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1-T Township Assessor Introductory Course Outline

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Glossary

**Abatement** - a reduction in a tax. For example, a unit of government may reduce its levy by filing an appropriate resolution with the County Clerk prior to extension.

**Actual age** - the number of years that have elapsed from the year of construction to the present date.

**Ad valorem** - according to value.

**Ad valorem tax** - a tax levied according to value.

**Aggregate rate** - the sum of all taxing district rates applicable to a tax code. The aggregate rate is usually listed as $/$100 of taxable EAV.

**Allowable expenses** - legitimate expenses that can be deducted from effective gross income to arrive at net income.

**Appraisal** - an opinion of value, supported by evidence.

**Appraiser factor** – a factor applied to bring buildings valued by a particular appraiser more in line with the value of the rest of the buildings in the jurisdiction.

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

**Assessed Value (AV)** - the value placed on property for tax purposes and used as a basis for distribution of the tax burden. Most of the time this amount is subject to the State-issued equalization factor and the deduction of the homestead exemption on residential parcels.

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

**Assessment level** - refers to the statutory level of 33.33% or the actual level obtainable from a sales ratio study.

**Assessment/Sales Ratio Study** - used to indicate the percentage relationship of the prior year’s equalized assessed value to actual market value for real property in certain categories and in geographical areas.

**Assessment uniformity** - the degree to which different properties are assessed at equal percentages of Market Value. This is the foundation of assessment practices.

**Base Line, Sectionalized Land** - a parallel of latitude, or approximately a parallel of latitude, running through an arbitrary point chosen as the starting point for all sectionalized land within a given area.
Bank Real Estate Owned (REO) - the first sale of the property owned by a financial institution as a result of a judgment of foreclosure, transfer pursuant to a deed in lieu of foreclosure, or consent judgment, occurring after the foreclosure proceeding is complete.

Bearing - Direction of a line measured as the acute angle from a reference meridian, usually expressed in the form "S 30° E" or "N 58° W".

Board of Review - an appeal agency in each county, consisting of three members; in commission counties, the county commissioners or their appointees; in other counties, usually appointed by the County Board. The Board of Review is a review and equalizing agency.

Boundary - a line that marks the outermost extent of an area, or a subdivision between areas.

Building residual - the building value derived from the sales price minus the lot value.

Cadastral map - a map that shows the size, shape and extent of each land parcel in a prescribed geographical area for purposes of describing and recording ownership.

Capital - refers to money used by a business to purchase fixed assets, such as land, machinery, or buildings.

Capitalization - a mathematical process for converting the net income produced by a property into an indication of value. Used in the income approach to value.

Capitalization rate - “R” in the IRV formula. The ratio of the Net Operating Income to the property value. It is the total of the Equity Rate, the Effective Tax Rate, and the Mortgage/Interest Rate.

Recapture (or equity) rate - annual rate at which invested capital is returned to the investor over a specified period. Refers to income provision made to compensate for the loss of invested capital.

Effective tax rate - determined by multiplying the level of assessment by the aggregate tax rate supported by that property. Used to calculate property taxes by applying the effective tax rate to full market value.

Mortgage/Interest rate – interest rate used to convert future payments or receipts into present value.
**CDU rating** - modifies the normal age depreciation of an improvement according to the appraiser’s determination of the improvement’s condition, desirability, and utility.

**Certificate of Error** - a certificate issued by the assessing official and approved by the court to correct an error in the tax bill. Cannot be used to correct an error in judgement.

**Chain** - a land surveyor's measure – 66 feet or 100 links.

**Chief County Assessment Officer (CCAO)** - the individual appointed by a county board or elected in a county to assist township assessors in completing original assessments and to review their work. The CCAO has the power to revise and equalize assessments and is the Clerk of the Board of Review. In commission counties, the CCAO makes the original assessment.

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

**Coefficient of Concentration (COC)** - the percentage of observations falling within 10% of the median level of assessments; a high COC indicates more uniformity.

**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 of the median; an indicator of assessment uniformity found by dividing the average deviation by the median. It is the most common method used in measuring assessment uniformity.

**Commencing** - informative term of beginning and/or origin.

**Comparable** - recently sold property that is similar in many aspects to a property being appraised.

**Condition** - a type of depreciation that refers to the physical condition of the improvement. Condition changes due to depreciation, such as wear and tear, use, and abuse.

**Contributory Value (CV)** - the amount that contributes to the productivity of a farm as value in use. Wasteland is assessed according to its contributory value; farm buildings are assessed according to their contributory value to the productivity to the farm based on their current use. For farm buildings, contributory value is found by multiplying Replacement Cost New by the Remaining Economic Life. \( CV = RCN \times REL \)

**County Assessor** - an individual elected to oversee the assessment process in a county. In practice, a county assessor is responsible for making initial assessments rather than township assessors.
**Cost approach** - calculating the cost of reproducing the improvements, subtracting accrued depreciation, and adding land value.

**Cost factor** - used to adjust the cost schedules for differences in local construction labor and material rates.

**Cropland** - includes all lands from which crops are harvested or hay cut; all lands in orchards, citrus groves, vineyards, and nursery and greenhouse crops; land in rotational pasture and grazing land that could have been used for crops without additional improvements; land used for cover crops, legumes, and soil improvement grasses, but not harvested and not pastured; land on which crops failed; land in cultivated summer fallow; and idle cropland.

**Degree** - one/360th of the circumference of a circle.

**Delinquent taxes** - past due and unpaid taxes.

**Depreciation** - loss of value from any cause, *i.e.*, physical depreciation, functional obsolescence, and economic obsolescence.

**Description** - the exact location of a piece of property stated in terms of lot, block, and tract, or by metes and bounds.

**Design factor** - a factor applied to accommodate increased cost associated with complex architectural designs.

**Desirability** - a type of depreciation that refers to the economic or external depreciation, such as lack of appeal due to location, or some type of adverse influences outside the boundary lines of the property.

**Eaves** - lower edge of a roof, overhanging the side walls of a building.

**Eave height** - the height of a building from grade-level to the building’s eaves.

**Economic life** - estimated period over which it is anticipated that a property may profitably be used. The period over which property will yield a return on and of the investment, over and above the economic rent due to land. This period can never exceed the physical life of the property and generally is shorter than physical life or endurance.

**Effective age** - age of an improvement based on the improvement’s CDU rating; effective age does not always equal actual age.
Effective Gross Income (EGI) - potential gross income, less vacancy and credit loss, plus miscellaneous income.

Effective tax rate - determined by multiplying the level of assessment by the aggregate tax rate supported by that property; used to calculate property taxes by applying the effective tax rate to full market value.

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 the market value.

Equalization factor - the factor that must be applied to local assessments to bring about the percentage increase or decrease that will result in an equalized assessed value equal to one-third of the market value of taxable property in a jurisdiction (other than farm land, farm buildings, coal rights, state-assessed property, and certain wind turbines).

Equalization multiplier - the application of a uniform percent increase or decrease to assessed values of various areas or classes of property to bring assessment levels to a uniform level of market value. The multiplier can be applied by Township Assessor (TA), Supervisor of Assessments (CCAO) or Board of Review (BR).

Equalized Assessed Value (EAV) - the assessed value multiplied by the State equalization factor. This gives the property value from which the tax rate is calculated after deducting all qualified homestead exemptions. For farm acreage, farm buildings, and coal rights, the final assessed value is the equalized assessed value. Individual tax bills are calculated by multiplying the individual district’s tax rates by the equalized assessed value after all qualifying exemptions have been removed.

Equity rate - annual rate at which invested capital is returned to the investor over a specified period; refers to income provision made to compensate for the loss of invested capital.

Exemption - the removal of property from the tax base. An exemption may be partial, like a homestead exemption, or complete. One example would be a church building used exclusively for religious purposes.

Extension - the process in which the County Clerk determines the tax rate needed to raise the revenue (levy) certified by each taxing district in the county. Also, the actual dollar amount billed to property taxpayers in a district.

Factor - represents the adjustment to an appraisal for any number of variables.
Farm - when used in connection with valuing land and buildings for an agricultural use, any
property used solely for the growing and harvesting of crops; for the feeding, breeding and
management of livestock; for dairying or for any other agricultural or horticultural use or
combination thereof; including, but not limited to, hay, grain, fruit, truck or vegetable crops,
floriculture, mushroom growing, plant or tree nurseries, orchards, forestry, sod farming and
greenhouses; the keeping, raising and feeding of livestock or poultry, including dairying,
poultry, swine, sheep, beef cattle, ponies or horses, fur farming, bees, fish and wildlife
farming.

Conventional farm – the tending of all major and minor Illinois field crops, pasturing,
foresting, livestock, and other activities associated with basic agriculture.

Intensive farm – farm practices for which per acre income and expenditures are
significantly higher than in conventional farm use. Intensive farm use often requires
significantly more labor than conventional farm use.

Forfeited taxes - taxes which received judgment for sale of delinquent taxes but were not
purchased at the tax sale and remain unpaid.

Front foot - a strip of land one foot wide fronting a street, etc., and running the entire depth
of the lot. (Lot size 50' x 150' FF = 50')

Front foot price - supposes that each foot of lot frontage is worth the same dollar amount;
used to indicate lot value.

Geographic Information System (GIS) – a system developed for spatial analysis needs,
such as planning, natural resources, and land records management.

Grantee - one to whom a grant is made (buyer).

Grantor - the person by whom a grant is made (seller).

Highest and best use - that (the property’s) use determined to generate the highest net
return to a property over a period of time, provided it is legal, reasonable, profitable, and
probable.

Home Rule - local governments can exercise any local powers not denied to them by the
state; without home rule, they can exercise only the power explicitly given to them by the
state.
**Improvement** - any structure attached to, lying upon, or within the land that may not be removed without physical stress.

**Income approach** - calculating the present worth of the income from an income-producing property.

**IRV formula** - formula for income approach to value; 
\[ I \text{ (income)} = R \text{ (capitalization rate)} \times V \text{ (market value)}. \]

**Judgment** - court-ordered authorization to sell delinquent taxes.

**Lambert grid** - an informal designation for state coordinate system based on a Lambert conformal map projection with two standard parallels.

**Land** - the raw land without amenities, such as streets, utilities, etc.

**Latitude** - angular arc distance north or south of the Equator along a meridian of longitude. Latitude lines are horizontal circles around the Earth and measure degrees north or south of the Equator.

**Legal description** - a description in words or numbers judged legally sufficient to locate and identify a parcel of land.

**Level of Assessments** - ratio of assessed value to the sale price.

**Levy** - the amount of money a taxing body certifies to the County Clerk to be raised by property taxes to meet its operating expenses.

**Line** - boundary, course, or extension between points; may consist of straight or curvilinear segments.

**Link** - linear measurement equivalent to 7.92 inches or .66 feet. A chain is made up of 100 links.

**Load bearing** - walls of a building that support the structure.

**Longitude** - angular arc distance East or West of the Prime Meridian along a parallel of latitude. Vertical circles around the Earth measuring degrees East or West.
Map - a representation (usually on a flat medium) of all or a portion of the Earth, showing the relative size and position of features to some given scale or projection. A map may emphasize, generalize, or omit the representation of certain features to satisfy specific requirements. Maps are frequently categorized and referred to according to the type of information which they are designed primarily to convey to distinguish them from maps of other types.

Market Value - the most probable sales price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus.

Mass appraisal - the process of valuing many properties as of a given date using standard methods and that provide uniformity.

Median - the middle value of a ranked set of numbers.

Meridian line - any line running due North and South. Since meridian lines converge at the North Pole, no two meridians are parallel. Practically within the limits of a property survey, all lines shown as North or South are considered parallel.

Mettes and Bounds - precise description of the boundary lines of a parcel of land. Not described by reference to a lot or block shown on a map, but described by starting at a known point and describing the bearings and distances of the lines forming the boundaries of the property.

Monuments - tangible landmarks indicating boundaries.

1. Physical Monument - an existing feature such as a stone or stake but not the line of an adjoining property.
2. Natural Monuments - a naturally occurring object such as a lake, river, tree, boulder, or hill.
3. Artificial Monument - a man-made object such as a stake, fence, set stone, etc.
4. Record Monument - an adjoining property called for in a deed such as a street or a particular parcel of land.
5. Legal Monument - any monument referenced in a legal description for the purposes of identifying property.

Mortgage interest rate - interest rate used to convert future payments or receipts into present value.
Natural boundary - any existing boundary that can be readily identified and located, *i.e.*, the boundary line of an adjacent parcel of land, a river boundary, ditch, wall, bluff, etc. Courses and distances, as a rule, give way to a call for a natural boundary, because a natural boundary, if fixed, is unchangeable and more likely to be the true call than courses and distances.

Neighborhood - the immediate environment or area having the most direct impact on a property's value.

Neighborhood factor - a factor applied when the neighborhood where a building is located directly affects the value of the buildings in that area.

Net Operating Income (NOI) - effective gross income, less allowable expenses and reserves for replacement.

Other farmland - includes woodland pasture, woodland including grass waterways, windbreaks, woodlots, timber tracts, cutover and deforested land, and farm building lots other than homesites.

Outlier - a Sales Ratio (SR) whose results are a large deviation from the median, either below the median or above the median.

Overall capitalization rate (OAR) - a capitalization rate used in the income approach to value. Net income divided by the selling price.

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

Parallel lines - lines extending in the same direction and at the same distance apart at every point so as never to meet.

Parcel - in land ownership mapping for assessment purposes, a parcel is usually held to be a tract of land under one identical ownership. It may be a combination of two or more tracts acquired by separate deeds.

Party wall - common wall shared by two buildings. Multiply the length of the wall by 60% for an adjusted length. Use this adjusted length for perimeter only.

Permanent Pasture - any pastureland except woodland pasture and certain exclusions such as rotational pasture and grazing land that could have been used for crops without additional improvements.

Plat Map - usually a survey drawing of an individual parcel of land showing special characteristics and the locations of any buildings thereon.
Plottage - the increment of value created when two sites are combined to create greater utility. For example, two sites are worth $35,000 each sold separately. When combined they sell for $80,000 so the plottage value is $10,000.

Point of Beginning (POB) - the reference point at the beginning location of a surveyed piece of land.

Point of Commencement (POC) - a remote established point from which the true point of beginning can be identified.

Political Township - township units set up by government agencies. They can be changed at any time and do not necessarily correspond with congressional township boundaries.

Potential gross income (PGI) - income that a property is capable of producing if 100 percent occupied for 100 percent of the time, based on market standards.

Prime Meridian (Principal Meridian) - Zero Longitude at Greenwich, England. It is the line from which all other lines of longitude are measured. This includes the line that runs 180° away from Greenwich also known as the International Date Line.

Principle of substitution - the informed buyer is not paying more for a property than it would cost him to acquire an equally desirable substitute property.

Productivity Index numbers (Soil PI) – a scale based on average level management used to determine the relative capacity of soils to produce crops. Farmland is assessed based on a soil's PI or adjusted PI, and its use.

Property Index Number (PIN) - a brief legal description of a particular parcel by numerical reference to parcels on assessment maps. It is a fourteen-digit number. The first two digits refer to the geographical township; the second two, to the section in which the parcel is located; the next three, to the block number; the next three digits identify the parcel within the block; the last four digits identify the use of the parcel.

Property record card (PRC) - used to record individual property appraisals used for assessment.

Quality grade - used to adjust cost schedules for differences in the quality of construction materials and workmanship.

Quarter Section - a 160-acre block of land, 1/4 of a section.

Range - a vertical column of townships in the rectangular survey system.
Rectangular Survey System - also known as the Governmental Survey System; a system in which land is divided in a grid-like fashion consisting of principal meridians, baselines, townships, ranges, and sections. The Rectangular Survey System provides for a unit of land approximately 24 miles square, bounded by base lines running east and west, and meridians running north and south. This 24-mile square area is divided into areas six miles square called townships. Townships are then further divided into 36 sections, each one mile square.

Redemption - the payment by owner or interested party, of sold taxes, interest, costs, and penalties, following a tax sale.

Remaining Economic Life (REL) - period of time over which a prudent investor would reasonably expect to recapture his or her investment.

Remaining Physical Life (RPL) – the tangible life span that an improvement should have remaining given its current effective age and considering its physical deterioration along with ordinary maintenance.

Replacement Cost New (RCN) - represents current cost of replacing an improvement.

Reserves for Replacement (RR) - replacement or repair cost of short-lived items pro-rated as an allowable expense to be deducted from effective gross income.

Residual - remaining value. Sales Price – Land Value = Building Residual (Building Value), or Sales Price – Building Value = Land Residual (Land Value).

Rod (or pole) - a surveyor’s lineal measure of 16.5 feet, or 1/4 of a chain.

Sale in error - real property which has been sold but later declared by the court to be an improper order for sale.

Sale in lieu of foreclosure - a transfer pursuant to a deed in lieu of foreclosure if the Grantee is a financial institution.

Sales comparison (or market) approach - calculating the value of properties by observing and analyzing the selling prices of comparable properties.

Sales Ratio (SR) - the ratio of assessed value to market value found from a property that has sold; ratio equals prior year (equalized) assessed value (AV or EAV) divided by the current year sales price (SP).

Sales Ratio study - an analysis of the percentage relationship of assessed value to market value. Ratio equals prior year assessed value divided by the current year sales price. A minimum of 25 useable sales/appraisals is required.
**Scale** - relative ratio of map to ground distances.

**Section** - a one mile square block of land containing 640 acres, or one thirty-sixth of a township.

**Section number** - number assigned to the one mile square units within a survey township. A standard survey township will contain 36 sections.

**Short sale** - property was sold for less than the amount owed to the mortgage lender or mortgagor, if the mortgagor has agreed to the sale.

**Site** - parcel that has been made ready to be used for the purpose for which it was intended.

**Size & shape** - a site’s dimensions and area can create advantages and disadvantages for the site, which in turn can affect value.

**Soil Productivity** – the capacity of soil to grow crops or plants under specified environmental conditions influenced by soil properties, climatic conditions and management inputs. The soil productivity indexing system assigns a number (PI) which compares a soil’s potential to produce crops to the potential of the Muscatune soil.

**Standard Parallels** – (correction lines) parallels of latitude at intervals of 24 miles North or South of the base line.

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

**Subdivision** - a tract of land divided, by means of a map, into lots, or lots and blocks, for the purpose of resale, generally for residential or agricultural purposes.

**Survey** - the act or operation of making measurements for determining the relative position of points on, above, or beneath the Earth's surface; also, the results of such operations.

**Tax map** - a picture of one or more parcels of land showing the boundaries of sub-divisions of land, with the length thereof, and the areas of individual tracts for the purpose of describing and recording ownership. It is a graphical representation on a flat surface of some portion of the Earth's surface. It shows the relative size and position of the land with respect to the other properties, roads, highways and major topographic features relating to the value and use of the land.

**Taxing body** - a governmental organization that levies a property tax.
**Taxing district** - a territorial area under the taxing body's jurisdiction.

**Tax base** - composed of the Equalized Assessed Value (EAV) of locally assessed property, less all qualified exemptions, plus the value of any State-assessed property.

**Tax rate** - the amount of tax due stated in terms of a percentage of the tax base. Example: $6.81 per $100 of equalized assessed valuation (equal to 6.81%).

**Tax sale** - the process by which delinquent taxes are annually sold.

**Tax year** - the year of assessment. The tax year of 2016 refers to assessments based on January 1, 2016 values; the taxes are billed in calendar year 2017.

**Three approaches to value** - sales comparison (or market), cost, and income approach.

**Topography** - the changes in land elevation can affect drainage, grading, view and usefulness of the property.

**Township (congressional township)** – a township is a nearly square area of land containing 36 sections.

**Traverse** - a method of surveying in which a sequence of lengths and directions of lines between points are measured.

**Units of comparison** - used in the sales comparison approach when establishing an appropriate measure of value. Front Foot (FF), Square Foot (SF), and site value are typical units of comparison. The median unit value of the most consistent unit of comparison is used as an indicator of value when all the lots have exactly the same features.

**Units of value** - divides sales price by the number of units.

**Warrant** - a commission or document giving authority to do something. A collector's warrant gives the authority to collect the tax.

**Wasteland** - a portion of a qualified farm tract which is not put into cropland, permanent pasture, or other farmland as the result of soil limitations and not as the result of a management decision.

**33 1/3%** - means 33 ⅓% of the actual value of real property as determined by the Department of Revenue’s Assessment / Sales Ratio studies for the three 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.
**65-35 Rule** - suggests that the utility of a lot is seriously affected by its shape, thus a loss in value. Applies to right-angle triangular shaped lots; if base is on the frontage, the lot has 65% of the value of a rectangular lot having the same frontage and depth, if the apex is located on the frontage, the lot has 35% of the value of a rectangular lot having the same frontage.
Where to Get Assistance

When individuals are just starting out in the assessment field, they may often feel overwhelmed by their duties.

In addition to the Property Tax Code and the Illinois tax publications, there are many other resources available to the board member.

It is often helpful to talk with other assessors in your area for information on handling troublesome situations. The CCAO for your county can be very helpful regarding how you can better perform work-related responsibilities. Also, there are numerous assessment classes available from professional appraisal and assessment organizations to give you the tools to better perform your job, and the department is available to provide technical assistance in many areas.

When the question is of a legal nature, such as interpreting the statutes, you should check with your state’s attorney, who is charged with enforcing the statutes in your county.

WEB LINKS

- Property Tax Division: tax.illinois.gov/localgovernment/propertytax
- Property Tax Code (35ILCS 200): ilga.gov
- Illinois Property Tax Appeal Board: ptab.illinois.gov/

PUBLICATIONS

- PTAX-1004 The Illinois Property Tax System
  tax.illinois.gov/publications/localgovernment/ptax1004.pdf
- Publications 122,123,124,126 and 127
  revenue.state.il.us/publications/pubs/
Guide to Mathematical Terms and Equations

This guide explains mathematical terms and illustrates frequently used formulas and equations. Proceed to Unit 1 if you feel proficient in your math skills and do not need to review this material.

Percentages and Decimals

Percentage (%) denotes a standard of measurement that represents a whole quantity divided into 100 equal parts. For example, 20 percent refers to 20 parts of a total of 100 parts, which in terms of fractional values is written as 20/100.

Values are often written in percentages or decimals, and it is important to understand both the relationship between the two and the process of converting one to the other.

Note: Frequently calculators will run specialized functions when the % key is used that is not the intention of the user. Unless an individual is confident in the use of the % key for the calculator, using the % key is not recommended.

To convert from a percent to a decimal, divide the value by 100, or simply move the decimal point two places to the left. For example, 20% is found by dividing 20 by 100 and it becomes .20. The result is the same if the decimal point were moved two places to the left. For example, 5% becomes .05. A “0” must be placed to the left of the “5” to provide the second place before the decimal point can be moved two places to the left. By adding the “0” 5.0% would change to .05 (which can also be read as 5 hundredths or 5 parts of 100 parts). Similarly, 8 ½% or 8.5% becomes .085.

To convert a decimal to a percentage, multiply the value by 100, or simply move the decimal point two places to the right. For example, .30 becomes 30%; .06 becomes 6%; and .0975 becomes 9.75%.

To multiply or divide percentages, convert the number to a decimal by moving the decimal point 2 places to the left. If a number does not have a decimal point, it is considered to be at the right of the number. 25% = 25.0% = .25

After the number has been converted to a decimal number, complete the calculation on the calculator and convert the answer back to a percent by moving the decimal point two places to the right and follow it with a % symbol.
Examples of **multiplying percentages**:

1. $11\% \times 8\% = .11 \times .08 = .0088 = .88\%$
2. $11 \times 8\% = 11 \times .08 = .88$ or $88\%$

Examples of **dividing percentages**:

1. $20\% \div 5\% = .20 \div .05 = 4$
2. $20 \div 5\% = 20 \div .05 = 400$

**To convert a percent to $ per $100 AV**: carry the number over as it is and exchange the % sign with the $ $/$100 AV.

Examples of converting a percent to $/$100 AV:

1. $27\% = \$27 / \$100 AV = \$27 per \$100 of AV$
2. $.0382 = 3.82\% = \$3.82 / \$100 AV$ or $3.82$ per $\$100$ of AV

**Exercise 1**: Converting decimals to percent to $/$100 AV

<table>
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<th>Decimal</th>
<th>Percent</th>
<th>$ per $100 AV</th>
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<td>5.</td>
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<td>$2.55$ per $$100 AV</td>
</tr>
<tr>
<td>6.</td>
<td>.06 %</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>.1234</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td>$.033$ per $$100 AV</td>
</tr>
<tr>
<td>9.</td>
<td>.0225</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>.45%</td>
<td></td>
</tr>
</tbody>
</table>
Percentages and decimals can be added, subtracted, multiplied, or divided.

Adding

\[
20\% \quad .20 \\
+ 5\% \quad +.05 \\
25% \quad .25
\]

Subtracting

\[
20\% \quad .20 \\
–5\% \quad –.05 \\
15\% \quad .15
\]

Multiplying

\[
20\% \quad .20 \\
x 5\% \quad x .05 \\
1\% \quad .01
\]

Dividing

\[
20\% \div 5\% = 4 \\
.20 \div .05 = 4 \\
20 \div 5\% = 400 \\
20 \div .05 = 400
\]

Factors

The factoring process involves the adjustment of a number by multiplication, resulting in a product either more or less than the original value.

There are many types of factoring that may be used by an assessor to accurately value the individual characteristics of a parcel of property. Some examples include **quality grade**, **remaining economic life (REL)**, **depreciation**, **cost**, and **time**.

Examples of Factoring

The appraisal publications’ Replacement Cost New (RCN) value is $110,400. Since that time costs have increased by 4%. To determine the factor to be used in this situation, add the 4% amount of the increase to the 100% value, which represents 100% of the original cost new.

\[
\begin{array}{c c c c c c}
$110,400 & $110,400 & $110,400 & $110,400 \\
\times 104\% & \times 1.04 & \times \%4 & \times 100\% = \$114,816 \\
\$114,816 & \$114,816 & \$4,416 & \$110,400 \\
\end{array}
\]
Again, assume the original cost is $110,400. This time the costs have decreased by 4%.

\[
\begin{array}{cccc}
\$110,400 & \times 0.96 & \text{or} & \times 0.96 \\
\$105,984 & \$105,984 & \$110,400 & \$110,400 \\
\end{array}
\]
Unit 1
An Overview of the Property Tax Cycle

The purpose of this unit is to provide a basic understanding of property taxation, the establishment of value for tax purposes, and the two-year property tax cycle, beginning with the creation of the assessment books and concluding with the sale of a lien on real estate due to nonpayment of taxes.

Learning Objectives

After completing the assigned readings, you should be able to

- outline the flow of the assessment books, from their creation through their use in preparation of the collector’s books.
- identify the roles that various township and county officials play in the property tax cycle.
- identify established completion dates for various processes.

Terms and Concepts

*Ad valorem* tax
Assessment
Assessment date
Assessment cycle
Budget and levy cycle
Equalized assessed value (EAV)
Levy
Market value
Personal property
Real property
State-assessed property
Statutory level of assessments
An Overview of Property Tax

Property tax is governed by the Illinois Property Tax Code, 35 ILCS 200/1-1 through 32-20. Property tax is a local tax assessed by the county or township. Revenues are collected and spent at the local level. IDOR (Illinois Department of Revenue) issues guidelines, determines county equalization factors, grants or denies non-homestead exemptions, distributes assessment manuals, provides technical assistance and assessment training to local assessing officials.

The complete Illinois Property Tax Code can be found at ilga.gov. Look under the Illinois Compiled Statutes, Section 35, Act 200.

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, furniture, etc.

All owners of real property must pay property taxes unless specifically exempted by state law. Owners of residential, commercial, industrial, and agricultural property all pay property taxes directly. Renters also contribute to the property taxes, but do so indirectly through their rent.

In Illinois, taxpayers now pay property taxes only on their real property. Personal property tax for individuals was abolished by the 1970 Illinois Constitution. Corporations, partnerships, limited partnerships, joint ventures, and similar entities continued to pay taxes on personal property until 1979. These business entities now pay a replacement tax on income or invested capital. Business entities pay this tax to IDOR, which distributes the monies to local taxing districts in proportion to the amount received previously from the personal property tax.

Property taxes are raised, spent, and distributed locally. Property taxation produces more than three-fourths of the total state 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 the property tax goes to school districts.

Property tax is a tax that is based on value of the property owned and is assessed according to its value. For this reason, it is often called an ad valorem tax. Most real property in Illinois must be assessed based on its value in the open market.

Market value is the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus.
Appraisals for *ad valorem* tax purposes shall assume property is owned in “fee simple”, meaning the total bundle of rights is considered to be intact.

The determination of market value for tax purposes is the job of assessors, who use one or more of the following three basic approaches to estimate market value.

1. **Cost Approach**—calculating the cost of replacing the improvements, subtracting all depreciation, and adding the land value.

2. **Sales Comparison Approach (or Market Approach)**—calculating the value of property by analyzing the selling prices of comparable sales.

3. **Income Approach**—calculating the present value of the property by analyzing the income from similar income-producing properties.

The determination of market value requires skilled, knowledgeable Board of Review members. To encourage assessing officials to improve their knowledge and skill in determining value, the state pays an educational stipend to any supervisor of assessments, assessor, deputy assessor, or member of a Board of Review who earns certain professional designations and who continues their education each year.

**The Property Tax Cycle**

The property tax cycle—from the assessment of property to the collection and distribution of taxes—takes nearly two years for most property. Some steps take place concurrently, but basically the cycle can be divided into six steps.

1. Assessment
2. Review
3. Equalization
4. Levy
5. Extension
6. Collection and distribution
The Assessment Cycle

The assessment cycle begins with the creation of the assessment books and ends with review of the assessments by the Board of Review. The assessment cycle takes from nine to twelve months to complete, depending on the size of the county and the number of assessment complaints filed with each Board of Review. The steps in the assessment cycle are:

- Assessment
- Review
- Equalization

Step 1: Assessment

An assessment involves four steps:

1. Identifying the real property within a jurisdiction.
2. Listing it.
3. Appraising it.
4. Placing an assessed value on it for the tax rolls.

The assessed value is the basis for determining what portion of the total tax burden each property owner will bear. In Illinois, the statutory level of assessments is one third or 33 1/3% of market values, unless set otherwise by law.

Most property is locally assessed by township and county officials. In all counties except Cook and the 17 commission counties, township or multi-township assessors have primary assessment responsibility.

State Assessed Property

A few types of properties are assessed by the state, such as railroad property, railroad right-of-way and track, wind turbines*, and pollution-control facilities that have been certified as such by the Pollution Control Board. The value of state-assessed property is a small percentage of all taxable property. State-assessed property is valued by IDOR and these assessments are certified to the appropriate county clerks for inclusion in the local tax base.

*Wind turbines over .5 MV nameplate capacity
Commission Counties

The 17 commission counties are Alexander, Calhoun, Edwards, Hardin, Johnson, Massac, Menard, Morgan, Monroe, Perry, Pope, Pulaski, Randolph, Scott, Union, Wabash, and Williamson. These counties have no township level of government. The supervisor of assessments has the primary responsibility for assessments of property.

CCAO

Supervisors of assessments and county assessors are also referred to as Chief County Assessment Officers (CCAO) or Supervisors of Assessment (SA). The work of the township and multi-township assessors is subject to review and, if necessary, revision by the supervisor of assessments. Some Counties have an elected supervisor of assessments (St. Clair and Cook) but the SA is usually appointed by the County Board.

The supervisor of assessments must have two years of relevant experience, pass a qualifying examination administered by IDOR, and possess a professional appraisal designation specified in the statutes. Some counties have an elected supervisor of assessments. The county assessors in Cook, Mason and St. Clair counties are elected; 24 other counties elect a supervisor of assessments. In addition, assessors must also qualify to hold office based on prescribed course work in assessment techniques.

Statutory Assessment Date

In Illinois, property is to be viewed, inspected and valued once every four years. That fourth year is referred to as a general reassessment year (or a quad year). (Cook County is on a three-year reassessment cycle with triad assessment districts.) Between these Quadrennial assessments, assessors may revalue any property whose value has changed or is incorrect.

Farmland

Farmland acreage is reassessed every year using Certified Values from the Illinois Department of Revenue.
The Cycle Begins

On January 1, the assessment cycle begins. The **assessment date** in Illinois is January 1. Property must be valued as to its condition at that point in time. The Property Tax Code requires that on or before this date, the CCAO calls on the county clerk to receive the assessment books listing all parcels of real estate to be assessed in each of the townships in the county.

Most counties now have computerized “assessment books”. The old, hard copy assessment books had columns for the Property Index Number (PIN), the name of the owner, the assessment by the township assessor, the assessment by the CCAO, and the assessment by the Board of Review for each parcel. The CCAO conducts a meeting with the township assessors to give instructions to the assessors, inform them of any changes, and give them the assessment books.

Procedures for the establishment of farmland assessments begin on May 1 in the year prior to the assessment date, with the certification of proposed values sent by IDOR to the CCAO. The values are used to make assessments for the assessment year beginning on the following January 1.

In most non-commission counties, township and multi-township assessors should complete their assessments **by June 15**. After the assessors have certified their assessment books as being correct and complete, they return them to the CCAO, who has until **the third Monday in June** or on or before the 90th day following the certification of the final township assessment roll in the county, whichever is later, (revised July 2016) to examine the books and make changes.

Assessment books are then given to the Board of Review for subsequent review and equalization. *(The Cook County assessor certifies the completed assessment books to the Board of Review as they are completed.)*

**Taxpayers have the right to inspect property record cards and other assessment records for any property, subject to reasonable rules and regulations established by local authorities.**

*With a few exceptions, assessment information is a matter of public record and subject to requests under the Freedom of Information Act.*
Steps 2 & 3: Review and Equalization

Review and *intra*-county (within the county) equalization (in all counties except Cook) are performed by the CCAO and/or the Board of Review. While the CCAO and the Board of Review have the power to equalize, normally only one will do so.

The CCAO examines the assessment books and makes any changes that will make the assessments more accurate and/or more equitable. The CCAO may equalize assessments by applying a factor to all assessments for a township, an area, or a class of property.

All assessments that have been changed from the previous assessment year must be published in a newspaper. However, only the equalization factor(s) must be published for properties that had assessment changes due solely to equalization. Individual assessment notices must be mailed to taxpayers whose assessments were changed for any reason other than an equalization factor.

In a general reassessment year (a quad year), *all* values must be published whether there have been any changes or not.

Any assessment changes made by the CCAO are entered in the CCAO column in the assessment books. The CCAO certifies the assessment books to the Board of Review by the *third Monday in June* of the assessment year, or on or before the 90th day following the certification of the final township assessment roll in the county. They also send a *tentative abstract* of assessments to IDOR.

The department uses the information on the tentative abstract to determine if the level of assessments has changed since the data for the department’s sales ratio study was collected. The department then certifies a tentative *inter*-county (between counties) equalization factor, often called a “tentative state multiplier,” to the CCAO and the county clerk and holds a public hearing on the factor.

The Board of Review convenes *no later than the first Monday in June* in most counties and completes its work no later than March 15th of the following year. *The Cook County Board of Review convenes on or before the second Monday in September and adjourns 60 days after the date of the last delivery to the Board of Review of the assessment books for any township or taxing district.*

Any assessment changes are entered in the Board of Review’s column in the assessment books. *Whenever a change of assessment has been made, the CCAO must mail a change of assessment notice to the taxpayers.* The board must also make a full and complete list of all changes it has made and the final equalization factors it has applied. *The BOR makes the final decision on property values at the County level.*
A copy of the list(s) must be given to the CCAO and to the county clerk. These lists are a matter of public record and open for public inspection. The Board of Review then certifies the assessment books to the county clerk.

**Completion of the Assessment Cycle**

After the county clerk receives the assessment books from the Board of Review, the clerk prepares an abstract of assessments that IDOR uses in the computation of the final (inter-county) equalization factor for the county. When the county clerk receives the department’s certification of the final equalization factor and the certification of state-assessed properties, the clerk applies the final equalization factor to the local assessments as certified by the Board of Review. This results in the **Equalized Assessed Value (EAV)**. These EAVs are the final values used to compute tax rates and extend taxes.

The assessment cycle is **complete**.

The order to the flow of the books is:

<table>
<thead>
<tr>
<th>Connie</th>
<th>County Clerk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Came</td>
<td>CCAO</td>
</tr>
<tr>
<td>To</td>
<td>Township Assessor</td>
</tr>
<tr>
<td>Chicago</td>
<td>CCAO</td>
</tr>
<tr>
<td>By</td>
<td>Board of Review</td>
</tr>
<tr>
<td>Car</td>
<td>County Clerk</td>
</tr>
</tbody>
</table>

The cycle begins and ends with the County Clerk.
## Assessment cycle

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>County Clerk:</td>
<td>Prepares two sets of real estate books and delivers to the CCAO by January 1.</td>
</tr>
<tr>
<td>CCAO:</td>
<td>Meets with township assessors before January 1 and establishes guidelines; delivers one set of books to the township.</td>
</tr>
<tr>
<td>Township assessor:</td>
<td>Values real estate as of January 1 and returns books to CCAO by June 15; can equalize.</td>
</tr>
</tbody>
</table>
| CCAO:                 | 1. Reviews assessments made by township assessors; makes changes.  
                        | 2. Equalizes assessments within county by class, by area, or by township.  
                        | 3. Mails changes of assessment notices to taxpayers.  
                        | 4. Publishes changes in newspaper of general circulation.  
                        | 5. Delivers books to board of review by the third Monday in June, or on or before the 90th day following the certification of the final township assessment roll in the county, whichever is later.  
                        | 6. Prepares tentative abstract of assessment report; mails report to the department.                                                                                                                      |
| Department of Revenue:| Develops tentative equalization factor; publishes factor in newspaper.  
                        | Holds public hearing.                                                                                                                                                                                         |
| Board of review:      | 1. Assesses omitted property.  
                        | 2. Acts on non-homestead exemptions and mails to department for approval.  
                        | 3. Hears complaints and makes assessment changes on any property when deemed necessary.  
                        | 4. Mails changes of assessment notices to taxpayers.  
                        | 5. Equalizes assessments within county by class or area, if necessary.  
                        | 6. Delivers books to county clerk.  
                        | 7. Mails report on equalization to department.  
                        | 8. Makes a list of changes and gives the list to the CCAO and county clerk.                                                                                                                               |
| County clerk:         | Prepares final abstract of assessments and mails to department.                                                                                                                                             |
| IDOR:                 | Certifies final equalization and mails to county clerk.                                                                                                                                                     |
| County clerk:         | Applies equalization factor to all local assessments, except farmland, coal rights, farm buildings, and state-assessed property.                                                                       |
| IDOR:                 | Certifies state assessments and mails to county clerk.                                                                                                                                                      |
| County Clerk:         | Totals the EAV for each taxing district.                                                                                                                                                                    |
The Budget and Levy Cycle

While the assessment cycle determines the allocation of the tax burden among property owners, the budget and levy cycle determines the total amount of property tax to be paid by the property owners. The three steps in the budget and levy cycle are:

1. Levy
2. Extension
3. Collection and Distribution

Step 1: Levy

The Budget is the amount of money by category each taxing district determines it needs to operate and to provide services.

The Levy is the amount of money each taxing district determines it needs from the property tax.

The budget and levy cycle begin in the fall of the assessment year when most Boards of Review are still in session. Now, taxing districts have generally determined their budgets for the next fiscal year and have held hearings on their budgets. Taxpayers who are concerned with the amount of property tax distributed to taxing districts should attend these public hearings and voice their opinions.

After the budget is approved, the taxing districts can then calculate the levy. This amount is certified to the county clerk as the property tax levy **on or before the last Tuesday in December**. The amount levied is the amount the taxpayers will pay on their property tax bill in the following year.

Step 2: Extension

Extension is a two-step process that includes the:

- computation of tax rates
- application of those rates to the EAVs of individual parcels of real estate.

Once the assessment cycle is complete, the county clerk receives the assessment books from the Board of Review and applies the county equalization factor from IDOR to the individual assessments. With this information, and the levies received from the taxing districts, the county clerk proceeds with the extension of taxes.
In the first step, tax rates are computed by dividing a taxing district’s levy by the total EAV of the parcels in that taxing district. Some tax rates are subject to statutory maximums. **If the calculated rate is above the maximum rate, the clerk uses the maximum rate.**

**Example of computation of a tax rate:**

\[
\text{Levy} = \frac{\text{Total EAV of property}}{	ext{Tax Rate}} = \frac{\$1,000}{\$100,000} = \frac{\text{Levy}}{\text{EAV}} = \frac{\$1,000}{\$100,000} = .01 \text{ or } 1\%
\]

Tax rates are normally expressed in dollars per $100 of Assessed Value (or EAV). In the example above, the tax rate is $1 in taxes for each $100 of EAV.

In the second step of the extension process, **the individual tax bills are extended into the collector’s book by multiplying the EAV of each property by the sum of the tax rates for all taxing districts in which the property is located.** The sum is called the **aggregate tax rate.** The typical aggregate tax rate includes rates from the county, township, school district, municipality, park district, fire protection district, etc., depending on where the property is located.

**Example of tax extension** (or calculating individual tax bills):

Assume the property’s aggregate tax rate is $7.00 per $100 of the property’s EAV. Assume the property’s EAV is $20,000.

\[
\text{Tax bill} = \text{EAV} \times \text{aggregate tax rate} = \$20,000 \times \$7/\$100 \text{ (or .07)} = \$1,400
\]
Another way of calculating the tax bill:

\[ \text{EAV} = 20,000 \]

Calculate the number of $100 increments in $20,000

\[
\begin{align*}
20,000 & \quad = \quad 200 \text{ increments (of}$ 100 \text{ each)} \\
100 & \quad \quad \\
\text{Tax bill} & \quad = \quad 200 \times $7.00 \quad = \quad $1,400
\end{align*}
\]

**Step 3: Collection and Distribution**

The county treasurer prepares a property tax bill for each property listed in the collector’s books. The bill is mailed by May 1\textsuperscript{st} of the year following the assessment year. For counties that use a two-installment method, the first installment is due by June 1 and the second installment is due on September 1.

When the treasurer begins receiving money, he or she distributes that money to the appropriate taxing districts.

**Delinquent Taxes**

Soon after September 1, the county treasurer prepares a list of properties for which taxes have not been paid. This delinquent tax list is published in a newspaper and notices are sent to the owners of the properties. These notices specify that the treasurer will apply to the circuit court for a judgment against the property for delinquent taxes. If the taxes remain unpaid, the court will order a lien on the property to be sold at the tax sale in the amount of the unpaid property taxes, interest, penalty, and fees.

The tax sale usually occurs in late October, approximately 22 months into the tax cycle, with the county clerk and the county treasurer presiding. A lien on the property is sold through a bidding process in which bidders, also called tax buyers, state the percent of interest for which they are willing to purchase the tax lien, starting at 18% per 6 months, and going lower until the lowest bidder purchases the lien. The tax buyer pays the amount of the lien and receives a “certificate of purchase” from the county clerk. The county treasurer then distributes revenues from the tax sale to the taxing districts.

