

Zoning & Land Use Assessment

Available Groceries and Healthcare Research

September 2025

Outcomes of Focus

TOPIC	DESCRIPTION
Affordable Housing	Diverse and affordable housing options (subsidized, affordable, workforce/middle, market, luxury) are available in every neighborhood including for the job insecure and unhoused populations
Strong Business Corridors	Strong and vibrant business corridors with diverse business opportunities to support the economic needs and resiliency of every community
Limited Pollution Exposure	All neighborhoods feature low levels of pollution, taking into account cumulative impacts on overburdened communities
Accessible Public Transit Hubs	All communities feature public transit options that are convenient and reliable, and serve hubs with housing, businesses, recreation and other services
Productive Land Use	All land in communities is used productively, meaning beneficial to local residents and aligned with community needs
Available Groceries and Healthcare	Affordable grocery options and healthcare providers are accessible in all neighborhoods
Mitigation and Adaptation to Climate Change	All communities feature green infrastructure and energy-efficient building stock that both mitigates and adapts to climate change





Research questions and key findings

RESEARCH QUESTIONS

KEY FINDINGS

Understand the outcome:

What is the distribution of grocery stores across the city?

- Neighborhoods have an average of 8 food stores across the city
- Almost all Chicago neighborhoods have at least one healthy food store, though northern neighborhoods have more
- Healthy food stores cluster by transit or highway corridors and in ethnic communities
- Healthy food store counts and density drop with White resident share and median home values but rise with Hispanic resident share

Understand the zoning:

Does the zoning code incentivize food store locations?
What zones do and do not consistently have grocery access?

- Chicago's zoning ordinance does not incentivize the location of food stores through zoning
- Most healthy food stores are in B3 zones while super stores and supermarkets are mostly located in PDs
- Business zones tend to have a higher proportion of unhealthy food stores while PD zones have higher shares of healthy food stores

Understand the relationship: Does the distribution of grocery stores correlate positively with any specific zone types?

- The **higher** the tract share of single-family zoning, high-density zoning, and white residents, and the higher the tract median incomes, the **lower** the food store counts and densities.
- The **higher** the tract share of low-density multifamily zoning, and Asian or Hispanic residents, the **higher** the food store counts.
- Poor grocery access for low-income households is most strongly correlated with racial tract demographics, especially segregated Black communities, but higher shares of business zoning are still related to better grocery access.

Research Approach

- Assess grocery store distribution across the city
- Qualitatively assess Chicago zoning code for all regulations around food and beverage retail sales
- Quantify which zones are most commonly associated with grocery store locations
- Assess correlations between tract-level zoned land shares and grocery store counts and density



Data Sources

We combine a series of key datasets related to Chicago's zoning and grocery stores:

- > Racial demographic data from the Census and ACS (2000, 2010-2014, 2018–2022)
- > 2020 Zoning data from MPC analysis
- USDA SNAP grocery vendor data (2023)
- > USDA Food access research atlas data (2010, 2019)



Data Definitions

USDA SNAP Food Vendors (2023):

- **Grocery Stores** carry a wide selection of all four staple food groups (1- vegetables or fruits; 2- meat, poultry, or fish; 3- dairy products; and 4- breads or cereals).
- > Supermarkets includes establishments known as supermarkets, food stores, grocery stores and food warehouses primarily engaged in the retail sale of an extensive variety of grocery and other store merchandise. This store typically has ten or more checkout lanes.
- > Super Stores include very large supermarkets, "big box" stores, super stores and food warehouses primarily engaged in the retail sale of a wide variety of grocery and other store merchandise. Includes stores that are large food/drug combo stores, and warehouse-type membership retail/wholesale hybrids.

USDA Food Access Research Atlas Data (2010, 2019):

> Percentage of tract population living more than one-half mile from the nearest supermarket, supercenter, or large grocery store (from 2019 SNAP directory).



Examples







Grocery Stores Supermarkets Super Stores



Understand the outcome

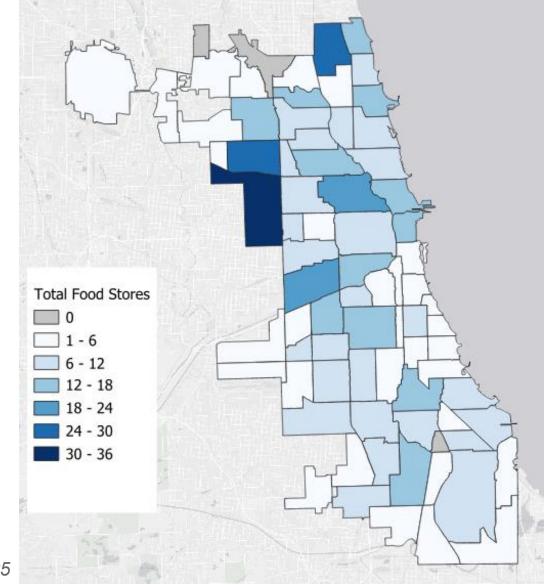
What is the distribution of grocery stores across the city?

- Neighborhoods have an average of 8 food stores across the city
- Almost all Chicago neighborhoods have at least one healthy food store, though northern neighborhoods have more
- Healthy food stores cluster by transit or highway corridors and in ethnic communities
- Healthy food store counts and density drop with White resident share and median home values but rise with Hispanic resident share



Chicago has slightly more food stores in the north and west, and slightly fewer in the south

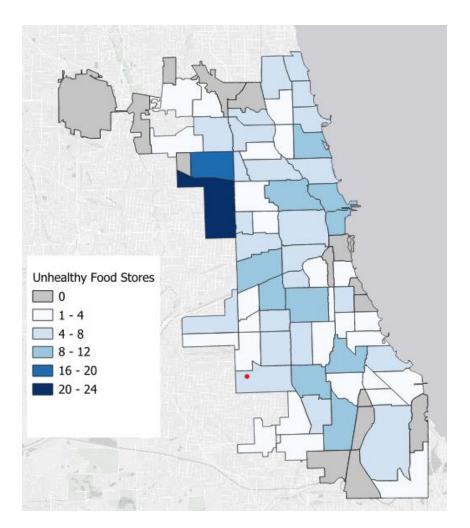
- Nearly all neighborhoods have at least one food store
- Community areas have on average 8 food stores
- Higher concentrations of food stores are in the north and near northwest
- Lowest concentrations are in the near south and far northwest





Data: USDA SNAP Food Vendors 2025

Northern communities have access to more healthy food stores, and less healthy food stores are evenly distributed



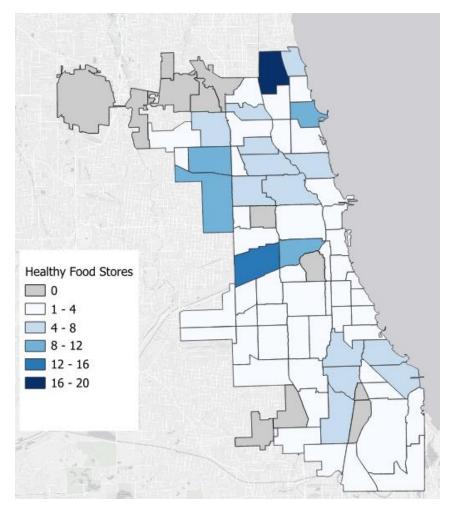


(Convenience Stores, Drug Stores, Dollar Stores)



MORE HEALTHY

(Grocery stores, supermarkets, super stores, farmer's markets, restaurant food centers)

