2020 Cicero Township Residential Reassessment Report

2020 South Triad Reassessment

Reassessment notices mailed: July 24, 2020

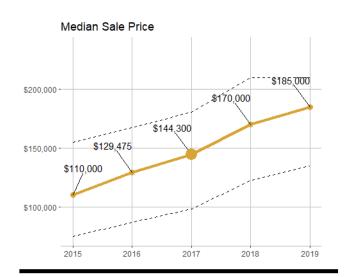


Cicero's residential reassessments

Sales-based Jan 2020 Market Estimate

For each home: sale data from 2015-2019 was used to calculate the January 2020 value of each home.

In Cicero, the median sale value of a single-family home in 2019 was \$185,000.



Your neighborhood's COVID-19 Adjustment

Data about the market and the economy from January-April 2020 were used to estimate effects of COVID-19 on housing values.

COVID-19 Adjustments were calculated for each neighborhood and property type.

Your home's CCAO Estimated Market Value

Your home's **Market Estimate** as of January 2020, minus the **COVID-19 Adjustment** for your property type and neighborhood, equals your home's Estimated Market Value.

Typically during a reassessment in 2020, the Assessor's Office would produce a **2020 Market Estimate** of your home's value based **only** on prior sales of homes.

Due to the significant economic impact of the COVID-19 outbreak and the natural disaster proclamation by the Governor of Illinois, the CCAO also applied a **COVID-19 Adjustment** to property values. Each home's adjustment depends on its location and property type.

The rest of this report contains information about initial Market Estimates and the real estate data used to produce them, and COVID-19 Adjustments.

Cicero's residential reassessments

Median initial estimate of single-family home values, based on sales data from 2015-2019:

\$186,540

Median COVID-19
Adjustment, based on
Jan-April 2020 market &
economic data:

-11.9%

Median estimated CCAO fair market value that combined

Market Estimate and

COVID-19 Adjustment

\$160,000

Cicero homeowners: the market value printed on your notice of reassessment in 2020 has been adjusted.



How the Assessor's Office produced an estimate of Fair Market Value (FMV) for a single-family home in Cicero:

For each home....

- 1 Data about sales of similar homes nearby were used to calculate trends in sale values.
- These trends were used to estimate this home's initial value.
- The COVID-19
 Adjustment was applied to the value of the home.





This home's
Jan 2020 Market
Estimate

COVID-19 Adjustment





This home's Jan 2020 Market Estimate

COVID-19 Adjustment





This home's Jan 2020 Market Estimate

COVID-19
Adjustment

Cicero 2020 Residential Reassessment

Executive Summary of Market Estimates

Cicero is the 11th largest township in the south and west suburbs. In 2020, it had:

- 8,585 single-family homes,
- 270 residential condos, and
- 5,148 small multi-family apartments of 2-6 units.

The most common single-family home type in 2020 is a class 2-03: One-story Residence, any age, 1,000 to 1,800 square feet.

Sales: The median sale value of a single-family home that sold in Cicero in 2019 was \$185,000. Median sale prices have increased 30.0% from 2016, when the median sale price was \$129,475.

Assessments: The Cook County Assessor's median estimated Fair Market Value (FMV) for a single-family home in Cicero in 2020 is \$160,000. In the prior reassessment of Cicero in 2017, the median FMV was \$119,680. The median change in estimated FMV from 2017 to 2020 was 25.2%.

Cicero has grown by approximately \$139.1 million (46.9%) in total assessed value from 2019 (Assessor-certified) to 2020 (Assessor mailed values).

The Assessor's legal obligations for property reassessments:

- A property's value must be fair* a fair market value.
- 2. In Cook County, properties must be re-assessed every 3 years*.
- 3. Property assessments must be uniform*.
- 4. Property assessments must comply with Cook County ordinance about the property's **assessed value****, which is used to determine property taxes.

- * = This is literally the statutory duty of the Assessor per the Illinois Tax Code (§35 ILCS 200).
- ** = Levels of assessment for taxation are set by Cook County Ordinance.

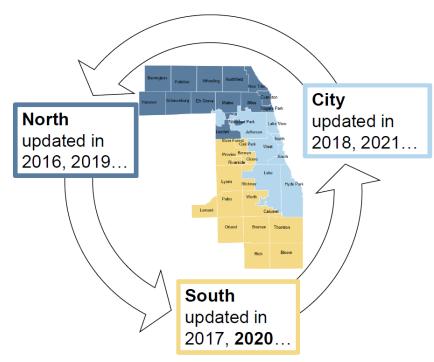


Reassessments are every 3 years.

