

State of North Dakota  
Office of State Tax Commissioner

# Supervised Home Study Manual



2010

# Supervised Home Study Manual

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## **Introduction To The Supervised Home Study Program**

The supervised home study program is designed to (1) introduce the student to the assessment process used by assessors, (2) provide a study guide for the assessor certification test, and (3) be a reference manual for future use.

You are given information and then asked to respond to a question or statement. The correct answer follows your response. Cover up the answers and write your response in the space provided. Check your response with the correct answer. If you make an incorrect response, review the material again to find the correct information. Use a calculator to work mathematical calculations. Some units include problems which you need to work and bring to class for review and discussion. Complete each unit prior to the classroom instruction. That way, if you have any questions or problems, they may be addressed in class.

Allow sufficient time to study the material in the manual. Good luck.

Unit A  
**Concept of Value**

**There are three types of taxes: sales, income and property. The sales tax is based upon the price paid for an item. The income tax is based upon the income an individual or corporation earns. The property tax is ad valorem or based upon the value of property. It is not based upon the ability of the owner to pay nor the amount for which the property last sold. The property tax is based solely upon value. The property tax is apportioned among taxpayers according to the value of individual properties.**

The property tax is a tax based upon value. It is considered to be an \_\_\_\_\_ tax.

The property tax is an AD VALOREM tax.

**Property taxation involves two separate processes: the assessment process and the levy process. The assessment process happens before the levy process. Assessors participate only in the assessment process. They are responsible for discovering, listing and valuing all taxable real property each year. The general duties of assessors follow:**

- **Locate and identify all taxable real property in the jurisdiction (discovery)**
  - **Involves use of maps and physical inspection of property**
- **Make an inventory of all taxable property; i.e., quality, quantity, and property characteristics (listing)**
  - **Involves use of property records and listing accurate information**
- **Classify each property and determine taxable status (listing)**
  - **Involves determination of property classification and taxable or exempt status**
- **Estimate true and full value of each taxable property (valuation)**
  - **Involves use of sales comparison, cost and/or income approaches**
- **List all values of taxable real property in assessment list and certify assessment list (listing)**
  - **Involves accurate listing of property information and certification of values**
- **Notify owners of increases in true and full value of \$3,000 or more and 10% or more than the last assessment (if the increase meets both conditions)**
  - **Involves calculation and preparation and mailing of the notices**
- **Defend property value estimates and methods during appeals (valuation)**
  - **Involves investigation and preparation of information for owners and governing boards**

Property taxation involves two processes: \_\_\_\_\_ and \_\_\_\_\_.

The two processes involved in property taxation are ASSESSMENT AND LEVY.

**County auditors participate only in the levy process. After assessments are finalized for the year and the annual budgets are submitted, the county auditor calculates the mill rate for each**

**taxing district using a statutory formula. The county auditor determines the applicable mill rate for each taxing district by dividing the certified levy (budget) by the total taxable valuation of the taxing district.**

For property taxation purposes, the assessor is involved only in the \_\_\_\_\_ process while the county auditor participates only in the \_\_\_\_\_ process,

The assessor participates only in the ASSESSMENT process and the county auditor participates only in the LEVY process.

**The formula for calculating the taxable value of property follows:**

**True and full value multiplied by 50% equals assessed value; assessed value multiplied by the level of valuation (agricultural and commercial property = 10%, residential property = 9%) equals taxable value. (T & F x 50% = A.V.; A.V. x 9 or 10% = Taxable Value)**

**For example, property A is a commercial property and has a current true and full value of \$88,600.**

**\$88,600 true & full value (determined by the assessor)**  
**x 50%**  
**\$44,300 assessed value**  
**x 10%**  
**\$ 4,300 taxable value**

**The county auditor is responsible for dividing the current levy in dollars (maximum budget allowable for a taxing district) by the total taxable valuation of all property in the taxing district to determine the mill rate.**

**As an example, the budget of a taxing district indicates that a levy of \$95,000 is needed to operate for the current year. The total taxable value of the taxing district is \$8,500,000.**

$$\text{\$95,000} \div \text{\$8,500,000} = 0.011 \text{ or 11 mills (mill rate)}$$

**To determine the amount of property tax for property A, the county auditor multiplies the taxable value of the property (\$4,300) by the mill rate for the taxing district (0.011).**

$$\text{\$4,300} \times 0.011 = \text{\$47.30 (property tax)}$$

**To summarize, the property tax due for a property valued at \$88,600 true and full value is \$47.30, which represents the share of tax (revenue) that property A contributes to meet the budgeted needs of the taxing district. It is important that the assessor value similar properties similarly so that the property tax is distributed equally for similar type properties. If property B is similar to property A valued at \$88,600 but property B is valued at \$59,000, the property tax for property B is only \$32.45.**

**Property B**

\$ 59,000 true & full value	\$ 2,950 taxable value
<u>x 50%</u>	<u>x 0.011 mill rate</u>
\$ 29,500 assessed value	\$ 32.45 property tax
<u>x 10%</u>	
\$ 2,950 taxable value	

The property tax for property B (\$32.45) is only 68.6% of the property tax for property A (\$47.30). Assuming the true and full value of \$88,600 for property A is correct, property B is undervalued and therefore the owner pays an unfair amount (68.6% of what should be paid). Equalization of property values is very important for proper administration of the ad valorem property tax.

Assessors participate in only one of the two processes involved in property taxation. Assessors administer the \_\_\_\_\_ process.

For property taxation purposes, assessors participate in the ASSESSMENT process.

**There are two major categories of property - real and personal. Personal property refers to any movable items not permanently attached to or part of the real estate. Examples of personal property include a portable dishwasher or a free-standing stove. Real property is the interest, benefits and rights inherent in the ownership of physical real estate. There is a difference between real estate and real property. Real estate refers to land and buildings or structures attached to the land. Real property refers to the rights, privileges, and benefits involved in ownership of real estate.**

A residential structure located on lot 1, block 2, Original Townsite is an example of \_\_\_\_\_.

The building and lot is an example of REAL ESTATE.

The building and lot plus the right of the owner to live in the residence and use it and the lot however he/she wants to is referred to as \_\_\_\_\_.

The residence, lot, and the interest, benefits and rights involved in property ownership is referred to as REAL PROPERTY.

**There are six basic rights associated with ownership of property - the right to use, sell, lease, enter, give it away or refuse to exercise any of these rights. These are referred to as the bundle of rights.**

As an owner of a house in Beulah, you decide to build an attached garage. You are exercising the right to \_\_\_\_\_.

By building a garage, you are making use of the property, therefore exercising the right to USE.

**Ownership of all legal rights is referred to as an estate in fee simple. A fee simple title is the greatest possible degree of property ownership.**

Someone owning all legal rights involved with property ownership has a \_\_\_\_\_  
\_\_\_\_\_ title.

The person owning all legal rights has a FEE SIMPLE title.

**Property not owned by the government is subject to certain governmental restrictions for the common good. The four governmental restrictions on property ownership are: taxation, eminent domain, police power and escheat. Property is taxed to provide revenue for governmental operation and services. The property tax is a restriction on property ownership. Eminent domain is the right of government or a quasi government (an entity having similar powers as government) to take private land by condemnation for public benefit, provided just compensation is paid. An example of eminent domain is the right of MDU, Northern States Power or Ottertail Power Company to take private land for erecting power lines, provided they pay the owner just compensation. Property needs to be policed and regulated by law for public protection. Zoning is an example of a police restriction on property ownership. Escheat involves the return of the title of ownership to the state if the property owner dies, leaving no will and no known heirs, or if the owner does not pay taxes.**

The federal government plans to build a highway through Beulah. The Johnsons own property along the route of the highway. The government pays them a fair price for the property and the title of ownership transfers to the federal government. This process is the governmental restriction known as \_\_\_\_\_.

The restriction on property ownership exercised by the federal government is known as EMINENT DOMAIN.

John Smith owned real property at the time of his death. He had no will and no known heirs. The title of ownership reverts to the state. This is an example of \_\_\_\_\_.

The governmental restriction involved here is ESCHEAT.

**There are also private limitations which affect fee simple ownership of property. These are: the rights of the other co-owners of the property, covenants and deed restrictions, easements and rights-of-way, liens and judgments, mortgages and leases.**

Fee simple ownership of property is affected by \_\_\_\_\_ limitations such as an access easement on an individual's property, which gives someone else the privilege to travel on the individual's property to reach to another parcel.

An access easement is an example of a PRIVATE limitation of fee simple ownership of property.

**Value is defined as the present worth of future benefits arising out of ownership to typical users and investors.**

Lawrence Peterson is interested in purchasing a corner lot in the business district to build a gas station. The lot has \_\_\_\_\_ to Mr. Peterson.

Mr. Peterson considers the lot to have VALUE.

**In order for anything to have value, it must contain three ingredients: *utility* which is the capacity of goods to create a desire for possession, *scarcity* or how scarce something is, and *desirability* which is the want for something based upon purchasing power.**

To have value, property must have \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.

To have value, property must have UTILITY, SCARCITY, and DESIRABILITY.

**North Dakota law defines true and full value as “the value determined by considering the earning or productive capacity, if any, the market value, if any, and all other matters that affect the actual value of the property to be assessed. This includes, for purposes of arriving at the true and full value of property used for agricultural purposes, farm rentals, soil capability, soil productivity, and soils analysis.”**

**For assessment purposes the assessor values each parcel individually; first, as a tract of vacant land without any improvements and then the value of any improvements and structures located on the tract. The combination of the land and the improvement or structure values equals the total value of the property. An example follows:**

True and Full Value of Land	\$10,000
True and Full Value of Improvements or Structures	<u>65,800</u>
Total True and Full Value	\$75,800

**The International Association of Assessing Officers defines market value as the “most probable price, estimated in terms of money, that a property will bring if exposed for sale on the open market for a reasonable length of time by an owner who desires to sell, but is not compelled to sell and is purchased by someone who is willing, but not compelled to buy; both parties being reasonably prudent and knowledgeable of the uses to which the property can be put.”**

**There are four forces that motivate the actions of people and affect property value: environmental (physical), economic, governmental and social forces. *Environmental (Physical)* forces include location, size, appearance and topography. *Economic* forces include population growths and shifts, new construction, income and lender attitudes and policies; *governmental* forces include municipal services, planning, zoning, and development regulations; and *social* forces include population densities, characteristics of residents, and crime.**

A high interest rate is an example of a/an \_\_\_\_\_ force affecting value.

A high interest rate is an example of an ECONOMIC force.

Two tracts are similar except for size. Because one tract is larger, it has more utility and therefore is more valuable. Size is an example of a/an \_\_\_\_\_ force.

Size is a ENVIRONMENTAL/PHYSICAL force that affects the value of property.

Property zoned for commercial development generally commands higher prices on the market because of its potential for producing income for the property owner. Zoning is an example of the \_\_\_\_\_ force which motivates the action of buyers and sellers and affects value.

Zoning of property is an example of the GOVERNMENTAL force.

## Unit B

### Highest and Best Use and Basic Principles

There are some basic economic principles that are generally accepted as having an effect on value. These principles are rarely considered by themselves, as they generally tend to complement and accompany one another. There are twelve principles to consider. The way in which a property is used plays an important role in determining its market value. When estimating market value, it is necessary to determine which of the competing uses is the highest and best use. For example, a residence is located in the path of commercial development. The assessor needs to determine whether the highest and best use of the property is for residential or commercial use.

Highest and best use is defined by I.A.A.O. as “that use which will generate the highest net return to the property over a period of time.” The highest and best use must be a legal use, a probable use and not a highly unlikely use. The highest and best use will be a complementary use rather than a competitive use. Also it must be the most profitable for the whole property, generating the highest net return over a reasonable length of time. Highest and best use is the interrelationship between the basic appraisal principles.

**Anticipation** - Value is created by anticipated benefits to be derived in the future; or simply the present worth of future benefits.

**Balance** - When applied to an individual property, maximum market value is reached when the four agents of production - labor, management, capital, and land attain a state of equilibrium. When applied to a neighborhood, maximum market value is reached when the complementary uses of land attain an equilibrium.

**Change** - Nothing stays the same; things constantly change. Market value is never constant. Property and its environment change because of economic, social, physical, and governmental forces.

**Competition** - When substantial profits are made, competition is created. Profit tends to breed competition and excess profit breeds ruinous competition.

**Conformity** - Market value is reached when a reasonable degree of economic and social similarity is expected in the near future.

**Consistent Use** - Property must be valued with a single use for the entire property. It is especially applicable to a property in transition from one use to another.

**Contribution** - The value of an agent of production (or a property component) depends upon its marginal contribution to the whole. To say it another way, cost does not necessarily equal value but can be a valid indicator of value. This principle is the basis for the adjustment process of the sales comparison approach to value.

**Increasing and Decreasing Return** - Larger and larger amounts of the agents in production will produce greater and greater net income up to a certain point at which the maximum in value will be reached.

**Progression and Regression** - Progression indicates that value of a lesser object is enhanced by association with better objects of the same type. Regression indicates that when there are dissimilar properties within the same general classification in the same area, the better property will be adversely affected by the poorer properties.

**Substitution** - A property's market value tends to be set by the cost of obtaining an equally desirable substitute property, assuming there are no costly delays. This principle serves as the basis of the three approaches to value - sales comparison, cost, and income.

**Supply and Demand** - Supply is the amount producers are willing and able to sell at a given moment and at a given or stated price. Demand is the desire for a commodity and the ability to fulfill that desire.

**Surplus Productivity** - The net income remaining after the cost of the agents of production - labor, management, and capital have been paid, in that order. The surplus productivity is the income earned by the land.

The principle of \_\_\_\_\_ guides appraisers as the basis for the sales comparison, cost, and income approaches to value.

The principle of SUBSTITUTION serves as the basis for the three approaches.

The principle which provides that market value is never constant is the principle of \_\_\_\_\_.

It is the principle of CHANGE that provides that nothing stays the same.

A new split-level house which is built in an older neighborhood is an example of the principle of \_\_\_\_\_.

This is an example of REGRESSION. The new house will have less value because of its location in the older neighborhood.

An older, smaller commercial building located in a newly developed commercial area is an example of the principle of \_\_\_\_\_.

By applying the principle of PROGRESSION, the value of the older commercial structure will be enhanced because of its association with newer commercial structures.

The principle which provides that cost does not necessarily equal value but can be an indicator of value is the principle of \_\_\_\_\_.

It is the principle of CONTRIBUTION. If a property owner spends \$3,500 to build a single attached garage but the *typical* buyer is willing to pay \$2,500 to have a single attached garage, the garage contributes \$2,500 market value, not \$3,500.

There are two fast food restaurants located on a street corner. Another fast food restaurant is being built. This is an example of the principle of \_\_\_\_\_.

When substantial profits are being made, competition is created. This is the principle of COMPETITION.

A small neighborhood shopping center is located in a single-family and multi-family area. This would be an example of the principle of \_\_\_\_\_.

The principle of BALANCE is indicated. Equilibrium is attained between commercial and residential properties. The shopping center is beneficial to the residents and the residents support the shopping center.

## Unit C

# Appraisal Process

Assessors identify, list and value all real property located within their assessment jurisdiction. This process is referred to as the assessment process. The appraisal process is one part of the assessment process. The appraisal process is a systematic and logical method of collecting, analyzing and processing data into an estimate of value which is supportable. An appraisal is an estimate or opinion of value of an adequately described property as of a specified date. Assessors appraise all real property according to its value on the assessment date, which is February 1 of each year.

An appraisal is an \_\_\_\_\_ of value as of a specified date.

An appraisal is an ESTIMATE/OPINION of value as of a specified date.

The specified appraisal date for assessment of real property is \_\_\_\_\_.

The assessment date for real property is FEBRUARY 1.

There are six steps involved in the appraisal process. Although assessors appraise a large number of properties in a short period of time, they cannot omit any steps and they must complete them in the following sequence:

1. Define the problem
2. Complete a preliminary survey and plan
3. Collect and analyze data
4. Apply the data
5. Correlate and reconcile into an indicated value
6. Determine the final estimate of value

The first step of the appraisal process, definition of the problem, involves identification of the following items:

1. Property appraised - legal description, street address and parcel number.
2. Property rights appraised - fee simple estate, life estate, fractional interest, leasehold interest. Generally, assessors determine the value of ownership in fee simple estate (ownership of all property rights).
3. Function (use) of an appraisal - taxation, financing, insurance, establishing asking price. Assessors appraise property for taxation purposes.
4. Appraisal date - point in time when the value estimate is valid. Assessors determine value of property as of February 1 each year.
5. Definition of value sought - true & full, market, insurance, or value in use. Assessors determine true & full value. For residential and commercial property, true & full value represents market value. For agricultural property, true & full value represents the agricultural (productive) value.

The first step of the appraisal process is definition of the problem. The appraiser identifies what property rights the owner possesses. The assessor estimates the value of property ownership of all rights, known as \_\_\_\_\_.

The assessor values the FEE SIMPLE ESTATE.

**The second step, preliminary survey and planning, involves examination of the character and scope of the appraisal assignment. This involves determining the following:**

- 1. Amount of time and work involved in the assignment**
- 2. Tentative estimate of the highest and best use of the property**
- 3. Most relevant approach to value (depends on the type of property)**
- 4. Type and amount of data necessary**

The second step of the appraisal process is \_\_\_\_\_.

The second step involves PRELIMINARY SURVEY AND PLANNING.

**The third step involves collecting and analyzing data. Appraisal assignments require three basic types of data - general, specific and comparative. Depending on the type of property appraised, general data includes the social, economic, governmental and environmental factors and international, national, regional, local and neighborhood trends that affect property value.**

**Specific data refers to data about the site and improvements of the subject property (property being appraised). It includes such things as size, shape, topography, zoning and drainage of the lot or tract; and square footage/cubic footage, quality of construction, condition, features, heating, plumbing, etc. of the improvement/building. It also includes off-site improvements such as water, sewer, street lights, curb and gutter.**

**Comparative data refers to information on properties similar to the subject property and information necessary to apply the methods of valuation. Data necessary to apply the cost approach includes current construction costs and depreciation schedules. Sources of cost data include cost manuals and building contractors. Data necessary to apply the sales comparison approach includes information about properties similar to the subject property that sold and terms of the sales, such as the amount paid, date of sale, gross rent and expenses. Sources of sales information include buyers and sellers, appraisers and realtors. Data necessary to apply the income approach includes economic rents, vacancy rates, collection allowances, typical expenses and rate information.**

The third step of the appraisal process is \_\_\_\_\_.

The third step is COLLECTING AND ANALYZING DATA.

The three types of data appraisers need to collect and analyze are: \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ data.

The three types of data necessary to complete an appraisal are: GENERAL, SPECIFIC, and COMPARATIVE data.

**The fourth step of the appraisal process is application of the data. This involves converting known information into an estimate of value by applying the three approaches to value. Depending on the type of property, the appraiser should determine the market value of residential and commercial property by two or more of the approaches to value. The cost approach is used to estimate the value of improved property by adding the estimated value of the land, as if vacant, to the depreciated cost of the improvements. The sales comparison approach is used to value vacant land or property improved with buildings or structures. The steps involve comparing similar properties that sold, adjusting the sales prices for differences between the sales properties and the subject property, and selecting the adjusted sales price of the most similar property as the best indicator of value for the subject property. The income approach is also used to value vacant land or improved property by capitalizing the net operating income of a property into an estimate of value.**

The fourth step of the appraisal process is: \_\_\_\_\_ of the \_\_\_\_\_.

The fourth step is APPLICATION of the DATA.

The three approaches to value available to estimate the market value of property are: \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_ approaches.

The three approaches available to value property are the SALES COMPARISON, COST, and INCOME approaches.

**The fifth step is reconciliation of values. This involves review of all gathered data to determine whether it is consistent and relevant to the appraisal problem. It also involves examination of the relevancy and reliability of each approach and the estimates. Depending on the type of property and its highest and best use, one approach will produce a reliable estimate of value. For example, the income approach is not the most relevant approach to use in valuing residential property. The appraiser should review the value estimates produced by the three approaches. If the estimates are not within close range of one another, investigate why they aren't.**

The fifth step of the appraisal process is \_\_\_\_\_ of \_\_\_\_\_.

The fifth step is RECONCILIATION of VALUES.

**The sixth and final step, involves selecting the final estimate of value. The final estimate may be a range of values, or a specific amount. However, it should be a logical and supportable conclusion. For assessment purposes, the final estimate must be a specific amount. It is inappropriate to average the value estimates determined by the approaches to value.**

The sixth step of the appraisal process is \_\_\_\_\_ the \_\_\_\_\_ of \_\_\_\_\_.

The sixth step is SELECTING the FINAL ESTIMATE of VALUE.

For assessment purposes, the final estimate of value represents a \_\_\_\_\_ .

For assessment purposes, the final estimate of value represents a SPECIFIC AMOUNT.

Unit D  
**Legal Descriptions of Property**

Assessors are responsible for identifying and accounting for all property in their assessment jurisdiction. There are three basic methods available to the assessor for identifying and describing real property: by street address, legal description and parcel identifying number. Each method provides a unique identification/description of every assessment parcel. Most assessors use all three methods, whenever available.

The three basic methods of identifying and describing real property are: \_\_\_\_\_,  
\_\_\_\_\_, and \_\_\_\_\_.

The three basic methods available are: STREET ADDRESS, LEGAL DESCRIPTION, and PARCEL IDENTIFYING NUMBER.

It is important that each property has a description that is \_\_\_\_\_ to that property.

Each property must have a UNIQUE description.

One of the methods, the street address, is a specific identification number assigned to a parcel depending on its location on a map. The assessor may locate a specific property by beginning with a map of the area (city, township, subdivision or neighborhood). The assessor then finds the correct street or road on which the property is located. The assessor needs to know on what side of the street/road the even and odd numbered properties are located as well as the names of intersecting streets and roads. For an address of 5608 35th Avenue, the assessor would find that address between the 5600 and 5700 blocks on 35th Avenue on the side of the block with even-numbered addresses.

The description method that gives a specific identity to a parcel depending on its location on a map is the method known as \_\_\_\_\_.

The method of property identification described is the STREET ADDRESS.

Another method, the parcel identification number, refers to a specific number unique to each property. Generally, the number refers to a specific addition/subdivision, block, and parcel. Let's look at an example: 001-140-030. The 001 refers to a specific addition, say Original Township. The second set of numbers represents block 140 within Original Township. The third set of numbers identifies a specific parcel within block 140 of Original Township. The third set of numbers is usually assigned in sequential order based upon the numbering of the lots within the block. This method is used on rural property descriptions also.

The third method of identifying property is legal descriptions. There are three basic types: the rectangular survey system, metes and bounds, and lots and blocks. The rectangular survey is used to describe most of the land west of the Mississippi River. Land described by the rectangular survey system may be subdivided and described by metes and bounds, and lots and blocks.

The basic unit of the rectangular survey system is the township, which is six miles square and contains approximately 23,040 acres. A township contains 36 sections. The section numbers begin with section 1 in the northeast corner and end with section 36 in the southeast corner of the township. All townships contain sections numbered the same way. Note the numbering of the sections in the township below.

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Each section may be divided into four quarter sections. State law provides that, for assessment purposes, the size of a parcel of land cannot exceed one quarter section. Quarter sections may be further subdivided into halves and quarter sections. The legal descriptions of those parcels begin with the specific location and go to the general location. For example, to locate the  $N\frac{1}{2}NW\frac{1}{4}$  of section 1 on the township map, the best way to locate a parcel on a township map is to begin with the largest description (the section) and break the parcel down by reading the description backwards from general to specific. Begin with section 1. On the township map, it is the section in the northeast corner. Next, divide the section into four quarters and locate the  $NW\frac{1}{4}$  of section 1; and finally, the  $N\frac{1}{2}$  of the  $NW\frac{1}{4}$  of section 1. The sketch below shows the  $N\frac{1}{2}NW\frac{1}{4}$  of section 1.

Section 1

NW	NE
SW	SE

Let's try another example. Locate the  $E\frac{1}{2}NW\frac{1}{4}SE\frac{1}{4}$  of section 34. Following the description backwards, first find section 34 on the township map. Locate the  $SE\frac{1}{4}$  of section 34. Within the  $SE\frac{1}{4}$ , locate the  $NW\frac{1}{4}$  of that quarter and finally the  $E\frac{1}{2}$  of the  $NW\frac{1}{4}$  of the  $SE\frac{1}{4}$ . Below is a sketch of the  $E\frac{1}{2}NW\frac{1}{4}SE\frac{1}{4}$  of section 34.

Section 34

NW	NE
SW	SE

To calculate acreage of descriptions by the rectangular survey system, we need to know some basic acreages. The basic unit is the section. A section contains 640 acres more or less. By dividing 640 acres (one section) by four (quarter sections), a quarter section contains 160 acres, more or less. One-half of a quarter section contains 80 acres ( $160 \div 2$  or  $160 \times 50\%$ ) and one-fourth of a quarter section contains approximately 40 acres. There are 36 sections in a township. Each section contains 640 acres. To calculate the acreage in a township, multiply 36 sections by 640 acres. The total number of acres in a township is 23,040, more or less.

Each section may be divided into four quarter sections. State law provides that, for assessment purposes, the size of a parcel of land cannot exceed one quarter section. Quarter sections may be further subdivided. Parcels are legally described by beginning with the specific location and going to the general location. For example, the  $N\frac{1}{2}NW\frac{1}{4}$  of section 1. To locate the  $N\frac{1}{2}$  of the  $NW\frac{1}{4}$  of section 1, begin with the most general location - section 1. Section one is located in the northeast corner of the township. Next, divide section 1 into four quarter sections and locate the  $NW\frac{1}{4}$  of section 1. The final step involves dividing the  $NW\frac{1}{4}$  into two halves - north and south. The north one-half part of the  $NW\frac{1}{4}$  of section 1 is the specific location of the parcel.

The number of acres in a quarter section of land is \_\_\_\_\_ acres.

There are 160 acres in a quarter section of land.

A township consists of \_\_\_\_\_ sections. Section 1 is located in the \_\_\_\_\_ corner of a township.

There are 36 sections in a township and section 1 is located in the NORTHEAST corner of a township.

For assessment purposes, a parcel located outside of an incorporated city can be described in subdivisions no larger than \_\_\_\_\_.

For assessment purposes, the maximum size a parcel located outside of an incorporated city may be described is QUARTER SECTIONS.