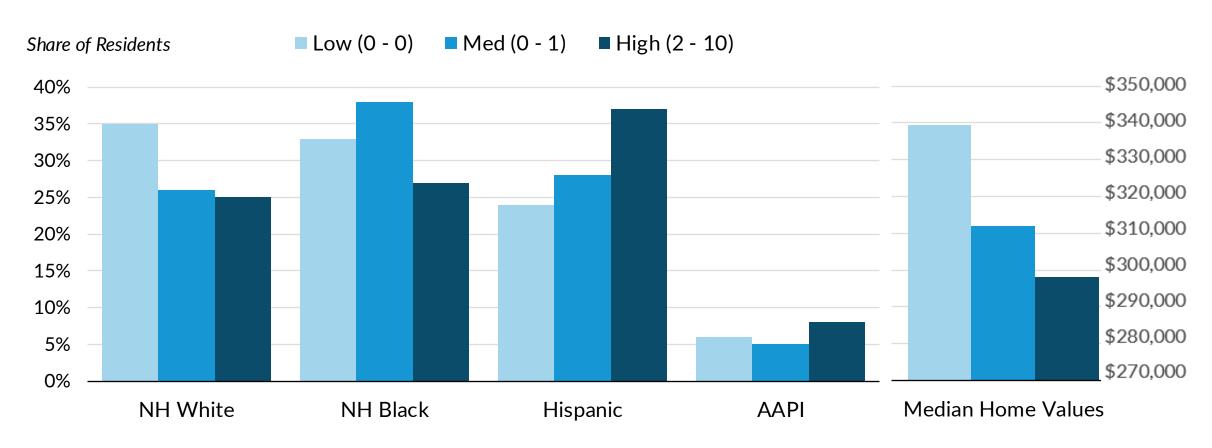




Data: USDA SNAP Food Vendors 2025

Healthy food store counts drop with White resident share and median home values; they rise with Hispanic resident share

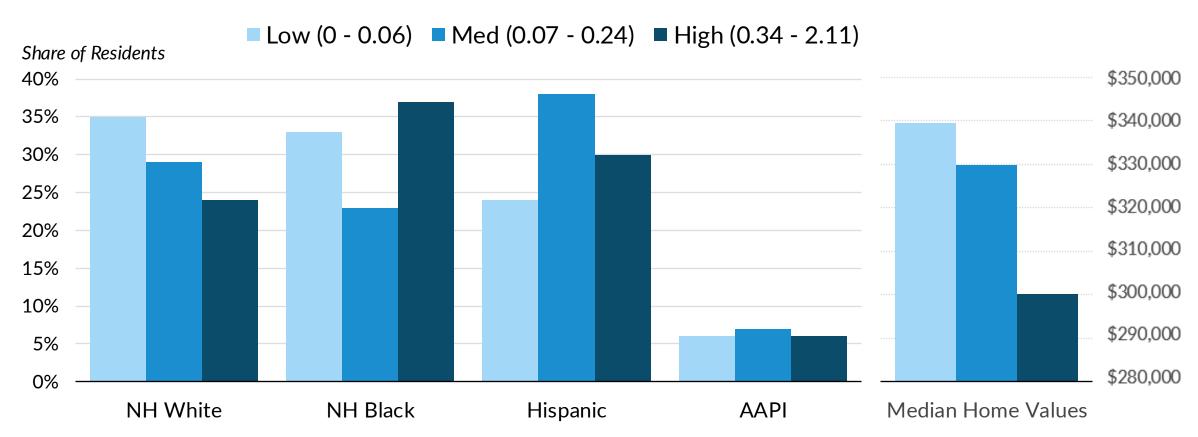
Tract Demographic Shares and Median Home Values by Low, Medium, and High Grocery Counts



Source: USDA 2025 SNAP Vendor Groceries, Supermarkets, and Super Store Data, 2018-2022 ACS Demographic data

Healthy food store density per resident drops as white population share and median home values rise

Tract Demographic Shares and Median Home Values by Low, Medium, and High Grocery Densities per 1k Residents



Source: USDA 2025 SNAP Vendor Groceries, Supermarkets, and Super Store Data, 2018-2022 ACS Demographic data MPC

Low income and low food access tracts are mostly in the south of Chicago

LILA Tract: A tract that is

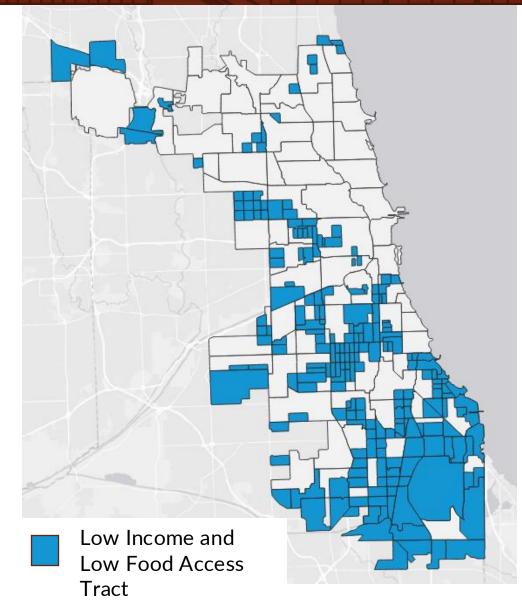
low-income (having a poverty rate of 20%+) AND

low food access (more than 1/3rd of the population lives more than 0.5 miles from a healthy food store)

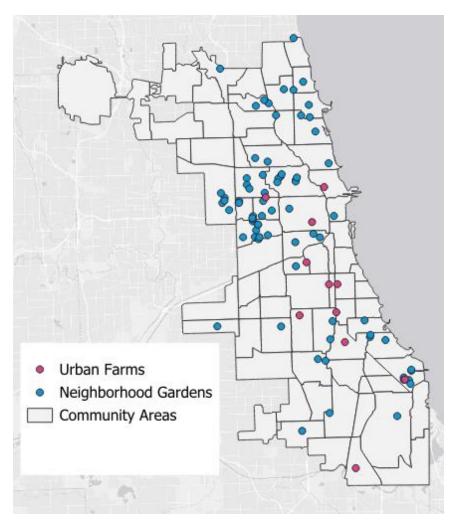
 LILA tracts are heavily concentrated on the south side of Chicago

Data: USDA SNAP Food Access Research Atlas Data 2019***



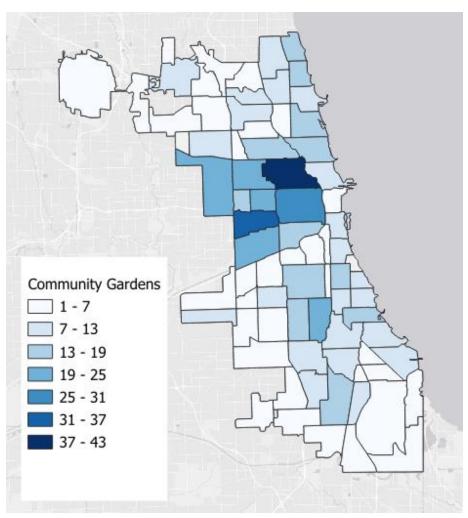


Community gardens are primarily concentrated in the near northwest while urban farms are in central and south Chicago



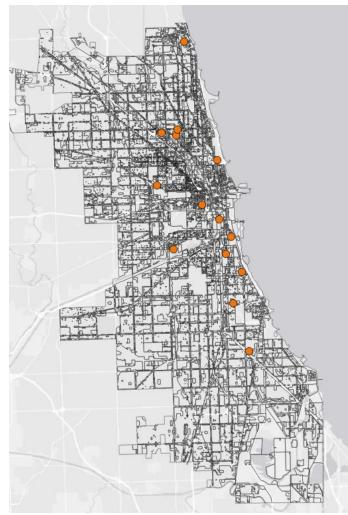


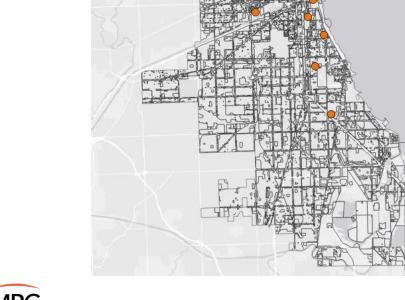
Source: City of Chicago Open Data: Urban Farms and Open Spaces, Neighbor Space Gardens



