

February 27, 2013

TO: Members of the MAG Intelligent Transportation Systems Committee
FROM: Catherine Hollow, City of Tempe, Vice Chair
SUBJECT: MEETING NOTIFICATION AND TRANSMITTAL OF TENTATIVE AGENDA

Wednesday, March 6, 2013- **10:00 a.m.**
MAG Office Building, 2nd Floor, Ironwood Room
302 North First Avenue, Phoenix

A meeting of 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>TENTATIVE AGENDA</u>	
	<u>COMMITTEE ACTION REQUESTED</u>
1. <u>Call to Order</u>	
2. <u>Approval of the February 6, 2013 Meeting Minutes</u>	2. Review and approve minutes of the meeting held on February 6, 2013.

3. Call to Audience

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.

4. Program Managers Report

The following items will be discussed:

- ITS on-call RFQ and Special Meeting on March 27, 2013
- TSOP Update
- RCN Update
- FHWA Operations Data Workshop

5. Action Plan for Improved Operations on I-10 and I-17

At last meeting the committee assigned the task of developing a draft plan to the AZTech ICM Working Group. The resulting draft plan will be presented to the committee at the March 27th meeting. The plan will be reviewed, if necessary modified, and finalized by the committee for recommendation to MAG. A briefing will be provided on the status of this effort.

6. Emergency Vehicle Preemption (EVP) Study

This study is included in the Draft MAG Work Program for FY2014, based on the recommendation of the committee. A draft scope of work was reviewed by the

3. For information and discussion.

4. For information and discussion.

5. For information and discussion.

6. For information and discussion.

committee at the January meeting. Based on the discussion and comments received a revised scope has been developed (See Attachment One). This study will be conducted under the new ITS on-call contract.

7. Reports by Committee Members

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

8. Request for Future Agenda Items

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

9. Next Meeting Date and Place

The next committee meeting is scheduled to be held at 10:00 a.m. on Wednesday, March 27, 2013. It will be held in the Ironwood Room on the 2nd Floor of the MAG office building.

Adjournment

7. For information and discussion.

8. For information and discussion.

9. For information.

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

February 6, 2013
MAG Ironwood Room, 2nd Floor
302 North First Avenue
Phoenix, Arizona

MEMBERS ATTENDING

Reza Karimvand, ADOT	Luke Albert, City of Goodyear
+ Soyoung Ahn, ASU	Nicolaas Swart, Maricopa County
Chris Hamilton, City of Avondale	Avery Rhodes, City of Mesa
**Daymara Cesar for Thomas	Ron Amaya, City of Peoria
Chlebanowski, Town of Buckeye	Marshall Riegel, City of Phoenix
Mike Mah, City of Chandler	**Bill Birdwell, Town of Queen Creek
Captain Burley Copeland, DPS	Steve Ramsey for Bruce Dressel,
Jorge Gastelum, City of El Mirage	City of Scottsdale
+ Jennifer Brown, FHWA	Albert Garcia for Nicholas Mascia,
Erik Guderian, Town of Gilbert	City of Surprise
Debbie Albert, City of Glendale	Catherine Hollow, City of Tempe
	Ratna Korepella, RPTA

OTHERS PRESENT

Faisal Saleem, Maricopa County	Trevor Ebersole, Glendale
Natalie Carrick, Michael Baker Jr Inc	Paul Porell
Jason Watson, Stantec Inc	Don Tappendorf, Tappendorf Consultants
Arnab Gupta, PB Inc	Bo Gao, Stanley Inc
Lisa Burgess, KHA Inc	Dan Hartig, Ayres Inc
Keith Winney, UCG Inc	Deanna Haase, KHA
Sarah Simpson, UCG Inc.	David Riley, UCG Inc
Saroja Devarakonga, HDR	Jeff Jenq, OZ
Chuck O'Connor, Rythem Engineering	Don Wiltshire, YSMA LLC
Joey Paskey, Atkins Inc	Art Brooks, Strand Associates
Sandra Thoms, Jacobs	Ryan Gish, MAG
Teri Kennedy, MAG	Sarath Joshua, MAG
Margaret Boone, MAG	Kiran Guntupalli, MAG
Leo Luo, MAG	

+ Not present

** Teleconference

1. Call to Order

Chair Debbie Albert called the meeting to order at 10:06 a.m.

2. Approval of the January 9, 2013 Meeting Minutes

After a few minor corrections were noted, Catherine Hollow moved, Erik Guderian seconded and it was unanimously carried to approve the minutes of the meeting held on January 9, 2013.

3. Call to Audience

Chair Debbie Albert 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

Sarath Joshua addressed the following items in his report:

➤ ITS and Safety On-call RFQ

The RFQ is due at noon on March 5th. A proposers meeting and DBE networking event is scheduled at 3:00 on February 7th. The selection panel will review the proposals and make a recommendation of a list of qualified consultants. The ITS Committee will hold a special meeting on March 27th to take action on the item. This on-call contract will cover duration of three years. Sarath also mentioned that a total of 90 task orders were carried out under the previous ITS-Safety on-call contract.

