The Assessor's Method: A Field Guide for Property-Tax Attorneys

How Illinois assessors are trained to set the number — the three approaches to value, level of assessment, equalization, and the Coefficient of Dispersion — and the concrete appeal opening each method creates.

The assessor's number is not a verdict. It is the output of a method — a method the State of Illinois teaches in writing, in the same manuals every Chief County Assessment Officer, township assessor, and Board of Review member studies to hold office. The Illinois Department of Revenue (IDOR) distributes those assessment manuals and provides the training to local officials. Read the doctrine carefully and a quiet truth surfaces: every approach to value the State endorses carries an embedded assumption, and every assumption is a place an over-assessment can hide.

This is a practitioner reference for the firm that litigates and negotiates assessments — written from the assessor's own playbook, then turned around to show where the playbook leaves the door open. We do not hedge. An inflated assessment quietly inflates the bill every year it stands, and the owner pays it on autopilot until someone with the method in hand challenges the number. That someone is counsel. This guide is the field manual.

The short version

- The State trains assessors to set value with **three approaches** — sales comparison, cost, and income — then apply a **level of assessment** and an **equalization** multiplier. Each step carries an assumption, and each assumption is an appeal opening.
- **Sales comparison → bad comps.** The number is only as good as the comparables, and the State's own grounds name "higher than similar neighboring properties" as a valid complaint.
- **Cost → stale replacement cost and under-counted depreciation.** Market Value = Land + (Replacement Cost New − Depreciation); mass appraisal misses functional and economic obsolescence unless someone documents it.
- **Income → aggressive assumptions and a cap rate set too low.** V = I ÷ R; every line of the net-operating-income waterfall is an estimate, and because value is income *divided* by the rate, a low rate multiplies the result.
- **Level / equalization → a non-uniform level.** The State calls assessment uniformity "the foundation of assessment practices" and makes it measurable with the sales-ratio study and the **Coefficient of Dispersion (COD).** A property can be valued plausibly in isolation yet still be over-assessed *relative to its peers* — and that, by the State's own standard, is correctable.
- Income property is overwhelmingly entity-held, and at the Board of Review entities generally appear through a licensed attorney. These openings are frequently attorney work from the start.

What "Value" Means Before Any Method Runs

Start where the manuals start. Most real property in Illinois must be assessed on its value in the open market, and the State defines **market value** as "the most probable sale price of a property in terms of money in a competitive and open market, assuming that the buyer and seller are acting prudently and knowledgeably, allowing sufficient time for the sale, and assuming that the price is not affected by undue stimulus."

Two principles sit underneath all three approaches. The **principle of substitution** holds that a buyer is not justified in paying more for a property than it would cost to acquire an equally desirable substitute. And before value is even estimated, the **highest and best use** must be determined — "that use that will produce the highest net return to the land for a given period of time, within the limits of those uses which are economically feasible, probable, and legally permissible."

Why does this matter to counsel? Because the assessment is, per the Property Tax Code, "the basis for determining what portion of the total tax burden each property owner as of January 1 will bear." The owner is appealing the **assessed value**, not the tax bill — and as the State puts it, "Tax rates are not an issue in the appeal process, only the amount of the assessment." If the method produced the wrong value, the bill is wrong, and it stays wrong until the value is corrected. The State says assessors "use one or more of the following three basic approaches": sales comparison, cost, and income. We take them in turn.

Approach One: Sales Comparison (Market Approach)

The **sales comparison, or market, approach** is, in the State's words, "calculating the value of properties by observing and analyzing the selling prices of comparable properties." It leans directly on the principle of substitution and is the workhorse for residential property. The assessor identifies recently sold properties similar to the subject (**comparables**), then adjusts for differences. Note the reach of this method: even in the cost approach, "the land value is usually estimated by using the sales comparison, or market approach." The **units of comparison** the State teaches — front foot, square foot, and site value — are how raw sale prices get normalized into a per-unit indicator.

