

## **Methodology for Preparing July 1, 2015 Municipality Population Updates**

### **1. Prepare Census Data**

Using the Census 2010 as the Base, determine the April 1, 2010 household population, group quarter population, total housing units, occupied housing units, occupancy rates and population per occupied unit for total units for each jurisdiction. Adjust the original census counts to reflect results of the Census Count Question Resolution (CQR) Program.

### **2. Collect New Data**

Obtain the residential housing unit completions and demolitions for the time period from July 1, 2014 through June 30, 2015 from member agencies.

Obtain annexed and de-annexed housing unit data from member agencies. Determine population change from annexations/de-annexations using persons per household and occupancy rates from the Census 2010 blocks intersecting each annexed/de-annexed area.

Obtain July 1, 2015 group quarters population from survey of member agencies. Subtract the April 1, 2010 group quarter count from the July 1, 2015 to obtain the change in group quarter population.

Data for municipalities in Maricopa County were collected by MAG. Data for municipalities in Pinal County were collected by Central Arizona Governments (CAG).

### **3. Calculate July 1, 2015 Housing Units**

Calculate the July 1, 2015 total housing stock by municipality by adding the net housing units (completions minus demolitions) and the net housing units annexed from step 2 above to the Census base.

### **4. Calculate July 1, 2015 Resident Population**

Calculate the updated household population using the Housing Unit Method (HUM). For Maricopa County, calculate change in the household population by multiplying the annual change in the housing stock of non-annexed units by the respective occupancy rates and persons per occupied unit by municipality. Then add the estimated household population change to the annexed population for each municipality and estimated household population for the previous year. For Pinal County, estimate the household population by multiplying the total non-annexed housing stock by the respective occupancy rates and persons per occupied unit by municipality and adding to annexed population estimates. Occupancy rates and persons per occupied unit by municipality were taken from Census 2010 for both counties.

Bench the residential population in households to the county control totals for population in households from Arizona State Demographer's Office (SDO) to obtain July 1, 2015 population in households. Benching is necessary when the MAG derived total population does not match the control total obtained from SDO. The household population difference

is distributed proportional to the pre-beneched household population results for July 1, 2015.

Calculate the total resident population for July 1, 2015 by adding the July 1, 2015 group quarter population from step 2 to the July 1, 2015 household population.