

September 2026

Technical Addendum: *Mapping Displacement Pressure in Chicago*

Introduction

The Institute for Housing Studies (IHS) developed the Mapping Displacement Pressure in Chicago project to provide a data-informed framework for understanding housing affordability pressures and displacement risk across Chicago neighborhoods. The project combines housing market, demographic, socioeconomic, housing stock, and neighborhood indicators to identify areas where rising housing costs may overlap with populations that may be more vulnerable to displacement. Rather than predict future displacement outcomes, the analysis is intended to help public agencies, community organizations, researchers, and other stakeholders understand neighborhood conditions and changing affordability pressures and to inform discussions about housing affordability, neighborhood change, and housing preservation.

The framework consists of two complementary census tract-level analytical components: a vulnerability analysis that identifies neighborhoods with demographic, socioeconomic, housing, and neighborhood characteristics associated with heightened vulnerability in a rising-cost environment, and a housing market analysis that measures market conditions and changes in residential property values over time. Together, these components provide a framework for identifying areas where housing market pressures and resident vulnerability may intersect.

Since its initial release in 2017, IHS has periodically refined the methodology to reflect changing housing market conditions, newly available data sources, and advances in the Institute's understanding of neighborhood change. The 2021 update introduced improvements to the housing market analysis, including peer-market comparisons and a rolling baseline period for evaluating price change, while also expanding the contextual information available through the interactive mapping tool. For the 2026 release, both analytical components were updated to reflect current neighborhood and housing market conditions. The vulnerability analysis was reconstructed using updated census and administrative data sources, replacing the clustering analysis originally developed using data from the mid-2010s, while the housing market analysis was revised to incorporate a new four-category market typology consisting of High-Cost, Moderate-High-Cost, Moderate-Low-Cost, and Lower-Cost Markets, along with updated measures of housing market change. This technical addendum summarizes the updated methodology, presents results from the 2026 analysis, and documents the data sources and methods used to create the Mapping Displacement Pressure tool.

Vulnerability Analysis (2026)

Consistent with the framework established in the original Mapping Displacement Pressure in Chicago methodology, the vulnerability analysis identifies census tracts with demographic, socioeconomic, housing, and neighborhood characteristics associated with vulnerability in a rising-cost environment. The analysis groups neighborhoods with similar underlying conditions and provides a framework for understanding how characteristics associated with vulnerability vary across Chicago neighborhoods.

Previous versions of the Mapping Displacement Pressure project relied on a clustering framework developed using data from the mid-2010s. For the 2026 release, IHS conducted a new clustering analysis using updated census and administrative data sources to better reflect current and changing neighborhood conditions throughout the city.

The vulnerability analysis uses a clustering algorithm to identify census tracts that share similar characteristics related to housing affordability, housing market conditions, housing stock, neighborhood conditions, and resident demographics, grouping census tracts according to their similarity across a range of indicators. The central observation, or medoid, represents the characteristics of each cluster, and census tracts are assigned to the cluster whose medoid most closely resembles their overall profile across data points. This approach allows neighborhoods that face similar opportunities and challenges to be grouped together regardless of their geographic location within the city. The analysis was conducted using 2020 census tract boundaries,¹ and data were collected from a range of sources, including:

- 2023 American Community Survey (ACS) 5-Year Estimates, geography and TIGER/Line files
- HUD Picture of Subsidized Households data
- City of Chicago crime data
- IHS Data Clearinghouse housing and property data
- NHGIS geographic crosswalks used to align historical census tract boundaries with current 2020 Census geographies

Indicators were selected from these data sources to capture multiple dimensions of neighborhood vulnerability, housing affordability, housing demand, and housing supply. Together, these measures provide a framework for assessing variation in neighborhood conditions across Chicago and identifying groups of census tracts with similar demographic, socioeconomic, housing, and neighborhood characteristics. Figure 1 summarizes the indicators included in the clustering analysis. Additional information on data preprocessing and analytical methods is available in the original *Mapping Displacement Pressure in Chicago Technical Appendix (2017)*, accessible at www.housingstudies.org.

