Census Overview:

Basics, Decennial, ACS, and Estimates

The Nebraska State Data Center 26th Annual Data Users Conference

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www.unomaha.edu/cpar  www.facebook.com/unocpar
Census Basics

- Geography
- Subject items
- Data collection
- Data availability/Products
Part of the Department of Commerce--Serves as the leading source of quality information on the nation’s people and economy.

✓ Decennial Census
✓ American Community Survey
• Other surveys/censuses
  – Current Population Survey
  – Census of Governments
  ❖ Economic Censuses
  ❖ County Business Patterns
✓ Annual population estimates
Census data are summarized for geographic areas. The most current and detailed information is available for the larger (most populous) geographic areas.

- **Legal/Administrative**
  - Nation, State, County, Place, Township
  - School District, Legislative District, Tribal area

- **Statistical**
  - Large area
    - Metropolitan/Micropolitan Area
  - Small area
    - Census Tract, Block Group, Block
    - Zip Code, Voting District, Public Use Microdata Area (PUMA)
Nebraska Metropolitan and Micropolitan Areas
Block 2022 in Block Group 2, Census Tract 47 Douglas County, NE

This is a single block – they are “building blocks” for larger geographies. The first number indicates the block group.

Blocks are bounded by physical features like roads or streams.
A group of usually about 15-30 blocks comprise a “block group”.

Block 2022 in Block Group 2, Census Tract 47 Douglas County, NE
Two or more block groups comprise a “census tract”, a key unit for small-area analysis.

Census tracts typically have ~4,000 people and nest within counties.
What is the Decennial Census?

- National Population and Housing Count
  - Taken once every 10 years in years ending with 0
  - Mandated by Constitution for reapportioning and redistricting Congress
- Linked to geographic areas
- Complete headcount—involves entire population
- Numbers of people along with selected characteristics
Decennial Census Data Collection

• Short form
  – Basic decennial census questionnaire sent to most households in 2000 and prior censuses and all households in 2010
  – Recorded simple demographics like age, sex, race, Hispanic/Latino origin, relationship, housing tenure (own/rent)

• Long form
  – Detailed decennial census questionnaire sent to a sample of about 1 in 6 households in the 2000 Census (also included basic questions from short form)
  – Not used in the 2010 Census (replaced by ACS)
  – Recorded socio-economic and detailed housing data
Decennial Census Datafiles

- **Summary File 1 (SF 1)**
  - Used for both 2000 and 2010 basic demographic data from the *short form*: age, gender, race/ethnicity, housing tenure (own vs. rent), etc.
  - Available for all geographic areas down to the block level

- **Summary File 2 (SF 2)**
  - Similar to SF 1 but iterated for many detailed race and Hispanic or Latino categories, and American Indian and Alaska Native tribes
  - Available for geographic areas down to the census tract level

- **Summary File 3 (SF 3)**
  - Not part of 2010 Census, replaced by ACS datasets
  - Has detailed socio-economic and housing data from the 2000 *long form*
  - Also has figures for SF 1 items (age) but they are based on a “weighted” sample, not the official counts
American Community Survey (ACS)

- **American Community Survey (ACS)**
  - Continuous sample survey (forms sent every month) compiled to provide current annual data
  - Nearly identical to long form – allowed 2010 Census to be short form only (simply a headcount)
  - 2015 ACS (and those in future years) continues monthly surveying even though 2010 Census is finished

**BE CAREFUL** – You must go to the right source to get correct data!

- **ACS Datasets:**
  - Contain data for ACS variables;
  - Are based upon the timeframe over which the data were collected
  - 1-year: 2013  
  - 3-year: 2011-2013  
  - 5-year: 2009-2013  
  - Do NOT Compare ACS datasets to SF 1 from the decennial census
    - Compare SF 1 from 2000 to: SF 1 from 2010
    - Compare SF 3 from 2000 to: ACS datasets
ACS Data are Released Based Upon the Population of the Geographic Unit

<table>
<thead>
<tr>
<th>Time Period of Data</th>
<th>Population Threshold for Data Release</th>
<th>Nebraska Areas with Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Estimates (2005, 2006,…2013)</td>
<td>65,000 or more</td>
<td>State; Omaha and Lincoln; Douglas, Lancaster, Sarpy Counties; Omaha, Lincoln, Millard Schools</td>
</tr>
<tr>
<td>3-Year Aggregates (2005-2007…2011-2013)</td>
<td>20,000 or more</td>
<td>All of the above plus regional centers like Kearney, Norfolk, etc.</td>
</tr>
<tr>
<td>5-Year Aggregates (2005-2009…2009-2013)</td>
<td>No threshold</td>
<td>All areas--counties, cities, townships, census tracts, zip codes, school districts, legislative districts, etc.</td>
</tr>
</tbody>
</table>