Once the lien is sold, the property owner may redeem it by paying the amount of the lien, interest, penalty, and fees to the county clerk. The amount of the lien and interest is then paid by the county to the tax buyer, who must surrender the “certificate of purchase”. A tax buyer may eventually obtain a tax deed for the property if the tax lien is not redeemed. The following table shows a summary of the budget and levy cycle.
Budget and Levy Cycle

**Taxing body:**
1. Prepares tentative budget.
2. Publishes notice of public hearing; puts tentative budget on display 30 days before public hearing.
3. Holds public hearing.
4. Passes budget with changes in form of ordinance.
5. If necessary, makes truth-in-taxation publication and holds hearing.
6. Gives certificate of levy to county clerk by the last Tuesday in December.

**County clerk:**
1. Calculates tax rates and computes aggregate tax rate for each combination of taxing districts.
2. Extends taxes on the total EAV in each taxing district and enters the amounts in the collector’s books.
3. Prepares and delivers collector’s books to county treasurer by December 31.

**County treasurer (collector):**
1. Prepares and mails tax bills by May 1st.*
2. Collects first installment for real estate by June 1st.*
3. Distributes tax money proportionately to taxing districts as money is collected.
4. Collects second installment for real estate by September 1st.*
5. Prepares delinquent tax list and sends notice of application for judgment on real estate.

**Circuit court:**
1. Pronounces judgment for sale of a lien on real estate due to nonpayment of taxes.
2. Rules on tax objections.

**County clerk and treasurer:**
Administers sale of lien on real estate due to nonpayment of taxes.

* For counties that use accelerated billing, the estimated bill is mailed by January 31; the first installment is due by March 1 (or the date provided in the county ordinance or resolution); the last installment is normally due by August 1. Counties can also adopt a four-installment payment schedule.
What Information is in the “Collector’s Book”?  

The collector's book will normally show an abbreviated legal description, the owner’s name, property index number (PIN), the EAV, the individual taxing districts and each tax rate, the aggregate tax rate, the total tax due, and the amount due for each installment.
Unit 1  Summary

Property is divided into two classes—real and personal.

*Ad valorem* means according to value. Real property in Illinois is assessed according to value, therefore it is an ad valorem tax.

*Market value* is the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus.

The three approaches to value are the *Cost Approach*, the *Sales Comparison Approach* and the *Income Approach*.

Property is assessed according to its condition on January 1 of each year.

The CCAO reviews assessments made by township assessors and makes changes when deemed necessary.

The Board of Review hears Assessment Complaints and makes changes to assessments when it deems necessary. The Board of Review makes the final decision on property values at the county level.

The county clerk calculates tax rates and extends taxes on individual parcels of property.

The county treasurer prepares and mails tax bills.

If taxes are not paid on time, the treasurer prepares a delinquent tax list and publishes a notice of application to the circuit court for judgment against the property for delinquent taxes, interest, penalties, and fees which results in a lien being placed on the affected property.
The county clerk and the county treasurer then conduct a sale of the liens at a tax sale each year. Only the liens for unpaid taxes, interest, penalties, and fees are sold, not the real estate.

The order in which the offices handle the assessment books is:

County Clerk  
CCAO  
Township Assessor  
CCAO  
Board of Review  
County Clerk

A mnemonic to remember the order is: Connie Came To Chicago By Car.
Unit 1  Review Questions

1. What body or group handles Homestead Exemptions?
   ____________________________________________________________

2. Define *ad valorem* tax.
   ____________________________________________________________

3. Who may change the Assessed Value numbers of the Township Assessor?
   ____________________________________________________________

4. ________________________ is the major source of tax revenue for local governments.

5. What are the two classifications of property?
   _______________________________ and __________________________

6. What four steps are involved in the assessment of any property?
   _______________________________ _____________________________
   _______________________________ _____________________________

7. What two types of property are assessed by the state?
   _______________________________ and __________________________
8. What happens if an individual does not pay his taxes?

9. Who has the statutory authority to review assessments and make changes when deemed necessary?

For all non-commission counties except Cook:

10. List in order, the offices that handle the assessment books, from the time they are created until the taxes are extended.

11. In all counties except Cook, property is to be viewed, inspected, and revalued once every ______ years.

   Cook County has a ______ year reassessment cycle.
Unit 2
Duties, Responsibilities, and Procedures of the Township Assessor

This unit covers the statutes regarding the qualifications, duties, and responsibilities for the office of township and multi-township assessor.

The purpose of this unit is to provide a basic understanding of the responsibilities and qualifications needed to hold office by the Assessor; the Certified Illinois Assessing Officer (CIAO) designation; and show where to look in the Illinois Property Tax Code for guidance in performing those duties.

Learning Objectives

After completing the assigned readings, you should be able to

- identify the basic duties and responsibilities of an Assessor.
- identify the qualifications for holding office.
- understand the CIAO designation and requirements.
- have a general understanding of the various provisions related to those duties in the Illinois Property Tax Code and where to find them.

Terms and Concepts

The Property Tax Code
Pre-election requirements
Rule 110.162
Article 2- Township Officials
Article 4- Assessment Officials- Other Provisions
Article 9- General Valuation Procedures
Article 25- Penalties

Qualification Requirements to be a Township Assessor

All candidates for assessor must file a certificate of qualifications, along with their nomination papers, as stated in Section 2-45 of the Property Tax Code.

Any candidate who

1. files nomination papers,
2. intends to participate in any caucus, primary or general election,
3. is seeking to be appointed to fill a vacancy in the office of township or multi-township assessor, or
4. intends to enter into a contract to complete assessments in any township or multi-township.

must meet the following minimum education requirements generally based upon the EAV of the assessment jurisdiction.

In addition, once all qualifications have been met, each candidate must file a “Pre-election/Pre-appointment Certification Application” and forward it to the Department of Revenue for Certification.

Introductory (or smallest) Jurisdictions
EAV <$10M Residential and < $1M Commercial

In jurisdictions with $10 million or less in non-farm/non-mineral EAV and less than $1 million in commercial and industrial EAV, the candidate or appointee must

- complete and pass the 1-T Township Assessor Introductory Course offered by IDOR,
  or
- have passed the Basic Assessment Course offered by the Illinois Property Assessment Institute (IPAI) prior to January 1, 1997, or
- possess a designation approved for a jurisdiction with higher EAV’s.

Intermediate Assessment Jurisdictions
EAV > $10M <$25M Residential and < $1M Commercial

In jurisdictions with more than $10 million but less than $25 million in non-farm/non-mineral EAV and less than $1 million in commercial/industrial EAV, the qualifications are based on whether the candidate was previously elected in any such jurisdiction.
If the candidate or appointee previously was not elected to office in an assessment jurisdiction that had more than $10 million but less than $25 million in nonfarm/non-mineral EAV and less than $1 million in commercial/industrial EAV, the candidate must meet one of the introductory assessment jurisdiction requirements.

If the candidate or appointee previously was elected to office in an assessment jurisdiction that had more than $10 million but less than $25 million in non-farm/non-mineral EAV and less than $1 million in commercial/industrial EAV, the candidate must meet one of the larger assessment jurisdiction requirements.

**Largest Assessment Jurisdictions**

EAV >$25M Residential and > $1M Commercial

In jurisdictions with more than $25 million in non-farm/non-mineral EAV and more than $1 million in commercial/industrial EAV, the candidate or appointee must possess one of the following designations:

- A Certified Illinois Assessment Officer (CIAO) designation from the Illinois Property Assessment Institute (IPAI).
- A Certified Assessment Evaluator (CAE) or Residential Evaluation Specialist (RES) designation from the International Association of Assessing Officers (IAAO).
- A Residential Member (RM), Member Appraisal Institute (MAI), Senior Real Property Appraiser (SRA) designation from the Appraisal Institute.
- A Member (IFA), Senior Member (IFAS), or Appraiser-counselor (IFAC from the National Association of Independent Fee Appraisers (NAIFA).
- A Member (ASA) designation from the American Society of Appraisers.

In addition, all candidates or appointees must complete 30 hours of continuing education in the year of or the year prior to filing nominating petitions or caucusing, whichever is applicable for that jurisdiction.

Candidates who plan to use either the Department of Revenue’s 1-T course (this course) or the CIAO designation must request a “Pre-election/Pre-appointment Certification Application” from IDOR as discussed above.

Candidates who plan to use one of the other approved designations need to request a letter of qualification from that organization. The letter of qualification from the other organization must specify the type of designation, membership status, and the time period for which the candidate is qualified.
Revised Qualifications Can be Petitioned for by the Township Board

A jurisdiction may be in a higher EAV category only due to a small number of high-value commercial/industrial properties. The township board of trustees may petition IDOR to review the qualifications of a particular jurisdiction and IDOR may change the qualification to that required for a lower EAV jurisdiction. This provision is covered by Section 2-52 of the Code.

How Do I Know What Size my Jurisdiction is Each Year?

Every 4 years, in the year before the scheduled elections, IDOR will send out to each CCAO a list of qualifications needed for each jurisdiction. This list is also available on our website located at tax.illinois.gov. Select Property Tax, then go to General and scroll down to Township/Multi-township Assessor Qualifications.

Please refer to our Education Program Guide, found at tax.illinois.gov, for additional details.

The Duties of a Township Assessor

There are 4 main steps in the job of the assessor. They are to:

1. Discover.
2. Identify.
3. Value.
4. List.

all real property within his or her jurisdiction as of January 1st. Real property is defined as land and any permanent structures attached to it. Some examples of real property are houses, retail stores, apartment buildings, factories, vacant land, and natural resources such as oil and timber.

All property except farm buildings and farmland is assessed at 33.33% of market value by the assessor annually. Farm buildings are assessed based on their contribution to the farm. Farmland is assessed on the productivity of the soil as certified by values provided by IDOR to the County Assessor.

The actual value of real property is determined by actions in the marketplace; the buying and selling of property by the public. The assessor does not create the value of your property. The assessor simply has the statutory responsibility to accurately value property.
Sales, new construction, use and building permits, independent appraisals, etc., are tracked by the assessor and the Illinois Department of Revenue (IDOR) to produce sales ratios studies, which indicate the levels of assessments in each township and county. If the level of assessments is above or below the statutory level of 33.33% of market value, the Chief County Assessment Officer may apply equalization factors (also called township multipliers) to adjust the value levels within the county. Establishing and maintaining equitable assessments is extremely important to ensure that the tax burden is distributed fairly among property owners.

What else might the assessor do?

The assessor is often communicating with the public, answering questions, and dealing with concerns raised by property owners. Other local government officials who have an interest in the annual EAV also depend on information provided by the assessor.

The assessor’s office is a source of information utilized by realtors, appraisers, property investors, and taxpayers. The township assessor maintains property record cards with past and current information about each parcel in their jurisdiction. The information includes a brief legal description, land size, dimensions of all the buildings and building types. The property record card also lists the sales history and any building permits that have been taken out. Property record cards are public information and are available for inspection during regular business hours. Taxpayers, realtors, appraisers and reporters are all entitled to view and copy the assessment records.

The assessor tracks and follows up on the building permits taken out at the City and County Building Departments and notifies property owners of eligibility for the Home Improvement Exemption (HIE). This is the only exemption that the assessor’s office determines eligibility for and calculates the amount. All other exemptions are filed at the county or state level.

**Remember:**
The assessor’s job is **not** to keep an assessment as high as possible or at its current level. Your duty is to accurately value property. You should be willing and able to explain your assessments.

**When Meeting with a Taxpayer**

Introduce yourself! Listen and try to determine what the actual complaint is. Most people just don’t like their tax bill. Ask the taxpayer why he or she thinks the assessment is too high.

Review the PRC with the taxpayer. Is the property record card correct? Confirm that the property is accurately described.
Always check to see if a taxpayer is receiving all the exemptions for which they qualify.

Take good notes; you may see several taxpayers and you’ll want to remember as much detail about each property and taxpayer as possible.

A little education goes a long way. Take this opportunity to educate the taxpayer about how the property tax system works in Illinois. Ask lots of questions.

Thank the taxpayer for coming.

Valid Reasons for a Taxpayer to Make a Complaint

The most common reasons for a taxpayer to file an Assessment Complaint are

- **fair market value**—the assessor’s market value is higher than the actual market value.
- **lack of assessment equity** with similar properties.
- **inaccurate information**—the assessment is based on inaccurate information, such as incorrect measurements or an incorrect description of a building. This can often be corrected by the assessor.

How to determine the Fair Market Value

1. Obtain the Assessed Valuation of the Property from the most recent Tax Bill.
2. Compare the Assessed Value to evidence provided by the taxpayer of:
   - recent sale (closing statement),
   - appraisal (within 1 year), and/or
   - comparable sales.
3. If not enough evidence is presented, do a Sales Comparison or Market Analysis study of recent comparable sales. These will be covered in Unit 7.

How to determine Assessment Equity

- Determine the Median Level of Assessment for that jurisdiction.
- Request info from Assessor or CCAO.
- Perform an Equity Analysis.
Equity Analysis Process

1. Select 25 (or as many as are available) comparable neighborhood properties. These are not sales! This may include going for a drive or walking the neighborhood to find similar style homes. You will be looking up property PIN numbers and Property Record Cards for the Building Assessed Values and the Above Ground Square Feet number.
2. Calculate a Dollar per Square Foot Value for the Building only.
3. Rank those figures.
4. Select the Median (In this case $40.29/SF).
5. Evaluate the Subject Property (the one the complainant is there for) by $/SF.
6. See where the Subject fits in the ranked scale of numbers.
7. Analyze.
   - Does the Subject rank higher than the Median? By how much? Is there a great range between the highest and lowest ranked numbers? What does this mean?
   - Does the Subject rank lower than the Median? If so, there may not be any adjustment needed.
   - Learn all you can about the Subject Property Features. Is it “special” in some way? Or is it pretty much the same as the other neighborhood properties?

An example of an Assessment Equity Worksheet is on the next page. Based on the worksheet, ask yourself the following questions:

1. If $40.29 is the median dollar amount per SF of Assessed Value, is $45.00 per SF of Assessed Value reasonable? Is it too high? _________

2. Is it true that other comparable properties are being assessed at $30.00 per SF of Assessed Value? _________

What might be a reasonable resolution based on these numbers?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
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Unit 2  Summary

The statutory authority for township and multi-township assessors is the Property Tax Code. The Code is Act 200 in Chapter 35 of the Illinois Compiled Statutes (35 ILCS 200).

Under Section 2-45 of the Code, assessors are required to meet pre-election and pre-appointment qualifications before filing nomination papers, participating as a candidate in any caucus, primary, or general election, or being appointed to the position.

Under Section 2-60, the township or multi-township district may either re-appoint, make new appointments, or develop new contracts with a qualified person to do the assessments. The person contracted to do the assessing in the district must also meet the pre-election or pre-appointment educational requirements under Section 2-45, prior to entering into a contract with the assessment district.

Individuals in jurisdictions with higher EAVs are required to have a CIAO designation or one of the other designations approved by the department, as provided by the statutes. Individuals in jurisdictions with lower EAVs are required to complete the introductory course.

Township and multi-township assessors are responsible for the assessing of property within their respective jurisdictions. The duties of the assessor and the procedures for assessment of property are outlined in the Property Tax Code. There are also penalty provisions for assessors who fail to perform their duties in a responsible manner.

The assessor’s job is not to keep assessments as high as possible or at the current level. The job is to accurately value property.
Unit 2  Review Questions

1. Section ____________ outlines the pre-election and pre-appointment requirements for township and multi-township assessors.

2. Section ____________ provides for the revision of assessor qualifications.

3. Individuals in jurisdictions with a non-farm/non-mineral EAV of _______ or more or a commercial/industrial EAV of _______ or more are required to have a CIAO designation before running for office or being appointed to office.

4. Individuals in jurisdictions with more than $10 million and less than $25 million of non-farm/non-mineral EAV and less than $1 million of commercial/industrial EAV who have previously held office will be required to have an approved _____________ prior to running for office.
Unit 3
Using the Property Tax Code

This unit explores an excerpt of the Illinois Property Tax Code.
The purpose of this unit is to provide the user the opportunity to answer questions by directly referencing the code.

Learning Objectives

- After completing the assigned readings, you should be able to use the Code to answer the unit questions and reference where you found the answer. There may be more than one Section that contains information applicable to the questions.

NOTE: You will not be required to memorize the Article and Section numbers. However, the material within will be included on the exam.
Illinois Property Tax Code Excerpts for 1-T Township Assessor
Excerpted from the Illinois Compiled Statutes, 35 ILCS 200 ilga.gov/legislation/ilcs/ilcs.asp

TITLE 2. ASSESSMENT OFFICIALS

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Sec. 2-10. Mandatory establishment of multi-township assessment districts.
Sec. 2-15. Voluntary establishment of multi-township assessment districts.
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Sec. 2-55. Role as ex-officio deputy assessors.
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Revised January 2018

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TITLE 2. ASSESSMENT OFFICIALS

Article 2. Township Assessment Officials

(35 ILCS 200/2-5)

Sec. 2-5. Multi-township assessors. Townships with less than 1,000 inhabitants shall not elect assessors for each township but shall elect multi-township assessors.

(1) If 2 or more townships with less than 1,000 inhabitants are contiguous, one multi-township assessor shall be elected to assess the property in as many of the townships as are contiguous and whose combined population is 1,000 or more inhabitants.

(2) If any township of less than 1,000 inhabitants is not contiguous to another township of less than 1,000 inhabitants, one multi-township assessor shall be elected to assess the property of that township and any other township to which it is contiguous. (Source: P.A. 87-818; 88-455.)

(35 ILCS 200/2-10)

Sec. 2-10. Mandatory establishment of multi-township assessment districts. Before August 1, 2002 and every 10 years thereafter, the supervisor of assessments shall prepare maps, by county, of the townships, indicating the number of inhabitants and the equalized assessed valuation of each township for the preceding year, within the counties under township organization, and shall distribute a copy of that map to the county board and to each township supervisor, board of trustees, sitting township or multi-township assessor, and to the Department. The map shall contain suggested multi-township assessment districts for purposes of assessment. Upon receipt of the maps, the boards of trustees shall determine separately, by majority vote, if the suggested multi-township districts are acceptable.

The township boards of trustees may meet as a body to discuss the suggested districts of which they would be a part. Upon request of the township supervisor of any township, the township supervisor of the township containing the most population shall call the meeting, designating the time and place, and shall act as temporary chairperson of the meeting until a permanent chairperson is chosen from among the township officials included in the call to the meeting. The township assessors and supervisor of assessments may participate in the meeting. Notice of the meeting shall be given in the same manner as notice is required for township meetings in the Township Code. The meeting shall be open to the public and may be recessed from time to time.

If a multi-township assessment district is not acceptable to any board of trustees, they shall so determine and further determine an alternative multi-township assessment district. The suggested or alternative multi-township assessment district shall contain at least 2
townships and 1,000 or more inhabitants, shall contain no less than the total area of any one township, shall be contiguous to at least one other township in the multi-township assessment district, and shall be located within one county. For purposes of this Section only, townships are contiguous if they share a common boundary line or meet at any point. This amendatory Act of 1996 is not a new enactment, but is declarative of existing law.

Before September 15, 2002 and every 10 years thereafter, the respective boards of town trustees shall notify the supervisor of assessments and the Department whether they have accepted the suggested multi-township assessment district or whether they have adopted an alternative district, and, in the latter case, they shall include in the notification a description or map, by township, of the alternative district. Before October 1, 2002 and every 10 years thereafter, the supervisor of assessments shall determine whether any suggested or alternative multi-township assessment district meets the conditions of this Section and Section 2-5. If any township board of trustees fails to so notify the supervisor of assessments and the Department as provided in this Section, the township shall be part of the original suggested multi-township assessment district. In any dispute between 2 or more townships as to inclusion or exclusion of a township in any one multi-township assessment district, the county board shall hold a public hearing in the county seat and, as soon as practicable thereafter, make a final determination as to the composition of the district. It shall notify the Department of the final determination before November 15, 2002 and every 10 years thereafter. The Department shall promulgate the multi-township assessment districts, file the same with the Secretary of State as provided in the Illinois Administrative Procedure Act and so notify the township supervisors, boards of trustees and county clerks of the townships and counties subject to this Section and Section 2-5. If the Department’s promulgation removes a township from a prior multi-township assessment district, that township shall, within 30 days after the effective date of the removal, receive a distribution of a portion of the assets of the prior multi-township assessment district according to the ratio of the total equalized assessed valuation of all the taxable property in the township to the total equalized assessed valuation of all the taxable property in the prior multi-township assessment district. If a township is removed from one multi-township assessment district and made a part of another multi-township assessment district, the district from which the township is removed shall, within 30 days after the effective date of the removal, cause the township’s distribution under this paragraph to be paid directly to the district of which the township is made a part. A township receiving such a distribution (or a multi-township assessment district receiving such a distribution on behalf of a township that is made a part of that district) shall use the proceeds from the distribution only in connection with assessing real estate in the township for tax purposes.

(Source: P.A. 88-455; incorporates 88-221; 88-670, eff. 12-2-94; 89-502, eff. 6-28-96; 89-695, eff. 12-31-96.)
Sec. 2-15. Voluntary establishment of multi-township assessment districts. Any 2 or more contiguous townships in any one county, other than townships provided for in Sections 2-5 and 2-10, may by majority vote of each board of trustees of the townships, form a multi-township assessment district comprising those townships. This determination shall be made no later than October 1 of the year preceding the year in which township officials are elected. If one or more of those township assessor’s offices is vacant, a determination to form a multi-township assessment district may still be made at the time of that vacancy. The assessor or assessors remaining in office in one or more of the townships comprising the multi-township assessment district shall assume the duties of multi-township assessor until a successor is elected or appointed and qualified. If there is no township assessor remaining in office at the time, the board of trustees of the multi-township assessment district, as defined in Section 2-20, shall appoint a multi-township assessor for the unexpired terms of the former elected township assessors as provided in this Code.

The township boards of trustees shall notify the supervisor of assessments and the Department prior to December 1 of the year in which they have taken any action prescribed in this Section. (Source: P.A. 88-455; 88-670, eff. 12-2-94.)

Sec. 2-20. Township and Multi-Township Boards of Trustees; Elected Assessors. The township supervisors and clerks of townships comprising a multi-township assessment district, and the township board of trustees in townships that are not a part of a multi-township assessment jurisdiction, shall, ex officio, constitute a multi-township or township board of trustees for their respective assessment jurisdictions.

Each multi-township board of trustees shall organize and select one of its number as chairman, another as clerk and another as treasurer. These officers shall serve a term of 2 years or until their successors are elected, except no person shall be a member of a multi-township board of trustees after the expiration of his or her term as township supervisor or township clerk.

The powers and duties of a multi-township board of trustees or township board of trustees concerning property tax assessment administration shall be limited to the following: (1) levying taxes necessary to provide the funds required by the budget adopted for the township or multi-township assessor and certifying the levy to the county clerk, (2) determining and approving the budget of the assessor, (3) determining a salary for the assessor, and (4) setting the compensation of any assessor or temporarily appointed because the assessor is physically incapacitated, according to Section 60-5 of the Township Code. The levy shall not be included within any statutory limitation of rate or amount for other township purposes, but shall be in addition to that rate or amount. The board shall have no power to approve or disapprove personnel of the multi-township or township
assessor. The treasurer of the multi-township board of trustees shall have the duties and responsibilities of the township supervisor in relation to the township assessor in the maintenance and disbursement of funds of the multi-township assessor.

The changes made in this Section by Public Act 82-554 do not apply to any township in a county with more than 3,000,000 inhabitants.

(Source: P.A. 88-455; 88-670, eff. 12-2-94.)

(35 ILCS 200/2-25)

Sec. 2-25. Transition to multi-township organization. No later than December 1 preceding the date the multi-township assessor takes office, the assessors of townships included in the multi-township district and the supervisor of assessments shall deliver to the multi-township assessor all books, records, supplies, and other property relating to their assessing office, taking the multi-township assessor's receipt therefor. The township supervisors of the townships comprising the multi-township district shall transfer to the multi-township treasurer all funds relating to or budgeted for purposes of township assessments. Any accounts or tax moneys for township assessment purposes thereafter shall be paid to the multi-township treasurer of the multi-township district, with copies of the county treasurer's disbursement statements going directly to the multi-township assessor. (Source: P.A. 81-838; 88-455.)

(35 ILCS 200/2-30)

Sec. 2-30. Budget Making. At least 60 days prior to the beginning of each fiscal year, the assessor for each multi-township assessment district or township shall prepare and present on forms provided or approved by the Department an office budget for the ensuing fiscal year. The multi-township or township board of trustees shall adopt a budget and appropriation ordinance in accordance with the Illinois Municipal Budget Law.

The multi-township board must, at least 30 days before the public hearing required by Section 3 of the Illinois Municipal Budget Law, prepare or cause to be prepared a tentative budget and appropriation ordinance and file the ordinance with the township clerks of the townships comprising the multi-township assessment district. The township clerks must make the tentative budget and appropriation ordinance available for public inspection for at least 30 days before final action on the ordinance. The required public hearing must be held on or before the last day of the first quarter of the fiscal year before the board. Notice of the hearing must be given by publication in a newspaper published in the multi-township assessment district at least 30 days before the time of the hearing. If there is no newspaper published in the multi-township assessment district, notice of the public hearing may be given by posting notices in 5 of the most public places in each township comprising the multi-township assessment district. It is the duty of the township clerks to arrange for the public hearing. The board at the public hearing may adopt all or part of the tentative budget and appropriation ordinance, as the board deems necessary.
The multi-township or township board of trustees shall determine the amount required and permitted by law to finance the operations of the office of the multi-township or township assessor. The board of trustees shall certify that amount in a levy to the county clerk in the manner provided in Section 2-20. The county clerk shall extend the tax levies, as provided in this Code, against all taxable property within the jurisdiction.

(Source: P.A. 92-684, eff. 7-16-02.)

(35 ILCS 200/2-35)
Sec. 2-35. Disconnection petition.

(a) A township with 1,000 or more inhabitants according to the last preceding special Federal Census may be disconnected from a multi-township district under this Section if: (1) the township had less than 1,000 inhabitants preceding the date on which the township was included within a multi-township district under Section 2-5 and 2-10; or (2) the township was included within a multi-township district created under Section 2-15.

(b) If a petition for the disconnection from a multi-township assessment district of a township described in subsection (a) is signed by 10% of the registered voters of the township and is filed with the clerk of the township no later than August 1 of the year preceding the year in which the multi-township assessor is to be elected, the clerk shall promptly forward the petition to the township board of trustees. The township board of trustees shall adopt or reject the petition within 60 days after receiving it. If the board adopts the petition, the township shall be disconnected from the multi-township district, effective upon the expiration of the term of office of the incumbent multi-township assessor.

(c) After the disconnection of a township under this Section, the multi-township district shall continue to exist. If only one township remains in the district after the disconnection or if the combined population of the remaining townships is less than 1,000 inhabitants, the disconnection shall not be allowed.

(Source: P.A. 84-1051; 88-455.)

(35 ILCS 200/2-40)
Sec. 2-40. Notice of disconnection. Within 60 days of an adoption of a disconnection petition under Section 2-35, the clerk or clerks of the disconnected township or townships shall notify the Department of that fact.

When so notified, the Department shall amend the list filed with the Secretary of State under Section 2-10. (Source: P.A. 85-340; 88-455.)
Sec. 2-45. Selection and eligibility of township and multi-township assessors.

(a) In all counties under township organization, township or multi-township assessors shall be qualified as required by subsections (b) through (d) of this Section and shall be elected as provided in this Code. Township or multi-township assessors shall enter upon their duties on January 1 following their election, and perform the duties of the office for 4 years.

(b) Beginning December 1, 1996, in any township or multi-township assessment district not subject to the requirements of subsections (c) or (d) of this Section, no person is eligible to file nomination papers or participate as a candidate in any caucus or primary or general election for, or be appointed to fill vacancies in, the office of township or multi-township assessor, unless he or she (i) has successfully completed an introductory course in assessment practices that is approved by the Department; or (ii) possesses at least one of the qualifications listed in paragraphs (1) through (6) of subsection (c) of this Section. The candidate cannot file nominating papers or participate as a candidate unless a copy of the certificate of his or her qualifications is filed with the township clerk, board of election commissioners, or other appropriate authority as required by the Election Code. The candidate cannot be appointed to fill a vacancy until he or she has filed a copy of the certificate of his or her qualifications with the appointing authority.

(c) Beginning December 1, 1996, in a township or multi-township assessment district with $25,000,000 or more of non-farm equalized assessed value or $1,000,000 or more in commercial and industrial equalized assessed value, no person is eligible to file nomination papers or participate as a candidate in any caucus or primary or general election for, or be appointed to fill vacancies in, the office of township or multi-township assessor, unless he or she possesses at least one of the qualifications listed in paragraphs (1) through (6) of this subsection (c).

(1) a Certified Illinois Assessing Officer certificate from the Illinois Property Assessment Institute with current additional 30 class hours as required for additional compensation under Section 4-10;

(2) (A) A Certified Illinois Assessing Officer certificate from the Illinois Property Assessment Institute with a minimum of 300 additional hours of successfully completed courses approved by the Department, if at least 150 of the course hours required a written examination; and

(B) within the 4 years preceding the election, successful completion of at least 15 class hours of additional training in courses that must be approved by the Department, including but not limited to, assessment, appraisal, or computer courses, and that may be offered by accredited universities, colleges, or community colleges;

(3) a Certified Assessment Evaluator designation from the International Association of Assessing Officers;
(4) certification as a Member of the Appraisal Institute, Senior Real Estate Analyst, or Senior Real Property Appraiser from the Appraisal Institute or its predecessor organization;

(5) a professional designation by any other appraisal or assessing association approved by the Department; or

(6) if the person has served as a township or multi-township assessor 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 approved by the Department, if at least 180 of the course hours required a written examination.

The candidate cannot file nominating papers or participate as a candidate unless a copy of the certificate of his or her qualifications is filed with the township clerk, board of election commissioners, or other appropriate authority as required by the Election Code. The candidate cannot be appointed to fill a vacancy until he or she has filed a copy of the certificate of his or her qualifications with the appointing authority.

(d) Beginning December 1, 2000, in a township or multi-township assessment district with more than $10,000,000 and less than $25,000,000 of non-farm equalized assessed value and less than $1,000,000 in commercial and industrial equalized assessed value, no person who has previously been elected as township or multi-township assessor in any such township or multi-township assessment district is eligible to file nomination papers or participate as a candidate in any caucus or primary or general election for the office of township or multi-township assessor, unless he or she possesses at least one of the qualifications listed in paragraphs (1) through (6) of subsection (c) of this Section. The candidate cannot file nominating papers or participate as a candidate unless a copy of the certificate of his or her qualifications is filed with the township clerk, board of election commissioners, or other appropriate authority as required by the Election Code.

(e) If any person files nominating papers for candidacy for the office of township or multi-township assessor without also filing a copy of the certificate as required by this Section, the clerk of the township, the board of election commissioners, or other appropriate authority as required by the Election Code shall refuse to certify the name of the person as a candidate to the proper election officials.

If no candidate for election meets the above qualifications there shall be no election and the town board of trustees or multi-township board of trustees shall appoint or contract with a person under Section 2-60.

As used in this Section only, "non-farm equalized assessed value" means the total equalized assessed value in the township or multi-township assessment district as reported to the Department under Section 18-225 after removal of homestead exemptions, and after removal of the equalized assessed value reported as farm or minerals to the Department under Section 18-225.
For purposes of this Section only, "file nomination papers" also includes having nomination papers filed on behalf of the candidate by another person. (Source: P.A. 93-188, eff. 7-11-03.)

(35 ILCS 200/2-50)

Sec. 2-50. Certification by Department.

The Department shall, within 15 days after the effective date of this amendatory Act of 1995 and, thereafter, by February 1 of each year before the year of election of township or multi-township assessors, certify to each township or multi-township clerk and each county clerk a list showing all township and multi-township assessment districts with the pre-election requirements for township or multi-township assessor under Section 2-45 for each township and each multi-township assessment district. If a new multi-township assessment district is established under Section 2-15 or a township is disconnected from a multi-township assessment district under Section 2-35, the Department shall, within 30 days after the required statutory notice, certify to the multi-township clerk and county clerk whether the assessor for the new multi-township assessment district is subject to the requirements of subsections (b), (c), or (d) of Section 2-45 of this Code.

(Source: P.A. 88-455; 89-441, eff. 6-1-96.)

(35 ILCS 200/2-52)

Sec. 2-52. Revision of assessor qualifications by Department.

The Department may revise the assessor qualifications for township and multi-township assessment districts from those qualifications specified in subsections (c) or (d) of Section 2-45 to those qualifications specified in subsection (b) of Section 2-45 if the township or multi-township board of trustees petition the Department to do so. In determining petitions from a township or multi-township board of trustees requesting a change in assessor qualifications, the Department shall consider the quantity and complexity of assessments in the township or multi-township. The Department shall promulgate reasonable rules relating to the administration of this Section.

(Source: P.A. 89-441, eff. 6-1-96.)

(35 ILCS 200/2-55)

Sec. 2-55. Role as ex-officio deputy assessors.

In all townships in counties of 3,000,000 or more, in which township assessors are elected, the township assessors shall be ex-officio deputy assessors to make the assessments in the townships wherein they are elected but those ex-officio deputy assessors shall be under the direction and control of the county assessor in the same manner as other deputy assessors, subject to the rules and regulations prescribed by the county assessor and the board of
appeals. The compensation and expenses of the township assessors shall be determined and paid as provided in Sections 2-70, 2-75, 2-80, 4-10, 4-15 and 4-20. If in any township the ex-officio deputy assessor is not able, within the time allowed by law or set by rules and regulations prescribed by the county assessor and the board of appeals, to make the assessment in the township, any additional deputy assessor or deputy assessors required to make the assessment shall be residents and legal voters of the township and may be appointed by the county assessor. For failure to complete the assessment and return the assessment books within the time prescribed by law or set by the rules and regulations of the county assessor and board of appeals, any township assessor may be removed from office by the order of the county assessor. All clerks and deputies shall take and subscribe an oath of office to honestly and faithfully perform all the duties of their respective offices under the direction of the county assessor. The county assessor, the clerks and deputy assessors, may administer oaths authorized by law to be administered by assessors. The number and compensation of the clerks and the deputies (other than the ex-officio deputies) shall be determined annually by the county board and shall be paid from the county treasury. (Source: P.A. 83-121; 88-455.)

(35 ILCS 200/2-60)
Sec. 2-60. Vacancies.

(a) When any township or multi-township assessment district fails to elect an assessor or when an assessor's office becomes vacant for any reason specified in Section 25-2 of the Election Code, the township or multi-township board of trustees shall fill the vacancy in townships or multi-township assessment districts by appointing a person qualified as required under Section 2-45 or as revised by the Department under Section 2-52. A person appointed to fill a vacancy under this Section must be a member of the same political party as the person vacating the office if the person vacating the office was a member of an established political party, as defined in Section 10-2 of the Election Code that is still in existence at the time the appointment is made. The appointee shall establish his or her political party affiliation by his or her record of voting in party primary elections or by holding or having held an office in a political party organization before the appointment. If the appointee has not voted in a party primary election or is not holding or has not held an office in a political party organization before the appointment, then the appointee shall establish his or her political party affiliation by his or her record of participating in a political party's nomination or election caucus.

(b) In the alternative, a township or multi-township assessment district shall contract with a person qualified as required under Section 2-45 or as revised by the Department under Section 2-52 to do the assessing at a cost no greater than the maximum salary authorized for that township or multi-township assessment district under Section 2-70.

(Source: P.A. 89-342, eff. 1-1-96; 89-441, eff. 6-1-96; 90-748, eff. 8-14-98.)
Sec. 2-65. Deputies and employees.

(a) In all counties under township organization where a township or multi-township assessor is unable alone to perform all duties of the office, he or she may appoint one or more suitable persons as deputies to assist in making the assessment, and may appoint other employees required for operation of the office. The deputies and other employees may be employed on an annual, monthly or daily basis.

(b) Every township or multi-township assessor with 5 or more deputies and other employees shall adopt rules concerning all benefits available to employees. The rules shall include, without limitation, the following benefits to the extent they are applicable: insurance coverage, compensation, overtime pay, compensatory time off, holidays, vacations, sick leave, and maternity leave. The rules shall be adopted and filed with the township clerk within 4 months after the assessor takes office. A multi-township assessor shall file the rules with the clerk of each township in the district. Amendments to the rules shall be filed with the appropriate township clerk or clerks by their effective date. (Source: P.A. 87-818; 88-455.)

Sec. 2-70. Salary. Each multi-township board of trustees shall set the salary of its multi-township assessor at least 150 days before his or her election. Each township board of trustees shall set the salary of its township assessor at the same time it sets the compensation of its township supervisor. (Source: P.A. 90-210, eff. 7-25-97.)

Sec. 2-75. Affidavit for time employed. When compensation of a township or multi-township assessor or his or her deputy is based upon the time actually employed in the making of assessments, the assessors and deputies shall make an affidavit of the time so employed. Payments of the compensation and expenses under Sections 2-65, 2-70 and 2-80 shall be paid out of the township or multi-township treasury. (Source: Laws 1967, p. 388; P.A. 88-455.)

Sec. 2-80. Expenses and office needs. Township and multi-township assessors shall receive travel and transportation expenses in the amount determined by the board of town trustees, and shall be reimbursed for their reasonable travel, meal, lodging and registration expenses incurred in attendance at a school of instruction prescribed by the Department. The board of town trustees shall provide the office and storage space, equipment, office supplies, deputies and clerical and stenographic personnel and other items as are necessary for the efficient operation of the office. (Source: P.A. 83-1277; 88-455.)
Article 4. Assessment Officials - Other Provisions

(35 ILCS 200/4-5)

Sec. 4-5. State compensation not to affect county compensation. Any additional compensation payable from State funds to any county officer under this Code shall not affect any other compensation provided by law to be paid to the county officer. No county board may reduce or otherwise impair the compensation payable to a county officer because the person receives additional compensation payable from State funds under this Code. However, a county board may include State funds payable under this Code as reimbursements of or contributions to county officer salaries in determining the compensation of a county officer. As used in this Section, "county officer" includes any local assessment officer whose compensation is determined in whole or in part by a county board. (Source: P.A. 86-348; 88-455.)

(35 ILCS 200/4-10)

Sec. 4-10. Compensation for Certified Illinois Assessing Officers. Subject to the requirements for continued training, any supervisor of assessments, assessor, deputy assessor or member of a board of review in any county who has earned a Certified Illinois Assessing Officers Certificate from the Illinois Property Assessment Institute shall receive from the State, out of funds appropriated to the Department from the Personal Property Tax Replacement Fund, additional compensation of $500 per year.

To receive a Certified Illinois Assessing Officer certificate, a person shall complete successfully and pass examinations on a basic course in assessment practice approved by the Department and conducted by the Institute and additional courses totaling not less than 60 class hours that are designated and approved by the Department, on the cost, market and income approaches to value, mass appraisal techniques, and property tax administration.

To continue to be eligible for the additional compensation, a Certified Illinois Assessing Officer must complete successfully a minimum of 15 class hours requiring a written examination, and the equivalent of one seminar course of 15 class hours which does not require a written examination, in each year for which additional compensation is sought after receipt of the certificate. The Department shall designate and approve courses acceptable for additional training, including courses in business and computer techniques, and class hours applicable to each course. The Department shall specify procedures for certifying the completion of the additional training.

The courses and training shall be conducted annually at various convenient locations throughout the State. At least one course shall be conducted annually in each county with more than 400,000 inhabitants. (Source: P.A. 97-72, eff. 7-1-11.)
Sec. 4-15. Compensation of local assessment officers holding other designations.

Any assessor, deputy assessor or member of a board of review who has been awarded a
Certified Assessment Evaluator certificate by the International Association of Assessing
Officers shall receive an additional compensation of $500 per year from funds appropriated
to the Department from the Personal Property Tax Replacement Fund.

Any assessor, deputy assessor or member of a board of review who has been awarded a
Residential Evaluation Specialist, Assessment Administration Specialist, or Cadastral
Mapping Specialist certificate by the International Association of Assessing Officers, but who
has not been awarded a Certified Assessment Evaluator certificate, shall receive additional
compensation of $250 per year from funds appropriated to the Department from the
Personal Property Tax Replacement Fund. If any assessor, deputy assessor, or member of
a board of review has been awarded more than one certificate, but has not been awarded a
Certified Assessment Evaluator certificate, the maximum additional compensation shall be
$250.

To continue to qualify for the additional compensation after receipt of a certificate, any
assessor, deputy assessor or member of a board of review must, each year that additional
compensation is sought, complete successfully a minimum of 15 class hours requiring a
written examination, and the equivalent of one seminar course of 15 class hours which does
not require a written examination. (Source: P.A. 97-72, eff. 7-1-11.)

Sec. 4-20. Additional compensation based on performance.

Any assessor in counties with less than 3,000,000 but more than 50,000 inhabitants each year may petition the
Department to receive additional compensation based on performance. To receive
additional compensation, the official's assessment jurisdiction must meet the following
criteria:

1. The median level of assessment must be no more than 35 1/3% and no less than 31
   1/3% of fair cash value of property in his or her assessment jurisdiction; and

2. The coefficient of dispersion must not be greater than 15%.

For purposes of this Section, "coefficient of dispersion" means the average deviation of all
assessments from the median level. For purposes of this Section, the number of inhabitants
shall be determined by the latest federal decennial census. When the most recent census
shows an increase in inhabitants to over 50,000 or a decrease to 50,000 or fewer, then the
assessment year used to compute the coefficient of dispersion and the most recent year of
the 3-year average level of assessments is the year that determines qualification for
additional compensation. The Department will promulgate rules and regulations to
determine whether an assessor meets these criteria.
Any assessor in a county of 50,000 or fewer inhabitants may petition the Department for consideration to receive additional compensation each year based on performance. In order to receive the additional compensation, the assessments in the official's assessment jurisdiction must meet the following criteria: (i) the median level of assessments must be no more than 35 1/3% and no less than 31 1/3% of fair cash value of property in his or her assessment jurisdiction; and (ii) the coefficient of dispersion must not be greater than 40% in 1994, 38% in 1995, 36% in 1996, 34% in 1997, 32% in 1998, and 30% in 1999 and every year thereafter.

Real estate transfer declarations used by the Department in annual sales-assessment ratio studies will be used to evaluate applications for additional compensation. The Department will audit other property to determine if the sales-assessment ratio study data is representative of the assessment jurisdiction. If the ratio study is found not representative, appraisals and other information may be utilized. If the ratio study is representative, upon certification by the Department, the assessor shall receive additional compensation of $3,000 for that year, to be paid out of funds appropriated to the Department from the Personal Property Tax Replacement Fund.

