About this publication

Property tax is the largest single tax in the state of Illinois. It is also a major source of revenue for local government taxing districts. Every person and business in Illinois is affected by property taxes, whether by paying the tax or receiving services or benefits paid for by property taxes.

When Illinois became a state in 1818, the constitution contained a provision for taxing property in direct proportion to the value of the property. From 1818 to 1930, amendments to the constitution provided the state with various powers concerning property taxation. The last year the state levied real estate taxes was 1932. Since then, property taxes have been levied at the local level.

Property tax is governed by the Property Tax Code, 35 ILCS 200/1-1 through 32 20. It is a local tax imposed by local government taxing districts (e.g., schools, municipalities, counties). Revenues from property tax are collected and spent at the local level. Property taxes are raised, spent, and distributed locally. Property taxation produces more than three-fourths of the total tax revenue and finances a major part of the services provided by local governmental units which benefit citizens and their property. The largest share of property tax goes to school districts.

There are 102 counties in Illinois. Most counties, referred to as township counties, have a township level of government. There are 17 counties, called commission counties, which do not have the township form of government. The supervisor of assessments has the primary assessment responsibility in commission counties.

Property can be divided into two classes – real and personal. Real property is land and anything permanently attached to the land (e.g., buildings and fixtures permanently or constructively attached to a building). Personal property is all property that is not real property (e.g., automobiles, livestock, money). In Illinois, taxpayers pay property taxes only on their real property.

This publication is designed to explain, in general terms, the sales ratio and equalization procedures authorized by statute and the people and agencies responsible. It is not a definitive interpretation of property tax law. Local assessment officials are the resource for specific factual information about property taxes. The applicable Illinois laws can be reviewed in the Illinois Property Tax Code.

Note: See “Illinois Property Tax System” publication on our Web site for general information about Illinois property assessment and billing procedures.
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### Acronyms

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<th>Term</th>
<th>Abbreviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board of Review</td>
<td>BOR</td>
</tr>
<tr>
<td>Chief County Assessment Officer</td>
<td>CCAO</td>
</tr>
<tr>
<td>Coefficient of concentration</td>
<td>COC</td>
</tr>
<tr>
<td>Coefficient of dispersion</td>
<td>COD</td>
</tr>
<tr>
<td>Coefficient on variation</td>
<td>COV</td>
</tr>
<tr>
<td>Equalized assessed value</td>
<td>EAV</td>
</tr>
<tr>
<td>Illinois Department of Revenue</td>
<td>IDOR</td>
</tr>
<tr>
<td>Median absolute deviation</td>
<td>MAD</td>
</tr>
<tr>
<td>Price-related differential</td>
<td>PRD</td>
</tr>
<tr>
<td>Real Estate Transfer Declaration</td>
<td>RETD</td>
</tr>
<tr>
<td>State Property Tax Appeal Board</td>
<td>PTAB</td>
</tr>
</tbody>
</table>
**Glossary of terms**

**Ad valorem** - According to value.

**Appraisal** - Opinion of value supported by evidence.

**Arm’s length sale** - Sale between two parties, neither is related to or under abnormal pressure from the other.

**Assessed value** - Value placed upon property after multiplying its market value by the level of assessment.

**Assessment** - Official act of discovering, listing, appraising, and entering a value for property on the assessment rolls for ad valorem tax.

**Assessment level** - Percentage of full value at which property is being assessed. This may refer to the statutory level (33 1/3 percent) or the actual level as inferred from a sales ratio study.

**Board of Review (BOR)** - Appeal agency in each county, consists of 3 members; commission counties - county commissioners; in other counties members are appointed by the county board, or are elected.

**Classification** - Practice of classifying various types of property according to use, and assigning different assessment levels to each class. Purpose is to tax various kinds of property at different effective tax rates though the nominal rate is the same.

**Coefficient of concentration (COC)** - Percentage of observations falling within 10 percent of the median level of assessments. A high COC indicates more uniformity.

**Coefficient of dispersion (COD)** - Statistical measure of variation of individual assessment ratios around the median level of assessments: Average error expressed as a percent (%); Indicator of assessment uniformity found by dividing the average deviation by the median.

**Coefficient of variation (COV)** - Statistical measure of variation of individual assessment ratios around the mean assessment ratio.

**Effective tax rate** - Ratio of taxes billed to market value. Generally found by multiplying the level of assessment by the local current tax rate. Expressed as a percentage, applied to the full market value (if level of assessments is 33 1/3 percent and the local rate is 6 percent; Effective Tax Rate = 2 percent; if market value $90,000, tax = $1,800).

**Equalization** - Application of a uniform percent 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.

**Equalization factor** - Factor applied to assessed valuation of each county that raises or lowers the level of assessments to the mandated level of 33 1/3 percent of market value (intra-county factors may be used by a county to bring all property to a uniform level. Factors are sometimes referred to as multipliers. Not applied to farm land, buildings and coal rights.

**Equalized assessed value (EAV)** - Assessed value multiplied by any applicable equalization factor; can form tax base from which tax rate is calculated; for farm acreage, farm buildings, and coal rights the final assessed value is the equalized value.

**Exemption** - Removal of property from the tax base; may be a partial (a homestead) or complete (church building used exclusively for religious use).

**Extension** - Process in which the county clerk determines the tax rate needed to raise the revenue (levy) certified by each taxing district. The actual dollar amount billed to property taxpayers in district.

**General assessment year** - Assessment year that occurs every 4 years in which all property assessments are reviewed, formerly known as quadrennial year.

**Level of assessments** - Ratio of assessed value to the sale price.

**Levy** - Money a taxing body certifies to be raised from the property tax to meet its operating expenses.
Glossary of terms

Market value (full value) - 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 transaction is not affected by undue pressures.

Mean - An arithmetic average.

Median - Middle value of a group of numbers after they have been ranked.

Median absolute deviation (MAD) - Median of the absolute deviations from the median as a percentage of the median.

Mode - Number that occurs most frequently in a set of numbers.

Outlier - Observations that have unusual values, that is, differ markedly from the median.

Overlapping taxing districts - Taxing districts that are located in more than one county.

Price-related differential (PRD) - Measures a pattern of inequity in assessments related to the value of property.

Quartiles - Values that divide a set of data into four equal parts (25%, 50%, 75%, 100%) when the data are arrayed in ascending order.

Sales ratio study - Analysis of the percentage relationship of assessed value (AV) to market value; ratio equals prior year assessed value divided by the current year sales price (SP) (Minimum of 25 useable sales/appraisals required).

State Property Tax Appeal Board (PTAB) - Highest state quasi-judicial body which hears appeals from taxpayers and taxing bodies on property tax assessment decisions by the county Board of Review.

Tax base - Composed of the equalized assessed value (EAV) of all locally assessed property, less all qualified exemptions, plus the value of any state assessed property.

Tax rate - Amount of tax due stated as a percentage of the tax base, derived by dividing the levy by the EAV. Some districts have a maximum statutory rate; the sum of the fund rates equals the total district rate.

Tax year - Refers to the year of assessment.

Taxing body - Governmental organization that levies a property tax.

Taxing district - Territorial area under the taxing body’s jurisdiction.

$33\frac{1}{3}\%$ - Means $33\frac{1}{3}$ percent of the actual value of real property as determined by IDOR's assessment/sales ratio studies for the 3 most recent years preceding the assessment year, adjusted to take into account the implementation of any changes in assessment levels since the data for such studies were calculated.

Urban weighted method - Non-farm values; used in determining a county’s median level of assessment by dividing the county's total assessed value (AV) by the county's total estimate of full value (EFV); this is the preferred method of calculating a county multiplier.

Useable sales/appraisals - Those sales that reflect the definition of “market value”
What is property tax?