Source: Chicago Urban Agriculture Mapping Project

Distribution of Food Store Types



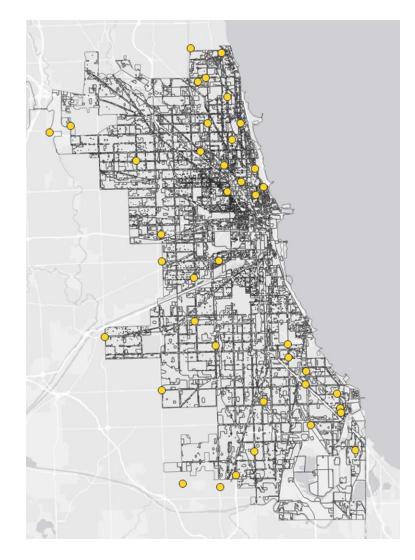


Convenience Stores



Farmer's Markets

Distribution of Food Store Types



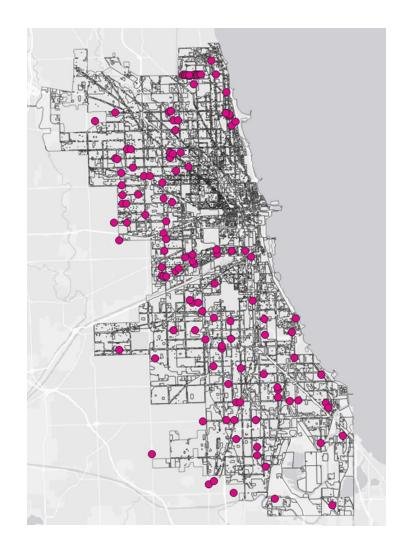


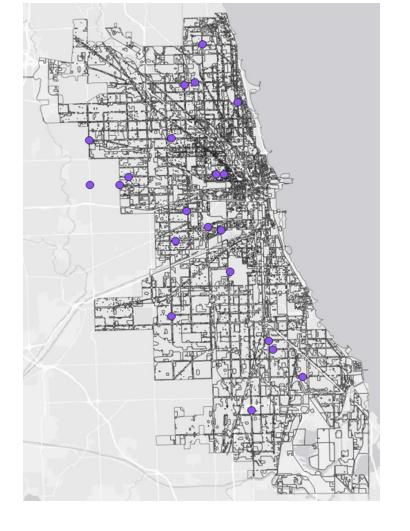


Super Markets

Super Stores

Distribution of Food Store Types







Grocery Stores

Specialty Stores

Most Food Stores in B3, B1, and C1 Zones

B3, B1, and C1 zones have an outsized share of food stores relative to their share of land in the city

Source: 2025 USDA SNAP Vendors (grocery stores, supermarkets, and super stores) and 2023 Chicago zoning data **Note**: This excludes specialty stores, pharmacies, corner stores, convenience stores, and farmers markets

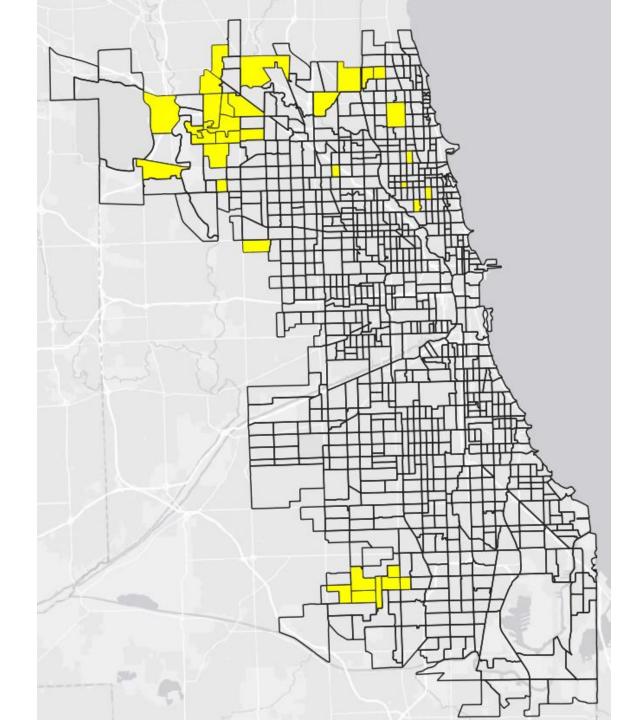


Zone		Share of All Food Stores		Zone Share of City Land	Ratio of Food Store Share to Zone Share
B1	121	20%	0.56	2%	10.9
B2	4	1%	0.32	1%	0.6
В3	242	39%	0.74	2%	16.3
C1	60	10%	0.42	1%	7.1
C2	24	4%	0.23	1%	5.3
DS	3	0%	0.03	0%	4.6
DX	6	1%	0.35	1%	0.9
M1	10	2%	0.93	3%	0.5
M2	8	1%	0.96	3%	0.4
M3	1	0%	0.15	0%	0.3
PD	94	15%	6.98	23%	0.7
PMD	7	1%	6.28	20%	0.1
RM	1	0%	1.42	5%	0.0
RS	25	4%	7.50	24%	0.2
RT	10	2%	2.26	7%	0.2
Grand Total	616	100%			

Zones with High White Resident Share and High Shares of Residents >0.5 Miles from Food Store

Neighborhoods included:

- Far northwest (Norwood park, Edison Park, North Park)
- North Side (Lincoln Park)
- Northwest (Austin)
- Far Southwest Side (Beverly, Mount Greenwood).





Understand the zoning

Does the Chicago zoning code encourage grocery locations in any zones?
What zones do and do not consistently have grocery access?

- Most food stores are in B3 zones while super stores and supermarkets are mostly located in PDs
- Business zones tend to have a higher proportion of unhealthy food stores while PD zones have higher shares of healthy food stores
- Chicago's zoning ordinance does not incentivize the location of food stores through zoning

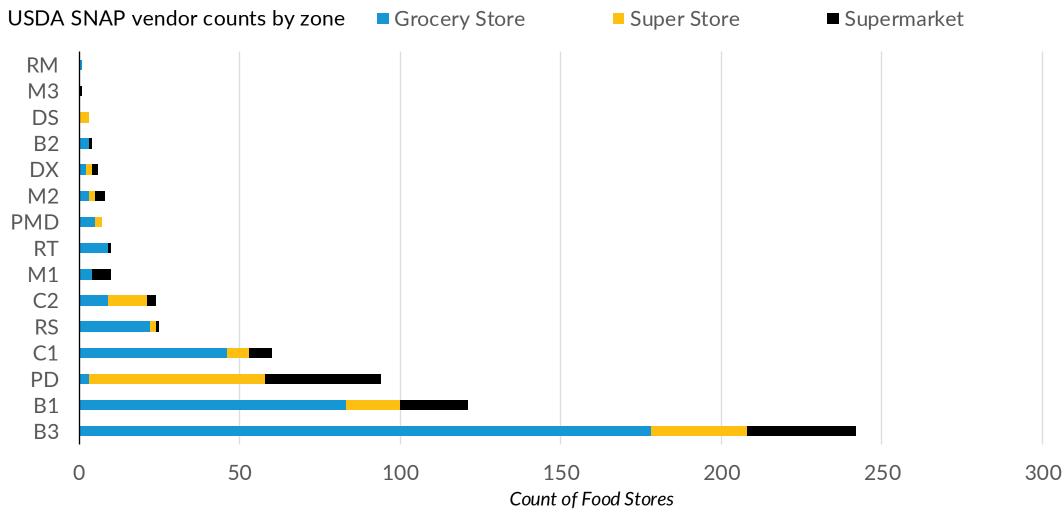


Chicago's zoning ordinance doesn't incentivize grocery location in any specific zones

- > Food and beverage retail sales allowed by right in all B1, B2, B3, C1, C2, and C3 zones
- > Unlike other jurisdictions, Chicago's zoning ordinance does not:
 - > Prioritize grocery stores as a use in overlay districts (e.g., Tulsa, OK)
 - > Require grocery stores in certain districts (e.g., Tybee County, GA)
 - Offer density bonuses to PUDs that have grocery stores (e.g., Carteret County, NC)
 - > Explicitly permit and encourage healthy grocery access in zones (e.g., Madison, WI



Most healthy food stores are in B3 zones while super stores and supermarkets are mostly located in PDs





