

November 20, 2014

TO: Members of the MAG Intelligent Transportation Systems Committee

FROM: Catherine Hollow, City of Tempe, Chair

SUBJECT: MEETING NOTIFICATION AND TRANSMITTAL OF TENTATIVE AGENDA

Wednesday, December 3, 2014- **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 December 3, 2014 meeting, the quorum requirement is 10 committee members.	
2. <u>Approval of the November 5, 2014 Meeting Minutes</u>	2. Review and approve minutes of the meeting held on November 5, 2014.
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 TSOP Projects• Status Report on the RCN• 2015 Meeting Schedule (Attachment One)	4. For information and discussion.
5. <u>Bell Road Adaptive Signal Control Technology Project</u> The Adaptive Signal Control Technology (ASCT) project that is currently under design along Bell Road is an ITS project recommended by the committee. The implementation is planned to initiate in 2015. It is funded with \$2.7million in RTP funds and is programmed in the FY2015 TIP. The	5. For information and discussion.

lead agency is Maricopa County with other participating the agencies: ADOT, Surprise, Peoria, Glendale, Phoenix and Scottsdale. This is a complex project of much interest to the region, involving nearly 52 intersections along 15 miles of Bell Road, possibly with many lessons to be learned for future ASCT implementations. An overview of the project status and next steps will be provided.

6. Video Sharing During the 2015 Superbowl Event

The City of Phoenix has recently submitted a request to MAG, to provide the police department with access to traffic video images from cameras at jurisdictions hosting Superbowl Events in January 2015. This would not require any additional hardware, and also would have no impact on other video sharing services supported by the RCN. A brief overview of the request and MAG plans to address this request will be provided.

7. Reports by Committee Members

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

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, January 7, 2015. It will be held in the Ironwood Room on the 2nd Floor of the MAG office building.

Adjournment

6. For information and discussion.

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**

November 5, 2014
MAG Ironwood Room, 2nd Floor
302 North First Avenue
Phoenix, Arizona

MEMBERS ATTENDING

Reza Karimvand, ADOT	* Rob Dolson, City of Maricopa
Chris Hamilton, City of Avondale	Nicolaas Swart, Maricopa County
# Chris Lemka, City of Buckeye	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	* Mohamed Youssef, Town of Queen Creek
Toni Whitfield, FHWA	# Steve Ramsey, City of Scottsdale
Leslie Bubke, Town of Gilbert	Albert Garcia, City of Surprise
Kiran Guntupalli, for Debbie Albert, City of Glendale	Catherine Hollow, City of Tempe
Luke Albert, City of Goodyear	Amanda Luecker, Valley Metro

OTHERS PRESENT

Brent Cain, ADOT	Dave Chambers, TransCore
David Riley, United Civil Group	Tim Wolfe, Dibble
Deanna Haase, KHA	Dan Hartig, Ayres
Jeff Jenq, OZ Engineering	Margaret Boone, MAG
Jothan Samuelson, Wilson	Ryan Gish, MAG
Radu Nan, Kittelson	Micah Henry, MAG
Laura Sewell, Stantec	Sarath Joshua, MAG
Jason Watson, Stantec	Eric Nava, MAG

- * 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. Self introductions were made by committee members.

2. **Approval of the October 7, 2014 Meeting Minutes**

Chair Hollow requested comments on the meeting minutes from the October 7th ITS Committee meeting. Reza Karimvand from ADOT provided a few corrections to the meeting minutes for MAG staff to incorporate in the meeting minutes. The correct number of DMSs in Phase II of the Travel Time information display in the Phoenix metropolitan area is 65 and Phase III is slated to be completed by December 2014. **Reza Karimvand from ADOT moved, Albert Garcia from Surprise seconded and it was unanimously carried to approve the minutes of the meeting held on October 7, 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

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:

A total of 11 TSOP projects, five have been completed, six projects are underway. These projects are scheduled to be completed by January 2015. The FY2015 TSOP project list was recommended for approval by TRC and goes before Management Committee on November 5th, and then Regional Council in December. Once approved the task orders will be developed in January and February 2015, and initiated and completed in the Spring of 2015. Mr. Joshua will provide an overview of the TSOP program to the Transportation Policy Committee on November 12th. Since 2004 there have been over 100 projects involving well over a thousand locations. Studies have shown that the Benefit-Cost Ratio for signal re-timing efforts is over 17:1. The monies allocated to the TSOP program have resulted in numerous benefits and the program is a success for the region.

