# Cook County Assessor's Office: 2019 North Triad Assessment

Northfield Township Residential Assessment Narrative May 28th, 2019



#### Northfield Residential Properties Executive Summary

- Since the 2016 re-assessment, property values in Northfield have decreased by 2.5% according to the <u>Institute for Housing Studies at DePaul University</u>.
- The change in median assessed value for residential properties between the 2016 and 2019 re-assessments is 1.58%.
- The CCAO met the standard for compliance: the legal requirement to assess residential properties at a 10% assessment ratio.
- The CCAO met the standards for uniformity.
- The CCAO will continue its efforts to make assessments fair and accurate by continuously improving residential modeling and data collection.

# Northfield Residential Properties Valuation Statistics

The aggregate assessed value of residential properties in Northfield has changed from \$1,038,096,248 in the 2016 re-assessment to \$1,224,842,815 in the 2019 re-assessment.\*

|                                   | 2016      | 2019      |
|-----------------------------------|-----------|-----------|
| Median Sale Price                 | \$560,000 | \$575,000 |
| Median Assessed Value             | \$58,153  | \$59,070  |
|                                   | 2018      | 2019      |
| Change in Median Assessed Value   | \$13,188  | \$7,508   |
| Change in Median Assessed Value   | \$13,166  | 80د,7ډ    |
| % Change in Median Assessed Value | 29%       | 15%       |

<sup>\*</sup> 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.

# Northfield Residential Properties Valuation Glossary

Let's talk about each of these statistics and what they show. Remember that assessed value (abbreviated as AV) is 10% of market value for residential properties.

**MEDIAN SALE PRICE:** If you arranged every sale from lowest to highest, the median sale price is the price in the middle of the group.

**MEDIAN ASSESSED VALUE (AV):** If you arranged every assessed value from lowest to highest, the median assessed value is the value in the middle of that group.

% CHANGE IN MEDIAN AV: The percent difference between the median assessed values in two given time periods. In this report, we're showing the percent change in median AV between the given year and the year prior.

**CHANGE IN MEDIAN AV:** The difference (in dollar amount) between the median assessed values in two given periods. Again, we're showing the change in median between the given year and the year prior.

To review your specific home's assessment, visit cookcountyassesor.com or review the assessment notice you received in the mail.

### Northfield Assessment Methodology

#### 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.

Our office combined sales data from Maine, New Trier, Northfield, and Wheeling.

This created a sales database of 45,848 sales ranging from 2013 to the end of 2018.

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

### Northfield Assessment Methodology

#### Other factors

The assessment process strives for uniformity when it considers properties' size, age, location, and quality. In addition to sales data, other factors affect the models we create for re-assessment.

These factors include building square footage, land square footage, number of full bathrooms, number of rooms, finished basements, age, exterior wall construction, garage, location, township and CCAO neighborhood code.

Our full models and the underlying code used in our calculations will be published after the north triad re-assessment is completed in the fall of 2019. We will also provide information on median ratio and assessed values later in the year.

#### **Evaluating Questions About Northfield Assessments**

The data on the previous slides tends to suggest the following questions/concerns:

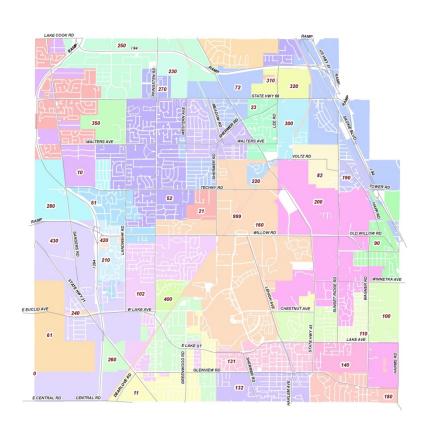
### Q. If the median % change in assessed value is 15% and the change in median assessed value is \$7,508, why did my assessment go up so much more?

