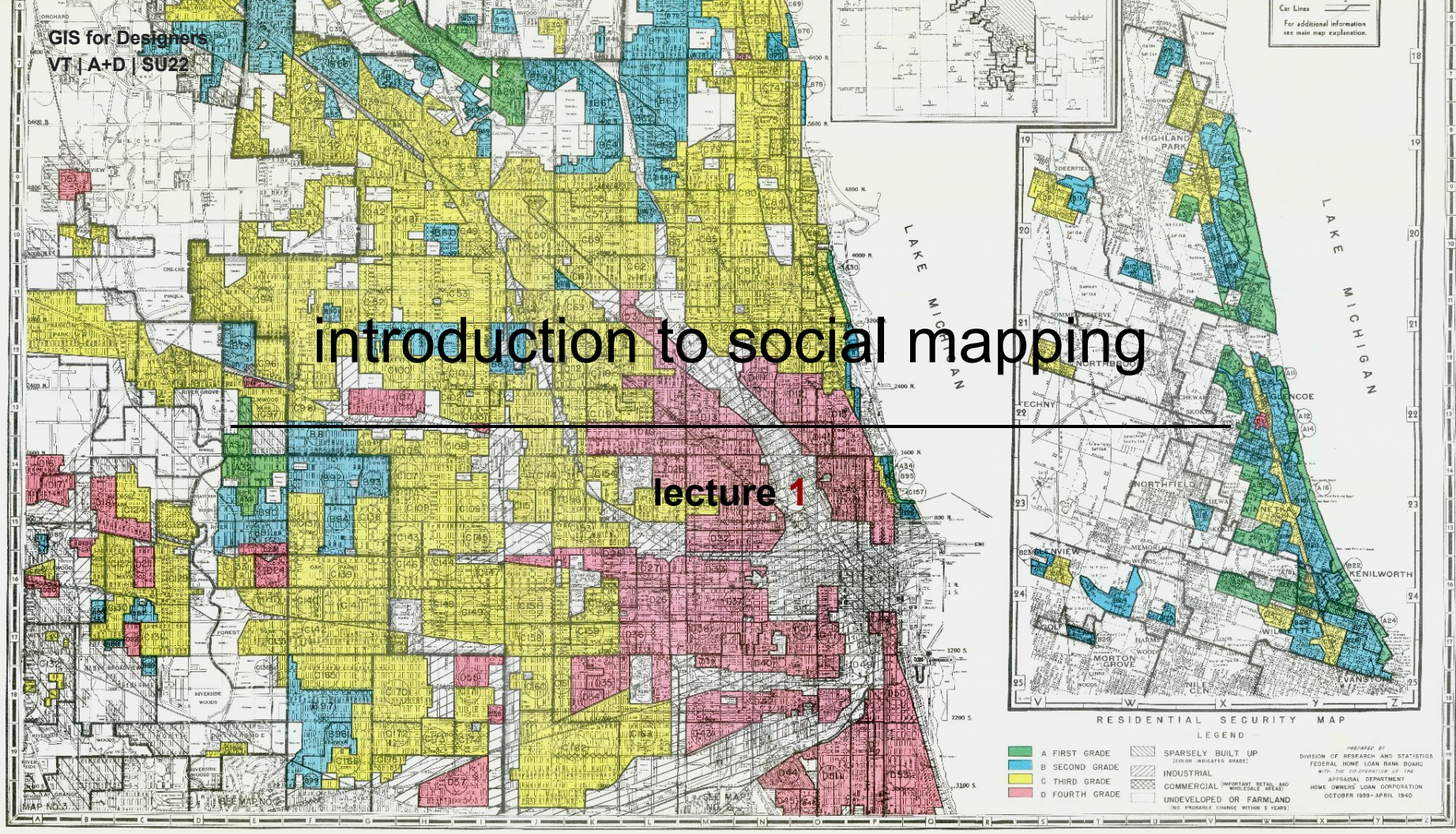


# introduction to social mapping

## lecture 1



## **overview**

**visualizing social issues  
geographically, maps as tools of  
power, and using data visualization for  
activism.**

- 1. example of Du Bois's data  
visualizations of black America**
- 2. example redlining maps**



"The problem of the twentieth century is the problem of the color-line."

