



# Leveraging Administrative Data to Study Characteristics and Outcomes of HUD Tenants

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July 30, 2019

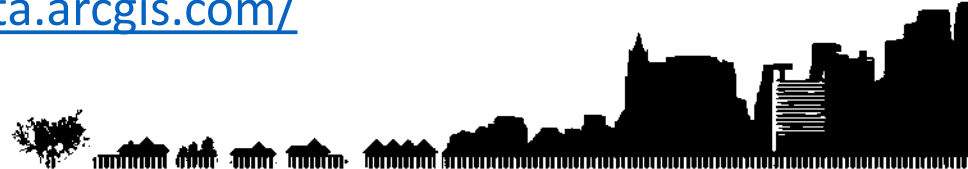
## Topics Covered Today:

- Uses of HUD's administrative data on assisted tenants
- Ways that HUD leverages tenant administrative data through data linkages and research partnerships
- Examples of data-matching projects and the insights gained from these projects

## Three Major Uses of HUD's Administrative Data

### 1. Monitoring and Reporting

- Collected for the purpose of program administration and oversight.
- Is the tenant eligible? How much rent will they be charged? Is the Public Housing Authority (PHA)/project owner administering the housing assistance program in compliance with program rules?
- Open data:
  - Picture of Subsidized Households:  
<https://www.huduser.gov/portal/datasets/assthsg.html>
  - EGIS Open-Data Storefront:  
<https://hudgis-hud.opendata.arcgis.com/>



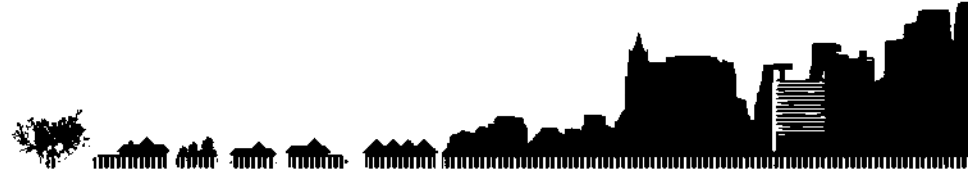
## PD&R'S EVIDENCE-BUILDING ACTIVITIES

### 2. Expand HUD's Knowledge Base and Inform Policy

- How can HUD's policies be more responsive to the needs of HUD tenant and stakeholders?
- How will tenants/PHAs/property owners/HUD be affected by proposed policy changes?

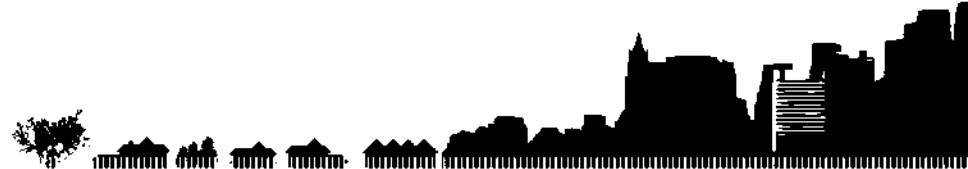
### 3. Evaluation

- Are HUD programs achieving their intended goals?
  - Do particular programs, policies, or interventions achieve better results?
- In all three categories, HUD data can be **linked** with survey data and other administrative datasets to answer research and policy questions not answerable by HUD data on its own



## Data Linkages Increase the Value of HUD's Administrative Data

- Provide information of interest to HUD, policymakers, and practitioners that was not previously available
- Does not require new data collection (cost effective), and in some cases can reduce respondent burden
- Coverage: Universe of program participants. Can support research designs such as propensity score matching or the use of a synthetic control group
- Longitudinal: Can be used to track individuals across time, including long-term tracking beyond the intervention period

