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◆ American Community Survey ... Still Under Construction

[2007] Block Group Size proposal @Census

ACS data Usability & Reliability

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Presented to HartfordInfo

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◆ [Note:] Block Group Size proposal @Census

■ Proposal:

- ◆ Hoping to allow discrete data to be available outside the confidentiality parameters, Census' Geography Division had suggested changing minimum Block Group population from 600 to 1200.
- ◆ Their committee's report (9/20/07) showed an improvement in the coefficient of variation at the 1,200 minimum, but without the substantial change that warranted increasing the threshold.

■ What Next?

- ◆ Geography will report to Census' Executive Committee, who will make a recommendation, which will be published in the Federal Register in early 2008.

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- ◆ I. ACS data Usability & Reliability
 - A. Why collect Population Characteristics
 - B. Advantages/Disadvantages of ACS
 - C. Census/CtSDC/NSF recommendations
 - D. Using ACS Population Characteristics
 - E. What does "done" look like
 - F. How do you cope?

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◆ A. Why collect population characteristics

- Federal:
 - ◆ Federal fund allocation of billions of dollars
 - ◆ Protection to citizens under "Voting Rights Act"
- State-level: support programs - research new
- Local-level: grant stats – evaluate progress
- Commercial development : sites / marketing

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◆ B1. Advantages of ACS

- 1-, 3- and 5-year updates rather than once every 10 years in the Long Form (LF)
- More frequent review of characteristics questions included in the survey.

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◆ B1-a: Evaluate ACS Advantages

- Frequency – More frequent updates are good when comparable
 - With 1-year updates, don't have tracks/groups till 2010
 - With 3-year updates, have three(3) 3-year cycles by '10
 - With 5-year updates, first report is in September 2010
- ACS User Guides http://www.census.gov/acs/www/Products/users_guide/
- May need to wait for 2010 for baseline.

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◆ B1-b: Evaluate ACS Advantages

- Publishing 3- & 5-yr reports averaged over the full period requires statistical complexity
 - ◆ Census cautions against comparing 2005-2007 against 2006-2008, due to overlapping pairs of years (2006-2007), which will decrease the ability to see change through the period
 - ◆ NSF study cautioned that if you compare 1-yr attributes for a county with 3-yr characteristics for a below-65,000 town, the county has potential to look better and gain additional funds than area represented by 3-yr ACS data

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◆ B1-c: Evaluate ACS Advantages

- Re-stating questions from one Census to next
 - ◆ Census has always revised questions
 - Census is working to make questions easier for citizens to respond, so the collected data matches its use
 - As society changes, so does the need to measure and what is measured
 - ◆ Census does post how Demographic Questions have morphed:
 - <http://www.census.gov/acs/www/Downloads/Person07.pdf>

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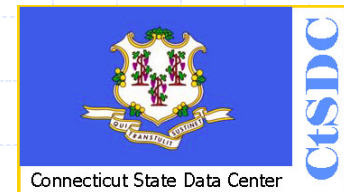
◆ B-2. Disadvantages of current ACS

■ Plan and its effect

- ◆ Reduced sample : 2000 Long-form was 17%, ACS is 2.5%
- ◆ Still a sample, as was LF, so always Margin of Error (MOE)
- ◆ Less incentive for citizens to complete, since out of sync with decennial
- ◆ Group Quarters first included in 2006
- ◆ Residency reduced to "two months"
- ◆ Tracts and Block Groups not available until 2010

■ Execution

- ◆ Margins of Error (MOE) can be **very high**
- ◆ Confidence Interval is 90%



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◆ B2-a: Disadvantages of ACS (detail)

- Reduced sample size of ACS vs. Long-Form
 - ◆ 2000 Long-form was 17% LF
 - ◆ ACS sample size averages 2.5%
 - Higher sample size in rural areas
 - Lower sample size in urban areas
 - ◆ ACS improves non-responders follow-up, to attain 2.5% goal
 - Follow-up is by phone and then a personal visit

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◆ B2-a: Disadvantages of ACS (detail)

- Still a sample so still a Margin of Error (MOE)
 - ◆ Reducing the sample size statistically increases the Margin of Error
 - For Hartford, Margin of Error for Total Population came down from 7.7% in 2005 to 6.4% in 2006
 - Census expects 3-year averaging will reduce each averaged MOE by 1/3 (ie., $6.4\% / .33 = 2.13$)
 - ◆ Standard Deviation (sampling error) on ACS will be 50% higher than for Long Form