➤ Media Event on DPS Officer at the TOC

Sarath Joshua recapped the effort to establish the presence of DPS officers at the ADOT TOC. There were numerous local media covering the story. Mayor LeVault, Chair of MAG Regional Council, was quoting, "A great example of how regional, state and federal agencies saw a need and decided to implement a proven and effective solution." Other quotes were attributed to Mayor Greg Stanton, ADOT Director John Halikowski, DPS Director Robert Halliday, and FHWA Division Administrator Karla Petty. A MAG analysis using the Dynus-T traffic simulation model found that having the DPS help with collision reactions could result in a 33 percent reduction in traffic delays due to major closures. Sgt. Cartier is the DPS officer responsible for management and operations of the project. Chair Hollow thanked MAG, ADOT, and DPS representatives for their effort and perseverance in seeing the project through to initiation. Reza Karimvand offered to provide additional information for those that are interested. DPS officers will be present in the TOC and provide direct communication to officers at the scene to improve response efforts and times, and to improve traveler information. It is anticipated that there will be one supervisor and three staff members to provide 24-hour coverage by DPS officers at the TOC. The staffing plan is currently being developed and finalized, so this configuration may change. Mr. Joshua stated that the direct benefit is for TOC officers to directly communicate with field officers and provide an assessment of the non-recurring event. In response to a question from Avery Rhodes on what exactly the DPS officer would do at the TOC, both Reza Karimvand and Capt Burley Copeland explained the role that would be played by the DPS officers. The field experience of the TOC officers will be a huge benefit to the overall response effort, but there is a lack of research done on cost-benefit information on co-location.

➤ SHRP2 L04 Pilot Project Funded by FHWA - An Enhanced Simulation Model with Reliability Output

Sarath Joshua highlighted the selection of a team that includes MAG by FHWA for a national pilot project to test a research product from the SHRP2 program. The pilot project will be applied at the regional level in the MAG region. The Portland OR region was also selected for a corridor application. The lead consultant is Kittelson & Associates, and other project partners are Prof Yi-Chang of Metropia, Prof Zhou of ASU, and Kiel Ova formerly with PTV. The project involves the validation of a method to estimate travel time reliability using a simulation model that has various random factors that cause system unreliability, such as weather, crashes etc. built-in. The unreliability variables are to be included in the model to simulate realistic travel times. This will be done via a Scenario Manager that incorporates regional data to develop a random event generator to impact the transportation network, and a Trajectory Processor that would keep track of travel times. Sarath indicated that he and Eric Nava are providing support for this national pilot project.

➤ Planned ITS Committee Meeting Schedule for 2015

Sarath Joshua presented the proposed meeting schedule for the ITS Committee for 2015. The dates are January 7th, February 4th, March 4th, April 1st, May 6th, June 3rd, July 1st, August 5th, September 2nd, October 7th, November 4th, and December 2nd. The committee meeting schedule for July 1st is likely to be canceled due to its proximity to the Fourth of July holiday.

➤ 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 detailed the current efforts to finalize the network and firmware updates on switches throughout the MAG region. The outlying switches have all been updated.

He reported meeting with Valley Metro representatives to discuss adding the Valley Metro Operations Center to the RCN in order to share video. This effort is anticipated to be executed over the next two months. Mr. Gish also reported on completion of the scope of work for the City of Tempe Network Assessment and Services Project.

Mr. Gish updated the Committee on the Regional Fiber Optic Mapping Project. MAG staff has received several fiber infrastructure data files from participating agencies to be added to the database. The effort is on-going.

