

November 2024

# Housing affordability, zoning, and the creation of a Chicago open to all residents

# Our goal: Affordable housing for all, citywide

## Outcome of interest:

- Diverse and affordable housing options (subsidized, affordable, workforce/middle market, luxury) are available in every neighborhood including for the job insecure and unhoused populations.

# Research approach

## Three major research streams:

1. Understand the outcome: How affordable is the city of Chicago?
2. Understand the zoning: Where are residential uses enabled by zoning?
3. Understand the relationship: What do we know about how housing availability, affordability, and zoning are linked?

*Understand the outcome*

What is housing affordability, and where is affordable housing available?

# Defining housing affordability

**Housing affordability is typically defined as a household being able to rent or own a home for less than 30 percent of its monthly income.**

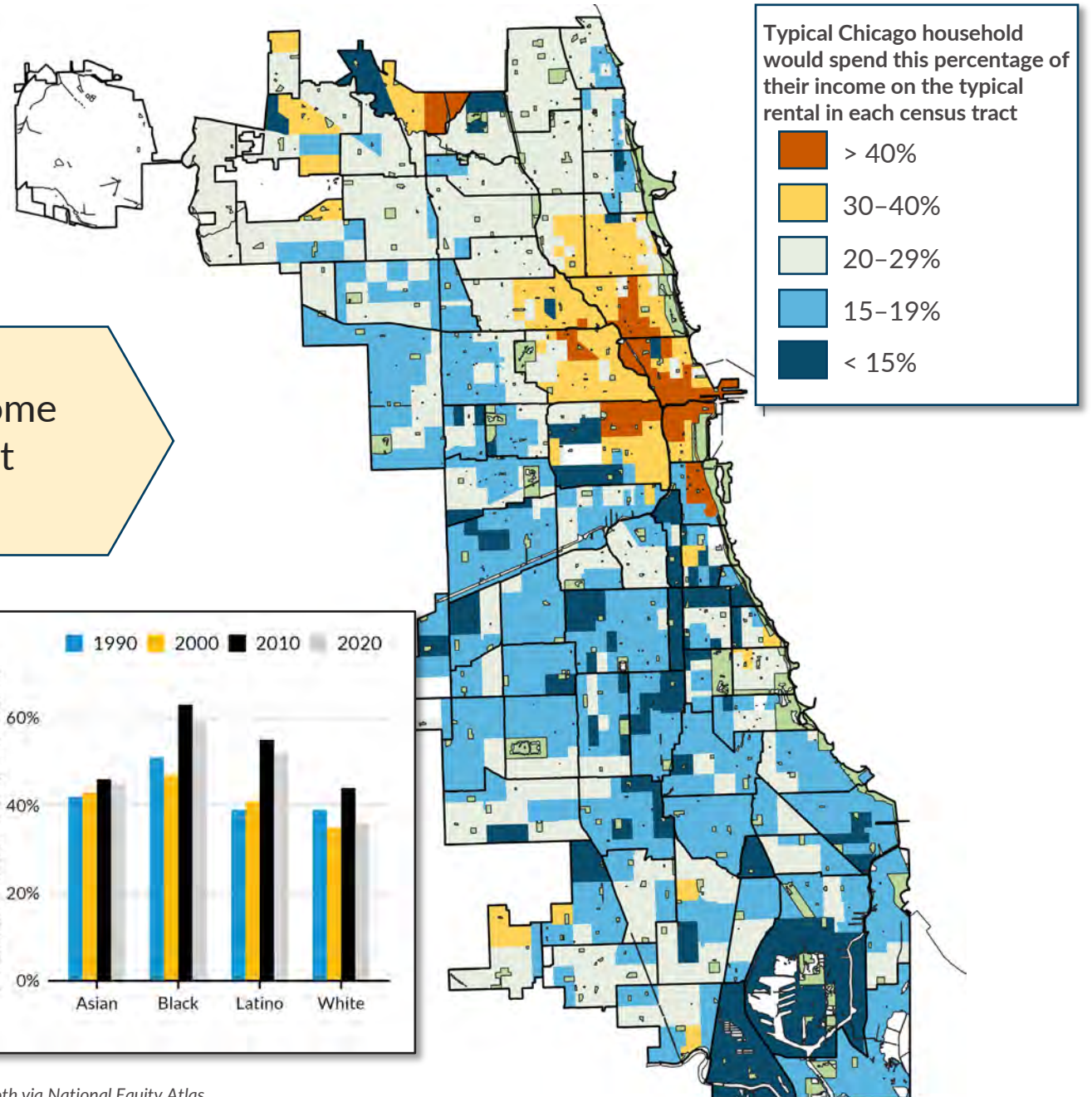
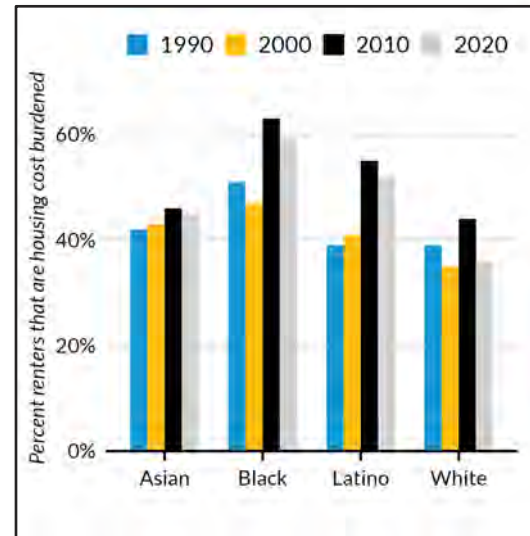
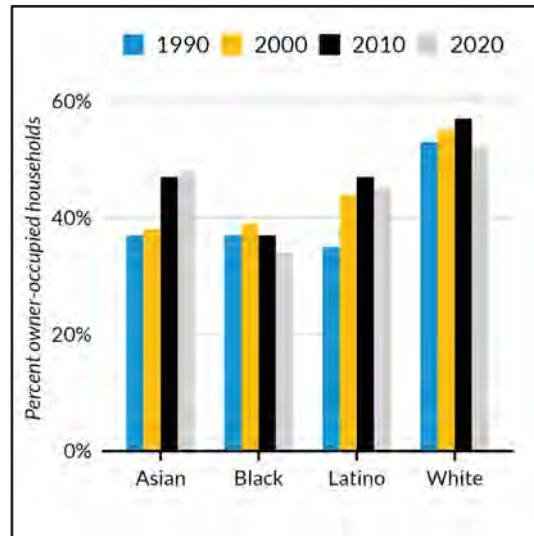
- Households that pay more than 30 percent of income for housing are “cost burdened;” those that pay more than 50 percent are “severely cost burdened.”
- “Affordable housing” can be:
  - A home that is affordable to a household with a low or moderate income;
  - A home with stabilized rents or mortgage payments;
  - A government-subsidized home.

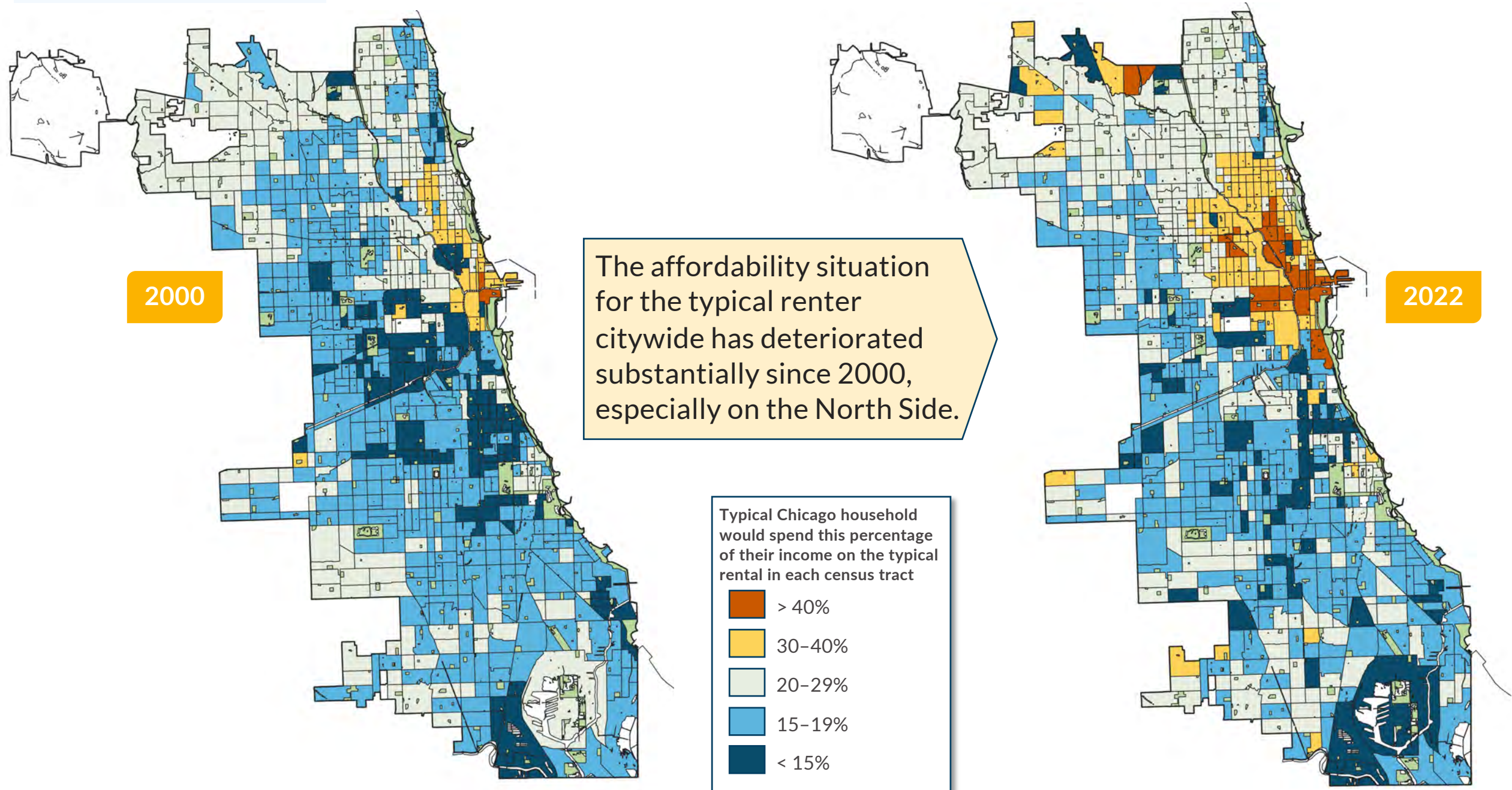


# Where can the *typical Chicagoan* afford to rent?

The median Chicago household would be cost-burdened if they wanted to move into a typical home downtown or in much of the North and Northwest Sides of the city.

Black households in Chicago are disproportionately renters, and they are also more likely to face housing cost burdens.

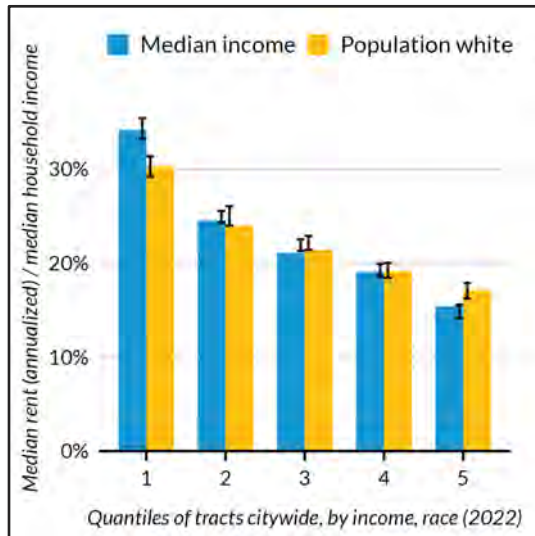




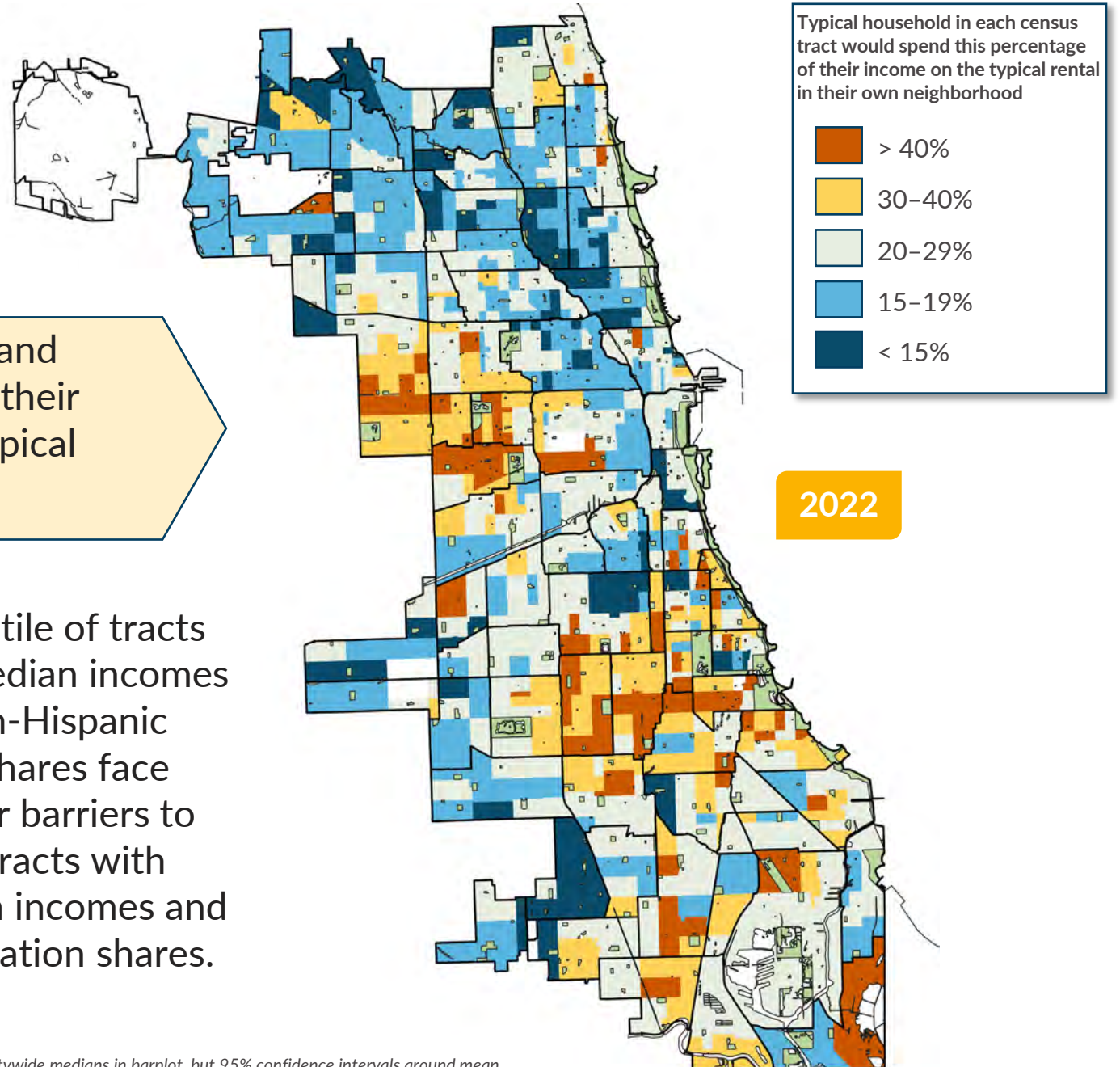


# Housing affordability for renters *in their own neighborhoods*

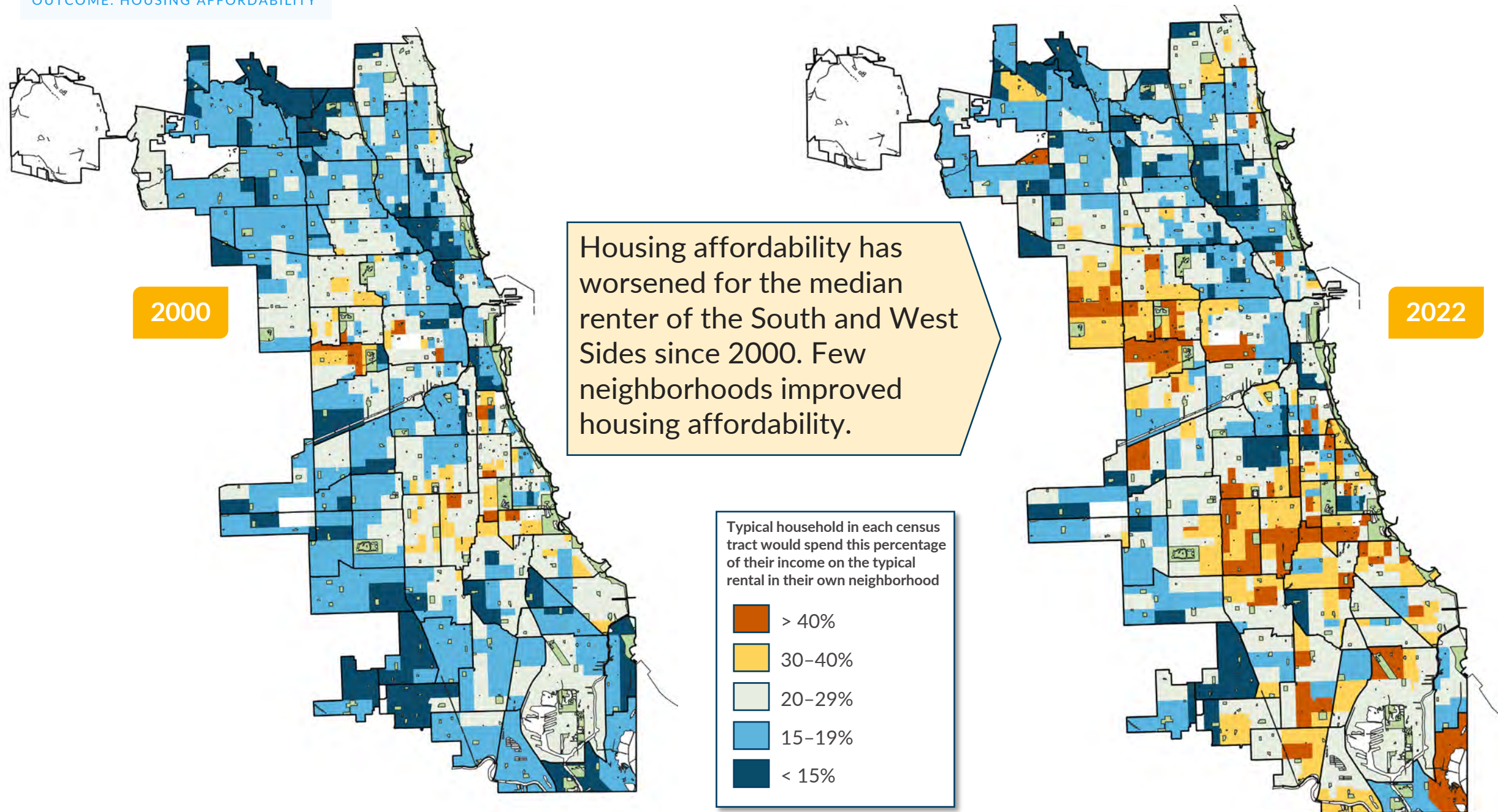
The median renter in much of the city's South and West Sides cannot afford the median rental in their neighborhood. In other parts of the city, the typical renter is not cost burdened.



