

Towards Place-level intercensal estimates: 2000 - 2010

MAG POPTAC
September 27, 2011



Types of population estimates

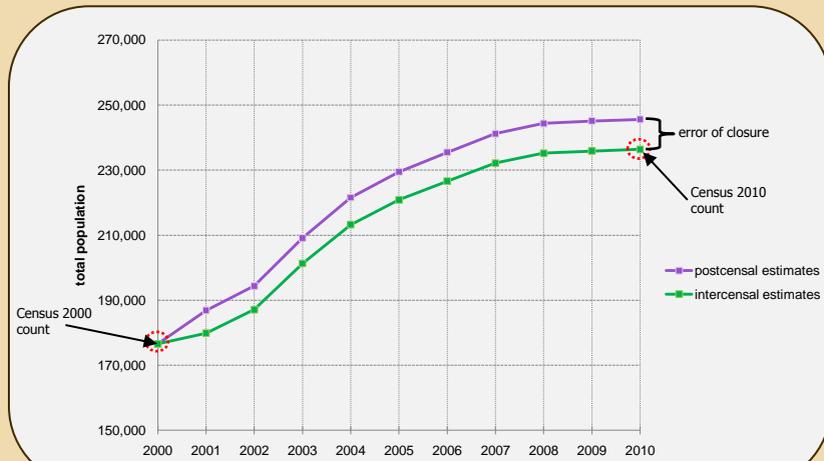
- **Postcensal**
 - Developed annually, provide a population estimate for the current year
 - Based on counts from the previous census and ancillary information collected for the current year (e.g. residential completions since the last census)
 - MAG employs the housing-unit method (HUM) for creating estimates

- **Intercensal**
 - Developed decennially, attempt to infer population for all years in between successive Census counts
 - Commonly developed by adjusting the postcensal estimates to match new Census counts
 - May allow historical analysis of population trends and highlight deficiencies in the postcensal methodology



About intercensal methods

- Most intercensal methods attempt to adjust the annual postcensal estimates to match new Census figures



Developing intercensal estimates using the Das Gupta method

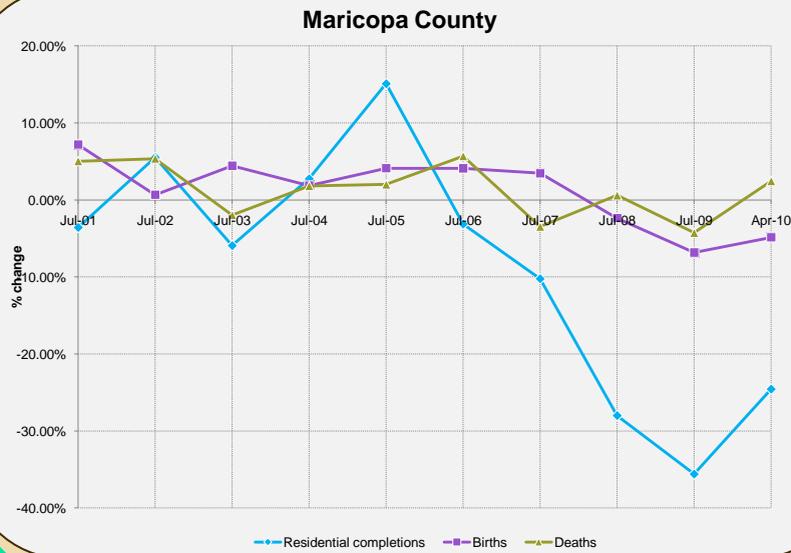
- Multiply postcensal estimates by a ratio of the postcensal estimate for 2010 and the Census 2010 count; this ratio is weighted over time
- Benefits**
 - Popular, widely accepted method used by Census and various regions
 - Retains shape of original estimates
 - Errors are distributed more towards end of estimate period
- Disadvantages**
 - Does not consider additional information sources
 - Assumes that postcensal estimates are qualitatively correct and must simply be re-scaled to match new counts
 - Can cause erratic curves in some cases

ADOA intercensal implementation

- 1) For each place, obtain initial intercensal estimates
 - a) Apply Das Gupta to postcensal estimates for 2000 – 2005 using 2005 special census as most recent census
 - b) Using the adjusted estimates obtained from step 1a, re-apply Das Gupta for 2000 – 2009 using Census 2010 as most recent census
- 2) Obtain county sum for initial place-level estimates
- 3) Adjust county sum to conform with state-level controls
- 4) Adjust initial place-level estimates to conform with new county total

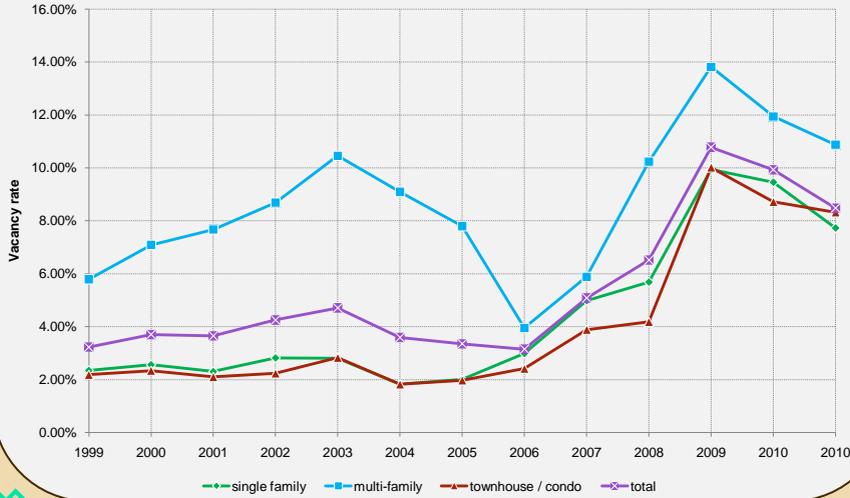


Are there additional datasets that can inform these estimates?



