Berwyn Residential Reassessment Report

2020 South Triad Reassessment

Reassessment notices mailed: May 18, 2020

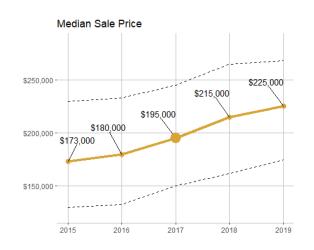


Berwyn's residential assessments

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 Berwyn, the median sale value of a single-family home in 2019 was \$225,000.



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 in Berwyn.

Berwyn's residential reassessments

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

\$218,115

In Berwyn, sale prices have increased by an average of 30.0%.

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

-11.1%

Median estimated CCAO fair market value that combined

Market Estimate and

COVID-19 Adjustment

\$191,760

The final median change in the CCAO's estimated FMV from 2017 to 2020 was 12.1%.

Berwyn 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 Berwyn:

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

Berwyn 2020 Residential Reassessment

Executive Summary of Market Estimates

Berwyn is the 12th largest township in the south and west suburbs. In 2020, it had:

- 9,916 single-family homes,
- 3,059 residential condos, and
- 728 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 Berwyn in 2019 was \$225,000.

The Cook County Assessor's median estimated Fair Market Value (FMV) for a single-family home in Berwyn in 2020 is **\$191,760**. In the prior reassessment of Berwyn in 2017, the median FMV was \$168,640. The median change in estimated FMV from 2017 to 2020 was 12.1%.

Berwyn has grown by approximately \$57.8 million (19.2%) in total assessed value from 2019 (Assessor-certified) to 2020 (Assessor mailed values).

Single-family homes numbers include the following property classes: 202, 203, 204, 205, 206, 207, 208, 209, 210, 234, 278, 295 Condos include the following property classes: 299 (See appendix)

Multi-family homes include the following property classes: 211, 212 (See appendix)

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*.
- 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.

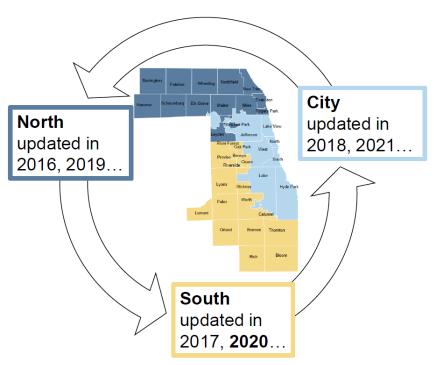


Reassessments are every 3 years.

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



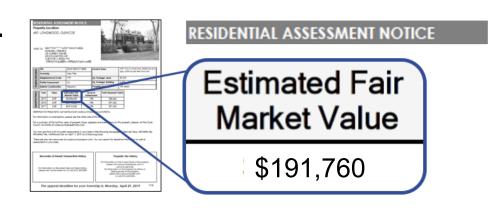


Our duty: Fairness and accuracy.

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.

This is referred to as the Fair Market Value.

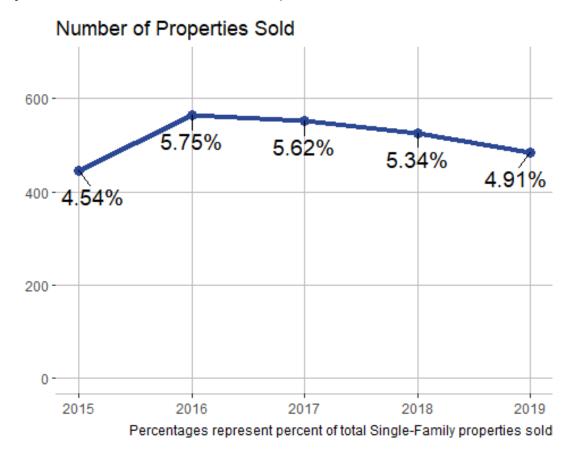
When you receive a Reassessment Notice in the mail, it contains this updated value, along with characteristics of your home.

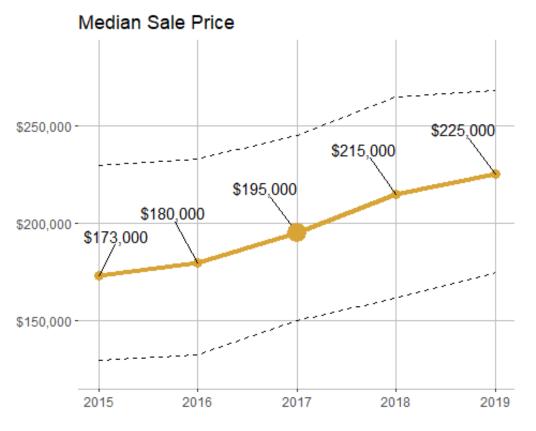


To produce a fair market value for a home in 2020, we look to recent trends in the real estate market.

