

## **Lecture 10**

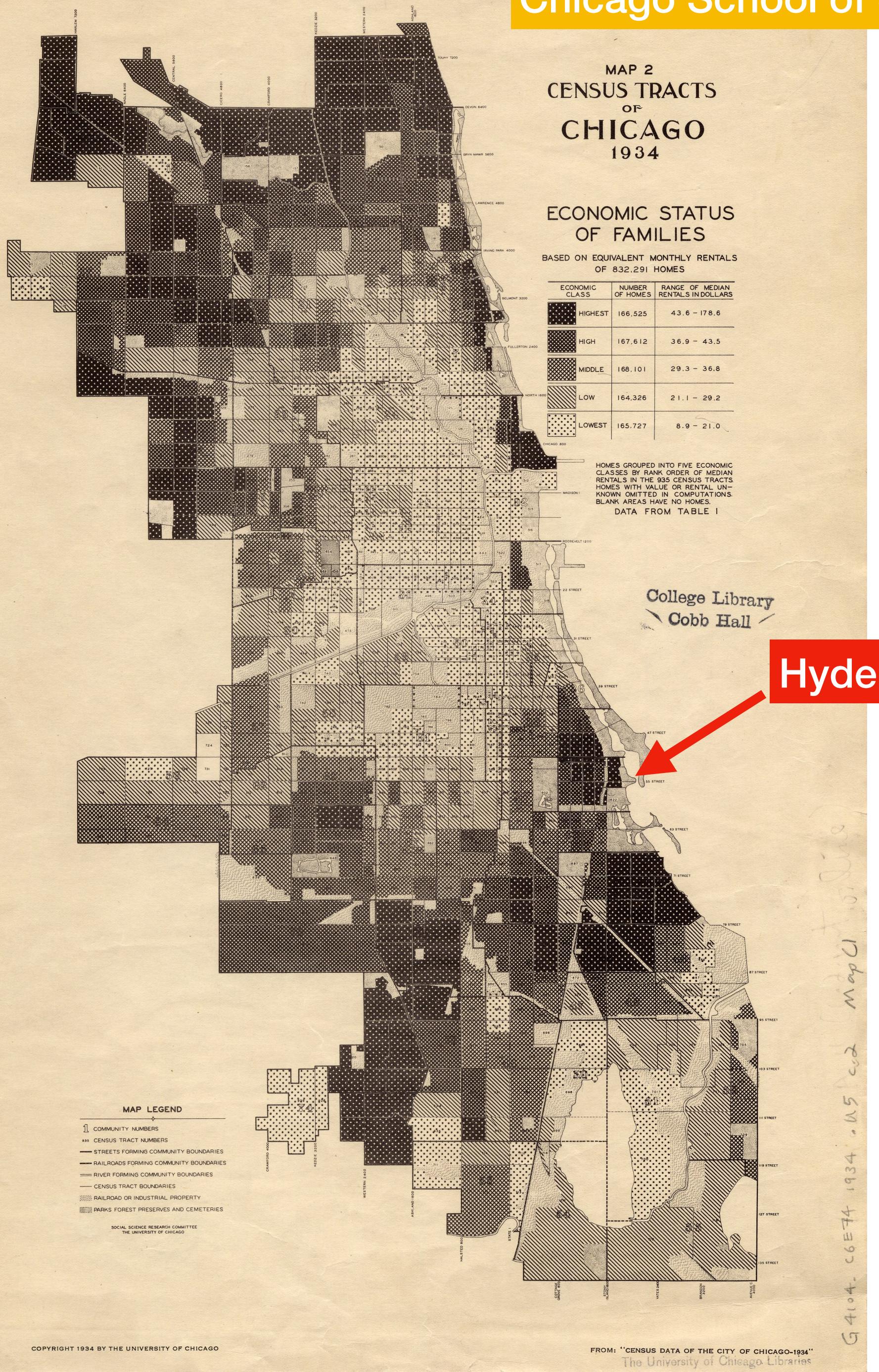
### **Looking inside Cities: Spatial Structure and Neighborhood**

#### **10.3 Spatial Structure of Socioeconomic Quantities: Neighborhood Effects**

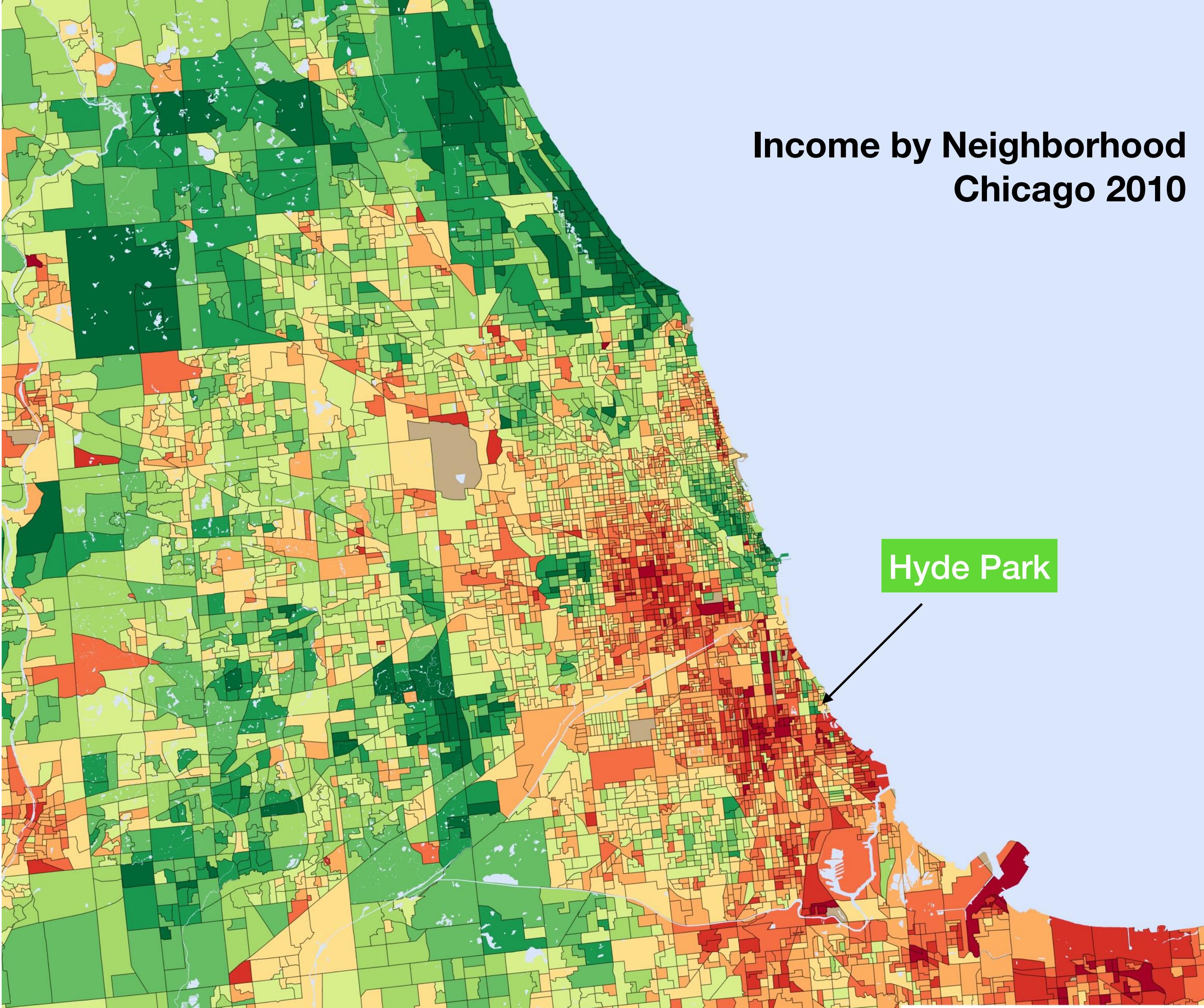
# Looking Inside Cities

in space

# Chicago School of Sociology: Maps of the City



## Income by Neighborhood Chicago 2010



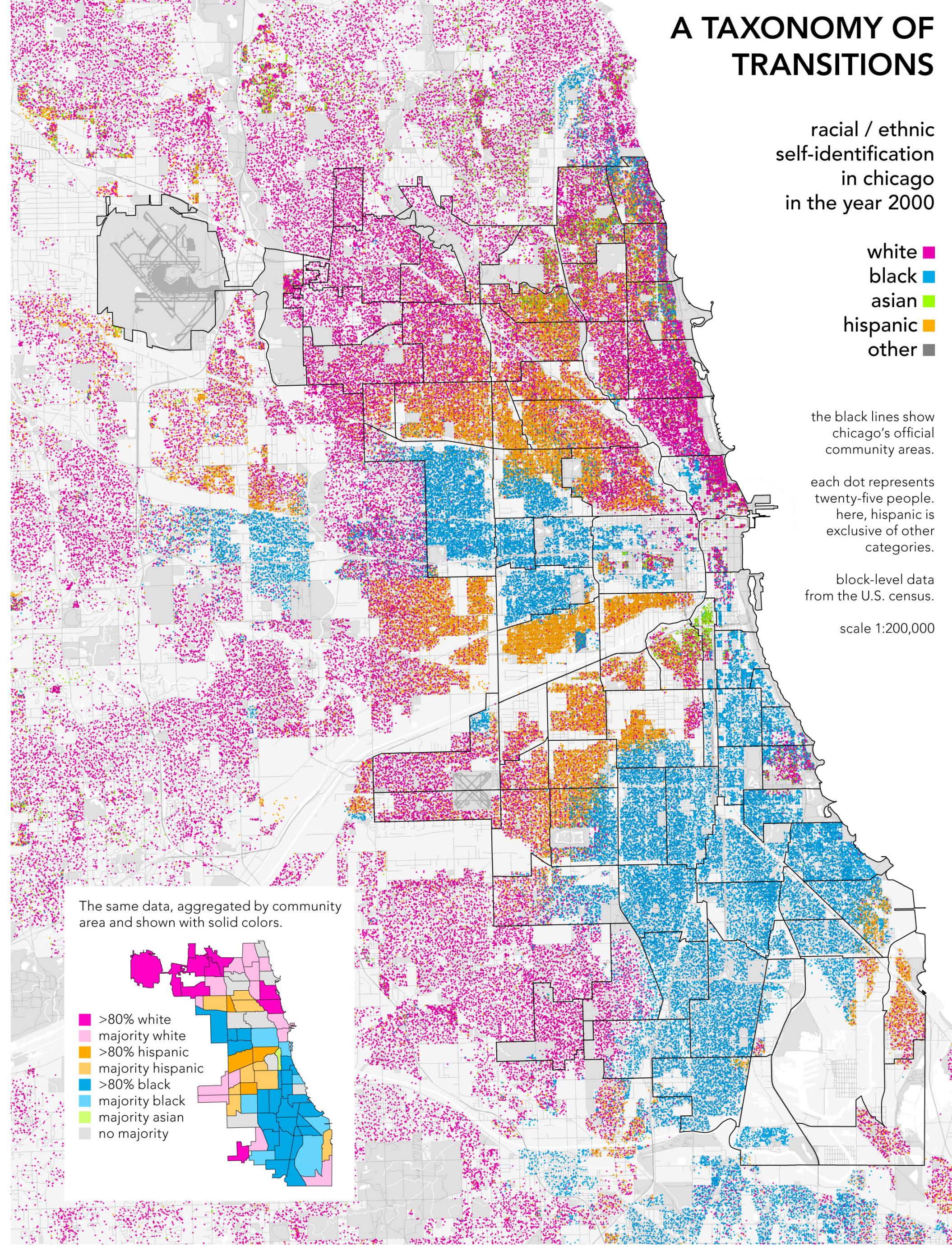
Log Mean Income (2010)