Hint: when citing sources, be specific (use table #s):
- U.S. Census Bureau, 2013 American Community Survey 1-Year Estimates (S1701)
- U.S. Census Bureau, 2009-2013 American Community Survey 5-Year Estimates (S1701)
Important Concepts--Residence

• For the Decennial Census, it is based on *usual residence* – where people are most of the year (their permanent residence). It is also based upon an April 1 reference date.
  – Snowbirds spending 3 months in Texas 9 months in Nebraska should be a resident of NE
  – College students are counted where they are on April 1 (usually their college city)

• Since the ACS forms are sent out and mailed back monthly, residence for the ACS is based upon who is living in the household for “the next 2 months”
  – Provides a more accurate picture of the population: e.g. some snowbirds are counted in the South & college students in parent’s house if home for summer
Important Concepts—Race/Ethnicity

- Race and Ethnicity are asked in 2 questions—Each person is either Hispanic/Latino or not, AND then they also are one or more races (option for 2+ races first utilized in 2000)

- The 2020 census likely will use a combined race/ethnicity question!
  - It will get similar results, “other” race category will be selected less frequently
  - There likely will be areas to write in ancestry/origin (so we’d get data on African and European countries/origins in addition to Asian and Hispanic/Latino and Native American tribes)
How does CPAR typically analyze race/ethnicity?

• We usually list totals for Hispanic/Latino, and then all races ALONE non-Hispanic (NH): White NH; Black NH; etc.
  – These are mutually exclusive categories that sum to the total population
  – Race ALONE means that only one race was selected on the form

• When we use 2 groups
  – White non-Hispanic
  – Population of color = Total pop – White non-Hispanic

• Also can evaluate race for those ALONE or IN COMBINATION
  – This includes those who selected that race specifically (alone) as well as those who selected that race and another one (2 or more races)
  – Double counts the people selecting 2 or mores races (doesn’t sum to total population or 100%)
Important Concepts—Income and Dollars

• Census 2000, being a point-in-time survey as of 4-1-00, had items like income for 1999 (the previous year)—Dollar values were for that year.

• Many other Census surveys also are point-in-time surveys and use similar methodology

• ACS, sending surveys monthly, asks items like income for the “past 12 months”
  – 2013 Example: If interviewed in May 2013, the reference period is from 5/12 to 4/13
  – Since the final released data are from a combination of months, the monthly data are adjusted using the Consumer Price Index (CPI) and expressed in calendar year 2013 dollars
  – For multiple year periods, data measured in dollars are adjusted to the latest year. Income data for the 2009-2013 period are expressed on 2013 dollars.
Important Concepts—Householder and Relationship

• **Householder**—simply the first person on the census form
  – Is NOT necessarily the “head of the household” (that’s old terminology)
  – Supposed to be the person “in whose name the residence is owned or rented”; that’s usually but not always the person who fills out the form
    • Can be male or female; householder is somewhat arbitrary but makes a big difference for how families and by extension items like poverty are defined

• **Relationship**—how other persons living in the household are related or connected to the householder
  – Spouse, biological/adopted/step child, parent-in-law, roommate, unmarried partner, foster child, etc.
  – A household with 2 or more related individuals is a “family” household
    • One person households are not a family by definition, and thus are excluded from variables like median family income (but are included in median household income)
    • Unmarried partners are not a family by definition
      – If a child lives in the household of unmarried partners but is from a prior relationship, it is a function of who fills out the form (is the householder) for whether that is a “family” or not – IT GETS COMPLEX – impacts items like poverty
Householder Example

Assume we have a three person household. Susan and her daughter Emily live with Paul.

Note: Susan and Paul are not married; Paul is not the father of Emily

If Susan is the householder...

Emily is related to Susan as biological child, and this is a family household; Paul is unmarried partner & not part of the ‘family’

If Paul is the householder...