The appeal opening it creates: bad comps. The method is only as good as the comparables feeding it, and the State's own list of valid appeal grounds names the failure points directly. A formal complaint may be filed where "the assessor's market value is higher than the actual market value" — supportable, the State says, "if the property has recently been purchased on the open market or if a professional appraisal is supplied" — or where "the assessment is higher than those of similar neighboring properties."

The comparables the assessor relied on may not be comparable — wrong condition, wrong size, wrong submarket, or sales that fail the **arm's-length** test the State defines as "a sale between two parties, neither of whom is related to or under abnormal pressure from the other." A distressed sale, an intra-family transfer, or a stale comparable is not a clean indicator of market value, yet it can sit inside the assessor's mass-appraisal output unexamined. For counsel, the move is to rebuild the comp set on the firm's terms and present, as the State's evidence checklist recommends, "a list of recent sales of comparable properties, including photographs, PRCs, and evidence of the sale prices." When the better comp set produces a lower indication of value, the bad-comp assessment is exposed — not as a guarantee of any outcome, but as a documented, method-grounded challenge.

Approach Two: Cost (Land + RCN − Depreciation)

The **cost approach** is the State's structural method, governed by one formula every assessor learns verbatim:

> **Market Value = Land Value + (Replacement Cost New − Depreciation)**

The State defines it as "estimating the value of land as vacant and then estimating the depreciated cost of replacing the improvement." Three moving parts, each independently attackable:

1. **Land Value** — "usually estimated by using the sales comparison, or market approach." (Per the State, *land does not depreciate.*)
2. **Replacement Cost New (RCN)** — "the current cost of constructing improvements having utility equal to that of the subject improvements." The State distinguishes replacement cost (equal utility) from reproduction cost (an exact replica), and adjusts the manual cost by a **cost factor** — "used to adjust the cost schedules for differences in local construction labor and material rates."
3. **Depreciation** — "loss of value from any cause," in three types: **physical** (wear and tear), **functional obsolescence** (poor design, excessive frills), and **economic (external) obsolescence** (factors outside the property), each **curable** or **incurable.**

Depreciation is tied to **effective age** — "the age of an improvement based on the improvement's CDU rating" (condition, desirability, utility) — which "does not always equal actual age," and to **remaining economic life (REL)**, where the State's identity is plain: **%REL + %Depreciation = 100% of market value.**

The appeal opening it creates: stale cost and under-counted depreciation. Two soft joints, both favoring over-assessment when neglected. **Stale RCN:** cost schedules and factors drift; an out-of-date figure, or a reproduction-cost number where a lower-utility replacement was the right standard, comes in high. **Under-counted depreciation:** mass appraisal applies *normal* age depreciation; on its own it does not see the functional obsolescence of a dated floor plan or the economic obsolescence of an external nuisance. The State's own evidence list invites "a photograph of elements detracting from the value of the property not shown on the [property record card] and an estimate, in terms of dollars, of their negative effect on the market value" — an explicit instruction to monetize the obsolescence the schedules missed. A property record card showing a too-young effective age, an external obsolescence the CDU never captured, or a cost factor that no longer matches local construction costs — each is a method-grounded crack in the cost number.

Approach Three: Income (IRV)

The **income approach** values income-producing property by "calculating the present worth of the income from an income-producing property." Its engine is **capitalization** — "a mathematical process for converting the net income produced by a property into an indication of value" — expressed in the **IRV formula**:

> **V = I ÷ R** — Value equals net income divided by the capitalization rate.

The income figure is not gross rent. The State builds **Net Operating Income** through a disciplined waterfall:

Potential Gross Income (100% capacity at economic rent)

− Vacancy & Collection Loss

\+ Miscellaneous Income

= **Effective Gross Income**

− Allowable Expenses

− Reserve for Replacement

= **Net Operating Income**

And the State is explicit about what does *not* count: for assessment purposes, "depreciation, mortgage interest, and property taxes are not allowable expenses." The **capitalization rate (R)** is itself a stack — the discount rate (return *on* investment), the recapture rate (return *of* investment, tied to remaining economic life, found by "dividing 100 (percent) by the REL of the building"), and the **effective tax rate**, "found by multiplying the level of assessments by the current local (aggregate) tax rate."

