Tools and Resources for Demographic Data

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Informed Communities, Informed Decisions
July 16-17, 2011
Today’s overview:

• What do we need data for?

• How do we know what data to look for?

• How do we assess the accuracy of the data?

• Where can we find reliable data?
  – Focus on the Census, ACS, Cornell’s Program on Applied Demographics, and Headwaters Economics

• Discussion
What do local governments need data for?
What do we (as planners) need data for?

• A primary mission of local governments is to deliver efficient services & enact policies that advance public safety & economic growth.

• Data can help frame issues in the proper context and help governments and other organizations create proposals, develop budgets, prioritize issues, and pursue strategies to address well-documented needs.

• Data helps to identify, measure, document, and track these issues.
What data should we look for?

• Some communities have a clear sense of current issues and emerging needs. This will inform what data they gather to measure and benchmark:

  Issues/Needs → Data

• Some communities will examine data in an exploratory manner – data will help reveal current issues, emerging needs, etc, and should lead to additional data exploration

  Data → Issues/Needs → Data

• Ideally, the process is iterative. That is, even with clear-cut ideas, a community is open to exploring data to reveal additional information about community. May lead to new priorities and goals.
To assess current conditions, create a community profile

To start, you might include indicators such as:

• Population trends and projections
• Age structure
• Disability status
• Race/ethnic composition
• Employment rate
• Unemployment rate
• Industrial composition of labor force
• Occupational composition of labor force
• Commuting patterns
• Educational attainment levels
• Migration patterns – net, international, internal, etc
• Per capita, household, family income
• Poverty rates for children, families, households, elderly, etc
Important things to consider about data

• No single indicator is representative of the entire community or county or region or state.
• One time point does not necessarily represent the community over time.
• Local data is most useful and informative when:
  – Examined over time – need trend data.
  – Compared to other places.
  – Multiple measures are used.
• Graphs, charts and maps are usually better than tables of numbers for communicating data to an audience.
• Does the data make sense?
• Data and numbers do not tell the story without interpretation, context, etc.
• Pay attention to Margins of Error!!!! More on this later........
Where can we find reliable data?
Good data sources for demographic & other community development indicators

U.S. Census Bureau
http://census.gov

PAD – Cornell Program on Applied Demographics
http://pad.human.cornell.edu

Headwaters Economics
http://headwaterseconomics.org/tools/eps-hdt
Census Geography:

Through its many surveys, the Census Bureau reports data for a wide variety of geographic types, ranging from the entire United States down to a Census Block. The geographic types that a survey reports on will depend upon the survey's purpose, and how the data were collected.
How Census Data was collected in the past

- **Short Form vs. Long Form**
  - **Short Form** - 100% full count – 7 Questions
    - 6 Population items
    - 1 Housing item
  - **Long Form** - Sample (~ 1 in 6 sample) – 53 questions
    - Detailed Socio-economic characteristics of population
    - Detailed Physical and Financial characteristics of housing
American Community Survey (ACS)  
The New Census!

- Replacement for the 2010 Long Form
- Large monthly sample
- Generate annual estimates for small areas
- Full coverage began in 2005
- Issues of data comparability and statistical error

http://www.census.gov/acs/www/
American Community Survey (ACS)

- Data is currently available for all geographic areas down to the block group level.

- Areas with a population 65,000+: 1-Year Estimates

- Areas with a population 20,000+: 3-Year Estimates

- Areas below 20,000 (incl. census tracts & block groups):
  5-year estimates (data avail. for 2005-09, 2006-10, 2007-2011)
How do we assess the accuracy of the data?

What is a margin of error (MOE)?

• It is a way to express how “good” an estimate is.

• It describes the uncertainty, because of sampling, that surrounds an estimate – it is what we predict the likely range is.

• Margins of error are reminders of the limitations of the estimates.
What is the effect of sampling?

Remember: the ACS is based on a sample

- As sample size decreases relative to total population, the variation in the estimate – the margin of error - increases.

- The multi-year estimates may have smaller margin of errors than the single year estimates.
Ugh. This all sounds too technical for me. I never used margins of error before, so why should I pay attention now?

