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February 8, 2005

TO: Members of the MAG POPTAC Ad Hoc Subcommittee

FROM: Harry Higgins, Scottsdale, Chairman

SUBJECT: TRANSMITTAL OF MEETING NOTICE AND TENTATIVE AGENDA

Tuesday, February 15, 2005 - **8:30 a.m.**  
MAG Office, Suite 200, Cholla Room  
302 North 1<sup>st</sup> Avenue, Phoenix

A meeting of the MAG Population Technical Advisory Committee (POPTAC) Ad Hoc Subcommittee will be held at the time and place noted above.

Members of the POPTAC may attend either in person, by telephone conference call or by videoconference. To videoconference to the meeting, prior arrangements need to be made with Heidi Pahl at MAG and or your site coordinator. Those attending by telephone conference call are requested to call 602-261-7510 between 8:25 a.m. and 8:30 a.m. After prompting, please enter the meeting ID number 767822 (POPTAC) on your telephone key pad followed by the pound sign. If you have a problem or require assistance, please dial 0 after calling the number above.

If you are driving, please park in the garage under the Compass Bank building. Bring your ticket to the meeting and parking will be validated. For those using transit, the RPTA will provide transit tickets for your trip. For those using bicycles, please lock your bicycle in the bike rack in the garage.

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 Harry Wolfe at the MAG office. Requests should be made as early as possible to allow time to arrange the accommodation.

Please be advised that under procedures approved by the MAG Regional Council on June 26, 1996, all MAG committees need to have a quorum to conduct business. A quorum is a simple majority of the membership or 13 people for the MAG POPTAC. If you are unable to attend the meeting, please make arrangements for a proxy from your jurisdiction to represent you. If you have any questions or need additional information, please contact Anubhav Bagley at (602) 254-6300.

TENTATIVE AGENDA

1. Call to Order

2. Call to the Audience

An opportunity will be provided to members of the public to address the MAG POPTAC 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 minutes for their comments. A total of 15 minutes will be provided for the Call to the Audience agenda item, unless the Chair of the POPTAC requests an exception to this limit. Please note that those wishing to comment on action agenda items will be given an opportunity at the time the item is heard.

3. Approval of Meeting Minutes of January 18, 2005

4a. DES Projections for Maricopa County

Executive Order 95-2 requires that official population projections be prepared every five years. DES staff presented a draft set of projections at the January 28, 2005 DES POPTAC meeting. DES staff indicated that they would be developing a refined draft, which MAG has not yet received. Once approved, the county projections will become the control total for the subregional projections prepared by MAG. A status report will be provided.

4b. Approval of Additional Assumption for the 2005 MAG Socioeconomic Projections

At the January 2005 meeting of the MAG POPTAC a set of assumptions were approved for use in developing a new set of

COMMITTEE ACTION REQUESTED

2. For information.

3. For information, discussion and approval of the minutes of January 18, 2005.

4a. For information, discussion and possible action.

4b. For information, discussion and recommendation to the MAG POPTAC on assumption for projecting post high school enrollment.

socioeconomic projections. An additional assumption that will need to be approved pertains to the method for projecting post high school enrollment. The MAG POPTAC Ad Hoc Subcommittee will be requested to recommend POPTAC approval of these assumptions. Please see Attachment One.

5. Next Meeting of the MAG POPTAC Ad Hoc Subcommittee

The next meeting of the MAG POPTAC Ad Hoc Subcommittee is scheduled for Tuesday, March 15, 2005 at 9:00 a.m.

5. For information

MINUTES OF THE  
MARICOPA ASSOCIATION OF GOVERNMENTS  
POPULATION TECHNICAL ADVISORY COMMITTEE ADHOC SUBCOMMITTEE

January 18, 2005  
MAG Office, Suite 200, Saguaro Room  
302 North 1<sup>st</sup> Avenue  
Phoenix, Arizona

MEMBERS IN ATTENDANCE

Hector Tapia, Tempe, Acting Chairman	Dave Wolfson, Maricopa County
Max Enterline, Phoenix	*Wahid Alam, Mesa
Sam Andreas, Chandler	*Harry Higgins, Scottsdale, Chairman
Karen Flores, Peoria	*Adrian Williamson, Avondale
**Kate Langford, Glendale	

\*Those members neither present nor represented by proxy.