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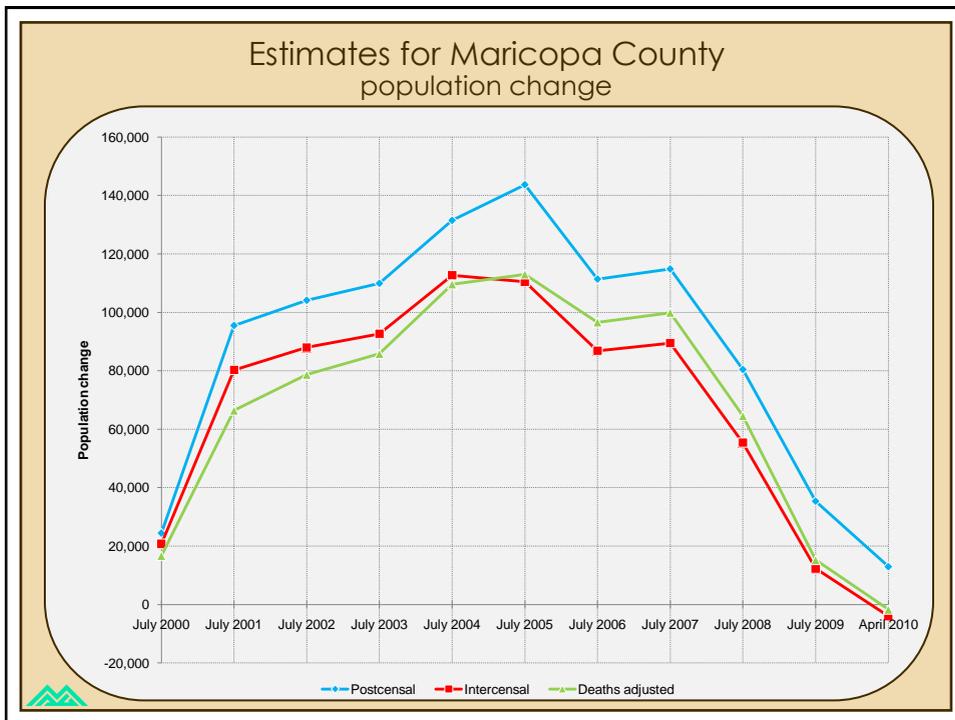
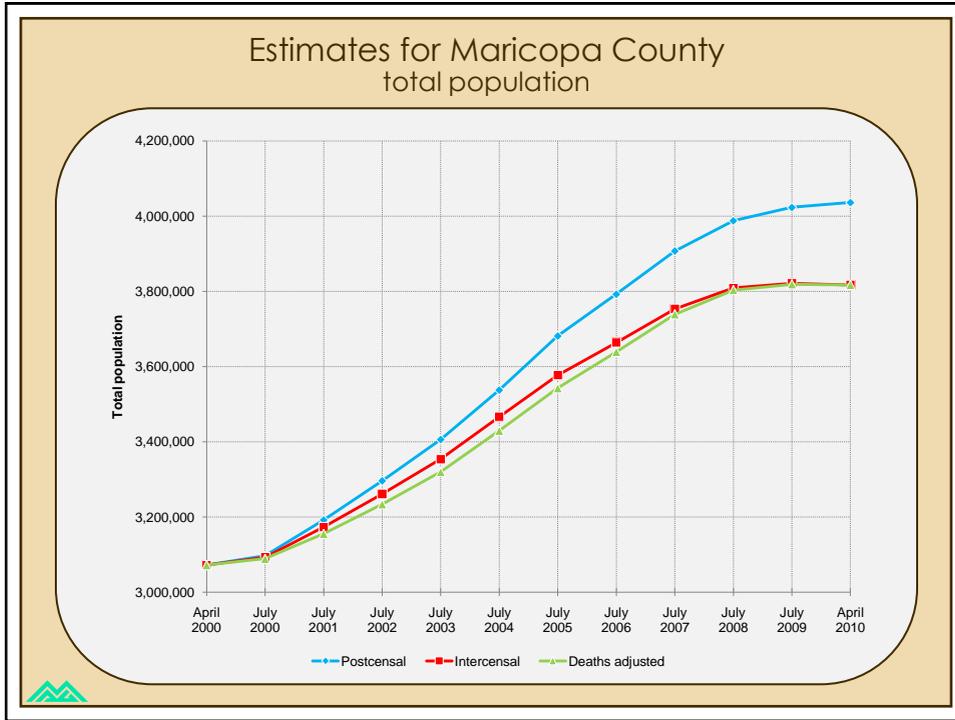
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Maricopa County**



Potential adjustment based on deaths

- **Basic premise:**
 - Changes in the number of deaths acts as a proxy to infer changes in population: years with larger number of deaths indicate larger population changes

- **MAG implementation**
 - Adjust the ADOA intercensal estimates to capture changes in deaths across cities over time



Comments / questions:

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