Taxes are calculated every year. But the reassessment cycle is every **3** years.

South/West Suburbs:

- Reassessed in 2017 and 2020
- <u>2020</u> reassessments are reflected in the second installment property tax bill sent in summer <u>2021</u>



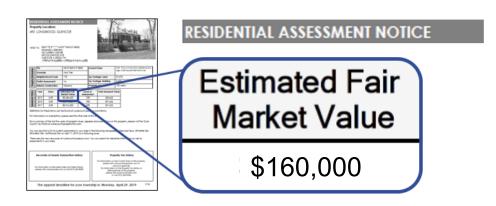


Our duty: Fairness and accuracy.

The Illinois Tax Code (35 ILCS 200/1-50) defines a home's fair cash value like this: Sec. 1-50. Fair cash value. The amount for which a property can be sold in the due course of business and trade, not under duress, between a willing buyer and a willing seller.

This is referred to as the Fair Market Value.

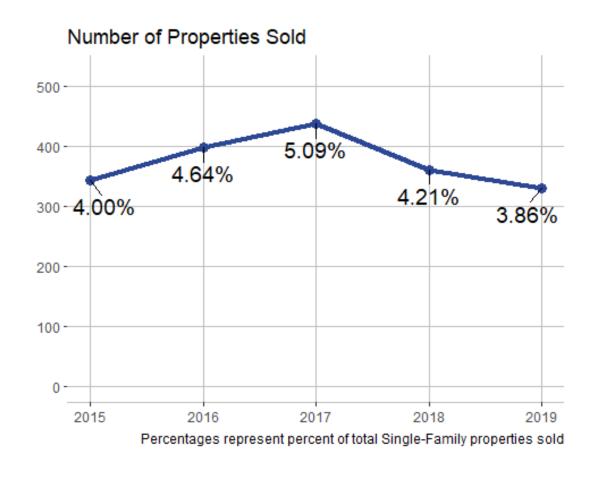
When you receive a Reassessment Notice in the mail, it contains this updated value, along with characteristics of your home.

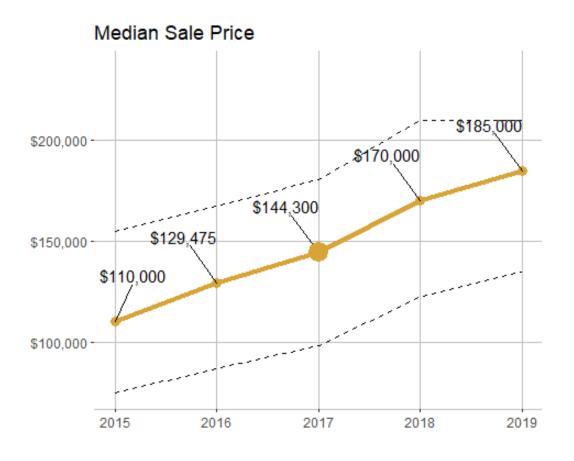


To produce a fair market value for a home in 2020, we look to recent trends in the real estate market.

What were the trends in Cicero home sales?

These trends were observed in the real estate market for **single-family homes** from January 1, 2015 to December 31, 2019. Sales are recorded by the Cook County Recorder of Deeds and reviewed by the Illinois Department of Revenue. Dashed lines represent 25th and 75th percentiles each year: of all the Cicero single-family homes that sold in each year, 50% of them had sale prices between the dashed lines.





COVID-19 Adjustments

The COVID-19 pandemic is associated with **increasing unemployment**. Historically, when unemployment rises, **housing prices decline**.

The CCAO analyzed evidence about the economic effects of COVID-19 from sources including the Urban Institute, Case-Shiller housing indices, Real Estate Investment Trusts (REITs), and census workforce data.

The CCAO estimated **unemployment** in each of Cicero's neighborhoods and then created a **COVID-19 Adjustment** for each single-family homes and condos in each neighborhood.

