Chapter 7

Part 1: Real Estate Concepts

Part I of this chapter provides a background in real estate terms and concepts that every assessor must know in order to accurately identify what is being valued.

The assessor will frequently encounter the terms "real estate" and "real property." In appraisal terms, real estate refers to the physical items; the land and any structures and improvements located on the land while real property is the rights, privileges, and benefits of owning the real estate. Sec. 70.03, Wis. Stats., states "The terms 'real property', 'real estate' … shall include not only the land itself but all buildings and improvements thereon, and all fixtures and rights and privileges appertaining thereto." Thus, for assessment purposes in the State of Wisconsin, the terms 'real property' and 'real estate' are synonymous

Bundle of Rights

In sec. 70.03, Wis. Stats. the definition of real property includes "all fixtures and rights and privileges appertaining thereto." This means the assessor must not consider only the physical attributes of the land and improvements but the intangible benefits that are associated with them. These intangibles are collectively called the bundle of rights and include the following:

- The right to sell an interest
- The right to lease an interest and to occupy the property
- The right to mortgage an interest
- The right to give an interest away
- The right to do none or all of these things

It is possible to own all or just some of these rights. The extent of ownership of these rights determines what kind of estate, or interest, one has in the property.

When a property owner possesses all the bundle of rights, they have a fee simple ownership interest (or a fee simple estate) in the property. A fee simple ownership interest is the fullest form of private ownership subject only to certain government limitations. The estate has no time limit on its existence, is inheritable, and is freely transferable during the owner's life by gift or sale.

Public Restrictions on Real Property

The bundle of rights is subject to certain governmental limitations which may or may not affect the market value of property. These limitations include:

Taxation - the power to tax property to raise revenues to support government. Any unpaid property taxes represent a lien on property. That is, the property itself becomes security for the payment of the debt. Tax liens have priority over all other liens.

Police Power - the right to regulate the use of property for the public welfare. Examples of police power include zoning ordinances, housing and building codes, and subdivision controls.

Escheat - the power to take title to property if the owner dies without an heir.

Eminent Domain - the power to take property for public use provided the property owner receives just compensation. An example of eminent domain would be the condemnation of property for redevelopment. When the government takes or uses property without providing compensation, it is considered police power rather than eminent domain.

Private Restrictions on Real Property

A property owner's bundle of rights may also be subject to private limitations. These limitations may be created either voluntarily (by deed or contract) or involuntary. They may end at the time of transfer or go with land, in which case the sale of the property does not cancel these limitations. These may, or may not, affect the value of the property. Private restrictions can be divided into two major types: liens and encumbrances.

Liens

Liens are typically cases where another party holds a legal financial interest in the property. A lien may entitle the creditor to have the property sold to satisfy the debt. When this occurs, any liens on a property are paid off in the same sequence in which they are recorded, except for tax liens which have priority over all other liens. Examples of other liens include mortgages, home equity loans, and mechanics liens.

Encumbrances

Deed Restrictions – Deed restrictions are limitations incorporated into deeds. They are a form of private zoning and limit land use. Deed restrictions may control such things as minimum lot size, setback requirements, minimum building value, building type or size, etc.

Easements – An easement is an interest in real property that transfers use, but not ownership, of a portion of the owner's property. In most cases the easement designates a specific use and/or a specific portion of the property. An easement may be in the form of a surface, subsurface, or overhead easement. An example of a surface easement is a shared driveway; an easement for mineral rights is a subsurface easement; air rights are an example of an overhead easement. In the United States, most properties have utility easements granting utility companies access to the property for the purpose of running gas, electric, and other utility lines.

Life Estate – A life estate is an ownership interest in property that is not inheritable. It expires upon the death of the person against whose life it is measured. At that time it reverts to the owner who granted the estate (or the owner's heirs). An individual who is granted a life estate receives all rights to the property for his/her life, including the right to sell the property; however, the life estate would still expire upon the death of the individual to whom it was originally granted.

Leases – A lease is a contract between the property owner and tenant which transfers a portion of the bundle of rights in exchange for rent. When a property is sold, the rights of the

tenant are usually not extinguished. The existing leases remain intact and must be honored by the new property owner.

Encroachments – An encroachment is the unauthorized use of the property by an individual who does not own it, such as a neighbor's fence or driveway extending over the property line. An encroachment can make the title to a property unmarketable unless this restriction on the title is clearly stated in the sales contract.

Ownership Interests

Under most circumstances, the notion of fee simple ownership is hypothetical. The Appraisal of Real Estate, 13th Ed., ©2008 Appraisal Institute states, "The complexity of real property ownership in the United States today suggests that a true fee simple interest seldom exists because nearly all properties are encumbered to some degree by easements, reservations, or private restrictions. Although most appraisers define the interest being appraised as a fee simple interest, once a partial interest is created by a lease, a mortgage, or by any other restriction, the fee simple interest becomes largely theoretical".

So what is the assessor actually valuing? The short answer is that *the assessor values only those rights in the bundle that the owner is able to convey*, and only inasmuch as those rights have market value.

The assessor must consider what effects public restrictions (e.g. zoning) might have on the value of the property. When the title to a property has an encumbrance against it (easements, life estates, leases, encroachments, etc.), the assessor must consider how the encumbrance(s) affects market value and adjust the value accordingly. The assessor does not evaluate liens as these do not normally affect the market value of a property.

Real Estate Instruments

While a deed is the only legal instrument that transfers title (ownership) to property, contracts can be used to contract for the transfer of real estate. Title to the property does not pass, however, until the contract is fulfilled and a deed has been delivered to the buyer. The two main contracts that are used in regard to the sale of property are land contracts and option contracts.

A land contract is a contract between a seller and buyer in which the seller promises to convey the property to the buyer at a specified time in the future and the buyer is obligated to make installment payments to the seller. The seller retains title to the property until all of the terms of purchase have been met. The buyer receives title to the property upon satisfaction of the land contract.

With an option contract the property owner gives a prospective purchaser the right to buy a property at a specified price within a given period of time. An option contract binds the owner of the property for the period of the option; however, the prospective purchaser is not bound to purchase the property. If the option is accepted by the prospective purchaser during the option period, that person becomes the buyer and the option becomes a binding contract.

Deeds

A deed is used to transfer title from the seller to the buyer. The seller of real estate executes the deed and is called the grantor. The buyer, or recipient of the deed, is the grantee. All deeds are recorded in the office of the Register of Deeds.

There are numerous types of deeds used to transfer title. A warranty deed is the one preferred by buyers since it contains certain guarantees that the title has no defects. Other deeds, while not as desirable as a warranty deed, are commonly used and will be briefly discussed.

Warranty Deed. Under a warranty deed, the seller guarantees to the buyer that the title is free and clear of encumbrances except those mentioned expressly in the deed. The guarantees or warrants included in a warranty deed are the following:

1. The covenant of seizin – This guarantees that the seller owns the property and has the right to transfer title.
2. The covenant of quiet enjoyment – The seller guarantees that the buyer will not be disturbed by other persons claiming to have a right to the property.
3. Covenant against encumbrances – This is a promise that there are no encumbrances on the property which have not been mentioned in the deed.
4. Covenant of further assurance – The seller promises to obtain any further documentation as necessary to perfect the title.
5. Covenant of warranty forever – The seller promises to defend the title against claims of persons contesting title even if it occurs after title is transferred to the buyer.

Special warranty deed. Similar to a warranty deed in that it too, contains certain promises or covenants that the title is free of defects. The difference is that with a special warranty deed the seller guarantees the title only against defects occurring during the time that the seller held title to the property.

Quit-claim deed. Does not guarantee or imply the existence, quantity, or quality of the seller's interest in the property. It simply passes all of the interest in the land that the grantor might have and can lawfully convey. Quit-claim deeds are typically used to clear up flaws in the title.

Correction deed. Corrects a previously recorded deed that may contain an error, such as an incorrect legal description, or a misspelled name.

Sheriff's deed. Used in cases where the sheriff acts as the grantor for the benefit of the public. A sheriff's deed may be used in cases of mortgage foreclosure, partition, or execution. A sheriff's deed contains no warranties on the title.

Trustee's Deed. Used when the property is sold that is held in a trust. The trustees of the trust need to sign the deed and guarantees the title only against acts by the trustees.

Personal Representative's deed. Used when property of an estate is sold, with the executor of the estate acting as the grantor. A Personal Representative's deed guarantees the title only against acts by the Personal Representative.

Involuntary Transfer

An involuntary transfer is one in which the title (ownership) to real estate is transferred without the consent of the property owner. Types of involuntary transfer include:

Condemnation – The government, through its power of eminent domain, takes title to property for a public purpose in exchange for just compensation by this process.

Adverse Possession – A person takes possession of another's land without that person's permission and acquires titles to the land. The person seeking to gain title must actually take possession of the land, and that possession must be hostile (without the owner's consent), open and notorious, and continuous for twenty years. A title based on adverse possession is not marketable in Wisconsin unless the adverse possessor takes legal action to "quiet the title." This is the process of having the court enter a judgment showing the title of record to be in the adverse possessor.

Foreclosure Sale – This is an involuntary sale of a debtor's property with the proceeds used to pay unpaid obligations. When property is used as security for a debt, foreclosure is the creditor's means of collecting the debt if the financial obligations are not met.

Partition Sale – A person having an interest in real property jointly or in common with others (as in the case of a tenancy in common or joint tenancy), may petition the court to partition or separate the various interests. If the property cannot be physically divided, the court may order a sale of the property and division of the proceeds among the joint owners.

Accretion – A person may acquire title to a portion of another person's land when accretion occurs. Accretion is the gradual adding of soil to land by natural deposits. This can occur by either reliction or alluvion. Reliction is the gradual uncovering of land caused by the recession of a body of water. Alluvion is the process by which the washing of a body of water causes sand or soil to be deposited upon land, forming additional land.

Escheat – The state acquires title to property when the owner dies without a will or heirs.

Voluntary Transfer

When a property owner transfers the title to property of his or her own accord the transfer is voluntary. Methods of transfer which are considered voluntary include:

Sale – The right to sell property is part of the bundle of rights. Any property owner may voluntarily sell his or her property, limited by only governmental requirements for transfer of ownership.

Gift – A property owner may give away the title to property to a private individual or to government. When property is given to the government as a gift, it is referred to as a dedication.

Will – Title to property may be passed to a property owner's heir(s) by will. The process of transferring title by will is known as devise.

Descent – When a person dies "intestate" (without leaving a will) he or she has voluntarily agreed to allow the state to distribute the estate to the heir(s) according to the statute of descent and distribution. State laws prescribe the person(s) to inherit title to property when an individual dies intestate.

