

Hanover: Residential

2019 Assessment Narrative

**2019 North Triad Assessment
Cook County Assessor's Office**

September 24, 2019



Executive Summary

Hanover Township 2019 Residential Reassessment

Since the 2016 re-assessment, property values in Hanover have increased about 14.0% according to the [Institute for Housing Studies at DePaul University](#).

The change in median assessed value for residential properties between the 2016 and 2019 re-assessments is 7.09%.

The CCAO met the standard for compliance: the legal requirement to assess residential properties at a 10% assessment ratio.

The CCAO met IAAO standards for uniformity.

The CCAO will continue its efforts to make assessments fair and accurate by continuously improving residential modeling and data collection.

Valuation Statistics

Hanover Township 2019 Residential Reassessment

The aggregate assessed value of residential properties in Hanover has changed from \$544,421,875 in the 2016 re-assessment to \$580,859,762 in the 2019 re-assessment.

	2016	2019
Median Sale Price	\$179,950	\$215,500
Median Assessed Value (AV)	\$19,582	\$20,971

	2016	2019
Year-over-year change in median AV	\$3,346	\$2,675
Year-over-year % change in median AV	21%	15%

* 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.

Valuation Glossary

Hanover Township 2019 Residential Reassessment

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 cookcountyassessor.com or review the assessment notice you received in the mail.

Assessment Methodology:

Residential 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.

For the Hanover reassessment, our office combined sales data from Hanover, Schaumburg, and Barrington townships.

This created a sales database of 53,658 sales 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.

Assessment Methodology:

Residential Mass Appraisal

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

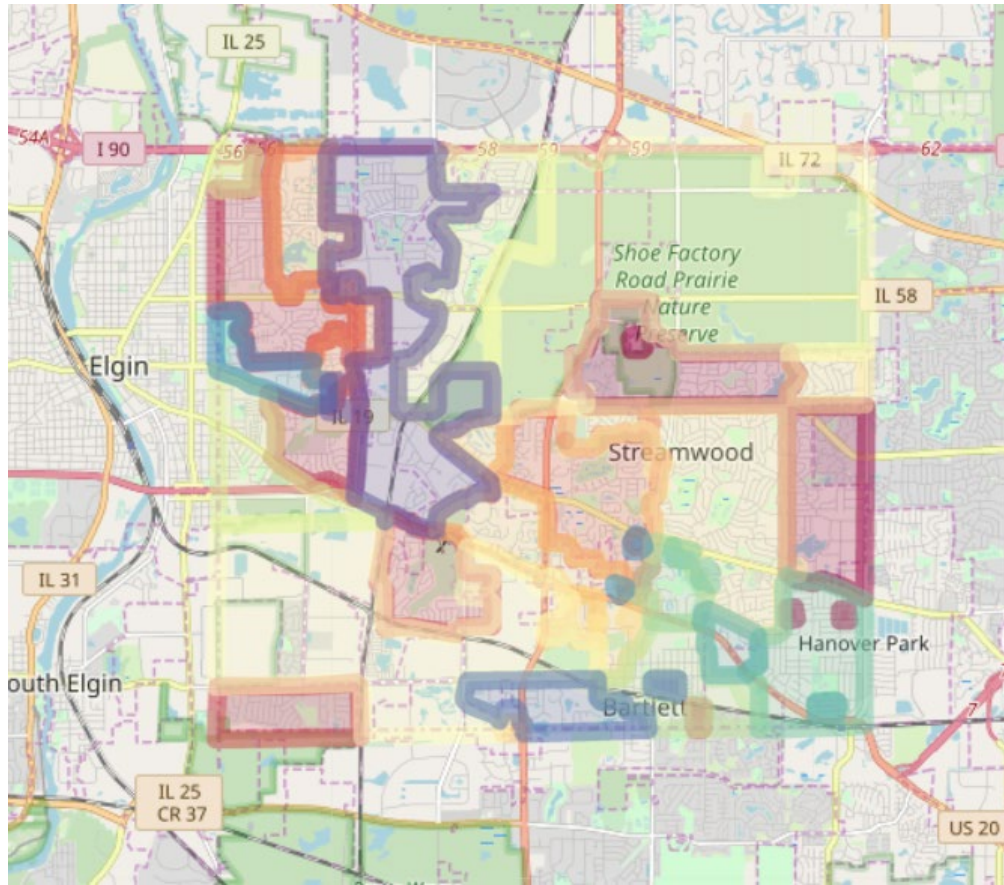
Hanover Township 2019 Residential Reassessment

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

- **Q. If the median % change in assessed value from 2016 to 2019 is 7.09% and the change in median assessed value is \$1,389, 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 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.