Citywide, the quantile of tracts with the lowest median incomes and the lowest non-Hispanic white population shares face substantially higher barriers to affordability than tracts with the highest median incomes and higher white population shares.

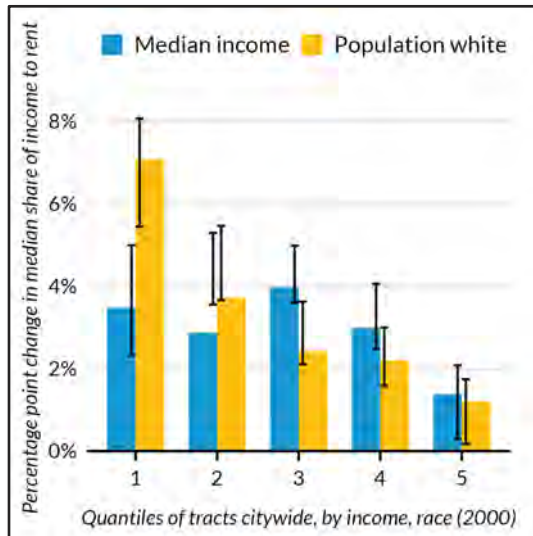




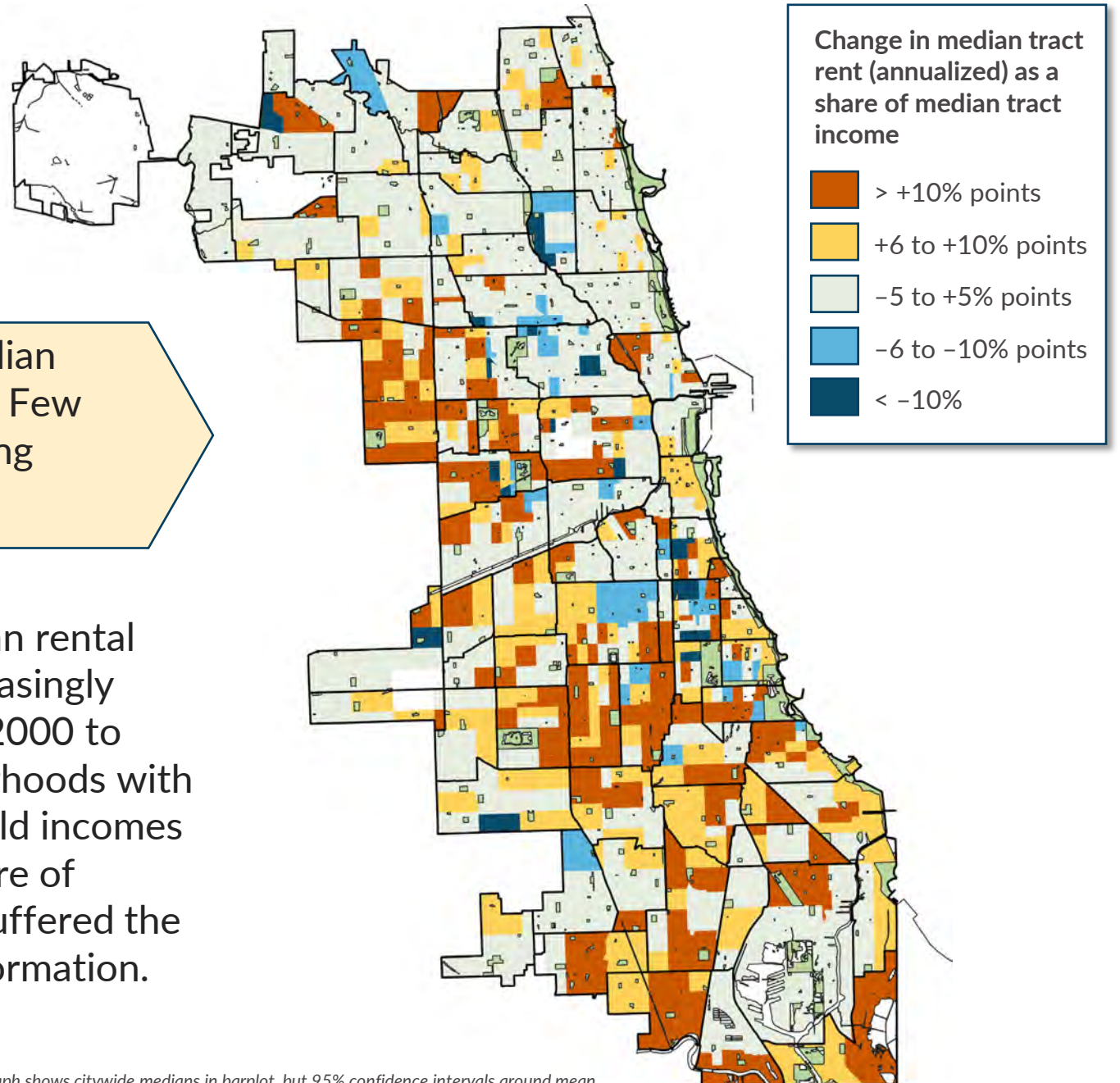


# Change in renter in-neighborhood housing affordability

Housing affordability has worsened for the median renter of the South and West Sides since 2000. Few neighborhoods have experienced greater housing affordability over that period.



Citywide, the median rental home became increasingly unaffordable from 2000 to 2018–22. Neighborhoods with the lowest household incomes and the highest share of residents of color suffered the brunt of this transformation.



Source: Census 2020; Census ACS 2018–2022. Graph shows citywide medians in barplot, but 95% confidence intervals around mean.

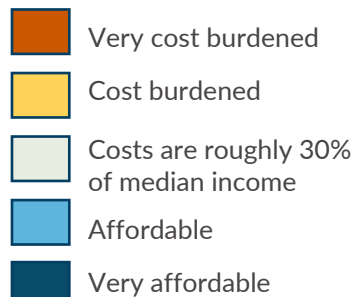


# Where can the *typical Chicagoan* afford to buy?

As with rentals, the North and Northwest Sides of the city are unaffordable to the median city household.

Conditions have worsened since 2000, especially in areas like Logan Square, Albany Park, and Hyde Park.

Indicates whether the typical Chicagoan buying a house in this tract would be cost burdened



2000

2022

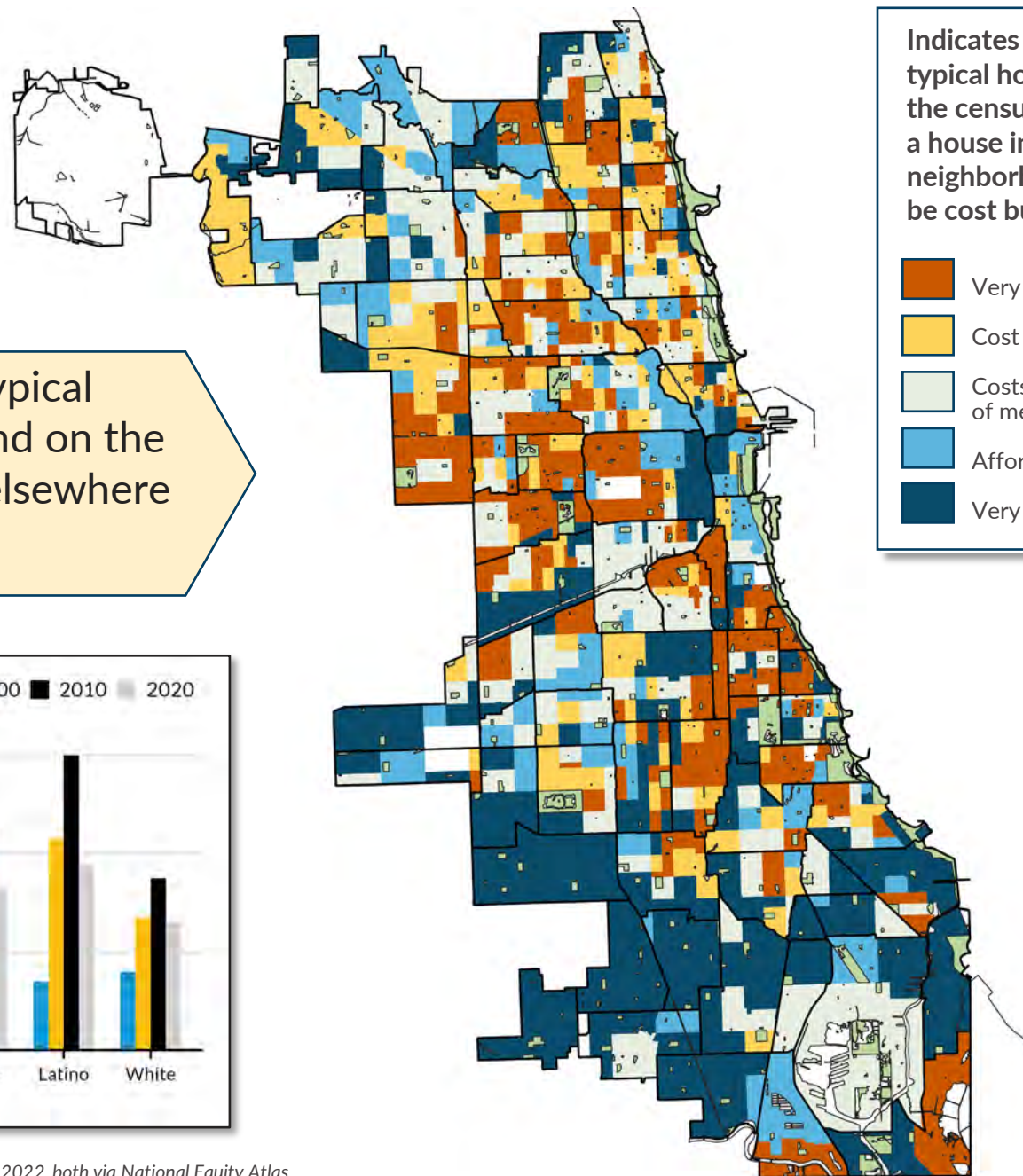
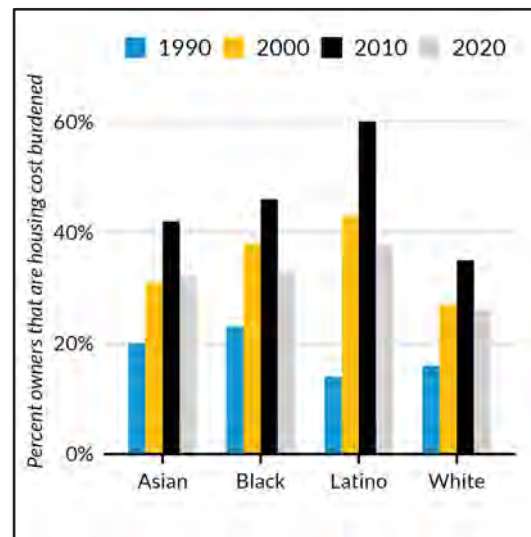
Source: Census 2000; Census ACS 2018–2022. Assumes 27% of monthly income to principal and interest, 20% downpayment, and 7.05% interest rates in 2022; 8.2% interest rates in 2000.



# Housing affordability for owners *in their own neighborhoods*

The most affordable parts of the city for the typical local resident to buy a home are downtown, and on the far South and Southwest Sides. Home values elsewhere are far more expensive compared to income.

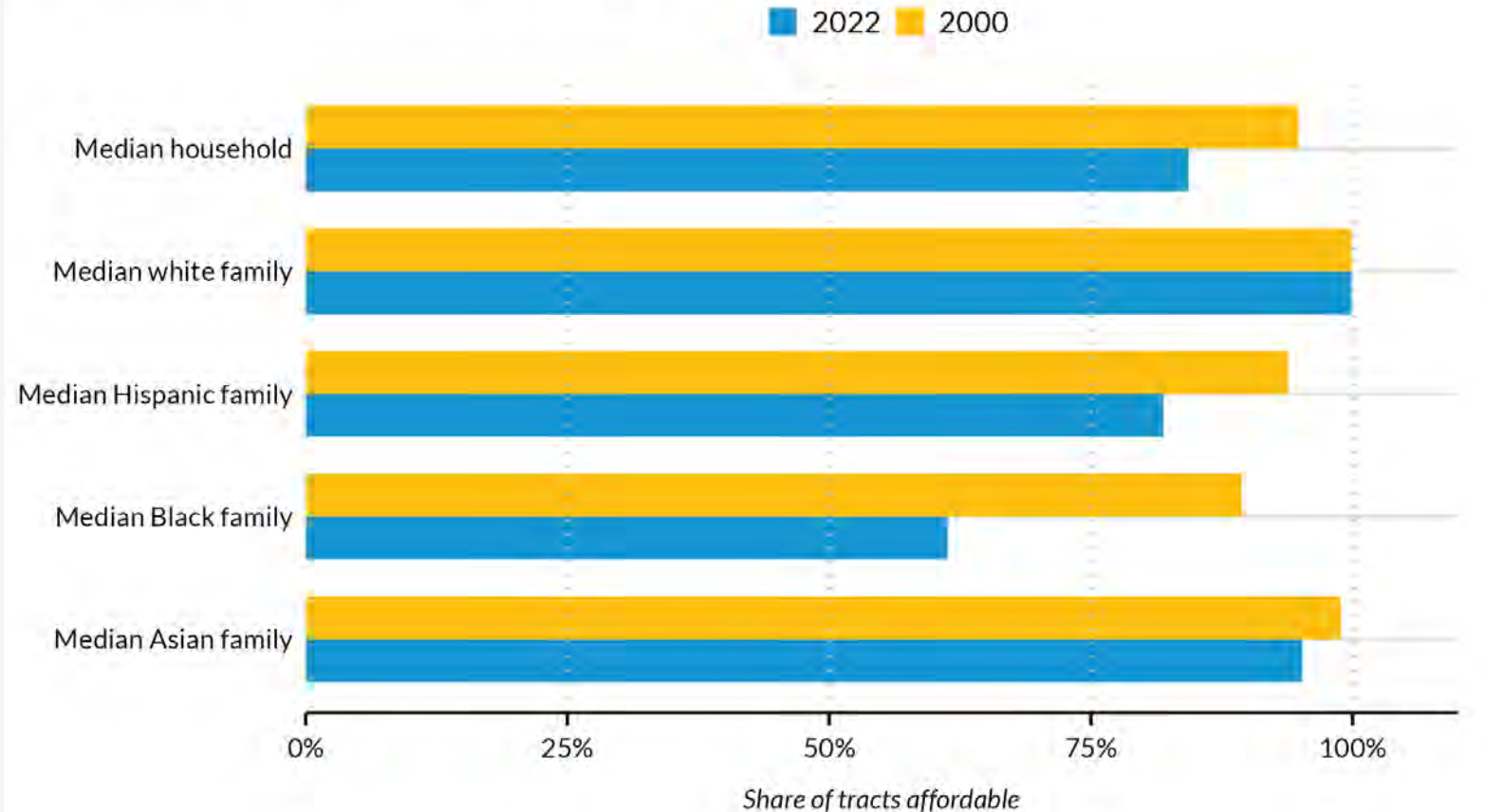
Housing burdens for owners in Chicago have declined since 2010, but remain much higher than in 1990. Latino households that own have the highest homeownership cost burdens of any ethnic or racial group.



