2020 Bremen Residential Reassessment Report

2020 South Triad Reassessment

Reassessment notices mailed: September 16, 2020

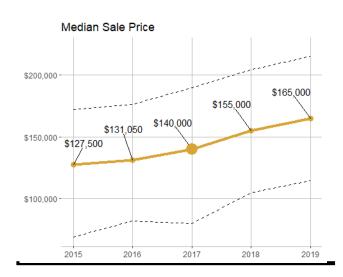


Bremen's residential reassessments

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 Bremen, the median sale value of a single-family home in 2019 was **\$165,000**.



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.

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

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

Bremen 2020 Residential Reassessment

Executive Summary of Market Estimates

Bremen is the 4th largest township in the south and west suburbs. In 2020, it had:

- 31,861 single-family homes,
- 6,308 residential condos, and
- 720 class 2 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 price of a single-family home that sold in Bremen in 2019 was \$165,000. Median sale prices have increased **26%** from 2016, when the median sale price was \$131,050.

Assessments: The Cook County Assessor's median estimated Fair Market Value (FMV) for a single-family home in Bremen in 2020 is \$139,330. FMVs in Bremen have changed by a median of -6% since 2017, when Bremen was last triennially reassessed and the median estimated FMV was \$147,925.

Bremen has grown by approximately \$84.8 million (11.7%) in total assessed value from 2019 (Assessorcertified) 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.

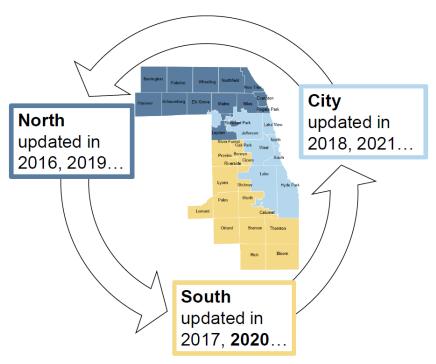


Reassessments are every 3 years.

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

South/West Suburbs:

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



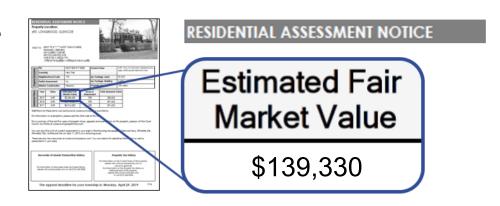


Our duty: Fairness and accuracy.

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.

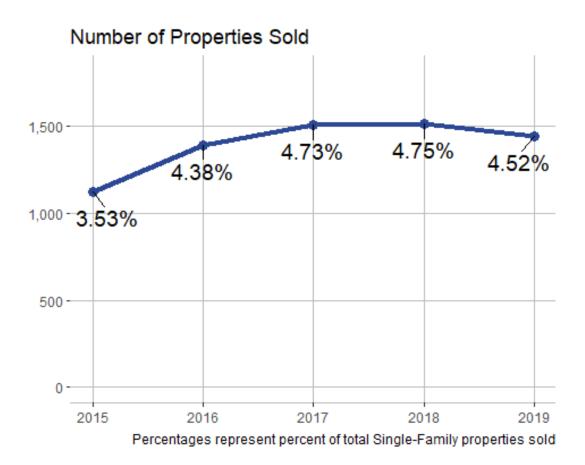


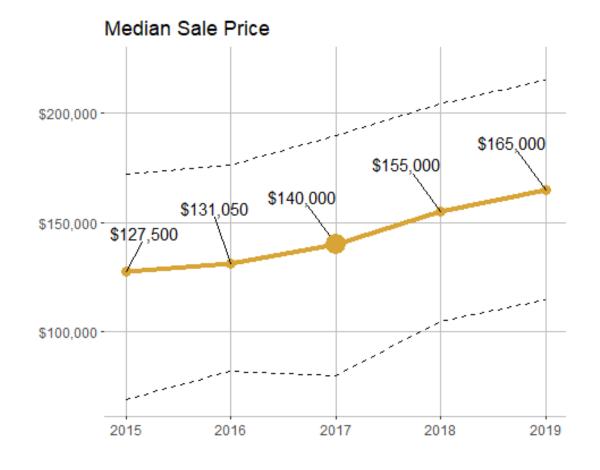
To produce a fair market value for a home in 2020, we look to recent trends in the real estate market.