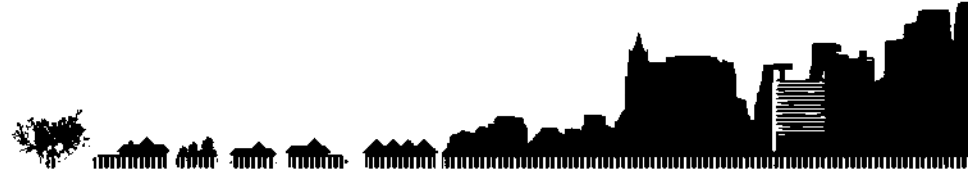


## Type of Agreements that Facilitate Data-Matching Projects

- IAA, MOU (Inter-Agency Agreement, Memorandum of Understanding)
- Contracts, Grants
- Research Partnerships
  - [https://www.huduser.gov/portal/oup/research\\_partnerships.html](https://www.huduser.gov/portal/oup/research_partnerships.html)
- Data Licenses
  - [https://www.huduser.gov/portal/research/pdr\\_data-license.html](https://www.huduser.gov/portal/research/pdr_data-license.html)

## PII and Privacy Risk

- HUD's databases contain confidential Personally Identifiable Information (PII)
- Examples: Names, Social Security Number, Date of Birth, Address
- Privacy protections are built into every data sharing agreement that PD&R enters into, with the goal of:
  - guaranteeing that data containing PII is restricted to a secure computing environment; and
  - ensuring that only the researchers authorized to use the data have access to it.
- We also have a strict limit on the disclosure of information about small numbers of tenants (at highest risk of re-identification)



## HUD Tenant Administrative Databases

**PIC** – Public and Indian Housing Information Center (HUD Form 50058)

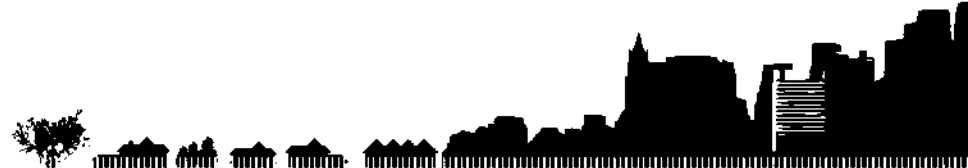
- Tenant data collected by Public Housing Authorities (PHAs)
- Programs: Public Housing and Housing Choice Voucher (HCV)

**TRACS** – Tenant Rental Assistance Certification System (HUD Form 50059)

- Tenant data collected by project owners for Multifamily programs
- Programs: Project-Based Section 8, Section 202 & 811, etc.