¹ Of Chicago's 792 census tracts, three unpopulated tracts were excluded: 789 populated census tracts were included.

Figure 1. 2026 Vulnerability Data Types and Indicators

Indicator Types	Variables
Demographic and Socioeconomic Characteristics	Population density; population age; householder age; household size; educational attainment; income level; poverty rate
Housing Affordability	Gross rent; monthly ownership cost; housing cost burden; subsidized housing
Housing Stability and Tenure	Housing tenure; tenure length; long-term ownership patterns
Housing Stock Characteristics	Housing structure age; privately owned vacant parcels; property type; senior property tax exemptions
Housing Market Characteristics	Mortgage lending activity; investor purchases
Other	Violent and property crime

Consistent with the original methodology, race and ethnicity were intentionally excluded from the clustering process. Preliminary analysis indicated that longstanding patterns of racial segregation in Chicago strongly influenced cluster formation and tended to overshadow other characteristics associated with vulnerability, including housing affordability, tenure, income, educational attainment, and household composition. As a result, race and ethnicity were not used to define vulnerability clusters but were retained for descriptive and post-analysis purposes.

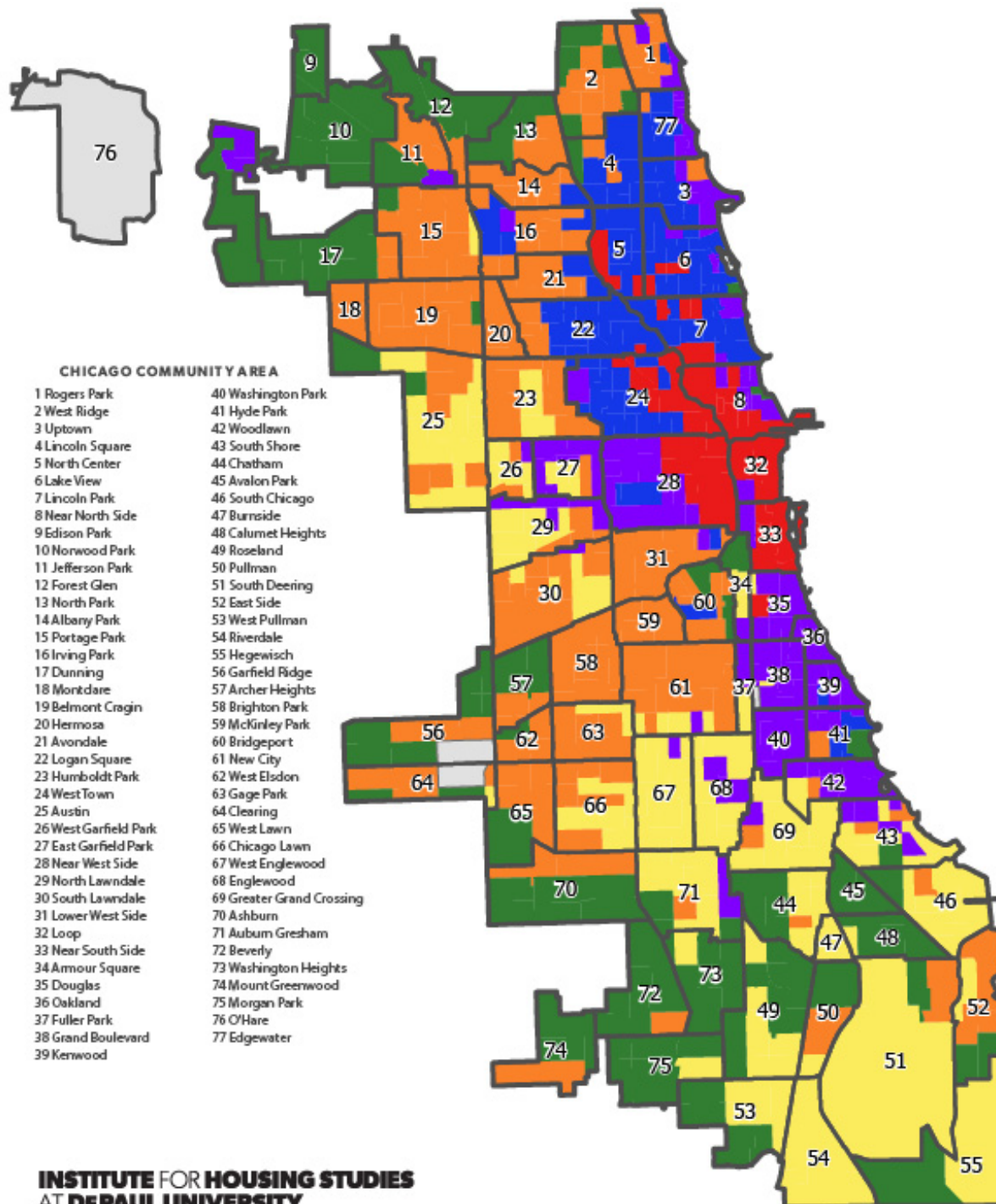
Additionally, IHS also examined a range of other indicators that were not incorporated directly into the model to provide further context for interpreting cluster characteristics. These measures include race and ethnicity, household composition, mobility patterns, household income by tenure, housing costs by tenure and mortgage status, property tax burdens, exemption status, and other indicators related to neighborhood and housing market conditions.

