

# The Importance of Place: New Insights from Large Scale Data

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Future Directions for Social and Behavioral Science Methodologies in the Next  
Decade: A Workshop

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# Introduction

- ▶ Large-scale data have transformed social science research
- ▶ This talk discusses this trend in spatial research on the effects of place on economic outcomes by providing specific examples
- ▶ Conclude by highlighting areas where the creation of new data will push the research frontier

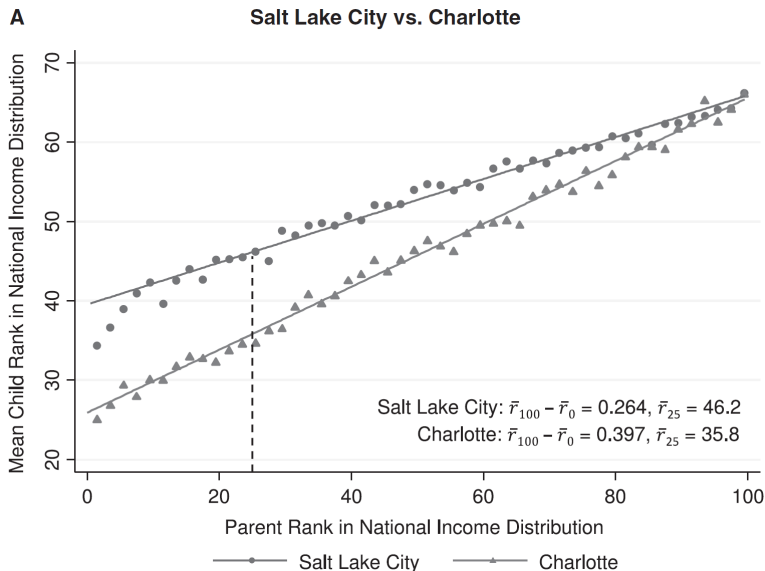
# Detailed Roadmap

- ▶ New insights on geography of economic opportunity
- ▶ Causal estimates of the effects of moving
  - ▶ Long-run economic success
  - ▶ Health
- ▶ Directions for the future:
  - ▶ New Census data products
  - ▶ New historical data created using machine-learning methods

# Where is the land of opportunity?

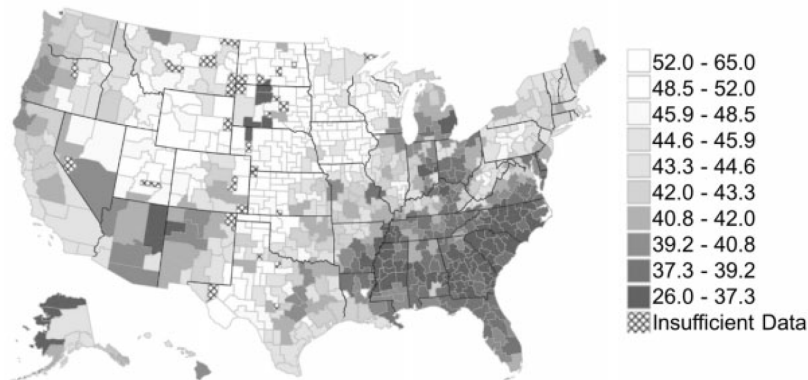
- ▶ Chetty et al. (2014):
  - ▶ National and location-specific estimates of intergenerational mobility for the U.S.
  - ▶ Administrative data:
    - ▶ IRS tax records for children born 1980-1982 (measured 2011/2012)
    - ▶ Parent income measured between 1996-2000 when children were between 15 and 20
  - ▶ Compare rates of economic success (mobility) of children across the U.S.