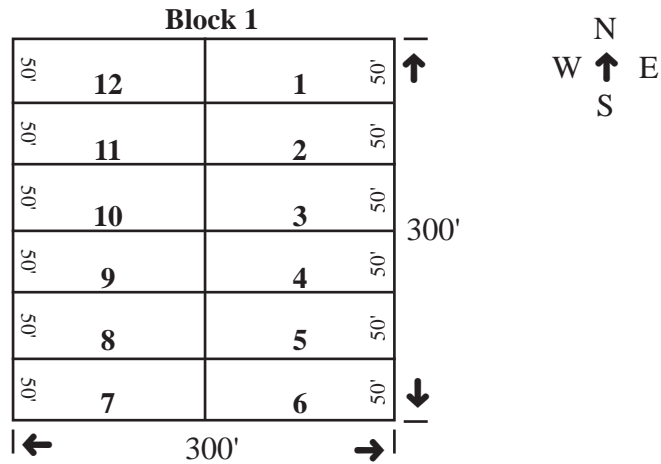
Calculate the number of acres in the  $E\frac{1}{2}NW\frac{1}{4}SE\frac{1}{4}$ . \_\_\_\_\_ acres.

There are 20 acres in the  $E\frac{1}{2}NW\frac{1}{4}SE\frac{1}{4}$ .

**Another type of legal description is called metes and bounds. It identifies a parcel by delineating its boundaries in a series of directions and distances from an established point of beginning. Metes means measurements; for example, feet, inches, yards. Bounds means boundaries, including features of terrain and compass bearings and distances. These types of descriptions are often used to describe irregular or small parcels within a section, quarter section or block. An example of a metes and bounds description is as follows:**

**Beginning at the NE corner of  $SW\frac{1}{4}$ , thence west 370' along the north line of  $SW\frac{1}{4}$ ; then south perpendicular to the north line a distance of 180 feet; thence east parallel to the north line of  $SW\frac{1}{4}$  a distance of 370'; thence north 180 feet to the point of beginning. Tract contains 1.53 acres more or less.**

The third type of legal description is the lot and block method. As the need for smaller parcels emerged, lands described by metes and bounds and the rectangular survey system were subdivided into blocks and further subdivided into lots. Each block is assigned a unique number as well as the lots within the block. The lots are numbered sequentially. For example, the addition, Original Plat, was divided into 40 blocks. Block 1 contains 12 lots. Locate Lot 7 of Block 1.

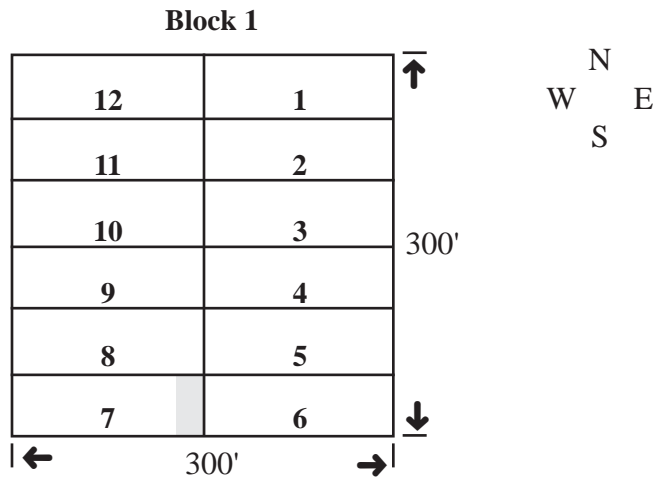


Lots may be further subdivided and described legally. To explain this, let's use the example above. If the owner of lot 7 sells the east 20' to the owner of lot 8, the two parcels would then be described as follows:

Lot 7 less the east 20'; Block 1; Original Plat (lot size: 50' x 130')

Lot 8 and the east 20' of Lot 7; Block 1; Original Plat (lot size: 50' x 150' plus 20' x 50')

See the sketch which follows.



**The symbol  $\lrcorner$  indicates that the legal description includes the parcels joined by that symbol and have the same owner.**

The type of legal description used primarily in incorporated cities is \_\_\_\_\_.

The type of legal description used primarily in incorporated cities is the LOT AND BLOCK.

Unit E  
**Property Inspection and Property Records**

As assessor, you are responsible for taking inventory and determining the value of all real property in the assessment district. You must determine whether the property is real or personal property, whether it is taxable or exempt from taxation, and the property's value as of the assessment date, February 1. In order to do this, you need to make a personal inspection of all parcels, including the structures and buildings, exterior and interior. The quality and quantity of information affects not only the reliability of the three approaches to value - sales comparison, cost and income but also the equity of assessments. Properties and their environment change continuously. You must review the properties and property records each year to determine whether the information on the property records completely describes the properties as they are on February 1 each year. It is important to have a property record for every parcel in the assessment district.

Assessors inventory and determine the value of real property as of \_\_\_\_\_.  
Date

The assessment date for real property is FEBRUARY 1 each year.

The quality and quantity of information obtained about real property affects the reliability of the three approaches to value. The three approaches available to value real property are:  
\_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.

The three approaches to value are: SALES COMPARISON, COST, and INCOME

Assessors need to know everything about the property and the information must be accurate in order to apply the three approaches to value. The best method of obtaining that information requires making a property inspection. The purpose of a property inspection is to identify the actual use of the property and describe physical characteristics and features that affect the property's value. The assessor needs to know the following:

- Characteristics of the site, buildings and structures (e.g., location, topography, size, number of stories, rooms, fixtures, etc.)
- Actual use of land and buildings (useful to determine highest & best use and taxable status)
- Quality of construction materials and condition of improvements
- Location of property relative to markets, services, etc.
- Off-site improvements available (e.g., electricity, natural gas, telephone, streets, roads)
- Features (positive and negative) that affect the value of the property

Supplies necessary for property inspection include the property record, a 100' measuring tape, clipboard, pencils and paper. It is beneficial to have pictures of improved properties so a camera is needed also. A laptop or notebook computer is useful.

**When inspecting land, the assessor needs to observe and determine what off-site improvements are available to the site. Examples of those improvements are: water, electricity, natural gas, telephone, cable TV, sewage disposal, streets, curbs, gutters, roads, etc. The assessor also needs to observe the physical characteristics of the site such as: size and shape, topography, soil condition, landscaping and location. Having observed the physical characteristics of the site, the assessor needs to determine the highest and best use of the property. To review the concept of highest and best use, refer to Unit B.**

Some off-site improvements are available to parcels of land. Name three. \_\_\_\_\_,  
\_\_\_\_\_, and \_\_\_\_\_.

Off-site improvements to land include such things as WATER, ELECTRICITY, NATURAL GAS, CABLE TV, TELEPHONE, STREETS, CURBS, GUTTERS, ROADS, ETC.

**The assessor also needs to make a physical inspection of improvements (buildings and structures) in order to collect data to estimate the value using any one of the three approaches to value. For the sales comparison approach, you need to know the subject property in order to find similar properties that sold for comparison purposes. To calculate the replacement cost new and the amount of depreciation in the cost approach, the assessor needs accurate information regarding size, shape, quality, condition and physical characteristics of the improvements. The assessor needs to know specific information about the improvements in order to determine income comparisons, typical operating and maintenance expenses, and appropriate capitalization rates.**

The assessor needs to physically inspect all improvements (buildings and structures) in order to properly apply the \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ approaches to value.

A physical inspection of improvements is necessary to apply the SALES COMPARISON, COST, and INCOME approaches to value.

**For the physical inspection of the improvements, the assessor begins with the exterior. The assessor determines how the improvements conform to its surroundings, how it's presently used, the highest and best use of the improvements and the general condition of the improvements. On the exterior, measure the improvement, check the style, quality, construction type and maintenance, condition of the foundation, exterior wall covering and openings (windows and doors), living area overhangs, roof structure and covering, overhangs, building additions and out buildings (e.g., porches, patios, balconies, decks, storage buildings and garages), and yard improvements (paving, fences, swimming pools, etc.). On the interior, check the design, functional utility, quality of construction and workmanship, mechanical systems (heating, cooling, electrical, plumbing and waste disposal), types and number of rooms, maintenance condition, insulation and energy efficient items, wall coverings, floor coverings, and basement and attic finish.**

List four items assessors consider when inspecting the exterior of an improvement.

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.

Items to inspect on the exterior of an improvement are: SIZE, STYLE, QUALITY, CONSTRUCTION TYPE & MAINTENANCE CONDITION OF THE FOUNDATION, WALL COVERING, WALL OPENINGS, LIVING AREA OVERHANGS, ROOF STRUCTURE & COVERING and YARD IMPROVEMENTS.

List four items to inspect on the interior of an improvement \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.

Items to inspect on the interior of an improvement are: DESIGN, FUNCTIONAL UTILITY, QUALITY OF CONSTRUCTION & WORKMAN-SHIP, MECHANICAL SYSTEMS, ROOM TYPES & NUMBER, MAINTENANCE CONDITION, INSULATION & ENERGY EFFICIENT ITEMS, WALL COVERINGS, AND SIMILAR FEATURES OF BUILDING ADDITIONS and OUT BUILDINGS.

**When measuring size of improvements, measure the outside dimensions. Begin measuring at one corner and continue around the entire improvement, noting the length of each wall and making sure the measurements close the building, and the distance across one side of an improvement equals the distance across the opposite side. For example, the distance across the front of an improvement should be the same as the distance across the back of an improvement. Measure not only the distance around all exterior walls but also the length and depth of overhangs and wall height (industrial-use buildings only).**

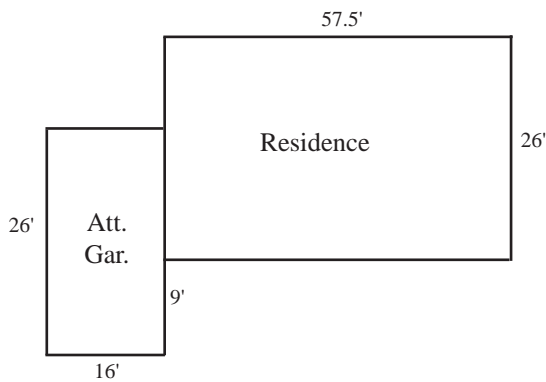
**The assessor may round measurements either to the nearest one-fourth foot or one-half foot. For example, a wall is 57 and one-half feet in length. It may be written as 57½' or 57.5' (6 inches = 5/10 of one foot or 0.5'). A wall length of 57 feet 3 inches may be written as 57'3", 57¼' or 57.25' (3 inches = ¼ of one foot or 0.25 of one foot). When rounding measurements, it's important to round consistently for all properties (either to the nearest 0.5' or ½' OR 0.25' or ¼').**

To determine the size of an improvement, always measure the \_\_\_\_\_ of an improvement.

To determine size of an improvement, assessors must measure the EXTERIOR/OUTSIDE of an improvement.

After you obtain the measurements of an improvement, draw a sketch of the building on the property record/card. On the sketch, list the measurement of each exterior wall on the exterior side of the wall. You may then calculate the building living area. The formula used to calculate building area is  $A = L \times W$  ( $A = \text{Area}$ ,  $L = \text{Length}$ ,  $W = \text{Width}$ ). For example, a residence consists of a basic rectangle, 57.5' feet in length and 26 feet in width. To calculate the building area, multiply 57.5' by 26'. The area is 1,495 square feet. Do not include attached garage measurements as living area. Calculate the area of the garage separately. If a building has different angles, divide the building area into different sections, calculate the square footage for each section and total the square footage of all of the sections. See the two examples that follow.

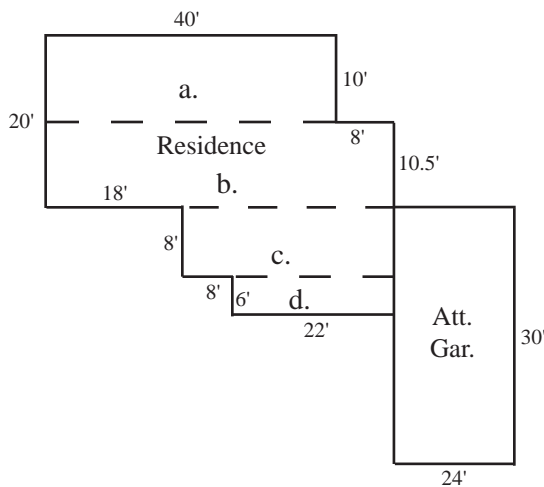
Example 1 (not drawn to scale)



Residence:  
 $57.5' \times 26' = 1,495 \text{ sq. ft.}$

Garage:  
 $16' \times 26' = 416 \text{ sq. ft.}$

Example 2 (not drawn to scale)



Residence:

a.	$40' \times 10' = 400 \text{ sq. ft.}$
b.	$48' \times 10.5' = 504 \text{ sq. ft.}$
c.	$30' \times 8' = 240 \text{ sq. ft.}$
d.	$22' \times 6' = 132 \text{ sq. ft.}$
Total	<u>1,276 sq. ft.</u>

Garage:  
 $24' \times 30' = 720 \text{ sq. ft.}$

If the improvement is an industrial building (e.g., warehouse) so that the height of the building is important, you may determine what the cubic volume is by multiplying the length by the width and the height of the building or  $L \times W \times H$ . For example, the length and width of the building are 72 feet and 50 feet. You measure the height of the wall and find it to be 18 feet. To calculate the cubic volume, simply multiply 72' by 50' and 18'. The cubic volume of the building is 64,800 cubic feet.

The formula for calculating the square footage area of an improvement is \_\_\_\_\_.

To calculate area of an improvement, use the formula LENGTH x WIDTH (L x W).

Calculate the area of an improvement 67 feet by 42 feet.

Using the formula:  $A = L \times W$ ,  $67' \times 42' = \underline{2,814 \text{ SQUARE FEET}}$ .

Calculate the area of an improvement 120' by 85' by 20' high.

Using the formula:  $V = L \times W \times H$ ,  $120' \times 85' \times 20' = \underline{204,000 \text{ CUBIC FEET}}$ .

**You obtained all the information about the property that you need in order to estimate its value. What do you do with it? That's what the property record is for. There should be a separate property record for every assessment parcel. There are four types of property records available to the assessor: residential, commercial, grain elevator and agricultural land. Use the residential property record for land on which residential improvements exist or may exist in the future. Use the commercial property record for land and improvements used or intended for use as retail, office, industrial, or other commercial-type use. Use the grain elevator card for property on which a commercial grain elevator is located. A grain elevator owned by an individual who farms is not exempt from taxation. Use the agricultural land property record for vacant land classified and used as agricultural land.**

The four types of property records available for assessors to use to record property information and maintain valuation information are \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

Four types of property records are: COMMERCIAL, RESIDENTIAL, AGRICULTURAL, and GRAIN ELEVATOR.

**The property record is the assessor's worksheet. It is designed for use as a checklist of property characteristics and it contains pertinent property information. The property record contains four basic types of information: legal description, ownership, property characteristics and valuation summary. Each property has a unique legal description, address and parcel number and this information is listed on the front of the property record. Information regarding the tract of land is listed in the lower part of the front of the record. The building sketch and characteristics are listed on the back of the residential and commercial property records and inside of the elevator card.**

**The property record also contains the assessment information consisting of the true and full value for the land, improvements and total value. The property record provides a checklist for the assessor to identify the physical characteristics and factors that affect the value of the property.**

**That is the third basic type of information listed on the property record. The fourth basic type of information contained on the property record is the assessment summary. It consists of the year of assessment and the assessment for the land, improvements and total value. There is also space for listing the zoning (if any), sketch of improvements, remarks and a photograph, income and expenses of income-producing property and identification of soils for agricultural land.**

**Most information obtained by assessors is public information. However, certain information must be kept confidential. Any sales information sent directly to the State Board of Equalization [N.D.C.C. § 11-18-02.2(7)] and any income and expense information obtained from commercial property owners and occupants (N.D.C.C. § 57-02-11.2) must be used only by assessors for determining true and full value. Income and medical expense information listed on homestead credit applications is also confidential. Income and expense information may only be disclosed if a specific law allows it, by judicial order, or if the owner or occupant appeals the assessment. If you question whether certain sales, income or expense information may be disclosed to the public, contact your county director of tax equalization.**

The property record contains four basic types of information about the property which are:

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_,  
\_\_\_\_\_, and \_\_\_\_\_.

The four basic types of property information recorded on the property record are:  
OWNERSHIP, LEGAL DESCRIPTION, PROPERTY CHARACTERISTICS, and  
ASSESSMENT SUMMARY.

**Unit F**  
**Neighborhood Analysis**

A property is an integral part of the neighborhood; therefore, it is necessary to examine the neighborhood surrounding the property. The term "neighborhood" is defined as the area of complimentary land uses in which all properties are similarly influenced by the one or more of the four forces affecting property value: environmental (physical), governmental, social, and economic forces. Generally the properties in a neighborhood are similar and the area will contain complimentary land uses.

There are four general classes of neighborhoods: residential, commercial, industrial, and rural. Residential neighborhoods consist of dwelling units (one to multi-family) and properties that provide services to the neighborhood such as schools, churches, parks, and commercial facilities. Commercial neighborhoods consist of retail, offices, etc. Industrial neighborhoods consist of manufacturing, warehouses, etc. Rural neighborhoods consist of areas where crops are raised or animals grazed.

There are three types of boundaries: natural, political, and man-made. Natural boundaries are those provided by nature and include rivers, lakes, hills, ravines, and undeveloped land areas. Political boundaries are those established for governmental purposes such as city limits, school districts, zoning districts, and assessment districts. Man-made boundaries are those established by man. They include streets, highways, railroad tracks, and major utility rights-of-way.

A state highway goes through town, separating the business district from the residential area. This is an example of a \_\_\_\_\_ boundary.

The highway is a MAN-MADE boundary.

You are appraising a single-family residence located in a neighborhood which you determined is residential. The neighborhood is surrounded on the north by a river, on the south by a major street, on the east by a city park, and on the west by vacant land. What type of boundaries surround this neighborhood?

North \_\_\_\_\_  
South \_\_\_\_\_  
East \_\_\_\_\_  
West \_\_\_\_\_

The boundaries of this neighborhood are:

North NATURAL  
South MAN-MADE  
East POLITICAL  
West NATURAL

The same four forces which affect value also affect a neighborhood. Do you remember what these forces are? \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

If you stated that the four forces are ENVIRONMENTAL/PHYSICAL, SOCIAL, GOVERNMENTAL, and ECONOMIC, you are correct.

**Examples of physical forces that affect neighborhoods are: location, size, appearance, and topography. Economic forces include population growths and shifts, new construction, and income and lender attitudes and policies. Governmental forces affecting neighborhoods are municipal services, planning, zoning, and developmental regulations. Population densities, crime, and characteristics of the residents are social forces affecting neighborhoods.**

**These forces interact with one another. Within the environmental/physical, social, governmental, and economic forces there are factors such as good schools, churches, and recreational facilities that have a positive affect on the neighborhood and improve the value of property. The assessor must consider not only positive factors but also negative factors that affect the value of the property.**

A small, deteriorated commercial neighborhood is one that is affected by the \_\_\_\_\_ force.

If the neighborhood is small in size and deteriorated in appearance, it is affected by the ENVIRONMENTAL/PHYSICAL force.

A single-family residential neighborhood which consists of small families and has a low crime rate is affected by the \_\_\_\_\_ force.

Family size and density and crime are examples of the SOCIAL force.

**The principle of change applies to neighborhoods as they are always changing. Because of this, neighborhoods typically have a life cycle consisting of four stages:**

- growth** - a time of construction and development
- stability** - there is an equal balance between supply and demand
- decline** - a time when there is a diminishing demand or desirability
- revitalization** - a declining neighborhood becomes economically desirable again and experiences renewal, reorganization, rebuilding, or restoration

**Some neighborhoods remain stable for a long time. Decline may occur very slowly and may be interrupted by an increase in demand or a change in use.**

A neighborhood is in the stage of \_\_\_\_\_ when there is little demand for property and the properties become less desirable.

A neighborhood is in the stage of DECLINE at a time when the properties become less desirable and there is less demand for those properties.

When the supply and demand for property are about equal and construction and development have basically stopped, a neighborhood is in the state of \_\_\_\_\_.

A neighborhood is in the stage of STABILITY when filled with improved properties and the supply and demand for properties is about equal.

Unit G  
Cost Approach To Value

The primary use of the cost approach is to obtain a value estimate that may be compared with value estimates determined by the sales comparison and income approaches to value. Costs may be obtained for all improvements whether or not a market exists or the property produces income. For example, governmental buildings, schools, hospitals and churches are considered special-purpose property that rarely sell or produce income. Single-family residential properties are rarely used for income purposes; however, there usually is a demand for those properties in the market. Cost does not necessarily equal value but can be a valid indicator of value. The cost approach usually provides a more accurate estimate of market value when the improvement is new and available for use at its highest and best use. Costs should represent typical costs in the local market and should be current as of the assessment date.

The cost approach is based on the principle of substitution which states that "a prudent or wise person would not pay more to buy a property than it would cost to construct a new and equally desirable substitute property, assuming no costly delay is encountered in making the substitution."

Cost does not necessarily equal value but could be a valid \_\_\_\_\_ of value.

Cost may be a valid INDICATOR of value.

The cost approach is based upon the principle of \_\_\_\_\_.

The principle of SUBSTITUTION is basic to the cost approach.

In order to apply the cost approach, it is important to inspect and adequately describe the improvements. You must observe the quality, condition and adequacy of each component and also the entire improvement. A builder or developer includes all expenses incurred in the development of an improvement. Therefore, if cost is to represent value, all appropriate costs must be included in the estimate.

Costs involved in producing a building or improvement may be separated into direct and indirect costs. Direct costs include items directly involved in construction such as labor, material, supervision, equipment rental, electrical and water services, and installation of parts. Indirect costs are those costs involved in construction such as: architectural and engineering fees, building permits, title and legal expenses, insurance during construction, real estate and other taxes during construction, overhead, profit, advertising, and sales expense.

Labor, supervision and materials are examples of \_\_\_\_\_ costs.

Labor, supervision and materials are examples of DIRECT costs.

Architectural and engineering fees, building permits and profit are examples of \_\_\_\_\_ costs.

Architectural and engineering fees, building permits and profit are INDIRECT costs.

**Reproduction cost is the cost of producing an exact replica of a building using the same or very similar materials, design and workmanship. Replacement cost is the cost of producing a building having the same utility but using modern materials, design and workmanship. Assessors generally use techniques that produce replacement cost estimates. Detailed techniques that account for unique features of a building tend to produce reproduction cost estimates. Reproduction cost new and replacement cost new may both be abbreviated using the initials "RCN;" however, you need to know which cost you are working with.**

To determine the current cost of constructing a residence similar to a two-story residence built in 1893, with 10' high ceilings and only one bathroom, but using modern materials and design you would calculate \_\_\_\_\_ cost new.

Calculate REPLACEMENT cost because you want to determine the current cost of constructing a residence similar in function and utility as the one being appraised but eliminate the cost of the additional wall height (typical new residential properties have 8' high ceilings) and include the cost of two bathrooms (new residences typically have two bathrooms).

The current cost of producing a building exactly as it exists, including any obsolescence it may suffer from, is referred to as \_\_\_\_\_ cost.

REPRODUCTION cost is the current cost of constructing a building exactly as it exists.

**There are five steps involved in the cost approach:**

- 1. Estimate the land (site) value as if vacant and available for development to its highest and best use.**
- 2. Estimate the total cost new of the improvements from market analysis as of the appraisal date.**
- 3. Estimate the total amount of accrued depreciation of the improvements.**
- 4. Subtract the total amount of accrued depreciation from the total cost new to arrive at the depreciated cost of improvements.**
- 5. Add the site value to the depreciated cost new of the improvements.**

Let's take one step at a time.

**Step 1. Estimate the value of the site as if vacant and available for its highest and best use.**

There are six methods available to estimate the value of vacant land:

1. Sales comparison
2. Allocation
3. Abstraction
4. Anticipated use
5. Capitalization of ground rent
6. Land residual capitalization

The most reliable and preferred method is the sales comparison method. The method involves comparing the subject property, available for its highest and best use, with similar vacant parcels that sold. Based on how buyers in the area purchase vacant land, develop an appropriate unit of comparison, such as sale price per square foot, front foot, acre, or units buildable. Agricultural land generally sells according to the number of acres. Commercial land located in the main business district typically sells according to a front foot basis. Property used for industrial purposes generally sells on a square foot or an acre basis. Residential land generally sells according to a square foot or units buildable basis; however, whenever a lot faces a body of water or has an extraordinary view at the front, typical buyers will determine how much they are willing to pay based on the amount of frontage the parcel has. Use the same unit of comparison to analyze sales of similar property. For example, if you're comparing sales of vacant lots in a residential area and the typical unit of comparison used by buyers is sale price per square foot, use square footage to compare other sale properties to the subject property.

You can develop a unit of comparison by dividing the sale price by the number of acres or footage. For example, you are appraising a 7,900 sq. ft. residential parcel and have found three sales of similar parcels. Sale #1, containing 7,500 square feet, recently sold for \$15,000. Sale #2, contains 8,000 square feet and recently sold for \$14,800. Sale #3 contains 7,850 square feet and recently sold for \$15,100. Because residential lots tend to sell according to the amount of area available, use the square foot unit of comparison. To determine, simply divide the sale price by the square footage.

Sale #1	$\$15,000 \div 7,500 \text{ sq. ft.} = \$2.00 \text{ per sq. ft.}$
Sale #2	$\$14,800 \div 8,000 \text{ sq. ft.} = \$1.85 \text{ per sq. ft.}$
Sale #3	$\$15,100 \div 7,850 \text{ sq. ft.} = \$1.92 \text{ per sq. ft.}$

The subject property contains 7,900 sq. ft. The buyers recognized that as size increases, the unit price decreases. Therefore, using \$1.90 per sq. ft. as the unit price, the subject parcel would most likely sell for \$15,010 or \$15,000.

The unit of comparison used most often to compare agricultural land is the sale price divided by the number of \_\_\_\_\_.

Agricultural land is usually compared on the basis of ACREAGE (Sale price  $\div$  acreage).

Commercial property located in a downtown area is typically compared by a potential buyer in terms of \_\_\_\_\_ footage.

Commercial property located downtown is usually compared on a FRONT footage basis.

A three-acre parcel of land recently sold for \$44,430. Determine the unit price on an acreage basis and square footage basis.