As used in this Section, "assessor" means any township or multi-township assessor, or supervisor of assessments. (Source: P.A. 97-72, eff. 7-1-11.)

(35 ILCS 200/4-25)

Sec. 4-25. Bond of assessors. Before entering office, every assessor and supervisor of assessments, other than township or multi-township assessors, shall enter into a bond, payable to the People of the State of Illinois in the sum of two thousand dollars, or such larger sum as the county board shall determine, with two or more sufficient sureties. The bond of the supervisor of assessments shall be approved by the county board, and bonds of other assessors by the president or chairman of the county board. The condition of the bond shall be that the assessor or supervisor of assessments will diligently, faithfully and impartially perform the duties of the office during the term or portion thereof for which he or she was elected or appointed. The bond shall be filed in the office of the county clerk and recorded in a book to be provided for those bonds. Any taxing district, or person suffering any loss resulting from an assessor's failure to perform any of the conditions of the bond may sue to recover the loss in the name of the People of the State of Illinois. (Source: P.A. 87-1021; 87-1189; 88-455.)

(35 ILCS 200/4-30)

Sec. 4-30. Oath of assessors. Before entering office, every assessor or supervisor of assessments shall take and subscribe to the following oath, which shall be filed in the office of the county clerk, except the oath of township or multi-township assessors and their deputies shall be filed with their respective town clerks. The oath shall be as follows:
State of Illinois)
       ) ss.
County of .......

I do solemnly swear (or affirm) that I will support the Constitution of the United States and
the Constitution of the State of Illinois; and that I will faithfully discharge all the duties of the
office of assessor, or supervisor of assessments to the best of my ability.

Dated..........

(Source: P.A. 87-1021; 87-1189; 88-455.)

TITLE 3. VALUATION AND ASSESSMENT

Article 9. General Valuation Procedures

Division 1. Office Operations

(35 ILCS 200/9-5)

Sec. 9-5. Rules. Each county assessor, board of appeals, and board of review shall make
and publish reasonable rules for the guidance of persons doing business with them and for
the orderly dispatch of business.

In counties with fewer than 3,000,000 inhabitants, these rules shall not require specific
proof to be offered nor limit the nature of evidence which may be offered as a condition of
filing an assessment complaint under Section 16-55.

In counties with 3,000,000 or more inhabitants, the county assessor and board of appeals
(ending the first Monday in December 1998 and the board of review beginning the first
Monday in December 1998 and thereafter), jointly shall make and prescribe rules for the
assessment of property and the preparation of the assessment books by the township
assessors in their respective townships and for the return of those books to the county
assessor. (Source: P.A. 98-322, eff. 8-12-13.)

(35 ILCS 200/9-10)

Sec. 9-10. Office hours. The offices of the chief county assessment officer shall be open
all the year during business hours to hear or receive complaints or suggestions that property
has not been properly assessed.

(Source: Laws 1939, p. 886; P.A. 88-455.)
Sec. 9-15. Annual meeting of supervisor of assessments. In all counties of township organization having a supervisor of assessments, the supervisor of assessments shall, by January 1 of each year, assemble all assessors and their deputies for consultation and shall instruct them in uniformity of their functions. The instructions shall be in writing and available to the public. Notice of the annual assembly shall be published not more than 30 nor less than 10 days before the assembly in a newspaper published in the township or the tax assessment district, and if there is no such newspaper, in a newspaper published in the county and in general circulation in the township or tax assessment district. At the time of publishing the notice, a press release giving notice of the assembly shall be given to each newspaper published in the county and to each commercial broadcasting station whose main office is located in the county. The assembly is open to the public.

Any assessor or deputy assessor who willfully refuses or neglects to observe or follow instructions of the supervisor of assessments, which are in accordance with law, shall be guilty of a Class B misdemeanor. Any supervisor of assessments who willfully gives directions which are not in accordance with law is guilty of a Class B misdemeanor. (Source: P.A. 84-837; 88-455.)

Sec. 9-20. Property record cards. In all counties, all property record cards maintained by a township assessor, multi-township assessor, or chief county assessment officer shall be public records, and shall be available for public inspection during business hours, subject to reasonable rules and regulations of the custodian of the records. Upon request and payment of such reasonable fee established by the custodian, a copy or printout shall be provided to any person.

Property record cards may be established and maintained on electronic equipment or microfiche, and that system may be the exclusive record of property information.

(Source: P.A. 83-1312; 88-455.)

Sec. 9-25. Township property record cards. In counties under township organization, the township assessors and multi-township assessors shall allow the supervisor of assessments to make a duplicate copy of any or all records compiled and maintained by the township assessor and multi-township assessor. The supervisor of assessments shall make and maintain a complete set of property record cards. The township or multi-township assessor shall supply the supervisor of assessments with a copy of all new property record cards as they are added to the tax rolls.

(Source: P.A. 84-837; 88-455.)
(35 ILCS 200/9-30)

Sec. 9-30. Property records systems - Townships and multi-townships. The township or multi-township assessor may spend funds for the preparation, establishment and maintenance of a detailed property record system which would provide information useful to assessment officials. The assessor also may enter into contracts with persons, firms or corporations for the preparation and establishment of the record system. The property record system shall include up-to-date and complete tax maps, ownership lists, valuation standards and property record cards, including appraisals, for all or any part of the property in the township or multi-township assessment district in accordance with reasonable rules and procedures prescribed by the Department, but the system and records shall not be considered to be assessments nor limit the powers and duties of assessing officials. The record shall be available to all assessing officials and to the public. (Source: P.A. 82-554; 88-455.)

(35 ILCS 200/9-35)

Sec. 9-35. County tax maps - Supervisor of assessments. Except as provided in Section 5-1108 of the Counties Code, each supervisor of assessments shall prepare and maintain, in accordance with rules and procedures prescribed by the Department, tax maps and up-to-date lists of property owners' names and addresses and property record cards for all of the property in the county, and shall procure at regular intervals from the records maintained by the county recorder information relating to transfers of property. The supervisor of assessments shall not, however, duplicate the work of any full-time township assessor or multi-township assessor who maintains up-to-date and complete tax maps, ownership lists and property record cards in accordance with rules and procedures prescribed by the Department. This shall not preclude the maintenance of duplicate records in the supervisor of assessments' office. This Section shall not prohibit the preparation and setting up of a property record system (including appraisals) and property record cards as provided for in other Acts, but such system and records shall not be considered to be assessments nor limit the powers and duties of the assessors as provided by this Code. Systems and records or copies of them set up under other Acts may be maintained by the supervisor of assessments in his or her office. In preparing the original tax maps, lists and property record cards, he or she shall consult with the Department and the Department shall furnish to the officer such supplies and equipment as may, in its judgment, be necessary to set up the original set of maps, lists and records required by this Section.

(Source: P.A. 86-482; 86-1475; 88-455.)

(35 ILCS 200/9-40)

Sec. 9-40. County tax maps; County assessor. In any county with less than 3,000,000 inhabitants which elects a county assessor under Section 3-45, the county assessor shall, except as provided in Section 5-1108 of the Counties Code, prepare and maintain tax maps,
up-to-date lists of property owners' names and addresses, and property record cards for all of the property in the county. Those documents shall be prepared and maintained in accordance with rules and procedures prescribed by the Department. The county assessor also shall procure at regular intervals from the records maintained by the recorder information relating to transfers of property. The county assessor shall not duplicate the work of any fulltime township assessor who maintains up-to-date and complete tax maps, ownership lists and property record cards in accordance with rules and procedures prescribed by the Department, but this shall not preclude the maintenance of duplicate copies of those records in the county assessor's office. This Section does not prohibit the preparation and setting up of a property record system (including appraisals) and property record cards as provided for in other Acts, but the system and records shall not be considered to be assessments nor limit the powers and duties of the assessors under this Code. Systems and records or copies of them set up under such other Acts may be maintained by the county assessor in his or her office. In preparing the original tax maps, lists and property record cards, the county assessor shall consult with the Department. The Department shall furnish to that officer supplies and equipment as may, in its judgment, be necessary to set up the original set of maps, lists and records required by this Section.

(Source: P.A. 86-1475; 88-455.)

(35 ILCS 200/9-45)

Sec. 9-45. Property index number system. The county clerk in counties of 3,000,000 or more inhabitants and, subject to the approval of the county board, the chief county assessment officer or recorder, in counties of less than 3,000,000 inhabitants, may establish a property index number system under which property may be listed for purposes of assessment, collection of taxes or automation of the office of the recorder. The system may be adopted in addition to, or instead of, the method of listing by legal description as provided in Section 9-40. The system shall describe property by township, section, block, and parcel or lot, and may cross-reference the street or post office address, if any, and street code number, if any. The county clerk, county treasurer, chief county assessment officer or recorder may establish and maintain cross indexes of numbers assigned under the system with the complete legal description of the properties to which the numbers relate. Index numbers shall be assigned by the county clerk in counties of 3,000,000 or more inhabitants, and, at the direction of the county board in counties with less than 3,000,000 inhabitants, shall be assigned by the chief county assessment officer or recorder. Tax maps of the county clerk, county treasurer or chief county assessment officer shall carry those numbers. The indexes shall be open to public inspection and be made available to the public. Any property index number system established prior to the effective date of this Code shall remain valid. However, in counties with less than 3,000,000 inhabitants, the system may be transferred to another authority upon the approval of the county board.

Any(756,116),(832,133) real property used for a power generating or automotive manufacturing facility located within a county of less than 1,000,000 inhabitants, as to which litigation with respect to its assessed valuation is pending or was pending as of January 1, 1993, may be the
subject of a real property tax assessment settlement agreement among the taxpayer and taxing districts in which it is situated. In addition, any real property that is (i) used for natural gas extraction and fractionation or olefin and polymer manufacturing and (ii) located within a county of less than 1,000,000 inhabitants may be the subject of a real property tax assessment settlement agreement among the taxpayer and taxing districts in which the property is situated if litigation is or was pending as to its assessed valuation as of January 1, 2003 or thereafter. Other appropriate authorities, which may include county and State boards or officials, may also be parties to such agreements. Such agreements may include the assessment of the facility or property for any years in dispute as well as for up to 10 years in the future. Such agreements may provide for the settlement of issues relating to the assessed value of the facility and may provide for related payments, refunds, claims, credits against taxes and liabilities in respect to past and future taxes of taxing districts, including any fund created under Section 20-35 of this Act, all implementing the settlement agreement. Any such agreement may provide that parties thereto agree not to challenge assessments as provided in the agreement. An agreement entered into on or after January 1, 1993 may provide for the classification of property that is the subject of the agreement as real or personal during the term of the agreement and thereafter. It may also provide that taxing districts agree to reimburse the taxpayer for amounts paid by the taxpayer in respect to taxes for the real property which is the subject of the agreement to the extent levied by those respective districts, over and above amounts which would be due if the facility were to be assessed as provided in the agreement. Such reimbursement may be provided in the agreement to be made by credit against taxes of the taxpayer. No credits shall be applied against taxes levied with respect to debt service or lease payments of a taxing district. No referendum approval or appropriation shall be required for such an agreement or such credits and any such obligation shall not constitute indebtedness of the taxing district for purposes of any statutory limitation. The county collector shall treat credited amounts as if they had been received by the collector as taxes paid by the taxpayer and as if remitted to the district. A county treasurer who is a party to such an agreement may agree to hold amounts paid in escrow as provided in the agreement for possible use for paying taxes until conditions of the agreement are met and then to apply these amounts as provided in the agreement. No such settlement agreement shall be effective unless it shall have been approved by the court in which such litigation is pending. Any such agreement which has been entered into prior to adoption of this amendatory Act of 1988 and which is contingent upon enactment of authorizing legislation shall be binding and enforceable. (Source: P.A. 96-609, eff. 8-24-09.)

(35 ILCS 200/9-50)

Sec. 9-50. Maps and plats. The chief county assessment officer may make or purchase maps and plats that will facilitate the business of his or her office. The maps and plats shall always remain in the office, and will be open and accessible to the public. (Source: Laws 1939, p. 886; P.A. 88-455.)
(35 ILCS 200/9-55)

Sec. 9-55. Survey by owner. When a property is divided into parcels so that it cannot be described without describing it by metes and bounds, it is the duty of the owner to have the land surveyed and platted into lots. The platting shall be in accord with the Plat Act. The plat shall be certified and recorded. Any unit of local government responsible for issuing building permits may require, by ordinance, that the plat be certified and recorded before the building permit is issued, unless a subdivision plat is not required under subsection (b) of Section 1 of the Plat Act. The description of property, in accordance with the number and description in the plat, shall be a valid description of the property described. However, no plat of a subdivision, vacation or dedication of a tract of land shall be approved by a city, incorporated town or village officer, nor shall any recorder record a plat, unless a statement from the county clerk is endorsed thereon showing that he or she finds no delinquent general taxes, unpaid current general taxes, delinquent special assessments or unpaid current special assessments against the tract of land. No officer of a city, village or incorporated town shall approve the plat of a subdivision of a tract of land until all deferred installments of outstanding unpaid special assessments are either certified as paid by the proper collector, or a division thereof is made in accord with the proposed subdivision and duly approved by the court that confirmed the special assessment. (Source: P.A. 90-788, eff. 8-14-98.)

(35 ILCS 200/9-60)

Sec. 9-60. (Repealed). (Source: P.A. 88-455. Repealed by P.A. 95-925, eff. 1-1-09.)

(35 ILCS 200/9-65)

Sec. 9-65. Reassessment after platting. Except as otherwise provided by Section 10-30 with respect to assessments made in counties with less than 3,000,000 inhabitants, whenever acreage property has been subdivided into lots and the subdivision has been recorded, the lots shall be reassessed and placed upon the assessor's books, replacing the acreage property, as of the first day of January immediately following the date of the recording or filing of the subdivision.

(Source: P.A. 83-358; 83-837; 83-1362; 88-455.)

Division 2. Assessment authority

(35 ILCS 200/9-70)

Sec. 9-70. Assessment authority. The Department shall assess all pollution control facilities, low sulfur dioxide emission coal fueled devices, and property owned or used by
railroad companies operating within this State, except non-carrier real estate. Local assessment officers shall assess all other property not exempted from taxation. (Source: P.A. 81-838; 88-455.)

(35 ILCS 200/9-75)

Sec. 9-75. Revisions of assessments; Counties of less than 3,000,000. The chief county assessment officer of any county with less than 3,000,000 inhabitants, or the township or multi-township assessor of any township in that county, may in any year revise and correct an assessment as appears to be just. Notice of the revision shall be given in the manner provided in Section 12-10 and 12-30 to the taxpayer whose assessment has been changed. (Source: P.A. 81-838; 88-455.)

(35 ILCS 200/9-80)

Sec. 9-80. Authority to revise assessments; Counties of less than 3,000,000. The chief county assessment officer in counties with less than 3,000,000 inhabitants shall have the same authority as the township or multi-township assessor to assess and to make changes or alterations in the assessment of property, and shall assess and make such changes or alterations in the assessment of property as though originally made. Changes by the chief county assessment officer in valuations shall be noted in a column provided, and no change shall be made in the original assessor's figures.

When the chief county assessment officer or his or her deputy views property for the purposes of assessing the property or determining whether a change or alteration in the assessment of the property is required, he or she shall give notice to the township assessor by U.S. Mail at least 5 days but not more than 30 days prior to the viewing, so that the assessor may arrange to be present at the viewing, except if the township or multi-township assessor fails to timely return the assessment books or workbooks as required by Section 9-230. He or she shall also give notice to owners of the properties by means of notices in a paper of general circulation in the township. The notices shall state the chief county assessment officer's intention to view the property but need not specify the date and time of the viewing. When the chief county assessment officer or his or her deputy is present at the property to be viewed, immediately prior to the viewing, he or she shall make a reasonable effort to ascertain if the owner or his or her representative, or the assessor, are on the premises and to inform them of his or her intention to view the property. Failure to provide notice to the township assessor and owner shall not in of and by itself invalidate any change in an assessment. A viewing under this Section and Section 9-155 means actual viewing of the visible property in its entirety from, on or at the site of the property.

All changes and alterations in the assessment of property shall be subject to revision by the board of review in the same manner that original assessments are reviewed. (Source: P.A. 96-486, eff. 8-14-09.)
Sec. 9-85. Revision of assessments by county assessor and board of review; Counties of 3,000,000 or more. In counties with 3,000,000 or more inhabitants, the county assessor shall have authority annually to revise the assessment books and correct them as appears to be just; and on complaint in writing in proper form by any taxpayer, and after affording the taxpayer an opportunity to be heard thereon, he or she shall do so at any time, until the assessment is verified. An entry upon the assessment books does not constitute an assessment until the assessment is verified. When a notice is to be mailed under Section 12-55 and the address that appears on the assessor’s records is the address of a mortgage lender or the trustee, where title to the property is held in a land trust, or in any event whenever the notice is mailed by the assessor to a taxpayer at or in care of the address of a mortgage lender or a trustee where the title to the property is held in a land trust, the mortgage lender or the trustee within 15 days of the mortgage lender’s or the trustee’s receipt of such notice shall mail a copy of the notice to each mortgagor of the property referred to in the notice at the last known address of each mortgagor as shown on the records of the mortgage lender, or to each beneficiary as shown on the records of the trustee.

All changes and alterations pursuant to Section 16-95 or Section 16-120 in the assessment of property shall be subject to revision and entry into the assessment books by the board of appeals (until the first Monday in December 1998 and the board of review beginning the first Monday in December 1998 and thereafter) in the same manner as the original assessments.

(Source: P.A. 88-455; 89-126, eff. 7-11-95; 89-671, eff. 8-14-96.)

Division 3. Assessment books.

Sec. 9-90. Procuring assessment books. The county clerk shall procure all necessary books and blanks required by this Code to be used in the assessment of property and collection of taxes, at the expense of the county.

(Source: Laws 1939, p. 886; P.A. 88-455.)

Sec. 9-95. Listing of property. All property subject to taxation under this Code, including property becoming taxable for the first time, shall be listed by the proper legal description in the name of the owner, and assessed at the times and in the manner provided in Sections 9-215 through 9-225, and also in any year that the Department orders a reassessment (to the extent the reassessment is so ordered), with reference to the amount owned on January 1 in the year for which it is assessed, including all property purchased that day. The
assessment, as modified or equalized or changed as provided by law, shall be the assessment upon which taxes shall be levied and extended during the general assessment period for which the assessment is made, or during the remainder of that general assessment period for any property reassessed by order of the Department. No assessment shall be considered illegal by reason of not having been listed or assessed in the name of the owner or owners.

(Source: P.A. 85-1221; 86-1481; 88-455.)

(35 ILCS 200/9-100)

Sec. 9-100. Assessment list; Delivery of books. Before January 1 in each year of the general assessment, as provided in Sections 9-215 through 9-225, each county clerk shall make up the list of property to be assessed for taxes for the townships or taxing districts in the county, in books for that purpose. Annually, before January 1, he or she shall make up lists of properties which are taxable, or which become taxable for the first time, and which are not already listed, and make up lists of properties which have been subdivided and not listed by the proper description. The county clerk shall enter in the proper column, opposite the respective parcels, the name of the owner, or other such persons, so far as he is able to ascertain the names. The lists shall contain columns to show the number of acres or lots improved, and the assessed value; the assessed value of improvements; the total value; and other information as may be required. The county clerk shall also have prepared and ready for delivery all blanks necessary in the assessment of property, and shall deliver those blanks to the assessors along with the assessment books or lists. The books or lists may be completed and delivered by townships or taxing districts without waiting for the completion of all the books or lists, but all assessment books or lists shall be delivered by the county clerk to the chief county assessment officer on or before January 1. The books or lists shall be made in duplicate. (Source: P.A. 86-1481; 88-455.)

(35 ILCS 200/9-105)

Sec. 9-105. Makeup of assessment books by townships. The books for the assessment of property, in counties not under township organization, shall be made up by congressional townships, but parts or fractional townships may be added to full townships, at the discretion of the county board. In counties under township organization, the books shall be made to correspond with the organized townships. Separate books shall be made for the assessment of property and the collection of all taxes and special assessments thereon, within the corporate limits of cities, incorporated towns and villages, if ordered by the county board.

(Source: Laws 1939, p. 886; P.A. 88-455.)
Sec. 9-110. Railroad assessment book. The county clerk shall procure, at the expense of the county, a record book in a form prescribed by the Department, in which to enter railroad property as listed for taxation, and shall enter the valuations assessed, corrected and equalized in the manner provided by law. The county clerk shall extend all the taxes for which the property is liable against its equalized assessed value. At the time fixed by law for delivering tax books to the county collector, the clerk shall attach a warrant, under his or her seal of office, and deliver the book to the county collector. The county collector shall collect the taxes charged against railroad property, and pay over and account for the taxes in the manner provided in other cases. The book shall be returned by the collector and filed in the office of the county clerk. The taxes on all railroad property shall be extended as on other property, and shall be subject to the same penalties, dates of payment and methods of enforcement as other property taxes.

(Source: Laws 1945, p. 1212; P.A. 88-455.)

Sec. 9-115. Parcels in more than one taxing district. When any property is situated in more than one township or taxing district, or is situated and assessed in any drainage district, for drainage purposes, the portion in each township or taxing district shall be listed separately. The lands in any drainage district shall be listed so as to correspond, as nearly as possible, to the respective subdivisions and descriptions in the latest assessment roll of the drainage district. (Source: Laws 1939, p. 886; P.A. 88-455.)

Sec. 9-120. Combined listings. When a whole section, half section, quarter section, or half-quarter section of property, belongs to the same owner, it may, and shall, at the request of the owner or his or her agent, be listed as one tract, and when all lots in the same block belong to the same owner they may, and shall, at the request of the owner or his or her agent, be listed as a block. When several adjoining lots in the same block belong to the same owner, they may, and shall, at the request of the owner or his or her agent, be included in one description. However, this Section shall not apply to property on which delinquent or forfeited taxes are outstanding.

(Source: Laws 1939, p. 886; P.A. 88-455.)

Sec. 9-125. Verification of assessment lists. The county clerk shall compare the lists of property with the list of taxable property on file in his or her office.

(Source: Laws 1939, p. 886; P.A. 88-455.)
Sec. 9-130. Delivery of assessment books. The chief county assessment officer shall call upon the county clerk on or before the first day of January in each year and receive the assessment books and blanks as prepared by the county clerk for the assessment of property for that year. (Source: P.A. 86-678; 88-455.)

Sec. 9-135. Correction of assessment lists. If the assessor or chief county assessment officer finds that any property subject to taxation, or special assessment, has not been returned to him or her by the clerk, or has not been described in the subdivisions or manner required by this Code, he or she shall correct the return of the clerk, and shall list and assess the property in the manner required by law.

The assessor or chief county assessment officer shall, also, from time to time, make alterations in the description of property as he or she may find necessary. When property has been subdivided since the making of the general assessment, the assessor or chief county assessment officer shall from time to time correct the descriptions so that they correspond to the subdivision, and distribute the assessment in the proper proportions among the parcels into which the land has been subdivided; and in case of a vacation of a subdivision readjust the description of the assessment accordingly. (Source: Laws 1939, p. 886; P.A. 88-455.)

Sec. 9-140. Loss or destruction of assessment books. When all or any part of the assessment rolls or collectors' books of any county, or other taxing district are lost or destroyed by any means whatever, a new assessment, or new books, as the case may require, shall be made under the direction of the county board. The board shall, in those cases, fix reasonable times and dates for performing the work of assessment, equalization, levy, extension and collection of taxes, and paying over the same, or making new books, as the circumstances of the case may require. All provisions of this Code apply to the dates fixed by the county board, in the same manner that they apply to the dates for similar purposes, as fixed by this Code. The presiding officer of the county board may select and appoint persons, with the advice and consent of the county board, when he or she finds it necessary, to carry out provisions of this section.

(Source: P.A. 78-1128; 88-455.)
Division 4. Valuation procedures

(35 ILCS 200/9-145)

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 10-170 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.)

(35 ILCS 200/9-150)

Sec. 9-150. Classification of property. Where property is classified for purposes of taxation in accordance with Section 4 of Article IX of the Constitution and with such other limitations as may be prescribed by law, the classification must be established by ordinance of the county board. If not so established, the classification is void.

(Source: P.A. 78-700; 88-455.)

(35 ILCS 200/9-155)

Sec. 9-155. Valuation in general assessment years. On or before June 1 in each general assessment year in all counties with less than 3,000,000 inhabitants, and as soon as he or she reasonably can in each general assessment year in counties with 3,000,000 or
more inhabitants, or if any such county is divided into assessment districts as provided in Sections 9-215 through 9-225, as soon as he or she reasonably can in each general assessment year in those districts, the assessor, in person or by deputy, shall actually view and determine as near as practicable the value of each property listed for taxation as of January 1 of that year, or as provided in Section 9-180, and assess the property at 33 1/3% of its fair cash value, or in accordance with Sections 10-110 through 10-140 and 10-170 through 10-200, or in accordance with a county ordinance adopted under Section 4 of Article IX of the Constitution of Illinois. The assessor or deputy shall set down, in the books furnished for that purpose the assessed valuation of properties in one column, the assessed value of improvements in another, and the total valuation in a separate column. (Source: P.A. 86-1481; 87-1189; 88-455.)

(35 ILCS 200/9-160)

Sec. 9-160. Valuation in years other than general assessment years. On or before June 1 in each year other than the general assessment year, in all counties with less than 3,000,000 inhabitants, and as soon as he or she reasonably can in counties with 3,000,000 or more inhabitants, the assessor shall list and assess all property which becomes taxable and which is not upon the general assessment, and also make and return a list of all new or added buildings, structures or other improvements of any kind, the value of which had not been previously added to or included in the valuation of the property on which such improvements have been made, specifying the property on which each of the improvements has been made, the kind of improvement and the value which, in his or her opinion, has been added to the property by the improvements. The assessment shall also include or exclude, on a proportionate basis in accordance with the provisions of Section 9-180, all new or added buildings, structures or other improvements, the value of which was not included in the valuation of the property for that year, and all improvements which were destroyed or removed. In case of the destruction or injury by fire, flood, cyclone, storm or otherwise, or removal of any structures of any kind, or of the destruction of or any injury to orchard timber, ornamental trees or groves, the value of which has been included in any former valuation of the property, the assessor shall determine as near as practicable how much the value of the property has been diminished, and make return thereof.

Beginning January 1, 1996, the authority within a unit of local government that is responsible for issuing building or occupancy permits shall notify the chief county assessment officer, by December 31 of the assessment year, when a full or partial occupancy permit has been issued for a parcel of real property. The chief county assessment officer shall include in the assessment of the property for the current year the proportionate value of new or added improvements on that property from the date the occupancy permit was issued or from the date the new or added improvement was inhabitable and fit for occupancy or for intended customary use until December 31 of that year. If the chief county assessment officer has already certified the books for the year, the board of review or interim board of review shall assess the new or added improvements on
a proportionate basis for the year in which the occupancy permit was issued or the new or added improvement was inhabitable and fit for occupancy or for intended customary use. The proportionate value of the new or added improvements may be assessed by the board of review or interim board of review as omitted property pursuant to Sections 9-265, 9-270, 16-50 and 16-140 in a subsequent year on a proportionate basis for the year in which the occupancy permit was issued or the new or added improvement was inhabitable and fit for occupancy or for intended customary use if it was not assessed in that year. (Source: P.A. 91-486, eff. 1-1-00.)

(35 ILCS 200/9-165)

Sec. 9-165. Definitions. As used in Sections 9-160 and 9-180:

"Municipality" means a city, village or incorporated town.

"Governing body" means (a) the corporate authorities of a municipality with respect to territory within its corporate limits and (b) the county board with respect to territory in the county not within the corporate limits of any municipality.

"Occupancy permit" means the certificate or permit, by whatever name denominated, which a municipality or county, under its authority to regulate the construction of buildings, issues as evidence that all applicable requirements have been complied with and requires before any new, reconstructed or remodeled building may be lawfully occupied. (Source: P.A. 91-357, eff. 7-29-99; 91-486, eff. 1-1-00.)

(35 ILCS 200/9-170)

Sec. 9-170. (Repealed). (Source: P.A. 88-455. Repealed by 89-412, eff. 11-17-95.)

(35 ILCS 200/9-175)

Sec. 9-175. Owner on assessment date. The owner of property on January 1 in any year shall be liable for the taxes of that year, except that when coal has been separated from the land by deed or lease, the owner or lessee of the coal shall be liable for the taxes on the coal in the year of first production and each year thereafter until production ceases. Subject to the provisions of Section 20-210 for payment of current taxes on a specified part or undivided share of property, in all cases of property having more than one owner as of January 1 of any year, each owner is liable jointly and severally in any action under Section 21-440 for all taxes of that year.

(Source: P.A. 86-949; 87-818; 88-455.)
Sec. 9-180. Pro-rata valuations; improvements or removal of improvements. The owner of property on January 1 also shall be liable, on a proportionate basis, for the increased taxes occasioned by the construction of new or added buildings, structures or other improvements on the property from the date when the occupancy permit was issued or from the date the new or added improvement was inhabitable and fit for occupancy or for intended customary use to December 31 of that year. The owner of the improved property shall notify the assessor, within 30 days of the issuance of an occupancy permit or within 30 days of completion of the improvements, on a form prescribed by that official, and request that the property be reassessed. The notice shall be sent by certified mail, return receipt requested and shall include the legal description of the property.

When, during the previous calendar year, any buildings, structures or other improvements on the property were destroyed and rendered uninhabitable or otherwise unfit for occupancy or for customary use by accidental means (excluding destruction resulting from the willful misconduct of the owner of such property), the owner of the property on January 1 shall be entitled, on a proportionate basis, to a diminution of assessed valuation for such period during which the improvements were uninhabitable or unfit for occupancy or for customary use. The owner of property entitled to a diminution of assessed valuation shall, on a form prescribed by the assessor, within 90 days after the destruction of any improvements or, in counties with less than 3,000,000 inhabitants within 90 days after the township or multi-township assessor has mailed the application form as required by Section 9-190, file with the assessor for the decrease of assessed valuation. Upon failure so to do within the 90-day period, no diminution of assessed valuation shall be attributable to the property.

Computations under this Section shall be on the basis of a year of 365 days.

(Source: P.A. 91-486, eff. 1-1-00.)

Sec. 9-185. Change in use or ownership. The purchaser of property on January 1 shall be considered as the owner on that day. However, when a fee simple title or lesser interest in property is purchased, granted, taken or otherwise transferred for a use exempt from taxation under this Code, that property shall be exempt from taxes from the date of the right of possession, except that property acquired by condemnation is exempt as of the date the condemnation petition is filed. Whenever a fee simple title or lesser interest in property is purchased, granted, taken or otherwise transferred from a use exempt from taxation under this Code to a use not so exempt, that property shall be subject to taxation from the date of purchase or conveyance. It shall be the obligation of the titleholder of record in such cases where there is a change in use or a change in a leasehold estate or, in cases where there has been a purchase, grant, taking or transfer, it is the obligation of the transferee to notify the chief county assessment officer within 30 days of that action. Failure to give the notification, resulting in the assessing official continuing to list the property as exempt in
subsequent years, shall cause the property to be considered omitted property for the purpose of this Code. In those cases the county collector is authorized to issue a tax bill to the person holding title to the property in that part of the year during which it was not exempt from taxation for that part of the year and to accept payment of the bill as full and final settlement of tax liability for the year involved. (Source: P.A. 86-949; 87-818; 88-455.)

(35 ILCS 200/9-190)
Sec. 9-190. Damaged or destroyed property.
(a) When a property in a county with less than 3,000,000 inhabitants has been destroyed or rendered uninhabitable or otherwise unfit for occupancy or customary use by natural disaster or accidental means, the township assessor shall send to the owner by certified mail an application form for reduction of the assessed valuation of that property as provided in Section 9-180.

(b) Whenever an official, employee, or other representative of a municipal fire department, fire protection district, volunteer fire protection association, or emergency services and disaster agency of a political subdivision of this State is required by law to make an official report to another government official or agency concerning a natural disaster or accident that is likely to cause real property to have a diminished assessed valuation, that official, employee, or representative shall make a copy of the report available to the property owner on the owner's request and shall insure that the report contains the following notice:

NOTICE TO PROPERTY OWNER

If your property has been damaged you may be eligible for a decrease in the assessed valuation of your property, which could result in lower property taxes. Contact your local assessor for more information.

(c) Regardless of whether an official report concerning the natural disaster or accident is issued under subsection (b), the property owner may notify the township assessor of the property's destruction, un-inhabitability, or unfitness for occupancy or normal use. (Source: P.A. 87-818; 88-455; incorporates 88-221; 88-670, eff. 12-2-94.)

(35 ILCS 200/9-195)
Sec. 9-195. Leasing of exempt property.
(a) Except as provided in Sections 15-35, 15-55, 15-60, 15-100, 15-103, 15-160, and 15-185, when property which is exempt from taxation is leased to another whose property is not exempt, and the leasing of which does not make the property taxable, the leasehold estate and the appurtenances shall be listed as the property of the lessee thereof, or his or her assignee. Taxes on that property shall be collected in the same manner as on property that
is not exempt, and the lessee shall be liable for those taxes. However, no tax lien shall attach to the exempt real estate. The changes made by this amendatory Act of 1997 and by this amendatory Act of the 91st General Assembly are declaratory of existing law and shall not be construed as a new enactment. The changes made by Public Acts 88-221 and 88-420 that are incorporated into this Section by this amendatory Act of 1993 are declarative of existing law and are not a new enactment.

(b) The provisions of this Section regarding taxation of leasehold interests in exempt property do not apply to any leasehold interest created pursuant to any transaction described in subsection (e) of Section 15-35, subsection (c-5) of Section 15-60, subsection (b) of Section 15-100, Section 15-103, Section 15-160, Section 15-185, or Section 6c of the Downstate Forest Preserve District Act.

(Source: P.A. 99-219, eff. 7-31-15.)

(35 ILCS 200/9-200)
Sec. 9-200. Previously exempt property. Property that is purchased, granted, taken or otherwise transferred from a use exempt from taxation under this Code to a use not so exempt shall be subject to taxation from the date of change of use, purchase or conveyance. In those cases the county collector may issue a tax bill to the person holding title to the property for that part of the year during which it was not exempt, and may accept payment of the bill as full and final settlement of tax liability for that year.

(Source: P.A. 86-1481; 88-455.)

(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.)

(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.)

(35 ILCS 200/9-213)

Sec. 9-213. Explanation of equalization factors. The chief county assessment officer in every county with less than 3,000,000 inhabitants must provide a plain-English explanation of all township, county, and State equalization factors, including the rationale and methods used to determine the equalizations. If a county Internet website exists, this explanation must be published thereon, otherwise it must be available to the public upon request at the office of the chief county assessment officer.

(Source: P.A. 96-122, eff. 1-1-10.)

(35 ILCS 200/9-215)

Sec. 9-215. General assessment years; counties of less than 3,000,000. Except as provided in Sections 9-220 and 9-225, in counties having the township form of government and with less than 3,000,000 inhabitants, the general assessment years shall be 1995 and every fourth year thereafter. In counties having the commission form of government and less than 3,000,000 inhabitants, the general assessment years shall be 1994 and every fourth year thereafter. (Source: P.A. 86-1481; 87-1189; 88-455.)
Sec. 9-220. Division into assessment districts; assessment years; counties of 3,000,000 or more.

(a) Notwithstanding any other provision in this Code to the contrary, until January 1, 1996, the county board of a county with 3,000,000 or more inhabitants may by resolution divide the county into any number of assessment districts. If the county is organized into townships, the assessment districts shall follow township lines. The assessment districts shall divide, as near as practicable, the work of assessing the property in the county into equal parts but neither the area nor the number of parcels need be equal in the assessment districts. The resolution shall number the assessment districts and provide for a general reassessment of each district at regular intervals determined by the county board.

(b) Beginning January 1, 1996, in counties with 3,000,000 or more inhabitants, assessment districts shall be subject to general reassessment according to the following schedule:

(1) The first assessment district shall be subject to general reassessment in 1997 and every 3 years thereafter.

(2) The second assessment district shall be subject to general reassessment in 1998 and every 3 years thereafter.

(3) The third assessment district shall be subject to general reassessment in 1996 and every 3 years thereafter.

The boundaries of the 3 assessment districts are as follows: (i) the first assessment district shall be that portion of the county located within the boundaries of a municipality with 1,000,000 or more inhabitants, (ii) the second assessment district shall be that portion of the county that lies north of State Route 64 (North Avenue) and outside the boundaries of a municipality with 1,000,000 or more inhabitants, and (iii) the third assessment district shall be that portion of the county that lies south of State Route 64 (North Avenue) and outside the boundaries of a municipality with 1,000,000 or more inhabitants. (Source: P.A. 88-455; 89-126, eff. 7-11-95.)

Sec. 9-225. Division of county into four assessment districts. Resolutions of any county board dividing the county into four assessment districts, if adopted before January 1, 1990, shall remain valid thereafter unless and until repealed by the county board.

The county board of any county may, by resolution adopted after January 1, 1992, divide the county into 4 assessment districts. The county clerk shall forward a copy of the resolution to the Department. The assessment districts shall follow township lines if the county is organized into townships, and shall divide, as near as may be, the work of assessing the property in the county into 4 equal parts. Neither the area nor the number of parcels of property need be equal in the 4 assessment districts. The resolution shall number
the assessment districts 1 to 4 inclusive. The general assessment years for assessment
district number 1 shall be 1992 and every fourth year thereafter; for assessment district
number 2, the general assessment years shall be 1993 and every fourth year thereafter; for
assessment district number 3, the general assessment years shall be 1994 and every fourth
year thereafter; and for assessment district number 4, the general assessment years shall
be 1995 and every fourth year thereafter. However, the general assessments shall not
include property constituting a farm which is assessed under Sections 10-110 through 10-
140. The county board of any county divided into assessment districts under this paragraph
may provide by resolution for the assessment of the entire county in the general assessment
year provided by law for that county and for the dissolution of the assessment district after
the first such assessment.

(Source: P.A. 86-1481; 87-1189; 88-455.)

(35 ILCS 200/9-230)

Sec. 9-230. Return of township or multi-township assessment books.

(a) The township or multi-township assessors in counties with less than 600,000
inhabitants, based on the 2000 federal decennial census, shall, on or before June 15 of the
assessment year, return the assessment books or workbooks to the supervisor of
assessments. The township or multi-township assessors in counties with 600,000 or more
but no more than 700,000 inhabitants, based on the 2000 federal decennial census, shall,
on or before July 15 of the assessment year, return the assessment books or workbooks to
the supervisor of assessments. The township or multi-township assessors in counties with
less than 3,000,000 inhabitants, but more than 700,000 inhabitants, based on the 2000
federal decennial census, shall, on or before November 15 of the assessment year, return
the assessment books or workbooks to the supervisor of assessments. If a township or
multi-township assessor in a county with less than 3,000,000 inhabitants, based on the 2000
federal decennial census, does not return the assessment books or work books within the
required time, the supervisor of assessments may take possession of the books and
complete the assessments pursuant to law. Each of the books shall be verified by affidavit
by the assessor substantially as follows:

State of Illinois)

) ss.
County of .......

I do solemnly swear that the book or books ... in number, to which this affidavit is
attached, contains a complete list of all the property in the township or multi-township or
assessment district herein described subject to taxation for the year .... so far as I have been
able to ascertain, and that the assessed value set down in the proper column opposite the
descriptions of property is a just and equal assessment of the property according to law.

Dated..............
(b) If the supervisor of assessments determines that the township or multi-township assessor has not completed the assessments as required by law before returning the assessment books under this Section, the county board may submit a bill to the township board of trustees for the reasonable costs incurred by the supervisor of assessments in completing the assessments. The moneys collected under this subsection may be used by the supervisor of assessments only for the purpose of recouping costs incurred in completing the assessments.

(Source: P.A. 96-486, eff. 8-14-09; 97-797, eff. 1-1-13.)

(35 ILCS 200/9-235)

Sec. 9-235. Failure to complete assessments. If the board of review, in any county under township organization with less than 3,000,000 inhabitants, fails to complete its work for the assessment year by the next January 1, the supervisor of assessments shall issue work books to the township assessors until the board of review completes its work. (Source: P.A. 85-1253; 88-455.)

(35 ILCS 200/9-240)

Sec. 9-240. Assessment book totals. The assessor and chief county assessment officer shall add up and note the aggregate of each column in the assessment books; and shall also add in each book, under proper headings, a tabular statement, showing the footings of the several columns upon each page; and shall add up and set down the total of each column. When the assessor or chief county assessment officer returns several assessment books, he or she shall, in addition to this tabular statement, return a similar statement showing the totals of all the books. (Source: P.A. 83-121; 88-455.)

(35 ILCS 200/9-245)

Sec. 9-245. Return of books to board of review; counties of less than 3,000,000. In counties with less than 3,000,000 inhabitants, the chief county assessment officer shall on or before the third Monday in June of the assessment year, return the assessment books to the board of review verified by affidavit, substantially in the following form:

State of Illinois)

........ County)

I,....., chief county assessment officer do solemnly swear that this book contains a correct and full list of all the property subject to taxation in ...., so far as I have been able to ascertain the same; and that the assessed value set down in the column opposite the descriptions of property is a just and equitable assessment under the law, to the best of my
knowledge and belief, and that the footings of the columns and the accompanying tabular statement, are correct to the best of my knowledge and belief.

Dated..........

(Source: P.A. 83-121; 88-455.)

(35 ILCS 200/9-250)

Sec. 9-250. Abstract of assessment by county clerk. Annually, upon receipt of the assessment books from the board of review or board of appeals, each county clerk shall make out and, within 30 days, transmit to the Department, on forms provided or approved by the Department, an abstract of the assessment of property. The values to be given in the abstracts shall be the assessed valuations.

(Source: Laws 1943, vol. 1, p. 1136; P.A. 88-455.)

(35 ILCS 200/9-255)

Sec. 9-255. Statement of incomplete assessments. In case of the failure of any assessor to certify the assessment within the time specified in this Act, each county clerk shall transmit to the Department a statement of the assessment in all the townships or districts from which returns have been received, together with a statement of the amount of taxable property assessed in the defaulting townships or districts for the previous year.

(Source: Laws 1943, vol. 1, p. 1136; P.A. 88-455.)

Division 5. Omitted property

(35 ILCS 200/9-260)

Sec. 9-260. Assessment of omitted property; counties of 3,000,000 or more.