Patents – A private individual may voluntarily take title to public lands by patent. A patent is the legal document used to transfer title to public (state owned) lands and is only issued upon full payment of the purchase money, and any taxes and interest due on the property.

Transfer-in-Effect – While not a legal term, this applies to situations where a lease arrangement provides the lessee with control of the real estate to the point where the lessee becomes the 'beneficial owner'.

Deferred Like-Kind Exchange – The sale of investment real estate is usually a taxable event. To postpone paying a capital gains tax due to an investment property sale; many property owners structure the sale as a deferred like-kind exchange. Section 1031 of the Internal Revenue Code contains detailed instructions about deferred like-kind exchanges. Essentially the owner sells one property (relinquished property) and purchases another one (replacement property) within certain time periods. To adhere to the IRS Code and postpone the gain, the transactions must follow strict rules and occur within inflexible time frames.

Generally, both the sale of the relinquished property and the purchase of the replacement property are separately negotiated transactions between different parties.

Data Validation

The real estate transfer return is the vehicle for collecting information about the transfer of real property in the State of Wisconsin. Not all of the transfers captured are valid for use in assessment functions. Validation is the process of examining each transaction to determine whether it's an arm's-length sale useable for modeling, appraisal, assessment, or ratio analysis. The assessor must review each transaction recorded in the real estate transfer return system and identify those that are valid sales. For each transaction that does not meet validation criteria, the assessor enters the appropriate rejection code into
DOR's Provide Assessment Data (PAD) system. Typical reasons for rejecting sales, both arm's-length and non-arm's-length, are identified in the Rejection Criteria section of Chapter 14.

Part 2: Concepts of Value

In simplest terms, an assessment is an opinion of value. This does not imply however, that one opinion is as good as another. There are valid and accurate assessments and there are

invalid and inaccurate assessments. The validity of an assessment can be measured against the supporting evidence from which it was derived, and its accuracy against the very thing it is supposed to predict, the actual behavior of the market. Each is contingent upon the ability of the assessor to document adequate data and to interpret that data in developing an opinion of value.

Assessing real property, like the solving of any problem, is an exercise in reasoning. It is a discipline founded on fundamental economic and social principles. From these principles evolve certain techniques or approaches which, when applied to the valuation of property, serve to explain the interaction of the marketplace. This chapter concerns itself with those concepts, principles, and techniques basic to the evaluation process.

Standards of Value

The term 'value' can have different meanings depending on context and usage. Because the number associated with different standards of values can fluctuate, the assessor must know which value standard applies to the specific class of property, and the criteria for developing it.

At one time, statutes required all general property to be assessed using the same standard of value. The value standard was referred to as full cash value when applied to personal property and as market value when applied to real property. Full cash value and market value are considered one and the same.

In recent years, the state developed additional value standards in order to provide incentives to protect and preserve the state's agricultural lands and natural resources such as wetlands. The legislature has established value standards for each classification of property. They are:

Classification	**Value Standard**
Residential	market value
Commercial	market value
Manufacturing	market value
Agricultural	use value
Undeveloped Lands	50% of market value
Agricultural Forest	50% of market value
Productive Forest	market value
Other	market value
Personal Property	full cash value (same as market value)

Market value –The definition of market value is the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

1. Buyer and seller are typically motivated;
2. Both parties are well informed or well advised, and acting in what they consider their own best interests;

3. A reasonable time is allowed for exposure in the open market;
4. Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
5. The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale

The following definitions, except full value, are taken from *The Dictionary of Real Estate Appraisal*, fifth edition by the Appraisal Institute.

Use Value in real estate appraisal is the value a specific property has for a specific use; may be the highest and best use of the property or some other use specified as a condition of the appraisal.

Value in Use is the value of a property assuming a specific use, which may or may not be the property's highest and best use on the effective date of the appraisal. Value in use may or may not be equal to market value but is different conceptually.

Investment Value is the value of a property interest to a particular investor or class of investors based on the investor's specific requirements Investment value may be different from market value because it depends on a set of investment criteria that are not necessarily typical of the market. Investment value reflects that subjective relationship between a particular investor and a given investment. However, if the investor's investment requirements are similar to the markets, investment value will equal market value.

Going Concern Value 1. The market value of all the tangible and intangible assets of an established and operating business with an indefinite life, as if sold in aggregate; more accurately termed the *market value of the going concern.* 2. The value of an operating business enterprise. Goodwill may be separately measured but is an integral component of going-concern value when it exists and is recognized.

Business Enterprise Value (BEV) is the value contribution of the total intangible assets of a continuing business enterprise such as marketing and management skill, an assembled work force, working capital, trade names, franchises, patents, trademarks, contracts, leases, customer base, and operating agreements.

Insurable Value is a type of value for insurance purposes.

Full Value Throughout this manual this term means the value at 100% of the value standard. This is the value that should be applied in assessing the property per Wisconsin statutes.

Use Value

Wisconsin's standard for valuing agricultural lands is use-value. Use-value is based on the probable income that can be generated through use of the land. The process for valuing agricultural lands is discussed extensively in Chapter 11 and its appendices.

Market Value

The definition of market value is 'the most probable price paid by a willing buyer to a willing seller in an arm's-length transaction'.

The basis for the assessor's valuation of real property is found in sec. 70.32(1), Wis. Stats.:

> "Real property shall be valued by the assessor in the manner specified in the Wisconsin property assessment manual under Section 73.03(2a), Wis. Stats., from actual view or from the best information that the assessor can practicably obtain at the full value which could ordinarily be obtained therefore at private sale. In determining the value, the assessor shall consider recent arm's-length sales of the property to be assessed if according to professionally accepted appraisal practices those sales conform to recent arm's-length sales of reasonably comparable property; recent arm's-length sales of reasonably comparable property; and all factors that, according to professionally acceptable appraisal practices, affect the value of the property to be assessed."

The scope of the assessor's valuation is defined in sec. 70.03 Wis. Stats. which states "Real property...includes not only the land itself but all buildings and improvements thereon, and all fixtures and rights and privileges appertaining thereto...".

The goal of the assessor is to estimate the current market value of the bundle of rights for a particular property, considering only those rights and privileges that the owner, or beneficial owner, can transfer to a willing buyer in an arm's-length transaction.

Wisconsin Courts have declared that, when applying the market value standard, the assessor must base the value of a property on the arm's-length sale price of the subject property or the sales of reasonably comparable properties, if available. Therefore, the assessment of any property should reflect the arm's-length sale price of the subject, or its probable selling price if no sale has occurred.

Uniformity

Section 1, Article 8 of the Wisconsin Constitution states that "The rule of taxation shall be uniform…". This directive is woven throughout chapters 70 and 73 of Wisconsin Statutes in the structuring of the laws for the assessment and taxation of real property. Uniformity in taxation ensures equity among taxpayers and, through the equalization process, equity among jurisdictions across the state.

Uniformity occurs when all property is assessed at full value or when all classes of property are assessed at the same percentage of full value. Because appraising is not an exact science and is based on the 'typical buyer and typical seller' there will always be variances in individual properties. The ideal of every single property being valued at exactly 100% of its value, no more, no less, is a practical impossibility. The statutes have acknowledged this by allowing assessments to range from 90% to 110% of full value.

At a broader level, there is uniformity as applied across municipalities. This ensures that each community bears its fair share of the tax burden. This becomes uniformity at the state level. Equalization is the method used to achieve a high degree of uniformity (equity) across communities at the state level.

The primary source for the concept of uniformity in the Wisconsin assessment process comes to us directly from the Wisconsin Constitution. Section 1 of Article 8 reads as follows:

> **Article VIII. Finance**.
>
> "Section 1. [Rule of taxation uniform; income, privilege and occupation taxes.] The rule of taxation shall be uniform but the legislature may empower cities, villages or towns to collect and return taxes on real estate located therein by optional methods. Taxes shall be levied upon such property with such classifications as to forests and minerals including or separate or severed from the land, as the legislature shall prescribe. Taxation of agricultural land and undeveloped land, both as defined by law, need not be uniform with the taxation of each other nor with the taxation of other real property. Taxation of merchants' stock-in-trade, manufacturers' materials and finished products, and livestock need not be uniform with the taxation of real property and other personal property, but the taxation of all such merchants' stock-in-trade, manufacturers' materials and finished products and livestock shall be uniform, except that the legislature may provide that the value thereof shall be determined on an average basis. Taxes may also be imposed on incomes, privileges and occupations, which taxes may be graduated and progressive and reasonable exemptions may be provided."

This has become to be known as the Uniformity Clause.

There are three basic principles of uniformity which apply to each constitutional class of taxable property:

1. All property within the class must be taxed on the basis of equality so far as practicable and all property must bear its burden equally on the full value basis of the value standard for that statutory class (market value for personal property, residential, commercial, manufacturing, productive forest, and other; use value for agricultural; and 50% of market value for undeveloped and agricultural forest).
2. While there can be no classification of property for different rules or rates of property taxation, the legislature can classify as between property that is to be taxed and that which is to be wholly exempt, and the test of such classification is reasonableness.
3. There can be variations in the mechanics of the property assessment or tax imposition so long as the resulting taxation shall be borne with as nearly as practicable equality on a full value basis of the value standard for that statutory class with other taxable property.

Uniformity does not mean that the assessments must be at the full value of the statutory value standard. It does require that assessments be at the same percent or fraction of the full

value upon which the statutory class is based. Uniformity is required for all property in a constitutional class, which includes all taxable property.

Uniformity does not require that the identical method or approach be used in determining what the assessed value should be. The ultimate goal is equality between the tax burden of each of the property owners, and that is achieved by using the most appropriate and effective approach or methodology for calculating the assessed value using the value standard for that statutory class. For example, it is incorrect to presume that all items classified as personal property should be valued using the year of acquisition times the annual factor shown in the schedules DOR provides. The assessor must recognize that in some instances the sales comparison method, or some other methodology, may yield a more reliable indicator of true cash (i.e. market) value. What is critical for uniformity is not the methodology used, but that the tax burden of each dollar's worth of one sort of property is liable for exactly the same tax as a dollar's worth of any other property in that statutory class.

There are circumstances where the assessment process has resulted in non-uniform treatment of properties on the roll. The uniformity clause is violated where the assessor has significant differences between assessment to full value ratios of statutory classes (residential as compared to commercial or personal property, for example), or strata within a statutory class (on water vs. off water residential; newer vs. older homes). Changing the values of properties in certain neighborhoods while not adjusting the values in other neighborhoods, particularly when sales activity shows relative values are changing, fails the uniformity test. Singling out specific properties as a result of a sale of the subject, while not addressing all properties, would be another arbitrary method of assessment resulting in non-uniform assessments.