➤ ICMS initiatives

Sarath mentioned that there is a pilot project in the Loop101 corridor involving DPS, ADOT, Scottsdale, Tempe and MAG. Nicolaas Swart mentioned that a project kick-off meeting was held at Scottsdale. The meeting mainly discussed the modeling effort, the required coordination effort among stakeholders, an emergency response plan, traveler information plan as well as specific traffic management plans. Steve Ramsey mentioned that he is developing detailed timing plans for the project.

➤ FY 2013 TSOP Project Recommendations

- 10 projects, total \$243,000
- Regional Council approval on January 30, 2013
- All projects to be completed by June 30, 2013

➤ TRB Annual Meeting 2013

Sarath mentioned that the DynusT modeling effort and the plan to use the DynusT model for Loop 101 ICMS analysis at MAG has generated a lot of interest at the national level. Leo was invited to participate in a related workshop. A primer was also being prepared in advancing TIM within transportation planning process. He mentioned several other topics of current discussion at the national level: ICMS, Adaptive Traffic Control, optimizing arterial operations, speed harmonization, eco driving and smart phone applications.

➤ RCN Working Group Meeting

Ryan Gish mentioned that the RCN main core switches will be updated in the upcoming weeks.

➤ Project Status Report to MAG via Workbooks

Teri Kennedy, MAG TIP programming manager was invited to brief the committee on the importance of providing project status reports to MAG. She mentioned that CMAQ is under programmed for FY 2013 and over programmed for FY 2014. The project status reports are very important to make sure that the region does not lose federal funds. Each MAG member agency is responsible for reporting to MAG on all federally funded ITS projects. Teri agreed to provide the agency contact list to Sarath for project status reports, and that will be distributed to the committee by Sarath.

June 28, 2013 is the deadline for obligating FY 2013 projects. She also mentioned that the list of the TIP projects is in the TRC meeting agenda item No. 9. Agencies can utilize the new funding level once Regional Council approves the recommendation.

5. FY 2013 MAG Closeout Funds for Design Phase of FY 2015 TIP Projects

Teri Kennedy provided a list of potential design phase projects to Committee members. She mentioned that the deadline for obligation of these projects is June 28, 2013. Member agencies need to provide 5.7% of the overall cost of the projects. If agencies do not intend to include these projects in the TIP, please contact Teri or Sarath. She also mentioned the ADOT local government manual will be ready soon. Qualified CA agencies could administer the projects themselves, but need to inform ADOT. Teri mentioned that she will get back to agencies with their questions on the environmental clearance process for these projects. Sarath added that the funding could be used for PA and DCR. Teri also mentioned that the Regional Council approval on January 31, 2013 includes all the projects that received increased design funds. **Marshall Riegel moved, Catherine Hollow seconded and it was unanimously carried to approve the list of the design phase projects to be included in the TIP and utilize the FY 2013 Closeout funds.**

6. MAG Regional ITS Architecture Update

Deanna Haase from KHA was invited to make a presentation on the Regional ITS Architecture project. She briefly mentioned the changes made at the National ITS Architecture and explained the concepts and the update process of the project. The MAG Regional ITS Architecture website was also demonstrated. Following the committee meeting, invitations for comments on ITS Architecture will be sent to Committee members. Detail instructions will also be provided. She also mentioned that the use of Regional ITS Architecture as part of the project programming and funding process is a federal requirement. Reza suggested Deanna in coordinating with UCG to include some of the updates ADOT has. Sarath commented that the inventory in ITS Architecture is mainly defining the functions. Marshall Riegel commented that Phoenix use the Architecture extensively during TIP application process. Reza suggested having a workshop for the project. Sarath suggested using the ITS Architecture beyond the TIP application process and would like to hear any new ideas from the committee members. The consulting team will provide updates to the committee in April.

7. Action Plan for Improved Operations

Sarath mentioned that the RTP includes \$1.3 billion for planned improvements to I-17 and I-10 freeway corridors. However, it has been determined that, due to a number of new constraints, some of the planned improvements may no longer be feasible. Recent discussions on this subject have identified an opportunity to utilize some of these funds to implement a short-term action plan that would demonstrate improved traffic operations in these corridors by the end of 2015. The success demonstrated by such an Action Plan developed by the committee could form the basis for including significant resources for future regional ITS initiatives, in the next generation RTP. Margaret mentioned that a working group will be needed to develop such action plan and form a concept of operations. The plan should focus on improving operations based on the existing infrastructure. Nicolaas and Reza suggested having the same group as the on-going Loop 101 efforts, but extended to other members. Marshall Riegel stated that Phoenix fully supports the ICMS concept. Margaret mentioned that one of the tasks will be identifying