(a) After signing the affidavit, the county assessor shall have power, when directed by the board of appeals (until the first Monday in December 1998 and the board of review beginning the first Monday in December 1998 and thereafter), or on his or her own initiative, subject to the limitations of Sections 9-265 and 9-270, to assess properties which may have been omitted from assessments for the current year and not more than 3 years prior to the current year for which the property was liable to be taxed, and for which the tax has not been paid, but only on notice and an opportunity to be heard in the manner and form required by law, and shall enter the assessments upon the assessment books. Any notice shall include (i) a request that a person receiving the notice who is not the current taxpayer contact the office of the county assessor and explain that the person is not the current taxpayer, which contact may be made on the telephone, in writing, or in person upon receipt of the notice, and (ii) the name, address, and telephone number of the appropriate
personnel in the office of the county assessor to whom the response should be made. Any time period for the review of an omitted assessment included in the notice shall be consistent with the time period established by the assessor in accordance with subsection (a) of Section 12-55. No charge for tax of previous years shall be made against any property if (1) the assessor failed to notify the board of review of the omitted assessment in accordance with subsection (a-1) of this Section; (2) the property was last assessed as unimproved, the owner of such property gave notice of subsequent improvements and requested a reassessment as required by Section 9-180, and reassessment of the property was not made within the 16 month period immediately following the receipt of that notice; (3) the owner of the property gave notice as required by Section 9-265; (4) the assessor received a building permit for the property evidencing that new construction had occurred or was occurring on the property but failed to list the improvement on the tax rolls; (5) the assessor received a plat map, plat of survey, ALTA survey, mortgage survey, or other similar document containing the omitted property but failed to list the improvement on the tax rolls; (6) the assessor received a real estate transfer declaration indicating a sale from an exempt property owner to a non-exempt property owner but failed to list the property on the tax rolls; or (7) the property was the subject of an assessment appeal before the assessor or the board of review that had included the intended omitted property as part of the assessment appeal and provided evidence of its market value.

(a-1) After providing notice and an opportunity to be heard as required by subsection (a) of this Section, the assessor shall render a decision on the omitted assessment, whether or not the omitted assessment was contested, and shall mail a notice of the decision to the taxpayer of record or to the party that contested the omitted assessment. The notice of decision shall contain a statement that the decision may be appealed to the board of review. The decision and all evidence used in the decision shall be transmitted by the assessor to the board of review on or before the dates specified in accordance with Section 16-110.

(b) Any taxes based on the omitted assessment of a property pursuant to Sections 9-260 through 9-270 and Sections 16-135 and 16-140 shall be prepared and mailed at the same time as the estimated first installment property tax bill for the preceding year (as described in Section 21-30) is prepared and mailed. The omitted assessment tax bill is not due until the date on which the second installment property tax bill for the preceding year becomes due. The omitted assessment tax bill shall be deemed delinquent and shall bear interest beginning on the day after the due date of the second installment (as described in Section 21-25). Any taxes for omitted assessments deemed delinquent after the due date of the second installment tax bill shall bear interest at the rate of 1.5% per month or portion thereof until paid or forfeited (as described in Section 21-25).

(c) The assessor shall have no power to change the assessment or alter the assessment books in any other manner or for any other purpose so as to change or affect the taxes in that year, except as ordered by the board of appeals (until the first Monday in December 1998 and the board of review beginning the first Monday in December 1998 and thereafter). The county assessor shall make all changes and corrections ordered by the board of appeals (until the first Monday in December 1998 and the board of review beginning the first
Monday in December 1998 and thereafter). The county assessor may for the purpose of revision by the board of appeals (until the first Monday in December 1998 and the board of review beginning the first Monday in December 1998 and thereafter) certify the assessment books for any town or taxing district after or when such books are completed. (Source: P.A. 96-1553, eff. 3-10-11.)

(35 ILCS 200/9-265)

Sec. 9-265. Omitted property; interest; change in exempt use or ownership.

(a) If any property is omitted in the assessment of any year or years, not to exceed the current assessment year and 3 prior years, so that the taxes, for which the property was liable, have not been paid, or if by reason of defective description or assessment, taxes on any property for any year or years have not been paid, or if any taxes are refunded under subsection (b) of Section 14-5 because the taxes were assessed in the wrong person's name, the property, when discovered, shall be listed and assessed by the board of review or, in counties with 3,000,000 or more inhabitants, by the county assessor either on his or her own initiative or when so directed by the board of appeals or board of review.

(b) The board of review in counties with less than 3,000,000 inhabitants or the county assessor in counties with 3,000,000 or more inhabitants may develop reasonable procedures for contesting the listing of omitted property under this Division.

(c) For purposes of this Section, "defective description or assessment" includes a description or assessment which omits all the improvements thereon as a result of which part of the taxes on the total value of the property as improved remain unpaid. In the case of property subject to assessment by the Department, the property shall be listed and assessed by the Department. All such property shall be placed on the assessment and tax books.

(d) The arrearages of taxes which might have been assessed, with 10% interest thereon for each year or portion thereof from 2 years after the time the first correct tax bill ought to have been received, shall be charged against the property by the county clerk.

(e) When property or acreage omitted by either incorrect survey or other ministerial assessor error is discovered and the owner has paid its tax bills as received for the year or years of omission of the parcel, then the interest authorized by this Section shall not be chargeable to the owner. However, nothing in this Section shall prevent the collection of the principal amount of back taxes due and owing.

(f) If any property listed as exempt by the chief county assessment officer has a change in use, a change in leasehold estate, or a change in titleholder of record by purchase, grant, taking or transfer, it shall be the obligation of the transferee to notify the chief county assessment officer in writing within 90 days of the change. If mailed, the notice shall be sent by certified mail, return receipt requested, and shall include the name and address of the taxpayer, the legal description of the property, and the property index number of the property when an index number exists. If notice is provided in person, it shall be provided on
a form prescribed by the chief county assessment officer, and the chief county assessment officer shall provide a date stamped copy of the notice. Except as provided in item (6) of subsection (a) of Section 9-260, item (6) of Section 16-135, and item (6) of Section 16-140 of this Code, if the failure to give the notification results in the assessing official continuing to list the property as exempt in subsequent years, the property shall be considered omitted property for purposes of this Code.

(g) In counties with fewer than 3,000,000 inhabitants, if a chief county assessment officer discovers at any time before judgment that a property has been granted a homestead exemption under Article 15 of this Code to which it was not entitled, the chief county assessment officer may consider the erroneously exempt portion of the property as omitted property under this Section for that taxable year only.

(Source: P.A. 98-615, eff. 6-1-14.)

(35 ILCS 200/9-270)

Sec. 9-270. Omitted property; limitations on assessment. A charge for tax and interest for previous years, as provided in Sections 9-265 or 14-40, shall not be made against any property for years prior to the date of ownership of the person owning the property at the time the liability for the omitted tax was first ascertained. Ownership as used in this section shall be held to refer to bona fide legal and equitable titles or interests acquired for value and without notice of the tax, as may appear by deed, deed of trust, mortgage, certificate of purchase or sale, or other form of contract. No charge for tax of previous years, as provided in Section 9-265, shall be made against any property if (1) the assessor failed to notify the board of review of an omitted assessment in accordance with subsection (a-1) of Section 9-260; (2) the property was last assessed as unimproved, the owner of the property gave notice of subsequent improvements and requested a reassessment as required by Section 9-180, and reassessment of the property was not made within the 16 month period immediately following the receipt of that notice; (3) the owner of the property gave notice as required by Section 9-265; (4) the assessor received a building permit for the property evidencing that new construction had occurred or was occurring on the property but failed to list the improvement on the tax rolls; (5) the assessor received a plat map, plat of survey, ALTA survey, mortgage survey, or other similar document containing the omitted property but failed to list the improvement on the tax rolls; (6) the assessor received a real estate transfer declaration indicating a sale from an exempt property owner to a non-exempt property owner but failed to list the property on the tax rolls; or (7) the property was the subject of an assessment appeal before the assessor or the board of review that had included the intended omitted property as part of the assessment appeal and provided evidence of its market value. The owner of property, if known, assessed under this and the preceding section shall be notified by the county assessor, board of review or Department, as the case may require.

(Source: P.A. 96-1553, eff. 3-10-11.)
Article 25. Penalties

(35 ILCS 200/25-5)
Sec. 25-5. Delivery and receipt of collector's book before bond approved. If any county clerk delivers the tax books into the hands of the county collector, or if any collector receives the books or collects any taxes before the collector's bond has been approved and filed, as required by this Code, the clerk and collector, and each of them, shall be liable to a penalty of not less than $500, and all damages and costs, to be recovered in a civil action. The State's Attorney shall bring suit, in the name of the People of the State of Illinois. Nothing in this Section shall be construed as relieving the sureties of a collector from liabilities incurred under a bond not approved and filed as required by this Code. (Source: P.A. 76-2254; 88-455.)

(35 ILCS 200/25-10)
Sec. 25-10. Failure of collector to obtain timely judgment or present list of errors. If any collector, by his own neglect, fails to obtain judgment within the time prescribed by this Code, or fails to present his list of errors in assessment of property at the time required by this Code, he shall lose the benefit of any abatement to which he might have been entitled, and shall pay to the county the full amount charged against him, except that in the 10 years next following the completion of a general reassessment of property in any county with 3,000,000 or more inhabitants, the collector is under no duty to obtain judgment earlier than 30 days after taxes upon property have become delinquent and have begun to bear interest. (Source: P.A. 83-121; 88-455.)

(35 ILCS 200/25-15)
Sec. 25-15. Knowing failure of local assessment officer to perform duties. Any local assessment officer or other person whose duty it is to assess property for taxation or equalize any assessment, who refuses or knowingly or willfully neglects any duty required of him by law, or who consents to or connives at any evasion of this Code whereby any property required to be assessed is unlawfully exempted in whole or in part, or the valuation thereof is set down at more or less than is required by law, is guilty of a Class A misdemeanor. He or she shall also be liable upon his bond to the party injured for all damages sustained by that party. He or she shall also be removed from office by the judge of the court before whom he or she is tried and convicted. (Source: P.A. 77-2236; 88-455.)
(35 ILCS 200/25-20)

Sec. 25-20. Knowing failure of public officer to perform duties. Every public officer who refuses to perform or knowingly neglects any duty enjoined upon him by this Code, or who consents or connives to evade its provisions, whereby any proceeding required by this Code shall be prevented or hindered, or whereby any property required to be listed for taxation is unlawfully exempted or the same be entered upon the assessment or collector's books at less than the value required by this Code, or the percentage as may be provided by a county ordinance adopted under Section 4 of Article IX of the Constitution of Illinois, shall, for every such offense, neglect or refusal, be liable, on the complaint of any person, for double the amount of the loss or damage caused thereby, to be recovered in a civil action in the name of the People of the State of Illinois in any court having jurisdiction, and may be removed from office at the discretion of the court.

(Source: P.A. 80-247; 88-455.)

(35 ILCS 200/25-25)

Sec. 25-25. Failure of officer to perform duties if no other penalty provided. If any officer fails or neglects to perform any of the duties required of him by this Code, upon being required so to do by any person interested in the matter, and for the failure or neglect to perform that duty there is no other or specific penalty provided in this Code, he shall be liable to a fine of not less than $10 nor more than $500, to be recovered in a civil action in the circuit court of the proper county, and may be removed from office at the discretion of the court. Any officer who knowingly violates any of the provisions of this Code, for the violation of which there is no other specific penalty provided in this Code, shall be liable to a fine not less than $10 nor more than $1,000 to be recovered in a civil action in the name of the People of the State of Illinois, in any court having jurisdiction and may be removed from office at the discretion of the court. Fines when recovered shall be paid into the county treasury.

(Source: Laws 1939, p. 886; P.A. 88-455.)

(35 ILCS 200/25-30)

Sec. 25-30. Failure of collector to attend tax sale. If any county collector or designated deputy fails to attend any sale advertised under this Code, and offer property for sale as required by law, he or she shall be liable to pay the amount of taxes, special assessments and costs due on the advertised property. The county collector may afterwards advertise and sell the delinquent property to reimburse himself or herself for the amount advanced by him or her, but at the sale no property shall be forfeited to the State. (Source: Laws 1939, p. 886; P.A. 88-455.)
(35 ILCS 200/25-35)
Sec. 25-35. Failure of county clerk to attend tax sale or keep required records. If any county clerk or designated deputy fails to attend any tax sale, or to make and keep the record, as required by this Code, he or she shall forfeit and pay the sum of $500, and shall be liable to indictment for that failure. Upon conviction, he or she shall be removed from office. The sum shall be sued for in civil action, in the name of the People of the State of Illinois, and when recovered shall be paid into the county treasury.

(Source: Laws 1939, p. 886; P.A. 88-455.)

(35 ILCS 200/25-40)
Sec. 25-40. Fraudulent return or schedule. Any person who, with intent to defeat or evade the law in relation to the assessment of property, delivers or discloses to any assessor or deputy assessor a false or fraudulent list, return or schedule of his or her property not exempted by law from taxation, is guilty of a Class A misdemeanor.

(Source: P.A. 77-2236; 88-455.)

(35 ILCS 200/25-45)
Sec. 25-45. Duty of state's attorney to prosecute. The State's Attorney of each county shall prosecute all violators of this Code. They shall receive as fees the sum of $20 in counties with less than 3,000,000 inhabitants and $40 in counties with 3,000,000 or more inhabitants for each conviction, to be taxed as costs, and 10% of all fines collected. The residue of all fines collected under this Code shall be paid into the county treasury for use of the county. (Source: P.A. 87-669; 88-455.)
Unit 3  Review Questions

Use the Property Tax Code to answer the following questions and cite the correct section.

1. What is the education requirement for the assessor in a township or multi-township with a non-farm, non-mineral equalized assessed valuation of less than $10 million and less than $1 million commercial and industrial valuation?

   ____________________________  Section __________________

2. Are assessing officials required to take an oath of office?

   ____________________________  Section __________________

3. Must a supervisor of assessments hold an annual meeting for his or her township and multi-township assessors?

   ____________________________  Section __________________

4. Are individuals permitted to obtain copies of property record cards?

   ____________________________  Section __________________

5. Are township assessors required to provide the supervisor of assessments with a copy of all new property record cards as they are added to the tax rolls?

   ____________________________  Section __________________

6. Must the supervisor of assessments provide “rules” for the assessment of property by township assessors?

   ____________________________  Section __________________

7. Is there a provision in the statutes for the revisions of assessment in counties of less than 3 million?

   ____________________________  Section __________________
8. What is the date specified by statute for the return of the assessment books by the township assessor to the supervisor of assessments?

Section __________

9. May township assessors appoint deputies to assist them with their duties?

Section __________

10. Is there a provision in the statutes for setting the salary of an assessor?

Section __________

11. Can township assessors be reimbursed for their education expenses?

Section __________

12. Are there any penalties for assessors who knowingly fail to perform their duties?

Section __________

13. Who is responsible for prosecuting violators of the Property Tax Code?

Section __________

14. How are vacancies in the office of township assessor filled?

Section __________

15. What is the statutory level of assessment?

Section __________

16. Can candidates “get qualified” after they are elected or appointed, as long as they are qualified when they take their oath?

Section __________
17. Section _______ outlines the pre-election and pre-appointment requirements for township and multi-township assessors.

18. Section _______ provides for the revision of assessor qualifications.

19. Individuals in jurisdictions with more than ____________ in non-farm/non-mineral EAV or more than ______________ in commercial/industrial EAV, are required to have a CIAO designation before running for office or being appointed to office.

20. Individuals in jurisdictions with more than $10 million and less than $25 million of non-farm/non-mineral EAV and less than $1 million of commercial/industrial EAV who have previously held office will be required to have an approved __________________________ prior to running for office.
Unit 4
Mapping and the Property Index Numbering System

This unit covers the U.S. Rectangular Land Survey System and the property index number (PIN).

The purpose of this unit is to provide a basic understanding of legal descriptions and the property index numbering system.

Learning Objectives

After completing the assigned readings, you should be able to

• correctly number jurisdictional townships within a county,
• correctly number sections within a township/range tier,
• understand the different types of legal descriptions and how to locate a property,
• define property index number (PIN), and
• explain the composition and use of the segments of a PIN.

Terms and Concepts

Principal meridian
Baseline
Township
Range
Section
Metes and bounds
Legal description
Property index number (PIN)
Overview of Mapping

What is the Definition of a Map? It is a representation, usually on a flat surface, of the features of an area of the earth showing them in their respective forms, sizes, and relationships according to some convention of representation.

There are many types of maps. Political boundary maps, road maps, soil survey maps, and topographic maps are just a few. Assessors often use Cadastral Maps. A Cadastral Map is a legal map for recording ownership of property. The map describes both the boundaries and the ownership of properties. This is often referred to as a tax map.

In the years prior to the late 1700’s, land ownership was often described using naturally occurring boundaries and landmarks such as rivers and trees. This system is referred to as Metes and Bounds. The Metes and Bounds system had its limitations since rivers could flood and recede or even change course; trees could be chopped down; Stones could be moved, etc.

Following the Revolutionary War, the Federal government became responsible for large areas west of the thirteen original colonies. The government wished both to distribute land to Revolutionary War soldiers in reward for their service as well as to sell land as a way of raising money for the nation. Before this could happen, the land needed to be surveyed.

Beginning in 1785, The United States was divided in a grid-like fashion using specific longitude and latitude references. This is referred to as The Rectangular Survey System, and it was proposed by one of our founding fathers, Thomas Jefferson.

These longitude and latitude lines became what we refer to in this system as Principal Meridians and Baselines.
U.S. Principal Meridians and Baselines
The Rectangular Survey System

The Rectangular Survey System in Illinois divides the state into areas using principal meridians, baselines, townships, ranges, and sections.

Illinois Meridians and Baselines

A latitude line is an east-west circle, measuring degrees north or south of the Equator. A baseline is a parallel of latitude running east and west.

A longitude line is a north-south circle measuring degrees east and west of zero longitude at Greenwich, England. A principal meridian is an arbitrary line of longitude used as a starting point and reference for all sectionalized land. Principal meridians run north and south.

In Illinois, there are two baselines and reference to three principal meridians. The most prominent meridian is the Third Principal Meridian, which virtually cuts Illinois in half.

A reference occurs where a baseline and principal meridian intersect. The reference for the Third Principal Meridian exists at the intersection of the Centralia Baseline. This baseline runs east and west through Centralia, Illinois. The Second Principal Meridian, located in Indiana, shares the Centralia Baseline for its reference.
Property located in eastern Illinois is unique. Part of it is referenced to the Third Principal Meridian, and part of it is referenced to the **Western Control of the Second Principal Meridian**, which is actually located in Indiana.

Property in Illinois, west of the Illinois River or west of the Third Principal Meridian, is referenced to the **Fourth Principal Meridian**. The reference point for the Fourth Principal Meridian is the **Beardstown Baseline**. The baseline runs west of Beardstown, Illinois.

Once we know the meridian and the baseline for a property, we can determine the general location of any property anywhere in the country governed by the **Rectangular Survey System**.
Congressional Townships and Ranges

Survey townships run north and south of base lines and are laid out in approximate 6-mile increments. The first tier of townships north or south of a base line is called township 1, the next tier, township 2, etc.

Ranges are laid out in approximate 6-mile increments, east and west of principal meridians. The first tier east or west is called range 1, the next tier, range 2, etc.

Survey townships are identified by township and range numbers. For example, a township in the third tier south of the base line and in the second-tier east of the 3rd principal meridian, is identified as “township 3 south range 2 east of the 3rd principal meridian.”

Townships

Numbering of townships and ranges begins at the reference point of a principal meridian and a baseline. Township numbers increase away from the baseline using the direction from the baseline as an indicator (north or south). Range numbers increase away from a principal meridian using the direction from the principal meridian as an indicator (east or west).

Each township is six miles by six miles, or thirty-six square miles in size (6 miles square). The township identified with the arrow is three townships south of the baseline and two ranges east of the principal meridian. These 6-mile square (6 miles on a side) townships are further divided into sections.
Sections

A section is a one mile square block of land containing 640 acres. There are 36 sections within each township. Numbering of the sections begins in the northeast corner of the township, and progresses west then east, back and forth in a serpentine manner as illustrated by the dashed line. Section 36 is in the southeast, or lower right corner.

Northeast corner

A true section of land contains 640 acres. Sections are often quartered, with the upper right quadrant, or ¼, being referred to as the northeast quarter; the upper left quadrant, or ¼, being referred to as the northwest quarter; the lower left quadrant, or ¼, as the southwest quarter; and the lower right quadrant, or ¼, as the southeast quarter. These quarter sections each contain 160 acres.

Quarter sections are often further divided into quarter–quarter sections, containing 40 acres each; or quarter–quarter–quarter sections, containing 10 acres each. Occasionally, they are further divided into quarter–quarter–quarter–quarter sections each containing 2 ½ acres.
Most tracts containing less than 2 ½ acres are described using a metes and bounds description. Metes and bounds descriptions first describe a beginning point, and then use directions and distances to describe the perimeter of the property. Metes and bounds descriptions should always end back at the point of beginning (POB).
Legal Descriptions
Legal descriptions fall into three categories — lots and block, land descriptions (which can be described either fractionally, by acreage, or lineally), and metes and bounds. When reading legal descriptions to locate property, read all legal descriptions backwards, except those written in metes and bounds.

Lots and Blocks
Descriptions are often used in assessment books, typically referring to appropriate page numbers within those books. For example:

Lots 1 and 4 in Block 30 in the Village of Good Hope, McDonough County, Illinois.

Lot 4 in Block 28 in the City of Bushnell, according to Plat #2 of said City, County of McDonough, State of Illinois.

When locating a parcel written in a lots and blocks description, it is necessary to read the description backwards to specifically locate the property. In the first example above, if we were to read the description in the order written, we would start with Lots 1 and 4. The question becomes Lots 1 and 4 where? It could be anywhere in the world. By starting at the end of the description, we know that the lots are in the State of Illinois, the County of McDonough, the Village of Good Hope, and in Block 30 of the village.

Land Descriptions
Land Descriptions are referenced to the government surveys. A strength of the rectangular survey systems is that the land has been, for the most part, divided evenly. This makes property descriptions more uniform and predictable. Under the rectangular survey system, land can be described one of three ways. When locating these parcels, the descriptions are read backwards to specifically locate the property:

Fractional- Describing property using fractions of rectangles.

E 1/2, NE 1/4, Section 6, Township 3 N, Range 4 West of the 3rd Principal Meridian.

NW ¼, SW ¼, NE ¼, Section 6, T.3N, R.4W, 3rd Principal Meridian.

W ¼, NE ¼, SW ¼, Section 6, T.3N, R.4W, 3rd Principal Meridian
**Acreage**- Describing property using the acreage values associated with each fraction of a rectangle.

**West 80 acres**, NE 1/4 Section 6, Township 3 North, Range 4 West of the 3rd Principal Meridian.

**Lineal**- Describing property using the perimeter measurement of each fraction of a rectangle.

**The East 400’** of the Southeast Quarter of Section 7, Township 2 South, Range 1 East of the 3rd Principal Meridian.

The diagram illustrates how an individual section of the rectangular survey system can be dissected using land descriptions to describe property. The diagram shows section divisions and land measurements. A section is simply a large square that is one mile from east to west and one mile from north to south.

The large square, or section, can be divided into four equal parts creating the Northeast Quarter, the Northwest Quarter, the Southeast Quarter and the Southwest Quarter of the entire section.

Considering an entire section is 640 acres, by dividing the section by four (quartering the section) each quarter section is 160 acres \((640 ÷ 4 = 160\)). Therefore, if a property is described as the NW ¼ section, the total acreage of that property is 160 acres. Property can be further divided into a quarter-quarter section. If the property is described as the NW ¼ of the NW ¼, the section has been quartered twice \((640 ÷ 4 = 160 ÷ 4 = 40\)); the property contains 40 acres. This division by one-fourth can continue to a quarter-quarter-quarter which would contain 10 acres, and a quarter-quarter-quarter-quarter containing 2.5 acres. Tracts smaller than 2.5 acres are generally described using the metes and bounds description.

Any adjustments to measurements are made on the north and west sides of the section.

Property can be dissected using any combination of fractional portions. For example, a single parcel can be the equivalent of one half of a section, or 320 acres. The half section can be the north half or the south half or the east half or west half.

**Metes and Bounds**

Are used to describe the perimeter of property. When locating a parcel written in a metes and bounds description, it is necessary to read the first part of the land description portion backward to locate the point of beginning. Once the point of beginning is determined, the metes and bounds portion of the description is read in the order written.
For example:

Commencing at the Southeast corner of the Northwest Quarter of Section 4, Township 7 North, Range 8 East of the 3rd Principal Meridian, thence North 50 feet to the point of beginning; thence West 550 feet; thence North 400 feet; thence East 550 feet; thence South 400 feet to the point of beginning.

Metes and bounds descriptions were originally recorded as a person walked around the perimeter of the property and noted landmarks or made artificial monuments.
Locating Legal Descriptions

When locating legal descriptions that are fractional (NE ¼ of the NW ¼ of the SE ¼), begin with the whole 640 acres of the section. Go to the end of the legal description for the last part of the section. In this example, the last part mentioned is “SE ¼.” Divide the section into 4 equal parts (since the SE ¼ is described). Each part is 160 acres (640 acres in a section divided by 4). Now locate the SE ¼ on the grid.

\[
\text{NE ¼ of the NW ¼ of the SE ¼}
\]

\[
\text{SE ¼} = 640 \text{ acres} \div 4 = 160 \text{ acres}
\]

Next, find the NW ¼ of this SE ¼.

\[
\text{NW ¼ of the SE ¼} = \\
160 \text{ acres (SE ¼)} \div 4 = 40 \text{ acres}
\]

Now locate the NE ¼ of the NW ¼ of the SE ¼.

\[
\text{NE ¼ of the NW ¼ of the SE ¼} = 40 \text{ acres} \div 4 = 10 \text{ acres}
\]
Exercise 4-1 Locating Legal Descriptions

Identify these parcels on the grid provided by shading in the appropriate parts on the grid.

1. SE $\frac{1}{4}$ of SE $\frac{1}{4}$

\[ \text{___________ Acres} \]

2. S $\frac{1}{2}$ of NW $\frac{1}{4}$

\[ \text{___________ Acres} \]

3. N $\frac{1}{2}$ of NE $\frac{1}{4}$ of SE $\frac{1}{4}$

\[ \text{___________ Acres} \]
4. E $\frac{1}{2}$ of NW $\frac{1}{4}$ and NW $\frac{1}{4}$ of NW $\frac{1}{4}$

_____________ Acres

5. SW $\frac{1}{4}$ of SE $\frac{1}{4}$ of SW $\frac{1}{4}$

_____________ Acres

6. NE $\frac{1}{4}$ of NW $\frac{1}{4}$ of SW $\frac{1}{4}$

_____________ Acres
**Property Index Number**

A property index number, or PIN, is a series of numbers that denote the geographic location and use of a parcel of land.

A PIN is a 14-character series of numbers that describe the geographic location and use of a specific tax parcel. No two parcels share the same PIN.

PINs are considered legal descriptions under the Property Tax Code, and every time the legal description of a parcel changes, a new PIN must be assigned.

**Example**  
07 – 32 – 203 – 021 – 0040

- 07 = County Township Number
- 32 = Township Section Number
- 203 = Block Number
- 021 = Parcel Number
- 0040 = Use or Unit Number

The first two digits, known as the area or county township number, indicate the survey township in which the parcel is located. **The area or survey townships are numbered from left to right in the county beginning in the NORTHWEST corner.**

Since counties may be irregular in shape, and the townships and ranges are numbered from the baselines and principal meridians, the County Township overlay includes whole townships of 6 miles by 6 miles, and small township edges and corners. Any township area that is overlaid must be numbered, so even though in the example on the next page, the first area in the overlay is very small, it is still labeled County Township 1.
**County Township Number Derivation**

The County Township Number is assigned by overlaying the government survey townships over the county. Then beginning in the northwest government survey township of the county, and progressing west to east, and north to south each township is assigned a number. Note: These numbers do not correspond to the numbers of the congressional township or ranges (i.e. T12N or R3E) that we discussed earlier.

In this example, there are 15 County Townships. Referring back to the example PIN, County Township “07” is highlighted. The first and second digits in the property index number indicate the county township in which the parcel is located. The next two digits in the series represent the section number. This number corresponds to the actual geographic section.
Section Number Derivation 32

The numbering of sections begins in the northeast corner of the township, and progresses west then east, back and forth in a serpentine manner.

Referring to the example PIN, Section “32” is highlighted. The third and fourth digits in the property index number indicate the section in which the parcel is located.
**Block Number Derivation 203**

The next three digits correspond to the block or quarter section in which the parcel is located.

- **100 — 199** Blocks are in the northwest quarter section.
- **200 — 299** Blocks are in the northeast quarter section.
- **300 — 399** Blocks are in the southwest quarter section.
- **400 — 499** Blocks are in the southeast quarter section.

**Parcel Number Derivation 021**

The next 3 digits, the 8th, 9th and 10th digits of the property index number, indicate the particular legal description within the quarter section in which the parcel is located.
Unit Number Derivation 0040

Unit Number 07 32 203 021 0040

The Unit or Use Number refers to the taxable use of the property, or in the case of condominiums, the unit number.

The Use Number “0040” is highlighted. In this case, the “0040” refers to a residential parcel, with a dwelling. The 11th, 12th, 13th and 14th digits of the property index number indicate the use of the property or the condo unit number.

Following are some commonly used Use numbers:

Common Use/Unit numbers:

- 0010 Rural property improved with buildings. Not assessed under the Farm Bill.
- 0011 Rural property improved with buildings. Assessed under the Farm Bill.
- 0020 Rural property not improved with buildings. Not assessed under the Farm Bill.
- 0021 Rural property not improved with buildings, but assessed under the Farm Bill.
- 0030 Residential vacant land
- 0040 Residential with dwelling
- 0050 Commercial residence – 6 units or more
- 0060 Commercial business
- 0070 Commercial office
- 0080 Industrial
- 0090 Miscellaneous
- 7000 Mineral rights
- 7400 Sand-gravel
Unit 4  Summary

The Rectangular Survey System began in 1785 and was proposed by Thomas Jefferson. The entire United States of America is divided into a grid with Principal Meridians and Baselines.

Legal descriptions fall into three categories: Lots and Block; Land Descriptions (can be divided fractionally, linearly or by acreage) and Metes and Bounds.

A Section of land contains 640 Acres.

A Quarter Section contains 160 Acres.

Read all legal descriptions backwards except Metes and Bounds.

The Rectangular Survey System is comprised of townships, ranges, and sections.

Townships are numbered from left to right beginning in the northwest corner.

Sections are numbered in a serpentine fashion beginning in the northeast corner.

A Property Index Number, or PIN, is a series of 14 numbers that denotes the geographic location and use of a parcel of land. The first two digits denote the area number, the second two digits denote the section number, the next three digits denote the block number, the next three digits denote the parcel number, and the last four digits denote the use code or unit number.

PINs are considered legal descriptions under the Property Tax Code, and every time the legal description of a parcel changes, a new PIN must be assigned.
Unit 4  Review Questions

Match these terms to the correct definition.

1. _____  Section
2. _____  Base Line
3. _____  3\textsuperscript{rd} Principal Meridian
4. _____  Township
5. _____  Metes and Bounds
6. _____  PIN

A  An abbreviated legal description consisting of the area, section, block, parcel, and unit numbers.

B  6 mile X 6-mile square block of land numbered from left to right.

C  A legal description that describes the perimeter of a property.

D  A 14-digit number denoting geographic location and use.

E  A township has 36 of these and they are numbered in a serpentine fashion.

F  Line of latitude running east and west through the state of Illinois.

G  Line of longitude running north and south through the state of Illinois.
Unit 5
Land Valuation

This unit covers land valuation using the front foot method, the square foot method, and the site method. The purpose of this unit is to provide a basic understanding of calculating land values using these three methods.

Learning Objectives

After completing the assigned reading, you should be able to

- explain the various methods for valuing land.
- define the front foot method for valuing land.
- define the square foot method for valuing land.
- define the site method for valuing land.

Terms and Concepts

“65-35 Rule”
Front Foot Value
Site Value
Square Foot Value
Unit Value
Land Valuation

Several principles are involved in land valuation. **Land is valued as if vacant and at its highest and best use**, meaning the use that will bring the greatest net return to the property over a reasonable period of time.

Highest and best use must be:

- **legal**—use must be legal and in compliance with zoning laws.
- **probable and physically possible**—use is reasonable and not speculative.
- **economically feasible**—use is in demand and with the potential of being profitable.

Land and Site

**Land** is considered to be raw land without amenities, such as streets, curbs, gutters, sidewalks, utilities, etc.

**Site** is defined as a parcel that has been made ready for its intended purpose.

Units of Value

1. **Front Foot Value**—The amount of frontage is often the most significant factor in determining value, particularly with commercial property.

2. **Square Foot Value**—The size is one of the most important factors in determining value and is also used to value irregular shaped lots.

3. **Site Value**—Location is a significant factor in determining value.

4. **Acreage**—The dollar per acre value is often the most important factor in determining rural residential land values.

The assessor must analyze the market to determine the most appropriate unit of value to be used. Unit value is determined by dividing the selling price of vacant land by the number of units, whether that “unit” is Front Foot, Square Foot, Site, or Acreage.
Example:

The selling price for a lot is $24,000. The lot is 80’ x 150’. (For lot dimensions, the first number is always the width of the lot. The second number refers to the depth of the lot.)

\[ 80’ \times 150’ = 12,000 \text{ Square Feet} \]

**Front Foot Calculation:** \[ \frac{24,000}{80’} = \$300 \text{ per Front Foot} \]

**Square Foot Calculation:** \[ \frac{24,000}{12,000 \text{ Sq. Ft.}} = \$2 \text{ per Square Foot} \]

**Site Value Calculation:** \[ \frac{24,000}{1 \text{ (Lot)}} = \$24,000 \text{ per unit (Lot)} \]

Adjustments to the basic unit value must be supported by the actual sales in the market. Adjustments may be required for:

- **time**
- **physical characteristics**, e.g., trees, landscaping, topography, etc.
- **location**, e.g., a corner lot or an interior lot.

A **Front Foot** (FF) is a strip of land one foot wide, running from the front of the lot to the rear. When using the front foot method, all front feet that run the entire depth of the lot have the same value. Some adjusts may be necessary, since not all lots have the same dimensions.

Irregular lot adjustments are made when the front foot is the unit of comparison. These adjustments assume that the utility of the lot may be affected by its shape.

The most common rule for shape adjustment is the “**65-35 Rule.**” It is based on the premise that a right-angle triangular shaped lot, with its base on the street, has 65 percent of the value of a rectangular lot of the same frontage. It also assumes that a right-angle triangular shaped lot with its apex, or point, on a street, has 35 percent of the value of a rectangular lot that has the frontage.

The **Square Foot** (SF) unit of comparison is commonly used **when size is the dominant factor in determining value**. The number of square feet is determined by multiplying the width x the depth.
Land Values

The assessor must place a separate assessment on the land (or site) and the improvements. Common land values that are used in this process are $ per square foot values and $ per acre values. Before either dollar values can be determined, the total square footage of an area or the total acreage must be calculated.

Square Foot

To determine the total square footage of an area, multiply the length of the area by the width of the area. \( \text{L x W} = \text{Total Square Footage} \)

One must keep in mind that if a triangular shaped lot is being valued using square feet as the unit of comparison, the size of the lot is determined by:

\[
\frac{\text{Base} \times \text{height}}{2}
\]

Acreage

To convert total square footage into total acres, divide the total square footage of the area by 43,560 (the total square footage of 1 acre).

Exercise 5-1: Land Values

<table>
<thead>
<tr>
<th>Site Shape</th>
<th>Measurements</th>
<th>Square Footage</th>
<th>Approx. Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rectangle</td>
<td>400’ x 800’</td>
<td>320,000</td>
<td>7.35</td>
</tr>
<tr>
<td>2. Rectangle</td>
<td>320’ x 480’</td>
<td>_____________</td>
<td>_____________</td>
</tr>
<tr>
<td>3. Triangle</td>
<td>320’ x 480’</td>
<td>76,800</td>
<td>1.76</td>
</tr>
<tr>
<td>4. Triangle</td>
<td>150’ x 180’</td>
<td>_____________</td>
<td>_____________</td>
</tr>
<tr>
<td>5. Square</td>
<td>150’ x 150’</td>
<td>_____________</td>
<td>_____________</td>
</tr>
<tr>
<td>6. Triangle</td>
<td>600’ x 900’</td>
<td>_____________</td>
<td>_____________</td>
</tr>
</tbody>
</table>
Exercise 5-2  Front Foot Rules  
65/35 Rule for Right-angle Triangular Shaped Lots

The 65-35 Rule is based on the premise that a right-angle triangular shaped lot, with its base on the street, has 65 percent of the value of a rectangular lot of the same frontage and depth. It also assumes that a right-angle triangular shaped lot with its apex, or point, on a street, has 35 percent of the value of a rectangular lot of the same dimensions.

The lots in Exercise 5-2 have a standard depth of 100 feet. Use the front foot method to value these lots, using the following formula:

Lot value = number of FF x ($ per FF) x factor (65/35)

Compute the value for lot C first because it is a rectangular lot. To compute the lot value, multiply the 150' of frontage by the $100 per front foot value.

Lot C  
150 FF x $100/FF = $15,000

Lot A is a right-angle triangular shaped lot with its base on the street, and will carry 65 percent of the value of lot C, a full lot. To compute the value of lot A, chain multiply the 150' of frontage by the $100 per front foot value by the shape adjustment factor of 65% (.65).

Lot A  
150 FF x $100/FF x 65% (.65) = $9,750

Lot B is a right-angle triangular shaped lot with its apex, or point on the street, and will carry 35 percent of the value of lot C, a full lot. To compute the value of lot B, chain multiply the 150' of frontage by the $100 per front foot value by the shape adjustment factor of 35% (.35).

Lot B  
150 FF x $100/FF x 35% (.35) = $5,250

Check the accuracy of your computations by adding the values for lots A and B. This value should equal the value of a full lot, such as lot C.
Exercise 5-2 65/35 Rule (Applies to Front Foot Only)

Compute the values for the three parcels above if the front foot value is $100/FF.

A __________
B __________
C __________
Exercise 5-3 Residential Lots—Measuring by Square Foot

The purpose of this exercise is to familiarize you with the valuation of lots with various shapes. For this exercise, the square foot value derived from the market is $1/SF.

Value the lots using the formula below.

\[
\text{Lot value} = \text{number of SF} \times \$\text{ per SF}
\]

Lot # ________   # Square Feet________   $1.00 per SF   Lot Value $__________
Lot # ________   # Square Feet________   $1.00 per SF   Lot Value $__________
Lot # ________   # Square Feet________   $1.00 per SF   Lot Value $__________
Lot # ________   # Square Feet________   $1.00 per SF   Lot Value $__________
Lot # ________   # Square Feet________   $1.00 per SF   Lot Value $__________
Lot # ________   # Square Feet________   $1.00 per SF   Lot Value $__________

Lot 004

To compute the lot value using the square foot value as the unit value, multiply the frontage 100’ by the depth of 100’ by the square foot value ($1/SF).

\[
100' \times 100' \times $1/SF =
\]

Cherry Blossom Lane

Lot # ________   # Square Feet________   $1.00 per SF   Lot Value $__________
Lot # ________   # Square Feet________   $1.00 per SF   Lot Value $__________
Lot # ________   # Square Feet________   $1.00 per SF   Lot Value $__________
Lot # ________   # Square Feet________   $1.00 per SF   Lot Value $__________
Lot # ________   # Square Feet________   $1.00 per SF   Lot Value $__________
Lot # ________   # Square Feet________   $1.00 per SF   Lot Value $__________
Lot 005

To compute the $/SF value, simply multiply the frontage of 75' by the depth of 70'. Then multiply by the $/SF

\[ 75' \times 70' \times \$1/\text{SF} = \ldots \]

Lot 006

Determine the square footage of the triangular shaped lot. Multiply the base by the height and divide by 2. The square footage is then multiplied by the $/SF value.

\[ \frac{75' \times 100'}{2} = \ldots \text{SF} \times \$1/\text{SF} = \ldots \]

Lot 007

Follow the same process for lot 007 as you did for lot 006.

\[ \frac{75' \times 100'}{2} = \ldots \text{SF} \times \$1/\text{SF} = \ldots \]

Lot 008

Multiply the 75' of frontage by the depth of 120' and then by the $/SF.

\[ 75' \times 120' \times \$1/\text{SF} = \ldots \]

Lot 009

When using $/SF as the unit value, this lot will be divided into a triangular-shaped portion containing ______ SF, and a rectangular-shaped portion containing ______. Adding them together gives a total of ______ SF multiplied by $1/\text{SF} = ______ for the entire lot.

This lot contains ______SF $1/\text{SF} = 7,500
Exercise 5-3
Calculating FF values and SF values

Calculate the FF values and the SF values for lots 024 through 029.

The FF value is $140/FF
The SF value is $.80/SF

Lot 024 FF value = _________ SF value = _________
Lot 027 FF value = _________ SF value = _________
Lot 025 FF value = _________ SF value = _________
Lot 028 FF value = _________ SF value = _________
Lot 026 FF value = _________ SF value = _________
Lot 029 FF value = _________ SF value = _________

130' 120' 120'                           75'             20'
Lot 027

Lot 024 Lot 025 Lot 026 Lot 027 Lot 028 Lot 029

75'           80'              80'              60'                   100' 80'
Easy Street
Exercise 5-4 Site Unit of Value

You are appraising a subdivision that began to be developed 10 years ago. Now it is nearing the end of its development life cycle. Approximately 70 percent of the sites are interior sites, lots with trees, and sites with level terrain. The remaining 30 percent consists of corner sites, sites with no trees, and sites with rolling terrain. It appears that the market responds to differences in location and physical features.

The seven sales below have been verified as arm’s length transactions. Using the market data, determine the value for time, location, and physical features. Note: This exercise has been simplified for class purposes. When determining the value of features in the market, numerous pairs should be utilized.

<table>
<thead>
<tr>
<th>Site</th>
<th>Sales price</th>
<th>Sale date</th>
<th>Location</th>
<th>Physical features</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$ 9,000</td>
<td>Current</td>
<td>Interior</td>
<td>Level - trees</td>
</tr>
<tr>
<td>2</td>
<td>$ 8,500</td>
<td>Current</td>
<td>Corner</td>
<td>Level - trees</td>
</tr>
<tr>
<td>3</td>
<td>$10,000</td>
<td>Current</td>
<td>Interior</td>
<td>Rolling - trees</td>
</tr>
<tr>
<td>4</td>
<td>$ 9,000</td>
<td>1 year ago</td>
<td>Interior</td>
<td>Rolling - trees</td>
</tr>
<tr>
<td>5</td>
<td>$ 8,000</td>
<td>Current</td>
<td>Interior</td>
<td>Level – no trees</td>
</tr>
<tr>
<td>6</td>
<td>$ 6,500</td>
<td>1 year ago</td>
<td>Corner</td>
<td>Level - no trees</td>
</tr>
<tr>
<td>7</td>
<td>$ 7,500</td>
<td>Current</td>
<td>Corner</td>
<td>Level - no trees</td>
</tr>
</tbody>
</table>

To Determine Time Adjustments:

A time adjustment identifies sales with identical features except the sale date. Look for sales that meet those criteria. For instance, compare sale 1 to sale 2. The sale date is the same-current. We want sales that have different dates.