Source: Census 1990–2010; Census ACS 2018–2022, both via National Equity Atlas.  
Assumes 27% of monthly income to principal and interest, 20% downpayment, and 7.05% interest rates.

# Rental affordability has declined since 2000 for median non-white family

Affordability of median rental unit, by tract

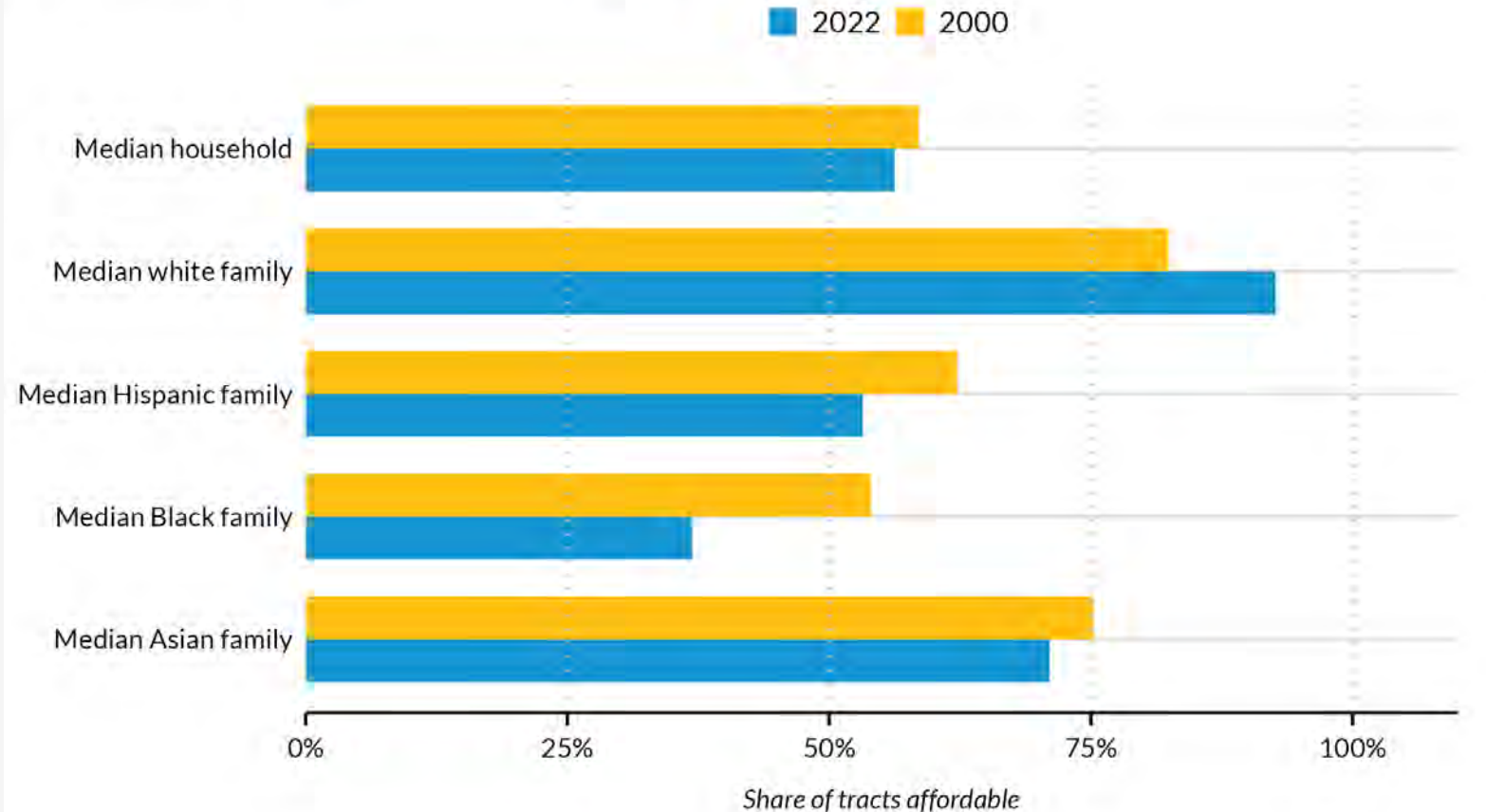


2000 median incomes: All households: \$38,625; White families: \$62,680; Hispanic families: \$37,166; Black families: \$32,776; Asian families: \$47,838

2018–2022 median incomes: All households: \$71,673; White families: \$154,749; Hispanic families: \$68,370; Black families: \$53,587; Asian families: \$89,416

Median white family has more purchasing power, while others have less

Affordability of median ownership unit, by tract

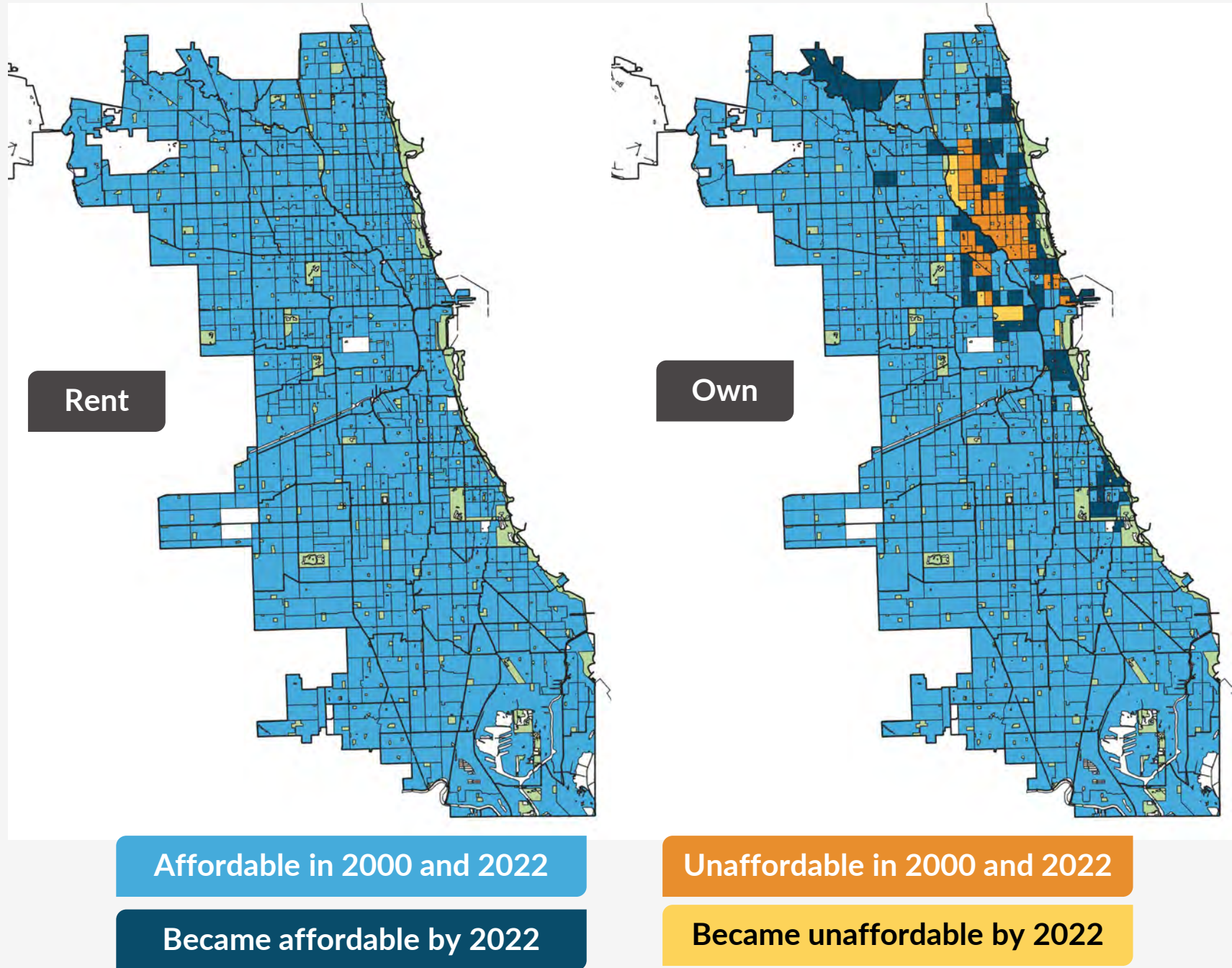


2000 median incomes: All households: \$38,625; White families: \$62,680; Hispanic families: \$37,166; Black families: \$32,776; Asian families: \$47,838

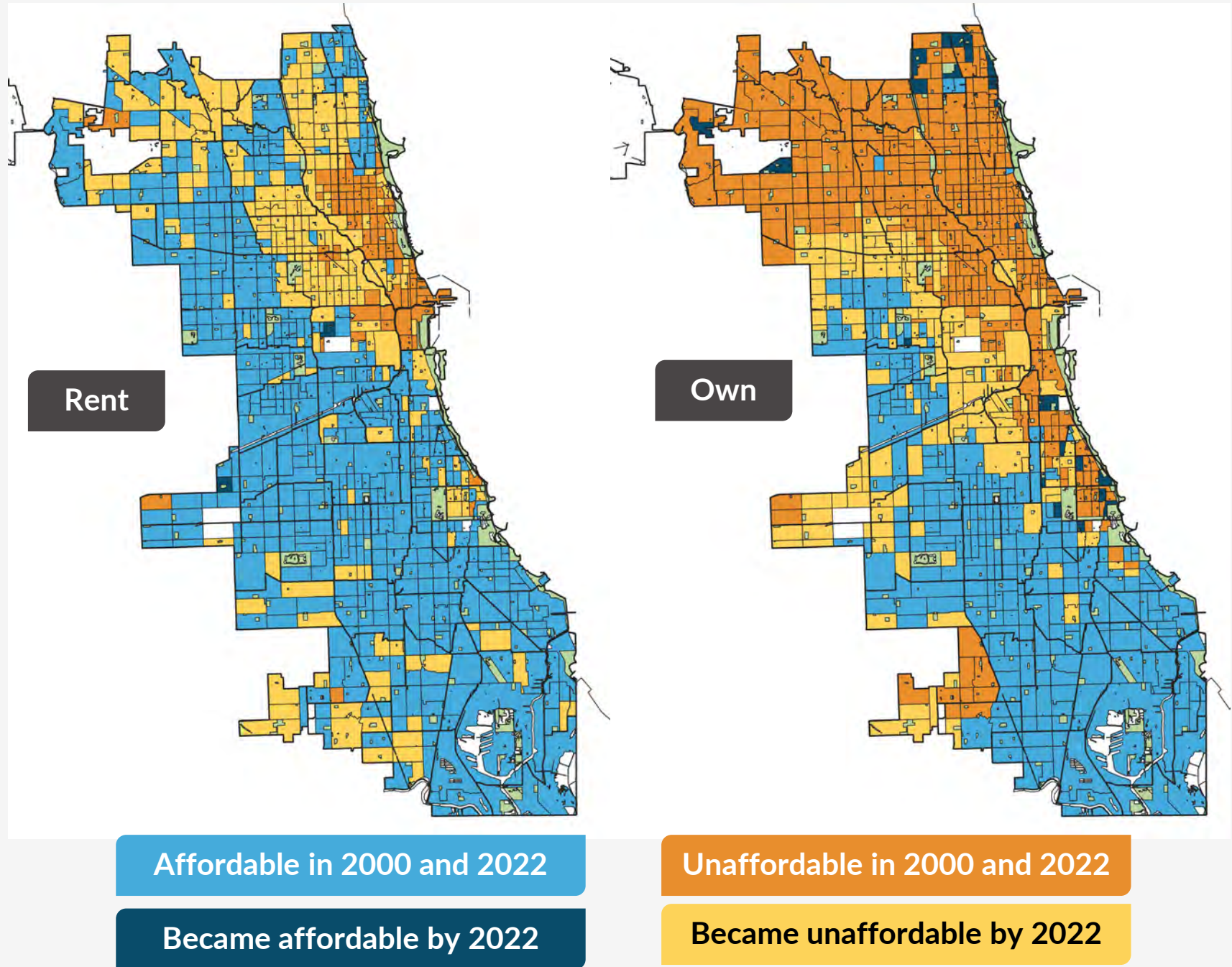
2018–2022 median incomes: All households: \$71,673; White families: \$154,749; Hispanic families: \$68,370; Black families: \$53,587; Asian families: \$89,416