- < \$23,763
- \$46,216 - \$58,618
- \$90,698 - \$114,347
- > \$218,840

0 5 10 km

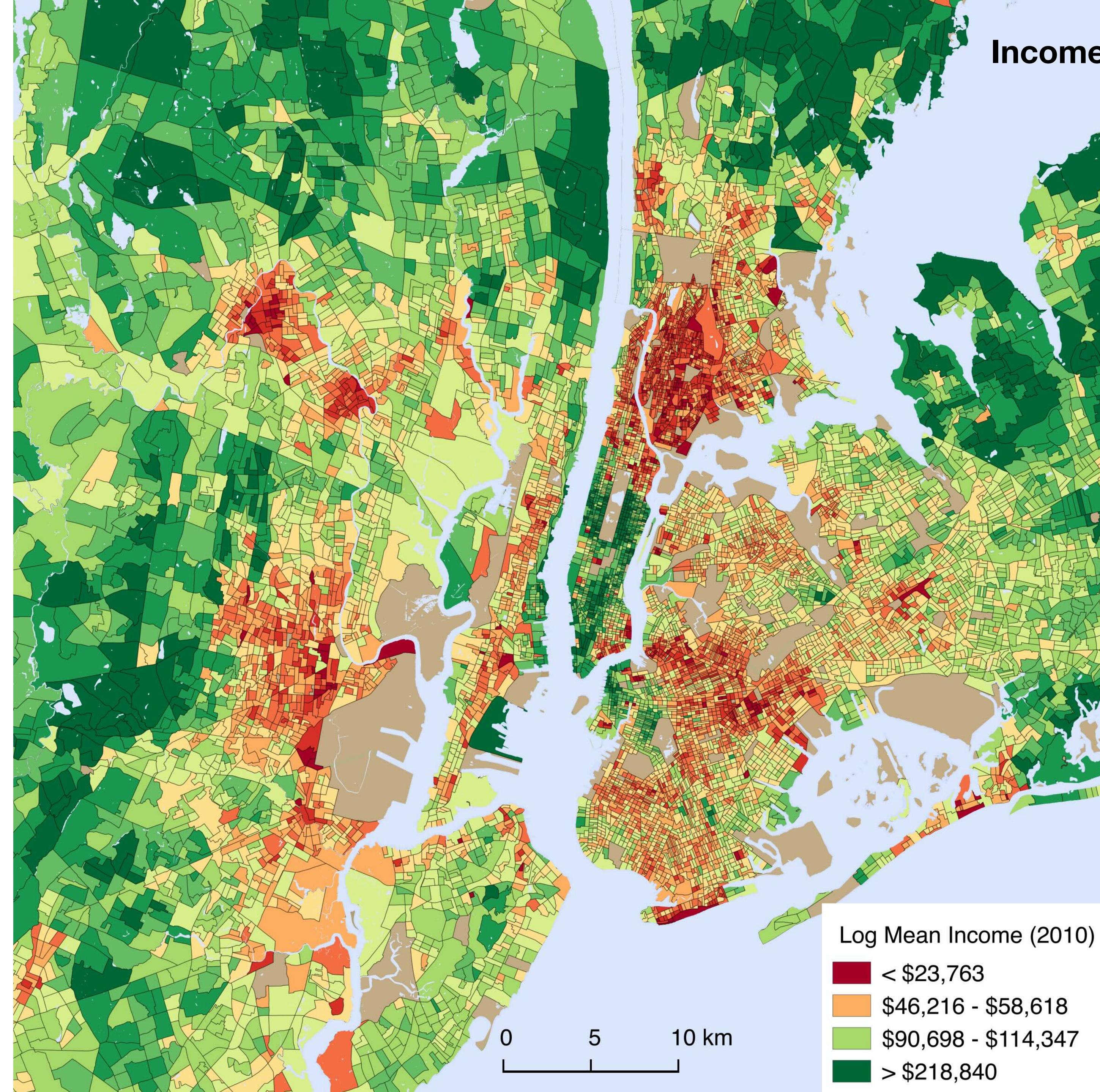
# A TAXONOMY OF TRANSITIONS

# racial / ethnic self-identification in chicago in the year 2000



# credit:radical cartography

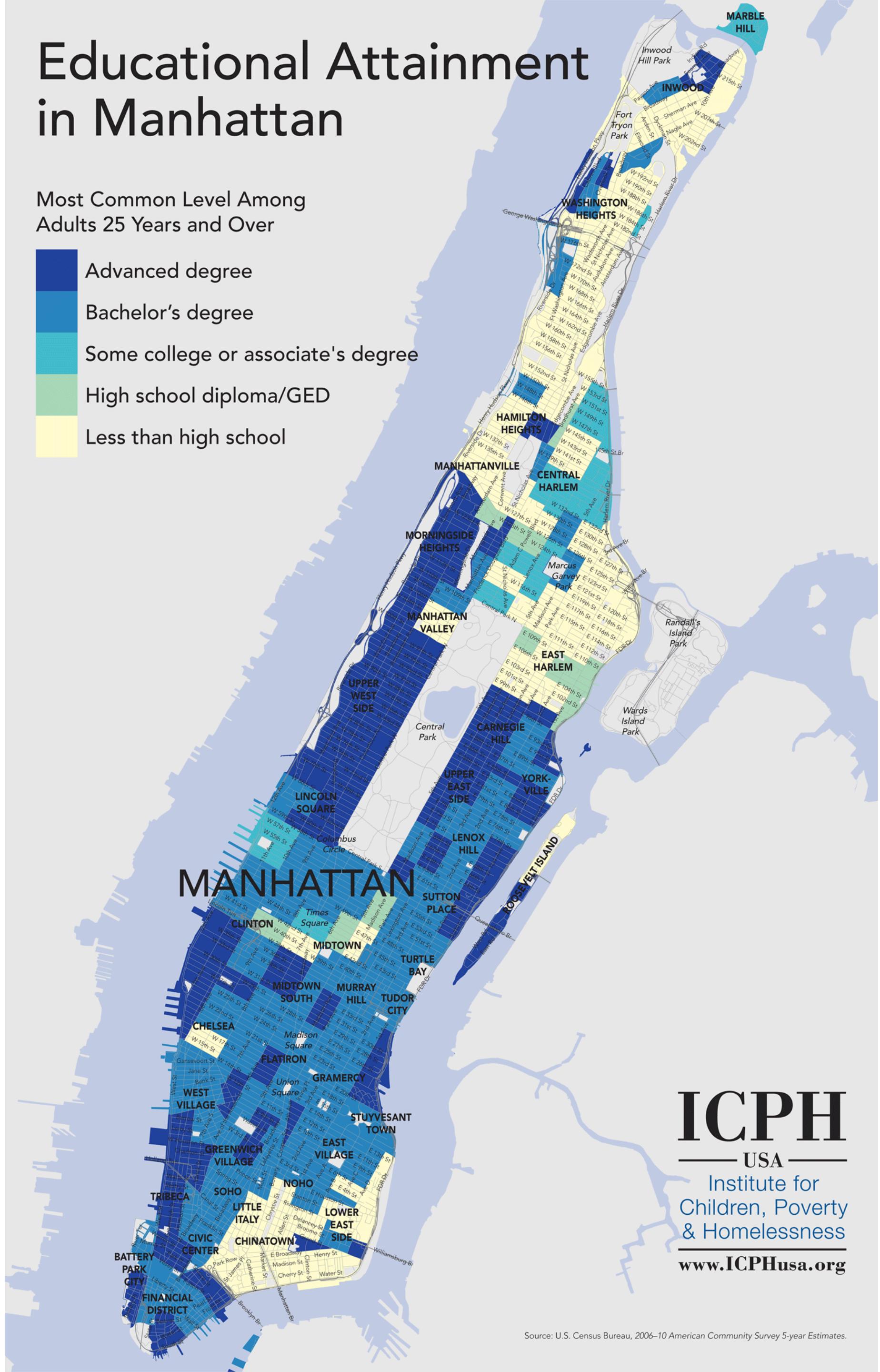
**Income by Neighborhood  
NYC 2010**



# Educational Attainment in Manhattan

Most Common Level Among Adults 25 Years and Over

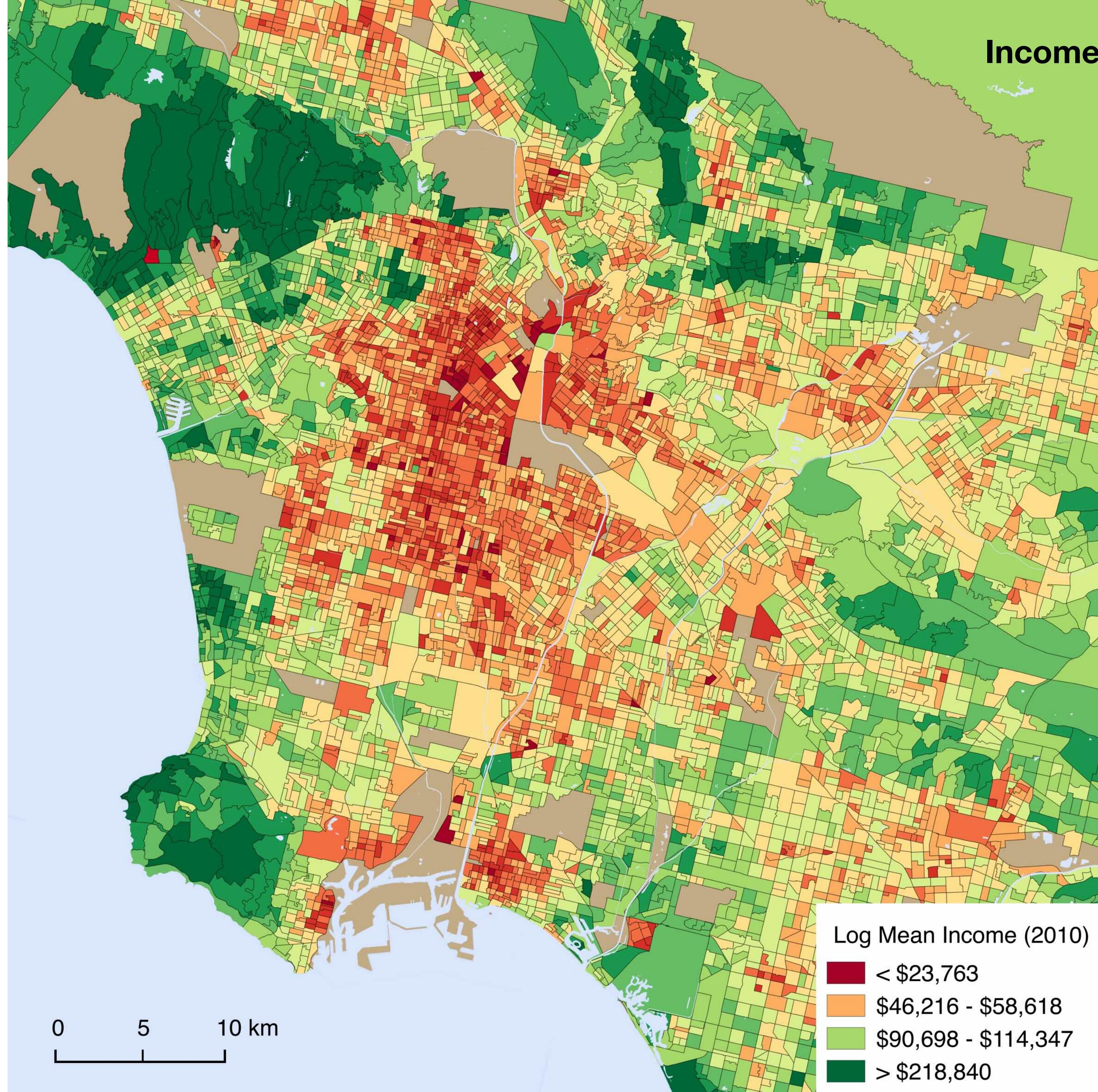
- Advanced degree
- Bachelor's degree
- Some college or associate's degree
- High school diploma/GED
- Less than high school