What were the trends in Berwyn 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 Berwyn 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 Berwyn's neighborhoods and then created a **COVID-19 Adjustment** for each single-family homes and condos in each neighborhood.

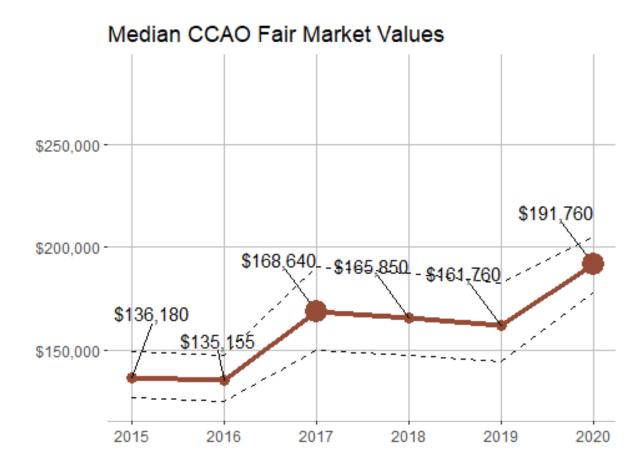
Neighborhoods with higher estimated unemployment had larger adjustments.

CCAO's Estimated Fair Market Values

The median estimated Fair Market Value for a single-family home in Berwyn in 2020 is **\$191,760**.

Berwyn 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 Berwyn 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).

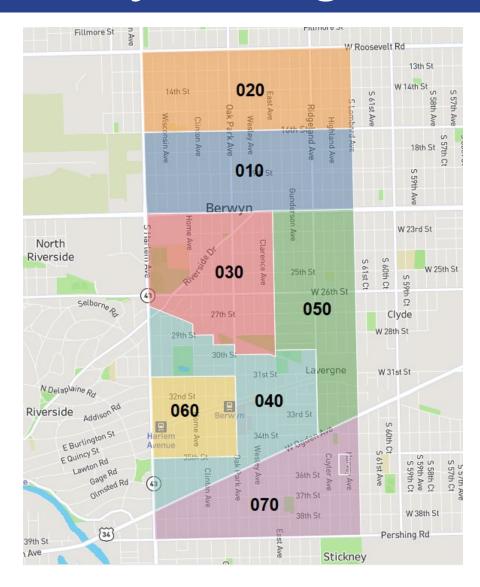
Year	2016	2019	% change
Median sale price of a home	\$180,000	\$225,000	20.0%

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

CCAO estimated FMV Comparison:

Year	2017	2020	Median % change
Median CCAO estimated Fair Market Value	\$168,640	\$191,760	12.1%

Berwyn Neighborhood Data



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

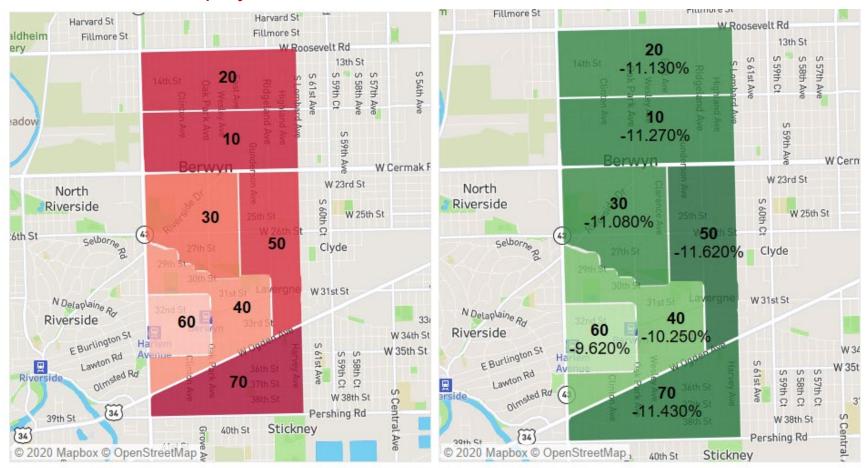
The CCAO's database contains a township and a **neighborhood code** for each home.

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

COVID-19 Adjustments in Berwyn neighborhoods

Neighborhoods with larger increases in estimated unemployment....

