# Race, Place, and Social Mobility

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Disclaimer: Any opinions and conclusions expressed herein are those of the author and do not necessarily reflect the views of the U.S. Census Bureau. All results have been reviewed to ensure that no confidential information is disclosed. The statistical summaries reported in these slides have been cleared by the Census Bureau's Disclosure Review Board release authorization numbers CBDRB-FY18-195 and CBDRB-FY18-319. All values in the tables and figures that appear in this presentation have been rounded to four significant digits as part of the disclosure avoidance protocol. Unless otherwise noted, source for all tables and figures: authors calculations based on Census 2000 and 2010, tax returns, and American Community Surveys 2005-2015.



# Research

Race and Economic Opportunity in the United States

Opportunity Atlas: Mapping the Childhood Roots of Social Mobility

Comprehensive census tract-level atlas of children's outcomes in adulthood

Children's earnings distributions, incarcerations rates, and other outcomes in adulthood by parental income, race, and gender

Users can view data for every census tract in America, overlay their own data, export into a data set for their own analysis





# Data Sources and Sample Definitions

Data sources: Census data (2000, 2010, ACS) covering U.S. population linked to federal income tax returns from 1989-2015

Link children to parents based on dependent claiming on tax returns

Target sample: Children in 1978-83 birth cohorts who were born in the U.S. or are authorized immigrants who came to the U.S. in childhood

Analysis sample: 20.5 million children, 96% coverage rate of target sample





# Variable Definitions

Parents' pre-tax household incomes: mean Adjusted Gross Income from 1994-2000, assigning non-filers zeros

Children's pre-tax incomes measured in 2014-15 (ages 31-37)

Non-filers assigned incomes based on W-2's (available since 2005)

To mitigate lifecycle bias, focus on percentile ranks: rank children relative to others in their birth cohort and parents relative to other parents

Also examine other outcomes in Opportunity Atlas: marriage, teenage birth, incarceration, ...





# **Estimating Mean Outcomes by Tract**

In each tract c, for each race r and gender g, regress children's outcomes on a smooth function of parent rank:

$$y_{icprg} = \alpha_{crg} + \beta_{crg} \times f_{rg}(p_{icrg}) + \varepsilon_{icprg}$$

In practice, many children move across tracts in childhood

Weight children in each tract-level regression by fraction of childhood (up to age 23) spent in that tract

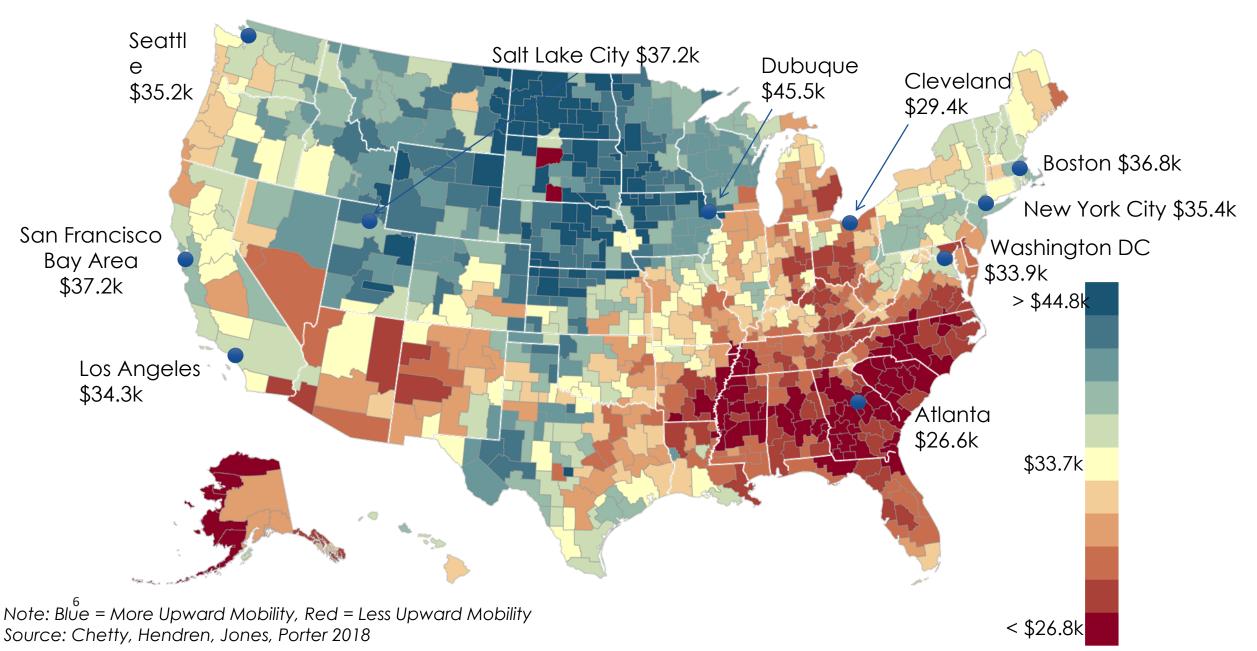
\*For additional technical details see Chetty, Hendren, Jones, Porter 2018.





