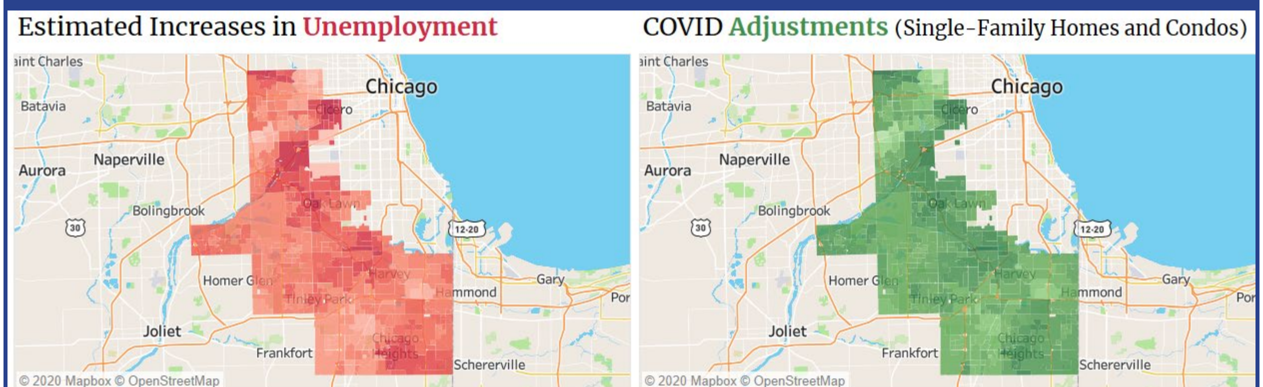
Cook County Assessor's COVID-19 Adjustments to Property Assessments in the South and West Suburbs

Berwyn, Bloom, Bremen, Calumet, Cicero, Lemont, Lyons, Oak Park, Orland, Palos, Proviso, Rich, River Forest, Riverside, Stickney, Thornton, Worth



Cook County Assessor's Office

May 28, 2020

Fritz Kaegi
COOK COUNTY ASSESSOR

Executive Summary

The Cook County Assessor's Office (CCAO) reassesses approximately one-third of the real property in Cook County each year. We began 2020 with the scheduled reassessment of all properties in the South and West suburbs, and of specific properties in the North suburbs and Chicago with divisions, permits, or other special applications.

After we began our work, however, the COVID-19 pandemic led to substantial economic, social, and market effects, including the following:

- A record-breaking number of unemployment claims in Illinois
- Significant downturns in some (but not all) commercial sectors
- Widespread loss of rental income, both commercial and residential
- Disaster declarations encompassing Cook County were issued at the federal, state, and county levels
- A statewide stay-at-home order was issued by the Governor, and related orders were issued by the President of the Cook County Board of Commissioners and the mayors of numerous municipalities in Cook County

These economic and market effects can have corresponding effects on real property values.

Typically, property owners must file appeals to receive reductions in a property's assessed value. But relying on the appeal system to correct for COVID-19's effects could create an inequitable tax burden borne by property owners who do not have the resources or access to file an appeal, particularly during a health-related pandemic.

Therefore, to account for the pandemic's impact on real estate values throughout Cook County's neighborhoods and communities, the Cook County Assessor determined that it is appropriate to apply COVID-19 Adjustments to property values in 2020, where applicable. The extent of these adjustments will depend on each property's use, type, and location.

Scope

This report contains a summary of the methodologies used by the CCAO to produce COVID-19 Adjustments to residential and commercial property values for townships in the South and West Suburbs, which are scheduled for reassessment in 2020.

In the near future, the CCAO will issue a supplemental report describing its approach to COVID-19 Adjustments for townships in the North Suburbs (reassessed in 2019) and Chicago (reassessed in 2018).

COVID-19 Analyses and Adjustments

Different property types and locations experience different economic impacts of COVID-19.

Residential (Class 2) property value adjustments

Historically, rising unemployment has correlated with falling home values. Our logic is that areas with the largest increases in unemployment will experience the largest declines in home values.

Based on estimates of local unemployment, we created two COVID-19 Adjustments for each neighborhood: one for single-family homes and condominiums, the other for multi-family homes.