Property Tax is a tax based on the value of a property. For this reason it is often called an ad valorem tax. (i.e., according to value). Property tax is a local tax imposed by local government taxing districts (e.g., school districts, municipalities, counties) and administered by local officials (e.g., township assessors, Chief County Assessment Officers (CCAOs), local Boards of Review (BORs), county collectors). Property taxes are also collected and spent at the local level. The state of Illinois does not have a state property tax.

What is “market value”?

“Market value” is the most probable sale price (in terms of money) in a competitive, open market. This is under the assumption both buyer and seller are acting prudently and knowledgeably, and allowing sufficient time for the transaction which is not affected by undue pressures.

In Illinois, most real property must be assessed based on its market value. The Illinois Property Tax Code uses the term “fair cash value” to describe market value.

How is fair cash value determined?

Fair cash value is determined by using one or more of the following methods:

- **Market data**: Comparison of similar, neighboring properties recently sold to the property being assessed.
- **Cost**: Calculation of the cost to reproduce (or rebuild) a property, subtracted by the depreciation (e.g., wear and tear, age) amount, plus the land value.
- **Income**: The present worth of the income from an income-producing property is calculated by measuring the amount, quality, and durability of the future net income the property can be expected to return to an investor.

Illinois law requires farmland to be reassessed each year and all other property must be viewed, inspected, and revalued every four years. The only exception is for Cook County, which has a three-year reassessment cycle. The general assessment date is January 1. This is also the date the assessment cycle begins for all real property which must be valued as to its condition at that time. Local assessment officials may revalue property at any time if its value is incorrect.

Once market value has been determined, assessors put a value on the property for the tax assessment books. This value should be $33\frac{1}{3} \text{ percent of the fair cash value. For example, if the fair cash value of a property is } $150,000, and the county level of assessments is at the statutory level of $33\frac{1}{3} \text{ percent, the assessed value of the property to be entered in the assessment books would be } $50,000.$
Sales Ratio Studies

A sales ratio study compares a property's assessed value as of January 1 in one year to its selling price in the following year. For example, the assessed value of property as of January 1, 2008, is compared to its selling price in 2009. The sales ratio is the prior year's assessed value (e.g., 2008) divided by the current year's selling price (e.g., 2009).

What is the purpose of a sales ratio study?
The sales ratio study shows whether assessments within a given area actually average $33\frac{1}{3}$ percent of the market value. If the study results in something other than $33\frac{1}{3}$ percent, a blanket percentage change (increase or decrease), called an “equalization factor” or “multiplier”, is applied to all non-farm property to bring the level of assessments to $33\frac{1}{3}$ percent.

In addition to its value in determining inter-county equalization factors, an assessment/sales ratio study is a useful tool for local assessing officials in their efforts to achieve assessment uniformity; Comparison of median assessment levels for townships or property categories within a county can reveal a lack of uniformity among categories or geographic areas within the county. This lack of uniformity can often be remedied by intra-county equalization, which may raise the average assessment level in some townships, areas, or categories and lower it in others, until all are at the average assessment level of the county.

In addition to supplying information about average assessment levels, the study can also provide knowledge of the degree of uniformity, or degree of divergence from the average, in the assessments of individual parcels within a district. The closeness of individual assessments to the average assessment level is just as important to a property owner as the level itself.

What is the sales ratio study process?

Step 1: County recorded RETDs are sent to IDOR.
When property is sold in Illinois, a real estate transfer declaration (RETD) is completed. The RETD identifies the property sold, amount paid, and other information used to determine if a sale is a useable (arm's-length) transaction. An arm's length transaction is a sale between two parties, neither of whom is related to or under abnormal pressure from the other. The assessed value as of January 1 from the year prior to the sale is also included.

Note: Transfers of farmland are excluded because farmland assessments are not based on market value; instead, farmland is assessed based on its use value (ability to generate income from farming based on the soil's ability to produce a crop).

Step 2: IDOR reviews each real estate transfer declaration
Identifies bona fide useable (arm's-length) sales occurring between willing sellers and buyers. Once identified, IDOR calculates the sales ratio for each useable transfer.

Step 3: Statistical measures are calculated
Statistical measures, (median ratio, first and third quartiles, coefficient of dispersion (COD), etc.) are computed for urban or non-farm property in each geographic area with 25 or more useable (arm's-length) sales. For Cook County, statistical measures are computed for any class of property with 25 or more useable sales. For all other counties, IDOR calculates median assessment levels for both “improved” and “unimproved” urban property when there are 25 or more useable transfers in each category. Statistical information helps assessing officials identify systematic bias toward assessment levels on unimproved property.

Step 4: Median levels of assessment are adjusted
Median levels of assessment from the sales ratio study are adjusted to reflect any significant assessment changes during the year of the study. By analyzing the county's assessment data,
township medians can be adjusted to reflect the extent of any reassessment during that period. Revised township levels are used to obtain an adjusted urban-weighted county average, forming the basis of IDOR’s inter-county equalization process.

**Step 5: Adjust prior years’ assessment levels**

Step 4 is for a single-year sales ratio study. If significant adjustments are made during the year of the study, medians for the two prior years are also adjusted. Finally, the average of the last three years’ medians is calculated. The result is the basis on which the tentative and final multipliers will be certified.

See Exhibit A on Page 18 to determine which years are included when adjusting prior year assessment levels for equalization purposes.

**Which transfers (sales) are not included in a sales ratio study?**

Some examples of transfers (sales) not included in the sales ratio study are

- Land and improvements classified as “farm”
- Between relatives
- Under compulsion (foreclosures, bankruptcies, etc.)
- Conveying less than full title
- To governmental units
- To/from a charitable organization
- To/from a lending institution
- Auction sales
- Transfers in which the assessed value and sales price are not comparable (e.g., property formerly assessed as a “model home”, parcel was split/divided, building destroyed or torn down)
- Deeds of convenience or to correct errors
- Deeds recording sales made in previous years
- Certain specific deed types

**Are any other sales excluded from the sales ratio study?**

Yes. Outlier ratios are observations that have unusual values, that is, values that differ markedly from the median. For example, a property assessed at $30,000 and selling for $5,000 would very likely be an outlier ratio since the ratio of 600% (30,000 ÷ 5,000 x 100%) is so extreme. There are various explanations for outlier ratios:

- **Unusual market changes** — Inflation or deflation in the regional economy, variation in the interest rates, population movements due to shifts in the labor market often cause rapidly rising or decreasing real estate prices. Under such conditions accurate property assessments become very difficult and may differ significantly from market price.

- **Non-market transactions** — The most common is transactions involving related parties where the property sells for below its market price. Forced sales are also non-market transactions.

- **Data errors** — These are usually clerical errors, such as mismatching the assessment and the sale price.

- **Erroneous assessment or sale price information** — Incorrect sale price and/or assessment entries on the real estate transfer declarations.

- **Assessment errors** — Limited or total lack of access to a property, inaccuracies in measurements, or incomplete assessments.

**Do outliers affect the statistics obtained from the sales ratio study?**

Some of the measures of uniformity are sensitive to the presence of outlier ratios; others are not. The COD, one of the most widely used measures of uniformity, may vary greatly when outlier ratios are present. By definition, the COD is a statistical measure of variation of individual assessment ratios around the median level of assessments (an average error expressed as a percentage). Eliminating these outlier ratios may lower the COD. The affect on the PRD is very minimal.
Statistics and what they represent
The COD is the most commonly used statistical measure of uniformity of assessments. The higher the COD, the greater the scattering of individual assessments around the county median level and the greater the degree of inequity in the sharing of the tax burden among property owners in a county.

To illustrate the practical effect of dispersion and inequity in assessments on a property with a $40,000 market value, consider the following example:

Assume a county has a median level of 35 percent and a COD of 30 percent. A COD of this degree means the assessment levels of individual properties can be expected, on average, to deviate from the median level by 30 percent.