A. The median assessed value is merely the value within the middle of a set of numeric values. It does not indicate an average of the values. Some assessed valuations will be higher or lower than that median number.

#### Q. Why do you use data from different townships for the residential assessment? Isn't that inaccurate?

A. Increasing the sample size increases the accuracy of our models as our office uses a mass appraisal model, rather than one that looks at each house individually. Differences in location are accounted for in our models.

#### Northfield Neighborhood Locations/Codes



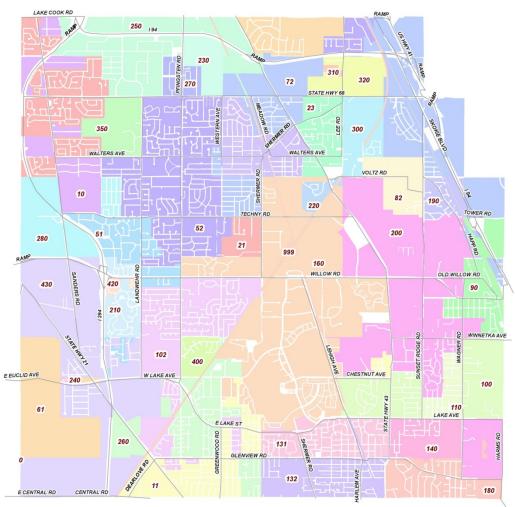
Northfield is located on the northern border of Chicago. It is the 5th largest township in the northern suburbs with 23,069 single-family parcels.

For our purposes, "neighborhood code" refers to the identifying numbers for a specific set of properties in our database.

A property's specific neighborhood code can be found by looking up a property using its address or PIN at cookcountyassessor.com.

To see an interactive map of these neighborhoods and corresponding assessment data, please visit cookcountyassessor.com/reporting.

#### Northfield Neighborhood Code Map



| Code | Sales in<br>sample | Median<br>ratio | Median sale<br>price | Change in<br>median sale<br>price | % change<br>in median<br>sale price | Median<br>assessed<br>value | Change<br>in<br>median<br>assessed<br>value | % change in median assessed value |
|------|--------------------|-----------------|----------------------|-----------------------------------|-------------------------------------|-----------------------------|---------------------------------------------|-----------------------------------|
| 10   | 30                 | 10%             | \$946,809            | \$183,059                         | 24%                                 | \$74,813                    | \$5,421                                     | 8%                                |
| 11   | 87                 | 10%             | \$432,406            | (\$162,594)                       | -27%                                | \$47,382                    | (\$7,442)                                   | -14%                              |
| 21   | 169                | 10%             | \$588,125            | (\$625)                           | 0%                                  | \$62,652                    | \$10,298                                    | 20%                               |
| 23   | 48                 | 10%             | \$731,575            | \$222,575                         | 44%                                 | \$63,901                    | \$17,411                                    | 37%                               |
| 51   | 36                 | 10%             | \$640,000            | (\$40,000)                        | -6%                                 | \$66,049                    | \$10,040                                    | 18%                               |
| 52   | 238                | 10%             | \$570,000            | \$25,000                          | 5%                                  | \$59,365                    | \$7,803                                     | 15%                               |
| 61   | 34                 | 10%             | \$333,500            | (\$7,750)                         | -2%                                 | \$38,647                    | (\$241)                                     | -1%                               |