In neighborhoods throughout the South and West suburbs, for Class-2 residences (e.g., excluding garages), the Office has estimated value reductions of:

- 8.0% to 12.2% (median: 10.3%) for 942,728 **single-family homes and condos**
- 10.0% to 15.2% (median: 13.1%) for 166,159 **multi-family** (2 - 6 unit) apartment buildings

These reductions in estimated residential property values will be applied to Class-2 residences (excluding garages) during Tax Year 2020.

Commercial and other Non-residential property value adjustments:

Our research indicates that non-residential properties have experienced different impacts of COVID-19 that depend on their location, use, and investment class. Capitalization rates (cap rates) are one indicator of value used in commercial valuations.

To account for market impacts, the Office is making a range of adjustments to cap rates that are often used as a factor in determining property values.

- Basis point adjustments ranged from 0 (all grocery stores) to 200 (neighborhood restaurants).
- These adjustments will apply to “baseline” cap rates that are set as of January 2020. Baseline cap rates can vary by location, use, and investment class.

Contents

Overview of Reasoning

In the beginning of 2020, the economy of Cook County and the United States was strong. National unemployment was at 3.6%, the stock market experienced record highs, and housing prices in Chicago as measured by Case Shiller, increased 1% in the prior year.

Though these strong economic conditions continued through February, March saw the disease commonly referred to as COVID-19, caused by the virus SARS-CoV-2, dramatically impact the United States and Cook County. Governor Pritzker issued a statewide stay-at-home order on March 20, while President Trump declared a national emergency on March 13 and declared Illinois a major disaster area on March 26. By the end of March, many states had issued stay-at-home orders, and total COVID-19 cases in the United States had reached 164,620 with 3,170 deaths.

The impact of COVID-19 on employment is unprecedented. The U.S. Department of Labor reported on March 21 that more than 3.3 million Americans had filed unemployment claims in the prior week. The previous record had been less the 700,000 in 1982. Staggering as the March 21 report was, the report for March 27 recorded double the claims of the previous week. More than 10 million Americans filed unemployment in the month of March alone. Over the seven-week period ending on May 2, approximately 33,483,000 Americans filed initial unemployment claims.

The events described above made it clear that the volume of unemployment claims and business closings merited research as to the potential impact on real estate values in Cook County. The CCAO paused mailing assessment notices in late March to conduct research.

Research and Analysis

The CCAO began a wide-ranging inquiry as to how the COVID-19 crisis is impacting real estate values in Cook County, including the following:

- Conducting interviews with academics, financial institution regulatory agencies of the federal government, and economic research organizations
- Reviewing historical documentation of home price movements from a number of sources while paying particular attention to the work of the DePaul University Real Estate Center
- Participating in seminars sponsored by the Appraisal Institute which analyzed the differing impact of the crisis on a wide range of property types
- Speaking with banks and following reports about the more stringent lending criteria for real estate loans as compared to the beginning of the year
- Participating in meetings of neighborhood and industry groups to answer questions about the Assessor’s response to the crisis and to gather ground-level information from participants in the local markets

Appeal Process Considerations

In view of the state and federal declarations that all of Cook County is a major disaster area, and the Assessor's authority to assess property, it is appropriate to evaluate the disaster's impact on property values throughout the County.

Furthermore, the CCAO concluded that many individual property owners across the County would appeal 2020 assessments based on the COVID-19 market changes and that such appeals, properly documented, would be granted in whole or in part. A reliance, however, solely on the appeal system to correct for COVID-19's effects could create an inequitable tax burden borne by property owners who do not have the resources or access to file an appeal, particularly during a health-related pandemic.

Accordingly, the CCAO is treating all property owners as if they formally appealed their 2020 assessments based on COVID-19's impact on their property value.

Policy Decision

The Assessor determined that property values for 2020 should, to the extent reasonable and practicable, reflect the real estate market effects of COVID-19.

Our approaches to the COVID-19 adjusted valuation of residential and commercial properties in the South and West Suburbs are summarized in the following sections.