Valuation Principles

Appraisal and assessment theory identify various principles to explain the actions of the real estate market. The interaction of these principles produces the actions of the real estate market. The application of these principles forms the basis of the techniques used by the assessor to arrive at the market value of a given property.

Assessors need skills in both mass appraisal and single-property appraisal. Both appraisal methods are based on the valuation principles discussed in this section.

Supply and Demand

Market value is determined by the interaction of the forces of supply and demand. Demand is represented by buyers with similar desires and resources. Supply is represented by all of the properties that are similar in the eyes of those buyers. The greater the supply of a commodity, the lower its value; and conversely, if there is a scarcity of a commodity, its value will be greater. For example, if the population of an area increases without a corresponding increase in housing, the value of residential space would increase. On the other hand, if there were an increase in residential construction while the population remains stable or decreases, the market value of residential property would probably decrease. The assessor must be knowledgeable of the supply and demand factors and be able to analyze the effect of changes in either factor on market value.

Highest and Best Use

Highest and best use is defined as that use which over a period of time produces the greatest net return to the property owner. The possible uses of a property have a significant influence on its value. Because most properties could be put to a number of different uses, it is necessary to determine which of the possible uses is the highest and best use. There are a number of factors that influence the highest and best use of a property.

The contemplated use must be legal. That is, it must not violate any government regulations. This would include such items as zoning, building codes, health codes, criminal laws, and other regulations. For example, an office building may represent the greatest net return on a parcel of real estate; however, if this use is prohibited by zoning laws, it does not represent the highest and best use.

The use must be complementary. It must be in balance with the uses of the property around it. This is explained in the principle of conformity.

The highest and best use should not be a highly speculative use. The use should produce the greatest net return over a reasonable time period. An income stream of high return over a short time may not be as valuable as that use which generates a smaller income but over a longer period of time.

The highest and best use of a property can change over time. Changes in the economy, society, and neighborhood can result in new uses of properties. Therefore, the assessor should be periodically reviewing the data on highest and best use and change the conclusions if necessary.

Assessors should start with the assumption that the current use is the highest and best use. However, it is important to recognize that the current use of a particular property does not necessarily represent the highest and best use or the full market value of the property. All of the available uses of the property should be considered.

Substitution

Assuming that a property is replaceable, the market value is usually set by the cost of acquiring an equally desirable property. The premise of the principle of substitution is that a prudent purchaser will pay no more for a property than the cost of building an equivalent structure, or purchasing an existing property with similar utility or income generating capacity. This principle is the basis for the cost, income, and sales comparison approaches to value, which will be discussed later in this chapter.

While the principle of substitution is the basis for the three approaches to value, the terms “cost” and “sale price” may not always be synonymous with market value. Cost and sale price represent a historical figure for a specific property at a specific time. Cost and/or sale price is not always indicative of market value. For example, a buyer may be willing to pay more for an existing house than the cost of building it new because the new house would require waiting 4-6 months for construction to occur.

Contribution

This principle states that the value of an element or a component of a property is worth only what the element or component adds to, or subtracts from, the whole property value. The principle of contribution is the basis for the adjustment process of the comparable sales approach. In this approach, adjustments are made based on how much the presence or absence of an element affects the market value of a property. For example, a property owner may spend $5000 to add a half-bath to his or her home; however, the value of the home may only increase by $4000. Thus, the contribution of the half-bath to the overall value is $4000.

Increasing and Decreasing Returns

This principle says that value increases as investment increases until a certain point is reached, at which point additional expenditures will result in decreasing returns. This principle can be likened to a farmer's use of fertilizer. As fertilizer is added, crop production increases to a point; after this point, the addition of fertilizer increases production at a decreasing rate until successive additions begin to decrease production by killing the crop.

An example of increasing and decreasing returns is a residential attached garage. If most homes in a neighborhood have a two car garage and sell for $5,000 more than a house with no garage, then the owner can expect to increase the value of his residence $5,000 if he builds a two car garage. This amounts to a return of $2,500 per stall. If he builds a three stall garage, he will likely get $2,500 each for the first two stalls but a lesser amount for the third stall. The typical buyer is happy with this additional amenity but it is more than he expects so he's not willing to pay as much for it as for the first two stalls. If the owner builds a 6 car garage the added investment may actually decrease the value of his property because the garage does not conform to the typical neighborhood house.

Anticipation

One definition of value is the present worth of anticipated future benefits. These future benefits can be the amenities of home ownership, the receipt of an income, a place to run a business, or any other benefits that may be projected. It is the conversion of anticipated future benefits into a present value that is the basis of the valuation of property in the income approach.

Change

The factors that affect market value are constantly changing. Not only are economic, social and government forces constantly changing, but the property itself is subject to change. Because change is constant, every opinion of value is meaningful only in the context of the date to which is applies. In Wisconsin, assessment values are always as of January 1. Any changes to the property, economy, or any other financial factors affecting value that occur after that date, are not considered until the following assessment cycle.

Conformity and Balance

The value of a property tends to increase when it conforms to the standards of the neighborhood. Conversely, value may decrease due to the presence of inharmonious use or conditions. For example, a residential property is likely to be at its highest value when it conforms to neighboring properties in age, size, condition, and construction quality. Zoning and land use planning are based on the principles of conformity and balance.

When a residential neighborhood has the necessary support facilities such as stores, schools, churches, and recreational area, it is said to be in balance, and barring any outside factors, values will probably be stable or increase. If a non-conforming use, such as a heavy industrial plant or truck terminal, were located in a residential neighborhood, values of residential property would probably decline.

The principle of conformity is one of the reasons for the growth of industrial parks. The plants can be separated from residential areas and, by being grouped in the same area, they lend support and uniformity to each other.

Another aspect of this principle concerns competition. A neighborhood or municipality can support only a certain number of restaurants, supermarkets, shopping centers, theaters, and so forth. When there is a greater number of one type of property than the area can support, this tends to depress the value of most, if not all, similar properties.

Valuation Considerations

This section describes how to apply the previously discussed valuation principles and concepts to the valuation of real property. Application of the principles requires the assessor to understand the trends and factors that affect value in general and hence affect the value of an individual property. These valuation considerations apply to both individual appraisal and to mass assessment.

Market Conditions

Real property valuation does not exist in a vacuum. It is not enough for the assessor to apply the principles of valuation to a specific property. The assessor must also be aware of the trends and factors that occur on the international, national, and regional levels as well as those factors which have an influence at the neighborhood and municipal levels.

International, national, and regional forces affect the value of property indirectly. At this time, conditions are such that the world has become more interdependent. National and international events influence almost every municipality. The value of currencies, the price of oil, the rate of inflation, the unemployment level, changes in population, and shifts in demographics may all have an influence on property values.

Neighborhood Analysis

The assessor should consider those factors that have a direct and immediate impact on value in a neighborhood. The first step is to identify neighborhood boundaries. There are basically

three types of boundaries: man-made, geographical, and political. Man-made boundaries include freeways, highways, railroad tracks, streets, and property use. Lakes, hills, rivers, swamps, and similar features are all examples of geographical boundaries. Political boundaries can be city limits, school districts, zoning areas, and aldermanic wards. Once the assessor has defined the various neighborhoods in the municipality, it is then possible to analyze each neighborhood in terms of the physical, economic, governmental, and social forces that affect it.

Physical Factors

Location. The most important physical factor is typically location. All real estate derives its value from its location.

Appearance. The physical appearance of a neighborhood affects all types of property. Well-maintained residential areas are more desirable than those that are dilapidated. This is also true of other property. Commercial areas of run-down buildings, inadequate parking, poor lighting, and poor snow removal are not as desirable as those that are well-maintained.

Traffic. In residential areas curved streets, cul-de-sacs, and dead ends are desirable to keep out heavy traffic and to keep speeds down; however, in industrial and commercial areas the opposite is true. In such areas, roads capable of carrying heavy traffic are needed to facilitate the movement of customers and trucks.

Soil and Subsoil Conditions. This can determine the use of a property. For agricultural properties, soil conditions determine what crops can be grown. The supporting capabilities of the subsoil can also determine the size and type of structure that can be built.

Economic Factors

Population. Any growth, decline, or shift in the population can have an effect on value. People moving into an area increases the demand for housing and services.

Property Use. When the uses of property in a neighborhood are in balance, value is enhanced. Balance is achieved when the mix of property uses, generally achieved through zoning, results in property uses that support each other. Examples are adequate commercial, retail, parks, schools, and other amenities to support residential neighborhoods and easy access to highways to transport goods from industrial facilities.

Assessment. Assessments should be uniform not only within a neighborhood, but also between neighborhoods. If a neighborhood is not assessed uniformly, it can create an artificial competitive advantage or disadvantage.

Governmental Factors

Municipal Services. The availability and adequacy of such services as schools and fire and police protection will influence the desirability of a neighborhood.

Planning and Zoning. Good planning and zoning create a balance in a neighborhood (See economic factors above)

Building Codes. Building code requirements affect the cost of construction and remodeling.

Social Factors

Social factors include population trends, family size, education trends, crime rates, and age distribution. They also include the availability of recreational, social, and cultural facilities.

Property Considerations

The assessor must derive a land value for each parcel and, if improvements exist, the assessor must place a separate value on all improvements. These values are listed separately on the assessment roll according to sec. 70.32 (2a), Wis. Stats. If a property has sold, the assessor must apportion the sales prices between land value and improvement value. This section discusses the various factors which affect land and improvement value.

Conservation Easements

Limitations or restrictions on use may be incorporated into deeds. Restrictive covenants or deed restrictions typically run with the land, regardless of the owner and may regulate land use, minimum lot areas, building setbacks, minimum building value and maximum building size. These types of private use restrictions on property may, or may not, affect the value of a parcel.

Conservation easements represent private land use restrictions and may be more or less stringent than zoning by the local government. However, sec. 70.32(1g), Wis. Stats. states in part, "… the assessor shall consider the effect on the value of the property of any zoning ordinance under s. 59.692 , 61.351 or 62.231 , any conservation easement under s. 700.40 , any conservation restriction under an agreement with the federal government and any restrictions under CH. 91 ."

Section 700.40(1)(a), Wis. Stats. defines conservation easements as "… a holder's non-possessory interest in real property imposing any limitation or affirmative obligation the purpose of which includes retaining or protecting natural, scenic or open space values of real property, assuring the availability of real property for agricultural, forest, recreational or open space use, protecting natural resources, maintaining or enhancing air or water quality, preserving a burial site, as defined in s. 157.70 (1) (b) , or preserving the historical, architectural, archaeological or cultural aspects of real property."