- Avoid Making a Mistake when interpreting the data!
  MOE’s may save you from saying something has changed when it hasn’t, or that something is different when it isn’t.
- Shows the range of possible estimates of a characteristic.
- Confidence intervals help you decide how confident you should be about your assertions.
U.S. Census Bureau

http://www.census.gov

“Quickfacts” on left-hand side of page is a good start
Cornell PAD
Program on Applied Demographics

The Program on Applied Demographics brings skills in demographics, economics, statistics, data gathering and data analysis. PAD works closely with the New York State Department of Economic Development, the U.S. Census Bureau and other organizations to assist them in their activities.

http://pad.human.cornell.edu

Maps, Data, Projections, ACS Calculator, Workshops, Publications, etc

NYS County profiles:
http://pad.human.cornell.edu/profiles/index.cfm

Sub-County profiles (Cities, Towns, & Villages):
http://pad.human.cornell.edu/profiles/subcounty/SchuylerMCD.pdf
I love the new PAD profiles!

But what if I want to.....

Compare counties?

Create a region?

Look at sub-county geographies?
Headwaters Socio-Economic Profile Toolkit – It’s FREE!!!
Example #1:
Run a socio-demographic report for a “region” (using whatever counties and/or states you choose)

- Download free EPS-HDT software to your computer
- Open Excel
- Select “Add-ins” from top menu
- Select “EPS-HDT” from top left, click “Select Geographies” from drop-down menu
- Select 1st General Report, Socioeconomic Measures (check box)
- Select counties or states to include in a region, and give your region a “title”
- Select geography to compare as a benchmark (entire state, non-metro part, etc).
- “Run”
Example #2:
Run a summary report comparing two or more counties

– Select “Add-ins” from top menu

– Select “EPS-HDT” from top left, click “Select Geographies” from drop-down menu

– Select “Detailed Reports, Summary” (check box)

– Select counties to compare individually (select state first). By default the system will also create a “region” of these individual counties (even if it doesn’t make sense...) so you may want to give this region a “title”. Otherwise, ignore the region in the resulting report.

– “Run”
Example #3:
Run a demographic report comparing two or more towns, villages, cities, and/or counties (sub-county geography only available for Demographic detailed report)

- Select “Add-ins” from top menu

- Select “EPS-HDT” from top left, click “Select Geographies” from drop-down menu

- Select “Detailed Reports, Demographics” (check box)

- First select the state within which you will select smaller geographies.

- Then select the geographic level. Cities and towns will be found by selecting “County subdivisions” in drop-down menu and are organized alphabetically within counties. Villages will be found by selecting “Cities and Towns and Census Designated Places (CDP)” and are organized alphabetically for the whole state.
Examples #4-11 !!!!:
Run reports comparing two or more counties, creating a region, etc using the following reports:

• Demographics
• Mining & Energy
• Services
• Travel & Tourism
• Government
• Non-Labor
• Timber
• Land Use
Features of the Headwaters System:

• Similar to PAD profiles, you can copy graphics and tables from reports
• Nice cover page, table of contents, etc.
• Includes a “study guide” on opposite page which includes “what do we measure on this page”, “why is it important”, “methods”, and additional resources”. PAD profiles also includes a glossary of terms.
• Estimates with higher margins of error are noted by orange or red font – use cautiously!
• Demographic data for all U.S. states, counties, cities, towns, villages, american indian areas, and congressional districts
Discussion

- Do you use data in your community to make decisions?
- If yes, what sources do you trust and typically rely on?
- If not, what other kinds of information is used?
- What kinds of data and information do you need to make everyday decisions in your community?
- Are there specific types of data that you wish were available but are difficult to access?
- Do you typically find it difficult to find and access the data you need?
- Please share some examples of how you use data in your planning and decision-making efforts in your community.
Links to some other useful data sources:

- State and County Quickfacts: http://quickfacts.census.gov/qfd/
- American FactFinder (population, income, education, and social characteristics): http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml
- County Business Patterns: http://censtats.census.gov/cbpnaic/cbpnaic.shtml
- Net Migration Rates for U.S. Counties: http://www.netmigration.wisc.edu/
- Religion Data: http://www.thearda.com/
- Center for Urban Research - http://www.urbanresearch.org/resources/census-2010-NYS-links-roundup
- New York State County Health Indicator Profiles: http://www.health.state.ny.us/statistics/chip/index.htm
- Comparison data on purchasing power, business activity, and workforce density for all residential ZIP codes and the 100 largest metro areas in the U.S. http://www4.uwm.edu/eti/etizip.cfm
- Historical Census Browser: http://mapserver.lib.virginia.edu/
- These and other sources are notes at the end of each chapter in the “Upstate New York in Profile” Chartbook you have received.
- Etc, etc, etc!
Thank you
& Good Luck!!!

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