

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

December 1, 2010  
MAG Cholla Room, 2nd Floor  
302 North First Avenue  
Phoenix, Arizona

**MEMBERS ATTENDING**

Reza Karimvand, ADOT	Luke Albert, City of Goodyear
Pitu Mirchandani for Soyoung Ahn, ASU	Nicolaas Swart, Maricopa County
Margaret Boone-Pixley for Bennie Robinson, City of Avondale	*Derrick Bailey, City of Mesa
**Thomas Chlebanowski, Town of Buckeye	Ron Amaya, City of Peoria
Mike Mah, City of Chandler	Marshall Riegel, City of Phoenix
*Captain R. Brant Benham, DPS	*Bob Ciotti, Phoenix Public Transit
Jorge Gastelum, City of El Mirage	**Bill Birdwell, Town of Queen Creek
Jennifer Brown, FHWA	*Bruce Dressel, City of Scottsdale
Kurt Sharp, Town of Gilbert	Allan Galicia for Nicholas Mascia City of Surprise
Debbie Albert, City of Glendale	Cathy Hollow, City of Tempe
	Arkady Bernshteyn, Valley Metro Rail

**OTHERS PRESENT**

**Lydia Warnick, ADOT	Farzana Yasmin, ADOT
Darrell Bingham, ADOT	Erik Guderian, Gilbert
Madhuri Uddaraju, PBS&J	Paul Basha, EPS
Jay Yenerich, PB	Jason Uhrinyak, Roadsafe Traffic
Paul Lanb, Roadsafe Traffic	Joe Spadafino, YSMA
Amara Ibeji, CK Engineering	Sara Simpson, UCG
Jason Watson, Horrocks	Keith Winney, UCG
Bo Gao, TransCore	Lisa Burgess, KHA
Deanna Haase, KHA	Tomas Guerra, OZ
Natalie Carrick, Michael Baker Assoc	Dan Hartig, Ayres Associates
Jim Lee, Lee Eng.	Brennan Kidd, Lee Eng.
Jody Short, Lee Eng.	Yung Koprowski, Lee Eng.
Soroja Devarakonda, HDR	Ashish Arawal, AMEC
**Bennie Robinson, City of Avondale	Gary Rylander, Rylander Consulting
Sarath Joshua, MAG	Kiran Guntupalli, MAG
Leo Luo, MAG	

\* Not present

\*\* Via teleconference

1. Call to Order

Chairman Nicolaas Swart called the meeting to order at 10:05 AM.

2. Approval of October 6, 2010 and October 19, 2010 Meeting Minutes

**Cathy Hollow moved, Debbie Albert seconded and it was unanimously carried to approve the minutes of the meeting held on October 6, 2010. Luke Albert moved, Ron Amaya seconded and it was unanimously carried to approve the minutes of the meeting held on October 19, 2010.**

3. Call to Audience

Chairman Nicolaas Swart 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:

- RCN Project Update: ADOT is currently configuring the IronView Network Management Software. A new version of 360 Camera Chameleon software has been released. ADOT will be working with MAG member agencies to install the update. The regional video conferencing system equipment installation is close to completion. The RCN working group will begin a discussion on the potential expansion of the RCN. There was a suggestion to hold a workshop on the RCN, in February 2011, inviting agencies that are not yet connected to the RCN. The workshop will identify future fiber paths and other related issues. Lydia Warnick added that ADOT has connect Scottsdale to RCN.
- FY2011 TSOP Program Update: Sixteen (16) TSOP projects recommended by the ITS Committee has been approved by TRC and Management Committee and pending approval of the Regional Council. A newsletter about the program is also included in the MAGAZine. It was also mentioned that the TSOP program was also awarded as the best ITS planning effort by the 2010 ITS Arizona.
- Non-Recurring Congestion Study: The data collection phase of the project has been completed. Preliminary results showed that non-recurring congestion accounts for about 50% of the congestion on freeways, but only about 9% on arterial streets. More detail information will be provided at the project meeting after the ITS Committee meeting.
- ADOT System Engineering Analysis Checklist: The System Engineering Analysis is required for all federal funded ITS projects during authorization process. Lydia Warnick of ADOT and Jennifer Brown of FHWA confirmed that the checklist could simplify the System Engineering Analysis when the projects do not warrant a full scale package. Lydia will provide a presentation at the next ITS Committee meeting.
- 2011 ITS Committee Meeting Schedule: The 2011 ITS Committee meeting schedule was provided to the committee.