Look at sales 3 and 4. Sale 3 is a current sale and sale 4 sold 1 year ago. All other features are the same. But sale 3 (current) sold for $1000 more than sale 4. Therefore, the time adjustment indicated is $1,000 each year. Remember, this is a simplified exercise. In actual practice, many sales would be compared to determine the adjustment for each feature.

Continue to compare sales to find adjustments for terrain, trees, and site location using the same method:
1. Based on the above sales, a site that sold today is worth $_________ more than a site that sold a year ago. (Used sales 3 & 4)

2. A site that is on rolling terrain is worth $___________ more than a site on level terrain. (Used sales ___&___)

3. A site that has trees is worth $___________ more than a site without trees. (Used sales ___&___)

4. An interior site is worth $___________ more than a corner site. (Used sales ___$___)
Unit 5  Summary

The assessor is responsible for determining the value of both the land and the improvement for all properties located in his or her jurisdiction. **Land** is valued as vacant and at its highest and best use.

Several principles may be used to value land. The three most common units of value are **front foot value, square foot value, and site value.**

A **front foot** is a strip of land 1 foot wide running from the front to the rear of the lot. Adjustments may be necessary when using the front foot (FF) method to value residential property. The adjustments described below may be necessary.

An irregular lot adjustment is also made when the front foot value is the unit of comparison. These adjustments assume that the utility of the lot may be affected by its shape.

The most common rule for shape adjustment is known as the **“65-35 Rule.”** It is based on the premise that a right-angle triangular shaped lot with its base on the street has 65 percent of the value of a rectangular lot having the same frontage. It also assumes that a right-angle triangular shaped lot with its apex, or point on a street has 35 percent of the value of a rectangular lot having the same frontage.

The area of a triangle is found by multiplying the base by the height and dividing by 2.
Match these terms with the correct definition.

1. _____ “65-35 Rule”  
   A. As vacant and at its highest and best use.

2. _____ Front foot  
   B. Based on the premise that the value of a right-angle triangular shaped lot is affected by its shape.

3. _____ How land is valued  
   C. A strip of land 1 foot wide running from the front to the rear of the lot.

4. _____ \( \frac{b \times h}{2} \)  
   D. Based on the assumption that the front portion of the lot is more valuable on a unit basis than the rear portion.

5. _____ \( \frac{SP}{\#units} \)  
   E. Area of a triangular-shaped lot
   F. Unit value
Unit 6
The Cost Approach to Value

This purpose of this unit is to provide a basic understanding of the Cost Approach to value. The Cost Approach is one of the most common valuation methods used by assessors in doing mass appraisals.

Learning Objectives

After completing the assigned readings, you should be able to:

- understand the formula for the Cost Approach to value.
- identify three types of depreciation and how they affect value.
- define a mass appraisal system.

Terms and Concepts

Cost approach
Cost factor
Physical depreciation
Functional depreciation
Economic depreciation
Mass appraisal
Replacement Cost New (RCN)
Mass Appraisal

Mass Appraisal is the valuation of many properties as of January 1 of the assessment year, using standard procedures that provide uniformity.

Unlike an independent appraiser, who has the time to carefully analyze the various approaches to value for a single property, the assessor may have hundreds or thousands of properties to value in a short period of time.

The purpose of mass appraisal is produce equitable and efficient appraisals of all property in a jurisdiction for ad valorem tax purposes. A mass appraisal system should incorporate all three approaches to value, but most systems are primarily based on the cost approach.

The Cost Approach

The Cost Approach is the most accurate method of valuing new construction because no depreciation has yet occurred. This method consists of using known values for construction materials and labor (using IDOR publication 123) for the central Illinois area, and adjusting those values for various features of the structure.

The market value of a property can be estimated using the Cost Approach by calculating the Replacement Cost New (RCN) of the improvements, subtracting the depreciation, and adding the land value.

An improvement is any structure attached to, lying upon or within the land that may not be removed without physical stress.

The formula for the cost approach is:

\[
\text{Market Value} = (\text{RCN} - \text{Depreciation}) + \text{Land Value}
\]

The land value is usually estimated by using the Sales Comparison Approach (Market Approach) to value. This approach is applied by comparing the subject site (land) with sales of comparable sites that are vacant.

Replacement Cost New (RCN) is the current, total cost of construction incurred by the builder to construct improvements with the same utility as the subject property. It may or may not be the same cost of reproducing an exact replica of the subject improvements (Reproduction Cost). The distinction between the two is that, replacement cost refers to a substitute property of equal utility and reproduction cost refers to an exact replica property. In a particular situation, the two concepts may be interchangeable, but not necessarily so. Both RCN and reproduction cost have their applications in the Cost Approach to value.
Replacement cost usually represents the upper limit of value of a structure. The difference between RCN and the present value is **depreciation**, the loss of value from all causes. In the Cost Approach, it is necessary to estimate the amount of depreciation.

**Cost Factors**

A cost factor is designed to adjust the values in an Appraisal Publication to reflect the local cost of labor and materials. The use of a cost factor may be necessary for any assessor whose jurisdiction is not similar to the central Illinois area.

**Three Types of Depreciation**

1. Physical depreciation
2. Functional depreciation (or obsolescence)
3. Economic depreciation (or obsolescence)

Depreciation can also be either **curable** or **incurable**.

**Curable**— Depreciation is curable when the cost to cure will add to the market value, e.g., short-lived components such as windows, doors, floor covering, roofs, etc.

**Incurable**— Depreciation is incurable when the cost to cure is greater than the increase to the market value, e.g., foundation, studs, and rafters.

**Physical Depreciation**

Physical Depreciation is defined as the loss of value due to deterioration, e.g., wear and tear, time, and the action of the elements. The physical life of a building is dependent on:

- the degree of maintenance it receives,
- the type and quality of the materials used in its construction, and
- the soundness (workmanship) of the builder.

Physical depreciation can be **curable** or **incurable**.

**Curable**— short-lived components such as windows, doors, floor coverings, and roofs.

**Incurable**— long-lived components such as foundations, studs and rafters.
**Functional Depreciation (or Obsolescence)**

Functional Depreciation is defined as the loss of value resulting from conditions *inside* of the property.

Examples:
- in many old farm houses the only bathroom is off the kitchen
- it is necessary to pass through a bedroom to get to the only bathroom
- outdated electrical system, *e.g.*, “knob and tube”
- very low or very high ceilings

Functional depreciation can be **curable** or **incurable**.

**Curable**—lack of an air conditioning system or low hanging pipes.

**Incurable**—poor floor plan; 7 foot ceilings.

**Economic Depreciation (or Obsolescence)**

Economic Depreciation is defined as the loss of value resulting from conditions *outside* of the property. Economic depreciation is almost always **incurable**.

Examples:

- location — a change in traffic pattern, noise, or pollution.
- economic — high interest rates, high unemployment, or businesses closings.
- government — zoning changes, poor services, and high taxes.

**The Responsibility of the Assessor**

Simply stated, the job or responsibility of the assessor is to place an assessed value in his or her column of the assessment books for each of the properties in the jurisdiction. There are four steps the assessor must complete for each property in the jurisdiction. The assessor must

1. **Discover** find and inventory all real property using tax maps and property index numbers; find new construction by observation, reviewing building permits, and other methods.

2. **List** describe the characteristics of land and improvements on property record cards, including measurements of improvements.
3. **Value** estimate the value of all real property in the jurisdiction and ensure uniformity and equity in the methods used and the market values produced.

4. **Assess** apply an assessment level to these market values, arriving at an assessed value for each of the properties in the jurisdiction. Ensure that the assessed values reflect a uniform level of assessments, and that these assessed values are derived from current market values.

Unlike an independent appraiser, who has the time to carefully analyze the various approaches to value before arriving at an estimate of value for one property, the assessor must estimate values within a relatively short period of time. The assessor is a mass appraiser.

The Appraisal Publications are designed for mass appraisal. The cost schedules discussed in Unit 6 are used to apply the cost approach to value in a mass appraisal system. It is unreasonable to expect that every building value obtained using these schedules will be exact. However, it is expected that the value estimates produced be well within tolerable limits. The outcome of this system still depends greatly on the professional judgment of the assessor. This is especially true when the assessor must use factors that will adjust various values before arriving at the final value of the subject property. These factors are defined in the following unit. There are guidelines that can be used to establish factors, but the assessor must continually rely on his or her skill and experience when assigning individual factors to each property.

**Cost Factor**

A cost factor is designed to adjust the Appraisal Publications’ RCN value to reflect the local cost of labor and material in other areas. The use of a cost factor may be necessary for any assessor whose jurisdiction is not similar to the central Illinois area. The cost to build may be higher or lower in your particular jurisdiction. You can calculate a cost factor by performing a cost factor study for use with the class exercises.

**Steps in calculating a cost factor:**

**Step 1** Find arms-length sales of improved properties on which the improvements are one year old or less, which eliminates adjusting for depreciation.

**Step 2** Subtract the current land values from those sale prices to obtain the value of the improvement or building.
Building value = sale price – land value

Step 3     Determine the RCN for each building.

Step 4     Divide each building value by the corresponding RCN to obtain a cost factor for each sale.

Cost factor = \[\frac{\text{Building Value}}{\text{Publication RCN}}\]

Step 5     Rank the factors.

Step 6     Select the median factor as the overall cost factor.

Step 7     Apply the overall cost factor to the Appraisal Publications RCN of all property within the jurisdiction.

The true RCN is equal to the Appraisal Publications’ RCN multiplied by the cost factor.

\[\text{True RCN} = \text{Publication RCN} \times \text{cost factor}\]

Exercise 6-1
Cost Factor Study

The purpose of a cost factor study is to determine the factor to be used to adjust the values found in the Appraisal Publications to reflect the labor and material costs found in your local area. Once this factor is determined, it is applied to all construction within the jurisdiction.

Note: When computing a cost factor, it is important to remember to use only improvements that have an actual age of one year or less, which eliminates the need to factor in depreciation.

A cost factor greater than 1.00 indicates that the Appraisal Publications’ values are too low for the jurisdiction, so you must increase the RCN values. A cost factor less than 1.00 indicates that the Appraisal Publications’ values are too high for the jurisdiction, so you must decrease the RCN values.

In this exercise, use the worksheet on the following pages to determine a cost factor for 15 sales. There are several formulas that you will need to use to determine the cost factor. The first formula is used to determine the building value or building residual.
Step 1  Looking at Sale 1, the age column lists the improvement as new. To find the building residual, subtract the lot value of $20,000 from the sale price of $112,000. The remainder of $92,000 is the building residual, or building value.

\[
\text{Building residual} = \text{sale price} - \text{lot value} \\
\$112,000 - \$20,000 = \$92,000
\]

Step 2  Divide the building residual of $92,000 by the Appraisal Publications’ RCN of $88,000, which gives you a cost factor of 1.05.

Note:  For this exercise round to 2 decimal places.

\[
\text{Cost factor} = \frac{\text{building residual}}{\text{Publications' value}} \\
\frac{\$92,000}{\$88,000} = 1.05
\]

Looking at Sale 2, the age column lists the improvement as new. Use the formula for the building residual and subtract the lot value of $20,000 from the sale price of $99,300, which produces a building residual of $79,300.

\[
\$99,300 - \$20,000 = \$79,300
\]

Divide the building residual of $79,300 by the Appraisal Publication RCN of $75,000, which gives you a cost factor of 1.06

\[
\frac{\$79,300}{\$75,000} = 1.06 \text{ cost factor}
\]

Continue the computations for the remaining sales.

Step 3  The last step is to select the median after ranking all the cost factors that meet the age criteria. In other words, throw out sales that are over 1 year old! The factors can be ranked from highest to lowest or from lowest to highest.

Note:  If you have an odd number of factors, select the median or middle value as the cost factor for your jurisdiction. If the number of factors is even, add the two middle factors together, then divide the sum by two, and use the average as your cost factor.

The cost factor that is determined is applied to all construction within a jurisdiction and will be used for all of the residential property record card (PRC) examples in this workbook.
### Exercise 6-1 worksheet

**Cost Factor Study**

<table>
<thead>
<tr>
<th>Sale No.</th>
<th>Age</th>
<th>Sale Price</th>
<th>Lot Value</th>
<th>Building Residual</th>
<th>Manual Value</th>
<th>Cost Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>N</td>
<td>112,000</td>
<td>20,000</td>
<td>92,000</td>
<td>88,000</td>
<td>1.05</td>
</tr>
<tr>
<td>2</td>
<td>N</td>
<td>99,300</td>
<td>20,000</td>
<td></td>
<td>75,000</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>22</td>
<td>66,200</td>
<td>15,500</td>
<td>50,700</td>
<td>55,200</td>
<td>0.92</td>
</tr>
<tr>
<td>4</td>
<td>N</td>
<td>72,500</td>
<td>14,000</td>
<td></td>
<td>50,000</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>N</td>
<td>97,000</td>
<td>15,500</td>
<td>81,500</td>
<td>85,000</td>
<td>0.96</td>
</tr>
<tr>
<td>6</td>
<td>N</td>
<td>89,200</td>
<td>18,000</td>
<td></td>
<td>70,900</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>N</td>
<td>89,300</td>
<td>18,000</td>
<td>71,300</td>
<td>70,900</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>N</td>
<td>106,500</td>
<td>21,000</td>
<td></td>
<td>82,000</td>
<td>1.01</td>
</tr>
<tr>
<td>9</td>
<td>N</td>
<td>78,200</td>
<td>14,000</td>
<td>64,200</td>
<td>65,000</td>
<td>0.99</td>
</tr>
<tr>
<td>10</td>
<td>N</td>
<td>108,900</td>
<td>21,000</td>
<td></td>
<td>81,000</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>N</td>
<td>88,800</td>
<td>15,500</td>
<td>73,300</td>
<td>77,200</td>
<td>0.95</td>
</tr>
<tr>
<td>12</td>
<td>37</td>
<td>86,500</td>
<td>15,000</td>
<td>71,500</td>
<td>77,500</td>
<td>0.92</td>
</tr>
<tr>
<td>13</td>
<td>N</td>
<td>99,000</td>
<td>12,000</td>
<td></td>
<td>81,000</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>N</td>
<td>101,000</td>
<td>19,500</td>
<td>81,500</td>
<td>82,000</td>
<td>0.99</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>115,000</td>
<td>20,500</td>
<td>94,500</td>
<td>90,000</td>
<td>1.05</td>
</tr>
</tbody>
</table>

### Rank

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 
11. 
12. 

---

Add the number ranked #6 to the number ranked #7 and then divide by 2 to find the median.

**Median = ______________**
Unit 6  Summary

The market value of a property can be estimated using the **Cost Approach** by calculating the **Replacement Cost New (RCN)** of the improvements, subtracting the depreciation, and adding the land value.

\[
\text{MV} = (\text{RCN} – \text{Depreciation}) + \text{LV}
\]

The Cost Approach is the most accurate method of valuing new construction because no depreciation has yet occurred.

Replacement cost usually represents the upper limit of value of a structure. The difference between RCN and the present value is **depreciation**, the loss of value from all causes.

There are three types of depreciation that exist:

1. physical depreciation,
2. functional depreciation (or obsolescence), and
3. economic depreciation (or obsolescence).

The appraisal publications are designed for **mass appraisal**.

A cost factor is designed to adjust the values in a cost schedule to reflect the local cost of labor and materials.
Unit 6 Review Questions

1. What are the three types of depreciation? Place an “X” beside the one which is generally incurable.

   ____ _______________________________
   ____ _______________________________
   ____ _______________________________
   ____ _______________________________

2. What is the formula for calculating a cost factor?

   ________________________________

3. What is the formula to find Building Residual?

   ________________________________

4. What is the formula to calculate Market Value?

   ________________________________

5. What is a mass appraisal system?

   ________________________________
   ________________________________
Unit 7
Mass Appraisal and Residential Square Foot Schedules

This unit covers the mass appraisal system and the various factors used to adapt a mass appraisal system to local jurisdictions. It also covers the residential square foot schedules in the Appraisal Publications.

The purpose of this unit is to provide a basic understanding of a mass appraisal system and its use. In addition, the unit explains the use of the schedules to value property using the cost approach.

Learning objectives

After completing the assigned readings, you should be able to

- identify the various factors used to adjust the appraisal publications.
- explain how the various factors are obtained and used.
- identify the use of the appraisal publications.
- identify and use the various cost tables in the manual.
- understand and use a remaining economic life (REL) depreciation table.

Terms and Concepts

Actual age
Base price
CDU (condition, desirability, and utility) rating
Cost approach
Depreciation
Effective age
Full value
Property record card 1 (PRC-1)
Property record card 2 (PRC-2)
Quality grade
Remaining economic life (REL)
Replacement cost new (RCN)
Standard 5 plumbing fixtures
Factors used with the Appraisal Publications (Cost Schedules), (Publications 123, 126, 127, etc.)

Cost Factor

As discussed in Unit 5, a cost factor is designed to adjust the Appraisal Publications’ RCN value to reflect the local cost of labor and material in other areas. The use of a cost factor may be necessary for any jurisdiction that is not similar to the central Illinois area.

Quality Grade

The accuracy of an RCN obtained from the Appraisal Publications is greatly affected by proper quality grading. A quality grade represents the quality of construction, workmanship, and materials used in a project. The quality of workmanship and materials can greatly affect the cost of construction and the value of the improvement.

The majority of improvements fall within a definite class of construction involving average quality of workmanship and materials. This type of construction is designated as grade “C” which carries a factor of 100 percent or 1.00. The cost tables in the Appraisal Publications represent quality grade “C.” A different quality grade factor may be used if the subject property was not built using average quality materials and workmanship.

There are six basic quality grades in the Appraisal Publications:

<table>
<thead>
<tr>
<th>Quality grade</th>
<th>Quality Description</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>Superior</td>
<td>225 percent</td>
</tr>
<tr>
<td>A</td>
<td>Excellent</td>
<td>150 percent</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>122 percent</td>
</tr>
<tr>
<td>C</td>
<td>Average</td>
<td>100 percent</td>
</tr>
<tr>
<td>D</td>
<td>Cheap</td>
<td>82 percent</td>
</tr>
<tr>
<td>E</td>
<td>Very Cheap</td>
<td>50 percent</td>
</tr>
</tbody>
</table>

Pluses and minuses after the letter grade can be used to fine tune these adjustments. For example a “C+10” grade improvement would have a grade factor of 10 percent above “C,” or 110 percent.

A quality grade must be assigned to each improvement and should be established during construction if possible. During the lifetime of a property, a quality grade generally remains the same.

It is important not to confuse quality and condition. Condition refers to the physical condition of the improvement. Condition changes due to depreciation, such as wear and tear, use, and abuse.
Quality grade depends on the kinds of materials and workmanship used in the construction of the improvement. If these materials remain, the quality grade will remain the same until what is considered “typical” in the market changes. In general, higher quality materials deteriorate more slowly than poorer quality materials, all other things being equal. A quality grade of “C” is average or typical for the standards and materials at the date of valuation.

**Design Factor**

Another factor that may be used to adjust a building's RCN is the **design factor**. The cost schedules in the Appraisal Publications are designed for use in determining RCN values for conventional, rectangular shaped structures of compact, efficient design. Architectural designs have become more diverse. There is an increased cost associated with such structures due to the need for more material and more labor per square foot. The following details should be considered in determining whether to use a design factor:

- unusual architectural design and irregular foundation outline
- wide roof overhangs
- large number of built-ins
- large number of special features, like large fireplace chimneys, floor to ceiling windows, etc.

The design factor is handled in the same manner as a quality grade factor; it is assigned to individual homes and should remain unchanged during the life of the structure.

To determine a design factor, the percentage increase or decrease in cost due to the design feature or features must be determined. These costs should be verified through the contractor. The original contractor can provide a certified construction cost value. Several opinions from local contractors are also beneficial in verifying costs.

Typically, a minus 13 percent to a plus 50 percent adjustment is made to the Appraisal Publications’ RCN value when using a design factor. A design factor is more commonly used in quality grades “B,” “A,” and “AA” improvements, although it may be required for grade “C” construction.
**Appraiser Factor**

A jurisdiction may have more than one assessor. Some jurisdictions may employ field appraisers to determine the quality grades of all buildings within that jurisdiction. Because quality grades are based on the judgment of one individual, it is possible that quality grades may be assigned that are consistently higher or lower than what other assessors or appraisers in that jurisdiction would have assigned to those buildings. To maintain uniformity, an appraiser factor is required to bring those buildings, valued by that particular individual, more in line with the value of the rest of the buildings in the jurisdiction. This factor is applied to all the parcels listed by the individual assessor.

The appraiser factor is developed using a method similar to that used to obtain the cost factor. Additional information on this factor and other factors are available in the Appraisal Publications.

**Neighborhood Factor**

The neighborhood where the property is located has a direct effect on the value. The neighborhood of a property may be defined by a natural boundary formed by rivers, or political boundaries formed by zoning to protect the common use in an area. The neighborhood should be analyzed to determine if the area is in a stage of growth, stability or decline in order to estimate the future use and value.

**A Review of the Factors**

The quality grade — used to adjust the Publication 123 RCN values to reflect the quality of materials and workmanship of the improvement.

Cost factor x design factor x neighborhood factor x appraiser factor —these factors are chain multiplied to arrive at **one factor used to adjust the Appraisal Publications’ RCN value to reflect a true RCN** of the improvement.

**Example**

\[
\text{Cost} \times \text{Design} \times \text{Neighborhood} \times \text{Appraiser} = \text{One Factor}
\]
REL/Depreciation

The final factor that is applied to all improvements is a remaining economic life (REL) factor. This factor is applied to the true RCN to arrive at a full market value, which now reflects the adjustment made for depreciation.

Remember, depreciation is the loss in value due to all factors. Generally, depreciation is placed into three categories: physical, functional, and external or economic depreciation. All depreciating forces act concurrently, but not at the same rate.

Exercise 7-1
Using the Residential REL Depreciation Table

Schedule A — This schedule considers the actual age of the improvement, and what is referred to as the CDU rating of the improvement, to arrive at an effective age. This effective age is then used to find the remaining economic life factor, which is applied to the true RCN.

The CDU rating is assigned to each property by comparing that subject property’s physical condition “C,” desirability “D,” and utility “U” to other properties within the neighborhood, or within a jurisdiction if neighborhoods have not been established.

The CDU rating is the method for determining a rate of depreciation. The condition refers to physical depreciation, such as wear and tear and action of the elements that has taken place. The desirability refers to the economic or external depreciation, such as lack of appeal due to location, or some type of adverse influences outside the boundary lines of the property. The utility refers to functional obsolescence, such as inefficient and impractical arrangement of rooms and any super-adequacy or inadequacy that may be present.

The CDU rating is broken down into five classifications.

<table>
<thead>
<tr>
<th>CDU</th>
<th>Rating</th>
<th>Condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>Excellent</td>
<td>Superior condition</td>
</tr>
<tr>
<td>G</td>
<td>Good</td>
<td>Better than average condition</td>
</tr>
<tr>
<td>A</td>
<td>Average</td>
<td>Normal wear and tear for area</td>
</tr>
<tr>
<td>P</td>
<td>Poor</td>
<td>Definitely below average condition</td>
</tr>
<tr>
<td>U</td>
<td>Unsound</td>
<td>Excessively deteriorated condition</td>
</tr>
</tbody>
</table>
How to use the Residential REL Depreciation Table

Step 1  Locate the actual age of the improvement (based on year of construction) in the AGE column of Schedule A.

Step 2  Determine the CDU of the subject and locate it along the upper portion of Schedule A.

Step 3  Trace the age to its point of intersection with the CDU and find the Effective age.

For example, a property that has an age of “10,” with a CDU rating of “good,” has an effective age of “7” in Schedule A.

Step 4  This effective age is then located on Schedule B in the column headed “EFFECTIVE AGE”. The percentage factor indicated in the right column of Schedule B is the REL factor. This factor is then applied to the true RCN, which depreciates the value to reflect full market value. REL is directly related to depreciation.

For example, a property with an effective age of 7 has an REL of 92%.

\[
\text{REL\% + Dep\% = 100\%, or}
\]
\[
100\% - \text{REL factor expressed as a percent} = \text{percent of depreciation.}
\]

This property has an REL of 92%. It has depreciated 8%. 100\% - 92\% = 8\%

The assessor must carefully review CDU ratings over time because the CDU rating of each property may change for a variety of reasons. Because each property is assigned an individual CDU rating, a change of one CDU may not require a change in the CDU ratings of other properties within the neighborhood.
Residential REL Table
Age
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50

E
1
1
1
1
1
2
2
2
2
2
3
3
3
4
4
4
4
5
5
6
8
10
10
11
11
12
12
13
13
13
14
15
16
17
18
19
20
21
22
23
24
25
25
26
27
28
29
30
31
32

Effective Age
G
A
P
1
1
14
1
2
15
2
3
16
2
4
16
3
5
17
4
6
17
5
7
18
6
8
19
6
9
20
7
10
21
7
11
22
8
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Schedule A
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Effective Age
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Schedule B

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Eff.
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Eff.
Age
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REL
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Residential Square Foot Schedules

The schedules in Publication 123 are based on construction costs in the central Illinois area.

The values are also based on construction, using average quality materials and workmanship.

There are various factors that can be applied to adjust Publication 123 to reflect the Values in various jurisdictions.

For residential structures, Publication 123 includes base cost schedules for building Style and type of construction. When referencing a base cost schedule, it is important to use the appropriate schedule.

The base cost schedules include normal construction features, such as a slab foundation, exterior walls, floors, roof, interior finish, central heating, lighting, and average landscaping. They also include the standard five plumbing fixtures: bathroom toilet, basin, tub or shower, kitchen sink, and hot water heater. If you are dealing with construction features other than those included in the base cost schedules, you must make “plus” or “minus” adjustments to the base cost. Publication 123 includes various supplemental schedules to assist in valuing these variances that also indicate whether a plus or minus adjustment to the base price is required.

The residential schedules are used in conjunction with the residential Property Record Cards (PRCs). PRC-1 is used for valuing land, and the PRC-2 is used for the computation of building values. The right column of the PRC-2 is used for computing the full value of the structure. This column is called the “computation ladder.”
<table>
<thead>
<tr>
<th>Attribute</th>
<th>Publication 123</th>
<th>Refinement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Square Footage</strong></td>
<td>The manual has categories for 1-Story, 2-story, 1 ½ Story, 2 Story Bi-level, Tri-level or split-level, 2 ½-3 Story, Log Home, Pole Frame, Mobile and Manufactured homes</td>
<td>Wood frame, Concrete Block or Solid Brick Masonry Construction with Wood siding, Vinyl Siding, Brick Veneer, or Stucco Exterior Materials</td>
</tr>
<tr>
<td><strong>Foundation Type</strong></td>
<td>The manual base costs are based on Slab Construction</td>
<td>Crawl, Unfinished basement, Finished Basement Living Area and Finished Basement Rec Room Area</td>
</tr>
<tr>
<td><strong>Additions, Wings and efs</strong></td>
<td>The manual has 1-Story and 1-1/2 Story categories</td>
<td>Exterior Wall Treatment of Wood, Vinyl, Brick, Stucco, Solid Brick or Masonry and Log</td>
</tr>
<tr>
<td><strong>Garages</strong></td>
<td>Attached garages are valued at the Grade and Condition of the house. Detached garages stand alone at its own Grade and Condition</td>
<td>Vinyl, Wood, Brick Veneer or Stucco on Wood frame; Solid Masonry or Brick; Basement Garage and Area over the Garage</td>
</tr>
<tr>
<td><strong>Attics</strong></td>
<td>Categories for Unfinished, Finished or ½ Finished</td>
<td>Square Footage must be calculated for Finished Area only for areas that are 6 Foot + in ceiling height</td>
</tr>
<tr>
<td><strong>Porches</strong></td>
<td>Categories for Open and Enclosed Porches</td>
<td>Frame, Frame Screened-In, Knee Wall with Glass, Masonry</td>
</tr>
<tr>
<td><strong>Stoops, Decks and Patios</strong></td>
<td>The manual has values for each individually</td>
<td>Masonry, Wood, Concrete, Brick in Sand and Stairs and Railing Adjustments</td>
</tr>
<tr>
<td><strong>Heating Type</strong></td>
<td>The manual has a Lack of Central Heat deduction schedule</td>
<td>By Square Footage of each home by number of stories- Always a subtraction</td>
</tr>
<tr>
<td><strong>Central Air Conditioning</strong></td>
<td>The manual has a Schedule to add A/C.</td>
<td>By Square Footage of each home by number of stories. Always an addition</td>
</tr>
<tr>
<td><strong>Plumbing</strong></td>
<td>The manual gives a value of $1,885 per fixture</td>
<td>1 Bath is usually 3 fixtures; ½ Bath is 2 fixtures</td>
</tr>
<tr>
<td><strong>Fireplaces</strong></td>
<td>The manual differentiates by # of stories of the home</td>
<td>Masonry Fireplace and Stack, 2nd fireplace on Same Stack or Pre-fab (Gas or Electric insert with Direct Vent)</td>
</tr>
<tr>
<td><strong>Partial Masonry Trim</strong></td>
<td>Quality Grade A-D. Masonry at least a “B”</td>
<td>Brick, Stone or Artificial Stone</td>
</tr>
<tr>
<td><strong>Pools</strong></td>
<td>Schedule based on Square Foot Surface Area. Separate Schedule for Pool Heaters</td>
<td>Gunite/Concrete or Vinyl Liner.</td>
</tr>
<tr>
<td>Attribute</td>
<td>Description</td>
<td>Refinement</td>
</tr>
<tr>
<td>----------------------------</td>
<td>--------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Paving</td>
<td>Sidewalks, Driveways, Parking Areas</td>
<td>Gravel, Concrete or Asphalt</td>
</tr>
<tr>
<td>Quality Grade</td>
<td>Most construction is considered Average or “C Grade”</td>
<td>Grade can also be set in between a range, i.e. B + 10 would = 1.32</td>
</tr>
<tr>
<td>AA  2.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A               1.50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B               1.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C               1.00 Average</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D               .82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E               .50</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost Factor</td>
<td>A Factor determined from the assessors Cost Study used to adjust the manual for differences in cost of labor and materials</td>
<td>Usually falls between 1.5 and .75</td>
</tr>
<tr>
<td>Neighborhood Factor</td>
<td>A Factor to adjust value based on some pre-determined neighborhood attribute</td>
<td>Neighborhood can be based on boundary, street, building style, or any like or similar property as determined by the assessor</td>
</tr>
<tr>
<td>Design Factor</td>
<td>A Factor applied to an individual improvement or structure</td>
<td>Can be either a plus or minus, i.e. mansard roof may be a negative adjustment; a home with floor to ceiling glass windows and a cantilevered foundation might be a positive</td>
</tr>
<tr>
<td>Condition and CDU Rating</td>
<td>CDU= Condition, Desirability, Utility This determination directly affects depreciation.</td>
<td>The rating will change with time, maintenance, neglect, etc.</td>
</tr>
<tr>
<td>E-Excellent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G-Good</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A-Average</td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-Poor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U-Unsound</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation-</td>
<td>An REL, or Remaining Economic Life Table, is part of Pub 123</td>
<td>The table adjusts for the age of the home based on Condition. 100% - Depreciation = REL</td>
</tr>
<tr>
<td>Physical</td>
<td></td>
<td></td>
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<tr>
<td>Economic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total SF</td>
<td>Wood siding</td>
<td>Vinyl siding</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
<td>--------------</td>
</tr>
<tr>
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<td>101,470</td>
</tr>
<tr>
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<td>109,000</td>
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<tr>
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<td>122,520</td>
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<td>128,260</td>
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<td>150,530</td>
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<td>158,820</td>
<td>157,900</td>
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<tr>
<td>2,600</td>
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<td>214,120</td>
</tr>
<tr>
<td>2,700</td>
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<td>218,510</td>
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<tr>
<td>3,200</td>
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<td>250,720</td>
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<tr>
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<tr>
<td>3,900</td>
<td>294,880</td>
<td>291,930</td>
</tr>
<tr>
<td>Over 4000</td>
<td>$75.00</td>
<td>$74.25</td>
</tr>
</tbody>
</table>
The base price includes the standard 5 plumbing fixtures: bathroom toilet, bathroom basin, tub or shower, kitchen sink and hot water heater. If the structure has more than the standard 5 fixtures, add $1,885 per fixture to the base cost. If you have less than the standard 5 fixtures, deduct $1,885 per fixture.

### Quality grade

Quality grade refers to the quality of the material and workmanship. Publication 123 is based on average quality improvements. The quality grade for average is “C.” If you have a quality other than average, you must apply the appropriate grade factor.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Factor</th>
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</thead>
<tbody>
<tr>
<td>AA</td>
<td>225%</td>
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<tr>
<td>A</td>
<td>150%</td>
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<tr>
<td>B</td>
<td>122%</td>
</tr>
<tr>
<td>C</td>
<td>100%</td>
</tr>
<tr>
<td>D</td>
<td>82%</td>
</tr>
<tr>
<td>E</td>
<td>50%</td>
</tr>
</tbody>
</table>

### Residential No Heat Schedule (-) Always a subtraction

<table>
<thead>
<tr>
<th>Total Square foot area</th>
<th>1 Story</th>
<th>1.5 Story</th>
<th>2 Story</th>
<th>Bi-level</th>
<th>Tri-level</th>
<th>2.5 – 3 Story</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>860</td>
<td>860</td>
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<td>---------</td>
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<tr>
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<tr>
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<td>5,105</td>
<td>5,085</td>
<td>5,110</td>
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<td>5,640</td>
<td>5,625</td>
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<td>7,705</td>
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<td>7,855</td>
<td>7,785</td>
<td>7,655</td>
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</tr>
<tr>
<td>2,600</td>
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<td>8,945</td>
</tr>
<tr>
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<td>8,875</td>
<td>8,930</td>
<td>8,695</td>
<td>9,525</td>
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<tr>
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<td>9,355</td>
<td>9,290</td>
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</tr>
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<td>12,260</td>
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<tr>
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<td>11,700</td>
<td>11,660</td>
<td>11,680</td>
<td>12,620</td>
</tr>
</tbody>
</table>

The base price schedule includes heat. If the structure is **not heated**, a minus adjustment must be made.
Central air conditioning is not included in the base price. If the structure is cooled by central air conditioning, a plus adjustment must be made.

<table>
<thead>
<tr>
<th>Total Square foot area</th>
<th>1 Story</th>
<th>1.5 Story</th>
<th>2 Story</th>
<th>Bi-level</th>
<th>Tri-level</th>
<th>2.5 – 3 Story</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>1,200</td>
<td>1,200</td>
<td>1,200</td>
<td>1,200</td>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>400</td>
<td>1,200</td>
<td>1,200</td>
<td>1,200</td>
<td>1,200</td>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>600</td>
<td>2,020</td>
<td>2,020</td>
<td>2,020</td>
<td>2,020</td>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>800</td>
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<td>2,475</td>
<td>2,500</td>
<td>2,500</td>
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<tr>
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<td>2,960</td>
<td>2,960</td>
<td>2,925</td>
<td>2,960</td>
<td>2,960</td>
<td>3,165</td>
</tr>
<tr>
<td>1,200</td>
<td>3,380</td>
<td>3,360</td>
<td>3,340</td>
<td>3,370</td>
<td>3,380</td>
<td>3,615</td>
</tr>
<tr>
<td>1,400</td>
<td>3,780</td>
<td>3,750</td>
<td>3,730</td>
<td>3,765</td>
<td>3,780</td>
<td>4,045</td>
</tr>
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<td>1,600</td>
<td>4,200</td>
<td>4,160</td>
<td>4,140</td>
<td>4,180</td>
<td>4,200</td>
<td>4,495</td>
</tr>
<tr>
<td>1,800</td>
<td>4,610</td>
<td>4,520</td>
<td>4,540</td>
<td>4,565</td>
<td>4,610</td>
<td>4,930</td>
</tr>
<tr>
<td>2,000</td>
<td>5,050</td>
<td>4,950</td>
<td>4,965</td>
<td>5,000</td>
<td>5,050</td>
<td>5,400</td>
</tr>
<tr>
<td>2,200</td>
<td>5,440</td>
<td>5,385</td>
<td>5,330</td>
<td>5,415</td>
<td>5,440</td>
<td>5,820</td>
</tr>
<tr>
<td>2,400</td>
<td>5,840</td>
<td>5,830</td>
<td>5,715</td>
<td>5,835</td>
<td>5,840</td>
<td>6,250</td>
</tr>
<tr>
<td>2,600</td>
<td>6,250</td>
<td>6,235</td>
<td>6,110</td>
<td>6,245</td>
<td>6,250</td>
<td>6,690</td>
</tr>
<tr>
<td>2,800</td>
<td>6,620</td>
<td>6,555</td>
<td>6,460</td>
<td>6,590</td>
<td>6,620</td>
<td>7,085</td>
</tr>
<tr>
<td>3,000</td>
<td>6,990</td>
<td>6,850</td>
<td>6,810</td>
<td>6,920</td>
<td>6,990</td>
<td>7,480</td>
</tr>
<tr>
<td>3,200</td>
<td>7,345</td>
<td>7,270</td>
<td>7,140</td>
<td>7,310</td>
<td>7,345</td>
<td>7,860</td>
</tr>
<tr>
<td>3,400</td>
<td>7,680</td>
<td>7,595</td>
<td>7,465</td>
<td>7,640</td>
<td>7,680</td>
<td>8,215</td>
</tr>
<tr>
<td>3,600</td>
<td>8,020</td>
<td>7,860</td>
<td>7,780</td>
<td>7,940</td>
<td>8,020</td>
<td>8,580</td>
</tr>
<tr>
<td>3,800</td>
<td>8,445</td>
<td>8,275</td>
<td>8,220</td>
<td>8,360</td>
<td>8,445</td>
<td>9,040</td>
</tr>
<tr>
<td>4,000</td>
<td>8,970</td>
<td>8,790</td>
<td>8,700</td>
<td>8,880</td>
<td>8,970</td>
<td>9,600</td>
</tr>
</tbody>
</table>

Central air conditioning is not included in the base price. If the structure contains a fireplace, an adjustment must be made for the number of fireplaces and stacks.

<table>
<thead>
<tr>
<th>Type</th>
<th>1 story</th>
<th>2 story</th>
<th>3 story</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masonry Fireplace &amp; stack</td>
<td>$5,340</td>
<td>$5,950</td>
<td>$6,775</td>
</tr>
<tr>
<td>2nd fireplace on same stack</td>
<td>$4,410</td>
<td>$4,915</td>
<td>$5,840</td>
</tr>
<tr>
<td>Pre-fab Fireplace</td>
<td>$4,205</td>
<td>$4,700</td>
<td>$5,200</td>
</tr>
</tbody>
</table>

Fireplaces are not included in the base price. If the structure contains a fireplace, an adjustment must be made for the number of fireplaces and stacks.
The base price of the dwelling includes the cost of only a slab foundation. You must make an adjustment for a dwelling that has either a crawl space or basement area. To use the schedule, calculate the SF area with a foundation other than a concrete slab, and correlate it to the appropriate construction type (crawl or basement).

This schedule is also designed to estimate the cost of finishing a basement into living quarters or a recreation room.

<table>
<thead>
<tr>
<th></th>
<th>400</th>
<th>600</th>
<th>800</th>
<th>1,000</th>
<th>1,200</th>
<th>1,400</th>
<th>1,600</th>
<th>1,800</th>
<th>2,000</th>
<th>2,400</th>
<th>2,800</th>
<th>3,200</th>
<th>3,600</th>
<th>Over 3600</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crawl space</td>
<td>3,265</td>
<td>4,750</td>
<td>6,375</td>
<td>7,370</td>
<td>8,350</td>
<td>9,410</td>
<td>10,740</td>
<td>10,945</td>
<td>11,904</td>
<td>13,415</td>
<td>14,930</td>
<td>17,050</td>
<td>18,145</td>
<td>5.05</td>
</tr>
<tr>
<td>Unfinished basement</td>
<td>4,680</td>
<td>6,935</td>
<td>9,000</td>
<td>10,480</td>
<td>12,025</td>
<td>13,500</td>
<td>14,960</td>
<td>16,470</td>
<td>17,980</td>
<td>21,750</td>
<td>24,100</td>
<td>26,400</td>
<td>29,350</td>
<td>8.00</td>
</tr>
<tr>
<td>Finished Basement Living area</td>
<td>5,870</td>
<td>10,355</td>
<td>14,820</td>
<td>16,835</td>
<td>19,750</td>
<td>22,730</td>
<td>25,730</td>
<td>28,680</td>
<td>31,630</td>
<td>36,520</td>
<td>41,805</td>
<td>47,970</td>
<td>49,825</td>
<td>15.20</td>
</tr>
<tr>
<td>Finished Basement Recreation Room area</td>
<td>3,995</td>
<td>7,335</td>
<td>9,560</td>
<td>10,870</td>
<td>12,935</td>
<td>13,900</td>
<td>16,090</td>
<td>17,430</td>
<td>19,020</td>
<td>21,380</td>
<td>25,460</td>
<td>28,160</td>
<td>32,210</td>
<td>11.45</td>
</tr>
</tbody>
</table>
Garages

The cost of a garage is not included in the base residence cost. The garage costs include wall surfaces, roof surface when applicable, a concrete floor, doors, and electric lighting. Walls and roof cover are the same as the basic residence. The garages cost table includes attached, detached, and built-in garages. Also included are costs for basement garages and areas over attached or detached garages.

Attached garages share a common wall with the residence and costs include interior finish for only that common or share wall.

Detached garages are freestanding structures with totally independent foundation and roof structures from the residence. There is no interior finish included in the costs.

Built-in garages having area both adjacent to and above. Costs include finish for all common surfaces.