Conservation easements are usually established by a grant from the owner to a qualified government or charitable organization "holder." Section 700.40(1)(b), Wis. Stats. restricts holders of conservation easements to: "1. Any governmental body empowered to hold an interest in real property under the laws of this state or the United States. 2. Any charitable corporation, charitable association or charitable trust, the purposes or powers of which include retaining or protecting the natural, scenic or open space values of real property, assuring the availability of real property for agricultural, forest, recreational or open space use, protecting natural resources, maintaining or enhancing air or water quality, or preserving the historical, architectural, archaeological or cultural aspects of real property."

The holder may pay the landowner for the value of the conservation easement, or accept the interest as a donation. Conservation easements may only be obtained by qualified government bodies and charitable organizations and only in a recorded document. In order to qualify as a conservation easement, the recorded grant must include restrictions or obligations whose purpose is to protect one or more of the conservation objectives listed in sec. 700.40(1)(a), Wis. Stats.

Government agencies including Wisconsin DNR and some local government bodies and the U.S. Departments of Agriculture and Interior all purchase conservation easements under the Knowles-Nelson Stewardship Program, the Federal Farmland Protection and Forest Legacy and other programs. Whether donated or purchased, a full narrative appraisal is often prepared to determine the value of these conservation easements. Determining the assessed value of property affected by conservation easements is a complex appraisal project. If an appraisal is available, the assessor may find the information helpful in determining the assessed value of the parcel.

Assessors should review each situation independently to determine the "bundle of rights" to be valued while considering:

- restrictions established by the easement
- potential uses
- duration of the recorded easement
- the property's location; and the boundary of the restricted land and its effect on the parcel and appurtenant parcels.

The restrictions of a conservation easement may result in a redistribution of value on the entire affected parcel. The impact of property restrictions on value is referenced in the "Private Limitations On Property" section at the beginning of this Chapter. The restrictions on the affected land may result in a change in value, either increased or decreased. The adjoining or adjacent property or portions of the subject parcel may also have a change in value due to the restrictions.

An assessor may not be aware of conservation easements since they are not separately indexed by the Register of Deeds and are not recorded with a Real Estate Transfer Tax Return. Assessors are not required to search public records to identify property within the jurisdiction that are subject to conservation easements. However, if the assessor has knowledge of a recorded conservation easement, the effect on the value on the affected property shall be considered.

It is in the property owner's best interest to provide the assessor of the municipality-information regarding the conservation easement and a qualified appraisal (if available) by January 1st of the assessment year. The assessor shall consider the information when determining the assessed value. Assessors should review and analyze the information contained in the appraisal. The appraisal will become part of the property record card file. The appraisal will provide information and an opinion regarding the impact of the conservation easement on the value of the property. When a conservation easement is discovered, the assessor should check to see if other parcels are subject to conservation

easements. Other possible sources of information are the Wisconsin Department of Natural Resources and the Real Property Lister.

The valuation of parcels subject to conservation easements should be valued at market value based upon the best information available to the assessor. The best evidence of market value is sale of the subject property or sale of a similar property. When sales data is available, the assessor can determine the impact on value based on the sales comparison approach. The impact on value can be found by comparing the sales price of properties with conservation easements with similar properties not subject to easements. Please see Chapter 9 for more information on the Sales Comparison Approach to value.

Zoning

Local zoning ordinances, and how strictly they are enforced, can greatly influence value. Zoning ordinances limit the permissible uses of the land. If land use is limited, the value may be affected by zoning unless the purchaser can easily get the zoning changed to permit other uses.

Limitations or restrictions on use may be incorporated into deeds. These restrictions represent "private" zoning or restrictive covenants and may be more or less stringent than zoning by government. Restrictive covenants, which are also referred to as deed restrictions, go with the land, regardless of the owner, and may control such things as minimum lot size, set back requirements, minimum building value, maximum building size, etc.

Special Zoning Restrictions

Section 70.32(1g), Wis. Stats. requires the assessor to "consider the effect on the value of the property of any zoning ordinance under Section 59.971, 61.351 or 62.231, any conservation easement under Section 700.40, any conservation restriction under an agreement with the federal government and any restrictions under Chapter 91."

The assessor should work closely with county and municipal zoning authorities to ensure that property subject to the above conditions is properly identified. The assessor should also consult the Soil Conservation Service, the Department of Natural Resources, and the Department of Agriculture, Trade and Consumer Protection. They may have maps and other information that identifies property subject to the above conditions.

Sections 59.971, 61.351, and 62.231, Wis. Stats. refer to county, village, and city zoning of wetlands and shorelands. The purpose of the zoning is the efficient use, conservation, development and protection of the state's water resources. The assessor must check with appropriate zoning authority to find out the provisions of the specific zoning ordinance. The zoning ordinance will also specify the permitted and prohibited uses of the wetlands.

In general the ordinance prohibits the development of the wetlands for any use that alters the existing condition of the wetlands. For example, residential, commercial, or industrial development is not permitted without receiving a variance from the zoning authority. However, although zoning ordinances change the way property can be used, they usually allow the continuation of an existing use. For example, if the property is being used as a

residence, this conforming use may continue. An enforced zoning ordinance can change a property's highest and best use. The assessor must monitor the zoning ordinances to be aware of any changes that affect the highest and best use and thus the value of the property.

Chapter 91, Wis. Stats. relates to Farmland Preservation. Farmland preservation agreements or transition area agreements are restrictive covenants running with the land, for a term of years, whereby the owner and the state agree to hold jointly the right to develop the land except as may be expressly reserved in the instrument.

Location

Location is a primary factor in the value of any particular property, though the factors associated with location may vary based its use. For example, most retail establishments place greater value on locations with visibility and access while residential property value may be influenced by proximity to parks or schools.

Land Factors

Topography. Topography can determine the type of construction, the location of improvements, and the potential uses of a property. It can also influence the cost of developing improvements. For example, if a property is lower than surrounding properties it may need fill to make it conform to the neighborhood, adding additional cost to building a residence.

Soil Condition. The condition of the soil and subsoil can influence what can be built on a site or what additional costs may be necessary to build. For example, swampy conditions may require heavier and deeper foundations, or permit only light construction. The soil type and condition also help to determine the productivity of agricultural land.

Natural Features. The natural features of a property can have a significant effect on its value. Woods, water frontage, and views are just a few of the features which can affect value. For example, a buyer may pay more for a site with an attractive view of a lake. The assessor should be aware of what natural features may affect value, both positively and negatively, when deriving the assessment. See WPAM Chapter 8 for a more detailed discussion of riparian property.

Size. The size or area of a parcel can influence value. The assessor must be aware of the useable area of a property. If a property includes a gully, ravine, or other disadvantage that would prohibit building or cultivation on that portion, the assessor should take that into consideration when deriving the assessment.

Shape. The shape of a parcel must be considered influences its utility which can significantly affect value. The shape, together with the area of the parcel, will affect what uses are possible and permissible under local zoning and private use restrictions.

Frontage. The distance which a property fronts a roadway, street, or body of water, will also have an effect on its value. Frontage is usually expressed in front feet, and generally in terms of a standard depth.

Depth. This is the distance from the front to the rear of the parcel. When a parcel is not of rectangular shape usually the two distances from the front to the corners are averaged to give an average depth. Depth has an influence on value.

Water Influence. Buyers frequently place greater value on property that has a water view or water frontage. The quality of beach, the extent and desirability of the view, the availability of access to the water, and the type of water (lake, stream, pond, etc.) all affect the value of a property.

Improvement Factors

To value property correctly, assessors must gather detailed information on the utility, condition, desirability, and thus the marketability of the improvements. This information is best obtained through an on-site viewing. An on-site viewing allows the assessor to gather and record detailed data on any new construction, remodeling and other characteristics. This ensures that each parcel has an accurate and up to date property record card.

Physical Characteristics

Physical characteristics such as age, condition, design, layout, quality of construction materials and workmanship all have an effect on the value of improvements. Again, the important characteristics vary between property types. For single family homes, the number of bedrooms or bathrooms may matter. For office space, handicap accessibility features, fenestration, and modularity may affect the value.

Size. The size of a building often influences value with smaller properties tending toward lower values when compared to larger properties. However, when comparing the property value per square foot, smaller properties may have higher per square foot values when compared to larger properties.

Age. The age of the building can have an impact on the value of the property. Typically, a property loses value as it gets older. This loss in value can be attributable to several factors including: the aging of the building components (e.g. furnace, roof, wiring) or the lack of up-to-date amenities. Historic properties may not lose as much value due to their unique property characteristics. Remodeling and regular maintenance can reduce the effects of actual age on value.

Condition. The condition of the building can have an impact on the value of the property. A property in excellent condition generally has a higher value than a similar property in poorer condition. Condition may be correlated with the age of the property. However, there can be newer properties in poor condition and older properties in excellent condition.

Special Features. The property's special features can have an impact on the value of the property. Special features can include fireplaces in residential buildings, or off-street parking in a commercial or industrial building.

Economic Characteristics

The property's economic characteristics can have an impact on the value of commercial property because they have an effect on income. Characteristics which affect income include: operating expenses, quality of management, tenant mix, rent concessions, lease terms, lease expiration dates, renewal options, and lease provisions such as expense recovery clauses.

This is not an exhaustive list of the factors that can influence property value. The factors that influence value can also vary by property type.

Part 3: Overview of Appraisal Practices

Single-property appraisal is the valuation of a particular property as of a given date; mass appraisal is the valuation of many properties as of a given date, using standard procedures and statistical testing. Both mass and single-property appraisals apply economic analysis. Both have logical, systematic methods for collecting, analyzing, and processing data to produce credible and reliable value estimates. Part III of this chapter provides an overview for appraising an individual property. An overview of mass appraisal can be found in Part IV.

Scope

The appraisal process consists of determining what property rights are to be appraised; collecting and validating data related to the property, the neighborhood, the market, and to comparable properties and sales; developing preliminary values based on the three approaches to value; then reconciling the results to determine the most probable market value. Each of these steps is briefly described below.

Market Value of Bundle of Rights

The goal of the assessor is to estimate the current market value of the bundle of rights for a particular property, considering only those rights and privileges that the owner or beneficial owner can transfer to a willing buyer in an arm's-length transaction. The first step in the appraisal process is to identify the bundle of rights associated with the individual property. All future steps in the process will require the assessor to keep these in mind when selecting sales and analyzing data to be sure that an apples-to-apples comparison is being made. In this way, equity among assessments (property owners) is enhanced.

Effective Date of Assessment

Section 70.10, Wis. Stats. sets the statutory assessment date as the close of January 1 of each year. The assessment is based on the status of the property as of the close of that day.

In the case of partially completed improvements as of the statutory assessment date, the assessor must value those improvements as they exist on that date.

For example, assume a property is worth $90,000 and the property owner has begun an addition. However, as of January 1, only the foundation has been laid. The property should be appraised at the $90,000 plus the value of the foundation as of January 1. Having a single

valuation date for all property throughout the state is one of the steps that assist in ensuring equitable assessments.

