

May 2021

Technical Addendum: Patterns of Lost 2 to 4 Unit Building in Chicago

Since 2012, IHS has written extensively about [the importance of 2 to 4 unit properties](#) to Chicago's supply of unsubsidized affordable housing and produced papers highlighting the [challenges](#) facing this critical stock citywide. [IHS analysis](#) utilizing aggregated data from the American Community Survey identified that the stock was disappearing during the post-Great Recession housing market recovery and pointed to pressures to convert 2 to 4 unit buildings to single-family homes and the loss of the stock through deterioration as likely reasons for this lost supply. Since 2019, IHS has focused on developing a method to examine changes to the 2 to 4 stock at the property level as a means to understand the nature and market context for the lost supply and better facilitate the development of targeted policies to preserve 2 to 4 unit properties.

Using its [Data Clearinghouse](#), IHS developed a preliminary version of the data set used in the Lost 2 to 4 analysis to begin to quantify the scale of conversion activity of 2 to 4's to single-family homes in and around the North Center neighborhood in Chicago, testing initial results against walk surveys collected by residents in 2019. Throughout late 2019 and 2020, IHS utilized iterations of this preliminary data set for multiple technical assistance projects completed for neighborhood-based nonprofits including Communities United and East Garfield Park Community Council, policy organizations including Enterprise Community Partners and Elevated Chicago, and the City of Chicago Department of Housing¹.

Through these technical assistance engagements, IHS vetted and refined the data and the results, culminating in the data set used in the production of the *Patterns of Lost 2 to 4 Unit Buildings in Chicago* report. This brief technical addendum details the data sources and methodology used in IHS's [Patterns of Lost 2 to 4 Unit Buildings in Chicago](#) report released in May 2021.

About the Data

To produce the primary data set used in this analysis, IHS utilized annual parcel-level data collected since 2009 from the Cook County Assessor which has been improved and stored in the IHS Data Clearinghouse. These data include information on building characteristics and other data used in the property valuation process. Due to the time lag between property-level changes to buildings and their recording in the data collected by the Cook County Assessor, IHS focused on longer-term changes in the data collected by the Assessor in Tax Year 2013 compared to Tax Year 2019. In order to examine trends

¹ Please note that previous analysis produced during these technical assistance engagements may differ from the analysis described in this report.

in the data, IHS utilized the lens of neighborhood market types defined by house prices developed as part of the Institutes' 2020 [Mapping Displacement Pressure in Chicago](#) project. For more on the methodology used to categorize census tracts based on house prices (high-, moderate-, and lower-cost areas) click [here](#).

Categorizing Lost 2 to 4's

Beginning with data from Tax Year 2013, IHS focused on 2 to 6 unit buildings classified by the Cook County Assessor as minor class '211' or '212'. In order to align the analysis with community development policy and practice which considers 2 to 4 unit properties as distinct from larger five- and six-unit buildings, IHS further refined the analysis to focus on 2 to 4 unit properties using the number of apartments recorded by the Assessor. Properties without data on the number of apartments were excluded from the analysis. Using Parcel Identification Numbers (PINs), IHS combined the 2013 data with data from Tax Year 2019 and categorized changes in minor class into five groups as follows:

Still 2-to-4 Unit Building: Minor class code in 2019 is still '211' or '212' and the number of units coded in the 'Apartment Number' field remains '2', '3', or '4'.

Likely Single Family Conversion/Demolition: Includes minor class codes in 2019 assigned to single-family property types including '202-210', '278', and '295'.

Other Conversion to Non-Residential Use: Includes minor class codes in 2019 assigned to non-residential uses such as vacant land and exempt properties including minor class codes '0', '100', '201', '241', etc.

Conversion to Other Residential Use: Includes minor class codes in 2019 assigned to another residential property type such as '213', '297', '299', and all Class 3 properties. Additionally, this category includes a number of properties that remain within their 2013 minor class code but have been reclassified to have five or more units.

Removed from the Dataset by 2019: The PIN is no longer in the data by 2019. Using post analysis, IHS was able to determine that many of these PINs can be traced to condominium properties with PINs unique from the previous PIN sequence and structure.

Examining 2 to 4's Added to the Stock

In order to detect 2 to 4's that were added to the stock after 2013, IHS replicated the process for identifying lost 2 to 4's to examine changes in minor class from 2019 to 2013. Beginning with data from

Tax Year 2019, IHS focused on 2 to 6 unit buildings classified by the Cook County Assessor as minor class '211' or '212'. In order to align the analysis with community development policy and practice which considers 2 to 4 unit properties as distinct from larger five- and six-unit buildings, IHS further refined the analysis to focus on 2 to 4 unit properties using the number of apartments recorded by the Assessor. Properties without data on the number of apartments were excluded from the analysis. Using Parcel Identification Numbers (PINs), IHS combined the 2019 data with data from Tax Year 2013 and categorized changes in minor class into five groups as follows:

Was a 2-to-4 Unit Building: Minor class code in 2013 was '211' or '212' and the number of units coded in the 'Apartment Number' field was '2', '3', or '4'.

Was Likely a Single Family Home: Includes minor class codes in 2013 assigned to single-family property types including '202-210', '278', and '295'.

Was Non-Residential Use: Includes minor class codes in 2013 assigned to non-residential uses such as vacant land and exempt properties including minor class codes '0', '100', '201', '241', etc.

Was Another Residential Use: Includes minor class codes in 2013 assigned to another residential property type such as '213', '297', '299', and all Class 3 properties. Additionally, this category includes properties that remain within their 2013 minor class code but have been reclassified to have two to four units.

Newly Added: The PIN was not in the 2013 data. Using post analysis, IHS was able to determine that many of these PINs had changes in the sequence and structure of a 2013 PIN active at the same address.

Results of the Lost 2 to 4 Analysis

IHS identified 115,510 2 to 4 unit parcels representing 281,207 units in TY 2013 in the City of Chicago. Comparing results in 2019, 95.8 percent of 2 to 4's in 2013 were still 2 to 4 unit properties by 2019. As noted in the *Patterns of Lost 2 to 4's* report, IHS detected 4,820 property-level changes in minor class or unit count. Detailed tables illustrating these changes by market type, by census tract race and ethnicity typology, by City of Chicago Community Area, and by City of Chicago Ward are detailed in the report [appendix](#).