

Studying Social Inequality with Data Science

INFO 3370 / 5371
Spring 2023

Political Origins of Wealth Inequality

Learning goals for today

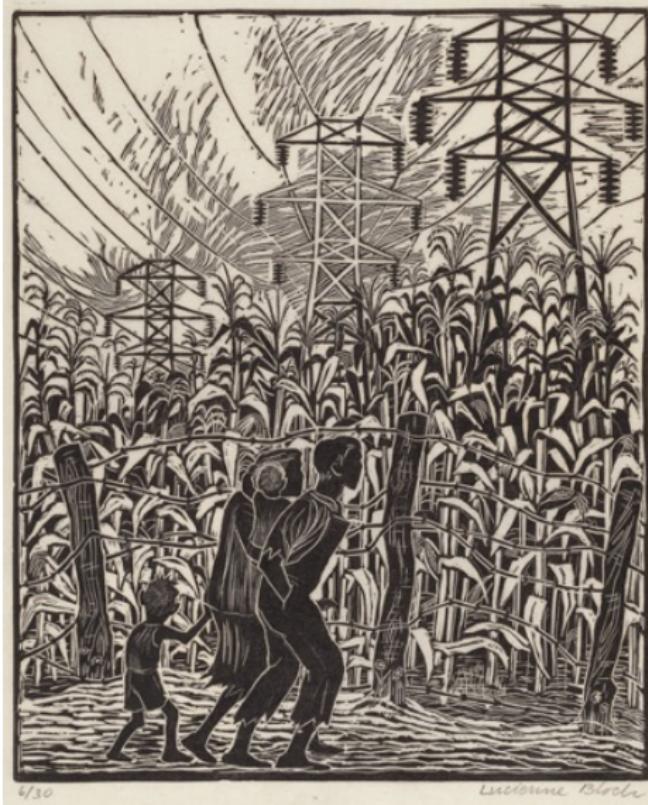
By the end of class, you will be able to

- ▶ trace political origins of racial wealth inequality
- ▶ link these to data science questions with a
 - ▶ unit of analysis
 - ▶ set of predictors
 - ▶ outcome variable



Walker Evans, 1933. The Breadline.

Source: National Gallery of Art



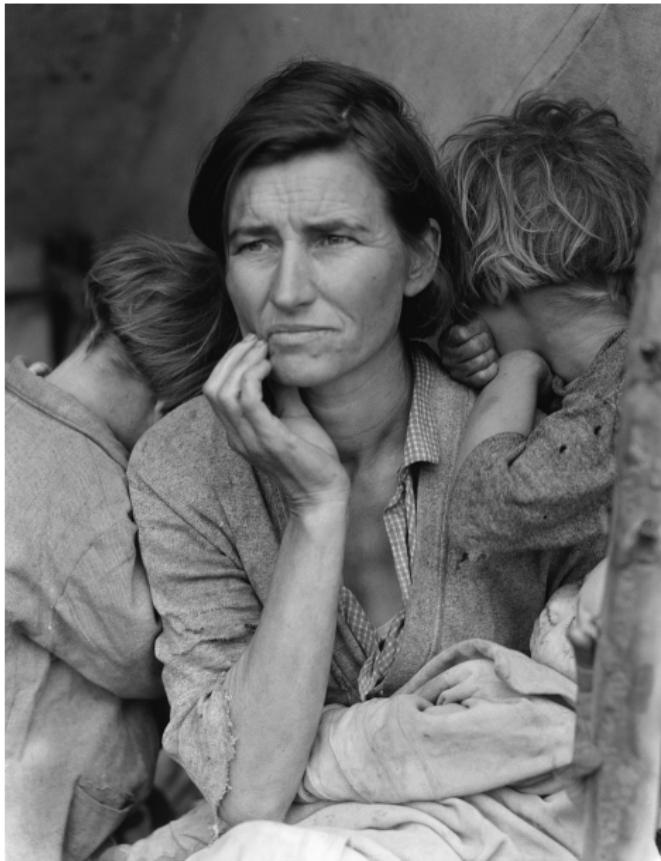
Lucienne Bloch, 1936. Land of Plenty.

Source: National Gallery of Art



Gordon Parks, 1942. Washington, D.C. Government Charwoman (American Gothic).