The updated clustering analysis identified six distinct groups of census tracts based on shared demographic, socioeconomic, housing, and neighborhood characteristics. These clusters represent different neighborhood contexts and patterns of vulnerability observed across Chicago. Figure 2 summarizes the defining characteristics of each cluster, while Figure 3 illustrates their geographic distribution. The cluster framework serves as the vulnerability component of the Mapping Displacement Pressure methodology and provides the basis for the displacement pressure typology presented later in this report.

Figure 2. Vulnerability Clustering Results in Chicago Census Tracts, 2026

Cluster/ Vulnerability	Housing Affordability & Market Conditions	Housing Stock & Neighborhood Conditions	Demographic & Socioeconomic Characteristics
Cluster 0 (Yellow) Vulnerable	Lower housing costs; higher shares of severely cost-burdened renters and owners; higher levels of subsidized housing; elevated investor activity; greater share of multifamily properties that changed ownership since 2020.	Higher share of privately held vacant land; larger concentration of 2 to 4 unit buildings; elevated violent and property crime rates.	Lower educational attainment; higher poverty rates; larger shares of lower-income households; older population; increasing number of single-person households
Cluster 1 (Orange) Vulnerable	More stable lower-cost rents; fewer new households; relatively high renter cost burden compared to other clusters.	Older housing stock; significant concentration of 2 to 4 unit housing.	Larger family households; fewer single-person households; moderate-income populations; lower educational attainment; higher concentration of middle-aged householders
Cluster 2 (Red) Less Vulnerable	High rents and homeowner costs; strong household growth; lower renter cost burden.	Newer development; higher-density neighborhoods; larger share of condominium housing; higher property tax levels.	Higher educational attainment; higher-income households; younger residents and renters; increasing share of two-to-four-person households.
Cluster 3 (Blue) Less Vulnerable	Higher rents and ownership costs; newer households; relatively low renter cost burden.	Higher-density housing patterns; larger share of condominiums; higher property taxes.	Higher educational attainment; higher-income households; younger populations; more renters.
Cluster 4 (Purple) Vulnerable	Higher share of subsidized housing; greater owner cost burden; newer households.	Newer housing stock; higher density; larger share of multifamily and condominium housing; elevated levels of privately owned vacant land.	Higher share of renter households; smaller household sizes; higher poverty rates and lower incomes.
Cluster 5 (Green) Vulnerable	Greater concentrations of long-term residents; higher levels of investor activity; larger share of senior-exempt properties.	Predominantly mid-century housing stock; larger concentration of single-family homes.	Higher homeownership rates; older households; aging population; growing share of residents living below poverty.