\*\* Participated via audioconference.

OTHERS IN ATTENDANCE

Harry Wolfe, MAG	Elaine Trammell, MAG
Anubhav Bagley, MAG	Stephen Gross, MAG
Heidi Pahl, MAG	

1. Call to Order

Chairman Hector Tapia called the meeting to order at 8:35 a.m.

2. Call to the Audience

There were no requests to address the MAG POPTAC Ad Hoc Subcommittee.

3. Approval of Minutes of October 19, 2004

It was moved by Karen Flores, seconded by Max Enterline and unanimously recommended to approve the meeting minutes of October 19, 2004.

4. Preparation of 2005 MAG Socioeconomic Projections

Harry Wolfe informed the Subcommittee that in June 2003 the MAG Regional Council approved MAG Interim Subregional Projections. These were interim because official updated DES projections were not available, and the Maricopa County projections used were based upon projections prepared on behalf of the Arizona Department of Commerce.

DES is developing draft 2005 county population projections. Once these County projections are approved and official, MAG will need to use them to prepare an official set of subregional

projections. The time frame for preparing these projections is very tight because of the need to have them approved in time to be used for air quality conformity analysis.

Mr. Wolfe elaborated that the County projections will need to be recommended by the MAG POPTAC in February and approved by the MAG Regional Council in March. Sub regional projections will need to be recommended in April, and approved in May. Mr. Wolfe detailed the various steps involved in the review and approval of base data sets, methodology and assumptions and draft projection sets.

5. Review and Approval of Model Assumptions for 2005 MAG Socioeconomic Projections

Anubhav Bagley informed the Subcommittee that the MAG Socioeconomic projections are based upon a number of model assumptions. For the MAG 2003 Interim Projections, all assumptions and methods were developed based on input from MAG member agencies and were reviewed and approved by MAG POPTAC. Mr. Bagley explained that the assumptions and methods to be used for the 2005 MAG Socioeconomic Projections are essentially the same as before. The only differences being that in places where 1995 data was used due to the unavailability of Census 2000 data, the new updated data will now be used.

Mr. Bagley explained the following modeling assumptions –

1. MAG Geography
2. Base July 1, 2000 and July 1, 2004 Population and Housing Variables
3. Base July 1, 2000 and July 1, 2004 Employment by Sector
4. Population and Employment Control Totals for Socioeconomic Projections
5. Basic/Non-Basic Employment
6. Build Out Population and Housing Variables
7. Build Out Employment Variables
8. Build Out and Net Capacity Definitions for Households and Housing Units
9. Vacancy and Occupancy Rates
10. Persons per Household
11. Multiple Use Definitions by Geographic Location
12. Single Family / Multi-family Split for Maricopa County by Time
13. Work at Home Employment Methodologies
14. Cluster Size, Floor Area Ratios (FAR) and Employment Density
15. Residential Development Density, Cluster size and Velocity Curves
16. Households by Age of Householder and Housing Units by Age of Unit
17. Households by Income
18. Seasonal Population
19. Transient Population
20. Group Quarters
21. Age Restricted Communities

It was moved by Karen Flores, seconded by Sam Andreas and unanimously approved to recommend to MAG POPTAC to recommend approval of the Model Assumptions for 2005 MAG Socioeconomic Projections.

The meeting adjourned at 9:10 a.m.

## ATTACHMENT ONE

### Assumptions About Post Secondary Enrollment

- Post-secondary enrollment projections are a component of socioeconomic projections used to drive the travel demand model.
- A phone survey of post-secondary education providers was conducted to gather information on current enrollment and expansion plans. All institutions that require a high school diploma for admission and have at least 100 students were included in the survey.
- The Maricopa Community Colleges District provided total enrollment projections for 2005 to 2010.
- ASU provided its enrollment projections for 2000 through 2015. ASU estimates that current capacity enrollment will be reached by 2015. Distance learning students are not included in the projections.
- Based upon statewide findings, private colleges are projected to grow between 2 percent (traditional colleges) and 8 percent (non-traditional). The projected enrollment is capped at 25% increase over 2000 enrollment for tradition institutions, and a 50% increase over 2000 enrollment for non-traditional institutions.
- Student enrollment is also limited by the physical size of the campus.