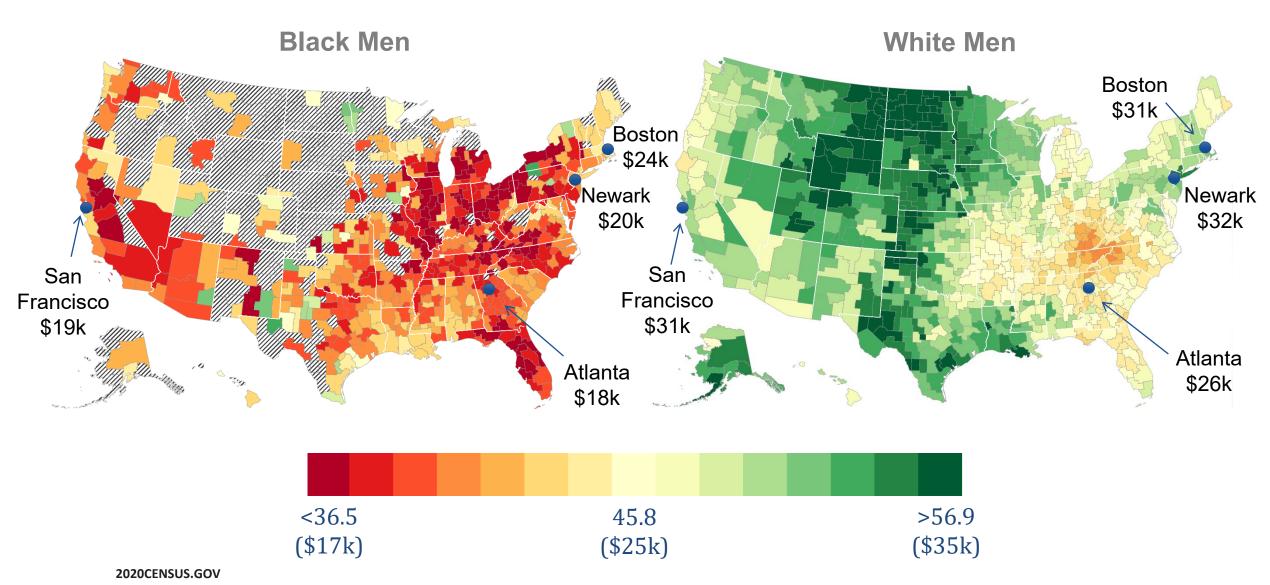
#### The Geography of Upward Mobility in the United States

Average Household Income for Children with Parents Earning \$27,000 (25th percentile)