**D. E. B. Du Bois** (1868-1963) -  
sociologist, historian, civil rights activist,  
educator

- first African-American Harvard PhD graduate (1895)
- co-founder of NAACP (1909)
- *The Souls of Black Folk* (1903)
- *Black Reconstruction in America* (1935)



Top: Du Bois and Mao Zedong (1959);  
left: Du Bois (1946)

Image source: [Wikipedia](#)

GIS for Designers

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## 1900 Paris Exposition (Exposition Universelle)

Du Bois was invited to present his sociological research as part of the “American Negro Exhibit” in the U.S. showcase.

With the help of his students at Atlanta University, Du Bois created these avant-garde data visualizations and maps to present his data to the international audience at the Exposition.

He specifically aimed to refute Darwinian claims of black inferiority and black population decline, and instead showed how, despite considerable disadvantages, black Americans had grown in population, employment, and wealth since the end of the Civil War.

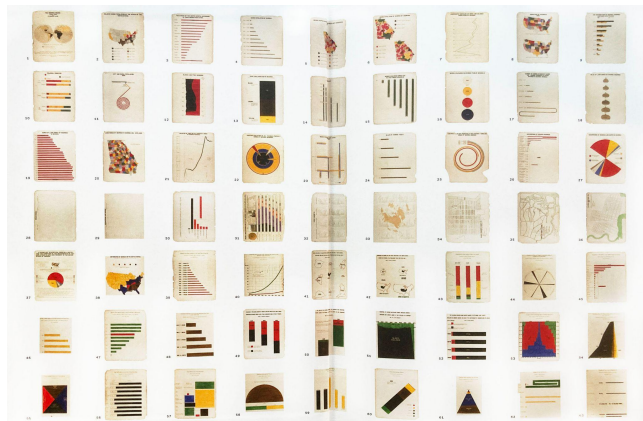


Photo of Exposition. Du Bois's data portraits are displayed alongside photo portraits of black Americans and copies of books by black authors.

image source: Medium article [“W. E. B. Du Bois’ staggering Data Visualizations are as powerful today as they were in 1900”](#).

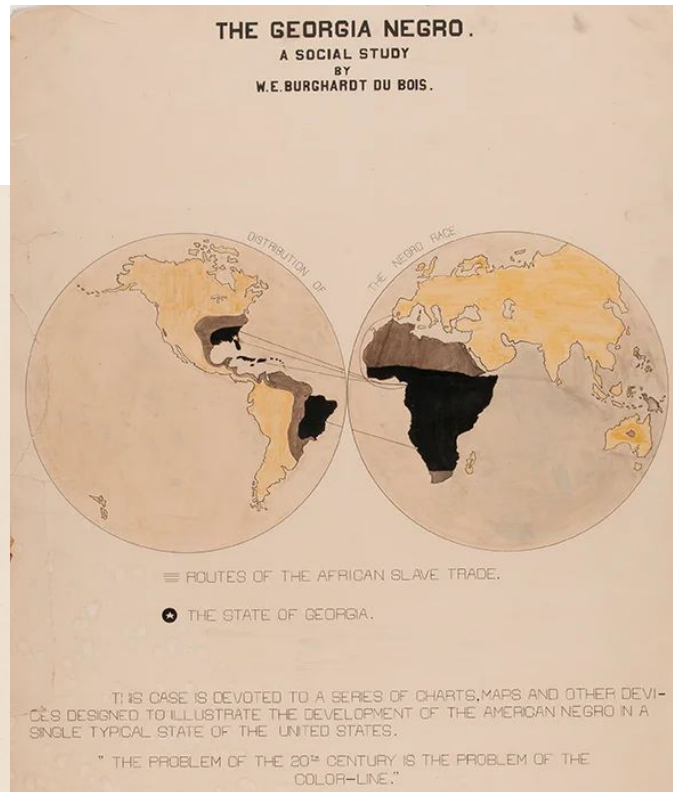
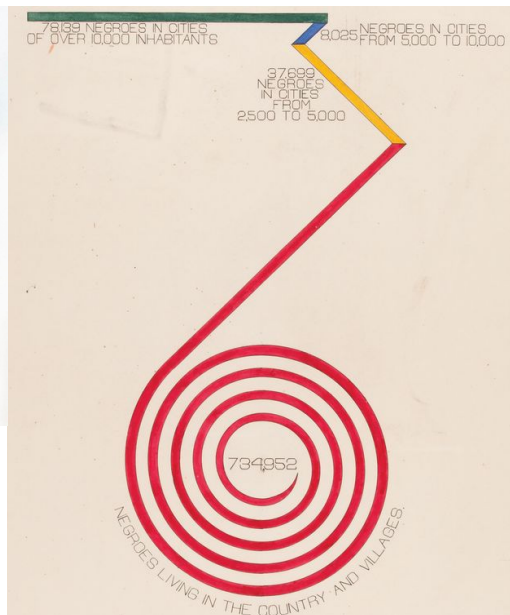
"The politics of visibility, and the very question of black visibility, were central to Du Bois's thought.... This focus on modernist design, as well as the diasporic sensibilities of the images, further points to Du Bois's interest in representing the Black South as an integral part of modernity..."