Emily is an “other nonrelative,” and Susan is unmarried partner; this is NOT a family household

In both cases Paul’s income is NOT included in Susan and Emily’s poverty calculation; if they were married it would be.
Tradeoff between Geography, Timeliness, & Detail

- There is usually a tradeoff between available information and the geography for which it is available
  - Can be due to sampling or confidentiality constraints
  - More specific or detailed information may require expanding to a larger geography (or a longer timeframe)
    - Even if the data are provided, you must ask whether the data are “reliable” for that geography?
    - Are the figures based on a small number of cases where the sampling error could be large?
Relationship between Data/Datafiles and Geography

• **For blocks**, only Redistricting or SF 1 data (2000 and 2010 Censuses)
  – Confidentiality reasons: you’d know certain incomes on your block (also sampling/error issues)

• **Block groups** have most SF 3 data (2000 Census); only meant as building blocks for larger custom geographies in the ACS
  – No ancestry or unmarried partner data

• **Census Tracts** are a key geography as they are one of the smallest geographies to have most all data compiled

• **Now have 5-yr ACS zip code data**; like tracts they are a good unit of analysis for “neighborhoods” but typically larger than tracts so more accurate/less variability
Public Use Microdata (PUMS)

PUMS data files are a set of untabulated records about individual people or housing units. The Census Bureau produces the PUMS files so that data users can create custom tables that are not available through pretabulated (or summary) ACS data products.

- 1-year file is 1% of Nebraska’s records, 5-year file is 5% of Nebraska’s records
- Nebraska has 14 PUMA areas (4 in Douglas Co., 2 in Lancaster)
- Made up of county or census tract areas that total at least 100,000 persons
- ACS data used 2000 based PUMAs from 2005-2011; 2012 and future years use updated 2010 based PUMA boundaries
  - The 2010 PUMAs are nearly identical: a couple tracts changed in Douglas and Lancaster counties; Sarpy Co. is now its own PUMA
- Data are released annually since PUMAs exceed the annual ACS population threshold of 65,000
  - Breaks core metro counties into smaller areas and gives proxies for smaller geographies that are similar to the larger PUMA area
- State Maps for PUMA boundaries can be viewed on the internet
Geographic Boundaries of Nebraska Public Use Microdata Areas (PUMAs)

Each PUMA contained at least 100,000 persons in the 2000 Census. Boundaries may change after the 2010 Census, but these boundaries are used in current products like the American Community Survey (ACS). PUMAs are useful as they have annual ACS data and subdivide metro areas into smaller subsections that can be compared.

Nebraska PUMA areas (number, description, and number of counties)

100 - Northwest: Scottsbluff, Chadron, O’Neill (17)
200 - Northeast: Norfolk, Columbus, South Sioux City (16)
300 - Central: Grand Island, Aurora, Broken Bow (12)
400 - Southwest: North Platte, Lexington, McCook (18)
500 - South Central: Kearney, Hastings, Holdrege (9)

600 - Southeast: Beatrice, Nebraska City, Seward (14)
701 - Greater Omaha Area: Fremont, Blair, Plattsmouth (4)*
702 - Sarpy County: Bellevue, Papillion, La Vista (1)
800s - Lancaster County (subdivided): Lincoln (1)**
900s - Douglas County (subdivided): Omaha (1)***

** Lancaster County is split in half roughly along 'O' Street into 801 (North) and 802 (South).
*** Douglas County is split into quadrants roughly at 72nd and Dodge Streets into 901 (Northwest), 902 (Southwest), 903 (Northeast), and 904 (Southeast).

Source: 2000 Census, Geography Program, U.S. Census Bureau (a detailed map can be viewed at http://ftp2.census.gov/geo/maps/puma/puma2k/ne_puma5.pdf)
Prepared by: David Drozd, Center for Public Affairs Research, University of Nebraska at Omaha - August 27, 2009
The American Community Survey: What is it?