| Code | Sales in<br>sample | Median<br>ratio | Median sale<br>price | Change in<br>median sale<br>price | % change<br>in median<br>sale price | Median<br>assessed<br>value | Change<br>in<br>median<br>assessed<br>value | % change in median assessed value |
|------|--------------------|-----------------|----------------------|-----------------------------------|-------------------------------------|-----------------------------|---------------------------------------------|-----------------------------------|
| 72   | 157                | 10%             | \$399,000            | \$6,500                           | 2%                                  | \$37,731                    | \$2,920                                     | 8%                                |
| 82   | 13                 | 11%             | \$950,000            | (\$400,000)                       | -30%                                | \$123,038                   | (\$13,962)                                  | -10%                              |
| 90   | 63                 | 10%             | \$505,000            | \$47,500                          | 10%                                 | \$45,666                    | \$5,192                                     | 13%                               |
| 100  | 60                 | 10%             | \$696,000            | (\$9,000)                         | -1%                                 | \$69,396                    | \$5,451                                     | 9%                                |
| 102  | 124                | 10%             | \$568,750            | \$42,750                          | 8%                                  | \$56,506                    | \$6,398                                     | 13%                               |
| 110  | 35                 | 10%             | \$943,750            | \$223,750                         | 31%                                 | \$85,279                    | \$10,251                                    | 14%                               |
| 131  | 71                 | 10%             | \$615,000            | \$30,000                          | 5%                                  | \$59,890                    | \$6,426                                     | 12%                               |

| Code | Sales in<br>sample | Median<br>ratio | Median sale<br>price | Change in<br>median sale<br>price | % change<br>in median<br>sale price | Median<br>assessed<br>value | Change<br>in<br>median<br>assessed<br>value | % change in median assessed value |
|------|--------------------|-----------------|----------------------|-----------------------------------|-------------------------------------|-----------------------------|---------------------------------------------|-----------------------------------|
| 132  | 200                | 10%             | \$482,000            | \$30,250                          | 7%                                  | \$44,760                    | \$915                                       | 2%                                |
| 140  | 24                 | 10%             | \$600,000            | (\$85,500)                        | -12%                                | \$64,510                    | \$5,164                                     | 9%                                |
| 160  | 138                | 10%             | \$575,000            | (\$50,000)                        | -8%                                 | \$66,544                    | \$3,356                                     | 5%                                |
| 180  | 46                 | 10%             | \$975,000            | \$82,000                          | 9%                                  | \$85,708                    | \$1,073                                     | 1%                                |
| 190  | 11                 | 10%             | \$560,000            | \$7,000                           | 1%                                  | \$59,222                    | (\$698)                                     | -1%                               |
| 200  | 91                 | 10%             | \$850,000            | (\$37,500)                        | -4%                                 | \$90,859                    | \$7,980                                     | 10%                               |
| 210  | 37                 | 10%             | \$764,750            | \$39,750                          | 5%                                  | \$72,901                    | \$3,254                                     | 5%                                |

| Code | Sales in<br>sample | Median<br>ratio | Median sale<br>price | Change in<br>median sale<br>price | % change<br>in median<br>sale price | Median<br>assessed<br>value | Change<br>in<br>median<br>assessed<br>value | % change in median assessed value |
|------|--------------------|-----------------|----------------------|-----------------------------------|-------------------------------------|-----------------------------|---------------------------------------------|-----------------------------------|
| 220  | 11                 | 10%             | #######              | \$11,250                          | 1%                                  | \$108,030                   | \$23,443                                    | 28%                               |
| 230  | 10                 | 10%             | \$589,000            | \$27,375                          | 5%                                  | \$57,731                    | \$2,297                                     | 4%                                |
| 240  | 3                  | 10%             | \$720,000            | \$78,000                          | 12%                                 | \$70,153                    | \$3,044                                     | 5%                                |
| 250  | 13                 | 10%             | \$370,000            | (\$66,250)                        | -15%                                | \$38,189                    | (\$1,908)                                   | -5%                               |
| 260  | 68                 | 10%             | \$450,750            | \$18,750                          | 4%                                  | \$42,905                    | \$4,593                                     | 12%                               |
| 270  | 30                 | 10%             | \$383,000            | (\$42,000)                        | -10%                                | \$39,215                    | \$2,266                                     | 6%                                |
| 280  | 34                 | 11%             | \$348,000            | \$39,500                          | 13%                                 | \$32,413                    | \$3,446                                     | 12%                               |
| 300  | 8                  | 10%             | \$742,500            | (\$285,638)                       | -28%                                | \$89,117                    | \$13,471                                    | 18%                               |