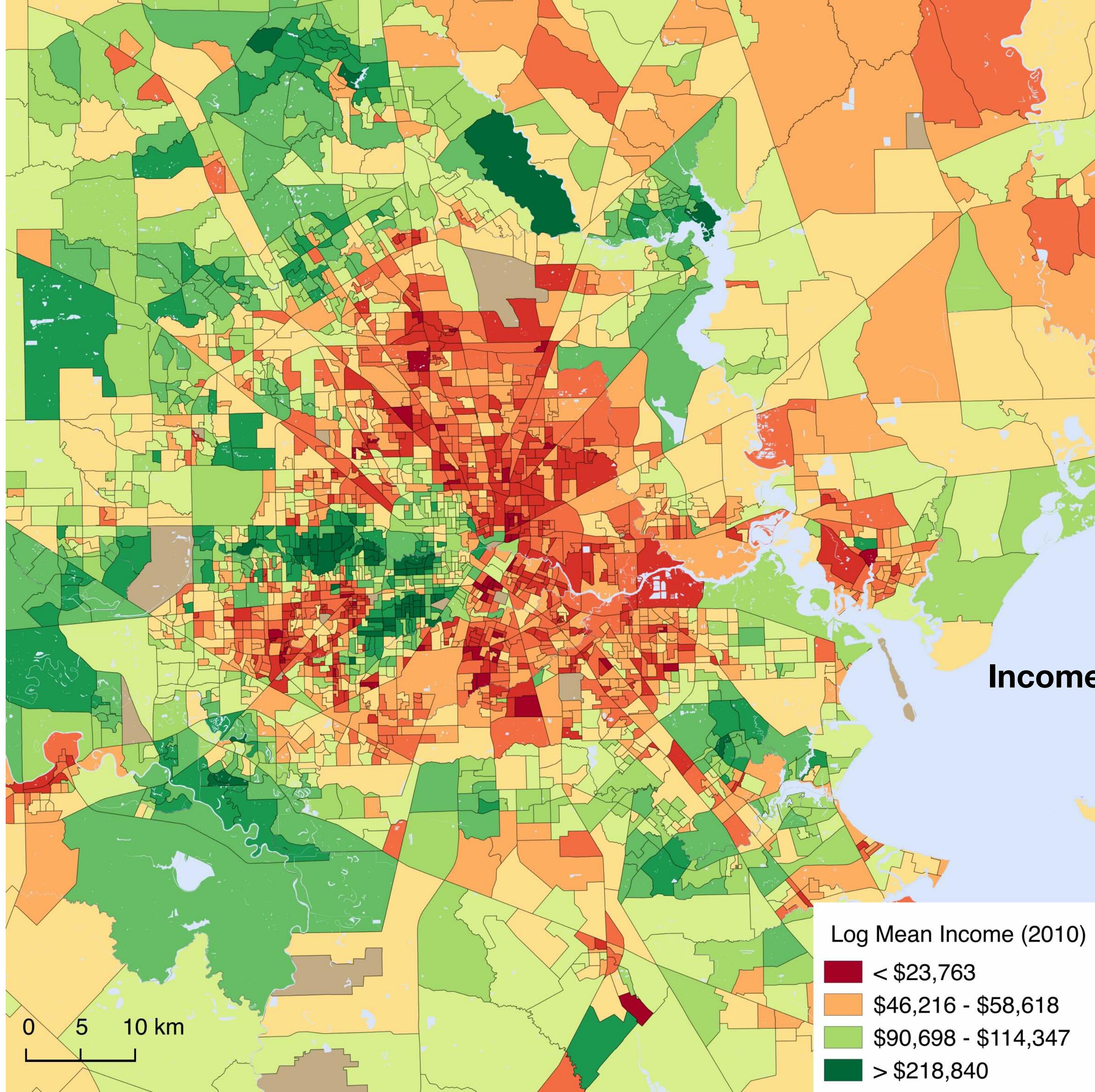


**ICPH**  
— USA —  
Institute for  
Children, Poverty  
& Homelessness  
[www.ICPHusa.org](http://www.ICPHusa.org)

Source: U.S. Census Bureau, 2006–10 American Community Survey 5-year Estimates.

**Income by Neighborhood  
LA 2010**

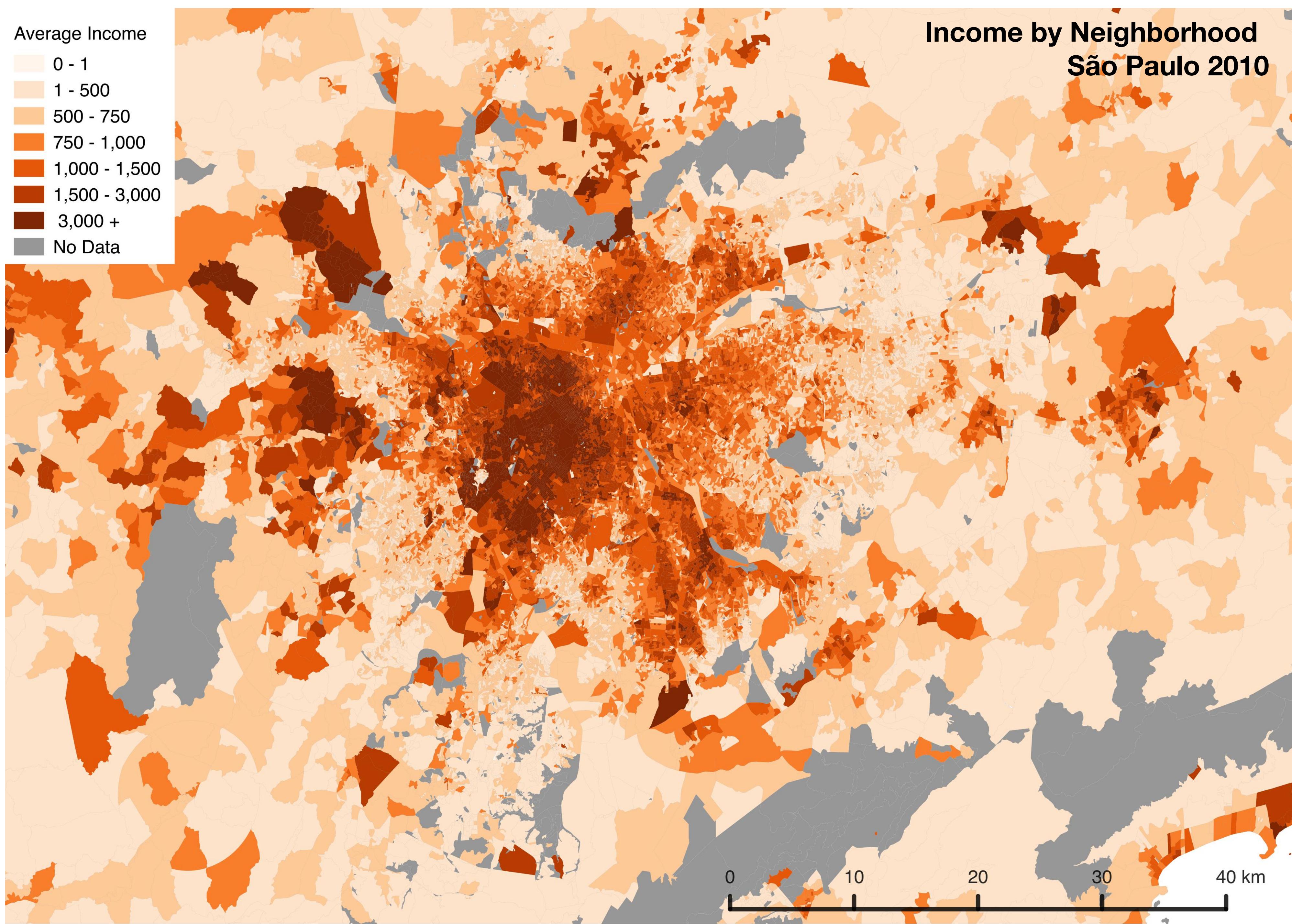




Average Income

- 0 - 1
- 1 - 500
- 500 - 750
- 750 - 1,000
- 1,000 - 1,500
- 1,500 - 3,000
- 3,000 +
- No Data

## Income by Neighborhood São Paulo 2010



# Neighborhood Effects

## Neighbourhood effect

From Wikipedia, the free encyclopedia

The **neighbourhood effect** is an economic and social science concept that posits that neighbourhoods have either a direct or indirect effect on individual behaviors. Although the effect of the neighbourhood was already known and studied at the beginning of the 20th century<sup>[1]</sup> and as early as the mid 19th century,<sup>[2]</sup> it has become a popular approach after the publication of the book *The Truly Disadvantaged* by William Julius Wilson in 1987. Wilson's theory suggests that living in a neighbourhood seriously affected by poverty affects a wide range of individual outcomes, such as economic self-sufficiency, violence, drug use, low birthweight, and cognitive ability.