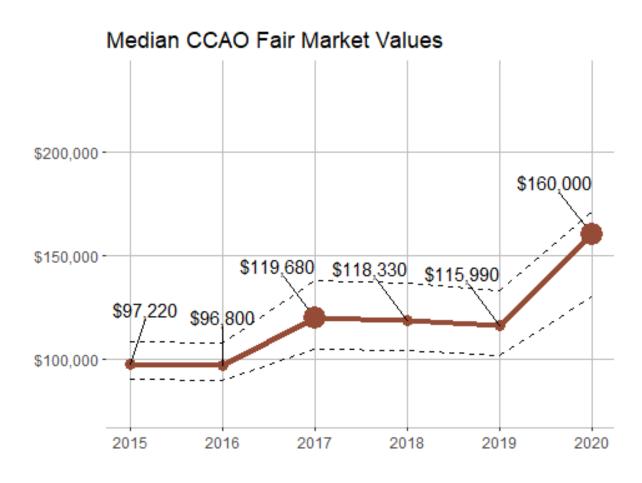
Neighborhoods with higher estimated unemployment had larger adjustments.

CCAO's Estimated Fair Market Values

The median estimated Fair Market Value for a single-family home in Cicero in 2020 is **\$160,000**.

Cicero was last fully reassessed in **2017**. Between the 2017 and 2020 reassessments, median values can change due to single-property reassessments (for new construction or similar reasons) and appeals.

This graph shows the median CCAO estimated Fair Market Value for single-family homes. Please note that all values before 2020 are Assessorcertified values.



50% of the FMVs of all single-family homes in Cicero are in between the dashed lines.

Sales Comparison between Reassessments:

Let's look at median sale prices of homes. Because reassessments in a year rely most on sales that occurred in the year prior, let's examine changes in median prices of a home in 2016 and 2019 (for reassessments in 2017 and 2020).

Year	2016	2019	Median % change
Median sale price of a home	\$129,475	\$185,000	30.0%

Note that the CCAO used sales data as well as **COVID-19 Adjustments** to produce estimated Fair Market Values in Cicero in 2020.

CCAO estimated FMV Comparison:

Year	2017	2020	Median % change
Median CCAO estimated Fair Market Value	\$119,680	\$160,000	25.2%

Cicero's Residential Neighborhood Codes



Sale prices of homes are affected by location. Because of this, estimates of Fair Market Values also depend on location.

The CCAO's database contains a township and a **neighborhood code** (see left) for each home.

A home's neighborhood code can be found on its Reassessment Notice and on its PIN details at cookcountyassessor.com.

COVID-19 Adjustments in Cicero neighborhoods

Neighborhoods with larger increases in estimated unemployment....

...had larger **COVID-19 Adjustments** to Fair Market Values of homes.

Estimated Increases in Unemployment

Assessor's COVID Adjustments to 2020 Property Values



Cicero Neighborhood Data

Neighborhood code	Median 2019 CCAO FMV	Number of sales in 2019	Median sale price in 2019	COVID-19 Adjustment	Median 2020 CCAO FMV	Median sales ratio	Median \$ change in CCAO FMV 2019-2020	Median % change in CCAO FMV 2019-2020
15	\$119,060	21	\$200,000	-11.9%	\$146,760	0.800	\$27,700	23.3%
20	\$103,770	7	\$86,500	-11.7%	\$118,330	*	\$14,560	14.0%
25	\$99,260	3	\$108,700	-11.4%	\$112,740	*	\$13,480	13.6%
30	\$112,890	93	\$180,000	-12.0%	\$165,910	0.910	\$53,020	47.0%
40	\$114,635	11	\$185,000	-11.5%	\$150,965	*	\$36,330	31.7%
65	\$107,220	30	\$179,000	-12.1%	\$136,150	0.926	\$28,930	27.0%
71	\$107,215	24	\$165,500	-11.6%	\$129,345	0.928	\$22,130	20.6%
72	\$116,940	11	\$175,000	-11.9%	\$152,320	*	\$35,380	30.3%
80	\$123,120	77	\$185,000	-11.3%	\$164,310	0.875	\$41,190	33.5%
85	\$131,565	23	\$205,000	-12.0%	\$169,950	0.861	\$38,385	29.2%
90	\$115,990	31	\$176,700	-11.2%	\$166,140	0.874	\$50,150	43.2%

These numbers include the following property classes: 2-02, 2-03, 2-04, 2-05, 2-06, 2-07, 2-08, 2-09, 2-10, 2-34, 2-78, 2-95.

15

^{* =} Too few sales in 2019 to calculate a statistically valid sales ratio.

Why two homes can have different changes in Assessed Value

Q: Between the 2017 and 2020 reassessments, the median change in assessed value was 25%. Why did my home's assessed value change more (or less) than 25%?