Thirty percent of the median is 10.5; therefore, 30 percent less than the median is 24.5 percent and 30 percent more is 45.5 percent. The assessed value of the property at 35 percent would be $14,000 ($40,000 x .35 = $14,000); at 24.5 percent it would be $9,800; and at 45.5 percent it would be $18,200. Assuming a tax rate of $6.80 per $100 of assessed value, a taxpayer owning property with a market value of $40,000 would pay a property tax bill of $952 on an assessment of 35 percent ($14,000 x 6.80 ÷ 100 = $952); $666 on an assessment of 24.5 percent; and $1,238 on an assessment of 45.5 percent.

Below is a listing of the statistical tables the state maintains, followed by a detailed explanation of their contents.

- Table 1, Assessment Ratios
- Table 2, Urban Weighted Median Ratios
- Table 3, Final Equalization Factors

Table 1, Assessment Ratios

Example of Table 1:

<table>
<thead>
<tr>
<th>Area</th>
<th>Geographic</th>
<th>Adjusted Median</th>
<th>Coefficient of Dispersion Median</th>
<th>Number</th>
<th>Coefficient of Quartiles 1st Quartile</th>
<th>Coefficient of Quartiles 3rd Quartile</th>
<th>Price-related Differential</th>
<th>95% Confidence Interval</th>
<th>Coefficient of Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>County</td>
<td>Total County</td>
<td>28.42</td>
<td>18.66</td>
<td>727</td>
<td>25.10</td>
<td>31.77</td>
<td>68.56</td>
<td>1.01</td>
<td>27.89</td>
</tr>
<tr>
<td>Townships</td>
<td>Township 1</td>
<td>31.72</td>
<td>30.34</td>
<td>14.53</td>
<td>42</td>
<td>25.48</td>
<td>33.91</td>
<td>25.40</td>
<td>1.01</td>
</tr>
<tr>
<td>Township 2</td>
<td>Urban</td>
<td>29.57</td>
<td>28.57</td>
<td>16.80</td>
<td>532</td>
<td>25.44</td>
<td>31.53</td>
<td>64.19</td>
<td>1.00</td>
</tr>
<tr>
<td>All Others</td>
<td>Urban</td>
<td>28.89</td>
<td>27.50</td>
<td>25.71</td>
<td>153</td>
<td>23.26</td>
<td>32.88</td>
<td>68.72</td>
<td>1.03</td>
</tr>
</tbody>
</table>
• **Column 3— Adjusted median**
The ratio study was conducted using the current year selling price and the prior year assessed value. For example, in the 2007 tables, the 2006 assessments were compared to the 2007 selling price. The ratios are then adjusted according to the percentage changes in assessments made in 2007 by any township or multi-township assessor, CCAO, or BOR. If there was a reassessment in 2007, the adjusted median becomes the level of assessment for that township in 2007. If there were no significant assessment changes in 2007, the median in Column 4 is the 2007 level of assessment.

• **Column 4— Median**
The median is the best measure of the average assessment level for a category and a geographic area since it is not unduly sensitive to extreme ratios (as can be the case with mathematical average or mean). The median is the exact midpoint of all individual assessment ratios for a given property and area category. The median is found by ranking the individual assessment ratios in ascending or descending order and counting downward until the middle value is reached. If an even number of ratios is found, the two middle ratios are averaged to calculate the median.

• **Column 5— Coefficient of dispersion (COD)**
This statistic provides a measure of the variation of individual assessment ratios around the median. The median indicates the average assessment level but does not provide information about how closely the individual ratios are grouped around it. If the individual ratios are clustered closely around the median, the COD will be low, which implies the assessments are relatively uniform. However, if the individual ratios vary widely from the median, the COD will be high, which indicates that the property was not uniformly assessed and the property tax burden was not fairly distributed among taxpayers in that particular area.

Statistically, the COD expresses the average absolute deviation of the individual ratios from the median ratio as a percentage of that median.

The average absolute deviation from the median is the sum of the differences between each individual ratio and the median ratio (disregarding whether the difference is positive or negative) divided by the total number of ratios.

• **Column 6 — Number of sales**
The number shown is the number of “usable” or “arms length” transactions that were included in the study. This figure represents the total number of property transfers used in the analysis.

• **Columns 7 and 8 — Quartiles**
Just as the median is the ratio that divides the ranking of all individual assessment ratios into two equal parts, quartiles are ratios that divide the ranking into four equal parts. These measures define the distribution in greater detail and indicate any skewness.

• **Column 9— Ratio range**
The range is the difference between the highest and lowest ratios in a given geographic area or category. This measure indicates the absolute variation in the distribution.
• Column 10— Price-related differential (PRD)
In addition to the COD, the intra-area price-related differential can be used as an indicator of assessment uniformity. While the COD measures the general scattering of individual ratios around the median ratio, the intra-area price-related differential measures a pattern of inequity in assessments that has a correlation with the value of the property.

If there is a tendency for the higher-valued properties to exhibit lower assessment ratios than lower-valued properties, the price-related differential will be greater than 1.03. If, on the other hand, higher-valued properties have higher assessment ratios than lower-valued properties, the price-related differential will be less than .98. Differentials greater than 1.03 or less than .98 are both indicative of an inequity in assessment.

The mean assessment ratio is the sum of all ratios divided by the number of ratios. The sales-based average ratio is computed by adding all assessed values and sale prices and then dividing the first sum by the second. The intra-area price-related differential, like the COD, is an indicator of a specific type of inequity. It cannot be used to calculate factors that will correct an inequity, nor will it indicate if a particular parcel of property has been assessed fairly. However, it will help locate the source of the inequity so a program can be formulated to correct the inequity.

• Column 11 — 95% confidence level
The range in which one can predict with 95 percent confidence the true median assessment level. As the interval widens, the measure of central tendency is less reliable.

• Column 12 — Coefficient of concentration (COC)
The coefficient of concentration (COC) is a measure of uniformity that measures the percentage of ratios that fall within a given percentage of the median. The percentage from the median used in IDOR’s calculations is 10. If 50 percent of the ratios fall within 10 percent (plus or minus) of the median, the COC is 50. A higher COC is an indicator of better assessment equity.

Table 2, Urban Weighted Median Ratios
Urban-weighted assessment levels are calculated using township aggregate assessment totals in conjunction with the median levels. This process ensures that each township’s median level of assessment has an impact on the countywide figure in proportion to the relative market value of its property.

The urban-weighted assessment level is used in the computation of the state equalization factor. Before that factor is calculated, an adjustment is made to the ratio to account for any significant changes in assessments made by local assessing officials since the data was collected.

The steps in the weighting procedure are shown below. The aggregate assessed values for each category or area are obtained from the abstract of assessments, submitted by the county clerk after final action by the board of review, but prior to state equalization. To prevent bias, any parcels having assessments greater than $999,999 are not included in the weighting process. The remaining assessed values are divided by the corresponding median ratio to obtain an estimated full market value of real estate for each category or area. The assessed values are added to a county urban total and then divided by the sum of the estimated full values. The result is an urban-weighted median that represents the best estimate of the average assessment level for urban property in the county.
Steps in the weighting procedure
(Amounts reported in thousands)

<table>
<thead>
<tr>
<th>Area</th>
<th>Assessed value</th>
<th>Median ratio</th>
<th>Estimated full value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban township 1</td>
<td>$ 1,648</td>
<td>25.00%</td>
<td>$ 6,592</td>
</tr>
<tr>
<td>Urban township 2</td>
<td>10,450</td>
<td>31.62%</td>
<td>33,049</td>
</tr>
<tr>
<td>All other urban townships</td>
<td>3,105</td>
<td>28.75%</td>
<td>10,800</td>
</tr>
<tr>
<td>Urban total</td>
<td>$15,203</td>
<td></td>
<td>$50,441</td>
</tr>
</tbody>
</table>

Urban weighted ratio: $15,203 ÷ $50,441 x 100% = 30.14%

Table 3, Final Equalization Factors
Example of Table 3:

<table>
<thead>
<tr>
<th>County</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>3-year Average</th>
<th>2008 Final Equalization Factor</th>
<th>Equalized Assessment Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>County A</td>
<td>34.47</td>
<td>33.67</td>
<td>31.90</td>
<td>33.35</td>
<td>1.0000</td>
<td>33.33</td>
</tr>
<tr>
<td>County B</td>
<td>32.03</td>
<td>31.26</td>
<td>32.15</td>
<td>31.81</td>
<td>1.0478</td>
<td>33.33</td>
</tr>
<tr>
<td>County C</td>
<td>32.58</td>
<td>37.49</td>
<td>33.16</td>
<td>34.41</td>
<td>0.9686</td>
<td>33.33</td>
</tr>
</tbody>
</table>

IDOR is required to provide an equalization factor for each county that will equalize the level of assessment at the statutory level of 33\(\frac{1}{3}\) percent of the fair cash value. The level of assessment to be equalized is the mean, or average, of the urban-weighted medians of the three years immediately preceding the assessment year, after adjustment for assessment changes through the current assessment year.