the challenges and future ITS investment needs. Debbie mentioned that some of the operations/events have system wide impacts, it may be necessary to look beyond just the I-10/I-17 spine. Sarath commented that the initial focus will be on operations improvement along the I-10 and I-17 corridor, but will be extended to the other corridors and the region. An effort has already been initiated under AZTech to develop an ICM plan for developing a draft plan. Maricopa County has assigned this task to Kimley Horn. Some committee members suggested that this task be could be assigned to AZTech and the Draft Action Plan provided to the MAG ITS Committee for review and recommendation to MAG. **Reza moved, Nicolaas seconded and it was unanimously carried to assign this task to AZTech for developing the Draft Operations Action Plan for I-10/I-17. The agencies to participate would include DPS, ADOT, Phoenix, Tempe, Chandler, MAG, Maricopa County and FHWA. Other interested members could also volunteer to join the working group.** Sarath also suggested the working group post the interim documents on MAG website for other Committee members to review.

8. Reports by Committee Members

Ron Amaya reported that Peoria just installed their first Flashing Yellow Arrow at 75th Avenue and Thunderbird Road. Reza mentioned that ADOT is implementing diversion route plan on state highways. He also mentioned that the Area of Influence on AZ511 is also ready for agencies to use. The state ITS Architecture and ramp metering study is close to completion.

9. Request for Future Agenda Items

No future agenda items were received.

10. Next Meeting Date and Place

Next meeting will be held at 10:00 a.m. on Wednesday, March 27, 2013, in the Ironwood Room (2nd floor) at MAG.

Adjournment

Chair Debbie Albert adjourned the meeting at 11:38 a.m.

Emergency Vehicle Preemption (EVP) Study – Draft Scope of Work 03/06/13

Background

The goal of this study is to conduct a comprehensive review of the current Emergency Vehicle Preemption (EVP) practices, and to determine the best practices, and develop a recommended practice for the region to follow. The EVP operation at signalized intersections usually involves multiple departments within a local jurisdiction. In some instances multiple jurisdictions are involved. Technologies involved include the communications between emergency vehicles and traffic controllers, signal indications, confirmation indications and etc. The fundamental concept of intersection EVP is to implement a temporary traffic signal timing scheme that would provide a safer path to an approaching EMS vehicle. The manner in which the traffic signal timing is implemented allows for other vehicles at or near the intersection to clear the path of the EMS vehicle, preventing movements that would potentially conflict with an approaching EMS vehicle. The study will conduct a comprehensive review of the current EVP practices within the MAG region and across the country to generate relevant suggestions for improving how EVP is currently implemented in the MAG region. The study will also identify funding opportunities, technology options and improved coordination methods.

Task 1: Different Practices Related to EVP

Review and identify current practices related to EVP among different MAG member agencies in terms of definition of emergency vehicles, funding source, the roles of different departments within one jurisdiction, related laws/regulations and etc. The information to be collected should include the following:

Hardware

Brand of EVP (GTT, Tomar, other)

Is Coding used or not

Do they use a confirmation indication ("F" head, strobe, other)

Operations

Which departments are permitted to use EVP (fire, ambulance, PD, or transit) ? Is it considered a high, or low level priority?

What is the signal display (solid green in both directions, solid green in one direction only, green ball with left turn arrow) ?

Does the EVP operation cut off pedestrian walk signal phase?

Is EVP set to shut off after applying the hand brake of the emergency vehicle?

Who maintains which part of the EMS equipment related to EVP?

What is the estimated (or actual observed) number of actuations, durations, etc. If so, provide date ?

Financial

Which department within the local agency pays for emitter, receiver, discriminator card (this part

is for info only, as each jurisdiction can decide for themselves who pays for what.)

Task 2: Challenges and Shortcomings

Identify challenges and shortcomings related to operating EVP among jurisdictions within the region. This will include concerns by emergency vehicle operators, traffic management personnel and other road users.

Task 3: Summary of Current EVP Technologies

Technologies have involved over the years, so has EVP. This summary will provide information on new technologies in EVP operations and may help address some of the challenges agencies are facing. This task will also include a summary of the advantages/benefits and disadvantages/costs of moving to new technologies from the current EVP systems. The primary purpose of this summary would be to inform local agencies that may be purchasing their first EVP system or those with systems at the end of their life cycle, on the benefits and costs (both capital and maintenance) associated with different EVP systems.

Task 4: EVP Best Practices

Identify some of the best practices in EVP. This task will summarize some of the best practices in EVP policies, coordination efforts, and operation strategies, technologies within the region and across the country. It should include the analysis of the practices in terms of benefits in safety, mobility and others.

Task 5: Recommendations for Improving EVP

Identify opportunities to improve EVP at regional level. Emergency vehicles respond to more than just one jurisdiction. Due to the complexity of the EVP operations and the number of agencies involved, improving EVP at regional level has a lot of challenges. This task should identify the challenges and summarize the opportunities in improving EVP operations within the MAG region as well as the steps needed to be taken.