2020 Reassessment of Calumet Residential Properties

2020 South Triad Reassessment

Initial values mailed: April 20, 2020



Changes to Calumet's residential assessments

Your home's Jan 2020 Market Estimate

Based on: Sales data from 2015-2019

> Mail date: April 20, 2020

Report published date: May 1, 2020 (this report)

Your neighborhood's COVID-19 Adjustment

Based on: 2020 market & economic data

Mail date: to be determined

Report published date: to be determined

Your home's CCAO Final 2020 Market Value

Based on: appeal changes,
Market Estimate, COVID-19 Adjustment

Mail date: (with COVID-19 Adjustment)

Report published date: to be determined

Calumet property owners were mailed reassessment notices containing their property's initial 2020 **Market Estimate** value, which was produced earlier this year (prior to COVID-19). All owners of Calumet properties will receive a **second** mailing with information about the Assessor's **COVID-19 Adjustment** to their property's estimated market value, and their property's **CCAO Final 2020 Market Value**.

Due to the significant economic impact of the COVID-19 outbreak and the natural disaster proclamation by the Governor of Illinois, the CCAO is reviewing this initial estimate. At the time of this report, we are processing and analyzing multiple data sources for a **COVID-19 Adjustment** to property values. Each home's adjustment will depend on its location.

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

Calumet 2020 Residential Reassessment

Executive Summary of Market Estimates

Calumet is the 15th largest township in the South Suburbs. In 2020, it had:

- 4,126 single-family homes,
- 370 residential condos, and
- 640 class 2 multi-family parcels.

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.

The median sale value of a single-family home in Calumet in 2019 was \$98,500.

The Cook County Assessor's median estimated Fair Market Value (FMV) for a single-family home in Calumet in 2020 is **\$87,540**. In the prior reassessment of Calumet in 2017, the median FMV was \$95,930. The median change in estimated FMV from 2017 to 2020 was -10%.

Calumet has grown by approximately \$29.4 million (34.3%) in total assessed value from 2019 (Assessor-certified) to 2020 (Assessor mailed values).

The Assessor's legal obligations for property reassessments:

- 1. 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.

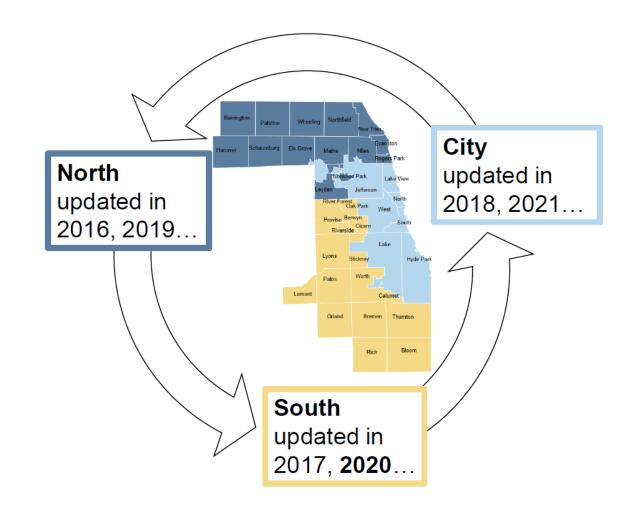


Reassessments are every 3 years.

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

South/West Suburbs:

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

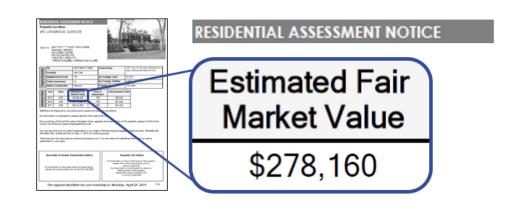


Our duty: Fairness and accuracy.

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.

We also call this 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.

How the Assessor's Office produces an estimate of Fair Market Value (FMV) for a home in a reassessment township:

For each home....

- 1 We find trends in sales of homes that are similar to it, in and around its neighborhood.
- We estimate the home's fair market value, based on those similar homes.







Estimated FMV in 2020:







Estimated FMV in 2020:



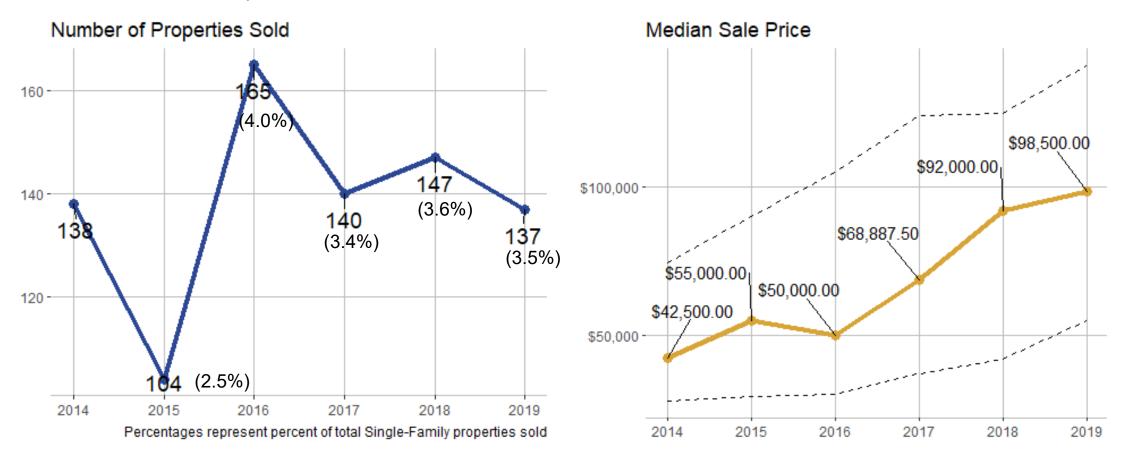




Estimated FMV in 2020:

What were the trends in Calumet home sales?

We observed these trends 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 Calumet single-family homes that sold in each year, 50% of them had sale prices between the dashed lines.



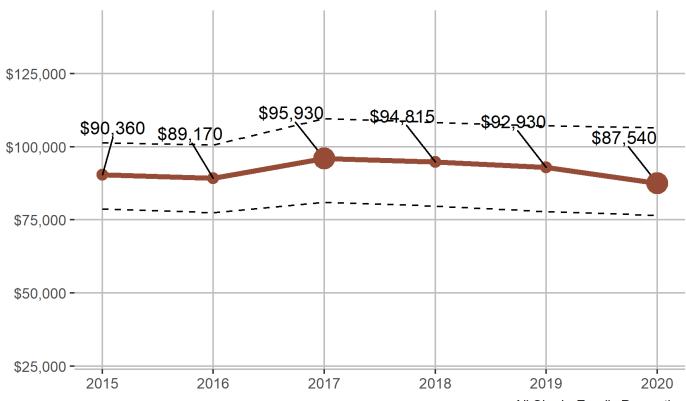
CCAO's Estimated Fair Market Values

The median estimated Fair Market Value for a single-family home in Calumet in 2020 is **\$87,540**.

Calumet 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.

Median CCAO Fair Market Values



All Single-Family Properties FMVs are assessor certified values (after appeals) except 2020, which is mailed initial values

50% of the FMVs of all single-family homes in Calumet 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).

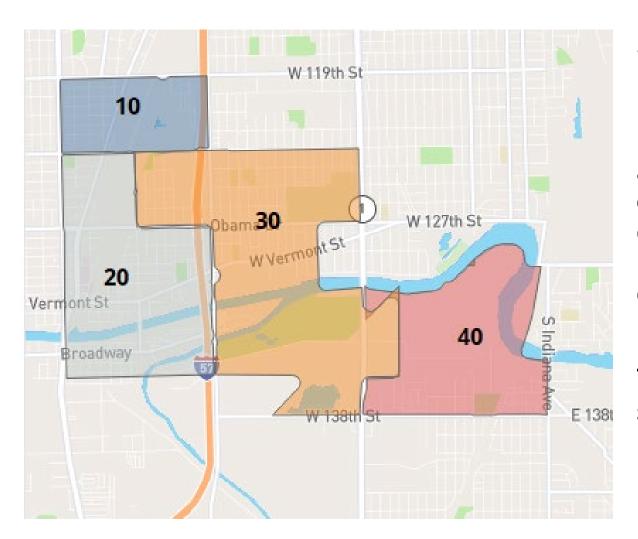
| Year | 2016 | 2019 | % change |
|-----------------------------|----------|----------|----------|
| Median sale price of a home | \$50,000 | \$98,500 | 49% |

The <u>Institute for Housing Studies at DePaul University</u> studies the housing market. From 2017 to the first half of 2019, their data indicated a 24.3% year-over-year change in median sale prices of homes in this region.

CCAO estimated FMV Comparison:

| Year | 2017 | 2020 | % change |
|---|----------|----------|----------|
| Median CCAO estimated Fair Market Value | \$95,930 | \$87,540 | -10% |

Calumet Neighborhood Data



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

The next page contains statistics for single-family homes in each neighborhood of Calumet.

Calumet Neighborhood Data

| Neighborhood code | Number of sales in 2019 | Median sale price in 2019 | Median 2020 CCAO FMV | Median sales ratio | Median \$ change in CCAO FMV 2019-2020 | Median % change in CCAO FMV 2019-2020 |
|----------------------|-------------------------|------------------------------|-------------------------|-----------------------|--|---|
| 10 | 12 | \$99,875 | \$104,705 | 0.971 | -\$1,855 | -1.7% |
| 20 | 41 | \$125,000 | \$96,470 | 0.963 | -\$685 | -0.7% |
| 30 | 77 | \$75,000 | \$92,685 | 1.209 | -\$2,750 | -2.9% |
| 40 | 7 | ** | \$37,060 | ** | -\$10 | 0.0% |

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.

^{**} There were too few sales in this neighborhood in 2019 to draw conclusions about aggregate sale prices or sales ratios.