The urban-weighted levels of assessment for the three years involved in the calculation of the equalization factor are shown in Columns 2 through 4. These levels have been adjusted for assessment changes, including those made by any board of review for the current assessment year. Column 5 indicates the mean of the urban-weighted medians for the three years. Column 6 shows the final equalization factor and Column 7 shows the equalized level of assessment.

Formulas for Sales Ratio Studies and Equalization

**Sales Ratio**

\[= \text{Prior year assessed value} \div \text{current year sale price} \times 100\%

**Coefficient of Dispersion (COD)**

\[= \text{Average deviation} \div \text{median} \times 100\%

**Median Absolute Deviation (MAD)**

\[= \text{Median deviation} \div \text{median of sales ratios} \times 100\%

**Coefficient of Concentration (COC)**

\[= \text{No. of sales ratios within 10% of the median} \div \text{total no. of sales ratios} \times 100\%

**Price-Related Differential (PRD)**

**Sales-Based Average Ratio**

\[= \text{Sum of assessed values} \div \text{sum of sales price} \times 100\%

**Mean Assessment Ratio**

\[= \text{Sum of the sales ratios} \div \text{number of ratios}

**Price-Related Differential**

\[= \text{Mean assessment ratio} \div \text{sales-based average ratio}

**Equalization Factor**

\[= \text{Desired level (33.33\%)} \div \text{prior 3-year average median level}
Examples of Statistical Calculations

### Distribution of sales ratios

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Sale price</th>
<th>Sales ratio</th>
<th>Absolute deviation from the median</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 9,000</td>
<td>$ 45,000</td>
<td>20%</td>
<td>15</td>
</tr>
<tr>
<td>6,000</td>
<td>30,000</td>
<td>20%</td>
<td>15</td>
</tr>
<tr>
<td>9,000</td>
<td>30,000</td>
<td>30%</td>
<td>5</td>
</tr>
<tr>
<td>7,500</td>
<td>25,000</td>
<td>30%</td>
<td>5</td>
</tr>
<tr>
<td>7,000</td>
<td>20,000</td>
<td>35%</td>
<td>0</td>
</tr>
<tr>
<td>7,000</td>
<td>20,000</td>
<td>35%</td>
<td>0</td>
</tr>
<tr>
<td>6,000</td>
<td>15,000</td>
<td>40%</td>
<td>5</td>
</tr>
<tr>
<td>4,500</td>
<td>10,000</td>
<td>45%</td>
<td>10</td>
</tr>
<tr>
<td>7,500</td>
<td>15,000</td>
<td>50%</td>
<td>15</td>
</tr>
<tr>
<td>5,000</td>
<td>10,000</td>
<td>50%</td>
<td>35</td>
</tr>
<tr>
<td>Total</td>
<td>$68,500</td>
<td>$220,000</td>
<td>355% 85</td>
</tr>
</tbody>
</table>

### Calculations (derived from above data)

- **Number of Transfers:** 10
- **Median:** \(\frac{35 + 35}{2} = 35\%\)
- **First Quartile:** 30%
- **Third Quartile:** 45%
- **Lowest ratio:** 20%
- **Highest ratio:** 50%
- **Range:** (50% - 20%) = 30%

### Coefficient of Dispersion (COD)

- **Sum of absolute deviations from the median:** 85
- **Average absolute deviation:** \(\frac{85}{10} = 8.5\)
- **COD:** \(\frac{8.5}{35\%} = 24.3\%\)

### Price-related Differential (PRD)

- **Mean assessment ratio:** \(\frac{355\%}{10} = 35.5\%\)
- **Sales-based average ratio:** \(\frac{68,500}{220,000} \times 100\% = 31.1\%\)
- **Price-related differential:** \(\frac{35.5\%}{31.1\%} = 1.14\)

### Coefficient of Concentration (COC)

- **Median:** 35
- **Department's concentration percentage:** 10%

\[35 \times .90 = 31.50\]
\[35 \times 1.10 = 38.50\]

Only 2 of the 10 ratios are in the range of 31.50 to 38.50; therefore, the COC is 20 percent.
How are sales ratio studies used?
Sales ratio studies are used for a number of purposes.

Computation of multipliers —
Determining both county and township multipliers used in equalizing the level of assessments among counties (inter-county) and within the county (intra-county). Examples of intra-county multipliers include township, neighborhood, and class (residential, commercial, industrial, etc.) multipliers.

Review and appeal of assessments —
Provides a measure of the average assessment level for a given geographic area or category of property against which assessments of individual parcels may be judged in determining the degree of over or under statement, if any.

Diagnostic tool to evaluate local assessment practices —
Local assessing officials are required to use the sales ratio study to evaluate their assessment policies and make assessment changes to sales and non-sales so the final assessments are at the uniform percentage of value.

Determine the assessor bonus —
To qualify for the assessor bonus award, the average median levels of assessments of the prior 3 years must be between 31\(^{1/3}\) percent and 35\(^{1/3}\) percent and the COD must be below the appropriate COD as determined by the county’s population.

Reimbursement to a county of a portion of S/A salary —
To qualify for the reimbursement to the county, the average median levels of assessments of the prior 3 years must be between 31\(^{1/3}\) percent and 35\(^{1/3}\) percent.
Assessment Levels

What is an “assessment level”? The percentage of fair cash value a property is assessed is the “assessment level”. Illinois law requires the assessed value of non-farm property equal 33\(\frac{1}{3}\) percent of its fair cash value except for in Cook County.

How is level of assessment computed? The level of assessments is computed by using the following steps to calculate a “sales ratio study” for each county in the state. You must know the total assessed values and total fair cash values of property in the county. Total assessed values for each township are reported to IDOR on the counties’ tentative and final abstracts. Estimating the total market value (Estimate of Full Value) is necessary and computed by dividing the total assessed value for the township by the median level of assessments (as a decimal number). If a township had at least 25 usable sales, IDOR will calculate a median level of assessment. If not, the remaining sales are placed in an “All Others” category from which a median is calculated. Once both median levels have been determined, a county median is calculated to determine the county’s state equalization factor. Urban (non-farm) weighted assessment levels are calculated by the township’s aggregate assessment totals in conjunction with the township’s median levels. This ensures each township’s median level of assessment has an impact on the county’s median level of assessment in proportion to the relative market value of its property.

Urban weighted assessment levels are used in the state equalization factor after any adjustments to ratio(s), after considering any significant changes in assessments by local assessing officials since the data had been compiled. To avoid bias, parcels with assessments greater than $999,999 are deducted before the weighting process. The remaining assessment values are divided by the corresponding median ratio to obtain an estimated fair cash value of property for each category or area. The assessed values are added to provide a county urban total assessed value. The sum of all estimated fair cash values provide a county urban total estimated full value. The total assessed value is divided by the total estimated fair cash value for the county’s median level of assessment for the year. This urban weighted median represents the best estimate of the average assessment level for non-farm property in the county.