*See also, attached paper (Paper 8) on Post Secondary Enrollment*

#### Recommendation Requested:

- Use the post-secondary enrollment projection methodology as identified in the accompanying paper (Paper 8), “Post-Secondary Enrollment.”

## PAPER 8

### POST-SECONDARY ENROLLMENT

Post-secondary enrollment projections are a component of socioeconomic projections required by the MAG travel demand model because of its potential impact on trip generation. This survey of post-secondary education providers was conducted to gather information on current enrollment and expansion plans. The methodology described here will produce estimates of post-secondary enrollment by institution for 2000 through 2030. The methodology used divides enrollment into four components—community colleges, public universities (ASU), traditional private colleges and non-traditional private colleges.

**Institution Survey:** As a first step in creating enrollment projections for Maricopa County, a phone survey of post-secondary education providers was conducted to gather information on enrollment and expansion plans. Ninety-one institutions of higher education in Maricopa County were identified. All institutions that require a high school diploma for admission, and have at least 100 students were included in the survey. These standards are consistent with earlier MAG post-secondary enrollment projections.

**Projections for Community Colleges:** The methodology for projecting community college enrollment combines historical participation rates by age cohort with projected population by age. In addition, information from the Maricopa Community College District about future expansion plans is also incorporated.

For the eleven existing campuses, detailed historical information was available about student enrollment by age cohort. Using such data, age-based participation rates were calculated.

The first step is to calculate participation rates by age for each campus. Since community colleges target students within approximately 10 miles from the campus, participation rates were calculated by dividing enrollment in each age cohort for a particular campus by population in that age cohort in the host MPA. In some cases, multiple smaller MPAs were combined.

Since MPA-level population is not projected by age, the county age distribution, which varies by year, was applied uniformly to all MPA-level population estimates for a given year. The results of this calculation yield a participation rate by age cohort by campus. These participation rates were then applied to projected population by MPA by age for the relevant geographic areas.

There are also several new community college sites that will come on line in the next 5 to 15 years. Information on projected enrollment and timing was obtained from the Facilities Department at the Maricopa Community Colleges District. Two sites are expected to reach 4,000 to 5,000 students by 2010. A third site is expected to build out between 2010 and 2020.

**Projections for Arizona State University:** The Office of Institutional Analysis at ASU was able to provide projected enrollment by campus through 2015, at which time capacity enrollment would be neared. Distance learning students were excluded from these enrollment figures.

**Projections for Private Colleges:** In order to project enrollment at private two and four-year colleges in Maricopa County, the methodology used in the statewide projections prepared for the Governor's Task Force on Higher Education was adopted. To apply this methodology, private colleges in the survey were divided into traditional and non-traditional schools. Non-traditional schools can generally be described as those that aggressively market to working adults and provide flexible class schedules and compressed instructional formats.

Based on the statewide findings on growth rates at private colleges in Arizona, traditional colleges are projected to grow at 2 percent per year, while non-traditional colleges are expected to grow at 8 percent per year. A further breakdown was done to calculate the growth rates during each five year period, that decrease over time from 2 to 0.4 percent annually for traditional schools, and 9 to 1 percent annually for non-traditional schools. These rates were then applied to current enrollment by institution to calculate the projections. The rates were trended forward through 2030, based on projected growth rates through 2020. However, for multi-campus non-traditional schools it is likely that they will open new campuses in the future rather than continue to grow indefinitely at existing sites. For this reason projected enrollment is capped at a 25 percent increase over the 2000 enrollment number for traditional institutions, and a 50 percent increase over the 2000 enrollment number for non-traditional institutions. Another factor that determines maximum projected enrollment is the physical size of the campus.