The appeal opening it creates: aggressive income assumptions. Every input in that waterfall is an assumption, and the income approach is where an over-assessment hides behind a spreadsheet that *looks* rigorous:

- **Potential Gross Income inflated** — asking rents used instead of achievable economic rent.
- **Vacancy and collection loss understated** — an allowance below the property's real, sustained experience pushes value up.
- **Expenses and reserves under-counted** — thin operating expenses or a missing reserve for replacement inflate net income directly.
- **Cap rate too low** — because V = I ÷ R, a rate set too low *multiplies* the value; a shrinking divisor balloons the assessment.

For counsel handling commercial, multifamily, or other income property, the work is to reconstruct the income statement on real, defensible figures and hold the assessor's pro forma against the State's own definitions of each input. Income property is overwhelmingly entity-owned, which carries the representation consequences addressed below.

The Number Behind the Number: Level of Assessment and Equalization

Knowing market value is only half the assessment. The **assessed value** is "the value placed upon property after multiplying its market value by the level of assessment." Statewide, the statutory level is one-third — 33 1/3 percent of market value, unless set otherwise by law. Cook County sets it otherwise: under the **Cook County classification ordinance** (a county-level rule, not part of the IDOR training manuals), property is assessed at different percentages by class — for example, Class 2 residential at 10% of market value and Class 5 commercial and industrial at 25%. Treat those class percentages as a county ordinance figure and confirm the current ordinance before relying on them.

Then comes **equalization** — "the application of a uniform percentage increase or decrease to assessed values of various areas or classes of property to bring assessment levels, on the average, to a uniform level of market value." The instrument is the **equalization factor** (the "multiplier"):

> **Equalization Factor = Desired Level (33.33%) ÷ Prior 3-Year Average Median Level**

Multiply assessed value by the equalization factor and you get **Equalized Assessed Value (EAV)** — the value, after qualified homestead exemptions are removed, from which the tax rate is actually computed. The multiplier is a per-county, per-year certified figure: for the **2024 tax year of record**, IDOR's final certified Cook County multiplier was **3.0355** (from IDOR's annual multiplier certification, external to the training manuals). Multipliers, class percentages, and deadlines are jurisdiction- and year-specific — always verify the current certified figure before relying on it.

The appeal opening it creates: a non-uniform level. This ground has nothing to do with whether the assessor's market value is right and everything to do with **fairness across the roll.** The State lists it among the valid bases for a formal complaint: "The assessed value is at a higher percentage of market value for the property than the prevailing township or county median level, as shown in an assessment/sales ratio study." The State calls **assessment uniformity** — "the degree to which different properties are assessed at equal percentages of Market Value" — "the foundation of Assessment practices," and the Board of Review's statutory charge (Section 16-55) is that "in no case shall the property be assessed at a higher percentage of fair cash value than other property in the assessment district."

Uniformity as a Measurable Standard: The Sales Ratio and the Coefficient of Dispersion

Uniformity is not a feeling. The State teaches it as statistics, and counsel who speak that language argue on the assessor's home field.

The **sales ratio study** is "an analysis of the percentage relationship of assessed value (AV) to market value," requiring a "minimum of 25 useable sales/appraisals." The per-sale ratio is **(Prior Year Assessed Value ÷ Current Year Sale Price) × 100%**, and the **level of assessments** is the median of those ratios — where a township or class is *actually* being assessed, regardless of the statutory level.

Then the measure that matters most: the **Coefficient of Dispersion (COD)** — "a statistical measure of variation of individual assessment ratios around the median level of assessments (an average error expressed as a percent)," which the State calls "the most common method used in measuring assessment uniformity."

COD = (Average Deviation ÷ Median) × 100%

A low COD means ratios cluster tightly around the median — assessments are uniform. A high COD means they scatter, and some properties carry a heavier share of the burden than others assessed at the same supposed level. For the firm, the COD is the bridge from a single property to a systemic argument. When the subject's sales ratio sits well above the median level — and the COD shows the district isn't uniform — the uniformity ground stops being rhetoric and becomes a measured standard the Board is statutorily obligated to honor. This is the appeal that survives even when the assessor's market value is arguably defensible.