The parcel sold for \$14,810 per acre.  $\$44,430$  (sale price)  $\div$  3 acres

In order to determine the unit price on a square foot basis you first need to calculate the number of square feet in 3 acres. There are 43,560 square feet in one acre; so,  $43,560 \times 3$  acres = 130,680 square feet. Next, divide the sale price (\$44,430) by 130,680 sq. ft. The unit price on a square foot basis is \$0.34 per square foot.

**The sales comparison method processes the sales information into an estimate of value by adjusting the sales prices for differences between the properties that sold and the subject property. Differences between properties might include market conditions, size, shape, topography, location, etc. The amount of adjustment reflects what an individual in the market would be willing to pay in order to have the benefit (e.g., larger size, better location, etc.) or the amount an individual would deduct for the lack of certain features. The adjusted sale price indicates the value of the subject property determined by the sales comparison method. The basic formula for the sales comparison method is: Sale price of property plus or minus adjustments for differences between the sale property and the subject property.**

**The allocation method of land valuation may be helpful when there are no vacant land sales available for comparison. A portion of the total property value is assigned to the subject site based on analysis of sales of improved properties. The relationship of land value to improvement property value is expressed as a ratio and is determined by consideration of the following:**

- 1. Site values in previous years**
- 2. Land-to-improvement ratios in similar neighborhoods**
- 3. Analysis of new construction on similarly classified sites**

**For example, based upon analysis of the above items, sites in the subject's single-family neighborhood represent 20 percent (1/5) of the total property value or an allocation of 1:4 (1 part land, 4 parts improvement/building = 5 parts total). If the total value of the subject property is \$50,000, the land value must be \$10,000 ( $\$50,000 \times 0.20$  (20%).**

Sales of similar property within a small community indicate the land to building ratio of improved sites is 1:5. You are appraising a property that has a building on it and recently sold for \$85,000. Determine the value of the site by the allocation method.

One part land value plus 5 parts building value equals a total of six parts. One part equals  $1/6$  ( $1 \div 6$ ) or 0.167 or 16.7%.  $\$85,000 \times 0.167$  (16.7%) = \$14,195 (\$14,200 rounded).

The abstraction method of land valuation uses elements of the cost approach. It involves subtraction of the depreciated replacement cost of improvements from the sale price of an improved property. The remaining value represents the land value. For example:

Total sale price of property (land & buildings)		\$ 85,000
Replacement cost new of building(s)	\$ 123,000	
Accrued depreciation (all types)	<u>- 45,000</u>	
Estimated value of improvements		<u>- 78,000</u>
Indicated site value (\$85,000 - \$78,000)		\$ 7,000

The anticipated use or development method is used primarily to value land in transition from agricultural use to residential or commercial use. The assessor hypothetically develops the site into lots ready for sale. Total development costs are subtracted from the projected sales prices of the developed lots to indicate the value of the land in its undeveloped state.

For example:

Projected sale price of tract (10 sites x \$10,000 per site)		\$100,000
Less:		
Site development: streets, sewers, water service, site preparation	\$ 35,000	
Overhead and sales expense (typical)	12,000	
Profit, interest and entrepreneurial profit	<u>18,000</u>	
Sum of development costs		- 65,000
Indicated value of undeveloped land		\$ 35,000

The capitalization of ground rent method utilizes the income approach to value when there are no sales data available and the site produces an income such as for a parking lot. The income to the site can be converted into an estimate of value by capitalizing the income. An example follows:

$$\frac{\text{NOI}}{\$15,000} \div \frac{\text{Capitalization Rate}}{0.08 (8\%)} = \frac{\text{Capitalized Value}}{\$187,500}$$

The land residual capitalization method is applicable to income-producing properties for which a well supported improvement value can be determined. The annual net operating income attributable to the improvement is deducted from the total annual income. The remaining income attributable to the land is capitalized into the land value. Below is an example of the land residual capitalization method.

Annual net operating income	\$ 10,000	
Improvement value	60,000	
Land capitalization rate	10%	
Improvement capitalization rate	12%	
Net operating income	\$ 10,000	
Less income to improvement (\$60,000 x 12%)	<u>- 7,200</u>	
Income attributable to the land	\$ 2,800	
Indicated land value (\$2,800 ÷ 10%)		\$ 28,000

**Step 2. (cost approach) Estimate replacement/reproduction cost new of the improvement.**

**In order to calculate the cost new of an improvement consider all direct and indirect costs involved in construction. Observe the quality, quantity, condition, and adequacy of each component. Building characteristics that influence cost estimates include:**

<b>Design type</b>	- commercial, residential and industrial
<b>Construction quality</b>	- ranked according to types of materials used and the quality
<b>Workmanship</b>	- quality; examples: excellent, good, average, fair, low
<b>Class of construction</b>	- structural characteristics, e.g., frame, walls, floors, roof structure, and degree of fire-proofing
<b>Size of improvements</b>	- smaller sizes usually have higher costs than larger structures (unit costs decrease as area or volume increases)
<b>Building shape</b>	- irregular shapes cause an increase in costs

**There are four methods available to calculate the cost of improvements.**

- 1. Comparative unit: easiest, fastest method used most by assessors. Costs are derived from cost services or analysis of benchmark structures. Costs include all direct and indirect costs and are usually expressed in square footage or cubic footage. For example, a two-story office building has 3,500 sq. ft. of area and has a Replacement Cost New (RCN) of \$275,000. To calculate the unit of comparison for this building, divide the RCN by its square footage.  
$$\$275,000 \div 3,500 \text{ sq. ft.} = \$78.57 \text{ cost per sq. ft.}$$
$$\$78.57 \text{ per sq. ft. is the unit of comparison for a structure of this type.}$$**

**Comparative unit costs are available from published cost manuals, such as Marshall Valuation Service and Vanguard Appraisals, Inc. Real Property Appraisal Manual. The cost schedules are arranged according to type and quality of construction, size and perhaps shape. This method produces typical costs and produces reliable replacement cost new estimates to use for assessing.**

Calculate comparative unit costs for a warehouse 50' x 100' x 14' high. RCN is \$225,000.

We can calculate two comparative unit costs: square footage and cubic footage.

$$50' \times 100' = 5,000 \text{ sq. ft.} \times 14' \text{ (height)} = 70,000 \text{ cu. ft.}$$

$$\$225,000 \text{ RCN} \div 5,000 \text{ sq. ft.} = \underline{\$45.00 \text{ per sq. ft.}}$$

$$\$225,000 \text{ RCN} \div 70,000 \text{ cu. ft.} = \underline{\$3.21 \text{ per cu. ft.}}$$

A simplified example of applying comparative unit costs to calculate an estimate of replacement cost new follows.

The subject property is an average quality, 1-story residence with 1,600 square feet on the main floor. It has a full basement - 100% finished, 8 plumbing fixtures plus a rough-in, and a 400 sq. ft. concrete patio.

Basic structure:	1,600 sq. ft. x \$ 81.76/sq. ft. = \$ 130,816
Finished basement:	1,600 sq. ft. x \$ 5.00 sq. ft. = \$ 8,000
Plumbing:	(in base cost)
Patio:	400 sq. ft. x \$ 4.77/sq. ft. <u>\$ 1,908</u>
Total RCN of structure and patio	\$ 140,724

Because the assessment date is February 1 each year, the assessor needs to determine the value of property as of that date. If a building is under construction on February 1, the assessor needs to place a value on the partially constructed building. In the example above, the assessor determines the building is 30 percent complete on Feb. 1. Therefore, 30% of the completed cost new of \$140,724 is \$42,217. The market value should reflect a building at 30% completion.

- 2. Unit-in-place:** Combines all direct and some indirect costs of individual construction components, as installed, into a single unit-in-place figure for each component. That cost, multiplied by the area or length being priced, produces a total cost estimate for that portion. Every building component is calculated that way and added together to produce the total building cost. To estimate the total costs for a component, multiply the unit cost by the number of units in a building. For example:

Unit price for carpet and pad installed in a fair quality residence containing 1,200 sq. ft. is \$4.57 per sq. ft.  $1,200 \times \$4.57 = \$5,484$  (total cost for carpet & pad)

The total of all unit costs of a building reflects the total replacement cost new of the building.

- 3. Historical cost:** Used to calculate RCN of special-purpose buildings such as governmental buildings and large industrial buildings when no comparable cost data is available. Requires knowledge of the original cost and date of construction and the use of an appropriate factor to calculate the current reproduction cost new of the building. For example:

A large manufacturing building was built 14 years ago for \$2,950,000. Construction costs have since increased 68.9 percent. The current reproduction cost is determined by multiplying \$2,950,000 by the historical factor 1.689 or:  $\$2,950,000 \times 1.689 = \$4,982,550$  (\$4,982,500 rounded).

- 4. Quantity survey:** Complete itemization of all direct and indirect construction costs. It is very detailed and time-consuming involving a complete itemization of all construction, labor and material costs. It is rarely used by assessors except for valuation appeals by abatement.

**Step 3. Estimate the amount of accrued depreciation.**

As improvements age, they may suffer from depreciation which tends to lessen the value of the improvements. Older improvements/structures lose value compared to newer structures because potential buyers perceive less utility in the older structures. The total loss in value from the cost new estimate represents accrued depreciation. Therefore, the true measure of depreciation is the effect on the marketability of the property and sales prices.

Accrued depreciation is the difference between the cost new estimate of the improvement and its market value as of the appraisal date (February 1 for assessors). The formula looks like:

$$\begin{array}{r} \text{Cost new estimate} \\ - \text{Market value} \\ \hline = \text{Accrued depreciation} \end{array}$$

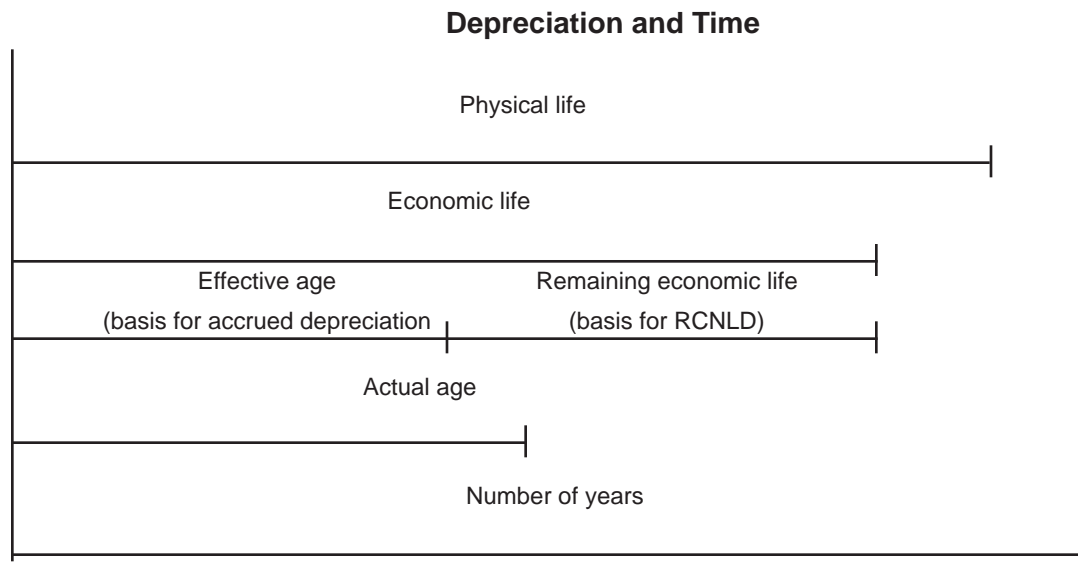
There are several terms you need to understand in order to determine depreciation.

**Physical life** - actual life span of a building or structure (chronological age from construction to demolition)

**Effective age** - age of an improvement indicated by its utility and condition (may be greater or less than actual age due to maintenance, design and location)

**Economic life** - period of time over which a building or structure is expected to contribute positively to the value of the entire property. It is the sum of effective age and remaining economic life and is usually shorter than physical life.

**Remaining economic life (REL)** - number of years remaining in the economic life of an improvement (difference between economic life and effective age). It is influenced by attitudes of buyers and sellers and by market reactions to competitive properties offered for sale.



The term "depreciation" is defined by IAAO as "the loss from the upper limit of value, from all causes, of property having an economic life." Three basic "causes" of depreciation are:

- Physical deterioration
- Functional obsolescence
- External obsolescence

Let's examine each form of depreciation separately.

Physical deterioration is the loss in value due to the wear and tear on a building or structure. It is often referred to as deferred maintenance. Physical deterioration can be either curable or incurable. It is considered curable physical deterioration if the cure or correction is economically justified on the appraisal/assessment date (February 1). That is, the cost of repair or replacement of the item is at least offset by the value added to the property. Therefore, the amount of depreciation attributable to curable physical deterioration is measured by the cost to cure or correct at the time of the appraisal/assessment date. Examples of curable physical deterioration are:

- |                     |                         |                       |
|---------------------|-------------------------|-----------------------|
| Broken windows      | Cracks in plaster       | Flaky and faded paint |
| Broken water heater | Worn-out floor covering | Leaky plumbing        |

Incurable physical deterioration affects the framework and physical parts of a structure and is not easily detected. Examples of incurable physical deterioration are:

- |                 |                     |
|-----------------|---------------------|
| Foundation      | Structure framework |
| Subflooring     | Ceiling structure   |
| Heating systems |                     |

Because it is a major expense to repair or replace one of the items above, it is generally considered incurable - not economically feasible to repair or replace on the appraisal/assessment date. The amount of depreciation attributable to incurable physical deterioration is measured by allocating a uniform percentage of value loss each year over the useful life of the structure.

Loss in value of an improvement due to wear and tear in service and disintegration from forces of nature is referred to as \_\_\_\_\_.

PHYSICAL DETERIORATION is a form of depreciation (loss in value of an improvement) due to wear and tear.

An outdated and inadequate furnace and a major crack in the foundation wall are examples of what type of depreciation? \_\_\_\_\_.

An outdated furnace and a major crack in the foundation wall are examples of the form of depreciation known as INCURABLE PHYSICAL DETERIORATION.

**Functional obsolescence is the loss in value due to the inability of an improvement to adequately perform the function for which it is currently used on the appraisal/assessment date. It is the loss of value resulting from changes in style, design, technology, and demands. Functional obsolescence may be either curable or incurable. Curable functional obsolescence is obsolescence that is economically feasible to correct as of the appraisal/assessment date. Examples of curable functional obsolescence are:**

- |  |   |
|--|---|
| <b>Poor or inappropriate architecture</b>  | <b>Inadequate heating or cooling capacity</b> |
| <b>Lack of modern equipment</b>  | <b>Inappropriate room sizes</b>               |
| <b>Wasteful floor plans</b>  | <b>Old-fashioned kitchen, bath</b>            |
| <b>Superadequacy - gold-plated plumbing fixtures in an average quality residence</b> |   |

**The amount of depreciation attributable to curable functional obsolescence is measured by the cost to correct or replace as of the appraisal/assessment date. The increased market value of the property, after curing the obsolescence, must be at least equal to the cost of the item if originally installed during construction. For example:**

**The current market for residential property expects air-conditioning and the subject house has none. Calculation of the curable functional obsolescence is as follows:**

<b>Current cost to add air conditioning</b>	<b>\$ 2,000</b>
<b>Cost to include air-conditioning in existing structure if it were built new</b>	<b>- 1,700</b>
<b>Excess cost to cure</b>	<b>\$ 300</b>
<b>Amount of depreciation attributable to curable functional obsolescence is \$300</b>	

A residence which has small bedrooms and a kitchen that needs remodeling suffers from the form of depreciation known as \_\_\_\_\_.

The residence suffers from FUNCTIONAL OBSOLESCENCE.

When it is economically feasible to correct the defects by the assessment date, the depreciation is considered \_\_\_\_\_.

The depreciation is considered CURABLE when it is economically feasible to correct the defects by the assessment date.

**Incurable functional obsolescence is a condition that decreases the utility of the property and is not economically feasible to correct as of the appraisal/assessment date. Examples are:**

- Poor room arrangement**
- Extra high ceiling in residential property**
- Inadequate column spacing in warehouses**
- Undesirable shape or location of a commercial structure on a site**

**Incurable functional obsolescence may be measured by two methods:**

- 1. Direct market comparison: comparing what the market indicates people will pay for similar property without the obsolescence**
- 2. Capitalization of rent loss: the difference in value due to the typical renter paying less rent for property with the obsolescence than for one without the obsolescence**

When it is not economically feasible to correct the obsolescence by the assessment date, it is referred to as \_\_\_\_\_.

The inability to correct the obsolescence by the assessment date is referred to as INCURABLE.

The amount of incurable functional obsolescence can be determined by two methods. Name them. \_\_\_\_\_ and \_\_\_\_\_.

The two methods available to determine the amount of depreciation known as incurable functional obsolescence are DIRECT MARKET COMPARISON and CAPITALIZATION OF RENT LOSS.

**External obsolescence is the loss in value due to forces or circumstances external to the property. External influences can cause both land and improvements to lose value. Examples include:**

- **Change in highest and best use; e.g., single family residential to commercial use**
- **Location of a factory near a residential area that produces an obnoxious odor; e.g., oil refinery, beet plant**
- **Narrow streets with poor traffic access**
- **Lack of adequate parking in retail business district**

**Because external obsolescence is caused by factors outside of the property, external obsolescence is considered incurable. The amount of external obsolescence is measured by direct market comparison or by capitalization of rent loss. Direct market comparison involves comparing what the market indicates people will pay for similar property without the obsolescence. Capitalization of rent loss is the difference in value due to the typical renter paying less rent for property with the obsolescence than for one without the obsolescence.**

Lower selling prices for residences located near a large airport than those located further away could indicate that the properties suffer from \_\_\_\_\_.

Properties located near an airport could suffer from EXTERNAL OBSOLESCENCE.

The amount of incurable external obsolescence can be determined by the two methods known as \_\_\_\_\_ and \_\_\_\_\_.

Incurable external obsolescence can be measured or determined by DIRECT MARKET COMPARISON and CAPITALIZATION OF RENT LOSS.

**There are six methods available to measure accrued depreciation:**

<b>Sales comparison</b>	<b>Modified economic age-life</b>
<b>Capitalization of income</b>	<b>Observed condition (breakdown)</b>
<b>Economic age-life</b>	<b>Depreciation tables</b>

In the sales comparison method, accrued depreciation of the subject property is based on the amount of accrued depreciation suffered by similar properties that sold. The improvements of recently-sold properties should be similar to the improvement of the subject property in age, condition and desirability. The following example indicates how this method works:

Sale price	\$ 100,000
Estimated land value	- 40,000
Improvement (bldg.) value	<u>\$ 60,000</u>

Estimated Replacement cost new of comparable improvement (above)	\$ 110,000
Improvement value	<u>- 60,000</u>
Indicated accrued depreciation from the market	\$ 50,000

(RCNLD - Replacement Cost New Less Depreciation)

Because not all improvements have the same cost new, the amount of accrued depreciation of the sale property is converted into a percentage before applying it to the subject property. To obtain the percentage of accrued depreciation divide the amount of accrued depreciation by the cost new estimate. Using the example above:

$$\frac{\text{Accrued depreciation}}{\text{Cost new}} = \frac{\$ 50,000}{\$ 110,000} = 0.45 \text{ or } 45\% \text{ depreciation}$$

If calculations of other sales property produce a depreciation percentage similar to 45%, you may apply the 45% accrued depreciation to the subject of the appraisal. If the subject property costs \$105,000 new (RCN), multiply \$105,000 by 0.45 (45%).

$$\$105,000 \times 0.45 (45\%) = \$47,250 \text{ accrued depreciation}$$

The steps of the capitalization of income method are as follows:

1. Capitalize income of subject property into estimate of total value ( $V = I \div R$  or Value = Income  $\div$  Rate)
2. Subtract the land value; remaining amount is the contributory value of the improvements (building or structure)
3. Subtract the contributory value of the improvement from the replacement or reproduction cost new to determine the amount of accrued depreciation
4. Convert amount of depreciation to a percentage of depreciation by dividing the amount by the replacement/reproduction cost new

An example of this method follows:

RCN of improvement			\$ 67,100
Net operating income	\$ 8,000		
Capitalization rate 11.5% (0.115)			
Total value of property ( $V = I \div R$ )	\$ 69,565	→	\$ 69,600 (rounded)
Land value		<u>- 13,900</u>	
Building value			<u>- \$ 55,700</u>
Amount of depreciation (RCN minus bldg. value)			\$ 11,400
Percentage of depreciation (amt. $\div$ RCN or \$11,400 $\div$ \$67,100)			17%

The Economic age-life method is based on the estimate of effective age and economic life of the building. A uniform percentage of value loss is allocated for each year over the remaining useful life of the building. It does not make any allowance for unusual functional or external obsolescence.

For the modified economic age-life method, the depreciation amount for curable items of both physical deterioration and functional obsolescence are deducted from the RCN. The remaining amount is then depreciated using the economic age-life method.

Use of the observed condition method requires separation (breakdown) of the causes of accrued depreciation into categories of physical deterioration (curable and incurable), functional obsolescence (curable and incurable), and external obsolescence (incurable). It is the most complete method of measuring depreciation; however, it is very time consuming.

Depreciation tables based on experience with market data provide a schedule of typical standards for measuring depreciation. The indicated percentages of depreciation should reflect current local conditions.

We now have all the information necessary to calculate the market value of the subject property by the cost approach. An example follows:

<b>Estimate of land value as if vacant</b>	<b>\$40,000</b>	
<b>RCN of the subject improvement (e.g., bldg.)</b>		<b>\$ 105,000</b>
<b>Accrued depreciation (determined by the market)</b>	<b>- 47,250</b>	
<b>Current market value of the improvement</b>		<b>\$ 57,750</b>
<b>Value of subject site (determined by sales analysis)</b>	<b>+ 40,000</b>	
<b>Total property value determined by cost approach</b>		<b>\$ 97,750 (\$97,800 rounded)</b>

The estimate of market value determined by the cost approach is most accurate for newly constructed improvements used at their highest and best use. The true measure of value is determined by buyers and sellers in the open market; therefore, cost new estimates and amounts of depreciation are representative of how typical buyers perceive value for specific items.

## Unit H

### Sales Comparison Approach and Benchmark Sales

The sales comparison approach is a method by which the market value of a property is based upon the prices paid for similar properties in the market. It involves comparing properties similar to the subject property for which market data such as sales prices, asking prices and offers to purchase are available.

The sales comparison approach relies on the economic principles of substitution, change and contribution. The principle of substitution is the underlying principle that applies to this approach. It provides that "a property's market value tends to be set by the cost of acquiring an equally desirable and valuable property assuming no costly delay is encountered in making the substitution." This provides that if two similar properties are available for sale, a wise person will purchase the property that could be purchased at a lower asking price. The principle of change provides that "market value is never constant because environmental, economic, social and governmental forces are at work to change the property and its environment." This provides that properties and their environment are constantly changing; therefore, property values need to change to reflect that. The third basic principle is the principle of contribution which provides that the "value of a component of property depends upon its contribution to the whole property." This provides that the cost of the component does not necessarily equal the value that the component adds to the property. For example, a property owner spends \$10,000 to erect a garage; however, a typical buyer is willing to pay only \$8,500 for the garage. The contributory value of the garage is \$8,500 instead of the \$10,000 cost.

Two one-story residences located in the same neighborhood are very similar. One residence is advertised for sale at \$84,500; the other at \$86,000. A wise buyer would most likely select the residence advertised at \$84,500 because of the principle of \_\_\_\_\_.

The principle of SUBSTITUTION provides that if two similar properties are available, the smart buyer will select the less expensive property.

A new brick fireplace costs \$3,500 installed. The value of the fireplace depends on what a typical buyer is willing to spend in order to have the fireplace. It may be more or less than the actual cost. This represents the economic principle of \_\_\_\_\_.

The principle represented is CONTRIBUTION.

A property and its environment become different over time because of age, maintenance, social and environmental factors, etc. This is an example of the principle of \_\_\_\_\_.

The fact that a property and its environment change involves the principle of CHANGE.

There are five steps involved in the sales comparison approach:

1. Collect comparative sales data
2. Analyze comparative sales data
3. Determine adjustment amounts based on the market
4. Apply the adjustments to the sale property
5. Reconcile into a value estimate of the subject property

Let's take one step at a time. First you collect comparative sales data. After inspecting the subject property, you select similar properties that have sold. It is ideal to have at least three sales of similar properties for comparison - one superior to the subject, one inferior and one about equal to the subject property in size or features. The more recently the sales took place, the more they reflect current market value. After selecting the sales you'll use for comparison, obtain and verify the following information about each property:

- **Non-realty components:** examples include personal property, franchise or business value (subtract value amount from sale price)
- **Real property rights:** what property rights does buyer acquire? (sell, lease, use, give away, enter or exit, refuse to do anything)?
- **Financing terms:** examples include conventional terms, contract for deed, seller financing, etc. (consider typical financing)
- **Conditions of sale:** reflect the motivation of buyer and seller; e.g., transaction meets criteria in the definition of market value, transaction is arms-length (buyer and seller are not related), seller is not under pressure to sell property soon, buyer does not pay more than market value to acquire adjacent land.
- **Legal encumbrances:** examples include easements, rights of way
- **Market conditions:** changes in the market since date of sale because of physical, social, economic and governmental forces
- **Location:** proximity to subject property, services, transportation, etc.
- **Physical characteristics:** examples include effective age, quality of construction, condition, size, type and number of rooms, etc.
- **Date of sale:** date of purchase agreement
- **Sale price of the real property (land, buildings and rights)**

The first step of the sales comparison approach is \_\_\_\_\_ .

The first step of this approach is COLLECT COMPARATIVE SALES DATA.

"Date of sale" actually refers to the date of \_\_\_\_\_ .

The date of sale refers to the date of the PURCHASE AGREEMENT.