Neighborhood Locations/Codes

Hanover Township 2019 Residential Reassessment



Hanover is the 6th largest township in the north suburbs with 24,571 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. You can also view our **interactive map** of data for each neighborhood in Hanover, at <https://www.cookcountyassessor.com/Resources/Valuation-Statistics.aspx>

Data: Neighborhoods 10-15

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Code	Sales in sample	Median ratio	Median sale price	Change in median sale price	% change in median sale price	Median assessed value	Change in median assessed value	% change in median assessed value
10	309	10%	\$174,500	\$4,500	3%	\$21,809	\$5,423	33%
11	276	10%	\$185,000	\$22,875	14%	\$17,876	\$2,226	14%
12	228	10%	\$267,500	\$7,500	3%	\$27,833	\$2,472	10%
13	208	10%	\$270,000	\$25,500	10%	\$25,243	\$2,514	11%
14	62	10%	\$224,000	\$10,000	5%	\$21,555	\$673	3%
15	87	10%	\$254,750	-\$14,250	-5%	\$26,553	\$1,688	7%

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.



Data: Neighborhoods 18-40

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Code	Sales in sample	Median ratio	Median sale price	Change in median sale price	% change in median sale price	Median assessed value	Change in median assessed value	% change in median assessed value
18	17	10%	\$452,500	\$72,425	19%	\$45,668	\$3,850	9%
19	130	10%	\$264,000	\$12,000	5%	\$32,786	\$9,208	39%
20	489	10%	\$189,500	\$14,500	8%	\$18,596	\$1,989	12%
30	21	10%	\$400,000	\$25,500	7%	\$39,164	-\$1,174	-3%
35	62	10%	\$407,250	\$19,750	5%	\$39,030	\$937	2%
40	44	10%	\$151,000	\$24,500	19%	\$15,048	\$821	6%

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.

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Data: Neighborhoods 50-90

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Code	Sales in sample	Median ratio	Median sale price	Change in median sale price	% change in median sale price	Median assessed value	Change in median assessed value	% change in median assessed value
50	64	10%	\$218,000	\$3,000	1%	\$21,876	\$3,091	16%
60	71	9%	\$125,251	\$9,751	8%	\$11,877	-\$1,380	-10%
70	188	10%	\$207,000	\$28,500	16%	\$19,770	\$2,702	16%
75	20	10%	\$242,500	\$12,500	5%	\$24,647	\$2,086	9%
80	11	11%	\$165,000	-\$13,000	-7%	\$16,942	-\$598	-3%
82	58	9%	\$286,000	\$28,500	11%	\$27,156	\$2,660	11%
90	132	10%	\$354,500	-\$5,500	-2%	\$36,287	\$1,290	4%

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.