Every home is different. Because of this, your home's change in assessed value may be different from a neighbor's change (or different from the median change).

Homes have different characteristics (like age and square footage), and are in different neighborhoods. Homes with different characteristics often have different patterns in sales, and these different patterns can therefore produce different changes in estimates of each home's fair market value – and therefore different changes in assessed value.

Fairness: Assessment Uniformity

Assessments should be uniform.

There are many ways to measure this. The CCAO is committed to measuring our work against the industry standards of uniformity, set by the International Association of Assessing Officers (IAAO). The IAAO defines two standards for uniformity: **variability** and **vertical equity**. The CCAO sets its standard to meet **both** of these metrics for every township.

- Variability measures the degree to which all values in a data set vary from the average. When variability is low, this indicates high-quality assessments.
- **Vertical equity** measures the degree to which high-value property assessments are similar to lower-value property assessments. There are two metrics for vertical equity.

IAAO Statistics for Uniformity

Cicero 2020 Residential Reassessment

The IAAO provides one statistic for measuring variability of assessments: Coefficient of Dispersion, or COD. Low variability indicates a high-quality assessment.

There are two statistics for measuring vertical equity of assessments: Price-Related Differential and Bias (PRD and PRB). If either PRD or PRB falls within the target range, the standard for vertical equity is considered met. In the 2020 Reassessment of Cicero, the CCAO has not met IAAO standards for uniformity.

The following slides provide details about current and historical uniformity metrics in Cicero.

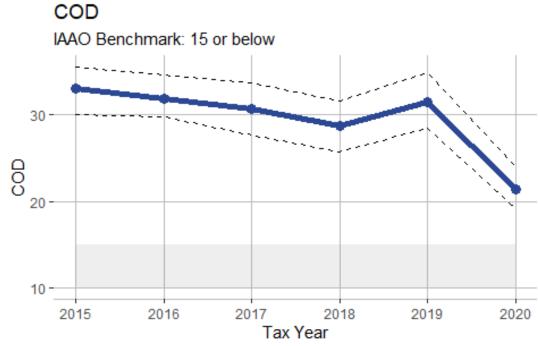
Category	Statistic	Target Range	Result	Standard Met?
Variability	COD	5-15	21.6288	No
Vertical Equity(1)	PRD	0.98-1.03	1.0725	No
Vertical Equity(2)	PRB	-0.05-0.05	-0.4761	No

Variability: Coefficient of Dispersion

Variability measures to what degree data points in a statistical distribution or data set diverge from the average. Low variability indicates high quality assessments.

Coefficients of Dispersion (CODs) between 5 and 15 indicate high-quality assessments.

This graph shows that our COD for the 2020 re-assessment of this township is 21.6288. As it is not between 5 and 15, the COD has not met the IAAO standard for variability.



Dotted lines represent 95% Confidence Interval

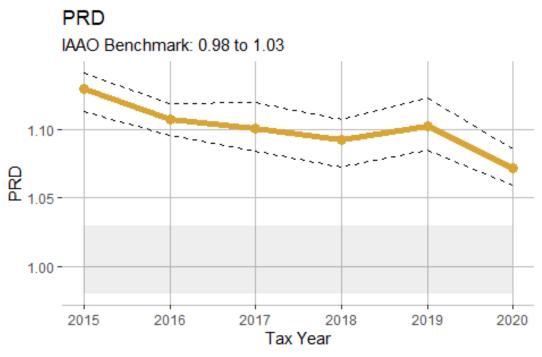
All values calculated using ratios from assessor certified values (after appeals),

except 2020, which is mailed initial values

Vertical Equity 1: Price-Related Differential

Vertical equity is the degree to which low-value properties are assessed at the same ratio as high-value properties. PRDs between .98 and 1.03 indicate high-quality assessments.

This graph shows that the PRD is 1.0725 for the 2020 reassessment of this township. This does not meet the IAAO standard for vertical equity.