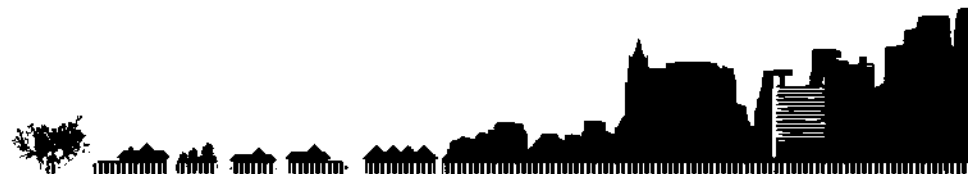
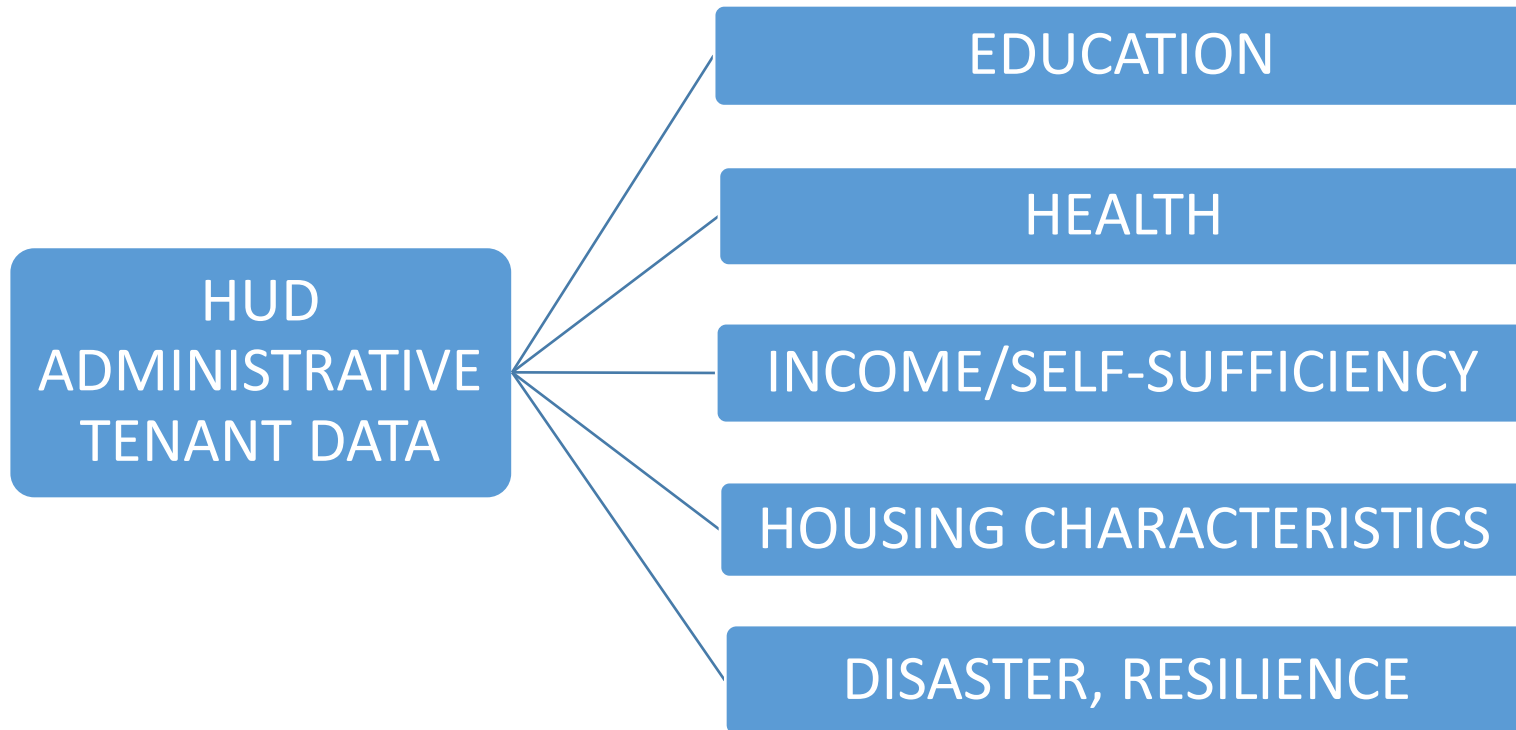
**LIHTC** – Low Income Housing Tax Credit (HUD Form 52697)

- Tax credit is administered by the Treasury Department, HERA (2009) mandated that tenant data be collected and sent to HUD