The Method, Mapped to the Motion

Pull the four openings together and you have a working triage for any book of property:

Approach the assessor used	Embedded assumption	The appeal opening	Evidence the State itself invites
Sales comparison	The comparables are truly comparable and arm's-length	Bad comps; non-comparable or distressed sales	Recent comparable sales with photos, PRCs, sale-price evidence
Cost	RCN and depreciation are current and complete	Stale cost factor; under-counted functional/economic obsolescence	PRC showing effective age; photos of value-detracting elements with a dollar estimate
Income (IRV)	PGI, vacancy, expenses, and cap rate are market-real	Aggressive income assumptions; cap rate too low	Actual rent roll, true vacancy, full expenses/reserves, market cap rate
Level / equalization	The property is assessed at the same percentage as its peers	Non-uniform level	Sales-ratio study; COD showing the district isn't uniform

None of these is a promise of a result. Each is a method-grounded reason to review — and the firm that runs this triage across an entire book, before the assessment notices land, is the firm that knows which parcels are worth the motion and which are not.

A Word on Representation — and Who Belongs at the Board

The appeal mechanics are statutory. The owner appeals the assessed value, not the bill; the informal path runs through the local assessing official, the formal path runs to the county Board of Review, with onward review to the **Property Tax Appeal Board (PTAB)** — "the highest state quasi-judicial body which hears appeals from taxpayers and taxing bodies" — or a tax-objection complaint in circuit court.

One real-world rule sits outside the IDOR training manuals but shapes who can stand at the Board: Board of Review rules in many jurisdictions — including Cook County — require that corporations, LLCs, and similarly organized entities be represented by a licensed attorney rather than by a non-attorney officer or employee. The specifics vary by board and by entity form, so confirm the current rules of the board where the property sits. As a practical matter, this is a place for the firm, not for an entity owner improvising. Income property is overwhelmingly entity-held, which means the income-approach openings above are frequently attorney work from the start — and even individual owners are well served by counsel who can marshal the sales-ratio and COD arguments the State's own doctrine rewards.

Where Censum Fits

Censum knows the State's method cold — and we built the rails so your firm can run the work at scale without rebuilding any of it.

We are not your co-counsel and we are not the county. **Censum is independent property-tax intelligence and the filing rails your firm files on under its own code.** The firm remains counsel of record; Censum is the Merchant of Record for the platform — never counsel, never the assessor, never the taxing body. Pricing is flat and per-seat, never a percentage of any result. The intelligence layer maps your book against the assessor's own method — which parcels show a sales ratio above the median level, which carry effective ages that don't match actual condition, which income assumptions look aggressive against market — so your attorneys spend their hours on the motions that earn them, not on triage.

The method above is the assessor's. The rails are ours. The judgment stays with your firm.

Methodology and sources

Every technical claim in this guide is drawn from the Illinois Department of Revenue's assessor-training material — *Introduction to Residential Assessment Practices* (PTAX-1-A) and the Department's *Glossaries and Formulas* for land valuation, math for assessing officials, and sales-ratio studies — quoted and paraphrased faithfully. Two Cook County figures come from outside that training corpus and are flagged where they appear: the class assessment percentages (the Cook County classification ordinance) and the year's equalization multiplier (IDOR's annual multiplier certification). The strategic framing — where each method bends into an appeal opening — is Censum's.

Important caveats

Assessment rules, class percentages, equalization multipliers, appeal grounds, and Board of Review representation requirements are jurisdiction- and year-specific; confirm the current figures and rules for the board where the property sits before relying on them. Nothing in this guide is a prediction or guarantee of any individual appeal outcome — the openings described are method-grounded reasons to review, not promised results. Censum is an independent property-tax intelligence and filing-rails vendor and Merchant of Record; it is not a law firm, not counsel of record, not the county, and not affiliated with any government agency. Nothing here is legal or tax advice.