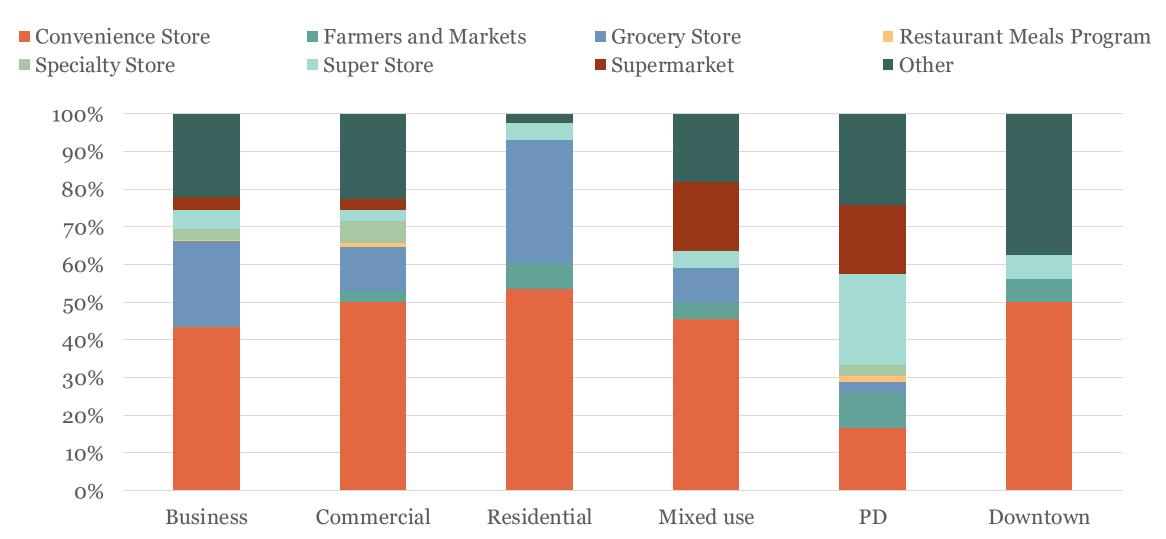
Source: 2025 USDA SNAP Vendors (grocery stores, supermarkets, and super stores) and 2023 Chicago zoning data **Note**: This excludes specialty stores, pharmacies, corner stores, convenience stores, and farmers markets

Food Store Types by Zone

Sto	e Type	N	Business	Commercial	Residential	Mixed use	PD	Downtown	Total
Less Healthy	Convenience Store	273	62%	19%	8%	4%	4%	3%	100%
Hea	Other	86	63%	17%	1%	3%	12%	4%	100%
Less	Specialty Store	136	58%	32%	0%	0%	11%	0%	100%
Healthy	Farmers and Markets	15	7%	20%	20%	7%	40%	7%	100%
	Grocery Store	118	75%	10%	12%	2%	2%	0%	100%
More	Super Store	43	47%	7%	5%	2%	37%	2%	100%
M	Supermarket	33	42%	9%	0%	12%	36%	0%	100%



The blend of food stores in each zone type





Understand the relationship **MPC**

Does the distribution of grocery stores correlate positively with any specific zone types?

- The **higher** the tract share of single-family zoning, high-density zoning, and white residents, and the higher the tract median incomes, the **lower** the food store counts and densities.
- The **higher** the tract share of low-density multifamily zoning, and Asian or Hispanic residents, the **higher** the food store counts.
- Poor grocery access for low-income households is most strongly correlated with racial tract demographics, especially segregated Black communities, but higher shares of business zoning are still related to better grocery access.

The greater the share of lowest and highest density zoning, the fewer the healthy food stores

- Grocery counts and densities are significantly negatively correlated with single-family tracts, highdensity multifamily zoning, and tracts with high shares of white residents and high home values
- They are positively correlated with high shares of low-density multifamily zoning and Asian and Hispanic residents

Source: 2025 USDA SNAP Vendors (grocery stores, supermarkets, and super stores) and 2023 Chicago zoning data **Note**: This excludes specialty stores, pharmacies, corner stores, convenience stores, and farmers markets



	Total number	
	of healthy food	Healthy food store
Tract Share:	stores	density per 1k pop
Single family zoning	-0.11*	-0.14*
Low-density MF zoning	0.18*	0.16*
High-density MF zoning	-0.10*	-0.08*
Low-mid density business		
zoning	0.04	0.05
High-density business zoning	0.09	0.03
Commercial (all) zoning	0.01	0.21
Share NH white residents	-0.13*	-0.20*
Share NH Black residents	-0.06	0.08
Share Hispanic residents	0.15*	0.09*
Share AAPI residents	0.12*	-0.00
Median home value	-0.08	-0.14*
Median rents	-0.05	-0.10*

Low-access populations are associated with more single-family zoning and a larger share of Black residents

- The USDA Low-Grocery-Access Population Share (share of a tract living more than half a mile from a grocery store) is positively correlated with tract shares of single-family zoning and Black residents
- They are negatively correlated with low or mid-density business zoning and shares of white residents

Source: 2019 USDA Low Access Population Data, ACS 2010-2014 and 2018-2022, and 2023 Chicago zoning data

Notes: *White-Black Concentration score = (white pop – black pop) /tract total pop. Positive values mean the tract is segregated AND entirely white, negative values mean the tract is segregated AND mostly Black.

** Black-Hispanic Concentration Score = (Black pop – Hispanic pop)/tract total pop. Positive values mean tract is segregated AND entirely Black, negative values mean the tract is segregated AND entirely Hispanic.



Tract Share:	Low Access Population Share
Single family zoning	0.15*
Low-density multifamily zoning	-0.09*
High-density multifamily zoning	-0.07
Low or mid-density business zoning	-0.12*
High-density business zoning	-0.07
Commercial (all) zoning	0.02
Manufacturing/industrial zoning	0.02
PUD zoning	0.02
White non-Hispanic residents	-0.15*
Black non-Hispanic residents	0.17*
Hispanic residents	-0.06
AAPI residents	-0.07
White-Black Concentration Score*	-0.17 [*]
Black-Hispanic Concentration Score**	0.14*

Low-access AND low-income populations are most strongly associated with race

- Tracts designated as low-income AND low-access (LILA tracts) are have significantly lower shares of white residents and significantly higher shares of Black residents
- Correlations with race are stronger than with any zoning type, but tracts with higher shares of business zoning were less likely to be LILA tracts

Source: 2021 USDA Low Access Population Data, ACS 2010-2014 and 2018-2022, and 2023 Chicago zoning data

Notes: *White-Black Concentration score = (white pop – black pop) /tract total pop. Positive values mean the tract is segregated AND entirely white, negative values mean the tract is segregated AND mostly Black.

** Black-Hispanic Concentration Score = (Black pop – Hispanic pop)/tract total pop. Positive values mean tract is segregated AND entirely Black, negative values mean the tract is segregated AND entirely Hispanic.