The median white family can afford homes in most areas

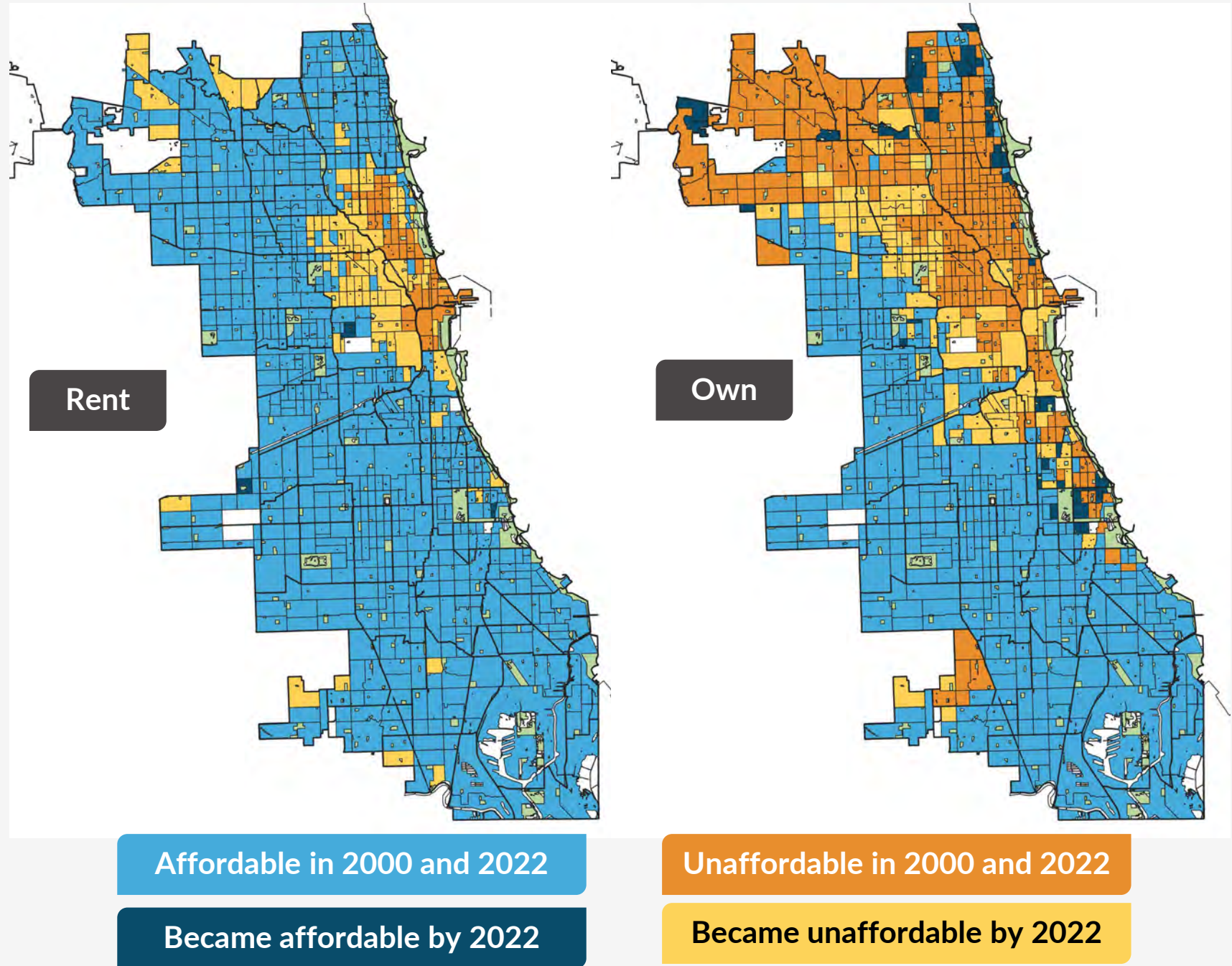


It is becoming increasingly unaffordable for the median Black family



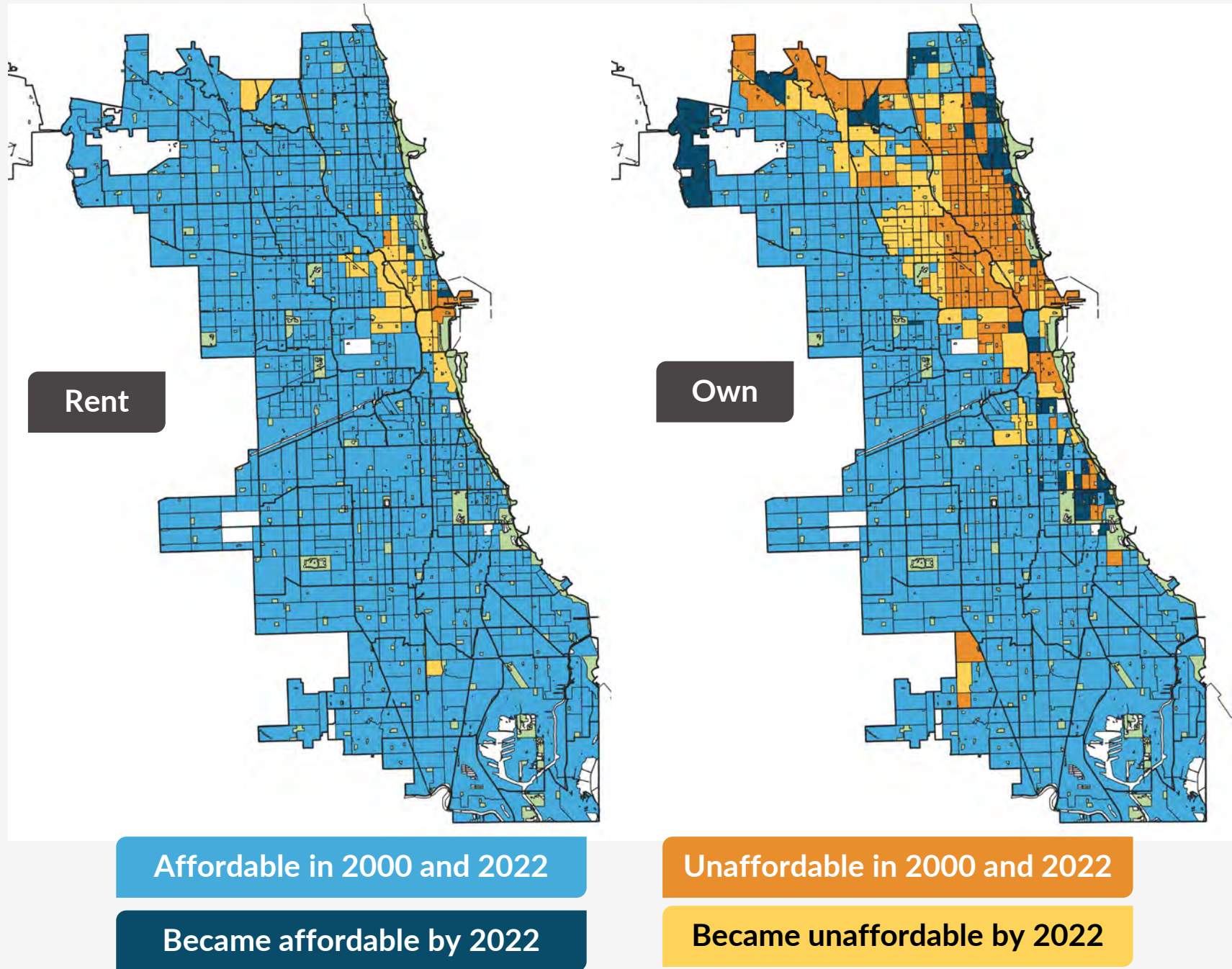


It is becoming increasingly unaffordable for the median Latinx family



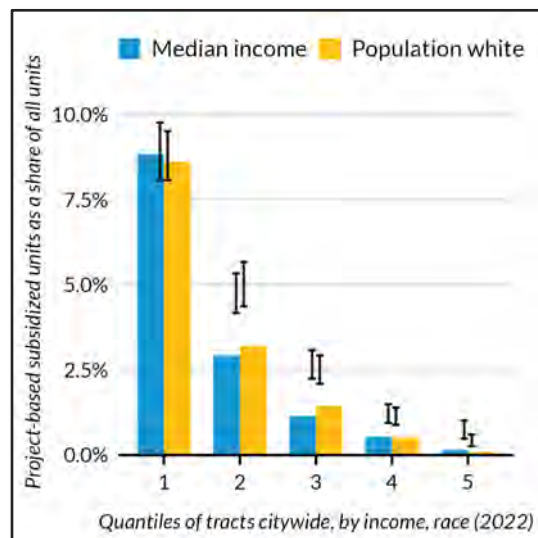


It is also becoming less affordable for median Asian families, but not to the same extent as Black and Latinx

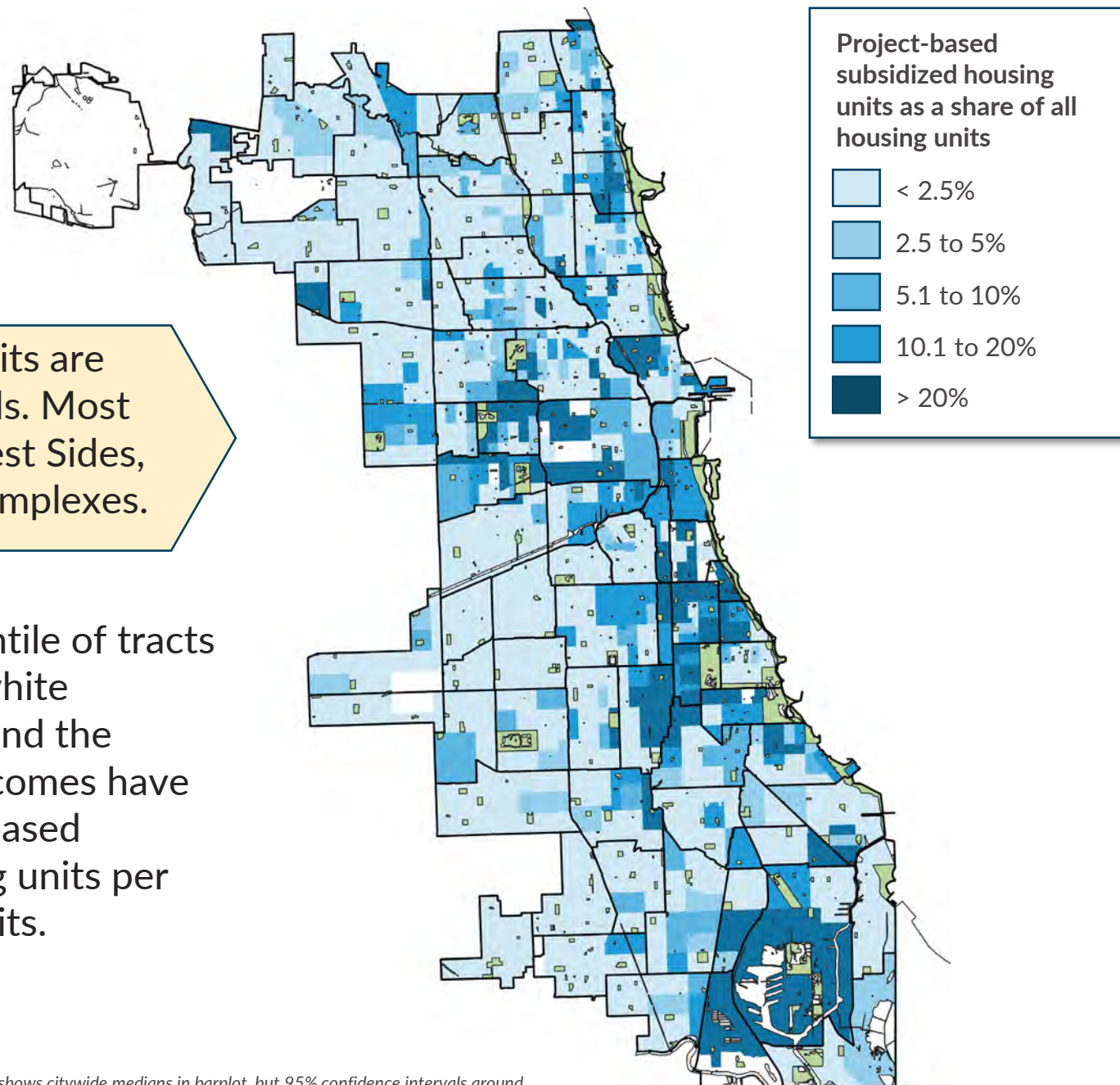


# Where are subsidized affordable housing units available?

Federally subsidized project-based housing units are concentrated in a small share of neighborhoods. Most units are arrayed in strips in the South and West Sides, even after the demolition of public housing complexes.



Citywide, the quantile of tracts with the highest white population share and the highest median incomes have very few project-based subsidized housing units per overall housing units.

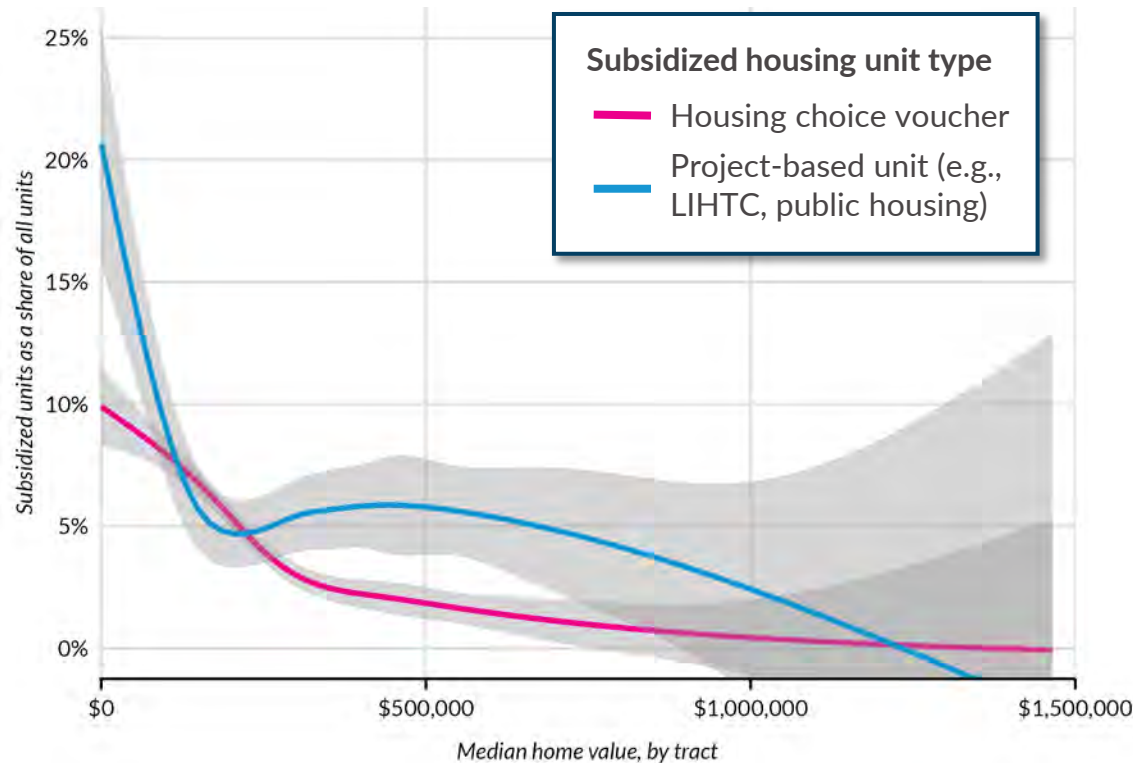




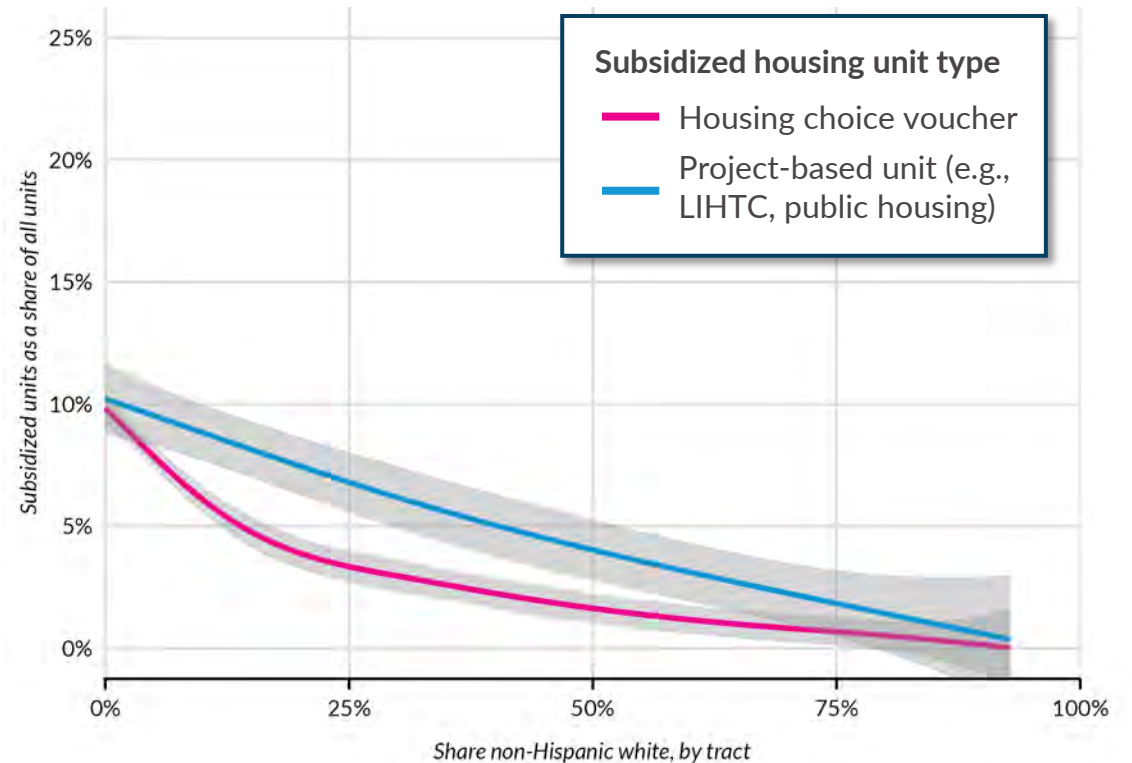
# Subsidized unit availability by tract income and race

Federally subsidized units—both vouchers and project-based units—are far more common in tracts with low home values and low white population shares

*Home values vs. subsidized unit availability*



*Share population white vs. subsidized unit availability*

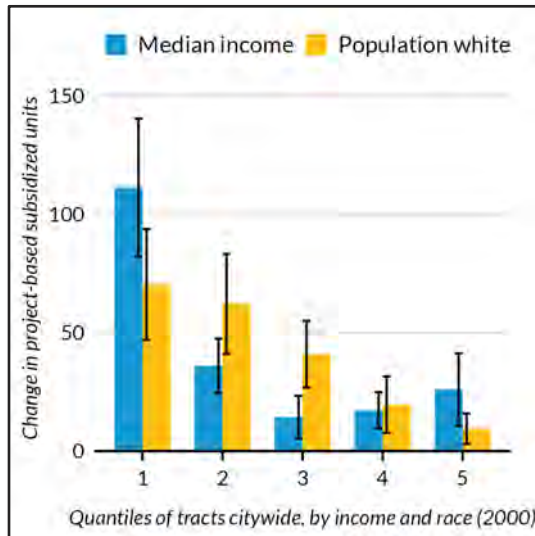
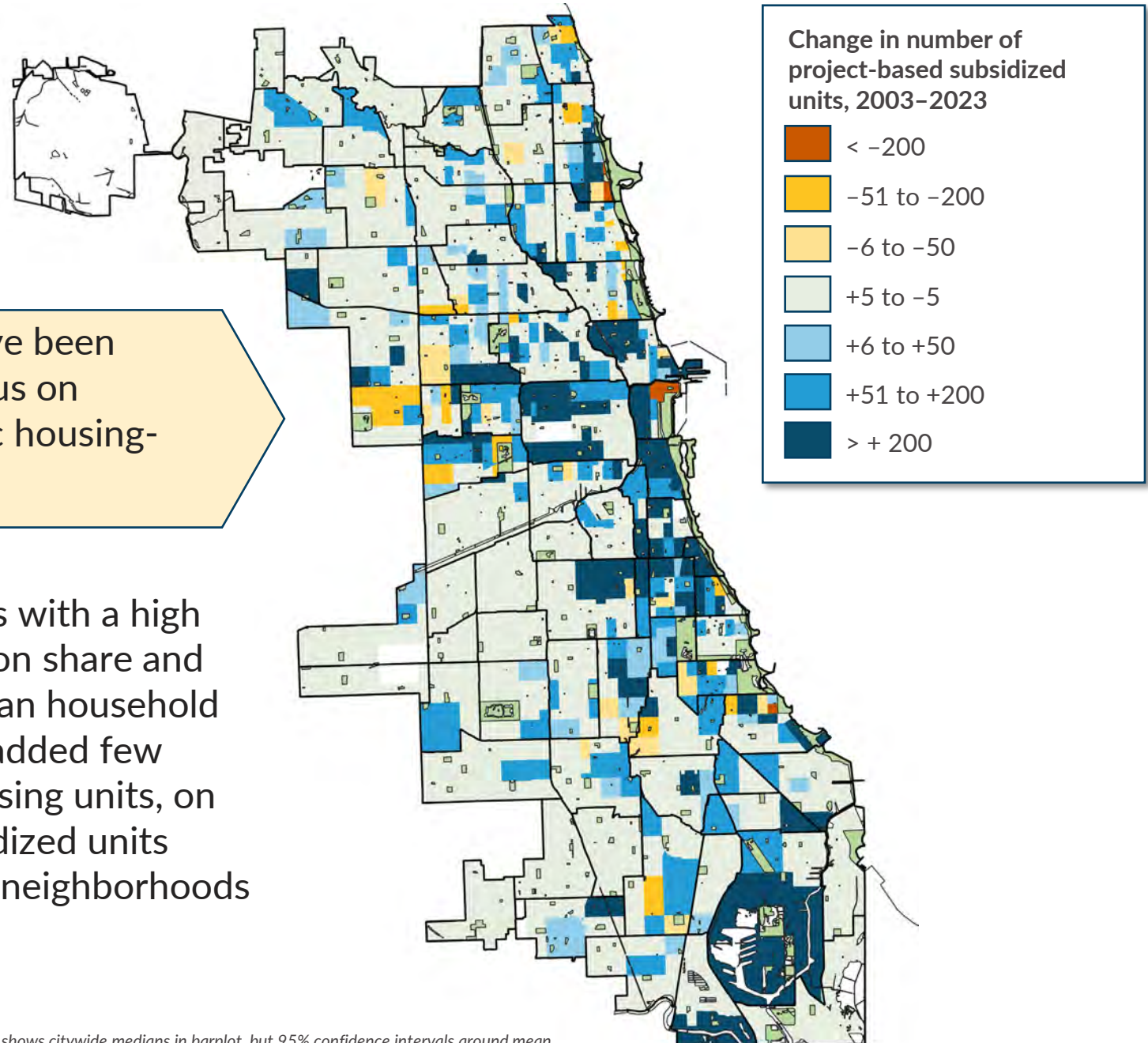