Step two involves analysis of comparative sales data. The conditions on which the property sold must meet the criteria set out in the definition of market value. Those are:

- Sold in cash or other typical financing for the area
- Exposed for sale on the open market for a reasonable time
- Offered for sale by a knowledgeable person
- Purchased by an informed buyer
- Both buyer and seller are knowledgeable about the capabilities of the property

In order to compare sales properties to the subject property, it is necessary to develop a unit of comparison. A unit of comparison is the relationship between the sale price of a property and the most appropriate unit used by buyers and sellers to compare properties. The mathematical formula for this is the sale price of the property divided by the unit of comparison. Sale price (\$) ÷ unit of comparison = \$ per unit. For example: it costs \$20.00 to fill a vehicle with 6 gallons of gasoline. To determine the cost per gallon, divide \$20.00 (sale price) by 6 gallons (unit of comparison).

$$\$20.00 \div 6 \text{ gallons} = \$3.33 \text{ per gallon}$$

Property can be compared in a number of ways. Residential properties are usually compared on a basis of one of the following units:

Dwelling unit	Room
Square footage of building	Bedroom

Apartment properties are generally compared by:

Number of living units	Square footage of buildings
Number of rooms	Gross rent multipliers (sale price ÷ income)

Commercial properties are generally compared on a square footage basis. Industrial properties are compared on a basis of either square footage or cubic footage of building.

Square footage of building (L x W)	Cubic footage of building (L x W x H)
------------------------------------	---------------------------------------

Vacant land can be compared on a basis of:

Square footage	Acres
Front footage	Buildable sites

The unit of comparison that may be developed for income-producing property is \_\_\_\_\_  
\_\_\_\_\_.

The unit of comparison which may be developed for income-producing property is the  
GROSS RENT MULTIPLIER (GRM).

When commercial property sells, it is generally compared on the basis of \_\_\_\_\_ .

Commercial property is usually compared on a SQUARE FOOTAGE basis.

Single family residential property is usually compared by \_\_\_\_\_ ,  
\_\_\_\_\_, \_\_\_\_\_ or \_\_\_\_\_ .

Single family residences may be compared on a SQUARE FOOTAGE, DWELLING UNIT,  
ROOM or BEDROOM basis.

**To calculate the unit price, divide the sale price of the real property by the number of units of comparison. For example, a ten-unit apartment building recently sold for \$250,500. It contains 11,000 square feet of living area and 60 rooms.**

**Sale price per square foot:      \$250,500 ÷ 11,000 sq. ft. = \$22.77 per sq. ft.**  
**Sale price per unit:              \$250,500 ÷ 10 units = \$25,050 per unit**  
**Sale price per room:              \$250,500 ÷ 60 rooms = \$4,175 per room**

**A duplex (two unit) residence recently sold for \$109,900. It contains a total of 2,600 sq. ft. of living area and each unit has three bedrooms. Based upon this information the residence may be compared by the number of living units available, square footage and number of bedrooms.**

**Sale price per unit:                  \$109,900 ÷ 2 units = \$54,950 per unit**  
**Sale price per square foot:      \$109,900 ÷ 2,600 sq. ft. = \$42.27 per sq. ft.**  
**Sale price per bedroom:          \$109,900 ÷ 6 bdrms (3 x 2 units) = \$18,317/per bedroom**

Develop the unit prices for an eight-unit apartment building containing a total of 12,350 square feet and five rooms per apartment unit which sold recently for \$226,900.

Apartment units                      \_\_\_\_\_  
Square footage                        \_\_\_\_\_  
Number of rooms                      \_\_\_\_\_

The unit prices are as follows:

Apartment units                      \$226,900 ÷ 8 units = \$28,363 per unit  
Square footage                        \$226,900 ÷ 12, 350 sq. ft. = \$18.37 per sq. ft.  
Number of rooms                      \$226,900 ÷ 40 rooms (5 rooms each apt. x 8 units) = \$5,673

You need to analyze the characteristics of each sale property to establish similarity to the subject property and identify necessary adjustments. Items for which adjustment may be necessary include:

**Market conditions:** change in market conditions from time of sale to assessment date; e.g., sale #1 sold Jan. 10th last year compared to what the value would be on the assessment date (Feb. 1) this year

**Location:** difference in location between property that sold and subject property; e.g., subject property has a better location than the sale property

**Physical characteristics:** number of bathrooms and bedrooms, construction quality, size, etc. subject property has compared to sale properties

The following grid is a convenient way to compare sales of residential properties to the subject property:

<u>Item</u>	<u>Subject</u>	<u>Sale #1</u>	<u>Sale #2</u>	<u>Sale #3</u>
Sale price		\$85,000	\$85,000	\$88,000
Date of sale		3 years	2 years	Current
Age - improvements	10 years	9 years	11 years	10 years
Condition	Good	Good	Good	Good
Lot size	50' x 140'	50' x 140'	50' x 120'	50' x 140'
Floor area (sq. ft.)	1,050	1,100	1,110	1,050
Full basement	No*	Yes	Yes	Yes
Garage	Yes	None	None	None
Quality	Good	Good	Good	Good
Site improvements	Average	Average	Average	Average
Location	Good	Good	Good	Good

\* Subject dwelling has only partial basement.

Comparing the three sale properties to the subject, adjustments are needed to account for differences in date of sale (market conditions/time), floor area (size), basement, garage, and lot size. Once you know what adjustments are necessary to make the sale properties similar to the subject property, step 3 of the sales comparison approach provides that you determine the amount of adjustments. Adjustments may be made in dollar amounts or percentage amounts. Generally, adjustments for market conditions (time of sale) and location are made in percentage amounts and all other adjustments are made in dollar amounts. The best method for determining the adjustment for market conditions is the resale of the same property, provided no physical changes to the property were made. The only change that took place from the first time it sold to the second time it sold was the difference in selling prices. For example, a residence sold 1 year ago for \$59,600.

**It sold recently for \$61,500. The difference between the two sale prices (\$1,900) reflects the dollar amount of adjustment for market conditions (\$61,500 - \$59,600) from one year ago to today. The dollar amount can be converted to a percentage by dividing that number (\$1,900) by the older of the two sale prices, \$59,600). This calculation indicates that the market increased 3.19% in the one-year time or 0.27% per month (3.19% ÷ 12 months). In another example, if the market indicates residential property values have increased ½ percent per month this past year and a property sold for \$80,000 2 months ago, you can calculate the adjustment for market conditions as follows:**

**0.005 (½ percent) x 2 months = 0.01 (1% increase in value over the 2 months);**

**\$80,000 x 1.01 (+1%) = \$80,800,**

**OR compounded: \$80,000 x 1.005 x 1.005 = \$80,802 (\$80,800 rounded)**

**By adjusting the sale price for market conditions, you determine that the property would probably sell today for \$80,800 if there were no physical changes made to the property since it sold two months ago.**

A single-family residence sold 3½ years ago for \$76,800. No physical changes were made to the property and it sold this month for \$81,500. Determine the dollar amount and percentage amount of adjustment for a change in market conditions (time).

\$ \_\_\_\_\_ %

The dollar amount of adjustment is determined by subtracting \$76,800 from \$81,500 to equal \$4,700 (\$81,500 - \$76,800).

The percentage adjustment is determined by dividing the amount of adjustment (\$4,700) by the older sale price (\$76,800) (\$4,700 ÷ \$76,800) to equal 0.0612 or 6.12%.

**The adjustment calculated above for change in market value may be further broken down into a percentage change per year or per month. It is determined by dividing the percentage amount of adjustment (6.12%) by the number of years or months between sales. Change in market conditions per year: 1.75% per year (6.12% ÷ 3.5 yrs.) OR 0.146% per month (6.12% ÷ 42 months)**

Dollar adjustments are typically used to account for differences in financing terms and physical characteristics such as size, quality of construction, garage, basement finish. The principle of contribution applies here. The amount of adjustment is the contributory value of the component to the total property value. The cost of an item may not necessarily equal the value of the item but the question to ask is "how much does the item contribute to the total value of the property?" The way to measure the contributory value of a property component is to compare two properties that recently sold and are similar except for the one feature that is different between the two properties. The

difference in sale prices reflects the amount typical buyers are willing to pay for having the component. For example, two single-family residences recently sold and are similar except residence #1 has a two-stall attached garage (2A garage) and residence #2 does not.

Residence #1 (2A garage) sale price:	=	\$72,800
Residence #2 (no garage) sale price:	=	<u>\$63,500</u>
Contributory value of 2-stall attached garage:	=	\$ 9,300

Although the current cost to construct the garage is \$12,000, the buyer of Residence #1 willingly paid \$9,300 to have the convenience of a 2-stall attached garage. If the conditions of the sale meet the definition of market value and, if possible, other sales transactions support the contributory value of \$9,300 for a 2-stall attached garage, that amount could be applied to other sales prices to adjust for differences in properties with or without a 2-stall attached garage.

Let's use another example to show the calculation of the adjustment for location. Two similar vacant residential lots recently sold. Lot #1 is located on the water front of a major river, lot #2 is not.

Lot #1 (river frontage) sale price:	=	\$18,900
Lot #2 (no river frontage) sale price:	=	- <u>\$15,500</u>
Contributory value of river frontage:	=	\$ 3,400

The contributory value of the lot frontage along the river is \$3,400, therefore, the adjustment is \$3,400.

Two single family residences are identical except the one that has an average quality finished basement recently sold for \$71,900. The second residence, which has an unfinished basement, recently sold for \$68,000. Determine the adjustment for basement finish. \$\_\_\_\_\_

The adjustment for basement finish is \$3,900 (\$71,900 - \$68,000).

Step 4 involves applying the adjustment amounts to the sale price of the comparable properties. It is ideal to compare at least three properties that sold to the subject property. You make the necessary adjustments to the selling prices of the sale properties to account for differences between those properties and the subject property. Always apply the adjustment amount to the sale price of the comparable property to make that property comparable to the subject property. If the sale property has a feature that makes the sale property inferior to the subject property, add the amount of adjustment to the sale price of the comparable property. If the sale property has a feature that is superior to the subject property; e.g., a better location, adjust the sale price of the comparable property downward to make the property more similar to the subject property. An easy way to remember which direction to adjust the sale property is "poorer: +(plus)," "better: -(minus)." The goal of adjustment is to make the sale properties similar to the subject property so remember, always adjust the sale property to make it comparable to the subject property. Using the example of Lots 1 and 2 (above):

The subject property is not located on the river; therefore, to make Lot #1 comparable to the subject property, subtract \$3,400 from the sale price of Lot #1. Remember, always adjust the sale property to make it comparable to the subject property. Lot #2 is not located on the river so no adjustment for location is necessary. From this information you determine that the subject lot would most likely sell for about \$15,500 which represents the true and full value of the subject property.

The adjustments applied to the sale prices of the three improved properties, described on page H-5, to make them similar to the subject property, are based on the following market observations:

*Time* - the market increases 2 percent per year.

*Lot size* - Lots 50' x 140' are typical. Lots with 120' depth sell for \$400 less. Lots with 160' depth sell for \$400 more.

*Floor area* - \$20 per square foot for differences in area.

*Basement* - \$2,500 less for having a partial basement versus a full basement.

*Garage* - \$2,000 is the contributory value for a one-car garage.

The adjustment grid showing adjustments made to sale properties is as follows:

<u>Adjustments</u>	<u>Sale #1</u>	<u>Sale #2</u>	<u>Sale #3</u>
Time (mkt. conditions)	+ \$ 5,100	+ \$ 3,400	\$ 0
Lot size	0	+ 400	0
Floor area	- 1,000	- 1,200	0
Basement	- 2,500	- 2,500	- 2,500
Garage	+ 2,000	+ 2,000	+ 2,000
\$ Amt. of adjustments	\$ 10,600	\$ 9,500	\$ 4,500
Net adjustment	+ \$ 3,600	+ \$ 2,100	- \$ 500
Sale price	\$ 85,000	\$ 85,000	\$ 88,000
<b>Adjusted price</b>	<b>\$ 88,600</b>	<b>\$ 87,100</b>	<b>\$ 87,500</b>

The fifth and final step in the sales comparison approach involves reconciling the adjusted sales prices of the comparable properties into an estimate of value for the subject property. Ideally, the value estimates (adjusted sales prices) will be within a narrow range. Never average the value estimates. The reconciliation process involves review of the adjustments made and placing the greatest reliance on the property most comparable to the subject property. The property most comparable to the subject property is typically the one that has the least number of adjustments and least dollar amount of adjustments. Let's review the market information for the comparable properties listed above.

	<u>Sale #1</u>	<u>Sale #2</u>	<u>Sale #3</u>
No. of adjustments	4	5	2
\$ Amt. of adjustments	\$ 10,600	\$ 9,500	\$ 4,500
Net adjustments	+ \$ 3,600	+ \$ 2,100	- \$ 500
Adjusted sale price	\$ 88,600	\$ 87,100	\$ 87,500

Sale #2 has the highest number of adjustments (5); Sale #1 has the highest dollar amount of adjustments. Sale #3 is a current sale and had the fewest adjustments and lowest dollar amount of adjustments. The range of values is relatively narrow: \$87,100 (sale #2) to \$88,600 (sale #1). Sale #1 was adjusted in four areas to account for differences between it and the subject property: market conditions (time), floor area, basement and garage. Sale #2 had adjustments for differences in five areas: market conditions, lot size, floor area, basement and garage. Sale #3 is the most recent sale, it had the least number of adjustments (2) and least dollar amount of adjustments. Therefore, sale #3 is the most comparable property to the subject property and represents the market value of the subject property determined by the sales comparison approach.

Some assessment districts do not experience many sales of property. Because the true and full value of residential and commercial property should reflect current market value, the assessor must use whatever sales information is available as benchmarks. A benchmark is a property that recently sold and may be used as an indicator of value for properties that have not sold. The value of a property that sold in an arms-length transaction is a benchmark and considered to be the typical value for that type of property. Once a sale price is verified, the assessor needs to develop a unit of comparison most pertinent to the type of property that sold. Examples include:

- Vacant land - per acre, square foot, front foot, buildable site
- Residential - per square foot, room, dwelling
- Apartments - per unit, room, GRM (gross rent multiplier)
- Commercial and industrial - per square foot, cubic foot

The unit price for comparison purposes is calculated by dividing the sale price by the most applicable unit. For example, a vacant lot available for residential use contains 8,350 square feet. It sold last month for \$10,000. Unit price = sale price ÷ square footage

$$\frac{\text{Sale Price: } \$ 10,000}{\text{Square Feet: } 8,350} = \$1.20 \text{ per square foot (unit price)}$$

To value other similar vacant residential lots, apply \$1.20, the unit price of the benchmark, to the square footage of other similar vacant lots. For example, a similar lot contains 8,583 square feet. Multiply \$1.20 by 8,583 sq. ft. = \$10,300. Lots having substantially larger square footage and a

**better location than the benchmark property would probably sell for more so the assessor needs to value those lots higher than \$1.20. Likewise, smaller and less desirable lots would probably sell for less so those lots need to be valued lower than \$1.20 square foot.**

Determine the market value of the subject property by the sales comparison approach.

	<u>Subject</u>	<u>Sale #1</u>	<u>Sale #2</u>	<u>Sale #3</u>	<u>Sale #4</u>
Sale Price		\$85,000	\$85,000	\$87,000	\$88,000
Mkt. Cond.		3 yrs.	2 yrs.	1 yr.	Current
Location	Good	Good	Good	Good	Good
Lot Size	50 x 140	50 x 140	50 x 120	50 x 160	50 x 140
Bldg. Size	1,050	1,100	1,110	1,130	1,050
Heating	Hot Wtr.	Hot Wtr.	Hot Wtr.	Hot Wtr.	Hot Wtr.
# of Baths	1½	1½	1½	1½	1½
Garage	2A	1A	1A	1A	1A
Bsm't. Fin.	525	1,100	1,100	1,100	1,050

Based upon current market analysis, the following adjustments are appropriate:

1. Market condition - market increases 2% per year.
2. Lot size - 140' lot depths are typical; \$400 less for 120' of depth; \$400 more for 160' of depth.
3. Floor area of building - \$20.00 per square foot contributory value
4. Basement finish - a partially-finished basement brings \$2,500 less than a finished basement.
5. Garage - \$2,000 contributory value of a second garage stall.

The adjustments are applied as follows:

<u>Adjustments</u>	<u>Subject</u>	<u>Sale #1</u>	<u>Sale #2</u>	<u>Sale #3</u>	<u>Sale #4</u>
Mkt. Cond.		+ 5,100	+ 3,400	+ 1,740	0
Lot Size	50 x 140	0	+ 400	- 400	0
Bldg. Size	1,050	- 1,000	- 1,200	- 1,600	0
Bsm't. Fin.	525	- 2,500	- 2,500	- 2,500	- 2,500
Garage	2A	+ 2,000	+ 2,000	+ 2,000	+ 2,000
<hr/>					
Total Adjmnts.		10,600	9,500	8,240	4,500
Net Adjmnts.		+ 3,600	+ 2,100	- 760	- 500
Sale Price		\$ 85,000	\$ 85,000	\$ 87,000	\$ 88,000
Adj. Sale Price		<b>\$ 88,600</b>	<b>\$ 87,100</b>	<b>\$ 86,240</b>	<b>\$ 87,500</b>

Range of Values: \$86,240 to \$88,600

Sale #4 has least number and lowest amount of adjustments; therefore, it is most comparable to the subject property and best represents the market value of the subject property.

**THE MARKET VALUE OF THE SUBJECT PROPERTY BY THE SALES COMPARISON APPROACH IS \$87,500.**

Unit I  
**Income Approach To Value**

The income approach to value is the appraisal process of converting future benefits of property ownership into an expression of present worth. Stated another way, the income approach is the process of converting the net income derived from a property into an estimate of market value.

Two principles of value are basic to the income approach: the principles of anticipation and substitution. The principle of anticipation states that "value is created by the expectation of benefits to be derived in the future." The principle of substitution provides that an income-producing property will not have market value in excess of another income-producing property with similar income.

The income approach involves estimating the \_\_\_\_\_ of a property based upon the income that the property is capable of \_\_\_\_\_.

The income approach involves estimating the MARKET VALUE of property based upon the income it is capable of PRODUCING/EARNING.

**There are eight steps involved in applying the income approach:**

- 1. Estimate potential gross income**
  - Market rent of property at full occupancy
  - Determined by analyzing rents from income-producing properties similar to the property being appraised
- 2. Deduct for vacancy and collection loss**
  - Loss of income due to vacancy and nonpayment of rent
  - Determined by analyzing date of similar income-producing properties
- 3. Add miscellaneous income to determine effective gross income**
  - Examples: laundry facilities, garages, concessions
  - Calculate effective gross income
$$\begin{array}{r} \text{Potential gross income} \\ - \text{Vacancy \& collection loss} \\ + \text{Miscellaneous income} \\ \hline = \text{Effective gross income} \end{array}$$
- 4. Determine operating expenses**
  - Must be proper annual expenses for the property
  - Examples: management fees, insurance, maintenance and repairs, supplies, utilities
  - Include reserves for replacement of short-lived items
    - \* Annual amount set aside to replace certain items
    - \* Examples: heating system, water heater, floor covering, roofing
- 5. Subtract operating expenses from effective gross income to determine net operating income before discount, recapture and property taxes**

**Effective Gross Income**

- Annual operating expenses and reserves for replacement

Net operating income (NOI) before discount, recapture and property taxes

6. Select the proper capitalization rate
  - High capitalization rate produces a low value
  - Low capitalization rate produces a high value
7. Determine the proper capitalization procedure to be used
  - Depends on type of income stream
  - Procedures available: straight line, sinking fund, annuity, direct, mortgage-equity
8. Capitalize the net operating income into an estimated property value
  - Various techniques available to determine value

When analyzing income of the property being appraised, an investor considers the following factors:

**Quantity** - how much income the property can produce

**Quality** - responsibility of tenants and their financial rating

**Durability** - length of time that the income will be received

To analyze property income, consider \_\_\_\_\_, \_\_\_\_\_,  
and \_\_\_\_\_.

When analyzing income of a property, one has to consider QUANTITY, QUALITY,  
and DURABILITY.

**Net operating income is determined by the following calculation:**

**Effective Gross Income (EGI)**

- Operating expenses and reserves for replacement

= Net Operating Income (NOI) before discount, recapture and property taxes

Basically, income minus \_\_\_\_\_ equals net income.

Income minus EXPENSES equals net income.

The capitalization process takes place when a capitalization rate is used to convert income from property into property value. There are three capitalization formulas which are basic to the proper use of the income approach. If you know two parts of the formula, you can determine the unknown part by using one of the formulas below. The letter "V" represents market value; the letter "I" represents income (net operating income before discount, recapture and property taxes); the letter "R" represents the capitalization rate. In other words, the capitalization process involves  $IRV, \frac{I}{R|V}$

For example, if you know what the income of the property is and what the appropriate capitalization rate is, you can determine the property value by using the formula  $V = I \div R$  (Value = Income  $\div$  Rate). Likewise, if you know the market value of the property and the appropriate capitalization rate, you can determine the income by multiplying the value by the rate ( $I = V \times R$ ). If the income and value are known, the rate may be calculated by dividing the income by the value ( $R = I \div V$ ). In order to properly apply the capitalization process, you must know these formulas derived from IRV:

<b>Value = Income <math>\div</math> Rate</b>	<b>or</b>	<b><math>V = I \div R</math></b>
<b>Income = Value <math>\times</math> Rate</b>	<b>or</b>	<b><math>I = V \times R</math></b>
<b>Rate = Income <math>\div</math> Value</b>	<b>or</b>	<b><math>R = I \div V</math></b>

A group of investors has \$200,000 to invest in a commercial property (e.g., an apartment complex) and wants to receive a 9 percent return on the investment. What income does the property need to earn in order for the group to assume the risk of the investment?

The \$200,000 represents the "value" portion of the formula because the investors will purchase the property for \$200,000. The 9 percent return represents the "rate" portion of the formula because the investors need to earn 9 percent on the investment and 9 percent seems to be what investors in the market place earn for a similar investment. Using "IRV" to determine the amount of income the property must produce in order for the group to be willing to invest, the formula is:

$$\begin{aligned} \text{Income} &= \text{Value} \times \text{Rate} \\ \text{Income} &= \$ 200,000 \times 0.09 \text{ (9\%)} \\ \text{Income} &= \$ 18,000 \text{ (Amount of annual income expected)} \end{aligned}$$

A commercial property for sale produces an annual income of \$5,000. Investors want to receive 11 percent return on the investment. What could the investors expect to pay for the property?

Using "IRV:"

$$\begin{aligned} I &= \$5,000 \\ R &= 11\% \\ V &= ? \quad V = I \div R \text{ or } V = \$5,000 \div .11 \text{ (11\%)} \\ & \quad V = \$45,455 \text{ (\$45,500 rounded)} \end{aligned}$$

When the annual income of the property is \$5,000 and the rate of return is 11 percent, the property should be worth \$45,500 (rounded) market value.

A commercial property is offered for sale at \$80,000. The property earned \$6,800 annually for the past three years. What rate of return could the investors expect?

Using "IRV" again:

$$I = \$6,800$$

$$V = \$80,000$$

$$R = ? \quad R = V \times I \text{ or } R = \$80,000 \times \$6,800$$

$$R = 0.085 \text{ or } 8.5\%$$

**If an investor pays \$80,000 for the property and it earns \$6,800 annually, the investor could expect an 8.5 percent return on the investment.**

The capitalization process involves using a capitalization rate to convert property \_\_\_\_\_ into property \_\_\_\_\_.

By using a capitalization rate, property INCOME is converted into property VALUE.

Knowledge of the three basic capitalization formulas allows an assessor to determine the \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.

By knowing the capitalization formulas, an assessor may determine the INCOME, RATE and VALUE.

Using "IRV," the basic capitalization formulas are:

$$\text{Income} = \underline{\hspace{2cm}}$$

$$\text{Value} = \underline{\hspace{2cm}}$$

$$\text{Rate} = \underline{\hspace{2cm}}$$

Did you remember the formulas?

$$\text{Income} = \text{RATE} \times \text{VALUE}$$

$$\text{Value} = \frac{\text{INCOME}}{\text{RATE}}$$

$$\text{Rate} = \frac{\text{INCOME}}{\text{VALUE}}$$

## Unit J

### Reconciliation and Final Estimate of Value

The final step in the appraisal process is to reconcile the value indications from the three approaches and arrive at a final estimate of value for the subject property. You complete this step in two parts - reconciliation of the value estimates determined by the cost, sales comparison and/or income approaches to value, and determination of a final estimate of value.

Reconciliation is the process of analyzing and resolving differences in value indications resulting from application of the sales comparison, cost and income approaches to value. Begin with listing the value estimates resulting from the three approaches. Consider the strengths and weaknesses of each approach and the relevancy of each approach to the type of property appraised and to the purpose of the appraisal. The cost approach is generally more appropriate for newer buildings with less depreciation. The sales comparison approach is appropriate when there are several recent sales of similar properties. The income approach is useful for properties that are purchased for their income-producing capabilities.

Verify the estate of the property appraised. The estate valued for assessment purposes is the fee simple interest. Possessory interest in property is the right to use property owned by the government for private use and is assessable.

Verify the accuracy of the information obtained and recheck all mathematical calculations. For the sales comparison approach, review market information for accuracy and relevancy to current market activity. Sales data should be sufficient to draw realistic conclusions. Market information should meet the qualifications of the definition of "market value." There should be a minimum number of adjustments used to make sale properties comparable to the subject property. The lowest dollar amount of adjustments made indicates similarity to the subject of the appraisal. The gross or total amount of adjustments without considering the plus or minus signs indicates a more accurate measure of comparability to the subject property. For the income approach, verify the accuracy of the income and expense estimates, and the rates. For proper application of the cost approach, check the accuracy and relevancy of the replacement or reproduction cost new estimates and depreciation types and estimates. Review the entire appraisal to make sure the information and logic are reasonable, consistent, accurate, appropriate and sufficient to lead you to a logical conclusion of value.

The last step of the appraisal process is \_\_\_\_\_ and \_\_\_\_\_  
of \_\_\_\_\_.

The last step of the appraisal process is RECONCILIATION and FINAL ESTIMATE of VALUE.

The process of analyzing and resolving differences in value indications resulting from applications of the three approaches is known as \_\_\_\_\_.

The process of analyzing and resolving differences in value indications is called RECONCILIATION.