Figure 3. Map of Vulnerability Clustering Results in Chicago Census Tracts, 2026



Housing Market Analysis (2026)

Consistent with previous versions of the Mapping Displacement Pressure analysis, the 2026 housing market analysis uses parcel-level sales data for 1 to 4 unit residential properties and geospatial interpolation techniques to identify neighborhood-level housing market conditions. The analysis classifies census tracts according to 1) current housing market conditions and 2) the relative pace of price change observed over time. The underlying data preparation, normalization, kriging interpolation, aggregation procedures, and qualitative review processes remain consistent with prior releases of the project. For more on these details, see *Mapping Displacement Pressure in Chicago Technical Appendix (2017)*.

The primary methodological change introduced in the 2026 release is the transition from a three-category housing market typology used in previous versions of Mapping Displacement Pressure in Chicago to a four-category framework. Earlier releases classified census tracts as High-Cost, Moderate-Cost, or Lower-Cost Markets. To better distinguish between these market contexts, the 2026 update incorporates an additional category, allowing for greater differentiation among moderate-cost neighborhoods. The 2026 market typology includes four categories, with interpolated average home values reported for comparison:²

- High-Cost Markets (Greater than \$571,061)
- Moderate-High-Cost Markets (\$298,021 to \$571,060)
- Moderate-Low-Cost Markets (\$155,529 to \$298,020)
- Lower-Cost Markets (Less than \$155,529)

Consistent with the approach introduced in 2021, house price changes were evaluated relative to peer market types rather than against a citywide benchmark. With this methodology, house price changes within a given market type are compared against the average price change observed among other neighborhoods in the same market category. This approach recognizes that expected price changes differ substantially across housing market contexts and provides a more meaningful basis for identifying neighborhoods experiencing above-average price growth.

For the 2026 study, housing market classifications are based on 2025 market conditions.³ Price change measurements compare 2025 housing market conditions to a baseline period derived from combined 2018 and 2019 sales data, reflecting house price changes observed during the COVID-19 pandemic. Census tracts are classified as either 'Rapidly Rising' or 'Not Rapidly Rising' based on whether price growth exceeds the average observed within their respective market types. Figure 4 illustrates the results of the analysis for Chicago census tracts; Figure 5 maps these results.