• Nationwide written/mail survey conducted by the U.S. Census Bureau
  – Sent to a sample of households, not all households
  – Online completion option began January 2013

• Similar to the sample portion of the decennial (10 year) census but is completed every year
  – Gives us more current information: annual data rather than 10 year intervals between releases
  – Provides data on the same Census topic areas
  – Replaced “long form” of decennial census; 2010 Census primarily a population count
  – The “future” of socio-economic Census data, IF funded into the future
ACS Methodology in Brief

• Surveys mailed out & received back each month
  – 3.5 million surveys annually nationwide
    • Sample about 1 in 40 housing units (1 in 8 over five years of survey collection – Census 2000 long form was 1 in 6)
      – Census assigns both household and person weights. Summing these weights produces the estimates. Base weight for households is about 40 given 1 in 40 sample.
    – Monthly surveys are combined to estimate figures for the calendar year as a whole.
    – Nebraska response rate is in the top 5 (but has been slipping—help promote participation)
      • 1 in 3 non-respondents are personally interviewed to get info. (very important—improves its data over others—but Census 2000 had full non-response follow up)
Recently Added ACS Subject Areas:

• Food stamp (SNAP) recipiency of households

• Fertility (women age 15-50 giving birth in the last year)
  – Note: These items were not asked on Census 2000 but have been asked since early-on in the ACS

• Health insurance coverage, changes in marital status, and veteran service connected disabilities added in 2008; field of Bachelor’s Degree added in 2009
  – Disability question was revamped in 2008: see all forms here:
    • http://www.census.gov/acs/www/methodology/questionnaire_archive/

• New questions on computer/internet access (and type like cable, dial up, etc.) started in 2013
Point Estimates, MOE and Confidence Intervals

• The ACS data provide point estimates for various characteristics. ACS data also include a margin of error (MOE) for finding a lower and upper bound.

  — Why?
  • The ACS is a sample and subject to sampling error.
  • Are the ACS data representative of the entire population?
  • Census 2000 long form also a sample—1 in 6 sampling rate made sampling error small and MOE was not released.

• Adding and subtracting the MOE to/from the point estimate creates a range called a confidence interval.

  — Example: 2013 NE poverty rate for persons aged 5-17 years was 15.2% +/- 1.5%; so the range or interval is 13.7% to 16.7%
  — ACS displays the MOE for a 90% confidence interval.
Nebraska Related Children Aged 5-17 Years below Poverty

Data Table

<table>
<thead>
<tr>
<th>Year</th>
<th>1-year Estimate</th>
<th>1-year MOE</th>
<th>3-year Estimate</th>
<th>3-year MOE</th>
<th>5-year Estimate</th>
<th>5-year MOE</th>
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</thead>
<tbody>
<tr>
<td>2013</td>
<td>15.2</td>
<td>1.5</td>
<td>15.8</td>
<td>0.8</td>
<td>15.3</td>
<td>0.7</td>
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<tr>
<td>2012</td>
<td>16.2</td>
<td>1.3</td>
<td>16.2</td>
<td>0.8</td>
<td>14.8</td>
<td>0.7</td>
</tr>
<tr>
<td>2011</td>
<td>15.6</td>
<td>1.4</td>
<td>15.2</td>
<td>0.9</td>
<td>13.8</td>
<td>0.6</td>
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<tr>
<td>2010</td>
<td>16.1</td>
<td>1.6</td>
<td>13.6</td>
<td>0.9</td>
<td>13.2</td>
<td>0.5</td>
</tr>
<tr>
<td>2009</td>
<td>13.1</td>
<td>1.3</td>
<td>12.5</td>
<td>0.7</td>
<td>12.6</td>
<td>0.6</td>
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<tr>
<td>2008</td>
<td>11.2</td>
<td>1.3</td>
<td>11.8</td>
<td>0.7</td>
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<td></td>
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<tr>
<td>2007</td>
<td>12.9</td>
<td>1.2</td>
<td>12.6</td>
<td>0.8</td>
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<tr>
<td>2006</td>
<td>12.0</td>
<td>1.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2005</td>
<td>12.9</td>
<td>1.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2013 Population: 1,868,516; Aged 5-17: 334,922; 17.9%

2013 Sample: 46,478
2009-2013 Sample: 220,335
<table>
<thead>
<tr>
<th></th>
<th>Omaha City Related Children 5-17 Years below Poverty</th>
<th>Millard Public School District Related Children 5-17 Years below Poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1-year Estimate</td>
<td>MOE</td>
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<tr>
<td>2013</td>
<td>21.2</td>
<td>3.1</td>
</tr>
<tr>
<td>2012</td>
<td>23.4</td>
<td>3.1</td>
</tr>
<tr>
<td>2011</td>
<td>20.7</td>
<td>3.5</td>
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<td>2010</td>
<td>25.3</td>
<td>3.7</td>
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<tr>
<td>2009</td>
<td>17.7</td>
<td>3.4</td>
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<tr>
<td>2008</td>
<td>16.4</td>
<td>3.6</td>
</tr>
<tr>
<td>2007</td>
<td>19.4</td>
<td>3.8</td>
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<tr>
<td>2006</td>
<td>16.1</td>
<td>3.6</td>
</tr>
<tr>
<td>2005</td>
<td>20.8</td>
<td>3.3</td>
</tr>
<tr>
<td>2013 Population</td>
<td>434,353</td>
<td>Aged 5-17</td>
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<tr>
<td>2013 Sample</td>
<td>7,708</td>
<td></td>
</tr>
<tr>
<td>2009-2013 Sample</td>
<td>36,078</td>
<td></td>
</tr>
</tbody>
</table>
Multi-year Aggregate Estimates: Advantages