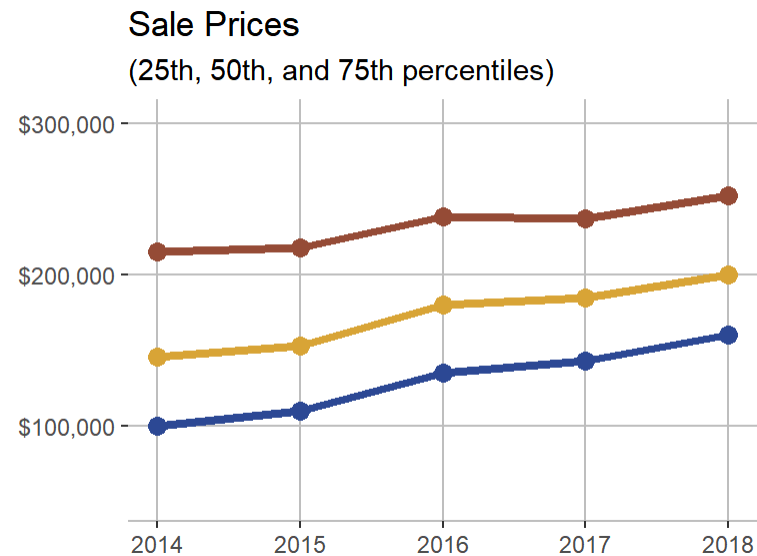
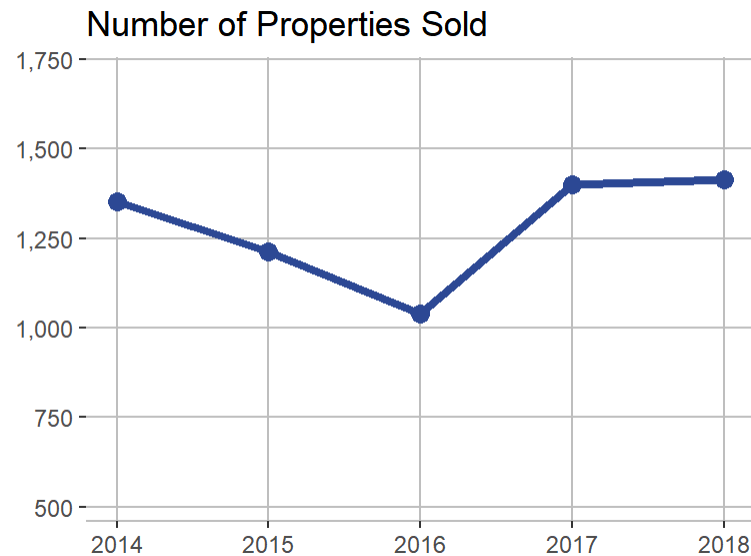
To see an interactive map of these neighborhoods and the above data, please visit cookcountyassessor.com/reporting.



Home Sale Trends

Hanover Township 2019 Residential Reassessment

The charts below summarize the market trends in Hanover 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.



Uniformity

Hanover Township 2019 Residential Reassessment

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.

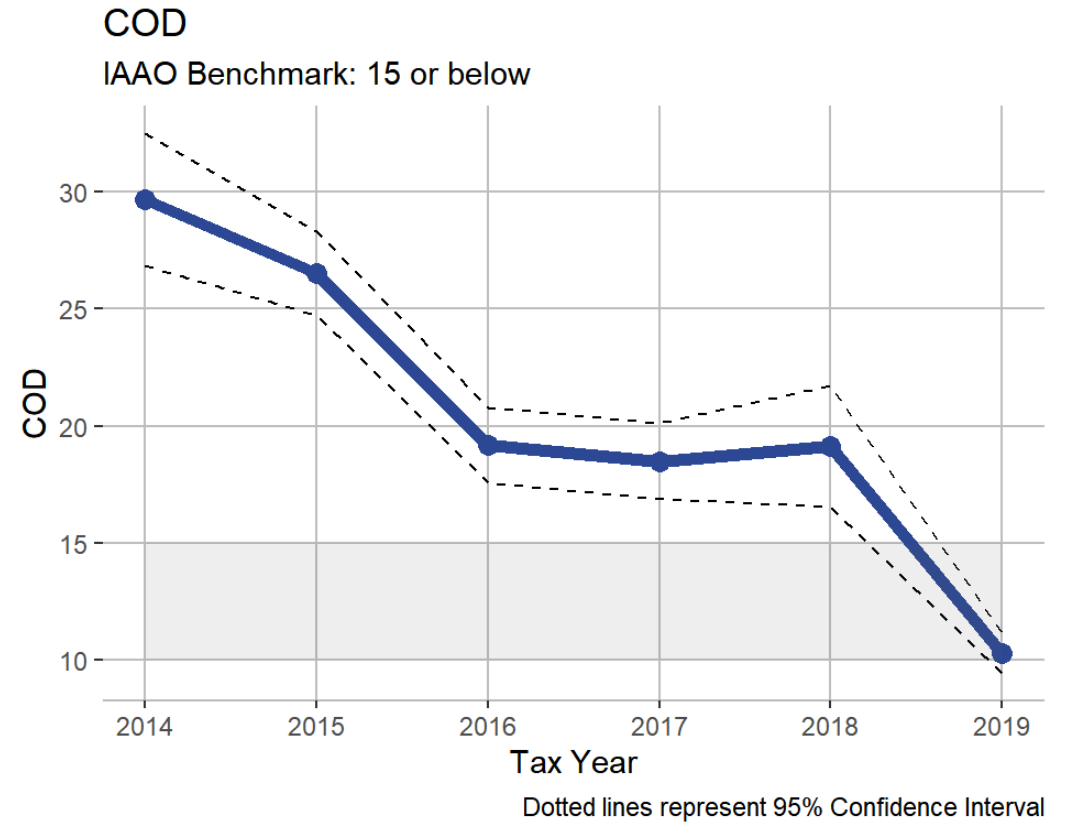
Category	Statistic	Target Range	Hanover Result	Standard Met
Variability	COD	5-15	10.29	Yes
Vertical Equity	PRD	0.98-1.03	1.02	Yes
Vertical Equity	PRB	-0.05-0.05	-0.08	No