5. SPINE Near-Term Improvements

Chair Hollow invited Sarath Joshua to discuss the recent efforts for the I-10/I-17 Master Corridor Study (“Spine”). Mr. Joshua referenced the agenda attachment detailing the list of potential projects recognized by the Spine Working Group. This list was recommended by the ITS Committee in May 2013, and it is anticipated that this list will be modified. ADOT is implementing the list of Spine Near-Term ITS Projects, and refinements of the list will be added to the TIP via a TIP Amendment at TRC in December. Projects will be assigned by ADOT to five (5) On-Call consultants for design & Project Assessment work. The Concept of Operations is in the process of being developed for both near-term & long-term. The Spine Corridor Master Plan is a long-

term plan and will use the Technology Working Group to continue to develop the projects. Specific projects will be launched as 3-year pilot projects with future funding to be determined.

6. 2012 MAG ITS Strategic Plan

Chair Hollow invited Sarath Joshua to discuss the 2012 MAG ITS Strategic Plan as some members of the ITS Committee are newer and may not be familiar with the regional ITS planning process. The MAG ITS Committee serves as the informers of ITS planning items to be incorporated into the region.

MAG was formed, in 1967, by its member agencies in the spirit of cooperation, who believed that by uniting, they can solve common problems, take an active role in regional issues and address concerns that affect all of the communities. Federal Aid Highway Act of 1973 mandated the formation of MPOs in urbanized areas to carry out 3C planning process – Continuous, Comprehensive & Cooperative. MAG was designated by the Governor, in 1973, as the MPO for the Phoenix metro region in the areas of planning and policy decisions in transportation, air quality, water quality and human services.

The MPO Transportation Planning Process is the process of examining travel and transportation issues and needs in metropolitan areas. This includes the examination of travel patterns and trends utilizing available data to inform the regional models. The process also includes analysis of alternatives to meet projected future demands, as well as to provide a safe and efficient transportation system that meets mobility without adverse impacts to the environment. As per FHWA requirements, the responsibility for transportation planning lies with the designated Metropolitan Planning Organizations (MPO).

The decision making hierarchy at MAG involves a multi-step process. The Regional Council consists of elected officials and Native American community governors. The Transportation Policy Committee consists of members of the Regional Council as well as leaders of the private sector. The Management Committee consists of chief administrators and city managers. The Transportation Review Committee includes transportation and public works directors. The technical committees include representatives from various departments of member agencies.

The Regional Transportation Plan (RTP) is performance based and provides the broad vision for the regional transportation system for the next two decades. It addresses freeways, highways, streets, transit, airports, bicycle and pedestrian facilities, freight, demand management, system management and operations (ITS), and safety. The current 2035 RTP, published in Jan 2014, emphasizes the target year of the 20-yr planning process. The new MAG planning area is based on federal regulations that require MAG to include areas likely to be urbanized in the 20-year forecast. The area includes parts of Pinal County, Florence, and City of Maricopa.

The RTP defines the regional agencies roles for the planning process. MAG responsibilities include developing the RTP in compliance with federal and state requirements, ensuring conformity with Air Quality Plans, providing oversight to the development of the RTP, and approval of the RTP and TIP. ADOT responsibilities include cooperatively developing the freeway and highway programs with MAG, managing the freeway and highway systems (including design, engineering, right-of-way,

construction, maintenance, and operations), and providing oversight for LPA TIP projects that use federal funds. The State Transportation Board responsibilities including approving the ADOT 5-year construction program, in addition to the MAG Freeway/Highway Life Cycle Program based on priorities set by MAG Regional Council. The State Transportation Board can only approve projects consistent with MAG RTP.

All “regionally significant” transportation projects are included in the RTP and TIP, regardless of funding sources. All federally funded projects in the MAG region are included in an approved MAG RTP and TIP. Funding sources for RTP comes from federal funds (MAG and ADOT), state funds, and RARF sales tax.

The role of ITS in the RTP is detailed in chapter 17 – System Management and Operations. It describes how ITS infrastructure on freeways, highways, and streets help address RTP goals. Nearly all MAG ITS projects are funded with CMAQ, where a few FMS projects are funded with RTP State Funds. MAG Air Quality Conformity Analysis takes credit for air quality improvements due to ITS projects. Emissions reduction potential is a factor in ITS project evaluation. Air quality conformity failure could lead to denial of federal funds for all transportation projects in the region.