Source: National Gallery of Art



Dorothea Lange, 1936. Migrant Mother.
Source: Wikimedia, original in MOMA NY



Source: Wikimedia



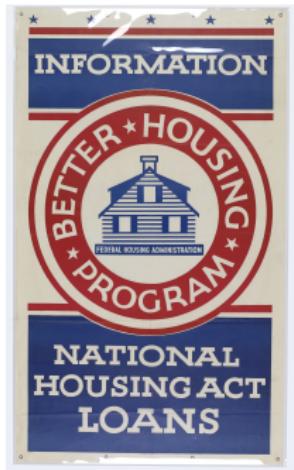
Source: Wikimedia



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Source: Smithsonian

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- ▶ B (less desirable)
- ▶ C (declining)
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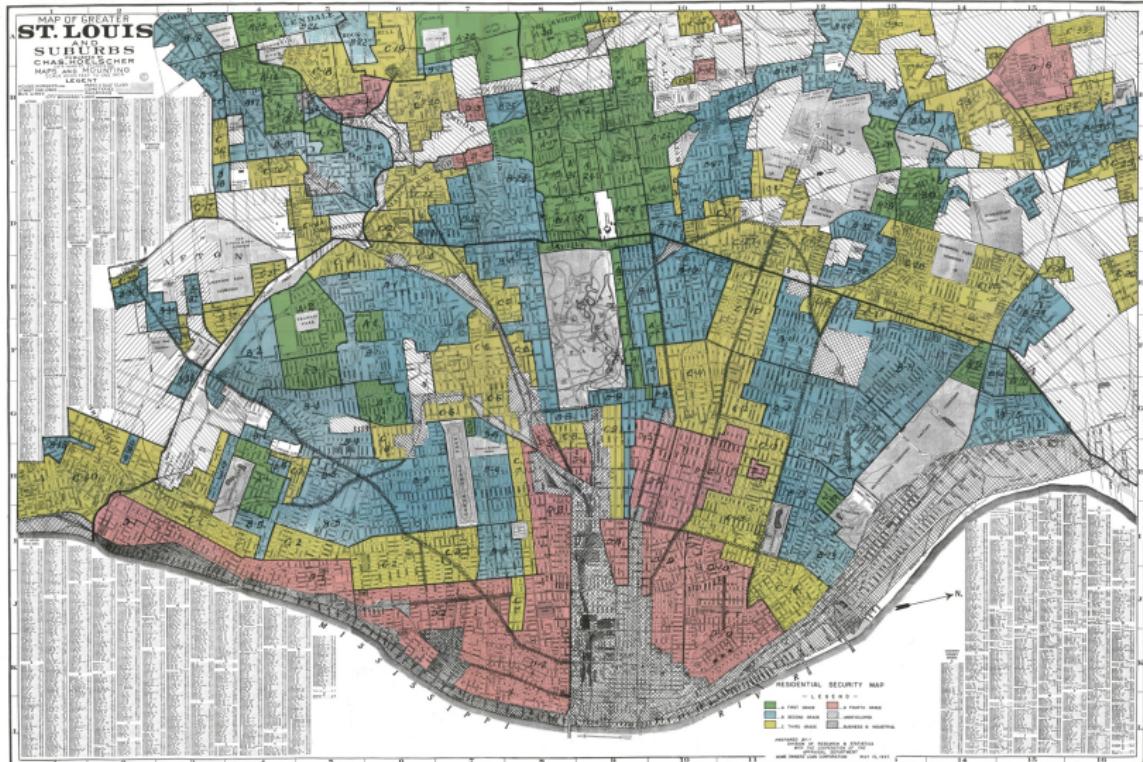
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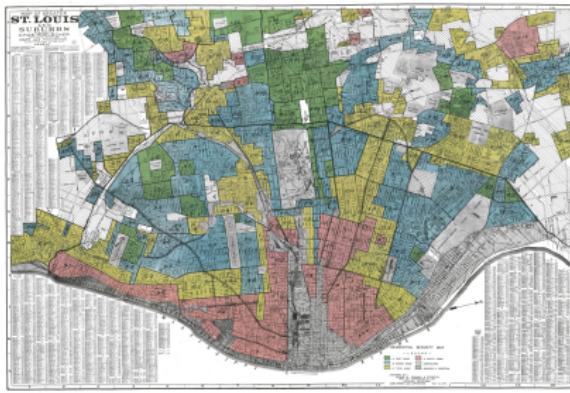
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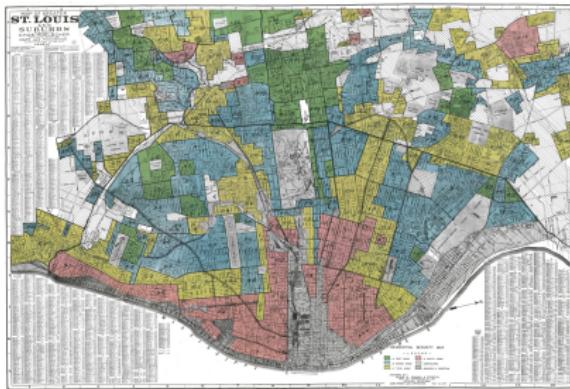
Jackson, Kenneth T. [Crabgrass frontier: The suburbanization of the United States](#). Oxford University Press, 1987.