Data Collection

The characteristics of the property, including the land, site improvements, buildings, and any other improvements should be visually inspected where possible (sec 70.32, Wis. Stats.) and noted on the property record card. Building permits should be reviewed to determine any effects on value of a property.

The Real Estate Transfer Return serves as the primary source of sales data for the assessor. This automated system contains the name and address of the grantor and grantee, the date of the transaction, the legal description of the property, and the amount of consideration.

The assessor should collect and verify data from other sources such as real estate brokers, appraisers, lenders, newspapers, and multiple listing services. The assessor should be aware of asking prices, listing prices, and typical market exposure time for the area as these may indicate trends in the market.

When appropriate, information on leases, operating expenses, terms of sale, financing considerations, and other particulars related to the characteristics, condition, or sale of the property should be collected and verified.

Valuation Techniques: Overview of the 3 Approaches to Value

Having gathered data about the property, the neighborhood, and market conditions, the assessor analyzes the data and develops an opinion of value. There are three traditional approaches to developing the opinion of value: the sales comparison approach, the cost approach, and the income approach. Each is based on a different valuation model.

The **sales comparison approach**, sometimes referred to as the market comparison approach, is predicated on the principle of substitution; that the typical buyer will pay no more for a property than it would cost to buy a reasonably comparable property. The sales approach relies on recent market sales of similar properties to predict the probable market price of the subject. Where sales differ from the subject, they are adjusted up or down in an attempt to reflect how the market responds to the various differences. Examples of items that may be adjusted are differences in age, condition, construction quality, the date of sale, financing terms, amenities (number of bedrooms and baths, fireplaces, garages), and any other factors to which the typical buyer would assign a dollar value. The amount of adjustment must be reflected in sales data and not just a 'guess' on the part of the assessor. The adjustment process is discussed further in the Sales Comparison section of this chapter and more extensively in Chapter 8.

The **income approach** to value is based on the principle of anticipation. It is the calculation of present value based on anticipated future benefits. Typically these benefits are in terms of rents and other income that the property may produce either directly or indirectly. These are compared to the typical rents and expenses of similar property types in developing an opinion

of value. The income approach relies on estimating the net rent that the subject property could generate, then capitalizing the rent by an appropriate rate.

The **cost approach** relies on determining either the reproduction or replacement cost of the improvements, subtracting all depreciation, then adding the value of the land.

Board of Review and court cases often decide if the assessor used the most appropriate approach. The assessor should carefully consider how the courts have ruled in specific cases described in WPAM Chapter 21.

Reconciliation

Reconciliation is the process of evaluating and selecting from the alternative approaches to value. Keep in mind that the three approaches to value are designed to be economically "independent." That is, the foundation for each reflects independent methods and data, though all three methods require some correlation with sales data. For the sales comparison approach, all analysis is based on sales data. For the cost approach, it is cost of construction material, cost of labor, and depreciation data are emphasized. For the income approach, lease information, operating expenses, and other financial considerations are emphasized.

The appraiser should consider all three approaches when estimating the value of a property. However, whether an approach is developed or not will depend on the availability of reliable data. For example, in most neighborhoods, single family dwellings are habited by the owners so there is little rental data available for developing the income approach. In some cases, the particular approach may not fit the characteristics of the property. For example, if the property is a private zoo, there may be no sales of private zoos with which to compare the subject.

Historically, the cost approach has not been a reliable indicator of value in older homes or in homes with a great deal of depreciation so the cost approach might not be developed in these situations unless the sales comparison and income approaches also lacked sufficient reliable data.

The assessor can employ only those approaches to value for which there is adequate data to develop an opinion of value. If more than one approach is developed in the appraisal, the individual value estimates must be reconciled into one final value estimate for the property giving greatest weight to the value derived by the approach that is most appropriate for the type of property, best reflects conditions in the market place, and has the greatest degree of reliability based on the quality of data.

The above discussion applies to the general concepts of valuation used by appraisers. Assessors, and appraisers valuing property for assessment purposes, must use the "Markarian hierarchy" in valuing real property. The Markarian hierarchy requires assessors to first use a recent arm's length sale of the subject property. If there is no such sale, the next step is to use recent comparable sales of other properties. Only if there are no recent comparable sales of other properties should the assessor proceed to other indicators of value that include the income and cost approaches to value. See *Markarian v City of Cudahy,* 45 Wis. 2d 683 (1970), ¶ 686 173 N.W. 2d 627.

Appraisers typically use the sales comparison approach in markets where adequate sales exist. They typically use the cost approach in cases of new or special purpose structures or where limited sales or rental data activity exist. Appraisers typically use the income approach for income-producing properties and when an active rental market exists. It is also important to understand which valuation approach buyers and sellers rely on when they interact in the marketplace. For example, buyers and sellers of income-producing property may place the most reliance on the income approach because it explicitly considers the net income of the property. Usually, more than one – and often all three – of the approaches apply to a given property. The only limiting factor: whether available and appropriate data exists to develop any and all approaches.

Given the data used and the type of property appraised, the appraiser must consider how well each method employed estimates the market value of the property. How does the appraiser determine which approach or approaches are most reliable? The best guidance that can be offered is to review market activity for the subject and determine the attributes by which the market uses to evaluate alternative real estate decisions. Generally, the greatest weight should be placed on the approach for which the greatest amount of reliable and appropriate data is available that will yield the highest degree of confidence.

The final value estimate may be the value estimate derived from one of the approaches or may be a careful reconciliation of the applicable approaches.

The remainder of Part III will examine the three approaches to value in greater detail.

Sales Comparison Approach

This approach is based on the premise that similar properties will sell for similar prices on the open market. Moreover, this approach embraces the principle of substitution that states a buyer will pay no more for a property than the cost of acquiring a substitute property of equal desirability and utility.

Wisconsin court cases have declared that the assessor must base the value of a property on the arm's-length sale price of the subject property (the property being valued) or the sales of reasonably comparable properties, if available per sec. 70.32(1), Wis. Stats., which states "the assessor shall consider recent arm's-length sales of the property to be assessed if according to professionally acceptable appraisal practices those sales conform to recent arm's-length sales of reasonably comparable property; and all factors that, according to professionally acceptable appraisal practices, affect the value of the property to be assessed."

Comparable sales refer to properties that are similar to the subject property in age, condition, use, type of construction, location, design, physical features and economic characteristics. The more similar the sold property is to the subject, the more reliable is the sale price as an indicator of the value of the subject property.

Wisconsin Statutes require that assessors base market value based on comparable sales, if available. In order to be considered comparable, the sale must be an arm's-length transaction. Sales that do not meet the definition of arm's-length transactions may therefore not be used in developing market value assessments.

After the assessor eliminates those sales that are not valid arm's-length transactions or not valid for other reasons, the remaining sales are available for use in the sales comparison approach. The number of sales used should be sufficient to establish a defensible estimate of value. The important criterion is not the number of sales, but how comparable the sales are to the subject. One sale of a property that is almost identical to the subject and needs no adjustments is more valuable than 7 or 8 sales that are totally dissimilar to the subject and would require numerous adjustments to arrive at an estimate of value that would be suspect. Appraisers usually select 3 to 5 reasonably comparable sales for their estimate; more than that usually causes confusion and adds little to the strength of the value estimate.

This approach compares the subject property to recent sales of similar properties. Adjustments are made to the sale prices to reflect the differences between them and the subject to arrive at indicators of value for the subject property. The adjustments are made on the basis of what buyers in the marketplace consider when purchasing land parcels. Such factors could include time of sale, location, availability of sewer and water, the productivity of the soil for agricultural land, the number of bedrooms and bathrooms, or any number of other factors that influence the amount a typical buyer will pay for a property.

The sales comparison approach is the most commonly used method of estimating value for land as well as for improvements. In some cases, however, there will not be a sufficient number of sales to use this method and the assessor will be forced to rely upon other methods.

Assessors are not limited to sales that occur in the municipality they are currently assessing. Assessors should search for comparable property sales in the surrounding municipalities also. An adjustment for location may have to be made; however, this should not deter the assessor from looking outside of the municipality for comparable property sales. Independent appraisers and taxpayers do not limit themselves to sales which occur just inside the municipality so assessors should not limit themselves either.

Searching for sales in surrounding municipalities is very easy. There are several options the assessor has available for searching for sales information. The assessor can use the eRETR system to search for sales. After you are in the eRETR system, you can access electronic transfer returns by: date recorded, date of posting, county document ID, or by county/municipality. You will be able to search for sales in any municipality statewide. This is especially helpful if you have a specialized or unique property. To search the database for sales:

1. Open the DOR website
2. Click on the Government Tab
3. Assessors in the municipality section
4. eRETR Log-in
5. All users – Log-in to eRETR
6. Enter WAMS ID and password
7. I Agree
8. Under Access electronic transfer returns by selecting one of the following categories:
    a. Date recorded
    b. Date of posting
    c. County document ID
    d. County/municipality
    e. Download county wide assessment data

Assessors are able to access the database to obtain limited parcel attributes also. Follow the above steps one through six to access the database using your WAMS ID. You will be on the same page as you are in step seven above; however, under Assessor Sales Data you should choose Download sales data. Click on the county you wish to view, then on the next screen click on the municipality. Choose to download sales by date loaded or date of conveyance. When you click download, the next pop-up screen will ask you to save the zip file. Once you save the file, you will be able to open it and access the parcel attributes.

DOR has a website that can be accessed to obtain sales information. When the website is accessed, you have a choice of "Go to Real Estate Transfer Return Search" or downloading a ZIP file to your computer. You will need a software program, like WinZip or PKzip, to extract the files.

Another search option, if you do not have a WAMS ID, is to search the IPAS sales database This website will take you to the same search page as the "Go to Real Estate Transfer Search" choice from the website in the paragraph above this one.

Searching for comparable property sales in surrounding municipalities will help ensure that you are prepared if the taxpayer or independent appraiser presents a sale from an adjoining municipality.

Elements of Comparison

In deciding what elements should be used for comparison the assessor should look to the actions of the marketplace. The items that the assessor uses for comparison should be the same ones that buyers consider when purchasing a property. The elements of comparison can differ depending on property type.

The following basic elements of comparison should be considered in the sales comparison approach. Examples in applying adjustments are illustrated. For a detailed discussion of important elements of comparison, refer to The Appraisal Institute's The Appraisal of Real Estate.

1. Real property rights conveyed
2. Financing terms
3. Time (market conditions)
4. Location
5. Physical characteristics (e.g. size, construction quality, age, condition, features)
6. Economic characteristics (e.g. operating expenses, lease terms, management, and tenant mix).