# Chetty et al., (2014), Spatial Mobility



# Chetty et al., (2014), Spatial Mobility (continued)

**A Absolute Upward Mobility: Mean Child Rank for Parents at 25th Percentile ( $\bar{r}_{25}$ ) by CZ**



# What policies can be effective for promoting opportunity?

- ▶ Can we move to opportunity?
  - ▶ Experimental and quasi-experimental studies relying on detailed administrative records
    1. Moving-to-Opportunity (MTO)
    2. Gautreaux Assisted Housing Program
    3. Hurricane Katrina

# Moving to Opportunity (MTO)

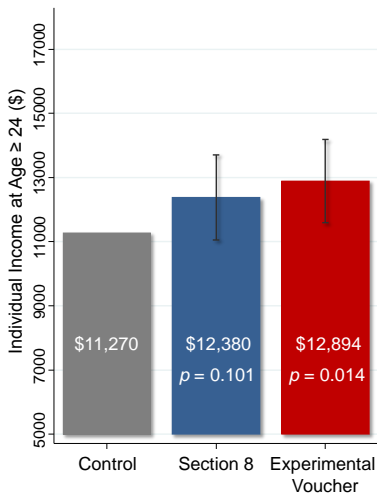
- ▶ MTO housing voucher experiment
  - ▶ Nearly 5,000 families from 5 cities: Baltimore, Boston, Chicago, LA, New York
  - ▶ Families assigned to one of three groups:
    1. Experimental vouchers: restricted to low-poverty neighborhoods
    2. Section 8 vouchers
    3. Control (no voucher)
- ▶ New analysis by linking program records to IRS tax records (Chetty et al., 2016)



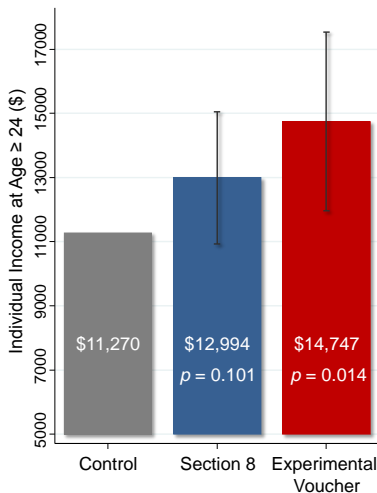
# Chetty et al., (2014), Spatial Mobility (continued)

## Impacts of MTO on Children Below Age 13 at Random Assignment

(a) Individual Earnings (ITT)



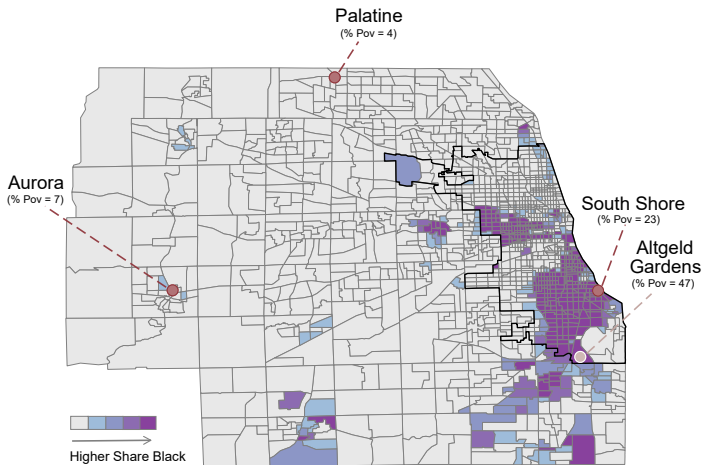
(b) Individual Earnings (TOT)



# Gautreaux

- ▶ Relocation program in Chicago created in response to a desegregation lawsuit
  - ▶ Relocated more than 7,000 Black, low-income families
  - ▶ New neighborhoods:
    1. General areas (often suburban, predominately White, low-poverty)
    2. Revitalizing areas (within Chicago with higher share minorities)
- ▶ Recent analysis based on linking program and administrative records based on U.S. Census Bureau Evidence Building Project Series (Chyn et al., 2022)
- ▶ Main finding: Desegregating moves to predominately white and low-poverty communities increased long-run earnings and wealth and increased later-life neighborhood diversity

# Gautreaux Program Relocations



Notes: This figure provides a map of selected origin and placement neighborhoods for Gautreaux participants.