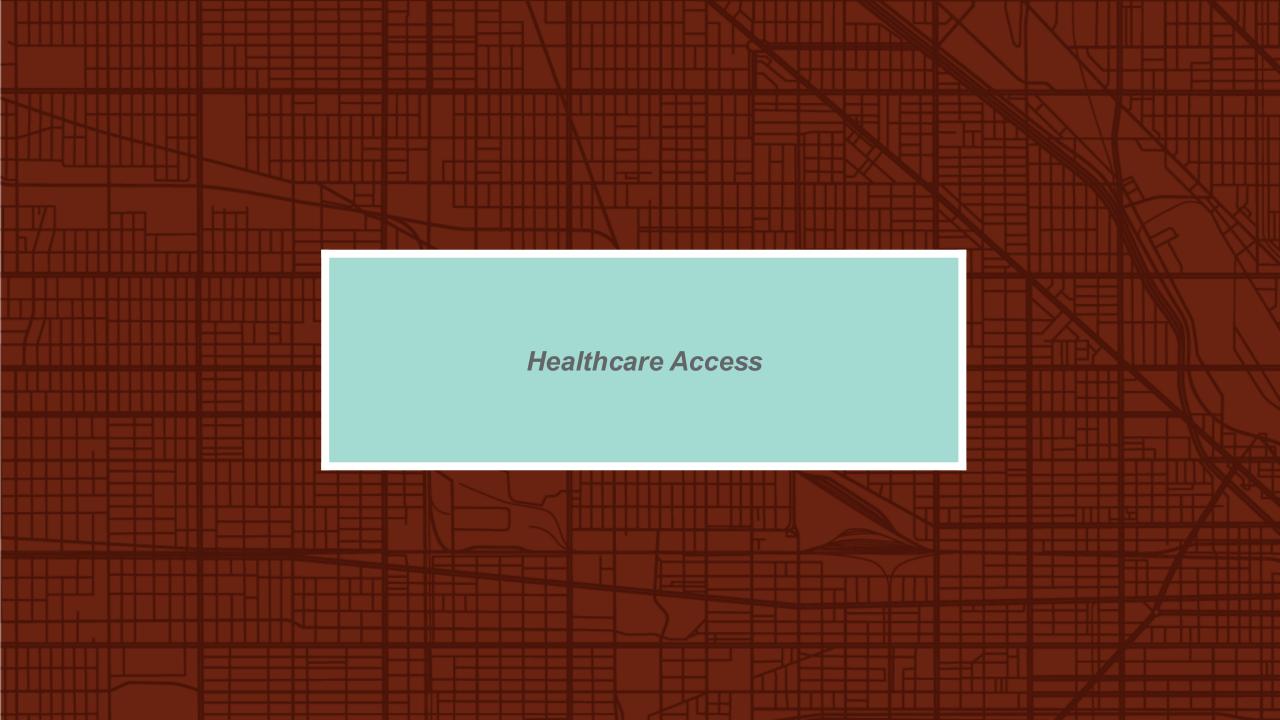
MPC

Tract Share:	Low Access Population Share	LILA Status
Single family zoning	0.15*	0.03
Low-density multifamily zoning	-0.09*	-0.02
High-density multifamily zoning	-0.07	-0.07*
Low or mid-density business zoning	- 0.12*	-0.13*
High-density business zoning	-0.07	-0.09*
Commercial (all) zoning	0.02	0.02
Manufacturing/industrial zoning	0.02	0.16*
PUD zoning	0.02	-0.01
White non-Hispanic residents	-0.15*	-0.42*
Black non-Hispanic residents	0.17*	0.44*
Hispanic residents	-0.06	-0.12*
AAPI residents	-0.07	-0.18*
White-Black Concentration Score*	- 0.17*	-0.45*
Black-Hispanic Concentration Score**	0.14*	0.34*

Summary

- > Food stores are evenly geographically distributed across Chicago, but some communities have too little access while others have high access.
- Most food stores are in B3 zones while super stores and supermarkets are mostly located in PDs
- Counterintuitively, food store counts and density drop with white resident share and median home values but they rise with Asian and Hispanic resident share as well as low-density multifamily zoning.
- Poor grocery access for low-income households is most strongly correlated with racial tract demographics, especially segregated Black communities, but higher shares of business zoning are still related to better grocery access.





Research questions and key findings

RESEARCH QUESTIONS

KEY FINDINGS

Understand the outcome:

What is the distribution of primary care, physician, and outpatient clinics across the city?

- Primary care access is better in Chicago's northern neighborhoods
- Geographic access rises with wealth and diversity
- Most tracts in Chicago have below-WHO recommended density of 1 physician practice per 1k residents
- Tracts with the highest wealth or racial diversity had WHO-recommended density of >1
 physician practice per 1k residents and highest counts and density of clinics

Understand the zoning:

Does the zoning code encourage healthcare clinic locations in any zones?
What zones do and do not consistently have clinic access?

- Primary care clinic are mostly located in B3 and PD zones
- The zoning ordinance allows medical services by right in all business, commercial, and downtown non-residential zones, and by special permit in RT 4-6 zones; but it does not incentivize the location of medical services (e.g., through density bonuses, healthcare overlays, streamlined permitting, or parking reductions)

Understand the relationship: Does the distribution of health care clinics correlate positively with any specific zone types?

- Locational access to physician practices (in both counts and per capita density) is negatively correlated with low-density multifamily zone share and share of Black and Hispanic residents and positively correlated with the share of PD zoned land; privately insured, white, and Asian residents; and high household incomes
- Zoning appears to influence physician access most strongly as it influences residential income distribution

Research Approach

- Identify the distribution of primary care clinics across the city and who has geographic access to them
- Qualitatively assess Chicago zoning code for all regulations around medical services and clinic locations
- Quantify which zones are most commonly associated with primary care clinics
- Assess correlations between tract-level zoned land shares and physician and outpatient clinic counts and density



Data Sources

We combine a series of key datasets related to Chicago's zoning and healthcare locations:

- > Racial demographic and health insurance coverage data from the Census and ACS (2000, 2010-2014, 2018–2022)
- > 2023 Zoning data from MPC analysis
- > Chicago HHS Primary Care Community Health Center and Hospital location data (2025)
- Chicago Department of Public Health, Healthy Chicago Survey: Primary Care Access (2024)
- National Neighborhood Data Archive data
 - o Generated and cleaned by University of Michigan NAICS code analysis that classifies businesses by primary industry
 - Count and density (per 1k people) of all physician clinics and outpatient clinics



Data Definitions

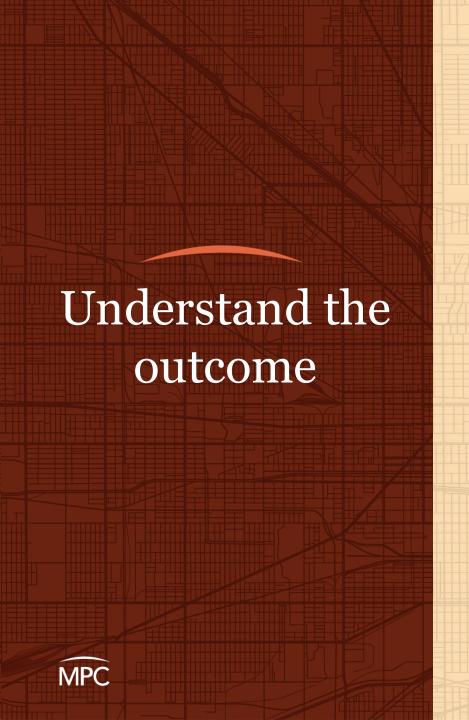
Chicago HHS Primary Care Community Health Centers (2025):

 Chicago primary care community health clinics (including all federally qualified health centers and similar community health centers) that provide primary care and are open to the general community.

National Neighborhood Data Archive data (2021)

- Outpatient Clinics: Includes ambulatory surgical centers, freestanding emergency medical centers, HMOs, and other outpatient medical centers; also includes kidney dialysis centers and other outpatient specialty clinics, e.g., physical therapy, mental health, respiratory therapy, and weight loss clinics.
- Physician Offices/Clinics: Physicians (except mental health and osteopathy), including family medicine and general/internal medicine practitioners as well as specialists such as cardiologists, oncologists, pediatricians, obstetrician/gynecologists, ophthalmologists, and dermatologists.



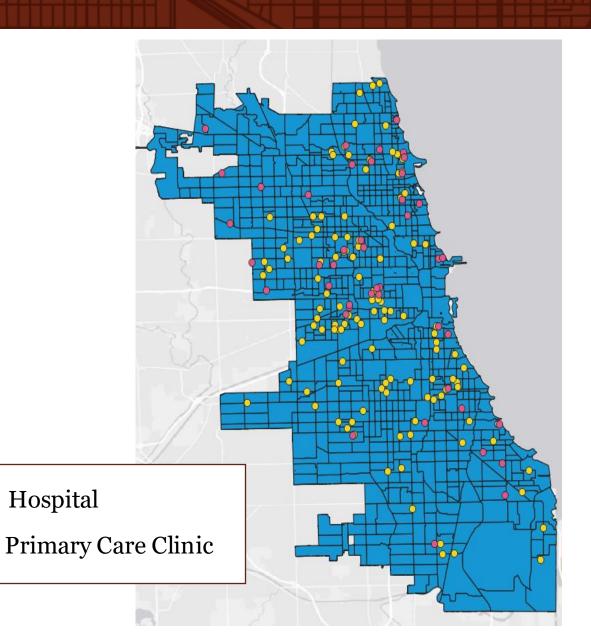


What is the distribution of primary care, physician, and outpatient clinics across the city?