Source: Census ACS 2018–2022; HUD 2023; NHPD 2023



# Where have new subsidized units been added?

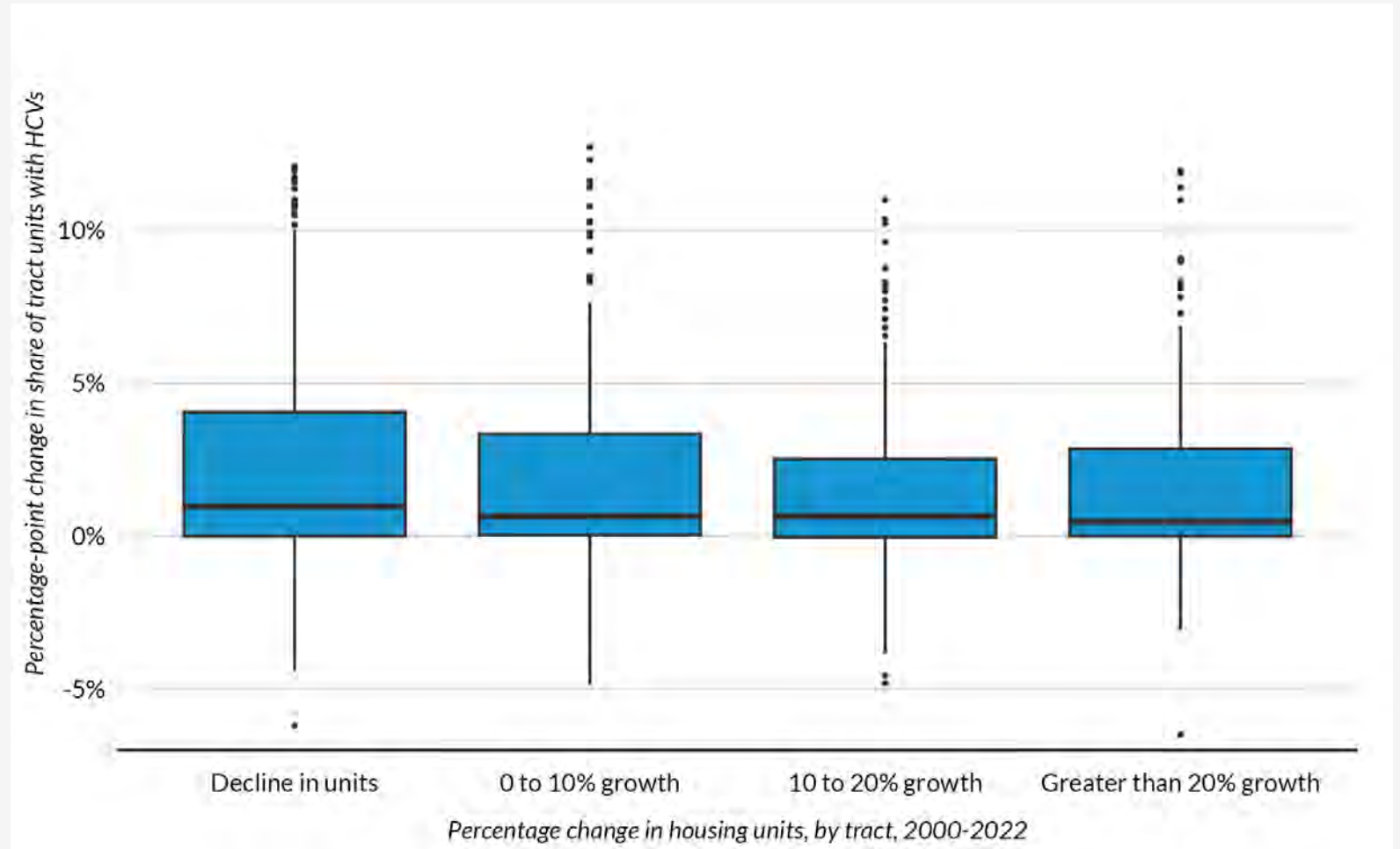
Project-based subsidized housing units have been added in many parts of the city, with a focus on neighborhoods that have undergone public housing-based redevelopment.



Neighborhoods with a high white population share and with high median household incomes have added few subsidized housing units, on average. Subsidized units concentrate in neighborhoods of color.

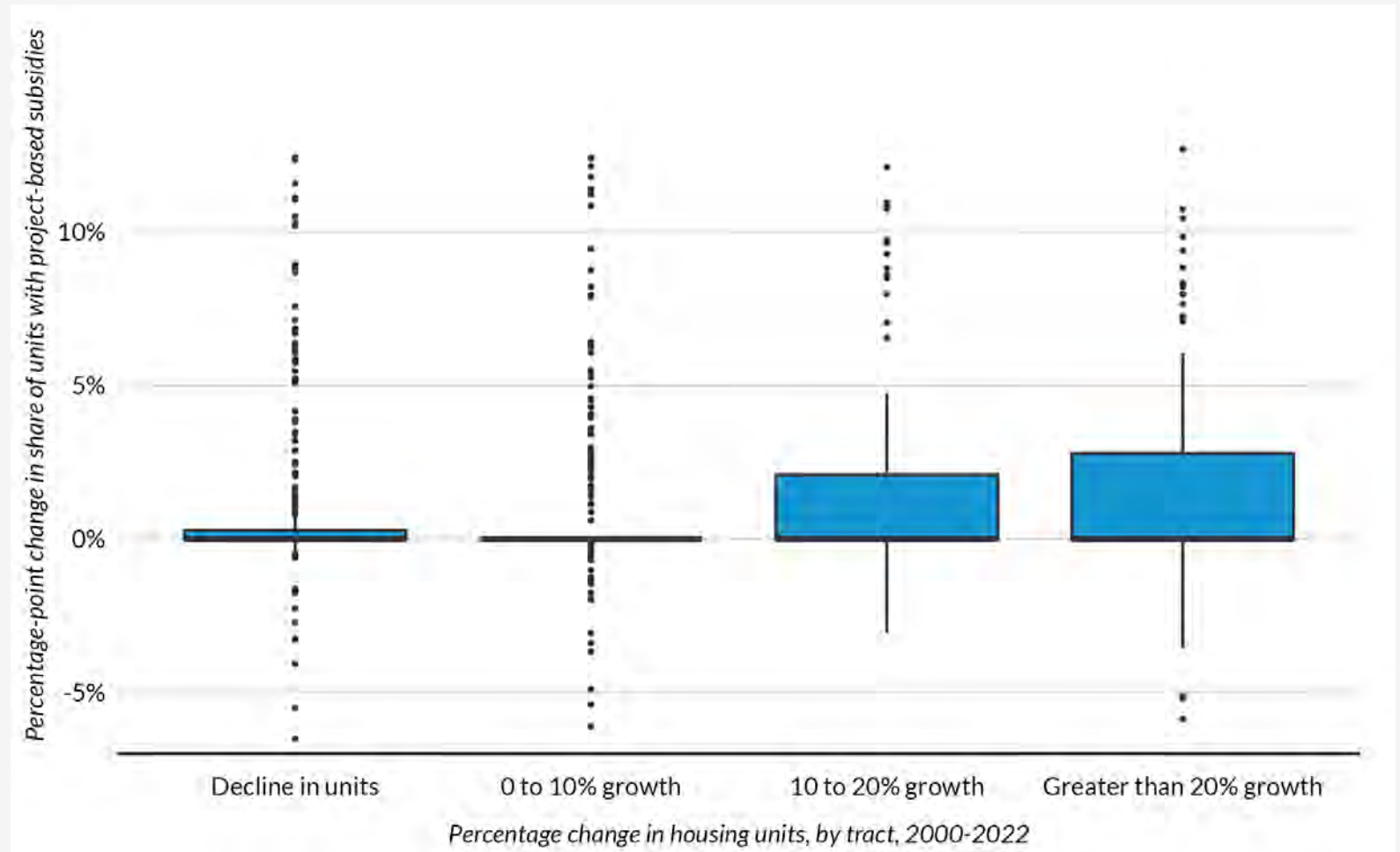
# Voucher use does not decline in areas with more housing construction

Tracts with high rates of housing construction have similar rates of changes in their respective share of Housing Choice Voucher-subsidized units



Nor is there evidence that project-based units decline

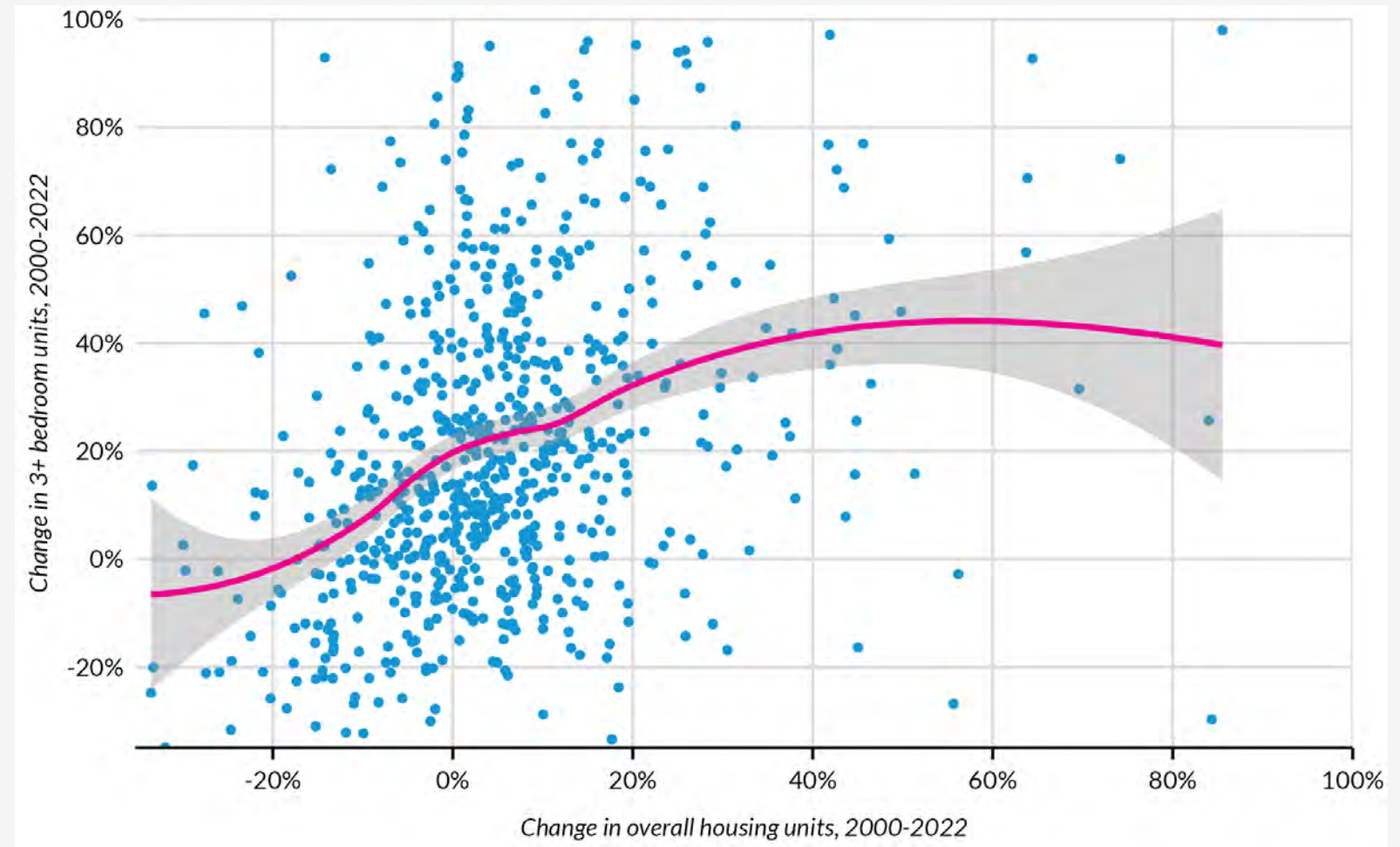
Tracts with high rates of housing construction have similar rates of changes in their respective share of units with project-based subsidies



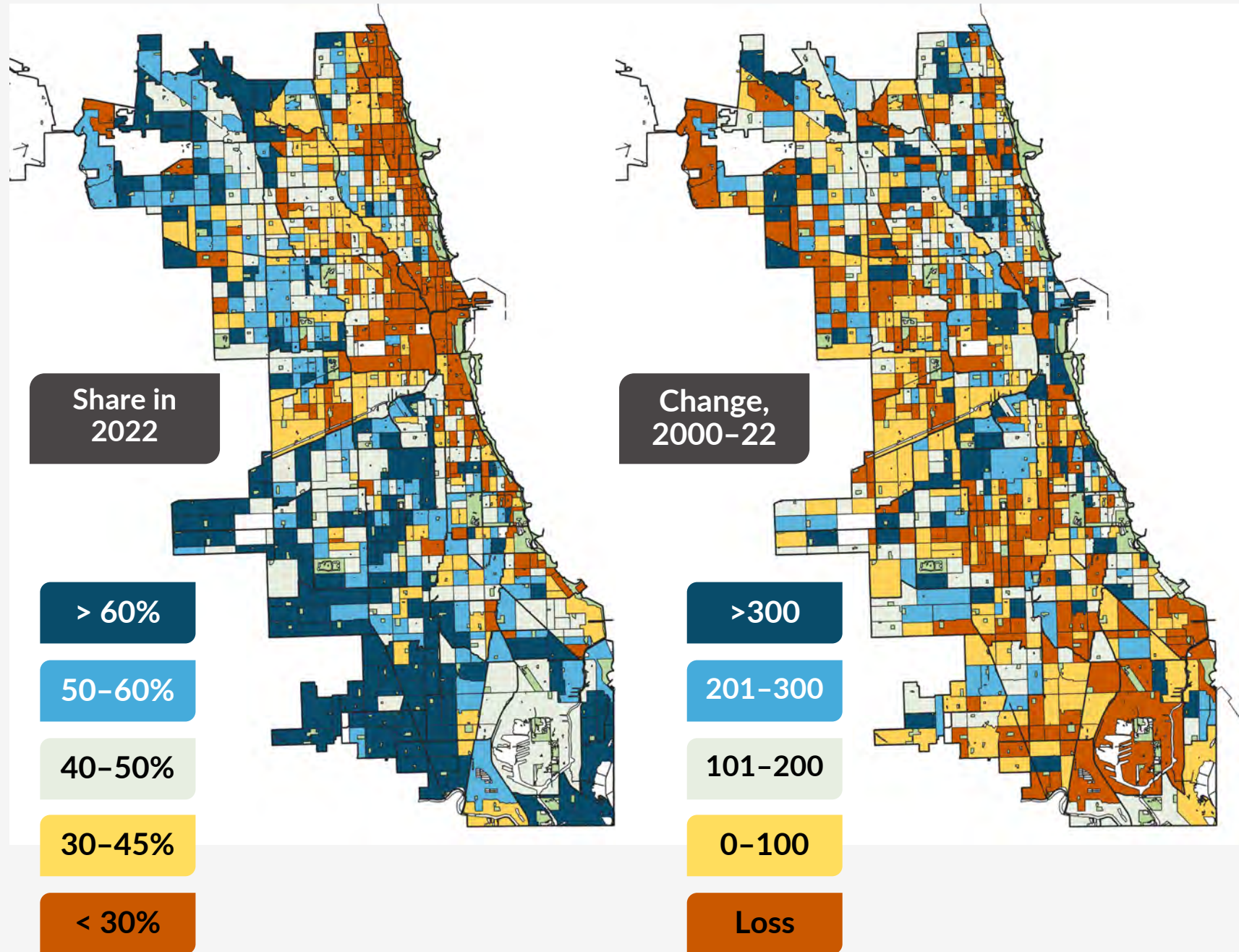


# New large housing units generally tracked overall housing construction

On average (pink line), as tracts added housing units, they added a proportionate share of large housing units (3 or more bedrooms), but there was considerable variation