COVID-19 Adjustments to Residential Values

The CCAO uses sales data to calculate home values during reassessment. Our sales data, at this point, is only current to the middle of February. Therefore, to fairly and uniformly estimate the effects of COVID-19 on residential (Class 2) property values in different neighborhoods, we used other data and methods.

Reasoning

In recent history (during the Global Financial Crisis in 2008), increasing unemployment correlated with falling home prices. These impacts were regional: counties with larger changes in unemployment also had larger declines in home prices.[1,2]

Therefore, we used estimated regional increases in unemployment throughout the county as of April 30, 2020 to estimate regional COVID-19 changes to residential property values.

Data and Methods

Step 1: We estimated regional unemployment.

- Workers in different industries are experiencing different unemployment rates. Based on research by the Urban Institute, we estimated unemployment in affected industries.

Industry	Pre-COVID Unemployment	Post-COVID Unemployment	COVID Employment Reductions
Agriculture, forestry, fishing and hunting, and mining	8.3%	10.0%	-1.7%
Construction	6.9%	36.0%	-29.1%
Manufacturing	4.2%	22.0%	-17.8%
Wholesale trade	5.4%	17.0%	-11.6%
Retail trade	5.5%	24.0%	-18.5%
Transportation and warehousing, and utilities	5.1%	17.0%	-11.9%
Information	2.6%	12.0%	-9.4%
Finance and insurance, and real estate, and rental and leasing	2.2%	6.0%	-3.8%
Professional, scientific, and management, and administrative, and waste management services	4.8%	9.0%	-4.2%
Educational services, and health care and social assistance	3.2%	9.0%	-5.8%
Arts, entertainment, and recreation, and accommodation and food services	8.1%	33.0%	-24.9%
Other services, except public administration	3.9%	27.0%	-23.1%
Public administration	2.2%	2.2%	0.0%

[1] Maximiliano A. Dvorkin and Hannah G. Shell, "The Recent Evolution of U.S. Local Labor Markets," Economic Synopses, No. 15, 2016. https://doi.org/10.20955/es.2016.15

[2] Hendrick, Rebecca, Martin Luby, and Jill Mason Terzakis. "The Great Recession's impact on the City of Chicago." *Municipal Finance Journal* 32, no. 1 (2010): 33-69.

- Workforce composition by industry varies regionally. In each of Cook County's 1,319 census tracts, 0% to 53.7% of the workforce are/were employed in affected industries.
- To estimate COVID-19 related changes in unemployment in each census tract, we multiplied estimated industry-based unemployment rates by that tract's workforce composition in these affected industries.

This created an estimated unemployment rate for each of Cook County's census tracts.

We used this **distribution of regional unemployment changes** to calculate a corresponding distribution of regional COVID-19 Adjustments to home values.

Step 2: We estimated how much housing prices in each region will decline.

We needed to take into account that although there is a *consistent* relationship between unemployment and housing prices, the relationship isn't necessarily the *same*. A 1% increase in unemployment does not necessarily indicate a 1% decrease in housing prices.

We analyzed historic trends in Case-Shiller Chicago-area Home Price Index.

- During the Global Financial Crisis in 2008, **average** housing price indices were 156.2 in the first quarter, and 139.5 in the last quarter. This is a relative decline of **10.7%**.
- In 2008, the summed total decline in the housing price index that year was **15.2%.**

We also analyzed data from January 2020 through April 2020 about declines in values of publicly-traded single-family home Real Estate Investment Trusts (REITs).

- The reasoning is that a change in price of REITs would represent the change in market valuation for a broad portfolio of single-family homes.
- The REITs used in this analysis were American Homes 4 Rent (AMH) and Invitation Homes (INVH), both of which own over 50,000 homes nationwide (3-4% in the Chicago area), with an average house value of about $200,000.
- During January-April 2020, AMH's enterprise value fell 6% and INVH's fell 14%, for an **average decline in value of 10%**. This is another useful reference point in estimating the impact of COVID-19 on single-family home values in Cook County.[i]

Based on this data, the distribution of estimates for changes in values of single-family homes and condominiums was set to have a median of a 10% decline.

