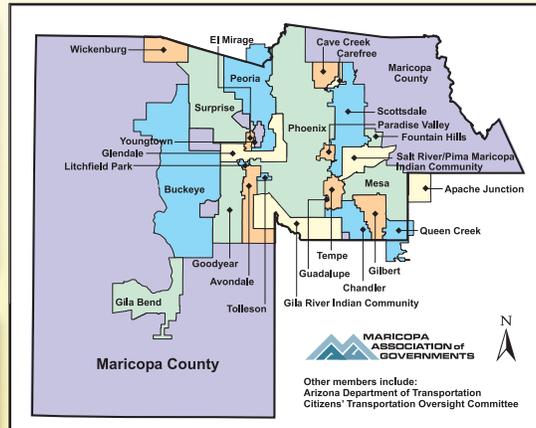


MAG Q3 Fiscal Year 2004 Report

January 1, 2004 through March 31, 2004

Regional Video conferencing System

to the
**United States Federal Highway Administration
and the Arizona Department of Transportation**



April 2004

INTRODUCTION

January 1, 2004 through March 31, 2004 is the third quarter of the MAG 2004 fiscal year and is the seventh official reporting period for MAG Regional Videoconferencing System (RVS) usage. This report is based on the third quarter MAG FY 2004 RVS use as illustrated in the summary table of data found in Appendix A at the end of the report. Additional training and marketing activities are underway to support use of the RVS.

QUARTERLY USAGE

An analysis of the third quarter RVS usage data for FY 2004 (Appendix A) shows that a total of 71 audio and videoconferences were held for an average of 24 conference calls per month. Prior to every videoconference meeting, a videoconference test call is conducted to ensure call success. However, there are no miles, time or dollars saved or logged for test calls or training. Test calls and training are not included in the total number of conference calls. Q4 FY03 was the first quarter to not include test calls or system training in the total number of conferences. In the current quarter, 48% (34 calls) were audio conferences and 34% (24 calls) were videoconferences. The number of videoconferences with audio integration was 18% (13 calls). A total of 1,089 people participated in conference calls this quarter. This number includes both the off-site participants and those at the designated host meeting sites who attended in person. Audio conferences included 128 remote attendees while videoconferences included 242 remote attendees. Miles, time and dollars saved are only calculated for remote attendees, not all participants.

Most of the conferences were initiated by MAG. However, some were initiated by various member agencies. The majority of all conferences were for participants within the Maricopa County region. Interestingly, 12 of the conferences included one or more out-of-state participants. This is significant because it indicates that videoconferencing facilities are available and easily accessible in many areas outside of Arizona. The out-of-state attendees are utilizing: private videoconference facilities found in other major metropolitan areas; or facilities at government or educational institutions; or the out-of-state attendees are audio conferencing. Four conferences involved participants within the State but outside of the Maricopa County region.

All MAG committees have begun regular use of the RVS for their meetings. The Air Quality Technical Advisory Committee, Building Codes Committee, Continuum of Care on Homelessness Committee, Human Services Technical Committee, Management Committee, Population Technical Advisory Committee, Regional Council, Transportation Policy Committee and Telecommunications Advisory Group used audio conferencing and/or videoconferencing at committee meetings this quarter. Compared to the previous quarter, videoconference and audio conference use increased.

The top two uses of the RVS were to attend MAG meetings and to conference with consultants. The overwhelming majority of the conferences (61%) were held to attend various MAG meetings. Other uses included training, job interviews, in custody arraignments, and business meetings. The Town of Guadalupe led the way in member agency initiated RVS usage initiating 13 videoconferences, most of which were for in custody arraignments with the courts.

Wickenburg participated in eight videoconferences, Carefree in seven videoconferences and Buckeye and Apache Junction in six videoconferences each this quarter.

All of the conferences occurred without any problems or technical difficulties. There were no failed audio or videoconference meetings this quarter.