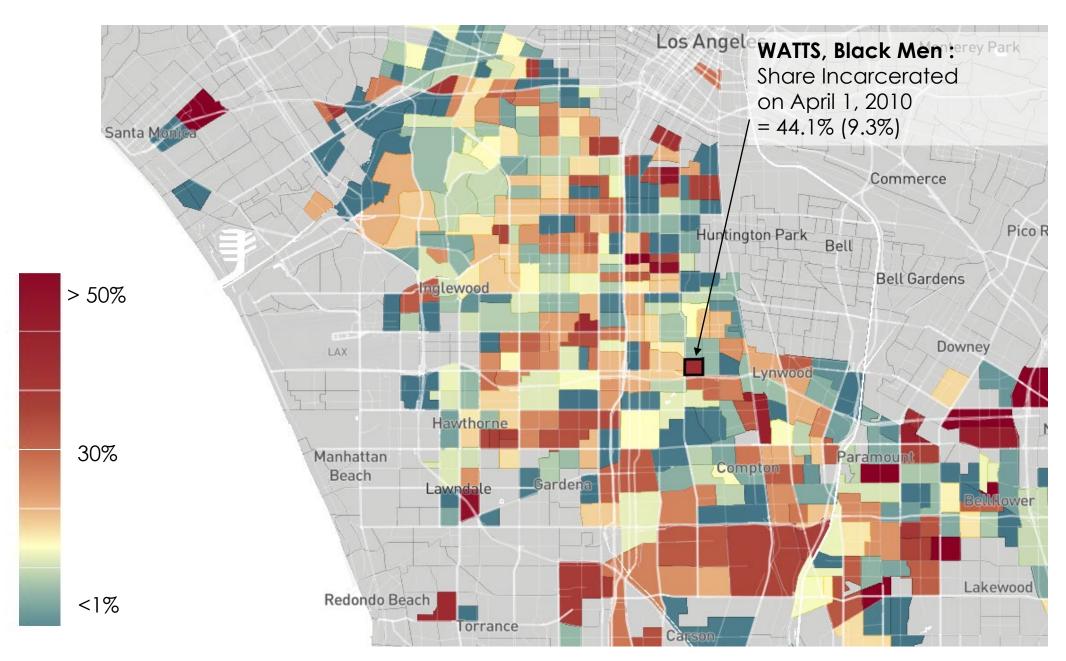
### Two Americas: The Geography of Upward Mobility by Race

Average Individual Income for Boys with Parents Earning \$25,000 (25th percentile)