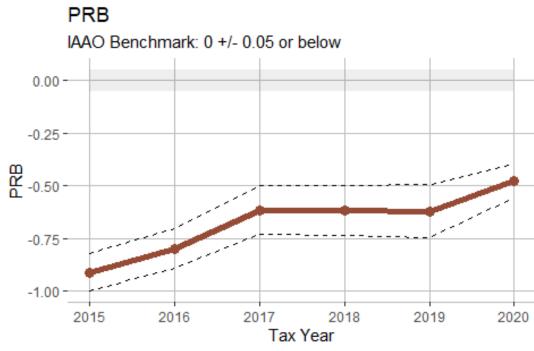
Dotted lines represent 95% Confidence Interval

All values calculated using ratios from assessor certified values (after appeals), except 2020, which is mailed initial values

Vertical Equity 2: Price-Related Bias

Vertical equity is the degree to which high-value properties are assessed at the same ratio as low-value properties. PRBs between -.05 and .05 indicate high-quality assessments.

This graph shows that the PRB for our 2020 assessment of this township is -0.4761. This does not meet the IAAO standard for vertical equity.



Dotted lines represent 95% Confidence Interval

All values calculated using ratios from assessor certified values (after appeals), except 2020, which is mailed initial values

Addressing the gap between Cicero Reassessments and IAAO Standards

Although measures of variability and vertical equity of reassessments in Cicero have improved significantly this year compared to prior years, we have not yet achieved the IAAO standard for assessments in Cicero. This is likely due to data.

The CCAO's property characteristic data can explain *large* differences in properties and their values. Our models can explain why one home sold for \$400,000, while another sold for \$700,000: more square feet, more bedrooms, finished basement, etc.

But in Cicero, sale values of homes tend to have a *small* range – half of homes had sale values between approximately \$140,000 and \$210,000. Explaining relatively smaller differences between homes that are similar to each other requires more granular property data – bathroom and kitchen remodels, repair condition, proximity to railroad tracks. The CCAO does not currently have data at this level of granularity.

Using current data, models struggle to distinguish between the narrow range of properties in Cicero. Coefficient of Dispersion (the IAAO metric for low variability that we strive to meet) measures the degree to which our assessments distinguish between individual properties. Because our models struggle to distinguish between properties, Coefficient of Dispersion (variability) was higher than the IAAO's standard.

With more granular data, our models could distinguish additional sales trends – and produce uniformity statistics that are even closer to the IAAO standards. Appeals are one way that the CCAO receives updated property characteristic data of homes, but our office is also engaged in a years-long effort to obtain more data in our efforts for accurate and uniform assessments.

CCAO in 2020

Fairness. Ethics. Transparency.

CCAO resources and tools for homeowners: cookcountyassessor.com/homeowners

CCAO data and reports: cookcountyassessor.com/community-data

www.CookCountyAssessor.com

Facebook: /CookCountyAssessorsOffice

Twitter: @AssessorCook

Appendix A: Total Assessed Value in Cicero

Cicero's total assessed value is primarily residential. There has been total growth in both residential and non-residential real estate sectors.

	201	19	20	20	2019 -> 2020		
	Sum of AV	% share of total AV	Sum of AV	% share of total AV	Change in AV	Change in % share	
Commercial / Non-residential	\$110,844,209	37.4%	\$202,132,479	46.4%	\$91.3m	9.0%	
Residential	\$185,807,991	62.6%	\$233,601,216	53.6%	\$47.8m	-9.0%	
TOTAL	\$296,652,200		\$435,733,695		\$139.1m		

Residential includes all class 2. Commercial/non-residential includes classes 1, 3, 4, 5, 6, 7, and 9.

2019 are Assessor-certified final values.

2020 values are Assessor mailed values.

Appendix B: Data Sources

Sales Data

The Cook County Assessor's Office uses a computer-assisted mass appraisal method to value residential properties, which requires a significant number of data points about home's characteristics (like location, age, square footage, and construction material) and sale prices.

In Cicero from 2015 to the end of 2019, there were 1,936 sales of the total of 8,585 Single-Family homes. To create a larger data set, our office added sales data from across the south and west townships in Cook County.

This created a sales database of 175,741 sales from 2015 to the end of 2019.

These sales are recorded by the Cook County Recorder of Deeds and reviewed by the Illinois Department of Revenue before entering our database.

Note that each home's estimated fair market value depends most on its individual characteristics and location. For each home, sales of homes that are closer to its location and more similar to it contributed more to our estimate of its value.

Appendix C: What is an Assessed Value?

The estimated Fair Market Value of a property is *not* what is taxed. The taxable value of a property depends on its **Assessed Value (AV)**. The AV is a percentage of its Fair Market Value (FMV).

Cook County ordinance defines different assessment levels for different property types:

- Residential and apartment properties are assessed at 10% of FMV
- Most non-incentive commercial properties are assessed at 25% of FMV.