Do assessment levels vary? Yes. Assessment levels may vary from the statutory 33\(\frac{1}{3}\) percent within or between assessment jurisdictions within a county, and between counties. These occur for many reasons including the large number of local assessing officials with different value opinions, and the inherent difficulties of the assessment process (e.g., pressure to keep assessments low, lack of time and resources, ministerial errors, outdated valuations, changes in economic conditions).

Why must assessment levels be uniform? Assessment levels must be uniform to ensure:

- equal distribution of the tax burden among taxpayers;
- that tax rate and bonded indebtedness limitations are applied equally to local government taxing bodies; and,
- fair distribution of state grants-in-aid for education, highways, and public assistance. Assessed valuation is a component in the formulas used to calculate these distributions.

The following examples help clarify why uniform assessment levels provide equal distribution of the tax burden among taxpayers.

Example 1: Assessment level not uniform within assessment jurisdiction. Two homes with identical market values of $150,000. In valuing each property, the assessor estimates:
- House #1’s value = $144,000
- House #2’s value = $162,000

Level of assessments of 33\(\frac{1}{3}\) percent applied to each valuation:
- #1 assessed at $48,000 (32% of fair cash value)
- #2 assessed at $54,000 (36% of fair cash value)

The owner of House #2 will have a higher tax bill although the true value is identical to House #1.

Example 2: Assessment level not uniform within the county. Two townships (A and B) within the same county and school district.
- A assessed at average level of 20% of full value
- B assessed at average level of 40% of full value

The owner of House #2 will have a higher tax bill although the true value is identical to House #1.

Who must ensure uniform assessments? Both local assessment officials (township assessors, CCAOs, and county BOR) and IDOR are responsible for ensuring property assessments are uniform.
Equalization

What is equalization?
Equalization is the application of a uniform percentage increase or decrease to assessed values of various areas or classes of property to bring assessment levels, on average, to a uniform level of the market value (33\textsuperscript{1/3} percent). Both local assessment officials and IDOR are responsible for equalizing assessment levels.

Two types of equalization:
Intra-county: Multipliers issued within the county to equalize the level of assessments within that county. “Intra-county equalization” is the work done by local assessment officials.

Inter-county: State-issued county multiplier used to carry out the statutory responsibility of equalizing the level of assessments among counties. “Inter-county equalization” is the work done by IDOR.

Equalization factors will not correct assessment inequities between properties within an area or class. If the average three-year level of assessment for a county is
- less than 33\textsuperscript{1/3} percent, IDOR will certify an equalization factor (multiplier) greater than 1.0000.
- greater than 33\textsuperscript{1/3} percent, IDOR will certify an equalization factor (multiplier) less than 1.0000

This is to bring the counties assessments levels, on average, to a uniform level of market value.

Inter-county equalization of assessments is necessary to
- maintain the statutory assessment level throughout the state,
- provide a uniform basis for the distribution of state aid to schools and other state grant-in-aid programs,
- allow for an equitable distribution of the tax burden in districts that lie in more than one county, and
- provide a comparable base of the applications of tax rate and bonded indebtedness limitations for units of local government.

Equalization of assessment levels within counties, intra-county equalization, is necessary to achieve equitable distribution of the tax burden, prior to IDOR’s inter-county equalization. Local assessing officials are responsible for using the assessment/sales ratio study to evaluate their assessment policies and to make any changes needed to ensure that final assessments of all properties within their jurisdictions reflect a uniform percentage of value.

Do all counties use intra-county equalization?
No. Every county but Cook County possesses this intra-county equalization authority. Township assessors, chief county assessment officers, and county boards of review use equalization within the county only (intra-county equalization). Local assessment officials may equalize assessments within the county by class, area, and/or by township in order to ensure that the median level of assessments is at 33\textsuperscript{1/3} percent of market value (fair cash value).

Why do local assessors and boards of review issue multipliers?
Local jurisdictions must focus on valuing all property (uniformly and equitably), assuring all assessed values represent current market values. The assessment/sales ratio study becomes a tool of the county to evaluate assessment policies and make assessment changes when warranted. Ideally, the final assessments of all properties in the jurisdictions are then at a uniform percentage of value to provide an equitable distribution of the property tax burden.

Does the state force local assessment officials to do local equalization?
No; but the Property Tax Code states that they act as the equalizing authority. Factors may be used to raise or lower assessment levels based on the county’s independent monitoring of property transfers, based on results of the sales ratio study performed by IDOR, or based on the tentative multiplier certification.

For example, a township assessor who monitors sales within a particular development may note that the sales prices are increasing and will apply a factor to ensure that the development is assessed at the statutory level. Chief County Assessment Officers and County Boards of Review may notice similar trends. Factors can be applied based on a geographic area (e.g., neighborhood, township), property characteristics (e.g., lakefront lots, lots near a golf course), or type of property (e.g., residential, commercial).

Similarly, if IDOR’s sales ratio study and tentative multiplier calculations indicate that a particular township is under-assessed, then local assessment officials have two options: correct the assessment level for the particular township (to raise assessments to 33\textsuperscript{1/3} percent) or do nothing and apply the state multiplier to all properties. If the second option is chosen, the result is that properties already assessed at 33\textsuperscript{1/3} percent will be assessed at a higher percentage. IDOR’s role is to ensure that the county-wide assessment level, on average, is 33\textsuperscript{1/3} percent.
Must IDOR equalize assessments?  
Yes. IDOR is required by law to provide for each county an equalization factor which will equalize the level of assessments at the statutory level of 33\(\frac{1}{3}\) percent of fair market value. The level of assessments to be equalized is the mean, or average, of the urban-weighted medians of the three years immediately before the assessment year, after adjustments for assessment changes through the assessment year.

Why is IDOR required to issue a state multiplier?  
The purpose of the state multiplier is to equalize assessments between counties (inter-county equalization). Inter-county equalization eliminates certain tax burden inequities among taxpayers who live within the boundaries of taxing districts that overlap two or more counties. It is not, however, a substitute for proper intra-county equalization by local officials. IDOR's emphasis is slightly different from local concerns. The state's concern is developing inter-county equalization and does not focus on inconsistencies that may exist among individual properties.

How does the state calculate the county-wide multiplier?  
As explained on Page 7, IDOR uses information from the Real Estate Transfer Declarations (RETD's) to develop sales ratio studies. Assessed values from the Tentative Abstract are used to compute the tentative multiplier and assessed values from the Final Abstract are used to compute the final multiplier. If the average three-year level of assessments for a county is less than 33\(\frac{1}{3}\) percent, IDOR will certify an equalization factor (multiplier) greater than 1.0000 to bring the counties assessments levels, on average, to a uniform level of market value. If the average three-year level of assessments is greater than 33\(\frac{1}{3}\) percent, IDOR will certify an equalization factor less than 1.0000 to bring the counties assessments levels, on average, to a uniform level of market value.

How is the state multiplier computed?  
The preferred method is to divide the county's total assessed value reported to IDOR by the county's total estimated full value (based on the assessment levels from the sales ratio study). Only non-farm values are used.

Which years of sales are used when the multiplier is calculated?  
Sales from the three years immediately before the year for which the multiplier is calculated are used. For example, the 2009 multiplier is based on the sales ratio studies from sales in 2006, 2007, and 2008. Because the sales ratio study compares the prior year assessed value to the current year selling price, any reassessment work by the township assessor, CCAO, and BOR in subsequent years is also used when the multiplier is calculated. In essence, the ratios are adjusted so that “credit” is given when property is reassessed or local equalization factors are applied.

Why are three years’ worth of sales ratios used?  
Using sales ratios from three years provides some predictability when the market is fluctuating. It prevents extreme changes from happening in one year. When the market is rising rapidly, the effect is to “smooth” out the increases and owners are not forced to pay a dramatic increase in a single year. The same is true when the market decreases. This helps taxing districts with determining their budgets and how much must be raised from property taxes.