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◆ B2-b: Disadvantages of ACS (detail)

- Less incentive for citizens to complete, since out of sync with decennial
 - ◆ People annoyed with so many details about themselves: 9 pages for householder + 3 pages for each additional person : [2006 ACS Survey](#)
 - <http://www.census.gov/acs/www/Downloads/SQuest07.pdf>
 - ◆ Poor are less likely to complete than middle class, so may not get a true spectrum from the smaller sample
 - ◆ Media rarely picks up Census' Press Releases

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◆ B2-c: Disadvantages of ACS (Detail)

- Group Quarters (GQ) included in '06 not '05
 - ◆ Thus Total Population is not comparable
 - ◆ State-wide '06 GQ is an improvement over 2000
- Some emergency shelters and vagrant residences are counted – some are not
- ACS does not plan to count homeless at soup kitchens and on the streets

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◆ C1: Advice on using ACS from Census

- Comparability Grid between '00, '05 & '06

- ◆ <http://www.census.gov/acs/www/UseData/compACS.htm#footnote>

- Case Study for correctly developing a comparison:

http://www.census.gov/acs/www/UseData/COMPARISON_CASE_STUDIES.pdf

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- ◆ C2: Advice on using ACS from CtSDC
 - Compare ACS Total Population basis
 - ◆ Against Census Estimates – Total Population (characteristics available only at County level)
 - ◆ Against State Estimates published by DPH (being prepared; no current publication date)
 - Confirm MOE has some meaning
 - ◆ That is, a MOE count that is larger than the reported attribute has little significance

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- ◆ C3: Advice on using ACS from NSF
 - The National Science Foundation, through its Committee on National Statistics, established a panel to review ACS issues:
 - ◆ [Using the American Community Survey: Benefits and Challenges.](#)
 - http://www.nap.edu/catalog.php?record_id=11901
 - ◆ Presents positives and negatives for ACS

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◆ D1. Putting ACS population attributes to work

- Federal (1) – Block Grant allocations : A number of programs could be expected to use ACS but depend on other surveys
 - ◆ Each state and Local Education District (LED) distribution under NCLB (and ESEA: Elementary & Secondary Education Act) are built statistically by the Census' Estimates office, "Small Area Income & Poverty Estimates (SAIPE) survey, which is turn is compared with the BLS' CPS survey, Annual Social & Economic Supplement
 - SAIPE expects their estimates will improve with ACS
 - Poverty is based on Estimates rather than ACS
 - ◆ Housing vacancy issue for state & local advocates – start with HUD

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- ◆ D2. Putting ACS population attributes to work
 - State- and Local- level programs from ACS
 - ◆ State-wide characteristics
 - ◆ County-wide data for all CT counties
 - ◆ Truly need small-area data for successful evaluation
 - Commercial development from ACS
 - ◆ Marketing analysis can be performed at county level
 - ◆ Choosing business sites needs at least Tract level

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- ◆ E. What does “done” look like
 - 1. Are we there yet?
 - 2. What Quality measures matter

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◆ E1 : Are we there yet?

- ◆ This program is still “under Construction”
- ◆ Until 2010, there is not a full survey available
 - With 1-year updates, don't have tracks/groups till 2010
 - With 3-year updates, have three(3) 3-year cycles in '10, but difficult to compare
 - With 5-year updates (for communities under 20,000), the first report is in 2010
 - This is 115 CT towns comprising 986,000 population
- ◆ Proof of Concept is completed, but large MOEs

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◆ E2 : Confidence: What Quality matters

- ◆ Precision – Make sure the Margin of Error gets to a steady 5% for comfort in use
- ◆ Period Averaging – compare “apples to apples” until Census removes its cautions
 - NSF study cautioned that if you compare 1-yr attributes for a county with 3-yr characteristics for a below-65,000 town, the county has potential to look better and gain additional funds than area represented by 3-yr ACS data
 - With 5-yr surveys in under 20,000 communities, stats for rate of change will be only marginally better than LF

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◆ F. How do you cope?

- ◆ Margin of Error – always check MOE before using
- ◆ PUMS (Public Use Microdata Sample) 1% and 5% are available on the FactFinder data download
 - 1.25 million “household” and 3.0 million “person” records
 - About 40% of final sample, with all housing/person items
- ◆ Census recommends their [Custom Tabulations](#) program, when you need specific data in a geography that is not within standard download
 - http://www.census.gov/acs/www/Products/spec_tabs/

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◆ Contact Information

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