

August 29, 2012

TO: Members of the MAG Intelligent Transportation Systems Committee
FROM: Debbie Albert, City of Glendale, Chair
SUBJECT: MEETING NOTIFICATION AND TRANSMITTAL OF TENTATIVE AGENDA

Wednesday, September 5, 2012- **9:30 a.m. (Please note changed start time)**
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 August 1, 2012 Meeting Minutes</u>	2. Review and approve minutes of the meeting held on August 1, 2012.
3.	<u>Call to Audience</u>	3. For information and discussion.

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:

- FY2015-2017 TIP Project Application Schedule
- Status of TSOP projects
- RFQ for On-Call Services Contracts

5. Regional ITS Strategic Plan Update

The draft final version of the ITS Strategic Plan has been delivered to the committee via email and is also posted at the MAG website. The plan reviews past accomplishments, sets new priorities for ITS applications in the future and establishes resource allocation targets to be used as guidance when programming new projects in the future. Committee members will review and comment on the draft Plan.

6. ITS Projects Ranking Methodology

At the previous ITS Committee meeting, the committee adopted a project ranking methodology that incorporated: (1) merits of projects from a congestion management viewpoint; (2) four categories of ITS projects; (3) weight factors for each ITS project category; (4) TIP resource allocation targets; it was also agreed that the final project score must incorporate air quality scores that are developed for individual ITS projects. The air quality scores for a range

4. For information and discussion.

5. For information, discussion and possible action to adopt the ITS Strategic Plan with the recommended modifications.

6. For information, discussion and possible action to recommend a method to combine air quality scores into the ITS project ranking process, for use in the TIP project ranking process for FY 2015-2017.

of past ITS projects are provided in Attachment One. The committee will explore available options and recommend a method to combine the air quality score into the ITS project ranking process.

7. Clarification of ITS Project Categories and Other TIP Related Questions

The four subcategories of ITS projects that have been incorporated in the TIP applications are: (1) ITS Application for Safety; (2) Local ITS Plans; (3) Integrated Corridor Management; and (4) Arterial ITS. Any questions related to the definition of these project categories will be discussed. A particular project type to be discussed is the HAWK traffic signal that would qualify as an ITS Application for Safety.

8. Reports by Committee Members

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

9. 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.

10. Next Meeting Date and Place

The next committee meeting is scheduled to be held at 9:30 a.m. on Wednesday, October 3, 2012. 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 and discussion.

10. For information.

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

August 1, 2012

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

MEMBERS ATTENDING

Reza Karimvand, ADOT	Nicolaas Swart, Maricopa County
*Soyoung Ahn, ASU	Suresh Shrimavle, METRO
**Margaret Boone for Bennie Robinson, City of Avondale	*Avery Rhodes, City of Mesa
*Thomas Chlebanowski, Town of Buckeye	**Ron Amaya, City of Peoria
Mike Mah, City of Chandler	Marshall Riegel, City of Phoenix
Captain Burley Copeland, DPS	Nancy Steptoe, Phoenix Public Transit
*Jorge Gastelum, City of El Mirage	*Bill Birdwell, Town of Queen Creek
**Jennifer Brown, FHWA	Bruce Dressel, City of Scottsdale
Erik Guderian, Town of Gilbert	**Tracy Eberlein for Nicholas Mascia, City of Surprise
Debbie Albert, City of Glendale (Chair)	*Catherine Hollow, City of Tempe
**Luke Albert, City of Goodyear	Ratna Korepella, RPTA

OTHERS PRESENT

Farzana, Yasmin, ADOT	Lee Jimenez, Maricopa County
Mark Hannah, Young Town	David Riley, UCG
Sarah Simpson, UCG	Dana Owsiany, Michael Baker
Dan Hartig, Ayres	Arnab Gupta, PB
Shanthi, Krishnan, Jacobs	Allen Barakovic, Jacobs
Art Brooks, Strand	Doug McCants, Atkins
Jeff Jenq, OZ Engineering	Lisa Burgess, KHA
Bo Gao, Stanley	Paul Porell, AZTech
Cami Weckerly, KHA	Sarath Joshua, MAG
Ryan Gish, MAG	Leo Luo, MAG
Kiran Guntupalli, MAG	

* Not present

** Via teleconference

1. Call to Order

Debbie Albert called the meeting to order at 9:36 a.m.

2. Approval of the July 11, 2012 Meeting Minutes

A few minor corrections were noted. Reza Karimvand moved, Bruce Dressel seconded and it was unanimously carried to approve the corrected minutes of the meeting held on July 11, 2012.