MILEAGE, TIME AND COST SAVINGS

In terms of actual “hard cost” savings, three components are calculated: in-state mileage, travel time and travel costs. The mileage rate is based on the State of Arizona mileage rate of 0.345 cents per mile. There are two components to the time saved calculation. The first component is preparation at the beginning and end of the meeting. The preparation time is 30 minutes per RVS participant, 15 minutes of prep time prior to the meeting and 15 minutes at the end of the meeting. The second component to time saved is the actual driving time to and from the meeting. The time saved is calculated based on \$25 per hour. See Appendix B – Time and Distance table for calculations. If two or more people participate from the same agency, the time and mileage for each person is counted, as traditionally most of these people do not travel together. Similarly, the costs savings for out-of-state and international participants is calculated for both time and travel costs. Beginning Q2 FY04, each out-of-state and international participant’s time saved is lowered to \$200 that is \$25/hour times eight hours, since the typical business day is eight hours. Also beginning Q2 FY04, miles from Phoenix Sky Harbor Airport to the meeting destination are calculated for all out-of-state and international participants. Five hundred dollars is added for the costs saved for airfare and one night’s stay in a typical business class hotel. The total cost savings calculated for out-of-state and international participants is \$700 per person plus the cost from the airport to the meeting destination. The cost savings formulas are very conservative for all types of participants. Costs are not included for meals, parking, vehicle rental, traffic delays, airport delays or other miscellaneous travel related costs. Other benefits such as reduction in vehicular traffic, less work stress, less travel and traffic stress, and more efficient use of each participant’s time are also not included in calculating the impact of the RVS on the region.

For the third quarter of FY 2004, 13,885 in-state miles were saved due to RVS usage. A minimum of 728 hours in travel time and preparation was also saved. This resulted in a cost savings of \$32,884.46 for the quarter. As noted above, other intangible benefits are not included in this figure.

AIR QUALITY BENEFITS

Air quality emissions data has been included for: carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NOx) and particulate matter less than 10 microns (PM-10).

The data in the table below is consistent with the methodology in the August 10, 2001 Congestion Mitigation and Air Quality (CMAQ) report except that the latest MOBILE6 emission factors have been substituted and NOx has been added as a pollutant. The MOBILE6 emission factors (in grams/mile) represent light duty vehicles in the year 2010:

$$\text{VMT Reduced (VR)} = \text{TR} * \text{TL}$$

where: TR = Vehicle trips reduced by the project in this quarter

TL = Average trip length in miles of vehicle trips reduced

Reduction in carbon monoxide (CO) emissions = VR * 11.07 grams/mi

Reduction in volatile organic compound (VOC) emissions = VR * 0.66 grams/mi

Reduction in nitrogen oxide (NOx) emissions = VR * 0.53 grams/mi

Reduction in PM-10 emissions = VR * 0.78 grams/mi

This results in the following for Q3 FY04:

Vehicle Miles Not Traveled	13,885
Reduction in CO emissions (pounds)	338.56
Reduction in VOC emissions (pounds)	20.18
Reduction in NOx emissions (pounds)	16.21
Reduction in PM-10 emissions (pounds)	23.85

The figures in the table were calculated using the reduction in pollutant number multiplied by vehicle miles traveled divided by 454 to convert to pounds.

MAG is encouraging all MAG staff and member agencies to use available technology instead of traveling to meetings in order to reduce vehicle miles traveled thereby improving our region's air quality. With continued implementation of the RVS Marketing Plan, it is anticipated that RVS usage will increase and the amount of pollutants will decrease.

HIGHLIGHTS

MAG Divisions continue to use audio and/or videoconferencing. Communications, Environmental Programs, Human Services, Information Services, and Transportation used the MAG RVS this quarter. Human Services used audio and/or videoconferencing at their Homeless Program Evaluation meetings, HUD meetings, and social services meetings this quarter. This has given MAG staff greater exposure to the technology and helped them to integrate it into their daily business. MAG's highest profile meetings, the Transportation Policy Committee (TPC) and the MAG Regional Council both had audio and videoconference participants. Some city managers attend Management Committee via audio conference and videoconference on a regular basis to save regional vehicle trips.

Chandler, Fountain Hills, Gila River Indian Community, Gilbert, Guadalupe and Valley Metro used audio and/or videoconferencing technology this quarter for non-MAG, member agency business.

El Mirage attended the Budget Workshop via videoconference.

150 people attended the March 23-24 Valley Metro Ozone Workshops via multipoint videoconference and audio conference. Chandler, Goodyear, Peoria, Scottsdale and MFS Investments provided a site coordinator and their videoconference room for workshop participants. PowerPoint presentations were shown via videoconference to all sites and the participants collaborated and shared ideas on implementing trip reduction measures in their workplaces.