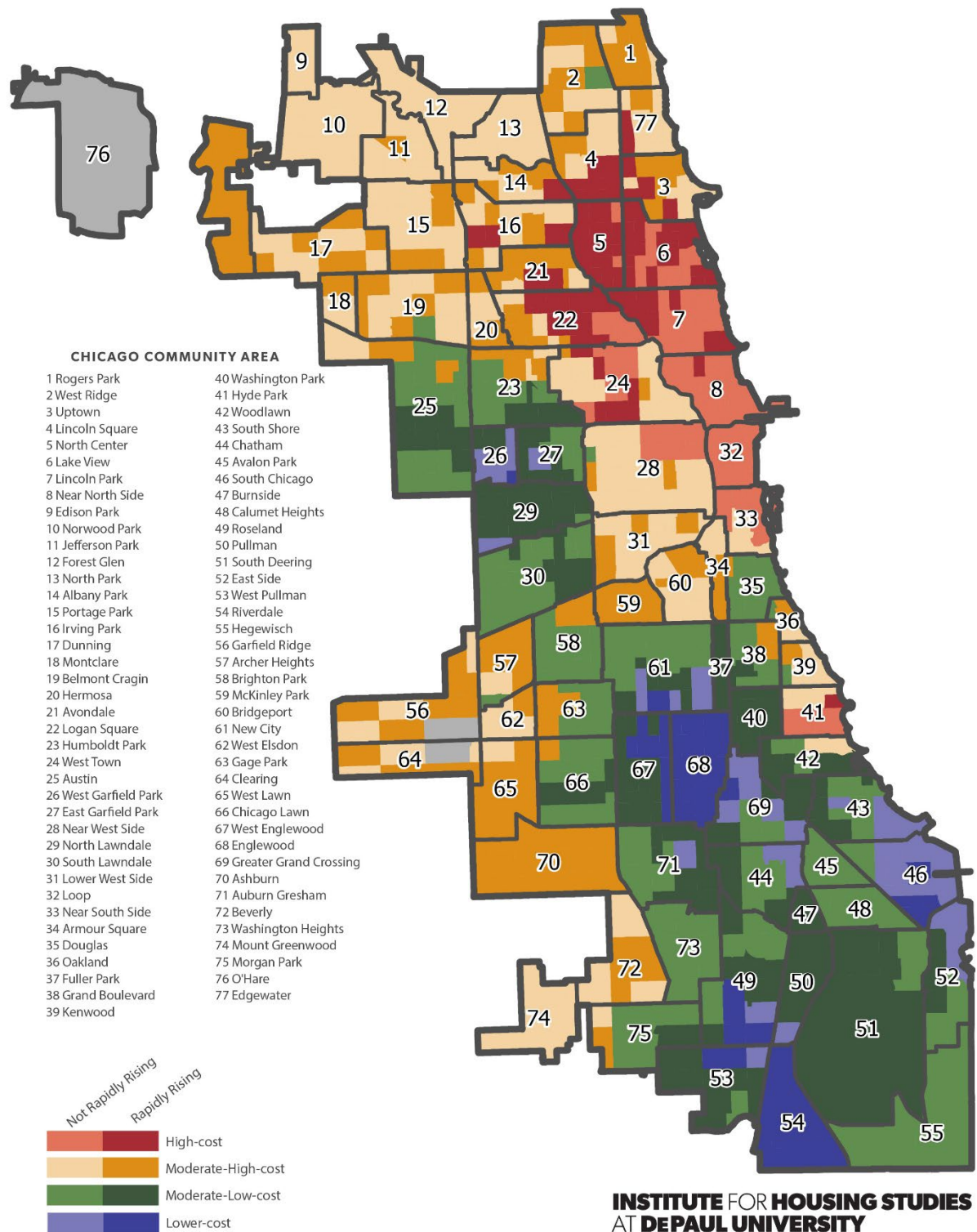
Figure 4. Housing Market Analysis Results for the City of Chicago, Data Year 2025

Current Typology	Not Rapidly Rising (less than average percent change)	Rapidly Rising (above average percent change)	Total Census Tracts
High-Cost	78	81	159
Moderate-High-Cost	175	145	320
Moderate-Low-Cost	137	107	244
Lower-Cost	36	31	67
Total Census Tracts	309	350	790

² Housing market classification dollar values are based on inverse-log-transformed interpolated sales values. Reported dollar values represent the approximate market value of a 1,500-square-foot residential property for each area.

³ Data are sourced from the IHS Data Clearinghouse.

Figure 5. Map of Housing Market Analysis Results for the City of Chicago, 2026



Displacement Pressure Typology (2026)

The displacement pressure typology combines the results of the updated vulnerability clustering analysis with the housing market analysis to identify areas where populations that may be more vulnerable to affordability pressures coincide with neighborhoods experiencing above-average housing price growth relative to comparable market areas.