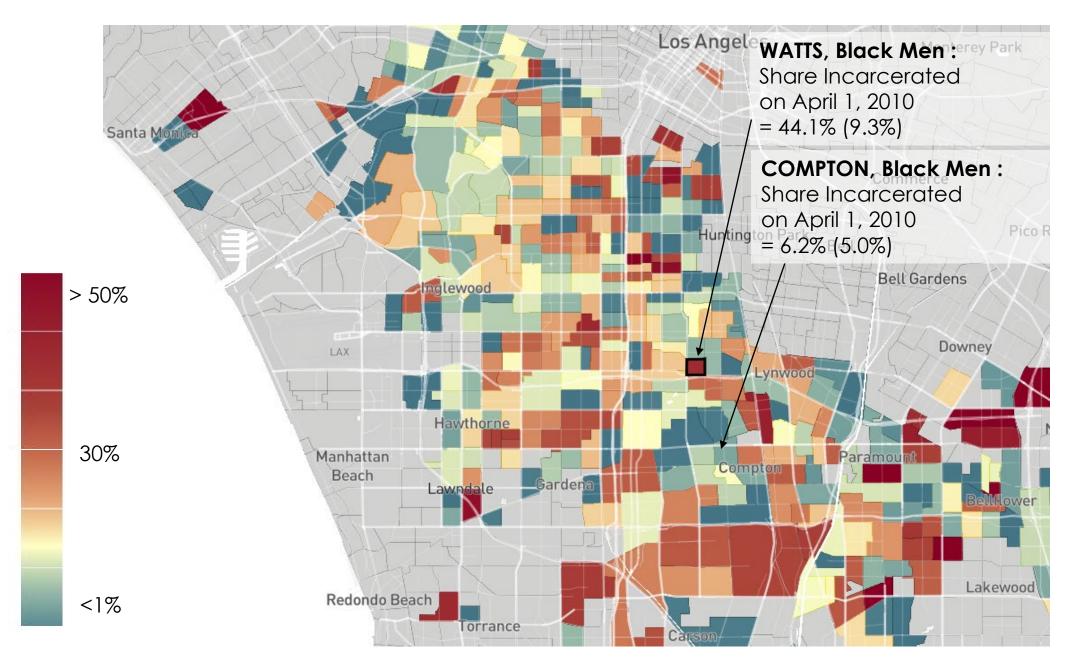


Note: Green = More Upward Mobility, Red = Less Upward Mobility; Grey = Insufficient

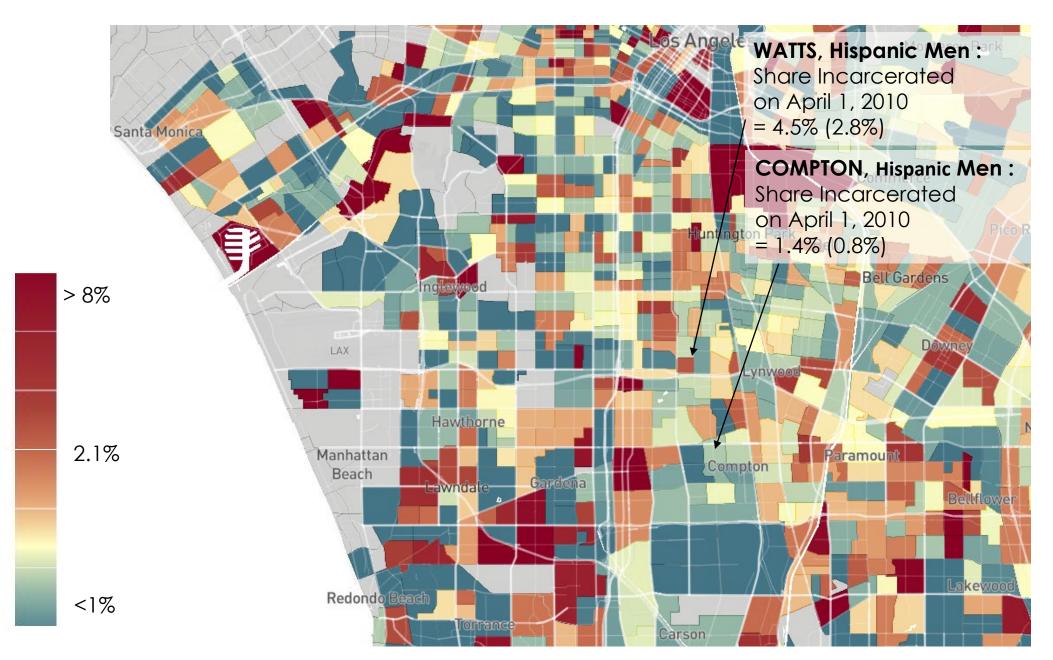
### Incarceration Rates for <u>Black Men</u> in Los Angeles with Parents Earning < \$2,200 (1st percentile)



