Current data linkage infrastructure

- Datasets housed at the Census Bureau
  - Surveys, administrative records
  - Decades-long effort
- Record linkage methods
  - Steady state system to create unique person IDs, Protected Identification Keys (PIKs)
  - Use PIKs to link datasets
- Provisioning protocols enable secure access
Access and Use of Administrative Records

(b) The Secretary may acquire, by purchase or otherwise, from States, counties, cities, or other units of government, or their instrumentalities, or from private persons and agencies, such copies of records, reports, and other materials as may be required for the efficient and economical conduct of the censuses and surveys provided for in this title.
## Data sources

<table>
<thead>
<tr>
<th>Federal Administrative Records</th>
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<tbody>
<tr>
<td>• Health and Human Services</td>
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<td>• Housing and Urban Development</td>
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<td>• Internal Revenue Service</td>
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<td>• Social Security Administration</td>
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<td>• Bureau of Justice</td>
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<td>• U.S. Postal Service</td>
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<td>• Office of Personnel Management</td>
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<td>• Selective Service</td>
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<thead>
<tr>
<th>State Administrative Records</th>
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<tr>
<td>• Supplemental Nutrition Assistance Program</td>
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<td>• Unemployment Insurance</td>
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<tr>
<td>• Women, Infants, and Children</td>
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<tr>
<td>• Low Income Energy Assistance Program</td>
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<td>• Temporary Assistance for Needy Families</td>
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<td>• Child Care Subsidy</td>
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<td>• Permanent Fund</td>
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<th>Third Party Data</th>
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<tbody>
<tr>
<td>• Contact</td>
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<td>• Household</td>
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<td>• Housing</td>
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</table>
Uses for program evaluation, research

- Many datasets either cover one domain deeply or many topics shallowly
- Integrated data can **fill in knowledge gaps**
  - Develop comprehensive understanding of outcomes across different social domains
  - Observe long-term outcomes
- **Cost-effective**: Re-use of data is no or low cost
- **No additional burden** to respondents and program participants
Descriptive research products

- Census Bureau censuses, surveys, programs
- State programs - products used for outreach, understanding characteristics of the population they serve
  - Cross-domain
  - SNAP, WIC, or TANF linked with American Community Survey (ACS)
  - Table packages – household, sociodemographic, socioeconomic characteristics
  - Interactive visualization (SNAP and WIC)
Match Ratio of 2010 Census and Administrative Records Persons by County
Interactive SNAP profile visualization

Estimated Eligibility

Estimated Access

Number of Cases

Number of Entries

Number of Exits

Number of Lapses

Source: Maps are generated using 2011-2012 New York SNAP AR linked to the 2012 1-year ACS. Charts are generated using 2012 New York SNAP AR.

Note: Counties that do not meet minimum sample size requirements have missing values.
More research products

- Modeled, cross domain
  - Do Doubled-up Families Minimize Household-level Tax Burden?
    - How complex households pool resources
  - The EITC over the business cycle: Who benefits?
    - CPS ASEC, EITC 2005 to 2010
    - Employment and eligibility patterns over the Great Recession
  - STEM Training and Early Career Outcomes of Female and Male Graduate Students
    - UMETRICS university administrative data, 2010 Census, W-2 forms
    - Gender differences in early STEM career and earnings
  - Local Labor Market Conditions & Program Participation Dynamics
    - NY SNAP, Census 2010
    - SNAP exit and county unemployment, industry employment growth
Even more research products

- Methodological
  - Evaluating Race and Hispanic Origin Responses of Medicaid Participants Using Census Data
    - Medicaid, Census 2010, ACS, Census 2000
    - Quality of Medicaid responses of race and Hispanic origin
  - Medicare Coverage and Reporting: A Comparison of CPS and Administrative Records
    - Medicare Enrollment, CPS ASEC
    - Medicare undercount, response validation, insurance coverage
  - When Race and Hispanic Origin Reporting are Discrepant Across Administrative Records and Third Party Sources: Exploring Methods to Assign Responses
    - Census 2010, administrative data, third party sources
    - Race and Hispanic origin reporting across sources
And even more research products