Variability: COD

Hanover Township 2019 Residential Reassessment

Variability measures to what degree data points in a statistical distribution or data set diverge from the average.

This graph shows that our COD for the 2019 re-assessment for this township is 10.29. As it is statistically between 5 and 15, it is statistically within the IAAO standard for variability.

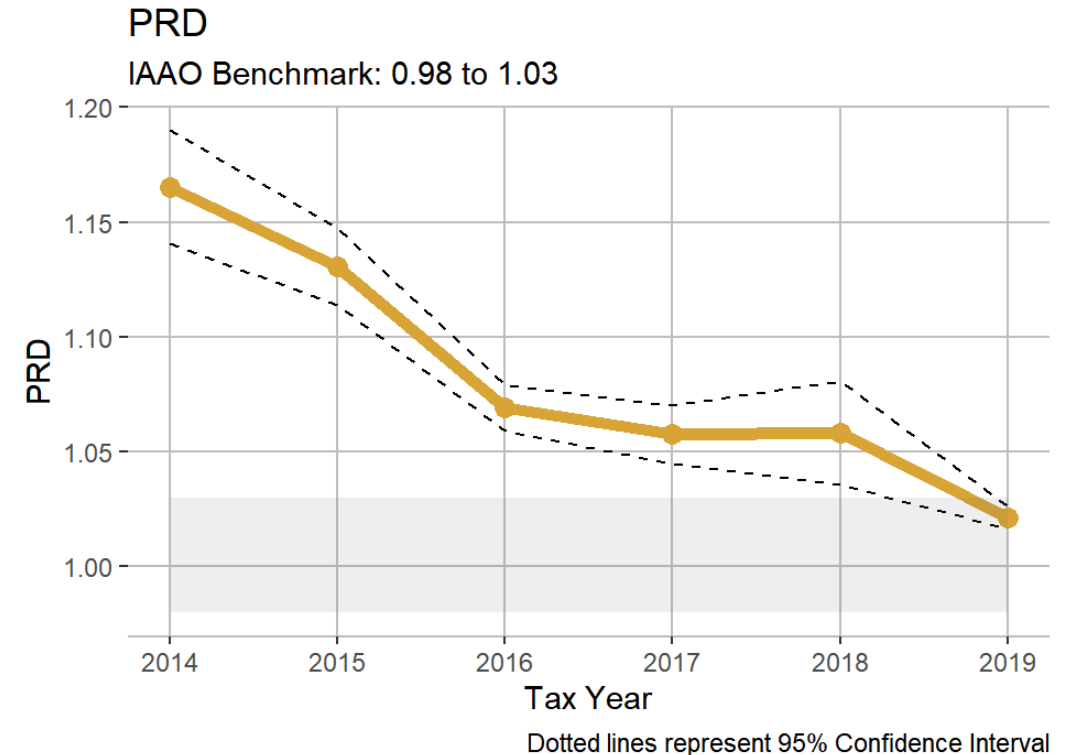


Vertical Equity 1: PRD

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

This graph shows that the PRD is 1.02 for our 2019 assessments of this township, which is not within the target range based on the confidence interval. The vertical equity component of the uniformity goal is not met.