Maps from Nelson, R. K., Winling, L, et al. (2023).
[Mapping Inequality: Redlining in New Deal America](#).
Digital Scholarship Lab.

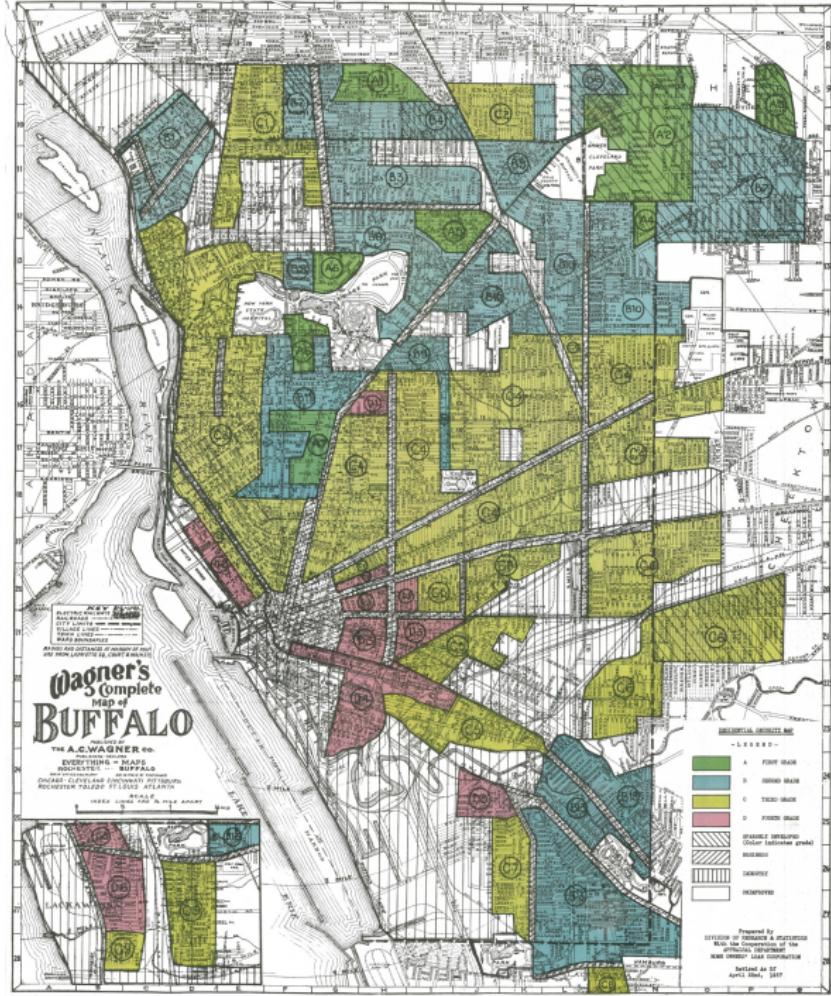


St. Louis
94,030 African Americans



St. Louis
94,030 African Americans
0 outside of red areas

Faber 2020, citing Jackson 1985