- The aggregates provide data for more geographies
- For areas that get annual data, the aggregates based on more completed surveys will be more accurate and have smaller margins of error
  - Especially important for sub-groups—data for specific age groups or racial/ethnic groups
  - Will help reduce variability in year-to-year figures
  - Some FactFinder tables are prepared but not released annually because of inaccuracy concerns—some of those tables will now have data released
- When comparing areas, do not compare a multi-year estimate with a single year estimate
ACS Sample Size Increase Began in 2011 and Continues!

- Higher sampling rate means more completed surveys and more data items available with better accuracy!!
- National sample expanded from 2.9 million to 3.54 million addresses per year (+ 22%)
  - Nebraska housing unit sample increased by about 5,700 (3,450 more completes or + 21%)
    - Statistical quality improvements are seen with 2011 & 2012 data vs. prior years (smaller error factors with bigger sample)
    - Full impact will be seen later as we move forward in time
    - This may prove to be the “golden time” for ACS data
      - Larger sample with solid weighting based on 2010 census
2014 ACS Data to be released later in 2015

• Basically all the annual (one-year) data for 2014 will be released at one time (for areas with 65,000+ persons)
  • Thursday Sept 17, 2015 (media embargo on Tuesday the 16th)
    – Annual CPS data on income/poverty and health insurance also released Sept 16 along with state ACS health insurance. (no embargo)
  • 2014 ACS response rates and data could be impacted by the new internet response option

• There will be no 3-year aggregate estimates for 2012-2014 released (20,000+ person areas). That program has been discontinued.

• New 5-year aggregate estimates for 2010-2014 will be released on Thursday Dec 10, 2015 (all geographies; embargo on Tuesday the 8th)

• Increased sampling rate is important, especially for small areas
Population Estimates Program: Basics

• The population estimates program provides the official head and housing unit counts as well as counts by age, sex, and race in non-census years
  – Shows how the population has changed since the most recent Decennial Census

• As of July 1 of the specific year

• Staggered releases throughout the year
  – Large geographies first, most detailed data last

• The most recent release/vintage always supersedes prior
  – Can create confusion for why one 7-1-11 estimate will differ from another—cite the source and release date
  – You always should get and use the most currently released data

• Estimates differ from projections
Population Estimates Program: Tips

• Note that racial categories may not exactly match with Census 2010 tables
  – Estimates program doesn’t use a “some other race” category – they “force” people into a category
  – Be consistent – the estimates program data usually will list totals for each year since 2010 and the appropriate Census 2010 count, so that you compare apples to apples

• Source the name of the file and the release date

• Can get 5-year age data (0-4, 5-9, etc.) and most major categories (14-17, under 18, 18-24, others)
  – Can’t always get exactly what you want, say 16-21 at the county level
Population Estimates Program: Census Methodology in Brief

– Start with the Census 2010 headcount (4-1-10)
– Adjust for headcount revisions, boundary changes (annexations) so that everything is consistent over time
  • This is called the Estimates Base (refers to 4-1-10)
  • With recent annexations, Omaha’s estimates base will be revised
– Add births, subtract deaths from vital records
– Make estimates of domestic and international migration
  • Partner with IRS to show changes in where people file returns
    – Limited to people/families who filed tax returns in both years, doesn’t account for people leaving the U.S. very well
  • Use Medicare records to be more precise in 65+ population
– Various methods estimate changes in group quarters and military populations (deployment affects)
– For cities use building permit data and **recorded** demolitions
  • Tornados don’t file demolition permits!! (Hallam, Pilger)
  • Permit allocation has some issues (Omaha ETJ vs. city limits – Omaha city estimates have been/continue to be overstated)
Population Estimates Program: Its Importance