Based on interviews and analysis by The Institute for Housing Studies at DePaul University about the larger effects of COVID-19 on the residential rental market, we set the distribution for **multi-family properties (of 2 - 6 units) a median of a 12.5% decline.**

Final step: We applied adjustments to homes in each of Cook County's neighborhoods within the South and West Suburbs.

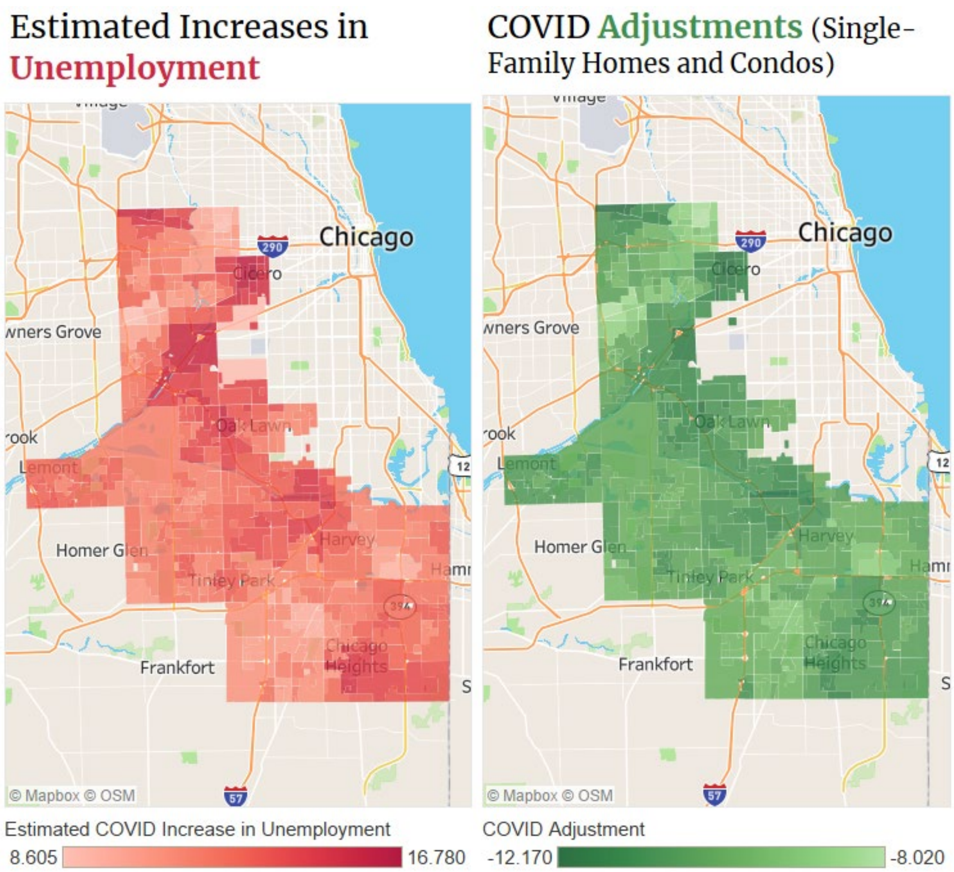
The Assessor's Office maintains a set of geographic identifiers called 'neighborhoods.' To avoid introducing non-uniformity within these neighborhoods, COVID adjustments were calculated by property type and neighborhood.

Results of Unemployment Analysis and Residential Adjustment Methods

This analysis of COVID-19's estimated effect on unemployment throughout Cook County produced two COVID-19 Adjustments for each neighborhood: one for single-family homes and condominiums, and one for multi-family homes.

COVID-19 Adjustments to residential property values in the South and West Suburbs ranged from -8.0% to -15.2%.

	Assessor's COVID-19 Adjustments	
	Median	*Range*
Single-family homes & condominiums	-10.3%	-8.0 to -12.2%
Multi-family homes (2-6 units)	-13.1%	-10.0 to -15.2%



More Data about each Community

- Explore the interactive map and data: https://public.tableau.com/profile/ccao#!/
- Repository of data, code, and technical documentation for this analysis: https://gitlab.com/ccao-data-science---modeling/covid-impact-on-residential-home-values

What are the residential values that are being adjusted?