Real Property Rights Conveyed. A transaction price is always predicated on the real property rights conveyed. The assessor must identify the real property rights available to be conveyed in the subject as well as property rights actually conveyed in each sales transaction selected for analysis. Many types of real estate, especially income producing property, are sold subject to existing leases. The revenue generating potential is often fixed or limited by the terms of existing leases. Leases are part of the bundle of rights. The effect of long-term leases on the bundle of rights, inasmuch as the leases affect market value, should be reflected

in the valuation of the property. The transaction price of a property sold subject to existing leases reflects the contract rent it will generate during the term of each lease and the market rent that will likely be achieved thereafter.

Financing Terms. Financing terms and conditions may influence the sale price of a property. If a sale involves the assumption of a below market interest rate mortgage, the sale price may need to be adjusted. Other financial terms and conditions that may need adjustment include: seller's points, blended mortgages, wrap-around mortgages, subsidized down payment, land contracts, and interest only mortgage payments. If the sale price includes personal property (e.g. boats, furniture, stocks, bonds, etc.), it must be adjusted to remove the value of these items.

Some financing terms and conditions do not require price adjustments. These include: typical financing, closing costs, real estate commissions, income tax considerations, title insurance, and transfer fees. These items are discussed in detail in the Appendix under Cash Equivalent Financing.

Time. Because the real estate market is constantly changing, the value of real estate tends to vary over time. For example, inflation or a shortage of available housing due to rapid population growth, will generally result in a trend toward rising property values. The assessor can evaluate the extent of these changes by looking at sales data. Ideally, the assessor would extract compare the sale price of properties that have sold multiple times over the desired time period where there were no changes in the condition, amenities, or features of the property between the first and second time it sold.

Sale of property (present)	$ 55,000
Sale (1 year ago)	$ 50,000
Increase over 12 months	$ 5,000

$5,000 ÷ $50,000 = 10% increase for one year.

The assessor should be aware that the adjustment for economic changes over time can vary by neighborhood. One part of a municipality may have a greater change in value than other areas due to changes in demand for properties in that area. For example, the building of a new plant hiring hundreds of employees may increase the demand (and prices) for housing in subdivisions closest to the new factory.

Location. Adjustments should be made to reflect differences in value resulting from the location of property. For example, the price of a home in one area may be higher than that of a similar home in another area because buyers view one location as more desirable than another.

Sale 1 (better location)	$ 100,000
Sale 2 (poorer location)	- $ 95,000
Difference due to location	$ 5,000

$5,000 ÷ $100,000 = 5%

If Sale 1 were going to be used as a comparable for a property with a location similar to Sale 2, then a -5% adjustment would be made to Sale 1.

Physical features. This is the area in which most adjustments are made. This would include plus or minus adjustments for differences in number of bedrooms, number of bathrooms, size of garage, fireplaces, pools, layout of building, age, and any other physical features that would have an effect on the value as judged by the marketplace. An example of this would be the presence of a fireplace in one of two otherwise similar properties.

Sale 1 (with fireplace)		$ 61,000
Sale 2 (without fireplace)	-	$ 59,500
Difference		$ 1,500

In this situation, if the subject has a fireplace $1,500 would be added to Sale 2 to make it comparable to a subject property with a fireplace.

Economic Characteristics. Economic characteristics include income attributes of the property which are reflected in sales price. Sales comparison adjustment factors include such things as operating expenses, quality of management, tenant mix, rent concessions, lease terms, lease expiration dates, renewal options, and lease provisions such as expense recovery clauses.

Adjustment Process

Adjustments are based on the principle of contribution. That is, how much more or less a purchaser would typically pay for a property with or without a certain feature. For example, the adjustment for the presence of a fireplace is the additional amount that purchasers are paying for a home with a fireplace as opposed to a similar home without one. It is important to remember that the cost of an item does not necessarily indicate the amount of the adjustment to be made for the presence or lack of that item. It is the value added to the sales price by the presence of the item, or the loss in value caused by the lack of the item, that determines the adjustment, not the cost to install or remove the item.

When making adjustments, the assessor should remember that the value to be arrived at is the value of the subject. Therefore, all adjustments are made to the sale price of the comparable to indicate the value of the subject. For example, assume the subject property has a two-car garage and that the property sold has a one-car garage. Furthermore, buyers in the marketplace are paying more for a property with a two-car garage than a property with a one-car garage. The procedure for the assessor is to increase the value of the property that sold to reflect the fact that the subject is better than the comparable in the eyes of purchasers.

The last step in the use of the direct sales comparison approach is applying the adjustment procedure to the comparable sales in order to arrive at an indicated value for the subject property. It is in this step that the assessor puts together all of the market information that has been gathered and applies it to the subject property to arrive at a value estimate. This step will be outlined in detail in WPAM Chapters 8 and 9. By using similar properties, sales prices need fewer adjustments to arrive at an estimate of value for the subject property.

Land Valuation Methods

Abstraction Method

This method can be used when there is a lack of vacant land sales. Under this method, the assessor estimates the value of vacant land through the use of sales of improved property. From the sale price, the assessor subtracts the estimated market value of the improvements to arrive at a market value for the land. The problem with this method is determining the value of the improvements. Usually this is done by estimating the cost new of the improvements and deducting the accrued depreciation. Due to the difficulty in estimating accrued depreciation, this method is best utilized on newer properties with little or no depreciation. This method is most reliable when the building's contribution to the total property value is small and relatively easy to identify.

In developed areas, a building may be sold and subsequently demolished. The value of the land can be estimated by adding the demolition costs to the sale price.

Allocation Method

This method is also known as the land ratio method. It is useful if there is a consistent overall relationship between land and improvement values. If there are few vacant land sales in a given area, the appraiser can look to comparable areas that have a sufficient number of land sales, determine the typical ratio of land value to total value, and apply the ratio to sales of improved parcels in the area in question.

Development Method

This method can be used to value land when there is limited sales data available or when a large tract of land is being developed for residential or commercial use, or as an industrial park. Using this method, the assessor estimates the number of lots that can be developed from a tract of land, and multiplies that number by the price at which the lots can be expected to sell. From this figure is subtracted the estimated costs of development. Development costs could include the installation of utilities and streets, sales expense, profit, interest, and any other costs incurred to develop and sell the sites. The result after subtracting the development costs from the sales price is the value of the land in its present state.

Examples of the application of these methods can be found in Chapter 8-Residential Valuation.

Residual Method

This method can be used to arrive at a land value in heavily built up areas where sales of vacant land cannot be found or in situations where the property type is unique. When using the residual method a projection is made of the potential net income that a new building suited to the same use could produce. The income required by the building investment is deducted, leaving a residual income that is attributable to the land. This income is capitalized at the current market rate into an estimate of land value. The method is explained in more detail later in Chapter 9.

Capitalization of Ground Lease

This method assumes the gross rental under a ground lease is the fair or economic rental for the property given current market conditions. Net rental after deduction of the owner's expenses (property tax, insurance, and management) is capitalized at an appropriate rate into an estimate of land value. An example is given in Chapter 9 in the section dealing with land value techniques.

Cost Approach

The cost approach is based on the principle of substitution. That is, that a well-informed buyer will pay no more for a property than the cost of constructing an equally desirable substitute property with like utility. The basic steps in the cost approach are:

1. Estimate the land value.
2. Estimate reproduction or replacement cost new of the structure.
3. Estimate accrued depreciation.
4. Subtract accrued depreciation from the estimated cost new to arrive at a present value for the improvements.
5. Add the present value of the improvements to the estimated land value to get total property value.

Reproduction Cost vs. Replacement Cost

Step 2 above is to estimate either reproduction or replacement cost. Reproduction cost represents the cost of an exact replica of the structure using the same materials, design, and quality of workmanship. Replacement cost is the cost of a structure having the same utility but using current materials, design, and methods.

The major difference between reproduction and replacement cost is that reproduction cost can include replicating obsolete items such as high ceilings, ineffective layouts, and other functionally obsolete items or materials. When using reproduction cost, the assessor must remember to deduct the market value of functional obsolescence caused by these items when estimating depreciation. This is not necessary when using replacement cost because the functional obsolescence is eliminated by using current materials, design, and workmanship.

Replacement cost is most often used for those structures that it would not be physically or economically feasible to reproduce today. An example is a barn with a fieldstone foundation. Reproduction of a fieldstone foundation would be cost prohibitive today. The same is true when materials are available but the craftsmanship for construction is no longer readily available. Using replacement costs allows utilization of modern materials and construction techniques at lower costs yet resulting in equal utility.

NOTE: The cost tables in WPAM Volume 2 provide for replacement of a structure with current materials. The method of estimating depreciation using Condition, Desirability and Usefulness (CDU) rating system against the costs provided in WPAM Volume 2 is further discussed in WPAM Volume 2 Chapter 6.

Estimating Cost

There are many methods that may be employed to arrive at an estimate of the cost of a structure. The two most commonly used methods are unit-in-place and the model method.

Unit-in-Place Method

This method is used by estimating the installed cost of each unit of material or component section. This cost includes labor, material, overhead, and profit. These unit and component costs are added together to produce a cost estimate.

Model Method

This method is an extension of the unit-in-place method. It involves developing the unit-in-place cost into a square foot cost for representative structures or models. The assessor selects the model most appropriate for the subject and then makes additions or deductions to the base cost of the model to arrive at a base cost for the property being valued.

Depreciation is defined as the decline in improvement value from all causes. To effectively estimate depreciation, the assessor must have an understanding of the terms of physical life, useful life, economic life, actual age, effective age, and remaining economic life.

Physical life is the length of time that an improvement can be expected to physically exist. Useful life is the length of time that a structure can be expected to perform the function for which it was intended. The useful life of an improvement may be lengthened through remodeling or renovation. Economic life is the length of time which an improvement can be expected to provide a positive contribution to the total property value, or the time period over which a prudent purchaser could be expected to receive a competitive net return from an improvement. The economic life of a structure is the time period over which its utility is measured.

The **actual age** of an improvement is the number of years from when the improvement was built until the date of valuation. Effective age is the age of the improvement with respect to its condition and utility compared to typical properties of that type. Effective age can be greater than, equal to, or less than the actual age of a structure. Above average maintenance and remodeling decrease the effective age of a structure, while properties that are poorly maintained will have an increased effective age.

Remaining economic life is the difference between the economic life and the effective age of a structure. Depreciation has the effect of reducing the remaining economic life of a structure through loss in utility.

Types of Depreciation

There are three types of depreciation: physical, functional, and economic.

Physical Depreciation

Physical depreciation is the loss in value due to deterioration through wear and tear, time, negligence, and the effects of nature or the elements. Physical depreciation is divided into two kinds: curable and incurable.