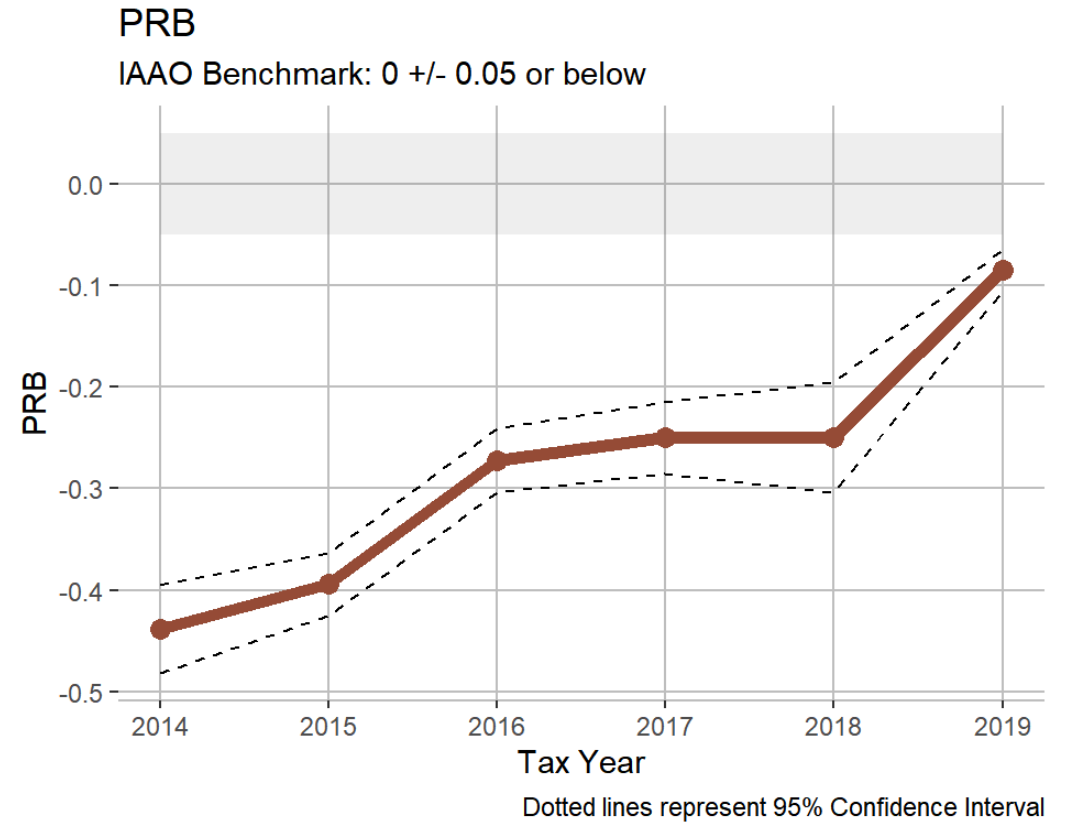


Vertical Equity 2: PRB

Hanover Township 2019 Residential Reassessment

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

This graph shows that the PRB for our 2019 assessment of this township is -0.08 .



Residential Property Conclusions

Hanover Township 2019 Residential Reassessment

With assessments that track market trends, met the industry standards for compliance, and met industry standards for uniformity, the CCAO has high confidence in the quality of the Hanover 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 Hanover 2019

Residential and Commercial

Assessed Values	Previous 2018 Assessed Value	2019 Assessed Value	% Increase
Industrial/Commercial	\$955,352,657	\$1,266,530,750	32.57%
Residential	\$608,480,725	\$686,979,688	12.90%
Total	\$1,563,833,382	\$1,953,510,438	24.92%

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 of fewer than six units), 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.

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