AHS Overview

- Purpose of the AHS
- Sampling plan
- Sample characteristics
- Questionnaire
- Working with longitudinally linked AHS data
- Tools
AHS: Purpose

- Provide national and major metro area housing data between the censuses
- Conducted by the Bureau of the Census for the Department of Housing and Urban Development (HUD) Official
- Household survey of housing conditions and housing markets
- More detailed housing data
- Analyzing the flow of households through housing
AHS: Target Population

• All Housing Units
  – Apartments
  – Single-family homes
  – Mobile homes
  – Assisted living units
  – Vacant units

• 50 States and District of Columbia
AHS: Sampling Plan

- Stratified multistage probability sample of housing units
- Use Frame and Primary Sampling Units (PSU) developed for CPS
- Since 1985, use sample selected from 1980 Census
- Same core sample since 1985, providing a panel on flow of households through housing
- Additions of new housing units follows CPS procedures
AHS: Sample Characteristics

• National sample covers on average 55,000 housing units
• Each metropolitan area sample covers 3,000 or more housing units
• Weights derived by controlling survey to independent estimates of housing units, based on Census 2000
AHS: Sample Characteristics

• National Sample
  – Odd-numbered years
  – Throughout the country
  – (Includes the 6 largest cities -- every other time)
  – Chicago, Detroit, Los Angeles, New York, Northern New Jersey, Philadelphia
  – About 50,000 homes

• 41 Metro Areas
  – Even-numbered years
  – on a rotating basis
  – about 13 each year
  – About 3,000 homes per metro
AHS: Coverage Issues

• Units constructed without permits in permit-issuing areas
  – New Structure
  – Conversions/Mergers

• Mobile Homes
AHS: Data Collection

• National data are collected in odd numbered years

• Data for each of 47 selected Metropolitan Areas are collected currently about every six years

• Data on 6 largest metro areas collected every four years
AHS: Data Collection

- Personal visit or telephone interview using laptops.
- Questions are asked of any knowledgeable adult (16+ years) household member
- If vacant then questions asked of landlord, rental agent or knowledgeable neighbor
AHS: Data Collection

• Content areas include:
  – Household
  – Housing Unit
  – Equipment and Facilities
  – Housing costs
  – Housing and Neighborhood Quality
  – Previous residence for recent movers
  – Alterations and Replacements
Air conditioning in USA homes

- Central air: 44%
- Window units: 25%
- None: 32%

Appliances
Housing deficiencies

- Holes in floor
- Interior cracks or holes
- Peeling paint
- Exposed wiring
- No electrical outlets

All occupied
Owner-occupied
Renter-occupied

□ All occupied  □ Owner-occupied  □ Renter-occupied
Neighborhood Quality and Problems

– 68.7% of households rate their neighborhood 8 or better, out of 10.
– 6.7% live in gated communities (walls or fences).

– Whether neighborhood has crime, odors, noise, litter, and whether it is bothersome.
– Satisfaction with public transportation, shopping, schools, police.
– Neighborhood buildings abandoned or with bars on windows.
AHS: Missing Data

• Critical items imputed using the cold or hot deck procedure
• Non-critical items coded with reason missing
AHS: Weighting

- Housing Unit weights for National Sample
- Product of 9 factors dealing with
  - Probability of selection (initial sampling rate)
  - Adjust for non-response
  - Adjust for non-self-representing PSUs
  - Adjust for new and old construction
  - Control to Census Bureau HU Estimates
Working with Longitudinally Linked AHS Data

- Same as CPS, the physical housing unit, and not the household is the object of the sampling plan
- A public use control number, scrambled from the master file control number, can be used to match record of housing unit over time
AHS: Data Products

- Published books
  - U.S. Census Bureau - Customer Service
  - HUD User (www.huduser.org)
  - Superintendent of Documents

- Microdata
  - Census Bureau’s Ferret System
  - HUD’s website in downloadable format
  - CD Rom -
    - Census Bureau - Customer Service
    - HUD User
Geography for Metropolitan data products

• For each of the 47 cities
  – 3 sub-areas
    • Usually a central city
    • 2 largest counties
  – Zones (microdata)
    • (Census tract groups of 100,000 population)
Related Data

• CINCH
  • Components of inventory Change
  • Construction, Demolitions, Conversions
  • Based on AHS
  • Latest is 1980-1993 (Census)
    1985-2001 (HUD)

• Property Owners and Managers Survey (POMS) 1995
  • Survey of landlords of AHS rental units
  • Finances, management practices, maintenance
Related Data

- New York City Housing and Vacancy Survey
  - Very similar to AHS but more detailed info on rent regulation status
  - Large Sample (16,000) every 3 years
  - More geographic detail (55 sub-boro areas)
  - Reports: Census, NYC, NYU
AHS: On HUD website

www.huduser.org

- 1997 - 2005 AHS files for downloading
  - (SAS and ASCII versions)
- Summary statistics for 1997 - 2005
- A codebook for the survey
- Links to the Census Bureau website
- Information for ordering reports
AHS: On Census Bureau website

• PDF versions of AHS reports since 1973
• Access to the microdata for extracts
• FERRET system access for
  – Creating user-specified tables
• Descriptions of the surveys
  – Historical changes
  – Definitions of concepts and variables
  – Sample design, sizes, and weights

• Census AHS Branch: 301-763-3235
Tools

• HUDUSER for public use data, documentation, and “file flattener”
• DataFerrett extracts and tabulations
AHS: On Data Ferrett

<table>
<thead>
<tr>
<th>Select All Topics</th>
<th>Administrative data</th>
<th>Alterations and repairs data</th>
<th>Selected amenities</th>
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<td>Assisted housing data</td>
<td>Equipment breakdowns</td>
<td>Condition of building outside the unit</td>
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<td></td>
<td>Housing cost data</td>
<td>Internal condition of the unit</td>
<td>Characteristics of the occupants</td>
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<td>Edit flags</td>
<td>Fuels</td>
<td>General housing unit characteristics</td>
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<td>Heating equipment</td>
<td>Home equity loans</td>
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<td>Income data</td>
<td>Commuting data</td>
<td>Kitchen facilities</td>
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<td>Payments made by lodgers</td>
<td>Mortgage data</td>
<td>Neighborhood characteristics</td>
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<td>Respondent's opinion of unit and neighborhood</td>
<td>Mobile home data</td>
<td>Characteristics of owner occupied units</td>
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<td>Plumbing and sewage disposal data</td>
<td>Recent mover data</td>
<td>Size of unit and lot</td>
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<tr>
<td></td>
<td>Monthly utility costs</td>
<td>Characteristics of vacant units</td>
<td></td>
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</tbody>
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RDC Files and Use

- Many AHS samples available on the RDC network
- No suppressions
- Full geography
- Files very similar to public use files
AHS: Research Questions

• Housing Rehabilitation and American Cities
  • Estimates of rehabilitation needs (Millennial Housing Commission Report)
• Worst Case Needs (HUD)
  • High rent burdens
  • Substandard housing
• Housing Profile: Out Of Order (Census)
  • Census report on equipment breakdowns, leaks, etc.
• The Value of Owner Occupation in Neighborhoods
  • Spillover effects of homeownership on property values of neighbors (Journal of Housing Research)