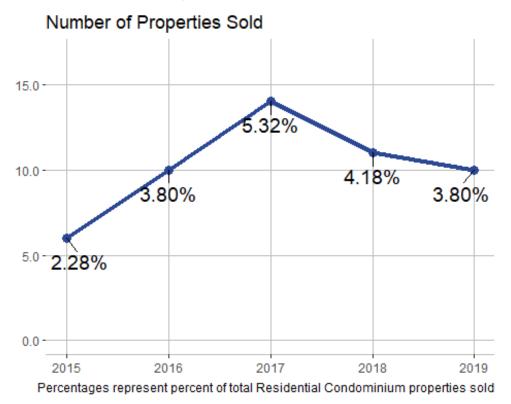
Example: for a home with a FMV of \$160,000, its AV equals 10% of \$160,000, for **\$16,000**.

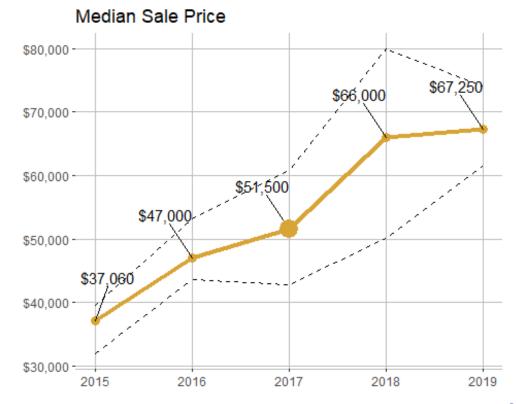
Note: residential property tax bills depend on the property's local tax rate, its assessed value, any exemptions applied to the property, and the State Equalizer. These numbers are all printed on the second-installment tax bills mailed by the Cook County Treasurer. 2020 reassessments will affect second-installment property tax bills sent in 2021.

Appendix D1: Residential Condo Sales

Cicero contains 270 residential condos (class 299). We report on condominiums separately from single-family homes because they may exhibit different trends in real estate activity.

We observed these trends in the real estate market for residential condominiums from January 1, 2015 to December 31, 2019. Sales are recorded by the Cook County Recorder of Deeds and reviewed by the Illinois Department of Revenue. Dashed lines represent 25th and 75th percentiles each year: of all the Cicero condos that sold in each year, 50% of them had sale prices between the dashed lines.





Appendix D2: Residential Condo Reassessments

Sales: From 2016 to 2019, median sale prices of condos that sold increased by 30% (from \$47,000 to \$67,250). **Reassessments**: From 2017 to 2020, median Fair Market Values estimated by the CCAO of all condos increased by 8% (from \$55,210 to \$60,230).

Below are statistics by neighborhood.

Neighborhood code	Median 2019 CCAO FMV	Number of sales in 2019	Median sale price in 2019	COVID-19 Adjustment	Median 2020 CCAO FMV	Median sales ratio	Median \$ change in CCAO FMV 2019-2020	Median % change in CCAO FMV 2019-2020
20	\$45,670	1	\$50,000	-11.7%	\$48,315	*	\$2,645	5.8%
30	\$55,210	4	\$69,500	-12.0%	\$62,840	*	\$7,630	13.8%
40	\$46,650	1	\$43,900	-11.5%	\$56,320	*	\$9,670	20.7%
65	\$53,090	1	\$126,000	-12.1%	\$57,790	*	\$4,700	8.9%
71	\$65,750	3	\$67,500	-11.6%	\$67,010	*	\$1,260	1.9%

^{* =} Too few sales to calculate a statistically valid sales ratio.

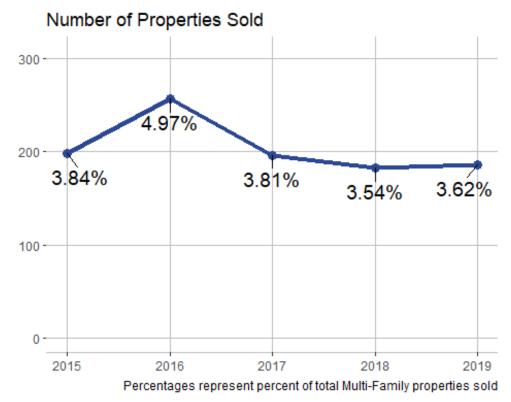
These numbers include the following property classes: 2-99