Curable. Curable items are those which are economically feasible to correct. The cost to cure the item is no greater than the value added to the property by the correction. Examples include broken windows, leaky faucets, for painting, or repairing a door.

Incurable. These are items which are not economically feasible to correct as of the date of valuation. This is further divided into short-lived and long-lived. Short-lived items are those items for which the cost to cure is greater than the addition in value at this time, even though the item will have to be replaced before the end of the structure's economic life. An example of this would be the roof on a 5-year-old home with a remaining economic life of 45 years. The roof will probably have to be replaced sometime before the end of the economic life of the structure even though it is not economically feasible to do so now. Long-lived items are those that cannot be replaced and last the life of the structure, including the foundation, framing, and subfloors.

Functional Obsolescence

Functional obsolescence is the loss in value, due to a lack of or excessive utility. Functional obsolescence occurs over time because of changing needs, technology, design, promotion/marketing, and cost/construction. Functional obsolescence occurs with all types/classes of improved property. Functional obsolescence can also be divided into two types: curable and incurable.

Curable. Curable items are those which are economically feasible to correct. As with physically curable, the determinant is whether the cost to cure is at least equal to the value added by the correction. An example of this would be old-fashioned plumbing fixtures.

Incurable. Incurable items are those which are not physically or economically feasible to correct. Examples of this include poor room layout, excessive ceiling heights, and undesirable building shape.

Research on residential property obsolescence indicates that houses built in each period in the past had special characteristics, as do the homes of today. Comparing some of the features of today's homes with older homes illustrates the functional obsolescence that occurs over time in the market place.

The large farm house and urban home common in prior years, sheltered families, in-laws, cousins, aunts, and other relatives - as well as family employees and many visitors. The family home was almost the equivalent of a boarding house. By contrast, the modern house is almost exclusively a two-generation dwelling. Today's homes typically house only the immediate family. It rarely includes grandparents and other relatives.

Today's houses differ from those of prior years in other ways. The many rooms in older houses are not practical for today's living; they are functionally obsolete. Older houses had cellars and pantries for food storage; today's homes have refrigerators, freezers, and storage

cabinets. In the past, people had front porches; now there may be a patio or deck on the back of the house for leisure use. The porch was usually adjacent to a parlor, the patio or deck is usually built in common with a sun room, family room, or recreational room. These changes created functional losses in value brought on by obsolescence of external (declining value of large porches) and internal (diminished value of food storage areas and parlors) components of homes. Most early houses were divided into specialized rooms such as dining room, kitchen, parlor, library, and music room. The modern house is more likely to have open space and multi-purpose rooms. For example, dining area, living area, and kitchen, may be one large open space (Great room).

Other indications of residential functional obsolescence are story heights greater than two or bathrooms only on the upper floor. The modern home is more likely to be on one level or split-levels. If two-storied, it usually has some sleeping space and bathroom(s) on the first floor.

Over time, the size of houses has decreased. However, the cost of housing has not been reduced because much more equipment is included in the homes of today. Homes now include upgraded electrical service to handle a large variety of equipment,, i.e., from dishwashers, air conditioning, to garage door openers. A house without adequate electrical service is not fully functional, it has obsolescence.

Even the placement and the type of windows and doors can cause obsolescence. Glass is one of the features of construction of the modern home. Recently constructed homes have large areas of glass which may open to the outside; glass doors to patios and decks are common. This results in a close relationship between outdoor and indoor space.
Comparing older homes with modern homes shows the following examples of functional obsolescence:

Curable	**Corrective action**
Patio Or Deck	Build
Sliding Patio Doors	Add
Electrical	Upgrade
1st Floor Bath	Remodel/Build
Incurable	
Excessive Size	*
Cellar	*
Pantry	*
Large Porch	*
Parlor	*
Story Height Greater Than Two	*

* Not feasible to correct.

These types of relationships illustrate how functional obsolescence affects residential property. As previously mentioned, functional obsolescence occurs with all types and classes of improved property. Changing needs, technology, design, promotion and marketing, and cost and construction determine functional obsolescence in commercial property as well.

Research on commercial property establishes where curable and incurable obsolescence occurs.

Curable obsolescence in business and income producing property may be corrected with remodeling or modern equipment. However, obsolescence is not always curable. In cases where physical limitations or prohibitive cost prevent curing obsolescence, these buildings have incurable functional obsolescence.

Incurable obsolescence occurs because of limited convenient parking, marginal delivery access, and minimal frontage. These buildings have minimal standards for floor loads and bay sizes (column spacing). Building partitions may be permanent or load bearing, and the floor levels may be too high, too low, or uneven. In many cases multiple floor construction has also caused obsolescence.

Buildings with maximum functional utility, use modern components and building material advancements; such as lightweight materials for equipment, e.g., air conditioning and heating systems.

These buildings are also built with lighter weight and quickly fabricated components, e.g., prefabricated alloys and pre-stressed concrete used in framing and roof support.

As in residential construction, to calculate functional obsolescence - compare the subject building with modern functional buildings.

Economic Obsolescence

Economic obsolescence is a loss in value due to factors outside the property. This would include changes in population and economic trends, encroachment of inharmonious uses, and inadequate government services. These factors are almost always beyond the owner's power to correct. This is also called locational obsolescence because the loss in value is a result of the property location.

Estimating Depreciation

There are several methods that may be used to estimate depreciation. They are the age-life method, the engineering breakdown method, the comparative sales method, and the observed condition method.

Age-Life Method

In utilizing this method the assessor estimates the effective age of a structure (economic life minus remaining economic life) which is expressed as a percentage of the total economic life of the structure. This percentage is then multiplied by the replacement cost new to obtain a figure that represents the total accrued depreciation of the structure.

Cost New	$100,000				
Effective Age	20 years				
Economic Life	50 years				
Ratio	20 ÷ 50	=	.40	or	40%
Depreciation	$100,000	x	.40	=	$40,000

It should be remembered that the effective age of a structure may not equal its actual age because factors such as maintenance, remodeling, and location may increase or decrease the effective age.

Engineering Breakdown Method

This is a more detailed version of the age-life method. Using this method, the assessor estimates the percent of remaining life for each building component. This percent is then multiplied by the cost of each component. The results are then added together to produce an estimate of the depreciated cost of the building.

Comparative Sales Method

This method provides the assessor with a way of estimating depreciation from sales in the marketplace. The assessor estimates the cost new and site value of a property which has recently sold and is comparable to the subject. The site value should be based on comparable vacant land sales and is deducted from the sale price to give a depreciated value of the improvement. This figure is then deducted from the estimated cost new to give the accrued depreciation. The final step is to divide the accrued depreciation by the estimated cost new of the sale property. This percentage can then be applied to the estimated cost new of the subject.

Estimated replacement cost new of comparable $60,000		
Sale price of comparable		$50,000
Less land value	-	$20,000
Depreciated improvement value		$30,000
Accrued depreciation (replacement cost new less depreciated improvement value)		$30,000
% Depreciation		$30,000 ÷ 60,000 = 50%

The percent of depreciation can then be applied to the cost new of the subject. This method requires the sales used be truly comparable to the subject property and requires an accurate estimate of the cost new. Its main advantage is that it provides a depreciation estimate based on the market and measures all forms of depreciation existing in the comparable.

Observed Condition Method

Under this method, assessors estimate the amount of physical, functional, and economical depreciation. In addition, each type is further broken down into its various subcategories as follows.

Physical Curable. The amount of depreciation is the cost to cure the defect. If, for example, a house needs to be repainted at a cost of $800, then $800 is the amount of physical curable depreciation.

Physical Incurable. In estimating physical incurable depreciation the first step is to divide the items into short-lived and long-lived. In valuing each short-lived item the assessor multiplies each component cost times the percent of actual age to expected physical life for that component. For example, the roof on a 5-year-old home has an expected physical life of 20 years and costs $2,000. The calculation for depreciation would be $2,000 x 25% = $500.

Since long-lived items are expected to last as long as the building, the costs of the components can be added together and then multiplied by the percent of actual age to physical life for the structure.

Functional Curable. As in physical curable, the amount of curable functional obsolescence is the cost to cure the defect. Assume a home has old-fashioned plumbing fixtures that are undesirable in the eyes of potential buyers and that it would cost $700 to replace the fixtures. The amount of curable functional obsolescence is the $700 cost to replace the fixtures.

Functional Incurable. This type of obsolescence can be measured through an analysis of , . If, for example, a commercial building has excessive ceiling heights, through the analysis of comparable sales, the assessor may discover that properties of this type bring $1,000 less than those without this defect. The amount of functional incurable obsolescence is then $1,000.

Economic. This type of depreciation can be measured through the sales comparison approach by comparing sales similar to the subject, some of which are subject to the negative influence, and others which are not. The difference in the sales prices of the properties with the negative influence and those without it represents the amount of economic depreciation. Economic depreciation can also be measured through the application of gross rent multipliers. For example, a two-family residential building rents for $1000 per month. Another similar property, due to a poorer location rents for $950 per month. The assessor through an analysis of the market determines the monthly gross rent multiplier for these types of properties is 100. The amount of economic depreciation is calculated as follows:

Good location (monthly rental)	$ 1,000
Poorer location (monthly rental)	- $ 950
Rental difference	$ 50
Times monthly G.R.M.	x 100
Economic obsolescence	$ 5,000

Because the entire property is affected by economic obsolescence the assessor must allocate this type of depreciation between the land and building. The amount of economic depreciation that is attributable to the building can be determined through the use of the land to building ratio. Using the above example, if the building represents 80% of the total property value, then the economic obsolescence of the building is $5,000 x 80% or $4,000. If the land has been properly valued, it will not change since it will already reflect this obsolescence.

Depreciation Tables

To make estimating depreciation easier and more consistent, tables have been developed to provide the average depreciation or residual (percent good) for different structure types. There are several factors the assessor should be aware of when using depreciation tables. First, most tables do not reflect all types of depreciation. The depreciation tables in Volume II reflect physical depreciation and functional obsolescence due to out-of-date materials and workmanship. The assessor must still estimate economic obsolescence and functional obsolescence due to such factors as design, style, or layout. Secondly, most depreciation tables represent average depreciation for the structure types. If the property being valued is in better or worse condition than average, the assessor must adjust the depreciation estimate to reflect this.

Income Approach

A fee simple interest in real property can be divided into partial interests. A lease for rented space is a common situation in which a partial estate is created. If a property encumbered by leases is sold, only the owner's interest in the property (leased fee interest) is actually transferred to the buyer. The Dictionary of Real Estate Appraisal, fifth edition by the Appraisal Institute, defines leased fee interest as a free hold (ownership interest) where the possessory interest has been granted to another party by creation of a contractual landlord-tenant relationship (i.e. a lease).