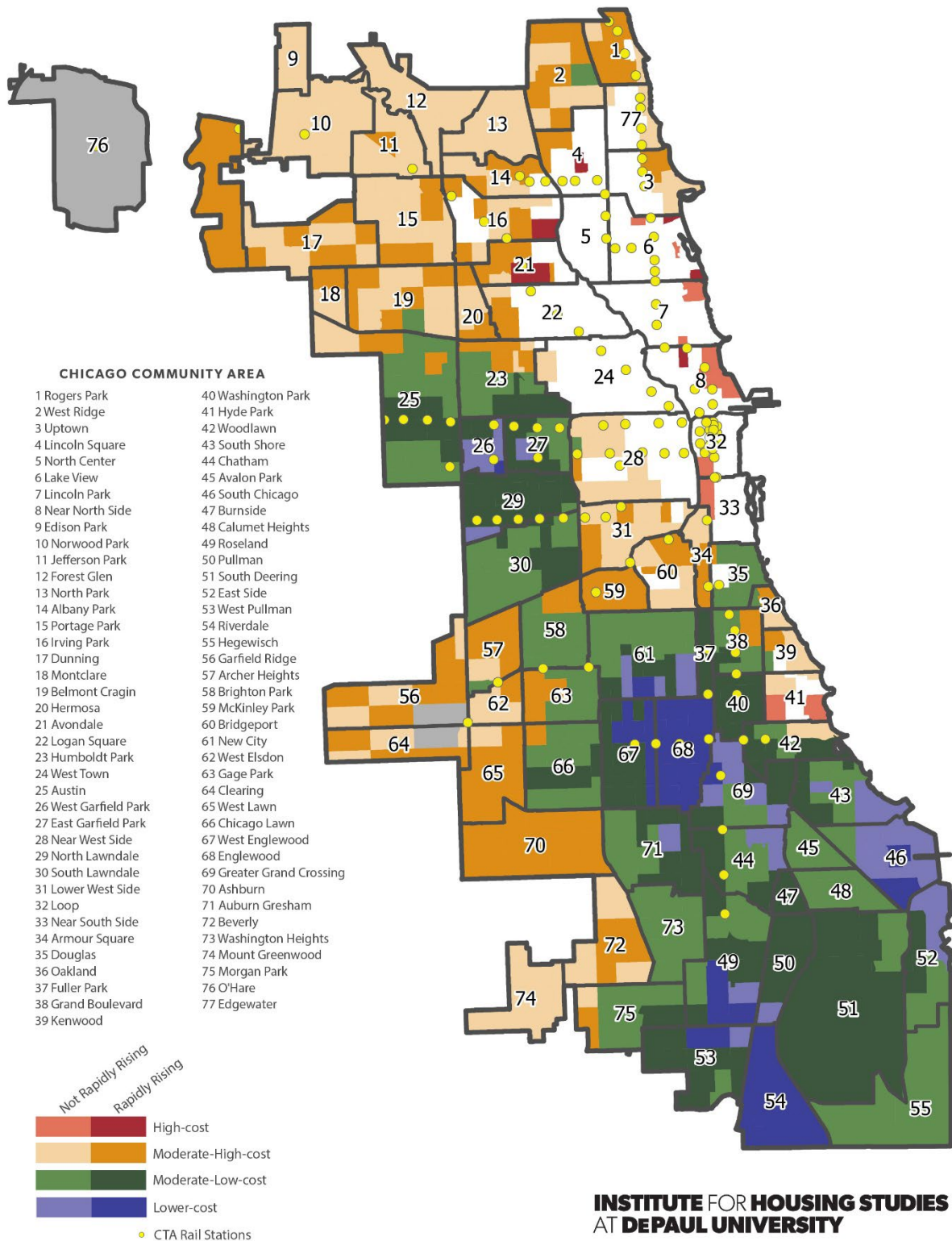
The typology reflects both major methodological updates incorporated into the 2026 release: an updated vulnerability framework based on current demographic, socioeconomic, housing, and neighborhood characteristics, and a revised four-category housing market framework. Together, these components provide an updated assessment of displacement pressure while remaining consistent with the conceptual approach established in the original Mapping Displacement Pressure study.

Consistent with the 2021 methodology, census tracts are classified based on whether housing market conditions are rising relative to comparable market areas. The resulting typology combines the vulnerability clustering analysis and housing market analysis to identify areas where characteristics associated with vulnerability coincide with rising housing market conditions. Figure 6 summarizes the resulting typology by illustrating housing market conditions within vulnerable clusters, while Figure 7 maps the geographic distribution of these patterns with Chicago Transit Authority rail stations for context.