The role of the MAG ITS Committee is to provide vision and leadership for implementation of ITS projects in the region. The Committee provides input to the RTP via the ITS Strategic Plan and recommends projects for federal funds. The Committee recommends projects for federal funds, coordinates among modes and jurisdictions, endorses ITS education and promotion, and supports data collection and reporting via performance measurements.

The role of MAG staff is to mainstream ITS within the MPO planning process, provide staff support for the ITS Committee, serve as a resource in ITS expertise for MAG and member agencies, monitor related federal requirements and take timely steps to meet them, recommend new programs to MAG Management Committee to address ITS related regional needs, and recommend MAG studies to support ITS planning. MAG ITS Committee may request a study via MAG staff.

The objectives of the 2012 ITS Strategic Plan include to shift from “projects” to “program/emphasis areas”, establish ITS investment targets for TIP programming, and address both regional and local ITS priorities. Through the RTP and TIP, focus areas for regional ITS investments include the Freeway Management System, transit operations, arterial traffic operations, and arterial safety enhancements. Arterial ITS investment goals are 50% for arterial ITS, 25% for integrated corridor management, 20% for safety improvements, and 5% for local ITS plans. \$19 million has been programmed for ITS projects in FY2015 through FY2017.

The MAG ITS Committee consists of representatives of MAG member agencies from state, regional and local agencies. The committee recommends special studies and programs such as TSOP and advanced operations planning with simulation modeling aided by the MAG work program and technical staff. MAG member agencies may collaborate on identifying ITS project ideas at AZTech meetings, however, since AZTech is not a MAG member agency, new projects must be proposed and presented to the Committee by MAG member agencies that wants to develop projects with regional funding. This can only be done through the formal MAG approval process.

7. Reports by Committee Members

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

Reza Karimvand with ADOT stated that Phase 2 for the Freeway Travel Time Display Project was launched, including 65 total DMS displaying travel times. The final phase is expected to be in place by December 2014 and will include a total of 76 DMS displaying travel times. This includes 24 AM signs, 40 PM signs, and 12 AM & PM signs.

Nicolaas Swart with MCDOT announced that Jennifer Toth, the previous deputy state engineer with ADOT, has joined MCDOT as the Director of Transportation.

Chair Hollow stated that the City of Tempe TMC is operating during ASU football games. TMC staff has coordinated with police to control and actively manage six traffic signals during egress operations. Both Tempe and ASU police are present in the TMC during events. The City of Tempe has also provided video feeds to the Department of Homeland Security.

8. Request for Future Agenda Items

There were no requests for future agenda items.

9. Next Meeting Date and Place

Next meeting date was announced at 10:00 a.m. on Wednesday, December 3, 2014, in the Ironwood Room (2nd floor) at MAG.

10. Adjournment

Chair Catherine Hollow adjourned the meeting at 11:00 a.m.

**2015 MAG Meeting Schedule
ITS Committee & RCN Working Group
MAG Ironwood Room**

January 7, 2015	9:00am	RCN WG
	10:00am	ITS Committee
February 4, 2015	9:00am	RCN WG
	10:00am	ITS Committee
March 4, 2015	9:00am	RCN WG
	10:00am	ITS Committee
April 1, 2015	9:00am	RCN WG
	10:00am	ITS Committee
May 6, 2015	9:00am	RCN WG
	10:00am	ITS Committee
June 3, 2015	9:00am	RCN WG
	10:00am	ITS Committee
July 1, 2015	9:00am	RCN WG
	10:00am	ITS Committee
August 5, 2015	9:00am	RCN WG
	10:00am	ITS Committee
September 2, 2015	9:00am	RCN WG
	10:00am	ITS Committee
October 7, 2015	9:00am	RCN WG
	10:00am	ITS Committee
November 4, 2015	9:00am	RCN WG
	10:00am	ITS Committee
December 2, 2015	9:00am	RCN WG
	10:00am	ITS Committee