For residential properties in the South and West Suburbs, the COVID-19 Adjustment percentages are the percentage reduction in the property's estimated market value. For example, a home with an initial estimated value of $200,000, and a COVID-19 Adjustment of 10%, would have a CCAO estimated market value of $180,000.

- These percentage adjustments will be applied to values that were initially estimated earlier in 2020 as part of the South and West Suburb's scheduled triennial reassessment.
- For homes in Riverside, River Forest, Palos, Oak Park, and Calumet: initial values without a COVID-19 Adjustment were mailed earlier this year. Information about adjusted values will be mailed at a later date.
- For homes in all other townships in the South and West Suburbs: mailed reassessment notices will reflect COVID-19 Adjusted property values. Once these notices are mailed, values will also be posted to our website on a property's detail page, under "Assessed Valuation," as the "2020 Assessor Valuation."

COVID-19 Adjustments to Commercial and other Non-Residential Properties

The CCAO values commercial properties by type (e.g., apartments or retail or office or industrial, etc.) and by investor class. Investor class is typically expressed as the type of investor most likely to acquire a particular property and by the capitalization rate that such an investor will require to support its investment.

The CCAO typically categorizes properties by investor class as follows:

- **INSTITUTIONAL:** properties which are typically the focus of large international and national commercial real estate investors
- **REGIONAL**: properties which are typically the focus of smaller commercial real estate investors that operate on a national or regional basis
- **NEIGHBORHOOD:** properties which are typically the focus of only local commercial real estate investors

The required return to an investor expressed as a capitalization rate is typically the lowest for Institutional properties, somewhat higher for Regional properties, and highest of all for Neighborhood properties.

As of January, initial neighborhood property capitalization rates were 50 to 150 basis points higher than institutional property capitalization rates.

Broad Expectations Re: COVID-19's Impact on Commercial Sectors

The effect of COVID-19 on real property values varies across property types, location, and investment class.

We anticipate that more stringent real estate lending standards will act to limit real estate values overall.

Furthermore, based on our research and preliminary reporting, we expect the following effects on **properties by property type:**

- **Apartment** rent collections are expected to be lower for April and May than historical levels.
- **Retail** rent collections for March, April, and May will be significantly lower than historical levels.
  - Furthermore, we expect that a number of retail tenants will not resume occupancy when the County reopens.
- **Hotel** occupancy rates will collapse, hitting convention hotels especially hard. We anticipate that occupancy levels will be under pressure for an extended period of time.
- **Restaurants and public entertainment** venues will be under pressure for an extended period of time.

- Some property classes will continue to **perform well** and that the strong performance will likely survive the crisis, including:
    - **supermarkets** and **drug stores**. To the extent that a neighborhood center is anchored by a grocery/drug operation with additional neighborhood tenants, such a center will experience a more stable rental income stream than a center anchored by other types of retailers.
    - **warehouses**, in particular newer warehouses with convenient access to distribution routes, and
    - properties that serve the **technology sector**, such as data centers.

Analysis Based on Share Prices of Commercial REITs

For some commercial property classes, our research included an analysis of publicly-traded Real Estate Investment Trusts (REITs). Virtually all main classes of commercial real estate have REITs dedicated to them. A change in the Estimated Value (EV) of these REITs is one of many useful indicators of changes in the values of the properties the REITs own.

The summary of this analysis is below.[ii]

