

## 2025 Property Tax Calculations in CCAO Commercial Mass Appraisal

The most important recommendation in the [Cook County commercial valuation study](#) (issued in December 2024) is for the Cook County Assessor's Office (CCAO) and Board of Review (BOR) to collaborate on setting estimated tax rates. If adopted, this recommendation could make assessments more accurate, more predictable, and more consistent.

The CCAO and the BOR agree to collaborate on tax rate estimates prior to the beginning of the 2026 reassessment of the south and west suburbs. The CCAO is also estimating tax rates for Tax Year 2025 in the North Suburbs for the purpose of commercial valuations. In the spirit of collaboration and transparency, the CCAO provides the following explainer.

Property tax expenses are one component of commercial real estate valuation. If tax expenses are inaccurate due to an inaccurate estimation of the tax rates, then the overall commercial assessments will be less accurate as a result.

Tax rates in Illinois reflect changes in both levies and assessments. When the tax base grows – which typically occurs during a reassessment, tax rates fall. Tax rates can be calculated using a property tax levy (the numerator) and tax base (denominator).

In 2025, the CCAO is estimating local tax rates for Tax Year 2025, incorporating data-driven estimates of growth in the tax base, to use in its 2025 revaluation of income-producing property in Cook County's North triad (North tri). A description of the method is below, with details in the appendix.

**Uniform Levy Growth Estimates:** The CCAO incorporated tax agency levy growth of 4% each year.

**Uniform AV Growth Estimates:** Based on statistical analyses of assessments from the Illinois Department of Revenue and the Cook County Commercial Valuation Study, the CCAO incorporated increases of 23.46% to Class 2 PINs, 68.35% to Class 3 PINs, and 39.30% to Class 5 PINs in the North Triad. **These increases are purely for the purpose of tax rate estimates and should not be considered estimates or predictions of the effects of the north suburban reassessment.**

**Local Tax Base Calculation:** Each tax base is different; Schaumburg's tax base is larger and more commercial than Barrington's, for example, and so would be more affected by a commercial Class 5 increase than Barrington (which is more residential, so would be more affected by a Class 2 increase). Tax bases were calculated using PINs with adjusted AVs as described above. This approach fairly applies uniform AV growth estimates as described above, while also reflecting granular, local tax base conditions of share of residential and non-residential AVs, exemptions, and TIFs. This produced a total estimated North Tri growth in taxable value of **28.7%**.

**Tax Rate Calculation:** Each agency's estimated tax rate was calculated by dividing its estimated levy (extension) by its estimated tax base. These individual agency rates were summed to produce cumulative tax rates per tax code.

There are over 1,000 tax codes in the North tri, each with their own cumulative tax rate. Below is a summary of the changes from Tax Year 2023 rates to estimated Tax Year 2025 rates.

In this calculation, estimated growth in tax bases exceeds estimated growth in levies. This results in a median estimated tax rate **decrease** of -1.336% from Tax Year 2023 to estimated Tax Year 2025 – a trend consistent with the historical trend of tax rate decreases after a reassessment.

|        | North Tri,<br>Tax Year 2023 | North Tri,<br>estimated Tax Year 2025 |
|--------|-----------------------------|---------------------------------------|
| Median | 9.076%                      | 7.757%                                |
| Range  | 5.597% to 18.136%           | 4.778% to 15.579%                     |

***Estimated tax as a component of commercial valuation***

The CCAO estimates the market value of the improved commercial (Class 3, Class 5, and incentive classes) properties primarily by implementing the Income Approach. The structure of the Income Approach is shown below with the Real Estate Tax Expense highlighted in yellow.

| Initial Reassessment<br>Income Approach |              |              |
|---|--------------|--------------|
| Square Feet                             | 6,637        |              |
| Rental Income                           | \$ 431,430   | \$ 65.00     |
| Other Income                            | \$ -         |              |
| Potential Gross Income                  | \$ 431,430   |              |
| Vacancy and Collection Loss             | 34,514       | 8.00%        |
| Effective Gross Income                  | 396,916      |              |
| Op. Expenses (excluding RE Tax)         | 79,383       | 20.00%       |
| Real Estate Tax Expenses                | 130,692      | 32.93%       |
| Total Operating Expenses                | 210,075      | 52.93%       |
| Net Operating Income                    | 186,841      |              |
| Capitalization Rate                     | 7.50%        |              |
| Market Value                            | \$ 2,491,213 |              |
| Market Value / SF(Unit)                 | \$ 375.35    |              |
| Excess Land Value                       | \$ -         | ROUNDED      |
| Market Value (w/ Excess Land)           | \$ 2,491,213 | \$ 2,491,000 |



As shown above the Real Estate Tax Expense is one of the Total Operating Expenses and can greatly affect the Net Operating Income (NOI). The calculation of the Real Estate Tax Expense is shown below with the Tax Rate highlighted in yellow.

| Initial Reassessment<br>Real Estate Tax Expense Calculation |               |
|---|---------------|
| Market Value (excluding Excess Land)                        | 2,491,213     |
| Level of Assessment   | 25%           |
| Most Recent Final Multiplier                                | 3.0163        |
| <b>Estimated Tax Rate</b>                                   | <b>6.957%</b> |
| Real Estate Tax Expense                                     | 130,692       |

Thus, if the Estimated Tax Rate is too high, the CCAO's Initial Reassessments for commercial properties could have an underestimated market value.