Why two homes can have different changes in Assessed Value

Q: Between the 2017 and 2020 reassessments, the median change in assessed value was -10%. Why did my home's assessed value change more (or less) than -10%?

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

Calumet 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 Calumet, the CCAO has not met standards for uniformity.

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

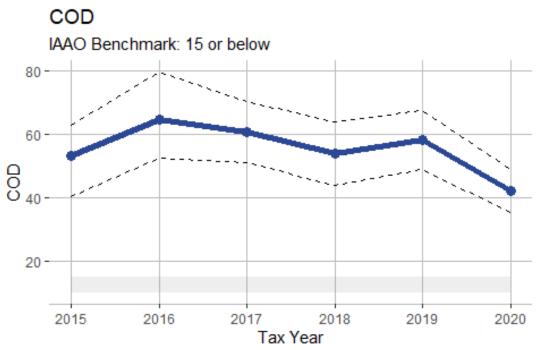
| Category | Statistic | Target Range | Result | Standard Met? |
|--------------------|-----------|--------------|---------|---------------|
| Variability | COD | 5-15 | 42.3657 | No |
| Vertical Equity(1) | PRD | 0.98-1.03 | 1.2239 | No |
| Vertical Equity(2) | PRB | -0.05-0.05 | -0.7671 | No |

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 for this township is 42.3657. As it is not between 5 and 15, the COD has not met the IAAO standard for variability, however 2020 does show improvements relative to prior years.



Dotted lines represent 95% Confidence Interval

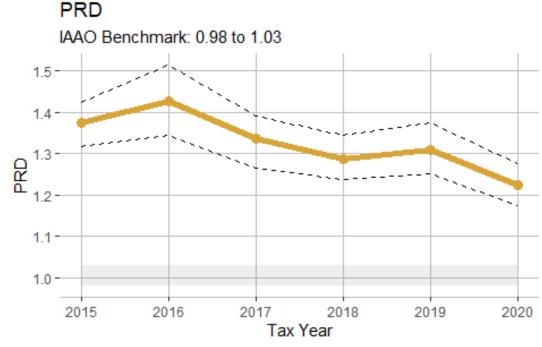
All values calculated using ratios from assessor certified values (after appeals),

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 1.2239 for our 2020 assessments of this township, which is not within the target range. The vertical equity component of the uniformity goal is not met from the PRD component, however 2020 does show improvements relative to prior years.



Dotted lines represent 95% Confidence Interval

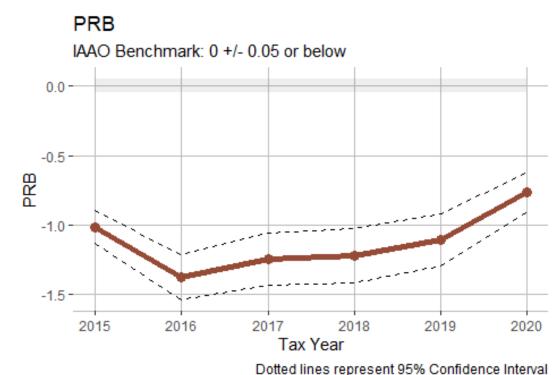
All values calculated using ratios from assessor certified values (after appeals),

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 -0.7671. As it is not between -.05 and .05, the PRB has not met the IAAO standard for variability, however 2020 does show improvements relative to prior years.



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

except 2020, which is mailed initial values

Addressing the gap between Calumet Reassessments and IAAO Standards

Although measures of variability and vertical equity of reassessments in Calumet have improved significantly this year compared to prior years, we have not yet achieved the IAAO standard for assessments in Calumet. 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 Calumet, sale values of homes tend to have a *small* range – half of homes had sale values between \$50,000 and \$150,000. 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 Calumet. 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 Calumet

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

| | 2019 | | 20 | 2020 | | 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 | \$35,794,590 | 41.9% | \$61,553,055 | 53.6% | \$25.8 m | 11.7% | |
| Residential | \$49,728,279 | 58.1% | \$53,372,749 | 46.4% | \$3.6 m | -11.7% | |
| TOTAL | \$85,522,869 | | \$114,925,804 | | | | |

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.

For the Calumet reassessment, our office combined sales data from across the southern 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.

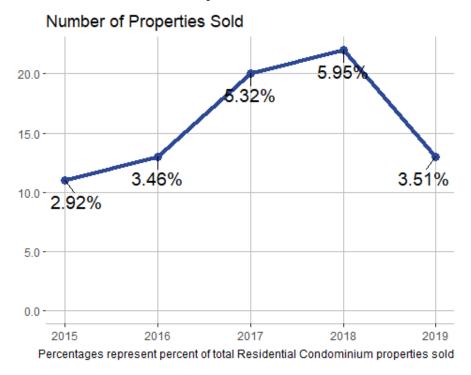
Example: for a home with a FMV of \$87,540, its AV = 10% of \$ \$87,540 = **\$8,754**.

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 D: Residential Condo Sales

There are 370 residential condominiums (class 2-99) in Calumet. 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 Calumet condos that sold in each year, 50% of them had sale prices between the dashed lines.





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