NO. 2 MAP SECTION

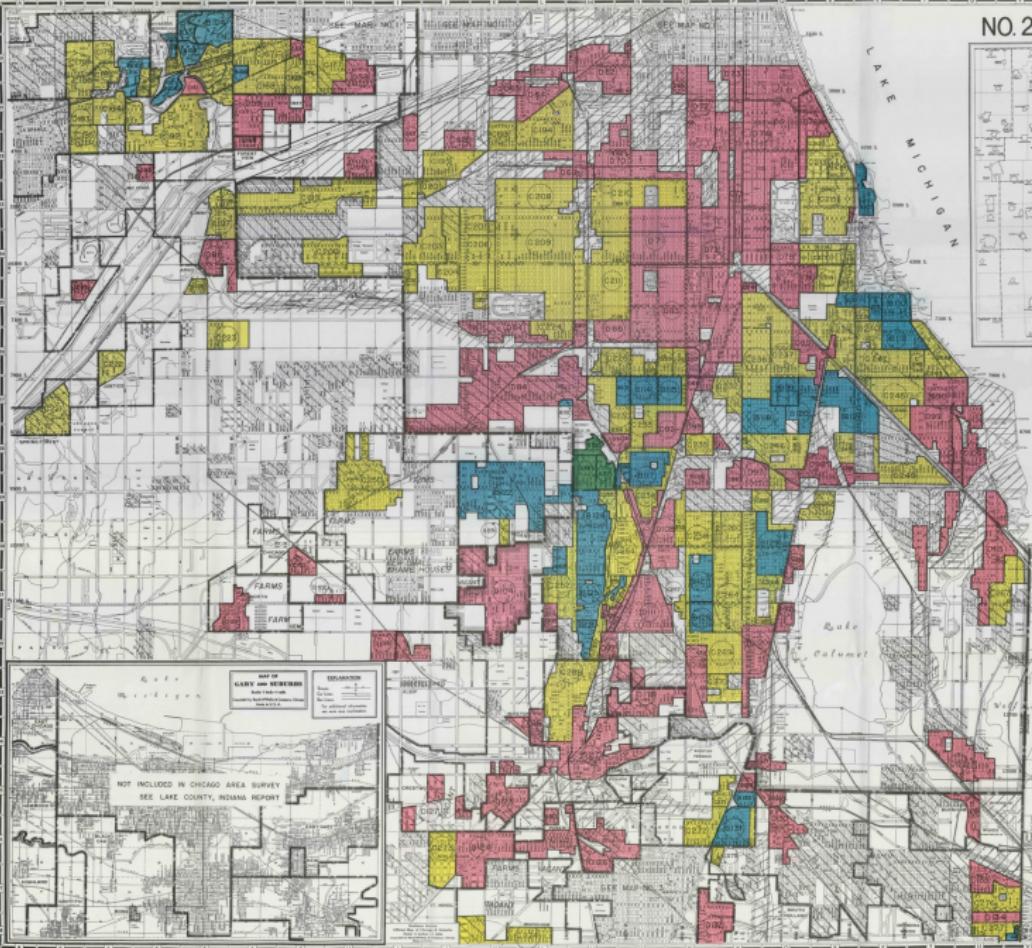


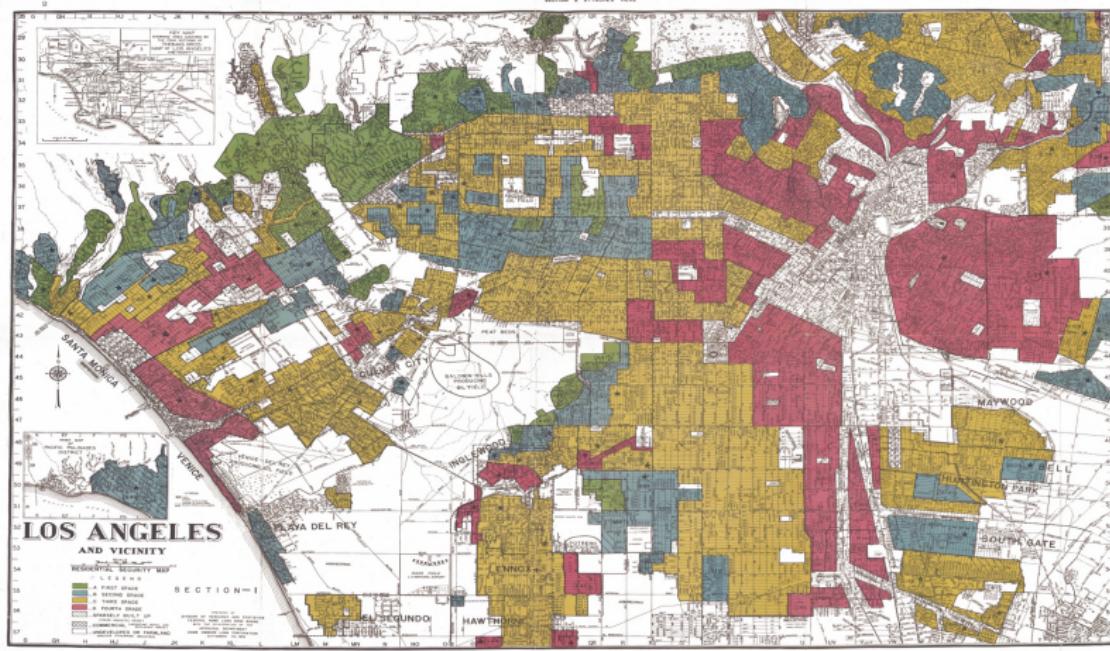
RESIDENTIAL SECURITY MAP

— LEGEND

- A FIRST GRADE
- B SECOND GRADE
- C THIRD GRADE
- D FOURTH GRADE
- SPARSELY BUILT UP
- INDUSTRIAL
- COMMERCIAL
- UNDEVELOPED OR FARM AND FOREST