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



Berwyn Neighborhood Data

Neighborhood code	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	57	\$235,000	-11.27%	\$201,690	0.866	\$32,605	19.3%
20	92	\$215,000	-11.13%	\$177,190	0.844	\$27,720	18.5%
30	71	\$220,000	-11.08%	\$191,770	0.875	\$36,575	23.6%
40	60	\$236,200	-10.25%	\$205,210	0.882	\$26,415	14.8%
50	90	\$219,250	-11.62%	\$190,580	0.882	\$32,930	20.9%
60	14	\$223,000	-9.62%	\$244,350	0.887	\$41,480	20.4%
70	100	\$217,950	-11.43%	\$192,395	0.870	\$31,895	19.9%

Why two homes can have different changes in Assessed Value

Q: Between the 2017 and 2020 reassessments, the median change in assessed value was 12.1%. Why did my home's assessed value change more (or less) than 12.1%?

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

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

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

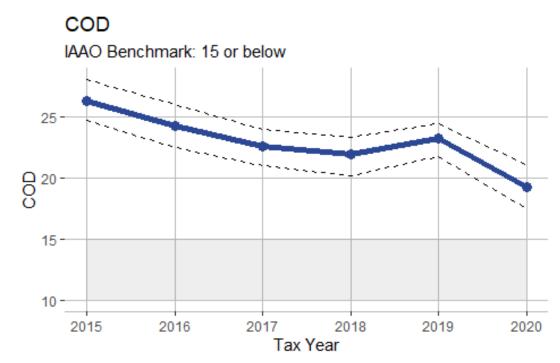
Category	Statistic	Target Range	Result	Standard Met?	
Variability	COD	5-15	19.32	No	
Vertical Equity(1)	PRD	0.98-1.03	1.05	No	
Vertical Equity(2)	PRB	-0.05-0.05	-0.29	No	

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 19.32. 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

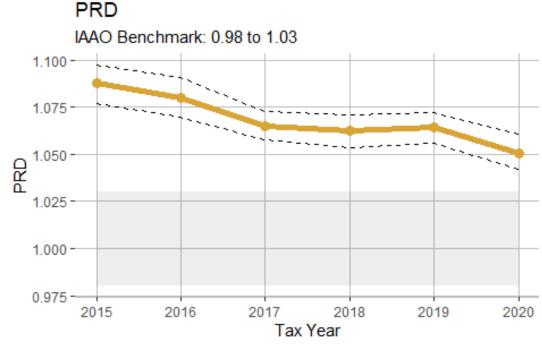
All values calculated using ratios from assessor certified values (after appeals),

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 1.05 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

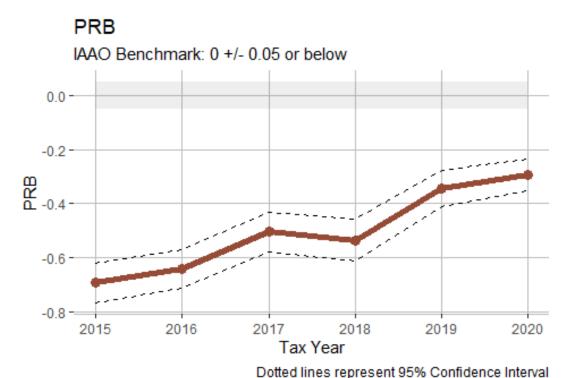
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Vertical Equity 2: Price-Related Bias

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 -0.29. 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 Berwyn Reassessments and IAAO Standards

Although measures of variability and vertical equity of reassessments in Berwyn have improved significantly this year compared to prior years, we have not yet achieved the IAAO standard for assessments in Berwyn. 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 Berwyn, sale values of homes tend to have a *small* range – half of homes had sale values between \$175,000 and \$275,000. 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 Berwyn. 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 Berwyn

Berwyn'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	\$65,605,650	21.8%	\$82,851,851	23.1%	\$17.2m	1.3%	
Residential	\$235,323,963	78.2%	\$275,911,015	76.9%	\$40.6m	-1.3%	
TOTAL	\$300,929,613		\$358,762,866		\$57.8m		

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 Berwyn between 2017 and January 31, 2020, there were 2,633 sales of the total of 9,916 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.