**The final estimate of value is based upon the approaches that are most appropriate to the subject property. The value estimate does not have to be identical to the value indicated by the most appropriate approach. It could be somewhere in between the estimates produced by two or more approaches. It all depends on how the market views the property. The final estimate can be a range of values which indicates the property value lies somewhere between two value estimates; e.g., \$58,000 to \$61,500. The final estimate could be a single-figure estimate which is called a point estimate. The point estimate is required for the assessment process and represents the assessor's best estimate of value. An example of a point estimate is \$69,800. The point estimate is generally rounded to reflect that a value estimate is not precise. It is an opinion of value.**

**For assessment of commercial and residential properties, the final estimates of market value represent true and full value. The true and full values of individual properties do *not* always equal their sales prices. The assessor's responsibility is to use the market information to value similar residential and commercial properties uniformly, which requires equity within and between groups of properties. To measure uniformity of true and full values, the assessor groups properties four ways:**

- 1. By class of property (e.g., residential, commercial, or agricultural)**
- 2. By neighborhoods (e.g., single-family, condominium/townhouse, multi-family, retail, offices or industrial)**
- 3. By types of construction within a class (e.g., residential - one-story, two-story, bi-level, split level; commercial - wood frame, concrete, reinforced steel)**
- 4. By year of construction within a class (e.g., residential - built 1900 to 1930, 1931 to 1950, 1951 to 1975, 1976 to 1990, 1991 to present)**

**The property tax is ad valorem or based upon value. If there are large differences in true and full values of similar properties within a group, there will be inequitable assessments. Inequitable assessments indicate that some property owners will pay an unfair portion of property tax. For example, there are five one-story residences in a taxing district, each containing approximately 1,100 square feet of living area on main floor, full unfinished basement, two bedrooms, one bath and a single car garage. One residence sold January 10 for \$55,000. The assessor did *not* review or adjust the values of the five residences for the current assessment year. The true and full values listed are as follows:**

- Property #1: \$39,900**
- Property #2: \$43,500**
- Property #3: \$48,300**
- Property #4: \$54,600**
- Property #5: \$59,200**

**If the mill levy for the taxing district is 485 mills, the property tax due for each property this year is as follows:**

**Property #1:**  $\$39,900 \times 50\% = \$19,950$  (ass'd.)  $\times 9\%$  (res.) =  $\$1,796$  (taxable)  $\times 0.485$  (mills) =  $\$ 871.06$  (tax)

**Property #2:**  $\$43,500 \times 50\% = \$21,750$  (ass'd.)  $\times 9\%$  (res.) =  $\$1,958$  (taxable)  $\times 0.485$  (mills) =  $\$ 949.63$  (tax)

**Property #3:**  $\$48,300 \times 50\% = \$24,150$  (ass'd.)  $\times 9\%$  (res.) =  $\$2,174$  (taxable)  $\times 0.485$  (mills) =  $\$1,054.39$  (tax)

**Property #4:**  $\$54,600 \times 50\% = \$27,300$  (ass'd.)  $\times 9\%$  (res.) =  $\$2,457$  (taxable)  $\times 0.485$  (mills) =  $\$1,191.65$  (tax)

**Property #5:**  $\$59,200 \times 50\% = \$29,600$  (ass'd.)  $\times 9\%$  (res.) =  $\$2,664$  (taxable)  $\times 0.485$  (mills) =  $\$1,292.04$  (tax)

**The market indicates that properties #1-5 would probably sell for about \$55,000 on February 1, the assessment date. Property #4 is valued closest to market value and the owner pays approximately \$1,192 in property taxes. Properties' #1-3, 5 would probably sell for about \$55,000 also; however, because they are not valued at current market value for assessment purposes, owners of properties #1-3 pay less property taxes than what they should pay and the owner of property #5 pays more property tax than what should be paid. When assessments are inequitable, taxes are inequitable. That is why it is very important to review residential and commercial sales information and use that information to value similar properties - for proper equalization of assessments.**

A final estimate of value may be expressed in two ways. Name them \_\_\_\_\_ and \_\_\_\_\_.

A final estimate of value may be expressed as a RANGE OF VALUES or POINT ESTIMATE.

For assessment purposes, the final estimate of value must be a single figure estimate known as: \_\_\_\_\_.

The final estimate of value for assessment purposes is a POINT ESTIMATE.

Inequitable property values produce inequitable property \_\_\_\_\_.

Inequitable property values produce inequitable property TAXES.

Unit K  
**Agricultural Land Valuation**

**N.D.C.C. § 57-02-27.2 provides for the valuation of agricultural land. The beginning point is always true and full value which represents agricultural value. Agricultural value is defined as the "capitalized average annual gross return," except for inundated agricultural land. Agricultural value of cropland and noncropland represents the capitalized average annual gross return; whereas, the agricultural value of inundated agricultural land represents ten percent of the average agricultural value of noncropland for the county.**

For assessment of agricultural land, the terms "true and full" value and " \_\_\_\_\_ " value are synonymous.

For agricultural land assessments the terms "true and full" value and "AGRICULTURAL" value mean the same thing.

**Annual gross return is determined from crop share rent, cash rent or the combination of the two reduced by estimated property taxes and crop marketing expenses incurred by farmland owners renting their lands on a cash or crop share basis. The annual gross return for cropland used for growing crops other than sugar beets and potatoes means 30 percent of annual gross income produced. Annual gross return for cropland used for growing sugar beets and potatoes means 20 percent of annual gross income. Annual gross return for land used for grazing farm animals means 25 percent of the annual gross income potential of the land based upon the animal unit carrying capacity of the land. The average annual gross return for each county is determined by the total of the annual gross returns for the most recent 10 years for which data is available, discarding the highest and lowest annual gross return of the 10 and dividing that number by eight.**

Annual gross return for cropland used for growing sugar beets and potatoes represents \_\_\_\_\_ percent of annual gross income produced. Annual gross return for cropland used for growing crops other than potatoes and sugar beets represents \_\_\_\_\_ percent of annual gross income produced. Annual gross return for land used for grazing farm animals represents \_\_\_\_\_ percent of annual gross income potential of the land based upon the animal unit carrying capacity of the land.

Annual gross return for cropland and noncropland is as follows:

Cropland:

Sugar beets and potatoes = 20% of annual gross income produced

Crops other than sugar beets and potatoes = 30% of annual gross income produced

Noncropland:

Grazing land = 25% of annual gross income potential of the land based upon animal unit carrying capacity of the land

To determine the "capitalized average annual gross return", the average annual gross return must be capitalized by a rate that is the ten-year average of the gross agribank mortgage rate of interest for North Dakota, calculated from the twelve most recent years, discarding the highest and lowest years. The rate cannot be less than 7.7 percent for taxable year 2010 and 7.4 percent for taxable year 2011.

"Inundated agricultural land" is agricultural land containing a minimum of ten contiguous acres and the value of the inundated land exceeds ten percent of the average agricultural value of noncropland for the county. The land is unsuitable for growing crops or grazing farm animals for two consecutive growing seasons or more, and produced revenue from any source in the most recent prior year that is less than the county average revenue per acre for noncropland.

To be eligible for consideration as inundated agricultural land, a written explanation must be submitted to the township assessor or county director of tax equalization by March 31 of each year. The board of county commissioners must approve the category of inundated agricultural land before all or any part of a parcel can be considered as inundated agricultural land for assessment purposes. The valuation of individual parcels may reflect the fact that the property will be used for growing crops or grazing farm animals in the future.

An assessment parcel has eight acres of cropland and two acres of noncropland that are not next to one another and have been under water for three continuous years. Because the land has been under water, it has not produced any revenue in that time and the value of those acres exceeds ten percent of the average agricultural value for the county. Does the assessment parcel contain inundated agricultural land? Why or why not?

The assessment parcel DOES NOT have inundated agricultural land. The acreages are not contiguous and therefore do not meet the ten-acre requirement.

Within an assessment parcel, 115 acres of cropland and 12 acres of noncropland qualify as inundated land. The average value of noncropland in a township is \$67.00 per acre. Determine the true and full value of the inundated land.

Cropland:	115 ac. x \$_____ = \$_____	Cropland:	115 ac. x \$6.70/ac. (\$67 x 10%) = <u>\$770.50</u>
Noncropland:	12 ac. x \$_____ = \$_____	Noncropland:	12 ac. x \$6.70/ac. (\$67 x 10%) = <u>\$80.40</u>
Total:	\$_____	Total	\$850.90
			Rounded \$851.00

The Agribusiness and Applied Economics Department at North Dakota State University (NDSU) calculates annually the average agricultural value per acre of cropland, noncropland and inundated agricultural land on a statewide and countywide basis and certifies the values to the ND Tax Commissioner before December 1. The Tax Commissioner then certifies those values to each county director of tax equalization before January 1.

The tax director uses soil type and soil classification data from detailed and general soils surveys to determine the average agricultural value for cropland and noncropland for each township in the county. The tax director certifies those average values to the assessors before February 1 each year. The assessor is responsible for determining the value of each assessment parcel within the township. This is done by adjusting the average agricultural value for the township by the relative value of the parcel. The assessor uses the soils survey and physical inspection to determine which parcels and soils represent the best and poorest agricultural land in the township, considering cropland, noncropland and inundated agricultural land. The assessor must apply the following considerations in descending order of significance:

1. Soil type and soil classification data from detailed or general surveys
2. Schedule of modifiers that must be used to adjust agricultural property assessments, whenever it is appropriate
3. Actual use of property for cropland or noncropland purposes by the parcel owner

To determine the true and full value of an assessment parcel, the assessor multiplies the number of acres of each soil type by the appropriate value for the soil type. For example, an assessment parcel has 158 taxable acres and has three different soil types. The assessor calculates the true and full value of the parcel as follows:

<u>Soil Type</u>	<u>Relative Value Per Acre</u>		<u># Acres</u>		<u>Agricultural Value</u>
Barnes-Svea Loam	\$250	×	14	=	\$ 3,500
Brantford Loam	\$180	×	115	=	\$20,700
Divide	\$ 65	×	<u>29</u>	=	\$ 1,885
<b>Totals:</b>			158 ac.		\$26,085 (\$26,100 rounded)

The true and full value (agricultural value) of the 158-acre parcel is \$26,100. After calculating the true and full value of each parcel, the assessor determines the average agricultural value by dividing the parcel's total true and full value by the total number of taxable acres. Using the example above, divide \$26,100 by 158 acres. The average agricultural value of the parcel is \$165.19 or \$165 per acre.

In the assessment book for this parcel, the assessor lists 158 acres under the column heading "Total acres agricultural land" and \$26,100 under the column heading "Total true and full value." From the true and full value, the assessor calculates assessed valuation by multiplying the true and full value by 50 percent:  $\$26,100 \times .50$  (50%) = \$13,050. Agricultural lands must be valued at 10 percent of assessed value. Ten percent of the assessed valuation represents the taxable value:  $\$13,050 \times .10$  (10%) = \$1,305 (taxable value). The formula follows:

$$\text{True and Full} \times 50\% = \text{Assessed} \times 10\% = \text{Taxable}$$

In order to review how the average agricultural values of individual assessment parcels relate to other parcels in the assessment district, the assessor identifies each assessment parcel on a township map and lists the average agricultural value of each parcel. It should indicate that parcels with

**poorer soils will have lower average agricultural values and parcels with better soils will have higher average agricultural values. Parcels with average soil types should have values somewhat similar to the average agricultural land value for the assessment district.**

Determine the total agricultural value and average agricultural value of an assessment parcel with the following soil types:

<u>Soil Type</u>	<u>Value Per Acre</u>	<u># Acres</u>	<u>True &amp; Full Value</u>
A	\$395	35	_____
B	\$310	23	_____
C	\$234	18	_____
D	\$158	4	_____

The agricultural value of the parcel is determined as follows:

<u>Soil Type</u>	<u>Value Per Acre</u>	x	<u># Acres</u>	=	<u>True &amp; Full Value</u>
A	\$395		35		\$13,825
B	\$310		23		\$ 7,130
C	\$234		18		\$ 4,212
D	\$158		<u>4</u>		<u>\$ 632</u>
Totals			80 ac.		\$25,799 (\$25,800 rounded)

The total agricultural value of the 80-acre parcel is \$25,800. The average true and full value of the parcel is \$322.50 per acre. ( $\$25,800 \div 80$  acres).

**The assessor calculates the average value per acre of agricultural land for the township by dividing the total true and full value by the total taxable acres of agricultural land (T & F  $\div$  total acres). For example, the total true and full value of agricultural land in township is \$7,389,580; the total taxable acres of agricultural land in the township is 22,645 acres. Divide \$7,389,580 by 22,645 ac. The average value of all agricultural land within the township is \$326.32 per acre.**

**The assessor compares this average value to the average value for the township certified by the county director of tax equalization. For equalization of assessments, it is helpful to check with assessors of neighboring assessment districts to verify that similar properties have similar values. If the assessor or local board of equalization develops an average agricultural value differing substantially from the estimate provided by the county director of tax equalization, written evidence to support the change must be submitted to the county director of tax equalization when the assessment list is returned.**

Unit L  
**Laws and Forms Used By Assessors**

North Dakota law provides the basis for the assessment process. The compilation of laws is referred to as the North Dakota Century Code or N.D.C.C. Section 1 of the Assessor's Manual contains most laws that pertain to real property taxation. The North Dakota Century Code is organized in a systematic form so that it is easy to use. One number or a set of numbers is referred to as a title. For example, Title 57 deals with taxation. Two groups of numbers separated by a hyphen are referred to as a chapter. Laws regarding general property assessment are found in N.D.C.C. ch. 57-02. When three groups of numbers are separated by hyphens, the code is referred to as a section. An example is N.D.C.C. § 57-02-08 which deals with property exempt from taxation. If a section is inserted between two sections because of what it pertains to, a period separates the two section numbers. For example, N.D.C.C. § 57-02-08.1 follows N.D.C.C. § 57-02-08 and precedes N.D.C.C. § 57-02-09. A section may be further subdivided into subsections. The subsection number follows the section number and is enclosed in parenthesis. Subsection 11 of N.D.C.C. § 57-02-08 is written N.D.C.C. § 57-02-08(11).

The letters N.D.C.C. refer to \_\_\_\_\_.

N.D.C.C. refers to NORTH DAKOTA CENTURY CODE.

Assessors will find laws regarding general property assessment in N.D.C.C. ch. 57-02. When two groups of numbers in N.D.C.C. are separated by a hyphen, it is referred to as a \_\_\_\_\_.

Two groups of numbers separated by a hyphen are referred to as a CHAPTER.

N.D.C.C. § 57-02-01 provides definitions of important terms used in general property assessment.

“True and full value” is defined in N.D.C.C. § 57-02-01(15) as “the value determined by considering the earning or productive capacity, if any, the market value, if any, and all other matters that affect the actual value of the property to be assessed. This shall include, for purposes of arriving at the true and full value of property used for agricultural purposes, farm rentals, soil capability, soil productivity, and soils analysis.” True and full value is the value determined by considering everything that could affect the actual value of a property.

N.D.C.C. § 57-02-27 requires real property to be valued at a percentage of assessed value. Residential property is valued at nine percent of assessed value. Agricultural, commercial, and centrally assessed property, including railroads, is valued at ten percent of assessed value. The resulting amount is known as taxable valuation. To calculate this, begin with the true and full value of the property. Let’s use an example. A commercial property has a true and full value of \$85,000. Assessed value represents

**fifty percent of the true and full value, so  $\$85,000 \times 50\% = \$42,500$  assessed value. Commercial property is valued at ten percent of assessed value. Ten percent of  $\$42,500 = \$4,250$  taxable valuation.**

A residential property has a true and full value of \$54,000. What is the taxable value?

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$$\begin{aligned} \$54,000 \times .50 (50\%) &= \$27,000 \quad \text{assessed value} \\ \$27,000 \times .09 (9\%) &= \underline{\$ 2,430} \quad \text{taxable value} \end{aligned}$$

A quarter section of land is valued at \$230/ac. What is the taxable value of the parcel?

$$\begin{aligned} 160 \text{ ac.} \times \$230/\text{ac.} &= \$36,800 \quad \text{true and full value} \\ \$36,800 \times .50 (50\%) &= \$18,400 \quad \text{assessed value} \\ \$18,400 \times .10 (10\%) &= \underline{\$ 1,840} \quad \text{taxable value} \end{aligned}$$

**“Agricultural property” is defined in N.D.C.C. § 57-02-01(1) as “platted or unplatted lands used for raising agricultural crops or grazing farm animals, except lands platted and assessed as agricultural property prior to March 30, 1981, shall continue to be assessed as agricultural property until put to a use other than raising agricultural crops or grazing farm animals. Agricultural property includes land on which a greenhouse or other property is located if the land is used for a nursery or other purpose associated with the operation of the greenhouse. The time limitations contained in this section may not be construed to prevent property that was assessed as other than agricultural property from being assessed as agricultural property if the property otherwise qualifies under this subsection. Property platted on or after March 30, 1981, is not agricultural property when any four of the following conditions exist:**

- a. The land is platted by the owner.**
- b. Public improvements including sewer, water, or streets are in place.**
- c. Topsoil is removed or topography is disturbed to the extent that the property cannot be used to raise crops or graze farm animals.**
- d. Property is zoned other than agricultural.**
- e. Property has assumed an urban atmosphere because of adjacent residential or commercial development on three or more sides.**
- f. The parcel is less than ten acres and not contiguous to agricultural property.**
- g. The property sells for more than four times the county average true and full agricultural value.”**

**For purposes of determining whether to classify land as agricultural property, assessment officials need to determine if the land is used for growing crops or grazing farm animals as part of a typical farm operation.**

**“Residential property” is defined in N.D.C.C. § 57-02-01(12) as “all property, or portions of property, used by an individual or group of individuals as a dwelling, including property upon which a mobile home is located but not including hotel and motel accommodations licensed under chapter 23-09 nor structures providing living accommodations for four or more separate family units nor any tract of land upon which four or more mobile homes are situated.”**

**“Centrally assessed property” is defined in N.D.C.C. § 57-02-01(4) as “all property which is assessed by the state board of equalization pursuant to chapters 57-05, 57-06, and 57-32.”**

**“Railroad property” is defined in N.D.C.C. § 57-02-01(11) as “the operating property, including franchises, of each railroad operated in this state including any electric or other street or interurban railway.”**

**“Commercial property” is defined in N.D.C.C. § 57-02-01(5) as “all property, or portions of property, not included in the classes of property defined in subsections 1, 4, 11, and 12.” This means that if property does not fit the statutory definitions of agricultural land, centrally assessed property, railroad or residential property, it must be classified as commercial property.**

**“Assessed valuation” is defined in N.D.C.C. § 57-02-01(3) as “fifty percent of the true and full value of property.”**

For taxation purposes, the assessed value represents 50% of true and full value. If the true and full value of a residential property is \$50,000, the assessed value is \$\_\_\_\_\_.

Fifty percent of \$50,000 is \$25,000 [ $\$50,000 \times .50$  (50%) = \$25,000].

A vacant lot is zoned for a single family residence. For assessment purposes, it is classified as \_\_\_\_\_ property.

For assessment purposes vacant lots must be classified as COMMERCIAL property. Use and not zoning is the determining factor for classifying property for assessment purposes.

**N.D.C.C. § 57-02-27.1 states, in part, that “all assessors . . . shall place the values of all items of taxable property at the true and full value of the property except as otherwise specifically provided by law”. This means that the assessor’s responsibility is to estimate true and full value of property in his/her assessment jurisdiction as it is defined by law.**

**N.D.C.C. § 57-02-11(1) states that all real property, subject to taxation, must be listed and assessed every year with reference to its value on February 1 of that year. If a building is partially complete on February 1, the assessment must reflect the value of a partially complete building.**

The assessment date for all taxable real property in North Dakota is \_\_\_\_\_.

The assessment date is FEBRUARY 1 of every year.

**N.D.C.C. § 57-02-34 provides that the assessor must complete assessment duties within the twelve months prior to April 1 each year. It also states that in the assessment books, the assessor is to enter land, taxable improvement or structure values in separate columns and show the total value of taxable property.**

**The assessment list shows the legal description of each taxable parcel; name of owner, if known; and the valuation. Platted property within city limits is listed and assessed separately, even if adjacent lots are owned by the same person. If a building is located on two adjacent lots both owned by the same individual, the lots may be listed and assessed together. Parcels located outside city limits are listed and assessed in subdivisions no larger than quarter sections, even if adjacent parcels are owned by the same individual(s). The list must also show the reduction in taxable value for property owners receiving homestead credit pursuant to N.D.C.C. § 57-02-08.1. Exempt real property should be listed on a separate list.**

For each parcel of taxable real property located within an assessment district, the assessment list must show three basic items: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_.

For each parcel the assessment list must show PROPERTY OWNERSHIP, LEGAL DESCRIPTION, and PROPERTY VALUATION.

**N.D.C.C. § 57-02-11.2 provides that income and expense information obtained from commercial property owners or occupants for assessment purposes is confidential. The information cannot be disclosed unless a law provides for it, a court orders disclosure, or the property owner or occupant appeals the assessment.**

**N.D.C.C. § 57-12-09 provides that whenever any assessor increases the valuation of real property (land and improvements) by \$3,000 or more and 10% or more than the amount of the last assessment, the assessor must mail, deliver, or electronically mail a written notice to the owner at least 15 days before the meeting date of the township or city board of equalization. The assessor may provide the notice to the property owner by electronic mail with verification of receipt if the owner has consented to receive notice by this method.**

**Let's use an example to explain the procedure. Last year, the true and full value of a property was \$24,000. This year the assessor increases the value to \$27,800.**

You may calculate the percentage of increase by dividing the current value by the previous value.

$$\$27,800 \div \$24,000 = 1.158 \text{ or } 15.8\% \text{ increase}$$

The percentage increase is more than 10%. Next, we need to determine the dollar amount of increase.

$$\$27,800 - \$24,000 = \$3,800$$

The increase in assessment from last year to the current year is at least 10% (actually 15.8%) AND at least \$3,000 (actually \$3,800). Therefore, the assessor is required to send the property owner a notice of increase.

Another way to determine the increase is to calculate the dollar amount of increase first and then calculate the percentage increase. Using the information in the example above, the amount of increase is \$3,800. You can calculate the percentage of increase by dividing the dollar amount of increase by the previous year's true and full value.

$$\frac{\text{Amt. of Increase}}{\$3,800} \div \frac{\text{Previous T \& F Value}}{\$24,000} = \frac{\% \text{ of Increase}}{0.158 \text{ or } 15.8\%}$$

Let's try another example. The true and full value of a property last year was \$60,700. The assessor increased it to \$66,500 for this year. Is the assessor required to send a notice of increase?

To calculate the dollar amount of increase, subtract \$60,700 from \$66,500. The result is \$5,800 increase in value, which is definitely more than \$3,000. Next, you need to determine the percentage of increase. You may divide the amount of increase by the previous year's assessment ( $\$5,800 \div \$60,700$ ) equals 0.0956 or 9.56% increase. Another way to calculate the percentage increase is by dividing the current value by the previous value ( $\$66,500 \div \$60,700$ ). This calculation yields 1.0956 and reflects a 9.56% increase in value.

Although the dollar amount of increase is greater than \$3,000, the percentage increase is less than 10%; therefore, the assessor is not required to send a notice of increase to the owner. Because the percentage increase is very close to 10% or would equal 10% if the calculation is rounded to the nearest whole number, the assessor may want to send a notice of increase to the property owner as a courtesy.

A property's true and full value last year was \$81,400. The assessor valued the property at \$89,700 for the current assessment year. Is the assessor required to send a notice of increase to the owner?

Determine the percentage of increase by dividing the current value by the previous year's value ( $\$89,700 \div \$81,400$ ). The percentage of increase is 10.20%. Determine the dollar amount of increase by subtracting the previous value from the current value ( $\$89,700 - \$81,400$ ). The dollar amount of increase is \$8,300.

The increase in value is greater than \$3,000 AND 10% or greater so the assessor is required to send the property owner a notice of increase.

**Remember, the assessor must send a notice of increase whenever the increase meets both criteria:  
Increase in true and full value is 10% or greater AND \$3,000 or more.**

Determine whether the assessor needs to send the owner a notice of increase in assessment for the following assessments:

<u>New T &amp; F</u>	<u>Previous T &amp; F</u>	<u>Notice Needed?</u>	<u>Why or Why Not</u>
\$53,900	\$45,800	_____	_____
\$96,500	\$93,000	_____	_____
\$21,700	\$18,800	_____	_____

<u>New T &amp; F</u>	<u>Previous T &amp; F</u>	<u>Notice Needed?</u>	<u>Why or Why Not</u>
\$53,900	\$45,800	Yes	Increase is >10% & > \$3,000
\$96,500	\$93,000	No	Increase is > \$3,000 but < 10%
\$21,700	\$18,800	No	Increase is >10% but < \$3,000

How did you do? If you answered differently, review the procedure and your calculations.

On the notice of increase form the assessor must list both the current and prior year's true and full values and the meeting dates of the local and county boards of equalization. The assessor must mail, deliver, or e-mail the notice of increase to the property owner at least fifteen (15) days before the meeting of the local (township or city) board of equalization. The assessment district pays for the cost of mailing or delivering the notices.

N.D.C.C. § 57-02-31 provides that the assessment book must contain the name of the property owner (if known), legal description (including acreage of agricultural land, and lots and blocks), and the assessment of each property in the assessment district.

N.D.C.C. § 57-02-38 specifies the maximum size of parcels listed in the assessment book and tax list. Unplatted land and undeveloped land platted before March 30, 1981, situated outside of incorporated cities must be described in parcels no larger than quarter sections (approximately 160 acres). Real property situated within the platted portion of incorporated cities or land platted on or after March 30, 1981, that is located outside any city and is not agricultural property according to N.D.C.C. § 57-02-01(1) must be described in parcels no larger than individual lots or parts of lots. Where a building or structure extends over two or more contiguous lots or parts of lots owned by the same person, the tract must be described and assessed as one parcel. A block that has not been subdivided may be described as one parcel.

**N.D.C.C. § 57-02-27.2** provides for the valuation of agricultural land. The beginning point is always true and full value. True and full value of agricultural property represents agricultural value. Agricultural value is defined as the "capitalized average annual gross return," except for inundated agricultural land. Agricultural value of cropland and noncropland represents their capitalized average annual gross return; whereas, the agricultural value of inundated agricultural land represents ten percent of the average agricultural value of noncropland for the county.

Annual gross return is determined by North Dakota State University from crop share rent, cash rent or the combination of the two reduced by estimated property taxes and crop marketing expenses incurred by farmland owners renting their lands on a cash or crop share basis. To determine the "capitalized average annual gross return," the average annual gross return must be capitalized by a rate that is the ten-year average of the gross agribank mortgage rate of interest for North Dakota, calculated from the twelve most recent years, discarding the highest and lowest years. The rate cannot be less than 7.7 percent for taxable year 2010 and 7.4 percent for 2011.