| Code | Sales in<br>sample | Median<br>ratio | Median sale<br>price | Change in<br>median sale<br>price | % change<br>in median<br>sale price | Median<br>assessed<br>value | Change in<br>median<br>assessed<br>value | % change in median assessed value |
|------|--------------------|-----------------|----------------------|-----------------------------------|-------------------------------------|-----------------------------|------------------------------------------|-----------------------------------|
| 310  | 1                  | **              | **                   | **                                | **                                  | \$141,437                   | \$30,188                                 | 27%                               |
| 320  | 3                  | 13%             | \$597,500            | \$142,500                         | 31%                                 | \$97,065                    | \$51,565                                 | 113%                              |
| 350  | 18                 | 10%             | \$375,000            | (\$74,000)                        | -16%                                | \$39,949                    | (\$3,748)                                | -9%                               |
| 400  | 15                 | 11%             | \$675,000            | (\$36,500)                        | -5%                                 | \$70,234                    | \$6,272                                  | 10%                               |
| 420  | 12                 | 9%              | \$532,500            | (\$14,500)                        | -3%                                 | \$57,120                    | \$5,259                                  | 10%                               |
| 430  | 48                 | 10%             | \$450,000            | \$73,000                          | 19%                                 | \$43,445                    | \$8,412                                  | 24%                               |

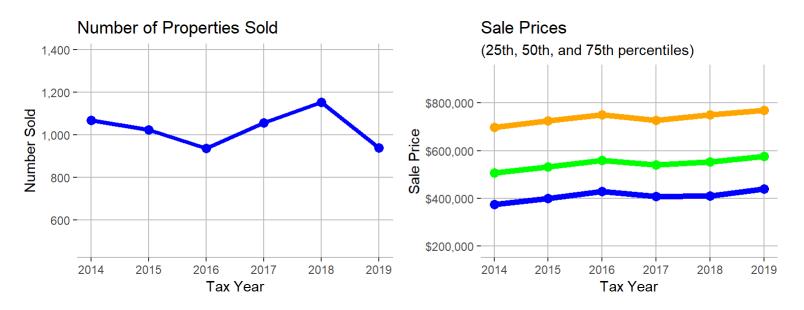
<sup>\*\*</sup> Due to a lack of sales in this neighborhood during 2018, no data is available.

Sales in sample data is as of 2018. All other fields account for all properties in the sample, not just sales. Median ratio is from 2018-19. Median sale price is as of 2018. Changes in median sale price are from 2017-18. Median assessed value is as of 2019. Changes in median assessed value are from 2018-19. 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.

To see an interactive map of these neighborhoods and the above data, please visit cookcountyassessor.com/reporting.

# Home Sale Trends Affecting Northfield Re-Assessment

The charts below summarize the market trends in Northfield since tax year 2013 from the perspective of the CCAO's Data. The first chart shows the number of residential sales in each year. The second chart shows the trends in median sale prices for the township described above. In general, the increases in assessed values discussed in the previous section are consistent with observed market activity.



#### Measuring Northfield Assessments Against Industry Standards

The CCAO is committed to measuring our work against the industry standards of uniformity, set by The International Association of Assessing Officers (IAAO). Under the umbrella of uniformity, there is one statistic for measuring variability of assessments: COD. There are two statistics for measuring vertical equity of assessments: PRD and PRB. If either PRD or PRB falls within the target range, the standard for vertical equity is considered met. Definitions of these terms can be found in Appendix B.