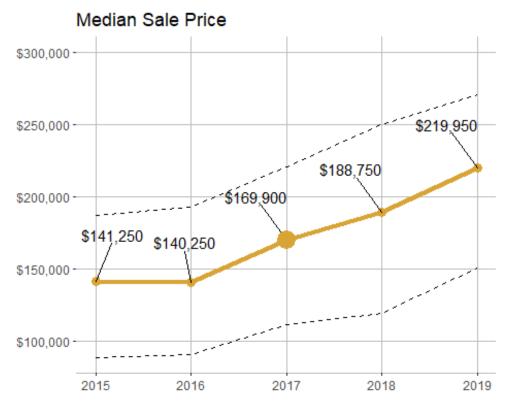
This slide was updated on August 25, 2020 due to an error in 2019 reporting.

Appendix E1: Residential Multi-Family Sales

Cicero has 5,148 multi-family apartment buildings of 2 to 6 units. We report on this property type (property class codes 2-11 and 2-12) separately from single-family homes because they may exhibit different trends in real estate activity.

We observed these trends in the real estate market for residential multifamily apartment buildings from January 1, 2015 to December 31, 2019. Sales are recorded by the Cook County Recorder of Deeds and reviewed by the Illinois Department of Revenue. Dashed lines represent 25th and 75th percentiles each year: of all the Cicero multifamily apartment buildings that sold in each year, 50% of them had sale prices between the dashed lines. Note that there were very few sales in a given year.





Appendix E2: Residential Multi-Family Reassessments

Sales: From 2016 to 2019, median sale prices of multi-family homes that sold increased by 36% (from \$140,250 to \$219,950). **Reassessments**: From 2017 to 2020, median values of all multi-family homes estimated by the CCAO increased by 19% (from \$157,260 to \$193,230).

Below are statistics by neighborhood for neighborhoods 15 through 65.

Neighborhood code	Median 2019 CCAO FMV	Number of sales in 2019	Median sale price in 2019	COVID-19 Adjustment	Median 2020 CCAO FMV	Median sales ratio	Median \$ change in CCAO FMV 2019-2020	Median % change in CCAO FMV 2019-2020
15	\$162,310	5	\$226,000	-14.9%	\$197,120	*	\$34,810	21.4%
20	\$143,425	22	\$169,500	-14.6%	\$157,820	1.001	\$14,395	10.0%
25	\$146,780	5	\$180,000	-14.3%	\$164,525	*	\$17,745	12.1%
30	\$155,550	72	\$229,500	-15.0%	\$220,580	0.944	\$65,030	41.8%
40	\$151,555	14	\$237,500	-14.4%	\$187,585	0.897	\$36,030	23.8%
65	\$139,075	21	\$220,000	-15.2%	\$185,000	0.904	\$45,925	33.0%

These numbers include the following property classes: 2-11, 2-12

This slide was updated on August 25, 2020 due to an error in 2019 reporting.

^{* =} Too few sales to calculate a statistically valid sales ratio.

Appendix E2: Residential Multi-Family Reassessments

Sales: From 2016 to 2019, median sale prices of multi-family homes that sold increased by 36% (from \$140,250 to \$219,950). **Reassessments**: From 2017 to 2020, median Fair Market Values estimated by the CCAO for all multifamily homes increased by 19% (from \$55,210 to \$60,230).

Below are statistics by neighborhood for neighborhoods 65 through 90.

Neighborhood code	Median 2019 CCAO FMV	Number of sales in 2019	Median sale price in 2019	COVID-19 Adjustment	Median 2020 CCAO FMV	Median sales ratio	Median \$ change in CCAO FMV 2019-2020	Median % change in CCAO FMV 2019-2020
71	\$145,030	31	\$215,000	-14.5%	\$188,760	0.907	\$43,730	30.2%
72	\$143,280	8	\$190,500	-14.8%	\$167,640	*	\$24,360	17.0%
80	\$209,550	3	\$125,000	-14.2%	\$200,790	*	-\$8,760	-4.2%
85	\$193,370	3	\$295,000	-15.0%	\$197,900	*	\$4,530	2.3%
90	\$179,990	2	\$238,500	-14.0%	\$174,400	*	-\$5,590	-3.1%

These numbers include the following property classes: 2-11, 2-12 This slide was updated on August 25, 2020 due to an error in 2019 reporting.

^{* =} Too few sales to calculate a statistically valid sales ratio.