**(Overestimated Tax Rate --> Overestimated Real Estate Tax Expense --> Overestimated Total Operating Expense --> Underestimated NOI --> Underestimated Market Value)**

Likewise, if the Estimated Tax Rate is too low, the CCAO's Initial Reassessments for commercial properties could have an overestimated market value.

## Appendix. Method of tax rate estimation

### 1.1 Uniform changes to North triad tax levies

The CCAO applied a uniform change of 4% increase per year to prior levy amounts for all taxing agencies in the North triad. This results in agency-level total taxes to collect, which form the numerator in each agency's property tax rate calculation.

### 1.2 Uniform changes to North triad tax bases informed by ratio statistics

Changes to Assessed Values can be estimated using ratio statistics. Ratio statistics are an analytical tool used to measure assessment performance by comparing assessed values to sale prices of sold properties. Specifically, the statistic **median ratio** quantifies whether assessments are typically close to 100% of the sale price of the property, or whether they are, for example, below sale prices (80%) or above sale prices (120%).

If, for example, a median sales ratio is 90%, then this indicates that for properties that have sold, their assessments are typically 10% lower than their sale prices. To get to a ratio of 100% accuracy, we can calculate what an increase would be by taking  $(100\% - 90\%) \div 90\% = 10\% \div 90\% = 11\%$ . This means that property assessments meeting a ratio of 90% could achieve a ratio of 100% if their assessments increased 11%.

The Illinois Department of Revenue<sup>1</sup> and the Cook County Commercial Valuation Study<sup>2</sup> have both produced ratio statistics that provide a data-driven way to inform the below AV changes that are consistently applied consistently to all Major Class 2, 3, and 5 properties.

| Source  | Major Class Code | Level of Assessment | Assessment Ratio | FMV Ratio | AV changes    |
|---|------------------|---------------------|------------------|-----------|---------------|
| IDOR 2023 Ratios, Cook County District 2            | <b>2</b>         | 0.1                 | 8.10%            | 81.0%     | <b>23.46%</b> |
| IDOR 2023 Ratios, Cook County District 2            | <b>3</b>         | 0.1                 | 5.94%            | 59.4%     | <b>68.35%</b> |
| County study, Appendix Table 16: North Tri, class 5 | <b>5A, 5B</b>    | 0.25                | --               | 71.79%    | <b>39.30%</b> |

The data-driven approach uniformly applies increases of 23.46% to Class 2, 68.35% to Class 3, and 39.30% to Class 5A and 5B PINs in the North Triad. Note that these years are the most current years of ratio statistics available from these sources. Because these are ratio statistics using prior years, these may be a conservative estimate of increases.

<sup>1</sup>

<https://tax.illinois.gov/content/dam/soi/en/web/tax/research/taxstats/propertytaxstatistics/documents/2022%20TABLE%201.pdf>

<sup>2</sup> <https://www.cookcountyil.gov/service/property-tax-reform-group>

**1.3 Local conditions**

Each tax base is different. Local (cumulative) tax rates are affected by local property tax bases and local tax levies. For example:

- Schaumburg’s total Assessed Value (AV) is large, with slightly more of its AV in non-residential, rather than residential, property classes. Its tax base will be affected mostly by Class 3 and 5 AV changes, and to a lesser extent affected by residential Class 2 AV changes.
  - Schaumburg property owners also pay property taxes that are affected most by local school and village taxing agencies, as well as local TIFs and exemptions.
- Barrington’s total AV is less than Schaumburg’s, and comprised primarily of residential AV. This means its tax base will be most affected by the Class 2 AV change, and less affected by the Class 3 and 5 AV changes.
  - Barrington property owners pay property taxes that are affected most by local school and village taxing agencies, as well as TIFs and exemptions.

To produce a tax base (Equalized Assessed Value, or EAV) for each North tri taxing agency, the CCAO applied the AV increases to North tri-PINs, subtracted the effects of exemptions and TIFs, and produced agency-level EAVs. These EAVs form the denominator in the agency tax rate calculation.

Using this method, the North tri total EAV grows a total of 28.7% for the purpose of this tax rate estimate.

**1.4 Estimated tax rates**

Each agency’s rate equals its levy numerator divided by its tax base denominator. Local cumulative tax rates, per tax code, sum up the rates of all the agencies associated with that tax code. This produced one cumulative tax rate per each of the 1,157 tax codes in the North tri.

Compared to the North triad’s median Tax Year 2023 rate of 9.076%, these estimates produced a median North tri tax rate of 7.757%, a decrease of -1.336%. The full list of cumulative tax rates for each tax code is available for download.

|               | North Tri,<br>Tax Year 2023 | North Tri,<br>estimated Tax Year 2025 |
|---------------|-----------------------------|---------------------------------------|
| <b>Median</b> | <b>9.076%</b>               | <b>7.757%</b>                         |
| <b>Range</b>  | <b>5.597% to 18.136%</b>    | <b>4.778% to 15.579%</b>              |