

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.