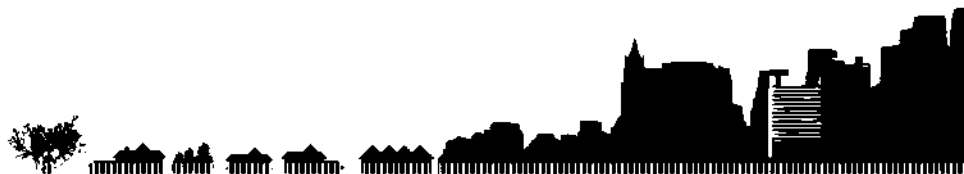
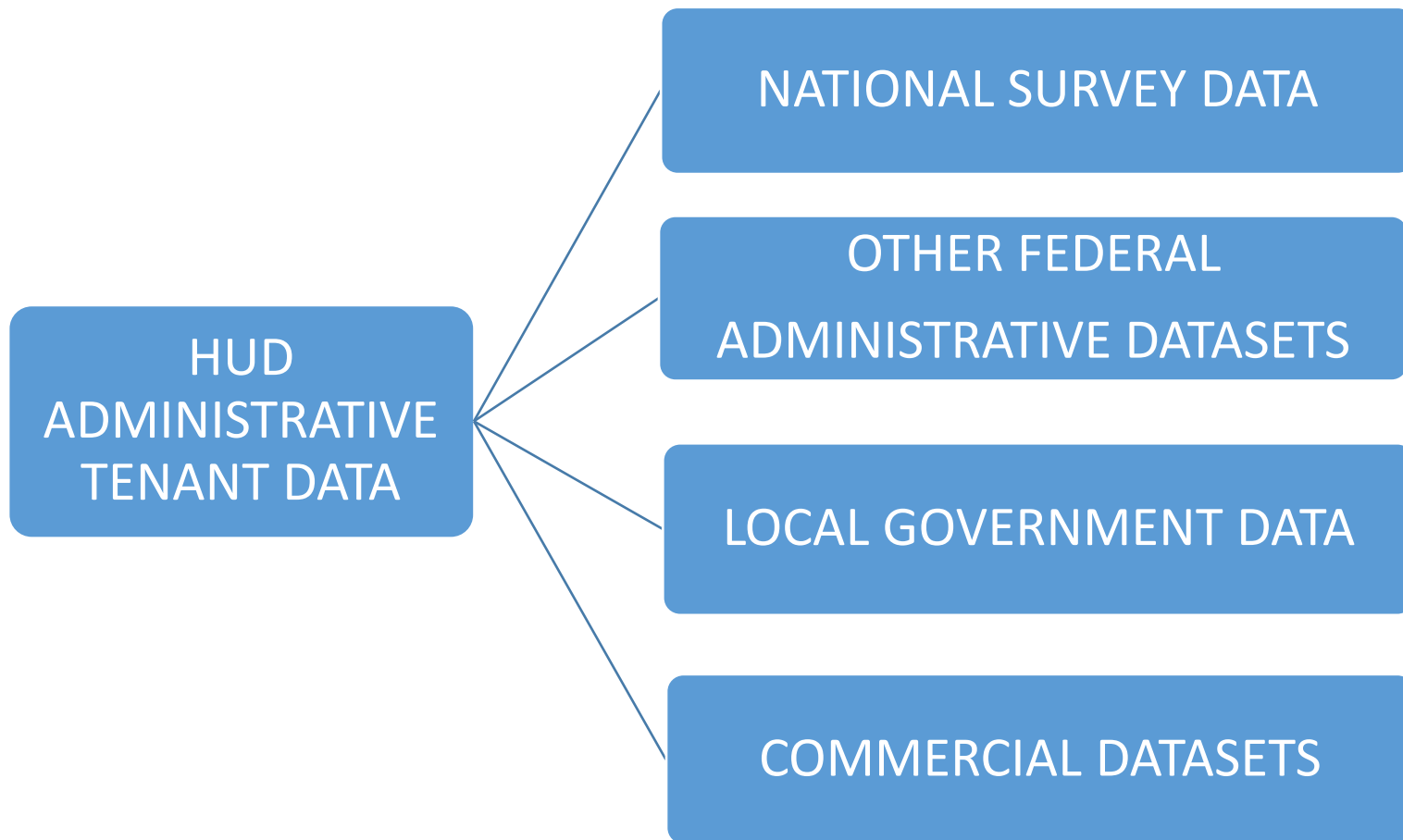