## Chicago School of Urban Sociology

“Ecological” Effects

## “Ecological” Effects

Roderick D. McKenzie  
The City

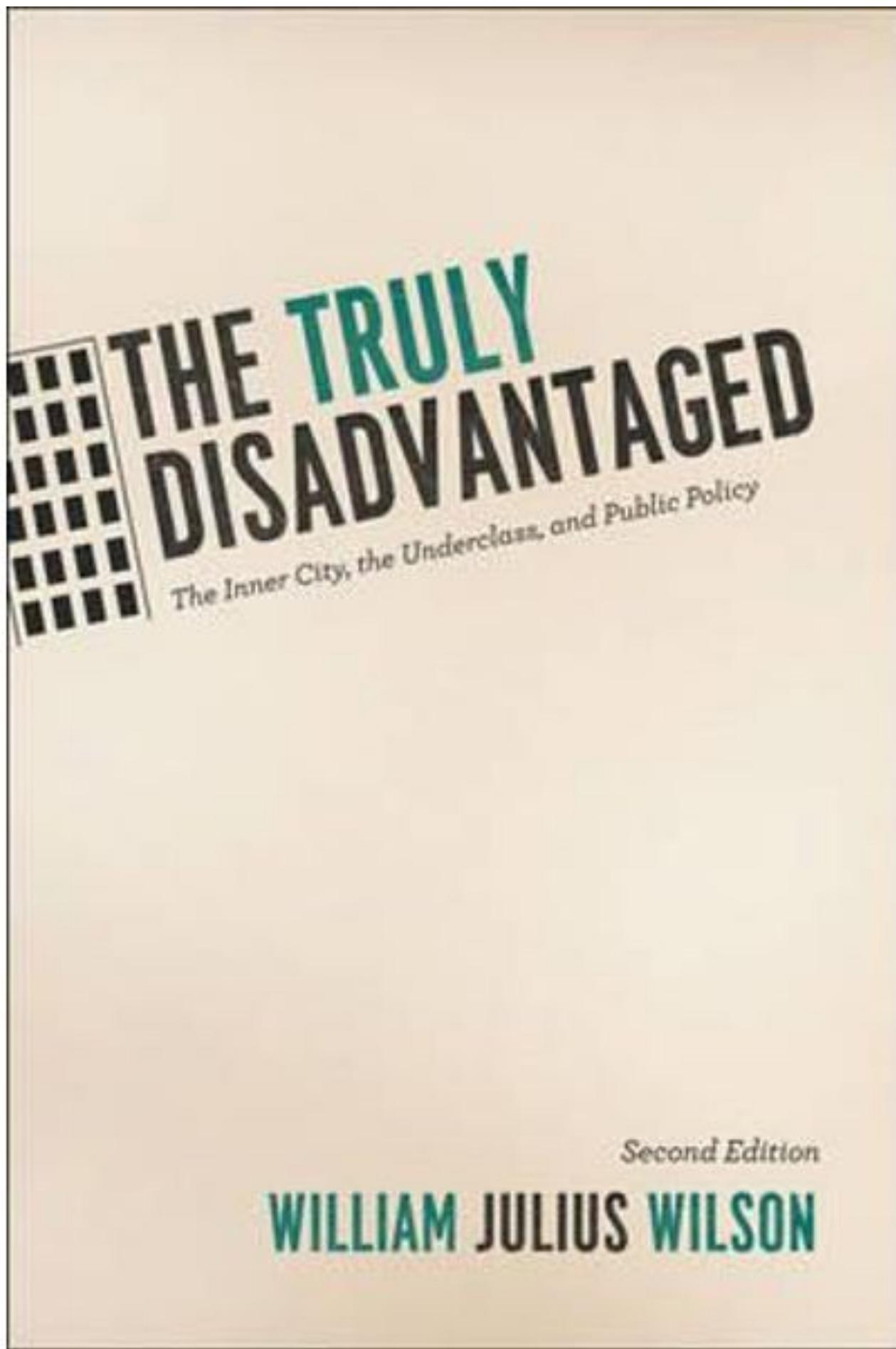
### CHAPTER III

#### THE ECOLOGICAL APPROACH TO THE STUDY OF THE HUMAN COMMUNITY

The young sciences of plant and animal ecology have become fairly well established. Their respective fields are apparently quite well defined, and a set of concepts for analysis is becoming rather generally accepted. The subject of human ecology, however, is still practically an unsurveyed field, that is, so far as a systematic and scientific approach is concerned. To be sure, hosts of studies have been made which touch the field of human ecology in one or another of its varied aspects, but there has developed no science of human ecology which is comparable in precision of observation or in method of analysis with the recent sciences of plant and animal ecology.

##### I. THE RELATION OF HUMAN ECOLOGY TO PLANT AND ANIMAL ECOLOGY

Ecology has been defined as “that phase of biology that considers plants and animals as they exist in nature, and studies their interdependence, and the relation of each kind and individual to its environment.”<sup>1</sup> This definition is not sufficiently comprehensive to include all the elements that logically fall within the range of human ecology. In the absence of any precedent let us tentatively define human ecology as a study of the spatial and temporal<sup>2</sup> relations of human beings as affected by the selective, distributive, and accommodative forces of the environment. Human ecology is fundamentally interested in the effect of *position*,<sup>1</sup> in both time and space, upon human institutions and human behavior. “Society is made up of individuals spatially separated, territorially distributed, and capable of independent locomotion.”<sup>2</sup> These spatial relationships of human beings are the products of competition and selection, and are continuously in process of change as new factors enter to disturb the competitive relations or to facilitate mobility. Human institutions and human nature itself become accommodated to certain spatial relationships of human beings. As these spatial relationships change, the physical basis of social relations is altered, thereby producing social and political problems.



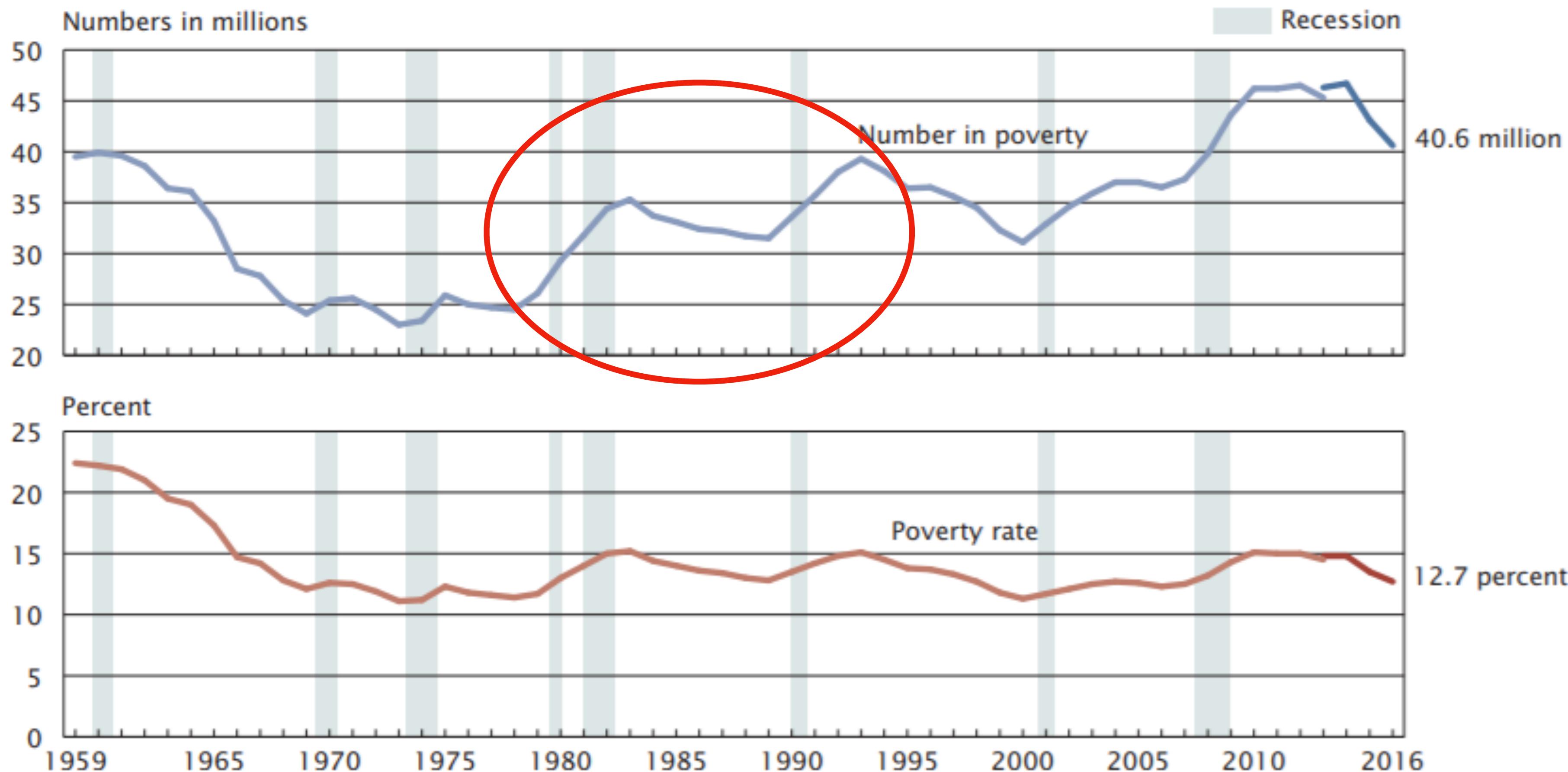
**William Julius Wilson, 1987**

<https://sociology.fas.harvard.edu/people/william-julius-wilson>

In "The Truly Disadvantaged," Mr. Wilson takes on conservatives, liberals and civil rights leaders alike as he develops persuasive alternative explanations of what has gone wrong in the inner city and supports them with extensive data and research. For example, he explores the sharpening of class lines among blacks; the proportions of black men with annual incomes over \$25,000 and those with annual incomes under \$5,000 have both increased. Inequality of income is greater now among black families than among white families. **NYtimes review**

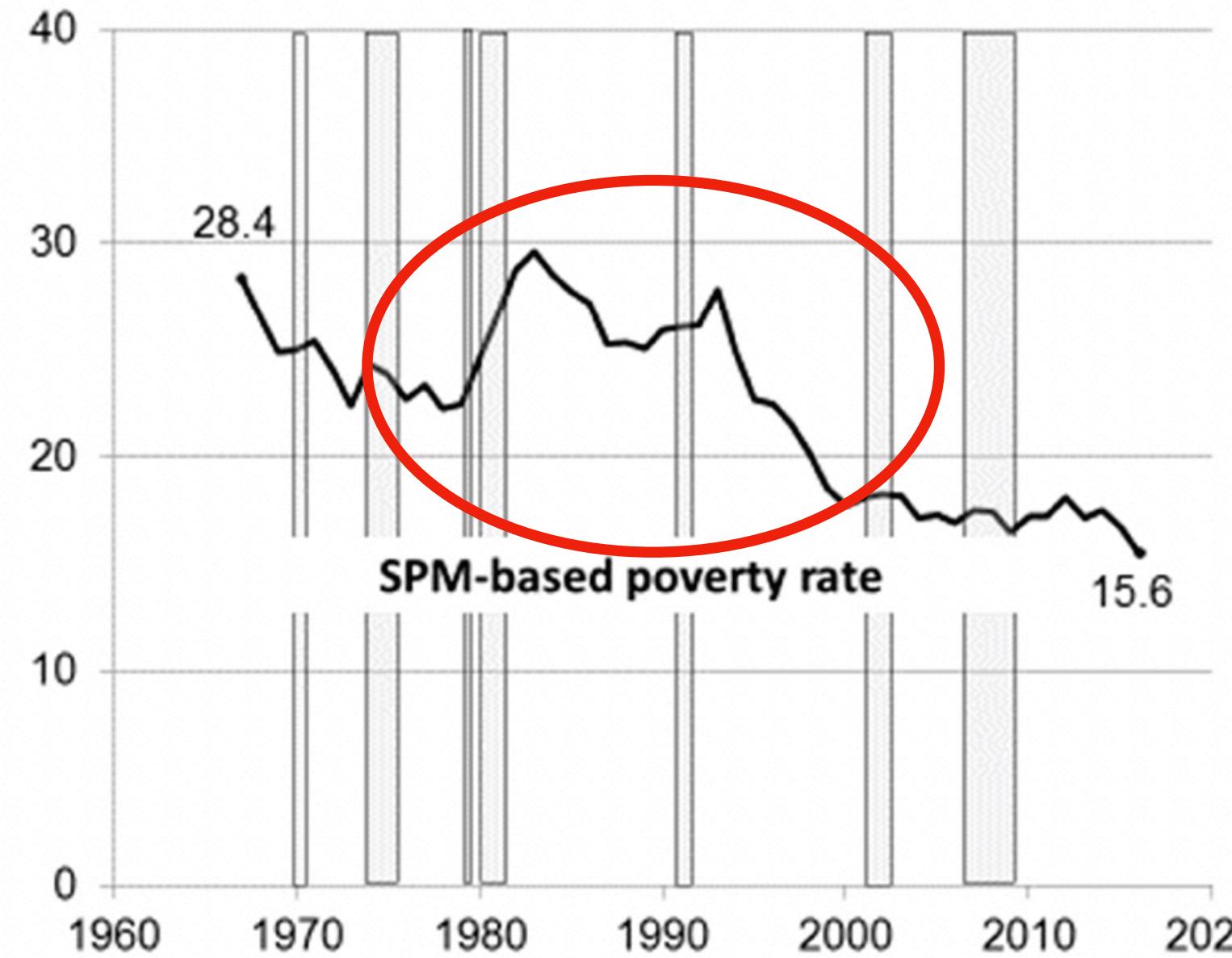
<https://press.uchicago.edu/ucp/books/book/chicago/T/bo13375722.html>

Figure 4.  
**Number in Poverty and Poverty Rate: 1959 to 2016**



Note: The data for 2013 and beyond reflect the implementation of the redesigned income questions. The data points are placed at the midpoints of the respective years. For information on recessions, see Appendix A. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see <[www2.census.gov/programs-surveys/cps/techdocs/cpsmar17.pdf](http://www2.census.gov/programs-surveys/cps/techdocs/cpsmar17.pdf)>.