"Inundated agricultural land" is agricultural land containing a minimum of ten contiguous acres and the value of the inundated land exceeds ten percent of the average agricultural value of noncropland for the county. The land is unsuitable for growing crops or grazing farm animals for two consecutive growing seasons or more, and produced revenue from any source in the most recent prior year that is less than the county average revenue per acre for noncropland. A written application must be submitted to the township assessor or county director of tax equalization by March 31 of each year in order for agricultural land to be considered as inundated. The board of county commissioners must approve the category of inundated agricultural land before all or any part of a parcel can be considered as inundated agricultural land for assessment purposes. The valuation of individual parcels may reflect the fact that the property will be used for growing crops or grazing farm animals in the future.

The Agricultural Economics Department at NDSU calculates annually the average agricultural value per acre of cropland, noncropland and inundated agricultural land on a statewide and countywide basis and certifies the values to the ND Tax Commissioner before December 1. The Tax Commissioner then certifies those values to each county director of tax equalization before January 1.

The Tax Director uses soil type and soil classification data from detailed and general soils surveys to determine the average agricultural value for cropland and noncropland for each township/assessment district compared to the county average value. The Tax Director certifies those values to the assessors before February 1. The assessor determines the relative value of each assessment parcel within the assessment district by adjusting the average agricultural value for the assessment district by the relative value of the parcel. For a more thorough explanation of agricultural land valuation, see Unit K.

**N.D.C.C. § 57-02-14.1** provides that, in order to claim exemption from taxation, the owner of real property located within a city must file an application for property tax exemption. The owner must complete the application and file it with the assessor and county auditor by February 1 each year or the assessor will consider the property taxable and assess it. This requirement does not pertain to

property owned by the United States, state of North Dakota or any of its departments, institutions, agencies, or political subdivisions. For example, federal, state, city, school and park district-owned property are not subject to application procedures. They are entitled to property tax exemption simply because of ownership.

N.D.C.C § 57-02-41 provides for prorating property taxes under certain circumstances. Property taxes become a lien upon real estate on January 1 of the year following the year in which the tax was levied. The 2010 property tax becomes a lien upon property and is payable on January 1, 2011. If taxable property is sold after the assessment date (Feb. 1) to someone in whose hands it will become exempt, taxes for the portion of year the property was taxable are a personal charge to the seller and the property will be exempt from taxation for the remaining months of the calendar year. If exempt property is sold after February 1 to an owner in whose hands it is taxable, the property is assessed as omitted property and taxed for the remaining months of the calendar year. This procedure is only available when there is a change of ownership (taxable to exempt or vice versa). Proration is not available for a change of use. The county auditor generally administers this procedure because assessors no longer have possession of the assessment book after April 1.

In addition to completing the assessment list of taxable real property, N.D.C.C. § 57-02-14 requires assessors to complete a *separate* list of real property exempt from taxation. The list must contain the following items:

Legal description of the exempt property

Owner's name

Property valuation

For what purpose the property is used or the statute that provides for the exemption

Property excluded from the requirement to list exempt property separately includes:

- Property owned by the United States, state of North Dakota, county, city, township, etc.
- Farm buildings and farm residences exempt according to N.D.C.C. § 57-02-08(15)

Before annual assessments are finalized, they are subject to review by the various boards of equalization. If property owners disagree with the assessor's estimate, they must provide evidence to support their claim. North Dakota law provides two methods for appealing property assessments: boards of equalization and applications for abatements.

Appeals to the boards of equalization are available before the current year's assessments are finalized. The process is considered informal. It involves the owner meeting first with the assessor and then with the various boards of equalization to present supporting evidence. The abatement process is a formal method of appeal and may result in court action. This process is available after assessments are finalized. The owner may appeal the current year or prior year's assessment by filing an application for abatement with the county auditor and presenting supporting information to the board of county commissioners within a timely manner and by following a strict schedule of hearings.

**N.D.C.C. ch. 57-09 pertains to the township board of equalization. The township board of equalization consists of the township board of supervisors and meets on the second Monday in April each year. If the same person assesses more than the one township, the assessor and township clerk determine the date and time for the meeting, for which notice must be published in the official newspaper at least ten days before the meeting.**

**Each year the township board of equalization must examine the assessment book to determine whether all real property is accounted for and properly valued. If property is omitted or improperly valued, the board must correct the assessment. Before the board can increase an individual assessment, however, it must first notify the owner of its intention. In that case, the board must recess and meet again to allow the owner time to prepare for and present information to support the owner's position. The township board of equalization must complete its business within ten days.**

**The best equalization takes place at this level of review because the township board of equalization has the authority to change assessments on individual properties.**

The township board of equalization meets on the \_\_\_\_\_ in April each year unless the assessor serves more than one assessment district.

The township board of equalization must meet on the SECOND MONDAY in April each year unless the assessor serves more than one assessment district.

The township board of equalization must notify the property owner if the board intends to increase an assessment (a) 10% (b) 15% (c) 25% (d) any amount

The township board of equalization must notify the property owner if the board intends to increase the assessment ANY AMOUNT.

The township board of equalization must complete the equalization process within \_\_\_\_\_ days.

The township board of equalization must complete its business within TEN days.

**N.D.C.C. ch. 57-11 pertains to the city board of equalization, which consists of the governing board of the city. It meets on the second Tuesday in April each year to review the assessments determined by the assessor. If the same person assesses more than one assessment district, the city auditor consults with the assessor to determine a date and time in April and must publish a notice in the official newspaper at least ten days before the meeting.**

**The city board of equalization must examine the assessment books to determine whether all real property within the city is accounted for and properly valued. If property is omitted or improperly valued, the board must correct the assessment. Before the board can increase an assessment more than 25 percent, it first must notify the owner of its intention. The written notice must specify when the board will meet again to consider the increase. The city board of equalization may adjourn from day to day to complete the equalization process.**

**It is best to review the assessments thoroughly at this level because the city board of equalization has authority to change individual assessments.**

The city board of equalization meets on the \_\_\_\_\_ in April unless the same person serves as assessor in more than one assessment district.

The city board of equalization must meet on the SECOND TUESDAY in April unless the same person serves as assessor in more than one assessment district.

The city board of equalization must notify the owner of any property if it intends to increase the property value more than \_\_\_\_\_ percent.

The city board of equalization must notify the owner of any property if it intends to increase the property value more than 25 percent.

**N.D.C.C. ch. 57-12 provides that the board of county commissioners must meet as the county board of equalization within the first ten days of June each year to equalize assessments within the county. The chairman or an appointed representative of each township and city board of equalization and the city and township assessors must attend the meeting.**

**Prior to the meeting, the board of county commissioners authorizes spot checks of property to verify accuracy of the listings and valuations. At the meeting of the county board of equalization, the board compares assessments returned by all the assessors and equalizes assessments between all assessment districts. The board has authority to increase or decrease individual assessments that are not listed at true and full value, provided proper notification to the local board of equalization and property owner are provided according to N.D.C.C. § 57-12-06(2). However, the board does not have authority to add property to the assessment list that was omitted by the assessor and local (township or city) board of equalization. The county auditor has authority to add omitted property to the assessment list according to N.D.C.C. §§ 57-14-01 through 57-14-07.**

**Property owners may appeal their assessments to the county board of equalization without having appealed to the township or city board of equalization first. Property owners are responsible for providing evidence to support their appeal for reduction. If dissatisfied with the decision of the board, the owner may appeal to the state board of equalization.**

**N.D.C.C. ch. 57-13** pertains to the state board of equalization. This board consists of the governor, state treasurer, state auditor, commissioner of agriculture, and state tax commissioner. The state board of equalization meets annually on the second Tuesday in August to equalize the assessments of taxable property returned by all of the counties. The board has authority to increase and decrease assessments of entire classes of property within any county so that the assessments represent true and full value. The board has authority to increase and decrease individual assessments; however, the board does not have authority to decrease an individual assessment unless the board is satisfied that the property owner first appealed the assessment to the appropriate local and county boards of equalization. The board cannot approve residential or commercial property assessments in any taxing district that exceed true and full value as determined by the sales ratio study.

The best equalization of property assessments is done at the local level - by the assessor and the local board of equalization. Decisions of the state board of equalization regarding equalization of assessments constitute finalization of assessments for the assessment year. Property taxes are calculated on valuations as equalized by the state board of equalization. Property owners dissatisfied with decisions of the state board of equalization may appeal their assessment by filing an application for abatement with the county auditor in a timely manner.

**N.D.C.C. ch. 57-23** deals with procedures to abate or refund taxes. N.D.C.C. § 57-23-04 provides for an abatement or refund, in whole or in part, of any assessment or tax for the following reasons:

1. Incorrect identifying description of property or incorrect valuation of property.
2. Value of improvements to property which were nonexistent at time of assessment was considered or included.
3. Complainant or property is exempt.
4. Complainant had no taxable interest in the property assessed against him at the time of assessment.
5. Taxes have been paid and should not have been paid; or an error was made in noting payment or in issuing receipts.
6. Property has been assessed more than once against the same person in the same year and sufficient proof of payment is supplied by complainant.
7. Any building, mobile home, structure or other improvement was damaged or destroyed by fire, flood, tornado or natural disasters.
8. Assessment of complainant's property is invalid, inequitable or unjust.

Anyone having any right, title, interest in or lien upon the property may file an application for abatement. The abatement form shows the owner's name and address, the property description, present and proposed assessment of the property, facts relating to the market or agricultural value of the property, and a checklist of reasons for the application. N.D.C.C. § 57-23-04 provides that the applicant must file the application for abatement with the county auditor by November 1 of the year **following** the year in which the tax becomes delinquent.

The 2010 tax becomes delinquent in 2011. In order to be eligible for a reduction, an individual must file an application for abatement or refund of the 2010 property tax with the county auditor by \_\_\_\_\_.  
month, day, year

The application must be filed by NOVEMBER 1, 2012, the year following the year in which the tax becomes delinquent.

**Depending on where the property in question is located, the board of township supervisors *or* the board of city commissioners reviews the application, holds a hearing and makes its recommendation. The application is then forwarded to the board of county commissioners for a hearing. The applicant cannot submit evidence during this hearing that suggests a lower value, a lower tax levy, or different taxable status than what was requested in the application. The board of county commissioners will approve or reject the application in whole or in part. The board must provide a written explanation of the rationale for its decision to deny an application. If dissatisfied with the decision of the board of county commissioners, the applicant may appeal to district court within 30 days of the decision of the county commissioners.**

**N.D.C.C. § 57-23-07 provides for a compromise of real estate taxes after the second Tuesday in December in the year they are due when the taxes have not been paid and the property has not been deeded to the county. The board of county commissioners, subject to approval by the state tax commissioner, may compromise with the owner of the property and abate a portion of the delinquent taxes, penalty and interest on that portion, on payment of the remainder of the taxes. The reason for the compromise must be for depreciation in value of the property or other valid reason. The compromise must be in the best interest of the county.**

If the tax on any real estate remains unpaid after the second Tuesday in December in the year it is due, the county may compromise with the property owner and abate a portion of the unpaid taxes if the compromise is in the best interest of the county. The board of county commissioners has the power to compromise taxes, upon approval of the \_\_\_\_\_.

The board of county commissioners may grant compromise of taxes, subject to approval by the TAX COMMISSIONER.

**N.D.C.C. § 57-02-08.1 provides for a property tax credit for qualifying homeowners. The applicant must be 65 years of age or older unless permanently and totally disabled. Applicants claiming permanent and total disability must provide a physician's certificate or a written determination from the Social Security Administration. The applicant must reside in and have an interest in the property claimed. In addition, the income of the applicant and spouse/dependent (for applications beginning with year 2009) cannot exceed \$26,000 in the calendar year preceding the assessment date, after deduction of medical expenses not compensated for by insurance. The applicant cannot have assets exceeding \$75,000, including the value of any assets gifted or otherwise divested within the last three years, excluding the first unencumbered \$100,000 market value of the homestead.**

Individuals need to file an application with the local assessor or the county director of tax equalization each year to receive the credit. Individuals whose homestead is exempt as a farm residence are not eligible for the homestead credit. In the event of an applicant's death, the benefits terminate at the end of the taxable year.

The amount of homestead credit allowed depends on the amount of the applicant's net income. The following chart indicates the ranges of allowable income, percentage of taxable value reduction for each range, and the maximum credit allowed at each level of qualification.

<u>Income</u>	<u>Reduction</u>	<u>Maximum Taxable Value Reduction Allowed</u>
\$ 0 - 18,000	100%	\$ 4,500
18,001 - 20,000	80%	3,600
20,001 - 22,000	60%	2,700
22,001 - 24,000	40%	1,800
24,001 - 26,000	20%	900

To qualify for the property tax credit under N.D.C.C. § 57-02-08.1, an applicant must have an interest in the property, be at least \_\_\_\_\_ years old or permanently and totally \_\_\_\_\_, and have income that does not exceed \$\_\_\_\_\_ in the year preceding the year of application. The value of the applicant's assets, including any assets divested within the last three years cannot exceed \$\_\_\_\_\_.

To qualify for the property tax credit under N.D.C.C. § 57-02-08.1, an applicant must have an interest in the property, be at least 65 years old or permanently and totally disabled, and have income that does not exceed \$26,000 in the year preceding the year of application. The value of the applicant's assets, including any assets divested within the last three years, does not exceed \$75,000 excluding the first unencumbered \$100,000 market value of the homestead.

Let's work the following examples:

1. True and full value of an applicant's homestead is \$125,000. The applicant had \$19,800 income in the previous year and is eligible for homestead credit at 80 percent reduction in taxable valuation.

\$125,000	total true & full value	\$ 5,625	taxable value of property
<u>x 50%</u>		<u>x 80%</u>	percent of homestead credit eligibility
\$ 62,500	assessed value	\$ 4,500	80% of taxable value
<u>x 9%</u>	level of valuation (residential)	\$ 3,600	maximum homestead credit
\$ 5,625	taxable value of property		allowed @ 80% eligibility

\$ 5,625	taxable value of property
- 3,600	homestead credit allowance @ 80%
\$ 2,025	remaining taxable value of property

The maximum homestead credit allowed at 80 percent is \$3,600. The applicant will owe property tax based on \$2,025 taxable value rather than \$3,825.

2. Total true and full value of an applicant's homestead is \$54,000. The applicant is eligible for homestead credit at 40 percent reduction in taxable valuation.

\$ 54,000	true & full value	\$ 2,430	taxable value of property
<u>x 50%</u>		<u>x 40%</u>	percent of eligibility
\$ 27,000	assessed value	\$ 972	40% of taxable value
<u>x 9%</u>	level of valuation (residential)	\$ 1,800	maximum homestead credit allowed @ 40% eligibility
\$ 2,430	taxable value		

\$ 2,430	taxable value of property
- 972	homestead credit allowance (972 < 1,800)
\$ 1,458	remaining taxable value of property

**N.D.C.C. § 57-02-08.1** also provides for a partial rent refund for qualifying renters. The applicant must be at least 65 years old or permanently and totally disabled, rent living quarters, and have annual income of \$26,000 or less. Whenever 20 percent of the annual rent exceeds 4 percent of the annual income, the applicant is eligible for a refund. The maximum refund is \$400; the minimum refund is \$5. Renter refund applications are available from the Office of North Dakota State Tax Commissioner. Anyone living in tax-exempt living quarters, including a nursing home licensed pursuant to N.D.C.C. § 23-16-01, is not eligible for a rent refund. An individual cannot receive both the homeowner's property tax credit and the renter's refund in the same year unless a mobile home owner rents land on which the mobile home is located. In this situation, an individual is eligible for the homeowner's property tax credit on the mobile home and the renter's refund for the lot rent.

The maximum annual income a renter may earn in order to qualify for the renter refund is \$\_\_\_\_\_.

In order to qualify for the renter refund, an applicant cannot have annual income exceeding \$26,000.

An applicant is eligible for the renter's refund when \_\_\_\_\_ percent of annual rent exceeds \_\_\_\_\_ percent of annual income.

Anytime 20 percent of the annual rent exceeds 4 percent of the annual income, a qualifying renter is eligible for a refund.

**N.D.C.C. § 57-02-08.3 provides for a homestead credit for special assessments. Any person who qualifies for the property tax credit according to N.D.C.C. § 57-02-08.1 may elect to qualify for an additional homestead credit for the portion of any special assessments levied and due that same year. The total amount of credit allowed for any one property is \$6,000. The applicant must file an application for homestead credit for special assessments with the county auditor by February 1 of the year in which the special assessment installment becomes due.**

**The credit allowed plus nine percent annual interest accrues from June 1 of the year for which the installment for which a credit is taken becomes payable. The credit taken will create and remain a lien in favor of the state against the property until the lien is satisfied. No transfer of title to the homestead because of sale, death, etc., may take place until the lien is satisfied. If a transfer occurs because of the death of one of the spouses, the lien does *not* need to be satisfied until the property again transfers.**

To qualify for the homestead credit for special assessments, the applicant must qualify for the property tax credit provided in N.D.C.C. § 57-02-08.1 and file the application for homestead credit for special assessments with the county auditor by \_\_\_\_\_ of the year in which the special assessments become due.

The application for the homestead credit for special assessments must be filed by FEBRUARY 1 of the year in which the special assessment installment becomes due.

**N.D.C.C. § 57-02-08.8 provides for a property tax credit for a disabled veteran of the United States armed forces. The veteran must have an armed forces service-connected disability of 50 percent or greater, have been discharged under honorable conditions or be retired from the armed forces of the United States and reside in the homestead. The unremarried surviving spouse is eligible for the credit. The percentage of credit allowed is equal to the percentage of the disabled veteran's disability compensation rating for service-connected disabilities as certified by the Department of Veterans Affairs. Assessors use the rating at which the veteran is compensated as of the assessment date to calculate the credit. The credit equals the disabled veteran's percentage of disability applied to the first \$120,000 of true and full value of the building and improvement value of the disabled veteran's homestead.**

**N.D.C.C. § 57-02-08 provides for property tax exemption of certain property:**  
**Subsection 1 - Property owned by the U.S. Government, except property for which the U.S. government waived immunity from taxation.**  
**Subsection 2 - Property owned by the State of North Dakota.**  
**Subsection 3 - Property owned by county, city, village, park district, township, school district, or any other municipal corporation is exempt.**

Ownership is the only requirement which is necessary in order for property to qualify for tax exemption according to N.D.C.C. § 57-02-08(1), (2) or (3). Subsections 4 and 5 have specific requirements for exemption qualification. To qualify for exemption according to subsections 6-42, there is not only an ownership requirement but also the specified use of the property.

**Subsection 4** - Property of Indians in which the title cannot be transferred without the consent of the U.S. Secretary of the Interior.

**Subsection 5** - Lands used exclusively for burying grounds or cemeteries.

**Subsection 6** - All school houses, academies, colleges, institutions of learning, and dormitories together with the land and not used with a view to profit.

**Subsection 7** - All houses, buildings, and lots upon which such buildings are erected used for public worship or as residences of the priest, bishop or minister in charge of services.

**Subsection 8** - Buildings and land belonging to institutions of public charity, including public hospitals and nursing homes, and used for the charitable purposes of the organization.

**Subsection 9** - Land, not extending over two acres, owned by a religious corporation or organization and buildings used for religious services or as a residence of a priest, bishop, or other minister in charge of such services. Also, all real property owned by a religious organization and used as a parking lot by persons attending religious services. A building used for religious services is exempt if rented to another tax exempt organization provided no profit is realized from the rent.

Subsections 7 and 9 refer to an exemption of real property owned by a religious organization and used for religious purposes. Key words involved in determining eligibility for the exemption are \_\_\_\_\_ and \_\_\_\_\_ of the property for religious purposes.

The key words are OWNERSHIP and USE. The property must be owned by a religious organization and used for a religious purpose in order to be exempt according to N.D.C.C. § 57-02-08(7)(9).

**Subsection 10** - Property of an agricultural fair association, incorporated solely for the use of holding agricultural fairs with no intentions of profit for any of its members.

**Subsection 11** - Property owned by lodges, chapters, commanderies, consistories, farmers' clubs, commercial clubs, and like associations not organized for profit and used by them for places of meeting and for conducting their business and ceremonies.

**Subsection 12** - Repealed.

**Subsection 13** - Land used as a public park or monument grounds and not used for profit.

**Subsection 14** - Land or lots and the armory situated upon it owned by a regiment, battalion, or company of the North Dakota National Guard and used for military purposes.

**Subsection 15** - Farm structures and improvements located on agricultural lands and used for agricultural purposes - growing crops or grazing farm animals. A structure or improvement located on agricultural land may be exempt provided it is used as part of a farm operation. There is no minimum acreage requirement or any property ownership requirement for farm structures such as barns and quonsets. They must, however, be used as part of a farm plant. Any structure or improvement,

including a residence, which is located on platted land within the corporate limits of a city or upon railroad operating property is not exempt. Any structure used primarily for a retail or wholesale business other than farming is not eligible for exemption. When determining eligibility, the assessor can not consider the following factors:

- a. whether the farmer grows or purchases feed for animals raised on the farm
- b. whether animals being raised on the farm are owned by the farmer
- c. whether the farm's replacement animals are produced on the farm
- d. whether the farmer is engaged in contract feeding of animals on the farm

A grain farmer has a quonset in which approximately 40 percent of the area is used to store the farmer's grain-handling machinery. The balance of the building is used as his mechanics shop in which he repairs not only his equipment but also other farmers' equipment and vehicles belonging to the public, for payment. The quonset \_\_\_\_\_ qualify for exemption as a farm building.  
does/does not

The quonset DOES NOT qualify for exemption as a farm building because it is *not* used primarily in connection with the individual's farm operation. It is primarily used as a retail mechanics shop.

An individual raises chickens on 15 acres of agricultural land. The individual purchases the chicks from Minnesota and feeds them food which is mostly obtained from the local grain elevator. The buildings used in connection with the chickens \_\_\_\_\_ qualify for exemption as farm buildings.  
do/do not

Buildings used in connection with raising chickens DO qualify for property tax exemption.

A barn located on an 8-acre parcel of agricultural land is used by an adjacent property owner for use with his cattle operation. The barn \_\_\_\_\_ eligible for exemption as a farm structure.  
is/is not

A barn located on agricultural land and used as part of a farming or ranching operation IS eligible for exemption as a farm structure.

**A residence may be exempt as a farm residence provided it is situated on a single tract or contiguous tracts of agricultural land containing *at least* 10 acres and is occupied by a person who devotes a major portion of time to farming activities. The farmer and spouse must have received 50 percent or more of their combined annual net income from farming activities during any one of the three preceding calendar years. Net farm income is determined as follows:**

	<b>Taxable farm income, including CRP payments</b>
<i>minus</i>	<b>Income from custom work (combining, hay cutting, etc.)</b>
<i>plus</i>	<b>Taxable capital gains from the sale of agricultural products</b>
<i>plus</i>	<b>The difference between gross sales price less expenses of sale and the amount reported for sales of agricultural products for which the farmers reported a capital gain</b>

*plus*        **Interest expenses from farming activities which have been deducted in computing taxable income**

*plus*        **Depreciation expenses from farming activities which have been deducted in computing taxable income**

*equals*      **NET FARM INCOME**

**In addition, nonfarm income of an individual claiming to be a farmer and the spouse, if married, cannot exceed \$40,000 during each of the three preceding calendar years. A residence is eligible for exemption if occupied by a beginning farmer who began a farm operation within the three preceding calendar years and who spends the majority of time at farming activities. A residence is eligible for exemption if occupied by an individual who is retired from farming because of illness or age and at the time of retirement owned and occupied the residence as a farmer. A "retired" or "beginning" farmer is not subject to the requirement that the farmer and spouse cannot earn more than \$40,000 of nonfarm income during each of the three preceding calendar years. The exemption of a farm residence is not lost if the farmer operates a bed and breakfast in a qualifying farm residence. The surviving spouse of a deceased farmer who died while working as an active farmer is eligible for the farm residence exemption only for five years after the farmer's death. The surviving spouse of a deceased farmer who was a retired farmer at the time of death retains the farm residence exemption for as long as the residence is continuously occupied by the surviving spouse.**

A residence may qualify for exemption as a farm residence if it is located on at least \_\_\_\_\_ acres of agricultural land and is occupied by a farmer.

A farm residence is one that is located on TEN (10) acres or more of agricultural land and is occupied by a farmer.

A farmer is an individual who spends the majority of time at farming activities and received at least \_\_\_\_\_ percent of the individual's annual income from farming activities during *any* one of the \_\_\_\_\_ preceding calendar years.

An individual claiming to be a farmer must spend the majority of time at farming activities and must receive at least FIFTY (50%) percent of the individual's annual income from farming activities during *any* one of the THREE (3) preceding calendar years.

Another requirement for qualifying as a farmer is that the individual and spouse, if married, cannot earn more than \$\_\_\_\_\_ nonfarm income during *each* of the three preceding calendar years.

An individual claiming to be a farmer, and spouse, if married, cannot earn more than \$40,000 nonfarm income during *each* of the three preceding calendar years.

The requirement pertaining to the limitation of \$40,000 nonfarm income does *not* pertain to \_\_\_\_\_ and \_\_\_\_\_ farmers.

BEGINNING and RETIRED farmers have no limitation regarding the amount of nonfarm income they may earn.

**Subsection 16 - Property owned by a nonprofit corporation organized to promote athletic and educational needs and uses at any state educational institution.**

**Subsection 17 - Moneys and credits.**

**Subsection 18 and 19 - Repealed.**

**Subsection 20 - Fixtures, buildings, and improvements up to a specified amount of valuation when owned and occupied as a homestead by:**

- a. **Paraplegic disabled veteran of the U.S. armed forces or any veteran awarded specially adapted housing by the Veterans Administration, or the unremarried surviving spouse if the veteran is deceased. The exemption applies to the first \$120,000 true and full valuation of the fixtures, buildings, and improvements.**
  
- b. **Any permanently and totally disabled person who is permanently confined to the use of a wheelchair or, if deceased, the unremarried surviving spouse. “Permanently confined to the use of a wheelchair” means that a person cannot walk with the assistance of crutches or any other device and will never be able to do so and a physician has certified to the specific condition. The maximum exemption allowed is \$4,500 taxable valuation because a homestead is limited to \$100,000 value. The exemption does not reduce the liability for special assessments.**

To qualify for exemption of one's homestead as a paraplegic disabled veteran, the applicant \_\_\_\_\_ need to have a service-connected disability. The maximum exemption  
does/does not

available is \$ \_\_\_\_\_ in true and full valuation of fixtures, buildings and improvements.