Figure 6. Displacement Pressure Typology, 2026

Vulnerable Clusters	Current Market Conditions in 2025	Not Rapidly Rising (less than average percent change)	Rising (above average percent change)	Total Census Tracts
Cluster 0 (Yellow)	High-Cost	0.0%	0.0%	0.0%
	Moderate-High Cost	1.4%	4.1%	5.4%
	Moderate-Low Cost	18.4%	39.5%	57.8%
	Lower Cost	17.7%	19.0%	36.7%
	Total	37.4%	62.6%	100.0%
Cluster 1 (Orange)	High-Cost	0.4%	2.2%	2.6%
	Moderate-High Cost	28.1%	36.8%	64.9%
	Moderate-Low Cost	22.4%	7.0%	29.4%
	Lower Cost	3.1%	0.0%	3.1%
	Total	53.9%	46.1%	100.0%
Cluster 4 (Purple)	High-Cost	11.4%	1.6%	13.0%
	Moderate-High Cost	29.3%	13.0%	42.3%
	Moderate-Low Cost	22.0%	17.9%	39.8%
	Lower Cost	2.4%	2.4%	4.9%
	Total	65.0%	35.0%	100.0%
Cluster 5 (Green)	High-Cost	1.8%	0.9%	2.7%
	Moderate-High Cost	36.3%	24.8%	61.1%
	Moderate-Low Cost	27.4%	8.8%	36.3%
	Lower Cost	0.0%	0.0%	0.0%
	Total	65.5%	34.5%	100.0%

Figure 7. Map of Displacement Pressure Typology, 2026



Displacement Pressure Interactive Tool (2026)

The Mapping Displacement Pressure in Chicago Interactive Tool presents the full results of the analysis through a web-based mapping platform that allows users to explore housing market conditions, displacement pressure, and neighborhood vulnerability across Chicago census tracts. In addition to the core analytical layers, the tool includes a project-based lens that allows users to examine market conditions surrounding several large-scale planned and existing project sites, including The Bloomingdale Trail, the Obama Presidential Center, and the Bronzeville Trail. The tool also includes tract-level contextual indicators, allowing users to explore neighborhood rents, housing stock characteristics, and the share of residents who identify as non-white. These indicators were updated using the most recently available data sources, including the 2024 American Community Survey and HUD's Picture of Subsidized Households data.

The methodology and data sources used to develop the contextual indicators generally follow those described in the *Mapping Displacement Pressure in Chicago Technical Addendum (2021)*, with one notable exception. The indicator used to approximate naturally occurring affordable rental housing was updated from the share of units with gross rents below \$900 to the share of units with gross rents below \$1,250. This revised threshold better reflects changes in housing costs since the 2021 release and aligns more closely with affordability thresholds used in IHS's State of Rental Housing in Chicago analysis.

Figure 7. Tooltip Data by Housing Market Type in the City of Chicago, 2026

	Lower-Cost Markets	Moderate-Low-Cost Markets	Moderate-High-Cost Markets	High-Cost Markets	All Census Tracts
Units with Gross Rent Under \$1,250	69.1%	59.0%	39.5%	15.1%	38.9%
Units in 2 to 4 Unit Buildings	40.4%	32.8%	22.4%	11.8%	23.1%
Project-Based Section 8 Units	7.7%	5.2%	4.1%	3.0%	4.3%
Housing Choice Voucher Units	21.1%	19.3%	6.9%	2.6%	9.7%
Non-White Population	95.4%	90.9%	58.1%	32.8%	64.0%

Similar to the 2021 release, the 2026 update also includes a simplified non-residential land use layer derived from the non-residential land use data used in the housing market analysis. The non-residential layer was updated using 2025 land use information and is intended to help users distinguish areas with substantial residential development from areas with limited housing activity. Additional information on the development of the non-residential land use layer is available in the *Mapping Displacement Pressure in Chicago Technical Appendix (2017)*.