What were the trends in Bremen 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 Bremen single-family homes that sold in each year, 50% of them had sale prices between the dashed lines.



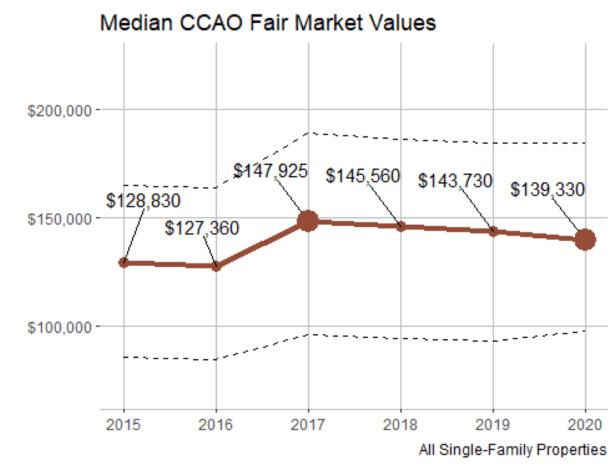


CCAO's Estimated Fair Market Values

The median estimated Fair Market Value for a single-family home in Bremen in 2020 is **\$139,330.**

Bremen 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 Bremen 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	\$131,050	\$165,000	26%

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

CCAO estimated FMV Comparison:

Year	2017	2020	Median % change
Median CCAO estimated Fair Market Value	\$147,925	\$139,330	-6%

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 Bremen'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.

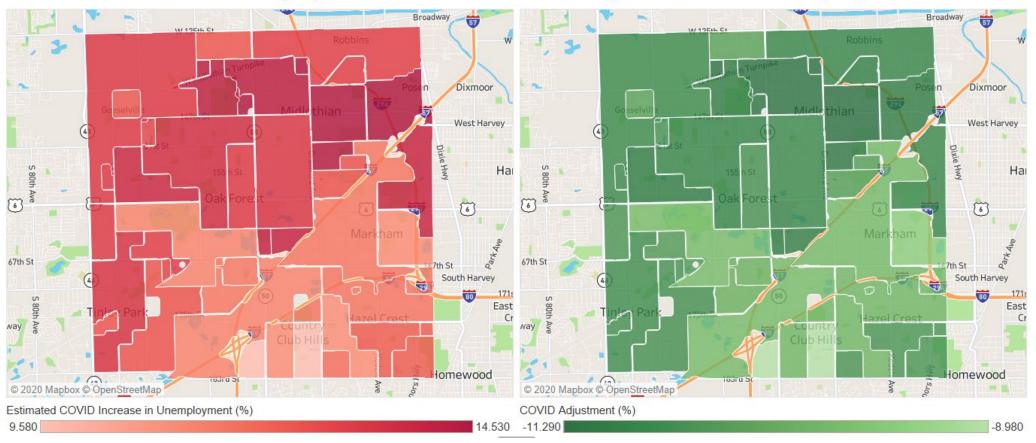
COVID-19 Adjustments in Bremen neighborhoods

Neighborhoods with larger increases in estimated unemployment....