The disability of an applicant for the paraplegic disabled veteran's exemption DOES NOT need to service-connected. The maximum exemption available is \$120,000 true and full value of improvements.

The maximum exemption allowed for an individual who is permanently and totally disabled and permanently confined to use of a wheelchair is \$ \_\_\_\_\_ of true and full valuation of fixtures, buildings and improvements.

The maximum exemption available to a disabled person permanently confined to use of a wheelchair is \$100,000 true and full value of the improvements.

**Subsection 21 - Repealed.**

**Subsection 22 - Fixtures, buildings, and improvements upon nonfarmland up to \$7,200 taxable valuation or \$160,000 true and full value when owned as a home by a blind person. The blind person must reside on the property. There is no income requirement; however, proof of blindness should be furnished at time of application and periodically. There is no provision for an unremarried surviving spouse.**

A qualifying blind person is eligible for exemption up to a maximum of \$\_\_\_\_\_ of true and full valuation of fixtures, buildings and improvements.

A blind person is eligible for exemption of fixtures, buildings and improvements up to a maximum of \$160,000 true and full value.

**Subsection 23 - Structural improvements other than paving and surfacing to land used exclusively as an automobile parking lot within a city open for general public patronage.**

**Subsection 24 - Repealed.**

**Subsection 25 - Personal property is exempt except: personal property of entities, other than railroads, that are assessed by the state board of equalization; personal property subject to a tax in lieu of ad valorem taxes; or personal property subject to any other provisions of law.**

**Subsection 26 - Fixtures, buildings or improvements up to a maximum of \$4,500 taxable valuation or \$100,000 true and full value when owned and occupied as a homestead by a paraplegic disabled person or the unremarried surviving spouse if such a person is deceased. Income from all sources cannot exceed the maximum allowed for the homestead credit under Section 57-02-08.1. The applicant must submit a medical certificate stating the facts.**

A qualifying paraplegic disabled person is eligible for an exemption up to a maximum of \$\_\_\_\_\_ true and full value of improvements if the income does not exceed the amount specified for receiving homestead credit.

A qualifying paraplegic disabled person is eligible for an exemption up to a maximum of \$100,000 true and full value of the improvements.

**Subsection 27 - Installations, machinery, and equipment of systems in new or existing buildings to provide heating or cooling, or to produce electrical or mechanical power or any combination of these by use of solar, wind, or geothermal energy. If such a device is part of a system which utilizes some other means of energy, only that portion using solar, wind, or geothermal energy is eligible for exemption. The exemption is valid for a period of five years following installation of the system.**

Subsection 27 exempts solar, wind and geothermal energy devices for a period of \_\_\_\_\_ years following installation.

Solar, wind and geothermal energy devices are eligible for exemption for FIVE years following installation.

**Subsection 28** - Fixtures, buildings, and improvements owned by any cooperative or nonprofit organization to furnish potable water to its members and customers for uses other than irrigation of agricultural land.

**Subsection 29** - Property for which the city holds title according to N.D.C.C. ch. 40-57 which is leased to an organization described and used for purposes as provided in Subsection 8, or subleased to a public school district for educational purposes.

**Subsection 30** - Property owned by a religious organization described in Subsection 9, but not used for residential purposes, and leased to a public school district for educational purposes. The property must have been owned and used by the religious organization for at least five years.

A church built three years ago has recently leased a portion of the building to the public school district for educational purposes. The property \_\_\_\_\_ be eligible for exemption  
would/would not  
of the portion of the building leased to the school district.

The portion used by the school district WOULD NOT be eligible for exemption according to Subsection 30 because the building has not been used by the church for five years.

**Subsection 31** - Land and buildings owned by a nonprofit organization and used as a group home. The property is also eligible for exemption during time of construction or remodeling. "Group home" means a community-based residential home which provides room and board, personal care, habitation services, or supervision for persons of developmental disabilities in a family environment, and, once established, is properly licensed.

**Subsection 32** - Minerals in place in the earth which at the time of removal are subject to the oil and gas gross production tax or coal severance tax.

**Subsection 33** - Property used for athletic or recreational activities when owned by a political subdivision and leased to a nonprofit corporation organized for the purpose of promoting public athletic or recreational activities.

**Subsection 34** - Buildings located on state-owned land and used at least in part for academic or research purposes by students and faculty of a state institution of higher education.

**Subsections 35** - New single family and condominium and townhouse residential property is eligible for exemption at the discretion of the governing body of the city or county, for the first two taxable years after the taxable year in which construction is completed. Certain conditions must be met:

1. The governing body where the property is located must pass a resolution stating that the exemption will be allowed.
2. Special assessments and general property taxes cannot be delinquent.

The governing body may limit or impose conditions on exemptions. A qualifying property is eligible for a maximum exemption of \$150,000 true and full value of the improvements. Land is not eligible for exemption. The allowable value of improvements is exempt for two taxable years following the year in which construction is completed and the residence is owned and occupied for the first time.

Determine whether the following property qualifies for the residential property exemption. The governing body of a city passed a resolution to allow the exemption. Special assessments and property taxes are current. The first owner resides in the single family residence. Construction was completed last year. The true and full value of the property this year is:

Land: \$35,900      Building: \$172,500

The property \_\_\_\_\_ eligible for the exemption.  
is/is not

The property IS eligible for the residential property exemption for the current year plus one more year. The exemption is applied to the value of the improvements.

What is the true and full value exempted and for how long? \_\_\_\_\_

The maximum amount of value eligible for exemption is \$150,000 true and full value of the improvements (land is not eligible for exemption). The maximum period of exemption is TWO YEARS FOLLOWING THE YEAR CONSTRUCTION WAS COMPLETED. The exemption applies to the current year and next year's valuation.

What is the true and full value remaining after the exemption?

The true and full value remaining is:

Land: \$35,900      Building: \$22,500      Total: \$58,400

**Subsection 36 - Fixtures, buildings, and improvements used primarily to provide early childhood services by a corporation or organization licensed under N.D.C.C. ch. 50-11.1 or improvements used primarily as an adult day care center are eligible for exemption at the discretion of the governing body of the city or county. Property used as a residence is *not* eligible for this exemption.**

**Subsection 37 - Pollution abatement improvement constructed after December 31, 1992, which is used as part of an agricultural or industrial facility to prevent, control, reduce and eliminate waste contaminants, or to comply with local, state, or federal environmental quality laws, rules, regulations, or standards.**

**Subsection 38 - Leasehold interest in state-owned property leased for pasture or grazing purposes or upon which payments in lieu of property taxes are paid by the state.**

**Subsection 39 - All property, including possessory interests, pertaining to waterworks, mains, and water distribution systems leased to the state or any agency or institution of the state or to a private entity pursuant to certain sections of law, which property is operated by or providing services to a political subdivision or agency of the state, or its citizens.**

**Subsection 40 - All property, including possessory interests, relating to sewage and sanitation systems leased to the state or any agency or institution of the state or to a private entity pursuant to certain sections of law which property is operated by or providing services to a political subdivision or agency of the state or its citizens.**

**Subsection 41** - All property, including possessory interests, leased to a private entity pursuant to section 54-01-27 which property is operated by or providing services to the state or its citizens.

**Subsection 42** - New single family, condominium and townhouse residential property is eligible for exemption at the discretion of the governing body of the city or county for the year in which construction began and the next two taxable years provided certain conditions are met:

1. The governing body where the property is located must pass a resolution stating that the exemption will be allowed.
2. Special assessments and general property taxes cannot be delinquent.
3. Property must remain owned by the builder and unoccupied.

A qualifying property is eligible for an exemption of any amount of true and full value of the improvements approved by the governing body. Land is not eligible for exemption. The allowable value of improvements is exempt for the taxable year in which construction began and the next two taxable years provided the property remains owned by the builder and is unoccupied. A builder is eligible for exemption of no more than 10 properties in a taxable year in each jurisdiction. "Builder" includes an individual who builds that individual's own residence. The governing body may limit or impose conditions upon exemptions.

**N.D.C.C. ch. 57-02.2** provides for exemption of improvements to commercial and older residential buildings. Improvements that qualify include remodeling, renovation, or alteration of an existing commercial building or a residence 25 years old or older. An addition built onto an existing building qualifies as an improvement. The governing body may limit or impose conditions on exemptions.

The governing body of a city or county, depending upon location of the property, is authorized to grant the exemption for a maximum of five years from the date of commencement of making the improvement. The exemption applies only to the valuation resulting from the "improvement" which is over and above the last assessment for the building or structure immediately preceding the commencement of the improvement. For example, the prior year's true and full value of a commercial building was \$90,000. Remodeling was since done to the building in the amount of \$28,000. If the market value of the building remains the same for the next five years, the true and full value would remain at \$90,000. The \$28,000 improvement value is exempt for the term of the exemption.

N.D.C.C. ch. 57-02.2 provides for exemption of improvements to existing commercial and residential buildings for a maximum of \_\_\_\_\_ years. The residential buildings must be at least \_\_\_\_\_ years old in order to qualify for this exemption.

N.D.C.C. ch. 57-02.2 provides for a maximum of FIVE years exemption of improvements to existing commercial buildings and to residential buildings that are at least 25 years old.

An addition built onto a 30-year old residence \_\_\_\_\_ qualify for exemption according to N.D.C.C. ch. 57-02.2. does/does not

An addition built onto a residence which is 30 years old DOES qualify for this exemption.

**N.D.C.C. ch. 40-57.1 provides a property tax exemption for qualifying new and expanding revenue-producing businesses. The exemption is granted at the discretion of the governing board of the city, for projects located within its boundaries, or the county for projects located outside city limits.**

**A municipality may grant a qualifying project complete or partial property tax exemption up to five years on buildings and improvements used in or necessary to the operation. Land is not eligible for exemption. The exemption may be extended to a maximum of ten years for a project that produces a product from agricultural commodities.**

**A project operator who leases an existing building owned by a governmental entity and who has received the new business exemption is eligible for an additional exemption. The exemption can be extended for up to another five years from the date of commencement of project operations, provided annual application is made for the additional exemption.**

**Buildings, structures and improvements constructed and owned by a local development corporation are eligible for partial or complete exemption from ad valorem taxation while unoccupied. The local development corporation must file a written request for the exemption with the municipality. When the building is occupied, the exemption continues until the next assessment. The project operator may be eligible for the property and income tax exemption according to other provisions of this chapter, if application for those exemptions is made before occupancy.**

**Payments in lieu of taxes may be used in place of, or in combination with, property tax exemptions for qualifying projects. The municipality and project operator negotiate the amount of payment and the length of time for making payments. The total length of time cannot exceed 20 years from commencement of project operations.**

**Application for the exemption must be made and granted prior to occupancy. Payments in lieu of taxes are not subject to that requirement. The period of property tax exemption begins with the assessment date immediately following the date of commencement of project operations. Assessment personnel must monitor the period of exemption closely. The municipality must submit to the State Board of Equalization a copy of each application it approves, together with a copy of the minutes of the meeting at which the governing body granted the exemption or payments in lieu of taxes.**

**The net income of a project that qualifies as a primary sector business or tourism destination attraction is eligible for exemption from state income tax for a maximum of five years. The project operator must submit an application to the State Board of Equalization, which either grants or denies the exemption.**

The owner of an existing business located in a township wants to expand the business. The project operator asks if the project is eligible for a property tax exemption. You inform the project operator about the exemption for expanding businesses provided for in N.D.C.C. ch. 40-57.1. To which governing board must the project operator submit the application?

A project operator of a new or expanding business must submit the application to the board of COUNTY COMMISSIONERS.

A project operator begins operations in an existing building on May 1. On June 15, the project operator submits an application for property tax exemption to the local governing body. The governing body \_\_\_\_\_ have authority to approve the exemption. Why?  
does/does not

The governing body DOES NOT have authority to approve the exemption. The application must be made and granted prior to occupancy.

**N.D.C.C. § 40-63-05 provides for a partial or complete property tax exemption of certain buildings, structures and improvements located within a renaissance zone of an incorporated city for a maximum of five years following the date of acquisition or rehabilitation. Eligible properties and the effective dates of the exemption are:**

<u>Type of Property Eligible</u>	<u>Exemption Period</u>
<ul style="list-style-type: none"> <li>• <b>Single-family residences purchased or rehabilitated by an individual as the primary place of residence as a zone project</b></li> </ul>	<p><b>Five taxable years following date of acquisition or completion of rehabilitation</b></p>
<ul style="list-style-type: none"> <li>• <b>Buildings, structures, fixtures, and improvements purchased or rehabilitated as a zone project for any business or investment purposes</b></li> </ul>	<p><b>Five taxable years following date of purchase or completion of rehabilitation</b></p>

**N.D.C.C. ch. 57-55 deals with taxation of mobile homes. A mobile home is defined as "a structure, either single or multi-sectional, which is built on a permanent chassis, ordinarily designed for human living quarters, either on a temporary or permanent basis, owned or used as a residence or place of business of the owner or occupant, which is either attached to utility services or is twenty-seven feet or more in length." The term, "utility services" means services purchased by the occupant from a utility company under the jurisdiction of the public service commission, a rural electric cooperative, or a political subdivision of the state.**

**Mobile homes permanently attached to a foundation and situated on land that is owned by the owner of the mobile home are considered real property and subject to taxation as real property. Mobile homes that are not permanently attached to the land or those located on land not owned by the owner of the mobile home are subject to the mobile home tax permit unless they are exempt. A manufactured home which has a recorded Affidavit of Affixation is considered real property.**

A mobile home attached to a foundation and located on land owned by the mobile home owner is subject to taxation as \_\_\_\_\_. A manufactured home that has a recorded Affidavit of Affixation is subject to taxation as \_\_\_\_\_. A mobile home that is not permanently attached to the land or which is located on leased land is subject to tax as a \_\_\_\_\_.

A mobile home permanently attached to land owned by the owner of the mobile home is subject to taxation as REAL PROPERTY. A manufactured home with a recorded Affidavit of Affixation is taxable as REAL PROPERTY. A mobile home that is not permanently attached to the land or that is located on leased land is taxable as a MOBILE HOME.

**The owner of a mobile home must file an application for the mobile home tax permit with the county director of tax equalization in the county in which the mobile home is located within ten days after the mobile home is acquired, moved, or first brought into the state. When the tax is paid in full, a tax permit is issued to the mobile home owner. A tax permit is valid in any county of the state for the year it was issued. Assessors should make note of all mobile homes located in their assessment districts, identifying which mobile homes are subject to taxation as real property and those that are subject to the mobile home tax permit. Some mobile homes are exempt or not subject to taxation. For a complete listing, see N.D.C.C. § 57-55-10 in Section 1 of your Assessor's Manual or check with the county director of tax equalization.**

The owner of a mobile home must file an application for a mobile home tax permit within \_\_\_\_\_ days after the mobile home is acquired, moved, or first brought into the state.

A mobile home owner must file an application for a mobile home tax permit within TEN days after it is acquired, moved, or first brought into the state.

**Before moving a mobile home, the owner must obtain from the county director of tax equalization a moving permit indicating that all taxes, penalties and interest have been paid. While in transport, the permit must be displayed on the rear of the mobile home. Any person who violates this provision is guilty of an infraction.**

**Mobile home owners are eligible for abatement or refund of the tax according to the provisions of N.D.C.C. ch. 57-23.**

Unit M  
**Statistics and Measuring Equalization**

The assessor is responsible for determining the true and full value of real property subject to property taxation. Assessors may increase or decrease assessments by percentages to reflect changes in market conditions, agricultural land valuations, and changes ordered by the township or city board of equalization. Therefore, the assessor needs to be familiar with the mathematical procedures involved.

To convert a percentage to a decimal - divide by 100, which moves the decimal point two places to the left, and remove the percentage sign. For example:

$$\begin{aligned} 8\% &= .08 \\ 20\% &= .20 \\ 33.6\% &= .336 \end{aligned}$$

Convert the following percentages to decimals:

$$\begin{array}{r} 25\% \quad \underline{\hspace{2cm}} \\ 13.6\% \quad \underline{\hspace{2cm}} \\ 8\% \quad \underline{\hspace{2cm}} \end{array}$$

By dividing by 100 and removing the percentage sign you have:

$$\begin{array}{r} \underline{.25} \\ \underline{.136} \\ \underline{.08} \end{array}$$

To convert a decimal to a percentage - multiply by 100, which moves the decimal point two places to the right, and then add the percentage sign.

$$\begin{aligned} .16 &- 16\% \\ .05 &- 5\% \\ 1.75 &- 175\% \\ .375 &- 37.5\% \end{aligned}$$

To increase a number by a percentage - convert the percentage to a decimal, multiply the number by the decimal, and add the result to the original number.

<b>100 plus 25%</b>	<b><math>100 \times .25 = 25</math></b>
	<b><math>100 + 25 = 125</math></b>
<b>3,000 plus 15%</b>	<b><math>3,000 \times .15 = 450</math></b>
	<b><math>3,000 + 450 = 3,450</math></b>
	<b>OR</b>

**Multiply the number to be increased by 100 plus the percentage of increase, expressed in decimal form.**

<b>100 plus 25%</b>	<b><math>100 \times 1.25 (100\% + 25\%) = 125</math></b>
<b>3,000 plus 15%</b>	<b><math>3,000 \times 1.15 (100\% + 15\%) = 3,450</math></b>

Increase the following numbers by the indicated percentage and round up to a whole, even number. Show your work.

- a. \$ 300 by 15% \_\_\_\_\_
- b. \$ 2,540 by 8.5% \_\_\_\_\_
- c. \$ 7,850 by 13.6% \_\_\_\_\_

Did you remember to round up to a whole, even number? The correct answers are:

- a.  $\$ 300 \times .15 (15\%) = 45$   
 $\$ 300 + 45 = \$345$ , rounded up =  $\$346$   
 OR  
 $\$ 300 \times 1.15 = \$345$ , rounded up =  $\$346$
- b.  $\$ 2,540 \times .085 (8.5\%) = \$215.90$  (rounded up = \$216)  
 $\$ 2,540 + 216 = \underline{\$2,756}$   
 OR  
 $\$ 2,540 \times 1.085 = \$2,755.90$ , rounded up =  $\$2,756$
- c.  $\$ 7,850 \times .136 (13.6\%) = 1,067.60$  (rounded up = \$1,068)  
 $\$ 7,850 + 1,068 = \underline{\$8,918}$   
 OR  
 $\$ 7,850 \times 1.136 = \$8,917.60$ , rounded up =  $\$8,918$

**To decrease a number by a percentage - convert the percentage to a decimal, then multiply the number by the decimal and subtract the product from the original number.**

<b>480 minus 20%</b>	<b><math>480 \times .20 = 96</math></b>
	<b><math>480 \text{ minus } 96 = \underline{384}</math></b>
<b>2,000 minus 65%</b>	<b><math>2,000 \times .65 = 1,300</math></b>
	<b><math>2,000 \text{ minus } 1,300 = 700</math></b>

OR

Subtract the percentage from 100, convert the remaining percentage to a decimal and multiply the remainder by the number.

480	minus	20%	100% minus 20% = 80% or .80
			$480 \times .80 = \underline{384}$
2,000	minus	65%	100% minus 65% = 35% or .35
			$2,000 \times .35 = \underline{700}$

Decrease the following numbers by the indicated percentage and round to a whole, even number.  
Show your work.

- a. \$ 3,300 minus 8% \_\_\_\_\_
- b. \$ 800 minus 9.5% \_\_\_\_\_
- c. \$ 45,200 minus 13.3% \_\_\_\_\_

Let's work each one showing both procedures. The solutions are:

- |    |  |    |   |
|----|--|----|---|
| a. | $\$ 3,300 \times .08 = 264$                            | OR | $100\% \text{ minus } 8\% = 92\% \text{ or } .92$     |
|    | $\$ 3,300 \text{ minus } 264 = \underline{\$3,036}$    |    | $\$3,300 \times .92 = \underline{\$3,036}$            |
| b. | $\$ 800 \times .095 = 76$                              | OR | $100\% \text{ minus } 9.5\% = 90.5 \text{ or } .905$  |
|    | $\$ 800 \text{ minus } 76 = \underline{\$724}$         |    | $\$800 \times .905 = \underline{\$724}$               |
| c. | $\$45,200 \times .133 = 6,011.60$                      | OR | $100\% \text{ minus } 13.3\% = 86.7 \text{ or } .867$ |
|    | (rounded up = \$6,012)                                 |    | $\$45,200 \times .867 = \$39,188.40$                  |
|    | $\$45,200 \text{ minus } 6,012 = \underline{\$39,188}$ |    | (rounded to = $\underline{\$39,188}$ )                |

**The assessor is responsible for equalizing assessments of property within the same classification. Before turning in the assessment book before the local equalization meeting, the assessor reviews all values in the assessment district. The assessor equalizes agricultural land values by using the detailed soils survey, preferably, to determine the relative productivity of similar soils to the countywide agricultural value calculated by NDSU for cropland, noncropland and inundated agricultural land. The assessor equalizes residential and commercial property valuations by using sales data to measure current market value. The assessor then uses the sales information as a guide or benchmark for establishing values of properties that have not sold. For example, an average quality, one-story single-family residence has 1,200 square feet on main floor, a full basement, three bedrooms, 1½ baths and a single attached garage. It sold recently in the open market for \$75,000. If it is an arms-length transaction, you can use that as a benchmark to value similar properties. Equalization does not mean that all one-story single-family residences should be valued at \$75,000.**

**Rather, the values of other residences should be relative to that one (or more) benchmark property(s). Properties that have newer and larger improvements with better location, for example, would typically have values higher than \$75,000, assuming the typical buyer would be willing to pay more to have the amenities. Likewise, properties with older, smaller improvements and poorer location would typically sell for less than the \$75,000 and therefore, assessments should reflect that.**

**Assessors have the best opportunity to equalize individual assessments because their primary duty involves determining and reviewing true and full values of all property in the assessment district every year. Assessors are most familiar with the properties, market trends, and soil productivity and have access to the sales ratio study to equalize values. Therefore, it is easy for the assessor to change individual assessments as needed.**

**The assessor uses data from the sales ratio study to measure how well true and full values of residential and commercial property represent current market value and true and full values of agricultural land represent agricultural land value. The assessor can determine the level of assessment for an individual property by dividing the true and full value of the property for the year in which the property sold by the sale price of the property. The result is called the assessment/sales ratio. For example, a commercial property sold in an arms-length transaction last year for \$79,900. The true and full value determined by the assessor last year was \$74,700. To determine the assessment/sales ratio or level of assessment for the property divide \$74,700 by \$79,900.**

$$\text{\$74,700 (T \& F)} \div \text{\$79,900 (sale price)} = 0.9349 \text{ or } 93.5\%$$

**This property is valued for assessment purposes at 93.5% of market value, which is low. The assessor needs to review the property to determine if any physical changes were made to improve the property since the last inspection. If changes added value to the property, the assessor reflects that in the true and full value of the property. The assessor can then use this sale as a benchmark of value to review and equalize assessments of other commercial property.**

The best opportunity to equalize individual assessments is at the local level, done by the \_\_\_\_\_.

At the local level, it is the ASSESSOR who has the best opportunity to equalize individual assessments.

When residential or commercial properties sell in arm's-length transactions and the true and full values are lower than the sale prices, the assessment/sales ratios will be less than 1.00 or 100%, indicating the properties are under assessed. When this happens, the property tax generated from the valuation will be less than what it should be. When property sells and the assessment/sales ratio is higher than 1.00 (100%), property is over assessed and the property owner pays more tax than the property's fair share. These examples represent unfair assessments and unfair taxation.

The assessor determines the central tendency or average of the assessment/sales ratios within each class of property. Because agricultural land values are based on productivity, the assessment/sales ratio study will not be used to measure agricultural land assessments. There are three measures of central tendency (average) that assessors may use to determine how assessments compare to sale prices: arithmetic mean, weighted mean and median. The arithmetic mean ratio is determined by dividing the sum of the ratios by the number of ratios. This average is affected by extreme ratios. The weighted mean is determined by dividing the sum of the true and full values by the sum of the sale prices. This average is also affected by extremely large values, either true and full values or sales prices. The median ratio is determined by arraying the assessment/sales ratios from high to low (or low to high) and finding the middle ratio (an equal number of ratios above and below the median ratio). If there is an odd number of ratios, the median is the middle ratio. If there is an even number of ratios, the median is the average of the two middle ratios. When the central tendencies determined by all three methods are close, uniformity of assessments is indicated.

Use the following information to determine the three types of central tendency (averages):

<u>True &amp; Full Value</u>	÷	<u>Sales Price</u>	=	<u>Ratio</u>	<u>% Value/S.P.</u>
\$ 17,000		\$ 15,000		1.13	113%
20,200		18,000		1.12	112%
6,000		6,000		1.00	100%
15,800		17,500		0.90	90%
40,400		45,000		0.90	90%
38,300		43,000		0.89	89%
42,600		48,000		0.89	89%
33,600		38,000		0.88	88%
21,600		25,000		0.86	86%
36,800		45,000		0.82	82%
72,500		88,900		0.82	82%
4,800		6,000		0.80	80%
<u>\$ 349,600</u>		<u>\$ 395,400</u>		<u>11.01</u>	<u>1101%</u>

Arithmetic mean: sum of ratios (11.01) ÷ number of ratios (12) = 0.9175 or 91.75%

Weighted mean: sum of T & F values (\$349,600) ÷ sum of sale prices (\$395,400) = 0.8842 or 88.42%

Median: middle of arrayed ratios = 0.89 or 89%

The central tendency (average) determined by dividing the sum of the true and full values of properties that sold by the sum of the sale prices is known as \_\_\_\_\_.

The WEIGHTED MEAN is the central tendency (average) determined by the following formula:  
 $\text{Sum of the T \& F values} \div \text{Sum of the sale prices}$

The average determined by dividing the sum of the ratios by the number of ratios is known as \_\_\_\_\_.

The central tendency, or average, determined by dividing the sum of ratios by the number of ratios, is known as the ARITHMETIC MEAN.

The average assessment/sales ratio determined by arraying the ratios in order from highest to lowest (or vice versa) and selecting the middle ratio is referred to as the \_\_\_\_\_.

The average ratio determined by arraying the ratios in order from highest to lowest (or vice versa) and selecting the middle ratio is known as the MEDIAN.