• Population estimates serve as controls for the American Community Survey
• The estimates give us our best look and official figures for how the population has changed since the Census
  • Some grants and $ allocations are calculated based on the estimates
  • On SF 1 style demographics, it is the estimates and not the ACS that are the official population source – use it for age, gender, race
    – Is Nebraska growing more/less than regional/neighborhood states and the U.S.?
    – What population components are changing
      • Births/Deaths; Foreign and Domestic net migration
    – How is the state’s population distribution (more growth in metro counties) and age/race structure changing?
      • Migration of baby boomers and those age 20-34 is key
      • Is Nebraska’s growth continue to be dominated by Asian and Hispanic/Latino populations?
Estimates Program Data

- Our office has a lot of the data compiled and will make an annual Nebraska Population Report (check our web site)
  - Is a good reference document as data changes year to year
  - If you need something specific, contact us to see if we have compiled what you’re looking for

- Realize that you may just want to use 2010 data rather than the estimates—the estimates have more value as we move further away from 2010

- Pop. estimates website is: www.census.gov/popest/

- Next big release will be for data as of July 1, 2014
  - Data for states coming in December 2014
  - Data for counties/metro areas released March 2015
Bottomline: Ask yourself these questions

- What would I like to have ideally?
  - Exact data items (variables)
  - Geography
  - Timeframe

- What source is best to use for that – Decennial Census, ACS, Estimates Program, other source?

- Are those data available? Are they accurate or do they have large error factors?
  - If not, what are my best tradeoffs?
    - Is it more important to have that exact geography or can I use a larger one as a proxy? (Douglas County census tract 11 versus PUMA 903)
    - Do I want the most current data or can I extend to a longer timeframe (to increase accuracy or availability)? (2012 versus 2010-12)
      - Any item split by age or race should use longest timeframe unless geography is sufficiently large (State level might not be large enough)
The 2009 ACS Nebraska “Double Whammy”

• Two separate methods adjustments affected the 2009 ACS sample size and weighting approach

  – Implementation of city weighting controls
    • ACS had always controlled to county estimates, but in 2009 they also started controlling to city estimates
      – Omaha 2000 pop = 390,007; ACS pop 388,894 in ’08; 454,714 in ’09; (2010 Census: 408,958)
        » Different characteristics—more accurate but may have to consider it a ‘break in series’

  – NE dissolution of elementary school districts affects ACS
    • Now are “unified” school districts – larger territory and population means a smaller sampling rate in the ACS
    • Distribution of sample changes: a “different Nebraska”
      – 500 less in micro counties; 70 less in Big 3; 85 less in Cherry Co

• Realize Omaha change impacts all NE data; try not to utilize 2009 products – rely on newer data (2010, 2011, 2012, etc.)
Infographic: How the ACS works...from your community back to the community.
Example of Standard Table without Data Released; this was for Sarpy County – the 3-yr dataset did list figures.
Initial ACS Mail Response Rates, U.S. and Nebraska: 2000 to 2010

We need your help in promoting participation - ACS response rates have been slipping, reducing data quality!

Nebraska had the 2nd best long-form response rate in 2000 but is only 5th best on the ACS.

Source: 2010 American Community Survey Variance Memorandum Series #ACS10-S-37 and prior

Compiled and Prepared by: David Drozd, UNO Center for Public Affairs Research, July 23, 2012
Percentage of Omaha Population with Hispanic/Latino Origin
(Only 5-year estimates available if Omaha had less than 20,000 people)

Source: American Community Survey, U.S. Census Bureau, 1997-2009

Note: Only since 2006 has the ACS included the group quarters population.
Percentage of Omaha Population in Poverty (Individuals)

(Only 5-year estimates available if Omaha had less than 20,000 people)

Source: American Community Survey, U.S. Census Bureau, 1997-2009

Note: Only since 2006 has the ACS included group quarters. (not a big impact on poverty)
### Foreign Born Nebraska Residents: 2006 through 2009 Annual ACS data

<table>
<thead>
<tr>
<th>Year</th>
<th>Foreign Born Residents (#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>99,500</td>
</tr>
<tr>
<td>2007</td>
<td>98,512</td>
</tr>
<tr>
<td>2008</td>
<td>97,670</td>
</tr>
<tr>
<td>2009</td>
<td>106,186</td>
</tr>
</tbody>
</table>