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:

- FY2011 TSOP Projects
 - 2 Projects are on-going
 - Bell Road Traffic Coordination – 6 agencies
 - Development and implementation of new signal timing plans – Avondale
- FY2012 TSOP Projects
 - 14 TSOP projects including 7 B/A evaluations
 - Two projects are completed
 - One project underway at Scottsdale FLW Blvd & Loop101
 - Four projects will begin work in August, two are in Gilbert and the other two are in Chandler
- On-call Contracts
 - MAG is planning to extend the existing on-call contracts so that the current projects can be completed.
- RCN
 - Sarath also invited Chair Debbie Albert to provide updates on RCN. She added that agencies connected to RCN will not be able to control the cameras when ADOT TOC is undergoing system acceptance test. Once the test is completed, new version of the Camera Chameleon software will be made available to agencies.
 - Debbie also mentioned the potential expansion of RCN along I-10 West to connect Goodyear, Avondale and possibly other cities.
- TIP Call for Projects

The Call for Projects will be announced on August 3, 2012. MAG will be programming projects in FY2015, FY2016 and FY2017. All the applications will be due to MAG at 10:00 AM on September 19th. There will be two workshops held at MAG to assist provide member agencies in addressing questions related to the applications. The first workshop is scheduled for 9am on Aug 13th. There will be breakout sessions for the different modal areas. The second workshop is scheduled for 1:00pm on August 27. Member agencies can also discuss issues related to the applications at the September ITS Committee meeting. The committee will review the applications at the October and November meetings. The committee will make a final recommendation at the December meeting.

5. Congestion Management Process (CMP) for ITS Projects

Sarath Joshua recapped the discussion on the CMP process at the July ITS Committee meeting. Four ITS project subcategories have been identified: ITS for Safety, Local ITS Plans, ICMS and Arterial ITS. The results of the email survey of committee members on the resource allocation targets for the four subcategories of ITS projects were shared. How these targets, the CMP process, and CMP weighting factors for each project category worked were demonstrated. He further explained that the projects for fiscal year FY2015, FY2016 and FY2017 will be ranked together, with the higher ranking projects

receiving the first choice of programmed year. The lower ranking projects will receive the second or third choice of the programmed year depending on the available funding of the target programmed years and project rankings. The scores provided by individual committee members would be based on each project category. He also reviewed the draft ITS project application form. The remaining step to finalize the project ranking process was to incorporate the air quality scores. Mike Mah asked whether samples of the previous air quality scores were available. Sarath agreed to make sample air quality scores available at the next meeting. He explained that how the air quality score was combined with the overall score needs to be determined by the ITS Committee at the next meeting. Leo explained that air quality scores shown on the draft project ranking sheet are solely based on the rankings of the air quality scores provided by MAG air quality division. In response to a question from Debbie Albert, Sarath responded that it would be difficult to program HSIP funding for ITS-Safety projects that also improved safety. Therefore, the project subcategory of ITS-Safety for improving safety should primarily address air quality and congestion issues, but at the same time improving safety. Committee members also discussed examples of ITS for improving safety projects. **Mike Mah moved, Reza Karimvand seconded and it was unanimously carried to approve the four project categories and the adoption of the planned resources allocation goals in the ITS Strategic Plan for Arterial ITS as 50%, ICMS as 25%, ITS for Safety as 20% and Local ITS Strategic Plan as 5%. Marshall Riegel moved, Erik Guderian seconded and it was unanimously carried to approve the CMP weighting factor for ICMS as 6.5, Arterial ITS as 6.5, ITS for Safety as 5.5 and Local ITS Strategic Plan as 2.5.**

6. Reports by Committee Members

Margaret Boone mentioned that the Avondale interim TOC is online and connected to 5 signals. Reza Karimvand mentioned that the ADOT control room project is completed. An open house invitation will be sent to committee members. ADOT is planning to implement travel time information on 15 inbound and 17 outbound DMS signs by the end of October.

7. Request for Future Agenda Items

No future agenda items were received.

8. Next Meeting Date and Place

Next meeting will be held at 9:30 a.m. on Wednesday, September 5, 2012, in the Ironwood Room (2nd floor) at MAG.

Adjournment

Debbie Albert adjourned the meeting at 10:31 a.m.