		% Change in EV divided by Common share			% Change in EV		
	# of REITs	Unweighted mean % change	Smallest change	Biggest change	Unweighted mean % change	Smallest change	Biggest change
Office	*17*	-10%	+10%	-21%	-10%	+8%	-22%
Multi-family	*14*	-12%	-4%	-15%	-11%	-3%	-15%
Malls & shopping centers	*20*	-23%	+15%	-38%	-23%	+ 15%	-38%
Malls	*3**	-29%*	-20%	-38%	-28%*	-20%	-38%
Power centers	*10*	-25%	-23%	-33%	-26%		
Urban street	*2*	-23%	-21%	-26%	-23%	-21%	-25%
Neighborhood centers	*4*	-19%	-13%	-23%	-19%	-13%	-23%
Retail Triple Net	*9*	-20%	-2%	-33%	-19%	-5%	-30%
Gas stations, convenience	*1*	-8%	n/m	n/m	-8%	n/m	n/m
Industrial	*12*	-6%	+ 3%	-19%	-5%*	+ 7%*	-19%
Storage	*5*	-11%	-3%	-15%	-11%	-3%	-15%
Data centers	*5*	+ 12%	+ 8%	+16%	+ 19%	+ 8%	+46%
Medical & Healthcare	*7*	-15%	-3%	-24%	-14%	-3%	-24%
Life Science	*1*	+ 0%	n/m	n/m	+ 3%	n/m	n/m
Lodging	*11*	-27%	-17%	-37%	-27%	-17%	-38%
Cinema & Leisure	*1*	-25%	n/m	n/m	-25%	n/a	n/a

* Excludes Taubman, where cash takeover offer led to +15%, and 3 microcaps on verge of bankruptcy

COVID-19 Adjustments to Capitalization Rates

The above research is consistent with the conclusion that numerous commercial properties are experiencing changes to rents, incomes, expenses, and vacancies associated with COVID-19. These impacts vary by property use type and investment class, with larger impacts to Neighborhood-class properties.

To adjust property valuations accordingly, the Office implemented changes to commercial values by creating the following adjustments to capitalization rates.

Basis Point Capitalization Rate Adjustments			
Property Type	***Institutional***	***Regional***	***Neighborhood***
Apartments of 6+ units	**0**	**50**	**100**
Industrial	**0**	**50**	**100**
Office	N/A	**50**	**100**
Medical Office	N/A	N/A	**0**
Strip Centers (5-17)	N/A	**100**	**150**
Freestanding Retail (5-17)	N/A	**100**	**150**
Grocery Stores (5-30)	N/A	**0**	**0**
Shopping Centers (5-31)	N/A	**200**	**200**
Restaurant	N/A	**100**	**200**
Fast Food	N/A	**50**	N/A
Hotels (5-29)	N/A	**200**	**200**

*Parentheses indicate property class codes.

What are the commercial values that are being adjusted?

For commercial properties in the South and West Suburbs (fully reassessed in 2020):

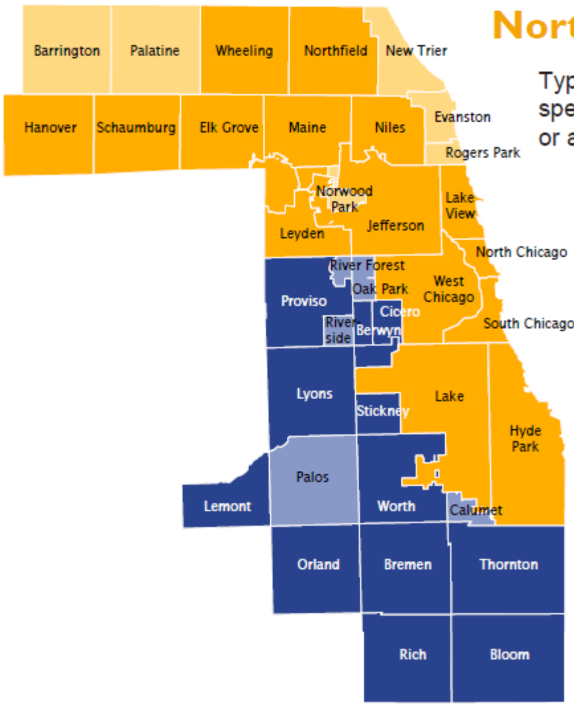
- Cap rate adjustments will be made to all commercial properties that are non-vacant, and that are valued by the CCAO using the income approach.

The ‘baseline’ cap rates to which adjustments apply will vary according to property use type, location, and investment class.

- For commercial properties in Riverside, River Forest, Palos, Oak Park, and Calumet: initial values without a COVID-19 Adjustment were mailed earlier this year. Information about adjusted values will be mailed at a later date.
- For commercial properties in all other townships in the South and West Suburbs: mailed reassessment notices will reflect COVID-19 Adjusted property values. Once these notices are mailed, values will also be posted to our website on a property’s detail page, under “Assessed Valuation,” as the “2020 Assessor Valuation.”