**The state board of equalization uses the median ratio determined from data in the assessment/sales ratio study to measure the central tendency (average) of assessments compared to sale prices. Based on the above ratios, it indicates that those properties are assessed at an average level of 89% of market value. Some properties are over assessed and some properties are under assessed. The minimum level of assessment accepted by the state board of equalization for residential and commercial property is 95%; therefore the state board would probably order *at least* a six percent increase for all assessments of that property classification. That means the properties that are already over assessed by 12 and 13 percent would be over assessed by 18 or 19 percent and properties under assessed by 20 percent (ratio of 80%) would still be under assessed by *at least* 14 percent. That is why it is better for the assessor to equalize property values individually.**

Use the following information to calculate the arithmetic mean, aggregate mean and median ratios. Remember, the formula for developing the assessment/sales ratio is True & Full Value ÷ sale price (T & F ÷ S.P.)

<u>Sale Price</u>	<u>T &amp; F Value</u>	<u>Ratio</u>	<u>%</u>
\$50,000	\$ 64,600	_____	_____
55,000	63,200	_____	_____
88,000	92,100	_____	_____
27,000	26,500	_____	_____
18,000	16,000	_____	_____
21,000	12,700	_____	_____

Develop the assessment/sales ratio for each transaction by dividing the T & F by the S.P.

<u>T &amp; F Value</u>	÷	<u>Sales Price</u>	=	<u>Ratio</u>	x 100 =	<u>%</u>
\$ 64,600		\$ 50,000		1.292		129.2%
63,200		55,000		1.149		114.9%
92,100		88,000		1.047		104.7%
26,500		27,000		0.981		98.1%
16,000		18,000		0.889		88.9%
<u>12,700</u>		<u>21,000</u>		<u>0.605</u>		60.5%
Sum: \$ 275,100		\$259,000		5.963		

Arithmetic Mean = sum of ratios ÷ number of ratios

$$5.963 \div 6 = 0.994 \text{ or } 99.4\%$$

Weighted Mean = sum of T & F ÷ sum of S.P.

$$\frac{\$275,100}{\$259,000} = 1.06 \text{ or } 106\%$$

Median = middle of arrayed ratios

$$(1.047 + 0.981) \div 2 = 1.014 \text{ or } 101.4\%$$

The assessor determines how uniform (similar) the true and full values are within each class of property because the goal is to equalize values. To measure the uniformity of true and full values, the assessor may calculate one or more of the following: range, coefficient of dispersion (COD), or price-related differential (PRD). Using the same statistics as in the example given earlier:

<u>True &amp; Full Value</u>	÷	<u>Sales Price</u>	=	<u>Ratio</u>	<u>Percentage</u>	<u>Deviation From The Median</u>
\$ 17,000		\$ 15,000		1.13	113%	.24 (1.13 - 0.89)
20,200		18,000		1.12	112%	.23
6,000		6,000		1.00	100%	.11
15,800		17,500		0.90	90%	.01
40,400		45,000		0.90	90%	.01
38,300		43,000		0.89	89%	.00
42,600		48,000		0.89	89%	.00
33,600		38,000		0.88	88%	.01
21,600		25,000		0.86	86%	.03
36,800		45,000		0.82	82%	.07
72,500		88,900		0.82	82%	.07
<u>4,800</u>		<u>6,000</u>		<u>0.80</u>	<u>80%</u>	<u>.09</u>
\$ 349,600		\$ 395,400		11.01		.87 ÷ 12 = 0.0725 (avg. dev.)

The range is simply the difference between the highest and lowest ratio. The range of ratios above is between .80 (80%) and 1.13 (113%) or a difference of .33 (33%).

The coefficient of dispersion (COD) measures uniformity and is calculated by dividing the average deviation by the median ratio. The median ratio determined above is 89%. The average deviation is determined in three steps. First, determine the difference between the median and each ratio (see above). Second, total the differences of deviations, and third, divide the total by the number of ratios (12).

The sum of the deviations above is .87. Divide .87 by 12. The average deviation is .0725. To calculate the coefficient of dispersion (COD) divide the average deviation (.0725) by the median ratio .89 (89%). The coefficient of dispersion is 0.0815 (8.15%). The levels of uniformity indicated by the COD are as follows:

- 10% or less - excellent uniformity
- 10% - 20% - good uniformity
- 20% - 30% - acceptable uniformity
- Greater than 30% - unacceptable; reappraisal is needed

The COD of 8.15% indicates there is excellent uniformity of assessments in the assessment district.

The price-related differential measures regressivity or progressivity of the assessor's estimates of true and full value. When lower-valued properties tend to have higher assessment/sales ratios than higher-valued properties, the assessment are considered regressive. Regressivity is typically seen when the assessor does not change the true and full value of older, small residential buildings to recognize depreciation of the building over the years due to physical deterioration (wear and tear), functional obsolescence (e.g., only one bathroom, no garage, etc.), and/or external obsolescence (e.g., location, change in highest and best use, etc.) If true and full values of those residences remain the same for many years and if the market does not have a demand for the type of property, and the properties eventually sell, they will most likely sell for less than the assessor's true and full values estimate. If the assessment/sales ratio study indicates that several older residences sell for less than the assessor's true and full value, but newer residential property tends to sell for an amount close to the assessor's estimate of true and full value, the assessments are regressive.

An example of regressive assessments is when a residential property, which has a true and full value of \$20,000 for the current year, sells for \$12,500 that same year. If the property was valued at 100% of market value, the ratio would be 1.00 or 100%. Dividing \$20,000 by \$12,500, the ratio is 1.66 or 166%, meaning the property is grossly over assessed and the property owner is paying too much property tax on the property. In the same assessment district, the current true and full value of a much larger and newer residence is \$85,900 and it recently sold for \$89,900, the assessment/sales ratio is 0.96% (96%) which indicates that the property is slightly under assessed but within the tolerance allowed by the state board of equalization. The ratio of the higher-valued, newer home is lower than the ratio of the low-valued, older home, indicating a regressive assessment. When higher-valued properties tend to have higher assessment/sales ratios than lower-valued properties, the assessments are considered progressive.

Using the example above, the higher-valued property has the assessment/sales ratio of 0.96 (96%). The true and full value of the lower-valued property remains at \$20,000 but it recently sold for \$25,000. The ratio for this transaction is 0.80 (80%), lower than 0.96 for the higher-valued property so the assessments tend to be progressive.

The price-related differential (PRD) is calculated by dividing the arithmetic mean ratio by the weighted mean ratio. Using the ratio information listed in the example on page M-5, the arithmetic mean ratio is 0.9175 (91.75%) and the weighted mean ratio is 0.8842 (88.42%) so the PRD is calculated as follows:  
 $0.9175 \div 0.8842 = 1.038$  or 1.04 (the assessments are slightly regressive)

The goal of the assessor is to have a PRD between 0.98 and 1.03.

If the PRD is greater than 1.00, assessments are regressive (PRD > 1.00 = regressive)

If the PRD is equal to 1.00, assessments are neutral (PRD = 1.00 = neutral)

If the PRD is less than 1.00, assessments are progressive (PRD < 1.00 = progressive)

Determine the uniformity of the following assessments (true & full values) by developing the range, coefficient of dispersion (COD) and price-related differential (PRD) and explain your findings.

	<u>T &amp; F Value</u>	÷	<u>Sales Price</u>	=	<u>Ratio</u>	<u>Deviation From Median</u>
	\$ 64,600		\$ 50,000		1.292	0.278
	63,200		55,000		1.149	0.135
	92,100		88,000		1.047	0.033
	26,500		27,000		0.981	0.033
	16,000		18,000		0.889	0.125
	<u>12,700</u>		<u>21,000</u>		<u>0.605</u>	<u>0.409</u>
Sums:	\$ 275,100		\$ 259,000		5.963	1.013 ÷ 6 = 0.169 (avg. deviation)

Arithmetic Mean = 0.994 or 99.4%

Weighted Mean = 1.062 or 106.2%

Median = 1.014 or 101.4%

Range = difference between highest and lowest ratio 1.292 (129.2%) to 0.605 (60.5%)  
Difference of 0.687 or 68.7%

COD = average deviation divided by median ratio 0.169 ÷ 1.014 = 0.167 x 100 = 16.7%  
COD of 16.7% is within the 10%-20% bracket; indicates good assessment uniformity

PRD = arithmetic mean ÷ weighted mean 0.994 ÷ 1.062 = 0.936 or 93.6%  
PRD of 93.6% indicates progressivity of assessments. Higher-valued properties have higher assessment/sales ratios than lower-valued properties.

## Unit N

### Public Relations and Board of Equalization Meetings

Assessors represent the government of the assessment district for whom they work. How property owners perceive the effectiveness of the assessment function affects public acceptance of property taxes and local government in general.

Assessment work involves many procedures - identification and description of real property, determination of whether property is taxable or exempt, and acquisition of proper applications for exempt property, acquisition of property information, valuation of property, equalization of property values, and listing of property values in the assessment book. It is important that taxpayers correctly understand the assessor's responsibilities and have confidence that the assessor properly completed those responsibilities. Proper functioning of the assessment process involves cooperation between property owners/occupants and assessment officials - the assessor and board of equalization (governing board). When the board of equalization and the public are well informed, they have confidence in the assessment process. Assessors should know the answers to and be able to explain the following:

- Why the assessment is done
- How the assessment is done
- When the assessment is done
- Results of the assessment

Let's look at each one separately.

- Why the assessment is done - It is required by state law and is a necessary part of the formula to determine property taxes as a source of revenue for various taxing districts (e.g., county, city, township, parks, schools, etc.).
- How the assessment is done - assessor identifies and describes real property, determines whether property is taxable or exempt, acquires property information, determines true and full values of property, and equalizes property values.
- When the assessment is done - assessors perform their duties within the twelve-month period prior to April 1 each year. Taxable property must be listed and assessed according to its value on February 1 each year. The assessor's listings and valuations are reviewed and corrected, if necessary, by the township or city board of equalization, and the county and state boards of equalization.
- Results of the assessment - provide a source of revenue for operating the government. Each taxing district prepares a budget to determine the money needed to provide services. The revenue needed is called the property tax levy. The county auditor divides the levy by the total taxable value of all property in the taxing district to calculate the mill rate for the taxing district. The mill rate is multiplied by the taxable value of each parcel to determine the tax due.

Assessors need to know the answers to and be able to explain four concepts of real property assessment. List them.

_____	_____
_____	_____

Four basic concepts of the assessment process that the assessor needs to know and be able to explain are:

_____ Why the assessment is done	_____ How the assessment is done
_____ When the assessment is done	_____ Results of the assessment

**Public relations is an important part of the assessor's responsibilities. Knowledgeable assessors who provide correct information to taxpayers can create a positive impression of the assessment process to the public. There are several methods by which assessors can promote good public relations - contacts (personal and telephone), correspondence and forms, the news media, and public meetings. Each method will be discussed separately.**

An important part of an assessor's responsibilities is \_\_\_\_\_.

PUBLIC RELATIONS is an important part of an assessor's responsibilities.

**Assessors have contact with taxpayers during property inspections, equalization meetings and by telephone. Whether it's a personal contact or a telephone conversation, the first impression that a taxpayer has of an assessor should be one that exhibits knowledge, empathy, courteousness, and efficiency. Most property records are considered public information, such as the assessment list, property records and some property sales information. Sales information sent directly by a grantee to the State Board of Equalization is specifically exempted from public access. Assessors cannot divulge any of that sales information to anyone. Generally, the public has a right to see most of the assessor's worksheets. If you don't know the answer to a question, find it and get back to the individual. For personal contacts, it is important to have a neat appearance and also proper identification, in case property owners do not know the assessor. For telephone contacts, it is important to be courteous, listen carefully to what the caller says and always respond in a calm and respectful manner.**

**Know how to handle difficult people such as an angry property owner. It is important to listen to the complaint before responding - in a calm voice. It does not help the matter if you become defensive or let your own anger get the best of you. Be willing to review the property and its valuation together with the property owner and be able to support your position by having accurate information on the property record and sales information, if necessary. If you are wrong, admit it and, if it is not yet**

**April 1, you may correct the current-year assessment list. If property owners are not satisfied with your explanation, inform them of the proper appeal procedures - the various boards of equalization for appeal of a current-year assessment and abatement proceedings for appeal of a current or prior year assessment.**

**Assessors can promote positive public relations through the correspondence and forms sent to taxpayers. Respond to letters of inquiry promptly and in good written format. Always offer your services. Make sure notices of increase in assessment are accurate and complete. It is helpful to include a short explanation of, or reason for, the increase in assessment. There are a number of brochures that explain various aspects of property taxation - the appeal process, homestead credit, and some of the property tax exemptions available. Provide the appropriate brochure to help explain a specific procedure.**

**The news media, whether it is the newspaper, radio or television, is a third way to communicate with taxpayers and promote good public relations. There are times when the public needs to be informed of changes in assessments and property tax benefits. Carefully prepare, in advance, any material submitted to the media.**

**Public meetings are an excellent way to inform the public of the assessment process and property tax benefits and also promote customer service. Meetings of civic organizations such as the Rotary Club, Senior Citizens' Club, Veterans' Club, Optimist Club, and American Legion provide an excellent opportunity to explain assessment procedures and benefits. You could select one specific topic to explain, such as homestead credit, and distribute brochures as needed. If you don't know the answer to a question, admit it and find the answer. Do not attempt to solve a problem with an angry individual during the presentation. Stay calm and be willing to discuss individual problems after the meeting. Make sure you have all the facts.**

**Assessors can also provide assistance to the governing board of the assessment district by explaining what the board's legal and technical responsibilities are regarding the equalization process and meeting. The legal responsibilities include the fact the township and city boards of equalization must hold the meeting on the specified dates set out in N.D.C.C. §§ 57-09-01 and 57-11-01, even if no property owners attend. The boards of equalization are required to equalize and correct assessments, if necessary, hear complaints about property values, and take testimony from property owners and interested persons. The township clerk and city auditor must prepare complete minutes of the respective equalization meetings. Technical responsibilities of the township and city boards of equalization include the following:**

- Chairman calls the meeting to order and asks for the assessor's report**
- Board members examine the assessment list, considering the following items:**
  - Is all taxable property accounted for and assessed?**
  - Are property classifications listed correctly (agricultural, residential, commercial)?**
  - Do properties that are similar have similar (equalized) values?**

- Do all assessments represent true and full value? (residential and commercial property T & F value = market value; agricultural property T & F value = agricultural value)
- Do any assessments need increasing or decreasing? The township board must notify property owners of its intent to increase any assessment. The city board must notify property owners of its intent to increase individual assessments more than 25% above the assessor's valuation. The boards must recess to allow time for the property owner to receive written notification of the board's intent and then meet again to consider the increase.

Assessors can assist the township and city boards of equalization by explaining the board's two types of basic responsibilities, \_\_\_\_\_ and \_\_\_\_\_.

The two basic responsibilities of the township and city boards of equalization are the LEGAL and TECHNICAL responsibilities.

When a township or city board of equalization orders an increase or decrease in valuation, the assessor proceeds to correct the assessment list according to the board's direction. When valuation changes for equalization purposes, the assessor needs to verify that the amount of homestead credit allowed is correct based on the new valuation. For example, the city board of equalization ordered a ten percent increase in valuation for residential properties located in the north one-half of the city. One of the property owners affected by the order is an elderly widow who qualifies for homestead credit at 80%. The total true and full value of her property is \$47,000. The calculations are as follows:

		\$ 47,000 (original true & full value)
		× <u>1.10</u> (10% increase in mkt. value)
		\$ 51,700 (T & F value with 10% increase)
\$ 47,000 (original true & full value)		× <u>.50</u> (50%)
		\$ 23,500 (assessed value)
		× <u>.09</u> (9%)
		\$ 2,115 (taxable value of property)
		× <u>.80</u> (80% hom. cr. allowance)
		\$ 1,692 (taxable value of hom. cr.)
		\$ 3,600 (maximum h.c. allowed @ 80%)
\$ 2,115 (taxable value of property)		\$ 2,327 (taxable value of property)
- <u>1,692</u> (homestead credit allowance)		- <u>1,862</u> (homestead credit allowance)
\$ 423 (taxable value remaining)		\$ 465 (taxable value remaining)

In this example, the amount of homestead credit changes. Therefore, instead of paying property taxes based upon a taxable valuation of \$423, the property owner will pay property taxes based upon a taxable valuation of \$465 which includes the ten percent increase the city board of equalization ordered. In the assessment list, the assessor needs to indicate the valuation changes and any changes in the homestead credit allowance.

The true and full value of Millie Taylor's residence determined by the assessor for the current year is \$75,900. She qualifies for homestead credit at 40%. The maximum amount of homestead credit allowance at 40% is \$\_\_\_\_\_. The local board of equalization reviewed the assessor's valuations and ordered a five percent reduction of residential property values. After calculating the five percent reduction, the amount of homestead credit Millie Taylor will receive is \$\_\_\_\_\_.

The maximum reduction allowed for homestead credit at 40 percent is \$1,800.

Calculation of Millie Taylor's original homestead credit allowance follows:

\$ 75,900 x 50% x 9% = \$3,416 taxable value  
\$ 3,416 taxable value x 40% homestead credit allowance = \$1,366  
Maximum homestead credit allowed at 40% is \$1,800  
\$1,366 is less than the maximum amount allowed for 40%; therefore,  
Homestead credit allowance for Millie Taylor's residence = \$1,366

Calculation of Millie Taylor's homestead credit allowance after the local board of equalization reduces residential property values by 5%:

\$ 75,900 x 95% = \$72,105 (T & F value reduced 5%)  
\$ 72,105 x 50% x 9% = \$3,245 taxable value  
\$ 3,245 taxable value x 40% homestead credit allowance = \$1,298  
\$1,298 is less than the maximum amount allowed for 40%; therefore:  
Homestead credit allowance after the local bd. of equalization reduction:  
\$1,298

**Unit O**  
**Appraisal and Assessment Terminology**

**ACCRUED DEPRECIATION:** Depreciation used only in the cost approach. It is the difference between reproduction or replacement cost new of a property and its market value as of the date of appraisal.

**AGRICULTURAL PROPERTY:** “Platted or unplatted lands used for raising agricultural crops or grazing farm animals, except lands platted and assessed as agricultural property prior to March 30, 1981, shall continue to be assessed as agricultural property until put to a use other than raising agricultural crops or grazing farm animals. Agricultural property includes land on which a greenhouse or other building is located if the land is used for a nursery or other purpose associated with the operation of the greenhouse. The time limitations contained in this section may not be construed to prevent property that was assessed as other than agricultural property from being assessed as agricultural property if the property otherwise qualifies under this subsection. Property platted on or after March 30, 1981, is not agricultural property when any four of the following conditions exist:

- a. The land is platted by the owner.
- b. Public improvements including sewer, water, or streets are in place.
- c. Topsoil is removed or topography is disturbed to the extent that the property cannot be used to raise crops or graze farm animals.
- d. Property is zoned other than agricultural.
- e. Property has assumed an urban atmosphere because of adjacent residential or commercial development on three or more sides.
- f. The parcel is less than ten acres (4.05 hectares) and not contiguous to agricultural property.
- g. The property sells for more than four times the county average true and full agricultural value.”

[N.D.C.C. § 57-02-01(1)]

**AMENITY:** A condition of agreeable living or a beneficial influence arising from the location.

**ASSESSED VALUATION:** “. . . Fifty percent of the true and full value of property.”

[N.D.C.C. § 57-02-01(3)]

**BENCHMARK:** A property which sold recently and is representative of other similar properties which have not sold.

**CENTRALLY ASSESSED PROPERTY:** “. . . All property which is assessed by the state board of equalization under chs. 57-05, 57-06, and 57-32.”

[N.D.C.C. § 57-02-01(4)]

**COMMERCIAL PROPERTY:** “All property, or portions of property, not included in the classes of property defined in subsections 1, 4, 11, 12.” (Property that is not agricultural, residential, centrally assessed, or railroad property.)

[N.D.C.C. § 57-02-01(5)]

**DEPRECIATION:** The loss from the upper limit of value, from all causes, of property having a limited economic life.

**ECONOMIC RENT:** The rent justified for property on the basis of a careful study of comparable properties in the area. Economic rent is market rent.

**EFFECTIVE AGE:** The number of years indicated by the condition of the building. A building's effective age may be more or less than its actual age depending on maintenance.

**ESCHEAT:** A governmental restriction placed upon property in which the title of ownership returns to the state if the owner does not pay taxes or if the owner dies, leaving no will and no known heirs.

**FARM:** “. . . A single tract or contiguous tracts of agricultural land containing a minimum of ten acres (4.05 hectares) and for which the farmer, actually farming the land or engaged in the raising of livestock or other similar operations normally associated with farming and ranching, has received annual net income from farming activities which is 50 percent or more of the annual net income including net income of a spouse, if married, during any of the three preceding calendar years.”

[N.D.C.C. § 57-02-08(15)]

**FARMER:** “An individual who normally devotes the major portion of time to the activities of producing products of the soil, poultry, livestock, or dairy farming in such products’ unmanufactured state and has received annual net income from farming activities which is fifty percent or more of annual net income, including net income of a spouse if married, during any of the three preceding calendar years. The term ‘farmer’ also includes:

‘Beginning farmer’ - an individual who has begun occupancy and operation of a farm within the three preceding calendar years; who normally devotes the major portion of time to the activities of producing products of the soil, poultry, livestock, or dairy farming in such products’ unmanufactured state; and who does not have a history of farm income from farm operation for each of the three preceding calendar years.

‘Retired farmer’ - an individual who is retired because of illness or age and who at the time of retirement owned and occupied as a farmer the residence in which the person lives.

‘Surviving spouse of a farmer’ - the surviving spouse of an individual who is deceased, who at the time of death owned and occupied as a farmer the residence in which the surviving spouse lives.

[N.D.C.C. § 57-02-08(15)(b)(2)]

**HOMESTEAD:** “. . . the land upon which the claimant resides, and the dwelling house on that land in which the homestead claimant resides, with all appurtenances and all other improvements on the land, the total not to exceed \$100,000 in value, over and above liens or encumbrances or both. . . . For purposes of this section, "contiguous" means two or more tracts of real property which share a common point or which would share a common point but for an intervening road or right of way.”

[N.D.C.C. § 47-18-01]

**IMPROVEMENT (for purposes of N.D.C.C. ch. 57-02.2):** “. . . The renovation, remodeling, or alteration, but not the replacement, of an existing building or structure for use for commercial or residential purposes. An improvement for residential purposes is limited to a building or structure at least twenty-five years old. An addition constructed to an existing building or structure to enlarge it is an improvement for purposes of this chapter.”

[N.D.C.C. § 57-02.2]

**MARKET VALUE:** "Most probable price, estimated in terms of money, that a property will bring if exposed for sale on the open market for a reasonable length of time by an owner who desires to sell but is not compelled to sell and is purchased by someone who is willing but not compelled to buy; both parties being reasonably prudent and knowledgeable of uses to which the property can be put.”

[International Association of Assessing Officers]

**MEDICAL EXPENSES:** “Amounts paid for the diagnosis, cure, mitigation, treatment, or prevention of disease, or for the purpose of affecting any structure or function of the body.”

[Federal Income Tax Guideline]

For purposes of homestead credit, "medical expenses" has the same meaning as it has for state income tax purposes, except that for transportation for medical care the person may use the standard mileage rate allowed for state officer and employee use of a motor vehicle under section 54-06-09.

[N.D.C.C. § 57-02-08.1]

**NET INCOME:** Income remaining after allowing for vacancy and collection loss and after subtracting operating expenses from potential gross income and adding miscellaneous expenses.

**NET INCOME FROM FARMING ACTIVITIES:** “. . . Taxable income from those activities as computed for income tax purposes pursuant to ch. 57-38 adjusted to include the following:

- a. The difference between gross sales price less expenses of sale and the amount reported for sales of agricultural products for which the farmer reported a capital gain.
- b. Interest expenses from farming activities which have been deducted in computing taxable income.
- c. Depreciation expenses from farming activities which have been deducted in computing taxable income.”

[N.D.C.C. § 57-02-08(15)]

**POTENTIAL GROSS INCOME:** Economic rent for income property at 100% occupancy.

**RAILROAD PROPERTY:** “. . . The operating property, including franchises, of each railroad operated in this state including any electric or other street or interurban railway.”

[N.D.C.C. § 57-02-01(11)]

**REAL ESTATE:** The physical land and everything permanently attached to it.

**REAL PROPERTY:** The sum of the tangible and intangible rights in land and improvements. It refers to the rights, benefits, and interest inherent in the ownership of physical real estate. (Land, buildings and structures, and the rights, benefits and interests involved in property ownership.)

**REPLACEMENT COST:** Cost of producing a building or improvement having the same utility, but using modern materials, design, and workmanship.

**REPRODUCTION COST:** Cost of producing an exact replica of a building or improvement using the same or very similar materials, design, and workmanship.

**RESIDENTIAL PROPERTY:** “. . . All property, or portions of property, used by an individual or group of individuals as a dwelling, including property upon which a mobile home is located but not including hotel and motel accommodations required to be licensed under ch. 23-09 nor structures providing living accommodations for four or more separate family units nor any tract of land upon which four or more mobile homes are located.”

[N.D.C.C. § 57-02-01(12)]

**SUBSTITUTION:** A principle having an effect on value which states that a property’s market value tends to be set by the cost of acquiring an equally desirable and valuable substitute property, assuming that no costly delay is encountered in making the substitution.

**TAXABLE VALUATION :** (1) “Signifies the value remaining after deducting exemptions and making other reductions from the original full assessed valuation, and is the valuation upon which the rate of levy finally is computed and against which the taxes finally are extended.”

[N.D.C.C. § 57-02-01(13)]

(2) Value determined by applying a certain percentage to the assessed valuation of property:

Residential property	9% of assessed valuation
Commercial property	10% of assessed valuation
Agricultural property	10% of assessed valuation
Centrally assessed property	10% of assessed valuation *

[N.D.C.C. § 57-02-27]

\* Centrally assessed wind turbine electric generators: 3% or 1½% of assessed valuation

[N.D.C.C. § 57-06-14.1]

**TRUE AND FULL VALUE:** “Value determined by considering the earning or productive capacity, if any, the market value, if any, and all other matters that affect the actual value of the property to be assessed. This shall include, for purposes of arriving at the true and full value of property used for agricultural purposes, farm rentals, soil capability, soil productivity, and soils analysis.”

[N.D.C.C. § 57-02-01(15)]