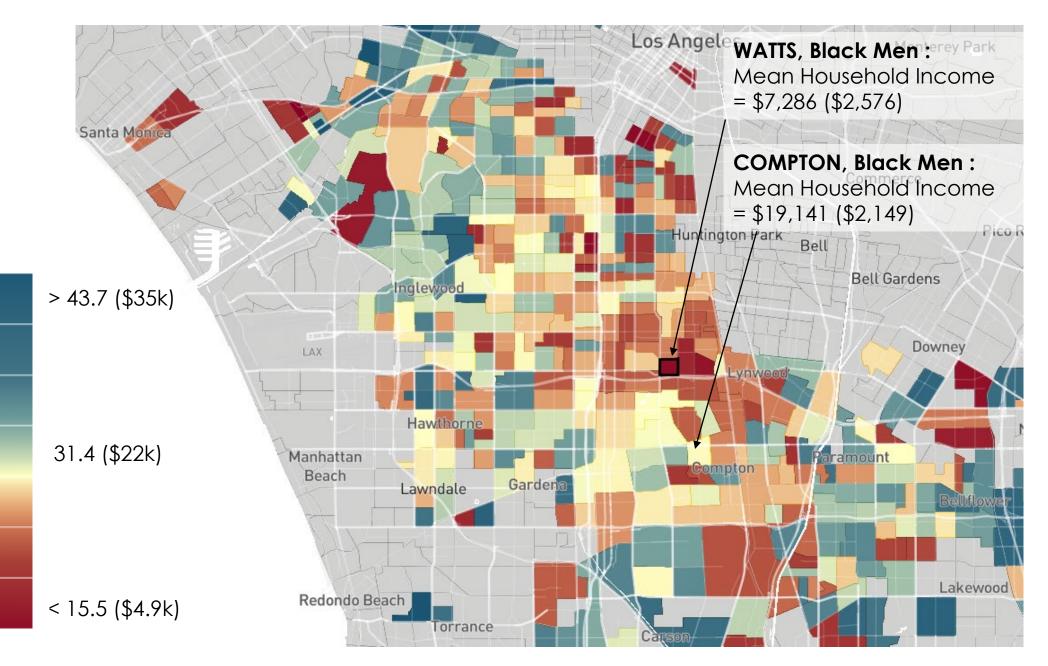
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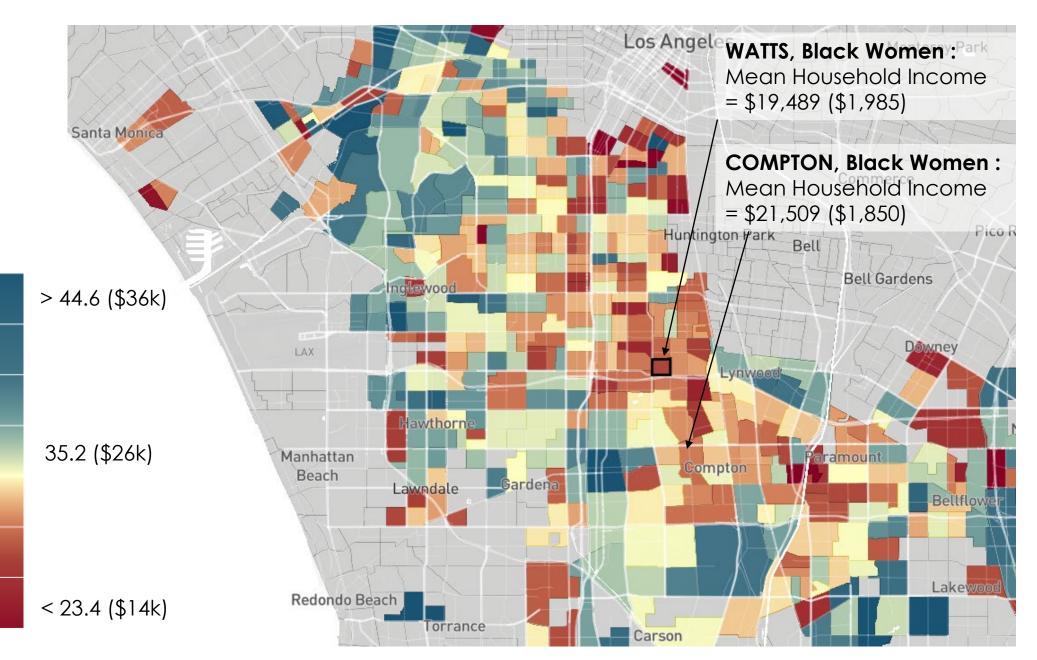
## Incarceration Rates for <u>Hispanic Men</u> in Los Angeles with Parents Earning < \$2,200 (1st percentile)



## Mean Household Income for Black Men in Los Angeles with Parents Earning \$27,000 (25th percentile)



### Mean Individual Income for <u>Black Women</u> in Los Angeles with Parents Earning \$27,000 (25<sup>th</sup> percentile)



# Select Findings and Conclusion

#### Race and Economic Opportunity in the United States

In 99% of neighborhoods in the United States, black boys earn less in adulthood than white boys who grow up in families with comparable income.

