mirage mentioned the successful completion of the Traffic Signal Optimization Project. Chair Riegel with City of Phoenix mentioned progress on the City of Phoenix's Arterial Travel Time Project. Abhishek Dayal with Valley Metro reported that the 3.1-mile extension of the light rail system in Mesa will be opening August 22nd. He also mentioned that Valley Metro is currently looking for an ITS intern.

9. Request for Future Agenda Items

Chair Riegel 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, September 2, 2015, in the Ironwood Room (2nd floor) at MAG.

11. Adjournment

Chair Riegel adjourned the meeting at 11:48 a.m.