How does the state multiplier affect assessments?  
The county clerk must multiply the assessed value of each parcel of non-farm property, as corrected and equalized by local assessment officers or the county BOR, by the state certified Multiplier.  
Example based on a $90,000 home:

County A - Multiplier is 1.0000  
Home assessed at $30,000 with an EAV of $30,000  
($30,000 x 1.0000 = $30,000)

County B - Multiplier is 2.0000  
Home assessed at $15,000 with an EAV of $30,000.  
($15,000 x 2.0000 = $30,000)

Equalization has eliminated the effects of the original underassessment in County B by the use of the equalization factor (multiplier). This new value is called the “equalized assessed value.” By law, the equalization factor (multiplier) is not applied to farm acreage, farm buildings, or coal rights, which are assessed using alternate assessment methods specified in Illinois law.
Applicable Statutes

Property Tax Code
(35 ILCS 200/1 1)
Sec. 1 1. Short title. This Act may be cited as the Property Tax Code.
(Source: P.A. 88 455.)

Defines “fair cash value”
(35 ILCS 200/1 50)
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.
(Source: P.A. 88 455.)

Defines “33 1/3 percent”
(35 ILCS 200/1 55)
Sec. 1 55. 33 1/3%. One third of the fair cash value of property,
as determined by the Department's sales ratio studies for the 3
most recent years preceding the assessment year, adjusted to
take into account any changes in assessment levels implement-
ed since the data for the studies were collected.
(Source: P.A. 86 1481; 87 877; 88 455.)

Defines “property”
(35 ILCS 200/1 130)
Sec. 1 130. Property; real property; real estate; land; tract; lot.
The land itself, with all things contained therein, and also all build-
ings, structures and improvements, and other permanent fixtures
thereon, including all oil, gas, coal and other minerals in the
land and the right to remove oil, gas and other minerals, exclu-
sing coal, from the land, and all rights and privileges belonging
or pertaining thereto, except where otherwise specified by this
Code. Included therein is any vehicle or similar portable structure
used or so constructed as to permit its use as a dwelling place, if
the structure is resting in whole on a permanent foundation. Not
included therein are low income housing tax credits authorized by
Section 42 of the Internal Revenue Code, 26 U.S.C. 42.
(Source: P.A. 91 502, eff. 8 13 99.)

Supervisor of Assessments
(35 ILCS 200/Art. 3 heading)
Article 3. County Assessment Officials
Sec. 3 5. Supervisor of assessments. In counties with less than
3,000,000 inhabitants and in which no county assessor has been
elected under Section 3 45, there shall be a county supervisor of as-
sessments, either appointed as provided in this Section, or elected.
In counties with less than 3,000,000 inhabitants and not having
an elected county assessor or an elected supervisor of assess-
ments, the office of supervisor of assessments shall be filled by
appointment by the presiding officer of the county board with the
advice and consent of the county board.
To be eligible for appointment or to be eligible to file nomination
papers or participate as a candidate in any primary or general
election for, or be elected to, the office of supervisor of assess-
ments, or to enter upon the duties of the office, a person must
possess one of the following qualifications as certified by the
individual to the county clerk:
(1) A Certified Illinois Assessing Official certificate from the Il-
liinois Property Assessment Institute, plus the additional training
required for additional compensation under Section 4 10.
(2) A Certified Assessment Evaluator certificate from the Interna-
tional Association of Assessing Officers.
(3) A Member of the Appraisal Institute (MAI), Residential Mem-
ber (RM), Senior Real Estate Analyst (SREA), Senior Real Prop-
erty Analyst (SRPA) or Senior Residential Analyst (SRA) certifi-
cate from the Appraisal Institute or its predecessor organizations.
(4) If the person has served as a supervisor of assessments for
12 years or more, a Certified Illinois Assessing Official certificate
from the Illinois Property Assessment Institute with a minimum
of 360 additional hours of successfully completed courses ap-
proved by the Department if at least 180 of the course hours
required a written examination.
In addition, a person must have had at least 2 years' experience
in the field of property sales, assessments, finance or appraisals
and must have passed an examination conducted by the Depart-
ment to determine his or her competence to hold the office. The
examination may be conducted by the Department at a con-
venient location in the county or region. Notice of the time and
place shall be given by publication in a newspaper of general cir-
culation in the counties, at least one week prior to the exam. The
Department shall certify to the county board a list of the names
and scores of persons who pass the examination. The Depart-
ment may provide by rule the maximum time that the name of a
person who has passed the examination will be included on a list
of persons eligible for appointment or election. The term of office
shall be 4 years from the date of appointment and until a succes-
sor is appointed and qualified.
(Source: P.A. 91 357, eff. 7 29 99.)

IDOR responsibility to equalize assessments
(35 ILCS 200/Art. 8 heading)
Article 8. Department of Revenue
Sec. 8 5. General duties. The Department shall:
(1) Direct and supervise the assessment of all property so that
all assessments are made relatively just and equal.
(2) Confer with, advise and assist local assessment officers rela-
tive to the performance of their duties.
(3) Prescribe for assessment officers general rules, relative to
the assessment of property, which rules shall be binding upon
all assessment officers until reversed, annulled or modified by a
court of competent jurisdiction.
(4) Prescribe or approve forms for returns, reports, complaints,
notices and other documents, and the contents of required files
and records authorized or required by law or by rule and regula-
tion of the Department. All assessing officers shall use true cop-
ies of such forms or reasonable electronic facsimiles of them.
(5) Assess all property owned by or used by railroad companies
operating within this State, except non carrier real estate.
(6) Equalize the assessment of property among the different
counties of the State and fix the aggregate amount of the as-
sessment for each county upon which taxes shall be extended in
each year; and publish a statement of the methods and proce-
dures used in making such equalization.
(7) Keep a correct record of its acts relative to the assessment of
property and the equalization of assessments. The record shall be
available for public inspection and copies shall be distributed to
any person upon request and payment of the cost of reproduction.
(8) Grant or deny non homestead exemptions under Sections 16
70 and 16 130.
(Source: P.A. 91 357, eff. 7 29 99.)
Statutory level of assessments
(35 ILCS 200/Art. 9 Div. 4 heading)
Division 4. Valuation procedures
Sec. 9 145. Statutory level of assessment. Except in counties with more than 200,000 inhabitants which classify property for purposes of taxation, property shall be valued as follows:
(a) Each tract or lot of property shall be valued at 33 1/3% of its fair cash value.
(b) Each taxable leasehold estate shall be valued at 33 1/3% of its fair cash value.
(c) Each building or structure which is located on the right of way of any canal, railroad or other company leased or granted to another company or person for a term of years, shall be valued at 33 1/3% of its fair cash value.
(d) Any property on which there is a coal or other mine, or stone or other quarry, shall be valued at 33 1/3% of its fair cash value. Oil, gas and other minerals, except coal, shall have value and be assessed separately at 33 1/3% of the fair cash value of such oil, gas and other minerals. Coal shall be assessed separately at 33 1/3% of the coal reserve economic value, as provided in Sections 10 117 through 10 200.
(e) In the assessment of property encumbered by public easement, any depreciation occasioned by such easement shall be deducted in the valuation of such property. Any property dedicated as a nature preserve or as a nature preserve buffer under the Illinois Natural Areas Preservation Act, for the purposes of this paragraph, is encumbered by a public easement and shall be depreciated for assessment purposes to a level at which its valuation shall be $1 per acre or portion thereof. This Section is subject to and modified by Sections 10 110 through 10 140 and 11 5 through 11 65.
(Source: P.A. 91 497, eff. 1 1 00.)

Township assessor or CCAO authority to equalize assessments within or between townships or by class of property
(35 ILCS 200/9 205)
Sec. 9 205. Equalization. When deemed necessary to equalize assessments between or within townships or between classes of property, or when deemed necessary to raise or lower assessments within a county or any part thereof to the level prescribed by law, changes in individual assessments may be made by a township assessor or chief county assessment officer, under Section 9 75, by application of a percentage increase or decrease to each assessment.
(Source: P.A. 81 1034; 88 455.)