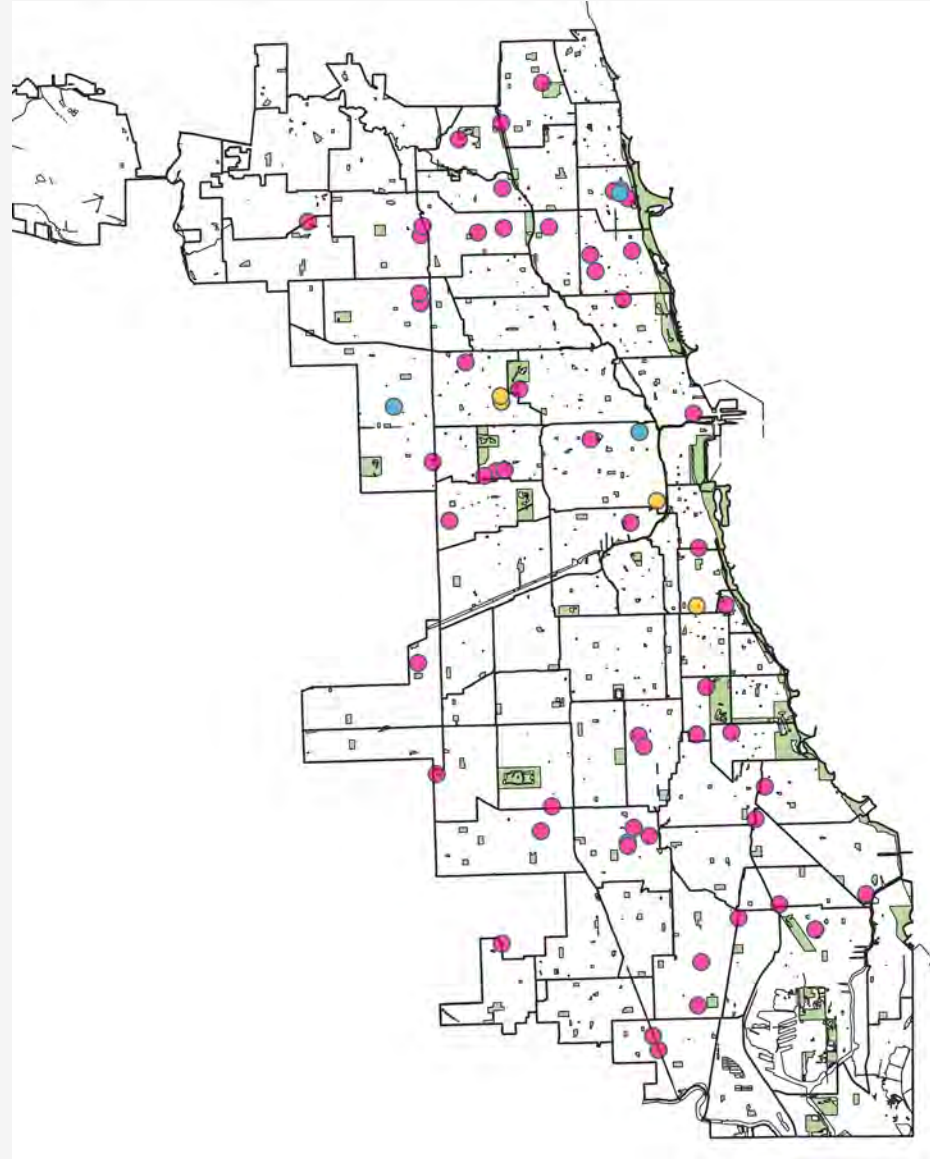


3+ bed units  
are much  
more common  
in city's outer  
areas, but  
growing  
downtown,  
along rivers





Senior units  
distributed  
across city;  
few shelters  
and SROs  
permitted



Permits for new housing, by  
project type, 2006–2024

- Senior homes
- Shelter
- SRO

*Understand the zoning*  
Where does zoning policy enable residential  
construction?

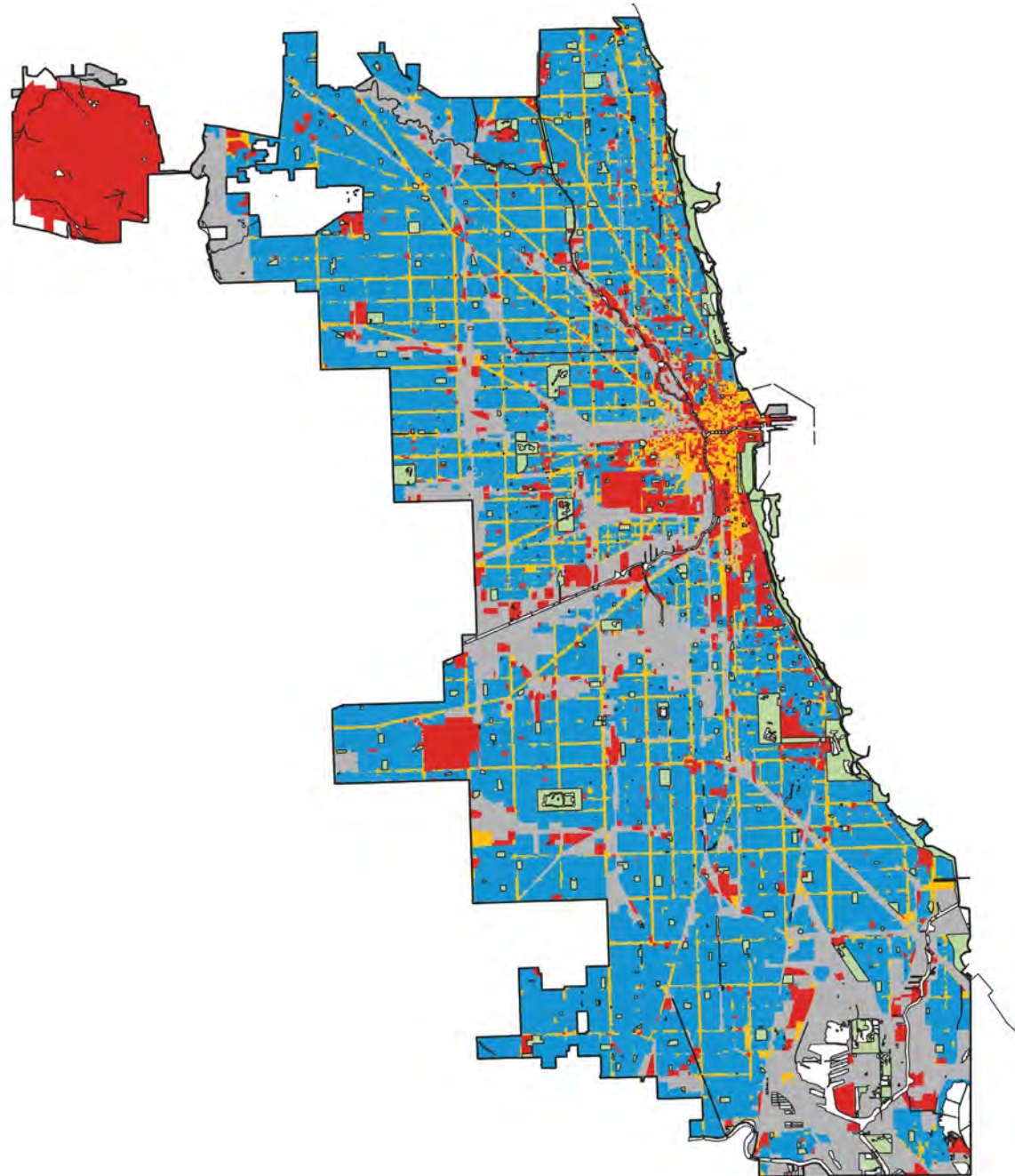


# Exploring how zoning policy interacts with housing availability

**Zoning can play an important role in impacting availability of housing supply.**

- By-right zoning is a key shaper of where and what types of housing are built.
- Historical evidence suggests that zoning policies have been founded on racism and classism, however.
- Understanding the links between zoning policy and housing affordability is essential.

# Where residential uses are allowed in Chicago

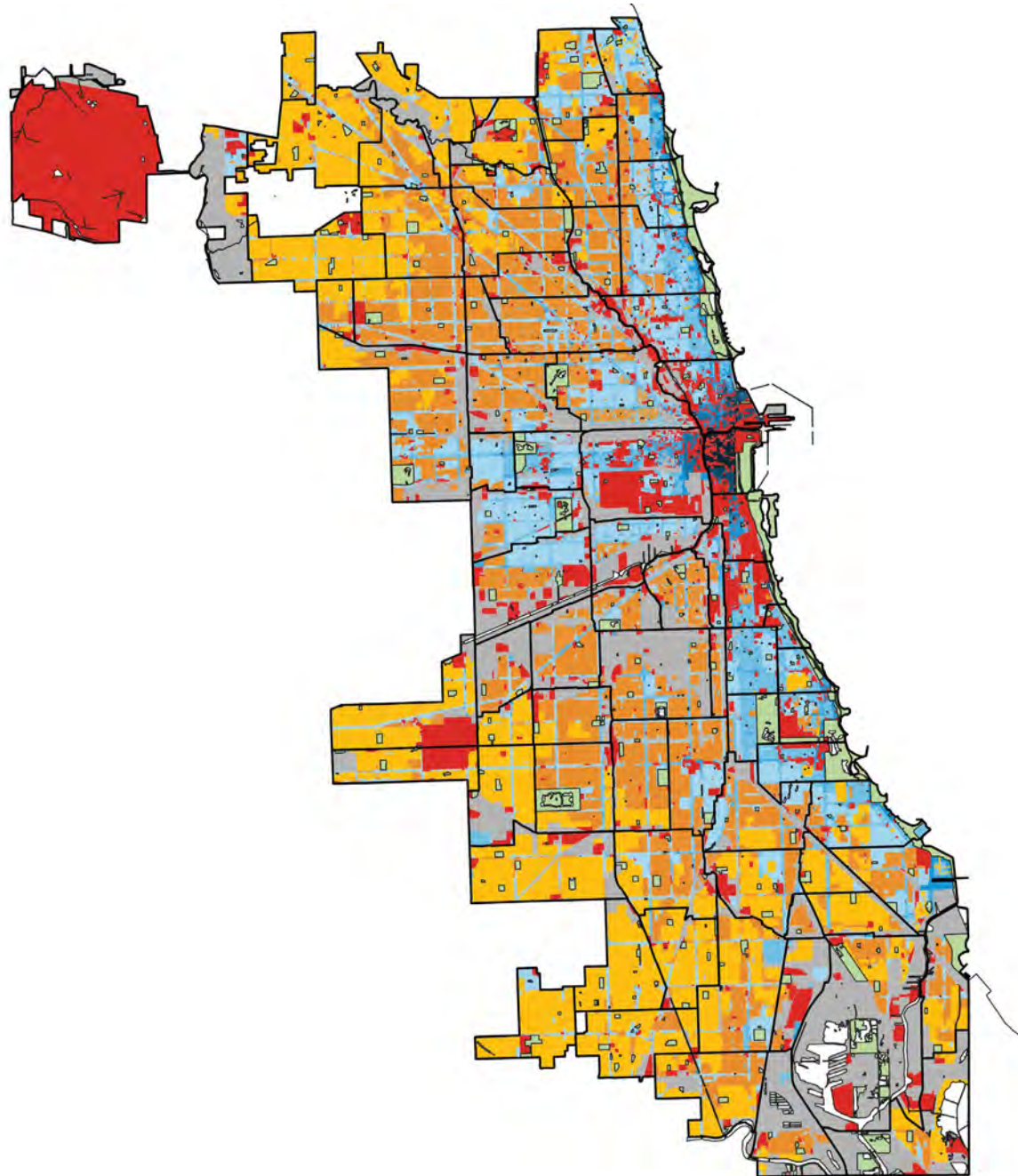


## Zoning district category

- Purely residential
- Mixed use
- Planned development
- No residential allowed (e.g., manufacturing)



# Residential uses by allowed density



## Allowed housing units

Single-family only	
One- or two-family*	
1 to 2 FAR	Multi-family housing allowed. Higher floor area ratio = higher density
2.1 to 3	
3.1 to 5	
5.1 to 7	
7.1 to 12	
16 FAR	
Planned development	
No residential allowed (e.g., manufacturing)	

\* Two-family units are not allowed on lots with lot areas of <5,000 square feet. They may be allowed on lots with areas of 3,000 to 5,000 square feet when 60% or more of the zoning lots fronting on the same side of the street between the two nearest intersecting streets have been lawfully improved with buildings containing more than one dwelling unit.

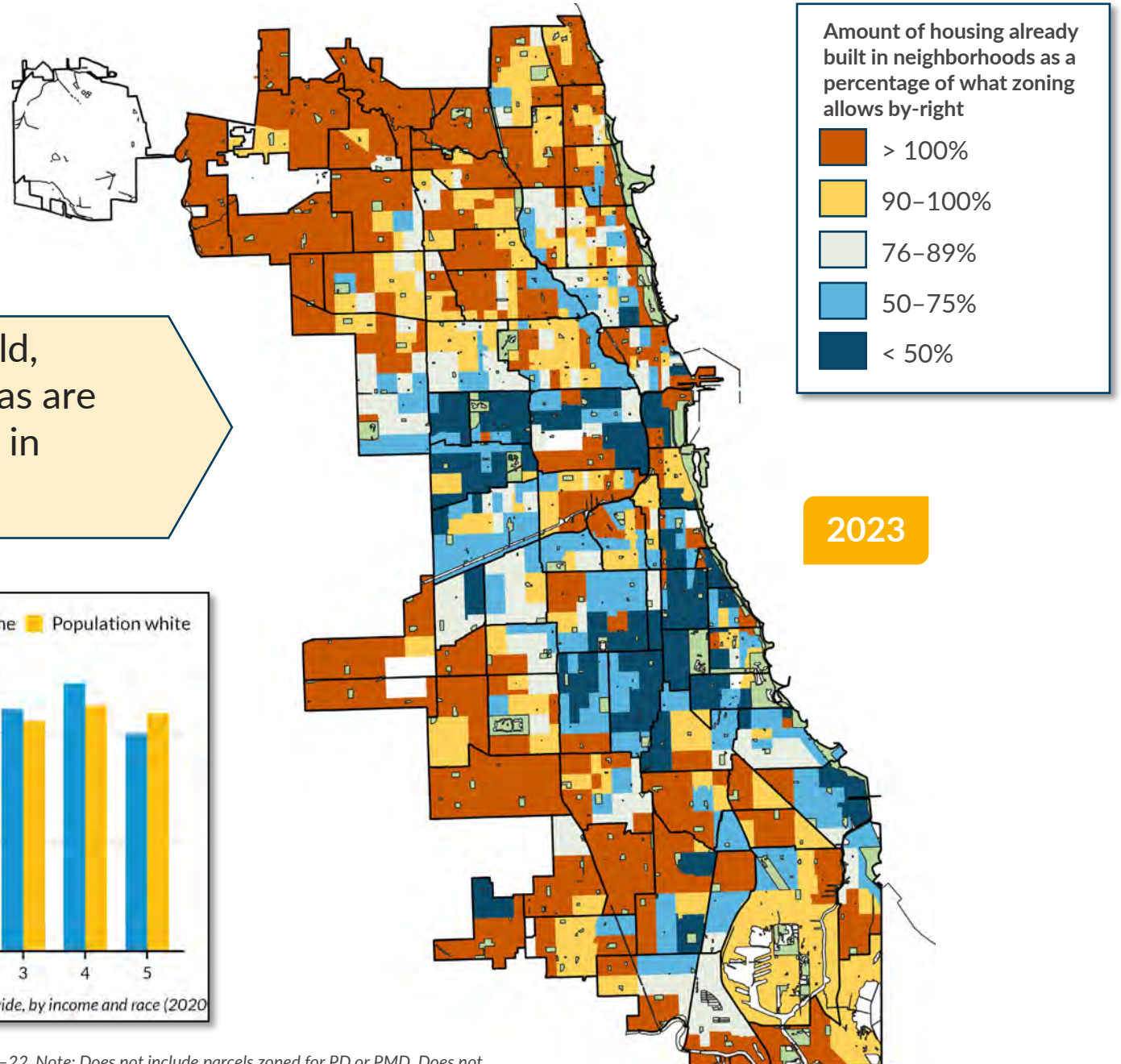
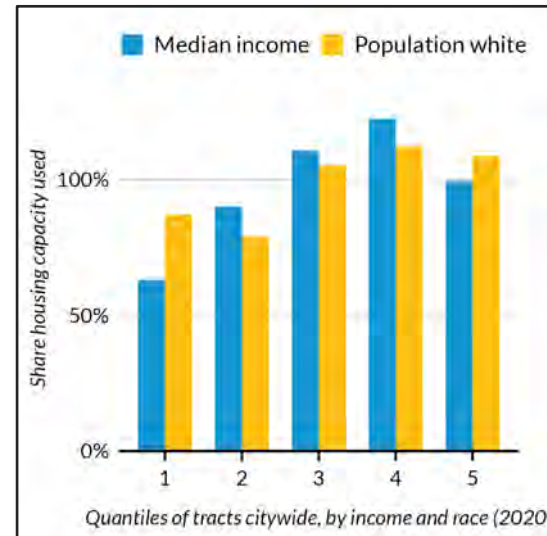
# Where does current zoning enable by-right construction?

- Infill housing construction is possible throughout most of the city. But most allowances for additional construction is downtown and in the surrounding areas, plus pockets of the south and far west side.
- Moreover, there is little room for construction along the northside lakefront—at least without passing through the PD, bonus, or zoning change process.

# What share of housing capacity is now used across the city?

Some areas of the city have more space to build, meaning they have zoning capacity. Those areas are concentrated on the South and West Sides, or in commercial corridors.

Citywide, neighborhoods that have higher median incomes and a greater share of the population that is white have used a larger share of their zoning capacity than neighborhoods with low median incomes and a greater share of people of color.