CHICAGO METROPOLITAN AREA
MAP NO. 2
SIXTH EDITION
JULY 1, 1940
DRAWN BY THE CHICAGO METROPOLITAN AREA SURVEY
FOR THE CHICAGO METROPOLITAN AREA BOARD
WITH THE APPROVAL OF THE CHICAGO METROPOLITAN AREA BOARD
AND THE CHICAGO PLANNING COMMISSION
OCTOBER 1939-APRIL 1940





HOLC loans: 1933–1934

Source: Faber 2020

\$3 billion of loans in two years

1 out of 10 non-farm, owner-occupied home

1950s and 1960s: Suburbs boomed

[image source]



1950s and 1960s: Suburbs boomed

[image source]



HOLC ended

1950s and 1960s: Suburbs boomed

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HOLC ended

but the Federal
Housing Administration
maintained the
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How did communities
and homeowners respond?

Local organizations furthered racist policies



Source: Blue Ridge Seattle

Local organizations furthered racist policies

16. RACIAL RESTRICTIONS. No property in said Addition shall at any time be sold, conveyed, rented or leased in whole or in part to any person or persons not of the White or Caucasian race. No person other than one of the White or Caucasian race shall be permitted to occupy any property in said Addition or portion thereof or building thereon except a domestic servant actually employed by a person of the White or Caucasian race where the latter is an occupant of such property.

17. ANIMALS. No fowl or animal other than song birds, dogs or cats as household pets, shall at any time be kept upon land embraced in this Addition.

18. AMENDMENTS. The owner or owners of the legal title to not less than 300 residence lots in said Addition may at any time by an instrument in writing duly signed and acknowledged by said owner or owners, terminate or amend said Mutual Easements of Blue Ridge Addition, and such termination or amend-

Source: Civil Rights and Labor History Consortium, University of Washington

Fair Housing Act (1968)

[image source](#), [video](#)



Fair Housing Act (1968)

- enforcement was difficult ([video](#))

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Fair Housing Act (1968)

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Segregation and racial inequality
rooted in the 1930s
persists today

data science (example 1)

Did HOLC maps cause neighborhoods to become more segregated?

Did HOLC maps cause neighborhoods to become more segregated?

American Sociological Review

Volume 85, Issue 5, October 2020, Pages 739-775

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<https://doi.org/10.1177/0003122420948464>



Article

We Built This: Consequences of New Deal Era Intervention in America's Racial Geography

Jacob W. Faber 

Some places were graded by HOLC. Others were not

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- ▶ Policy: Maps required for cities over 40,000 in population

Some places were graded by HOLC. Others were not

- ▶ Policy: Maps required for cities over 40,000 in population
- ▶ Practice
 - ▶ 31 cities over 40k that were not mapped
 - ▶ 188 cities under 40k that were mapped

Measuring segregation

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Within each place, there are Census tracts.

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Isolation index

On average over African American residents in the place, what is the average proportion of people in their Census tract who are African American?

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Isolation index

On average over African American residents in the place, what is the average proportion of people in their Census tract who are African American?

- ▶ 100% would be complete segregation

The effect of policy on segregation

Data

Unit of Analysis

place × year

The diagram illustrates a regression model. On the left, a table lists six observations across three columns: place, year, and ever graded by HOLC?. An arrow points from this table to a vertical column on the right labeled "isolation index".

place	year	ever graded by HOLC?
1	1930	yes
1	1950	yes
2	1930	no
2	1950	no
3	1930	yes
3	1950	yes

→

isolation index

The effect of policy on segregation

Sample restrictions

- ▶ place observed in 1920 or 1930, before HOLC
- ▶ Black population over 100
- ▶ at least two Census tracts within the place
- ▶ not missing values on covariates