County equalization by CCAO
(35 ILCS 200/9 210)
Sec. 9 210. Equalization by chief county assessment officer; counties of less than 3,000,000. The chief county assessment officer in a county with less than 3,000,000 inhabitants shall act as an equalizing authority for each county in which he or she serves. The officer shall examine the assessments in the county and shall equalize the assessments by increasing or reducing the entire assessment of property in the county or any area therein or of any class of property, so that the assessments will be at 33 1/3% of fair cash value. The equalization process and analysis described in this Section shall apply to all property except farm and coal properties assessed under Sections 10 110 through 10 140 and 10 170 through 10 200.
For each township or assessment district in the county, the supervisor of assessments shall annually determine the percentage relationship between the estimated 33 1/3% of the fair cash value of the property and the assessed valuations at which the property is listed for each township, multi township or assessment district. To make this analysis, he or she shall use property transfers, property appraisals, and other means as he or she deems proper and reasonable.
With the ratio determined for each township or assessment district, the supervisor of assessments shall then determine the percentage to be added to or deducted from the aggregate assessments in each township or assessment district, other than property assessed under Sections 10 110 through 10 140 and 10 170 through 10 200, in order to produce a ratio of assessed value to fair cash value of 33 1/3%. That percentage shall be issued as an equalization factor for each township or assessment district within each county served by the chief county assessment officer. The assessment officer shall then change the assessment of each parcel of property by application of the equalization factor.
(Source: P.A. 88 455; 88 670, eff. 12 2 94.)

Publication of BOR equalization factor
(35 ILCS 200/12 40)
Sec. 12 40. Notice provisions; equalization by board of review. The assessment of any class of property or of any township or multi township or part thereof, or any portion of the county, shall not be increased by an equalization factor applied by a board of review until the board has made one publication of notice in a newspaper of general circulation published in the county, of such proposed increase and has given an opportunity to be heard, within 20 days of the publication date, to the owners of the property affected or any one representing them, and other citizens of the territory. The assessor or chief county assessment officer shall have like opportunity to be heard thereon, except where such action is taken in individual cases upon complaint. The board shall hear any person, upon request, in opposition to a proposed reduction in the assessment of any person or territory.
(Source: P.A. 86 345; 86 413; 86 1028; 86 1481; 88 455.)

Mailed notice to property owner of BOR equalization factor
(35 ILCS 200/12 50)
Sec. 12 50. Mailed notice to taxpayer after change by board of review or board of appeals. If final board of review or board of appeals action regarding any property, including equalization under Section 16 60 or Section 16 65, results in an increased or decreased assessment, the board shall mail a notice to the taxpayer, at his or her address as it appears in the assessment records, whose property is affected by such action, and in the case of a complaint filed with a board of review under Section 16 25 or 16 115, to the taxing body filing the complaint. A copy shall be given to the assessor or chief county assessment officer if his or her assessment was reversed or modified by the board. Written notice shall also be given to any taxpayer who filed a complaint in writing with the board and whose assessment was not changed. The notice shall set forth the assessed value prior to board action; the assessed value after final board action but prior to any equalization; and the assessed value as equalized by the board, if the board equalizes. This notice shall state that the value as certified to the county clerk by the board will be the locally assessed value of the property for that year and each succeeding year, unless revised in a succeeding year in the manner provided in this Code. The written notice shall also set forth specifically the facts upon which the board’s decision is based. In counties with less than 3,000,000 inhabitants, the notice shall also contain the following statement: “You may appeal this decision to the Property Tax Appeal Board by filing a petition for
Applicable Statutes (continued)

review with the Property Tax Appeal Board within 30 days after this notice is mailed to you or your agent, or is personally served upon you or your agent”. In counties with 3,000,000 or more inhabitants, the notice shall also contain the following statement: “You may appeal this decision to the Property Tax Appeal Board by filing a petition for review with the Property Tax Appeal Board within 30 days after the date of this notice or within 30 days after the date that the Board of Review transmits to the county assessor pursuant to Section 16 125 its final action on the township in which your property is located, whichever is later”. The Board shall publish its transmittal date of final action on each township in at least one newspaper of general circulation in the county. The changes made by this amendatory Act of the 91st General Assembly apply to the 1999 assessment year and thereafter.  
(Source: P.A. 91 393, eff. 7 30 99; 91 425, eff. 8 6 99.)

BOR equalization authority after publication
(35 ILCS 200/16 60)
Sec. 16 60. Equalization within counties. Publication and hearing. After notice and hearing as required by Section 12 40, the board of review may increase or reduce the entire assessment, or the assessment of any class included therein, if, in its opinion, the assessment has not been made upon the proper basis. The board may also equalize the assessment in any multi township or township, or part thereof, or any portion of the county.  
(Source: P.A. 86 345; 86 413; 86 1028; 86 1481; 88 455.)

BOR equalization process
(35 ILCS 200/16 65)
Sec. 16 65. Equalization process. The board of review shall act as an equalizing authority, if after equalization by the supervisor of assessments the equalized assessed value of property in the county is not 33 1/3% of the total fair cash value. The board shall, after notice and hearing as required by Section 12 40, lower or raise the total assessed value of property in any assessment district within the county so that the property, other than farm and coal property assessed under Sections 10 110 through 10 140 and Sections 10 170 through 10 200, will be assessed at 33 1/3% of its fair cash value. For each assessment district of the county, the board of review shall annually determine the percentage relationship between the valuations at which property other than farm and coal property is listed and the estimated 33 1/3% of the fair cash value of any property. To make this analysis, the board shall use at least 25 property transfers, or a combination of at least 25 property transfers and property appraisals, such information as may be submitted by interested taxing bodies, or any other means as it deems proper and reasonable. If there are not 25 property transfers available, or if these 25 property transfers do not represent a fair sample of the types of properties and their proportional distribution in the assessment district, the board shall select a random sample of properties of a number necessary to provide a combination of at least 25 property transfers and property appraisals as much as possible representative of the entire assessment district, and provide for their appraisal. The township or multi township assessor shall be notified of and participate in the deliberations and determinations. With the ratio determined for each assessment district, the board shall ascertain the amount to be added or deducted from the aggregate assessment on property subject to local assessment jurisdiction, other than farm and coal property, to produce a ratio of assessed value to 33 1/3% of the fair cash value equivalent to 100%. However, in determining the amount to be added to the aggregate assessment on property subject to local jurisdiction in order to produce a ratio of assessed value to 33 1/3% of the fair cash value equivalent to 100%, the board shall not, in any one year, increase or decrease the aggregate assessment of any assessment district by more than 25% of the equalized valuation of the district for the previous year, except that additions, deletions or depletions to the taxable property shall be excluded in computing the 25% limitation. The board shall complete the equalization by the date prescribed in Section 16 35 for the board's adjournment, and, within 10 days thereafter, shall report the results of its work under this Section to the Department. At least 30 days prior to its adjournment, the board shall publish a notice declaring whether it intends to equalize assessments as provided in this Section. The notice shall be published in a newspaper of general circulation in the county. If the board fails to report to the Department within the required time, or if the report discloses that the board has failed to make a proper and adequate equalization of assessments, the Department shall direct, determine, and supervise the assessment so that all assessments of property are relatively just and equal as provided in Section 8 5.  
(Source: P.A. 84 1343; 88 455.)