Schedule of Reassessments and COVID-19 Adjustments

Property owners will receive mailed notifications of the Assessor's COVID-19 Adjustment to their property based on their township. See our [Assessment Calendar](#).



North Suburbs and Chicago:

Typically, only properties with permits or other special applications would have values reassessed or adjusted in 2020.

Any information about adjustments in the North Suburbs and Chicago will be released in another report.

Properties in these townships have not yet received reassessment notices (for properties with permits and special applications).

Earlier in 2020, some properties in these townships were reassessed.

South and West Suburbs:

ALL properties are scheduled for a 2020 reassessment and will receive reassessment notices. Property values will reflect this 2020 reassessment as well as a COVID-19 Adjustment.

Properties in these townships received pre-COVID property values as part of the scheduled reassessment. COVID-19 Adjustments will be sent in a second mailing.

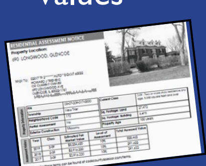
Properties in these townships have not received reassessment notices yet. COVID-19 Adjustments will be reflected in the values printed on these notices.

2021 Impact: In Cook County's property tax system, 2020 property values and COVID-19 adjustments will impact second installment property tax bills issued in the summer of 2021.

Cook County **Assessor**

2020

2020 Assessed Values



Cook County **Board of Review**

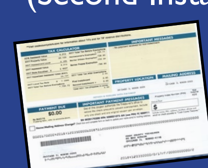
2020-2021

2020 Assessed Values (Final)

Cook County **Treasurer**

2021

2020 Property Tax Bills (Second Installment)



Notes

[i] Changes in values were determined as follows:

(I) Calculate the enterprise values for each REIT, by adding market capitalization of common shares, the market capitalization of preferred shares (if applicable), and their debt as of the most recent reporting period. Using enterprise value instead of market capitalization better adjusts for each REITs use of debt, and the differences in their financing structures.

(2) Calculate the percentage change in enterprise values from January 1, 2020 to the reference date of April 30, 2020.

(3) A table of these calculations is below.

	American Homes 4 Rent (AMH)		Invitation Homes (INVH)	
	1/1/2020	4/30/2020	1/1/2020	4/30/2020
Share Price	26.31	24.14	30.11	23.65
Pref share price	26.19	23.39		
Common Shares Outstanding (m)	299	299	545	545
Market Capitalization (m)	7877.609	7227.8781	16409.95	12889.25
Pref Shares Outstanding (m)	35	35	0	0
Capitalization of Preferreds (m)	916.65	818.65		
Debt (m)	2800	2800	8470	8470
Enterprise Value (EV)	**11594.26**	**10846.528**	**24879.95**	**21359.25**

% Change in EV from 1/1/2020	**-6.4%**	**-14.2%**

Source: Morningstar (for stock prices) and Annual 10-K filings at Securities & Exchange Commission by each of the REITs (for other financial information). American Homes 4 Rent: https://d18rn0p25nwr6d.cloudfront.net/CIK-0001562401/8bfb8592-aa38-4744-b141-6c82a075b0a4.pdf. Invitation Homes: https://www.invh.com/Cache/IRCache/b52653b7-0b66-b946-8eed-1641a4c7cbd3.pdf

[ii] Changes in values were determined as follows:

(1) Calculate the enterprise values for each REIT, by adding market capitalization of common shares, the market capitalization of preferred shares (if applicable), and their debt as of the most recent reporting period. Using enterprise value instead of market capitalization better adjusts for each REITs use of debt, and the differences in their financing structures.

(2) Divide enterprise value by the number of common shares, so that companies which raised money during the period by selling shares can have enterprise values calculated before and after compared on an apples to apples basis. (Per-share enterprise values and absolute enterprise values are shown in the table).

(3) Calculate the percentage change in values from January 1, 2020 to the reference date of April 30, 2020.

Sources for the data are Morningstar (for stock prices) and the most recent 10-Q or 10-K filings at Securities & Exchange Commission by each of the REITs (for other financial information).