Source: Chicago zoning 2023; Census ACS 2018–22. Note: Does not include parcels zoned for PD or PMD. Does not account for zoning bonuses.



# Where does current zoning enable by-right construction?

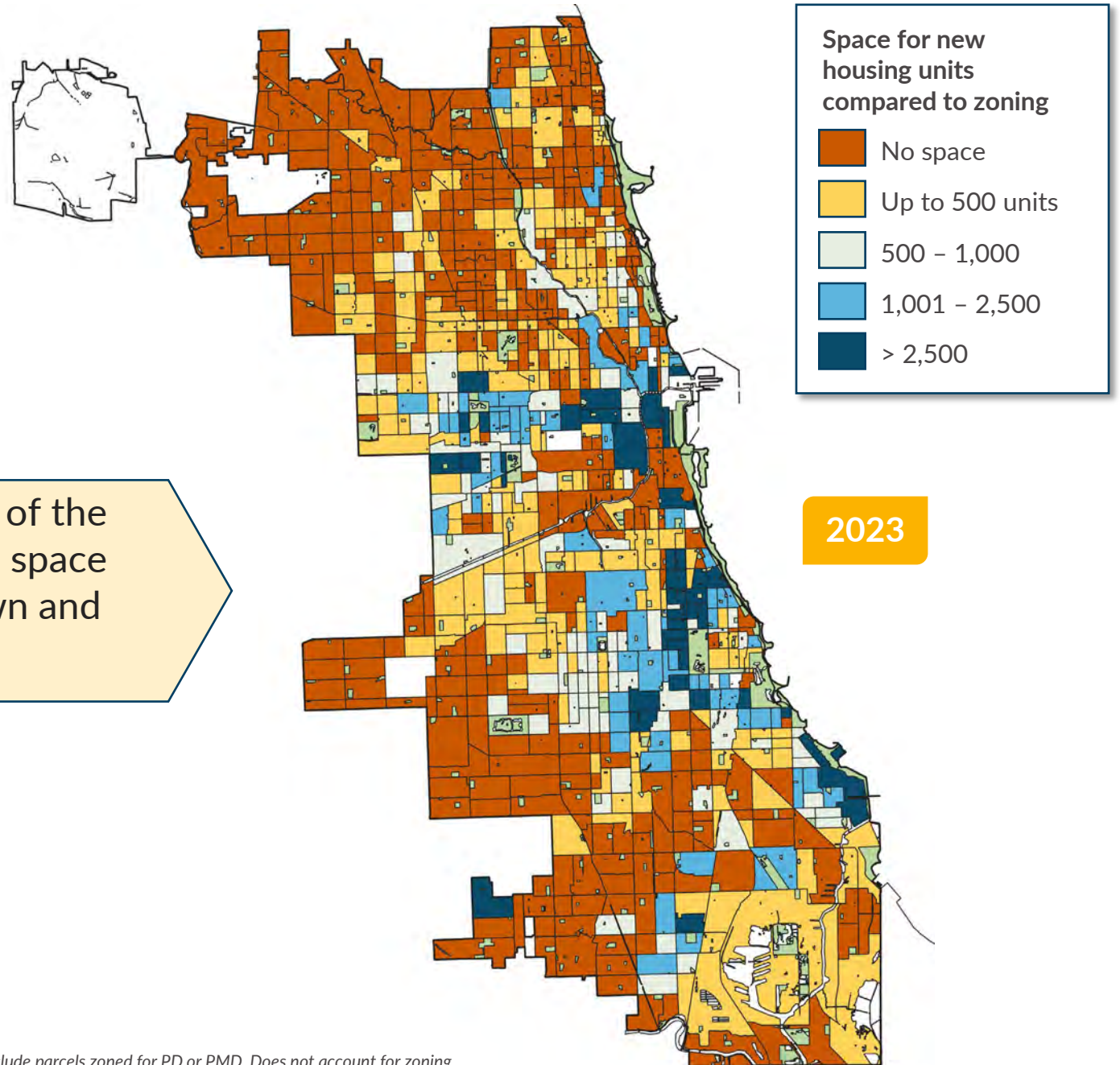
On average, tracts where most zoning capacity is used have and had higher housing values and share white population than those where there is considerably more space for construction.

	All tracts		Just tracts with population density > 15,000 people/sq mi	
	Tracts where at least 95% of zoning capacity is used	Tracts where less than 80% of zoning capacity is used	Tracts where at least 95% of zoning capacity is used	Tracts where less than 80% of zoning capacity is used
Median housing value 2022	\$347,446	\$276,146 ***	\$396,070	\$350,555
Median housing value 2000	\$194,271	\$149,348 ***	\$230,293	\$175,190 **
Share white householders 2022	37.3%	17.9% ***	42.7%	26.6% ***
Share white householders 2000	39.5%	17.1% ***	38.1%	17.7% ***

Source: Census 2000; ACS 2018–2022; Note: Difference in means between the two groups is statistically significant at the following levels: \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ .

# Space for new housing development around the city

We estimate that there remains room in some of the city for more housing units to be built. But the space for new units is largely concentrated downtown and on the South and West Sides.



*Understand the relationship*

Evaluating the impacts of downzonings since 1970 on  
Chicago housing construction and affordability



# What is downzoning and why does it matter?

- Between the 1970s and 2010s, Chicago city councilors systematically downzoned certain neighborhoods throughout the city, and classified many others for historic preservation.
- These downzonings were designed to “preserve” neighborhood aesthetics and quality by limiting how much new housing could be built therein.
- But based on historical evidence and research in other cities, we hypothesize that these downzonings:
  - Were racially and class-motivated.
  - Reinforced historic inequalities.

# Our key research questions

Our goal is to understand the causes, and downstream effects, of downzonings in Chicago. We ask:

1. What local demographic characteristics were associated with the decision to downzone a particular area?
2. In the time following downzonings, how did affected neighborhoods change in terms of:
  - Housing construction
  - Housing costs
  - Racial composition

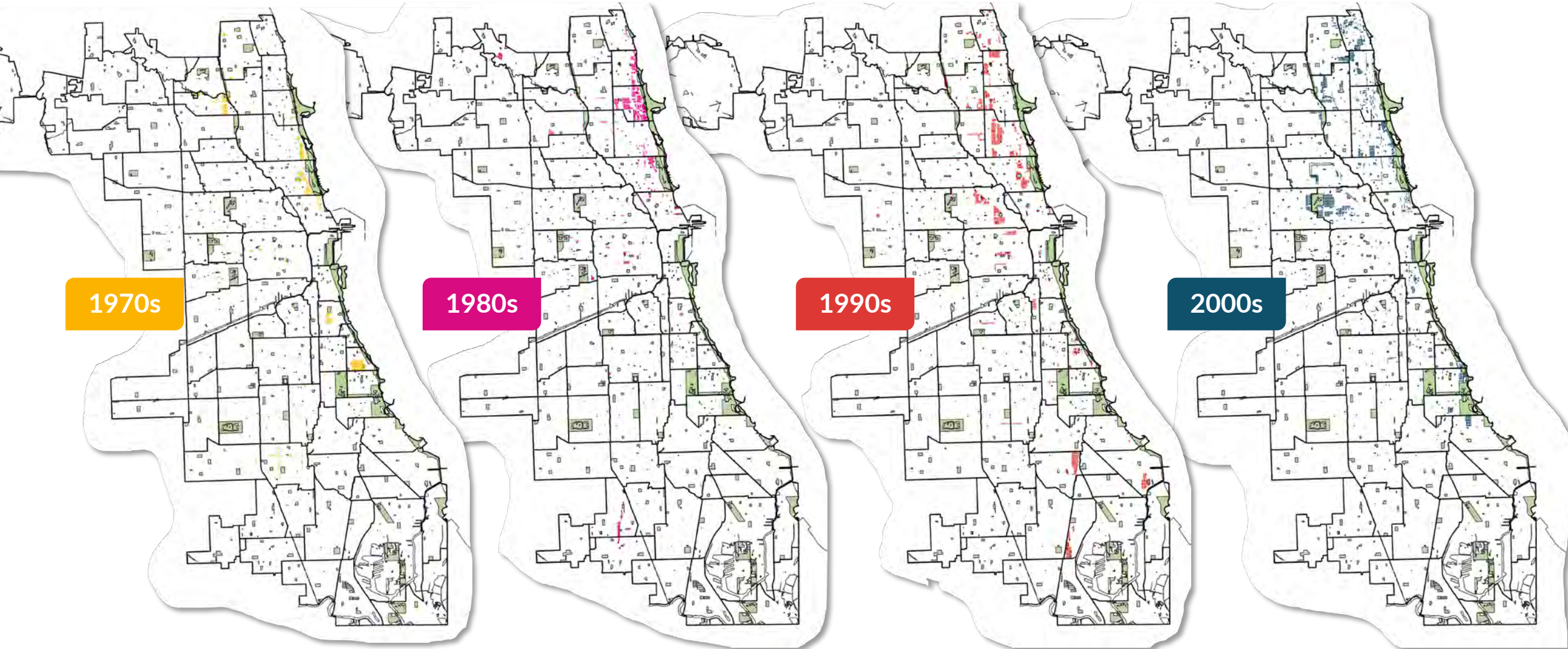
# Our data for downzoning analysis from 1970 to 2016

We combine a series of key datasets related to Chicago's history of development

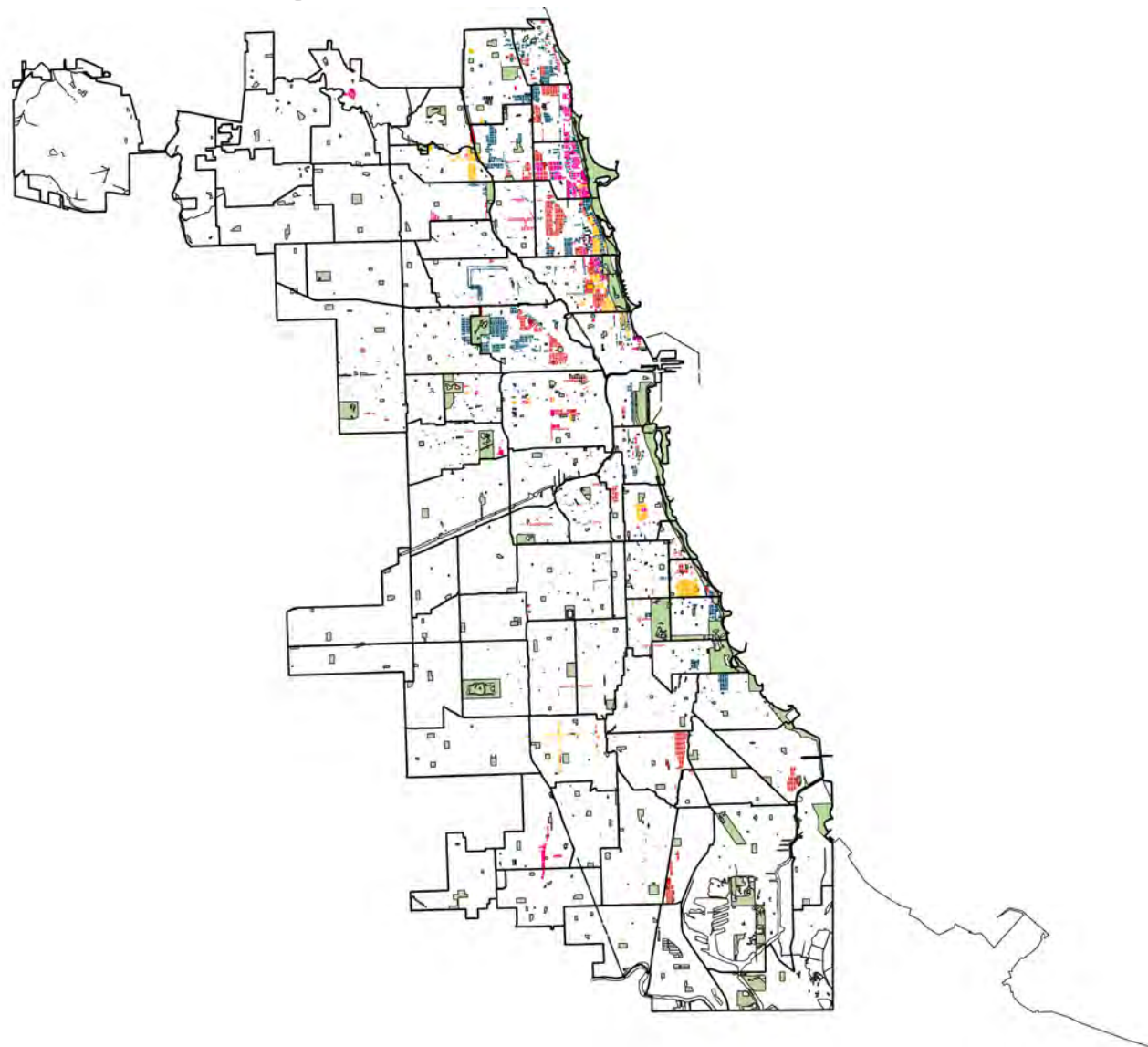
- Decennial Census data at the tract level from 1960 to 2020 (plus ACS 2018–22):
  - Number of housing units
  - Racial demographics
  - Housing costs (median rent and housing value)
- Parcels that were downzoned as a share of potentially developable land by tract, for each decade from 1970 to 2016
  - Compiled by George Kisiel of Okrent Associates



# Where did downzoning occur since the 1970s?



# Where did downzoning occur since the 1970s?



1970s

1980s

1990s

2000s

2010-16

# What types of neighborhoods experienced zoning change?

We evaluate what neighborhood characteristics at the beginning of a decade are associated with more than 10 percent of a tract's land area being downzoned over the following decade.

Generally, downzoning was more commonly applied in tracts with:

- Higher median home values and rental costs
- Higher white population shares; lower Black population shares
- Higher household incomes
- Lower homeownership shares



# What happened after downzoning between 1970–2020?

Using a sample of tracts, we run our fixed effects regressions to test effects over time. We *generally* find that downzoning was associated with:

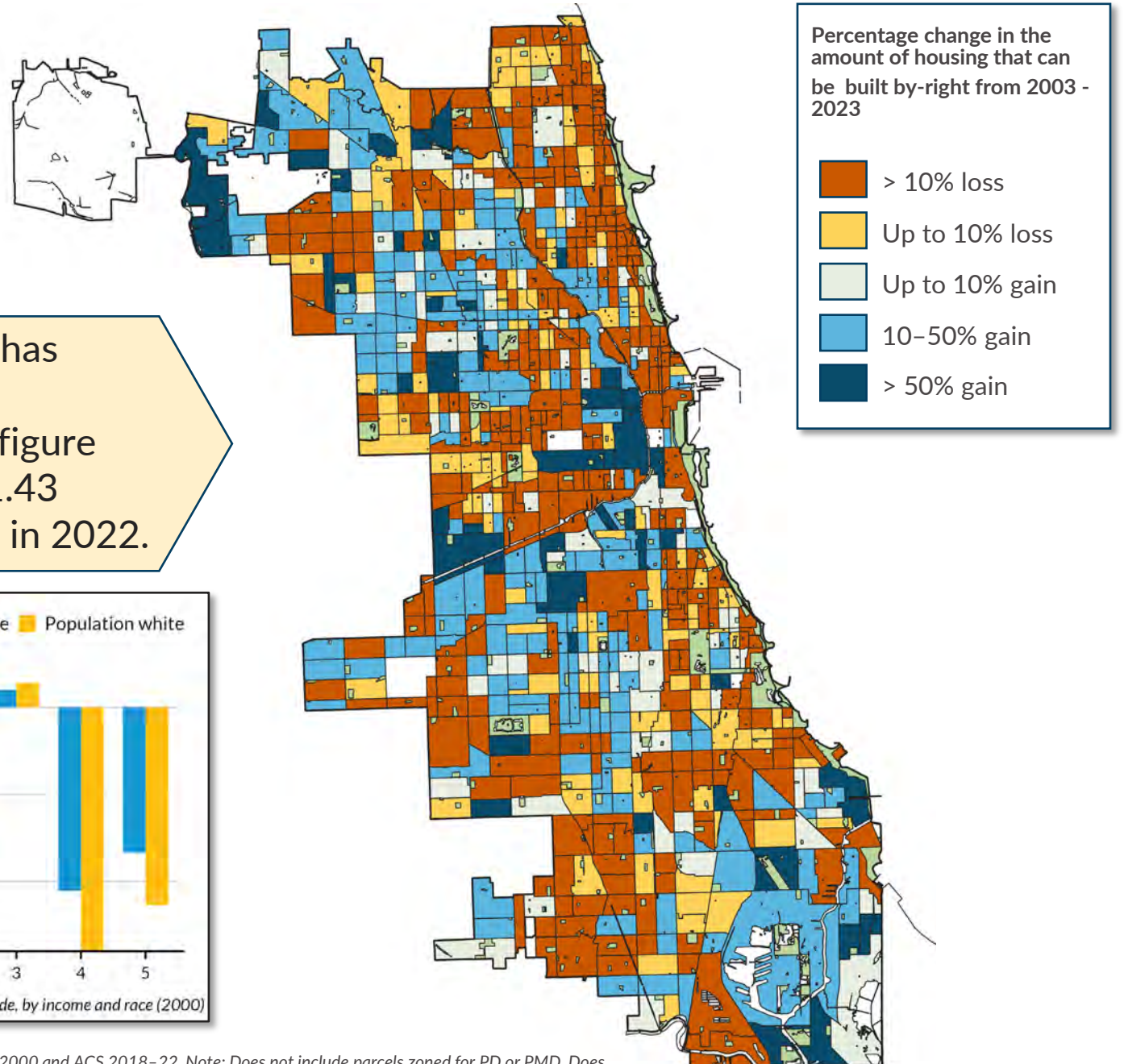
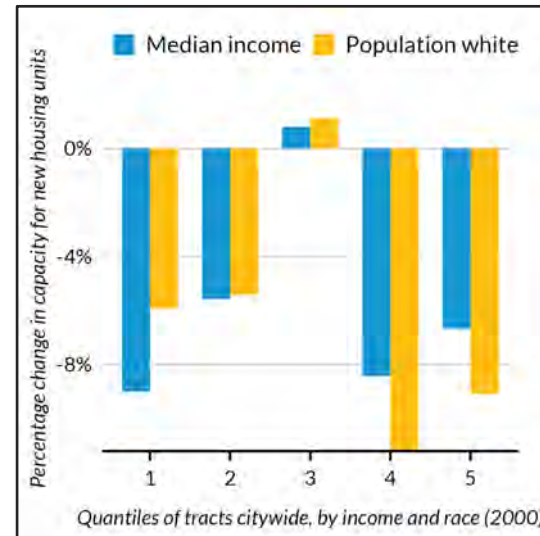
- Less housing construction
- Potentially higher housing values, recorded in terms of median home values and median rents
- A higher white population share

Downzoning does not appear to be associated with higher rents, at least controlling for time trends.