The black-white gap is not immutable: black boys who move to better neighborhoods as children have significantly better outcomes.

#### **Opportunity Atlas**

Rates of upward mobility vary substantially based on where children grow up.

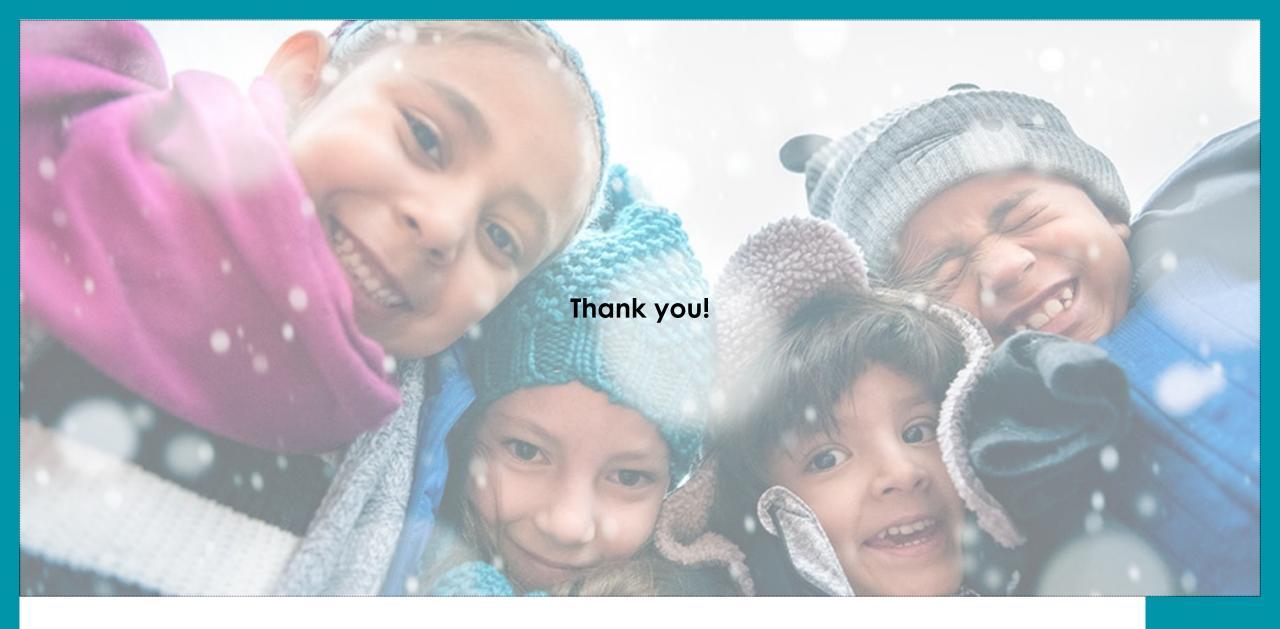
Currently, low-income families are segregated into lower-opportunity areas.

Within the same neighborhoods, different subgroups have markedly different outcomes.

Neighborhoods affect children's outcomes at a very granular level.









## **Intergenerational Mobility by Race**

- Organize empirical analysis using a statistical model of intergenerational mobility and inequality [Becker and Tomes 1979]
  - Let i index families, t index generations, and r(i) denote race of family i
  - Model child's income rank as a race-specific linear function of parent's income rank:

$$y_{it} = \alpha_r + \beta_r y_{i,t-1} + \varepsilon_{it}$$

- Evolution of racial gaps and steady-state disparities in mean ranks controlled by rates of relative and absolute mobility  $(a_r, b_r)$ 