- Primary care access is better in Chicago's northern neighborhoods
- Geographic access rises with wealth and diversity
- Most tracts in Chicago have below-WHO recommended density of 1 physician practice per 1k residents
- Tracts with the highest wealth or racial diversity had WHO-recommended density of >1 physician practice per 1k residents and highest counts and density of clinics

Chicago HHS Hospital and Primary Care Clinic Locations

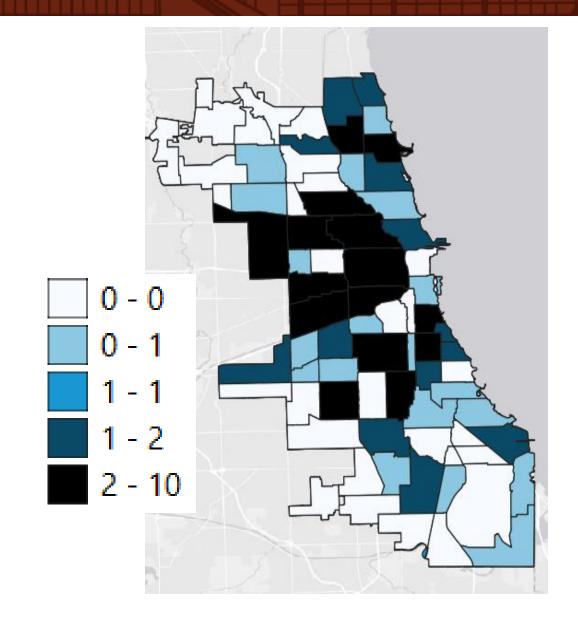
- Primarily located outside of the Loop, denser in north and western neighborhoods
- > Sparse clinics in south
- Hospitals relatively evenly dispersed





HHS Primary Care Clinic Locations by Community Area

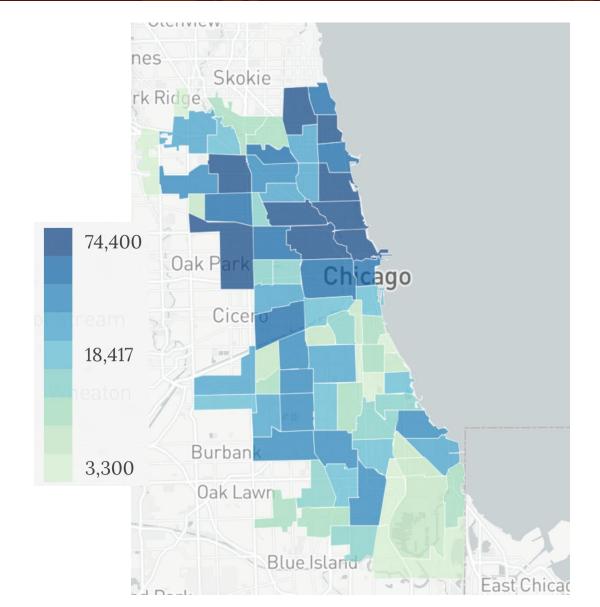
- Northwest and southwest have fewest primary care clinics
- Western neighborhoods have highest concentration
 - South Lawndale and West Town have highest with 10 and 7 (respectively)





Primary care access is better in Chicago's northern neighborhoods

The number of adults who report that they have at least one person they think of as their personal doctor or health care provider is highest in northern community areas and lowest in near and far south neighborhoods

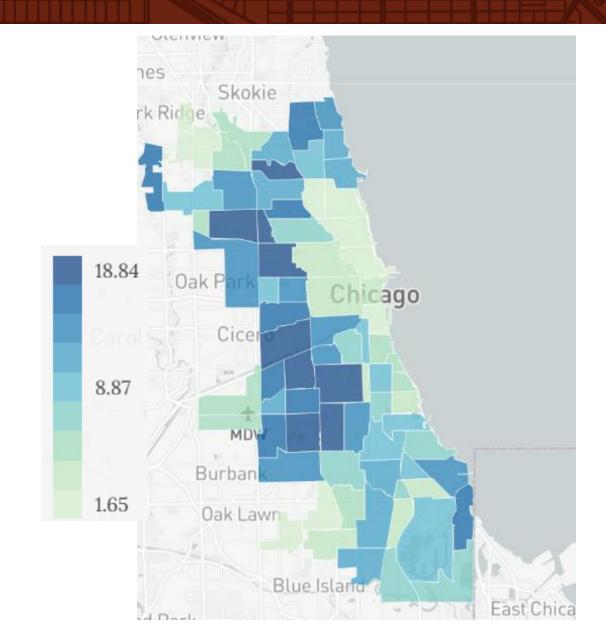




Source: Chicago Health Atlas: Primary Care Access

Uninsured populations ring the outer edges of the city

Community areas with the highest share of residents who have no insurance at all ring the city, but cluster in the southwest.

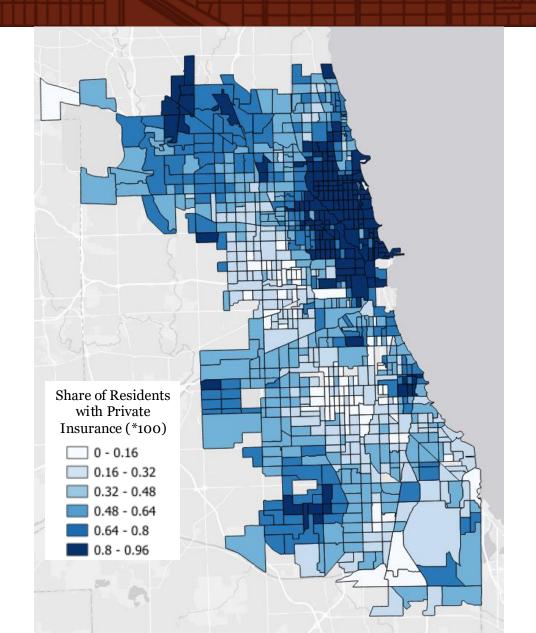




Source: Chicago Health Atlas: Uninsured Population Share

Health Insurance Coverage Type Correlates with Wealth

- Across all city tracts, an average of 57 percent of adult residents have at least one source of private insurance.
- Tracts with the highest share of residents who have at least one type of private insurance are clustered in the loop and near north.





Physician Access Rises Significantly with Private Insurance Coverage and Wealth

- Physician and outpatient access correlated most strongly with private insurance coverage.
- The share of adults in a tract with private health insurance coverage rises when these rise:
 - Share of white residents
 - Median household income
 - Median home value

	Share adults with private insurance
Count of physician practices	0.27*
Count of mental health practices	0.19*
Count of outpatient clinics	0.28*
Median household income	0.82*
Median home value	0.71*
Share of residents who are white	0.85*
Share of residents who are Black	-0.59 *
Share of residents who are Hispanic	-0.21 *
Share of residents who are Asian	0.28*



Most tracts in Chicago have below-WHO recommended 1 physician practice per 1k resident.

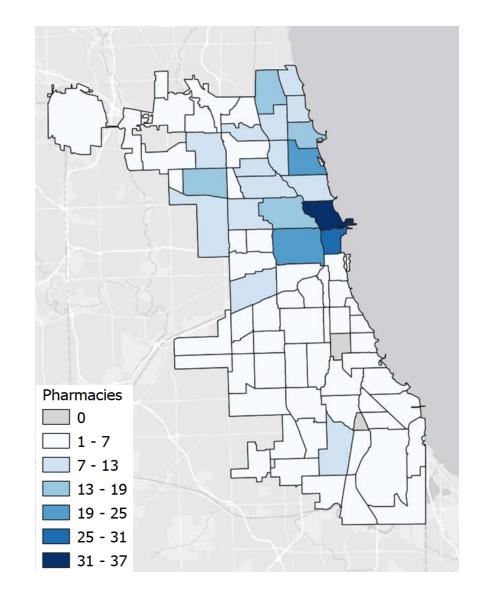
Descriptive Statistics	25%	Median	75 %	Largest	Mean	SD
Count of outpatient clinics	0	0	1	26	0.78	1.66
Density of outpatient clinics per 1k residents	0	0	0.31	6.78	0.23	0.46
Count of physician practices	0	1	3	135	2.66	7.33
Density of physician practices per 1k residents	0	0.28	0.75	54	0.75	2.6

Just 20% of Chicago's population lived in a tract with the recommended WHO density of >= 1 physician practice per 1k residents in 2021



Pharmacy Locations by Community Area

- Most community areas have at least ONE pharmacy
- Northeast Chicago has highest pharmacy density in 2025
- South Chicago has lowest concentration of pharmacies and most community areas with no pharmacies