- Longitudinal, long-term outcomes
  - National Longitudinal Mortality Study
    - CPS ASEC, death certificates
    - Differentials in demographic and socioeconomic characteristics on mortality
  - Does Childcare Setting Affect Grade Retention Risk? Using Linked Administrative Data to Assess U.S. Low-Income Children’s Long-Term School Trajectories
    - Child Care and Development Fund, ACS, SIPP, CPS October School Enrollment Supplement (NCES)
    - Longer term effects of center-based versus home-based day care on child grade retention (research in early stages)

Opportunities for your example here...
Infrastructure expansion

- Expanding infrastructure to support program evaluation, including performance
  - Especially interested in randomized controlled trials (RCTs)
  - Need identified data in order to link

- Streamlining access process and protocols
  - More timely
  - Census facilitates access
  - Continue to enable secure access
  - Working on expanding remote access
New data sources and infrastructure

- **Data**
  - Federal, state & local survey and program data; third party data; data in the *wild*

- **Tools**
  - Metadata, linkage and integration, analysis, maps, networks, visualizations

- **Insight**
  - Program administrators, policy makers, research community, public

*With secure access, privacy protections, and data stewardship!*
Knowledge-making community

- Barriers to effective evidence-building
  - Knowledge gaps, data gaps
  - Fragmented, disconnected research
- Solution: Knowledge management by research and evaluation community, “knowledge-making”
INTREPID

- “Innovation Network Transforming Research, Evidence, and Practice with Integrated Data”
- A community of knowledge makers innovating evidence-based solutions for a better society
- Census Bureau’s roles
  - Data linkage infrastructure for integrating data
  - Space for sharing results, best practices, research gaps
  - Initiate INTREPID in the near future
  - Partnering with HUD
Do you have ideas?

We want to help!
Here are some ways to work with us...
Expansion to MTO intervention

- By Fall of 2016, expect to hold the Department of Housing and Urban Development’s (HUD) **Moving to Opportunity** (MTO) data
- Expect to hold **Family Options Study** data Fall 2017
- First intervention data in the Census Bureau Data Linkage Infrastructure
- HUD is potentially supporting researchers’ access fees through September 2020
Pilot evaluation projects

- Request for Proposals for evaluation studies that can benefit from Census’ infrastructure
- With Chapin Hall at the University of Chicago, supported by the Laura and John Arnold Foundation
- “Using Linked Data to Advance Evidence-Based Policymaking: Helping Projects Utilize the U.S. Census Bureau Linkage Infrastructure”
Goals

- Demonstrate an efficient way to link state and local data to Census-held data to answer important questions while protecting privacy.
- Inform Federal, state, and local strategies for facilitating data linkage across programs.
- Create compelling use cases for strengthening the Census data linkage infrastructure to serve multiple levels of government.

Letter of Interest submissions open until December 15. See: [www.chapinhall.org/pages/RFP-Linked-Data-Evidence-Based-Policymaking](http://www.chapinhall.org/pages/RFP-Linked-Data-Evidence-Based-Policymaking)
Conference

- *Using Administrative Data for Program Evaluation and Research: Recent Successes and Next Steps*
- Sponsored by the Economic Research Service of the USDA and the U.S. Census Bureau
- Nov 1 and Nov 2
- Washington, D.C., WebEx available Nov 1 only
- To register, email: ADRM.data-linkage@census.gov
Contact us

Melissa C. Chiu
Data and Evaluation Outreach Manager
Center for Administrative Records Research and Applications
U.S. Census Bureau
Melissa.C.Chiu@census.gov, 301-763-2421

Information, Conference Registration
ADRM.data-linkage@census.gov

Census Bureau Data Linkage Infrastructure:
http://www.census.gov/datalinkage

CARRA Working Papers:
http://www.census.gov/srd/carra/