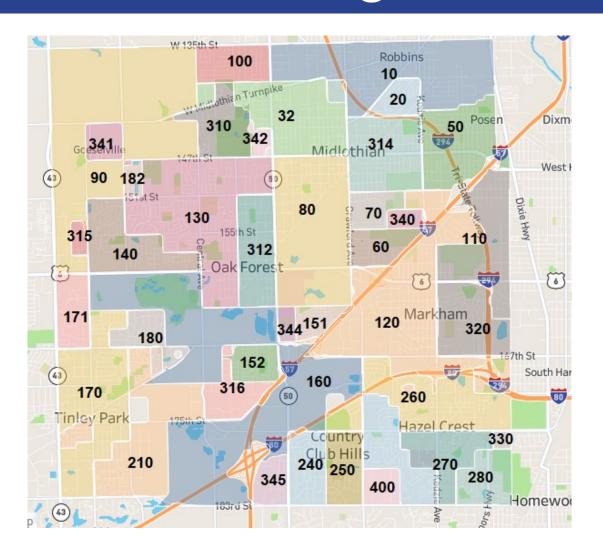
...had larger **COVID-19 Adjustments** to Fair Market Values of homes.

Estimated Increases in Unemployment

COVID Adjustments to 2020 Property Values



Bremen's 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.

Bremen Neighborhood Data (10 to 120)

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
10	\$46,170	30	\$88,000	-10.9%	\$60,515	1.006	\$14,345	31.1%
20	\$55,950	16	\$37,950	-11.0%	\$46,290	1.562	-\$9,660	-17.3%
32	\$151,120	59	\$159,900	-11.2%	\$142,330	0.940	-\$8,790	-5.8%
50	\$95,270	48	\$121,505	-11.0%	\$110,140	0.953	\$14,870	15.6%
60	\$75,190	13	\$124,900	-10.4%	\$76,360	0.928	\$1,170	1.6%
70	\$132,530	31	\$159,000	-11.1%	\$139,540	0.917	\$7,010	5.3%
80	\$155,150	49	\$145,000	-10.8%	\$130,910	0.900	-\$24,240	-15.6%
90	\$213,885	4	\$220,000	-10.8%	\$190,820	*	-\$23,065	-10.8%
100	\$193,090	46	\$214,000	-10.3%	\$186,620	0.914	-\$6,470	-3.4%
110	\$59,360	8	\$47,000	-10.8%	\$53,855	1.130	-\$5,505	-9.3%
120	\$76,480	57	\$85,555	-9.8%	\$59,580	0.990	-\$16,900	-22.1%

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.

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

Bremen Neighborhood Data (130 to 240)

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
130	\$176,340	191	\$200,000	-10.9%	\$177,310	0.962	\$970	0.6%
140	\$213,990	52	\$236,950	-11.1%	\$217,350	0.941	\$3,360	1.6%
151	\$147,010	24	\$164,000	-11.0%	\$156,275	0.950	\$9,265	6.3%
152	\$170,200	26	\$213,250	-10.0%	\$181,440	0.958	\$11,240	6.6%
160	\$167,290	6	\$248,000	-9.8%	\$155,750	*	-\$11,540	-6.9%
170	\$183,065	142	\$200,000	-10.7%	\$174,240	0.956	-\$8,825	-4.8%
171	\$200,660	31	\$195,000	-10.6%	\$178,590	0.891	-\$22,070	-11.0%
180	\$227,600	15	\$232,000	-10.5%	\$220,420	0.958	-\$7,180	-3.2%
182	\$275,670	9	\$305,000	-10.6%	\$283,695	*	\$8,025	2.9%
210	\$195,285	65	\$227,400	-10.7%	\$197,520	0.932	\$2,235	1.1%
240	\$95,705	90	\$117,588	-9.9%	\$99,980	0.953	\$4,275	4.5%

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.