# EXAMPLES OF RESEARCH TOPICS



# DATA MATCHING EXAMPLES

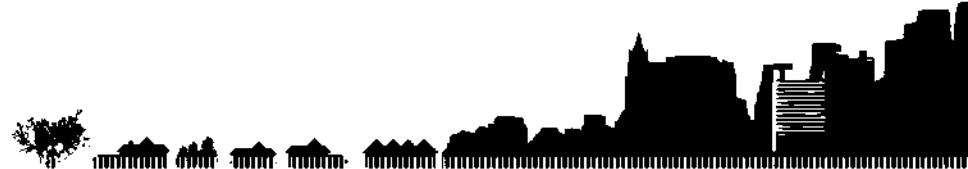


## American Community Survey (ACS), Census Bureau

- ACS is the main source of information in the U.S. for demographic and housing data
- Linkage value added: veteran status, health insurance, disability, labor force activity, internet and computer access

### *Examples of what we've learned:*

- In 2014, approximately 280,000 veterans lived in HUD-assisted housing.
- Approximately 54% of HUD-assisted households had access to high-speed internet at home, and 54% had a desktop or laptop at home.

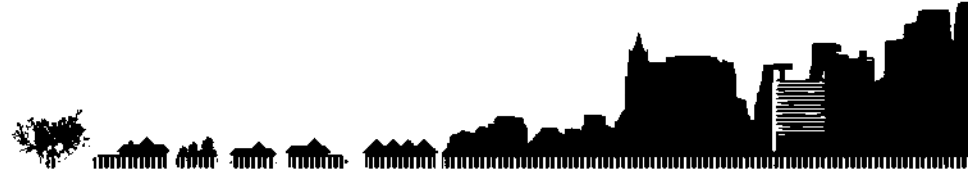


## American Housing Survey (AHS), HUD-Census Bureau

- The AHS is the most comprehensive national housing survey in the United States.
- Linkage value added: housing characteristics, including the physical condition of the unit

## Other Datasets in CARRA, Census Bureau

- CARRA: Center for Administrative Records and Research
- CARRA has many federal and state administrative and survey datasets that have been linked to each other and can be used for research purposes (see website for complete list)



# EXAMPLES OF DATA-MATCHING WITH NATIONAL SURVEY DATA



## National Health Interview Survey (NHIS) and National Health and Nutrition Examination Survey (NHANES), CDC/NCHS

- Nationally representative health surveys on a range of health topics
- Linkage value added: physical and mental health, healthcare utilization and access, health behaviors

### *Examples of what we've learned about HUD-assisted **adults**:*

Compared to unassisted low-income renters and the general population:

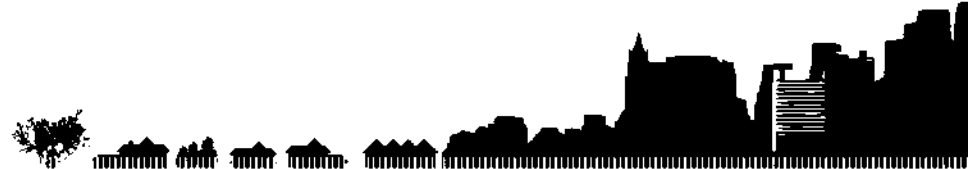
- HUD-assisted adults reported greater prevalence for serious chronic ailments such as heart disease, diabetes, and asthma.
- HUD-assisted tenants reported the highest rate of visiting the emergency room two or more times during the prior 12 months.
- More than one-third of HUD-assisted adults reported their health as either fair or poor.
- The majority of HUD-assisted adults were overweight or obese.
- 61% reported having a disability at the time of their health interview. (compared to 27.5% of adults identified as disabled in HUD's tenant data)



## National Health Interview Survey (NHIS) and National Health and Nutrition Examination Survey (NHANES), CDC/NCHS

*Examples of what we've learned about HUD-assisted **children** (note: children represent 3.6 million of the ~10 million HUD-assisted persons):*

- Among HUD-assisted children (ages 0-17 years), 5 percent had a knowledgeable adult report their health as fair or poor.
- During the year prior to the survey, 14 percent of HUD-assisted children visited the emergency room two or more times.
- 21% percent of HUD-assisted children had asthma.
- Most HUD-assisted children ages 0–17 years had insurance coverage via public health insurance programs (87 percent) and 4 percent were uninsured.