### Garages: Base cost per square foot of area

<table>
<thead>
<tr>
<th>Garages</th>
<th>Attached</th>
<th>Detached</th>
<th>Built-in</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 Car</td>
<td>2 Car</td>
<td>3 Car</td>
</tr>
<tr>
<td></td>
<td>275-364</td>
<td>484-676</td>
<td>864+</td>
</tr>
<tr>
<td>Vinyl Siding</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>on wood stud</td>
<td>33.50</td>
<td>27.30</td>
<td>25.60</td>
</tr>
<tr>
<td>Wood Siding</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>on wood stud</td>
<td>35.50</td>
<td>31.35</td>
<td>31.20</td>
</tr>
<tr>
<td>Brick veneer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>on wood stud</td>
<td>38.85</td>
<td>33.05</td>
<td>32.90</td>
</tr>
<tr>
<td>Stucco on Wood on wood stud</td>
<td>34.65</td>
<td>29.30</td>
<td>27.00</td>
</tr>
<tr>
<td>Solid Masonry, brick</td>
<td>40.65</td>
<td>37.60</td>
<td>36.50</td>
</tr>
<tr>
<td>Basement Garage:</td>
<td>Add lump sums to unfinished basement costs.</td>
<td>1 car: $2,350</td>
<td>2 car: $3,200</td>
</tr>
<tr>
<td>Areas over Garage:</td>
<td>If an area over an attached garage is equal to the residence in interior finish, include that area in the total square footage of the residence and price the garage as a built-in. If minimal finish like a bonus room, use 50% of the garage square foot costs. If storage only with high-pitched gable roof, add 20% to the garage costs to cover roof and floor costs.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Porches are not included in the base cost. If the structure has one or more porches, an addition to the base price must be made. To determine a value, locate the square footage of the porch in the left column and then go to the appropriate construction type in the right columns for the value. If you have more than one porch attached to the structure, price each porch individually.

You cannot combine the total square footage for all porches.

<table>
<thead>
<tr>
<th>SFGA</th>
<th>Open frame porch</th>
<th>Frame Screened-in porch</th>
<th>Knee wall with glass</th>
<th>Solid wall enclosed frame</th>
<th>Open Masonry Porch</th>
<th>Enclosed masonry porch</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>1,120</td>
<td>1,905</td>
<td>3,050</td>
<td>2,290</td>
<td>1,225</td>
<td>2,935</td>
</tr>
<tr>
<td>50</td>
<td>1,970</td>
<td>2,450</td>
<td>4,720</td>
<td>3,580</td>
<td>2,620</td>
<td>4,225</td>
</tr>
<tr>
<td>80</td>
<td>2,945</td>
<td>3,990</td>
<td>6,385</td>
<td>4,870</td>
<td>3,915</td>
<td>5,530</td>
</tr>
<tr>
<td>100</td>
<td>3,455</td>
<td>4,545</td>
<td>7,470</td>
<td>5,895</td>
<td>4,415</td>
<td>7,000</td>
</tr>
<tr>
<td>120</td>
<td>3,955</td>
<td>5,130</td>
<td>7,975</td>
<td>6,340</td>
<td>5,500</td>
<td>7,420</td>
</tr>
<tr>
<td>150</td>
<td>4,940</td>
<td>6,415</td>
<td>9,965</td>
<td>7,930</td>
<td>6,590</td>
<td>9,260</td>
</tr>
<tr>
<td>200</td>
<td>6,300</td>
<td>7,825</td>
<td>11,655</td>
<td>9,550</td>
<td>8,445</td>
<td>11,180</td>
</tr>
<tr>
<td>250</td>
<td>7,500</td>
<td>9,300</td>
<td>13,540</td>
<td>11,195</td>
<td>9,975</td>
<td>13,055</td>
</tr>
<tr>
<td>300</td>
<td>8,620</td>
<td>10,580</td>
<td>15,315</td>
<td>12,685</td>
<td>11,325</td>
<td>14,930</td>
</tr>
<tr>
<td>350</td>
<td>9,640</td>
<td>11,725</td>
<td>16,975</td>
<td>14,060</td>
<td>12,670</td>
<td>16,590</td>
</tr>
<tr>
<td>400</td>
<td>10,460</td>
<td>12,600</td>
<td>18,430</td>
<td>15,265</td>
<td>14,000</td>
<td>18,010</td>
</tr>
<tr>
<td>500</td>
<td>12,350</td>
<td>14,960</td>
<td>21,885</td>
<td>18,125</td>
<td>16,425</td>
<td>21,390</td>
</tr>
<tr>
<td>600</td>
<td>13,950</td>
<td>17,060</td>
<td>24,950</td>
<td>20,665</td>
<td>18,830</td>
<td>24,385</td>
</tr>
<tr>
<td>700</td>
<td>15,535</td>
<td>19,020</td>
<td>26,645</td>
<td>22,900</td>
<td>20,815</td>
<td>25,755</td>
</tr>
<tr>
<td>750</td>
<td>15,810</td>
<td>19,365</td>
<td>27,650</td>
<td>23,310</td>
<td>21,025</td>
<td>27,105</td>
</tr>
<tr>
<td>800</td>
<td>16,025</td>
<td>19,615</td>
<td>28,425</td>
<td>23,625</td>
<td>21,315</td>
<td>28,445</td>
</tr>
<tr>
<td>900</td>
<td>17,190</td>
<td>20,970</td>
<td>32,220</td>
<td>25,245</td>
<td>23,030</td>
<td>27,105</td>
</tr>
<tr>
<td>1,000</td>
<td>18,150</td>
<td>22,140</td>
<td>34,010</td>
<td>26,650</td>
<td>25,160</td>
<td>28,445</td>
</tr>
</tbody>
</table>
Occasionally, structures will feature brick, stone, or artificial stone as trim accenting a portion of the structure. If there is partial masonry trim on the structure, an addition to the base price must be made. The amount of the adjustment would reflect the type of material used and the quality grade of the material.

<table>
<thead>
<tr>
<th>Quality</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brick</td>
<td>$17.60</td>
<td>$14.35</td>
<td>$11.75</td>
<td>$9.65</td>
</tr>
<tr>
<td>Stone</td>
<td>44.10</td>
<td>35.85</td>
<td>30.60</td>
<td>25.30</td>
</tr>
<tr>
<td>Artificial Stone</td>
<td>19.00</td>
<td>15.45</td>
<td>12.60</td>
<td>10.35</td>
</tr>
</tbody>
</table>

The paving schedule is used to value sidewalks, driveways, etc. The amount of the addition is determined by the type of material used. Values are indicated for crushed stone, concrete, and asphalt. To determine the amount of the addition, multiply the square footage of the paved area times the indicated value.

<table>
<thead>
<tr>
<th>Paving (+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crushed stone</td>
</tr>
<tr>
<td>Concrete</td>
</tr>
<tr>
<td>Asphalt</td>
</tr>
</tbody>
</table>

Stoops, decks, and patios are not included in the base price, so an addition must be made. To determine the value, multiply the square footage of the structure times the indicated value.

<table>
<thead>
<tr>
<th>Stoop, decks, patios (+/-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stoop – masonry</td>
</tr>
<tr>
<td>Deck – wood, elevated</td>
</tr>
<tr>
<td>If no stairs, deduct</td>
</tr>
<tr>
<td>If no railing, deduct</td>
</tr>
<tr>
<td>Patio – concrete</td>
</tr>
<tr>
<td>Patio – brick</td>
</tr>
</tbody>
</table>

Stoops, decks, and patios are not included in the base price, so an addition must be made. To determine the value, multiply the square footage of the structure times the indicated value.
The schedules on the previous pages are not all inclusive. There are many different schedules for other features for other types of residential buildings like log cabins, manufactured homes and apartments.

Please refer to Publication 123 for the complete list of features and construction types.
Using the Schedules  
Exercise 7-1  1-Story Residence

The lot is improved with a 30-year-old 1-story frame dwelling with vinyl siding. The dwelling is on a crawl and has an attached 2-car frame garage with vinyl siding. The residence is typical for the neighborhood and contains 5 rooms, including 2 bedrooms and 1 bath.

| **Foundation** | 8” concrete block on spread footing |
| **Heating**    | Gas fired forced air                |
| **Plumbing**   | Standard 5 fixtures of average grade|
| **Exterior walls** | 2” x 4” stud frame, 16” on-center with vinyl siding |
| **Floors**     | Crawl 4” concrete — 1st floor - 2” x 8” wood joist |
| **Interior finish** | 1/2” drywall — pine doors and trim throughout — average grade |
| **Miscellaneous** | Average quality electrical fixtures — average quality workmanship — |
| **CDU**        | Average                              |
| **Quality grade** | C                                     |
# Exercise 7-1

## Building Record - Residential - Rural (Property - Type 1)

### 1-Story Home

<table>
<thead>
<tr>
<th>Occupancy</th>
<th>Interior Finish</th>
<th>Remodeled</th>
<th>Sold Date</th>
<th>Mo.</th>
<th>Day</th>
<th>Yr.</th>
<th>Age</th>
<th>Adj. Age 30</th>
<th>CDU Average</th>
<th>Grade</th>
<th>Dwelling Computations</th>
</tr>
</thead>
</table>

### Living Accommodations

<table>
<thead>
<tr>
<th>Total Rooms</th>
<th>Bedrooms</th>
<th>Family Room</th>
<th>Paneling</th>
<th>Features</th>
<th>SF</th>
<th>Quality</th>
<th>Type</th>
</tr>
</thead>
</table>

### Basement

| Full       | Crawls | Stabs | Integral garage | Crawl Space | Unfinished | Part | Full | % finished |

### Heating

<table>
<thead>
<tr>
<th>None</th>
<th>Central</th>
<th>Air Condition</th>
<th>Other</th>
</tr>
</thead>
</table>

### Plumbing

| Standard (5) | X | Other |

| Exterior Walls | X | Other |

### Attic

| None | Unfinished | Part | Full | % finished |

<table>
<thead>
<tr>
<th>Roof</th>
<th>Summary of Other Buildings</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>No.</th>
<th>Construction</th>
<th>Size</th>
<th>Rate</th>
<th>Grade</th>
<th>Age</th>
<th>CDU</th>
<th>Factor</th>
<th>Repl. Cost new</th>
<th>REL</th>
<th>Full Value</th>
</tr>
</thead>
</table>

### Repl. Cost new

| Eff. Age | REL | Depr. 33% | S | C | M | I | Full Value |

<table>
<thead>
<tr>
<th>Floors</th>
<th>Summary of Other Buildings</th>
</tr>
</thead>
</table>

| B | 1 | 2 | 3 |

### Other features

- Porches

- Attach./Integral garage

- Attic

- Garage (detached)

- 1 Story Frame Crawl

- 2-Car Frame Garage

### 48' x 25' = 1200 SF 1-Story Frame/Vinyl = $115,970

### 48' x 25' = 1200 SF Concrete Block Crawl Space = $8,350

### 25' x 22' = 550 SF Garage Frame/Vinyl = $15,015
Page left blank intentionally.
# 1-Story Base Cost Schedule

<table>
<thead>
<tr>
<th>Total SF</th>
<th>Wood siding Wood frame</th>
<th>Vinyl siding Wood frame</th>
<th>Brick veneer Wood frame</th>
<th>Stucco Wood frame</th>
<th>Concrete blk. or stucco on blk.</th>
<th>Brick Solid masonry</th>
</tr>
</thead>
<tbody>
<tr>
<td>600</td>
<td>70,070</td>
<td>60,370</td>
<td>74,130</td>
<td>70,550</td>
<td>73,570</td>
<td>86,800</td>
</tr>
<tr>
<td>700</td>
<td>79,900</td>
<td>76,110</td>
<td>83,470</td>
<td>79,990</td>
<td>82,840</td>
<td>97,640</td>
</tr>
<tr>
<td>800</td>
<td>86,900</td>
<td>86,030</td>
<td>91,940</td>
<td>89,659</td>
<td>91,240</td>
<td>107,320</td>
</tr>
<tr>
<td>900</td>
<td>95,000</td>
<td>94,050</td>
<td>100,510</td>
<td>97,330</td>
<td>99,570</td>
<td>117,090</td>
</tr>
<tr>
<td>1,000</td>
<td>102,500</td>
<td>101,470</td>
<td>108,340</td>
<td>105,810</td>
<td>108,440</td>
<td>126,080</td>
</tr>
<tr>
<td>1,100</td>
<td>110,070</td>
<td>108,970</td>
<td>117,150</td>
<td>114,610</td>
<td>116,230</td>
<td>135,110</td>
</tr>
<tr>
<td>1,200</td>
<td>117,140</td>
<td>115,970</td>
<td>125,460</td>
<td>123,470</td>
<td>123,480</td>
<td>143,490</td>
</tr>
<tr>
<td>1,300</td>
<td>124,250</td>
<td>123,060</td>
<td>133,530</td>
<td>129,090</td>
<td>130,710</td>
<td>151,000</td>
</tr>
<tr>
<td>1,400</td>
<td>130,950</td>
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</table>

| Over 3,500 | 77.00 | 76.20 | 84.00 | 78.50 | 79.30 | 91.60 |
Exercise 7-2  
Computing the Value of a Structure  

The subject property is a 10-year old, 2-story wood frame structure with 8 rooms, including 4 bedrooms and a family room. The foundation is 8" masonry. There is a full unfinished basement. The dwelling has central warm air heat and central air conditioning on the upper two floors. The plumbing consists of the standard 5 plumbing fixtures, plus an additional full bath and a separate half-bath (2 fixtures).

The exterior walls are covered with vinyl siding along with an open frame porch across the front. There is also 300 sf of partial masonry trim. The basement floor is concrete and the first and second floors are covered with tile and carpet. The interior finish is drywall on the first and second floors. In addition, there is one masonry fireplace. There is also an attached 600 square foot frame 2-car garage with vinyl siding, with a 600-square foot asphalt drive in front. There is a 6-ft. deep open frame porch across the front of the structure, as well as an 80-square foot wood deck with stairs and railings on the rear of the structure. The property has a CDU of “average,” a quality grade “C” as well as a 1.06 cost factor.

The property record card for this property follows. Pull this out and refer to the computation ladder and the corresponding line numbers as you go through this line-by-line.
Exercise 7-2

Building Record - Residential - Rural (Property - Type 1)

<table>
<thead>
<tr>
<th>Occupancy</th>
<th>Interior Finish</th>
<th>Remodeled</th>
<th>Sold Date</th>
<th>Mo. Day Yr</th>
<th>Age</th>
<th>Adj. Age</th>
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<tbody>
<tr>
<td>Vacant Lot</td>
<td>Plaster/dry wall</td>
<td>B 1 2 3</td>
<td>NH</td>
<td>Amount $</td>
<td>CDU</td>
<td>Average</td>
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<tr>
<td>Dwelling</td>
<td>Fiberboard Paneling</td>
<td></td>
<td>Memo</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile Home</td>
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<tr>
<td>Frame Home</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Apt.</td>
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Living Accommodations

<table>
<thead>
<tr>
<th>Total Rooms</th>
<th>Bed Rooms</th>
<th>Family Room</th>
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</thead>
<tbody>
<tr>
<td>8</td>
<td>4</td>
<td>1</td>
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Foundation

<table>
<thead>
<tr>
<th>Ft. Mys. Wall</th>
<th>Pier</th>
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<tbody>
<tr>
<td>8&quot;</td>
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Basement

<table>
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<tr>
<th>Basement Features</th>
<th>SF</th>
<th>Quality</th>
<th>Type</th>
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<tr>
<td>Finished</td>
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<tr>
<td>Basement</td>
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<tr>
<td>Recreation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fireplaces</td>
<td>1</td>
<td>masonry</td>
<td>Stack # 1</td>
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<tr>
<td>Integral garage</td>
<td>600</td>
<td>Fmr.</td>
<td>Mys. 2 Carport 3</td>
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<tr>
<td>Area without bmt.</td>
<td>SF</td>
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Heating

<table>
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<tr>
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<th>SF</th>
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<td>Warm air</td>
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<tr>
<td>Hot water/Steam</td>
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<tr>
<td>Floor furnace</td>
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<tr>
<td>Unit heaters</td>
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<td>Other</td>
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Plumbing

<table>
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<th>SF</th>
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<tbody>
<tr>
<td>Standard (5)</td>
<td>X</td>
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<tr>
<td>Bathroom (3)</td>
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<tr>
<td>Half bath (2)</td>
<td>X</td>
</tr>
<tr>
<td>Sink/Lavatory closet</td>
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Attic

<table>
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<tr>
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<th>SF</th>
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<tbody>
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<td>Unfinished</td>
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</tr>
<tr>
<td>Part</td>
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<tr>
<td>Full</td>
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Exterior Walls

<table>
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<tr>
<th>Exterior Walls</th>
<th>SF</th>
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<tr>
<td>Wood/stucco/aluminum/vinyl siding</td>
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<tr>
<td>Concrete block</td>
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</tr>
<tr>
<td>Brick/stone TRIM</td>
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</tr>
<tr>
<td>Other</td>
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Roof

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<tr>
<td>Shingle - asphalt/asbestos/wood</td>
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<tr>
<td>Slate/tile</td>
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<tr>
<td>Composition</td>
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<tr>
<td>Other</td>
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Floors

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<tr>
<td>Wood</td>
<td></td>
</tr>
<tr>
<td>Tile</td>
<td>X</td>
</tr>
<tr>
<td>Carpet</td>
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Summary of Other Buildings

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<th>Construction</th>
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<th>Rate</th>
<th>Grade</th>
<th>Age</th>
<th>CDU Factor</th>
<th>Repl. Cost new</th>
<th>REL</th>
<th>Full Value</th>
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<tbody>
<tr>
<td>Garage (detached)</td>
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<td>C/1.00</td>
<td>10</td>
<td>1.06</td>
<td>1.844</td>
<td>0.89</td>
<td>1.641</td>
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</table>

2-Story Frame Garage

2-Story wood/vinyl 40 x 25 x 2 = 2,000 SF
Basement 40 x 25 = 1,000 SF
Central air Basement Garage
Porch Fireplace Driveway
Trim Deck Plumbing

2-Story Frame

40' x 25' x 2 = 2,000 SF

Asphalt Drive

30' x 30' x 2 = 1,800 SF

Attic

30' x 30' x 2 = 1,800 SF

20' x 20' x 2 = 1,600 SF

Summary of Other Buildings

<table>
<thead>
<tr>
<th>Type</th>
<th>No.</th>
<th>Construction</th>
<th>Size</th>
<th>Rate</th>
<th>Grade</th>
<th>Age</th>
<th>CDU Factor</th>
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<th>REL</th>
<th>Full Value</th>
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<td>1.06</td>
<td>1.844</td>
<td>0.89</td>
<td>1.641</td>
</tr>
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</table>

Total full value other buildings

1,641

Total full value all buildings

225,254
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Exercise 7-2 instructions

1. The structure is 10 years old, so 10 is written on the Age line.

2. The CDU is listed as “average.”

3. The Quality grade is listed as “C.”

4. The dwelling is a 2-story, wood frame/vinyl siding structure with 1,000 square feet on the ground floor. (2-story x 1,000 SF = 2,000 total SF)

5. Looking at the Base cost schedule — wood frame/vinyl siding construction, (pg. 162) the base price is $171,760.

6. The structure has an unfinished basement. You must make a plus adjustment of $10,480 for the 1,000-square foot basement.

7. The structure is heated, so no adjustment is necessary for heat. However, the structure has central air conditioning. Since air conditioning is not included in the base price, you must make a plus adjustment. Look at the Central air conditioning schedule (page 164): a 2-story structure with 2,000 SF requires a plus adjustment of $4,965.

8. In addition to the standard 5 plumbing fixtures, there is an additional bathroom and a toilet room, so a plus adjustment for 5 additional fixtures is required. Reference the Plumbing schedule—the appropriate adjustment is $1,885 per fixture, or a plus $9,425 (5 x $1,885).

9. The listing indicated 1 "open frame porch," which is 240 square feet. Refer to The Porch schedule: the value for a 250-square foot open frame porch is $7,500. Since no value is given for 240 SF, choose the closest listed footage.

10. The next addition needed is for an 80-square foot wood deck with stairs and railings. Looking at the schedules for Decks — the base price is $17.35 per square foot. To arrive at a value, take 80 SF x $17.35 = $1,388.

11. There is a 600-square foot 2 car attached frame garage with vinyl siding. Look at the Garage schedule — the base price is $27.30. To arrive at a value, take 600 SF x $27.30. A plus $16,380 adjustment is required.

12. The base cost of $171,760 and the adjustments made so far (for the basement, central air conditioning, plumbing, a porch, a deck, and attached garage) are totaled to arrive at $221,898.
13. The next line refers to the quality grade. The quality grade for this structure is “C”. Looking at the schedule for Quality – the factor for “C” is 100 percent. Since the grade is “C”, or average quality construction, the values are not affected. Attention should always be paid to the factor assigned; any grade other than “C” will produce a factor other than 100 percent and change the value.

14. Taking 100 percent (1.00) times $221,898, the value remains $221,898.

15. It should be noted that in the first part of the computation ladder, a quality grade factor of 1.00 was applied to the adjusted base price. However, in the items listed in the next portion of the ladder, individual quality grades for each feature must be considered when selecting the amount of adjustments.

16. The property has 300 square feet of common stone trim, grade “C.” Looking at the schedule for Partial masonry trim, find “stone” and grade “C” - the value is $30.60. Taking 300 square feet $30.60 produces a value of $9,180 to add to the cost.

17. This structure contains 1 masonry fireplace. Referencing the Fireplace schedule, the value for a fireplace and stack for a 2-story dwelling is $5,950.

18. There are no more adjustments to make to the computation ladder at this point. Adding the adjusted base price of $221,898, to the value of the trim and fireplace results in a total of $237,028.

19. As stated earlier, the values in Publication 123 are for the central Illinois area. From the cost factor study completed in Exercise 5-1, this property is in an area where construction costs run about 6 percent higher. Therefore, you must use the cost factor of 106 percent to obtain accurate values for this jurisdiction.

20. When the adjusted value of $237,028 is multiplied by 106 percent (1.06), the resulting value of $251,250 is the RCN of this structure.

21. Since the structure is 10 years old, the RCN must be adjusted for any depreciation that has occurred. Going to Schedule A of the Residential REL Depreciation Tables: a 10-year old structure with a CDU of “average” has an effective age of 10. On Schedule B, an effective age of 10 indicates an REL factor of 89 percent. This property has depreciated 11 percent. (REL + depreciation = 100 percent).

22. Taking 89 percent (.89) of the RCN of $251,250 produces a full value of $223,613 for this structure today.
23. The listing also indicates that there is a 600 SF asphalt driveway. Reference the Paving schedule — the price per square foot of paved area is $2.90.

24. To arrive at a value, take 600 SF x $2.90 = $1,740 x 1.00 (quality grade) = $1,740 x 1.06 (cost factor) = $1,844 (RCN). $1,844 (RCN) x .89 (REL) = $1,641 full value.

25. The value for the asphalt drive is $1,641 and this becomes the full value of the other buildings.

26. The final step is adding $1,641, the full value of the other buildings, to $223,613, The full value of the dwelling, which results in a full value of $225,254 for all buildings.
Exercise 7-3  2-Story Residence

The lot is improved with a 70-year-old, 2-story frame dwelling with wood siding. The dwelling is on a crawl. It has an open frame front porch and a detached 1 car frame garage with wood siding. There is also a gravel drive, a 10 x 10 concrete patio and a wood deck with steps and railings.

**Foundation**
- 8” brick wall

**Heating**
- Hot water steam system

**Plumbing**
- Standard 5 plus 1 half bath with cheap grade fixtures and galvanized iron piping

**Exterior walls**
- Painted wood siding over 2”x4” studs. 1 3/8” pine doors and 1 3/8” pine double-hung windows

**Floors**
- 1st and 2nd floors - 2”x 8” wood joist. Cheap grade tile and soft pine floors

**Interior finish**
- 3/8” plaster board and cheap pine doors and trim throughout. Original metal kitchen cabinets

**Miscellaneous**
- Shingle roof. Poor quality electrical fixtures and lack of electric outlets. Below average workmanship. 30’ x 5’ open frame porch, 12’ x 10’ wood deck and 10’ x 10’ concrete patio. 7’ x 120’ gravel drive.

**CDU**
- Poor

**Quality grade**
- D

Complete the PRC-2 on the next page.
## Exercise 7-3

**Building Record - Residential - Rural (Property - Type 1)**

### 2-Story Home

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<th>Occupancy</th>
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<th>Mo.</th>
<th>Day</th>
<th>Yr.</th>
<th>Age</th>
<th>Adj. Age</th>
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</thead>
<tbody>
<tr>
<td>Vacant Lot</td>
<td>1 2 3 4 A Summer Apt.</td>
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<td>B 1 2 3 4 5 6 7 NH Amount $</td>
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<td>CDU</td>
<td>Grade</td>
<td>Dwelling Computations</td>
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<td>Mobile Home</td>
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<td>70 yrs</td>
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### Living Accommodations

- **Fiberboard**: 2 Sty. Frm Constr. Paneling
- **Fiberboard**: 2 Sty. Frm Constr. Paneling

### Total Rooms

- **8**: Living Accommodations
- **4**: Bedrooms
- **4**: Family Room

### Features SF

- **8" Msy. Trim**: 1 Car
- **Min. Wall**: 1 Car
- **Fibermat**: 1 Car
- **Batt**: 1 Car
- **Wall**: 1 Car
- **Door**: 1 Car
- **Window**: 1 Car
- **Rough**: 1 Car
- **Finish**: 1 Car
- **Base**: 1 Car
- **Floor**: 1 Car
- **Framing**: 1 Car
- **Siding**: 1 Car
- **Roof**: 1 Car
- **Plumbing**: 1 Car
- **Wiring**: 1 Car
- **Appliance**: 1 Car
- **Other**: 1 Car

### Foundation

- **8" Msy. Wall**: 1 Car
- **Pier**: 1 Car
- **Pier**: 1 Car

### Basement

- **1 3 4 Full Crawl Slab**: 1 Car
- **Integral garage**: 1 Car
- **On grade**: 1 Car
- **Below grade**: 1 Car
- **Wd. deck**: 1 Car
- **Wood box**: 1 Car

### Area without bsmt.

- **SF**: 1 Car
- **Attached garage**: 1 Car

### Heating

- **1**: None
- **2**: Central
- **3**: Air Condition
- **4**: Other

- **X**: Warm air
- **X**: Hot water/Steam
- **X**: Floor furnace
- **X**: Unit heaters
- **X**: Other

### Plumbing

- **X**: Standard (5)
- **X**: Bathroom (3)
- **X**: Half bath (2)
- **X**: Sink/Lavatory water closet

### Attic

- **1**: None
- **2**: Unfinished
- **3**: Part
- **4**: Full

### Exterior Walls

- **X**: Wood/stucco/aluminum/vinyl siding
- **Concrete block**: 1 Car
- **Brick/stone**: 1 Car
- **Other**: 1 Car

### Roof

- **X**: Shingle - asphalt/asbestos/wood
- **Composition**: 1 Car
- **Other**: 1 Car

### Floors

- **B 1 2 3**: Patio
- **Concrete**: 1 Car

### Summary of Other Buildings

<table>
<thead>
<tr>
<th>Type</th>
<th>No.</th>
<th>Construction</th>
<th>Size</th>
<th>Rate</th>
<th>Grade</th>
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<th>Factor</th>
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**Listed by:**

**Date:**

**Memo:** 1 Car

**CDU Factor:**

**Adj. Age:**

**Rel:**

**Eff. Age:**

**Rel:**

**Full Value:**

**Total full value other buildings**

**Total full value all buildings**

---

179
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# 2-Story Base Cost Schedule

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<tr>
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<th>Wood siding</th>
<th>Vinyl siding</th>
<th>Brick veneer</th>
<th>Stucco</th>
<th>Concrete blk. or stucco on blk.</th>
<th>Brick Solid masonry</th>
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Exercise 7-4   1 ½ Story Residence

Cost factor   1.06

The lot is improved with a 12-year-old 1 ½ -story brick solid masonry dwelling on a slab
with an attached 2 car brick solid masonry garage. The upper level has 600 square feet of
finished space.

Foundation  8” concrete block walls with concrete footing

Heating   Gas fired forced air — central air conditioning

Plumbing   Standard 5, plus an additional full bath and a half-bath — average
grade fixtures and galvanized piping

Exterior walls  Brick —1 3/4” doors — 1 3/8” double-hung windows

Roof     2” x 6” rafters, 1/2” plywood sheathing and asphalt shingles

Floors  1st and 2nd floors - 2"x 6" wood joist, sanded oak and some tile and
carpeting

Interior finish  Drywall — oak doors and trim throughout — higher grade cherry
kitchen cabinets

Miscellaneous  Average quality electrical fixtures — average quality workmanship.

20'x 40' concrete drive, open masonry front porch and a 14’x 16’ concrete patio.

CDU     Good

Quality grade   C

Complete the PRC-2 on the next page.
**Exercise 7-4**

**Building Record - Residential - Rural (Property - Type 1)**

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<th>Summary of Other Buildings</th>
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## 1 ½ Story Base Cost Schedule

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<td>Asphalt/Fiberglass shingles</td>
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<td>Hot air heat (gas fired)</td>
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<td>Painted drywall interior</td>
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<tr>
<td>Average material and workmanship</td>
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### Base cost per SF of total living area

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<th>Brick veneer Wood frame</th>
<th>Stucco Wood frame</th>
<th>Concrete blk. or stucco on blk.</th>
<th>Brick Solid masonry</th>
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<td>2,700</td>
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<td>250,890</td>
<td>237,100</td>
<td>249,580</td>
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<tr>
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<td>278,260</td>
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<td>270,400</td>
<td>265,580</td>
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<td>80.15</td>
<td>75.30</td>
<td>79.90</td>
<td>89.25</td>
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</tbody>
</table>
You will encounter one residential PRC (PRC-2) on your exam that does not have a narrative. One of the purposes is to figure out the description of the property by the boxes that have been checked. An example of a PRC-2, in the same format, is on the next page.
Page left blank intentionally.
Unit 7  Summary

The purpose of mass appraisal is to produce equitable and efficient appraisals of all property in a jurisdiction for ad valorem tax purposes.

Mass appraisal systems provide quickly obtainable value estimates with reasonable substantiation in the records. A mass appraisal system should incorporate all three approaches to value, but most systems are primarily based on the cost approach.

A cost factor is designed to adjust the Publication 123 replacement cost new (RCN) value to reflect the local cost of labor and materials.

The quality grade represents quality of construction, workmanship, and material used in a project. The quality of workmanship and materials can greatly affect cost.

To determine a design factor, the assessor must determine the percentage increase, or decrease, in cost due to the design features. The design factor is handled in the same manner as a quality grade factor; it is assigned to individual properties and should remain unchanged during the life of the structure.

The remaining economic life (REL) factor is applied to the true Replacement Cost New (RCN) to arrive at the full market value, which then reflects the adjustment made for depreciation.
Unit 7 Review Questions

1. What type of quality does the quality grade factor “D” represent and what is the factor applied from the schedules?

2. A local assessor notices that an improvement has been greatly neglected and its physical condition is extremely poor. He or she notes that this improvement was originally built with excellent materials and workmanship. Which one of the following will the assessor adjust?

   _____ Cost
   _____ Quality grade
   _____ CDU rating used to determine the REL factor

3. Quality grade refers to the___________________________

True or False

4. T or F A PRC-2 is used for calculating land values.

5. T or F A frame house of 1,000 square feet on a slab will not have an adjustment for a basement.

6. T or F All detached garages are calculated using the Summary of Other Buildings on the bottom of the PRC

7. T or F The quality grade is used to determine a REL factor.

8. T or F To compute the value for an enclosed frame porch of 60 square feet and an enclosed frame porch of 40 square feet, you should add the square footage of the porches together and price out a porch of 100 square feet from the cost tables.
Unit 8
Sales Comparison Approach (Market Approach) to Value

This unit covers the Sales Comparison Approach (Market Approach) to value. The purpose of this unit is to provide a basic understanding of the appraisal process and how the sales comparison method can be used to determine market value.

Learning Objectives

After completing the assigned readings, you should be able to

• understand the Principle of Substitution.
• understand the Principle of Highest and Best Use.
• complete a sales comparison grid.
• identify units of comparison when analyzing comparable sales data.
• make the appropriate adjustments to the comparable sales.
• select the property that is most comparable to the subject property.

Terms and Concepts

Highest and best use
Principle of Substitution
Sales Comparison or Market Approach
Sales price
Adjusted sales price
Unit price
Units of comparison
The Principle of Highest and Best Use

Before determining a property’s market value, the property’s highest and best use must first be determined. Property has its highest value at its highest and best use. Highest and best use is defined as “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.”

The property’s highest and best use is generally its current use. Let’s take a single-family residential property in a commercially zoned area along a busy street. The highest and best use of this property could easily be a store or an office building. The use that would lead to the highest net return to the property would be the highest and best use.

Principle of Substitution

The principle provides the basis of the three approaches to value and states that a buyer is not going to pay more for a property than it would cost to acquire an equally desirable, substitute property. That is, the value of a property is established as the amount equally desirable and comparable properties are being bought and sold for in the open market.

Sales Comparison or Market Approach

The Sales Comparison or Market Approach compares properties that have recently sold to the subject property that is being appraised. It is the best approach for a Board of Review to use when valuing residential property that is not new.

(It is impractical for an assessor to use this approach in doing mass appraisal.)

Units of Comparison

Units of Comparison are those components into which a property may be divided for purposes of comparison. Different Units of Comparison are used depending on the type of property that is being analyzed.

Examples of Units of Comparison

- Residential property—square feet, number of bathrooms, age, number of stories.
- Warehouse property—gross building area, gross building volume, number of loading docks, location.
- Apartment building—number of units, number of bedrooms, gross income multipliers.
- Hotel—number of rooms.
- Nursing Home—number of beds.

In the sales comparison approach, consideration must be given to all tangible and intangible factors influencing value, such as location, construction, age, physical features, condition, desirability, and utility.

The appraiser adjusts the comparable sales to the subject property. If the comparable property is superior in some manner to the subject property, the sales price of the comparable property is adjusted downward to the subject property. Likewise, if the comparable property is inferior in some manner to the subject property, the sales prices of the comparable property is adjusted upward to the subject property.

**Comparable Superior, Subtract.** If the comparable property is better than the subject property, then you subtract a dollar amount from the sale price of the comparable property.

**Comparable Inferior, Increase.** If the comparable property sale is inferior to the subject property, then you add (increase) a dollar amount to the sale price of the comparable property.

When making adjustments in the Sales Comparison Approach, you never adjust the subject; you adjust the comparable sales.

**Example of an upward adjustment**

An upward adjustment of $25,000 may be warranted if two comparable residential sales are alike in every way except Sale #1, sold for $150,000, and it has four bedrooms. Sale #2 sold for $125,000 but only has three bedrooms. If several other sales indicate similar trends, a $25,000 upward adjustment would be required before the inferior Sale #2 can be used to estimate the value of the subject property with four bedrooms.

**Example of a downward adjustment**

A downward adjustment may necessary if a comparable sale is superior to the subject property because the comparable sale property has four bedrooms and the subject property only has three bedrooms. Using the above example, the adjustment for one bedroom is $25,000. The sale price of the superior, comparable property would be adjusted downward by $25,000.
The significance of this approach to value lies in its ability to produce estimates of value that directly reflect the opinions of buyers and sellers in the market.

The first step in the Sales Comparison Approach is to gather information on comparable properties that have sold. Once the information is gathered, the appraiser should study the properties to determine if any adjustments are needed.

Units of Comparison for single family, residential property can be square feet, number of bathrooms, age, number of stories, amenities, etc.

Where would we find information on properties that had sold?

**Sales Data Collection and Analysis- Suggested Sources of Information**

**Comparative Data**

*Selling data*, which is collected and basic adjustments are developed, such as time and location, as well as adjustments for different property characteristics. As a result, benchmark properties for comparison purposes are established.

*Income data*, which is gathered from income and expense statements. The assessor may develop economic rents, vacancy and collection loss allowances, discount, effective tax and recapture (owner's equity) rates.

**Data Sources**

Public records are extremely useful in locating pertinent information. Some common examples are as follows:

- PTAX 203-Real Estate Transfer Declarations (most often used)
- City or County Recorder's Office
- Planning and Zoning
- Private Data sources (Real estate MLS services, newspaper ads, and commercial sales data from sources such as LoopNet)
Exercise 8-1
Completing a Sales Grid and Determining the Most Comparable Property

Let’s look at the process for finding the value for a subject property using data from comparable sales.

For this exercise, the following will be true:

- Newer is better than older
- Condition is important
- A crawl space is better than a slab
- A basement is better than a crawl
- An attached garage is better than a detached
- A 2-car garage is better than a 1-car
- The more beds, baths and square feet, the better
- Other amenities add value

Adjustment Values

Sale Date = 5% per year
1 bathroom fixture = $500
1 bedroom = $1,500
Crawl = $3,000
Basement, unfinished = $10,000
Fireplace = $2,500
Garage Space = $5,000

Each sale has its own column. Try to enter the data known into the grid. You don’t have to enter the dollar value yet. Let’s do the first column together. Enter the subject’s information, then start with adjustments for features that are different in each comparable’s column.
SUBJECT: 1211 Sherman Dr.

One story ranch home
Average Condition
20 Years Old
3 Bedrooms
2 Full Bathrooms
1350 Sq. Ft.
Crawl Space
2 Car Attached Garage
No Fireplace

Comparable Sale # 1: 810 N. Oak St. SALE PRICE: $128,000

One story ranch home
Current Sale
28 Years Old
Average Condition
3 Bedrooms
1.5 Bathrooms
1500 Sq. Ft.
Crawl Space
1 Car Attached Garage
1 Fireplace

Comparable Sale # 2: 512 W. White St. SALE PRICE: $120,000

One story ranch home
Current Sale
22 Years Old
Above Average Condition
3 Bedrooms
1 Full Bathroom
1200 Sq. Ft.
Crawl Space
2 Car Attached Garage
No Fireplace
Comparable Sale # 3:  912 E. Grand Av.          SALE PRICE:  $134,000

One story ranch home
Sold 3 years ago-adjust for 3 years, not current
9 Years Old
Average Condition
4 Bedrooms
2.5 Bathrooms
1550 Sq. Ft.
Partial Basement—500 Sq. Ft. Unfinished
3 Car Attached Garage
1 Fireplace

Comparable Sale # 4:  1001 Douglas Av.          SALE PRICE:  $135,500

One story ranch home
Current Sale
31 Years Old
Below Average Condition
3 Bedrooms
2 Full Bathrooms
1400 Sq. Ft.
Full Basement--1400 Sq. Ft. Unfinished
2 Car Attached Garage
No Fireplace

Enter the Sales Date, Age, SF, Condition, Basement, # Beds and # Baths, # of Fireplaces and # Bays of the Garage in the Subject column.

The goal of this exercise is to determine the Adjusted Sales Price of the Subject Property, 1211 Sherman Drive.

Next, fill in the number of adjustments in each column for the 4 Comparable Properties. If there is No Change as compared to the Subject, just enter NC.

Then, calculate the dollar value of each of the adjustments, and applying the CBS and CIA rules, make each adjustment a plus (add) or minus (subtract) adjustment.
Carefully total all the plus and minus adjustments for a total dollar amount and apply the adjusted $ amount to the known Sales Price to get the Adjusted Sales Price of each comparable.

When all the spaces are filled in, ask yourself:

How do we get to the value of the subject property?
Is it based on least number of adjustments?
Is it based on least dollar amount of adjustments?
Is it based on something else?
This is the part where your judgement comes into action.

The best value for the subject property would be:

$______________
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<tr>
<th>Subject</th>
<th>Sale 1</th>
<th>Sale 2</th>
<th>Sale 3</th>
<th>Sale 4</th>
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<tbody>
<tr>
<td>Address</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sales Date</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Sales Price</td>
<td></td>
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</tr>
<tr>
<td>Age</td>
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<tr>
<td># Square Ft</td>
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<td></td>
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</tr>
<tr>
<td>Basement</td>
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<td></td>
</tr>
<tr>
<td># Bedrooms</td>
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<td></td>
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</tr>
<tr>
<td># Bathrooms</td>
<td>2</td>
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<td></td>
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</tr>
<tr>
<td>Fireplace</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Garage</td>
<td>2-car attached</td>
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</tr>
<tr>
<td># of Adjustments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$$$ Adjustments</td>
<td></td>
<td></td>
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<tr>
<td>Adj. Sales Price</td>
<td></td>
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</tr>
<tr>
<td>Subject</td>
<td>Sale 1</td>
<td>Sale 2</td>
<td>Sale 3</td>
<td>Sale 4</td>
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<tr>
<td>Address</td>
<td>1211 Sherman Dr.</td>
<td>810 N Oak St</td>
<td>512 W White St</td>
<td>912 E Grand Ave</td>
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<td>Sales Date</td>
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<td>Current</td>
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<td>Current</td>
</tr>
<tr>
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<td>$120,000</td>
<td>$134,000</td>
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<td>Age</td>
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<td>9</td>
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<tr>
<td># Square Ft</td>
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<td>1500 - 150</td>
<td>1200 +150</td>
<td>1550 -200</td>
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<tr>
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<td>None- Crawl</td>
<td>Crawl</td>
<td>Crawl</td>
<td>Par. unf.</td>
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<tr>
<td># Bedrooms</td>
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<td>2.5</td>
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<td>1</td>
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<td>2 Car Att.</td>
<td>3 Car Att.</td>
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<td># of Adjustments</td>
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<td>+1,500</td>
<td>-15,000</td>
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<td>Adj. Sales Price</td>
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<td>$131,500</td>
<td>$121,500</td>
<td>$119,000</td>
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# Uniform Residential Appraisal Report

**There are** comparable properties currently offered for sale in the subject neighborhood ranging in price from $ to $.

**There are** comparable sales in the subject neighborhood within the past twelve months ranging in sale price from $ to $.

<table>
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<th>FEATURE</th>
<th>SUBJECT</th>
<th>COMPARABLE SALE #1</th>
<th>COMPARABLE SALE #2</th>
<th>COMPARABLE SALE #3</th>
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<td>Proximity to Subject</td>
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<td>Sale Price</td>
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<tr>
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<td>Verification Source(s)</td>
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<td>VALUE ADJUSTMENTS</td>
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<tr>
<td>Location</td>
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<tr>
<td>Leasehold/Fee Simple</td>
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</tr>
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<td>Site</td>
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<td>View</td>
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<tr>
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</tr>
<tr>
<td>Porch/Patio/Deck</td>
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<tr>
<td>Net Adjustment (Total)</td>
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<tr>
<td>Adjusted Sale Price of Comparables</td>
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</tbody>
</table>
Unit 8   Summary

Highest and best use is defined as “that use that will produce the highest net return for a given period of time, within the limits of those uses which are economically feasible, probable, and legally permissible.”

Property has its highest value at its highest and best use. The property’s highest and best use is generally its current use.

The Principle of Substitution is the basis of the three approaches to value. It states that a buyer is not going to pay more for a property than it would cost to acquire an equally desirable, substitute property.

The Sales Comparison or Market Approach is generally the best approach for valuing residential property that is not new.

Different Units of Comparison are used with different types of property.

When trying to determine the value of a subject property, all adjustments are made to the Comparable Properties, never the Subject.

Comparable Superior, Subtract. If the comparable property is superior to the subject property, then you subtract a dollar amount from the sale price of the comparable property.

Comparable Inferior, Increase. If the comparable property sale is inferior to the subject property, then you add (increase) a dollar amount from the sale price of the comparable property.