Source: Annual American Community Surveys, U.S. Census Bureau (2009 Comparison Profile)  
Prepared by: David Drozd, UNO Center for Public Affairs Research
Other Datafiles on
American FactFinder

- **ACS**: Conducted annually, the ACS has separate datafiles based on the year of interest.
- **Public Use Microdata Samples (PUMS)**: sample of questionnaire responses released with confidentiality protection so that you can run custom tables
  - Both Census 2000 and the ACS have PUMS files
  - Can download files from FactFinder but software and skill/training are needed to “run” the data correctly
- **Population Estimates Program**: in-between decennial censuses, this is the official source for total population estimates as well as figures by age, sex & race
  - The current estimate (vintage) supersedes prior releases
ACS Data are Released Based Upon the Population of the Geographic Unit

We had to wait for data for smaller areas, but now we will get annual data (rolling timeframe as new data is released: 2007-2011 then 2008-2012, with 2009-2013 coming this fall).

More data = be more careful! Cite sources accurately and with detail (use table #s): 2012 ACS (S1701), U.S. Census Bureau

<table>
<thead>
<tr>
<th>Type of Data</th>
<th>Population of Area</th>
<th>Previous Year's Data Released in the Fall of:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2006</td>
</tr>
<tr>
<td>Annual Estimate</td>
<td>65,000+</td>
<td></td>
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<tr>
<td>3-year aggregate</td>
<td>20,000+</td>
<td></td>
</tr>
<tr>
<td>5-year aggregate</td>
<td>Under 20,000; Census Tracts, Zip Codes</td>
<td></td>
</tr>
</tbody>
</table>
Multi-year Aggregate Estimates: Details

• Estimates are computed using the geography in place for the most recent year of the period.
  – City boundaries changing via annexation; MSAs
• Dollar valued data items are inflation adjusted to the most recent year of the period.
  – See pg 28 for an income deflator to compare over time: http://www.census.gov/prod/2009pubs/p60-236.pdf
• Medians are produced using combined data records from all years, not by averaging each year’s median.
  – 3-year median determined by combining the 3 years of records into one data set and finding the corresponding median. (Same process for 5-year medians)
Population Estimates Program: Methodology in Brief

- Start with the Census 2000 headcount (4-1-00)
- Adjust for headcount revisions, boundary changes (annexations) so that everything is consistent over time
  - This is called the Estimates Base (refers to 4-1-00)
- Add births, subtract deaths from vital records
- Make estimates of domestic and international migration
  - Partner with IRS to show changes in where people file
    - Limited to filers, doesn’t account for people leaving the U.S. real well
  - Use Medicare records to be more precise in 65+ population
- Use various methods for estimating changes in group quarters and military populations (deployment affects)
- Use building permit data and recorded demolitions
  - Tornados/Hurricanes don’t file demolition permits!! (Hallam)
Population Estimates Program: Data

• Some data is on FactFinder, more detailed information on the estimates website
  – FactFinder only has most current release; est. site has “vintage” (prior years) estimates
  – FactFinder has commonly used tables, est. site allows “download of entire data set” & has “popular” tables
  – Several separate coded files available – sometimes it’s easiest to just contact me & I’ll compile and email data

• Data varies based on geography
  – Cities/towns only have a total population estimate – nothing by age, sex, race nor any housing unit estimates

• Smaller geography data will exactly sum to larger
  – Counties to state, states to nation; “residual” is used
Other Major Federal Data Sources

• Bureau of Economic Analysis (BEA)
  http://www.bea.gov/

• Bureau of Labor Statistics (BLS)
  http://www.bls.gov/
BEA State and Local Level Data

• Gross State Product (GSP)
  – State counterpart of GDP - shows state output
  – Detailed by industry, has good mapping feature

• Personal Incomes
  – Incomes, per capita income, jobs, average wage per job
  – Some detailed information (taxes, farm income and expense, industry information)
  – State and county level
Bureau of Labor Statistics (BLS)

- Part of the Department of Labor—Federal Government’s principle fact-finding agency regarding labor economics and statistics.
- Employment
  - Labor force, number employed, number unemployed, unemployment rate
  - Payroll/jobs
  - Current data for the nation, states, MSAs, and counties
- Prices and Expenditures
  - Consumer Price Index (CPI)
    - Measures price change over time for goods and services purchased by households (inflation)
  - Producer Price Index (PPI)
    - Similar to CPI except it measures prices received by domestic producers
  - Consumer Expenditures