# EXAMPLES OF DATA-MATCHING WITH NATIONAL SURVEY DATA



## National Center for Health Statistics

CDC > NCHS > Data Linkage



Data Linkage

What's New

Using Linked Data Products

NDI Mortality Data +

CMS Medicare Data +

CMS Medicaid Data +

**HUD Housing Assistance Program—Data**

Restricted-Use Data

Linkage Methods / Analytic Support

USRDS End-Stage Renal Disease Data +

SSA Benefit History Data +

National Hospital Care Survey Data Linkages +

FAQs



## NCHS Data Linkage

### NCHS Data Linked to HUD Housing Assistance Program Files

NCHS has linked 1999-2016 National Health Interview Survey (NHIS) and 1999-2016 National Health and Nutrition Examination Survey (NHANES) to administrative data through 2016 for the Department of Housing and Urban Development's (HUD) largest housing assistance programs: the Housing Choice Voucher program, public housing, and privately owned, subsidized multifamily housing. Linkage of NCHS survey participants with HUD administrative records provides the opportunity to examine relationships between housing and health.

### NCHS Surveys Linked to HUD Administrative Data

- 1999-2016 National Health Interview Survey (NHIS)
- 1999-2016 National Health and Nutrition Examination Survey (NHANES)

### Linked NCHS–HUD Data Bibliography

- [Linked HUD Data Citation List \(Revised 06/17/2019\)](#) [PDF – 151 KB]

### Questions

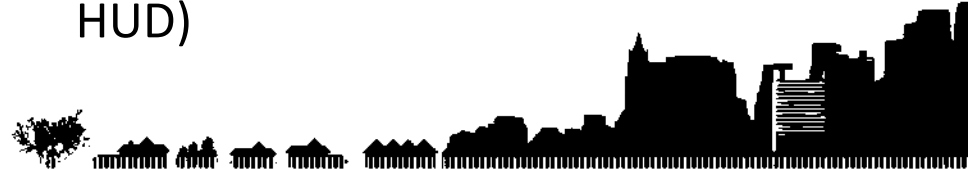
## Data-Matching with Medicare and Medicaid Claims Data

### RESEARCH TO INFORM POLICY

- Medicare and Medicaid Use Among Older Adults in HUD-Assisted Housing (Lewin Group, HHS-ASPE, HUD)
- Hurricane Sandy Data Enclave (Acumen, HHS-ASPR, FEMA, DOE, HUD)
- Affordable Senior Housing and Health (UMass Medical School, using MA All Payers Claim Database and home care assessment data for home care programs managed by the MA Office of Elder Affairs, includes LIHTC properties)

### PROGRAM EVALUATION

- Support and Services at Home (SASH) Evaluation (RTI, HHS-ASPE, HUD)
- Evaluation of the Supportive Services Demonstration for Elderly Households in HUD-Assisted Multifamily Housing (Abt, HHS-ASPE, HUD)
- Evaluation of the Section 811 PRA Program: Supportive Housing for Persons with Disabilities (Abt, HUD)





### Data-Matching with Wage and Employment Data – National Database of New Hires (NDNH), HHS (OCSE)

- Evaluation of the Family Self-Sufficiency (FSS) Program (MDRC, HUD)
  - FSS program helps public housing and voucher participants to become self-sufficient through education, training, case management, and other supportive services.
- Evaluation of the Jobs Plus Program (MDRC, HUD)
  - Jobs+ program offers employment services, earned-income disregard, and community support for work.
- Family Options Study (Abt, HUD)
  - Homeless families were randomly assigned different interventions: permanent housing subsidies, community-based rapid re-housing, project-based transitional housing, or usual care (control).