Table 4 - Evaluation of Proposed ITS Projects for the Federal Fiscal Year 2014 Sorted by Cost Effectiveness (Includes Weighted Emission Reductions)

Agency	Location	Work Type	FY	Length (miles)	Emission Reduction Weighted TOG(kg/day)	Emission Reduction Weighted NOx(kg/day)	Emission Reduction Weighted PM10(kg/day)	Emission Reduction Weighted Total(kg/day)	Cost Effectiveness (\$/met.ton)	CMAQ Funds Requested
Phoenix	Within Phoenix	Develop the City of Phoenix ITS Strategic Plan. ¹	2014	770.0	205.94	92.63	0.00	298.57	\$365	\$182,000
Maricopa County	Associated with AZTech Center-to-Center traffic management system located primarily at ADOT and MCDOT	Upgrade the Regional Archive Data Center Equipment and Systems to enhance archiving capacity and the utility of real time traffic data. ¹	2014	700.0	100.30	45.11	0.00	145.41	\$562	\$136,500
Phoenix	Within Phoenix	To extend Phase B Fiber Optic Backbone. ¹	2014	770.0	205.94	92.63	0.00	298.57	\$1,639	\$818,000
Scottsdale	Loop 101 at three intersections, Hayden Road, the 101 Freeway interchange at Pima Rd and 90th Street	1. To identify traffic adaptive signal systems that have been deployed and returned successful outcomes in reducing traffic delay on stated corridors across the country. 2. Deploy the selected system on FLW and complete before and after delay studies. 3. Evaluate if the Adaptive System can minimize delay as well, or better than real-time control of the area signals through the Traffic Management Center and human intervention. ¹	2014	1.0	1.27	1.21	0.00	2.47	\$9,518	\$39,375
Peoria	Four Corridors: Peoria Ave, Northern Ave, Olive Ave and 75th Ave, located in the southern most area of City of Peoria	To upgrade the existing cabinets, traffic controllers and also upgrade the existing loop detection to video detection on selected corridors to improve the overall communication within the City's Network and also upgrade the hardware and software with the changing technologies in ITS. ¹	2014	15.0	9.99	8.56	0.00	18.55	\$22,571	\$700,000
EI Mirage	Within City Limits	Various arterial traffic signal enhancements to improve existing signalized intersections for computerized signal control, closed circuit video, improved pedestrian control, improved signage and signal preemption. ¹	2014	16.0	2.83	2.36	0.00	5.18	\$47,959	\$415,660
Tempe	Corridors of Elliot/Guadalupe/Warner	This project proposes to use an existing conduit along Elliot for fiber optic communication to the signals. Wireless radios will be used to provide communication to signals along Guadalupe & Warner. CCTVs will be placed at the major intersections for traffic monitoring. ¹	2014	13.0	2.52	1.16	0.00	3.68	\$67,465	\$415,485
Chandler	Ray, Elliot, Dobson, connecting at Arizona back to TMC	Provide fiber communications to Traffic Signals in the project back to the TMC. ¹	2014	9.0	1.85	1.61	0.00	3.46	\$138,621	\$801,500
Gilbert	Seven intersections near Baseline Road & Val Vista Drive	The project enables the traffic control center to respond to traffic congestion at 7 intersections remotely and make real-time improvements. ¹	2014	3.0	0.54	0.21	0.00	0.75	\$252,728	\$317,122

Table 4 - Evaluation of Proposed ITS Projects for the Federal Fiscal Year 2014 Sorted by Cost Effectiveness (Includes Weighted Emission Reductions)

Agency	Location	Work Type	FY	Length (miles)	Emission Reduction Weighted TOG(kg/day)	Emission Reduction Weighted NOx(kg/day)	Emission Reduction Weighted PM10(kg/day)	Emission Reduction Weighted Total(kg/day)	Cost Effectiveness (\$/met.ton)	CMAQ Funds Requested
Glendale	67th Avenue between Glendale Ave and Cholla Street, near the intersection of 83rd Ave/Maryland	Expand the city's remote traffic monitoring and management capabilities along with providing redundancies to the communications system. ¹	2014	3.5	0.90	0.41	0.00	1.31	\$451,181	\$987,000
Maricopa County	Various locations along MC85 from Agua Fria Bridge West Terminal to 75th Ave	To extend traffic management capabilities along MC 85, thus improving traffic flow and overall roadway capacity, and reducing reliance on private sector leased lines for required communication links. ¹	2014	5.5	0.71	0.28	0.00	0.98	\$515,879	\$847,000
Fountain Hills	Shea Blvd. and Downtown Area	Provide an Initial Deployment ITS system for the traffic signals on Shea Blvd. and in the Downtown Area; with monitoring/control sites at Town Hall and the Street Yard. ¹	2014	7.0	0.51	0.20	0.00	0.71	\$847,724	\$1,000,000
Goodyear	Van Buren Street - Estrella Parkway to Cotton Lane	This project will provide traffic signal connectivity to three existing and one future traffic signal. In addition, CCTV cameras will be provided at key intersections. ¹	2014	2.0	0.34	0.05	0.00	0.39	\$1,236,143	\$812,000

Notes:

¹Supports the TCMs in the Serious Area PM-10 Plan and CO Maintenance Plan: “Coordinate Traffic Signal Systems” and “Develop Intelligent Transportation Systems”