– *Data Portraits Visualizing Black America* (pp. 15-16)



Top left: urban vs. rural population; Top right: introductory image, African diaspora to Americas; Bottom: data visualization plates

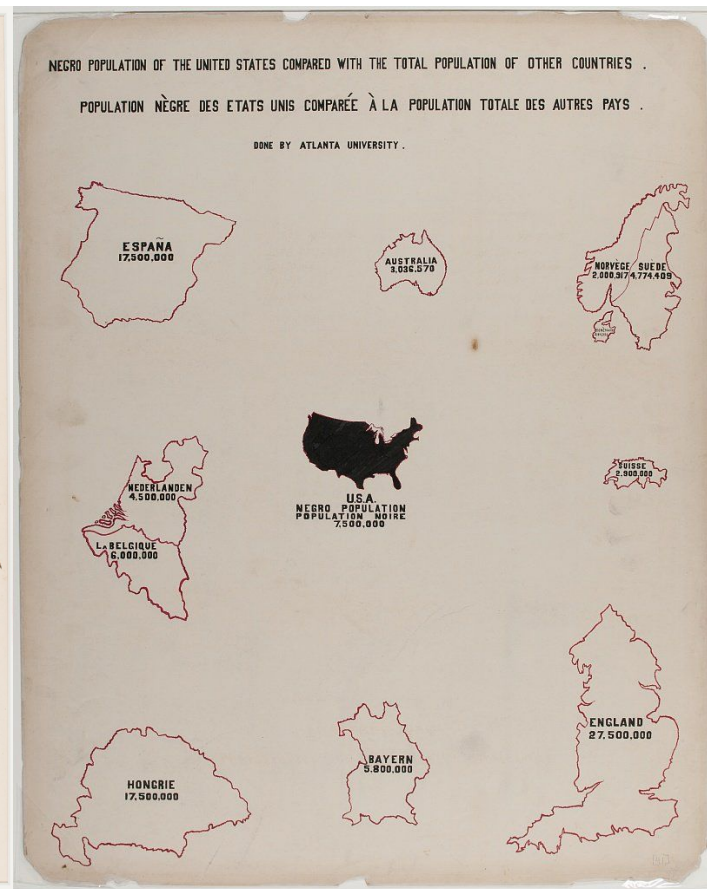
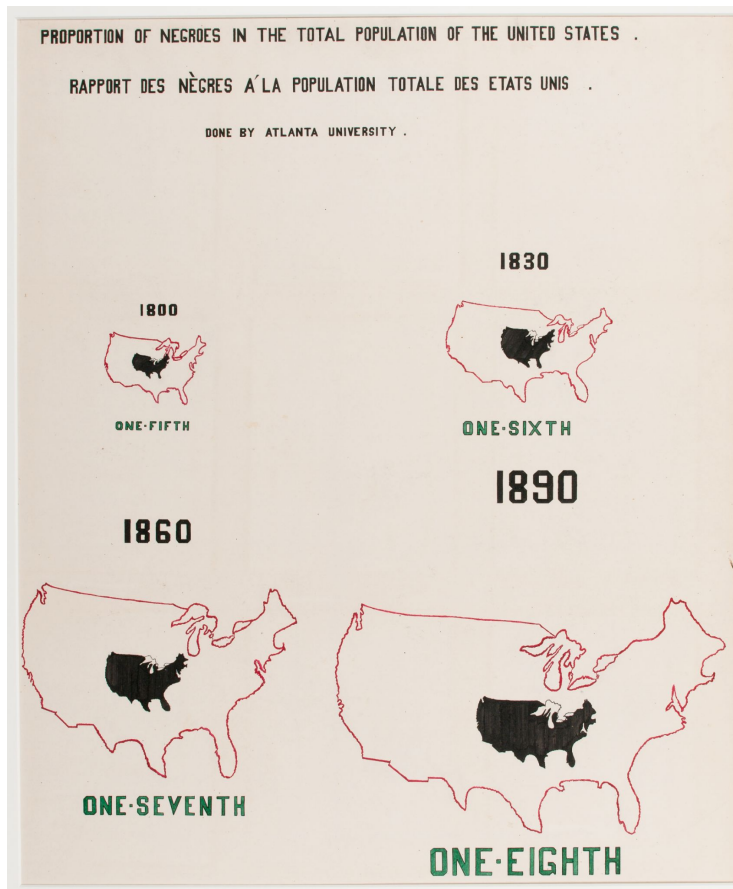
image source: *W.E.B. Du Bois's Data Portraits Visualizing Black America* (2018)