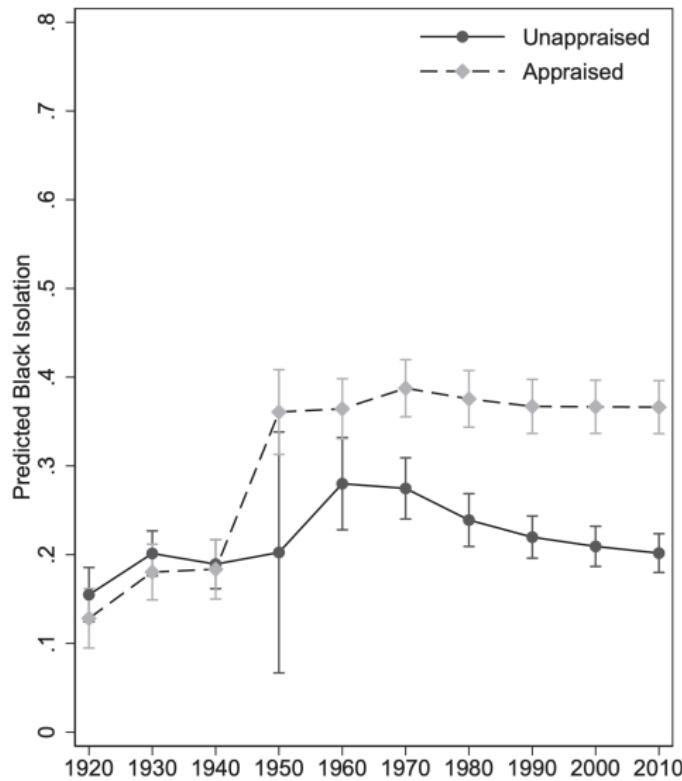


Figure 1 from Faber, J. W. 2020. [We built this: Consequences of New Deal era intervention in America's racial geography](#). American Sociological Review, 85(5), 739-775.

data science (example 2)

Racial Wealth Gap

Racial Wealth Gap

In redlined neighborhoods,

Racial Wealth Gap

- In redlined neighborhoods,
 - Hard to sell your home

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In the suburbs,

- ▶ Home ownership skyrockets
 - ▶ 44% owned their home in 1940
 - ▶ 62% in 1960

National estimates
from U.S. Census

Racial Wealth Gap

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Oliver, M., & Shapiro, T. (2013). [Black wealth/white wealth: A new perspective on racial inequality](#). Routledge.

Racial Wealth Gap

2022 Survey of Consumer Finances

<https://sda.berkeley.edu/sdaweb/analysis/?dataset=scfcomb2022>

SDA [Help](#) Accessibility mode Study: SCF Combined Extract Data

[Analysis](#) [Create Variables](#) [Download Custom Subset](#) [Search](#) [Codebook](#) [FAQ](#) [Net Worth Flowchart](#)

Variable Selection

Selected: [View](#)

Copy to: [Row](#) [Col](#) [Ctrl](#) [Filter](#)

Mode Append Replace

SDA Frequencies/Crosstabulation Program
Help: [General](#) / [Recoding Variables](#)

Row: (Required)

Column:

Control:

Selection Filter(s):

Weight: WGT - Sample weight

[Output Options](#)
[Chart Options](#)
[Decimal Options](#)
[Create and Download CSV File](#)

[Run the Table](#) [Clear Fields](#)

► TECHNICAL
► DEMOGRAPHICS
► ASSETS
► DEBTS
► RATIOS
► DEBT PAYMENTS
► SHOPPING PATTERNS
► ATTITUDINAL
► INCOME
► CAPITAL GAINS
► NETWORTH
► EXPENDITURES
► HYPOTHETICAL FINANCIAL EMERGENCY RESPONSES

Racial Wealth Gap

2022 Survey of Consumer Finances ([link](#))

- ▶ unit of analysis: household
- ▶ predictor: race
- ▶ outcome: net worth = assets - debts
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White households: \$272,000

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Ratio: 5.48

The typical White household has \$5.48 for each \$1 held by the typical Black household

Additional resources

- ▶ Oliver, M., & Shapiro, T. 2013. [Black wealth / white wealth: A new perspective on racial inequality](#). Routledge.
- ▶ Faber, J. W. 2020. [We built this: Consequences of New Deal era intervention in America's racial geography](#). American Sociological Review, 85(5), 739-775.
- ▶ Massey, D. S., & Denton, N. A. 1993. [American apartheid: Segregation and the making of the underclass](#). Harvard University Press.
- ▶ Killewald, A., Pfeffer, F. T., & Schachner, J. N. 2017. [Wealth inequality and accumulation](#). Annual Review of Sociology, 43, 379.

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