Determining Value is based on available data and the application of the assessor’s best judgement.
Unit 8  Review Questions

True or False

1. T or F  When using the sales comparison or market approach, one never adjusts the subject property.

2. T or F  Make a minus adjustment to the comparable property if it is inferior to the subject property.

3. T or F  The market is showing an annual increase in value of 3%. A comparable property sold 2 years ago. It would have a minus adjustment of 6%.

4. T or F  The comparable sale with the fewest adjustments is sometimes the best indicator of value for the subject property.
Unit 9
Income Approach to Value

This unit covers the ways to use the IRV formula to calculate the market value of an income producing property.

Learning Objectives

After completing the assigned readings, you should be able to

- determine the capitalization rate for a property when given the net income and the value.
- determine the value for a property when given the appropriate capitalization rate and income of a property.
- determine the income for a property when given the appropriate capitalization rate and value of a property.
- determine the Potential Gross Income (PGI) for the subject property.
- determine the Effective Gross Income (EGI) for the subject property.
- determine allowable expenses.
- determine net income.

Terms and Concepts

Allowable expenses
Effective Gross Income (EGI)
IRV Formula
Market Value (MV)
Net Operating Income (NOI)
Potential Gross Income (PGI)
Vacancy and Collection Losses
Capitalization
Capitalization Rate
Recapture Rate
Mortgage Interest Rate
Effective Tax Rate
Reserves for Replacement
The Income Approach

Properties, such as parking lots, apartments, and office buildings are often valued based on the net income these properties produce for their owners. The Income Approach has its widest application in appraisal of income-producing property. Commercial property is universally bought and sold on its ability to generate and maintain a stream of income for its owner. The value of such property is a measure of the amount, quality and durability of the future net income the property can be expected to return to its investor.

The process of converting the net income produced by a property into an indication of its value is called Capitalization.

If you know any two factors of the formula, the third can be calculated.

With the IRV formula, the income, capitalization rate or value can be determined.

The IRV formula is: $$I \over R \times V$$

In the IRV formula:

- $I$ = Net Operating Income
- $R$ = Capitalization Rate
- $V$ = Value

Net Operating Income

Net operating income can be most easily thought of as gross income minus expenses. In evaluating an income producing property, there are a couple of additional variables that are used in rental properties. To arrive at the net operating income, use the following formula:

Potential Gross Income
- Vacancy and Collection Losses
+ Miscellaneous Income
= Effective Gross Income
- Allowable Expenses (or Expenses allowed)
- Reserves for Replacement
= Net Operating Income

A mnemonic to help you remember this formula is: **P**lease **V**iew **M**y **E**lectronic **E**mail **R**ight **N**ow……or feel free to make up your own **P**otential **G**ross **I**ncome
The **Potential Gross Income** (PGI) is the economic rent for a property at 100 percent occupancy. When estimating the PGI, it is important to base it on the **economic or market rent** (rent based on the market), which may not be the same as the contract rent (actual rent) for the subject property. For instance, an owner may be charging $750 rent for his 1-bedroom apartments in a property. But other landlords are getting $825 for their comparable 1-bedroom apartments. The $825 would be the economic or market rent.

It is highly unlikely that a property will be rented to 100 percent capacity at all times, so a deduction for **vacancy losses** is allowed. The amount of the deduction, again, is based on **market standards**, which may or may not be the same for the subject property.

Deductions are also allowed for **collection losses**. Collection losses are losses that result from tenants’ failure to pay rent. Again, these losses are based on market standards.

The amounts deducted will be a **percent of the PGI**.

**Effective Gross Income**

The **Effective Gross Income (EGI)** is calculated by estimating the PGI, subtracting the vacancy and collection losses, and then adding in miscellaneous income, such as income from vending machines or laundry facilities.

**Net Operating Income**

The **Net Operating Income (NOI)** is derived from the **Effective Gross Income**, minus the **Allowable Expenses** and minus **Reserves for Replacements**.

**Allowable Expenses**

Allowable Expenses are the expenses necessary for the operation of the business to keep it competitive with other similar properties in the area. Some examples of allowable expenses are management fees, utilities, insurance, supplies, materials, repairs, and maintenance.

For assessment purposes, **property taxes and mortgage interest are not allowable expenses**. They are taken into consideration in the capitalization rate. Other items not considered allowable expenses are income taxes, depreciation, capital improvements, and the owner’s business expenses that are not necessary for maintaining the rent produced by the property.
Reserves for Replacements

The final deduction is for **Reserves for Replacements.** Annual expense deductions are made to replace such items as roofs, carpeting, appliances, furnaces, and air conditioning units.

**The Capitalization, or “Cap” Rate**

The process of converting the net income produced by a property into an indication of its value is called **Capitalization.** The “R” in the IRV Formula refers to the capitalization rate that consists of the equity (or recapture) rate, the mortgage interest (or discount) rate and the effective tax rate.

- **Recapture Rate**— the annual rate at which invested capital is returned to the investor over a specified period of time.

- **Mortgage Interest or Discount Rate**— the interest rate used to convert future payments or receipts into present value.

- **Effective Tax Rate**— the tax rate is expressed as a percentage of market value.

All three rates are combined to come up with an overall **“Cap” rate** for improved properties. If you are trying to determine a cap rate for property with no improvement, (vacant land), you do not use the recapture rate-only use the effective tax rate and the mortgage interest rate. The reason for this is that recapture has to do with depreciation, and land usually does not depreciate.

Selecting the proper capitalization rate and accurately estimating a realistic potential gross income, along with applicable operating expenses are essential to the capitalization process and arriving at a credible market value for a property.

It is important to note that land in these examples can also be a gravel parking lot.

For many assessors, a gravel parking lot is not considered in the income approach to value. It is considered to be unimproved. A paved parking lot is considered to have a greater value, can be different in condition and grade, and can depreciate in value.

In this course, do not use a recapture rate in your calculations of parking lots, unless it is specifically specified that the lot is paved.
Using the IRV Formula

\[ \frac{I}{R \times V} \]

The IRV formula can be used to determine any one of the three factors. If you cover up the letter representing the component you are trying to determine, the formula for determining the value of that component is left.

\[ \frac{I}{R \times V} \]

To find the income of a property, cover up the “I” in the formula so you are left with \( R \times V \).

Multiply the appropriate capitalization rate “R” by the value “V.”

\[ \frac{I}{R \times V} \]

If you know the net income of a property and the value, to find the appropriate capitalization rate, cover up the “R” in the formula so you are left with \( \frac{I}{V} \).

Divide the net income “I” by the value “V.”

\[ \frac{I}{R \times V} \]

To determine the value of the property cover up the “V” in the formula so you are left with \( \frac{I}{R} \).

Divide the net income “I” by the capitalization rate “R”.

Any one of the factors in the IRV formula can be determined if the other two factors are known.
An Example of Determining an Income Property Value

An apartment building has 15 units that rent for $500 per month. The appropriate capitalization rate is 10.25 percent.

What is the value of the property?

To arrive at the value, you need to know the Income and the Capitalization Rate.

1. Determine the Income
   \[ 15 \times \$500 \times 12 = \$90,000 \]

2. Determine the Income (NOI).
   \[ \$90,000 \]

   Apply the IRV Formula \[ V = \frac{I}{R} \]

   \[ \frac{I}{R \times V} \]

   \[ \frac{\$90,000}{10.25\%} = \$878,049 \]

The value of the property is \$878,049.
Exercise 9-1
Using the IRV Formula

1. An apartment building recently sold for $250,000. The building has 10 units each of which rents for $250 per month. What is the capitalization rate?

___________________

2. A parking lot provides its owner with a net operating income of $16,740. The appropriate capitalization rate is 9.3%. What is the value of the parking lot?

___________________

3. The capitalization rate for an office building is 11.37%. The building value in a recent sale was $452,600. What is the net operating income for the office building that an investor would expect?

___________________

4. An apartment building recently sold for $375,700. The annual income for the building is $53,428. What is the capitalization rate?

___________________

5. A run-down triplex recently sold for $157,000. The cap rate is 11.41%. What is the property’s annual income?

___________________

6. An apartment building has 20 units that rent for $800 per month. The capitalization rate is 14.5%. What is the value of the property?

___________________
**Example**—Determining the net operating income to use in the IRV formula.

An investor owns a small apartment building in his hometown. There are 12 1-bedroom units in his building. 6 of his tenants have resided there for over 10 years. The rest have been there 3 or more years. The long-term renters are paying $400 per month, and the newer 6 pay $550 per month. Similar 1-bedroom units in the area rent for $600 per month. The building experiences a 9% vacancy and collection loss. Other buildings have a more typical 7% loss.

There is a parking lot that residents can rent spaces in at $20 per month. The income from parking is $2,400 yearly. There is also a laundry room that brings in $100 per month.

The expenses for the building run $50 per unit per month. The owner reserves $5,000 per year for repairs and replacements.

What is the NOI for this apartment building?

\[
\begin{align*}
PGI &= 12 \text{ units} \times \$600 \times 12 \text{ months} = \$86,400 \\
\text{Vacancy and Collection Loss} &= -7\% \text{ of } PGI = \$6,048 \\
\text{Miscellaneous Income} &= +\$2,400 \text{ parking fees annually} \\
&\quad + \$100 \text{ laundry } \times 12 \text{ months} = \$1,200 \\
\text{Effective Gross Income} &= \$83,952 \\
\text{Allowable Expenses} &= -12 \text{ units} \times \$50 \times 12 \text{ months} = \$7,200 \\
\text{Reserves for Replacement} &= -\$10,000 \text{ annually} \\
\text{Net Operating Income} &= \$66,752
\end{align*}
\]

Remember that some calculations use market (or potential) numbers.

Now, let’s assume an owner is interested in purchasing this property but he needs a cap rate of 12%. What value might he place on the property using the IRV formula?

\[
\text{Income (NOI = 66,752) divided by Rate (12\% or .12) = } \$556,267
\]
Unit 9  Summary

IRV Formula: \[ \frac{I}{R \times V} \]

I = Net Operating Income  
R = Capitalization Rate  
V = Market Value

Formula for NOI

- **Potential Gross Income**
  - Vacancy and Collection Losses
  + Miscellaneous Income

= **Effective Gross Income**
  - Allowable Expenses (or Expenses allowed)
  - Reserves for Replacement

= **Net Operating Income**
Unit 9  Review Questions

1. What is the formula for the Income Approach to value?

___________________

2. A 100 space parking lot rents for $30 a month per space. The cap rate is 11.89%. What is the value of the parking lot?

___________________

3. A two-story commercial building has a value of $960,000. The building provides its owner with a monthly net income of $6,000 per floor. What is the capitalization rate?

___________________

4. A 4-unit quadruplex recently sold for $270,000. The cap rate is 10.65%. What is the income of this apartment building?

___________________

5. A 12-unit apartment building has (6) 1-bedroom units, (4) 2-bedroom units, and (2) 3-bedroom units. The 3-bedroom units rent for $400 per month, the 2-bedroom units rent for $350 per month, and the 1-bedroom units rent for $275 per month. What is the value of this 12-unit apartment building if the capitalization rate is 9.75%?

___________________

6. An assessor is trying to value a small rental property.

What is the NOI? ____________  What is the Value? ______________

PGI = $48,000
Cap Rate 9%
Rents = 5 units at $800 per month
Vacancy = 3% or .03
Misc. income = 1 coin operated washer and 1 coin dryer = $65 per month
Reserves = $7,500 annually
Unit 10
Levy

This unit covers the levy, tax extension, and tax bills.

The purpose of this unit is to provide a basic understanding of the calculation of
tax rates for tax extensions.

Learning Objectives

After completing the assigned readings, you should be able to

• understand the formula for the determining the levy.
• calculate the levy.
• understand a tax bill.

Terms and Concepts

LAR Formula
Levy
Maximum tax rates
Tax Base
LAR Formula

The county clerk has the responsibility of calculating tax rates and extending taxes against individual properties. The county clerk must also ensure that no tax rate exceeds any limitation that may be imposed by law. Tax rates that are limited by the statutes are referred to as maximum tax rates.

Although the board of review does not calculate tax rates or extend property taxes, taxpayers often contact the board upon receipt of their tax bills.

A tax rate is calculated by dividing the levy by the tax base for each taxing district. This mathematical process is referred to as the LAR formula.

\[
\frac{L}{A \times R}
\]

**Levy (L)** — This is the amount of money a taxing district determines is necessary to raise from property taxes.

**Tax base (A)** — This is the amount of taxable EAV after removing all qualified exemptions and including all applicable values for state-assessed property in the taxing district.

**Tax rate (R)** — This is the percentage applied to the taxable EAV in the taxing district.

If any two values are known, the third value can easily be determined with this formula. If you cover up the letter representing the component you are trying to determine, the formula for determining the value of that component is left.

To find the levy, cover up the “L” in the formula so you are left with \( A \times R \).

Multiply the tax base “A” by the tax rate “R.”

If you know the levy and the tax rate, to find the tax base, cover up the “A” in the formula so you are left with \( L \) and \( R \).

Divide the levy “L” by the tax rate “R.”

To determine the tax rate, cover up the “R” in the formula so you are left with \( L \) and \( A \).

Divide the levy “L” by the tax base “A.”
Example 1 Determining the Levy

\[ L = A \times R \]

If a taxing body has a tax base of $25 million and a tax rate of 2\%, or .02, the amount to be raised from property taxes is $500,000.

\[ \$25,000,000 \times 2\% \times (.02) = \$500,000 \]

Example 2 Determining the Tax Base

\[ A = \frac{L}{R} \]

If a taxing body has a tax levy of $500,000 and a tax rate of 2\%, or .02, the tax base is $25 million.

\[ \frac{\$500,000}{2\% \times (.02)} = \$25,000,000 \]

Example 3 Determining the Tax Rate

\[ R = \frac{L}{A} \]

If a taxing body has a levy of $500,000 and a tax base of $25 million, the tax rate is .02, 2\%, or $2.00/$100 AV.

\[ \frac{\$500,000}{\$25,000,000} = .02 = 2\% = \$2.00 / \$100 AV \]
Exercise 10-1 Tax Rates

<table>
<thead>
<tr>
<th></th>
<th>L</th>
<th>A</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$590,000</td>
<td>$30,000,000</td>
<td>1.9667%</td>
</tr>
<tr>
<td>2</td>
<td>$10,000,000</td>
<td>4.5000%</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>$45,000</td>
<td>.6875%</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>$95,480,000</td>
<td>2.3615%</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>$240,000</td>
<td>$50,000,000</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>$800,000</td>
<td>$54,257,900</td>
<td>.7500%</td>
</tr>
<tr>
<td>7</td>
<td>$41,600</td>
<td>$12,750,000</td>
<td>.3550%</td>
</tr>
<tr>
<td>8</td>
<td>$150,000</td>
<td>$54,257,900</td>
<td>.6544%</td>
</tr>
</tbody>
</table>

The tax rates determined in the previous exercise may be subject to maximum tax rates set by law. If the taxing district has a maximum tax rate and the calculated tax rate exceeds the maximum tax rate, the extension would be based on the maximum tax rate and the levy adjusted accordingly.

**Individual Tax Bill**

There are several processes involving different local government officials that are followed in determining an individual tax bill for most types of property.

1. Property is valued by the assessor to determine fair Market Value (MV).
2. The assessor determines the Assessed Value (AV) by multiplying the Fair Market Value (MV) by 33.33% (.3333).
3. Equalization factors (township, class, area, and state multipliers) may be applied to the assessed value to derive the equalized assessed value (EAV) for the parcel of property.
4. After all qualified exemptions, such as various homestead exemptions, are deducted from the EAV, the remaining value becomes the taxable EAV.
5. The taxable EAV of each individual property is multiplied by the applicable tax rate for each of the taxing districts in which the property is situated.
6. All the amounts due each taxing district are added to obtain a total tax bill. Another way to produce the total tax bill is to multiply the taxable EAV by the aggregate tax rate. The aggregate rate is the total of all the district rates in which the property is situated.
Exercise 10-2  Tax Bills

This property has a Market Value of $108,333 and an EAV of $36,108. Calculate the tax bill for this homeowner.

<table>
<thead>
<tr>
<th>District</th>
<th>Levy</th>
<th>Taxable EAV</th>
<th>Rate</th>
<th>Prop EAV</th>
<th>Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 School</td>
<td>$8,804,294</td>
<td>$235,408,929</td>
<td>3.7400 %</td>
<td>$36,108</td>
<td>$1,350.44</td>
</tr>
<tr>
<td>2 County</td>
<td>$175,017</td>
<td>$36,461,834</td>
<td>_____ %</td>
<td>$_____</td>
<td>$________</td>
</tr>
<tr>
<td>3 Township</td>
<td>$226,355</td>
<td>$34,337,844</td>
<td>_____ %</td>
<td>$_____</td>
<td>$________</td>
</tr>
<tr>
<td>4 City</td>
<td>$250,047</td>
<td>$26,549,879</td>
<td>_____ %</td>
<td>$_____</td>
<td>$________</td>
</tr>
<tr>
<td>5 Fire</td>
<td>$58,575</td>
<td>$18,761,915</td>
<td>_____ %</td>
<td>$_____</td>
<td>$________</td>
</tr>
<tr>
<td>6 Library</td>
<td>$8,031</td>
<td>$2,477,989</td>
<td>_____ %</td>
<td>$_____</td>
<td>$________</td>
</tr>
</tbody>
</table>

Aggregate tax rate = ________ %

x Total Taxable EAV of this property $ __________

= Tax Bill for this property $ __________

Effective tax rate = Taxes billed = $ __________ = ________ %

Market Value $
Exercise 10-3

Determine the tax bill on a residential property with a market value of $215,655, and a taxable EAV of $71,878. The property is situated in six taxing districts. Compute the tax rate for each taxing district (levy ÷ taxable EAV) and then determine the amount of tax due for each district and total (Aggregate) tax due. (Taxable EAV x tax rate).

<table>
<thead>
<tr>
<th>District</th>
<th>Levy</th>
<th>Taxable EAV</th>
<th>Rate</th>
<th>Property EAV</th>
<th>Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 School</td>
<td>$93,452,105</td>
<td>$1,796,119,642</td>
<td>5.2030%</td>
<td>$71,878</td>
<td>$3,739.81</td>
</tr>
<tr>
<td>2 County</td>
<td>$4,232,750</td>
<td>$560,926,319</td>
<td>______%</td>
<td>$_________</td>
<td>$_________</td>
</tr>
<tr>
<td>3 Township</td>
<td>$1,062,962</td>
<td>$1,164,251,916</td>
<td>______%</td>
<td>$_________</td>
<td>$_________</td>
</tr>
<tr>
<td>4 City</td>
<td>$1,378,780</td>
<td>$146,913,160</td>
<td>______%</td>
<td>$_________</td>
<td>$_________</td>
</tr>
<tr>
<td>5 Fire</td>
<td>$1,272,125</td>
<td>$1,781,687,675</td>
<td>______%</td>
<td>$_________</td>
<td>$_________</td>
</tr>
<tr>
<td>6 Library</td>
<td>$642,132</td>
<td>$1,716,960,481</td>
<td>______%</td>
<td>$_________</td>
<td>$_________</td>
</tr>
</tbody>
</table>

Aggregate tax rate = _________%

x Total Taxable EAV of this property $______________

= Tax Bill for this property $______________

Effective tax rate = ________% 

The Aggregate rate is applied to the Taxable EAV.

The Effective tax rate is applied to Market Value.
Unit 10  Summary

The levy is the amount of money a taxing district receives from property taxes. It is calculated using the LAR formula:

\[
\frac{L}{A \times R}
\]

- **L** is the levy
- **A** is the tax base
- **R** is the tax rate

Some tax rates are subject to maximum tax rates set by law.

Each taxing district has its own tax rate.

All the districts' tax rates combined equal the Aggregate Tax Rate.

The Effective Tax Rate is the Taxes Billed divided by the Market Value.

When calculating a tax bill, multiply the Total Aggregate rate by the individual property’s Total taxable EAV to get the tax bill total, or add up all the individual taxing district tax dollars owed.
Unit 10  Review Questions

1. If the levy for a local taxing body is $60,000 and the EAV for the local taxing body is $15,000,000, the tax rate for this taxing district will be:

__________________%

2. If the levy for a local taxing body is $1,200,000 and the tax rate for the local taxing body is $3.25/$100 EAV, the equalized assessed valuation for this taxing district will be:

$__________________

3. The equalized assessed valuation for a local taxing body is $26,660,000 and the tax rate is $2.95/$100 equalized assessed value. The levy for this taxing body will be:

$__________________

4. The EAV for a local taxing body is $65,000,000 and the levy is $22,750. The tax rate for this taxing body will be:

__________________%

5. If the levy for a local taxing body is $75,000 and the EAV for the local taxing body is $15,000,000, the tax rate for this taxing district will be:

$__________________/$100
Unit 11
Sales Ratio and Equalization

This unit covers the purpose of Sales Ratio Studies and the Equalization process.

Learning Objectives

After completing this unit, you should be able to

- explain the use of a Sales ratio study
- define Equalization
- understand how to find the median
- calculate an equalization factor (or multiplier)

Terms and Concepts

Sales Ratio Study
Coefficient of Dispersion (COD)
Mean
Median
Mode
Equalization
Equalization Factors or Multipliers
Equalized Assessed Value (EAV)
Sales Ratio and Equalization

Mean, Median and Mode

Mean  The average. To determine the mean, add up the values in the data set and then divide by the number of values that you added.

Median  The midpoint in a list of values. To determine the median, list the data set in numerical order and identify which value appears in the middle.

Mode  The value which occurs most often in the data set.

In assessment work, the median is the measure most often used.

The Sales Ratio Study

The starting point in the equalization process is the sales ratio study. The sales ratio study provides the ratio of Sales Price divided by the Assessed Value or the median level of assessments for that jurisdiction for the year of the study. It also provides information on the percentage relationship of assessed value to market value for real property in certain classes and geographic areas. In addition, sales ratio studies furnish information on the variation in assessment levels among and within classes of property and geographic areas.

Sales Ratio Studies are used:

- In the computation of equalization factors. State-issued county multipliers are used by the Department to carry out the statutory responsibility of equalizing the levels of assessments among counties (Inter-county). Township multipliers are issued by the county (Intra-county) to equalize the level of assessments within that county. Other types of studies that might be used would be neighborhood studies to determine neighborhood factors, and class studies for class factors.

- In the review and appeal of assessments. These studies provide 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 any over assessment or under assessment.
• **As a diagnostic tool for local assessing officials to evaluate assessment practices.** It is the responsibility of local assessing officials to use sales ratio studies to evaluate their assessment policies and make assessment changes when warranted so that the final assessments of all property in their jurisdiction are at a uniform percentage of market value.

• **To determine the assessor bonus.** The three-year average median level of assessments must be between 31 1/3% and 35 1/3% and below the appropriate Coefficient of Dispersion (COD) as determined by the population of the county.

• **To reimburse a county of a portion of the CCAO salary.** The three-year average median level of assessments must be between 31 1/3% and 35 1/3%.

A minimum of 25 useable sales (Market Value - Arms-Length transactions) are needed to conduct any sales ratio study. Randomly selected appraisals, or sales trending, may be used for intra-county studies if there are not enough usable sales available.

The Department’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. Local jurisdictions must focus on valuing all property uniformly and equitably, assuring that all assessed values represent current market values. The sales ratio study becomes a tool of the county to evaluate assessment policies and make assessment changes when warranted. 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.

The following are examples of some types of sales that would **not** be used in a sales ratio study:

- Land and improvements that are classified as farm
- Sales conveying less than full title
- Sales between related parties
- Sales involving government organizations
- Certain sales involving financial institutions
- Sales in which the assessed value and the sales price are not comparable, such as splits, partial assessments, and the destruction of an improvement

Form PTAX-203 Real Estate Transfer Declaration (RETD or Declaration) is the primary source of sale information used in a sales ratio study. The Declaration contains information on the amount of the sale, the use of the property, and the conditions of the sale. The RETD must be filed with the county recorder when a deed is recorded. The RETDs are then given to the CCAO, who supplies copies to the township or multi-township and the Department.
PTAX-203
Illinois Real Estate Transfer Declaration

Please read the instructions before completing this form. This form can be completed electronically at tax.illinois.gov.

Step 1: Identify the property and sale information.

1. Street address of property (or 811 address, if available) ____________________________
   City or village __________________ ZIP __________________

2. Township __________________________

3. Write the total number of parcels to be transferred __________________________

4. Write the parcel identifying numbers and lot sizes or acreage.
   Property index number (PIN) Lot size or acreage
   a. __________________________ __________
   b. __________________________ __________
   c. __________________________ __________
   d. __________________________ __________

5. Write additional property index numbers, lot sizes or acreage in Step 3.

6. Date of instrument: ________________

7. Type of instrument: (Mark with an "X"): _______ Warranty deed
   _______ Quit claim deed _______ Executor deed _______ Trustee deed
   _______ Beneficial interest _______ Other (specify) __________________________

8. Yes ___ No ___ Will the property be the buyer’s principal residence? __________

9. Yes ___ No ___ Was the property advertised for sale? __________

10. Identify any significant physical changes in the property since January 1 of the previous year and write the date of the change.

   Date of significant change: __________________________
   (Mark with an "X")
   _______ Demolition/damage _______ Additions _______ Major remodeling
   _______ New construction _______ Other (specify) __________________________

11. Identify any items that apply to this sale. (Mark with an "X")
   a. _______ Fulfillment of installment contract _______ transfer of less than 100 percent interest
   b. _______ Sale between related individuals or corporate affiliates _______ Court-ordered sale
   c. _______ Transfer of less than 100 percent interest _______ Short sale
   d. _______ Sale in lieu of foreclosure _______ Bank REO (real estate owned)
   e. _______ Auction sale _______ Seller/buyer is a relocation company
   f. _______ Transfer of less than 100 percent interest _______ Trade of property (simultaneous)
   g. _______ Sale-leaseback _______ Other (specify) __________________________

   s. _______ Homestead exemptions on most recent tax bill: _______
      1. General/Alternative $ __________
      2. Senior Citizens $ __________
      3. Senior Citizens Assessment Freeze $ __________

Step 2: Calculate the amount of transfer tax due.

Note: Round Lines 11 through 18 to the next highest whole dollar. If the amount on Line 11 is over $1 million and the property’s current use on Line 8 above is marked “a,” “b,” “g,” “h,” “i,” “k,” or “x,” complete Form PTAX-203-A, Illinois Real Estate Transfer Declaration Supplemental Form A. If you are recording a beneficial interest transfer, do not complete this step. Complete Form PTAX-203-B, Illinois Real Estate Transfer Declaration Supplemental Form B.

11. Full actual consideration $ __________

12a. Amount of personal property included in the purchase $ __________

12b. Was the value of a mobile home included on Line 12a? Yes ___ No ___

13. Subtract Line 12a from Line 11. This is the net consideration for real property $ __________

14. Amount for other real property transferred to the seller in a simultaneous exchange $ __________

15. Outstanding mortgage amount to which the transferred real property remains subject $ __________

16. If this transfer is exempt, use an "X" to identify the provision $ __________

17. Subtract Lines 14 and 15 from Line 13. This is the net consideration subject to transfer tax $ __________

18. Divide Line 17 by 500. Round the result to the next highest whole number (e.g., .61002 rounds to .62) $ __________

19. Illinois tax stamps — multiply Line 18 by 0.50 $ __________

20. County tax stamps — multiply Line 18 by 0.25 $ __________

21. Add Lines 19 and 20. This is the total amount of transfer tax due $ __________

This form is authorized in accordance with 35 BCS 51003-1 et seq. Disclosure of this information is REQUIRED. This form has been approved by the Forms Management Center — IL-40-0239.
Coefficient of Dispersion

There are several statistical measures of assessment uniformity. The most common measure of assessment uniformity is the **Coefficient of Dispersion (COD)**. The COD provides a measure of the variation of individual assessment ratios around the median level of assessments.

If individual ratios are found to be grouped closely around the median, assessments are relatively **uniform and the COD will be low**.

**Higher CODs** indicate that individual ratios vary widely from the median so the properties are **not uniformly assessed**.

In Illinois, a bonus of $3,000 is paid to assessors who maintain a level of assessment between 31 1/3% and 35 1/3% and have a COD of no greater than 15. In counties with 50,000 or fewer inhabitants, the COD must be 30 or less.
Formulas

\[
\text{Sales Ratio} = \frac{\text{Assessed Value}}{\text{Sales Price}} \times 100\%
\]

\[
\text{Deviation} = \text{Sales Ratio} - \text{Median}^*
\]

\[
\text{Average Deviation} = \frac{\text{Sum of Deviations}}{\text{Number of Sales}}
\]

\[
\text{COD} = \frac{\text{Average Deviation}}{\text{Median}} \times 100\%
\]

*Ignore plus or minus signs when subtracting the median from the sales ratios

Exercise 11-1 Sales Ratio Study

Step 1

Determine the percent relationship of assessed value to actual market value using the sales ratio formula. For each sale, divide the prior year’s assessed value by the current year’s selling price and then multiply it by 100 to change it to a percent.

The first sale has an assessed value for the prior year of $10,000 and the current year’s selling price is $35,000. Divide the assessed value of $10,000 by the sale price of $35,000, then multiply it by 100%. This gives you a sales ratio of 28.57%.

Round to 2 decimal places throughout this exercise. To round numbers, first carry the answer out 3 decimal places. If the last digit is 5 or greater, round up the number in the second decimal place. If the last digit is less than 5, leave the number in the second decimal place as it is. For example, 28.575 is rounded to 25.58 and 28.571 is rounded to 28.57.

\[
\text{Sales Ratio} = \frac{\text{Assessed Value}}{\text{Sales Price}} \times 100\%
\]

\[
\text{Sales Ratio} = \frac{$10,000}{$35,000} \times 100\% = 28.57\%
\]

Follow Step 1 to find the sales ratios for the remaining 10 sales.
Exercise 11-1 Worksheet
Sales Ratio Study

<table>
<thead>
<tr>
<th>Assessed Value</th>
<th>Sale Price</th>
<th>Sales Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>$10,000</td>
<td>$35,000</td>
<td>28.57%</td>
</tr>
<tr>
<td>$17,500</td>
<td>$42,500</td>
<td></td>
</tr>
<tr>
<td>$1,900</td>
<td>$12,000</td>
<td>15.83%</td>
</tr>
<tr>
<td>$9,000</td>
<td>$26,000</td>
<td></td>
</tr>
<tr>
<td>$9,000</td>
<td>$31,000</td>
<td>29.03%</td>
</tr>
<tr>
<td>$1,400</td>
<td>$8,000</td>
<td></td>
</tr>
<tr>
<td>$7,200</td>
<td>$23,000</td>
<td>31.30%</td>
</tr>
<tr>
<td>$8,000</td>
<td>$24,500</td>
<td></td>
</tr>
<tr>
<td>$5,600</td>
<td>$19,500</td>
<td>28.72%</td>
</tr>
<tr>
<td>$14,000</td>
<td>$50,000</td>
<td></td>
</tr>
<tr>
<td>$19,000</td>
<td>$67,000</td>
<td>28.36%</td>
</tr>
</tbody>
</table>

Rank the Ratios
1
2
3
4
5
6
7
8
9
10
11

Step 2

Next, rank all the ratios and determine the median level of assessments. You may rank your ratios from highest to lowest, or vice-versa, since either ranking will produce the same result. The **middle ratio is the median** when there are an odd number of ratios. The **mean**, or average, of the middle two ratios is the median when there are an even number of ratios. This example has an odd number of ratios. When you rank all 11 ratios, starting with the lowest ratio of 15.83% and ending with the highest ratio of 41.18%, the middle ratio, or median, is 28.72%. There are exactly 5 ratios above 28.72%, and 5 ratios below 28.72%. **Therefore, for this jurisdiction, the median level of assessments has been determined to be 28.72%.**
Equalization

**Equalization** is defined as the application of a uniform percentage increase or decrease to assessed values of various areas or classes of property to bring assessments, on average, to a uniform percentage of market value. Uniform percentage means that an equalization factor, sometimes referred to as a multiplier, is applied uniformly to all properties (except farm land, farm buildings, wind turbines with at least 0.5 MW nameplate capacity, coal, and State-assessed properties).

Township Assessors, CCAOs, all Boards of Review (*except in Cook County*), and the Illinois Department of Revenue have the authority to apply equalization factors.

*Assessors in Cook County do not have the authority to apply equalization factors.*

Equalization that occurs within a county is called **intra-county equalization.** Examples of intra-county equalization include neighborhood or township multipliers.

**Inter-county** equalization factors, sometimes called State multipliers or State equalization factors, are issued annually for each county by the Illinois Department of Revenue. The application of these factors to the appropriate property ensures the median level of assessment in all counties is at the statutory level of 33 1/3%.

Without applying the equalization factors, the taxpayers in overlapping taxing districts would not pay the same amount to the taxing districts, even though both properties have the same assessed value. Equalization also “evens out” the tax burden within the county.

If a county receives an equalization factor (multiplier) of 1.0000, it means that the median level in that county is already at 33 1/3% or within +/- 1% of 33.33.

**Equalization factors will not correct inequities in individual assessments.**

Inequities in individual assessments may result in a lack of assessment uniformity within an area or class and may necessitate a reassessment of individual properties before intra-county equalization. The importance of having uniform assessment levels that are grouped closely around the median level of assessments cannot be over-emphasized, because it is the median level of assessments that is adjusted to 33 1/3%.
Equalization is the process of applying a factor to each jurisdiction so that all jurisdictions throughout the state have assessment levels at the same average percentage of market value. This example shows how the tax bills of two similar properties in one school district, which overlaps two counties, are affected by unequal assessment levels. The example then shows how the application of an equalization factor establishes equity.

**Equalization vs. No Equalization**

Without applying the equalization factors, the taxpayers in this overlapping taxing district would not pay the same amount to the taxing district, even though both properties have a market value of $90,000. With the application of equalization factors, the equalized assessed values (EAV) of both properties are the same and both property owners share equally in the tax burden.

<table>
<thead>
<tr>
<th>No Equalization</th>
<th>County A</th>
<th>County B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property Market Value</td>
<td>$90,000</td>
<td>$90,000</td>
</tr>
<tr>
<td>3-Year Average Assessment Level</td>
<td>33.33%</td>
<td>23.00%</td>
</tr>
<tr>
<td>Assessed Value (AV)</td>
<td>$30,000</td>
<td>$20,700</td>
</tr>
<tr>
<td>Overlapping District Tax Rate</td>
<td>3.43%</td>
<td>3.43%</td>
</tr>
<tr>
<td>$3.43/$100 EAV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax Bill (for District)</td>
<td>$1,029</td>
<td>$710</td>
</tr>
</tbody>
</table>

\[
\text{Cnty A} \quad \text{Cnty B} \quad \\
\frac{33.33\%}{33.33\%} = \frac{1.0000}{1.4491}
\]
<table>
<thead>
<tr>
<th>With Equalization</th>
<th>County A</th>
<th>Cnty B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same Properties’ Assessed Values</td>
<td>$30,000</td>
<td>$20,700</td>
</tr>
<tr>
<td>Equalization Factor</td>
<td>1.0000</td>
<td>1.4491</td>
</tr>
<tr>
<td>Equalized Assessed Value (EAV)</td>
<td>$30,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>Overlapping District Tax Rate</td>
<td>2.9%</td>
<td>2.9%</td>
</tr>
<tr>
<td>$2.90/$100 EAV*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tax Bill (for District)</td>
<td>$870</td>
<td>$870</td>
</tr>
</tbody>
</table>

Not all properties are subject to equalization factors. State-assessed properties that are not affected by equalization include:

- coal rights
- farmland
- farm buildings
- wind turbines*

These are not affected by State multipliers; their assessed values are defined by law as equalized assessed values. However, both the farm residence and home site are subject to the State multiplier because their assessed values are based on market values.

*with at least a 0.5 MW nameplate capacity
Unit 11  Summary

The starting point in the equalization process is the sales ratio study. The sales ratio study provides the Median Level of Assessments for a particular jurisdiction for the year of the study. A minimum of 25 sales must be used to perform a valid study.

The Sales Ratio Study is used:
- in the computation of equalization factors.
- in the review and appeal of assessments.
- as a diagnostic tool to evaluate local assessment practices.
- to determine the assessor bonus.
- for reimbursement to a county of a portion of the S/A salary.

There are many types of property sales that cannot be used in a sales ratio study.

Equalization is the process of applying a factor to each jurisdiction so that all jurisdictions throughout the township, county and/or state have assessment levels at the same average percentage of market value.

In Illinois, the statutory level of assessments is 33 1/3% of market value.

The state equalization factor (state multiplier) is determined by taking the statutory level of assessment and dividing it by the prior 3-year average median level of assessments for a jurisdiction.

The equalization factor is applied to the assessed values for the current year. A 2016 equalization multiplier is applied to 2016 assessments, taxes payable in 2017.

Farm land, farm buildings, wind turbines with at least 0.5 MW nameplate capacity, coal, and State-assessed properties are not subject to equalization.
Unit 11  Review Questions

1. Name four types of properties that are not affected by equalization factors at the local level.

a. __________________________________________________________
b. __________________________________________________________
c. __________________________________________________________
d. __________________________________________________________

2. Name four types of sales that would not be used in a sales ratio study.

a. __________________________________________________________
b. __________________________________________________________
c. __________________________________________________________
d. __________________________________________________________

True or False

1.  T or F  Equalization means a factor is applied to each jurisdiction so that all jurisdictions are assessed at the same average percentage of market value.

2.  T or F  The state equalization factor is always 1.0000.

3.  T or F  Equalization factors will not correct inequities in individual assessments.

4.  T or F  A Coefficient of Dispersion is a measure of uniformity of assessments.

5.  T or F  Form PTAX-203 Real Estate Transfer Declaration (RETD) is the primary source of sale information used in a sales ratio study.
Unit 12
Ethics

This unit covers ethics and resources for Township Assessors.

The purpose of this unit is to discuss the importance of conducting business in an ethical manner and provide resources assessors can turn to for assistance.

Learning objectives

After completing the assigned readings, you should be able to

- understand the importance of ethical behavior.
- have a better understanding of where to seek assistance.

Terms and Concepts

Open Meetings Act
Freedom of Information Act
Ethics

Ethics is an important issue in government. As an assessor, you may be governed by a code of ethics that has been adopted by either the governing body in your assessment jurisdiction or by a professional organization with which you are affiliated. It is to your advantage to obtain a copy of the ethics code from your CCAO, township board, or the assessment organization with which you are affiliated.

Attached is a proposed Code of Ethics and Standards of Professional Assessment Practices for Illinois. This draft is included as an example only. Assessors should contact their county officials for a copy of the ethics code adopted for their jurisdictions.

Proposed Code of Ethics and Standards of Professional Assessment Practice for Illinois

Canon 1
An assessing official shall conduct himself or herself in a manner that promotes professionalism in the assessment process.

Canon 2
An assessing official must follow the Illinois state statutes and cooperate with all other public officials in carrying out his or her responsibilities to the assessment profession and the public.

Canon 3
In the assessment of any property, an assessing official must develop each analysis and opinion without bias and without intent to benefit his or her own self or another individual.

Canon 4
An assessing official must comply with these Standards of Professional Assessment Practice for Illinois.
Standards of Professional Assessment Practice

Standard 1
An assessing official must conform in all respects to these Canons of Ethics and Standards of Professional Assessment Practice, as they may be amended from time to time, and give full faith and allegiance to such oaths of office as the official may take. The official shall obey and apply equitably all applicable laws and regulations as may be required in the pursuance of his or her duties.

Standard 2
In developing a real property assessment and/or appraisal, an assessing official must be aware of, understand, and correctly employ those recognized methods and techniques that are necessary to produce a credible assessment and/or appraisal. The officer shall seek guidance from other assessment or appraisal professionals as necessary to meet this standard.

Standard 3
In developing a mass appraisal, an assessing official must be aware of, understand, and correctly employ those recognized methods and techniques that are necessary to produce credible assessments. The officer shall seek guidance from other assessment or appraisal professionals as necessary to meet this standard.

Standard 4
In estimating values for assessment purposes, an assessing official must estimate “market value” as that concept is defined by the courts of Illinois, regardless of the assessment percentage to be used, except when the law requires special valuation techniques.

Standard 5
An assessing official must conduct all official activities in a manner that will reflect credit on the assessment profession. The official must cooperate fully with other public officials in all matters affecting equity and the efficiency of the property tax system.

Standard 6
An assessing official must make available for public review all public records in his or her custody unless access to such records is specifically limited or prohibited by law, or the information has been obtained on a confidential basis and the law permits such information to be treated confidentially. The official must make every effort to inform the public about their rights and responsibilities under the law and the property tax system.
Standard 7
An assessing official must avoid the appearance of impropriety and must uphold the professional reputation of other assessing officials.

Standard 8
An assessing official must use no professional designation unless duly authorized to do so, and must claim no qualifications in any report, testimony or elsewhere, that are not factual or that may be subject to erroneous interpretation.

Standard 9
An assessing official must accept no fee appraisal or other assignment in which the official has an unrevealed personal interest or bias, or which cannot be completed without placing the official's personal integrity or that of the assessment profession in jeopardy. The official may accept no fee appraisal or other assignment that could possibly conflict with any assessment jurisdiction or responsibility the official may have.

Standard 10
An assessing official must not accept any assessment or appraisal engagement for which the amount of the official's compensation is contingent upon reporting a predetermined value; or on the amount of the value estimate; or on reporting a predetermined opinion, conclusion, or recommendation; or on the amount of a tax reduction obtained by a client using the official's services; or on any other result, value, or subsequent transaction that might impair or give the appearance of impairing the official's objectivity and professionalism.

Standard 11
An assessing official must not only uphold this Code of Ethics and Standards of Professional Assessment Practice by example, but must also encourage, by counsel and advice, adherence to this code and standards by others in the profession.
The Freedom of Information Act

GENERAL PROVISIONS
(5 ILCS 140/) Freedom of Information Act
(5 ILCS 140/1) (from Ch. 116, par. 201)

Sec. 1. Pursuant to the fundamental philosophy of the American constitutional form of government, it is declared to be the public policy of the State of Illinois that all persons are entitled to full and complete information regarding the affairs of government and the official acts and policies of those who represent them as public officials and public employees consistent with the terms of this Act. Such access is necessary to enable the people to fulfill their duties of discussing public issues fully and freely, making informed political judgments and monitoring government to ensure that it is being conducted in the public interest.

The General Assembly hereby declares that it is the public policy of the State of Illinois that access by all persons to public records promotes the transparency and accountability of public bodies at all levels of government. It is a fundamental obligation of government to operate openly and provide public records as expeditiously and efficiently as possible in compliance with this Act…

The Open Meetings Act

GENERAL PROVISIONS
(5 ILCS 120/) Open Meetings Act. 
(5 ILCS 120/1) (from Ch. 102, par. 41)

Sec. 1. Policy. It is the public policy of this State that public bodies exist to aid in the conduct of the people's business and that the people have a right to be informed as to the conduct of their business. In order that the people shall be informed, the General Assembly finds and declares that it is the intent of this Act to ensure that the actions of public bodies be taken openly and that their deliberations be conducted openly.