The market value of a leased fee interest in a rental property generally depends on how the contract rent relates to the market rent. If the contract rent is at the same level as the market, the leased fee interest has the same value as a fee simple interest. In this case, the leasehold interest has no value.

A leasehold interest may acquire value if the lease rate is below market. In this case, the leasehold interest has value due to the below market lease. Whenever a leasehold interest has value, the leased fee interest is reduced below that of the fee simple interest. Conversely, when the lease rate is above market rates, the leased fee interest may be more valuable than the fee simple interest.

Gross Rent Multiplier

The gross rent multiplier (GRM) is used to provide a direct estimate of value based on the relationship between the gross income and sale prices of similar properties. This method can also be considered a type of income approach. The GRM is simply the sale price divided by the annual or monthly gross income. For example, if the sale price of a property is $400,000 and the gross annual income is $50,000 the annual GRM is the following:

Sale Price	$ 400,000	=	8 (GRM)
Annual Income	$ 50,000		

After calculating the gross rent multipliers for a number of similar properties the assessor can determine which GRM is most appropriate for the subject. It is important for the assessor to use properties of a similar nature. By using comparable properties the assessor should be able to derive gross rent multipliers which fall into a narrow range (see Figure 7-1).

Figure 7-1

Sale	Sale price	Annual income	GRM
1	$500,000	$70,400	7.1
2	$475,000	$69,900	6.8
3	$525,000	$76,100	6.9
4	$450,000	$62,500	7.2

In the above example, after analyzing the sales and comparing them with the subject the assessor may decide that the appropriate GRM is 7. If the gross income is $65,000 then the value of the subject is $65,000 x 7 = $455,000.

The gross rent multiplier can also be applied to monthly rentals. The only difference is that the monthly GRM is 12 times the annual GRM. The advantage is that when an assessor is working with monthly rental figures it is easier to use a monthly GRM than to multiply the monthly figures by 12. The gross rent multiplier is often used as the income approach in valuing residential property and some apartment buildings. This is because properties of this type are not usually sold on the basis of the income generated from rentals, and thus, the usual income approach is not applicable.

Capitalization

Earlier in this chapter one definition of value was given as "the present worth of anticipated future benefits." The income approach is the conversion of anticipated future benefits (income) into an estimate of the present worth of a property. This process is called capitalization. The income approach can be useful in that it represents the way investors think when they buy and sell income property in the market. The gross rent multiplier (GRM) method can be considered a type of income approach. This method was discussed previously under the Sales Comparison Approach.

In applying the income approach there is one basic formula that is used to arrive at an estimate of market value. In this formula V = value, I = net income, and R = capitalization rate.

$$\frac{I}{R} = V$$

For example, if the net income from an apartment building is $70,000, and the capitalization rate is 14% the value of the property is then the following:

$$\frac{\$70{,}000}{.14} = \$500{,}000$$

In using this method the assessor has to calculate two estimates. One is to arrive at an estimate of net income by deducting the appropriate expenses from an estimate of the market rent of the property. The other is the derivation of the capitalization rate.

To arrive at an estimate of net operating income, only typical operating expenses reflecting stabilized property operations should be subtracted from the property's revenues. Typical operating expenses can include management, repairs and maintenance, utilities, and building insurance. Property operating expenses should not include capital expenses, depreciation, mortgage interest or debt service. Other property expenses that may be considered are leasing commissions, replacement reserves and tenant improvements. A more detailed discussion of these items can be found in Chapter 9.

In addition to building rents, the estimated gross revenues may include income generated from parking or vending. If a vacancy rate is applied to the gross revenues, a stabilized rate should be used.

The capitalization rate is composed of a number of elements:

Discount Rate: the rate of return required by investors to compensate for the risk assumed, the non-liquidity of their investment, and the use of their money. Non-liquidity means that the investment cannot be as quickly converted into cash as can bonds, stocks, or savings accounts.

Recapture Rate: the annual rate of return that will provide the investor with a return of the depreciable portion of the investment over the remaining economic life of the asset.

Effective Tax Rate: the tax rate of a municipality is expressed as a percentage of each dollar of the market value of the property. The most appropriate effective tax rate to use is the current year's average net tax rate for all property in the municipality.

The process of arriving at these estimates can involve a great deal of time and effort. There are a number of procedures that the assessor can use to arrive at market value estimate utilizing this approach. Since the income approach is most often used in the valuation of commercial and manufacturing property, a more detailed explanation of the procedures will be given in the chapter on commercial valuation.

Part 4: Overview of Mass Appraisal

Definition: **en masse**: adv. In one group or body; all together.

Definition: **mass**: noun. 1. Done on a large scale; involving great numbers or large amounts. 2. Total; complete.

Mass appraisal is the systematic appraisal of groups of properties, as of a given date, using standardized procedures and statistical testing. In sharp contrast, single property or "fee" appraisal is the valuation of one particular property as of a given date. As noted earlier in this chapter, both approaches are similar, but market analysis, valuation, and quality control are handled differently.

The purpose of mass appraisal is the equitable and efficient appraisal of all property, in a jurisdiction, for ad valorem tax purposes. Mass appraisal is the underlying principle that

Wisconsin assessors should be using to value properties in their respective jurisdictions. Wisconsin assessors must also consider sec. 70.32, Wis. Stats.

The assessor needs mass appraisal skills for producing initial values, whether during a reappraisal year or not, and single property appraisal skills to defend specific property values or to value special purpose properties that do not lend themselves to mass appraisal techniques.

Principles and Concepts

Mass appraisal, unlike single property appraisal, requires the development of a valuation model capable of replicating the forces of supply and demand over a large area. Simply put, "the model" recreates mathematically, the changes in value and real estate activity happening in the particular town, village, or city being assessed. Appraisal judgments relate to groups of properties rather than single properties. The assessor must be able to develop, support, and explain standardized adjustments in a valuation model among use classes, construction types, neighborhoods, and other property groups.

Quality control is handled differently in mass appraisal. Statistical methods are used to gauge the accuracy and consistency of valuations. These statistical methods are mathematical equations applied to the "models" used to replicate the local market activity. Specific guidelines exist that allow assessors to compare their statistical measures against industry established standards. Statistical measures falling in line with prescribed guidelines reflect good assessment uniformity and practices. When values fall outside the guidelines, this should alert the assessor that review of values and adjustments may be necessary within the tax district in the near future. Wildly fluctuating statistical measures may be indicating that a jurisdiction wide valuation adjustment is necessary.

Managing a mass appraisal system is both a challenge and an opportunity. Effective mass appraisal requires an adequate staff, budget, and resources. While it is possible to practice mass appraisal techniques using a manual method, most assessors are assisted by modern technology, in the form of computers and Computer Assisted Mass Appraisal (CAMA) software systems. CAMA systems provide an opportunity to increase the efficiency and technical capabilities of the assessor's office. These systems also allow the assessor to produce more accurate and equitable valuations. Uniformity and equity is the force behind ad valorem taxation. The "assessment process" is used to distribute the tax burden fairly and equitably amongst all taxpayers in the jurisdiction. Also bear in mind that properly executed mass appraisal techniques allow the local assessor to satisfy all taxpayers that assessments are fair and equitable, as well as, all taxing bodies and regulatory agencies that assessments are at the legal level.

A mass appraisal system is comprised of four interdependent subsystems which are discussed briefly here and in detail in Chapter 14:

- Data management system
- Sales analysis system
- Valuation system
- Administrative system

Data Management System

The data management system has components for collection, entry, editing, organization, conversion, and storage and security of property and ownership data. The data management system is the heart of the mass appraisal system, and as such, should be carefully planned and designed. Quality control is vital since the accuracy of values depends on the reliability of the data from which they are generated.

Property characteristics are used in the valuation system to conduct research and generate values, in the sales analysis system to stratify properties for ratio studies and to identify and list comparable sales. The property characteristics are also used in the administrative system.

System designers, and the assessor, need to decide what data elements need to be collected and maintained. Since data is expensive to collect and process the jurisdiction/assessor should capture those property characteristics that are important in the estimation of property values. Care should be taken to minimize redundant or insignificant data. However, certain data, seemingly insignificant, is sometimes captured and maintained because it helps the assessor explain values to taxpayers; e.g. number of bedrooms.

Sales Analysis System

The sales analysis system has components for sales data collection, sales screening and processing, ratio studies, and sales reporting. Ratio studies, the primary product of this system, generally provide the best available measures of appraisal performance. They are a valuable tool for monitoring appraisal results, identifying reappraisal priorities, adjusting valuations for the market conditions, and assisting management in planning and scheduling. For a more detailed discussion of ratio studies and analysis please refer to Chapter 14 of the WPAM.

Valuation System

The valuation system consists of mass appraisal applications of the sales comparison, cost, and income approaches to value.

Sales comparison applications include: multiple regression analysis, adaptive estimation procedure (AEP or feedback), and automated comparable sales analysis.

Cost approach requires maintenance of computerized cost schedules and equations, depreciation schedules derived from market analysis, and reconciliation of cost generated values with the market.

Income approach includes the development and use of income multipliers and overall rates.

Values produced by these three approaches should be reviewed and reconciled to select an appropriate value that most reflects the market, for assessment purposes.

The valuation system uses property characteristics from the data management system, and sales data and ratio study results from the sales system. Values produced by the valuation system are used in both the sales analysis and administrative system.

Administrative System

The administrative system uses data from all three of the previously described systems to produce products that are helpful to the assessor. Some of those products include the assessment roll, assessment notices, tax bills, final reports, appeal processing and tracking, sales reports, ratio studies, and a wide variety of other useful reports.

Functions of Mass Appraisal

There are three basic functions of a mass appraisal system: reappraisal, data maintenance, and value updates.

Reappraisal or revaluations are discussed in greater detail in Chapter 19 of this Manual.

Data maintenance is the process of keeping and updating data in the system. A good maintenance program has two components. The first element is new construction data from permit activity, new lots from subdivision plats and other land divisions are part of the first element.

The second element revolves around periodic re-viewing of all properties in order to keep data up to date and accurate. Therefore, good data maintenance information comes from new sources, as the community grows and verification of existing data from existing properties.

Value updates are annual adjustments applied to properties between appraisals. Ratio studies and other market analyses can be used to assist the assessor in adjusting properties between jurisdiction wide reappraisals.

Summary

A good mass appraisal system uses market data to build models that replicate the market in order to value all properties in the jurisdiction at market, for ad valorem tax purposes. Accurately maintained property characteristics, verified sales, and the use of ratio studies and other reports for analysis purposes make a mass appraisal system a powerful tool in the hands of the assessor.

While the assessment process is relatively simple in theory, it is extraordinarily difficult in its application. A good mass appraisal system assists the assessor with this difficult, but important, task.

Sources

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