Left: population growth of white and black Americans, scaled by size; right: comparison between black American population and European countries.

image source: *W.E.B. Du Bois's Data Portraits Visualizing Black America* (2018)



*"In the 1960s, sociologist John McKnight coined the term [redlining] to describe the discriminatory banking practice of classifying certain neighborhoods as 'hazardous,' or not worthy of investment due to the racial makeup of their residents.... The documented history of redlining in the United States is a manifestation of the historical systemic racism that has had wide-ranging impacts on American society, two examples being educational and housing inequality across racial groups."*

- Wikipedia, "[Redlining](#)"

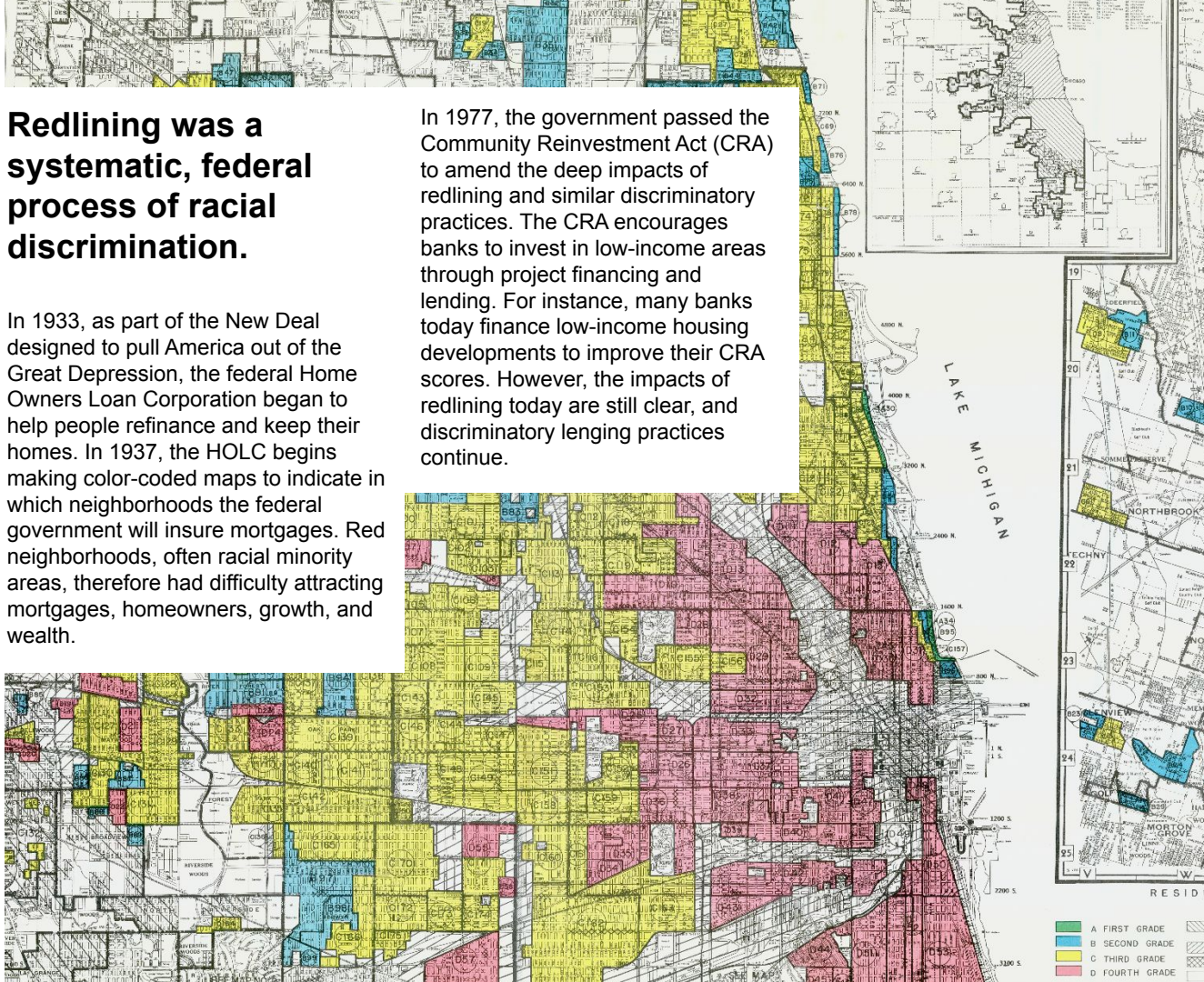
Image: Chicago redlining map created by Rand McNally, prepared by the Federal Home Loan Bank, 1940.