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

Bremen Neighborhood Data (250 to 330)

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
250	\$110,380	35	\$125,000	-9.0%	\$128,390	1.037	\$18,010	16.3%
260	\$93,420	98	\$101,950	-9.9%	\$94,060	0.977	\$640	0.7%
270	\$119,030	31	\$144,000	-10.6%	\$120,720	0.942	\$1,690	1.4%
280	\$183,045	26	\$210,950	-10.6%	\$179,725	0.947	-\$3,320	-1.8%
310	\$228,040	7	\$168,000	-11.0%	\$169,680	*	-\$58,360	-25.6%
312	\$163,370	46	\$175,500	-10.6%	\$151,860	0.959	-\$11,510	-7.0%
314	\$122,180	72	\$132,500	-11.3%	\$122,690	0.944	\$510	0.4%
315	\$255,490	7	\$268,000	-10.8%	\$269,570	*	\$14,080	5.5%
316	\$238,690	15	\$255,000	-10.0%	\$252,105	0.944	\$13,415	5.6%
320	\$69,750	37	\$52,000	-9.5%	\$53,160	1.008	-\$16,590	-23.8%
330	\$100,845	10	\$98,250	-10.6%	\$92,370	*	-\$8,475	-8.4%

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.

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

Bremen Neighborhood Data (340 to 400)

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
340	\$65,650	11	\$84,500	-10.4%	\$56,040	*	-\$9,610	-14.6%
341	\$193,200	8	\$246,238	-10.3%	\$212,920	*	\$19,720	10.2%
342	\$210,990	9	\$287,000	-11.2%	\$250,670	*	\$39,680	18.8%
344	\$188,480	6	\$210,000	-11.0%	\$198,480	*	\$10,000	5.3%
345	\$190,220	6	\$177,450	-9.0%	\$207,370	*	\$17,150	9.0%
400	\$136,790	4	\$118,000	-10.6%	\$114,880	*	-\$21,910	-16.0%

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.

^{* =} 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 21.4%. Why did my home's assessed value change more (or less) than -6%?

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

Bremen 2020 Residential Reassessment

The IAAO provides one statistic for measuring uniformity (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 Bremen, the CCAO has not met IAAO standards for uniformity.

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

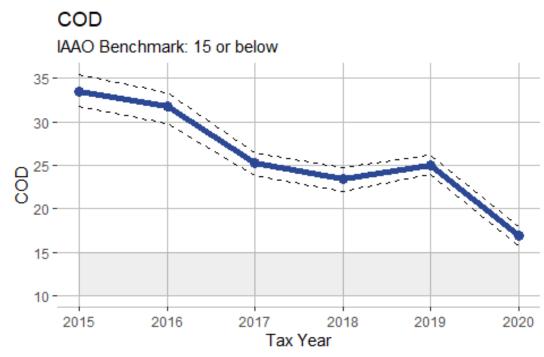
Category	Statistic	Target Range	Result	Standard Met?
Uniformity	COD	5-15	17.0206	No
Vertical Equity	PRD	0.98-1.03	1.0568	No
	PRB	-0.05-0.05	-0.1844	No

Uniformity: 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 17.0206. Although this metric does not meet the IAAO standard for variability, it has shown improvement relative to prior years.



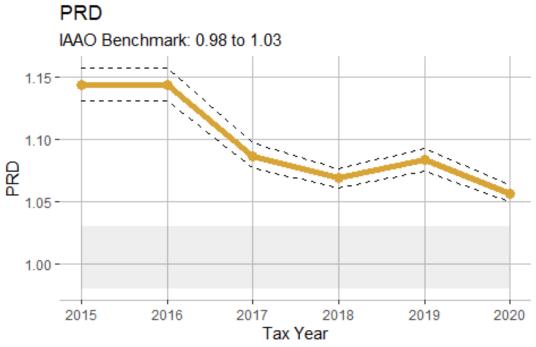
Dotted lines represent 95% Confidence Interval

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 1.0568 for the 2020 reassessment of this township. Although this metric does not meet the IAAO standard for PRD, it has shown improvement relative to prior years.



Dotted lines represent 95% Confidence Interval

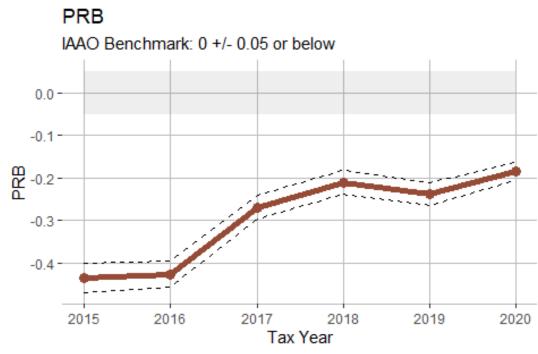
All values calculated using ratios from assessor certified values (after appeals),

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 -0.1844.