State equalization process (equalization among counties)
(35 ILCS 200/Art. 17 heading)
Article 17. State Equalization Process
Sec. 17 5. Equalization among counties. The Department shall act as an equalizing authority. It shall examine the abstracts of property assessed for taxation in the counties and in the assessment districts in counties having assessment districts, as returned by the county clerks, and shall equalize the assessments between counties as provided in this Code. Except as hereinafter provided, the Department shall lower or raise the total assessed value of property in each county as returned by the county clerk, other than property assessed under Sections 10 110 through 10 140 and 10 170 through 10 200, so that the property will be assessed at 33 1/3% of its fair cash value. The Department shall annually determine the percentage relationship for each county of the State, between the valuations at which locally assessed property, other than property assessed under the Sections 10 110 through 10 140 and 10 170 through 10 200, as listed by assessors and revised by boards of review, and the estimated 33 1/3% of the fair cash value of the property. To make this analysis, the Department shall use property transfers, property appraisals, and other means as it deems proper and reasonable. With the ratio determined for each county, the Department shall then determine the percentage to be added to or deducted from the aggregate reviewed assessment on property subject to local assessment jurisdiction, other than property assessed under the Sections cited above, to produce a ratio of assessed value to 33 1/3% of the fair cash value equivalent to 100%.  
(Source: P.A. 91 555, eff. 1 1 00.)

Sales ratio studies
(35 ILCS 200/17 10)
Sec. 17 10. Sales ratio studies. The Department shall monitor the quality of local assessments by designing, preparing and using ratio studies, and shall use the results as the basis for equalization decisions. In compiling sales ratio studies, the Department shall exclude from the reported sales price of any property any amounts included for personal property and, for sales occurring through December 31, 1999, shall exclude seller paid points. The Department shall not include in its sales ratio studies sales of property which have been platted and for which
an increase in the assessed valuation is restricted by Section 10 30. The Department shall not include in its sales ratio studies the initial sale of residential property that has been converted to condominium property.

When the declaration required under the Real Estate Transfer Tax Law contains financing information required under Section 31 25, the Department shall adjust sales prices to exclude seller paid points and shall adjust sales prices to "cash value" when seller related financing is used that is different than the prevailing cost of cash. The prevailing cost of cash for sales occurring on or after January 1, 1992 shall be established as the monthly average 30 year fixed Primary Mortgage Market Survey rate for the North Central Region as published weekly by the Federal Home Loan Mortgage Corporation, as computed by the Department, or such other rate as determined by the Department. This rate shall be known as the survey rate. For sales occurring on or after January 1, 1992, through December 31, 1999, adjustments in the prevailing cost of cash shall be made only after the survey rate has been at or above 13% for 12 consecutive months and will continue until the survey rate has been below 13% for 12 consecutive months. For sales occurring on or after January 1, 2000, adjustments for seller paid points and adjustments in the prevailing cost of cash shall be made only after the survey rate has been at or above 13% for 12 consecutive months and will continue until the survey rate has been below 13% for 12 consecutive months. The Department shall make public its adjustment procedure upon request.

(Source: P.A. 91 555, eff. 1 1 00.)

**Tentative equalization factor**

(35 ILCS 200/17-15)

Sec. 17 15. Tentative equalization factor. The Department shall forward to the County Clerk of each county in each year its estimate of the percentage, established under Section 17 5, to be added to or deducted from the aggregate of the locally assessed property in that county, other than property assessed under Sections 10 110 through 10 140 and 10 170 through 10 200. The percentage relationship to be certified to each county by the Department as provided by Section 17 25 shall be determined by the ratio between the percentage estimate so made and forward, as provided by this Section, and the level of assessments of the assessed valuations as made by the assessors and thereafter finally revised by the board of review of that county. Such estimate shall be forwarded by the Department to the County Clerk of any County within 15 days after the chief county assessment officer files with the Department an abstract of the assessments of the locally assessed property in the county, as finally revised. The abstract shall be in substantially the same form as required of the County Clerk by Sections 9 250 and 9 255 after completion of the revisions thereafter to be made by the board of review of the county, except that the abstract shall specify separately the amount of omitted property, and the amount of improvements upon property assessed for the first time in that year. The chief county assessment officer shall forward the abstract to the Department within 30 days after returning the county assessment books to the county board of review.

(Source: P.A. 91 555, eff. 1 1 00.)

**Certification of final equalization factor**

(35 ILCS 200/17 30)

Sec. 17 30. Certification of final equalization factor. When the Department has completed its equalization of assessments in each year, it shall certify to each county clerk the percentage finally determined by it to be added to or deducted from the listed or assessed valuation of property in the county as returned by the county clerk.

(Source: P.A. 91 555, eff. 1 1 00.)

**Publication of final equalization factor**

(35 ILCS 200/17 40)

Sec. 17 40. Publication of final equalization factor. The Department shall publish in each county the percentage and equalization factor certified to each county clerk under Section 17 30. If the percentage differs from the percentage derived from the initial estimate certified under Section 17 15, a statement as to the basis for the final percentage shall also be published. The Department shall provide the statement to any member of the public upon request.

(Source: P.A. 79 703; 88 455.)
Applicable Statutes (continued)

County clerk applies final equalization factor
(35 ILCS 200/18 40)
Sec. 18 40. Application of equalization factor. Each county clerk shall apply the percentages certified by the Department and enter the equalized valuations in the columns provided for that purpose. The percentages certified by the Department shall be applied to the assessed valuation of property, as corrected and equalized by the board of review, board of appeals, or local assessment officers. In all cases of extension of valuations where the equalized valuations are fractional, the clerk shall reject all fractions that fall below 50¢. Fractions of 50¢ or more shall be extended as $1.
If the equalized assessed value of any property is less than $150 for an assessment year, the county clerk may declare the imposition and collection of all tax for that year to be extended on the parcel to be unfeasible and cancelled. No tax shall be extended or collected on the parcel for that year and the parcel shall not be sold for delinquent taxes.
(Source: P.A. 85 312; 88 455.)

County and state equalization factor printed on tax bill
(35 ILCS 200/20 15)
Sec. 20 15. Information on bill or separate statement. There shall be printed on each bill, or on a separate slip which shall be mailed with the bill:
(a) a statement itemizing the rate at which taxes have been extended for each of the taxing districts in the county in whose district the property is located, and in those counties utilizing electronic data processing equipment the dollar amount of tax due from the person assessed allocable to each of those taxing districts, including a separate statement of the dollar amount of tax due which is allocable to a tax levied under the Illinois Local Library Act or to any other tax levied by a municipality or township for public library purposes,
(b) a separate statement for each of the taxing districts of the dollar amount of tax due which is allocable to a tax levied under the Illinois Pension Code or to any other tax levied by a municipality or township for public pension or retirement purposes,
(c) the total tax rate,
(d) the total amount of tax due, and
(e) the amount by which the total tax and the tax allocable to each taxing district differs from the taxpayer’s last prior tax bill. The county treasurer shall ensure that only those taxing districts in which a parcel of property is located shall be listed on the bill for that property.
In all counties the statement shall also provide:
(1) the property index number or other suitable description,
(2) the assessment of the property,
(3) the equalization factors imposed by the county and by the Department, and
(4) the equalized assessment resulting from the application of the equalization factors to the basic assessment.
In all counties which do not classify property for purposes of taxation, for property on which a single family residence is situated the statement shall also include a statement to reflect the fair cash value determined for the property.
In all counties, the statement must include information that certain taxpayers may be eligible for tax exemptions, abatements, and other assistance programs and that, for more information, taxpayers should consult with the office of their township or county assessor and with the Illinois Department of Revenue.
In all counties, the statement shall include information that certain taxpayers may be eligible for the Senior Citizens and Disabled Persons Property Tax Relief and Pharmaceutical Assistance Act and that applications are available from the Illinois Department on Aging.
In counties which use the estimated or accelerated billing methods, these statements shall only be provided with the final installment of taxes due. The provisions of this Section create a mandatory statutory duty. They are not merely directory or discretionary. The failure or neglect of the collector to mail the bill, or the failure of the taxpayer to receive the bill, shall not affect the validity of any tax, or the liability for the payment of any tax.
(Source: P.A. 95 644, eff. 10 12 07.)