Litchfield Park used its MAG RVS unit to videoconference with the Arizona State Retirement System (ASRS) during which all Litchfield Park staff received information on retirement planning.

An interesting highlight is that since the first quarter of documented RVS use (July 1 to September 30, 2002), RVS usage has increased by 31 percent. For this calculation, the test calls were deleted from the first quarter usage data so that we obtained an accurate percent increase from first quarter to current quarter.

As part of recent enhancements to the MAG Regional Videoconferencing System (RVS), the Federal Highway Administration approved the purchase of a high-quality conference room speakerphone for each MAG member agency requiring one. The purpose of the speakerphone is to increase audio conference use, thereby reducing travel and improving air quality in the region. Polycom speakerphones were distributed this quarter for each member agency that submitted a letter of authorization to MAG.

Overall, RVS usage has significantly increased since the first videoconferencing units were brought on-line. It is anticipated that usage will continue to grow as MAG committees and member agencies gain awareness of its convenience and accessibility and integrate its availability into the organization's culture.

TRAINING AND MARKETING ACTIVITIES

Since all site coordinators have been trained to use the videoconference system, training is conducted upon request. In January, Buckeye's new site coordinator was trained to use the videoconferencing equipment. Also in January, El Mirage and MAG staff received training on the new El Mirage videoconference unit. The MAG Videoconference Training Guide is available in hard copy form or on the MAG RVS Web site.

Seventeen human resource staff from the City of Tempe received a live videoconference demonstration. Tempe staff was also e-mailed the How-To-Guide for Using Videoconferencing for Job Interviews. Apache Junction, Buckeye and Wickenburg staff received live videoconference demonstrations in an effort to increase videoconference use at member agencies furthest away from MAG. After the live videoconference demonstrations to Apache Junction and Wickenburg our goal of increasing videoconference use at the agencies furthest away from MAG in an effort to save them time, reduce travel and improve the region's air quality was met through their increased remote attendance of MAG meetings.

The goal of the RVS Marketing Plan is to significantly increase and sustain RVS usage among MAG member agencies and MAG committees. The Plan has clearly stated objectives, timeframes, resources and an implementation strategy. As part of the RVS Marketing Plan, the RVS Marketing Group met once this quarter to provide input on the implementation of the Plan. Marketing materials including, three How-To-Guides, two brochures, a RVS Recognition Program, and RVS User Satisfaction Survey were approved by the RVS Marketing Group. Marketing materials were distributed to all site coordinators and placed on the MAG RVS Web site.

The RVS Recognition Program was implemented to recognize outstanding levels of videoconferencing usage among MAG member agencies and MAG committees. The intent of the program is to encourage continued videoconferencing use over the long term, resulting in fewer vehicle miles traveled and reducing air pollution. Awards were presented for Calendar Year 2003 accomplishments at the March Management Committee meeting. The award for:

- Most Videoconferences by a MAG Member Agency went to Guadalupe, which had a total of 36 videoconferences.
- Most Videoconferences by a MAG Committee went to the MAG Building Codes Committee with 8 videoconferences.
- MAG Committee With the Most Remote Videoconference Participants went to the Management Subcommittee on 2005 Population Options, since they had 24 remote participants at their committee meetings.
- Most Miles Saved by a MAG Member Agency went to Wickenburg with 4,557 miles saved.
- Best Use of Multipoint Videoconferencing went to Valley Metro, which had more than 180 people attend the April 1-2, 2003 Valley Metro Ozone Workshops via multipoint videoconference.

The one-time award for RVS Committee Champion went to the MAG Telecommunications Advisory Group, which has consistently promoted the RVS and is a champion of the technology. An update on the RVS Awards was given at the March Regional Council meeting. An article about the RVS Awards is included in the Site Coordinator Newsletter in Appendix C.

At the quarterly Videoconference Site Coordinators Meetings in March staff from Buckeye, Carefree, El Mirage, Gilbert, Guadalupe, Litchfield Park, Paradise Valley, Peoria, Surprise, Tolleson, and Wickenburg experienced firsthand how multipoint videoconferencing can look and feel like a regular meeting.

Reminders to use the audio and videoconference technology were given at MAG's monthly employee staff meetings. To further promote RVS usage, MAG staff set up an audio conference at every MAG committee meeting.