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 Bremen Reassessments and IAAO Standards

Although assessment variability (uniformity) in Bremen has improved this year compared to prior years, we have not yet achieved the IAAO standard for high-quality assessments in Bremen. This is likely due to the wide variety of homes throughout Bremen's neighborhoods, and to data quality.

In mass appraisal, to determine precisely what different characteristics (number of bedrooms, size, location, and so on) produce these different sale prices, statistical models need high-quality and up-to-date data about each home's characteristics. The characteristics the CCAO has about each home is printed on its reassessment notice, and on its PIN's details on the CCAO's website. Our Office is engaged in a years-long effort to improve this data. Furthermore, even more granular property data – like bathroom and kitchen remodels, repair condition, and proximity to railroad tracks – can be needed to explain differences in sale prices. The CCAO does not currently have data at this level of granularity.

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, yet we have improved in this area.

With more granular data, our models could distinguish 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 Bremen

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

	201	19	20	20	2019 -	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	\$203,408,467	28.1%	\$277,402,847	34.3%	+\$74.0m	6.2%		
Residential	\$521,561,349	71.9%	\$532,340,429	65.7%	+\$10.2m	-6.2%		
TOTAL	\$724,969,816		\$809,743,276		+\$84.8m (+11.7%)			

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 Bremen from 2015 to the end of 2019, there were 7,487 sales of the total of 31,861 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.

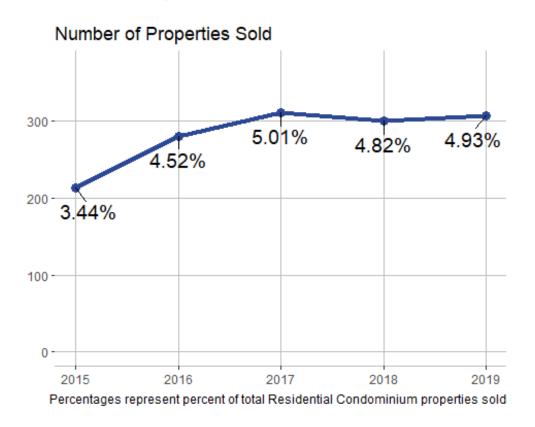
Example: for a home with a FMV of \$139,330, its AV equals 10% of \$139,330, for **\$13,933**.

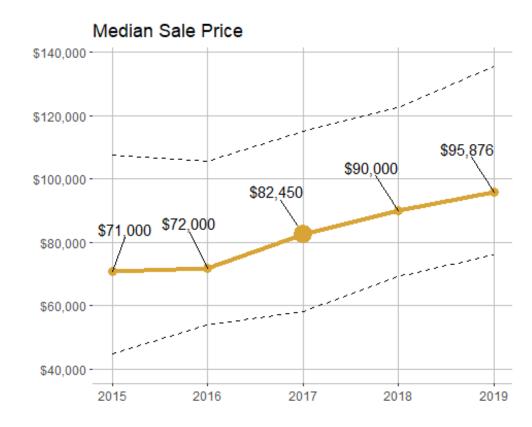
Note: residential property tax bills depend on the property's local tax rate, its assessed value, any exemptions applied to the property, and Cook County's Equalization Factor. For Tax Year 2020, tax rates, exemptions, and the Equalization Factor have not yet been calculated. These numbers will all be 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

Bremen contains 6,308 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 Bremen 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 33% (from \$72,000 to \$95,876). **Reassessments**: From 2017 to 2020, median Fair Market Values estimated by the CCAO of all condos changed by -2% (from \$82,360 to \$80,580).