image source: [Wikicommons](#).

## Redlining was a systematic, federal process of racial discrimination.

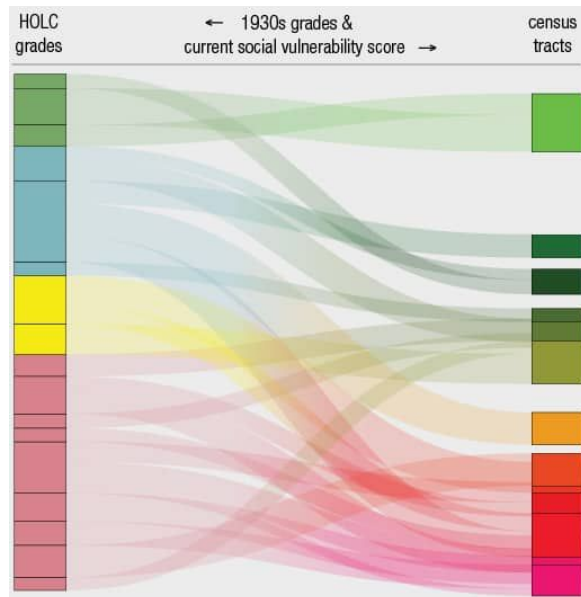
In 1933, as part of the New Deal designed to pull America out of the Great Depression, the federal Home Owners Loan Corporation began to help people refinance and keep their homes. In 1937, the HOLC begins making color-coded maps to indicate in which neighborhoods the federal government will insure mortgages. Red neighborhoods, often racial minority areas, therefore had difficulty attracting mortgages, homeowners, growth, and wealth.

In 1977, the government passed the Community Reinvestment Act (CRA) to amend the deep impacts of redlining and similar discriminatory practices. The CRA encourages banks to invest in low-income areas through project financing and lending. For instance, many banks today finance low-income housing developments to improve their CRA scores. However, the impacts of redlining today are still clear, and discriminatory lending practices continue.