TECHNICAL ACTIVITIES

During the third quarter of FY 2004, Norstan, the service and support vendor for the RVS, resolved 12 trouble tickets, and worked with the network vendor to repair some network issues. The majority of these trouble tickets were for weekly preventive maintenance evaluations of the three hub site videoconference rooms and the other trouble tickets were relatively minor issues. In most cases, vendor response time was within the contract parameters. For some complex or high profile conferences, a technician was on-site at MAG to immediately troubleshoot problems if necessary.

GOALS FOR NEXT QUARTER

For the fourth quarter of MAG FY 2004, MAG staff plans to continue to increase audio and videoconference use at MAG meetings. This will show member agencies that MAG is leading by example, by using the technology at meetings that member agency staff attend. To increase use, MAG aims to have at least one audio conference attendee and one videoconference attendee

per meeting for at least five different MAG committees. Site coordinator meetings will be held quarterly, the site coordinator newsletter will be created and distributed quarterly. RVS updates will be given at MAG staff meetings and to the MAG Telecommunications Advisory Group.

Since the implementation of the RVS Marketing Plan is finished, next quarter will involve promotion of the new marketing materials to the right people at the member agencies.

The web based scheduling package for the RVS and the server for the audio conference equipment will be purchased and implemented next quarter. The volume and complexity of RVS usage necessitates that MAG obtain a fully functional scheduling and usage documentation software package. Additionally, member agency usage of the audio conference component of the RVS has grown steadily since the implementation of the RVS. Continued use of the current server will result in increased down time of the equipment and could affect audio conference usage of the RVS if not addressed in a timely manner. A new audio conference server will enhance the functionality of the RVS.

Another goal for next quarter is to continue to promote RVS use to outlying member agencies. The goal is to increase videoconference use at the agencies furthest away from MAG in an effort to save them time, reduce travel and improve the region's air quality.

With the extra effort in promoting the RVS within MAG and at member agencies, usage is expected to increase. MAG staff will target the three most remote member agencies and continue to market the RVS to them using MAG marketing materials and strategies. Also, the pounds of pollution saved by using the MAG RVS will continue to be included in future reports.

**APPENDIX A
RVS USAGE STATISTICS
THIRD QUARTER MAG FY 2004**

	January-04	February-04	March-04	Total	Avg./Month
Number of conferences	19	24	28	71	24
Number of videoconferences	5	11	8	24	8
Number of audio conferences	11	11	12	34	11
Number of videoconferences with audio integration	3	2	8	13	4
Number of participants	259	333	497	1,089	363
Number of videoconference participants	27	84	131	242	81
Number of audio conference participants	45	29	54	128	43
Miles saved (only in-state)	3,972	5,894	4,019	13,885	4,628
Time saved (hours)	178	233	317	728	243
Money saved (\$)	\$9,214.53	\$10,364.69	\$13,305.24	\$32,884.46	\$10,961.49
CO emissions saved (pounds)	96.85	143.71	98	338.56	112.85
VOC emissions saved (pounds)	5.77	8.57	5.84	20.18	6.73
NOx emissions saved (pounds)	4.64	6.88	4.69	16.21	5.40
PM-10 emissions saved (pounds)	6.82	10.13	6.90	23.85	7.95
Number of MAG conferences	12	16	15	43	14
Number of non-MAG conferences	7	8	13	28	9
Number of MAG member agency initiated videoconf.	5	4	7	16	5
Number of MAG member agency initiated audio conf.	0	2	1	3	1
Number of in-region conferences	12	18	24	54	18
Number of in-state conferences	2	3	0	5	2
Number out-of-state conferences	5	3	4	12	4
Number of international conferences	0	0	0	0	0
Number of conferences with problems	0	0	0	0	0
Number of conferences with no problems	19	24	28	71	24
Number of successful conferences	19	24	28	71	24
Number of failed conferences	0	0	0	0	0