Source: U.S. Census Bureau, Current Population Survey, 1960 to 2017 Annual Social and Economic Supplements.

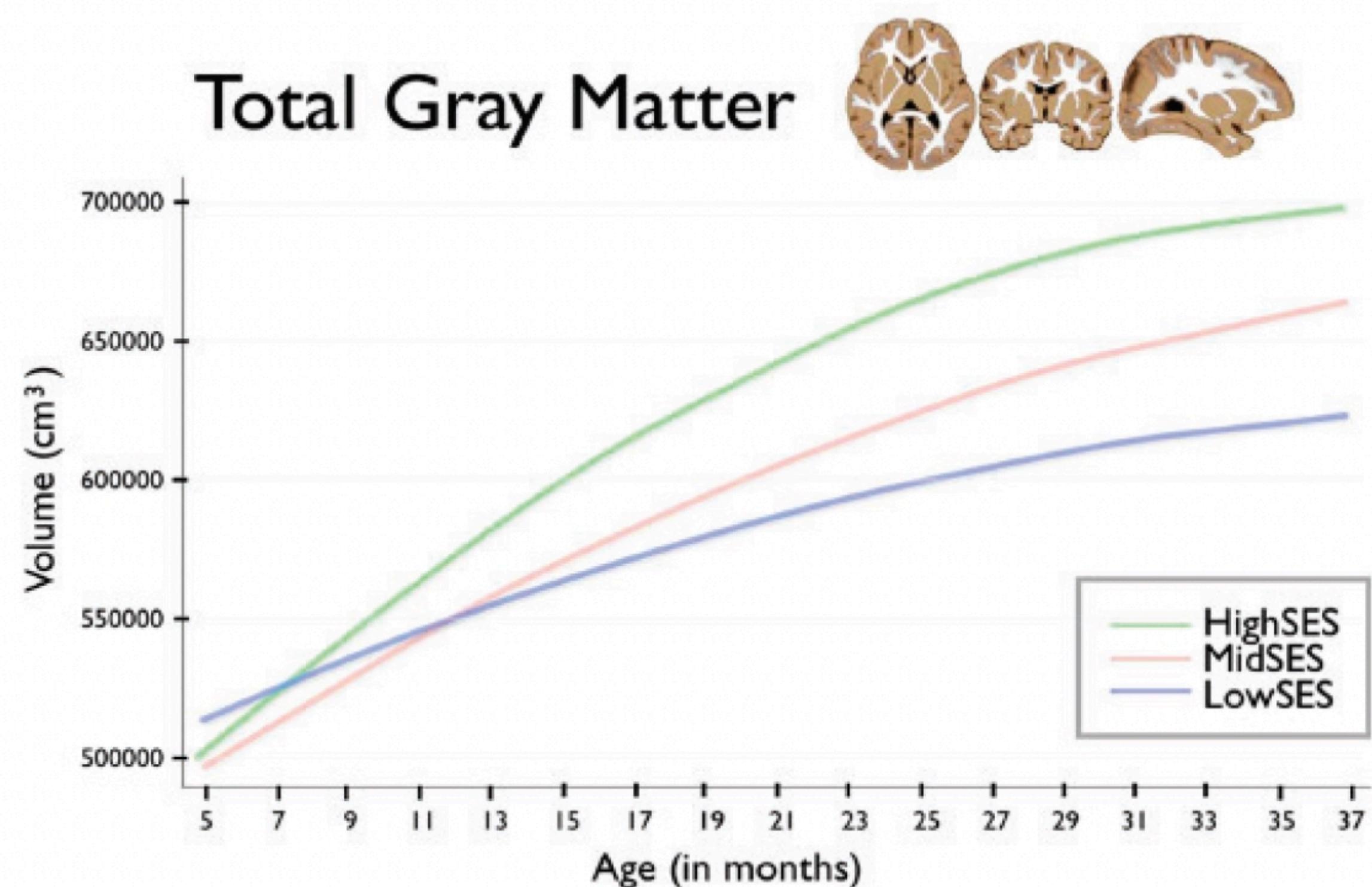


**FIGURE S-2** Child poverty rates as measured by the Supplemental Poverty Measure (SPM), 1967–2016, using the Current Population Survey Annual Social and Economic Supplement (CPS ASEC).

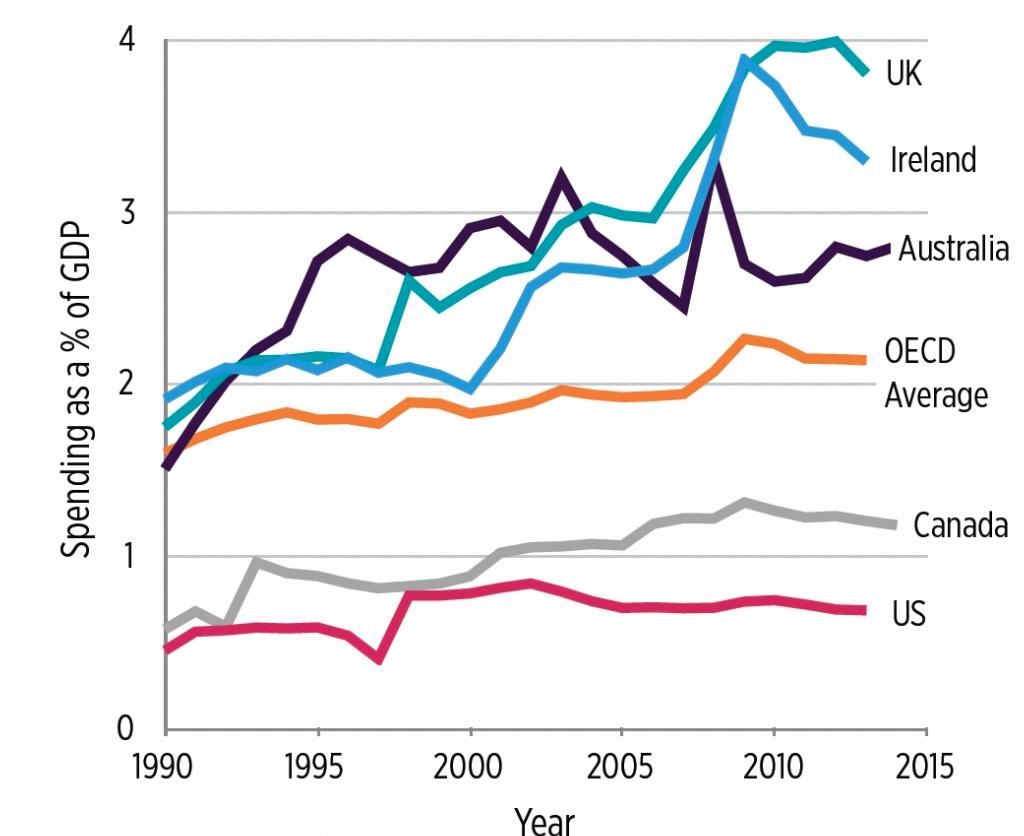
NOTE: Shaded areas indicate recession years. Poverty estimates use the SPM with income that is not corrected for underreporting, as it is not feasible to correct income reporting in the CPS ASEC over the entire period shown. Corrections for underreporting account for the bulk of the 13.0% vs. 15.6% poverty rate differences shown in Figures S-1 and S-2.

SOURCE: Analyses commissioned by the committee and conducted by Christopher Wimer (2017).

Poverty has long term consequences for people and society



**FIGURE 3-3** Total gray matter volume in early life, by socioeconomic group.  
SOURCE: Hanson et al. (2013).



**FIGURE 4-12** Public spending on families and children as a percentage of Gross Domestic Product, United States, OECD average, and four peer anglophone countries, 1990–2015.  
SOURCE: OECD, Social Expenditure database (see <https://data.oecd.org/socialexp/family-benefits-public-spending.htm>); and OECD (2017).

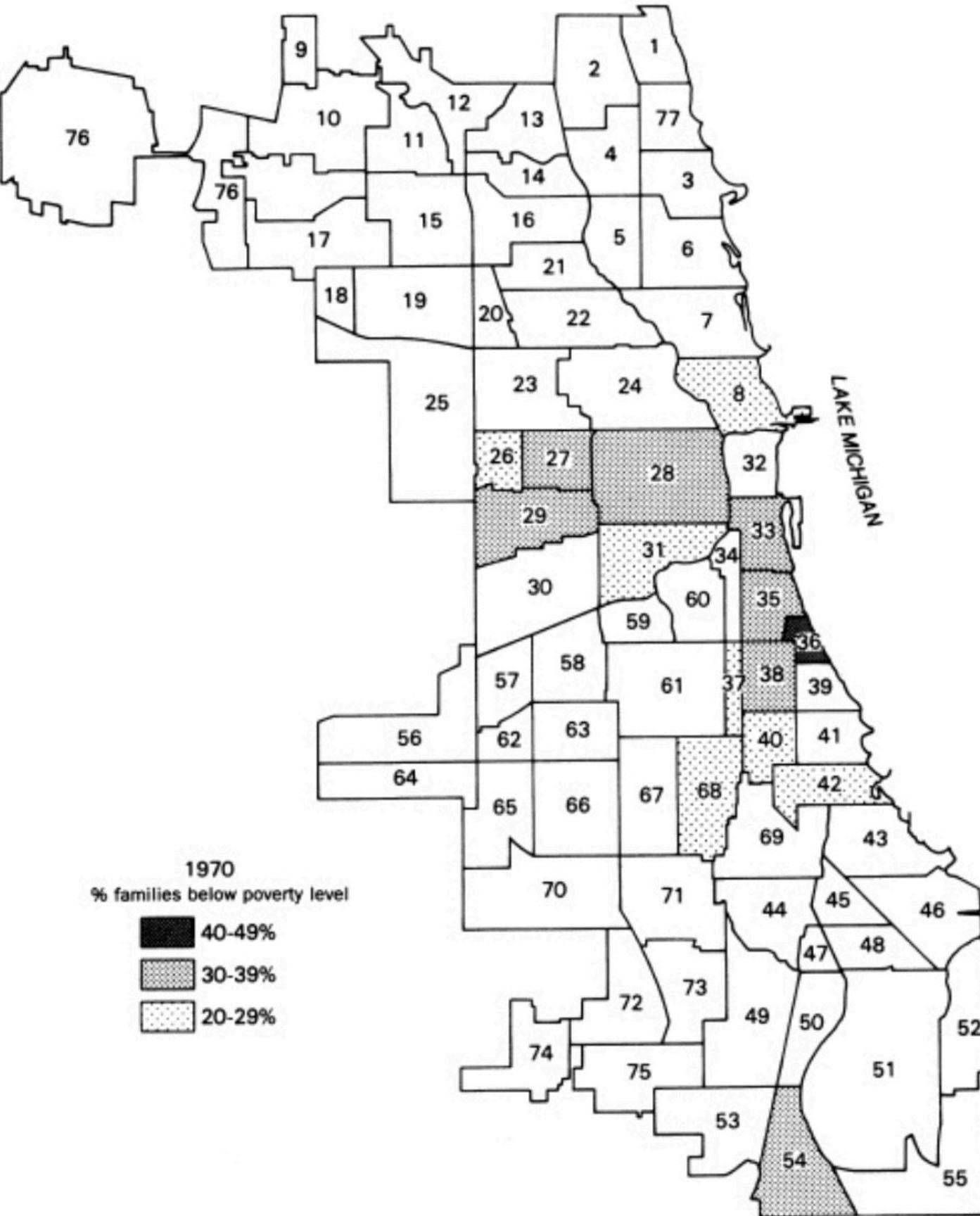


Figure 2.3 Chicago Community Poverty Areas, 1970. *Source: Local Community Fact Book: Chicago Metropolitan Area, 1970 and 1980* (Chicago: Chicago Review Press, 1984).