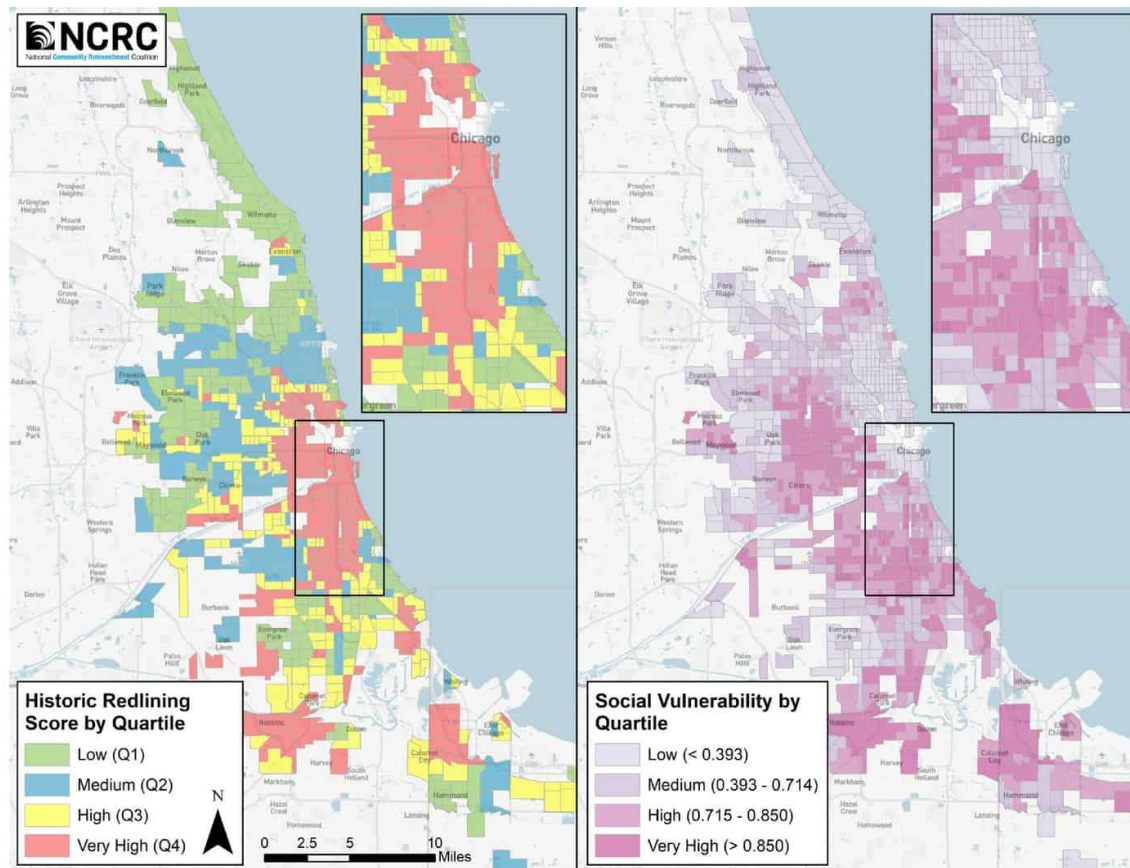


## 1930s HOLC Maps vs. 2018 Social Vulnerability Index (SVI)



Above: comparison of HOLC rank in the 1930s with contemporary SVI ratings. Right: comparison of 1940 Chicago redlining map and SVI today.

Image source: [NCRC](https://www.ncrc.org/)