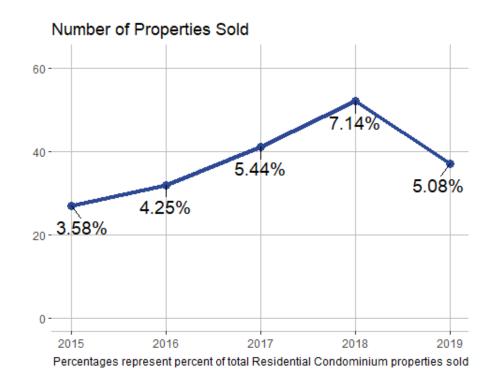
Example: for a home with a FMV of \$191,760, its AV equals 10% of \$191,760, for **\$19,176.**

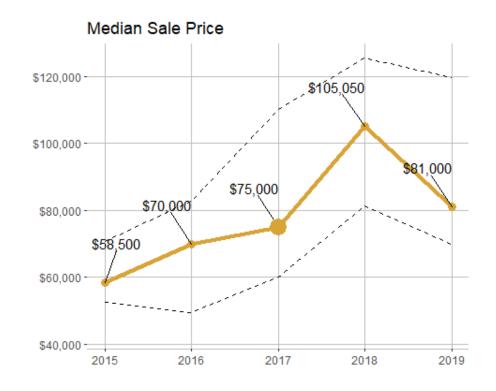
Note: residential property tax bills depend on the property's local tax rate, its assessed value, any exemptions applied to the property, and the State Equalizer. These numbers are all printed on the second-installment tax bills mailed by the Cook County Treasurer. 2020 reassessments will affect second-installment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

Appendix D1: Residential Condo Sales

There are 3,059 residential condominiums (class 2-99) in Berwyn. 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 Berwyn condos that sold in each year, 50% of them had sale prices between the dashed lines.





Appendix D2: Residential Condo Reassessments

Neighborhood code	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	6	\$80,500	-11.27%	\$69,010	*	\$8,890	14.8%
20	15	\$79,000	-11.13%	\$56,870	0.819	\$6,380	12.6%
30	NA	NA	-11.08%	\$92,470	*	-\$6,030	-6.1%
40	3	\$77,000	-10.25%	\$66,390	*	-\$1,200	-1.8%
50	4	\$66,500	-11.62%	\$71,960	*	-\$9,460	-11.6%
60	6	\$82,500	-9.62%	\$118,640	*	\$20,810	21.3%
70	3	\$125,000	-11.43%	\$89,450	*	\$22,020	32.7%

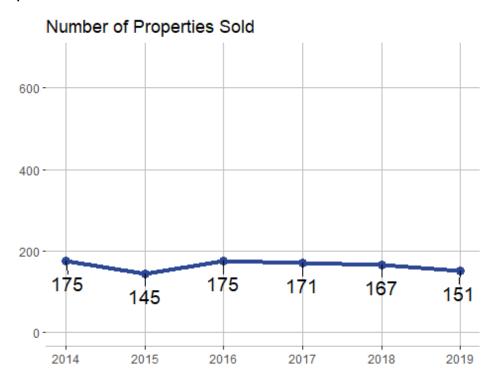
These numbers include the following property classes: 2-99

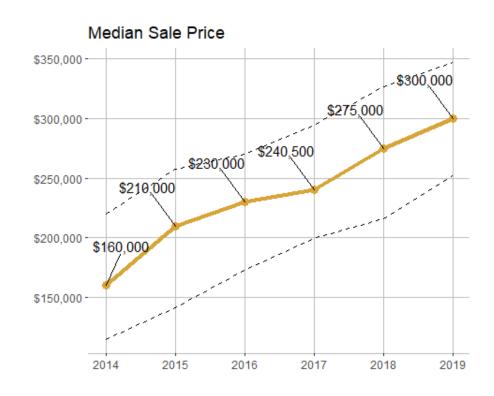
^{* =} Too few sales to calculate a statistically valid sales ratio.

Appendix E1: Residential Multi-Family Sales

There are 728 multifamily apartment buildings of 2 to 6 units (property class codes 2-11 and 2-12) in Berwyn. We report on multi-family homes 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 Berwyn multifamily apartment buildings that sold in each year, 50% of them had sale prices between the dashed lines.





Appendix E2: Residential Multi-Family Reassessments

Neighborhood code	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	62	\$322,500	-14.09%	\$281,580	0.867	\$59,760	26.9%
20	27	\$250,000	-13.91%	\$223,710	0.888	\$26,370	13.4%
30	4	\$289,500	-13.85%	\$255,855	0.924	\$34,850	15.8%
40	14	\$277,500	-12.81%	\$235,360	0.925	\$4,140	1.8%
50	21	\$292,000	-14.53%	\$259,660	0.906	\$62,315	31.6%
60	4	\$317,750	-12.02%	\$281,615	0.911	\$47,960	20.5%
70	15	\$279,000	-14.29%	\$239,305	0.897	\$21,060	9.6%

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

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