

MINUTES OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
POPULATION TECHNICAL ADVISORY COMMITTEE AD HOC SUBCOMMITTEE

June 26, 2012
MAG Offices, Chaparral Room
302 N. 1st Ave, Phoenix

MEMBERS IN ATTENDANCE

Charlie McClendon, Avondale, Vice Chair

*Wahid Alam, Mesa

Robert Yabes for Lisa Collins, Tempe

A-David de la Torre, Chandler

A-Adam Yaron, Scottsdale

Thomas Ritz, Glendale

*Matt Holm, Maricopa County

*Chris DePerro, Phoenix

**Those members neither present nor represented by proxy.*

A - Participated via audioconference

OTHERS IN ATTENDANCE

Eric Morgan, Avondale

Scott Wilken, MAG

Steve Gross, MAG

Anubhav Bagley, MAG

Jesse Ayers, MAG

Mark Roberts, MAG

1. Call to Order

Vice Chair Charlie McClendon called the meeting to order at 9:09 a.m.

2. Call to the Audience

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

3. Approval of Minutes of November 1, 2011

It was moved by Thomas Ritz, seconded by Robert Yabes and unanimously recommended to approve the meeting minutes of November 1, 2011.

4. Assumptions for MAG Socioeconomic Projections

Jesse Ayers presented the methods and assumptions used in Arizona's Socioeconomic Modeling, Analysis, and Reporting Toolbox (AZ-SMART) to prepare the 2012 MAG Socioeconomic Projections. He said that this presentation is the first of two presentations on AZ-SMART. He said this presentation will focus on assumptions that will be used to create the base year data, and the second part, which will be presented in August, will focus on the simulation itself. He said that the presentation will cover nine topics, six of which the Ad Hoc sub-committee will be asked to recommend to the full POPTAC.

Jesse Ayers said that the first topic, for information and discussion only, is about the official geographies to be used by the model. He said that AZ-SMART models down to the parcel level, and can aggregate data back up to any level of geography. He said that the data is officially released at three levels of geography: Regional Analysis Zones (RAZ), Transportation Analysis Zones (TAZ), and Municipal Planning Area (MPA).

Jesse Ayres said that AZ-SMART requires a detailed base-year database, down to the micro level. He said that starts with a record for each parcel of land, and then records associated with the parcels, including built space information and occupant information. He said that many different datasets and tools were used to create the base-year data, and one of the main tools is called PopGen. He said that PopGen is capable of generating person and household records and attaching them to a geography. He said that to assist with the base data, staff created Pseudo Block Groups, which are a combination of Census Place and Census Block Group.

Thomas Ritz noted that it seems that staff is taking data from the American Community Survey (ACS) 2006-2010 and squeezing it into the block groups from the 2010 Census and the July 1, 2010 population estimates, which would include information from as far back as 2006. Anubhav Bagley said that some of the necessary data is only available from the ACS, and the 2006-2010 survey is the latest information available. He said that Pseudo Block Groups were created because Census Block Groups do not aggregate to Census Places, and ACS data is only available by Census Block Group. Thomas Ritz asked if a Census Block Group that is totally within a Census Place boundary would be modified into a Pseudo Block Group. Anubhav Bagley said that it would not be modified. Thomas Ritz asked if Pseudo Block Groups are generally the same size as Census Block Groups. Anubhav Bagley said that they are, with the exception of when Census Block Groups cross Census Place boundaries.

Jesse Ayers said similar information is needed for the base employment dataset, starting with the parcel, and including non-residential built space on each parcel, and how many jobs occupy each record of built space. He said that this information largely comes from the MAG Employer Database, which is matched up with some outside data sources. Thomas Ritz asked if the work-at-home (WAH) and non-site-based (NSB) job points have been mapped. Anubhav Bagley said that staff took the employer database and identified the large employers that were located on residential property and adjusted as necessary for businesses with more than 2 employees. Robert Yabes asked what the maximum number was for home employment. Anubhav Bagley said that the cap was 2 employees.

Robert Yabes asked, on the residential base data, when block groups were divided, what characteristics were used to determine where to reallocate population. Anubhav Bagley said that the persons per household characteristics came from the block data, but data that came from the ACS, like income groups, number of children and workers, had to be assumed was shared across the block group.

Jesse Ayers said that AZ-SMART needs county-level control totals for each projection year to know what population and employment totals to match. He said that the population control totals come from the State Demographer using an annual cohort-component model. He said that the employment control total comes from Moody's Economy.com. Anubhav Bagley said that staff will take a population-to-jobs ratio from the Moody's data, and scale it to match the population projections from the State Demographer to join the two projection series together. Robert Yabes asked if there is any bias in that method. Anubhav Bagley said that it's not that it's biased, but it's the only way to tie the two series together. He said that usually in comparison, the differentials aren't very big.

Jesse Ayers said that staff supplied two different classification tables in the handout: building types and employment sectors. He said there will be more in the next presentation, but these two are the most relevant to the base-year data creation.

Jesse Ayers discussed the land use databases. He said that the Existing Land Use (EXLU) establishes areas that have been developed and areas that are to be developed. He said that the General Plan Land Use (GPLU) tells the model what is to come on the areas to be developed. He said that the Developments Database tells the model about developments that are to come at some known point in the future, with more detail than the GPLU. Anubhav Bagley said that any General Plan Amendments that come along in the next few months can be incorporated into the model.

Jesse Ayers discussed some assumptions made as part of the residential projection process. He said that density factors determine the capacity of land. As an example he said that General Plans provide density estimates that help establish carrying capacity of parcels of land. He said that staff has compiled a TAZ-based persons per household database. He said that vacancy rates are used throughout the data preparation process, the establishment of build-out estimates, and the projections process for residential. He said that staff has examined historical single-family to multi-family ratios to see how that has changed over time, which is one of the comparisons that can help determine if the model is on the right track. He said that the MAG transportation modelers are interested in age-restricted communities, and staff looked at those at a TAZ level.

Jesse Ayers discussed assumptions made as part of the employment projections process. He said to determine employment density an analysis of floor-area ratios (FAR) was done by land use type. He said staff also did an analysis of square feet per job for different job types using the built space database and the employer database. He said this will help determine future vacancy rates and when a non-residential building is at its full employment capacity. He said staff acquired non-residential vacancy rates from COSTAR. Anubhav Bagley said

that staff is looking at historic vacancy rates for residential and non-residential to ensure that any current anomalies are not relied on for future projections.

Jesse Ayers discussed build-out analysis methodology. He said that staff created base and build-out population, housing, and employment figures and reviewed them with member agencies.

Robert Yabes made a motion to recommend to the MAG POPTAC approval of the AZ-SMART assumptions and methodologies for the 2012 socioeconomic projections. David de la Torre seconded the motion and the motion passed unanimously.

The meeting adjourned at 10:02 am.