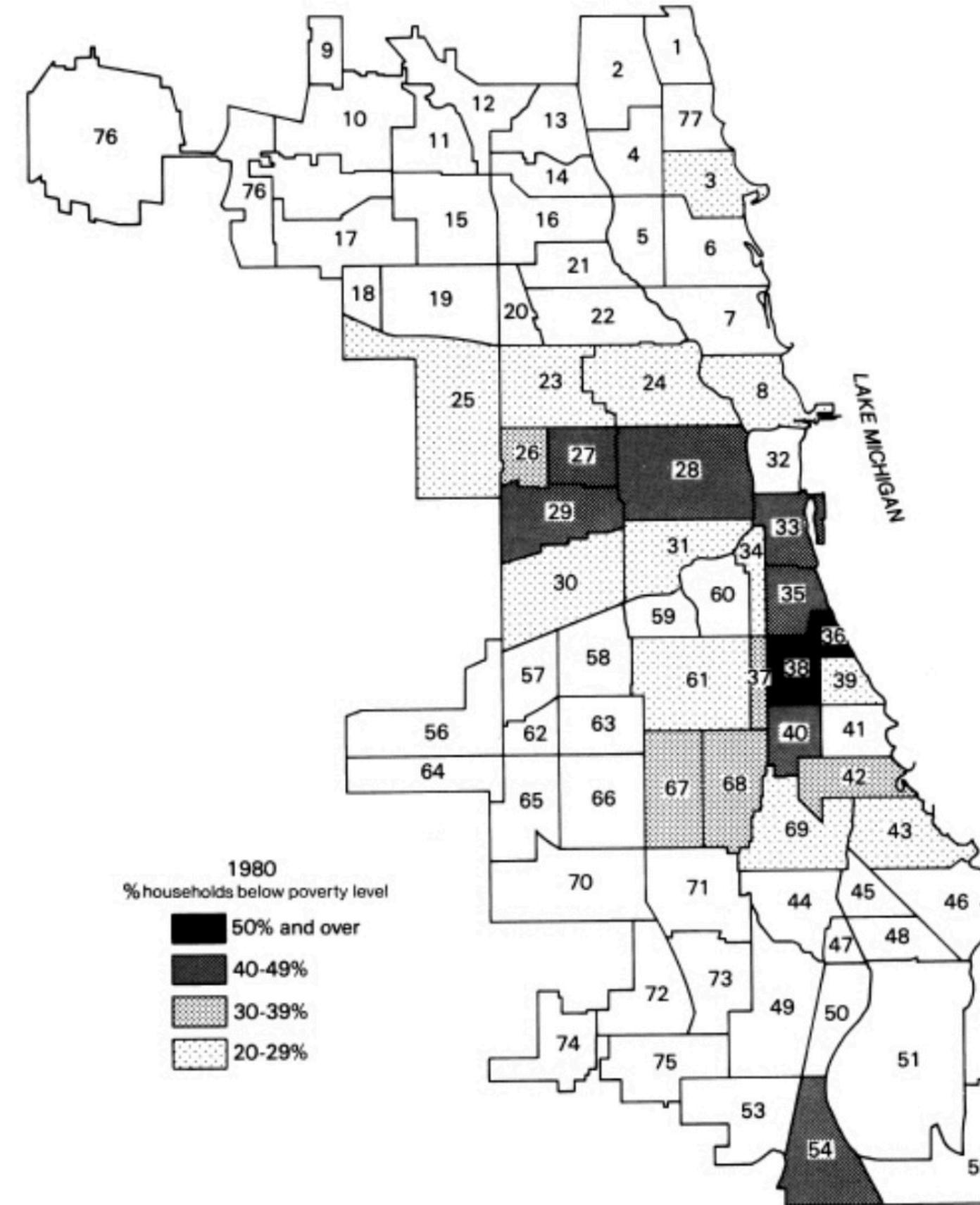


Figure 2.4. Chicago Community Poverty Areas, 1980. *Source: see fig. 2.3.*

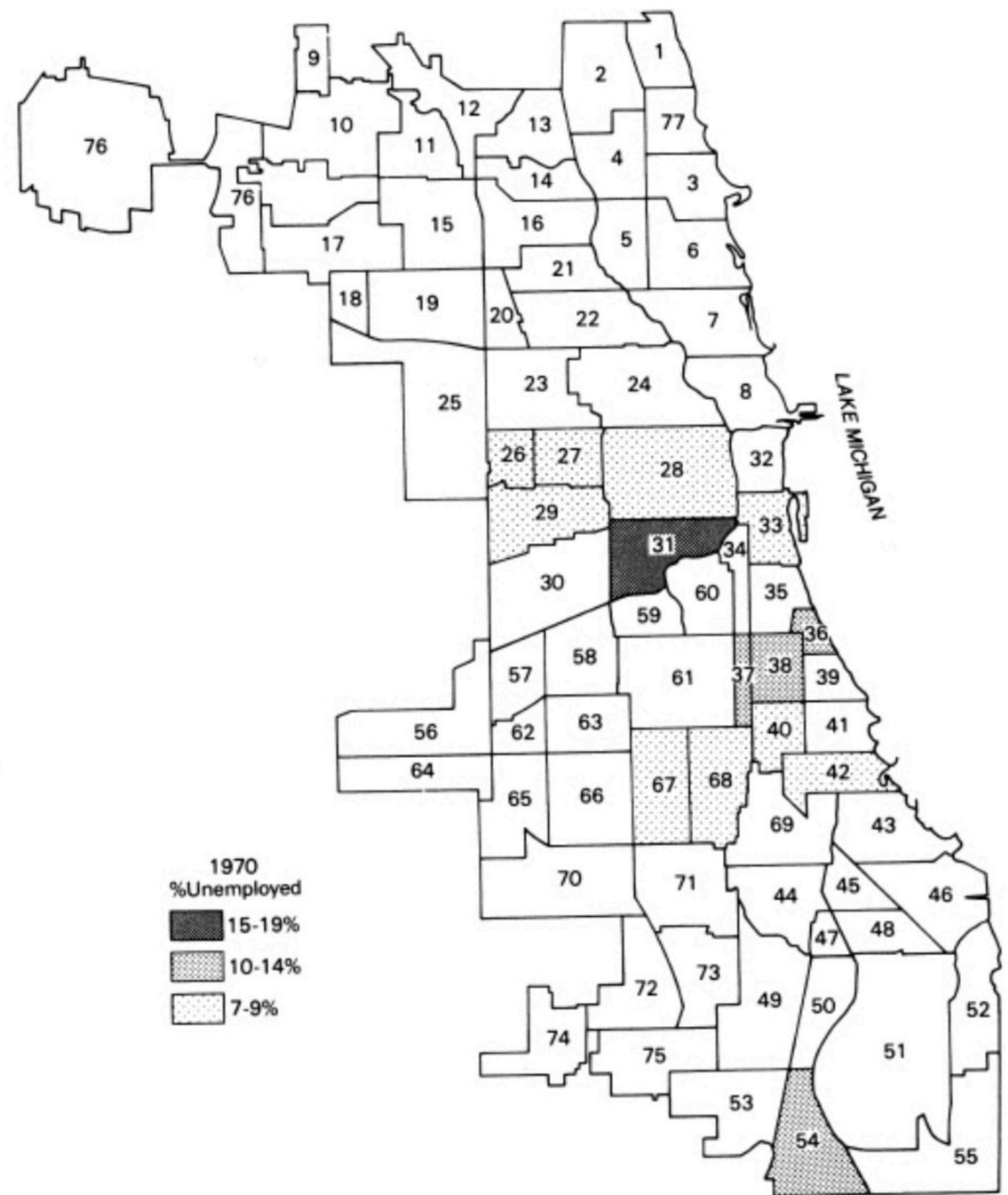


Figure 2.5. Unemployment rates in Chicago Community Areas, 1970.

Source: see fig. 2.3.