# Gautreaux

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# Hurricane Katrina

- ▶ Katrina:
  - ▶ One of the most costly storms in U.S. history and devastated the Gulf Coast in 2005
  - ▶ Displaced more than 1 million residents
- ▶ New analysis of the health impacts using comprehensive administrative data from 1992 to 2013 (Deryugina and Molitor, 2020)
  - ▶ Track elderly and long-term disabled over time and across place
  - ▶ Compare Medicare cohorts from New Orleans (before Katrina) to comparable cohorts from 10 other cities

# Deryugina and Molitor (2020), Health Impacts of Katrina

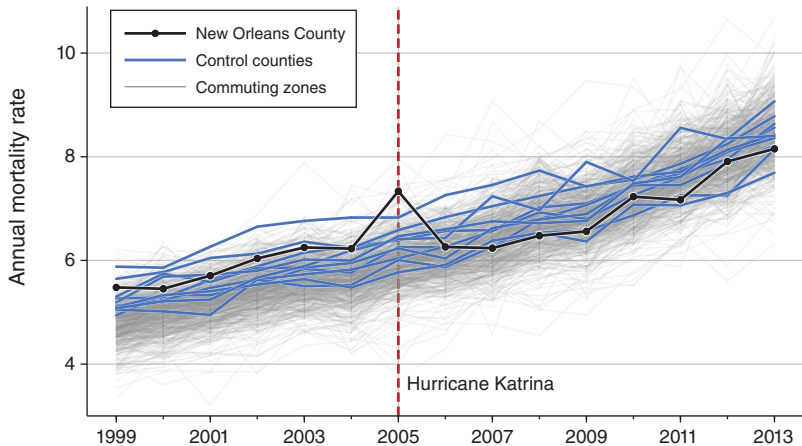
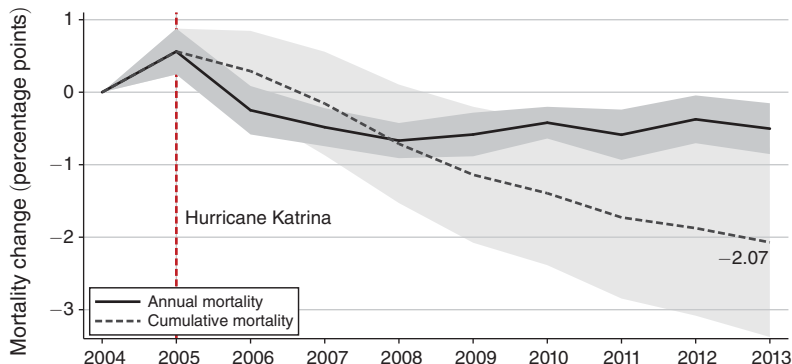


FIGURE 1. COHORT ANNUAL MORTALITY RATES FOR NEW ORLEANS VERSUS OTHER AREAS

# Deryugina and Molitor (2020), Health Impacts of Katrina

Panel A. Annual and cumulative mortality



# New data products can push the research frontier

- ▶ Administrative records to create new measures of intergenerational mobility across space
  - ▶ Link IRS and Census records to study cohorts born during the 60s and 70s (Alexander et al. 2024)
  - ▶ Link 1969-1990 decennial Census records through the Decennial Census Digitization and Linkage (DCDL) Project
- ▶ Large-scale genealogy collections to study long-run effects of historically significant events
  - ▶ Link FamilySearch and Census records to study the effects of 19th century land runs (Ellsworth et al. 2024)
- ▶ Machine-learning methods to create systematic records of forgotten historical events
  - ▶ Use large-language models (LLMs) to search millions of newspaper pages for racial violence and minority displacement (1860-1930) (Bazzi et al. 2024)



# Keys to Sustaining Progress

## 1. Resources:

- ▶ Bandwidth to support the creation of new administrative data products at the U.S. Census Bureau
- ▶ Funding for government and academic research teams to create new data products

## 2. Administrative record sharing:

- ▶ Continue to promote data sharing across agencies to create new data products

## 3. Access to research products:

- ▶ Support dissemination and expansion in access to newly created data products

# References

- Raj Chetty, Nathaniel Hendren, Patrick Kline, and Emmanuel Saez. Where is the land of opportunity? the geography of intergenerational mobility in the united states. *The Quarterly Journal of Economics*, 129(4):1553–1623, November 2014.
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