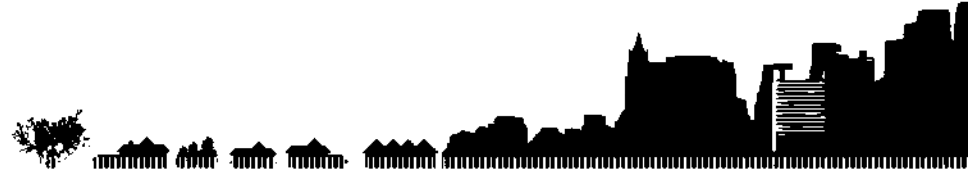
## Education and Well-Being of Children in Assisted Housing Programs

(Philadelphia, PA, Allegheny County, PA, South Carolina, Washington State, Milwaukee, WI, New York, NY)

- Multi-site study, in collaboration with AISP: Actionable Intelligence for Social Policy
- HUD tenant data was linked to state and local datasets: health, social services, education, employment, corrections, etc.
- Methodology: Used propensity score matching to compare children in HUD-assisted housing with a comparison group over a 5-year period

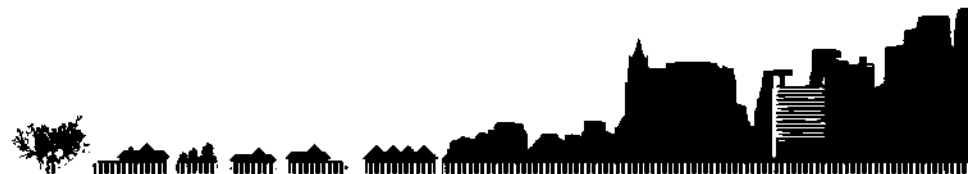
### *Examples of what we've learned:*

- Findings from WA State: HUD assistance was associated with greater housing stability and connection to social services. No effect was found on educational outcomes (test scores, attendance, graduation)



## Housing Search Frictions: Evidence from Detailed Search Data and a Field Experiment (Bergman, Chan)

- Showed school quality information (GreatSchools.org) to randomly selected users of the GoSection8 website during their (voucher) housing search, and used HUD admin data to track where users eventually move



# EXAMPLES OF DATA-MATCHING WITH OTHER HUD DATASETS

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## Moving to Opportunity Study (MTO)

- Raj Chetty linked MTO data to IRS earnings records to study long-term effects of moving on children's earnings in adulthood

## Homeless Management Information System (HMIS)

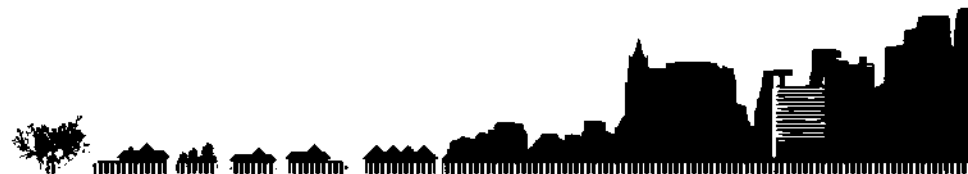
- Client-level data on persons receiving homelessness services, has been linked with Medicaid data

## FHA Single Family Data Warehouse Integrated Database (SFDW, IDB)

- FHA mortgage data has been linked with the ACS to provide current information on demographic and housing characteristics

## Using HUD tenant data to test behavioral nudges (with GSA OES)

- Linked tenant data with Dept. of Education (FAFSA) data to test effect of letters, robocalls, emails that encouraged completion of the FAFSA.



## Future Projects

- Research Roadmap
- HUD-FEMA match
- Reason for exit from housing assistance programs
- Anticipate data improvements resulting from:  
Federal Evidence-Based Policymaking Act, Federal Data Strategy, and GSA Centers of Excellence
- PD&R is always looking for research partners and ideas, check out [www.huduser.gov](http://www.huduser.gov) for more information



# THANK YOU

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