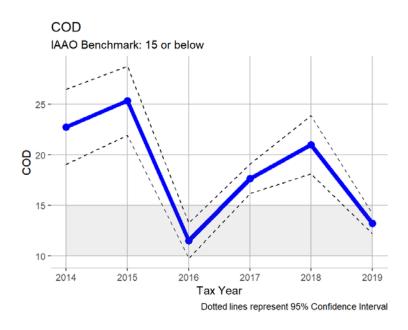
| Category        | Statistic | Target Range | Northfield Result | Standard Met |
|-----------------|-----------|--------------|-------------------|--------------|
| Variability     | COD       | 5-15         | 13.21             | Yes          |
| Vertical Equity | PRD       | 0.98-1.03    | 1.03              | Yes          |
| Vertical Equity | PRB       | -0.05-0.05   | -0.05             | Yes          |

<sup>\*</sup>Based on the confidence interval, this value is statistically within the target range.

# Variability Metric: COD

The graph below shows that our COD for the 2019 re-assessment for this township is 13.21.

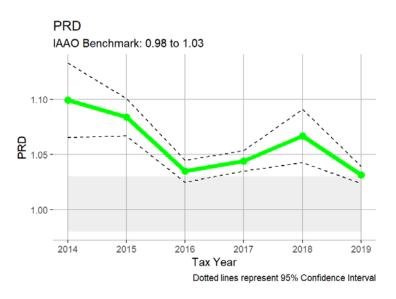
As it is statistically between 5 and 15, it is statistically within the IAAO standard for variability. Variability measures to what degree data points in a statistical distribution or data set diverge from the average.



# Vertical Equity Metric 1: PRD

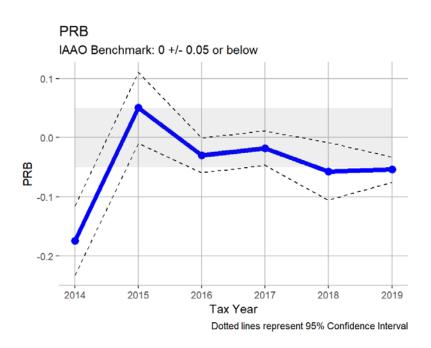
PRDs between .98 and 1.03 indicate high-quality assessments. The graph below shows that the PRD is 1.03 for our 2019 assessments of this township, which is statistically still within the target range based on the confidence interval.

The vertical equity component of the uniformity goal is met. Vertical equity is the degree to which high-value properties are assessed at the same rate as low-value properties.



## Vertical Equity Metric 2: PRB

PRBs between -.05 and .05 indicate high-quality assessments. The graph below shows that the PRB for our 2019 assessment of this township is -0.05. Therefore, we achieved this metric's standard for vertical equity.



### Northfield Residential Properties Conclusions

With assessments that track market trends and meet the industry standards for compliance and uniformity, the CCAO has high confidence in the quality of the Northfield assessments.

Improvements over time to both our modeling and data quality will make it possible for the CCAO to consistently achieve its goal of meeting or exceeding the IAAO standards, as well as the standard for compliance (the legal requirement to assess residential property at a 10% assessment ratio).

The CCAO is involved in a years-long effort to improve the quality of its assessments. We continue to build our ability to model and detect increasingly fine patterns in our data as we work to improve the accuracy, timeliness, and granularity of our data. The details of these efforts will be included in a future report.

# Appendix A – Total Assessed Value for Northfield Township Residential and Commercial

| Northfield Assessed Values | Previous 2018<br>Assessed Value | 2019            | % Increase |
|----------------------------|---------------------------------|-----------------|------------|
| Industrial/Commercial      | \$629,027,912                   | \$1,145,385,525 | 82.09%     |
| Residential                | \$1,513,984,141                 | \$1,721,934,431 | 13.74%     |
| Total                      | \$2,143,012,053                 | \$2,867,319,956 | 33.80%     |

Classes included in residential above: 2-02, 2-03, 2-04, 2-05, 2-06, 2-07, 2-08, 2-09, 2-10, 2-11 apartments (less than six), 2-12, 2-34, 2-78, 2-95, 2-99 and any residential side lots (2-41) or standalone garages (2-01) on separate pins. Note that the numbers above include additional classes not included in the numbers on slide 3 and slides 11-13.

Commercial classes include 1, 3, 4, 5, 6, 7, and 9.