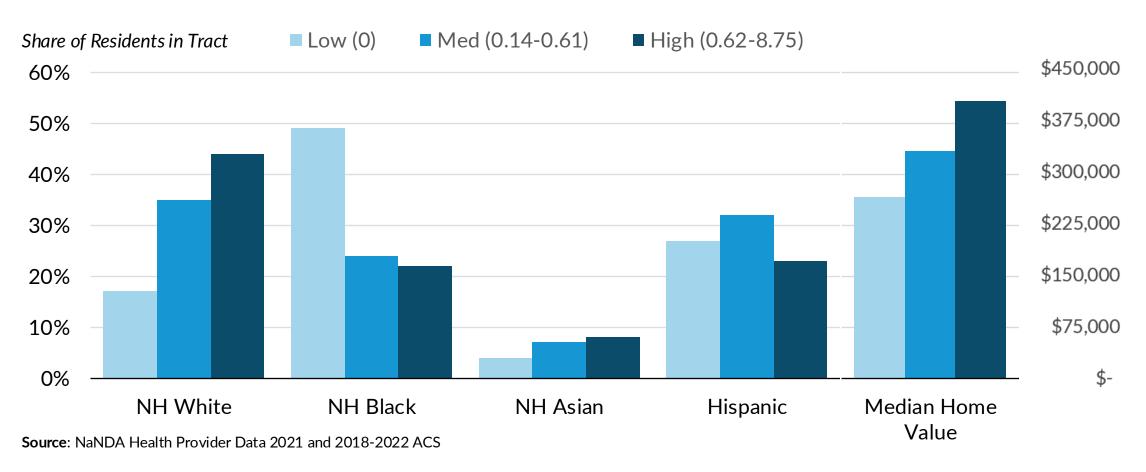




Source: Compiled Chicago Business License, HHS open list, and OpenStreet Facilities Pharmacy designations 2025

Physician Practice Density Rises with White, Asian Resident Share and Median Home Values

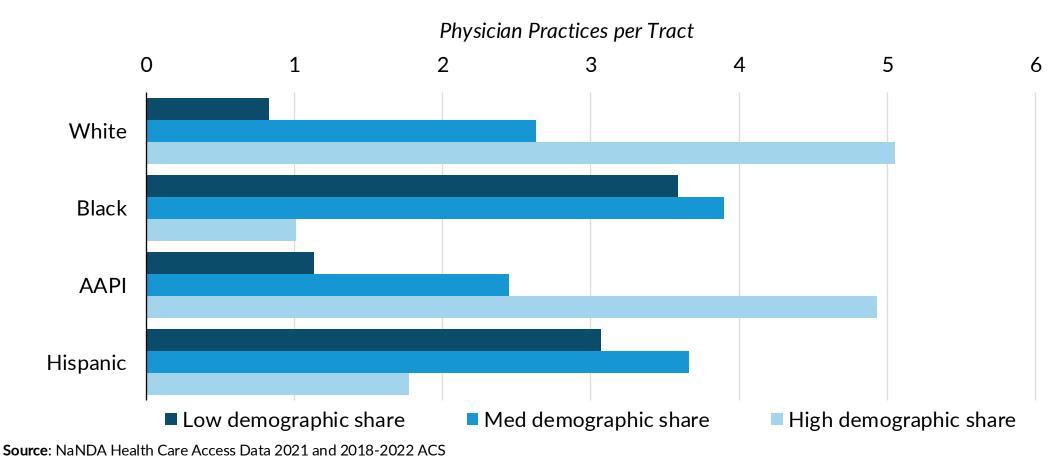
Tract demographic shares by low, medium, and high physician practice density per 1k residents





Tracts with highest White, Asian Resident shares had highest physician practice counts

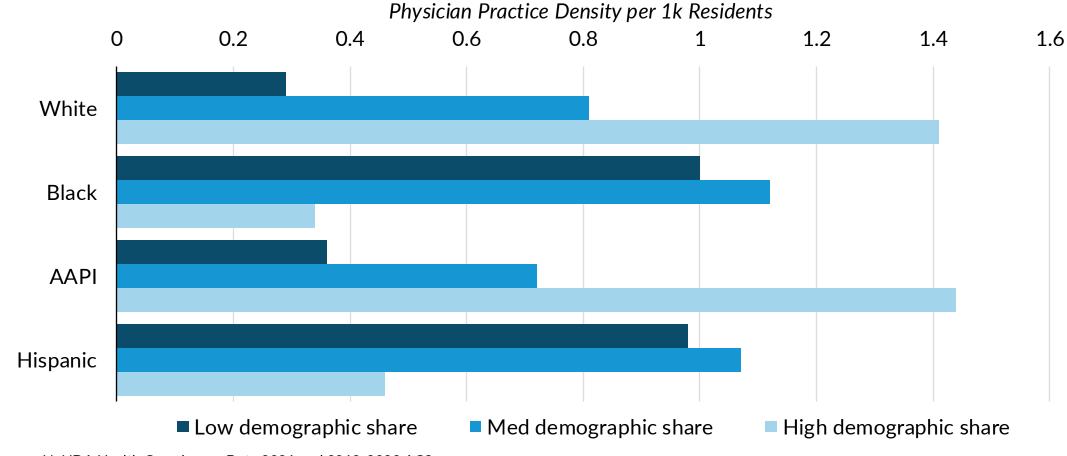
Physician practice counts by low, medium, high resident demographic shares

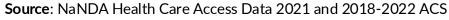




Only tracts with highest white, Asian and med Black and Hispanic resident shares had >1 physician practice per 1k pop

Physician practice density per 1k residents by low, medium, high tract resident demographic shares



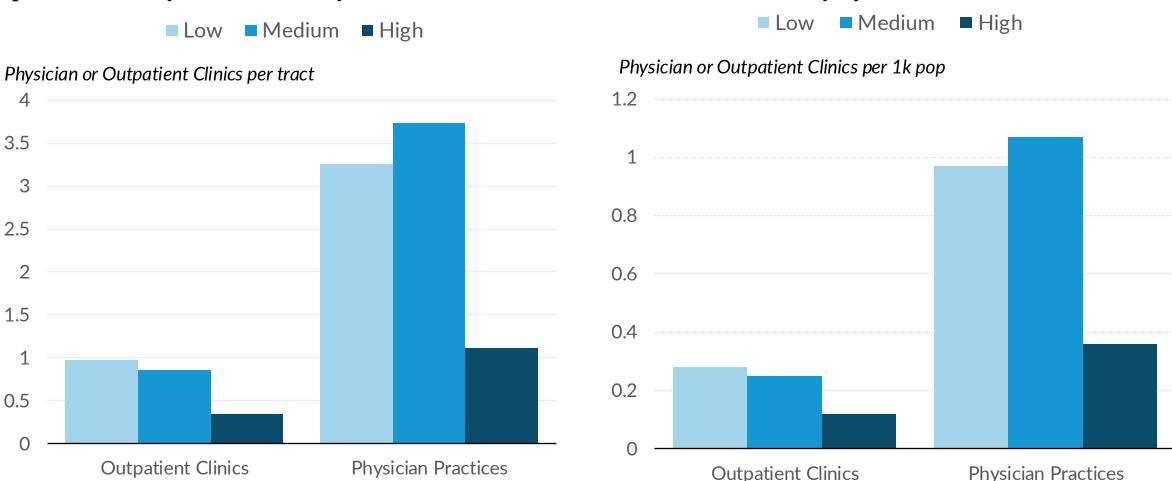




More racially/ethnically concentrated tracts had lower physician practice density and counts

Clinic Density by Distance Index Score

Outpatient and Physician Clinics by Distance Index Score





Source: NaNDA Health Care Access Data 2021 and 2018-2022 ACS

Notes: The Euclidean distance index measures how racially or ethnically similar a tract's distribution of residents is to the overall city. High scores indicate extreme racial/ethnic concentration, and low scores indicate a tract whose resident shares mirror the city

Understand the zoning

Does the Chicago zoning code encourage healthcare clinic locations in any zones?
What zones do and do not consistently have clinic access?

- Primary care clinic are mostly located in B3 and PD zones
- The zoning ordinance allows medical services by right in all business, commercial, and downtown non-residential zones, and by special permit in RT 4-6 zones; but it does not incentivize the location of medical services (e.g., through density bonuses, healthcare overlays, streamlined permitting, or parking reductions)

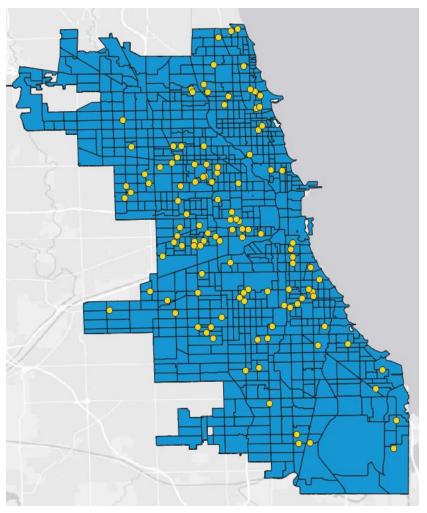


Chicago Zoning Ordinance Regulations on Healthcare Clinic Locations

- "Medical Services" are a by-right permitted use in B1, B2, B3, C1, C2, C3, Downtown Core, Downtown Mixed Use, and Downtown Service zones
- Government-operated health centers are permitted by special permits in RT-4, 4.5, 5, and 6 zones
- No incentives given to locate medical services in any area
- No definition of "Medical Services" or mentions of clinics are offered within the text



Most Primary Care Clinics in PD and B3 Zones



Source: Chicago HHS Primary Care Clinic Locations



	Count of	Share of
Zone	clinics	clinics
B1	15	13%
B2	2	2%
B3	32	27%
C1	12	10%
C2	4	3%
M1	4	3%
PD	30	25%
PMD	1	1%
POS	1	1%
RM	4	3%
RS	6	5%
RT	8	7%
Grand Total	119	100%

Understand the relationship **MPC**

Does the distribution of grocery stores correlate positively with any specific zone types?