**APPENDIX B
TIME AND DISTANCE**

JURISDICTION	ROUND TRIP DISTANCE FROM MAG BUILDING TO CITY HALL IN MILES	TRAVEL TIME IN MINUTES
ADOT Flagstaff	285.28	310
ADOT Globe	176.90	266
ADOT Phoenix	3.1	38
ADOT Prescott	196.34	264
ADOT Tucson	230.22	262
ADOT Yuma	364.30	432
Apache Junction	76	130
Avondale	33.2	86
Buckeye	68.8	132
Carefree	69.2	138
Cave Creek	65.6	126
Chandler	47.8	98
El Mirage	51	90
Fountain Hills	62.8	118
Gila Bend	145.6	230
Gila River Indian community	92.4	190
Gilbert	50	104
Glendale	24.6	62
Goodyear	34.8	76
Guadalupe	25	72
Litchfield Park	38.6	86
Maricopa County	1	32
MCDOT	10.9	46
Mesa	33.4	86
Paradise Valley	26.2	98
Peoria	36.2	76
Phoenix	0.6	32
Queen Creek	79.8	134
Salt River Pima-Maricopa Indian community	29	86
Scottsdale	23.4	78
Surprise	55	100
Tempe	19.4	64
Tolleson	22.2	68
Wickenburg	147	188
Youngtown	45.4	86
MAG/RPTA	0	0

Used Mapquest to determine time that it takes to travel from MAG to city hall or agency headquarters.



Site Coordinators Newsletter

Maricopa Association of Governments

April 2004

Regional Videoconferencing System Awards

The Videoconferencing Recognition Program was initiated to recognize outstanding levels of videoconferencing

usage among MAG member agencies and committees. The intent of this program is to encourage continued videoconferencing use over the long term, resulting in fewer vehicle miles traveled and reducing air pollution. Awards were presented for Calendar Year 2003 accomplishments at the March MAG Management Committee meeting.



The award for:

- **Most Videoconferences by a MAG Member Agency** went to Guadalupe, which had a total of 36 videoconferences.
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- **Most Miles Saved by a MAG Member Agency** went to Wickenburg with 4,557 miles saved.
- **Best Use of Multipoint Videoconferencing** went to Valley Metro, which had more than

Management Committee Chair Terry Ellis presents awards to: (top to bottom, left to right) Guadalupe Town Manager Tom Morales; Building Codes Committee Chair Bob Lee; Chair of the Management Subcommittee on 2005 Population Options, George Pettit; Wickenburg Town Manager Shane Dille; Valley Metro Management Committee Chair, Mike Hutchinson and MAGTAG Chair Greg Binder.

180 people attend the April 1-2, 2003 Valley Metro Ozone Workshops via multipoint videoconference.

- The one-time award for **RVS Committee Champion** went to the MAG Telecommunications Advisory Group, which has consistently promoted the RVS and is a champion of the technology.

Congratulations to all winners!

RVS
Help Desk
602-452-5095
8:30 am - 5:00 pm

Site Coordinators **Newsletter**

April 2004

Apache Junction and Buckeye Get Live Demo of RVS

In February, staff from Buckeye and Apache Junction participated in live videoconference demonstrations. The interactive videoconference included a PowerPoint presentation about the RVS, a discussion about various potential uses and benefits of videoconferencing, and a question and answer session with MAG staff in Phoenix.

"Our mayor and city manager have been using the RVS to attend MAG meetings and work with consultants. We wanted to familiarize more of our staff with the technology and encourage them to use it too," said Bryant Powell, Apache Junction Assistant City Manager.

Joe Blanton, Buckeye Town Manager, sees possibilities for the system. "Now that we have a person on staff dedicated to handling our information technology needs, we feel more comfortable about using the RVS. My staff members are looking at using it for training and workshops and to attend some MAG meetings."

MAG staff is available to give a similar demonstration for any MAG member agency that requests one. Call Heidi Pahl, Telecommunications Planner at (602) 254-6300 to schedule a demonstration.

Litchfield Park and Retirement Planning via Videoconference

Litchfield Park used its MAG RVS unit to videoconference with the Arizona State Retirement System (ASRS) during which attendees received information on retirement planning. If you are interested in knowing more about using videoconferencing for the ASRS Overview meeting, please contact Julie Crerand at (602) 240-2143, or e-mail at juliec@asrs.state.az.us.



Heidi Pahl provides a demonstration of the system to Apache Junction (above) and Buckeye (below) via videoconference.



RVS Usage – Just the Facts, Please

For the first two quarters of Fiscal Year (FY) 2004, there were 113 documented audio conferences and videoconferences. Of those, 52 were audio conferences and 61 were videoconferences. A total of 450 people attended one or more conferences from a remote location. In the first six months of FY 04: 22,728 miles were saved, 1,178 hours were saved, and \$56,114 were saved by using the RVS. Keep up the good work!

RVS
Help Desk
602-452-5095
8:30 am - 5:00 pm