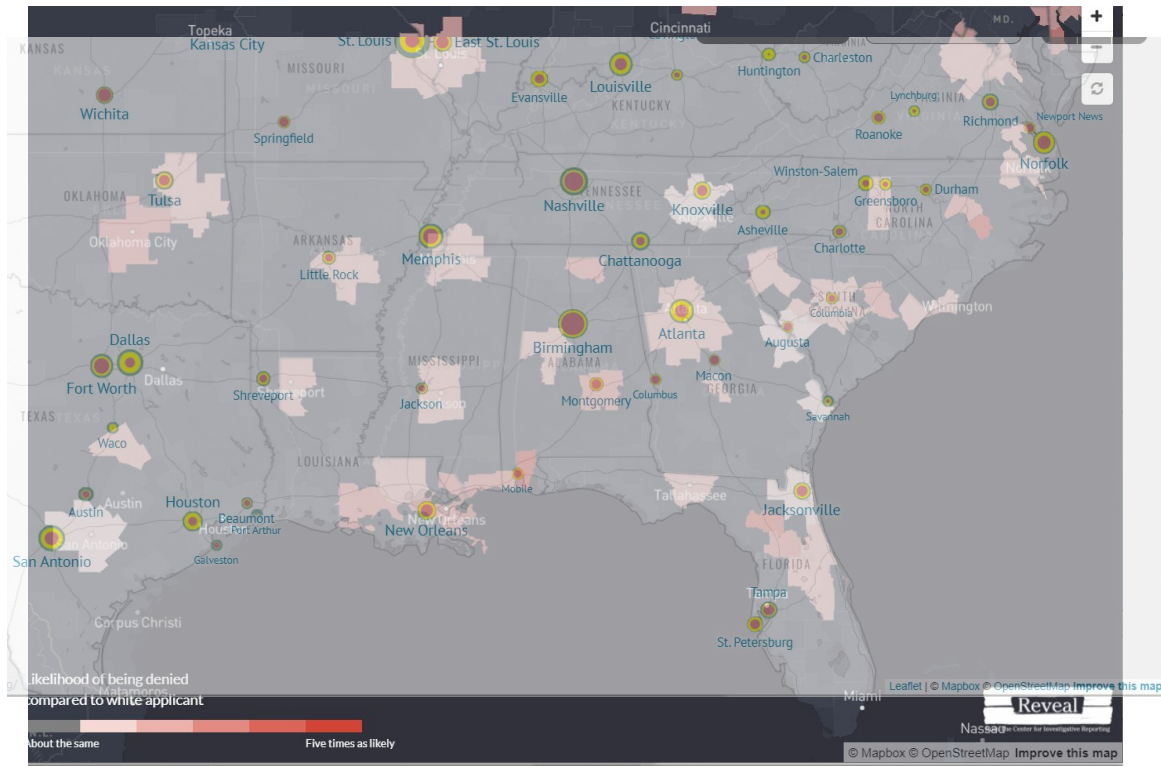
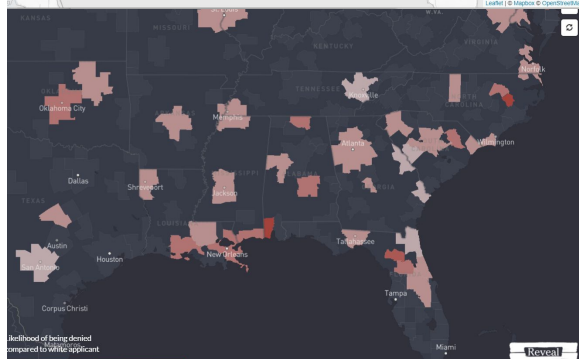
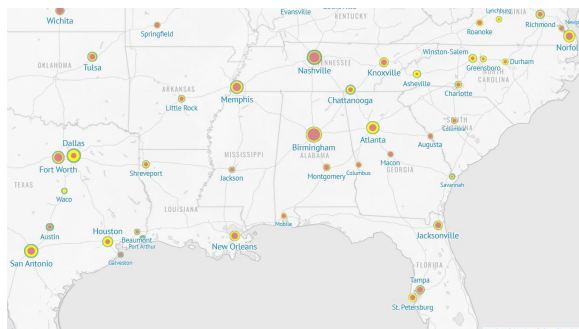


A-5c & 5d: Chicago, IL historical redlining score derived from HOLC map, and social vulnerability (SVI) in 2018 by quartile.



Top: map of cities redlined in the 20th century for home loans. Bottom: map of cities redlined today through discriminatory lending practices. Right: the two overlaid to show the similarities.

image source: [Mapping Inequality map](#) and [Revealed report map](#).



## Additional References

Multi-part article on Du Bois's data visualizations:

<https://medium.com/nightingale/w-e-b-du-bois-staggering-data-visualizations-are-a-s-powerful-today-as-they-were-in-1900-64752c472ae4>

Interactive USA map overlaid with historical redlining maps:

<https://dsl.richmond.edu/panorama/redlining/#loc=5/39.1/-94.58>

NCRC redlining historical report:

<https://ncrc.org/holc/>

Reveal's report to Congress on contemporary redlining practices:

<https://revealnews.org/article/reveal-submits-testimony-to-congress/>