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
32	\$37,150	10	\$93,750	-11.2%	\$33,800	1.124	-\$3,350	-9.0%
50	\$133,265	0	NA	-11.0%	\$86,380	*	-\$46,885	-35.2%
80	\$61,600	15	\$53,000	-10.8%	\$45,830	0.833	-\$15,770	-25.6%
90	\$106,450	33	\$144,000	-10.8%	\$124,650	0.875	\$18,200	17.1%
100	\$68,640	28	\$96,500	-10.3%	\$89,360	0.928	\$20,720	30.2%
130	\$96,990	17	\$140,000	-10.9%	\$116,450	0.921	\$19,460	20.1%

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

Appendix D2: Residential Condo Reassessments

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
140	\$45,710	18	\$89,450	-11.1%	\$67,890	0.905	\$22,180	48.5%
160	\$130,050	0	NA	-9.8%	\$111,670	*	-\$18,380	-14.1%
170	\$87,940	25	\$124,900	-10.7%	\$107,710	0.862	\$19,770	22.5%
171	\$93,020	23	\$102,000	-10.6%	\$72,570	0.903	-\$20,450	-22.0%
180	\$82,400	16	\$74,750	-10.5%	\$68,470	0.904	-\$13,930	-16.9%
210	\$102,280	41	\$130,000	-10.7%	\$112,380	0.860	\$10,100	9.9%
240	\$74,690	3	\$135,000	-9.9%	\$113,160	*	\$38,470	51.5%
250	\$38,510	4	\$34,000	-9.0%	\$30,970	*	-\$7,540	-19.6%
260	\$37,060	11	\$27,500	-9.9%	\$45,780	0.937	\$8,720	23.5%
270	\$40,875	8	\$35,500	-10.6%	\$35,560	*	-\$5,315	-13.0%
140	\$45,710	18	\$89,450	-11.1%	\$67,890	0.905	\$22,180	48.5%
160	\$130,050	0	NA	-9.8%	\$111,670	*	-\$18,380	-14.1%

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

Appendix D2: Residential Condo Reassessments

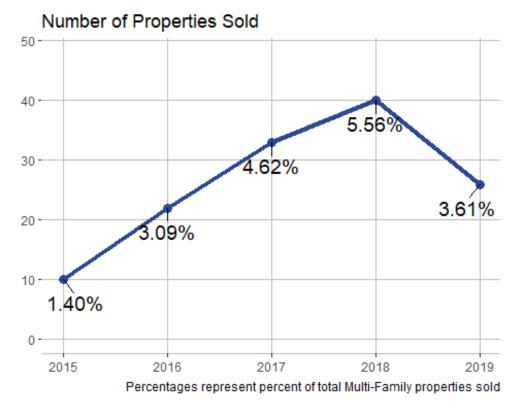
Neighborhood code	Median 2019 CCAO FMV	Number of sales in 2019	Median sale price in 2019	COVID-19 Adjustment	Median 2020 CCAO FMV	Median sales ratio	Median \$ change in CCAO FMV 2019-2020	Median % change in CCAO FMV 2019-2020
170	\$87,940	25	\$124,900	-10.7%	\$107,710	0.862	\$19,770	22.5%
171	\$93,020	23	\$102,000	-10.6%	\$72,570	0.903	-\$20,450	-22.0%
180	\$82,400	16	\$74,750	-10.5%	\$68,470	0.904	-\$13,930	-16.9%
210	\$102,280	41	\$130,000	-10.7%	\$112,380	0.860	\$10,100	9.9%
240	\$74,690	3	\$135,000	-9.9%	\$113,160	*	\$38,470	51.5%
250	\$38,510	4	\$34,000	-9.0%	\$30,970	*	-\$7,540	-19.6%
260	\$37,060	11	\$27,500	-9.9%	\$45,780	*	\$8,720	23.5%
270	\$40,875	8	\$35,500	-10.6%	\$35,560	*	-\$5,315	-13.0%
310	\$66,170	44	\$90,500	-11.0%	\$72,690	0.847	\$6,520	9.9%
312	\$63,750	6	\$108,250	-10.6%	\$96,280	*	\$32,530	51.0%
342	\$83,680	2	\$78,500	-10.6%	\$62,410	*	-\$21,270	-25.4%
345	\$74,620	3	\$97,900	-10.6%	\$89,265	*	\$14,645	19.6%