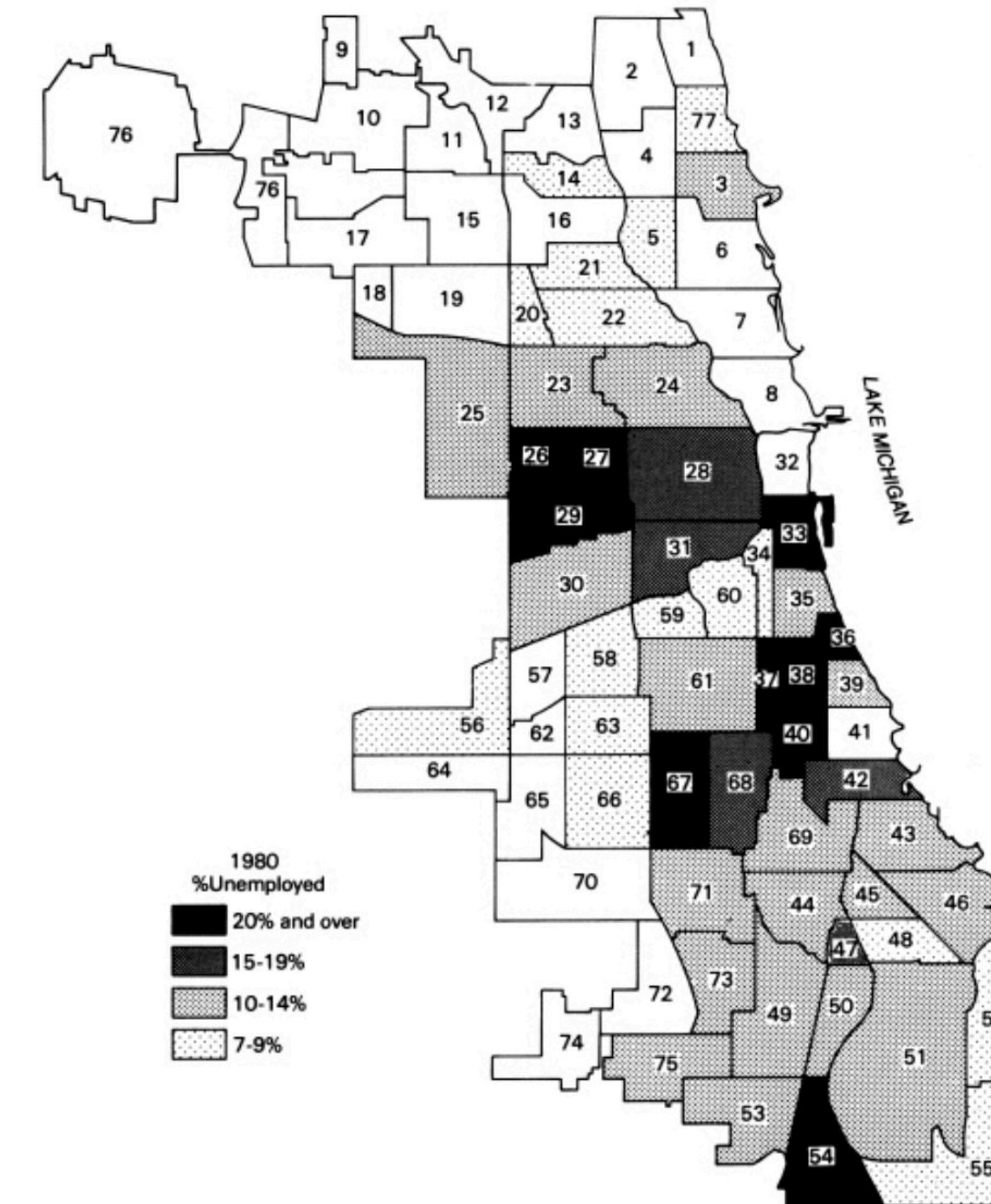
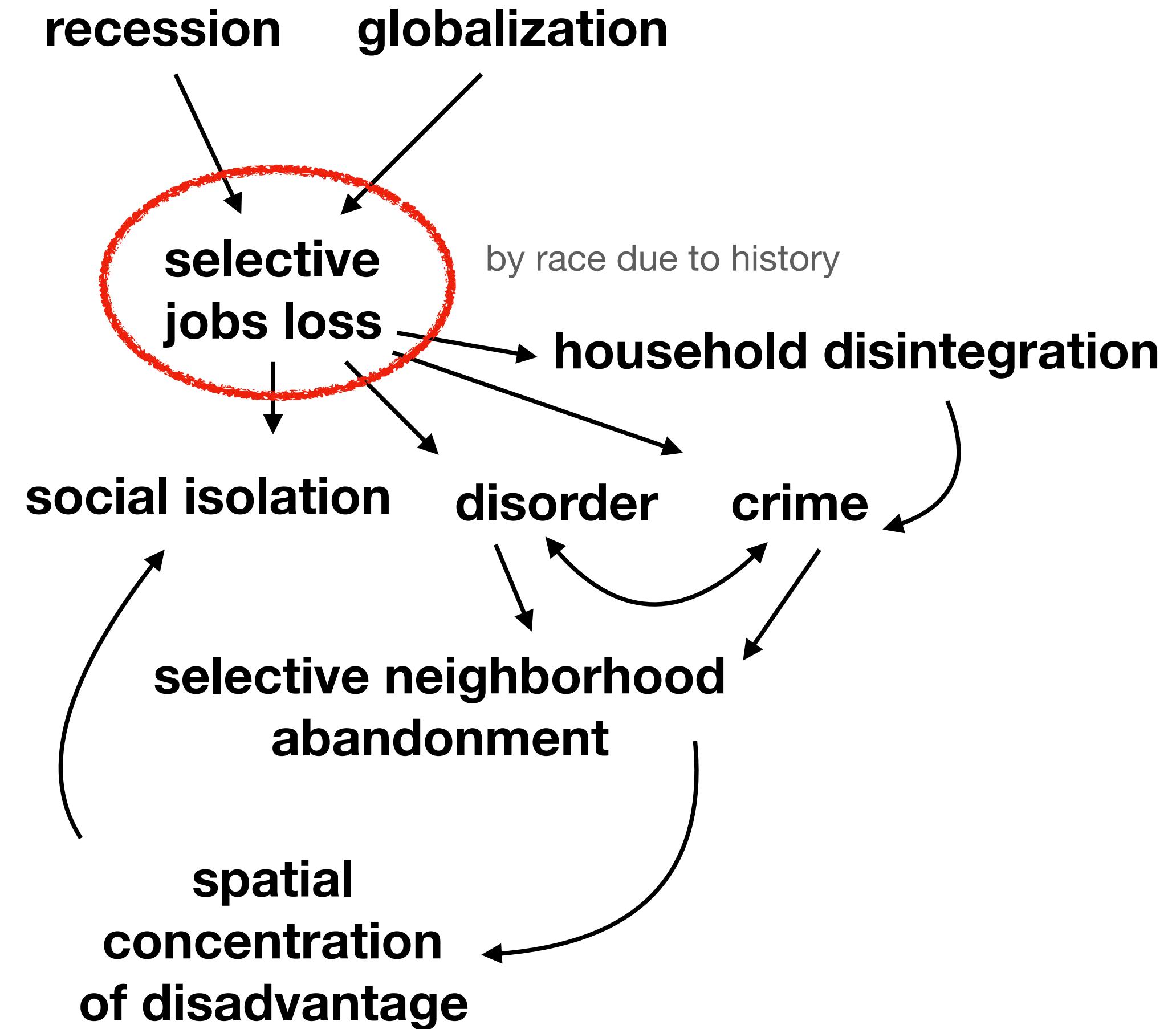


Figure 2.6. Unemployment rates in Chicago Community Areas, 1980.

Source: see fig. 2.3.

## Wilson's Model



## Ecological Sociology

**not individualistic determinants**

such as race

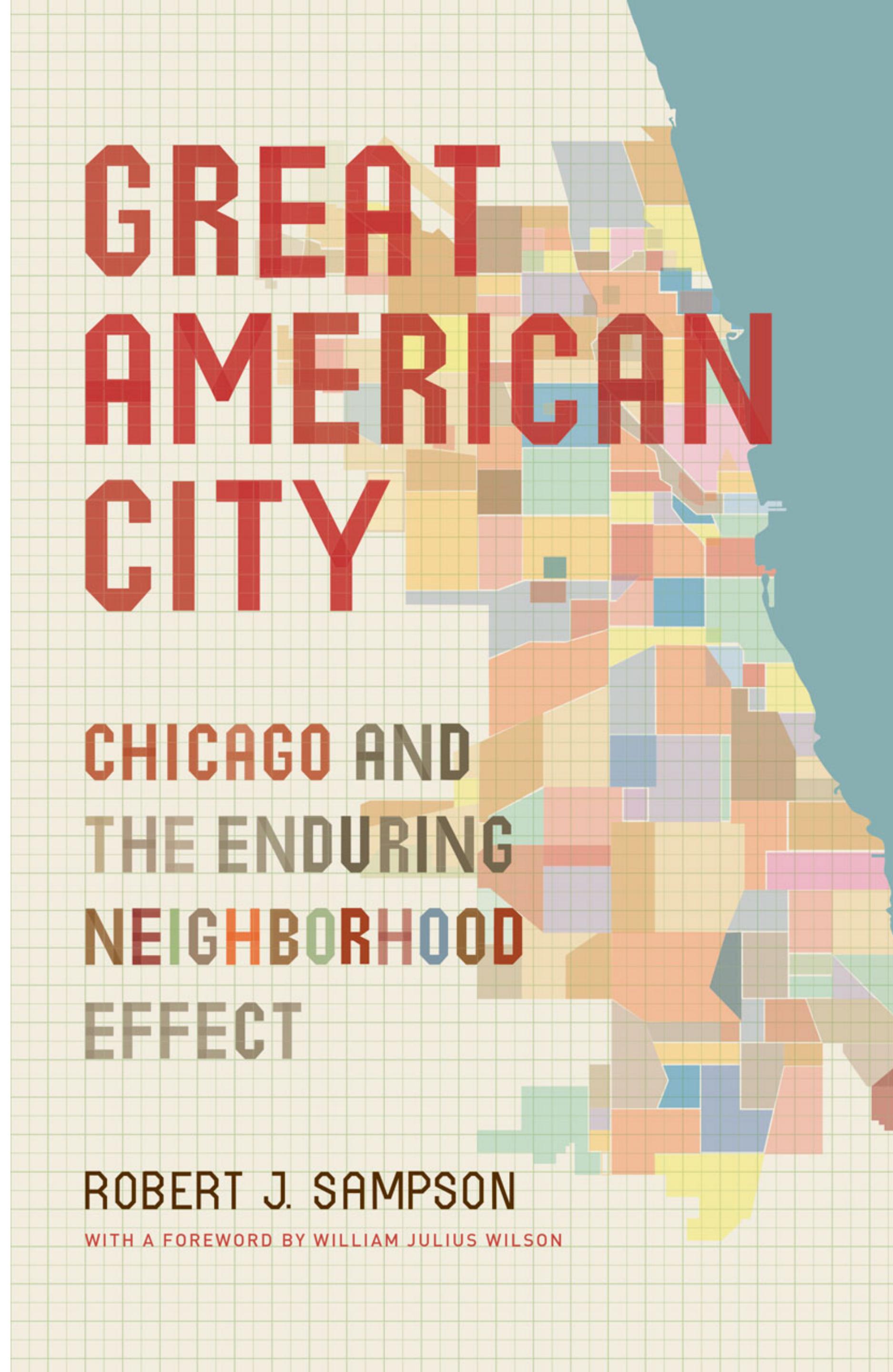
no personal virtue or pathology

**not structural determinants**

no environmental determinist  
(forces beyond our control)