5. Adaptive Traffic Control Applications in the Region

Jennifer Brown from FHWA provided some background information on an FHWA

initiative named “Everyday Counts”. Sarath Joshua mentioned that Maricopa County has expressed interest in looking into adaptive traffic control along the Bell Road Corridor. The City of Mesa is implementing SCATS system around the Superstition Spring Mall area. Adaptive Traffic Signal Control may also be useful during incidents when traffic patterns changed unexpectedly. Sarath Joshua and Leo Luo also provided information about basic concepts of adaptive traffic control, current available systems, advantage and potential drawbacks. Reza Karimvand of ADOT asked if examples exist from other states about how the systems work. Sarath mentioned that a number of studies have been conducted nationwide. Reza further asked what would be the range of the green times for an adaptive system. Mike Mah commented many implementations of the adaptive control systems in North America are corridor based. Pitu Mirchandani of ASU commented that quite a few places around the world have deployed large scale adaptive control systems. He further explained that constraints can be applied to the systems such as phasing. He also mentioned that driver expectation may not be a significant factor. Drivers could adjust their expectations as well. Nicolaas Swart from Maricopa County asked if there are any criteria to apply adaptive control or if there are some circumstances where adaptive control systems are not appropriate. Pitu mentioned that if the demand is relatively stable, adaptive control won’t provide much benefit. Allan Galicia from Surprise mentioned that his experience with SCATS is that the system in Oakland County, Michigan does not turn on 24/7. The system was turned off during peak period when the demand is relatively stable. The benefits are really coming from the off-peak period. His question is related to the many different central control systems in the region and relationship between the adaptive control systems and these central control systems. Nicolaas Swart asked if any funding opportunity exists to conduct a study to further look into the adaptive signal control systems. Sarath mentioned that MAG could incorporate the request and apply for new study project to be considered in the UPWP. However, implementation of the systems needs to go through the TIP programming process. Debbie Albert asked how much the systems typically cost per intersection. Faisal Saleem shared the ACS lite cost he received for 25 intersections: infrastructure upgrade is \$150,000, software and system integration is about \$350,000, installation is \$250,000, which is about \$30,000 per intersection. Mike Mah commented that the detection requirements may be a significant factor. Faisal commented that the system integration is also a major cost. Reza asked if it is worth considering adaptive system when an intersection is signalized. Mike commented that when an intersection is signalized, the congestion level is usually very low. It might not be necessary to put in an adaptive system. Pitu commented that significantly more detection is needed for adaptive systems may be overstated. The ITS Committee recommends an adaptive control systems study to be included in the FY2012 MAG UPWP.

6. Loop 101 Incident Management Workshop

Sarath Joshua briefly explained the background of the Loop 101 Incident Management Workshop and how the corridor was selected as a pilot for establishing a regional incident management coalition. A summary of the current incident management practices along the corridor was presented. Jennifer Brown from FHWA provided a brief update on the 2-day FHWA sponsored Traffic Incident Management workshop. A conclusion reached at the end of the FHWA workshop was that DPS will lead an effort to form a Regional Traffic Incident Management (TIM) Coalition under the AZTech banner, with Maricopa County providing administrative support. Jennifer Brown confirmed that an initial meeting will be in January 2011. Sarath Joshua suggested that the Loop 101 pilot project could now be advanced through the Regional TIM Coalition.

7. Status Reports by Committee Members

Marshall Riegel mentioned that three Phoenix ARRA projects: 18-miles fiber communication project, CCTV camera project and the wireless communications project are moving forward. Jennifer Brown from FHWA mentioned that several contracts are violating the federal contract regulation. FHWA and ADOT are working to resolve the problems. John Dickson from ADOT will be attending the ITS committee next month to address some of the concerns. Arkady Bernshteyn from MetroRail reported that there may be some confusion about federal requirements on transit side as well. Reza Karimvand from ADOT reported that TTG is putting together FMS standards. He also mentioned that Loop 101 ramp metering project is close to completion. The ramp meters are scheduled to be turned on in January 2011. He also reported that the state's DMS Master Plan development is scheduled to start tomorrow. The ADOT TOC upgrade project is underway and ADOT also plans to upgrade CCTV cameras to digital at the node buildings. The FMS Phase 6C project will go out for bid next March. Wireless communications will be utilized in this FMS phase. Ron Amaya from Peoria mentioned that the city is having the second phase of the fiber-wireless hybrid project to connect the rest of the traffic signals to the TMC. Jennifer Brown mentioned that Arizona is in compliance with the real-time information system requirements. Debbie Albert reported that on the RCN project connecting Peoria and Glendale, a preconstruction meeting was held last week. Bill Birdwell reported that the Queen Creek ITS phase 2 project is moving forward with IGA approval.

8. Request for Future Agenda Items

ADOT System Engineering Analysis checklist by Lydia Warnick.  
ADOT procurement process by John Dickson.

9. Next Meeting Date

Next meeting will be held at 9:30 a.m. on Wednesday January 5, 2011.

10. Adjournment

Chairman Nicolaas Swart adjourned the meeting at 11:05 a.m.