The General Assembly further declares it to be the public policy of this State that its citizens shall be given advance notice of and the right to attend all meetings at which any business of a public body is discussed or acted upon in any way. Exceptions to the public's right to attend exist only in those limited circumstances where the General Assembly has specifically determined that the public interest would be clearly endangered or the personal privacy or guaranteed rights of individuals would be clearly in danger of unwarranted invasion.
To implement this policy, the General Assembly declares:
(1) it is the intent of this Act to protect the citizen's right to know; and
(2) the provisions for exceptions to the open meeting requirements shall be strictly construed against closed meetings.

"Meeting" means any gathering, whether in person or by video or audio conference, telephone call, electronic means (such as, without limitation, electronic mail, electronic chat, and instant messaging), or other means of contemporaneous interactive communication, of a majority of a quorum of the members of a public body held for the purpose of discussing public business or, for a 5-member public body, a quorum of the members of a public body held for the purpose of discussing public business…

**Unit 12- Summary**

As an assessor, you should conduct yourself in an ethical manner at all times. Remember that you are not alone in tackling your job. There are numerous sources of assistance available to you.

You should be familiar with the provisions or the Freedom of Information Act and the Open Meetings Act.
Unit 12 Review Questions

1. What are three important duties of the assessor?

__________________________________________________________________

__________________________________________________________________

__________________________________________________________________

2. List two reference sources for assessors:

__________________________________________________________________

__________________________________________________________________

3. Is it a violation of the Open Meetings Act for an assessor to meet at the local diner with a taxpayer to discuss his assessment?

__________________________________________________________________
Exam Preparation

Examination Information

• You must have a calculator- one that displays up to 10 decimal points is best.

• The exam consists of 50 multiple choice questions.

• Each question is worth an equal number of points when the exam is graded.

• There is only one best answer for each question on the examination.

• Two hours are allotted for completion of the exam.

• The exam is closed book. All class materials, papers, computers, and cellular devices must be removed from the table before taking the exam.

• Cellular phones may not be used as calculators.

Test-Taking Strategies

• Read each question thoroughly and choose the one best answer provided.

• Review the answer sheet for any skipped answers or multiple answers for the same question

• Some test-takers prefer to answer questions that they are confident in the answers first and choose to skip over harder questions or questions that involve math calculations. If this is done, be sure to complete the correct answer on the answer sheet for the questions being answered. The answer sheets are graded by hand, so question numbers may be circled so that they can be easily identified during the second pass through the exam.

• Be mindful of the time allotted. If a question is taking a lot of time to answer, move past it and come back to it later.

• Guessing an answer is better than leaving it blank if time becomes an issue.
Answer Key

I-T Township Assessor

Introductory Course

Revised Mar 2019
## Guide to Math Terms-Answers

### Exercise 1 — Converting decimals to percent to $/100AV.

<table>
<thead>
<tr>
<th>Decimal</th>
<th>Percent</th>
<th>$/100 AV</th>
</tr>
</thead>
<tbody>
<tr>
<td>.1200</td>
<td>12.00%</td>
<td>$12.00/$100</td>
</tr>
<tr>
<td>.0175</td>
<td>1.75%</td>
<td>$1.75/$100</td>
</tr>
<tr>
<td>.0325</td>
<td>3.25%</td>
<td>$3.25/$100</td>
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<tr>
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<td>2.25%</td>
<td>$2.25/$100</td>
</tr>
<tr>
<td>.0045</td>
<td>.45%</td>
<td>$.45/$100</td>
</tr>
</tbody>
</table>
Unit 1  Review Answers

1. What body or group handles Homestead Exemptions?
   The CCAO’s office in most cases.

2. Define ad valorem tax.
   A tax that is based on the value of the property owned. It is assessed according to its value.

3. Who may change the Assessed Value numbers of the Township Assessor?
   No one may change the numbers. Only the CCAO and Board of Review have separate columns for entering any changes.

4. Property Tax is the major source of tax revenue for local governments.

5. What are the two classifications of property?
   Real and Personal

6. What four steps are involved in the assessment of any property?
   Identifying the real property
   Listing it
   Appraising it
   Placing a value on the tax rolls

7. What two types of properties are assessed by the state?
   Railroad operating property and Pollution control facilities.
8. What happens if an individual does not pay his taxes?
   The county treasurer prepares a delinquent tax list and publishes in a newspaper. If unpaid, the courts order a lien for unpaid taxes, penalty, and fees to be sold at a tax sale.

9. Who has the statutory authority to review assessments and make changes when deemed necessary?
   Chief county assessment officer (CCAO) and the Board of review.

10. List, in order, the offices that handle the assessment books, from the time they are created until the taxes are extended.
    County clerk
    Chief county assessment officer (CCAO)
    Township assessor
    Chief county assessment officer (CCAO)
    Board of review
    County clerk

11. In all counties except Cook, property is to be viewed, inspected, and revalued once every 4 years. Cook County has a 3 year assessment cycle.
Unit 2  Review Answers

1. Section ____2-45____ outlines the pre-election and pre-appointment requirements for township and multi-township assessors.

2. Section ____2-52____ provides for the revision of assessor qualifications.

3. Individuals in jurisdictions with a non-farm/non-mineral EAV of $25 M or more or a commercial/industrial EAV of $1 M or more are required to have a CIAO designation before running for office or being appointed to office.

4. Individuals in jurisdictions with more than $10 million and less than $25 million of non-farm/non-mineral EAV and less than $1 million of commercial/industrial EAV who have previously held office will be required to have an approved Designation prior to running for office.
Unit 3 Review Answers

Use the Property Tax Code to answer the following questions and cite the correct section.

1. What is the education requirement for the assessor in a township or multi-township with a non-farm, non-mineral equalized assessed valuation of less than $10 million and less than $1 million commercial and industrial valuation?
   
   Introductory course  
   Section 2-45

2. Are assessing officials required to take an oath of office?
   
   Yes  
   Section 4-30

3. Must a supervisor of assessments hold an annual meeting for his or her township and multi-township assessors?
   
   Yes  
   Section 9-15

4. Are individuals permitted to obtain copies of property record cards?
   
   Yes  
   Section 9-20

5. Are township assessors required to provide the supervisor of assessments with a copy of all new property record cards as they are added to the tax rolls?
   
   Yes  
   Section 9-25

6. Must the supervisor of assessments provide “rules” for the assessment of property by township assessors?
   
   Yes  
   Section 9-15

7. Is there a provision in the statutes for the revisions of assessment in counties of less than 3 million?
   
   Yes  
   Section 9-75

8. What is the date specified by statute for the return of the assessment books by the township assessor to the supervisor of assessments?
   
   June 15 in most counties  
   Section 9-230
9. May township assessors appoint deputies to assist them with their duties?

   Yes  
   Section 2-65

10. Is there a provision in the statutes for setting the salary of an assessor?

   Yes  
   Section 2-70

11. Can township assessors be reimbursed for their education expenses?

   Yes  
   Section 2-80

12. Are there any penalties for assessors who knowingly fail to perform their duties?

   Yes  
   Section 25-15, 25-20, & 25-25

13. Who is responsible for prosecuting violators of the Property Tax Code?

   States attorney  
   Section 25-45

14. How are vacancies in the office of township assessor filled?

   Either by appointment or contractual agreement with a person qualified under Section 2-45  
   Section 2-60

15. What is the statutory level of assessment?

   33 1/3 %  
   Section 9-145

16. Can candidates “get qualified” after they are elected or appointed, as long as they are qualified when they take their oath?

   No  
   Section 2-45

17. Section 2-45 outlines the pre-election and pre-appointment requirements for township and multi-township assessors.

18. Section 2-52 provides for the revision of assessor qualifications.
19. Individuals in jurisdictions with more than $25 million in non-farm/non-mineral EAV or more than $1 million in commercial/industrial EAV, are required to have a CIAO designation before running for office or being appointed to office.

20. Individuals in jurisdictions with more than $10 million and less than $25 million of non-farm/non-mineral EAV and less than $1 million of commercial/industrial EAV who have previously held office will be required to have an approved designation prior to running for office.
Unit 4 Answers

Exercise 4-1 Locating Legal Descriptions

1) SE ¼ of SE ¼

40 Acres

2) S ½ of NW ¼

80 Acres

3) N ½ of NE ¼ of SE ¼

20 Acres
4) E ½ of NW ¼ and NW ¼ of NW ¼

_____120_____ Acres

5) SW ¼ of SE ¼ of SW ¼

_____10_____ Acres

6) NE ¼ of NW ¼ of SW ¼

_____10_____ Acres
Unit 4 Review Answers

Match these terms to the correct definition.

1. **E**  
   A. Section

2. **F**  
   B. Base line

3. **G**  
   C. 3rd Principal Meridian

4. **B**  
   D. Township

5. **C**  
   E. Metes and Bounds

6. **A or D**  
   F. PIN

**A** An abbreviated legal description consisting of the area, section, block, parcel, and unit numbers.

**B** 6 mile X 6 mile square block of land numbered from left to right.

**C** A legal description that describes the perimeter of a property.

**D** A 14-digit number denoting geographic location and use.

**E** A township has 36 of these and they are numbered in a serpentine fashion.

**F** Line of latitude running east and west through the state of Illinois.

**G** Line of longitude running north and south through the state of Illinois.
Unit 5  Answers

Exercise 5-1 Land Values

<table>
<thead>
<tr>
<th>Site Shape</th>
<th>Measurements</th>
<th>Square Footage</th>
<th>Approx. Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Rectangle</td>
<td>400' x 800'</td>
<td>320,000</td>
<td>7.34</td>
</tr>
<tr>
<td>8. Rectangle</td>
<td>320' x 480'</td>
<td>153,600</td>
<td>3.53</td>
</tr>
<tr>
<td>9. Triangle</td>
<td>320' x 480'</td>
<td>76,800</td>
<td>1.76</td>
</tr>
<tr>
<td>10. Triangle</td>
<td>150' x 180'</td>
<td>13,500</td>
<td>.31</td>
</tr>
<tr>
<td>11. Square</td>
<td>150' x 150'</td>
<td>22,500</td>
<td>.52</td>
</tr>
<tr>
<td>12. Triangle</td>
<td>600' x 900'</td>
<td>270,000</td>
<td>6.20</td>
</tr>
</tbody>
</table>

Exercise 5-2  65/35 Rule (Applies to Front Foot Only)

Compute the values for the three parcels above if the front foot value is $100/FF.

<table>
<thead>
<tr>
<th>Parcel</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$9,750</td>
</tr>
<tr>
<td>B</td>
<td>$5,250</td>
</tr>
<tr>
<td>C</td>
<td>$15,000</td>
</tr>
</tbody>
</table>
Exercise 5-3 Residential Lots $1/SF

Cherry Blossom Lane

**Square Foot Results**

<table>
<thead>
<tr>
<th>Lot #</th>
<th># Square Feet</th>
<th>per SF</th>
<th>Lot Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>004</td>
<td>10,000</td>
<td>$1.00</td>
<td>$10,000</td>
</tr>
<tr>
<td>005</td>
<td>5,250</td>
<td>$1.00</td>
<td>$5,250</td>
</tr>
<tr>
<td>006</td>
<td>3,750</td>
<td>$1.00</td>
<td>$3,750</td>
</tr>
<tr>
<td>007</td>
<td>3,750</td>
<td>$1.00</td>
<td>$3,750</td>
</tr>
<tr>
<td>008</td>
<td>9,000</td>
<td>$1.00</td>
<td>$9,000</td>
</tr>
<tr>
<td>009</td>
<td>7,500</td>
<td>$1.00</td>
<td>$7,500</td>
</tr>
</tbody>
</table>
Exercise 5-4 Calculating FF Values and SF Values

Calculate the FF values and the SF values for lots 024 through 029.

The FF value is $140/FF
The SF value is $.80/SF

Lot 024
75 x 140 =
$10,500 FF
130 x 75 =
9750 SF
9750 x .80 =
$7,800

Lot 025
80 x 140 =
$11,200 FF
120 x 80 =
9600 SF
9600 x .80 =
$7,680

Lot 026
80 x 140 =
$11,200 FF
120 x 80 =
9600 SF
9600 x .80 =
$7,680

Lot 027
Lot 028
Lot 029
75’
80’
80’
60’
20’
25’
80’
100’
Lot 028
60 x 140 =
$8,400 FF
120 x 60 =
7200 Minus
20 x 60 =
1200 = 600
2
7200–600 =
$6,600 SF
6,600 x .80 =
$5,280 SF

Lot 029
100 x 140 =
$14,000 FF
100 x 100 =
10,000
Minus
20 x 25 = 500
10,000 – 500 =
9500 x .80 =
$7,600 SF
Lot 024    FF value = 10,500    Lot 027    FF value = 3,920
SF value = 7,800    SF value = 3,840

Lot 025    FF value = 11,200    Lot 028    FF value = 8,400
SF value = 7,680    SF value = 5,280

Lot 026    FF value = 7,280    Lot 029    FF value = 14,000
SF value = 3,840    SF value = 7,600

Exercise 5-5 Site Unit of Value

<table>
<thead>
<tr>
<th>Site</th>
<th>Sales price</th>
<th>Sale date</th>
<th>Location</th>
<th>Physical features</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$ 9,000</td>
<td>Current</td>
<td>Interior</td>
<td>Level - trees</td>
</tr>
<tr>
<td>2</td>
<td>$ 8,500</td>
<td>Current</td>
<td>Corner</td>
<td>Level - trees</td>
</tr>
<tr>
<td>3</td>
<td>$ 10,000</td>
<td>Current</td>
<td>Interior</td>
<td>Rolling - trees</td>
</tr>
<tr>
<td>4</td>
<td>$ 9,000</td>
<td>1 year ago</td>
<td>Interior</td>
<td>Rolling - trees</td>
</tr>
<tr>
<td>5</td>
<td>$ 8,000</td>
<td>Current</td>
<td>Interior</td>
<td>Level - no trees</td>
</tr>
<tr>
<td>6</td>
<td>$ 6,500</td>
<td>1 year ago</td>
<td>Corner</td>
<td>Level - no trees</td>
</tr>
<tr>
<td>7</td>
<td>$ 7,500</td>
<td>Current</td>
<td>Corner</td>
<td>Level - no trees</td>
</tr>
</tbody>
</table>

1. Based on the above sales, a site that sold today is worth $1,000 more than a site that sold a year ago. (3 & 4 — 6 & 7)
2. A site that is on rolling terrain is worth $1,000 more than a site on level terrain. (1 & 3)
3. A site that has trees is worth $1,000 more than a site without trees. (1 & 5 — 2 & 7)
4. An interior site is worth $500 more than a corner site. (1 & 2 — 5 & 7)
Unit 5  Review Answers

Match these terms with the correct definition.

1. ___B___ “65-35 Rule”  A  As vacant and at its highest and best use.

2. ___C & D___ Front foot  B  Based on the premise that the utility of a right-angle triangular shaped lot is affected by its shape.

3. ___A___ How land is valued  C  A strip of land 1 foot wide running from the front to the rear of the lot.

4. ___E___ \( \frac{b \times h}{2} \)  D  Based on the assumption that the front portion of the lot is more valuable on a unit basis than the rear portion.

5. ___F___ \( \frac{SP}{\# \text{ units}} \)  E  Area of a triangular-shaped lot

F  Unit value
Unit 6  Answers  

Exercise 6-1

<table>
<thead>
<tr>
<th>Sale No.</th>
<th>Age</th>
<th>Sale Price</th>
<th>Lot Value</th>
<th>Building Residual</th>
<th>Manual Value</th>
<th>Cost Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>N</td>
<td>112,000</td>
<td>20,000</td>
<td>92,000</td>
<td>88,000</td>
<td>1.05</td>
</tr>
<tr>
<td>2</td>
<td>N</td>
<td>99,300</td>
<td>20,000</td>
<td>79,300</td>
<td>75,000</td>
<td>1.06</td>
</tr>
<tr>
<td>3</td>
<td>22</td>
<td>66,200</td>
<td>15,500</td>
<td>50,700</td>
<td>55,200</td>
<td>0.92</td>
</tr>
<tr>
<td>4</td>
<td>N</td>
<td>72,500</td>
<td>14,000</td>
<td>58,500</td>
<td>50,000</td>
<td>1.17</td>
</tr>
<tr>
<td>5</td>
<td>N</td>
<td>97,000</td>
<td>15,500</td>
<td>81,500</td>
<td>85,000</td>
<td>0.96</td>
</tr>
<tr>
<td>6</td>
<td>N</td>
<td>89,200</td>
<td>18,000</td>
<td>71,200</td>
<td>70,900</td>
<td>1.00</td>
</tr>
<tr>
<td>7</td>
<td>N</td>
<td>89,300</td>
<td>18,000</td>
<td>71,300</td>
<td>70,900</td>
<td>1.01</td>
</tr>
<tr>
<td>8</td>
<td>N</td>
<td>106,500</td>
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<td>85,500</td>
<td>82,000</td>
<td>1.04</td>
</tr>
<tr>
<td>9</td>
<td>N</td>
<td>78,200</td>
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<td>65,000</td>
<td>0.99</td>
</tr>
<tr>
<td>10</td>
<td>N</td>
<td>108,900</td>
<td>21,000</td>
<td>87,900</td>
<td>81,000</td>
<td>1.09</td>
</tr>
<tr>
<td>11</td>
<td>N</td>
<td>88,800</td>
<td>15,500</td>
<td>73,300</td>
<td>77,200</td>
<td>0.95</td>
</tr>
<tr>
<td>12</td>
<td>37</td>
<td>86,500</td>
<td>15,000</td>
<td>71,500</td>
<td>77,500</td>
<td>0.92</td>
</tr>
<tr>
<td>13</td>
<td>N</td>
<td>99,000</td>
<td>12,000</td>
<td>87,000</td>
<td>81,000</td>
<td>1.07</td>
</tr>
<tr>
<td>14</td>
<td>N</td>
<td>101,000</td>
<td>19,500</td>
<td>81,500</td>
<td>82,000</td>
<td>0.99</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>115,000</td>
<td>20,500</td>
<td>94,500</td>
<td>90,000</td>
<td>1.05</td>
</tr>
</tbody>
</table>

The only ratios used in the study are current sales. Therefore, sales numbers 3, 12 and 15 are not included.

Median is \( \frac{1.04 + 1.01}{2} \) or 1.025 or 1.03 rounded to 2 places.
1. What are the three types of depreciation? Place an “X” beside the one which is generally incurable.

___ Physical ________________________________  
___ Functional ____________________________  
__X___ Economic (or External) __________________________

2. What is the formula for calculating a cost factor?

Building Residual divided by the Publication Manual Value.

3. What is the formula to find Building Residual?

Sales Price minus Land Value.

4. What is the formula to calculate Market Value?

Land Value + (Replacement Cost New – Depreciation) or  
MV = LV + (RCN-Dep)

5. What is a mass appraisal system?

The valuation of many properties as of January 1 of the assessment year, using standard procedures that provide uniformity.

6. Complete the cost study on the next page and find the median.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>N</td>
<td>112,000</td>
<td>20,000</td>
<td>92,000</td>
<td>1.05</td>
</tr>
<tr>
<td>2</td>
<td>26</td>
<td>99,300</td>
<td>20,000</td>
<td>79,300</td>
<td>75,000</td>
</tr>
<tr>
<td>3</td>
<td>N</td>
<td>66,200</td>
<td>15,500</td>
<td>50,700</td>
<td>55,200</td>
</tr>
<tr>
<td>4</td>
<td>29</td>
<td>72,500</td>
<td>14,000</td>
<td>58,500</td>
<td>50,000</td>
</tr>
<tr>
<td>5</td>
<td>N</td>
<td>97,000</td>
<td>15,500</td>
<td>81,500</td>
<td>85,000</td>
</tr>
<tr>
<td>6</td>
<td>20</td>
<td>89,200</td>
<td>18,000</td>
<td>71,200</td>
<td>70,900</td>
</tr>
<tr>
<td>7</td>
<td>N</td>
<td>89,300</td>
<td>18,000</td>
<td>71,300</td>
<td>70,900</td>
</tr>
<tr>
<td>8</td>
<td>N</td>
<td>106,500</td>
<td>21,000</td>
<td>85,500</td>
<td>82,000</td>
</tr>
<tr>
<td>9</td>
<td>N</td>
<td>78,200</td>
<td>14,000</td>
<td>64,200</td>
<td>65,000</td>
</tr>
<tr>
<td>10</td>
<td>N</td>
<td>108,900</td>
<td>21,000</td>
<td>87,900</td>
<td>81,000</td>
</tr>
<tr>
<td>11</td>
<td>N</td>
<td>88,800</td>
<td>15,500</td>
<td>73,300</td>
<td>77,200</td>
</tr>
<tr>
<td>12</td>
<td>37</td>
<td>86,500</td>
<td>15,000</td>
<td>71,500</td>
<td>77,500</td>
</tr>
<tr>
<td>13</td>
<td>N</td>
<td>99,000</td>
<td>12,000</td>
<td>87,000</td>
<td>81,000</td>
</tr>
<tr>
<td>14</td>
<td>N</td>
<td>101,000</td>
<td>19,500</td>
<td>81,500</td>
<td>82,000</td>
</tr>
<tr>
<td>15</td>
<td>3</td>
<td>115,000</td>
<td>20,500</td>
<td>94,500</td>
<td>90,000</td>
</tr>
</tbody>
</table>

**Median = 1.00**
### Exercise 7-1

#### Building Record - Residential - Rural (Property - Type 1)

**1-Story Home**

<table>
<thead>
<tr>
<th>Occupancy</th>
<th>Remodeled</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7</td>
<td>B 1 2 3</td>
</tr>
<tr>
<td>Vacant 2 Dwelling 3 Other</td>
<td>NH</td>
</tr>
<tr>
<td>Mobile A Summer Apt.</td>
<td>Amount $</td>
</tr>
<tr>
<td>8</td>
<td>Memo</td>
</tr>
<tr>
<td>Age</td>
<td>CDU</td>
</tr>
<tr>
<td>30</td>
<td>Average</td>
</tr>
<tr>
<td>Adj. Age</td>
<td>Grade</td>
</tr>
<tr>
<td>C</td>
<td>Dwelling Computations</td>
</tr>
</tbody>
</table>

**Living Accommodations**

| Total Rooms | 5 2 |
| Family Room | Paneling |
| Features | SF |
| Quality | Type |
| Foundation | Pt. Msty Trim |
| Basement | Bk  Stone Act |
| Porches | 1200 |
| SF | 115,970 |
| Crawl | + 8,350 |

**Heating**

| Type | Central |
| Air Condition | X |
| Warm air | X |
| Hot water/Steam | |
| Floor furnace | |
| Unit heaters | |
| Other | |

**Plumbing**

| Plumbing | |
| Crawl | |
| Attic | |

**Exterior Walls**

| Type | Wood/tuco/aluminum/vinyl siding |
| Concrete block | |
| Brick/stone TRIM | |
| Other | |

**Roof**

| Summary of Other Buildings | |
| Garage (attached) | X |
| Type | No. |
| Construction | Size | Rate | Grade | Age | CDU | Factor | Repl. Cost new | REL | Full Value |
| Garage (detached) | Frm 1 1 1 1 | May 2 2 2 2 | Carport 3 3 3 3 | |

**Floors**

| Floors | B 1 2 3 |
| Concrete | X |
| Wood | X |
| Tile | |
| Carpet | |

**Memo**

- Date: Total full value other buildings
- Total full value all buildings: 93,354
### Exercise 7-2 Building Record - Residential - Rural (Property - Type 1)

#### 2-Story Home

<table>
<thead>
<tr>
<th>Occupancy</th>
<th>Interior Finish</th>
<th>Remodeled</th>
<th>Sold Date</th>
<th>Age</th>
<th>Adj. Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacant Dwelling</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lot</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile Home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Summer Apt.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vacant Lot</th>
<th>Mobile Home</th>
<th>A Summer Apt.</th>
<th>Beach Home</th>
<th>Paneling</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Vacant Lot</td>
<td></td>
<td></td>
<td></td>
<td>Vacant</td>
</tr>
<tr>
<td>Mobile Home</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A Summer Apt.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Plaster/dry wall  X X**

**Dwelling Computation**

- Total full value other buildings: 225,254
- Total full value all buildings: 223,613

**Summary of Other Buildings**

- Shingle - asphalt/asbestos/wood  X
- Slate/frieze X
- Composition X
- Concrete X
- Wood X
- Tile X X
- Carpet X X

**Dwelling Computations**

- 1000x2=2000 SF  171,760
- Basement-unfinished  +10,480
- Heating(Central air)  + 4,965
- Total 221,898

**Roof**

- Replacement cost new  251,250
- Eff. Age 10  REL 0.89
- Depr. 11%  89%
- S C M I  Value  223,613

**Exterior Walls**

- Wood/stucco/aluminum/vinyl siding  X
- Concrete block  X
- Brick/stone  X
- Trim  X

**Interior Walls**

- Wood deck 10'
- Open frame porch 20'
- Asphalt drive 20'
- 2-Sty frame bsmt 25'

**Air Condition**

- Warm air X
- Central Air Conditioning
- None

**Heating**

- Hot water/Steam
- None
- Unit heaters
- Other

- Std. (5)  X
- Bathroom (3)  X
- Half bath (2)  X
- Sink/Lavatory water closet

**Plumbing**

- Toilet
- None
- Part
- Full

**Foundation**

- Full
- Crawl
- Slab

**Basement**

- Basement
- Recreation
- Partial
- Full

**Fireplaces**

- #1 masonry
- Below grade
- With porch
- 1 2-Sty frame bsmt

**Living Accommodations**

- Paneling
- Feature SF
- Pt. Msy. Trim
- 300
- 8'

**Other**

- None
- Attic
- Unfinished
- Part
- Full

**Summary of Other Buildings**

- Total 237,028

**Floors**

- Drive 1
- Asphalt
- 600 2.90
- 10 yrs
- 1.06
- 1,844
- 0.89
- 1,641

**Notes**

- Listed by:
- Date:
- Total full value other buildings: 1,641
- Total full value all buildings: 225,254
## Building Record - Residential - Rural (Property - Type 1) 1 1/2-Story Home

### Occupancy
- Vacant, Dwelling, Other
- Mobile, A, Summer, A
- Lot

### Interior Finish
- B, 1, 2, 3
- Plaster, Drywall, X, X

### Living Accommodations
- Paneling, X

### Features
- Foundation
  - B: M.S. Wall, Bk, Pier
  - B: Finshed, Living, Combo, Conn, Porch
- Basement
  - Basement, Recreational, %, Porch
- Fireplaces
  - 1: C, Stacks, 1
- Integral garage
  - On grade, Below
- Attached garage
  - SF, Fm, 400, Carport

### Heating
- 1, None, 2, Central, 3, Air Condition, 4, Other

### Plumbing
- Standard, (5)
- Bathroom, (3)
- Half bath, (2)
- Sink, hot water, closet

### Exterior Walls
- Brick, solid masonry, X
- Concrete, block
- Brickstone
- Other

### Roof
- Shingle - asphaltech/bitumen/wood, X

### Summary of Other Buildings
- Shingle - asphalttech/bitumen/wood, X
- Drive
- Concrete
- Concrete
- Wood
- Tile

### Other Features
- Eff, Age, 8
- Dep, 9%
- S, C, M, I

### Total Value
- 285,297
# Exercise 7-5

## Example for Exam - No Narrative

### 1-Story Home

<table>
<thead>
<tr>
<th>Occupancy</th>
<th>Interior Finish</th>
<th>Remodeled</th>
<th>Sold Date</th>
<th>Mo.</th>
<th>Day</th>
<th>Yr.</th>
<th>Age</th>
<th>Adj. Age</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dwelling Lot</td>
<td>8 1 2 3</td>
<td>NH</td>
<td>Amount $</td>
<td>Memo</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Living Accommodations

<table>
<thead>
<tr>
<th>Feature</th>
<th>SF</th>
<th>Quality</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plaster/dry wall</td>
<td>42</td>
<td>SF</td>
<td>Off</td>
</tr>
<tr>
<td>Brick floor</td>
<td>48</td>
<td>EFP</td>
<td>EMP</td>
</tr>
<tr>
<td>2-Story Basement</td>
<td>100 SF</td>
<td>Wood deck</td>
<td></td>
</tr>
</tbody>
</table>

### Foundation

<table>
<thead>
<tr>
<th>SF</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>143,490</td>
<td>Shed Comb. +3</td>
</tr>
</tbody>
</table>

### Basement

<table>
<thead>
<tr>
<th>SF</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,380</td>
<td>Plumbing +3</td>
</tr>
</tbody>
</table>

### Heating

- 10' Deck
- 8' Patio
- 8' 1 Story Brick Slab
- 25' 2-Car Brick Garage

### Exterior Walls

- Wood/stucco/aluminum/vinyl siding
- Concrete block
- Brick/block

### Roof

- Shingle/asphalt/asbestos/wood
- Slate/tile
- Composition

### Floors

- Concrete
- Wood
- Tile
- Carpet

### Summary of Other Buildings

- Garage (detached)
- Drive
- Patio
- Walk

### Replacement cost new

- 220,816

### Total

- 176,620
- 215,476
- 220,816

### Full Value

- 207,567

---

267
Unit 7  Review Answers

1. What type of quality does the quality grade factor “D” represent and what is the factor applied from the schedules?

   Inferior quality  82% or .82

2. A local assessor notices that an improvement has been greatly neglected and its physical condition is extremely poor. He or she notes that this improvement was originally built with excellent materials and workmanship. Which one of the following will the assessor adjust?

   _____ Cost
   _____ Quality grade
   √ CDU rating used to determine the REL factor

3. Quality grade refers to the  Quality of materials and workmanship.

4.  T or F  The PRC-2 is used for calculating land values.

5.  T or F  A frame house of 1000 SF on a slab will not have an adjustment for a basement.

6.  T or F  All detached garages are calculated using the Summary of Other Buildings section on the PRC.

7.  T or F  The quality grade is used to determine an REL factor.

8.  T or F  To compute the value for an EFP of 60 SF and a 40 SF EFP, add the square footage of the porches together and price out a porch of 100 SF from the cost tables.
Unit 8 Answers

Sales Comparison Chart Answers

How do we get to the value of the subject property? Compare the subject with the comp with the least number of adjustments.

Is it based on least number of adjustments? Most often.

Is it based on least dollar amount of adjustments? No

The best value for the subject property would be the value of Sale 2, $121,500.

Although Sale 4 also only has 1 adjustment as well, that adjustment is for a full unfinished basement valued at $10,000. Sale 2 has an adjustment for 1 bathroom valued at $1,500.

Unit 8 Review Answers

True or False

1) T or F  When using the Sales Comparison or Market Approach, one never adjusts the subject property.

2) T or F  Make a minus adjustment to the comparable property if it is inferior to the subject property.

3) T or F  The market is showing an annual increase in value of 3%. A comparable property sold 2 years ago. It would have a minus adjustment of 6%.

4) T or F  The comparable sale with the fewest adjustments is sometimes the best indicator of value for the subject property.
Unit 9  Answers

Exercise 9-1

1. An apartment building recently sold for $250,000. The building has 10 units, each of which rents for $250 per month. What is the capitalization rate?

   12 %

2. A parking lot provides its owner with a net operating income of $16,740. The appropriate capitalization rate is 9.3%. What is the value of the parking lot?

   $180,000

3. The capitalization rate for an office building is 11.37%. The building value in a recent sale was $452,600. What is the net operating income for the office building that an investor would expect?

   $51,461

4. An apartment building recently sold for $375,700. The annual income for the building is $53,428. What is the capitalization rate?

   14.22 %

5. A run-down triplex recently sold for $157,000. The cap rate is 11.41% What is the property’s annual income?

   $17,914

6. An apartment building has 20 units that rent for $800 per month. The capitalization rate is 14.5%. What is the value of the property?

   $1,324,138
Unit 9  Review Answers

1. What is the formula for the income approach?  \( R \times V \)

2. A 100 space parking lot rents for $30 a month per space. The cap rate is 11.89%. What is the value of the parking lot?

\[
\frac{I}{R \times V} = \frac{30 \times 12 \times 100}{0.1189} = \$36,000 = \$302,775
\]

3. A 2-story commercial building has a value of $960,000. The building provides its owner with a monthly income of $6,000 per floor. What is the capitalization rate?

\[
\frac{I}{R \times V} = \frac{\text{Income} = 6,000 \times 2 \times 12}{960,000} = \frac{144,000}{960,000} = 15\%
\]

4. A 4-unit quadruplex recently sold for $270,000. The cap rate is 10.65%. What is the income of this apartment building?

\[
\frac{I}{R \times V} = \frac{R \times V}{270,000 \times 0.1065} = \frac{28,755}{270,000}
\]

5. A 12-unit apartment building has (6) 1-bedroom units, (4) 2-bedroom units, and (2) 3-bedroom units. The 3-bedroom units rent for $400 a month, the 2-bedroom units rent for $350 a month, and the 1-bedroom units rent for $275 a month. What is the value of this building if the cap rate is 9.75%?

\[
\begin{align*}
2 \times 400 \times 12 &= \$9,600 \text{ annually for the 3-bed units} \\
4 \times 350 \times 12 &= \$16,800 \text{ annually for the 2-bed units} \\
6 \times 275 \times 12 &= \$19,800 \text{ annually for the 1-bed units}.
\end{align*}
\]

\[
\text{\$46,200 annual income divided by 9.75\% (or .0975) = \$473,846}
\]
6. An assessor is trying to value a small rental property. What is the NOI? **$39,840**
What is the value? **$442,667**

PGI = $48,000
Cap rate = 9%
Rent = 5 units at $800/mo.
Vacancy = 3%
Misc. income = 1 coin operated washer and 1 coin dryer = $65/mo.
Reserves for replacement = $7,500 annually

\[
48,000 \times .97 \text{ (vacancy)} = 46,560 + 780 \text{ (misc.)} = 47,340 - 7,500 = 39,840
\]

Next apply IRV: $39,840 divided by .09 (cap rate) = $442,667
Unit 10 Answers

Exercise 10-1 Tax rates

<table>
<thead>
<tr>
<th>L</th>
<th>A</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. $590,000</td>
<td>$30,000,000</td>
<td>1.9667% (.0197)</td>
</tr>
<tr>
<td>2. <strong>$450,000</strong></td>
<td>$10,000,000</td>
<td>4.5000 %</td>
</tr>
<tr>
<td>3. $45,000</td>
<td><strong>$6,545,455</strong></td>
<td>.6875 %</td>
</tr>
<tr>
<td>4. <strong>$2,254,760</strong></td>
<td>$95,480,000</td>
<td>2.3615 %</td>
</tr>
<tr>
<td>5. $240,000</td>
<td>$50,000,000</td>
<td><strong>.4800% (.0048)</strong></td>
</tr>
<tr>
<td>6. $800,000</td>
<td><strong>$106,666,667</strong></td>
<td>.7500 %</td>
</tr>
<tr>
<td>7. $41,600</td>
<td>$54,257,900</td>
<td><strong>.0767% (.0007667)</strong></td>
</tr>
<tr>
<td>8. $150,000</td>
<td><strong>$42,253,521</strong></td>
<td>.3550 %</td>
</tr>
<tr>
<td>9. <strong>$83,436</strong></td>
<td>$12,750,000</td>
<td>.6544 %</td>
</tr>
</tbody>
</table>

Exercise 10-2 Tax bills

<table>
<thead>
<tr>
<th>District</th>
<th>Levy</th>
<th>Taxable EAV</th>
<th>Rate</th>
<th>Prop EAV</th>
<th>Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 School</td>
<td>$8,804,294</td>
<td>$235,408,929</td>
<td>3.7400 %</td>
<td>$36,108</td>
<td>$1350.44</td>
</tr>
<tr>
<td>2 County</td>
<td>$175,017</td>
<td>$36,461,834</td>
<td><strong>.4800 %</strong></td>
<td>$36,108</td>
<td>$173.32</td>
</tr>
<tr>
<td>3 Township</td>
<td>$226,355</td>
<td>$34,337,844</td>
<td>.6592 %</td>
<td>$36,108</td>
<td>$238.02</td>
</tr>
<tr>
<td>4 City</td>
<td>$250,047</td>
<td>$26,549,879</td>
<td><strong>.9418 %</strong></td>
<td>$36,108</td>
<td>$340.07</td>
</tr>
<tr>
<td>5 Fire</td>
<td>$58,575</td>
<td>$18,761,915</td>
<td>.3122 %</td>
<td>$36,108</td>
<td>$112.73</td>
</tr>
<tr>
<td>6 Library</td>
<td>$8,031</td>
<td>$2,477,989</td>
<td><strong>.3241 %</strong></td>
<td>$36,108</td>
<td>$117.03</td>
</tr>
</tbody>
</table>

Aggregate tax rate = **6.4573 %**

x Total Taxable EAV of this property $36,108

= Tax Bill for this property $2,331.60

Effective tax rate = **Taxes billed** = $2,331.60 = **2.1522 %**

Market Value $108,333
Exercise 10-3 Tax bills

<table>
<thead>
<tr>
<th>District</th>
<th>Levy</th>
<th>Taxable EAV</th>
<th>Rate</th>
<th>Property EAV</th>
<th>Tax</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>$93,452,105</td>
<td>$1,796,119,642</td>
<td>5.2030%</td>
<td>$ 71,878</td>
<td>$3,739.81</td>
</tr>
<tr>
<td>County</td>
<td>$ 4,232,750</td>
<td>$ 560,926,319</td>
<td>0.7546%</td>
<td>$ 71,878</td>
<td>$ 542.39</td>
</tr>
<tr>
<td>Township</td>
<td>$ 1,062,962</td>
<td>$1,164,251,916</td>
<td>0.0913%</td>
<td>$ 71,878</td>
<td>$ 65.62</td>
</tr>
<tr>
<td>City</td>
<td>$ 1,378,780</td>
<td>$ 146,913,160</td>
<td>0.9385%</td>
<td>$ 71,878</td>
<td>$ 674.58</td>
</tr>
<tr>
<td>Fire</td>
<td>$ 1,272,125</td>
<td>$1,781,687,675</td>
<td>0.0714%</td>
<td>$ 71,878</td>
<td>$ 51.32</td>
</tr>
<tr>
<td>Library</td>
<td>$ 642,132</td>
<td>$1,716,930,481</td>
<td>0.0374%</td>
<td>$ 71,878</td>
<td>$ 26.88</td>
</tr>
</tbody>
</table>

Aggregate tax rate = **7.0962 %**

\[
\text{Aggregate tax rate} = \frac{\text{Taxes billed}}{\text{Total taxable EAV of this property}} = \frac{\$ 5,100.61}{\$ 71,878} = 2.3652\%
\]

*The amount of the tax bill is rounded to the nearest even number for two equal installment amounts.*

The Aggregate rate is applied to the **Taxable EAV**.

The Effective tax rate is applied to **Market Value**.
Unit 10  Review Answers

1. If the levy for a local taxing body is $60,000 and the EAV for the local taxing body is $15,000,000, the tax rate for this taxing district will be:
   \[ \frac{4000}{100} \% \]

2. If the levy for a local taxing body is $1,200,000 and the tax rate for the local taxing body is $3.25/\$100 EAV, the equalized assessed valuation for this taxing district will be:
   \[ \$ 36,923,077 \]

3. The equalized assessed valuation for a local taxing body is $26,660,000 and the tax rate is $2.95/\$100 equalized assessed value. The levy for this taxing body will be:
   \[ \$ 786,470 \]

4. The EAV for a local taxing body is $65,000,000 and the levy is $22,750. The tax rate for this taxing body will be:
   \[ \frac{0.0350}{\$100} \% \]

5. If the levy for a local taxing body is $75,000 and the EAV for the local taxing body is $15,000,000, the tax rate for this taxing district will be:
   \[ \frac{0.50}{\$100} \]
### Unit 11 Answers

**Exercise 13-1 worksheet**

<table>
<thead>
<tr>
<th>Assessed Value</th>
<th>Sale Price</th>
<th>Sales Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>$10,000</td>
<td>$35,000</td>
<td>28.57</td>
</tr>
<tr>
<td>17,500</td>
<td>42,500</td>
<td><strong>41.18</strong></td>
</tr>
<tr>
<td>1,900</td>
<td>12,000</td>
<td>15.83</td>
</tr>
<tr>
<td>9,000</td>
<td>26,000</td>
<td><strong>34.62</strong></td>
</tr>
<tr>
<td>9,000</td>
<td>31,000</td>
<td>29.03</td>
</tr>
<tr>
<td>1,400</td>
<td>8,000</td>
<td><strong>17.50</strong></td>
</tr>
<tr>
<td>7,200</td>
<td>23,000</td>
<td>31.30</td>
</tr>
<tr>
<td>8,000</td>
<td>24,500</td>
<td><strong>32.65</strong></td>
</tr>
<tr>
<td>5,600</td>
<td>19,500</td>
<td>28.72</td>
</tr>
<tr>
<td>14,000</td>
<td>50,000</td>
<td><strong>28.00</strong></td>
</tr>
<tr>
<td>19,000</td>
<td>67,000</td>
<td>28.36</td>
</tr>
</tbody>
</table>

### Ratios Ranked

1. 15.83
2. 17.50
3. 28.00
4. 28.36
5. 28.57
6. **28.72**  Median is 28.72
7. 29.03
8. 31.30
9. 32.65
10. 34.62
11. 41.18
Unit 11  Review Answers

1. Name four types of properties that are not affected by equalization factors at the local level.
   
   Farmland
   Railroads
   Farm buildings
   Wind turbines and coal rights

2. Name four types of sales that would not be used in a sales ratio study.

   Farm home sites, residences, land and buildings
   State assessed property
   Sales between related parties
   Sales conveying less than full title; Sales involving government entities;
   Sales not advertised
   Sales using any deed other than warranty or trust deed

True or False

1. T or F  Equalization means a factor is applied to each jurisdiction so that all jurisdictions are assessed at the same average percentage of market value.

2. T or F  The state equalization factor is always 1.0000.

3. T or F  Equalization factors will not correct inequities in individual assessments.

4. T or F  A Coefficient of Dispersion is a measure of uniformity of assessments.

5. T or F  Form PTAX-203, Real Estate Transfer Declaration (RETD) is the primary source of sale information used in a sales ratio study.
Unit 12  Review Answers

1. What are 3 important duties of the assessor?
   - To accurately value property
   - To provide fair and equitable assessments
   - To conduct business in an ethical manner

   *This answer will vary with the individual*

2. List two reference sources for assessors:
   - CCAO, other assessors, States attorney, Department of Revenue

3. Is it a violation of the Open Meetings Act for an assessor to meet at the local diner with a taxpayer to discuss his assessment?
   - No