racism / power / culture of poverty /culture of violence

**Emphasis on dynamical co-adaptation between  
people and (socioeconomic) environments**



**Robert J Sampson**

**“Ecometrics”**

**Ecological indicators in the city**

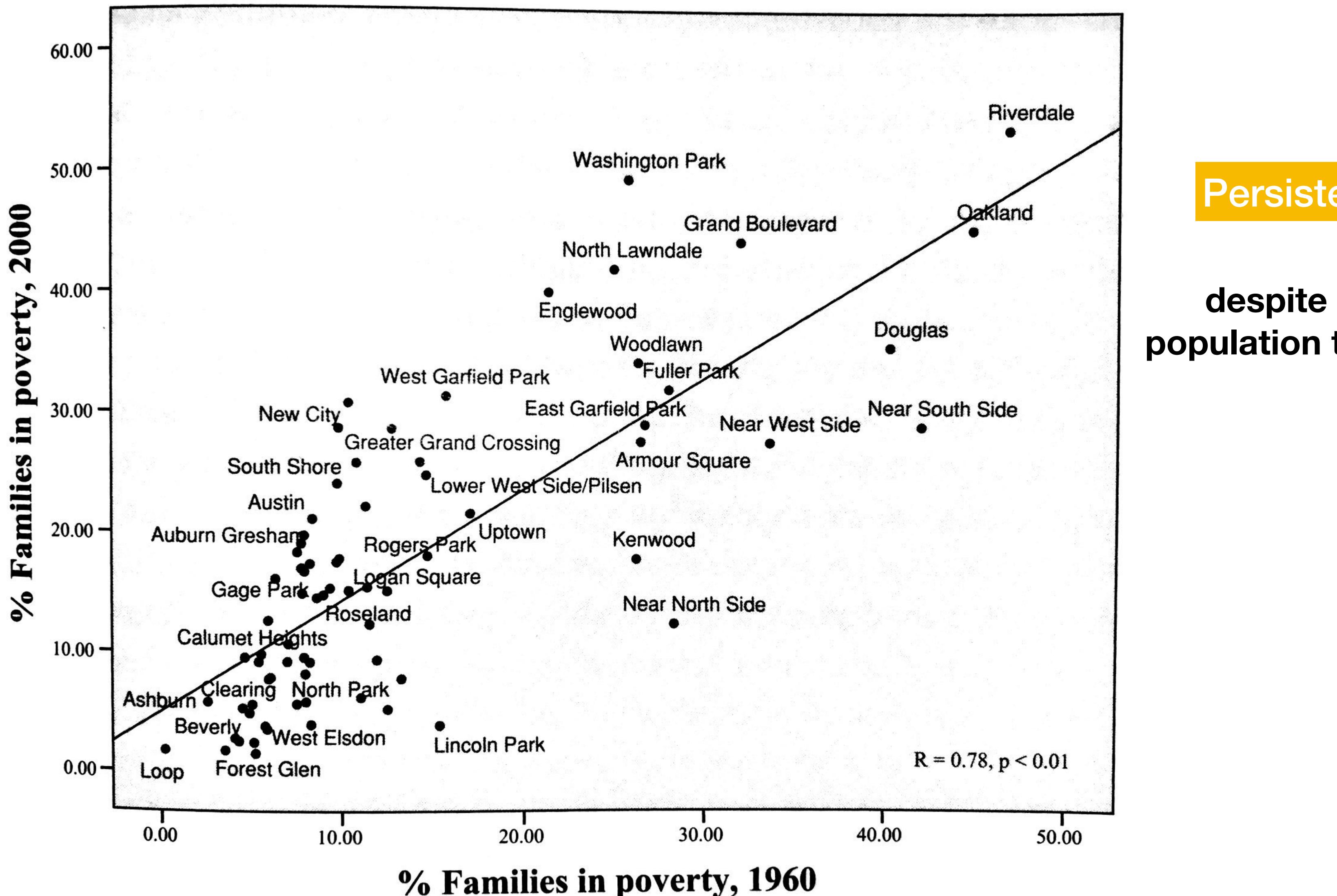


FIGURE 5.1. Persistence and change in poverty across forty years

SCIENCE



30:01

+ QUEUE

DOWNLOAD

EMBED

TRANSCRIPT

# How A Theory Of Crime And Policing Was Born, And Went Terribly Wrong

November 1, 2016 · 12:00 AM ET



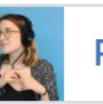
SHANKAR VEDANTAM



CHRIS BENDEREV



TARA BOYLE



RENEE KLAHR



MAGGIE PENMAN



JENNIFER SCHMIDT



The broken windows theory of policing suggested that cleaning up the visible signs of disorder — like graffiti, loitering, panhandling and prostitution — would prevent more serious crime as well.

Getty Images/Image Source

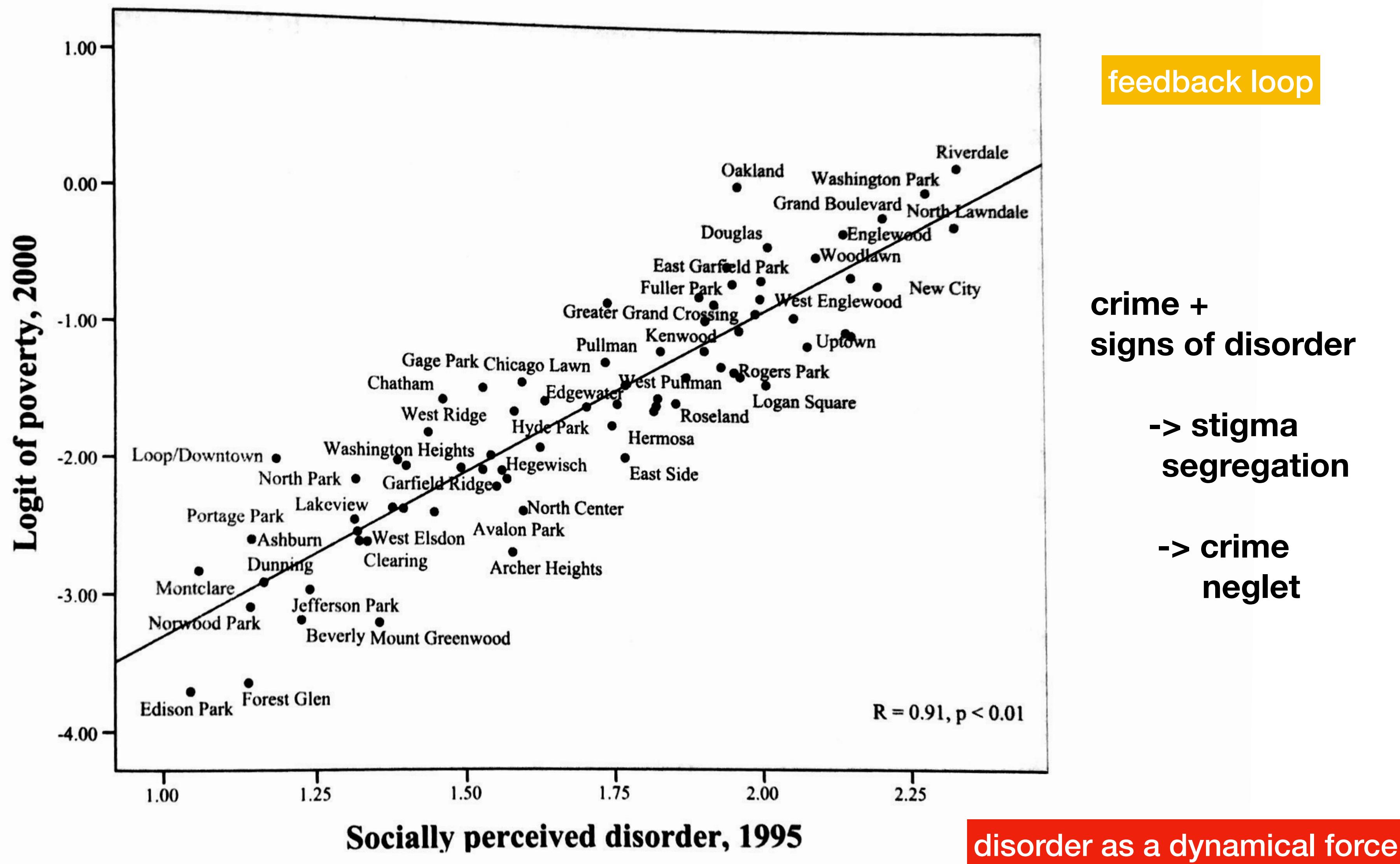


FIGURE 6.6. Socially perceived disorder strongly predicts later poverty at the community level

## Collective Efficacy

**Residents were asked:**

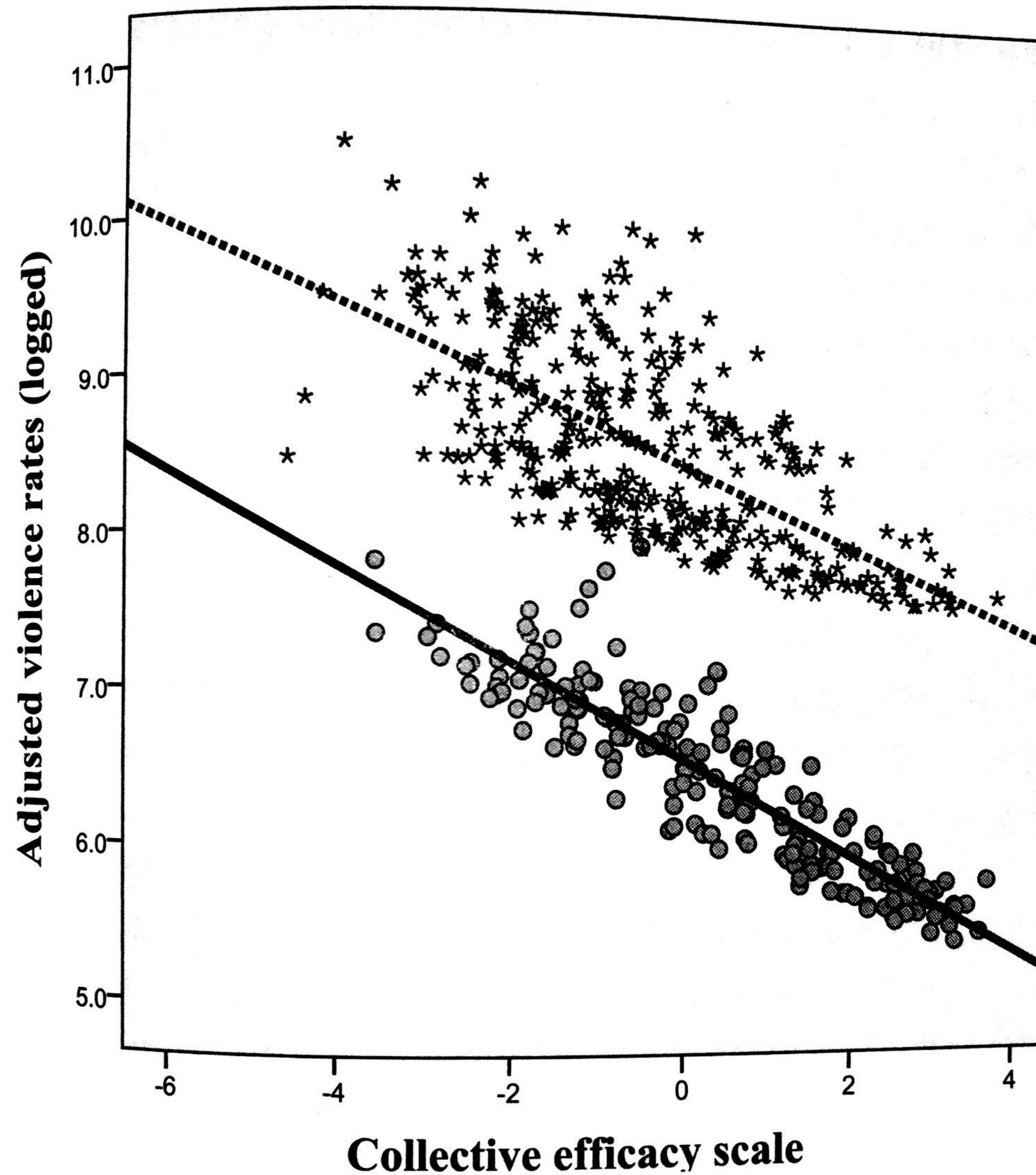
**likelihood their neighbors could be counted on to take action if:**

- 1) children skipping school and hanging out out on a street corner
- 2) children were spray-painting graffiti on a local building
- 3) children were showing disrespect to an adult
- 4) a fight broke out in front of their house
- 5) the fire station closest to their home was threatened with budget cuts

**Also asked:**

People around here can be trusted

...



Collective Efficacy

**social cohesion  
+ shared expectations of control**

City  
Stockholm  
Chicago  
Stockholm  
Chicago

**working trust  
and social interaction**

**every day strategies by which  
residents address challenges**

FIGURE 7.2. Similar prediction of violence in Chicago and Stockholm neighborhoods from collective efficacy, adjusting for concentrated disadvantage, percent black/immi-  
grants, and residential stability