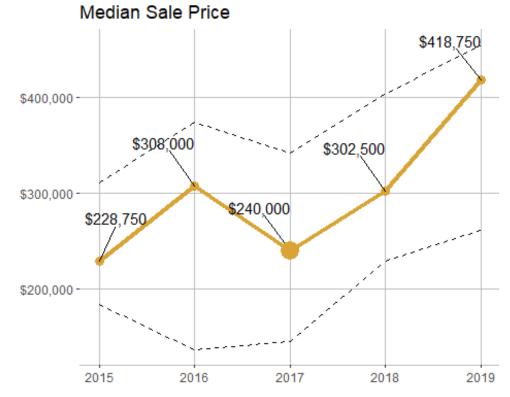
^{* =} Too few sales to calculate a statistically valid sales ratio.

Appendix E1: Residential Multi-Family Sales

Bremen has 720 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 Bremen multifamily apartment buildings that sold in each year, 50% of them had sale prices between the dashed lines.





Appendix E2: Residential Multi-Family Reassessments

Sales: From 2016 to 2019, median sale prices of multi-family homes that sold increased by 36% (from \$308,000 to \$418,750). **Reassessments**: From 2017 to 2020, median values of all multi-family homes estimated by the CCAO changed by 5% (from \$289,040 to \$303,275).

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
10	\$117,680	1	\$150,400	-13.6%	\$125,000	*	\$7,320	6.2%
20	\$211,350	0	NA	-13.8%	\$251,150	*	\$39,800	18.8%
32	\$368,660	2	\$317,500	-14.0%	\$439,260	*	\$70,600	19.2%
50	\$154,740	2	\$95,000	-13.8%	\$137,420	*	-\$17,320	-11.2%
80	\$327,810	1	\$395,000	-13.5%	\$322,480	*	-\$5,330	-1.6%
100	\$378,350	0	NA	-12.9%	\$424,540	*	\$46,190	12.2%
110	\$206,160	0	NA	-13.5%	\$213,175	*	\$7,015	3.4%
120	\$124,660	0	NA	-12.3%	\$165,840	*	\$41,180	33.0%
130	\$410,000	1	\$470,000	-13.6%	\$481,100	*	\$71,100	17.3%

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

Appendix D2: Residential Multi-Family Reassessments

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
140	\$385,180	7	\$455,000	-13.8%	\$401,870	*	\$16,690	4.3%
152	\$402,110	2	\$437,500	-12.5%	\$447,770	*	\$45,660	11.4%
160	\$301,010	0	NA	-12.3%	\$411,235	*	\$110,225	36.6%
170	\$282,435	3	\$440,000	-13.4%	\$308,490	*	\$26,055	9.2%
171	\$415,390	0	NA	-13.2%	\$462,390	*	\$47,000	11.3%
180	\$239,430	3	\$257,500	-13.1%	\$223,210	*	-\$16,220	-6.8%
210	\$369,960	2	\$387,500	-13.3%	\$397,475	*	\$27,515	7.4%
250	\$355,060	0	NA	-11.2%	\$432,080	*	\$77,020	21.7%
310	\$309,700	0	NA	-13.8%	\$313,130	*	\$3,430	1.1%
312	\$279,820	0	NA	-13.3%	\$266,650	*	-\$13,170	-4.7%
314	\$266,055	1	\$294,200	-14.1%	\$306,110	*	\$40,055	15.1%
342	\$425,995	1	\$500,000	-14.0%	\$633,385	*	\$207,390	48.7%

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