- Locational access to physician practices (in both counts and per capita density) is negatively correlated with low-density multifamily zone share and share of Black and Hispanic residents and positively correlated with the share of PD zoned land; privately insured, white, and Asian residents; and high household incomes
- Zoning appears to influence physician access most strongly as it influences residential income distribution

Physician and clinic access positively correlated with wealth, high-density and PD zoning, and white resident concentration

- Clinic access (both counts and density) drops as low-density multifamily zoned land and share of Black residents rises
- Access rises as the share of privately insured, white, and wealthy residents, and PD zoned land rise

Source: NaNDA Health Care Provider Data 2000-2021 and MPC Zoning Data

Note: * p<0.01 | Chicago HHS 2025 primary care clinic locations did not correlate significantly with any zoning or census variables *White-Black Concentration score = (white pop - black pop) /tract total pop. Positive values mean the tract is segregated AND entirely white, negative values mean the tract is segregated AND mostly Black.

** Black-Hispanic Concentration Score = (Black pop - Hispanic pop)/tract total pop. Positive values mean tract is segregated AND entirely Black, negative values mean the tract is segregated AND entirely Hispanic.

	Physician Practices		Out	patient Clinics
			Count	Density per 1k pop
Single family	-0.04	-0.05	-0.04	-0.07
Low-density MF	-0.18*	-0.14*	-0.16*	-0.12*
High-density MF	0.10*	0.06	0.08	0.03
Low-mid density business	0.01	-0.01	-0.01	0.01
High-density business	0.04	0.03	0.12*	0.08
PD zoning	0.26*	0.24*	0.21*	0.21*
Commercial (all)	-0.06	-0.03	0.00	0.02
Share with private insurance	0.27*	0.20*	0.28*	0.22*
Share NH white	0.24*	0.17*	0.25*	0.18*
Share NH Black	-0.17*	-0.11*	-0.16*	-0.08
Share Hispanic	-0.10*	-0.09	-0.12*	-0.13*
Share Asian	0.20*	0.14*	0.19*	0.12*
Median HH Inc	0.17*	0.15*	0.15*	0.13*
White-Black Concentration Score*	0.22*	0.15*	0.21*	0.14*
Black-Hispanic Concentration Score**	-0.06	-0.03	-0.04	0.01

Physician and clinic access rises as tracts are more racially/ethnically representative of the city

Locational access to physician practices and outpatient clinics (in both counts and per capita density) is lowest when tracts are heavily racially or ethnically concentrated

Source: NaNDA Health Care Provider Data 2000-2021 and MPC Zoning Data

Note: * p<0.01 | The Euclidean distance index measures how racially or ethnically similar a tract's distribution of residents is to the overall city. High scores indicate extreme racial/ethnic concentration, and low scores indicate a tract whose resident shares mirror the city

Distance Index Score
-0.13*
0.10
-0.11*
-0.19*
-0.16*



Physician clinic employees and zoning

The average physician practice has 5.3 employees (3.5 median).

- Physician practice total employee counts are not significantly correlated with many tract characteristics except incomes, private insurance, share white, share Asian, and share PD land.
 - Tracts with higher counts of employees at physician practices had higher shares of privately insured, white, or Asian residents (correlation of 0.12*, 0.10*, and 0.11* respectively) and shares of land dedicated to PD zoning (0.17*)
 - Tracts with higher counts of employees had lower shares of land dedicated to low-density multifamily zoning (correlation of -0.09*).
 - These are not strong correlations.

NOTE: Average employees per physician practice did not correlate with any zoning or demographic tract characteristics



Mental health access follows physician access trends

Mental health access

- The number of and employees at mental health clinics rise with the tract share of PD zoning and privately insured and white residents.
- Clinic counts rise with the share of Asian residents and median household incomes and home values, and they fall as Black and Hispanic resident shares rise.

NOTE: Average employees per mental health practice only correlated with household incomes and private insurance rates

correlations with tract share of:	Count	Employees
Single-family zoning	-0.05	-0.04
Low-density MF zoning	-0.11*	-0.03
High-density MF zoning	0.11*	0.02
Low-mid density business zoning	0.00	-0.02
High density business zoning	0.03	0.00
Commercial zoning	-0.03	0.00
Manufacturing/industrial zoning	-0.07	-0.03
PD zoning	0.14*	0.11*
Share privately insured residents	0.19*	0.10*
White residents	0.20^{*}	0.09*
Asian residents	0.21*	0.05
Black residents	-0.13*	-0.05
Hispanic residents	-0.15*	-0.05
Median household income	0.16*	0.08
Median home value	0.13*	0.06



Clinic

Pharmacy access ALSO follows physician access trends

- Tracts with low-density multifamily housing continue to have negative access correlations with pharmacies while PD zones are positively correlated
- Pharmacy access rises most as private insured, Asian, and white resident shares and household incomes rise
- As Black resident share rises, pharmacy access falls

Singic-laminy zoming	-0.02
Low-density MF zoning	-0.11*
High-density MF zoning	0.06
Low-mid density business zoning	0.00
High density business zoning	0.09*
Commercial zoning	-0.04
Manufacturing/industrial zoning	-0.08
PD zoning	0.14*
Share privately insured residents	0.16*
White residents	0.15*
Asian residents	0.17*
Black residents	-0.14*
Hispanic residents	-0.01
Median household income	0.13*
Median home value	0.09*

Pharmacy

Count

-0.02

Pharmacy access correlations

with tract share of:

Single-family zoning



Source: Compiled Chicago Business License, HHS open list, and OpenStreet Facilities Pharmacy designations 2025; ACS 2018-2022 data, MPC Zoning data 2023

Private insurance access (the strongest association with clinic access) is associated with wealthy zone types

- Private insurance is related to zoning, particularly with zoning types that are associated with higher-incomes:
 - > Rises with single family, highdensity residential, high-density business, and PD zoned land
 - Falls with low-mid density residential and manufacturing or industrial zoned land

	Share adults with private insurance
Single-family zoning	0.10*
Low-mid density residential	
zoning	-0.21*
High-density residential zoning	0.21*
Low-mid density business zoning	0.08
High density business zoning	O.11*
Commercial zoning	-0.08
Manufacturing/industrial zoning	-0.21*
PD zoned land	0.12*



Source: NaNDA Health Care Provider Data 2000-2021, ACS 2018-2022, and MPC Zoning Data

Note: * p<0.01

Physician access best predicted by private insurance coverage and PD-zoned land shares

- In regressions, the share of residents in a tract with private insurance was a stronger and larger predictor of physician clinic and physician employee access than any zone:
 - A 10% increase in the share of residents with private insurance was associated with 0.8 more physician practices in that tract, controlling for any differences in zoning.
- But also, the tract share of PD-zoned land remained a positive and significant predictor of having more physician practices and employees.
 - A 10% increase in PD-zoned land was associated with 0.6 more physician practices, controlling for insurance.



Summary

- Geographic access to primary care and outpatient clinics follows wealth and diversity: the wealthiest and most diverse tracts had the best access
 - > Primary care clinics are mostly located in B3 and PD zones, both of which are correlated with higher shares of privately insured, White and Asian residents and higher home values and negatively correlated with Black and Hispanic resident shares.
 - Tracts with higher distance index scores (i.e., least racially/ethnically representative of the city as a whole) had the lowest physician and outpatient clinic access, but tracts with concentrations of white residents also had more access.
- Chicago's zoning ordinance is not being used to incentivize or influence the geographic location of medical services in non-white racially or ethnically concentrated communities with lower levels of geographic access