# How have zoning policies changed over the past two decades?

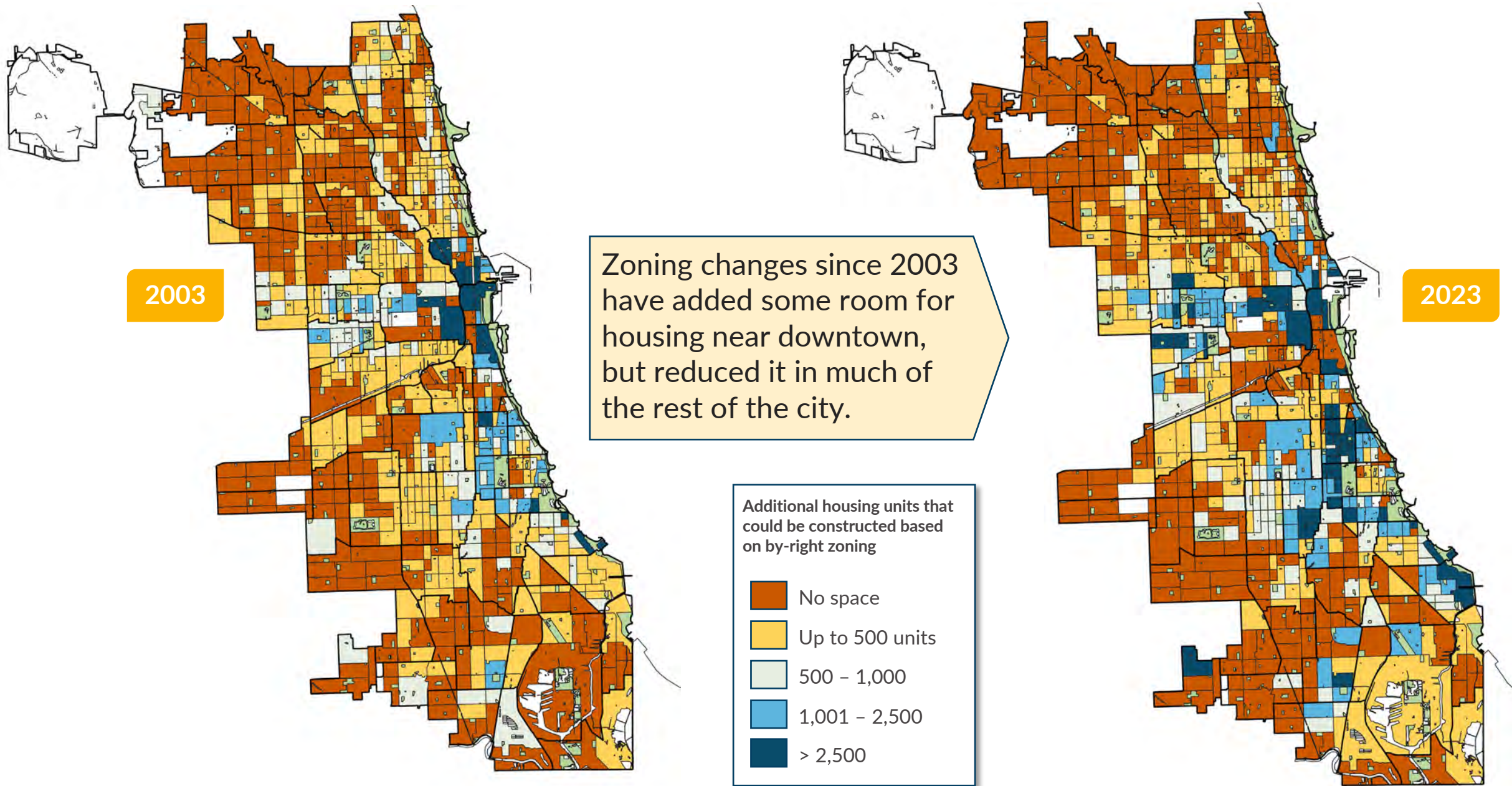
Overall, the amount of space for new housing has declined since 2003, when there was by-right allowance for 1.53 million units. In 2013, that figure declined to 1.40 million, before increasing to 1.43 million in 2023. The city had 1.26 million units in 2022.

We did not identify a clear pattern of local demographics that explains what types of neighborhoods experienced the most or least changes in capacity for new housing construction from 2003 to 2023.



Source: Chicago zoning 2003 and 2023; Census 2000 and ACS 2018–22. Note: Does not include parcels zoned for PD or PMD. Does not account for zoning bonuses.







# Characteristics of neighborhoods rezoned since 2003

On average, tracts where zoning capacity declined from 2003–2023 have and had substantially higher housing values and higher white population shares than those where capacity increased substantially.

	Tracts where zoning capacity declined by at least 20%, 2003–23	Tracts where zoning capacity increased by at least 20%
Median housing value 2022	\$330,314	\$313,307
Median housing value 2000	\$214,828	\$148,736 ***
Share white householders 2022	36.2%	26.9% **
Share white householders 2000	38.1%	29.9% **

Source: Census 2000; ACS 2018–2022; Note: Difference in means between the two groups is statistically significant at the following levels: \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ .

# Neighborhood transition since 2000

We ran regressions to compare zoned capacity for more housing in 2003 with neighborhood change since 2000. Tracts with more of their zoned capacity used had less housing construction, higher home value increases, and smaller white population growth.

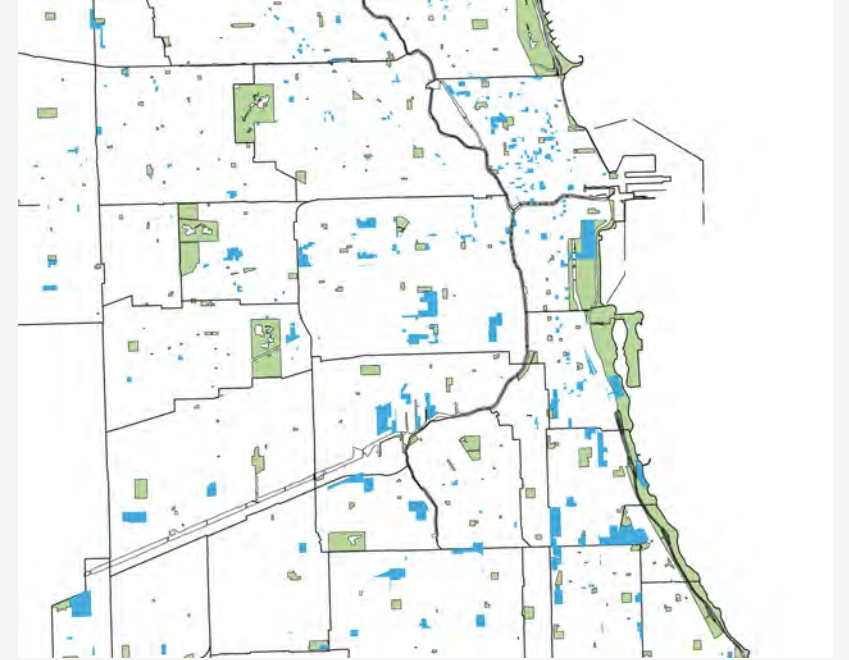
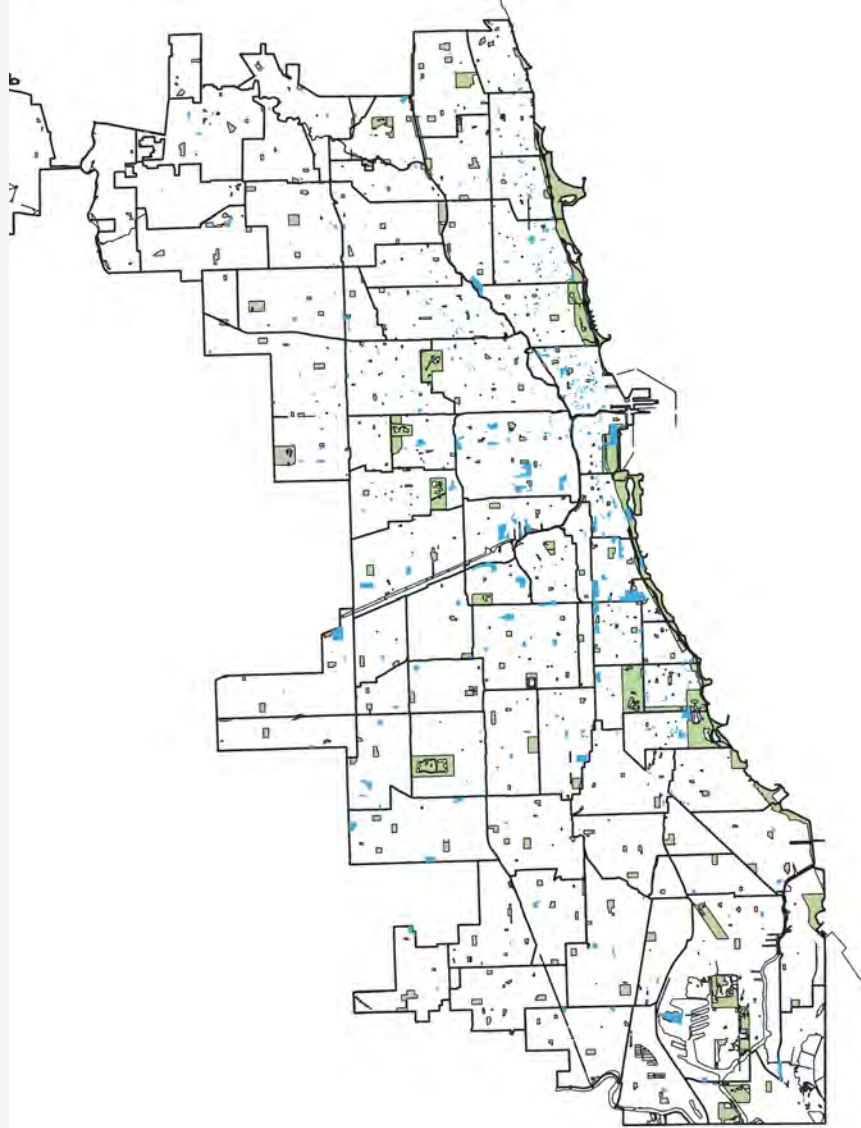
	Percentage change in housing units, 2000–20	Percentage change in median home value, 2000–20	Percentage change in median household income, 1999–2020	Percentage point change in share white residents, 2000–20	Percentage change in median rent, 1999–2020
% of zoned capacity used in 2003	–0.13 (0.02) ***	0.14 (0.06) *	–0.03 (0.06)	–0.05 (0.01) ***	–0.10 (0.04) *
Log median housing value in 2000	0.07 (0.02) ***	–0.44 (0.04) ***	0.43 (0.04) ***	0.01 (0.01)	0.16 (0.02) ***

Source: Census 2000; ACS 2018–2022; \*\*\*  $p < 0.001$ ; \*\*  $p < 0.01$ ; \*  $p < 0.05$ . Median housing value, share population white, median rent, and median income are all closely correlated.

# The relationship between housing construction and the planned development process



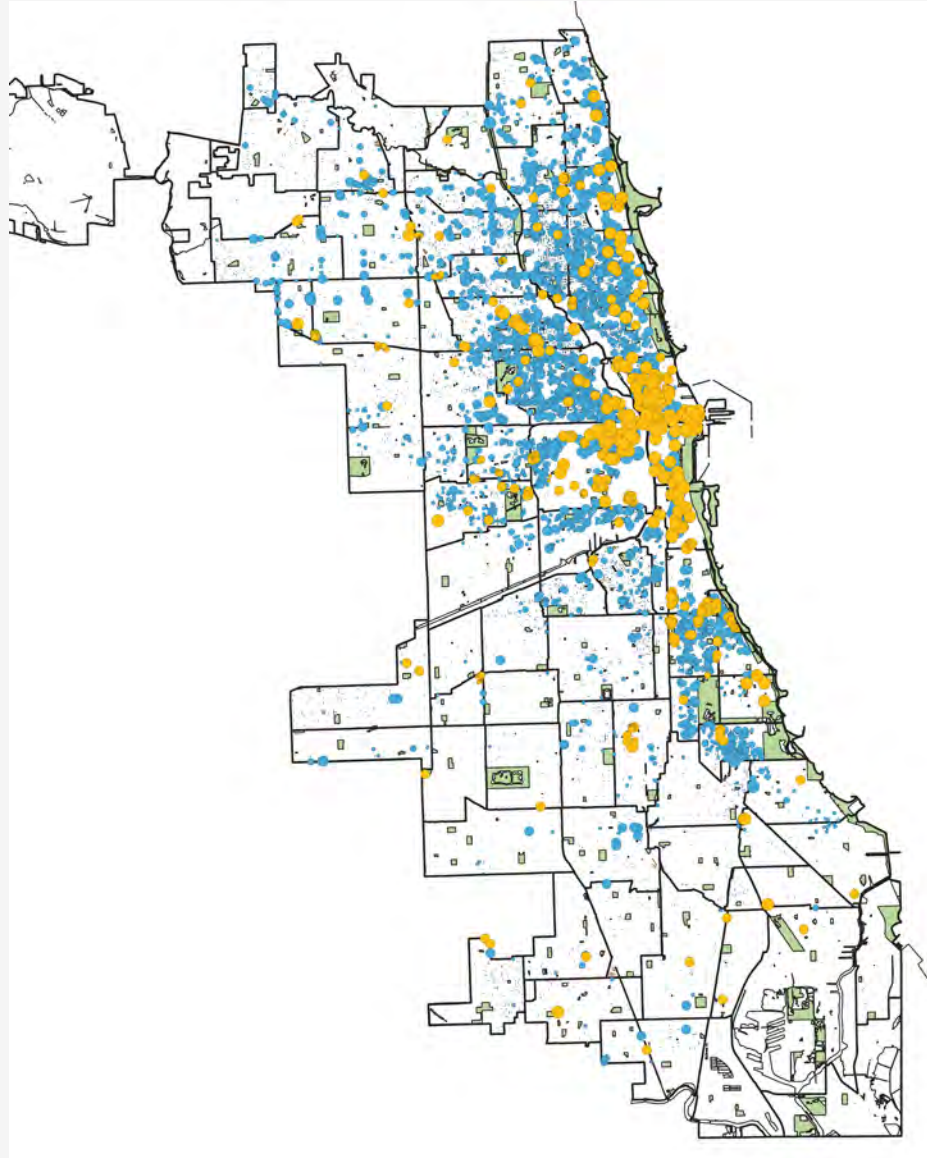
A large share  
of the city's  
area  
converted  
from  
residential to  
PD/PMD uses



Areas zoned to allow residential units  
in 2003, but which were converted to  
PDs or PMDs by 2023.

Total 3.2 square miles

# Most housing—especially multi-family housing—is developed in PD zones



## Permits for new housing, by project unit count, 2006–2024

- > 100 units
- 11–99 units
- 5–10 units
- 2–4 units
- 1 unit
- Developed outside a PD zone
- Developed in a PD zone

## Total of 121,601 housing units permitted

- 58% of units permitted were in PD zones
  - Of these, 98% were in projects with more than 4 units
- 68% of units in projects with more than 4 units were in PD zones
- 60% of units were concentrated in five community areas: Near N. Side (19%); Near W. Side (14%); Loop (13%); West Town (7%); Near S. Side (7%)
- 45 community areas (58% of areas) had < 500 units permitted

# Overall findings

- Housing affordability is limited in North/NW Sides
  - Affordability is worsening for non-white families, who can afford fewer and fewer neighborhoods
  - Subsidized housing is concentrated in just a few neighborhoods, but new construction does not crowd out subsidized units
- Zoning restricts construction of multi-family housing, with little room to build in most areas
  - More than two-thirds of apartment buildings with 5+ units are constructed in PD zones
  - Housing permitting is concentrated in a few areas
  - Senior housing is well distributed; shelters, not